Users Manual

Revindex Storefront 7.5

This manual and features described are based on the latest software release. Certain features may not be available in older versions of the software. Please download (http://www.revindex.com/My-Account/My-Downloads) the Users Manual for older releases.

Last update: 2016-02-08

Overview

Revindex Storefront is one of the most flexible shopping cart software for the DotNetNuke platform. It's powerful enough for large enterprises supporting over 60,000 products and unlimited orders, yet simple to manage for small businesses.

Start selling in just a few steps! Revindex Storefront complies with industry credit card PCI rules using strong encryption, secure default settings, SSL support and data validation to protect your customer information.

We support all major payment gateways. If you don't find a suitable payment gateway, please contact us and we'll try to add it.

Installation

Every Revindex software is designed to be easy to install and backward compatible where possible. Before doing any kind of installation whether upgrading or installing for the first time, always make sure to:

1. **Read the Release notes paying attention to any new requirements or breaking changes.**

2. **Make sure your system has all the necessary requirements.**

3. **Perform a full backup of your files and database.**

4. **Start the installation and pay attention to any errors. You should investigate and restore from your backup if you encounter any unusual error.**

5. **Test and verify.**

Requirements

- DNN 7.2+ (Older version 5.0+, 6.1+ is also available)
- Microsoft .NET 4.0 and above with Full Trust level*.
- Microsoft SQL Server 2008 and above.
- SSL certificate (recommended if accepting credit card payments).

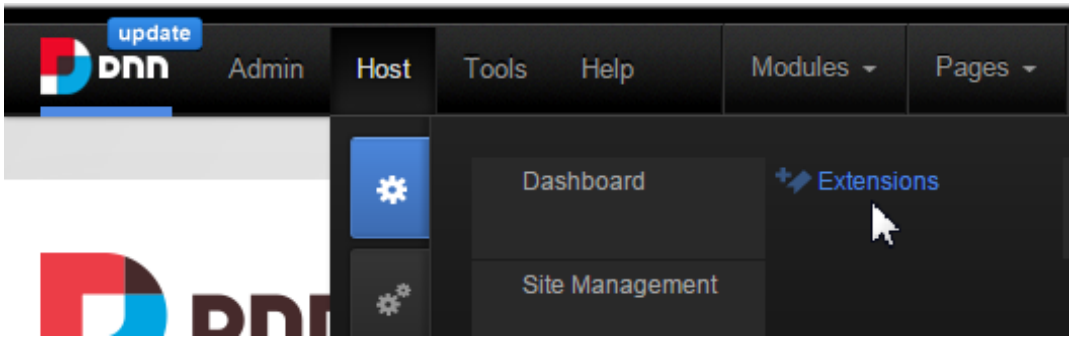
Revindex Storefront also supports large Web farm installation (running across multiple servers) allowing you to scale to millions of customers. Please see Web farm (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/web-farm/rvdwkpvm/section) for more information. Certain limitations may apply.

Your hosting provider determines what your Web site can do by enforcing different ASP.NET trust levels (Low, Medium, High, Full). For example, the default Medium Trust with a restricted WebPermission will not allow your Web site to communicate with external services such as FedEx. Similarly, a restricted ReflectionPermission will limit your ability to clone products, handle payment notification, etc.. Fortunately, most shared hosting providers will allow a modified Medium Trust or higher (with unrestricted ReflectionPermission, WebPermission) and is sufficient for Revindex Storefront to operate almost fully. We recommend that you ask your hosting provider the trust level and perform your own testing to determine what functionality is allowed. You can also look at your **Host > Host settings** page for the **Permissions** value to see if ReflectionPermission and WebPermission are allowed.

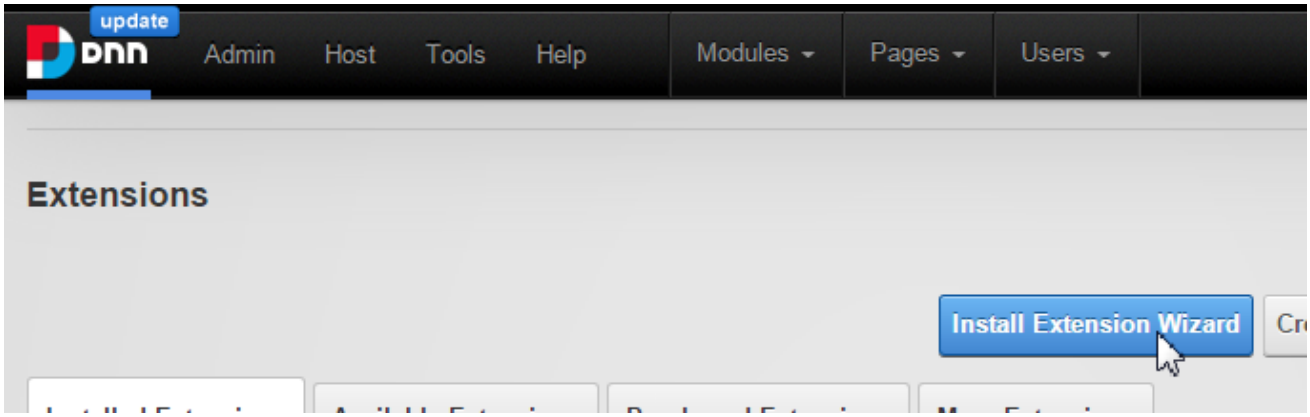
How to install

Make sure to perform a complete backup of your system before starting the installation. Follow the steps outlined below to install the Trial or production software.

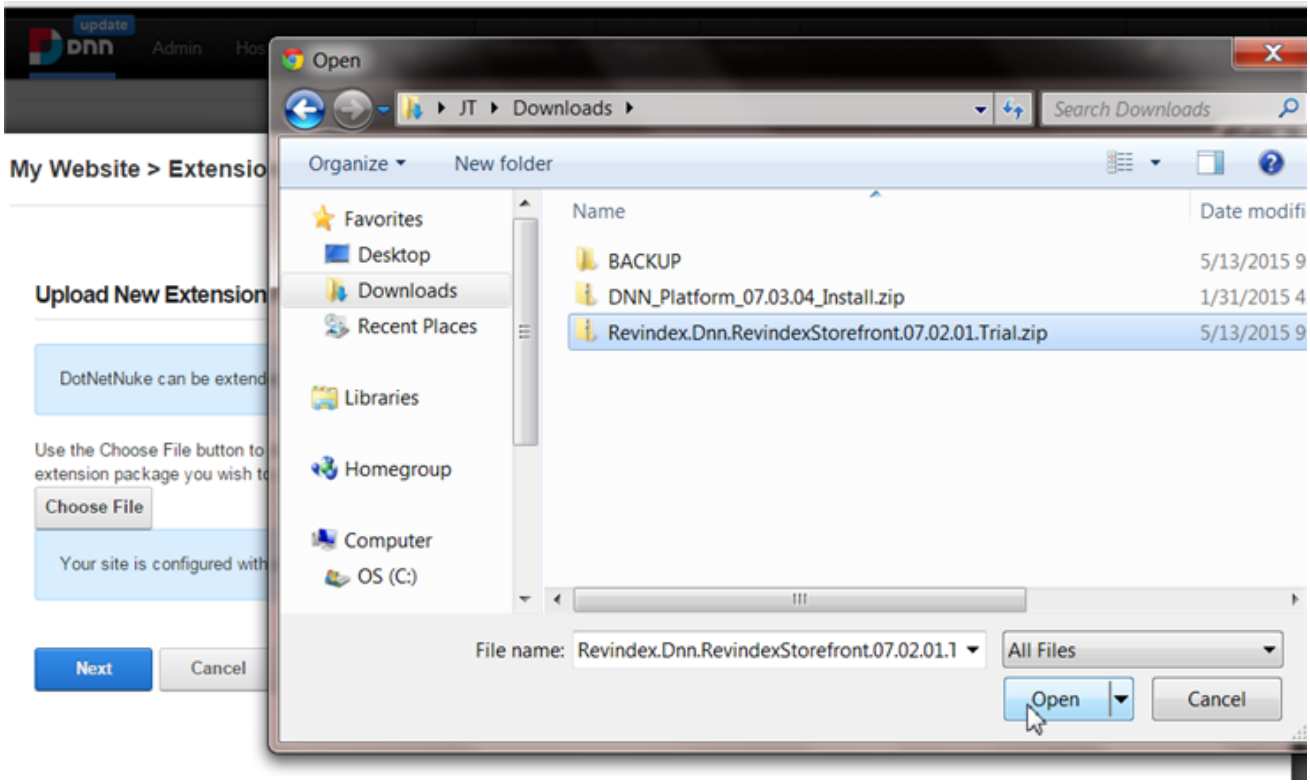
1. Go to DNN:**Host > Extensions**.



2. Click on **Install Extension Wizard**.

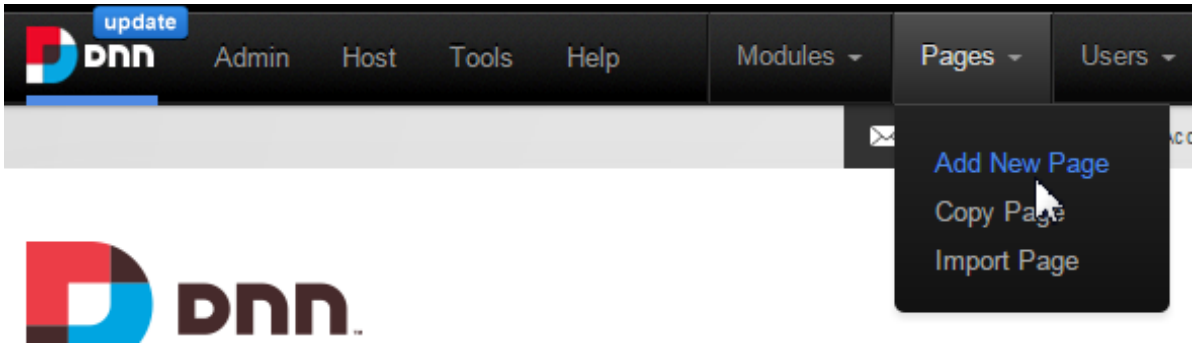


3. Upload the **Revindex.Dnn.RevindexStorefront.XX.XX.XX.zip** package and follow the install wizard instruction. If you are installing the production software over the existing Trial edition, select **"Repair Install"** checkbox when prompted.

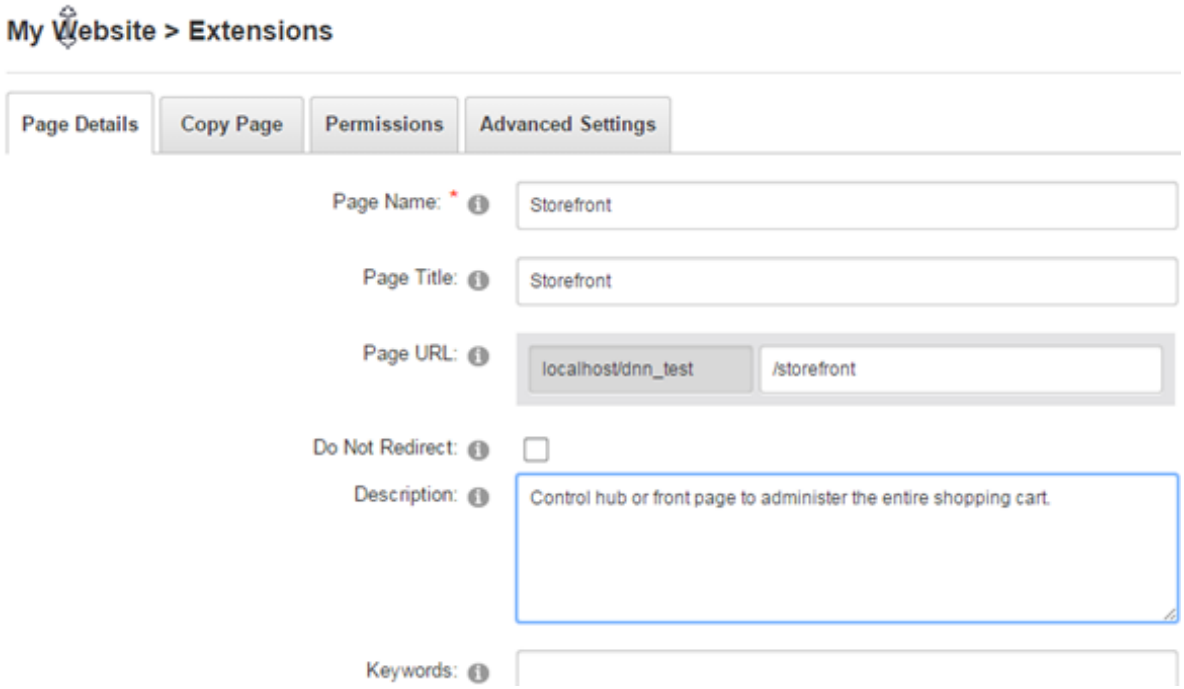


If you encounter the “Attempted to access an unloaded AppDomain” message, simply restart your IIS application pool to notify IIS that new DLLs have changed.

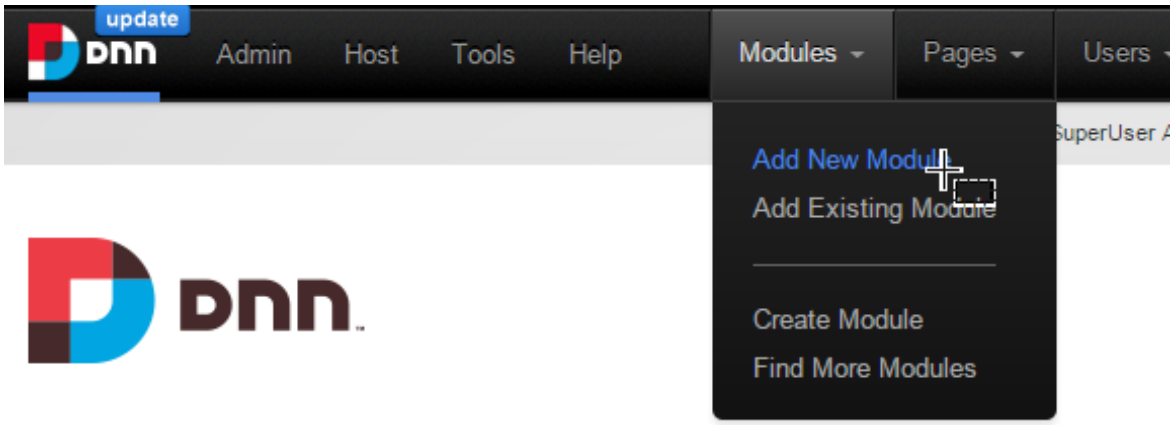
4. Now that you have installed the **RevindexStorefront** main module on your DNN system, you'll need a page to host that module. Click **Home** link first and then, go to DNN:**Pages > Add New Page**.

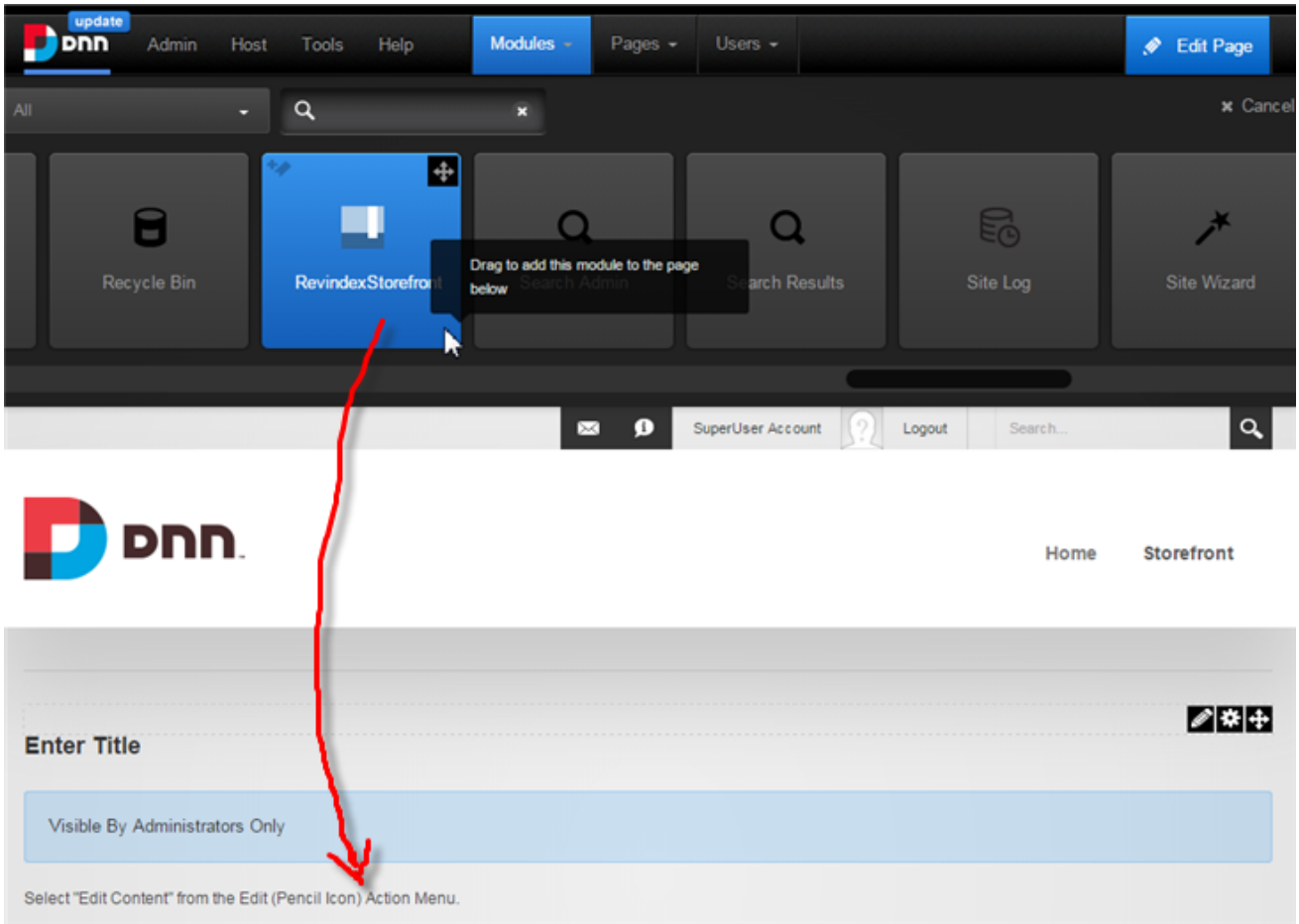


Give your page a name (e.g. "Storefront"). You can always rename this page later.

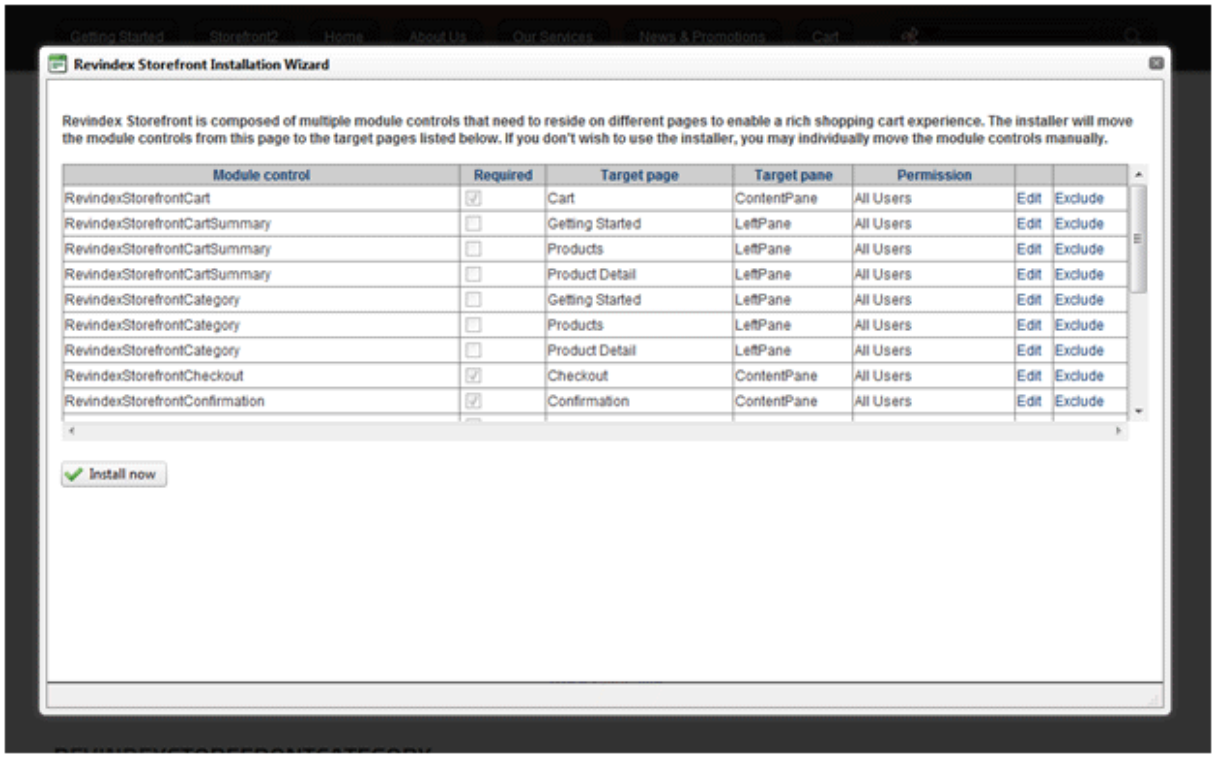


Next, you can drag the **RevindexStorefront** main module to that page from DNN:**Modules > Add New Modules**.





Immediately followed, you will be greeted with the installation wizard. Please note it may take several seconds to reload the first time the Storefront is added to the page as your system needs to load up the necessary files.



5. The Storefront is composed of multiple module controls that should reside on different pages to enable a rich shopping cart experience. Click **Install now** to automatically move the module controls to the recommended pages. You can always rename the pages, move the module controls to other pages or delete the non-required module controls afterwards. If you don't wish to use the installer, you may close it and manually move the module controls to your desired pages.

> You may need to go to DNN: **Host > Host Settings** and click on **Restart Application** to clear the cache for changes to appear. You may also need to recycle your IIS Application Pool if you encounter any ASP.NET errors.

Common installation errors

If you did not encounter any errors during installation, please skip to next.

It's important to observe and understand the type of errors during installation. Certain errors are informative whereas other errors may require you to restore from your backup.

1. **Error "Maximum request length exceeded" during upload**.
   See how to avoid timeout (http://www.revindex.com/Support/FrequentlyAskedQuestions/tabid/133/rvdwktid/how-to-avoid-timeout-when-uploading-software-435/Default.aspx) for more info.

2. **Error "Could not load file or assembly 'IKVM... The located assembly's manifest definition does not match the assembly reference."**
   If this error occurs only when the page is first loaded immediately after an installation, it is usually caused by IIS reloading the libraries and there's a temporary mismatch in the cache and is usually safe to ignore. It will clear on its own by reloading the page.

   If, however, the error persists or happens everytime the Web site is restarted, you should investigate if you have conflicting DLLs (in particular, you should verify if you have the older **bin\IKVM.GNU.Classpath.dll** file and see if it can be removed safely. This DLL may have been included from other modules and is considered deprecated since it has been replaced with IKVM.OpenJDK.*.dll, IKVM.Runtime.dll by the IKVM community and may cause conflicts.)

3. **Database installation error or installation failed error message.**
   If you have database errors during installation, you should take note of the error and attempt to restore from your backup. Contact technical support for assistance.

4. **Error message “Attempted to access an unloaded AppDomain”**
   Simply restart your IIS application pool to notify IIS that new DLLs have changed.

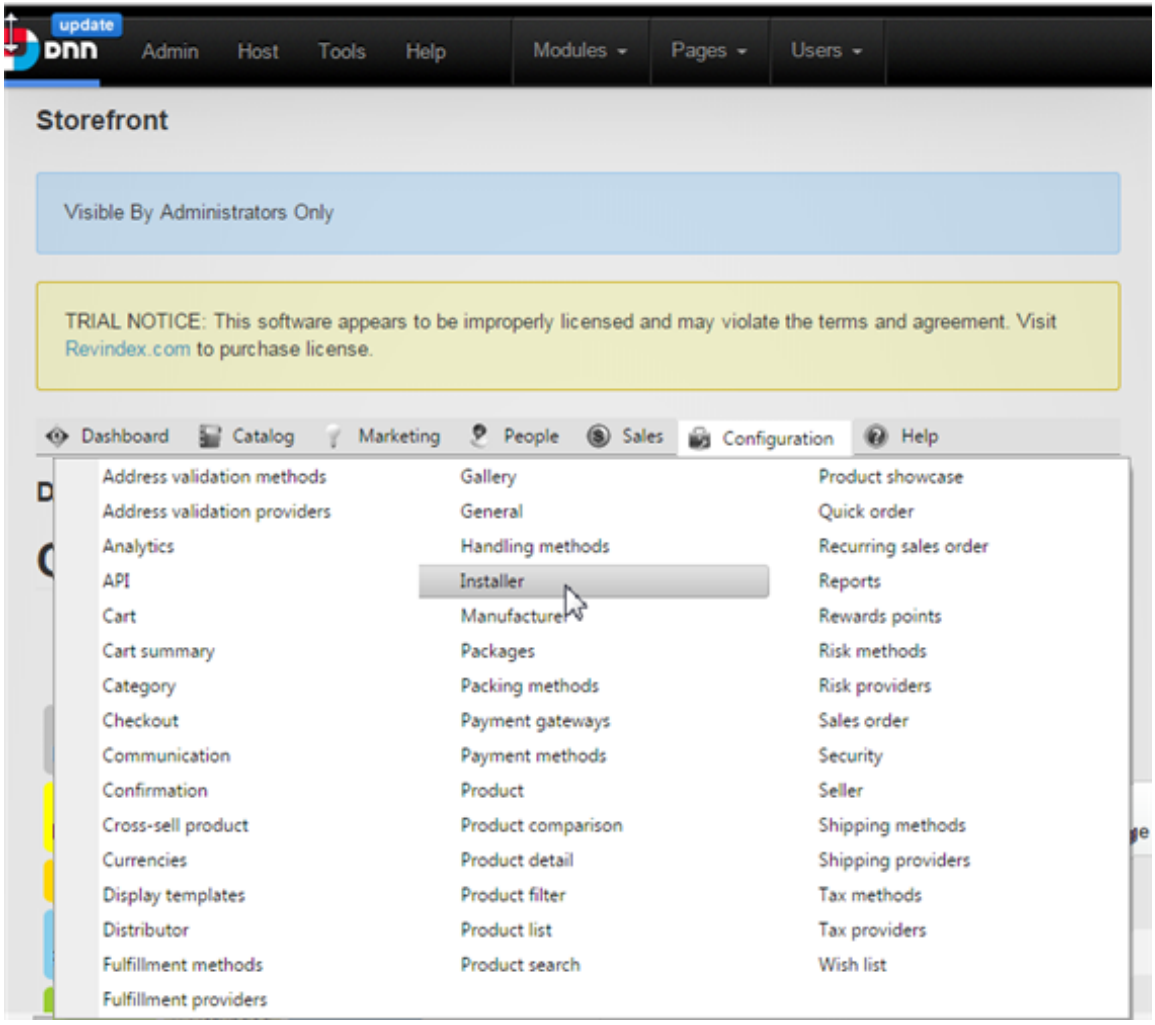
5. **Error on page "DotNetNuke.Services.Exceptions.ModuleLoadException: Index was out of range...".** This is usually caused by the fact you had deleted or not placed the required module controls somewhere on a page. The required module controls must exists on a page and it could be a hidden page if you don't want it to appear on the menu. See Adding module controls (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/adding-module-controls/rvdwkpvm/section) for more info.

6. **Error on page "Cannot find or load template.".** Make sure your configuration, products, catalogs are referencing a display template that exists. Older base display templates may be deleted with new versions of the software. If you're using custom display templates, you also want to check for syntax error and ensure you base display template still exists. See Display Templates (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/display-templates/rvdwkpvm/section) for more info.

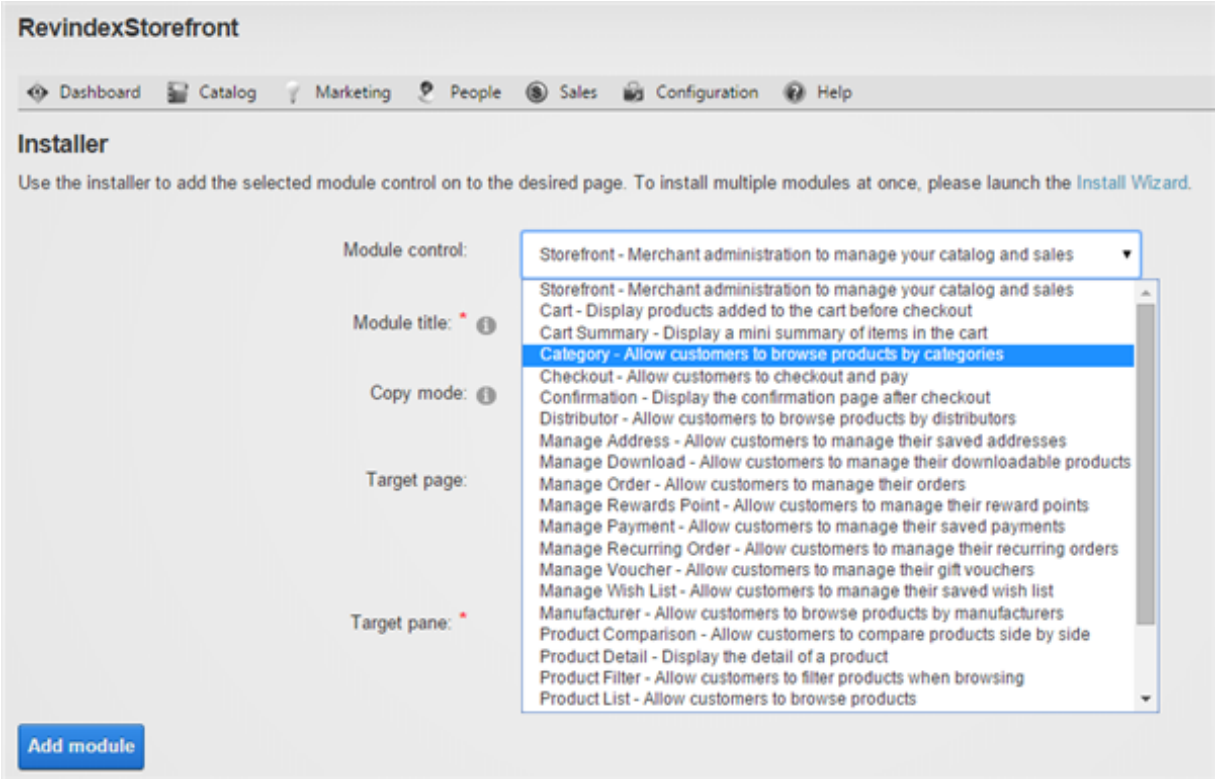
Adding module controls

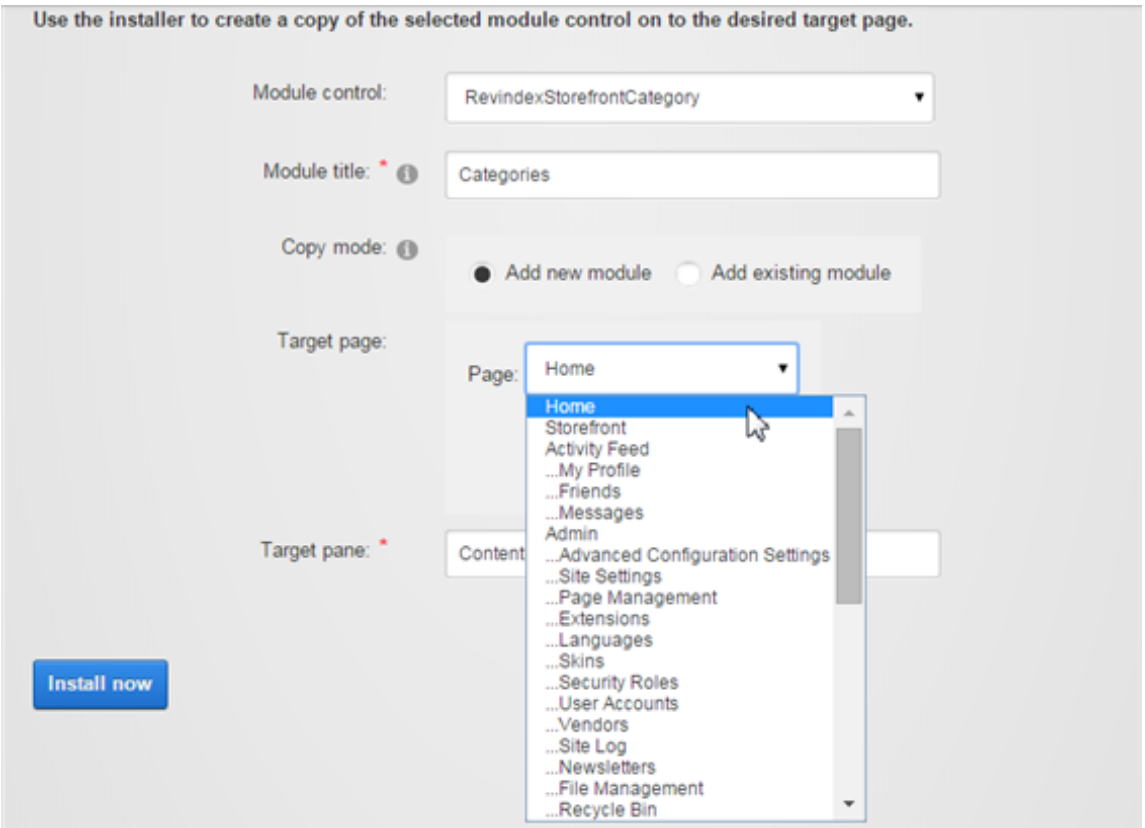
After the initial installation, you may decide to add module controls to other pages. For example, you may want to add the **Category** module control to your Home page. From the **Storefront** main module control, you can go to **Configuration > Installer** to easily perform this operation. Alternatively, you can follow the usual way of adding modules using the DNN panel which will create all the module controls on the page where you can select and remove the module controls you don't need.

1. Go to **Configuration** > **Installer.**



2. Select the **Module control: Category** and select the **Target page: Hom**e.





Below is the list of recommended pages and where each module control should normally reside for your reference. As you become familiar with the application, feel free to rename the pages and rearrange the module controls to different pages on your site. Many of these modules are optional providing useful enhancements to

your site and can be removed if not needed. SSL is not a requirement on any pages, but is recommended if you accept credit card directly on your site. Having SSL can help increase customer confidence shopping at your store.

Suggested Page Name	Required	Show in Menu	Permission	SSL	Module Control
Home Primary page.	No	Yes	All Users	No	**Product Search (optional)** Search for products. **Product Showcase (optional)** Display featured products.
Storefront Main console page to administer store, orders, users, etc.	Yes	Yes	Administrators	Yes	**Storefront** Main console to administer store, orders, users, etc.
Checkout Payment processing page.	Yes	No	All Users	Yes	**Checkout** Payment processing.
Cart Shopping cart page.	Yes	Yes	All Users	Yes	**Cart** Shopping cart.
Confirmation Confirmation page after a successful checkout.	Yes	No	All Users	Yes	**Confirmation** Confirmation page after a successful checkout.
					Product Detail Product detail view. **Category (optional)** Display product categories.

Product Product detail view page.	Yes	No	All Users	No	**Distributor (optional)** Display distributors. **Manufacturer (optional)** Display manufacturers. **Cart Summary (optional)** Quick display of items in cart.
Products Product list view page.	Yes	Any	All Users	No	**Product List** Product list view. **Product Filter (optional)** Filter products in the product list view. **Category (optional)** Display product categories. **Cart Summary (optional)** Quick display of items in cart. **Distributor (optional)** Display distributors. **Manufacturer (optional)** Display manufacturers. **Product Search (optional)** Search for products.
Product Comparison Allow comparing products in a grid.	No	No	All Users	No	**Product Comparison (optional)** Product comparison view.

My Account Allow users to manage order, address book, payments, etc.	No	Yes	Registered Users	Yes	**Manage Address (optional)** Allow users to manage address book. **Manage Order (optional)** Allow users to manage purchased orders. **Manage Recurring Order (optional)** Allow users to manage any recurring orders. **Manage Payment (optional)** Allow users to manage payments. **Manage Product Download (optional)** Allow users to download virtual goods. **Manage Rewards Point (optional)** Allow users to manage their rewards points. **Manage Voucher (optional)** Allow users to manage their vouchers. **Manage Wish List (optional)** Allow users to manage their wish lists.
Wish List Allow users to search public wish list, gift registry.	No	Yes	All Users	No	**Wish List (optional)** Allow users to search public wish list & registry.

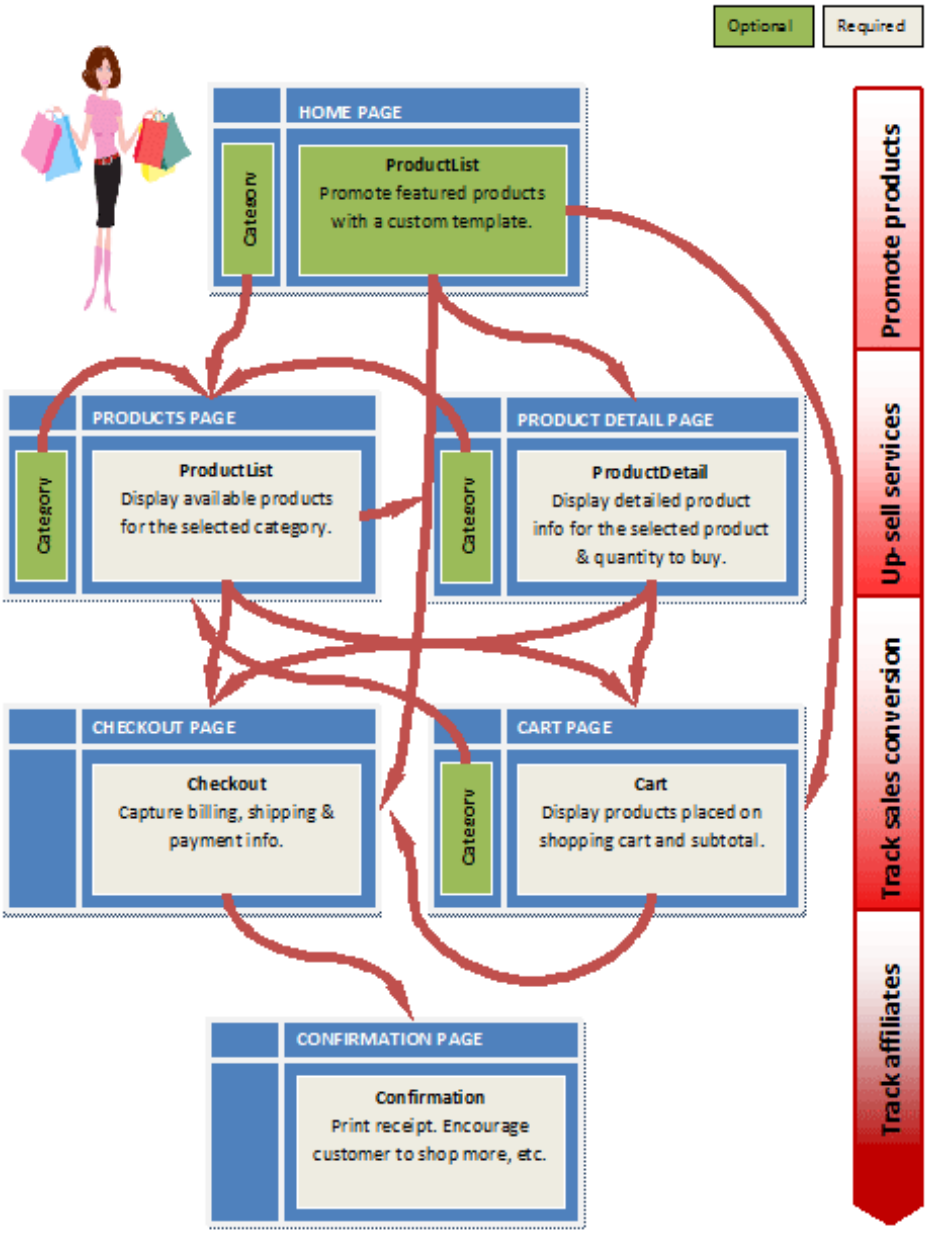
Quick Order Allow users to quickly bulk order products.	No	Yes	All Users	No	**Quick Order (optional)** Allow users to quickly bulk order products (e.g. wholesaler for automobile parts)

How module controls interact

Below is a typical use case how customers interact with the different module controls. Every customer has a different buying habit. Revindex Storefront is streamlined to help make the shopping experience easier and faster. It could take as little as 2 submit clicks to complete a checkout process from Home page to Confirmation page.

The Storefront is composed of multiple module controls hosted on separate pages giving you the flexibility to customize the look and feel, functionality and security at each step of the process. For example, you may want to add Web analytics tracking on to each page to measure sales conversion to see where your customers abandon or perhaps you like to place advertisement on certain pages to up-sell services. Another example is you may want use the module controls individually to promote featured products on a completely separate page from the rest of your shopping cart.

You are free to mix and match the different module controls together as long as you have the required core module controls hosted on pages somewhere on your site. You are encouraged to rename and organize the pages and module controls to make your site friendlier.


Optional
Required
HOME PAGE
Category
ProductList
Promote featured products with a custom template.
PRODUCTS PAGE
Category
ProductList
Display available products for the selected category.
PRODUCT DETAIL PAGE
Category
ProductDetail
Display detailed product info for the selected product & quantity to buy.
CHECKOUT PAGE
Checkout
Capture billing, shipping & payment info.
CART PAGE
Category
Cart
Display products placed on shopping cart and subtotal.
CONFIRMATION PAGE
Confirmation
Print receipt. Encourage customer to shop more, etc.
Promote products
Up-sell services
Track sales conversion
Track affiliates

MY ACCOUNT PAGE

- ManageOrder
- ManageRecurringOrder
- ManagePayment
- ManageAddress
- ManageProductDownload
- ManageWishList

STOREFROM PAGE

Storefront
Administer catalog, taxes, promotions, orders, collect payment, etc.

License key

If you purchased or received a license for use, you'll need to enter it into the production software. If you were running a trial software, you'll be given access to the production software to upgrade first after the purchase has been made. Please follow the steps in How to upgrade (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-upgrade) and remember to check "**Repair Install**" if prompted.

> Your license key is made available to you under your login profile at Revindex (http://www.revindex.com/).

Login as **Host** and go to the **Storefront** page you created. Under **Configuration > License** menu, click **Add new** and enter your license key and **Save**.

Mail - Unread(3 | Revindex > Res | Revindex > My | Storefront | New Tab

localhost/dnn_test/storefront/rvdsfpt/Configuration-WebUserControls_Common_Dnn_LicenseSetControl#RvdsfCon

Apps For quick access, place your bookmarks here on the bookmarks bar. Import bookmarks now...

update DNN | Admin | Host | Tools | Help | Modules | Pages | Users | Edit Page

Storefront

Visible By Administrators Only

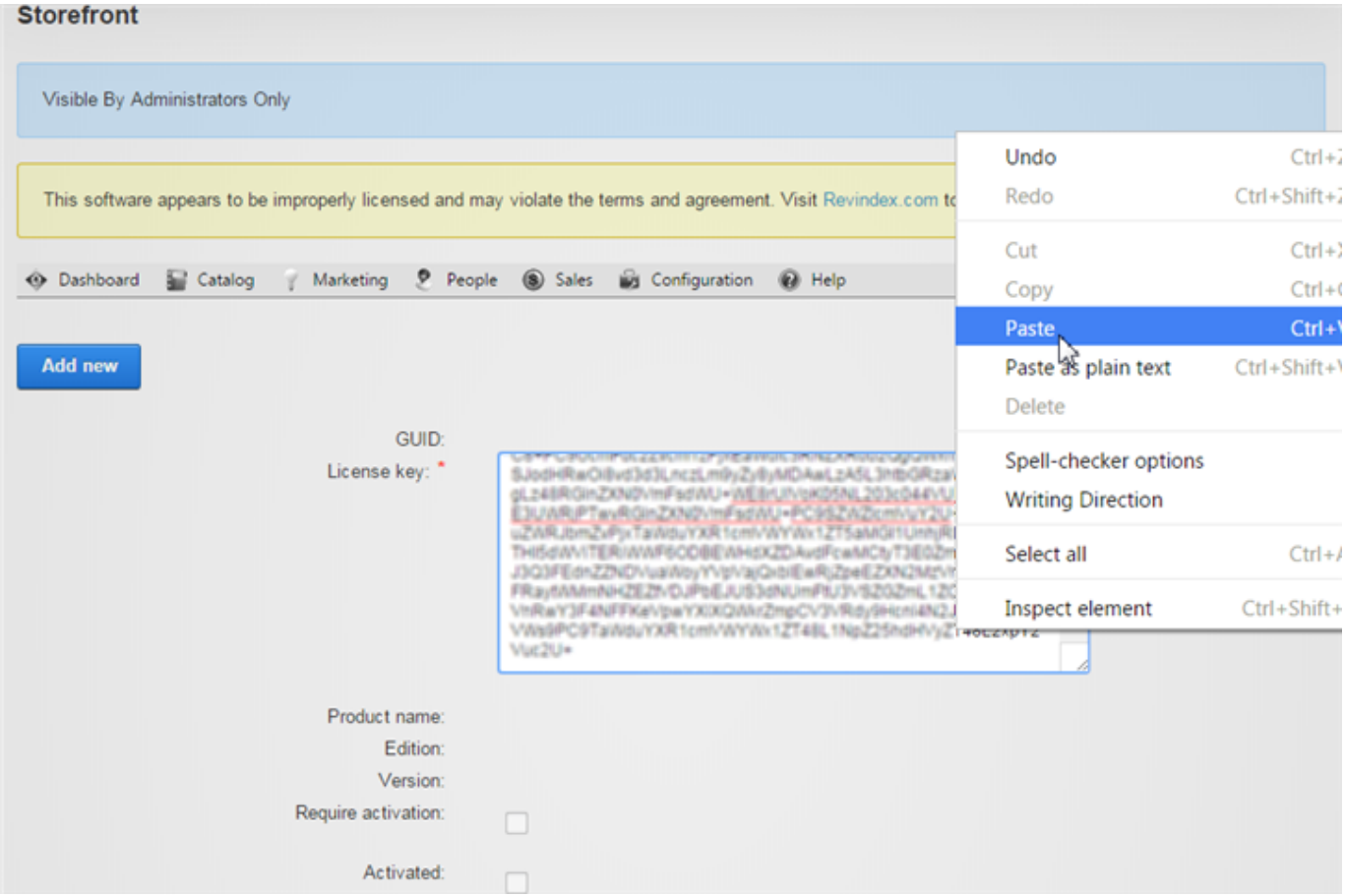
This software appears to be improperly licensed and may violate the terms and agreement. Visit Revindex.com to purchase license.

Dashboard | Catalog | Marketing | People | Sales | Configuration | Help

Add new

Address validation methods	Gallery	Product showcase
Address validation providers	General	Quick order
Analytics	Handling methods	Recurring sales order
API	Installer	Reports
Cart	License	Rewards points
Cart summary	Manufacturer	Risk methods
Category	Packages	Risk providers
Checkout	Packing methods	Sales order
Communication	Payment gateways	Security
Confirmation	Payment methods	Seller
Cross-sell product	Product	Shipping methods
Currencies	Product comparison	Shipping providers
Display templates	Product detail	Tax methods
Distributor	Product filter	Tax providers
Fulfillment methods	Product list	Wish list
Fulfillment providers	Product search	

Activated:


Storefront
Visible By Administrators Only
This software appears to be improperly licensed and may violate the terms and agreement. Visit Revindex.com to
Dashboard
Catalog
Marketing
People
Sales
Configuration
Help
Add new
GUID:
License key: *
Product name:
Edition:
Version:
Require activation:
Activated:
Undo
Redo
Cut
Copy
Paste
Paste as plain text
Delete
Spell-checker options
Writing Direction
Select all
Inspect element

Quick start settings

Your shopping cart is pre-configured with default values suitable for most businesses. In most cases, you only need to configure the settings below from the **RevindexStorefront** module control to start selling.

1. Where are you located?

   - **Configuration > General**
     Enter your store details. Enable only the advanced features you need.

2. How do you collect money?

   - **Configuration > Currencies**
     Configure the primary currency you are collecting money.

   - **Configuration > Taxes**
     Configure any tax rules that you need to collect.

   - **Configuration > Payment**
     Configure the payment methods you want to offer (credit card, PayPal, check, etc.).

3. How do you ship your products?

   - **Configuration > Shipping**
     Configure the available shipping methods if you’re selling products that require shipping.

4. What are the products you want to sell?

   - **Catalog > Categories**
     Optionally, define the categories to group your products.

   - **Catalog > Products**
     Add products to sell. Each product has a default variant where you will set your price, inventory and assign the tax class you created. You can have multiple variants (e.g. sell a black and brown variation of the same shoe).

Web farm

This is an advanced topic for businesses running multiple servers. You can skip this topic if you're running a single machine.

Revindex Storefront supports large Web farm installation (running across multiple Web servers) allowing you to scale to millions of customers. Web farm is a complex setup and should only be configured by experienced administrators with strong understanding of network, IIS, ASP.NET and DNN. Improper configuration of Web farm will result in instability of your system.

A common form of Web farm setup involves directing the user to a random or weighted Web server for each incoming Web request. Therefore, you need to ensure every Web server is capable of accessing the session information of the user, otherwise the user may see inconsistent data navigating from one page to another.

By default, as of version 6.3.1, the Storefront uses ASP.NET session to store state information (in older versions, the Storefront uses DNN data cache object). This means your Web farm needs to be configured to use State Server or SQL Server mode (http://msdn.microsoft.com/en-us/library/vstudio/ms178586(v=vs.100).aspx) to preserve session across machines. Other equivalent variation of this concept that allows sharing of session information out-of-process may also work (e.g. Windows Azure has several equivalent implementations of session storage modes (https://www.simple-talk.com/cloud/platform-as-a-service/managing-session-state-in-windows-azure-what-are-the-options/) such as TableStorage, SQL Azure, Windows Azure Caching, etc. as well as other 3rd party session providers like NCache, etc.).

If you're unable to change your session provider, you can try to shift the session responsibility from ASP.NET to DNN by configuring the Storefront to persist session information to DNN's data cache object. In this case, you will also need to ensure your DNN cache mode is using an out-of-process caching provider (e.g. AppFabric, NCache, Memcached, etc.). To configure the Storefront to use DNN data cache object, you need to add the key to your Web.config's **appSettings** section (please note that every Web server must be configured the same way):

```
<add key="SessionProvider" value="dnncache" />
```

Finally, if you're unable to employ any of the session storage modes above, you can configure your load balancer to direct all incoming requests from the same source IP address to the same Web server. This sticky IP routing approach alleviates any need to share session since it essentially operates as one Web server from the user standpoint.

How to move modules

The first time you install Revindex Storefront, you will be prompted with the installation wizard that will simply help you move modules to different pages on your site. If the installation wizard did not run or you need more control, you can manually move the modules to other pages on your own.

To move a module to another page,

1. Click on **Settings** from your module's **Manage** action menu.
2. Under **Page Settings** tab, expand the **Advanced Settings** panel.
3. Choose the page to move the module to under the **Move To Page** dropdown option.

How to SSL secure your pages

In order to secure your pages when transmitting customer information over the internet (e.g. checkout, cart, registration, login pages, etc.), you need to enable SSL on your site (also known as HTTPS protocol).

You must first have a valid SSL certificate for your site and have it installed on your IIS server by your administrator. Follow the remaining steps to configure SSL on your DotNetNuke web site:

1. Login as **Host** user.
2. Go to **Admin > Site Settings** page.
3. Under the Advanced Settings tab, expand the SSL Settings panel.
4. Check the **SSL Enabled** checkbox.
5. Check the **SSL Enforced** checkbox. When this option is set, pages which are not marked as Secure will not be accessible with SSL (HTTPS).
6. Optionally enter a **SSL URL** only if you do not have a dedicated SSL Certificate installed for your site. An example would be a shared hosting account where the hosting company provides you with a shared SSL URL.
7. Optionally enter the **Standard URL**. If an **SSL URL** is specified above, you will also need to specify a Standard URL for unsecure connections.
8. Save your changes.

You will now need to indicate which pages need to be SSL secured. Typically, this should be any pages where sensitive customer information may be transmitted over the Internet such as Login, Registration, Cart, Checkout, Confirmation and Account pages.

1. For each page needing to be SSL secured, go to its **Page Settings**. Under the Advanced Settings tab, expand the Other Settings panel and mark the **Secure** checkbox.
2. Save your changes.

How to improve performance

Performance is dependent on several factors such as hardware, network speed, server load, etc. There are several things you can do on the software side to improve performance:

- Ensure you are running .NET 4.0+ framework.
- Ensure you are running the latest version of Revindex Storefront running the newest display templates.
- Enable IIS or DotNetNuke compression.This will significantly improve download time.
- Install Revindex Optimizer (http://www.revindex.com/ProductDetail/tabid/138/rvdsfpid/revindex-optimizer-1-0-9/Default.aspx) to speed up page loading time by up to 50%.
- Remove any unnecessary module controls on your page (side banner, footer, etc.).
- Set your DotNetNuke **Cache Settings** to "Heavy" under **Host > Host Settings** page. Please note caching takes effect and builds up speed after the first page visit.
- Ensure your hosting does not place a limit your application pool's memory or CPU usage.

In terms of hardware changes:

- Ensure you have lots of free memory on the server so that your OS is not swapping to disk and the Web server is able to cache as much data as possible. E.g. Ensure the system can cache all your products to memory.
- Get faster hard drives for your database and file server. It's about the number of IO per second and not about storage size (10K/15K rpm hard drives, RAID or SSD are recommended).
- Get a very fast CPU for your Web server especially if you intend to use a lot of dynamic rules and promotions.
- Revindex Storefront supports Web farm configuration allowing you to spread the load over multiple Web servers.
- Ensure you have a fast ethernet connection between your Web server and database server if they're on separate machines (100 Mbps or higher is recommended).
- Ensure you have a fast public network (10 Mbps or more).

How you configure your Storefront will also determine the general performance of your shop:

- Group your products using multiple categories and sub-categories to avoid displaying too many products on a single page. It's generally ineffective to list thousands of products on one category even with paging enabled, when the average customer never navigates past the 2nd page. Most major shopping sites use this approach to speed up performance. For example, a good way is to mark a limited number of products as Featured products, therefore, showing only the subset of products when no category is being selected instead of showing all products. Likewise, sub-category is a great way to force customers to quickly narrow down to what they're looking for instead of paging through hundreds of pages. In general, aim for no more than a hundred products per category.
- Avoid creating unnecessary product variants when you can create product options with custom fields.

Product variants are generally used when you need to track distinct inventory and SKU for each product option.

- Limit the use of product filter for only important attributes. Balance between speed and ease of navigation for your customers. Product filter is generally an intensive operation. Learn to take advantage of other forms of navigation filters like product search, category, manufacturer, distributor, etc.
- Reduce the number of unnecessary modules on your page that can clutter and slow down the page rendering.
- Set a small but reasonable limit on the number of results to show under **Configuration > Product List** and **Configuration > Product Search** settings. Study shows 80% of customers don't navigate past the 2nd page (e.g. 100 is a good limit). Rather than setting a high limit and expect the customer to click through 20 pages of products, you should emphasize the use of the product search module instead.
- Disable natural sort under **Configuration > Product list** settings. The natural sort algorithm is an expensive operation.

How to upgrade

Make sure to read the latest Release notes (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/release-notes/rvdwkpvm/section) and Users Manual for any requirement or breaking changes introduced in the new version of the software. We recommend that you perform testing on a development machine first prior to upgrading your production site. In particular, you should pay attention to the following points before upgrading:

- Any obsolete base display templates that have been removed from the new software, usually base display templates older than 1 year. The older the base template, the smaller the version number (e.g. Standard1, Standard2). Any custom display templates using these very old base display templates will need to be recreated.

- Any CSS style and class name changes if you're customizing the look-and-feel by overriding the style classes that are included with the Storefront.

- If you're using the Revindex Storefront API, make sure you test the upgrade on a development machine first before upgrading the production site to ensure your API calls work correctly.

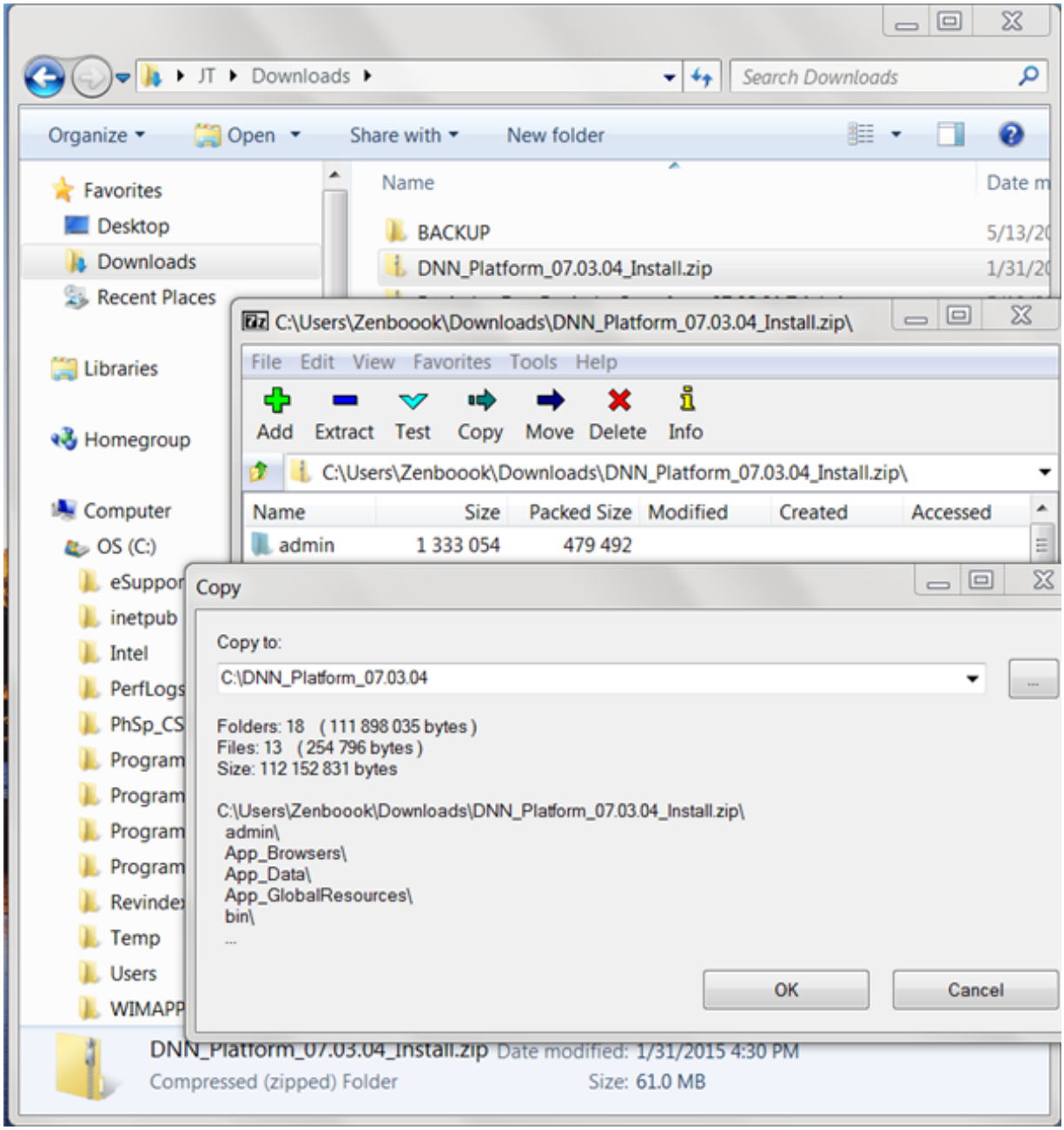
To upgrade over an existing version or upgrading from a Trial edition, take a complete backup of your system and repeat the same procedure as described in the How to install (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-install/rvdwkpvm/section) section. Revindex Storefront will automatically detect the running version and perform the necessary upgrade retaining your settings. For more information, please read the How to upgrade a DNN module or the importance of backing up (http://www.dnnsoftware.com/community-blog/cid/134807/how-to-upgrade-a-dnn-module-or-the-importance-of-backing-up) blog.

When possible, we recommend you to test your upgrade on a staging or development machine first prior to upgrading on your production site.

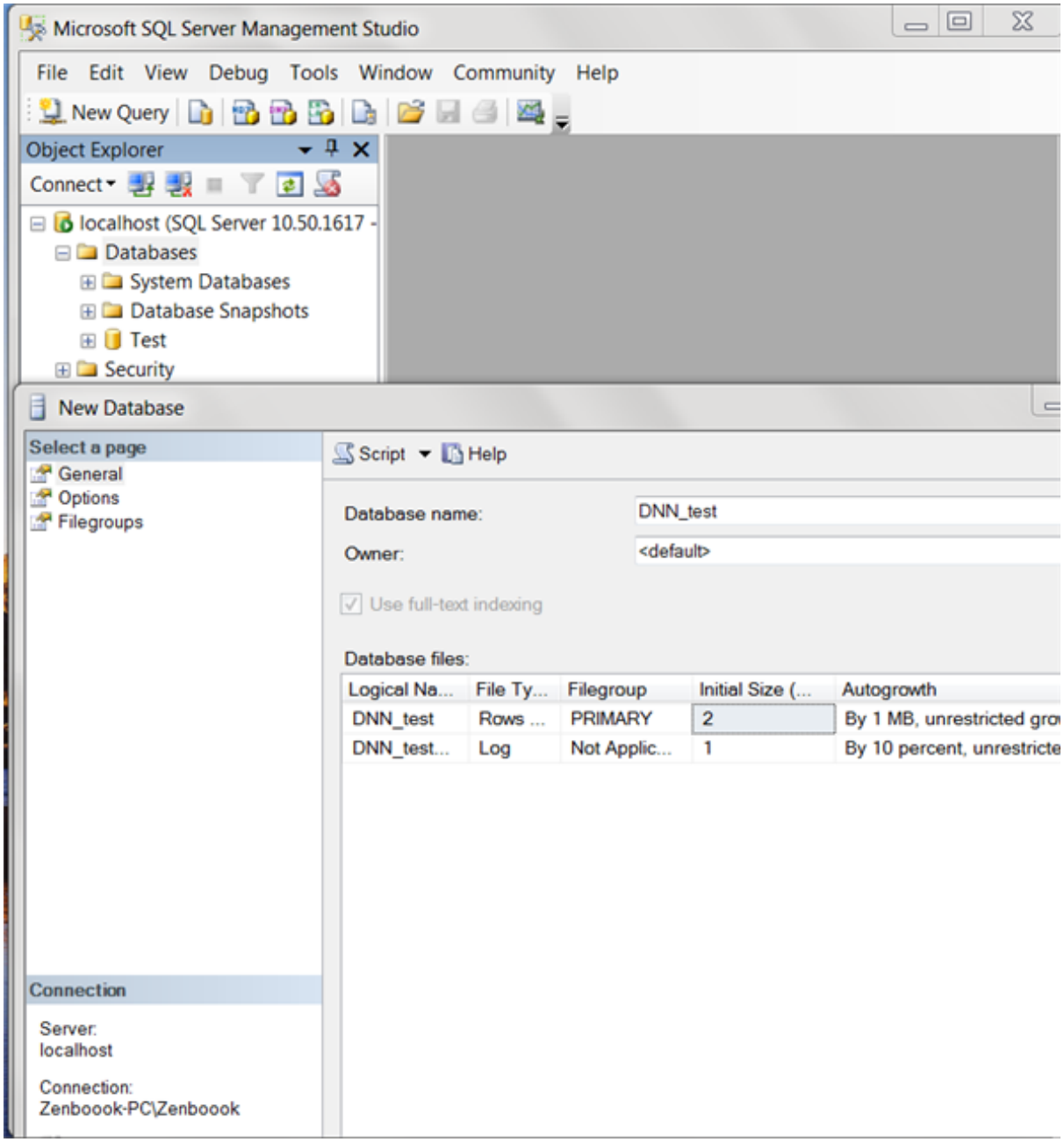
If you're running tests on a development/staging machine with production data copied over and you sell recurring products, make sure to disable any recurring orders or change the payment gateway credentials, otherwise it will automatically charge your customer's credit card when the order is due for renewal.

How to install DNN on local machine

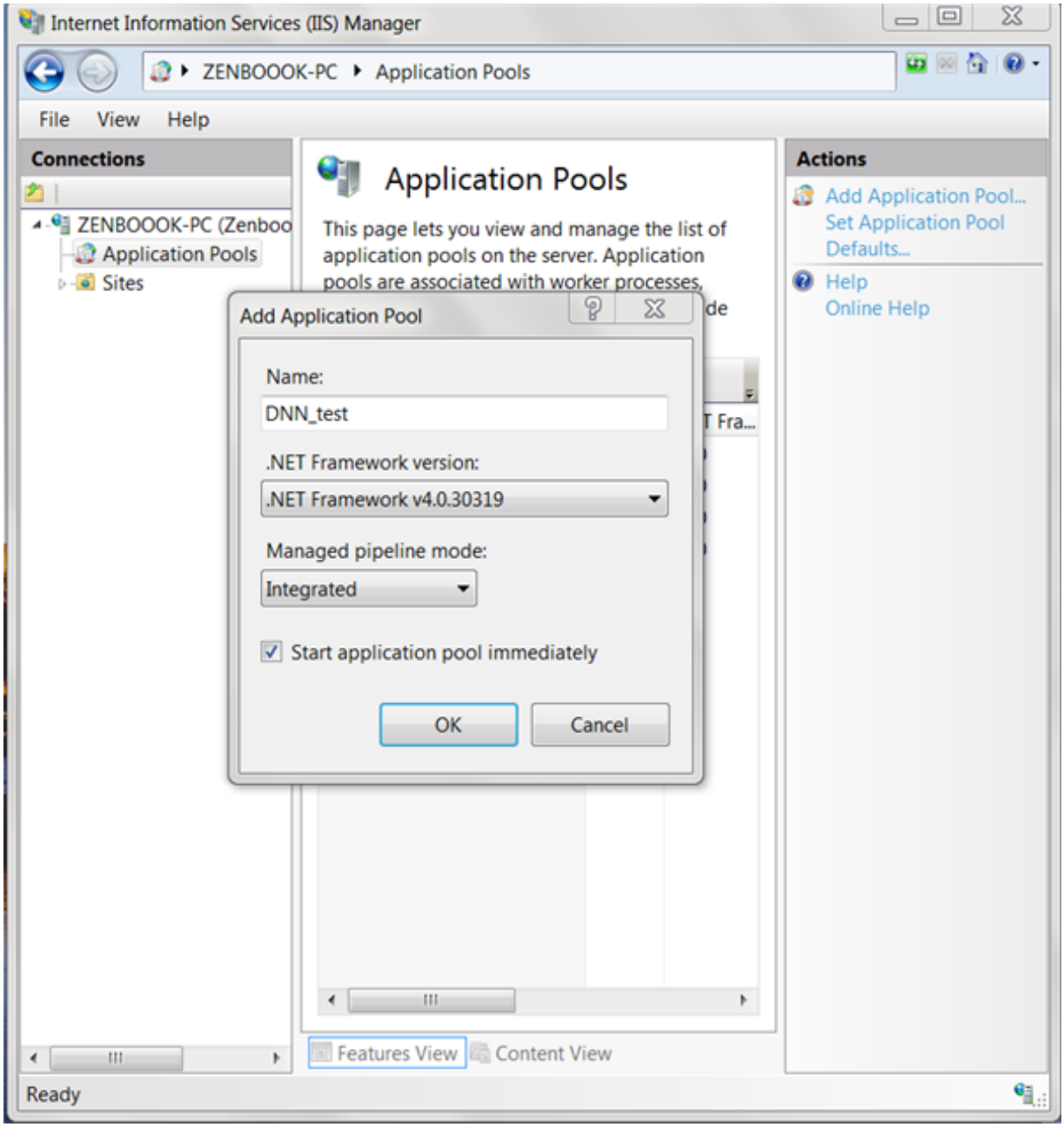
1. Unzip DNN_Platform_x.x.x.zip to c:\DNN_Platform_x.x.x folder.

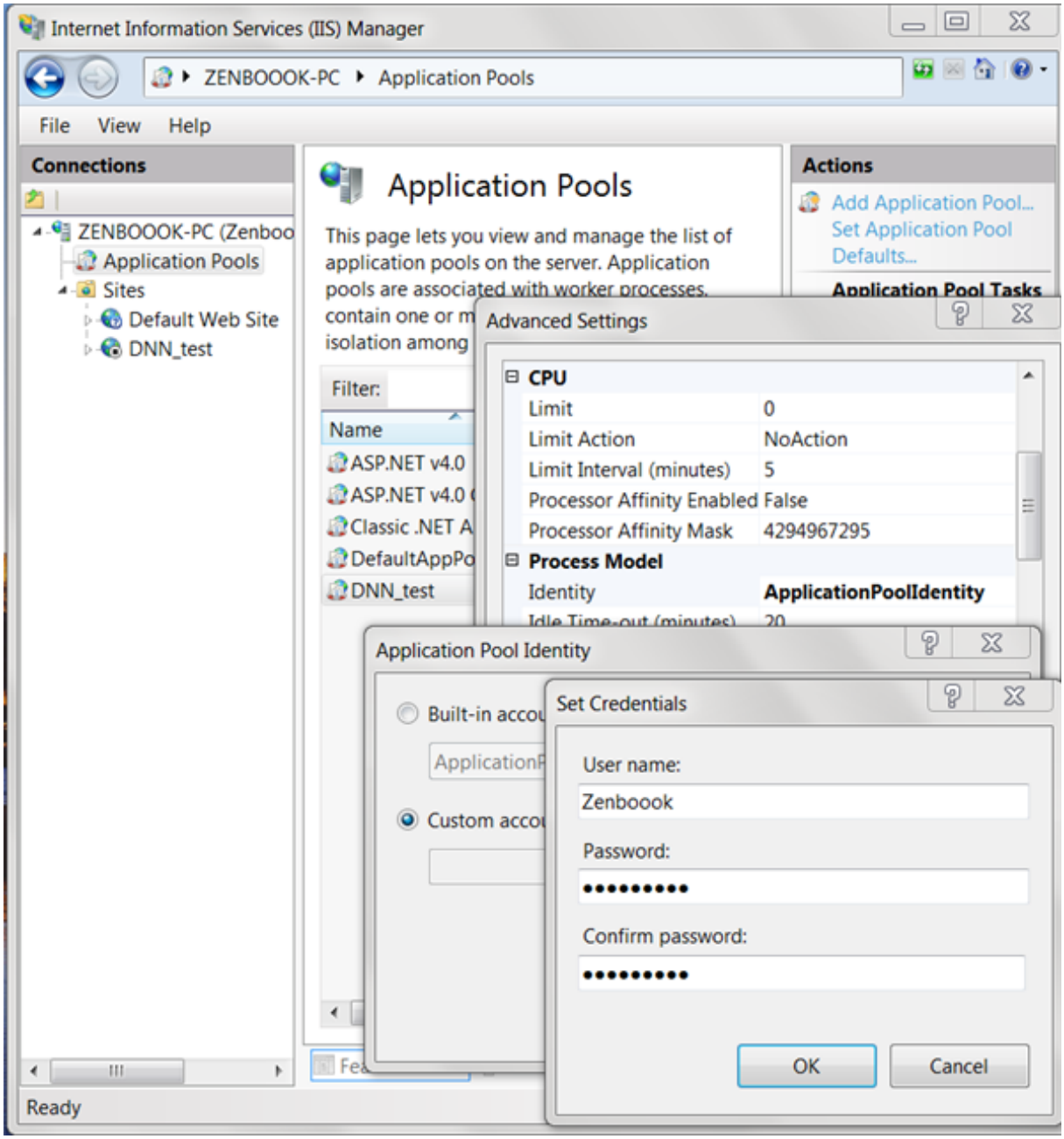


2. Create new database called DNN_test with MSQLSMS.

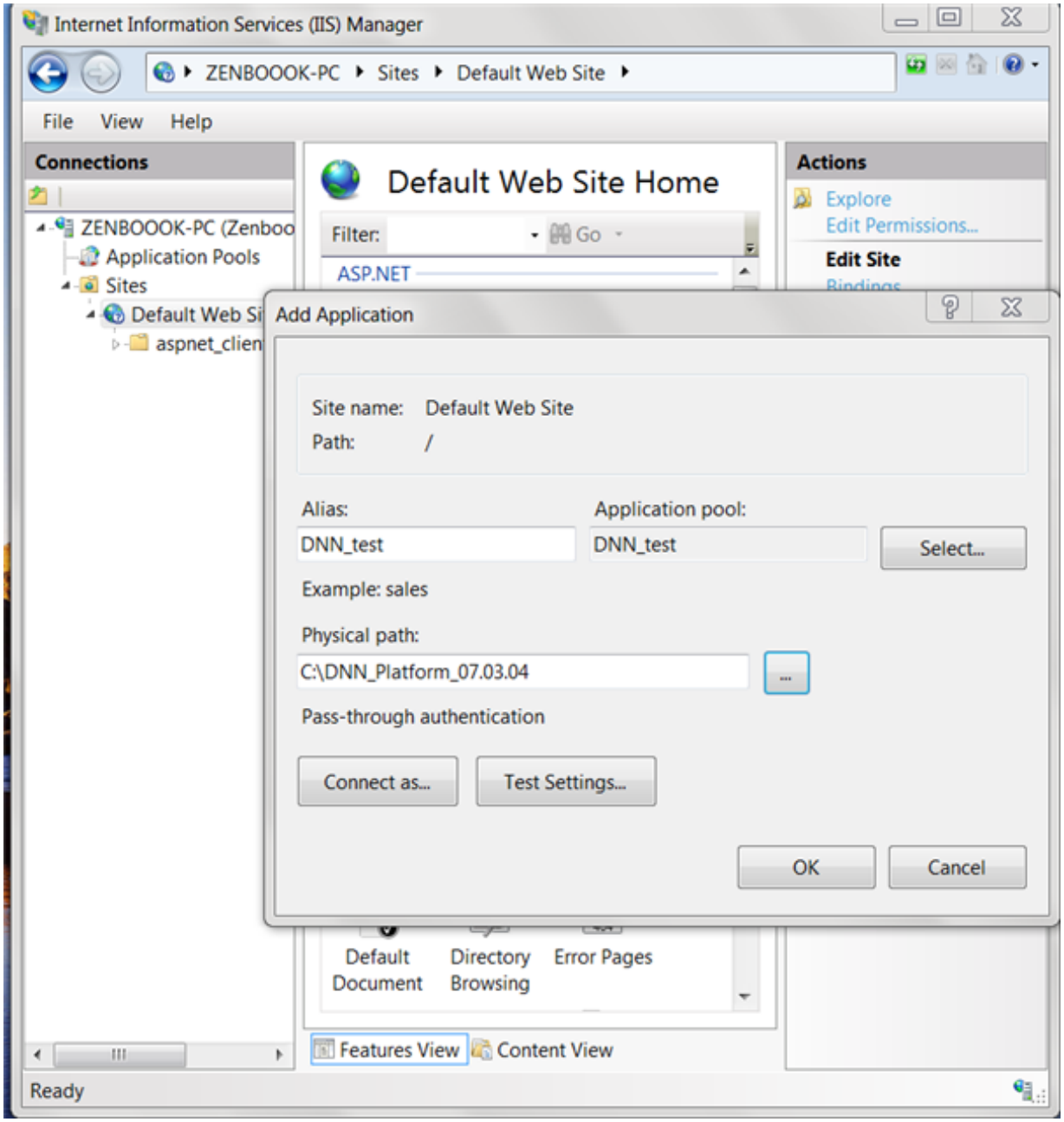


3. Add Application Pool called DNN_test with IIS Manager and under **Advanced Settings**, change the **Application Pool Identity** to custom account for DNN_test. You'll be prompted for your **Credentials** (your Window's user and password).

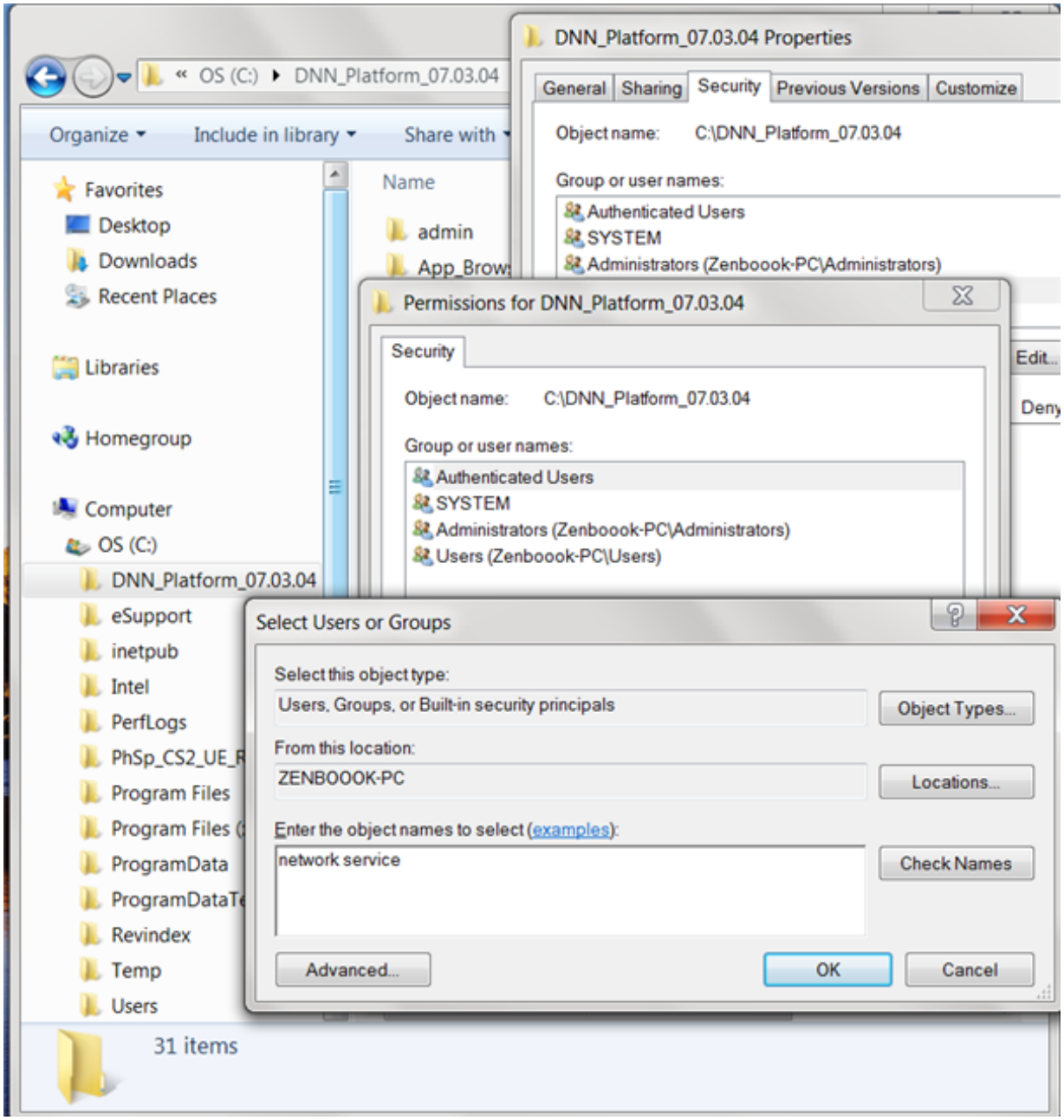

Internet Information Services (IIS) Manager
ZENBOOOK-PC
Application Pools
File
View
Help
Connections
ZENBOOOK-PC (Zenboo
Application Pools
Sites
Application Pools
This page lets you view and manage the list of application pools on the server. Application pools are associated with worker processes,
Add Application Pool
Name:
DNN_test
.NET Framework version:
.NET Framework v4.0.30319
Managed pipeline mode:
Integrated
Start application pool immediately
OK
Cancel
Actions
Add Application Pool...
Set Application Pool Defaults...
Help
Online Help
Features View
Content View
Ready



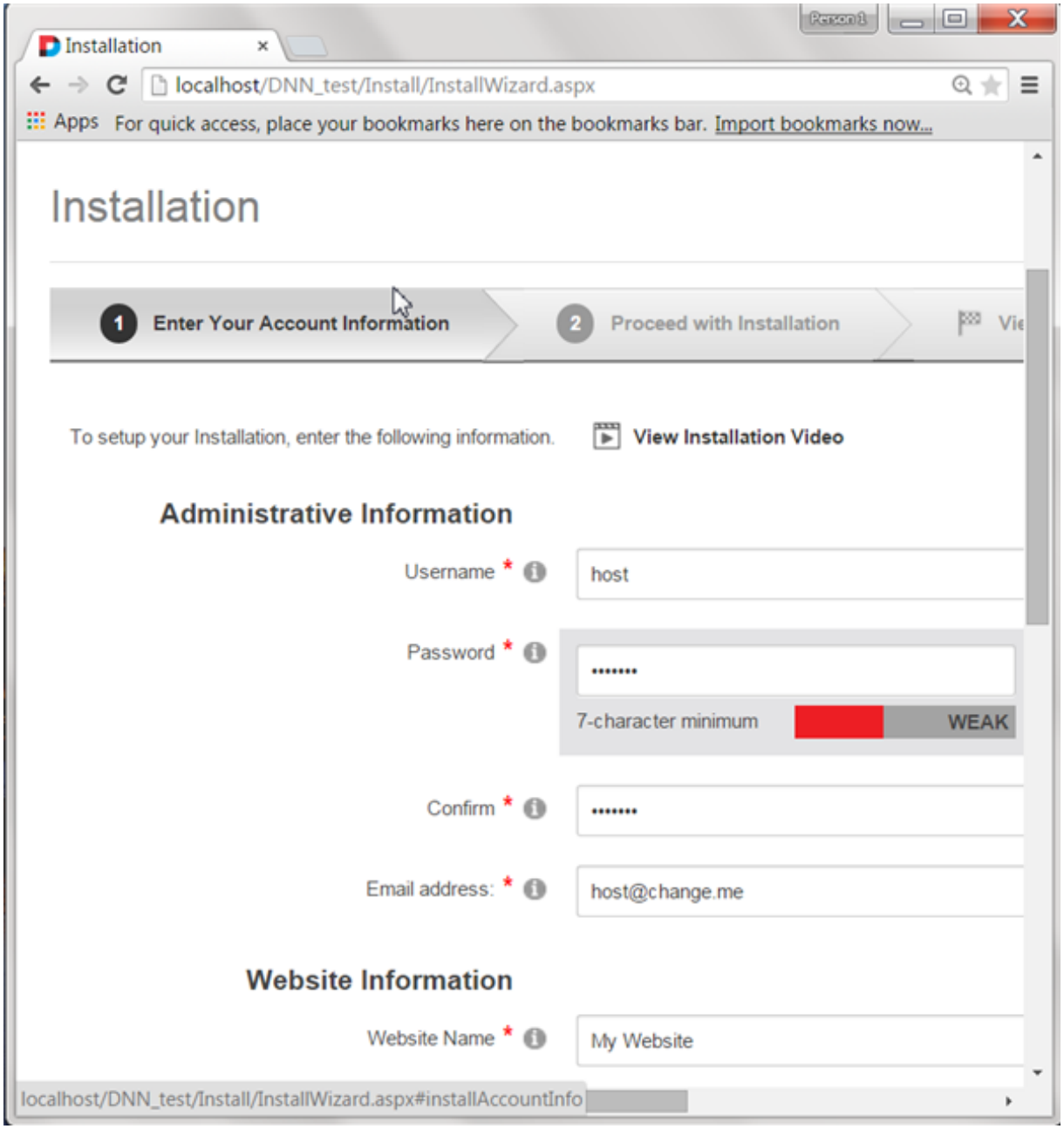
4. Under Sites > Default Web Site, add Application called DNN_test.



5. Change file permission on previously installed DNN_Platform_x.x.x folder.



6. At http://localhost/DNN_test/, enter the host and password (e.g. host, dnnhost) and point to relevant local test SQL.


Installation
localhost/DNN_test/Install/InstallWizard.aspx
Apps For quick access, place your bookmarks here on the bookmarks bar. Import bookmarks now...
Installation
1 Enter Your Account Information
2 Proceed with Installation
To setup your Installation, enter the following information.
View Installation Video
Administrative Information
Username *
host
Password *
7-character minimum
WEAK
Confirm *
Email address: *
host@change.me
Website Information
Website Name *
My Website
localhost/DNN_test/Install/InstallWizard.aspx#installAccountInfo

Installation

localhost/DNN_test/Install/InstallWizard.aspx

Apps For quick access, place your bookmarks here on the bookmarks bar. Import bookmarks now...

Template: Default Website

Language: English (United States)

Database Information

Unable to connect to databas

Database Setup: Default / Custom

No valid default database connection detected.
Standard Database setup option is unavailable

Database Type: SQL Server Express File / SQL Server/S

Server Name *: localhost

Database Name *: DNN_test

Object Qualifier:

Security: Integrated / User Defined

Run Database As: Database Owner

How to uninstall

Make sure to perform a complete backup of your system before performing the following steps.

1. Go to **Host > Extensions** and uninstall **"RevindexStorefront"**. It's recommended to keep files on the system by leaving the "**Delete Files"** checkbox unchecked.

2. Go to **Host > Schedule** and remove "**RevindexStorefront.*"** scheduler item.

3. It's not necessary to delete module files. Leaving module files on the system will not consume memory or CPU when unused. Deleting library files may affect other modules that rely on any shared assemblies. The following files may be deleted if absolutely necessary:

   bin\Revindex.*.dll
   DesktopModules\Revindex.Dnn.RevindexStorefront*

How to re-install with data

Under normal circumstances, you should never need to re-install Revindex Storefront from scratch unless your DotNetNuke system is corrupted beyond repair and needs to be re-installed cleanly. The following step is a rough guideline to try to retain the data if you come to the point where you need to re-install.

Make sure to perform a complete backup of your system before performing the following steps.

1. Take a full backup of your files and database.
2. Create a copy of your database. Give your temporary database a name such as "Temp1". Please see this topic (http://technet.microsoft.com/en-us/library/ms188664.aspx) for more information on copying your database.
3. From SQL Server Management Studio, delete all Revindex_Storefront_* tables from your temporary database.
4. Export the data to your temporary database using SQL Server Management Studio:
    i. Right mouse on your live database and click **Tasks > Export Data**.
    ii. Follow the wizard and select live database you are exporting the data from.
    iii. Select the temporary database you are exporting the data to.
    iv. Select **"Copy data from one or more tables or views"**.
    v. Select all the Revindex_Storefront_* tables.
    vi. Click **Finish**.
5. From your DotNetNuke **Host > Extensions** page, uninstall Revindex Storefront and select **Delete files** checkbox.
6. Install a new instance Revindex Storefront with the same version as the previous Revindex Storefront. If you're re-installing DotNetNuke, make sure your portal ID number is also the same.
7. To restore your data, use SQL Server Management Studio:
    i. Right mouse on your live database and click **Tasks > Import Data**.
    ii. Follow the wizard and select the temporary database (e.g. "Temp1") that you will be importing the data from.
    iii. Select your live database where you will be importing the data to.
    iv. Select **"Copy data from one or more tables or views"**.
    v. Select all the Revindex_Storefront_* tables.
    vi. On each selected table, click on **Edit Mapping** and select **Delete rows in destination table**

checkbox and select the **Enable identity insert** checkbox. Look for any column with the type "timestamp" and mark its Destination as "<ignore>".

vii. Click **Finish**.

8. To restore any template customizations, copy all the files from your backup under **\DesktopModules\Revindex.Dnn.RevindexStorefront\Portals\X** where X is your portal ID number to the same respective folder location on your live site. Also copy all files from **\DesktopModules\Revindex.Dnn.RevindexStorefront\App_LocalResources** to the same respective folder on your live site to restore any static localization text changes you may have made.

How to migrate product data

If you run multiple environments such as a staging and a production environment, you can following the suggested approach to migrate your products from one environment to another. You must ensure both environments operate on the same Portal ID number. Please ensure to take full backup first before starting the migration. This is an advanced topic and should only be performed by an experienced administrator who has strong understanding of DNN, SQL database and Revindex Storefront.

Using SQL Server Management Studio:

1. Right mouse on your source database and click **Tasks > Export Data**.
2. Follow the wizard and select source database you are exporting the data from.
3. Select the target database you are exporting the data to.
4. Select "Copy data from one or more tables or views".
5. Select all these tables:

   Revindex_Storefront_Category
   Revindex_Storefront_Distributor
   Revindex_Storefront_Gallery
   Revindex_Storefront_Manufacturer
   Revindex_Storefront_Product*
   Revindex_Storefront_RelatedProduct
   Revindex_Storefront_RequiredProduct
   Revindex_Storefront_Seller
   Revindex_Storefront_Warehouse

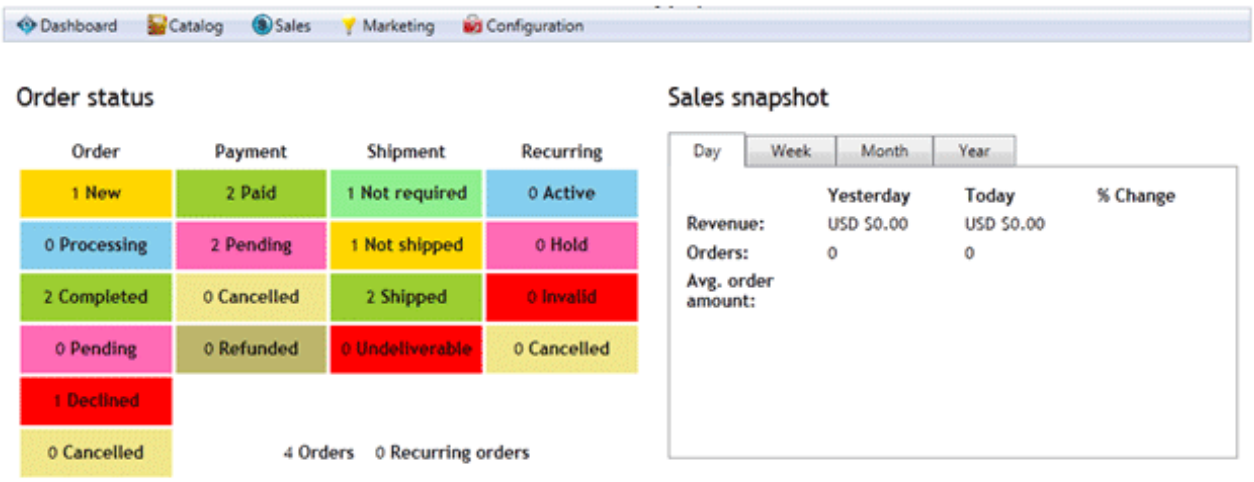
6. On each selected table, click on **Edit Mapping** and select the **Enable identity insert** checkbox. Look for any column of type "timestamp" and set the Destination to <ignore>.
7. Click Finish.
8. Copy over all the files from your folder \DesktopModules\Revindex.Dnn.RevindexStorefront\Portals\X to the other server respectively where X is your portal number.
9. Test your data

If you're running tests on a development/staging machine with production data copied over and you sell recurring products, make sure to disable any recurring orders or change the payment gateway credentials, otherwise it will automatically charge your customer's credit card when the order is due for

renewal.

Administration

The administration section is used to configure your store, define the products you sell as well as manage orders. The **Storefront** page you created hosts the main **RevindexStorefront** administration module control where you can perform configuration changes, manage products and orders.

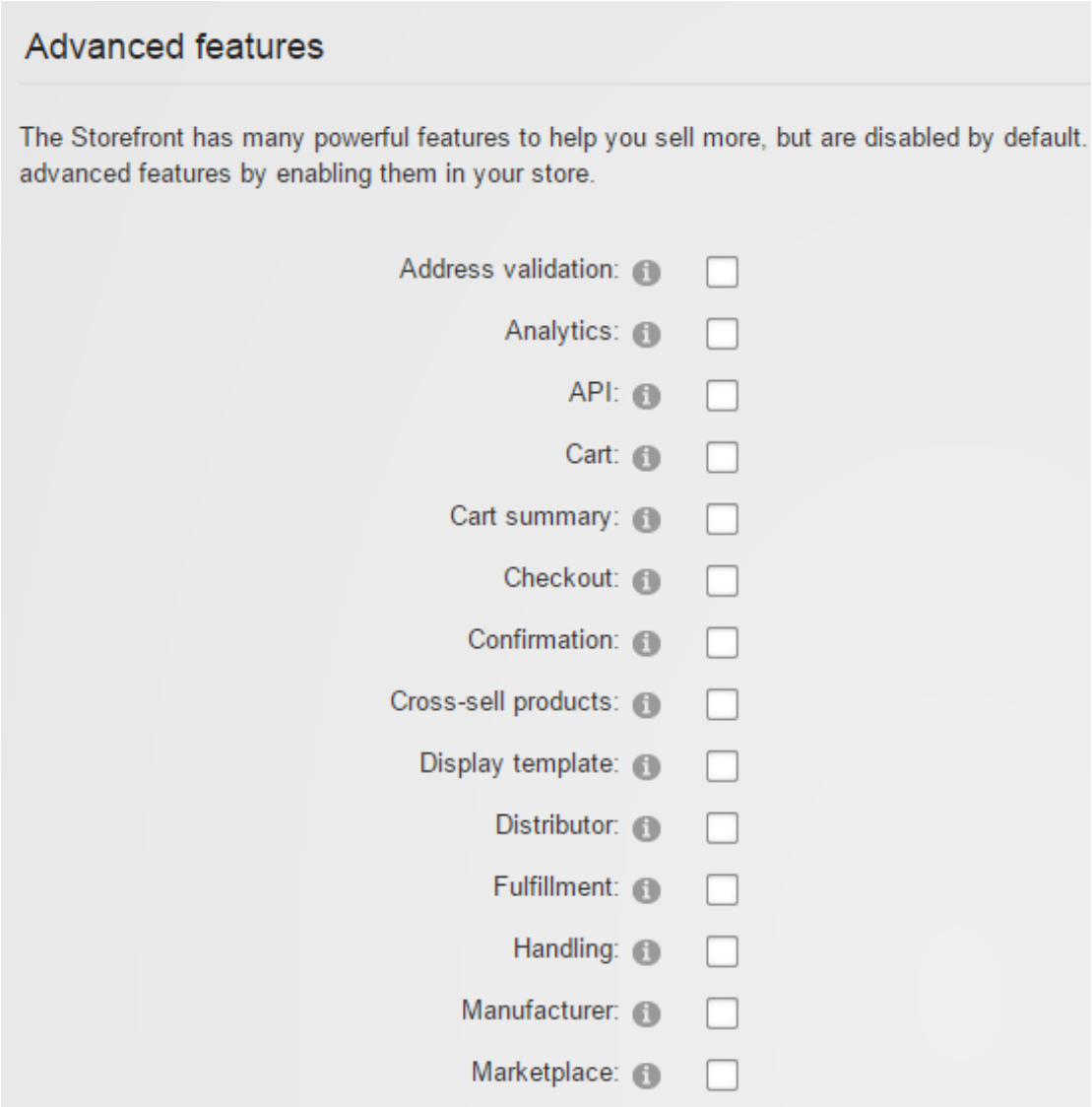


Configuration

General

Start by configuring your basic store information under **Configuration > General** such as your store name, email, address, units of measure, etc. This information will be used by various functions of your Storefront such as calculating shipping cost based on your store address or sending email receipt to the customer.

The Storefront comes with many advanced features that are disabled by default such as API, cross-sell, handling, packing, fraud score, address validation, etc. You may want to explore and enable some of these features once you have familiarized with the basic workings of the software.



Currencies

Revindex Storefront supports every known currency in the world. You can display prices and amounts in the currency of the user selected culture. For example, a customer viewing your site in English United States will see USD $, whereas a customer from English Canada will see CAD $, and a customer from France will see the Euro € , etc.. Currency conversion is performed using an exchange rate table from the **Configuration > Currencies** menu. If the exchange rate is not provided for a culture, the Storefront will automatically fall back to the primary currency.

It's important to note that the Storefront internally stores and calculates all the amounts in the primary currency. Actual money is also transacted with your payment gateway in the primary currency. Any non-primary currency is merely converted from the primary currency multiplied by its respective exchange rate for display on screen. Therefore, it's extremely important to ensure you pick the correct primary currency for your business from the start.

In reality, currency exchange rate varies throughout the day. The converted value displayed to the customer is only an approximation of the actual amount based on the exchange rate provided. In the case of credit card charges, the actual amount charged to the customer is based on the exchange rate charged by the bank at the moment of settlement and may be different than the exchange rate you provided in the table.

You can enable the **Auto update** feature to automatically update the exchange rates periodically using one of the supported currency providers (Yahoo Finance, European Central Bank, etc.). By default, the currency scheduler runs daily under the **Host > Schedule** page. Each provider may return a slightly different rate based on where they source and how frequently they update their own internal rates. Please verify if the selected provider supports your currency and the accuracy of the rate returned.

Payment

The Storefront supports many different payment methods such as cash, check, credit card, debit card, money order, PayPal and wire transfer payment methods. By default, most payment methods are disabled. Select the payment methods to allow from the **Configuration > Payment** menu. You must enable at least one payment method.

None payment method

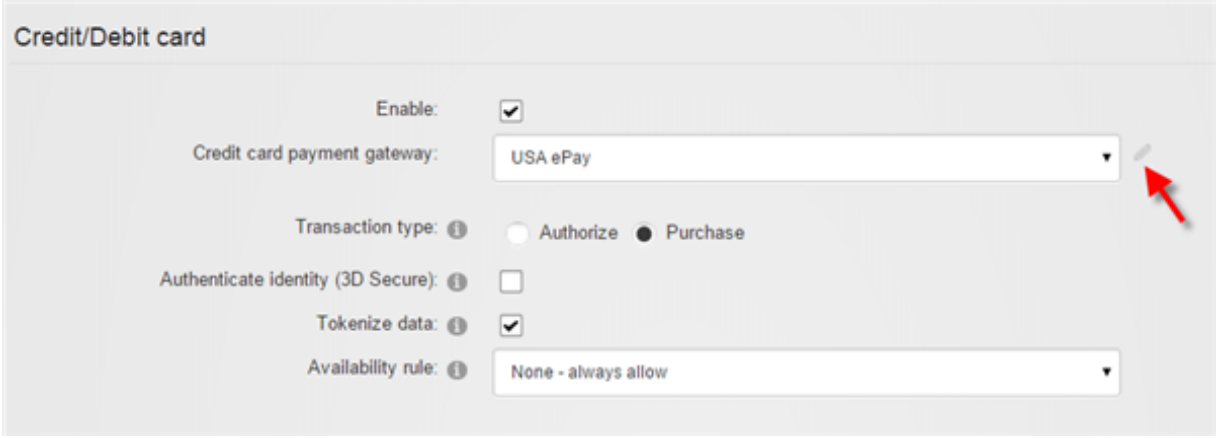
The **None** is a special payment method that allows a user to bypass payment and is useful for allowing a customer to checkout zero dollar amounts such as free trials. It should normally be used with an availability rule to allow it only when the balance amount due is zero.

Credit card payment method

If you simply want to capture credit card information and perform manual transaction later (e.g. using a virtual terminal), set the **Credit card payment gateway** to **"Manual"**.

Payment processor

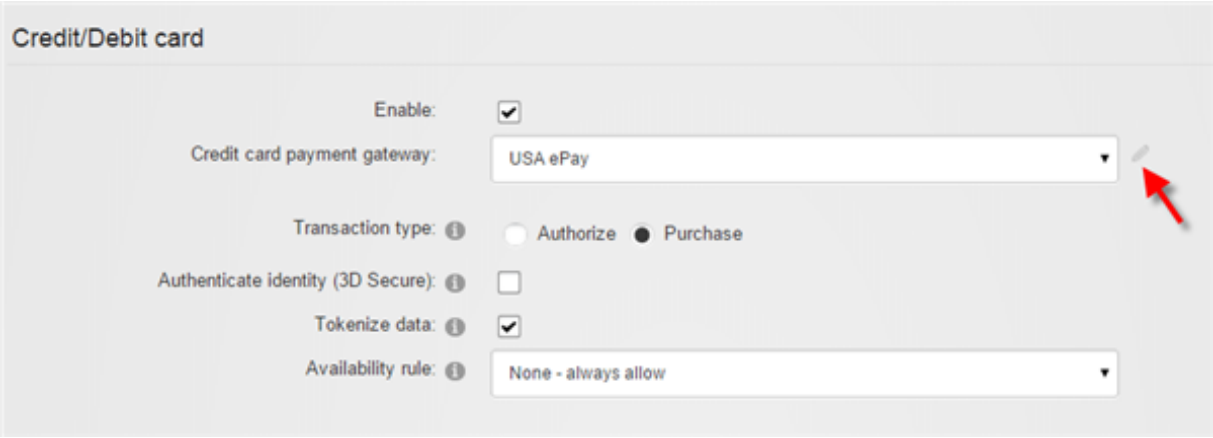
If you're using a 3rd party payment processor, you also need to enter the credentials for the desired payment method. For example, if your credit card payment gateway is Authorize.NET, you need to set the Authorize.Net gateway credentials. Similarly, if you enable the PayPal payment method, you need to set the PayPal Express Checkout or PayPal Website Payments Standard credentials. Click on the edit icon to enter your payment gateway credentials. Please see Gateways (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/payment-gateways/rvdwkpvm/section) for more information.



Gateways

In order to accept credit card and other advanced payment types like PayPal, you will need to open a merchant account with a payment gateway provider (Authorize.net, Elavon, PayPal, etc.). A payment gateway provides a secure connection to communicate payment information between the customer's financial account and your bank account.

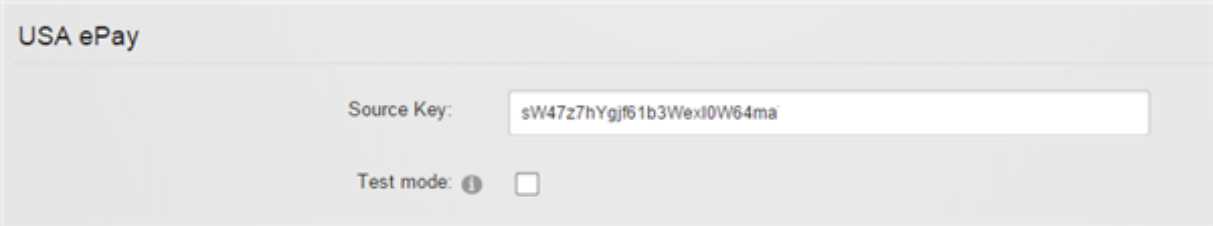
You will need to enter the account credentials given by your payment gateway provider into the Storefront under **Configuration > Payment**. For the type of payment method (credit card, PayPal, etc.), click on the edit icon to enter your payment gateway credentials.



Test mode

Only enable **Test mode** if your gateway provided you with a separate test account. The test account is usually different from your production account. Under test mode, the system will attempt to transact with the gateway's sandbox server and results will often vary depending on the amount, credit card number and expiry being used in order to simulate different approval and denial errors. Please consult your payment gateway's technical documentation for running in test mode.

Instead, it is recommended that you perform your tests in production mode. Most payment gateways will waive the transaction fee if you refunded a transaction before the funds have settled. Please contact your payment gateway for more information.



Currency

Most payment gateways accept only a single currency (e.g. USD) and are usually predetermined in your merchant account during registration. If a payment gateway accepts multiple currencies, the Storefront will attempt to transmit your primary currency information to the payment gateway. Always ensure that your payment gateway can support your primary currency for your merchant account.

Recurring payment

Automatic payment collection for a recurring order is supported for certain payment gateways (e.g. Authorize.Net AIM, Authorize.Net CIM, Paymentech, Elavon, PayPal Express Checkout, PayPal Website Payments Pro, Sage Pay Direct, etc.). Generally, you cannot automatically collect recurring payments where the checkout process requires manual intervention from the customer such as paying by check, cash, money order, etc.. The recurring order will still get created and you can always collect the money separately by invoicing your customer or use the virtual terminal provided by your payment gateway. You may also use the virtual terminal of your payment gateway to schedule the recurring collection of payment outside of the Storefront, if available. Please see the information on individual payment gateways to determine if it supports recurring payments.

Please contact us if you don't see the payment gateway you like to use.

Authorize.Net AIM

Authorize.Net (http://reseller.authorize.net/application/?resellerId=28871) Advanced Integration Method (AIM) is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Login** – Your API Login that uniquely identifies your account.
2. **TranKey** – Your API transaction key.

Leave the **Gateway URL** blank unless if you're using a different payment gateway that is emulating Authorize.Net compatible API.

Authorize.Net CIM

Authorize.Net (http://reseller.authorize.net/application/?resellerId=28871) Customer Information Manager (CIM) is a payment profile gateway that allows you to accept credit card transactions, bank payments, etc.. It uses a hosted payment page on Authorize.Net Web site for both one-time purchase and recurring payment (no credit card information passes through your site) thereby simplifying your PCI requirements.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment
- Purchase using gateway hosted page

The following fields are required:

1. **Login** – Your API Login that uniquely identifies your account.
2. **TranKey** – Your API transaction key.

Since Authorize.Net CIM uses pop-up to display payment profile, please ensure you also have enabled pop-up under your DNN **Admin > Site Settings** page.

Authorize.Net SIM

Authorize.Net (http://reseller.authorize.net/application/?resellerId=28871) Simple Integration Method (SIM) is a payment wallet gateway that allows you to accept credit card transactions, bank payments, etc. using a hosted payment page on Authorize.Net Web site.
This gateway supports the following features:

- Purchase using gateway hosted page
- Payment notification

The following fields are required:

1. **Login** – Your API Login that uniquely identifies your account.
2. **TranKey** – Your API transaction key.
3. **MD5 Hash -** Your secret MD5 hash value configured in your merchant account's security settings used to verify the response received from Authorize.Net.

Do not configure any Relay Response URLs in the merchant account settings otherwise the Storefront may not be able to complete the URL response relay needed to confirm payment.

Leave the **Gateway URL** blank unless if you're using a different payment gateway that is emulating Authorize.Net compatible API.

BluePay

BluePay (http://www.bluepay.com) is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Account ID** – Your API account.
2. **Secret Key**

CashFlows Remote API

CashFlows (http://www.cashflows.com) Remote API is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Purchase
- Refund
- Recurring payment

The following fields are required:

1. **ProfileID** – Your API profile ID.
2. **Password** – Your API password.

Please contact Ben Nunn or Paul Osborne via email (tech-support@cashflows.com) or by phone (01223 550920) to verify your CashFlows account configuration. In particular, if you intend to accept recurring payments, please let them know the Storefront uses the "Alternative Recurring Payment Request parameters" to handle recurring transactions.

Chase Paymentech Orbital Gateway

Chase Paymentech (http://www.chasepaymentech.com) Orbital Gateway is a direct payment gateway that allows you to accept credit card transactions within your site. Ensure that your merchant account is set up to use either the "Salem" or “Tampa” implementation.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Username** – The credentials for Chase Paymentech Orbital Gateway.
2. **Password**
3. **Merchant ID**
4. **Terminal ID** – For example “001”.
5. **Bin -** Enter "000001" for Salem implementation or "000002" for Tampa implementation.

When running in "Salem" implementation, you're responsible for running your own offline end-of-day batch settlement. The Storefront does not perform any batch settlement.

To certify your merchant account for use with Revindex Storefront, please contact **Jason Kimbrell**, Director, Integrated Solutions - Research & Discovery at Chase Paymentech (Phone: 214.849.3634, Email: Jason.Kimbrell@Chasepaymentech.com).

CyberSource

CyberSource (http://www.cybersource.com/) SOAP is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Merchant ID**
2. **Transaction Key**

Please make sure you use the security keys provided under the SOAP Toolkit API.

Dotpay

Dotpay (http://www.dotpay.pl/en/) is a Polish payment wallet gateway that allows you to accept a variety of payments (credit card, bank transfer, debit, etc.) through the hosted page on Dotpay Web site.

This gateway supports the following features:

- Purchase using gateway hosted page
- Payment notification

The following fields are required:

1. **Account ID**
2. **Pin**

You also need to configure your Dotpay account under **Settings > URLC parameters** to set the option to "Permit to receive URLC parameter from external services" in order for the payment notification to work.

Elavon Virtual Merchant

Elavon (http://www.elavon.com) Virtual Merchant is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Account ID** – Also known as your account's Merchant ID.
2. **User ID**
3. **Pin** – This number is generated within Virtual Merchant admin page.

Elavon Virtual Merchant allows you to customize the required and non-required fields from Elavon's **Terminal > Merchant > Payment fields** page. It is, however, recommended that you keep the required fields to a minimal.

eProcessing Network

eProcessing Network (http://www.eprocessingnetwork.com) is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Account number**
2. **Restrict key**

You must also enable Authorize.Net gateway on your account to use eProcessing Network.

eWay Direct Payment Australia

eWay Direct Payment (http://www.eway.com.au) is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Customer ID** - Your API Customer ID is not your merchant number.
2. **Refund password** - Password required and must be enabled if you intend to perform refund through the Storefront.

FirstData Global Gateway Web Service

FirstData Global Gateway (http://www.firstdata.com), also known as LinkPoint, Web Service is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **User** – Your API username and is different from your account username. The user is contained in the WS<StoreID>._.1.auth.txt file.
2. **Password** – Your API password and is different from your account password. The password is contained in the WS<StoreID>._.1.auth.txt file.
3. **PEM Certificate** – Open the PEM certificate (WS<StoreID>._.1.pem file) using Notepad. Copy the entire content into this field including the BEGIN CERTIFICATE header and END CERTIFICATE footer.

Login to your virtual terminal (https://secure.linkpt.net/lpc/servlet/LPCLogin (https://secure.linkpt.net/lpc/servlet/LPCLogin)) and download the certificate under **Support > Download Center** menu. Enter your **Tax ID** and click **Download** for Web service. Extract the zip file.

You will also need to install the PKCS #12 certificate (WS<StoreID>._.1.p12 file) contained in the same archive if your server is unable to connect to FirstData or you receive the error "Could not create SSL/TLS secure channel".

1. Run the Windows **MMC** console from the command prompt.
2. Click on **File > Add/Remove Snap-In** to add the **Certificates** object.
3. Choose **Computer account**, followed by **Local Computer** when prompted.
4. Expand the **Certificates (Local Computer)** node. The client certificate will be installed in the **Personal** folder. Right click the **Personal** folder, select **All Tasks**, and click **Import**.
5. Follow the wizard to import the p12 file. The password is contained in the WS<StoreID>._.1.p12.pw.txt file you received in your archive.
6. Grant the IIS application pool user access to the newly imported certificate. From the console, right

mouse on the certificate you just imported and click on **All Tasks > Manage Private Keys**. Click **Add** and then enter the username of the IIS application pool user (e.g. IIS App Pool\DefaultAppPool) and click **OK**. Make sure to grant that user **Full Control** permission.

Alternatively, you can also grant permission using the **WinHttpCertCfg** tool from Microsoft (http://www.microsoft.com/download/en/details.aspx?displaylang=en&id=19801). Run the following command to grant access to the IIS user where <StoreID> is your Store ID and AppPoolUser is your IIS Application Pool user.

Winhttpcertcfg -g –c LOCAL_MACHINE\My –s WS<StoreID>._.1 –a AppPoolUser

InternetSecure

InternetSecure (http://internetsecure.com/) is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Gateway ID**

You must contact InternetSecure to enable online refund and authorization operations in your account if you intend to use these features.

Intuit QuickBooks Merchant Service

Intuit QuickBooks Merchant Service (http://payments.intuit.com/products/internet-merchant-accounts.jsp) (QBMS) is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

Follow the steps below to obtain the information needed by the payment gateway.

1. You first need to register with https://developer.intuit.com (https://developer.intuit.com/) (previously http://appreg.intuit.com (http://appreg.intuit.com)) and login to the site.
2. Create a new app and choose either "Select API" or "QBMS Payments App".
3. Under "Legacy QBMS Payments App" and click on the **Create a QBMS payments app**. Set the following information:
   - **Application type** - Choose Desktop
   - **Environment** - Choose Production
   - **Application Name** - Give the name of your application
   - **Application Identifier** - Give a unique name without spaces
   - **Domain name** - Enter any domain name (e.g. mysite.com)
4. If you receive a verification email, make sure to click on the verification link that you received in your email and enter the verification code to confirm your new application. You may skip this step if you don't receive an email.
5. Once verified, take note of your **AppID** and **AppLogin** information.
6. Go to the following URL to obtain your connection ticket where **<AppID>** should be replaced with your application ID that you created. Choose the production URL if you created a production environment.

   Production:
   https://merchantaccount.quickbooks.com/j/sdkconnection?appid=**<AppID>**&sessionEnabled=true

Test mode:
https://merchantaccount.ptc.quickbooks.com/j/sdkconnection?appid=**<AppID>**&sessionEnabled=false

7. Login to the page with your merchant email and password.
8. Click on the **Create connection** button if you're not already presented with the connection ticket screen.
9. Copy the connection ticket info.

Once you have verified your application, you will be able to collect the following information that will be required to configure your payment gateway in the Storefront:

1. **App ID**
2. **App Login**
3. **Connection Ticket**

Please ensure you have disabled the **Login Security** option on your Intuit account as described here (https://developer.intuit.com/docs/030_qbms/0070_advanced_topics/session_authentication) if you encounter any session authentication error.

MasterCard Internet Gateway Service Hosted

MasterCard Internet Gateway Service (https://www.mastercardpaymentgateway.com) 3-Party Virtual Payment Client, also known as MIGS VPC, is a payment wallet gateway that allows you to accept credit card payments through the hosted page on MasterCard Web site. MIGS is used by many banks including ANZ, Bendigo, Commonwealth, Mauritius Commercial Bank, etc.

This gateway supports the following features:

- Purchase using gateway hosted page

The following fields are required:

1. **Merchant ID**
2. **Access Code**
3. **Secure Hash Secret**

Merchant e-Solutions

Merchant e-Solutions (http://www.merchante-solutions.com) is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Profile ID**
2. **Profile Key**

Mollie iDEAL

Mollie iDEAL (http://www.mollie.nl) is a payment wallet gateway that allows you to accept iDEAL bank transfer payments through the hosted page on Mollie Web site. iDEAL payments are primarily used in the Netherlands.

This gateway supports the following features:

- Purchase using gateway hosted page
- Payment notification

The following fields are required:

1. **Partner ID**

The list of banks accepted by Mollie is listed here (https://secure.mollie.nl/xml/ideal?a=banklist).

Moneris eSelectPlus Canada

Moneris eSelectPlus (http://www.eselectplus.ca) is a Canadian direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Store ID**
2. **API Token**

NMI

NMI (Network Merchants LLC) (https://www.nmi.com/) is a payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment
- Tokenization
- 3D Secure

The following fields are required:

1. **Key ID** - Only required if 3D Secure is enabled.
2. **Key** - Only required if 3D Secure is enabled.
3. **Username** - Ensure the account has access to perform auth, sale, capture, void, refund.
4. **Password**
5. **Gateway URL -** NMI provides white label payment processing for many other payment gateways. If you're using a gateway that is utilizing NMI beneath the cover, you simply need to enter the appropriate Gateway URL. Otherwise, you can ignore this field.

PayFast Website Payment

PayFast (http://www.payfast.co.za) Website Payment is a payment wallet gateway that allows you to accept a variety of payments (credit card, voucher, etc.) through the hosted page on PayFast Web site.

This gateway supports the following features:

- Purchase using gateway hosted page
- Payment notification

The following fields are required:

1. **Merchant ID**
2. **Merchant Key**
3. **PDT Key -** PDT allows the Storefront to validate the transaction was successful after redirecting the customer to PayFast Web site. if you enabled PDT on your PayFast account, you need to enter the PDT key. If you leave it empty, the Storefront will rely solely on the ITN notification from PayFast.

PayPal Express Checkout

PayPal (http://www.paypal.com) Express Checkout is a payment wallet gateway that allows you to accept PayPal transactions using a hosted page on PayPal Web site.

This gateway supports the following features:

- Purchase using gateway hosted page
- Recurring payment

The following fields are required:

1. **Username** – Your API username and is different from your account username.
2. **Password** – Your API password and is different from your account password.
3. **Signature**

To obtain the API credentials, you need to have a business account with PayPal. Login to PayPal Web site and go to **Profile**. Then go to **API Access** and followed by **Request API Credentials**. Select **Request API signature** and agree to the terms. Copy the API credentials (**API Username**, **API Password** and **Signature**) information.

For recurring payment, you will need to contact PayPal to enable "Reference Transactions" in your account first.

If you are using a URL rewriter, please ensure that it is not rewriting your checkout's page URL to lowercase as PayPal will redirect back to your site passing a security token that needs to be in mixed-case.

PayPal Payment Gateway

PayPal (http://www.paypal.com) Payment Gateway (formerly Payflow Pro and can be used with PayPal Payments Pro) is a direct payment gateway that allows you to accept credit card transactions within your site by interfacing with other major merchant providers.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **User** – If you set up one or more additional users on the account, this value is the ID of the user authorized to process transactions. If, however, you have not set up additional users on the account, User has the same value as Vendor.
2. **Vendor** - Your merchant login ID that you created when you registered for the account.
3. **Partner** - The ID provided to you by the authorized PayPal Reseller who registered you for the Payflow SDK. If you purchased your account directly from PayPal, use "PayPal".
4. **Password** – The password that you defined while registering for the account.

To obtain a Payflow Pro account, you must already have a merchant account with one of their compatible merchant providers or using PayPal Payments Pro. If you don't have a merchant account, you can obtain both the merchant account and Payflow Pro by contacing Revindex. You can also sign up for Payflow Pro directly from https://manager.paypal.com (https://manager.paypal.com)

PayPal Payments Standard

PayPal (http://www.paypal.com/) Payments Standard is a payment wallet gateway that allows you to accept PayPal and credit card transactions using a hosted page on PayPal Web site. Customers will be redirected temporarily to the hosted payment page to complete the checkout process.

This gateway supports the following features:

- Purchase using gateway hosted page
- Payment notification

The following fields are required:

1. **Email** – Your PayPal registered email account.
2. **Username** – Your API username and is different from your account username.
3. **Password** – Your API password and is different from your account password.
4. **Signature**

To obtain the API credentials, you need to have a personal or business account with PayPal. Login to PayPal Web site and go to **Profile**. Then go to **API Access** and followed by **Request API Credentials**. Select **Request API signature** and agree to the terms. Copy the API credentials (**API Username**, **API Password** and **Signature**) information.

Checkout using PayPal Website Payments Standard relies on the Web browser redirection to a PayPal hosted payment page and therefore, you need to configure the return URL to ensure the customer is safely redirected back to your site after completing their payment on PayPal. To configure the return URL, login to PayPal Web site and go to **Profile**. Then go to **Website payment preferences.** Enable **Auto Return** and simply set the **Return URL** field to your Web site's root address (e.g. http://www.example.com (http://www.example.com)). The Storefront will automatically set the complete notification URL via the PayPal API behind the scene.
Revindex Storefront supports Instant Payment Notification (IPN) with PayPal Website Payments Standard. IPN allows a checkout to complete without the customer needing to redirect back to your site after paying on PayPal.com site. There is nothing to configure but if your PayPal account is set to block payments for non-confirmed addresses, IPN may not work correctly. To allow payments from non-confirmed addresses, go to your PayPal account under **Profile > Payment Receiving Preferences** and select "No**"** for the **Block payments from U.S. users who do not provide a Confirmed Address** setting.

PayPal Website Payments Pro

PayPal (http://www.paypal.com/) Website Payments Pro is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Username** – Your API username and is different from your account username.
2. **Password** – Your API password and is different from your account password.
3. **Signature**

To obtain the API credentials, you need to have a business account with PayPal. Login to PayPal Web site and go to **Profile**. Then go to **API Access** and followed by **Request API Credentials**. Select **Request API signature** and agree to the terms. Copy the API credentials (**API Username**, **API Password** and **Signature**) information.

Paystation 3-Party

Paystation (http://www.paystation.co.nz/) 3-Party is a payment wallet gateway that allows you to accept a variety of payments (credit card, etc.) through the hosted page on Paystation Web site.

This gateway supports the following features:

- Purchase using gateway hosted page

The following fields are required:

1. **Paystation ID**
2. **Gateway ID**

You also need to provide the return URL to your Paystation by contacting info@paystation.co.nz. The return URL should be the URL that should redirect the customer back on success. For DotNetNuke system, please specify the return URL as your primary page (e.g. http://domain.com/Default.aspx)

PayTrace

Pay Trace (http://www.paytrace.com) is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Username**
2. **Password**

PayU Business

PayU (https://www.payu.co.za/) Business is a payment wallet that allows you to accept credit card, bank payments and other forms of payments using a hosted payment page on PayU Web site.

This gateway supports the following features:

- Purchase using gateway hosted page
- Payment notification

The following fields are required:

1. **API Username**
2. **API Password**
3. **API Safekey**

Primary currency must be ZAR (South Africa).

PayU Enterprise

PayU (https://www.payu.co.za/) Enterprise is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment (not available if 3D Secure is enabled in your account).

The following fields are required:

1. **API Username**
2. **API Password**
3. **API Safekey**

Peach Payments

Peach Payments (http://peachpayments.com/) XML Integrator is a payment profile gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment
- Tokenization
- 3D Secure

The following fields are required:

1. **Sender**
2. **Login**
3. **Password**
4. **Registration channel** - This channel should have 3D Secure enabled.
5. **Payment channel** - This channel should have 3D Secure disabled.

Please contact your Peach Payments representative to ensure your account's Registration channel has 3D Secure enabled and Payment channel has 3D Secure disabled. You must ensure you have this setting setup correctly.

Princeton CardConnect

Princeton Payment Solutions (http://www.prinpay.com) CardConnect is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Merchant ID**
2. **Username**
3. **Password**
4. **Web service URL** - The SOAP Web service URL gateway. For example, the production Web service URL may look like https://demo.prinpay.com:8443/cardconnect/CCWSv1 and for testing with the sandbox, the Web service URL would look like https://demo.prinpay.com:6443/cardconnect/CCWSv1

You may also need to provide your server's IP address to Princeton Payment Solutions in order for them to authorize your server to call their API service.

PSiGate XML Messenger

PSiGate (http://www.psigate.com) is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. **Store ID**
2. **Passphrase**

Sage Pay Direct

Sage Pay (https://applications.sagepay.com/apply/CBA37350-B26B-0EFE-0FE4-FA1A470A72DB), formerly known as ProtX, Direct is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. Register your server's IP address with Sage Pay.
2. Ensure your Sage Pay currency setting supports your Storefront's primary currency.
3. **Vendor name** – Your registered vendor name with Sage Pay.

In order to obtain permission to transact in production mode, Sage Pay requires that you perform a series of purchases and refunds starting with the simulator account (enable **Simulation mode** only). Once successful, you need to contact Sage Pay to obtain a test account (enable **Test mode** only). The valid simulator and test credit card numbers are located at http://www.sagepay.com/help/faq/how_can_i_test_the_different_card_types (http://www.sagepay.com/help/faq/how_can_i_test_the_different_card_types). Once the tests are successfully completed, contact Sage Pay to provide you with the production accounts needed for your business.

Sage Pay Form

Sage Pay (https://applications.sagepay.com/apply/CBA37350-B26B-0EFE-0FE4-FA1A470A72DB) Form is a payment wallet gateway that allows you to accept a variety of payment methods using Sage Pay's hosted payment page.

This gateway supports the following features:

- Purchase using gateway hosted page

The following fields are required:

- **Vendor name**
- **Encryption password**

Your site must enable human friendly URL format because Sage Pay Form is unable to correctly handle URLs that contain URL reserved characters.

Stripe

Stripe (https://stripe.com) is a payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Recurring payment
- Tokenization

The following fields are required:

1. **Secret Key**
2. **Publishable Key**

Suomen Verkkomaksut

Suomen Verkkomaksut (http://www.verkkomaksut.fi) is a payment wallet gateway allows you to accept a variety of payments (credit card, bank transfer, debit, etc.) through the hosted page on Verkkomaksut Web site.

This gateway supports the following features:

- Purchase using gateway hosted page
- Payment notification

The following fields are required:

1. **Merchant ID**
2. **Secret Code**

Only the Euro currency is accepted for Finnish banks, otherwise the payment will not be accepted.

Towah

Towah (http://www.towahgroup.com) is a payment wallet gateway that allows you to accept a variety of payments (credit card, bank transfer, debit, etc.) through the hosted page on Towah Web site.

This gateway supports the following features:

- Purchase using gateway hosted page
- Payment notification

The following fields are required:

1. **Merchant ID**
2. **Secret Key**

You also need to notify your account manager the location of your instant payment notification handler using the URL address format below where **<Site>** is your domain name and **<Number>** is the DotNetNuke's assigned portal number usually "0" if you only have a single portal.

http://<Site>/DesktopModules/Revindex.Dnn.RevindexStorefront/PaymentNotificationHandler.ashx?portalid=<Number>&rvdsfpaygw=Towah

USA ePay

USA ePay (http://www.usaepay.com) is a direct payment gateway allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. Register your server's IP address with USA ePay.
2. **Source key**

Virtual Card Services Pay

Virtual Card Services (VCS) (http://www.vcs.co.za) Pay is a payment profile gateway that allows you to accept credit card through the hosted page on VCS Web site.

This gateway supports the following features:

- Purchase
- Purchase using gateway hosted page
- Payment notification
- Recurring payment

The following fields are required:

1. **Terminal ID**
2. **MD5 Key**
3. **Username**
4. **Password**

From your VCS virtual terminal, you need to configure under the Merchant Administration section:

- Do Auth Callback: Yes
- Set the Approved Callback URL & Declined Callback URL: The location of your instant payment notification handler using the URL address format below where **<Site>** is your domain name and **<Number>** is the DotNetNuke's assigned portal number usually "0" if you only have a single portal.

  http://<Site>/DesktopModules/Revindex.Dnn.RevindexStorefront/PaymentNotificationHandler.ashx?portalid=<Number>&rvdsfpaygw=VirtualCardServicesPay

- Callback Method: POST
- Response Format: Name Value Pairs

You also need to send a secret passphrase (your MD5 Key) to support@vcs.co.za to activate the security hash check and request enable live operation for your account.

WorldPay Corporate XML Direct

WorldPay (http://www.worldpay.com) Corporate XML Direct is a direct payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment

The following fields are required:

1. Register your server's IP address with WorldPay.
2. **MerchantCode**
3. **XML Password** - Your API password and is different from your account password.

WorldPay by default automatically captures an authorized transaction. If you don't want to automatically capture the funds after authorization, you need to configure the **Capture Delay** settings from their administration panel.

Any order modification such as capture, refund or void transactions are performed offline by WorldPay even when the Storefront receives a successful acknowledgement. You are therefore responsible to verify that the order modifications are eventually applied by WorldPay.

Zooz

Zooz (http://www.zooz.com/) is a payment gateway that allows you to accept credit card transactions within your site.

This gateway supports the following features:

- Authorize
- Capture
- Purchase
- Refund
- Void
- Recurring payment
- Tokenization
- 3D Secure

The following fields are required:

1. **Unique ID**
2. **App key**

3D Secure only works with authorize transactions. For recurring billing, you must request support@zooz.com (mailto:support@zooz.com) with the name of your app to allow your account to work with transactions without CVV after the first transaction.

Custom gateway

You can easily integrate your own custom payment gateway by emulating the API of another supported gateway. For example, you can expose the same transaction services (Authorize, Purchase, Capture, Void, Refund, etc.) from Authorize.net and configure the Storefront to direct all calls to your gateway URL. The Storefront will process all payment transactions through your custom gateway.

The Storefront currently supports a limited number of emulation endpoints from well known gateways like Authorize.net AIM, Authorize.net SIM, NMI, Princeton Card Connect. Please consult the API documentation of individual gateway for integration details.

Please contact us if you don't see the payment gateway you like to use.

How to offer free products without payment

There are times when a business gives away free products or the checkout has a total amount of zero dollars after giving away discounts, coupons, etc. and you don't want to ask the customer's payment information (e.g. credit card number) to increase registration and checkout conversion.

You can do so by enabling the special **None** payment method from **Configuration > Payment methods** menu. The **None** payment method will bypass taking payment and allows the checkout to complete successfully. However, you want to make sure to allow this payment method only if the conditions are met (zero amount) and not accidentally bypass payment for a valid paying order.

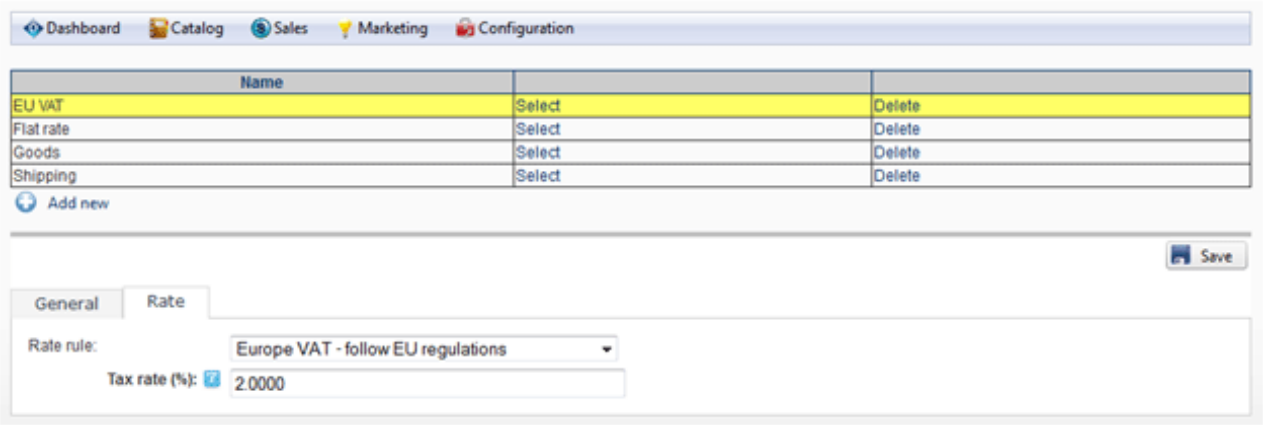
To do so, you need to set the **Availability rule** for the **None** payment method so that it only becomes available when the minimum and maximum amount or balance is **exactly zero**.

Likewise, you may want to do the reverse for the other payment methods (credit card, etc.) and set the **Availability rule** to allow only when the minimum amount or balance is **greater than zero**. This may or may not be the case for your business because you may want to give a free recurring product on the first month but you also want to offer the customer to the opportunity to enter their credit card information for taking next payments (first month free, and $20 thereafter charged to the credit card).

Taxes

Revindex Storefront supports almost every tax rule possible (e.g. collect percent tax rate based on country, state, postal code, quantity, product type, VAT, etc.). You can define individual tax classes from the **Configuration > Taxes** menu.

Click **Add New** then provide a name (e.g. "Goods") and choose a tax rule. Once the tax method has been added, you'll be able to assign any taxable products to the new tax method (e.g. Clothing products can be assigned to the "Goods" tax method, while shipping can be assigned to the "Services" tax method and taxed at a different rate).



Where it makes sense, you can enter up to 5 tax amounts in one tax calculation allowing you to break down and charge different tax rates by country, state, county, city and municipal level if needed for bookkeeping to comply with tax regulations. The sum of the individual tax amounts is what the customer will pay in taxes. If you don't care about tax levels, you can simply put your entire tax amount in the first level 1. If you intend to track and report the different levels of taxation, we suggest you follow the proposed ordering for consistency:

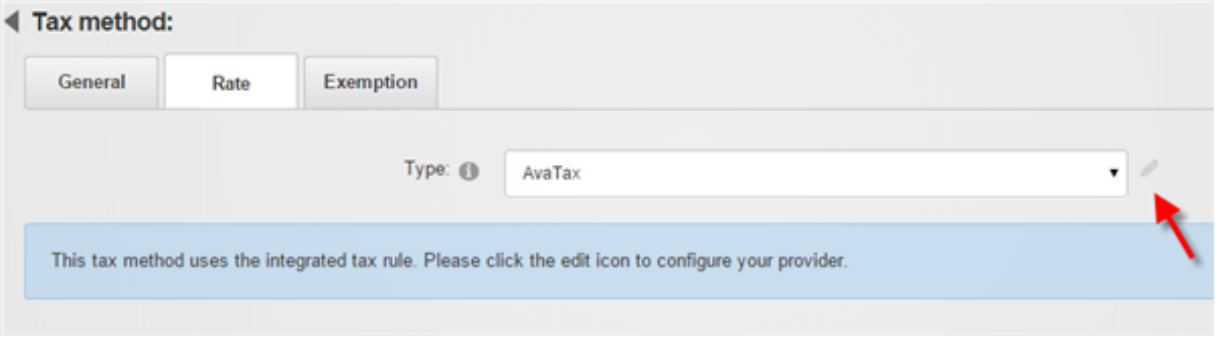
- Tax amount 1 = Country
- Tax amount 2 = State
- Tax amount 3 = County
- Tax amount 4 = City
- Tax amount 5 = Municipal or any special jurisdiction

The custom tax formula can also use powerful XSL transform. The Storefront comes with several pre-defined tax calculation templates (e.g. flat rate tax, percent tax on the item amount and vary by country and state, etc.). In most cases, you can simply modify the numeric values without knowing XSL. If you have highly complex tax requirements, you can employ full XSL syntax to output the tax calculation. To learn more about XSL, please see the **XSL Transform** section.

Tax formula is calculated individually against each sales order detail that has a product assigned to this tax class. When your formula is being calculated, the current sales order detail is available in the "in/this/salesOrderDetail" node.

Tax providers

If you decide to use a tax provider (Avalara, Zip2Tax, etc.) to automatically calculate your taxes, you need to configure the credentials needed for the Storefront to communicate with the 3rd party provider. Click on the edit icon to enter your provider crendentials. Please see Providers (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/tax-providers/rvdwkpvm/section) for more information.



Providers

Revindex Storefront supports integrated tax providers (e.g. Avalara, Zip2Tax) and will automatically calculate the tax charge in real-time on checkout. Under **Configuration > Taxes**, select the type (Avalara, Zip2Tax, etc.) and then click on the edit icon to enter the account credentials.

Please contact us if you don't see the tax provider you like to use.

Avalara

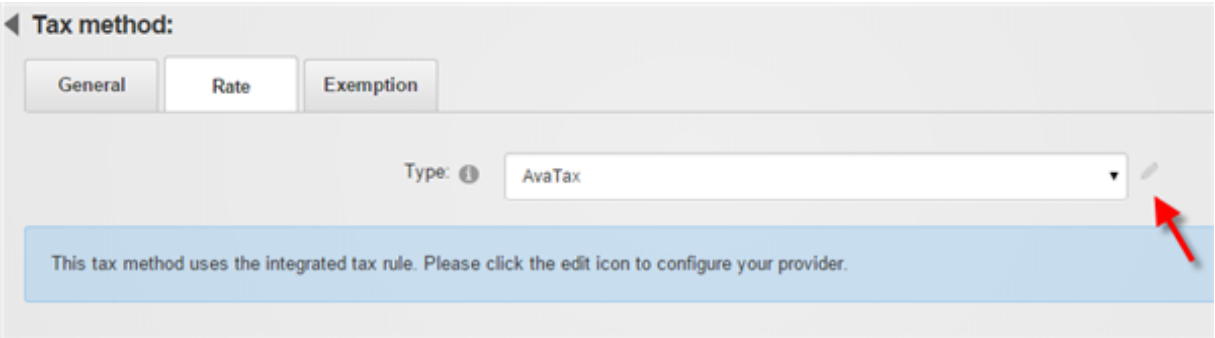
Avalara (http://www.avalara.com/) AvaTax provides real-time tax rates for U.S and international addresses. The following fields are required:

1. **Account number**
2. **License key**
3. **Company code**

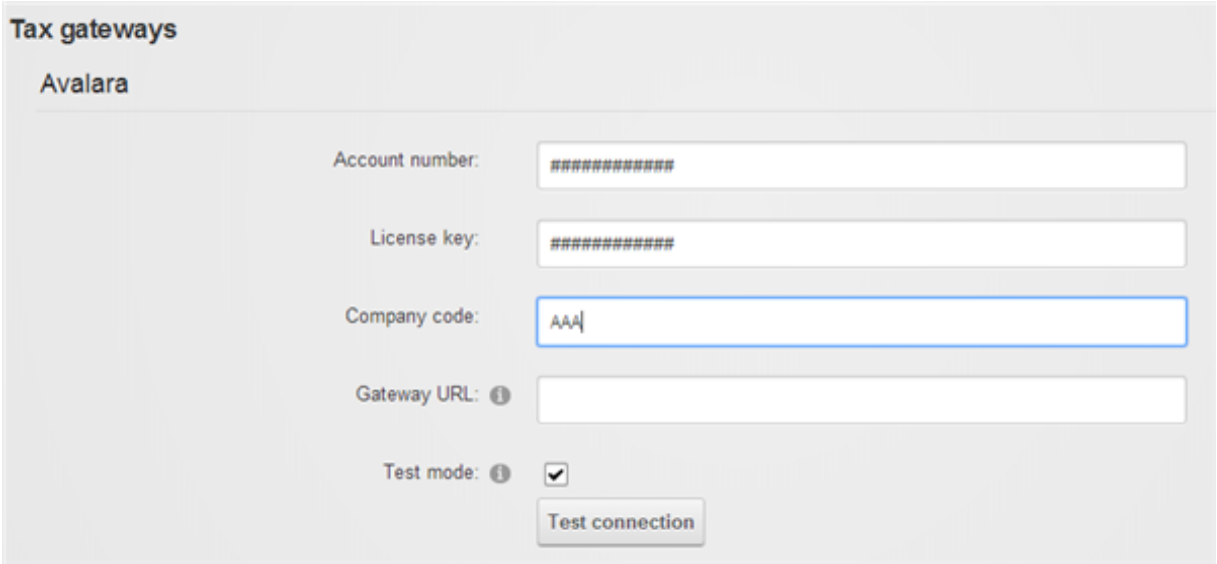
To ensure complete accuracy in tax calculation, we recommend that all your configured tax methods are set to use AvaTax exclusively and you're not mixing between custom rules and other tax providers.

Under **Configuration > Taxes** menu, click **Add new** to create a new tax method and select "AvaTax" as your tax type. Give it a name (e.g. "Products"). If you need to define a special tax category (e.g. you need to tax differently for shipping), you can enter a Avalara tax code otherwise leave the tax code empty and click **Save**.

Ensure you have created your organization and selected your Nexus jurisdiction in your Avalara administration settings first. Click on the edit icon to enter your Avalara credentials.



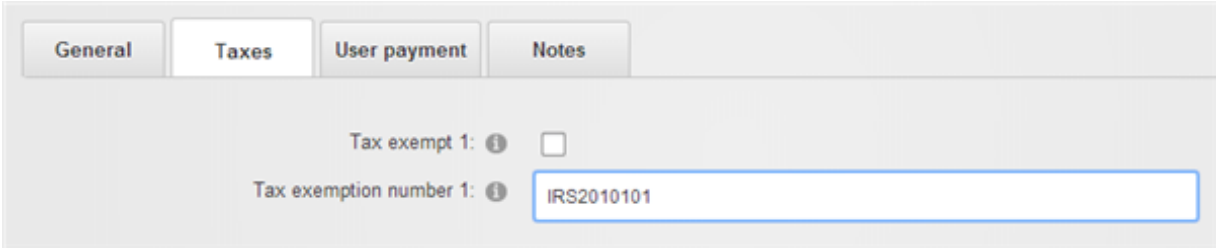
Click on **Test connection** to make sure your credentials work. Then **Save**.



Please note you can define as many different tax methods as needed. Any of your product variants, handling or shipping can now associate to these tax methods and will be treated as taxable.

Tax exemption

A customer may be exempt from taxes if they have a valid tax exemption number. You can enter the tax exemption number for a customer under the **People > Customers** menu.



Zip2Tax

Zip2Tax (http://www.zip2tax.com/) database interface provides real-time tax rates for U.S and Canada addresses. The following fields are required:

1. **Username**
2. **Password**

How to use a tax table

Using the custom tax rule, you can calculate tax rate from a tax table. The tax table can be in CSV or any format you choose. The advantage of using a tax table is it makes editing tax rates quick and easy.

The following example shows how to calculate the rate by using a sample CSV tax table from Zip2Tax (http://www.zip2tax.com/Website/pagesProducts/z2t_table_formats.asp). You can download a sample use table here (http://www.zip2tax.com/Website/Downloads/Sample_Tables/zip2tax_Use_Sample.csv).

1. Upload the CSV to a public location on your site or external. Take note of the URL.
2. Under **Configuration > Taxes**, add a new tax method. Give it a name like "Tax table".
3. Under the Rate tab, choose **Custom Rate** type and **Custom Rule**.
4. Paste the following XSL rule in the source view.

```

    <xsl:transform xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="2.0">
      <xsl:template match="/">
        <!--  The following parser assumes the Zip2Tax csv file format with header on the first row. It will parse the csv file into xml that we can use to query  -->
        <xsl:variable name="table" select="unparsed-text('http://www.zip2tax.com/Website/Downloads/Sample_Tables/zip2tax_Use_Sample.csv')"/>
        <xsl:variable name="rows" select="tokenize($table, '\r?\n')"/>
        <xsl:variable name="data">
          <!--   Loop through each row skipping the first header record   -->
          <xsl:for-each select="subsequence($rows, 2)">
            <tax>
              <xsl:for-each select="tokenize(., ',')">
                <xsl:element name="col{position()}">
                  <xsl:value-of select="."/>
                </xsl:element>
              </xsl:for-each>
            </tax>
          </xsl:for-each>
        </xsl:variable>
        <xsl:variable name="city" select="lower-case(/in/salesOrder/billingCity)"/>
        <xsl:variable name="zipCode" select="/in/salesOrder/billingPostalCode"/>
        <out>
          <taxAmount1>
            <!--   Try to match by exact city and zip, then by zip only and zero otherwise   -->
            <xsl:choose>
              <xsl:when test="$data/tax[lower-case(col12) = $city and col2 = $zipCode]">
                <xsl:value-of select="$data/tax[lower-case(col12) = $city and col2 = $zipCode][1]/col3"/>
              </xsl:when>
              <xsl:when test="$data/tax[col2 = $zipCode]">
                <xsl:value-of select="$data/tax[col2 = $zipCode][1]/col3"/>
              </xsl:when>
              <xsl:otherwise>0.00</xsl:otherwise>
            </xsl:choose>
          </taxAmount1>
          <taxAmount2>0.00</taxAmount2>
          <taxAmount3>0.00</taxAmount3>
          <taxAmount4>0.00</taxAmount4>
          <taxAmount5>0.00</taxAmount5>
        </out>
      </xsl:template>
    </xsl:transform>


```

5. Modify the XSL rule to replace the example URL with where you actually hosted your CSV file.

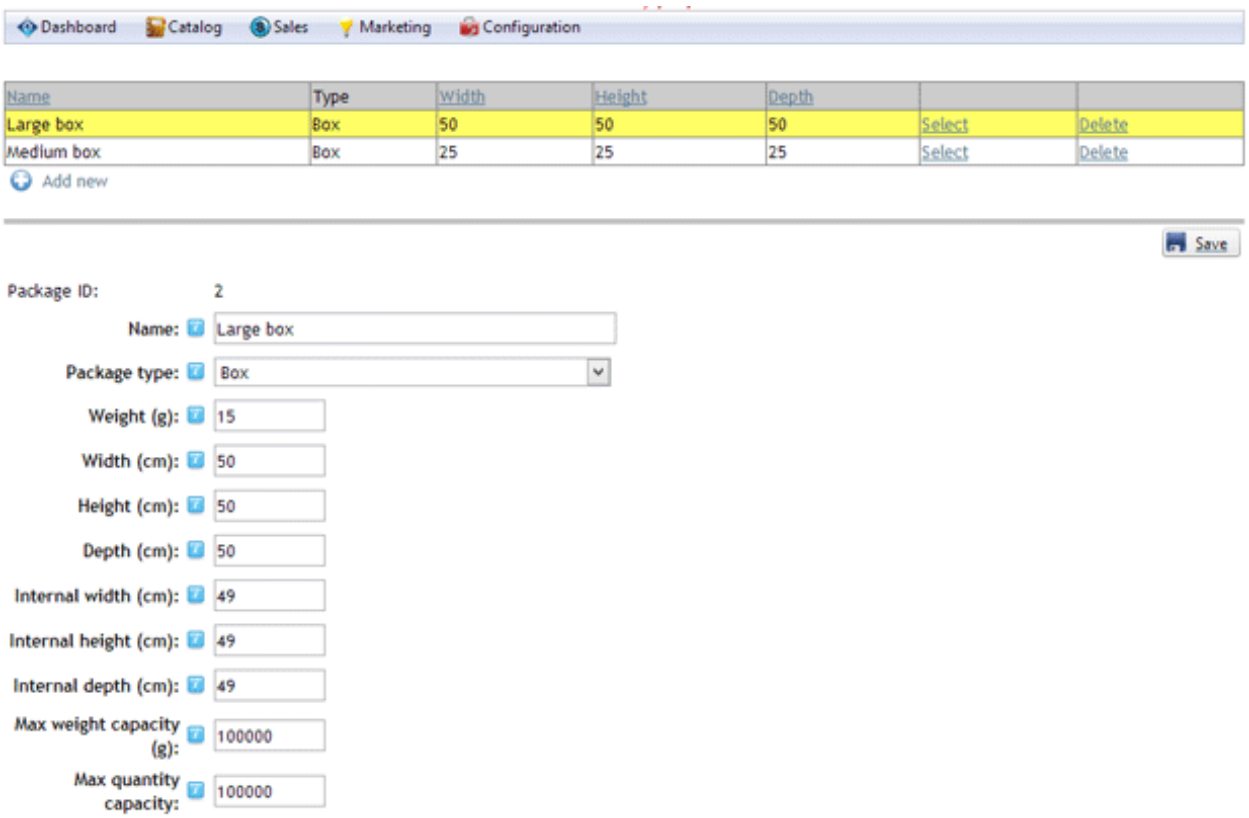
6. Save and test.

Packages

Packages are your shipping containers (box, bag, envelope, tube, etc.) used to pack your products for shipping. For example, you may want to use a small size box to ship small items and have a large box for oversize items. You may also have boxes that are cushion padded for fragile items like glassware or wine bottles. The different size boxes are important and will help reduce your shipping cost by packing efficiently.

The package dimension, weight and max capacity information you provide will help the packing method to intelligently decide the optimal way to pack your products as well as provide more accurate aggregate information to your shipping providers (FedEx, UPS, USPS, etc.) to help reduce unforeseen charges when you actually ship out your products. Please see Packing (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/packing-methods/rvdwkpvm/section) for more information.

You must first enable the **Packing** feature under **Configuration > General**. Once enabled, you can create packages under **Configuration > Packages** menu.



When creating packages, it's important to make sure your largest package is able to fit your largest product. Otherwise, the system will not be able to determine a suitable package to hold the product and no shipping option will be available to the customer.

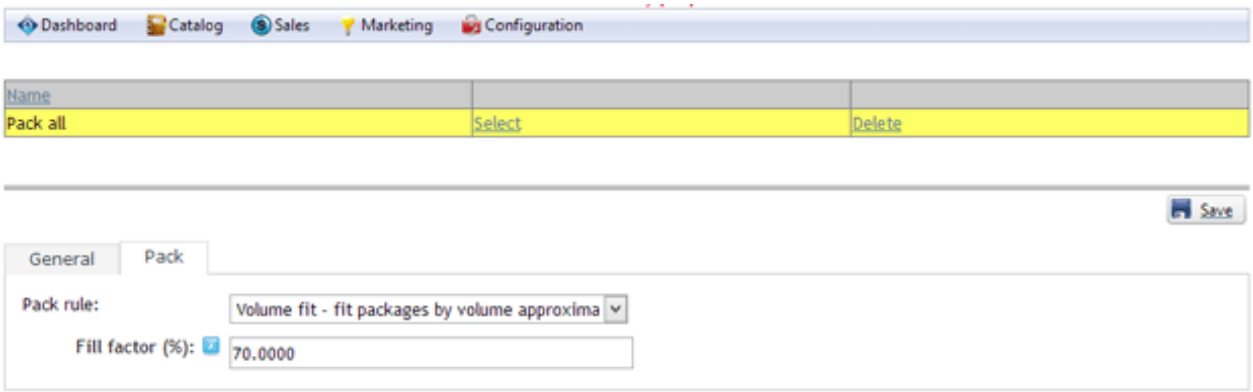
Packing

If your business sells products that need to be shipped, you likely need to pack the products together in one or many boxes before shipping out. The packing method is used to determine how products are packed together. If you don't configure a packing method, shipping providers will assume you are shipping each item separately in its original dimension and weight. Without a packing method defined, a customer buying 5 items will normally result in 5 times the shipping amount to ship a single item.

How you pack will affect how you much it costs you to ship, and in turn, how much you charge your customers for shipping. Customers will usually abandon from buying at your store if they see an extremely high shipping cost. In fact, studies have shown (http://www.ups.com/media/en/Smarter_Strategies_for_Free_Shipping.pdf) shipping and handling fees are the number one factor for cart abandonment. Shipping providers (FedEx, UPS, USPS, etc.) determine shipping rates based on the weight and dimension of your boxes. With rising cost of fuel, shipping providers have aggressively increased shipping rates to the point that they now measure dimensional weight (i.e. if your package is very large, but not necessarily heavy, they will charge based on their calculated density instead of your package weight). It is, therefore, in your best interest to optimize your shipping calculation by using packing methods to ensure you get the lowest shipping rates to win your customers.

For example, if a customer orders 4 bottles of wine, the packing rule can decide if all items can fit in one large box or whether they need to be split up in 2 medium boxes or perhaps they should be packed one small box per item because of the fragile nature of the items. In another example, you may sell an oversize product like a bicycle that needs to be split up in 2 boxes, one for the frame and the other for the wheels. Packing rule can help provide a more accurate shipping estimation and save you money.

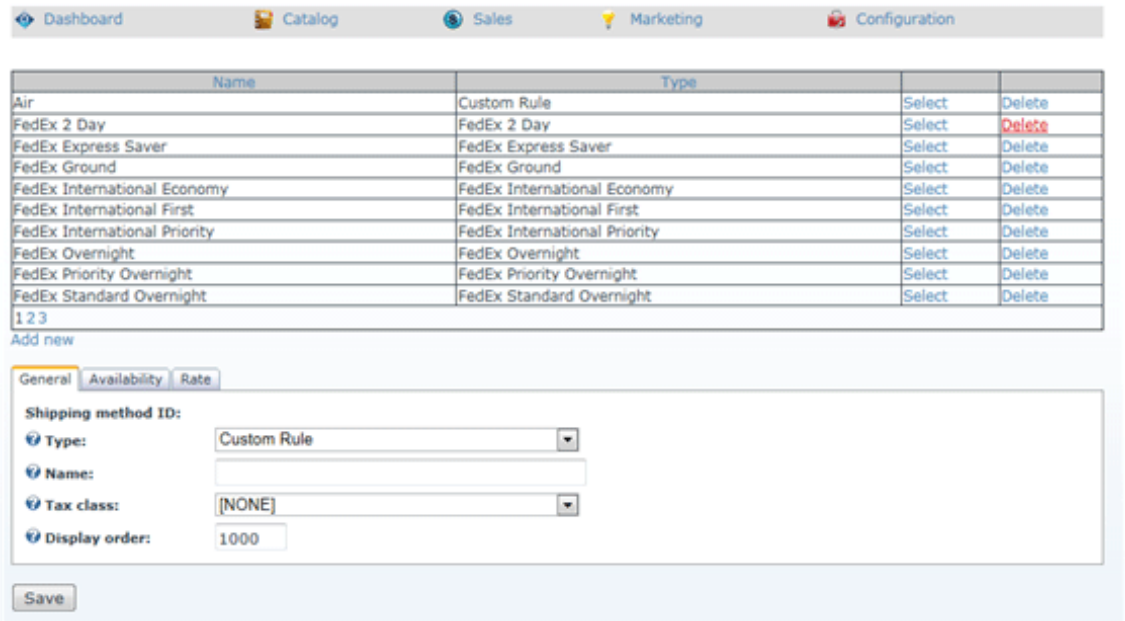
You must first enable the **Packing** feature under **Configuration > General**. Once enabled, you can start defining your available Packages (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/packages/rvdwkpvm/section) (box, bag, envelope, tube, etc.) and their dimensions. Under **Configuration > Packing** menu, you can then configure the packing method to use one of the predefined rules or write your own custom rule. The rules can make use of these packages to determine how to pack the items.



The packing method can also use powerful XSL transform to write your own custom packing rule. The expected output should return the shipping packages to use. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.

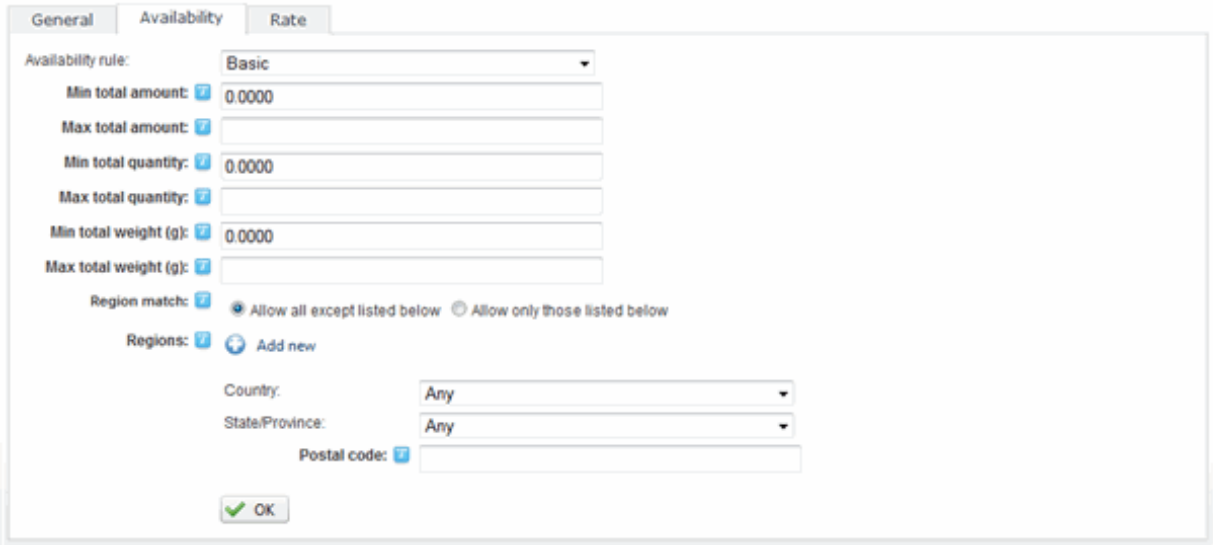
Shipping

If your product requires shipping, you can configure available shipping methods and rate from the **Configuration > Shipping** menu. Click **Add New** and give it a name (e.g. "Ground shipping") to create a new custom shipping method. Select the appropriate availability and rate rules. You can assign a tax class if this shipping method is taxable. You must create at least one shipping method if you have products for sale that require shipping.



Shipping Availability

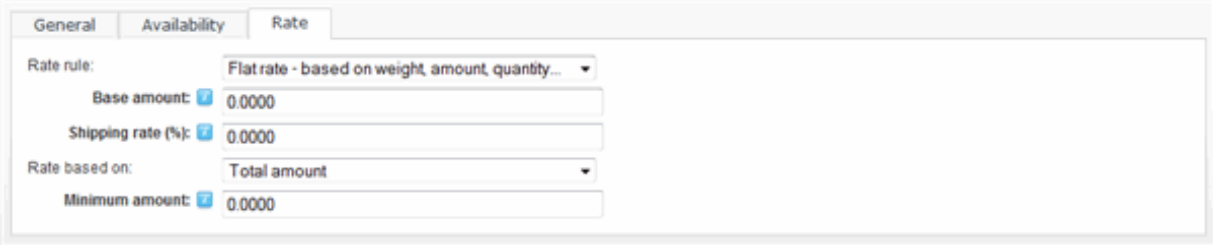
You can configure availability rule based on quantity, amount, weight, etc. that determines if a shipping method should become available for selection during customer checkout.



The availability rule can also use XSL transform to determine whether this shipping method is available for selection during checkout. The expected output should return "true" to indicate this shipping method is available for selection, otherwise "false" if disallowed. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.

Shipping Rate

You can easily configure the shipping rate to charge based on amount, quantity, weight, product's fixed rate, etc.



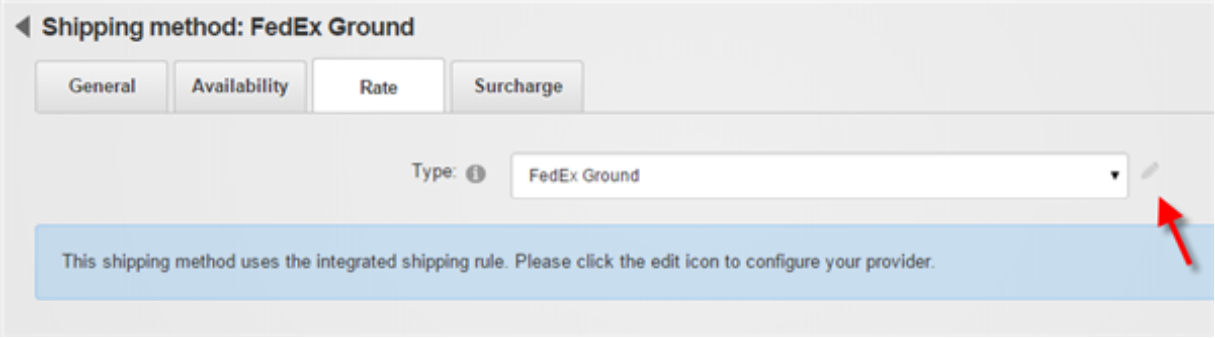
The rate formula can also use XSL transform to calculate the shipping charges. The expected output should return the calculated shipping amount to charge. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.

On the **Catalog > Products** menu, you will also want to tick the **Require shipping** checkbox on your product variants. This ensures that only those products will participate in the shipping calculation. If your shipping method is using the "Product rate" rule, it will use the amount entered in the product variant's **Shipping price** field to calculate shipping charges.

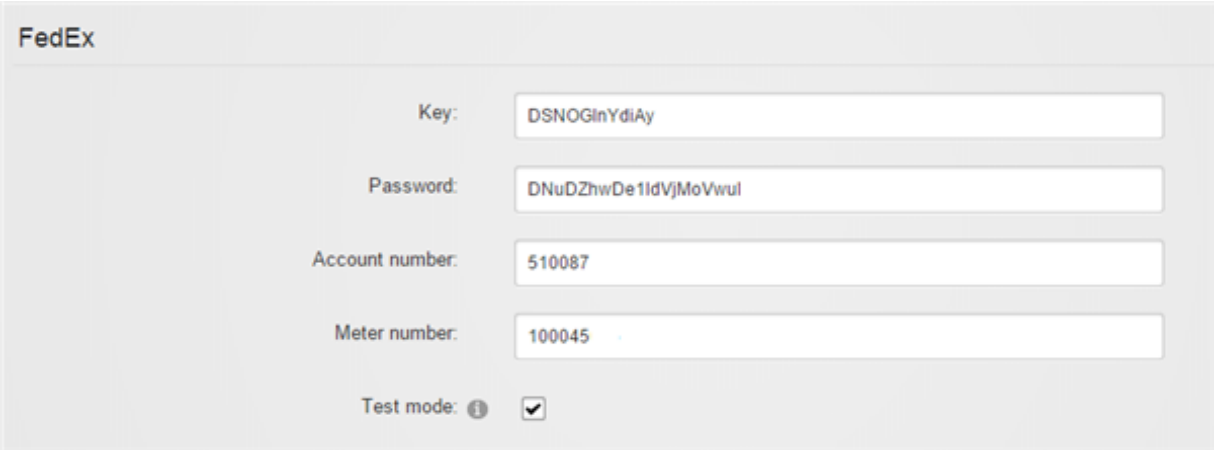
Providers

Revindex Storefront supports several integrated shipping carriers (e.g. FedEx, UPS, USPS, etc.) and will automatically calculate the shipping charge in real-time on checkout.

Start by configuring the shipping service available to your customers by adding it to the **Configuration > Shipping**. You can optionally configure the availability rule (e.g. allows FedEx Priority Overnight for reseller roles only) if you wish to restrict the shipping service to certain conditions. Because rates and availability are provided by the shipping carrier in real-time over the Internet, your checkout page loading time will increase as you enable more than several integrated shipping carriers. Click on the edit icon to enter the account credentials.



Only enable **Test mode** if your gateway provided you with a separate test account. The test account is usually different from your production account. Under test mode, the system will attempt to transact with the gateway's sandbox server and results will often vary depending on the test configuration. Please consult your shipping providers's API documentation for running in test mode.



Shipping calculation is primarily based on the customer shipping address, your store address in the **Configuration > General** menu as well as the weight, dimensions and package type configured for your product. Your shipping carrier may also determine the availability and rate based on your account standing, date of request, etc.
Please contact us if you don't see the shipping provider you like to use.

ABF

ABF (https://www.abfs.com) provides freight shipping in United States, Canada, Mexico, Puerto Rico and Dominican Republic. The following fields are required:

- Secure ID

Australia Post

Australia Post (http://www.auspost.com.au/) provides letter and parcel shipping from Australia to anywhere in the world. The following fields are required:

1. **API Key**

FedEx

FedEx (http://www.fedex.com/) provides parcel delivery service around the world. The following fields are required:

1. **Key**
2. **Password**
3. **Account number**
4. **Meter number**

You will first need to register a valid FedEx account from the http://www.fedex.com (http://www.fedex.com) web site. (Click on the **Register** link).

Once you are registered, you need to request your authentication key by completing this form (https://www.fedex.com/wpor/web/jsp/commonTC.jsp). Choose the **FedEx Web Services for Shipping** and **Corporate Developer**. Save your authentication key. You should receive an email from FedEx with the rest of your credentials.

Shipwire

Shipwire (http://www.shipwire.com) provides order fulfillment and shipping service. With Shipwire, you can deliver your products using a wide range of carriers including Canada Post, FedEx, Parcelforce, Purolator, Royal Mail, UPS, USPS, etc. from multiple warehouses. The following fields are required:

1. **Username**
2. **Password**

You will first need to register a valid Shipwire account from the http://www.shipwire.com (http://www.shipwire.com) web site.

Unishippers

Unishippers (https://www.unishippers.com) provides shipping cost savings through Unishippers extensive partners. The following fields are required:

- Username
- Password
- Customer number
- UPS account number

UPS

UPS (http://www.ups.com/) provides parcel delivery service around the world. The following fields are required:

1. **Access key**
2. **Username**
3. **Password**
4. **Shipper number** - This is also known as your account number.

You will first need a valid UPS account by registering here (https://www.ups.com/upsdeveloperkit) (Click on the **Register** link).

Once you are registered, you need to request your access key by going to the **Technology support > Developer resource > UPS Developer Kit** page on the UPS web site. Click on the **Request an access key** link. Complete the form.

USPS

USPS (https://www.usps.com/) is the official mail carrier for the United States. USPS mainly ships from within the United States addresses (from and to). You can obtain access to USPS web tools by applying here (https://secure.shippingapis.com/registration/). The following fields are required:

1. **User ID** – Your Web tools User ID.
2. **Password** – Your Web tools password.

You will need to email USPS that you would like to take your account to production mode. You can tell USPS that you have completed the testing required for production mode or simply send the message "Please move User ID xxxxxx to the production server". The USPS email contact is **uspstechnicalsupport@mailps.custhelp.com** or follow the contact instructions in the USPS email sent to you during your registration. You may also try contacting **USPS Internet Customer Care Center** directly over the phone at **1-800-344-7779 Opt. 3**

How to configure real-time shipping

When configuring real-time shipping (FedEx, UPS, USPS, etc.), make sure to follow the steps below:

1. Obtain valid API credentials from your real-time shipping provider.
2. Enter a valid address under **Configuration > General** menu settings. Your real-time shipping provider uses your business address to determine the outgoing sender address. If you use the seller or warehouse functionality, make sure they too have valid addresses.
3. Make sure your product variants have the "Require shipping" checked and have a valid Weight, Width, Height and Depth measurements specified. Your real-time shipping provider uses the information to calculate shipping cost.

   For the dimensions and weight, we recommend testing with a small product first that isn't too big and doesn't weigh too much since over-sized items don't qualify for many shipping methods (e.g. a very large product won't be allowed for services intended for small parcel delivery).

   For the package type, we recommend using "Unspecified" because certain types of packages are not allowed by the shipping method (e.g "Box" cannot be shipped by a lettermail service). It's best to leave it to the shipping method to decide what default type of package to use.

   Please remember to clear your shopping cart and re-add the item to your cart after each time changing the product dimension or weight. You can also visit the shipping provider's Web site directly and enter the same dimension/weight and compare the results.
4. Configure the allowable shipping services under **Configuration > Shipping** menu by adding the appropriate shipping methods. Make sure to add services that make sense (e.g. ground shipping cannot ship to Alaska, or International etc.). Your real-time shipping provider will determine which of the configured shipping services are available for shipping so it's a good idea to configure as many shipping services while testing even if you don't intend to use them in production (you can remove them later).
5. For the selected Type, click on the edit icon to enter the API credentials for your shipping provider. Do not use **Test mode** unless you've been explicitly given test credentials by your provider.
6. When testing and checking out as a customer, make sure to enter a valid address. Your real-time shipping provider will use it to determine if they can service this request. For example, if you're using USPS, you probably want to test with a valid address shipped from and to the United States. You want to avoid testing international addresses to make your testing simpler.
7. Check your DNN Event viewer for any errors.
8. You can enable Debug logging under **Configuration > General** settings to capture additional shipping related information from your shipping gateways. In the Event Viewer, you may need to select the "Debug Info" type log to view the data recorded by the Storefront. If the "Debug Info" type is not present,

you will need to explicitly add it from the **Edit Log Settings** followed by **Add Log Setting** and enabling the "Debug Info" type.

By default, the Storefront assumes you ship each product separately. For example, if you added 2 quantities of the same products to the cart, you would expect the shipping rates to double. If you frequently ship multiple products in a single box, you can reduce shipping cost by telling the Storefront how you intend to pack your products. Please see Packing (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/packing-methods/rvdwkpvm/section) for more information.

Fulfillment

You can automate and streamline your shipping and fulfillment processes using 3rd party fulfillment systems (e.g. ShipWorks).

You must first enable the **Fulfillment** feature under **Configuration > General**. Once enabled, you can configure your fulfillment system from the **Configuration > Fulfillment** menu. Make sure to enter the account credentials by clicking on the edit icon for each individual fulfillment systems.

Please contact us if you don't see the fulfillment provider you like to use.

ShipWorks

ShipWorks (http://www.shipworks.com) is a 3rd party software that helps you automate shipping. It will help you print shipping labels, packing slips and track packages easily. In order to allow ShipWorks to interface with your Storefront, you must first create the credentials. Select "Generic module" when prompted for the platform. The following fields are required:

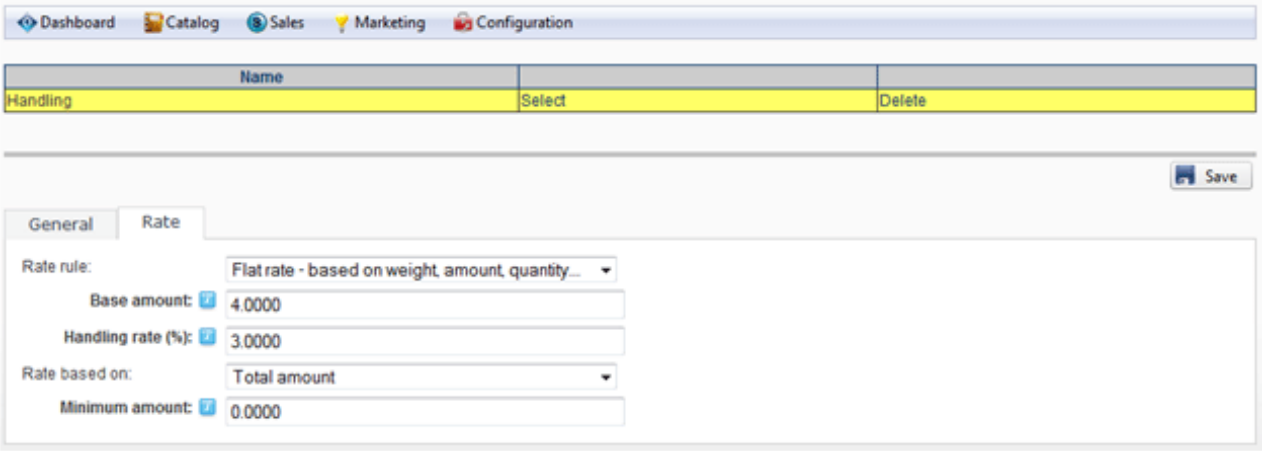
1. **Username** - enter any characters to create your username.
2. **Password** - enter any characters for your password.
3. **URL** - Enter the URL to your store's fulfillment handler page.
   E.g. **http://mysite.com/DesktopModules/Revindex.Dnn.RevindexStorefront/FulfillmentHandler.ashx?portalid=0&rvdsfffgw=ShipWorks** where 0 is your portal ID number. If you are a marketplace seller, you must also append the **&rvdsfsellerid=1** parameter where 1 is your seller ID.

You need to enter the same credentials and URL in your ShipWorks software to allow ShipWorks to communicate with the Storefront.

Handling

The Storefront can charge a handling fee based on your predefined rules. For example, your business may charge a handling fee for international customers, for shipping oversize packages or perhaps for receiving an EFT (wire transfer) payment.

You must first enable the **Handling** feature under **Configuration > General**. Once enabled, you can configure the handling method and rate from the **Configuration > Handling** menu. Click **Add New** and give it a name (e.g. "Packaging ") to create a new handling method and select a handling rule. You can assign a tax class if this handling method is taxable.



The rate formula can also use XSL transform to calculate the handling charges. The expected output should return the calculated handling amount to charge. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.

On the **Catalog > Products** menu, you will also want to tick the **Require handling** checkbox on your product variants. This ensures that only those products will participate in the handling calculation. If your handling method is using the "Product rate" rule, it will use the amount entered in the product variant's **Handling price** field to calculate handling charges.

How to charge handling for payment type

A good use for handling method is to charge an extra service fee depending on the customer's selected payment method. For example, you may want to charge a small fee if the customer pays by wire transfer because you incur a fee from your bank for this type of payment.

The video below shows how to charge $1.00 when the customer elects to pay by credit card. Please see Payment Method Types (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/payment-method-types/rvdwkpvm/section) for the different payment method lookup values.

Communications

Cart abandon email

This email is sent out to users whose incomplete orders have reached the threshold time and is considered as abandoned. For example, you may want to lure them back to shop at your site with a discount coupon, etc.

An order is considered abandoned if the status is "Incomplete" and the elapsed time from the sales order's create date exceeds the **Cart abandon timeout** value under **Configuration > Cart** settings. The cart abandon email is only sent once to avoid annoying the customer and this is indicated in the sales order's **Cart abandon notified** flag that the merchant can reset if needed. You can also force the cart abandon email to send out by clicking on the **Email cart abandon** button under the sales order screen.

For obvious reasons, a cart abandon email can only be sent if there is an email address captured with the order (i.e the user registered an account or attempted to checkout with an email address). By default, the Storefront will send the email to the registered user email address.

If your store has amassed many incomplete orders for a long period of time and you now decide to enable the cart abandon email, you may want to manually mark the old incomplete orders as already notified first. You can also configure the Storefront to automatically delete incomplete orders (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-auto-delete-incomplete-orders/rvdwkpvm/section) and letting it run its due course prior to enabling the cart abandon email.

The Basic template rule can accept XSL tokens (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/xsl-tokens/rvdwkpvm/section) to inject dynamic data. Below is the sample XML input that you can retrieve token values from:

```
<in>
  <configuration>
    <generalEmailRecipient>recipient@localhost.com</generalEmailRecipient>
    <generalEmailSender>test@example.com</generalEmailSender>
    <generalStoreName>Revindex Storefront</generalStoreName>
  </configuration>
  <portal>
    <cartTabs>
      <tab>
        <tabID>57</tabID>
      </tab>
    </cartTabs>
    <checkoutTabs>
      <tab>
        <tabID>61</tabID>
      </tab>
    </checkoutTabs>
    <manageOrderTabs>
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        <httpAlias>site.com</httpAlias>
        <isPrimary>true</isPrimary>
        <portalAliasID>1</portalAliasID>
      </portalAlias>
    </portalAliases>
    <portalID>0</portalID>
  </portal>
  <salesOrder>
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    <billingCompany>Revindex</billingCompany>
    <billingCountryCode>US</billingCountryCode>
    <billingCountryName>United States</billingCountryName>
    <billingEmail>text@example.com</billingEmail>
    <billingFirstName>John</billingFirstName>
    <billingLastName>Doe</billingLastName>
    <billingPhone>111-111-1111</billingPhone>
    <billingPostalCode>90210</billingPostalCode>
    <billingStreet>1 Melrose</billingStreet>
    <billingSubdivisionCode>US-CA</billingSubdivisionCode>
    <billingSubdivisionName>California</billingSubdivisionName>
    <businessTaxNumber>GB 123456789</businessTaxNumber>
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      <couponCode>free2</couponCode>
    </couponCodes>
    <cultureCode>en-US</cultureCode>
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    <currencyCultureCode>en-US</currencyCultureCode>
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        <field id="CustomColor">
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          <selected>Blue</selected>
        </field>
        <field id="CustomSize">
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        </field>
      </fields>
    </dynamicFormResult>
    <exchangeRate>1.0000</exchangeRate>
    <handlingAmount>9.00</handlingAmount>
    <handlingDiscountAmount>0</handlingDiscountAmount>
    <orderDate>2001-01-01T12:00:00</orderDate>
    <origin>1</origin>
    <parentSalesOrderID></parentSalesOrderID>
    <purchaseOrderNumber></purchaseOrderNumber>
    <rewardsPointsQualified>0</rewardsPointsQualified>
```

```
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    <salesOrderDetails>
      <salesOrderDetail>
        <amount>10.0000</amount>
        <combinedAmount>10.0000</combinedAmount>
        <combinedPrice>10.0000</combinedPrice>
        <discountAmount>0</discountAmount>
        <dynamicFormResult>
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            <field id="CustomText">MyText</field>
            <field id="CustomColor">
              <selected>Red</selected>
              <selected>Blue</selected>
            </field>
            <field id="CustomSize">
              <selected>XL</selected>
            </field>
          </fields>
        </dynamicFormResult>
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        <price>10.0000</price>
        <productName>Good Book</productName>
        <productVariant>
          <basePrice>10.0000</basePrice>
          <name>Series 1</name>
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        <sku>A100</sku>
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    </salesPayments>
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      <countryCode>US</countryCode>
      <email>test@example.com</email>
      <phone>111-111-1111</phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </seller>
    <sellerID>1</sellerID>
    <shippingAmount>1.00</shippingAmount>
    <shippingCity>Beverley Hills</shippingCity>
    <shippingCompany>Revindex</shippingCompany>
    <shippingCountryCode>US</shippingCountryCode>
    <shippingCountryName>United States</shippingCountryName>
    <shippingDiscountAmount>0</shippingDiscountAmount>
    <shippingEmail>text@example.com</shippingEmail>
    <shippingFirstName>John</shippingFirstName>
    <shippingLastName>Doe</shippingLastName>
    <shippingMethodID>2</shippingMethodID>
```

```
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    <shippingPostalCode>90210</shippingPostalCode>
    <shippingStatus>1</shippingStatus>
    <shippingStreet>1 Melrose</shippingStreet>
    <shippingSubdivisionCode>US-CA</shippingSubdivisionCode>
    <shippingSubdivisionName>California</shippingSubdivisionName>
    <status>7</status>
    <subTotalAmount>10.00</subTotalAmount>
    <taxAmount1>0.00</taxAmount1>
    <taxAmount2>0.00</taxAmount2>
    <taxAmount3>0.00</taxAmount3>
    <taxAmount4>0.00</taxAmount4>
    <taxAmount5>0.00</taxAmount5>
    <taxDiscountAmount>0</taxDiscountAmount>
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    <warehouse>
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      <countryCode>US</countryCode>
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      <phone></phone>
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        <Cell></Cell>
        <City>Beverley Hills</City>
        <Country>United States</Country>
        <Fax></Fax>
        <FirstName>John</FirstName>
        <IM></IM>
        <LastName>Doe</LastName>
        <MiddleName></MiddleName>
        <Photo></Photo>
        <PostalCode>90210</PostalCode>
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        <Region>California</Region>
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        <Suffix></Suffix>
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        <Unit></Unit>
        <Website></Website>
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      <role>Role2</role>
    </roles>
    <userHostAddress>127.0.0.1</userHostAddress>
    <userID>1</userID>
    <username>host</username>
  </user>
</in>
```

Order alert email

Email alerts are sent out whenever a new order is placed on your shopping cart. By default, the Storefront will send the alert to the sender email address listed under the **Configuration > General** settings.

The Basic template rule can accept XSL tokens (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/xsl-tokens/rvdwkpvm/section) to inject dynamic data. Below is the sample XML input that you can retrieve token values from:

```
<in>
  <configuration>
    <generalEmailRecipient>recipient@localhost.com</generalEmailRecipient>
    <generalEmailSender>test@example.com</generalEmailSender>
    <generalStoreName>Revindex Storefront</generalStoreName>
  </configuration>
  <portal>
    <cartTabs>
      <tab>
        <tabID>57</tabID>
      </tab>
    </cartTabs>
    <checkoutTabs>
      <tab>
        <tabID>61</tabID>
      </tab>
    </checkoutTabs>
    <manageOrderTabs>
      <tab>
        <tabID>62</tabID>
      </tab>
    </manageOrderTabs>
    <manageVoucherTabs>
      <tab>
        <tabID>174</tabID>
      </tab>
    </manageVoucherTabs>
    <portalAliases>
      <portalAlias>
        <cultureCode></cultureCode>
        <httpAlias>site.com</httpAlias>
        <isPrimary>true</isPrimary>
        <portalAliasID>1</portalAliasID>
      </portalAlias>
    </portalAliases>
    <portalID>0</portalID>
  </portal>
  <salesOrder>
    <billingCity>Beverley Hills</billingCity>
    <billingCompany>Revindex</billingCompany>
    <billingCountryCode>US</billingCountryCode>
    <billingCountryName>United States</billingCountryName>
    <billingEmail>text@example.com</billingEmail>
    <billingFirstName>John</billingFirstName>
    <billingLastName>Doe</billingLastName>
    <billingPhone>111-111-1111</billingPhone>
    <billingPostalCode>90210</billingPostalCode>
    <billingStreet>1 Melrose</billingStreet>
    <billingSubdivisionCode>US-CA</billingSubdivisionCode>
    <billingSubdivisionName>California</billingSubdivisionName>
    <businessTaxNumber>GB 123456789</businessTaxNumber>
    <couponCodes>
      <couponCode>free2</couponCode>
    </couponCodes>
    <cultureCode>en-US</cultureCode>
    <currency>
      <currencySymbol>$</currencySymbol>
      <isoCurrencySymbol>USD</isoCurrencySymbol>
    </currency>
    <currencyCultureCode>en-US</currencyCultureCode>
    <dynamicFormResult>
      <fields>
        <field id="CustomName">Name1</field>
        <field id="CustomText">MyText</field>
        <field id="CustomColor">
          <selected>Red</selected>
          <selected>Blue</selected>
        </field>
        <field id="CustomSize">
          <selected>XL</selected>
        </field>
      </fields>
    </dynamicFormResult>
    <exchangeRate>1.0000</exchangeRate>
    <handlingAmount>9.00</handlingAmount>
    <handlingDiscountAmount>0</handlingDiscountAmount>
    <orderDate>2001-01-01T12:00:00</orderDate>
    <origin>1</origin>
    <parentSalesOrderID></parentSalesOrderID>
    <purchaseOrderNumber></purchaseOrderNumber>
    <rewardsPointsQualified>0</rewardsPointsQualified>
```

```
    <rewardsPointsQualified>0</rewardsPointsQualified>
    <salesOrderDetails>
      <salesOrderDetail>
        <amount>10.0000</amount>
        <combinedAmount>10.0000</combinedAmount>
        <combinedPrice>10.0000</combinedPrice>
        <discountAmount>0</discountAmount>
        <dynamicFormResult>
          <fields>
            <field id="CustomURL">http://www.yahoo.com</field>
            <field id="CustomText">MyText</field>
            <field id="CustomColor">
              <selected>Red</selected>
              <selected>Blue</selected>
            </field>
            <field id="CustomSize">
              <selected>XL</selected>
            </field>
          </fields>
        </dynamicFormResult>
        <parentSalesOrderDetailID></parentSalesOrderDetailID>
        <price>10.0000</price>
        <productName>Good Book</productName>
        <productVariant>
          <basePrice>10.0000</basePrice>
          <name>Series 1</name>
          <product>
            <name>Good Book</name>
            <summary></summary>
          </product>
          <sku>A100</sku>
          <summary></summary>
        </productVariant>
        <productVariantExtension>
          <data>
            <shippingRate>1.00</shippingRate>
          </data>
        </productVariantExtension>
        <productVariantName>Series 1</productVariantName>
        <quantity>1</quantity>
        <salesOrderDetailID>102</salesOrderDetailID>
        <sku>A100</sku>
      </salesOrderDetail>
    </salesOrderDetails>
    <salesOrderGUID>F2CB78A0-5B3B-489a-9E62-006372ACAE34</salesOrderGUID>
    <salesOrderNumber>SA1000</salesOrderNumber>
    <salesPayments>
      <salesPayment>
        <amount>10.0000</amount>
        <creditCardHint>4345</creditCardHint>
        <paymentDate>2001-01-01T12:00:00</paymentDate>
        <paymentGateway>PayPalWPP</paymentGateway>
        <paymentHint></paymentHint>
        <paymentMethod>3</paymentMethod>
        <paymentMethodName>Credit card</paymentMethodName>
        <responseCode>1</responseCode>
        <transactionType>2</transactionType>
        <voucherHint></voucherHint>
      </salesPayment>
    </salesPayments>
    <salesPaymentStatus>1</salesPaymentStatus>
    <seller>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email>test@example.com</email>
      <phone>111-111-1111</phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </seller>
    <sellerID>1</sellerID>
    <shippingAmount>1.00</shippingAmount>
    <shippingCity>Beverley Hills</shippingCity>
    <shippingCompany>Revindex</shippingCompany>
    <shippingCountryCode>US</shippingCountryCode>
    <shippingCountryName>United States</shippingCountryName>
    <shippingDiscountAmount>0</shippingDiscountAmount>
    <shippingEmail>text@example.com</shippingEmail>
    <shippingFirstName>John</shippingFirstName>
    <shippingLastName>Doe</shippingLastName>
    <shippingMethodID>2</shippingMethodID>
```

```
    <shippingPhone>111-111-1111</shippingPhone>
    <shippingPostalCode>90210</shippingPostalCode>
    <shippingStatus>1</shippingStatus>
    <shippingStreet>1 Melrose</shippingStreet>
    <shippingSubdivisionCode>US-CA</shippingSubdivisionCode>
    <shippingSubdivisionName>California</shippingSubdivisionName>
    <status>2</status>
    <subTotalAmount>10.00</subTotalAmount>
    <taxAmount1>0.00</taxAmount1>
    <taxAmount2>0.00</taxAmount2>
    <taxAmount3>0.00</taxAmount3>
    <taxAmount4>0.00</taxAmount4>
    <taxAmount5>0.00</taxAmount5>
    <taxDiscountAmount>0</taxDiscountAmount>
    <totalAmount>20.00</totalAmount>
    <userHostAddress>127.0.0.1</userHostAddress>
    <warehouse>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email></email>
      <phone></phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </warehouse>
    <warehouseID>1</warehouseID>
  </salesOrder>
  <user>
    <email>user@address.com</email>
    <profile>
      <profileProperties>
        <Biography></Biography>
        <Cell></Cell>
        <City>Beverley Hills</City>
        <Country>United States</Country>
        <Fax></Fax>
        <FirstName>John</FirstName>
        <IM></IM>
        <LastName>Doe</LastName>
        <MiddleName></MiddleName>
        <Photo></Photo>
        <PostalCode>90210</PostalCode>
        <PreferredLocale>en-US</PreferredLocale>
        <Prefix></Prefix>
        <Region>California</Region>
        <Street>1 Melrose</Street>
        <Suffix></Suffix>
        <Telephone>111-111-1111</Telephone>
        <TimeZone>0</TimeZone>
        <Unit></Unit>
        <Website></Website>
      </profileProperties>
    </profile>
    <roles>
      <role>Role1</role>
      <role>Role2</role>
    </roles>
    <userHostAddress>127.0.0.1</userHostAddress>
    <userID>1</userID>
    <username>host</username>
  </user>
</in>
```

Order invoice email

Email invoices are useful for requesting payment. By default, the Storefront will send the invoice to the registered email address of the buyer.

The Basic template rule can accept XSL tokens (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/xsl-tokens/rvdwkpvm/section) to inject dynamic data. Below is the sample XML input that you can retrieve token values from:

```
<in>
  <configuration>
    <generalEmailSender>test@example.com</generalEmailSender>
    <generalStoreName>Revindex Storefront</generalStoreName>
  </configuration>
  <portal>
    <cartTabs>
      <tab>
        <tabID>57</tabID>
      </tab>
    </cartTabs>
    <checkoutTabs>
      <tab>
        <tabID>61</tabID>
      </tab>
    </checkoutTabs>
    <manageOrderTabs>
      <tab>
        <tabID>62</tabID>
      </tab>
    </manageOrderTabs>
    <manageVoucherTabs>
      <tab>
        <tabID>174</tabID>
      </tab>
    </manageVoucherTabs>
    <portalAliases>
      <portalAlias>
        <cultureCode></cultureCode>
        <httpAlias>site.com</httpAlias>
        <isPrimary>true</isPrimary>
        <portalAliasID>1</portalAliasID>
      </portalAlias>
    </portalAliases>
    <portalID>0</portalID>
  </portal>
  <salesOrder>
    <billingCity>Beverley Hills</billingCity>
    <billingCompany>Revindex</billingCompany>
    <billingCountryCode>US</billingCountryCode>
    <billingCountryName>United States</billingCountryName>
    <billingEmail>text@example.com</billingEmail>
    <billingFirstName>John</billingFirstName>
    <billingLastName>Doe</billingLastName>
    <billingPhone>111-111-1111</billingPhone>
    <billingPostalCode>90210</billingPostalCode>
    <billingStreet>1 Melrose</billingStreet>
    <billingSubdivisionCode>US-CA</billingSubdivisionCode>
    <billingSubdivisionName>California</billingSubdivisionName>
    <businessTaxNumber>GB 123456789</businessTaxNumber>
    <couponCodes>
      <couponCode>free2</couponCode>
    </couponCodes>
    <cultureCode>en-US</cultureCode>
    <currency>
      <currencySymbol>$</currencySymbol>
      <isoCurrencySymbol>USD</isoCurrencySymbol>
    </currency>
    <currencyCultureCode>en-US</currencyCultureCode>
    <dynamicFormResult>
      <fields>
        <field id="CustomName">Name1</field>
        <field id="CustomText">MyText</field>
        <field id="CustomColor">
          <selected>Red</selected>
          <selected>Blue</selected>
        </field>
        <field id="CustomSize">
          <selected>XL</selected>
        </field>
      </fields>
    </dynamicFormResult>
    <exchangeRate>1.0000</exchangeRate>
    <handlingAmount>9.00</handlingAmount>
    <handlingDiscountAmount>0</handlingDiscountAmount>
    <orderDate>2001-01-01T12:00:00</orderDate>
    <origin>1</origin>
    <parentSalesOrderID></parentSalesOrderID>
    <purchaseOrderNumber></purchaseOrderNumber>
    <rewardsPointsQualified>0</rewardsPointsQualified>
```

```
    <salesOrderDetails>
      <salesOrderDetail>
        <amount>10.0000</amount>
        <combinedAmount>10.0000</combinedAmount>
        <combinedPrice>10.0000</combinedPrice>
        <discountAmount>0</discountAmount>
        <dynamicFormResult>
          <fields>
            <field id="CustomURL">http://www.yahoo.com</field>
            <field id="CustomText">MyText</field>
            <field id="CustomColor">
              <selected>Red</selected>
              <selected>Blue</selected>
            </field>
            <field id="CustomSize">
              <selected>XL</selected>
            </field>
          </fields>
        </dynamicFormResult>
        <parentSalesOrderDetailID></parentSalesOrderDetailID>
        <price>10.0000</price>
        <productName>Good Book</productName>
        <productVariant>
          <basePrice>10.0000</basePrice>
          <name>Series 1</name>
          <product>
            <name>Good Book</name>
            <summary></summary>
          </product>
          <sku>A100</sku>
          <summary></summary>
        </productVariant>
        <productVariantExtension>
          <data>
            <shippingRate>1.00</shippingRate>
          </data>
        </productVariantExtension>
        <productVariantName>Series 1</productVariantName>
        <quantity>1</quantity>
        <salesOrderDetailID>102</salesOrderDetailID>
        <sku>A100</sku>
      </salesOrderDetail>
    </salesOrderDetails>
    <salesOrderGUID>F2CB78A0-5B3B-489a-9E62-006372ACAE34</salesOrderGUID>
    <salesOrderNumber>SA1000</salesOrderNumber>
    <salesPayments>
      <salesPayment>
        <amount>10.0000</amount>
        <creditCardHint>4345</creditCardHint>
        <paymentDate>2001-01-01T12:00:00</paymentDate>
        <paymentGateway>PayPalWPP</paymentGateway>
        <paymentHint></paymentHint>
        <paymentMethod>3</paymentMethod>
        <paymentMethodName>Credit card</paymentMethodName>
        <responseCode>1</responseCode>
        <transactionType>2</transactionType>
        <voucherHint></voucherHint>
      </salesPayment>
    </salesPayments>
    <salesPaymentStatus>1</salesPaymentStatus>
    <seller>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email>test@example.com</email>
      <phone>111-111-1111</phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </seller>
    <sellerID>1</sellerID>
    <shippingAmount>1.00</shippingAmount>
    <shippingCity>Beverley Hills</shippingCity>
    <shippingCompany>Revindex</shippingCompany>
    <shippingCountryCode>US</shippingCountryCode>
    <shippingCountryName>United States</shippingCountryName>
    <shippingDiscountAmount>0</shippingDiscountAmount>
    <shippingEmail>text@example.com</shippingEmail>
    <shippingFirstName>John</shippingFirstName>
    <shippingLastName>Doe</shippingLastName>
    <shippingMethodID>2</shippingMethodID>
    <shippingPhone>111-111-1111</shippingPhone>
```

```
    <shippingPostalCode>90210</shippingPostalCode>
    <shippingStatus>1</shippingStatus>
    <shippingStreet>1 Melrose</shippingStreet>
    <shippingSubdivisionCode>US-CA</shippingSubdivisionCode>
    <shippingSubdivisionName>California</shippingSubdivisionName>
    <status>2</status>
    <subTotalAmount>10.00</subTotalAmount>
    <taxAmount1>0.00</taxAmount1>
    <taxAmount2>0.00</taxAmount2>
    <taxAmount3>0.00</taxAmount3>
    <taxAmount4>0.00</taxAmount4>
    <taxAmount5>0.00</taxAmount5>
    <taxDiscountAmount>0</taxDiscountAmount>
    <totalAmount>20.00</totalAmount>
    <userHostAddress>127.0.0.1</userHostAddress>
    <warehouse>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email></email>
      <phone></phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </warehouse>
    <warehouseID>1</warehouseID>
  </salesOrder>
  <user>
    <email>user@address.com</email>
    <profile>
      <profileProperties>
        <Biography></Biography>
        <Cell></Cell>
        <City>Beverley Hills</City>
        <Country>United States</Country>
        <Fax></Fax>
        <FirstName>John</FirstName>
        <IM></IM>
        <LastName>Doe</LastName>
        <MiddleName></MiddleName>
        <Photo></Photo>
        <PostalCode>90210</PostalCode>
        <PreferredLocale>en-US</PreferredLocale>
        <Prefix></Prefix>
        <Region>California</Region>
        <Street>1 Melrose</Street>
        <Suffix></Suffix>
        <Telephone>111-111-1111</Telephone>
        <TimeZone>0</TimeZone>
        <Unit></Unit>
        <Website></Website>
      </profileProperties>
    </profile>
    <roles>
      <role>Role1</role>
      <role>Role2</role>
    </roles>
    <userHostAddress>127.0.0.1</userHostAddress>
    <userID>1</userID>
    <username>host</username>
  </user>
</in>
```

Order invoice print

Print invoice is useful for requesting payment.

The Basic template rule can accept XSL tokens (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/xsl-tokens/rvdwkpvm/section) to inject dynamic data. Below is the sample XML input that you can retrieve token values from:

```
<in>
  <configuration>
    <generalEmailSender>test@example.com</generalEmailSender>
    <generalStoreName>Revindex Storefront</generalStoreName>
  </configuration>
  <portal>
    <cartTabs>
      <tab>
        <tabID>57</tabID>
      </tab>
    </cartTabs>
    <checkoutTabs>
      <tab>
        <tabID>61</tabID>
      </tab>
    </checkoutTabs>
    <manageOrderTabs>
      <tab>
        <tabID>62</tabID>
      </tab>
    </manageOrderTabs>
    <manageVoucherTabs>
      <tab>
        <tabID>174</tabID>
      </tab>
    </manageVoucherTabs>
    <portalAliases>
      <portalAlias>
        <cultureCode></cultureCode>
        <httpAlias>site.com</httpAlias>
        <isPrimary>true</isPrimary>
        <portalAliasID>1</portalAliasID>
      </portalAlias>
    </portalAliases>
    <portalID>0</portalID>
  </portal>
  <salesOrder>
    <billingCity>Beverley Hills</billingCity>
    <billingCompany>Revindex</billingCompany>
    <billingCountryCode>US</billingCountryCode>
    <billingCountryName>United States</billingCountryName>
    <billingEmail>text@example.com</billingEmail>
    <billingFirstName>John</billingFirstName>
    <billingLastName>Doe</billingLastName>
    <billingPhone>111-111-1111</billingPhone>
    <billingPostalCode>90210</billingPostalCode>
    <billingStreet>1 Melrose</billingStreet>
    <billingSubdivisionCode>US-CA</billingSubdivisionCode>
    <billingSubdivisionName>California</billingSubdivisionName>
    <businessTaxNumber>GB 123456789</businessTaxNumber>
    <couponCodes>
      <couponCode>free2</couponCode>
    </couponCodes>
    <cultureCode>en-US</cultureCode>
    <currency>
      <currencySymbol>$</currencySymbol>
      <isoCurrencySymbol>USD</isoCurrencySymbol>
    </currency>
    <currencyCultureCode>en-US</currencyCultureCode>
    <dynamicFormResult>
      <fields>
        <field id="CustomName">Name1</field>
        <field id="CustomText">MyText</field>
        <field id="CustomColor">
          <selected>Red</selected>
          <selected>Blue</selected>
        </field>
        <field id="CustomSize">
          <selected>XL</selected>
        </field>
      </fields>
    </dynamicFormResult>
    <exchangeRate>1.0000</exchangeRate>
    <handlingAmount>9.00</handlingAmount>
    <handlingDiscountAmount>0</handlingDiscountAmount>
    <orderDate>2001-01-01T12:00:00</orderDate>
    <origin>1</origin>
    <parentSalesOrderID></parentSalesOrderID>
    <purchaseOrderNumber></purchaseOrderNumber>
    <rewardsPointsQualified>0</rewardsPointsQualified>
```

```
    <salesOrderDetails>
      <salesOrderDetail>
        <amount>10.0000</amount>
        <combinedAmount>10.0000</combinedAmount>
        <combinedPrice>10.0000</combinedPrice>
        <discountAmount>0</discountAmount>
        <dynamicFormResult>
          <fields>
            <field id="CustomURL">http://www.yahoo.com</field>
            <field id="CustomText">MyText</field>
            <field id="CustomColor">
              <selected>Red</selected>
              <selected>Blue</selected>
            </field>
            <field id="CustomSize">
              <selected>XL</selected>
            </field>
          </fields>
        </dynamicFormResult>
        <parentSalesOrderDetailID></parentSalesOrderDetailID>
        <price>10.0000</price>
        <productName>Good Book</productName>
        <productVariant>
          <basePrice>10.0000</basePrice>
          <name>Series 1</name>
          <product>
            <name>Good Book</name>
            <summary></summary>
          </product>
          <sku>A100</sku>
          <summary></summary>
        </productVariant>
        <productVariantExtension>
          <data>
            <shippingRate>1.00</shippingRate>
          </data>
        </productVariantExtension>
        <productVariantName>Series 1</productVariantName>
        <quantity>1</quantity>
        <salesOrderDetailID>102</salesOrderDetailID>
        <sku>A100</sku>
      </salesOrderDetail>
    </salesOrderDetails>
    <salesOrderGUID>F2CB78A0-5B3B-489a-9E62-006372ACAE34</salesOrderGUID>
    <salesOrderNumber>SA1000</salesOrderNumber>
    <salesPayments>
      <salesPayment>
        <amount>10.0000</amount>
        <creditCardHint>4345</creditCardHint>
        <paymentDate>2001-01-01T12:00:00</paymentDate>
        <paymentGateway>PayPalWPP</paymentGateway>
        <paymentHint></paymentHint>
        <paymentMethod>3</paymentMethod>
        <paymentMethodName>Credit card</paymentMethodName>
        <responseCode>1</responseCode>
        <transactionType>2</transactionType>
        <voucherHint></voucherHint>
      </salesPayment>
    </salesPayments>
    <salesPaymentStatus>1</salesPaymentStatus>
    <seller>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email>test@example.com</email>
      <phone>111-111-1111</phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </seller>
    <sellerID>1</sellerID>
    <shippingAmount>1.00</shippingAmount>
    <shippingCity>Beverley Hills</shippingCity>
    <shippingCompany>Revindex</shippingCompany>
    <shippingCountryCode>US</shippingCountryCode>
    <shippingCountryName>United States</shippingCountryName>
    <shippingDiscountAmount>0</shippingDiscountAmount>
    <shippingEmail>text@example.com</shippingEmail>
    <shippingFirstName>John</shippingFirstName>
    <shippingLastName>Doe</shippingLastName>
    <shippingMethodID>2</shippingMethodID>
    <shippingPhone>111-111-1111</shippingPhone>
```

```
    <shippingPostalCode>90210</shippingPostalCode>
    <shippingStatus>1</shippingStatus>
    <shippingStreet>1 Melrose</shippingStreet>
    <shippingSubdivisionCode>US-CA</shippingSubdivisionCode>
    <shippingSubdivisionName>California</shippingSubdivisionName>
    <status>2</status>
    <subTotalAmount>10.00</subTotalAmount>
    <taxAmount1>0.00</taxAmount1>
    <taxAmount2>0.00</taxAmount2>
    <taxAmount3>0.00</taxAmount3>
    <taxAmount4>0.00</taxAmount4>
    <taxAmount5>0.00</taxAmount5>
    <taxDiscountAmount>0</taxDiscountAmount>
    <totalAmount>20.00</totalAmount>
    <userHostAddress>127.0.0.1</userHostAddress>
    <warehouse>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email></email>
      <phone></phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </warehouse>
    <warehouseID>1</warehouseID>
  </salesOrder>
  <user>
    <email>user@address.com</email>
    <profile>
      <profileProperties>
        <Biography></Biography>
        <Cell></Cell>
        <City>Beverley Hills</City>
        <Country>United States</Country>
        <Fax></Fax>
        <FirstName>John</FirstName>
        <IM></IM>
        <LastName>Doe</LastName>
        <MiddleName></MiddleName>
        <Photo></Photo>
        <PostalCode>90210</PostalCode>
        <PreferredLocale>en-US</PreferredLocale>
        <Prefix></Prefix>
        <Region>California</Region>
        <Street>1 Melrose</Street>
        <Suffix></Suffix>
        <Telephone>111-111-1111</Telephone>
        <TimeZone>0</TimeZone>
        <Unit></Unit>
        <Website></Website>
      </profileProperties>
    </profile>
    <roles>
      <role>Role1</role>
      <role>Role2</role>
    </roles>
    <userHostAddress>127.0.0.1</userHostAddress>
    <userID>1</userID>
    <username>host</username>
  </user>
</in>
```

Order receipt email

Email receipts are sent out whenever a new order is placed on the shopping cart. By default, the Storefront will send the receipt to the registered email address of the buyer.

The Basic template rule can accept XSL tokens (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/xsl-tokens/rvdwkpvm/section) to inject dynamic data. Below is the sample XML input that you can retrieve token values from:

```
<in>
  <configuration>
    <generalEmailSender>test@example.com</generalEmailSender>
    <generalStoreName>Revindex Storefront</generalStoreName>
  </configuration>
  <portal>
    <cartTabs>
      <tab>
        <tabID>57</tabID>
      </tab>
    </cartTabs>
    <checkoutTabs>
      <tab>
        <tabID>61</tabID>
      </tab>
    </checkoutTabs>
    <manageOrderTabs>
      <tab>
        <tabID>62</tabID>
      </tab>
    </manageOrderTabs>
    <manageVoucherTabs>
      <tab>
        <tabID>174</tabID>
      </tab>
    </manageVoucherTabs>
    <portalAliases>
      <portalAlias>
        <cultureCode></cultureCode>
        <httpAlias>site.com</httpAlias>
        <isPrimary>true</isPrimary>
        <portalAliasID>1</portalAliasID>
      </portalAlias>
    </portalAliases>
    <portalID>0</portalID>
  </portal>
  <salesOrder>
    <billingCity>Beverley Hills</billingCity>
    <billingCompany>Revindex</billingCompany>
    <billingCountryCode>US</billingCountryCode>
    <billingCountryName>United States</billingCountryName>
    <billingEmail>text@example.com</billingEmail>
    <billingFirstName>John</billingFirstName>
    <billingLastName>Doe</billingLastName>
    <billingPhone>111-111-1111</billingPhone>
    <billingPostalCode>90210</billingPostalCode>
    <billingStreet>1 Melrose</billingStreet>
    <billingSubdivisionCode>US-CA</billingSubdivisionCode>
    <billingSubdivisionName>California</billingSubdivisionName>
    <businessTaxNumber>GB 123456789</businessTaxNumber>
    <couponCodes>
      <couponCode>free2</couponCode>
    </couponCodes>
    <cultureCode>en-US</cultureCode>
    <currency>
      <currencySymbol>$</currencySymbol>
      <isoCurrencySymbol>USD</isoCurrencySymbol>
    </currency>
    <currencyCultureCode>en-US</currencyCultureCode>
    <dynamicFormResult>
      <fields>
        <field id="CustomName">Name1</field>
        <field id="CustomText">MyText</field>
        <field id="CustomColor">
          <selected>Red</selected>
          <selected>Blue</selected>
        </field>
        <field id="CustomSize">
          <selected>XL</selected>
        </field>
      </fields>
    </dynamicFormResult>
    <exchangeRate>1.0000</exchangeRate>
    <handlingAmount>9.00</handlingAmount>
    <handlingDiscountAmount>0</handlingDiscountAmount>
    <orderDate>2001-01-01T12:00:00</orderDate>
    <origin>1</origin>
    <parentSalesOrderID></parentSalesOrderID>
    <purchaseOrderNumber></purchaseOrderNumber>
    <rewardsPointsQualified>0</rewardsPointsQualified>
    <salesOrderDetails>
```

```
    <salesOrderDetails>
      <salesOrderDetail>
        <amount>10.0000</amount>
        <combinedAmount>10.0000</combinedAmount>
        <combinedPrice>10.0000</combinedPrice>
        <discountAmount>0</discountAmount>
        <dynamicFormResult>
          <fields>
            <field id="CustomURL">http://www.yahoo.com</field>
            <field id="CustomText">MyText</field>
            <field id="CustomColor">
              <selected>Red</selected>
              <selected>Blue</selected>
            </field>
            <field id="CustomSize">
              <selected>XL</selected>
            </field>
          </fields>
        </dynamicFormResult>
        <parentSalesOrderDetailID></parentSalesOrderDetailID>
        <price>10.0000</price>
        <productName>Good Book</productName>
        <productVariant>
          <basePrice>10.0000</basePrice>
          <name>Series 1</name>
          <product>
            <name>Good Book</name>
            <summary></summary>
          </product>
          <sku>A100</sku>
          <summary></summary>
        </productVariant>
        <productVariantExtension>
          <data>
            <shippingRate>1.00</shippingRate>
          </data>
        </productVariantExtension>
        <productVariantName>Series 1</productVariantName>
        <quantity>1</quantity>
        <salesOrderDetailID>102</salesOrderDetailID>
        <sku>A100</sku>
      </salesOrderDetail>
    </salesOrderDetails>
    <salesOrderGUID>F2CB78A0-5B3B-489a-9E62-006372ACAE34</salesOrderGUID>
    <salesOrderNumber>SA1000</salesOrderNumber>
    <salesPayments>
      <salesPayment>
        <amount>10.0000</amount>
        <creditCardHint>4345</creditCardHint>
        <paymentDate>2001-01-01T12:00:00</paymentDate>
        <paymentGateway>PayPalWPP</paymentGateway>
        <paymentHint></paymentHint>
        <paymentMethod>3</paymentMethod>
        <paymentMethodName>Credit card</paymentMethodName>
        <responseCode>1</responseCode>
        <transactionType>2</transactionType>
        <voucherHint></voucherHint>
      </salesPayment>
    </salesPayments>
    <salesPaymentStatus>1</salesPaymentStatus>
    <seller>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email>test@example.com</email>
      <phone>111-111-1111</phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </seller>
    <sellerID>1</sellerID>
    <shippingAmount>1.00</shippingAmount>
    <shippingCity>Beverley Hills</shippingCity>
    <shippingCompany>Revindex</shippingCompany>
    <shippingCountryCode>US</shippingCountryCode>
    <shippingCountryName>United States</shippingCountryName>
    <shippingDiscountAmount>0</shippingDiscountAmount>
    <shippingEmail>text@example.com</shippingEmail>
    <shippingFirstName>John</shippingFirstName>
    <shippingLastName>Doe</shippingLastName>
    <shippingMethodID>2</shippingMethodID>
    <shippingPhone>111-111-1111</shippingPhone>
```

```
    <shippingPostalCode>90210</shippingPostalCode>
    <shippingStatus>1</shippingStatus>
    <shippingStreet>1 Melrose</shippingStreet>
    <shippingSubdivisionCode>US-CA</shippingSubdivisionCode>
    <shippingSubdivisionName>California</shippingSubdivisionName>
    <status>2</status>
    <subTotalAmount>10.00</subTotalAmount>
    <taxAmount1>0.00</taxAmount1>
    <taxAmount2>0.00</taxAmount2>
    <taxAmount3>0.00</taxAmount3>
    <taxAmount4>0.00</taxAmount4>
    <taxAmount5>0.00</taxAmount5>
    <taxDiscountAmount>0</taxDiscountAmount>
    <totalAmount>20.00</totalAmount>
    <userHostAddress>127.0.0.1</userHostAddress>
    <warehouse>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email></email>
      <phone></phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </warehouse>
    <warehouseID>1</warehouseID>
  </salesOrder>
  <user>
    <email>user@address.com</email>
    <profile>
      <profileProperties>
        <Biography></Biography>
        <Cell></Cell>
        <City>Beverley Hills</City>
        <Country>United States</Country>
        <Fax></Fax>
        <FirstName>John</FirstName>
        <IM></IM>
        <LastName>Doe</LastName>
        <MiddleName></MiddleName>
        <Photo></Photo>
        <PostalCode>90210</PostalCode>
        <PreferredLocale>en-US</PreferredLocale>
        <Prefix></Prefix>
        <Region>California</Region>
        <Street>1 Melrose</Street>
        <Suffix></Suffix>
        <Telephone>111-111-1111</Telephone>
        <TimeZone>0</TimeZone>
        <Unit></Unit>
        <Website></Website>
      </profileProperties>
    </profile>
    <roles>
      <role>Role1</role>
      <role>Role2</role>
    </roles>
    <userHostAddress>127.0.0.1</userHostAddress>
    <userID>1</userID>
    <username>host</username>
  </user>
</in>
```

Order receipt print

The Basic template rule can accept XSL tokens (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/xsl-tokens/rvdwkpvm/section) to inject dynamic data. Below is the sample XML input that you can retrieve token values from:

```
<in>
  <configuration>
    <generalEmailSender>test@example.com</generalEmailSender>
    <generalStoreName>Revindex Storefront</generalStoreName>
  </configuration>
  <portal>
    <cartTabs>
      <tab>
        <tabID>57</tabID>
      </tab>
    </cartTabs>
    <checkoutTabs>
      <tab>
        <tabID>61</tabID>
      </tab>
    </checkoutTabs>
    <manageOrderTabs>
      <tab>
        <tabID>62</tabID>
      </tab>
    </manageOrderTabs>
    <manageVoucherTabs>
      <tab>
        <tabID>174</tabID>
      </tab>
    </manageVoucherTabs>
    <portalAliases>
      <portalAlias>
        <cultureCode></cultureCode>
        <httpAlias>site.com</httpAlias>
        <isPrimary>true</isPrimary>
        <portalAliasID>1</portalAliasID>
      </portalAlias>
    </portalAliases>
    <portalID>0</portalID>
  </portal>
  <salesOrder>
    <billingCity>Beverley Hills</billingCity>
    <billingCompany>Revindex</billingCompany>
    <billingCountryCode>US</billingCountryCode>
    <billingCountryName>United States</billingCountryName>
    <billingEmail>text@example.com</billingEmail>
    <billingFirstName>John</billingFirstName>
    <billingLastName>Doe</billingLastName>
    <billingPhone>111-111-1111</billingPhone>
    <billingPostalCode>90210</billingPostalCode>
    <billingStreet>1 Melrose</billingStreet>
    <billingSubdivisionCode>US-CA</billingSubdivisionCode>
    <billingSubdivisionName>California</billingSubdivisionName>
    <businessTaxNumber>GB 123456789</businessTaxNumber>
    <couponCodes>
      <couponCode>free2</couponCode>
    </couponCodes>
    <cultureCode>en-US</cultureCode>
    <currency>
      <currencySymbol>$</currencySymbol>
      <isoCurrencySymbol>USD</isoCurrencySymbol>
    </currency>
    <currencyCultureCode>en-US</currencyCultureCode>
    <dynamicFormResult>
      <fields>
        <field id="CustomName">Name1</field>
        <field id="CustomText">MyText</field>
        <field id="CustomColor">
          <selected>Red</selected>
          <selected>Blue</selected>
        </field>
        <field id="CustomSize">
          <selected>XL</selected>
        </field>
      </fields>
    </dynamicFormResult>
    <exchangeRate>1.0000</exchangeRate>
    <handlingAmount>9.00</handlingAmount>
    <handlingDiscountAmount>0</handlingDiscountAmount>
    <orderDate>2001-01-01T12:00:00</orderDate>
    <origin>1</origin>
    <parentSalesOrderID></parentSalesOrderID>
    <purchaseOrderNumber></purchaseOrderNumber>
    <rewardsPointsQualified>0</rewardsPointsQualified>
    <salesOrderDetails>
```

```
    <salesOrderDetails>
      <salesOrderDetail>
        <amount>10.0000</amount>
        <combinedAmount>10.0000</combinedAmount>
        <combinedPrice>10.0000</combinedPrice>
        <discountAmount>0</discountAmount>
        <dynamicFormResult>
          <fields>
            <field id="CustomURL">http://www.yahoo.com</field>
            <field id="CustomText">MyText</field>
            <field id="CustomColor">
              <selected>Red</selected>
              <selected>Blue</selected>
            </field>
            <field id="CustomSize">
              <selected>XL</selected>
            </field>
          </fields>
        </dynamicFormResult>
        <parentSalesOrderDetailID></parentSalesOrderDetailID>
        <price>10.0000</price>
        <productName>Good Book</productName>
        <productVariant>
          <basePrice>10.0000</basePrice>
          <name>Series 1</name>
          <product>
            <name>Good Book</name>
            <summary></summary>
          </product>
          <sku>A100</sku>
          <summary></summary>
        </productVariant>
        <productVariantExtension>
          <data>
            <shippingRate>1.00</shippingRate>
          </data>
        </productVariantExtension>
        <productVariantName>Series 1</productVariantName>
        <quantity>1</quantity>
        <salesOrderDetailID>102</salesOrderDetailID>
        <sku>A100</sku>
      </salesOrderDetail>
    </salesOrderDetails>
    <salesOrderGUID>F2CB78A0-5B3B-489a-9E62-006372ACAE34</salesOrderGUID>
    <salesOrderNumber>SA1000</salesOrderNumber>
    <salesPayments>
      <salesPayment>
        <amount>10.0000</amount>
        <creditCardHint>4345</creditCardHint>
        <paymentDate>2001-01-01T12:00:00</paymentDate>
        <paymentGateway>PayPalWPP</paymentGateway>
        <paymentHint></paymentHint>
        <paymentMethod>3</paymentMethod>
        <paymentMethodName>Credit card</paymentMethodName>
        <responseCode>1</responseCode>
        <transactionType>2</transactionType>
        <voucherHint></voucherHint>
      </salesPayment>
    </salesPayments>
    <salesPaymentStatus>1</salesPaymentStatus>
    <seller>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email>test@example.com</email>
      <phone>111-111-1111</phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </seller>
    <sellerID>1</sellerID>
    <shippingAmount>1.00</shippingAmount>
    <shippingCity>Beverley Hills</shippingCity>
    <shippingCompany>Revindex</shippingCompany>
    <shippingCountryCode>US</shippingCountryCode>
    <shippingCountryName>United States</shippingCountryName>
    <shippingDiscountAmount>0</shippingDiscountAmount>
    <shippingEmail>text@example.com</shippingEmail>
    <shippingFirstName>John</shippingFirstName>
    <shippingLastName>Doe</shippingLastName>
    <shippingMethodID>2</shippingMethodID>
    <shippingPhone>111-111-1111</shippingPhone>
```

```
    <shippingPostalCode>90210</shippingPostalCode>
    <shippingStatus>1</shippingStatus>
    <shippingStreet>1 Melrose</shippingStreet>
    <shippingSubdivisionCode>US-CA</shippingSubdivisionCode>
    <shippingSubdivisionName>California</shippingSubdivisionName>
    <status>2</status>
    <subTotalAmount>10.00</subTotalAmount>
    <taxAmount1>0.00</taxAmount1>
    <taxAmount2>0.00</taxAmount2>
    <taxAmount3>0.00</taxAmount3>
    <taxAmount4>0.00</taxAmount4>
    <taxAmount5>0.00</taxAmount5>
    <taxDiscountAmount>0</taxDiscountAmount>
    <totalAmount>20.00</totalAmount>
    <userHostAddress>127.0.0.1</userHostAddress>
    <warehouse>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email></email>
      <phone></phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </warehouse>
    <warehouseID>1</warehouseID>
  </salesOrder>
  <user>
    <email>user@address.com</email>
    <profile>
      <profileProperties>
        <Biography></Biography>
        <Cell></Cell>
        <City>Beverley Hills</City>
        <Country>United States</Country>
        <Fax></Fax>
        <FirstName>John</FirstName>
        <IM></IM>
        <LastName>Doe</LastName>
        <MiddleName></MiddleName>
        <Photo></Photo>
        <PostalCode>90210</PostalCode>
        <PreferredLocale>en-US</PreferredLocale>
        <Prefix></Prefix>
        <Region>California</Region>
        <Street>1 Melrose</Street>
        <Suffix></Suffix>
        <Telephone>111-111-1111</Telephone>
        <TimeZone>0</TimeZone>
        <Unit></Unit>
        <Website></Website>
      </profileProperties>
    </profile>
    <roles>
      <role>Role1</role>
      <role>Role2</role>
    </roles>
    <userHostAddress>127.0.0.1</userHostAddress>
    <userID>1</userID>
    <username>host</username>
  </user>
</in>
```

Recurring order reminder email

This email is sent out to users to remind them of their upcoming recurring orders are due to repeat. Users may want to be reminded to update their address and payment information on file before the order is repeated.

The Basic template rule can accept XSL tokens (http://www.revindex.com/Resources/KnowledgeBase/RevindexStorefront/tabid/174/rvdwktid/order-alert-email-264/http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/xsl-tokens/rvdwkpvm/section) to inject dynamic data. Below is the sample XML input that you can retrieve token values from:

```
<in>
  <configuration>
    <generalEmailRecipient>support@localhost.com</generalEmailRecipient>
    <generalEmailSender>support@localhost.com</generalEmailSender>
    <generalStoreName>Revindex</generalStoreName>
  </configuration>
  <portal>
    <managePaymentTabs>
      <tab>
        <tabID>65</tabID>
      </tab>
    </managePaymentTabs>
    <manageRecurringOrderTabs>
      <tab>
        <tabID>64</tabID>
      </tab>
    </manageRecurringOrderTabs>
    <portalAliases>
      <portalAlias>
        <cultureCode></cultureCode>
        <httpAlias>site.com</httpAlias>
        <isPrimary>true</isPrimary>
        <portalAliasID>1</portalAliasID>
      </portalAlias>
    </portalAliases>
    <portalID>0</portalID>
  </portal>
  <recurringSalesOrders>
    <recurringSalesOrder>
      <cultureCode>en-US</cultureCode>
      <dynamicFormResult>
        <fields>
          <field id="CustomFieldID1">Value...</field>
          <field id="CustomFieldID2">Value...</field>
        </fields>
      </dynamicFormResult>
      <maxRepeat></maxRepeat>
      <nextRecurringDate>2015-03-19T00:00:00</nextRecurringDate>
      <originalSalesOrderID>1686</originalSalesOrderID>
      <productVariant>
        <basePrice>19.0000</basePrice>
        <name>Default</name>
        <preorderInterval>0</preorderInterval>
        <product>
          <name>Product 3</name>
        </product>
        <sku></sku>
      </productVariant>
      <productVariantID>6</productVariantID>
      <quantity>1</quantity>
      <recurringSalesOrderID>58</recurringSalesOrderID>
      <repeatCount>0</repeatCount>
      <shippingCity>Beverley hills</shippingCity>
      <shippingCompany></shippingCompany>
      <shippingCountryCode>US</shippingCountryCode>
      <shippingCountryName>United States</shippingCountryName>
      <shippingEmail>customer@localhost.com</shippingEmail>
      <shippingFirstName>John</shippingFirstName>
      <shippingLastName>Doe</shippingLastName>
      <shippingMethodID>2</shippingMethodID>
      <shippingPhone>111-111-1111</shippingPhone>
      <shippingPostalCode>90211</shippingPostalCode>
      <shippingStreet>1 melrose place</shippingStreet>
      <shippingSubdivisionCode>US-CA</shippingSubdivisionCode>
      <shippingSubdivisionName>California</shippingSubdivisionName>
      <status>1</status>
      <userPayment>
        <city>Raleigh</city>
        <company></company>
        <countryCode>US</countryCode>
        <countryName>United States</countryName>
        <creditCardHint></creditCardHint>
        <email>customer@localhost.com</email>
        <firstName>John</firstName>
        <lastName>Doe</lastName>
        <paymentHint></paymentHint>
        <paymentMethod>3</paymentMethod>
        <paymentMethodName>Credit card</paymentMethodName>
        <phone>111-111-1111</phone>
        <postalCode>27601</postalCode>
        <street>1 lopez ct</street>
```

```
        <street>1 Jones St</street>
        <subdivisionCode>US-NC</subdivisionCode>
        <subdivisionName>California</subdivisionName>
        <voucherHint>WBEP</voucherHint>
      </userPayment>
      <userPaymentID>68</userPaymentID>
    </recurringSalesOrder>
  </recurringSalesOrders>
  <user>
    <email>customer@localhost.com</email>
    <profile>
      <profileProperties>
        <Biography></Biography>
        <Cell></Cell>
        <City>Beverley hills</City>
        <Country>United States</Country>
        <Fax></Fax>
        <FirstName>John</FirstName>
        <IM></IM>
        <LastName>Doe</LastName>
        <MiddleName></MiddleName>
        <Photo>-1</Photo>
        <PostalCode>90210</PostalCode>
        <PreferredLocale>en-US</PreferredLocale>
        <PreferredTimeZone>Pacific Standard Time</PreferredTimeZone>
        <Prefix></Prefix>
        <Region>California</Region>
        <Street>1 road</Street>
        <Suffix></Suffix>
        <Telephone>111-111-1111</Telephone>
        <Unit></Unit>
        <Website></Website>
      </profileProperties>
    </profile>
    <roles>
      <role>Role 2</role>
      <role>Role 1</role>
    </roles>
    <userID>1</userID>
    <username>host</username>
  </user>
</in>
```

Right receipt email

Voucher receipt is used to send an email to the customer their voucher codes. By default, the Storefront will send the invoice to the registered email address and billing address of the buyer.

The Basic template rule can accept XSL tokens (http://www.revindex.com/Resources/KnowledgeBase/RevindexStorefront/tabid/174/rvdwktid/email-invoice-268/http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/xsl-tokens/rvdwkpvm/section) to inject dynamic data. Below is the sample XML input that you can retrieve token values from:

```
<in>
  <configuration>
    <generalEmailRecipient>recipient@localhost.com</generalEmailRecipient>
    <generalEmailSender>test@example.com</generalEmailSender>
    <generalStoreName>Revindex Storefront</generalStoreName>
  </configuration>
  <portal>
    <cartTabs>
      <tab>
        <tabID>57</tabID>
      </tab>
    </cartTabs>
    <checkoutTabs>
      <tab>
        <tabID>61</tabID>
      </tab>
    </checkoutTabs>
    <manageOrderTabs>
      <tab>
        <tabID>62</tabID>
      </tab>
    </manageOrderTabs>
    <manageRightTabs>
      <tab>
        <tabID>176</tabID>
      </tab>
    </manageRightTabs>
    <portalAliases>
      <portalAlias>
        <cultureCode></cultureCode>
        <httpAlias>site.com</httpAlias>
        <isPrimary>true</isPrimary>
        <portalAliasID>1</portalAliasID>
      </portalAlias>
    </portalAliases>
    <portalID>0</portalID>
  </portal>
  <salesOrder>
    <billingCity>Beverley Hills</billingCity>
    <billingCompany>Revindex</billingCompany>
    <billingCountryCode>US</billingCountryCode>
    <billingCountryName>United States</billingCountryName>
    <billingEmail>text@example.com</billingEmail>
    <billingFirstName>John</billingFirstName>
    <billingLastName>Doe</billingLastName>
    <billingPhone>111-111-1111</billingPhone>
    <billingPostalCode>90210</billingPostalCode>
    <billingStreet>1 Melrose</billingStreet>
    <billingSubdivisionCode>US-CA</billingSubdivisionCode>
    <billingSubdivisionName>California</billingSubdivisionName>
    <businessTaxNumber>GB 123456789</businessTaxNumber>
    <couponCodes>
      <couponCode>free2</couponCode>
    </couponCodes>
    <cultureCode>en-US</cultureCode>
    <currency>
      <currencySymbol>$</currencySymbol>
      <isoCurrencySymbol>USD</isoCurrencySymbol>
    </currency>
    <currencyCultureCode>en-US</currencyCultureCode>
    <dynamicFormResult>
      <fields>
        <field id="CustomName">Name1</field>
        <field id="CustomText">MyText</field>
        <field id="CustomColor">
          <selected>Red</selected>
          <selected>Blue</selected>
        </field>
        <field id="CustomSize">
          <selected>XL</selected>
        </field>
      </fields>
    </dynamicFormResult>
    <exchangeRate>1.0000</exchangeRate>
    <handlingAmount>9.00</handlingAmount>
    <handlingDiscountAmount>0</handlingDiscountAmount>
    <orderDate>2001-01-01T12:00:00</orderDate>
    <origin>1</origin>
    <parentSalesOrderID></parentSalesOrderID>
    <purchaseOrderNumber></purchaseOrderNumber>
    <rewardsPointsQualified>0</rewardsPointsQualified>
```

```
    <rewardsPointsQualified>0</rewardsPointsQualified>
    <salesOrderGUID>F2CB78A0-5B3B-489a-9E62-006372ACAE34</salesOrderGUID>
    <salesOrderNumber>SA1000</salesOrderNumber>
    <salesPaymentStatus>1</salesPaymentStatus>
    <seller>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email>test@example.com</email>
      <phone>111-111-1111</phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </seller>
    <sellerID>1</sellerID>
    <shippingAmount>1.00</shippingAmount>
    <shippingCity>Beverley Hills</shippingCity>
    <shippingCompany>Revindex</shippingCompany>
    <shippingCountryCode>US</shippingCountryCode>
    <shippingCountryName>United States</shippingCountryName>
    <shippingDiscountAmount>0</shippingDiscountAmount>
    <shippingEmail>text@example.com</shippingEmail>
    <shippingFirstName>John</shippingFirstName>
    <shippingLastName>Doe</shippingLastName>
    <shippingMethodID>2</shippingMethodID>
    <shippingPhone>111-111-1111</shippingPhone>
    <shippingPostalCode>90210</shippingPostalCode>
    <shippingStatus>1</shippingStatus>
    <shippingStreet>1 Melrose</shippingStreet>
    <shippingSubdivisionCode>US-CA</shippingSubdivisionCode>
    <shippingSubdivisionName>California</shippingSubdivisionName>
    <status>2</status>
    <subTotalAmount>10.00</subTotalAmount>
    <taxAmount1>0.00</taxAmount1>
    <taxAmount2>0.00</taxAmount2>
    <taxAmount3>0.00</taxAmount3>
    <taxAmount4>0.00</taxAmount4>
    <taxAmount5>0.00</taxAmount5>
    <taxDiscountAmount>0</taxDiscountAmount>
    <totalAmount>20.00</totalAmount>
    <userHostAddress>127.0.0.1</userHostAddress>
    <warehouse>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email></email>
      <phone></phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </warehouse>
    <warehouseID>1</warehouseID>
  </salesOrder>
  <user>
    <email>user@address.com</email>
    <profile>
      <profileProperties>
        <Biography></Biography>
        <Cell></Cell>
        <City>Beverley Hills</City>
        <Country>United States</Country>
        <Fax></Fax>
        <FirstName>John</FirstName>
        <IM></IM>
        <LastName>Doe</LastName>
        <MiddleName></MiddleName>
        <Photo></Photo>
        <PostalCode>90210</PostalCode>
        <PreferredLocale>en-US</PreferredLocale>
        <Prefix></Prefix>
        <Region>California</Region>
        <Street>1 Melrose</Street>
        <Suffix></Suffix>
        <Telephone>111-111-1111</Telephone>
        <TimeZone>0</TimeZone>
        <Unit></Unit>
        <Website></Website>
      </profileProperties>
    </profile>
    <roles>
      <role>Role1</role>
      <role>Role2</role>
    </roles>
```

```
    <userHostAddress>127.0.0.1</userHostAddress>
    <userID>1</userID>
    <username>host</username>
  </user>
  <rights>
    <right>
      <code>VKMO2XTJKPZUNGPB</code>
      <issueDate>2013-10-23T10:17:34</issueDate>
      <rightDefinition>
        <name>License key</name>
        <description></description>
      </rightDefinition>
      <rightDefinitionID>7</rightDefinitionID>
    </right>
  </rights>
</in>
```

Voucher receipt email

Voucher receipt is used to send an email to the customer their voucher codes. By default, the Storefront will send the invoice to the registered email address and billing address of the buyer.

The Basic template rule can accept XSL tokens (http://www.revindex.com/Resources/KnowledgeBase/RevindexStorefront/tabid/174/rvdwktid/email-invoice-268/http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/xsl-tokens/rvdwkpvm/section) to inject dynamic data. Below is the sample XML input that you can retrieve token values from:

```xml
<in>
  <configuration>
    <generalEmailRecipient>recipient@localhost.com</generalEmailRecipient>
    <generalEmailSender>test@example.com</generalEmailSender>
    <generalStoreName>Revindex Storefront</generalStoreName>
  </configuration>
  <portal>
    <cartTabs>
      <tab>
        <tabID>57</tabID>
      </tab>
    </cartTabs>
    <checkoutTabs>
      <tab>
        <tabID>61</tabID>
      </tab>
    </checkoutTabs>
    <manageOrderTabs>
      <tab>
        <tabID>62</tabID>
      </tab>
    </manageOrderTabs>
    <manageVoucherTabs>
      <tab>
        <tabID>174</tabID>
      </tab>
    </manageVoucherTabs>
    <portalAliases>
      <portalAlias>
        <cultureCode></cultureCode>
        <httpAlias>site.com</httpAlias>
        <isPrimary>true</isPrimary>
        <portalAliasID>1</portalAliasID>
      </portalAlias>
    </portalAliases>
    <portalID>0</portalID>
  </portal>
  <salesOrder>
    <billingCity>Beverley Hills</billingCity>
    <billingCompany>Revindex</billingCompany>
    <billingCountryCode>US</billingCountryCode>
    <billingCountryName>United States</billingCountryName>
    <billingEmail>text@example.com</billingEmail>
    <billingFirstName>John</billingFirstName>
    <billingLastName>Doe</billingLastName>
    <billingPhone>111-111-1111</billingPhone>
    <billingPostalCode>90210</billingPostalCode>
    <billingStreet>1 Melrose</billingStreet>
    <billingSubdivisionCode>US-CA</billingSubdivisionCode>
    <billingSubdivisionName>California</billingSubdivisionName>
    <businessTaxNumber>GB 123456789</businessTaxNumber>
    <couponCodes>
      <couponCode>free2</couponCode>
    </couponCodes>
    <cultureCode>en-US</cultureCode>
    <currency>
      <currencySymbol>$</currencySymbol>
      <isoCurrencySymbol>USD</isoCurrencySymbol>
    </currency>
    <currencyCultureCode>en-US</currencyCultureCode>
    <dynamicFormResult>
      <fields>
        <field id="CustomName">Name1</field>
        <field id="CustomText">MyText</field>
        <field id="CustomColor">
          <selected>Red</selected>
          <selected>Blue</selected>
        </field>
        <field id="CustomSize">
          <selected>XL</selected>
        </field>
      </fields>
    </dynamicFormResult>
    <exchangeRate>1.0000</exchangeRate>
    <handlingAmount>9.00</handlingAmount>
    <handlingDiscountAmount>0</handlingDiscountAmount>
    <orderDate>2001-01-01T12:00:00</orderDate>
    <origin>1</origin>
    <parentSalesOrderID></parentSalesOrderID>
    <purchaseOrderNumber></purchaseOrderNumber>
```

```
    <rewardsPointsQualified>0</rewardsPointsQualified>
    <salesOrderGUID>F2CB78A0-5B3B-489a-9E62-006372ACAE34</salesOrderGUID>
    <salesOrderNumber>SA1000</salesOrderNumber>
    <salesPaymentStatus>1</salesPaymentStatus>
    <seller>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email>test@example.com</email>
      <phone>111-111-1111</phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </seller>
    <sellerID>1</sellerID>
    <shippingAmount>1.00</shippingAmount>
    <shippingCity>Beverley Hills</shippingCity>
    <shippingCompany>Revindex</shippingCompany>
    <shippingCountryCode>US</shippingCountryCode>
    <shippingCountryName>United States</shippingCountryName>
    <shippingDiscountAmount>0</shippingDiscountAmount>
    <shippingEmail>text@example.com</shippingEmail>
    <shippingFirstName>John</shippingFirstName>
    <shippingLastName>Doe</shippingLastName>
    <shippingMethodID>2</shippingMethodID>
    <shippingPhone>111-111-1111</shippingPhone>
    <shippingPostalCode>90210</shippingPostalCode>
    <shippingStatus>1</shippingStatus>
    <shippingStreet>1 Melrose</shippingStreet>
    <shippingSubdivisionCode>US-CA</shippingSubdivisionCode>
    <shippingSubdivisionName>California</shippingSubdivisionName>
    <status>2</status>
    <subTotalAmount>10.00</subTotalAmount>
    <taxAmount1>0.00</taxAmount1>
    <taxAmount2>0.00</taxAmount2>
    <taxAmount3>0.00</taxAmount3>
    <taxAmount4>0.00</taxAmount4>
    <taxAmount5>0.00</taxAmount5>
    <taxDiscountAmount>0</taxDiscountAmount>
    <totalAmount>20.00</totalAmount>
    <userHostAddress>127.0.0.1</userHostAddress>
    <warehouse>
      <city>Beverley Hills</city>
      <countryCode>US</countryCode>
      <email></email>
      <phone></phone>
      <postalCode>90210</postalCode>
      <street>1 Melrose</street>
      <subdivisionCode>US-CA</subdivisionCode>
    </warehouse>
    <warehouseID>1</warehouseID>
  </salesOrder>
  <user>
    <email>user@address.com</email>
    <profile>
      <profileProperties>
        <Biography></Biography>
        <Cell></Cell>
        <City>Beverley Hills</City>
        <Country>United States</Country>
        <Fax></Fax>
        <FirstName>John</FirstName>
        <IM></IM>
        <LastName>Doe</LastName>
        <MiddleName></MiddleName>
        <Photo></Photo>
        <PostalCode>90210</PostalCode>
        <PreferredLocale>en-US</PreferredLocale>
        <Prefix></Prefix>
        <Region>California</Region>
        <Street>1 Melrose</Street>
        <Suffix></Suffix>
        <Telephone>111-111-1111</Telephone>
        <TimeZone>0</TimeZone>
        <Unit></Unit>
        <Website></Website>
      </profileProperties>
    </profile>
    <roles>
      <role>Role1</role>
      <role>Role2</role>
    </roles>
```

```
    <userHostAddress>127.0.0.1</userHostAddress>
    <userID>1</userID>
    <username>host</username>
  </user>
  <vouchers>
    <voucher>
      <amount>10.0000</amount>
      <code>VKMO2XTJKPZUNGPB</code>
      <initialAmount>10.0000</initialAmount>
      <issueDate>2013-10-23T10:17:34</issueDate>
      <status>2</status>
      <voucherDefinitionID>4</voucherDefinitionID>
    </voucher>
  </vouchers>
</in>
```

How to troubleshoot email not receiving

Most email related problems have to do with improper configuration. Please ensure you have followed the steps below:

1. Verify you have a valid SMTP server settings under DNN **Host > Host Settings** page. Try sending an email to an external email address (e.g. Hotmail or Gmail account). If that fails, try sending to your local address (e.g. john@mydomain.com) in case your SMTP is unable to resolve or send to external addresses. Always make sure to check your spam box in case the email falls into the trap.

2. Verify you have configured a valid email recipient and sender addresses under the Storefront's **Configuration > General** menu.

3. Make sure you enabled the appropriate order alert, receipt or invoice under **Configuration > Communication** menu.

4. If you customized your email templates, make sure the tags are matching and properly closed. Try resetting to the default template and resend the email. If you're using a **Custom rule** for your template, make sure your email templates are valid by performing a **Run test** on the template first. It should return a success message. Anytime you suspect a typo error, restore using the default email template to ensure it's not a template issue that is uncaught by the screen test.

5. Verify your site's **Admin > Event viewer** page for any email errors. You can always make a test purchase under your own account and test sending emails to yourself. If you need to resend a receipt or invoice, you can also force the system to send email from the **Sales > Orders** menu in the action button.

How to make HTML editor behave

If you're editing your email templates using the HTML editor on your site, you may want to change the editor settings to prevent the designer from over aggressively modifying your HTML code.

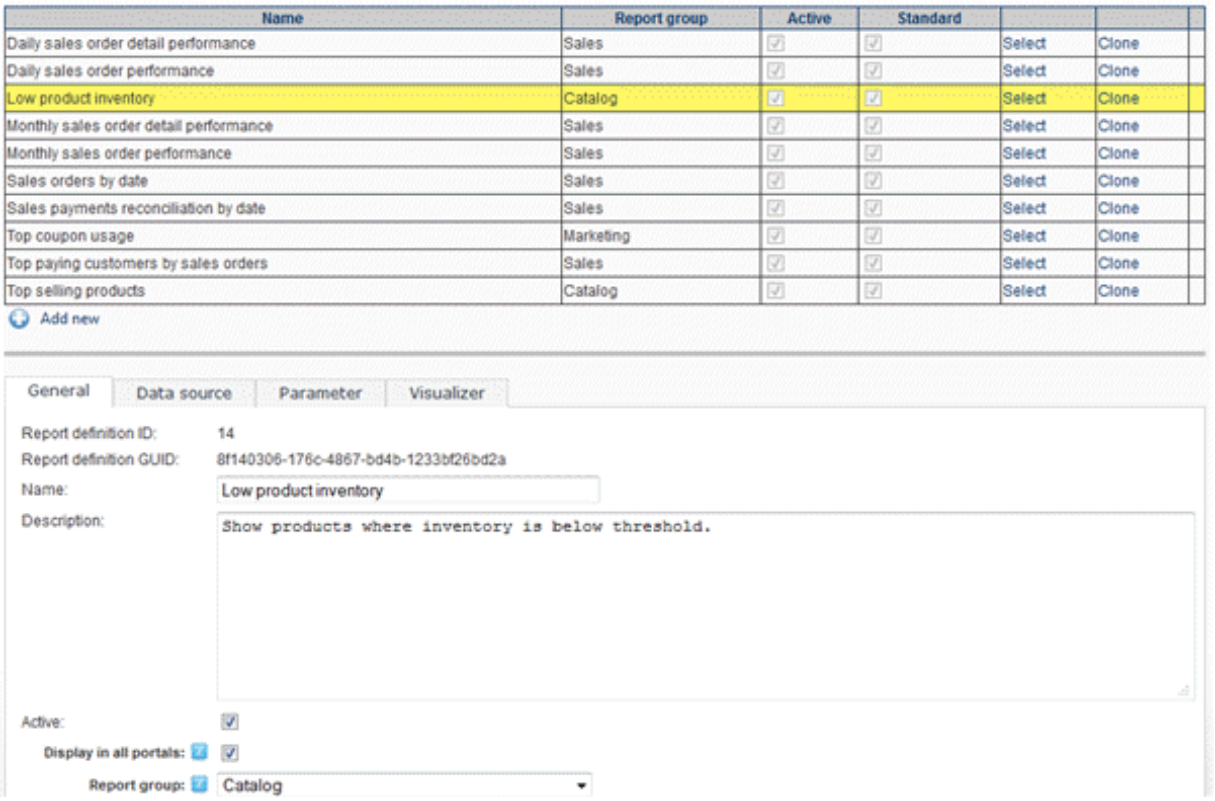
1. Login as the superuser and go to the **Host > HTML Editor Manager** page.
2. Select Everyone and uncheck the RemoveScripts and MakeURLsAbsolute settings under Content Filters.
3. Also, select the Enable Relative URL Links checkbox to allow it.
4. Repeat for Users and Host if you have multiple configurations.

Reports

Revindex Storefront comes with several useful standard reports out of the box such as:

- Low product inventory report
- Top selling products report
- Top paying customers report
- Daily sales activity report
- Monthly sales activity report
- Payment reconciliation report
- Coupon usage report
- and many more...

Many of the reports can be filtered by predefined criteria and may display colorful graphs.



Name	Report group	Active	Standard		
Daily sales order detail performance	Sales	✓	✓	Select	Clone
Daily sales order performance	Sales	✓	✓	Select	Clone
Low product inventory	Catalog	✓	✓	Select	Clone
Monthly sales order detail performance	Sales	✓	✓	Select	Clone
Monthly sales order performance	Sales	✓	✓	Select	Clone
Sales orders by date	Sales	✓	✓	Select	Clone
Sales payments reconciliation by date	Sales	✓	✓	Select	Clone
Top coupon usage	Marketing	✓	✓	Select	Clone
Top paying customers by sales orders	Sales	✓	✓	Select	Clone
Top selling products	Catalog	✓	✓	Select	Clone

Add new

General | Data source | Parameter | Visualizer

Report definition ID: 14
Report definition GUID: 8f140306-176c-4867-bd4b-1233bf26bd2a
Name: Low product inventory
Description: Show products where inventory is below threshold.
Active: ✓
Display in all portals: ✓
Report group: Catalog

You can also create your own custom reports. For security reasons, only the **Host** superuser account can create or edit reports.

How to create custom reports

You need to be logged in as a **Host** superuser to edit or create new reports. Standard reports cannot be edited.

1. The easiest way is to clone one of the existing reports and make the modifications. Alternatively, you can click on the **Add new** to create a new custom report from blank.

2. Give your report a name and optionally a description. Select the report group to determine where the report will show up under the Catalog, Sales, People or Marketing menu.

3. Enter one or more SQL SELECT statements in the **Data source** tab. You have full access to all the standard SQL commands including variables and temp tables. If you require any input parameters you can use the special @param placeholders. For example:

   SELECT col1, col2 FROM MyTable WHERE col3 = @Param1 AND col4 = @Param2

   SELECT col5, col6 FROM MyTable2 WHERE col8 = @Param1 AND col9 = @Param2

4. Add the matching input parameters required by your data source in the **Parameter** tab. The names must match exactly your @Param placeholder names. Parameters can be a form input or one of the predefined variables.

5. In the **Visualizer** tab, enter the HTML to render the report. The HTML can contain XSL Tokens (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/xsl-tokens/rvdwkpvm/section) to extract the returned values from your SQL execution. Each SQL SELECT statement, will generate a data table under the dataSet node. For example, the XML input below is generate from your data source. Your [xsl] tokens can be used to extract the result set to render the HTML:

```xml
<in>
        <dataSet>
            <dataTable>
                <dataRow>
                    <col1 dataType="int">...</col1>
                    <col2 dataType="nvarchar">...</col2>
                </dataRow>
                <dataRow>
                    <col1 dataType="int">...</col1>
                    <col2 dataType="nvarchar">...</col2>
                </dataRow>
            <dataTable>
            <dataTable>
                <dataRow>
                    <col5 dataType="boolean">...</col1>
                    <col5 dataType="nvarchar">...</col2>
                </dataRow>
                <dataRow>
                    <col4 dataType="boolean">...</col1>
                    <col5 dataType="nvarchar">...</col2>
                </dataRow>
            <dataTable>
        </dataSet>
      </in>
```

You can also include colorful graphics using Google charts (https://developers.google.com/chart/) simply by generating the correct Javascript statements needed to render the charts.

Rewards points

As a merchant, you typically want to build loyal and repeat customers over time. A great way is to reward your customers with loyalty points for purchases made at your store. The customer can then redeem these accumulated points to buy more products and services from you.

You must first enable the **Rewards points** feature under **Configuration > General**. Once enabled, the rewards point can be configured from the **Configuration > Rewards point** screen. Once you enable rewards points, your product detail and checkout pages will show the number of points awarded to the customer for their purchase. When configuring the rewards point program, you need to understand the differences between the action of rewarding and redeeming. The merchant rewards the points to the customer (e.g. 1 point for every $10 spent), whereas the customer redeems the points for purchases (e.g. if each point is worth $0.01, then 1000 points equals to $10 of money that can be used to pay during checkout).

- **Monetary value of each point** - This the actual value of each point. When the customer is at the checkout page, he can use his points to pay. E.g. you can enter 0.01, which means 1 point equals to $0.01 of your currency.
- **Reward points for orders** - Enable this if you want to reward customers with points for their purchases. Only product variants that have the rewards point enabled will qualify.
- **Reward points min order amount** - If a minimum order amount needs to be attained to be rewarded points.
- **Points to award per order unit amount** - The number of points to award for each currency unit spent on checkout for qualified products based on the order amount after discounts, but before shipping, handling and taxes. If the rate is equal to 1, then 1 point is awarded for each dollar spent. This rate can also be fractional to encourage customer to spend more. If the rate is 0.1, then 1 point is awarded for each 10 dollars spent, but if the customer spent 12 dollars, only 1 point is awarded.
- **Reward point delay** - The number of days to delay rewarding the points for an order purchased. This is a security measure to protect the merchant from fraudulent customers who purchase products solely to earn points and returning the products after the points have been redeemed. For example, if you have a 30 days refund policy, you may want to set the delay equal to 30 days.
- **Min points to allow redeeming** - The minimum number of points the customer must have to be allowed to redeem for purchases.
- **Points expiration** - If the points should expire after the period of inactivity

You can decide if certain products do not participate in the rewards point program by unchecking the **Enable rewards point** checkbox on the product variant. You can also enter a custom points value if you want to reward a different number of points for the purchase of a particular product. If not specified, the Storefront will calculate the number of points to award based on the selling price of the product.

If the rewards point program is enabled, points are rewarded when the order has reached the Completed status or the payment has reached the Paid status. By default, for security purposes, orders and payments immediately after checkout are never put in those states. You can use the Place order action rule to automatically set the order to Completed and payment to Paid statuses if needed. If a delay is set, the points will automatically be rewarded after the elapsed time has passed. Please see How to force order and payment status (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-force-order-and-payment-status/rvdwkpvm/section) for more information on changing order status.

You can modify the current number of points belonging to the customer from the **Sales > Rewards points** screen. You can also modify the number of points earned by the order from the **Sales > Orders** screen.

The customer can view their current points balance from the **RevindexStorefrontManageRewardsPoint** module control. This will show the number of points active and pending as well as any expiry date.

Points internally have an intrinsic monetary value and are treated in similar way as any other form of payment. To allow customers to redeem their points, you must therefore enable Rewards Points from the **Configuration > Payment** menu.

Analytics

Revindex Storefront supports Web site tracking of ecommerce transactions using Google Analytics (http://www.google.ca/analytics/). This feature allows you to track your site traffic and report on products purchased and order amounts.

You must first have a valid Google Analytics account. You also need to enable ecommerce tracking:

1. Click the **Admin** tab at the top right of any screen in Google Analytics.

2. From the **Account Administration** screen, click the name of the account and then the name of the property that has the profile you want to enable **Ecommerce Tracking** for.

3. Use the **Profile** drop down menu to select the profile you want. Click the **Profile Settings** tab. Under the **E-Commerce Settings** section, select **Yes, an E-Commerce Site/App** and save.

You also need to enable Google Analytics tracking under your Web site's **Admin > Google Analytics** page. Enter the Google Analytics **Web Property ID** (UA-XXXXX-Y) for your **Tracking ID** value. This will enable analytics tracking for all your Web pages.

Finally, to enable ecommerce transaction tracking, you need to enable the **Analytics** feature under **Configuration > General**. You can then enable the Google Analytics under the Storefront's **Configuration > Analytics** menu.

If you have everything properly setup, the system will automatically inject the Google Analytics tracking code in the confirmation page after checkout. You should find a snippet Javascript code that resembles "_gaq.push('_addTrans' ...." or ga('ecommerce:addTransaction', ... in your HTML source.

Google Universal Analytics

Google recently launched a new analytics engine and is recommending all users to move to the new platform. The Storefront is capable of emitting code that supports both the Classic and new Universal Analytics code. To enable the new Google Universal Analytics code, you must update the code contained in your **SiteAnalytics.config** file located under your Web site's root folder or perform the update from the **Host > Configuration Manager** page (select "SiteAnalytics.config").

```xml
<?xml version="1.0" encoding="utf-8" ?>
<AnalyticsEngineConfig>
    <Engines>
        <AnalyticsEngine>
            <EngineType>DotNetNuke.Services.Analytics.GoogleAnalyticsEngine, DotNetNuke</EngineType>
            <ElementId>Head</ElementId>
            <InjectTop>False</InjectTop>
            <ScriptTemplate>
                <!CDATA

                <script type="text/javascript">

                      (function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){
                      (i[r].q=i[r].q||).push(arguments)},i[r].l=1*new Date();a=s.createElement(o),
                      m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m)
                      })(window,document,'script','//www.google-analytics.com/analytics.js','ga');

                      ga('create', '[TRACKING_ID]');
                      ga('send', 'pageview');

                </script>
          >
            </ScriptTemplate>
        </AnalyticsEngine>
    </Engines>
</AnalyticsEngineConfig>
```

Sitemap

Sitemap is a special XML file that provides explicit URLs to search engine crawlers to help index your site. A good sitemap file plays an important role in your overall SEO success. It should include all your public Web pages as well as products you sell.

Revindex Storefront automatically includes all your published products into your portal sitemap file. There is nothing to configure. You can verify your sitemap under your DNN **Admin > Search Engine Sitemap** page. Sitemap files are cached, therefore, you may need to clear the cache data to see the changes the first time.

Affiliates

Revindex Storefront will automatically track any online sales referrals configured in your DNN system allowing you to eventually pay out commissions to your affiliate partners on pay-for-performance basis. Affiliates are a great way to generate more sales easily and cost effectively.

The Storefront integrates with DNN standard affiliate management system making it possible to track affiliate referrals arriving on any of your Web pages. For example, your affiliate partner may send customers to your home page or to a special promotion page you created. In both cases, your affiliate will be correctly tracked and credited for the completed sale.

To configure the affiliate tracking, please follow these steps listed below to create your vendor record. A vendor is any partner, company or individual who has a working relationship with your business.

1. On your Web site, go to the DNN **Admin > Vendors** page.
2. Click on **Add New Vendor**.
3. Enter all the required information for your new vendor.
4. Click **Update**.
5. Select the vendor you just created.
6. Towards the bottom, under the Affiliate Referrals section, click on **Add New Affiliate**.
7. Click **Update**.
8. Select the newly created affiliate.
9. Click on **Send Notification**. The vendor will receive an email with a link that can be used to track his referrals to your site.

The vendor is now your affiliate partner. He can use the link to redirect visitors to your site and earn sales commission. The email containing the link has an embedded Affiliate ID that looks like this:

http://site.com/Default.aspx?AffiliateId=1

Your affiliate partner can refer the visitor to any page on your site as long as the AffiliateID parameter is attached to the URL. For example, to direct the visitor to one of your product pages, you can attach the AffiliateID parameter to the URL as shown:

http://site.com/rvdsfpid/coffee-40/language/Product.aspx?AffiliateID=1

Once the AffiliateID parameter is detected by DNN, the visitor can freely visit any other page and will be tracked for the duration determined by your DNN site. Any sales completed by the visitor is now associated with the Affiliate ID.

Commissions can be paid out periodically at your own discretion via PayPal, check, wire transfer, etc. You can view the "Affiliate performance" report from the Storefront **Marketing > Reports** menu to find out how many sales orders and the total amount (excluding shipping, handling and taxes) are attributed to the vendor. You can simply multiply the number by your commission rate to determine the commission owed to your vendor. You can also create custom reports under **Configuration > Reports** menu to get more detailed information about your affiliates or automatically calculate the commissions if needed. For more information, please see How to create custom reports (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-create-custom-reports/rvdwkpvm/section).

For more advanced affiliate tracking and commission, Revindex Storefront is also integrated with STP Affiliate Manager that you can purchase separately. For more information, please visit STP Affiliate Manager (http://store.dnnsoftware.com/home/product-details/dnn-affiliate-manager-32/r/D8B7B587C7D34AC19829) product site.

Address validation

The Storefront supports address validation using real-time providers (e.g. Avalara). Once configured, any address entered by the end user will be validated and automatically corrected to a standard format. For example, depending on the provider implementation, the address "1 jones E, raleihg, North Carolina, 27601, United States" entered will validate and automatically be corrected to "1 E Jones St, Raleigh, North Carolina, 27601-1021, United States". Address validation can help ensure addresses are deliverable and avoid shipping losses. It is also a great way to ensure your data is clean and ready for any future business intelligence reports you may run that require accurate address information on file.

You must first enable the **Address validation** feature under **Configuration > General**. Once enabled, you can configure the use of address validation under **Configuration > Address validation**. Make sure to enter the account credentials by clicking on the edit icon for your selected provider.

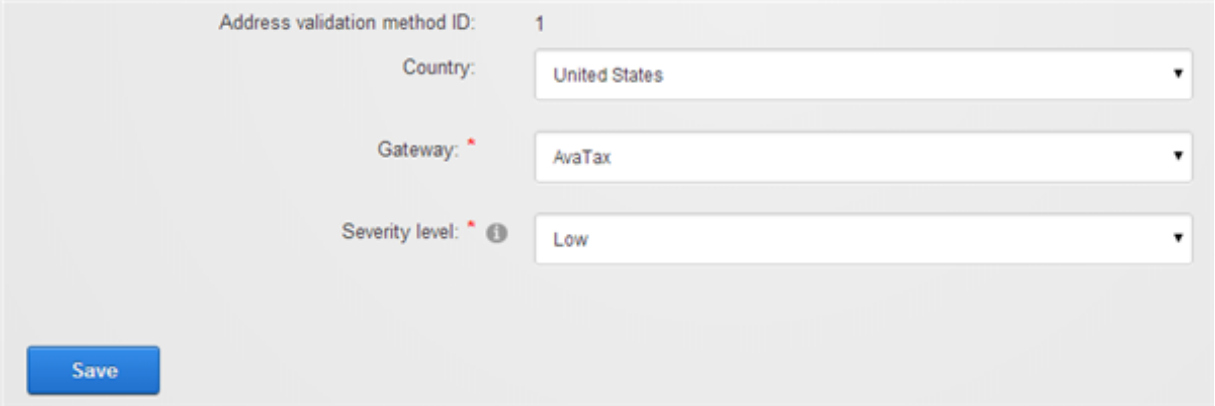
Please contact us if you don't see the address validation provider you like to use.

Avalara

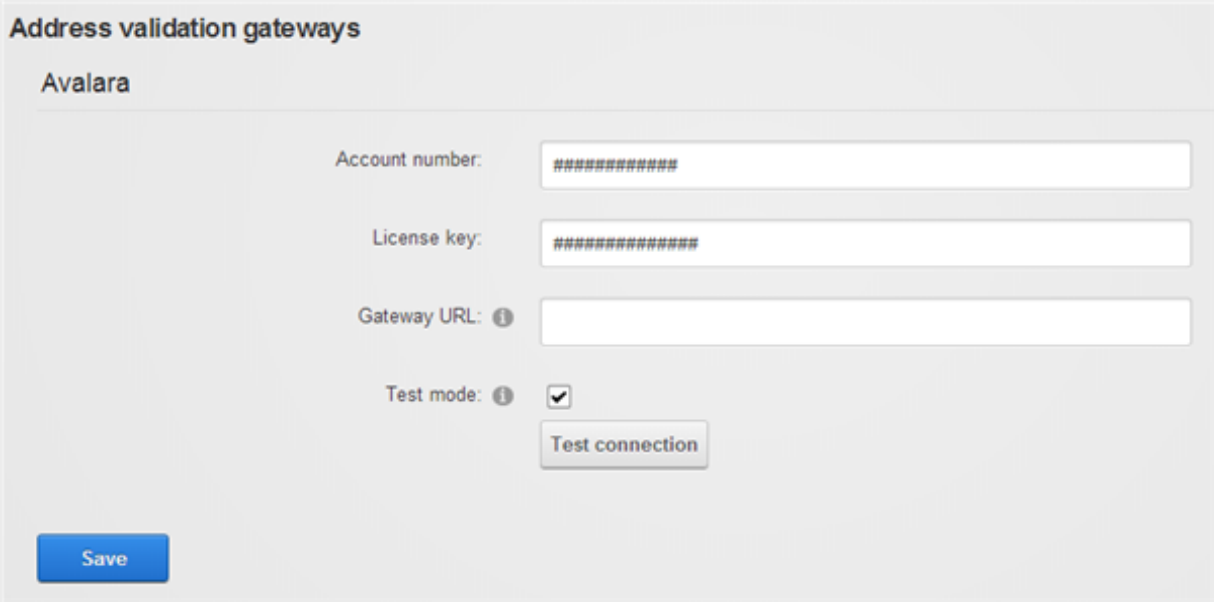
Avalara (http://www.avalara.com/) AvaTax provides real-time address validation for U.S and Canadian addresses. The following fields are required:

1. **Account number**
2. **License key**

You can configure how the address validation should work under **Configuration > Address validation**. Click **Add new** to create a new address validation method for the desired country and set the gateway to "AvaTax".



Click on the edit icon to enter the account credentials for your provider. Click on **Test connection** to make sure your credentials work.

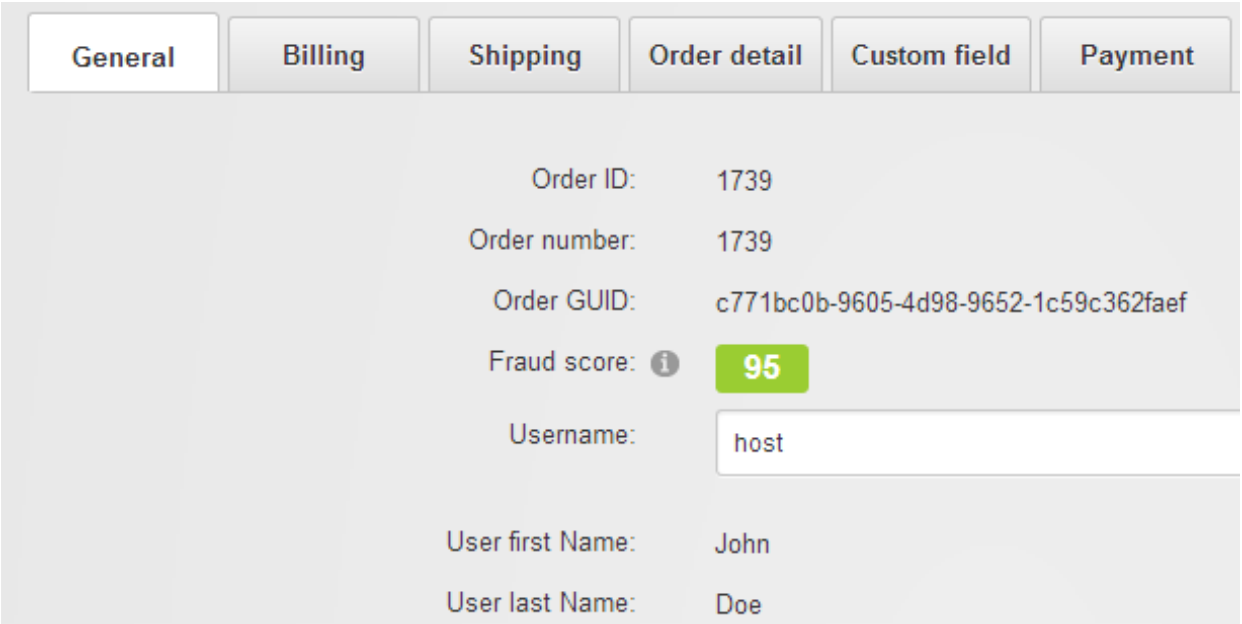


The system will attempt to validate the address for the selected country and if a valid match is found, it will automatically standardize the address format. The severity level determines how to treat an invalid address that cannot be automatically corrected by the system. High - Require user to correct the invalid address

before proceeding further. Normal - Warn user of the invalid address, but allow the user to proceed. Low - Invalid address is silently accepted.

Fraud risk

Revindex Storefront can help increase your merchant profits by reducing chargebacks and improving operation efficiency using powerful fraud protection technology. If enabled, the Storefront will display the fraud score for every order completed through checkout. The fraud score ranges between (high risk) 0 to 100 (low risk) and is color coded for low, moderate and high risk. As a merchant, you'll be able to confidently reject suspicious orders before shipping and avoid incurring expensive losses to your business.



The Storefront supports several different fraud scoring providers. These providers maintain a large aggregate of blacklist data from multiple reliable sources. Using sophisticated algorithm and statistics, they're able to filter out suspicious transactions by inspecting the IP location, email, credit card numbers and a host of other inputs that are fraudulent but would otherwise look normal to an untrained eye.

The more you use these providers, the better it gets as their system will automatically tune and learn from the aggregate data collected from your business transactions. Since one aspect of fraud detection is often associated with the customer's IP location, the Storefront has automatic built-in mechanism to avoid querying the fraud score for orders placed by employees of your store. For example, as a store operator, you may occasionally place an order on behalf of the customer over the phone by logging into the customer's account. The Storefront will automatically disable fraud score for this order to avoid penalizing the customer because your IP address would have been registered as different and negatively impact the customer's future risk score. Therefore, if you're just setting up and want to test the fraud score feature, make sure you test it with a different browser than the one running the Storefront console or clear your browser cache first.

You must first enable the **Risk** feature under **Configuration > General**. Once enabled, you can enable the fraud protection under **Configuration > Risk** menu. Remember to click the edit icon to provide the account credentials for your selected provider.

Please contact us if you don't see the fraud screening provider you like to use.

FraudLabs Pro

FraudLabs Pro (http://fraudlabspro.com/) provides a cost effective fraud screening service with the first 500 queries per month are free. Please contact the provider for more pricing information. The following fields are required:

1. **API Key**

Sift Science

Sift Science (https://siftscience.com/) provides an impressive and affordable fraud screening service with the first 10,000 transactions per month are free. Please contact the provider for more pricing information. The following fields are required:

1. **API Key**
2. **Javascript snippet key**

Channels

A good way to increase your sales is to list your products for sale on popular sites like eBay, etc. The Storefront makes it easy for you to publish and manage your products on 3rd party channels all in a central place saving you time and avoiding double entry mistakes.

You must first enable **Channel** feature under **Configuration > General** settings. Once enabled, you can configure the channel under **Configuration > Channels** menu. Make sure to enter the necessary application keys by clicking on the edit icon for the appropriate channels.

Please read How to sell on eBay (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-sell-on-ebay/rvdwkpvm/section) to see how easy it is to publish a product to a 3rd party channel.

Please contact us if you don't see the channel provider you like to use.

eBay

eBay (http://www.ebay.com/) is the world's largest auction marketplace selling to millions of users worldwide. The following fields are required:

- Dev ID
- App ID
- Cert ID
- Auth token

You must first register an eBay seller account (http://pages.ebay.com/help/sell/sell-getstarted.html). Once registered, you then must also register an account with eBay Developer Program (http://developer.ebay.com/). Check your email and follow the instructions to activate your account.

From your developer account, you can get your production application keys from the **My Account** page. You can perform tests by generating sandbox keys instead.

To obtain your auth tokens, click on **Get a User Token** under the tools panel. Select the desired environment and key set to generate your token. You may be directed to sign into your seller account. Once logged in, click on **I Agree** to allow eBay to connect with the Storefront application. You will be directed to a page to obtain your user tokens. Click on **Save Token** to complete the step.

Currently only a limited number of eBay features are supported by the Storefront. Please perform your own testing first to ensure it meets your needs. Please note eBay may charge additional fees for enhance listings (e.g. list on more than two categories, etc.):

- Support eBay U.S and Canada only. No eBay Motors.
- Limited to certain basic product types and categories (e.g. gift certificates, downloadable products, donations, etc. are not supported).
- Multiple variants must be published separately.
- Limited to certain basic product fields are published to eBay.
- Limited to certain basic product fields are update-able on eBay.
- Support certain shipping services. Country restrictions may apply.
- Support a limited number of payment methods (credit card, PayPal, etc.)
- U.S dollar currency only.
- Product inventory is not tracked.

Catalog

Categories

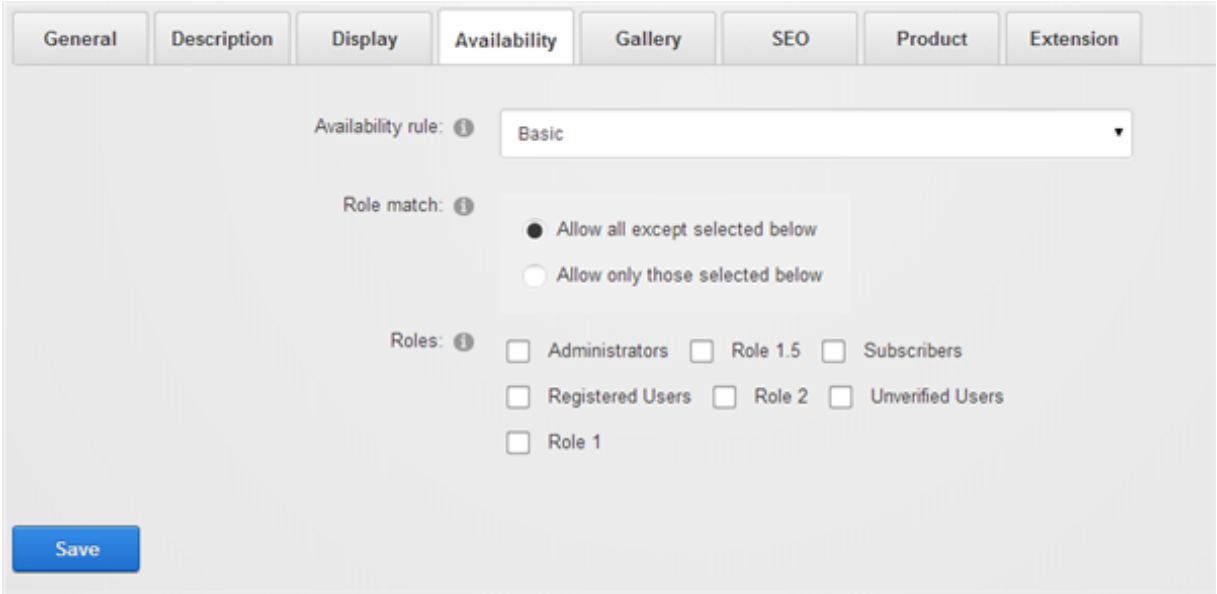
Categories allow you to group the products for sale making it easier for your users to browse your shopping cart. Revindex Storefront supports unlimited number of multi-level categories. Individual product can be assigned to one or more categories. You can add new categories from the **Catalog > Categories** menu. Click **Add new** to create a new category and give it a name. Select if this category has a parent category to create a sub-level category.

Each category can have a custom **Display template** that changes the look-and-feel of the **Product List** page. You can also store additional information about the category using the **Extension** field and XML data.

Category availability

The category availability determines if the category can be displayed under what conditions. You must first enable the **Availability** feature under **Configuration > Category** menu.

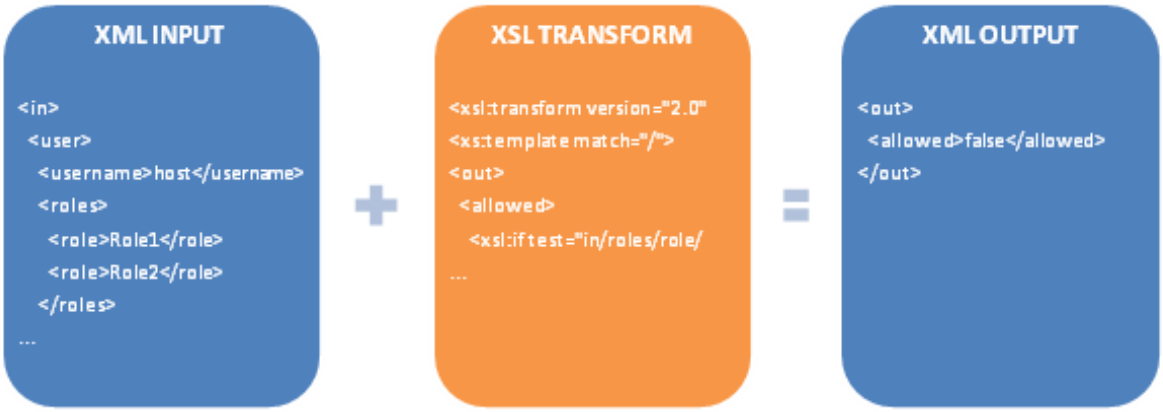
The Storefront comes with several predefined rules such as allowing a category to be shown based on user location or security role.



The category availability rule can also use XSL transform to determine whether this category is available. For example, you may restrict the category to wholesale members on your site with a certain security role. The expected output should return "true" to indicate this product is available for sale under the input conditions, otherwise "false" if disallowed.

You can store additional information about the category using the **Extension** field and XML data. The extension information automatically becomes available for query in your business rules.

The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.



Distributors

If you source your products from distributors, you can keep track of them by creating a distributor entry in the system.

You must first enable the **Distributor** feature under **Configuration > General**. Once enabled, you can manage distributors from the **Catalog > Distributors** menu. Click **Add New** and give it a name. You can store additional information about the distributor using the **Extension** field and XML data. Once saved, you can now assign this new distributor to your individual products.

Manufacturers

You can keep track of manufacturers of your product by creating a manufacturer entry in the system.

You must first enable the **Manufacturer** feature under **Configuration > General**. Once enabled, you can manage manufacturer from the **Catalog > Manufacturers** menu. Click **Add new** and give it a name. You can store additional information about the manufacturer using the **Extension** field and XML data. Once saved, you can now assign this new manufacturer to your individual products. Associating a product variant to a manufacturer will allow customers to quickly browse products at your store by manufacturers.

Warehouses

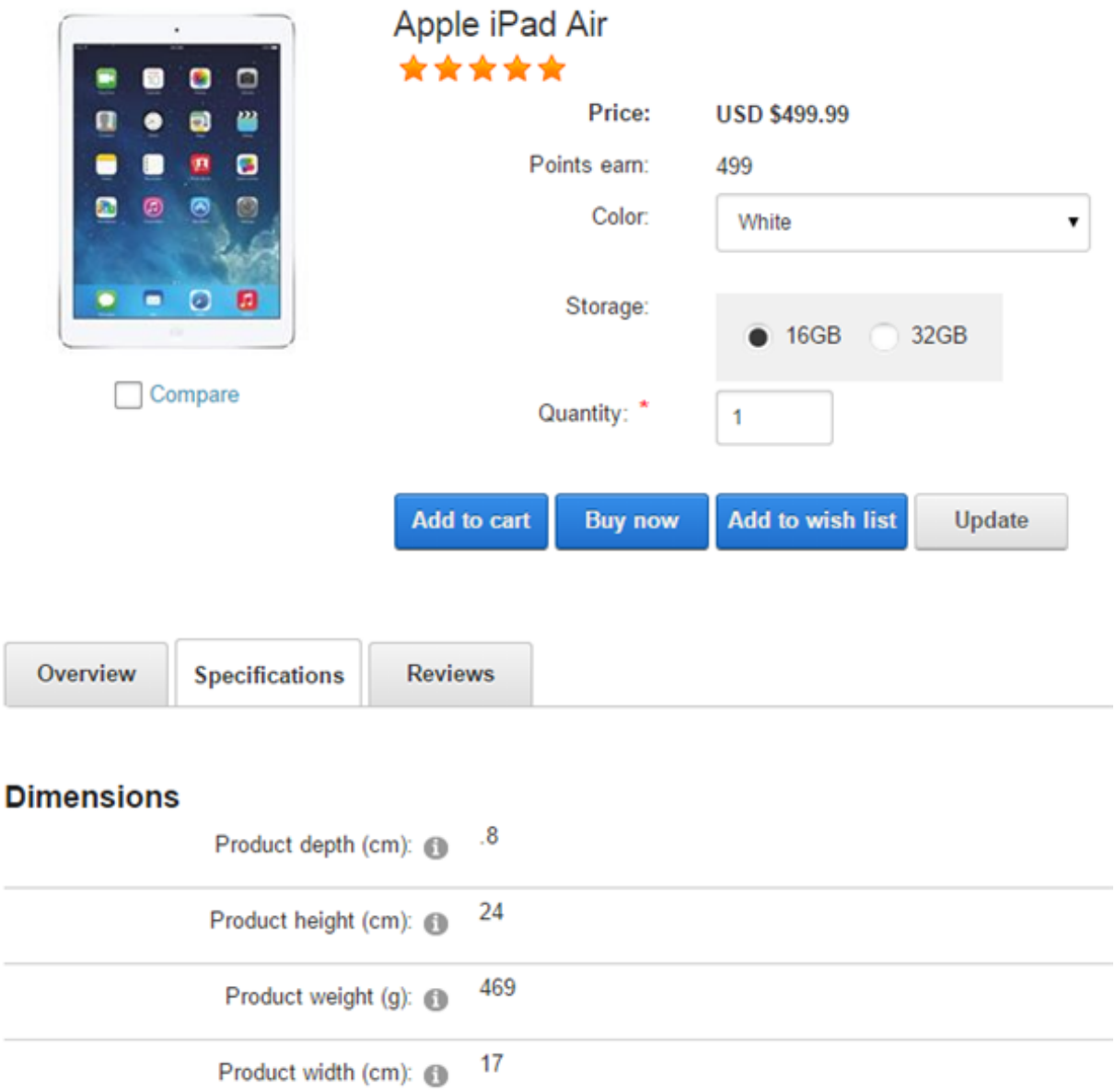
For certain businesses, the products may not be kept and shipped out from the same physical address as your store. These products are kept at one or many warehouses for logistic reasons. For example, you sell flowers that are held in the East and West coast warehouses to reduce shipping cost and delivery time. Drop-shipping is another common practice where the physical product is shipped directly from the manufacturer's address and not from your store. Your shipping rule (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/shipping-rate/rvdwkpvm/section) can take into account the warehouse location and charge a different amount based on the transit distance. Similarly, your shipping availability rule (http://www.revindex.com/Resources/KnowledgeBase/RevindexStorefront/tabid/174/rvdwktid/warehouses-418/http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/shipping-rate/rvdwkpvm/section) can determine if only certain shipping methods are available depending on the warehouse origin (e.g. your East coast warehouse can ship by UPS only).

Furthermore, the shipping origin has important tax implications. In almost every U.S state, you are liable for tax collection based on where the product is shipped from (warehouse address, not your business address) and where it is ship to. Your tax rule (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/tax-methods/rvdwkpvm/section) can charge a different tax rate based on the warehouse origin. Please see Order splitting (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/order-splitting/rvdwkpvm/section) for more information on how orders are treated by warehouse.

The Storefront handles warehouse information to help optimize your shipping cost and delivery time while ensuring you are compliant with tax laws. It will also track the inventory by warehouse so you know exactly how many products are available in which warehouse at all times. You must first enable the **Warehouse** feature under **Configuration > General**. Please see Warehouse (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/warehouse/rvdwkpvm/section) for more information on associating your products to your warehouses.

Product attributes

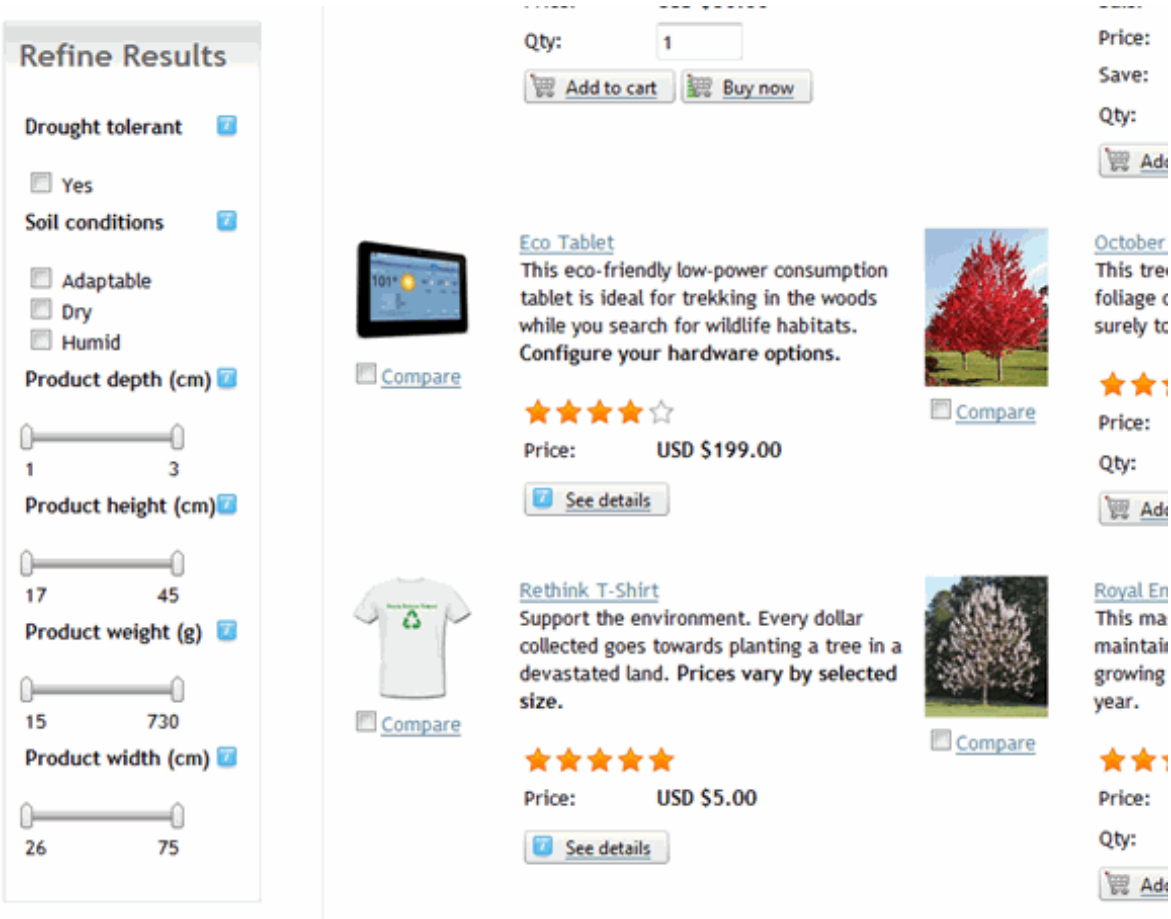
Product attributes are used to define the characteristic or feature of a product (e.g. power rating, size, etc.) and are displayed in the Specifications tab of a product detail.



Product attributes are also displayed in the **RevindexStorefrontProductComparison** module control. See Product Comparison (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/product-comparison/rvdwkpvm/section) for more information.

	Remove	Remove
Gallery:		
Product:	Apple iPad Air - White 16GB	Microsoft Surface Pro 3
Overall rating:	★★★★★	★★★★☆
Sale:		
Price:	USD $499.99	USD $849.99
MSRP:		
Save:		
Product #:		
Manufacturer:	Apple	Microsoft
Dimensions		
Product depth (cm):	.8	1.3
Product height (cm):	24	17.7
Product weight (g):	469	730
Product width (cm):	17	26

It is also used in the **RevindexStorefrontProductFilter** module control for refining results. See (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/) for more info.



You must first enable the **Product attributes** feature under **Configuration > Product**. Once enabled, you can define product attributes under the **Catalog > Attribute groups** and **Catalog > Attribute definitions** menus.

Groups

You can optionally create groups under **Catalog > Attribute groups** to classify similar attributes to make it easier for your customers to view the data. For example, if you define the attributes "Weight", "Height" and "Depth", you may want to classify these attributes under the "Dimensions" group.

Definitions

Product attributes need to be defined first before they can be added to a product. You can create definitions under the **Catalog > Attributes definitions** menu.

You can classify the new attribute definition to one of the groups you created earlier under **Catalog > Attributes groups**.

It's important to pick the correct **Attribute type** (Boolean, Decimal, etc.) as it determines how it will be used in product comparison and for filtering products. For example, if you sell televisions, you may have an attribute definition called "HD Ready" and it would take the Boolean attribute type because the possible values are either Yes or No. Whereas, you can have another definition for "Weight" and it would take the Decimal attribute type because the weight can be any number.

You can also set the attribute definition to be **Published** if it should be shown to the customer, **Comparable** if it should be used in product comparison or **Filterable** if it should be used to filter against the product list.

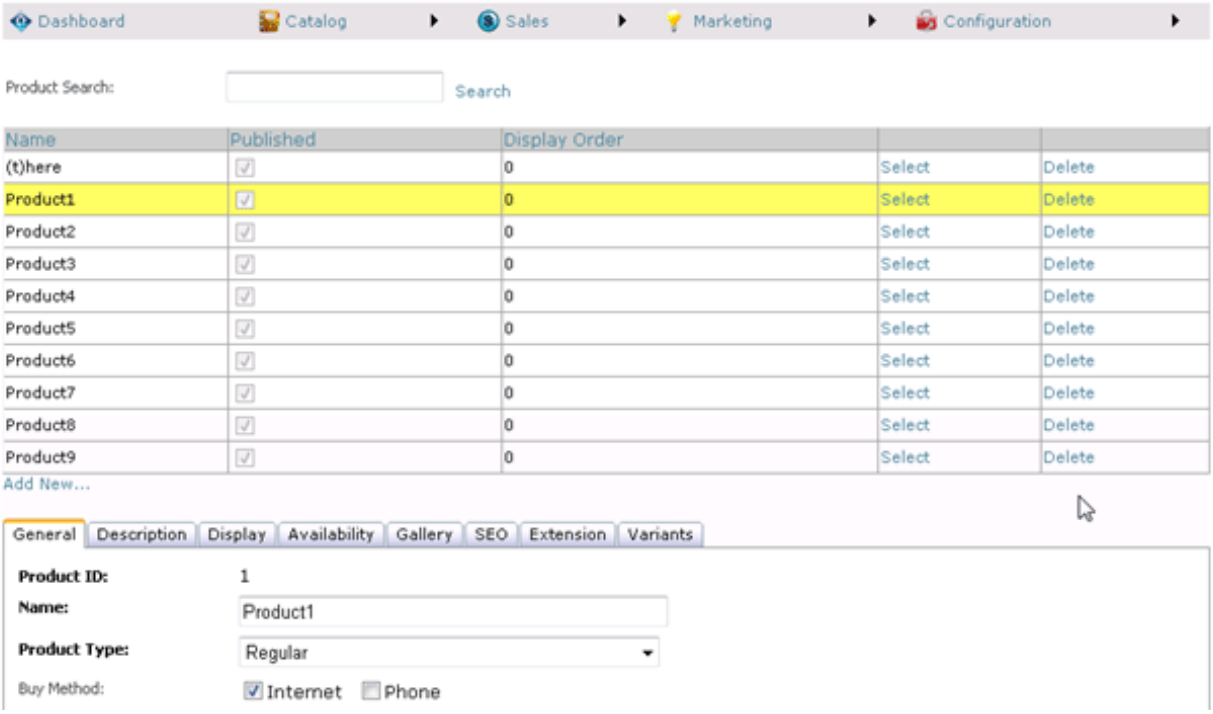
Products

Products (physical, virtual or services) are representation of items that are listed for sale on your store. For example, it could be shoes, downloadable e-book or perhaps a financial service you sell.

Do not think of a product is equal to exactly one physical object you sell. In fact, a product can be a bundle of items or can have many variations (e.g. Black, brown and white shoes can be represented as a single product even though there are 3 physical objects). Understanding that a product is simply a representation of the object(s) for sale will help you sell more because you will optimize your store to display products in tune with your customer's expectation (e.g. Normal customer behavior is to browse for the shoe they like first and then make conscious decision to pick the available colors).

Revindex Storefront is optimized to help you sell more using state-of the art features like SEO best practices, variants, unlimited images, product relationship, attributes, etc. that are only found in top e-commerce Web sites.

Products are managed from the **Catalog > Products** menu. You can search for an existing product or click **Add new** to create a new product. Each product can have a custom **Display template** that changes the look-and-feel of the **Product Detail** page.



Attributes

You must first enable the **Product attributes** feature under **Configuration > Product**. Once enabled, you can set product attribute values that were defined earlier in **Catalog > Attribute definitions** menu.

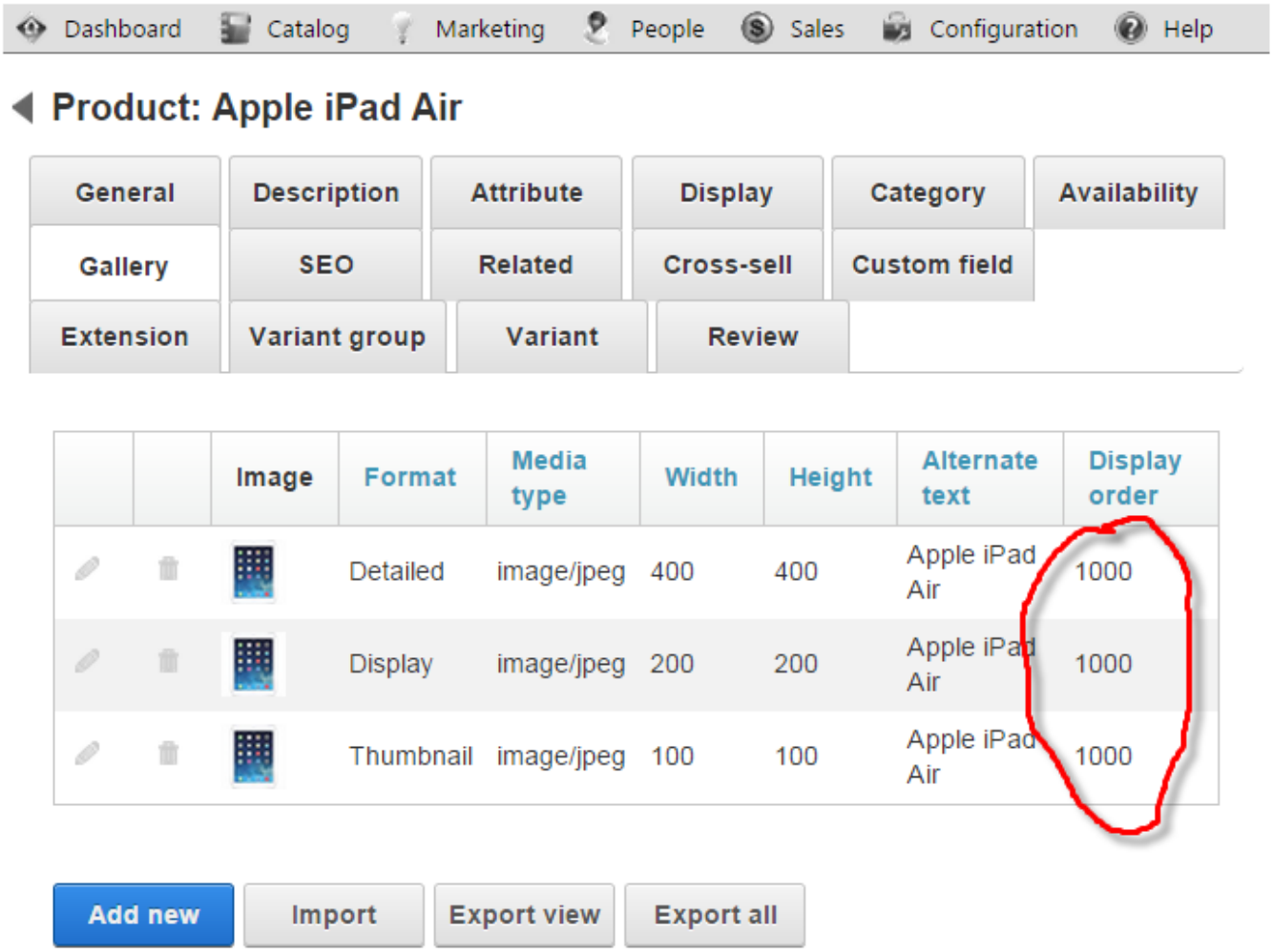
The product attributes will appear in the Specifications tab in the product detail as well as in product comparison and filter. Please see Product attributes (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/catalog-product-attributes/rvdwkpvm/section) for more information.

Gallery Images

Each product can show a thumbnail, multiple display and multiple detailed-size images. There is no limit to the number of product images. The different size formats are used in the product pages:

- **Detailed** - the detailed image shown usually on a pop-up window when the Display image is clicked to show high resolution details of the product.
- **Display** - the primary image shown in the product detail page.
- **Tile** - the icon size image shown underneath the Display image to allow the user to switch between images for viewing.
- **Thumbnail** - the image shown on the product list page.

You should ensure the **Display order** number is the same for the set of related images. The same number is how the system knows the images of different formats belong to the same picture and is needed for the zoom effect to work correctly. For example, if you uploaded a detailed image and you set the **Display order** value to 1000. If later, you upload the thumbnail and display formats, you want to make sure the **Display order** number is also set to 1000. However, the next set of images should have a different **Display order** value of 1001.



When you upload an image, the system will automatically resize the image to the pixel width set under **Configuration > Gallery** settings. If you want to avoid the resize operation for image quality reasons, you should upload the image with the exact width configured in your settings. We recommend using PNG over GIF for everyday pictures and using JPEG for complex photographs. If you selected multiple formats in the checkboxes, the system will attempt to automatically resize and generate the other image formats for you. To get the best result when generating other formats automatically, you should upload the largest image you have to avoid losing image quality on resize.

SEO

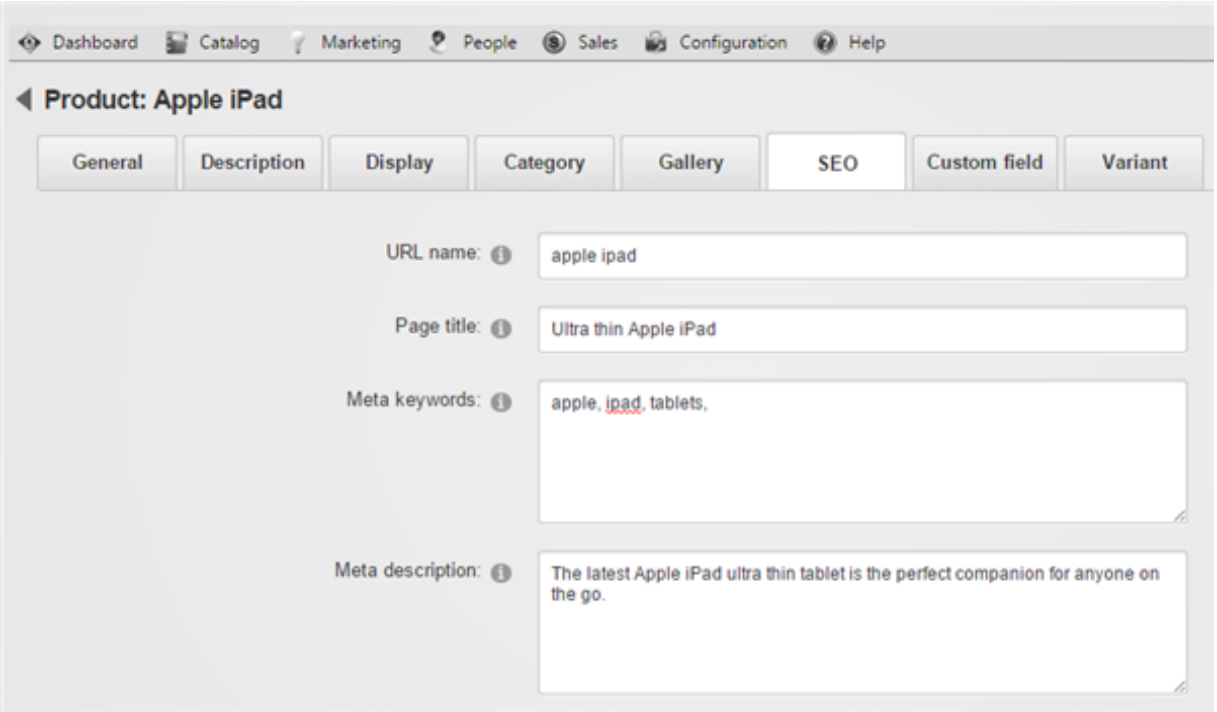
Revindex Storefront is highly optimized for SEO (search engine optimization) so you benefit from the free traffic coming from natural search results.

URL Keywords

According to Google, keywords in the URL help improve your SEO ranking because search engines will index these words with high relevancy. Furthermore, the URL itself is displayed in the search results page and is usually displayed prominently on the top of the browser can provide human users with useful clues about the page's content.

With the advanced URL provider enabled, the Storefront will generate a nice clean URL such as **http://site.com/product/shoe** Even if you don't enable the advanced URL provider, you can still get a nice URL that is amazingly SEO friendly like **http://site.com/product/rvdsfpid/shoe-3**

By default, the Storefront will use your product name to feed keywords in the URL. You can override the keywords without changing your product name by specifying the **URL Name** value under the SEO tab. For example, you may want to improve your SEO ranking by adding more searchable keywords "genuine leather shoe" without changing the product name. This will produce the URL **http://site.com/product/genuine-leather-shoe** and is more meaningful for users searching for high quality apparel than just any kind of shoe.



Just like your entire DNN site is localizable, the keywords in the URL are also localizable. Google recommends (https://support.google.com/webmasters/answer/182192?hl=en) that you make sure each language version is easily discoverable by keeping the content for each language on separate URLs. For example, the words

"genuine leather shoe" can be localized to "soulier en cuir veritable" since those will be keywords searched by french users. This will in turn generate the URL **http://site.com/produit/soulier-en-cuir-veritable** when users visit your site in French.

When using advanced URL provider, the product, category, distributor and manufacturer pages are entirely driven by keywords in the URL. Therefore, it is important that you provide a unique set of keywords either in your product name or URL name so that the Storefront can generate a nice clean unique URL that doesn't collide with other generated URLs. Your URL names must not conflict with any URL name already used in your product, category, manufacturer or distributor catalog.

Similarly, if your product has variations, you can specify URL names so that the system generates the URL **http://site.com/product/genuine-leather-shoe/brown** for brown shoes and **http://site.com/product/genuine-leather-shoe/black** for black shoes, respectively.

Please read How advanced URL provider works (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-advanced-url-provider-works/rvdwkpvm/section) for more information.

Canonical URL

In any shopping site, there's usually more than one way to get to the same product. A customer can browse by category, search engine or simply visiting a link from a blog or social media. Each channel may cause the URL to be slightly different because of the additional data being passed in the URL. For example, if you navigated from the category "Apparel", you would get the URL **http://site.com/product/apparel/genuine-leather-shoe**. To avoid diluting your SEO value (also known as duplicate page content), the Storefront automatically generates canonical information on the page to tell search engines that it should index the one and only real URL that is **http://site.com/product/genuine-leather-shoe** no matter how many different URLs you have may have to get to the same page.

META

As the merchant, you can also add META keywords and description to the page to give search bots more indexing hints. These values are localizable so you can present different keywords in different languages and earn more SEO points.

Page title

You can also override the page title and provide your own SEO optimized title. Just like your entire DNN site is localizable, the page title is localizable so you can print different titles for different languages. For a French customer, the English title "Genuine Leather Shoe" doesn't mean much and will prefer to read "Soulier en Cuir Veritable" when browsing your product page.

Clean HTML

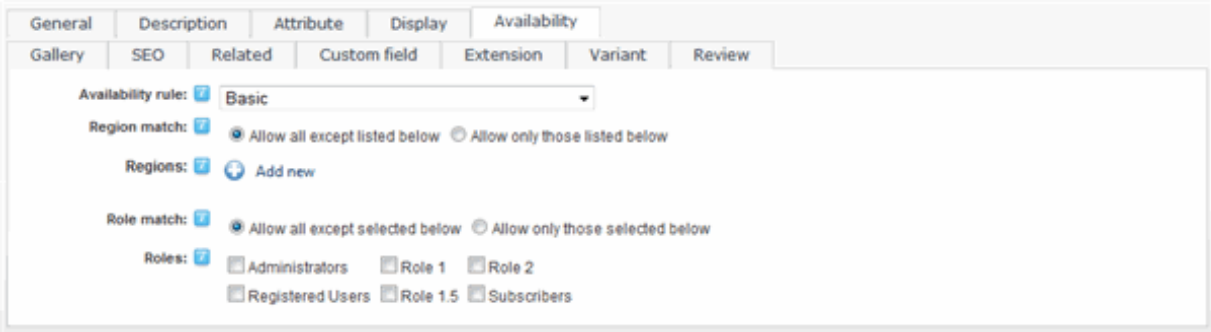
Every standard display template generates nice clean HTML so search bots don't miss out on crucial text and links even if your products are located many page numbers away or in a deeply nested categories.

Sitemap

The Storefront also generate complete sitemap of your products that is picked up by search engines. Please see Sitemap (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/sitemap/rvdwkpvm/section) for more information.

Product Availability

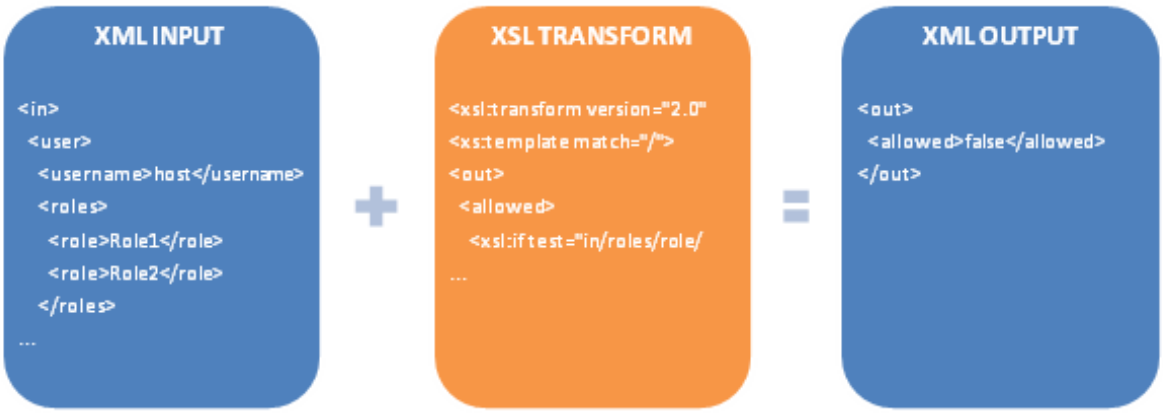
The product availability determines if the product is available for purchase. You must first enable the **Product availability** feature under **Configuration > Product**. Once enabled, you'll be able to add your own availability rules. The Storefront comes with several predefined rules such as allowing a product to be purchased based on user location or security role.



The product availability rule can also use XSL transform to determine whether this product is available for sale. For example, you may restrict the product to wholesale members on your site with a certain security role. The expected output should return "true" to indicate this product is available for sale under the input conditions, otherwise "false" if disallowed.

You can store additional information about the product using the **Extension** field and XML data. The extension information automatically becomes available for query in your business rules.

The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.



Custom fields

Custom fields allow you to capture additional information from customers. For example, you may want to require the customer to enter a date for a room reservation or the names of the attendees. The fields could be in the form of textboxes, dropdown list, radio buttons, etc. You can define any number of fields, assign a default value to them, marking them as required and perform simple validations.

You must first enable the **Custom fields** feature under **Configuration > Product**. Once enabled, you will see the Custom field tab appear in your product catalog. Click **Add new** and select either "Basic" or "Custom code". Basic type allows you to create fields from predefined input controls easily without any programming knowledge. If you want complete control over the rendered HTML, you can select the "Custom code" dynamic form type. Under custom code, you can enter HTML, ASP.NET tags and even Javascript.

When creating a custom field, make sure you enter a valid ID name for your controls. The ID is used to reference the control by the programming logic. It must be alphanumeric without any spaces and should be unique across all your custom fields and avoid colliding with any existing ASP.NET controls on the page. A good recommendation is to prefix your ID with a word. For example, you can prefix with the word "Custom" or "My" so you end up with an ID of "CustomNameTextBox". The ID name of the field along with its captured value will be printed on the checkout and confirmation pages. Any underscore character will be replaced with a space and control names like "TextBox", "DropDownList" will be omitted from the Web print out. For example, if you named your ID "Custom_NameTextBox", it will print out as "Custom Name" on the Web page.

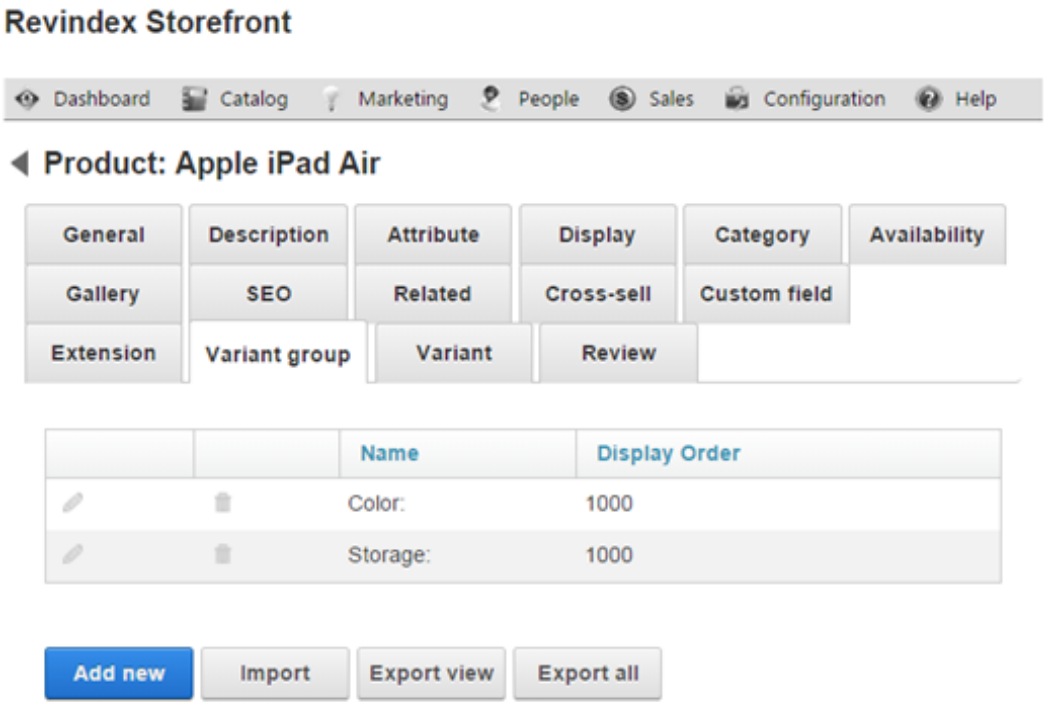
You'll find many references for the controls on the Web. Here's a good easy to read reference:

- ASP.NET Web forms (http://www.w3schools.com/aspnet/aspnet_refwebcontrols.asp)

Variant groups

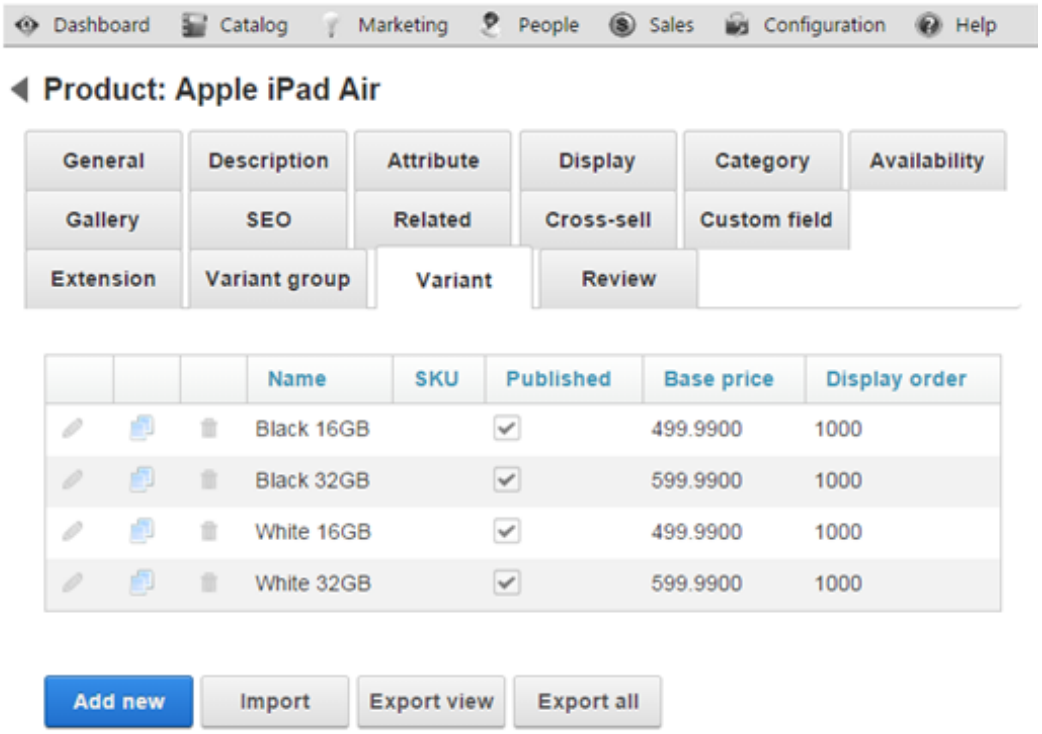
Variant groups is an optional feature that allows you to regroup the different options available for your variants such as by color and size. See Variants (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/variants/rvdwkpvm/section) for more information. You must first enable the **Product variant groups** feature under **Configuration > Products**.

For example, the current iPad comes in Black or White and 16GB or 32GB. We would then create 2 variant groups name "Color" and "Storage" to store the relevant attributes. The attributes can be edited under the Option tab of each group.

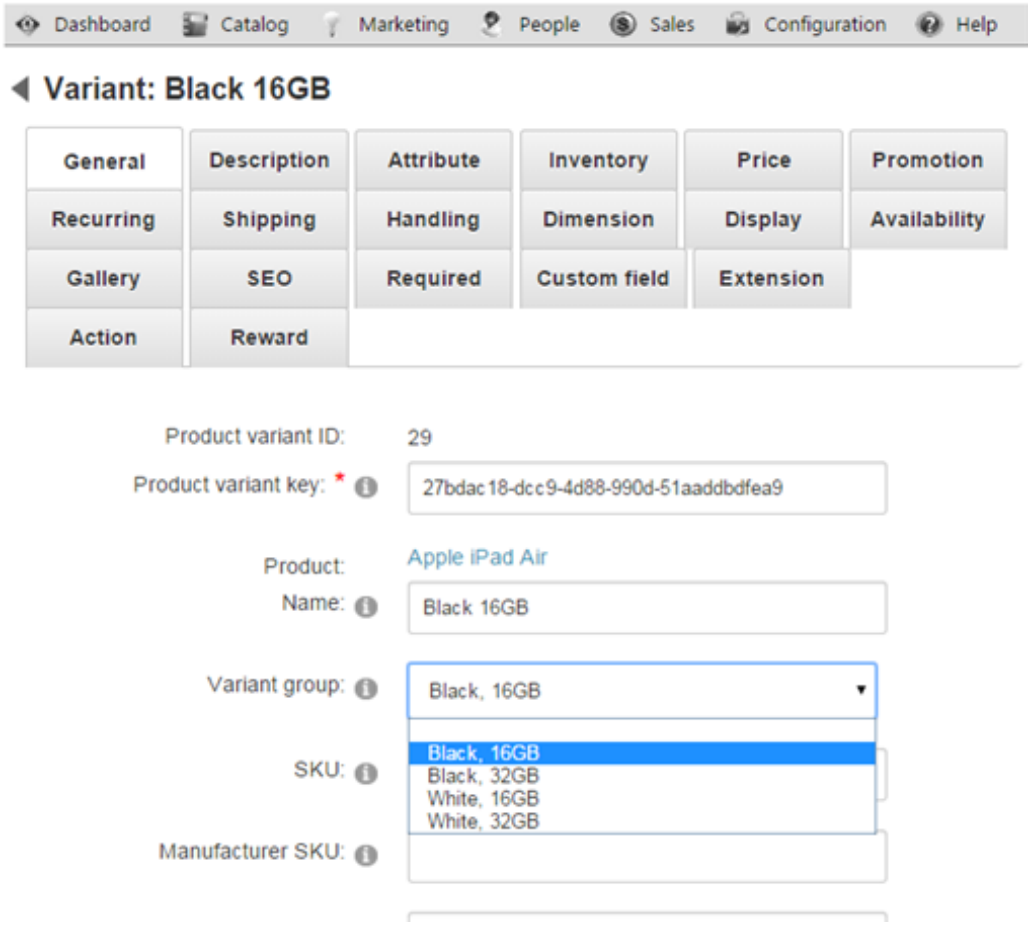


Then edit their attributes,

Which will now make the variant groups accessible when creating possible combinations of variants



By selecting the proper variant groups in the dropdown menu.



Once you defined your variant groups, your individual variants can then be assigned to one of the available variant group combinations (Black 16GB, Black 32GB, White 16GB, White 32GB, etc.). Once all your variants are associated, the RevindexStorefrontProductDetail module control will allow the customer to pick a variant using the variant groups "Storage" and "Color". If one variant is not associated to the variant group combination, the Storefront will continue to display the variants in the default selection mode without the grouping.

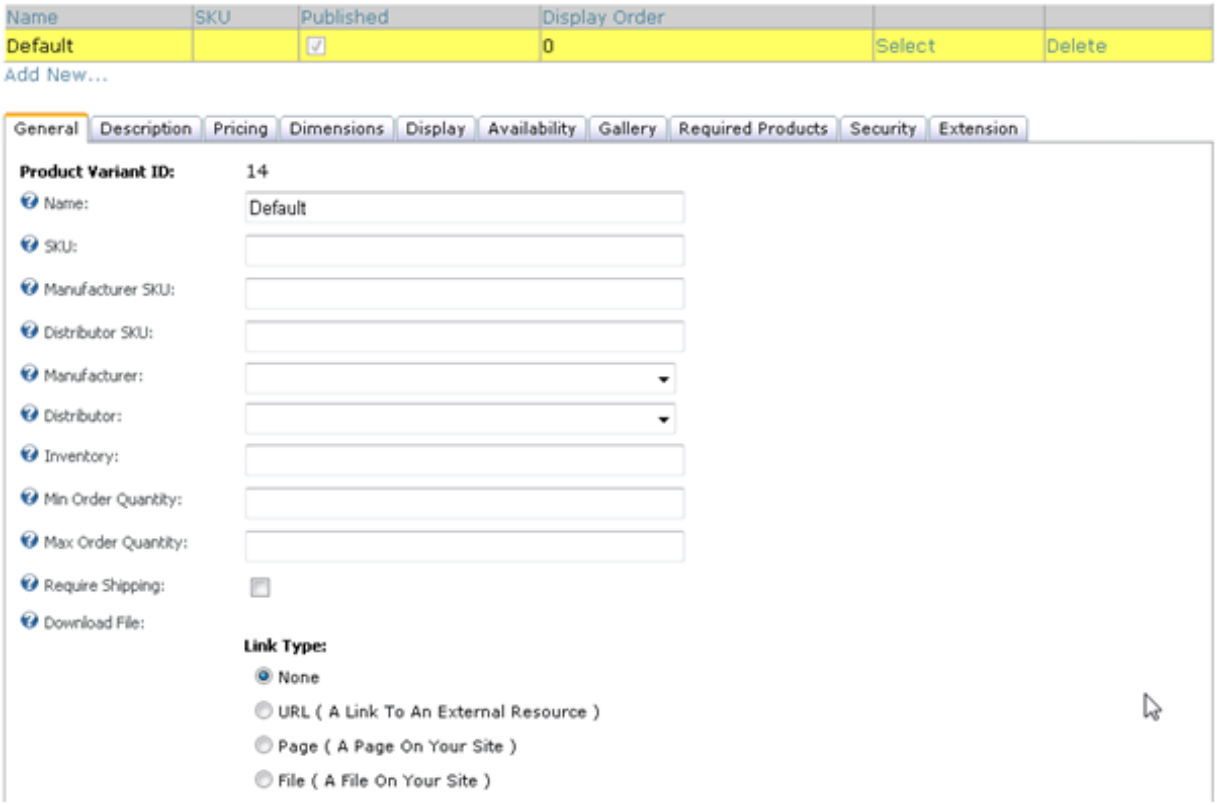
> If you use the variant groups feature on your variants, you must ensure every variant is associated to a variant group. If even one variant is not associated, the Storefront will show the default variant dropdown box instead of showing the variant group control.

Variants

Each product contains one or more variants. Variants are variations of the same product. For example, if you sell shoes, you may offer your customers different variations of the same shoe by size and color. If you sell movies online, you may offer in two variants of DVD format and in downloadable version. If there is only one variant entry, then the product is considered to be without variations. You must always have at least one variant per product, also known as the default variant.

Any field that is available to be configured in the variant will override the same field that appears at the product level. This feature allows you to create a product that shares the same information with all the variants underneath it while overriding some fields for certain variants. For example, the DVD format may have a very different licensing description than the downloadable version than the general description of the product.

Although not necessary, many retailers will also find it useful to provide a unique **SKU** number for your variants. This convention largely depends on your own stock keeping practice.



Inventory

You can track the real-time inventory on hand for your individual variants. When an item is sold, the quantity is automatically decreased by one. By default, when the inventory is empty, the variant is no longer available for sale unless you configured the inventory behavior to allow backorder. You can also restrict the minimum and maximum quantities that can be purchased by your customer per order.

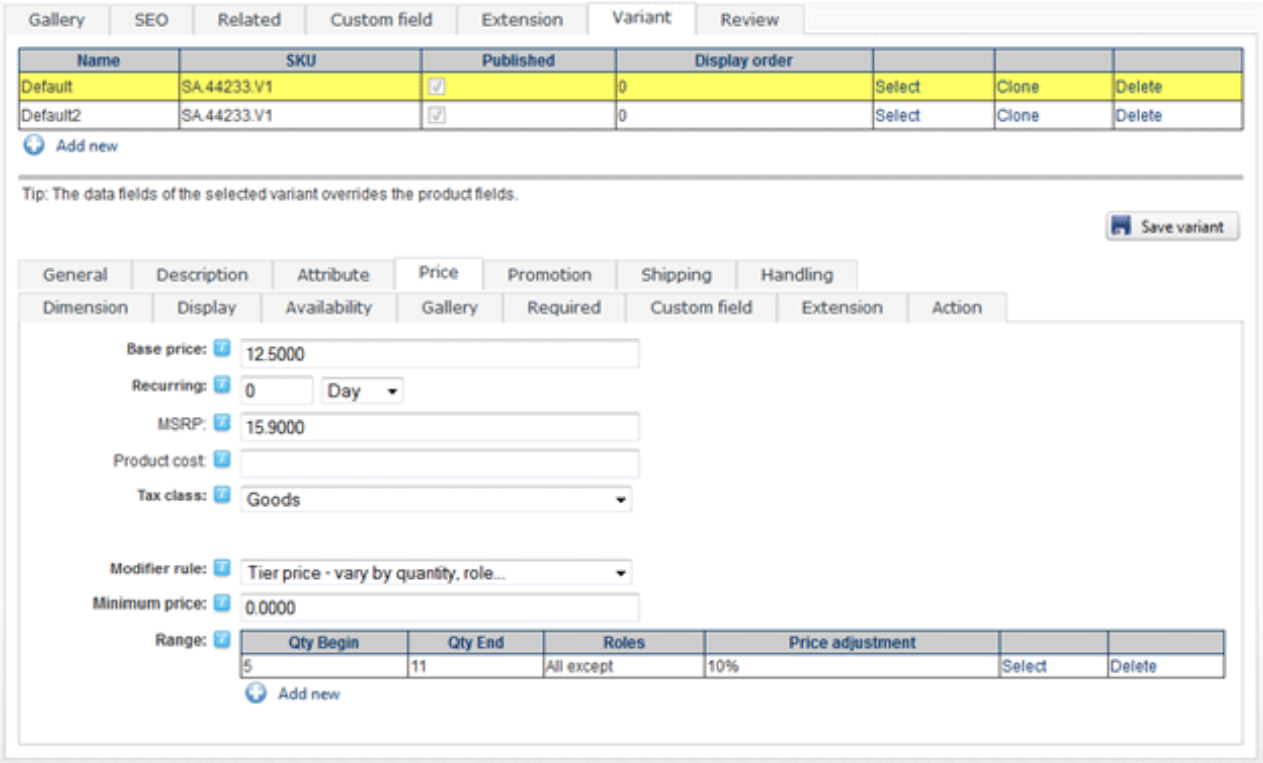
Warehouse

You can associate the product variant to a warehouse if this product is shipped from a different location than your business address. After checkout, the variant's inventory will automatically be reduced. You must first enable the **Warehouse** feature under **Configuration > General** to use warehouses. Please see Warehouses (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/warehouses/rvdwkpvm/section) for more information.

If the same product is available from different warehouses, you need to setup one variant for each warehouse so that the inventory is correctly tracked back to that warehouse. Rather than letting the user decide the variant to buy, you may want to configure the variant availability rule (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/variant-availability/rvdwkpvm/section) to show a particular variant from a certain warehouse depending on the user location. For example, you may want to use the Availability rule to detect if the user is visiting your site from California and present only the variant that is stored in your West coast warehouse, and do the reverse action for a user located in the East coast. Depending on the use case, you may need to employ 3rd party detection software like MaxMind GeoIP (https://www.maxmind.com) lookup to cookify the user visiting your site so that your Availability rule can correctly determine the precise location of the user.

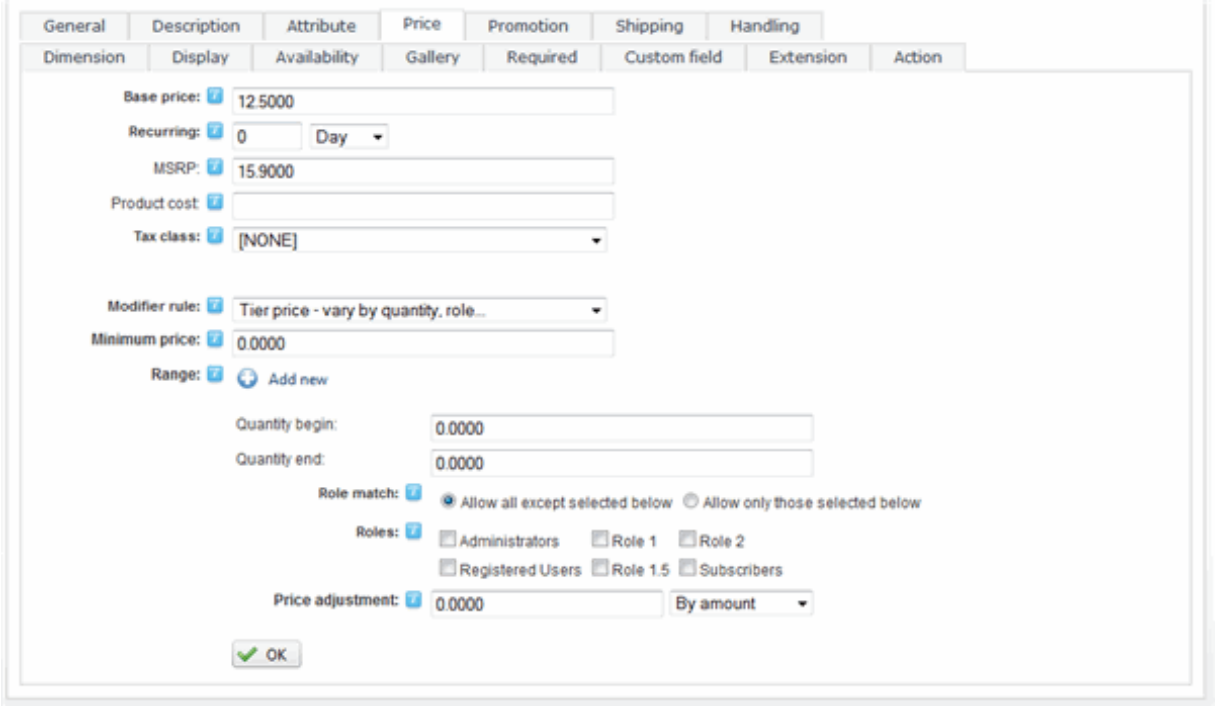
Price

The base price can be set for each variant. In addition, an optional product modifier (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/product-modifier/rvdwkpvm/section) rule can be applied to change the price based on the quantity selected (tier pricing), values captured from the custom fields (e.g. size, color, etc).



Product Modifier

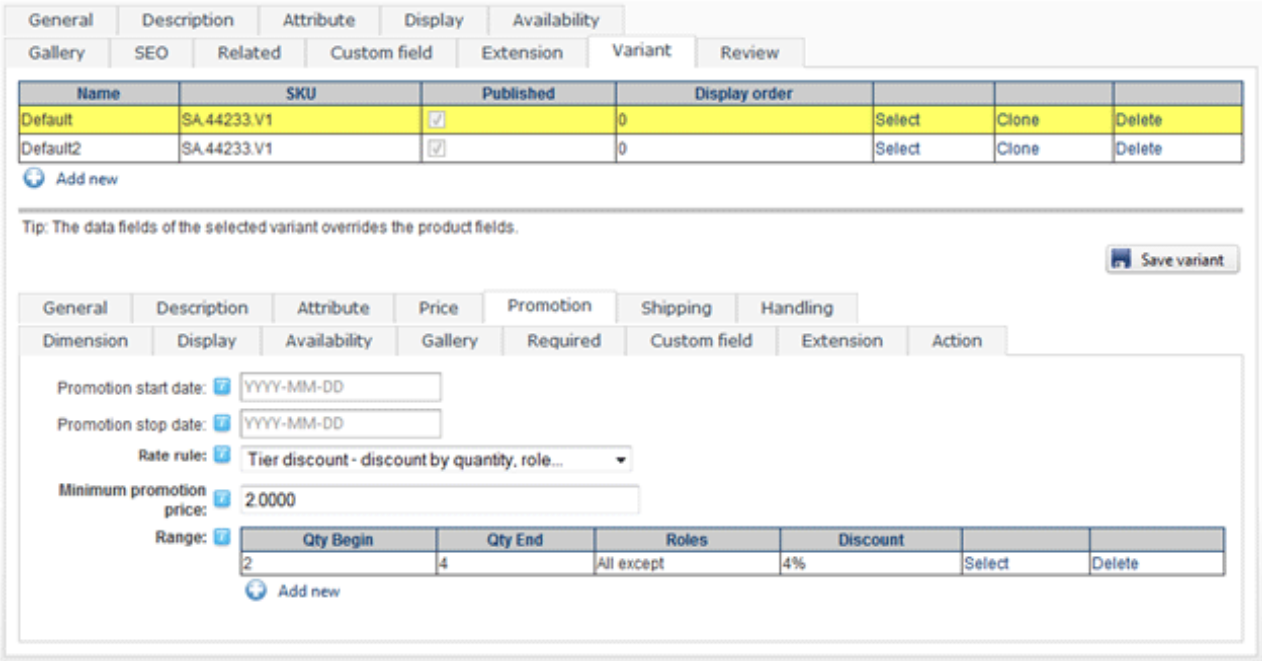
Modifier rule can be used to modify the selling price dynamically based on quantity, role, etc. For example, you may want to adjust the price if a customer belongs to a reseller group. You can also apply a sales promotion on top of the modified price.



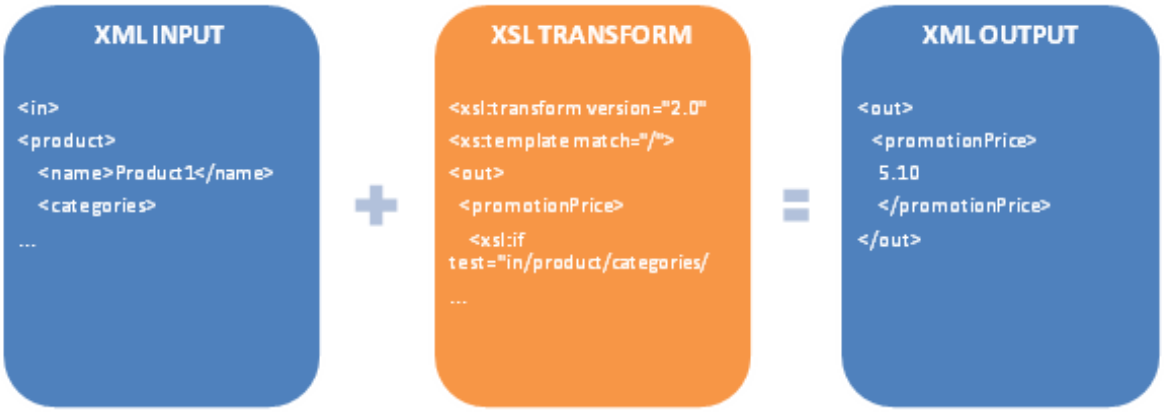
You can also use XSL to write your custom price modifier rule. This feature provides incredible flexibility to describe a highly complex pricing structure should your business require it.

Product Promotion

You can also apply a promotion rule to give a price reduction. For example, you may offer a 20% price discount for wholesale members or apply a time-limited flat discount.



You can also use XSL to write more complex promotion rule. The expected output should return the calculated promotion price to charge. Promotion rules are always applied after product modifiers. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.



Subscription Products

If you sell a subscription product, you can configure the Storefront to automatically bill the customer for a recurring order every fixed interval (e.g. magazine subscription, etc.).

You must first enable the **Recurring orders** feature under **Configuration > General**. Once enabled, you can set the recurring interval for the variant. The Storefront will automatically create a new order for the customer and attempt to charge the payment when the renewal period has occurred.

> If you're running tests on a development/staging machine with production data copied over and you sell recurring products, make sure to disable any recurring orders or change the payment gateway credentials, otherwise it will automatically charge your customer's credit card when the order is due for renewal.

Taxable Products

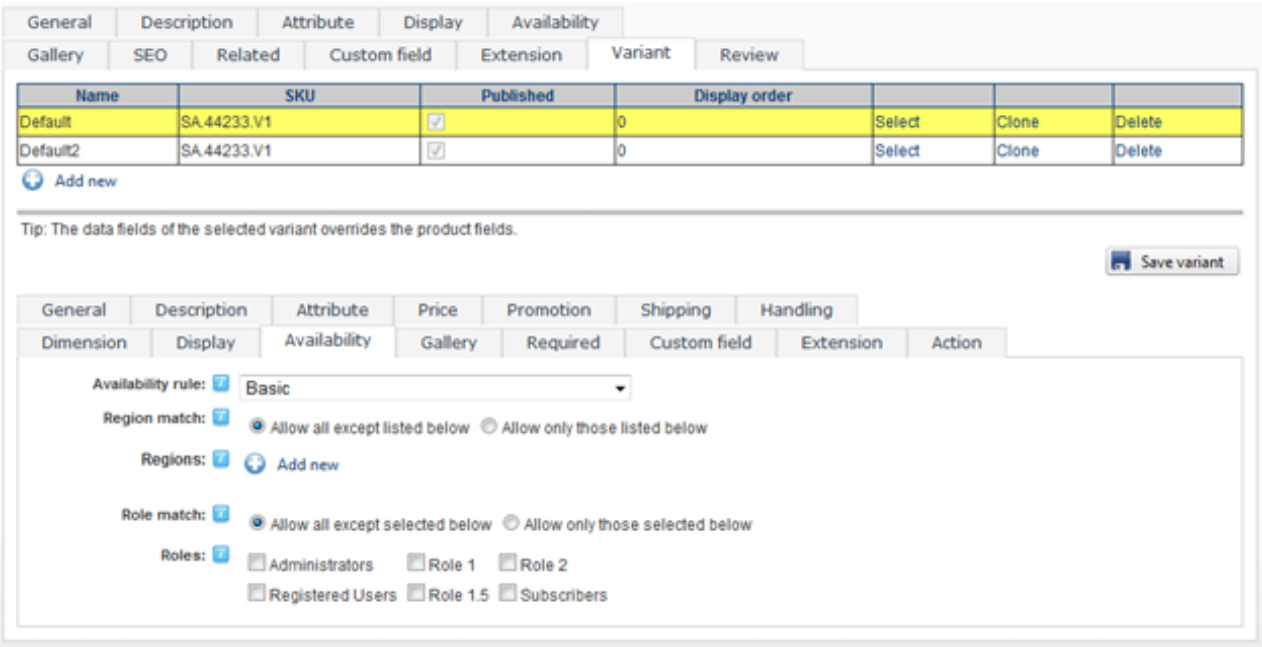
If the product is taxable, you can assign a tax class to this variant. Tax classes are created ahead of time in the **Configuration > Taxes** menu. Please see Taxes (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/tax-methods/rvdwkpvm/section) for more information.

Weight & Dimensions

You can also provide the weight and dimensions for your variant to be used to calculate the shipping cost. The values entered here should be the actual weight and dimensions of your product with its original packaging. It should not include the weight or dimension of the container or envelope used to hold the product for shipping. Please see Packages (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/packages/rvdwkpvm/section) and Packing (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/packing-methods/rvdwkpvm/section) for more information about other weights and dimensions used for actual shipping calculation.

Variant Availability

The variant availability determines if the variant is available for purchase. You must first enable the **Product availability** feature under **Configuration > Product**. Once enabled, you'll be able to add your own avalability rules. The Storefront comes with several predefined rules such as allowing a product to be purchased based on user location or security role.



You can also use XSL transform to determine whether this item is available for sale. The expected output should return "true" to indicate this variant is available for sale under the input conditions, otherwise "false" if disallowed. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.

Attributes

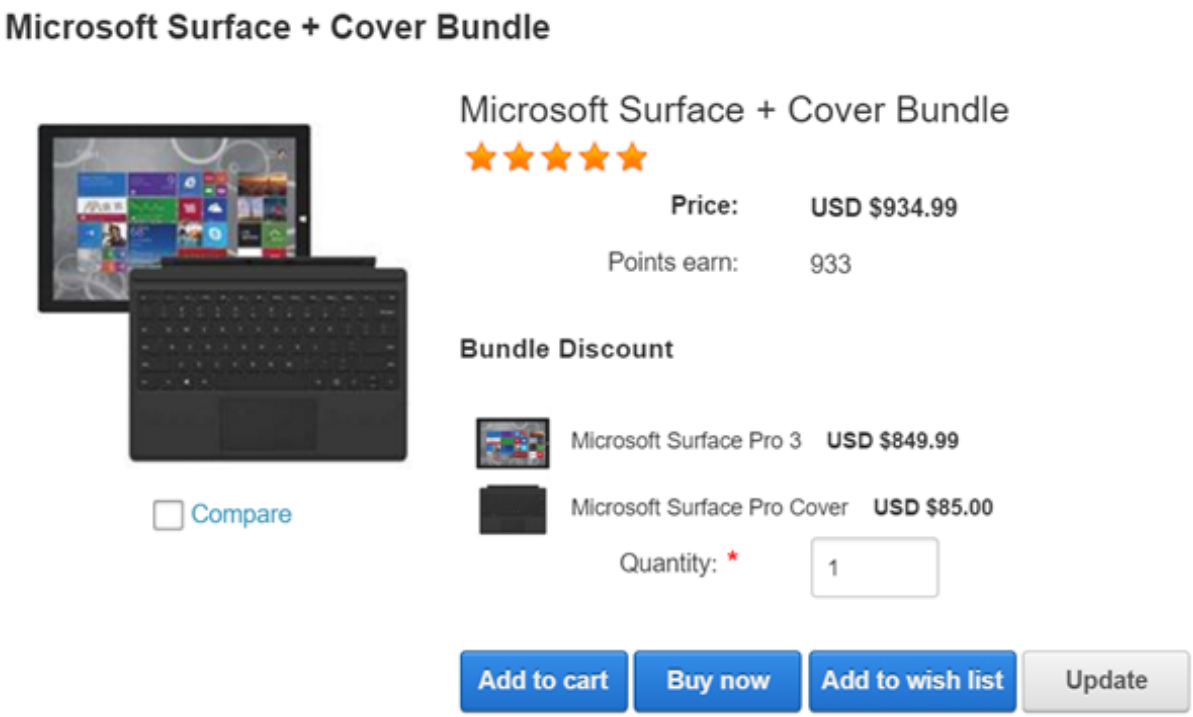
You may override the product attributes set at the product level for the variant. Please see Attributes (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/product-attributes/rvdwkpvm/section) for more information.

Gallery Images

You may override the gallery images for this variant. If you do not provide an image for the variant, the image will be taken from the product level. There is no limit to the number of product images.

Bundled products

Bundled products are a great way to encourage your customers to shop more. For example, you could sell a computer tablet and the cover together as a bundle. The customer appreciates it because it saves them time and is usually cheaper than buying the two products separately. You can create as many configurable or fixed bundles and they can be made up of as many separate parts you need. The inventory of each part is tracked independently so you know exactly how many tablets or covers you have left in stock.



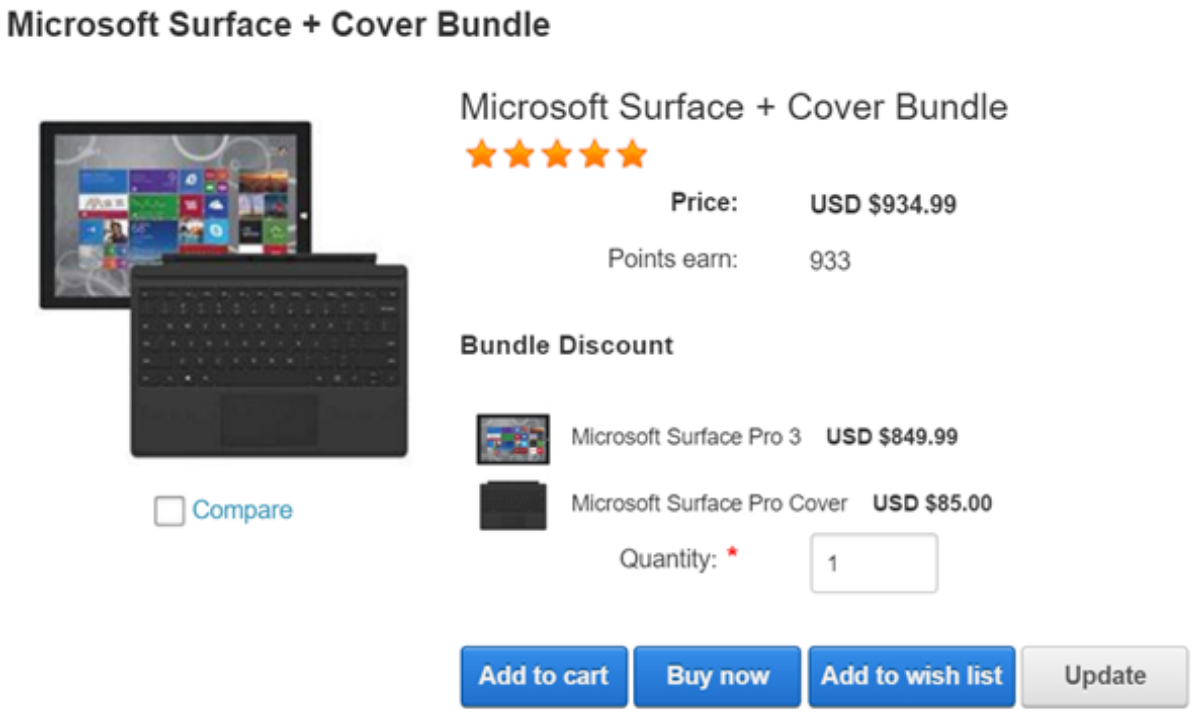
You must first enable the **Bundled products** feature under **Configuration > Product** settings. Once enabled, you'll be able to create components and assign parts that make up your bundle.

Component

A component is simply a grouping of your parts to come. You can have different components with different behaviors. For example, if you're selling a desktop computer, you might create several components (Processor, Memory, Storage, etc.) so that the customer can select the type of CPU for their processor, the amount of memory and hard drives, etc.

There are several kinds of bundled products. The first is an implicit bundle. An implicit bundle is meant to bundle several products together without advertising the parts. For example, you could bundle a bicycle and a kickstand but you don't necessarily want to emphasize the kickstand as a separate part with its own price because the kickstand might be worth very little compared to the price of the bicycle and would confuse the customer. Yet, it is an essential part of the bicycle and you still want to bundle them because it helps to sell quicker while allowing you to track the inventories separately. In this case, the sum of the parts in an implicit bundle appears to be worth more than if advertised out separately.

The second type of bundled product is an explicit bundle. This type of bundle is intended to emphasize the parts that make up the bundle. The previous example of selling the tablet and its cover is a great way to highlight the parts in an explicit bundle because the savvy customer is already aware of the prices and savings they would get if buying separately.

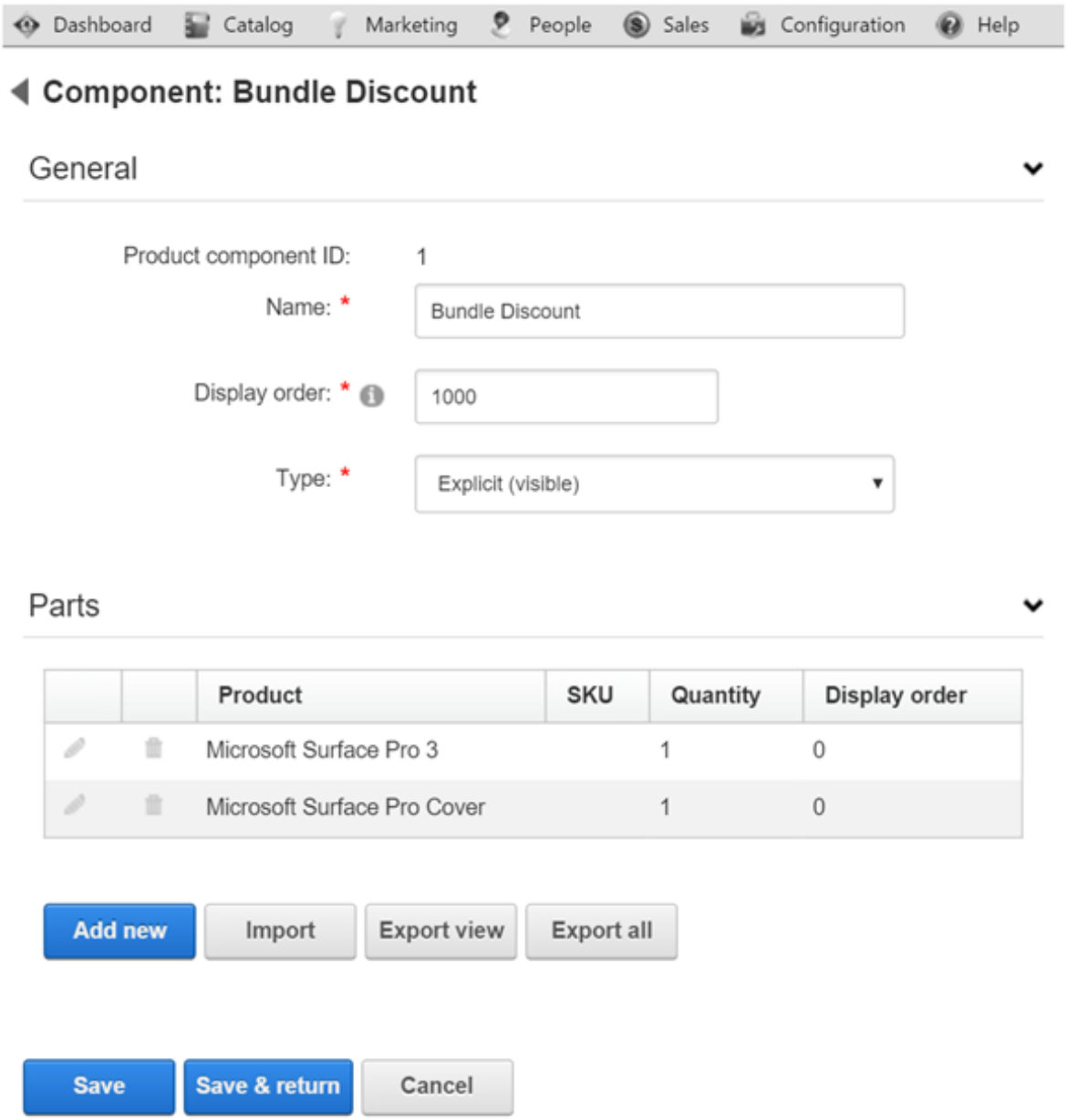


The last type is a configurable bundle. This is usually intended for customers to pick and select the parts they want to make up the bundle. The example of selling a desktop computer and giving the choice for the customer to pick the processor, amount of storage is a great candidate for configurable bundle if you need to track the inventory of the separate parts so that you don't run out of hard drives. The Storefront allows you to offer a single (one processor per computer) or multiple selection (perhaps for multiple hard drives that can go into the computer).

Microsoft Surface + Cover Bundle

You can mix and match different types of components that make up your bundle. For example, you can offer your customer the ability to select certain aspects of your bundle while fixing the rest through either implicit or explicit components.

You must first create the components that make up your bundle. Give it a name and select the desired type and **Save**. Then add the product parts that make up this component.



Parts

A product part lists the actual product that you want associated to the component groups that make up your bundled product. The part can modify the price of the product thereby achieving the bundled savings commonly expected by customers. You can also set the quantity of products in the bundle or go as far as allowing the customer to modify the quantity. Currently, only non-recurring products that belong to the same seller and warehouse can be bundled together.

Dashboard Catalog Marketing People Sales Configuration Help

Part: Microsoft Surface Pro Cover

General

Product part ID: 3

Product: * Microsoft Surface Pro Cover Edit

Selected: ☑

Price

Modifier rule: Adjust price - modify price by amount or perc

Price adjustment: * -50.0000 By percentage

Inventory

Default quantity: 1

Min order quantity:

Max order quantity:

Display

Show price: ☑

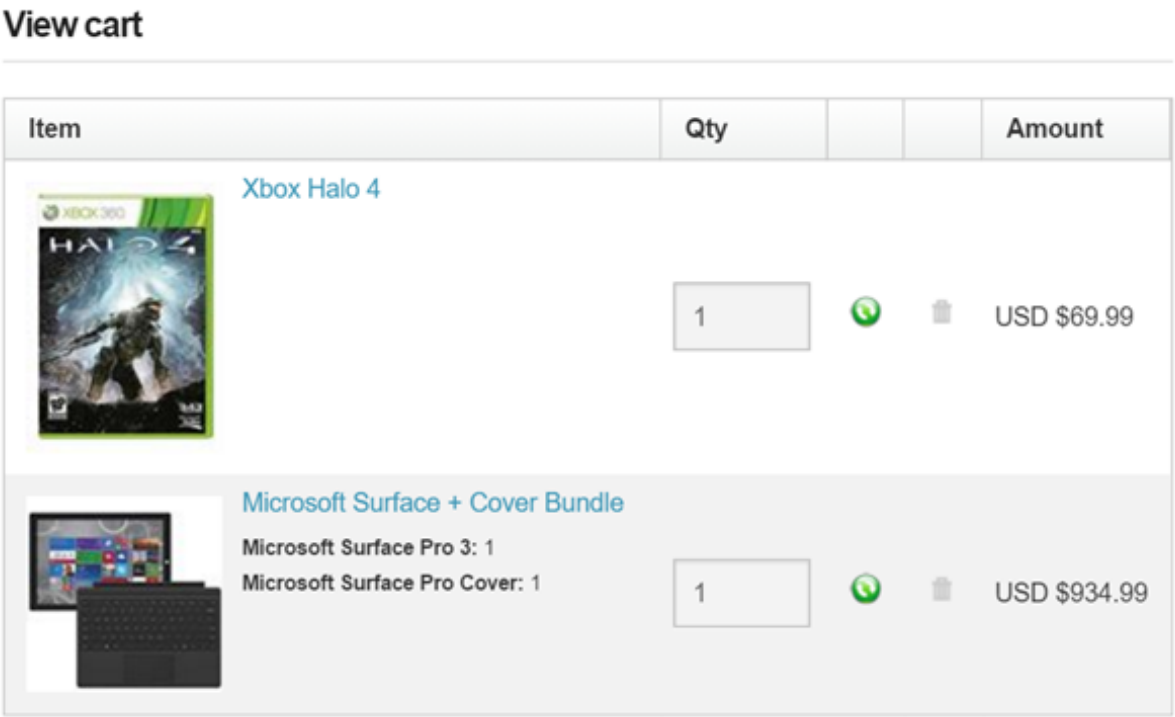
Show quantity: ☐

By default, the bundled product will show the combined price from sum of the parts. Suppose the tablet sells for $849.99 and the cover regularly sells for $170, the combined price would be $1019.99. If the cover has a price adjustment of 50% for being in a bundle, then the cover would be reduced to $85 and the complete bundled product would list the combined price of $934.99.

The sequence of multiple price adjustments occurs starting from the product variant first and then the product part. For example, if your variant has a base price of $100 and has a price modifier rule to adjust it to $95. The product part's price adjustment will occur against the $95, after the variant's own price adjustment. This sequence ensures that your customers always see the most up-to-date price in your catalog should you decide to sell the product individually or in a bundle.

Sales order detail

It's important to understand that while a bundled product consists of many products in one, it still creates separate order detail line items internally when added to the shopping cart.



While the customer is mostly unaware of it, this behavior is advantageous to the merchant who works hard to fulfill the order. The consistency minimizes disruption in your business processes because you can treat the order indifferently whether the product is bundled or not.

Order detail

		ID	Image	Product	SKU	Shipping status	Quantity	Amount
		24		Xbox Halo 4		NotShipped	1	USD $69.99
		25		Microsoft Surface + Cover Bundle		NotShipped	1	USD $0.00
				Microsoft Surface Pro 3		NotShipped	1	USD $849.99
				Microsoft Surface Pro Cover		NotShipped	1	USD $85.00

Add new | Export view | Export all

Your business will be able to pack, ship, fulfill, track and refund the individual items very easily. For example, you're not forced to have all the bundled parts ready for shipping if you're short on inventory for one product. You can ship and track them separately. The slight indentation in the sales order detail rows indicate a product part belonging to the bundle.

Required Products

Variants can also have required products (e.g. a notebook product requires a battery and power adapter). Required products are automatically added to the customer’s shopping cart when this variant is chosen. For example, you sell magazine subscriptions that has a one-time setup fee. Create your subscription product and your setup product as two separate products like you normally would. Then use the required products feature to associate both products. When the customer adds the magazine subscription, the Storefront will automatically attach the setup fee.

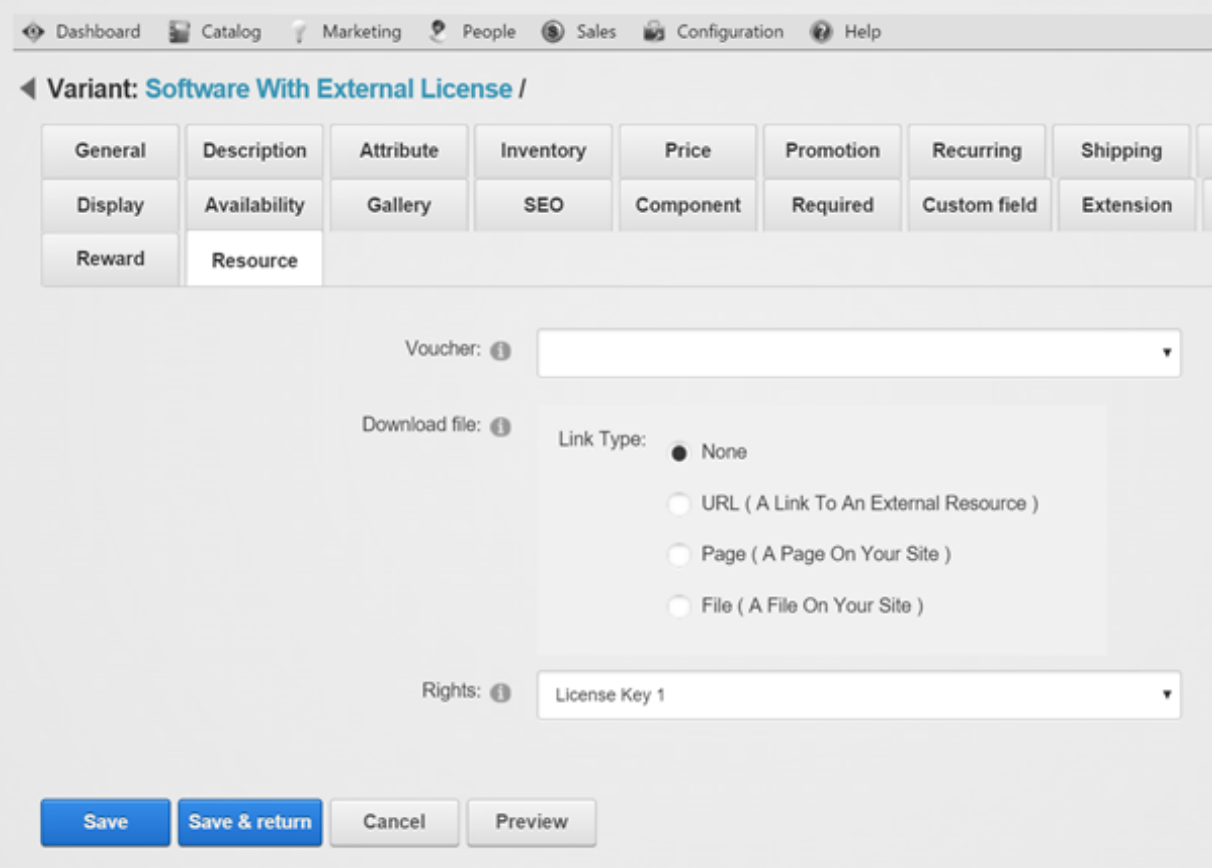
You must first enable the **Required products** feature under **Configuration > Product**. Once enabled, you'll be able to associated the products under the **Required** tab.

Unlike bundled products, the use of required products is more suitable for ensuring certain products that require each other are present both in the shopping cart as opposed to products that merely complement each other for a better price deal. From the customer point of view, a required product appears as a separate high-level order detail line item when added to the cart whereas parts from a bundled product are subdued and do not appear.

Therefore, conditions configured for a required product is validated against all the products currently present in the cart. As such, if the required product has a precise required quantity, it will validate against all the products currently in the cart. For example, you can use a required product to charge a one-time setup fee regardless of the number of products A or B added to the cart. Please see Bundled products (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/bundled-products/rvdwkpvm/section) for more information.

Downloadable Products

If you are selling a virtual product (e.g. software or e-book), you can provide a download file location that will be made available to your customers after purchase. The file location can be any downloadable file, a DNN page or any random URL. File protection is handled by native DNN security.



If you need to automatically issue a license key, serial number, password or any code to unlock your virtual product, you can make use of the Storefront's built-in access rights system. Please see Rights (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/catalog-rights/rvdwkpvm/section) for more information.

You can have multiple downloadable items per product simply by compressing your files into a single zip file or by creating implicit bundles. Please see Bundled products (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/bundled-products/rvdwkpvm/section) for more information.

Custom fields

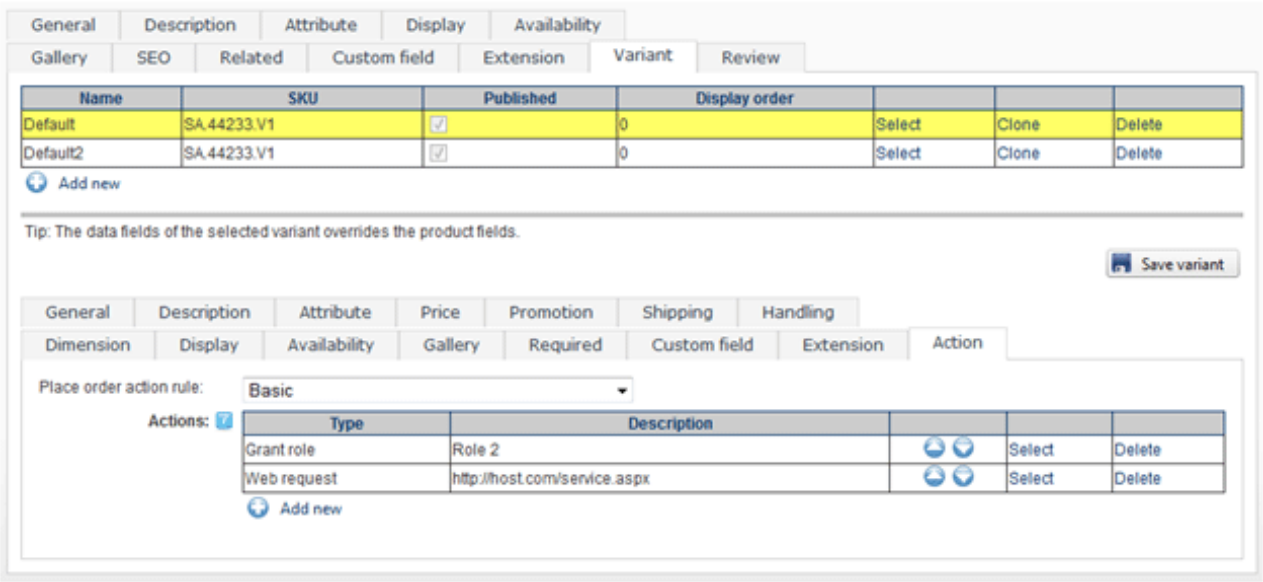
You can capture additional values from your customer using custom fields. Any custom fields defined under the product variant will override the custom fields defined at the product level. Please see Custom fields (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/product-custom-fields/rvdwkpvm/section) for more information.

Actions

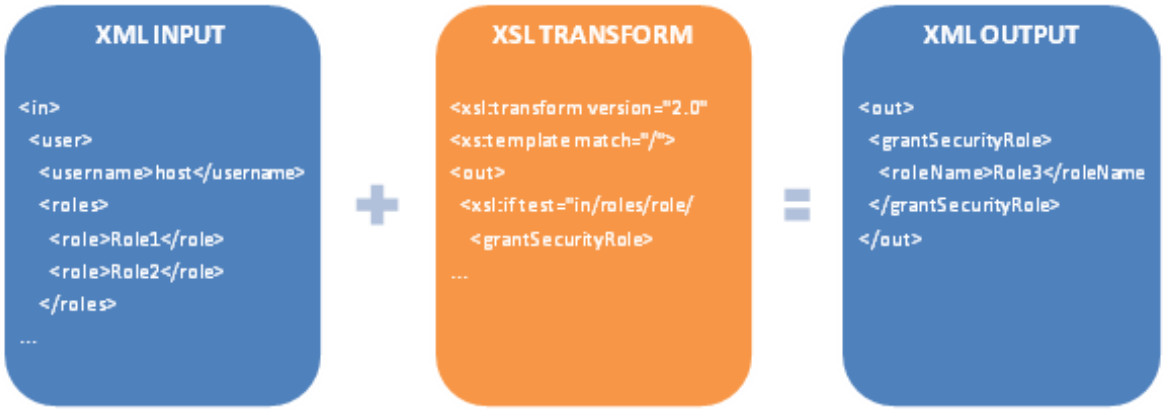
You can automatically grant or revoke security roles to customer after purchasing a variant or make a Web request (GET or POST) to an external service. This feature is useful if you need to allow access to certain pages on your Web site after the customer purchases the product or you have custom logic that needs to run.

You must first enable the **Product actions** feature under **Configuration > Product**. Once enabled, you can add your own action rules from the Action tab.

Please note you can only grant security roles that are allowed under the **Configuration > Security** menu. This security feature prevents staff operators from creating product action rules to grant themselves higher level roles (e.g. “Administrators” role).



The **Place order action rule** can also use XSL transform to determine what action rules to run. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.



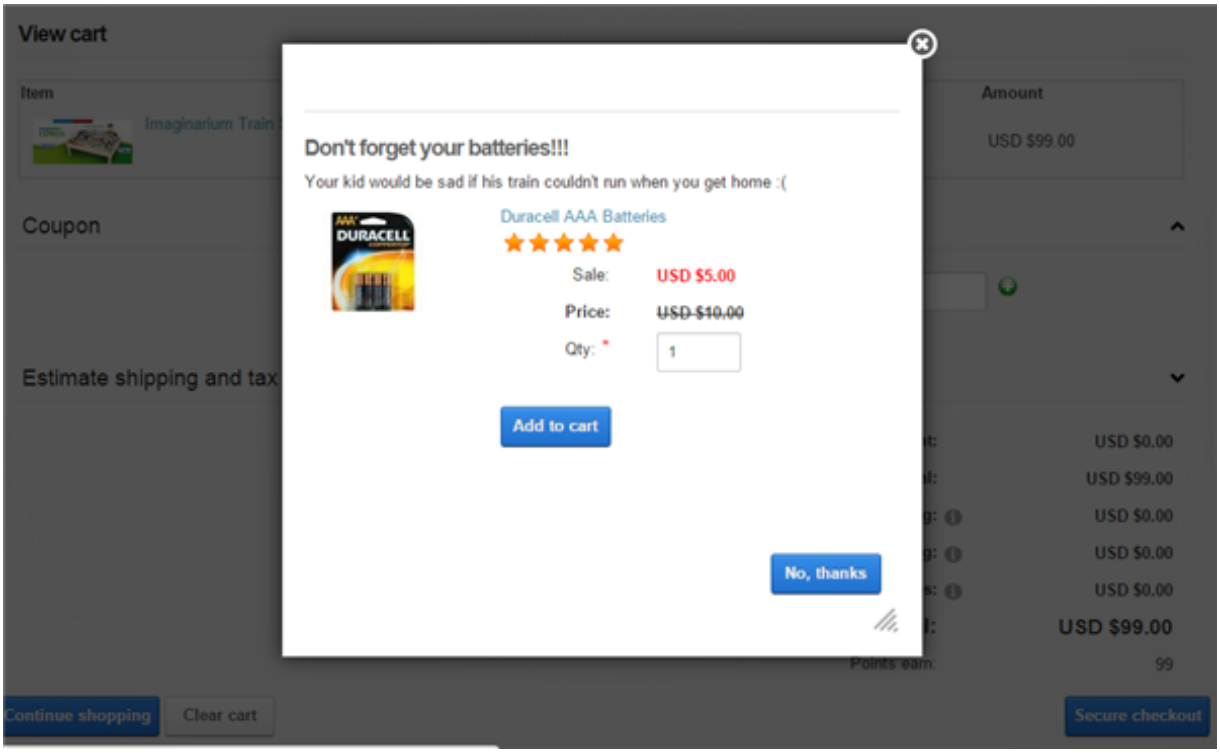
Extensions

You can store additional information about the variant using the **Extension** field and XML data. The extension information automatically becomes available for query in your business rules or for your viewing.

You must first enable the **Extensions** feature under **Configuration > Product**. Once enabled, you'll be able to enter your own extension data.

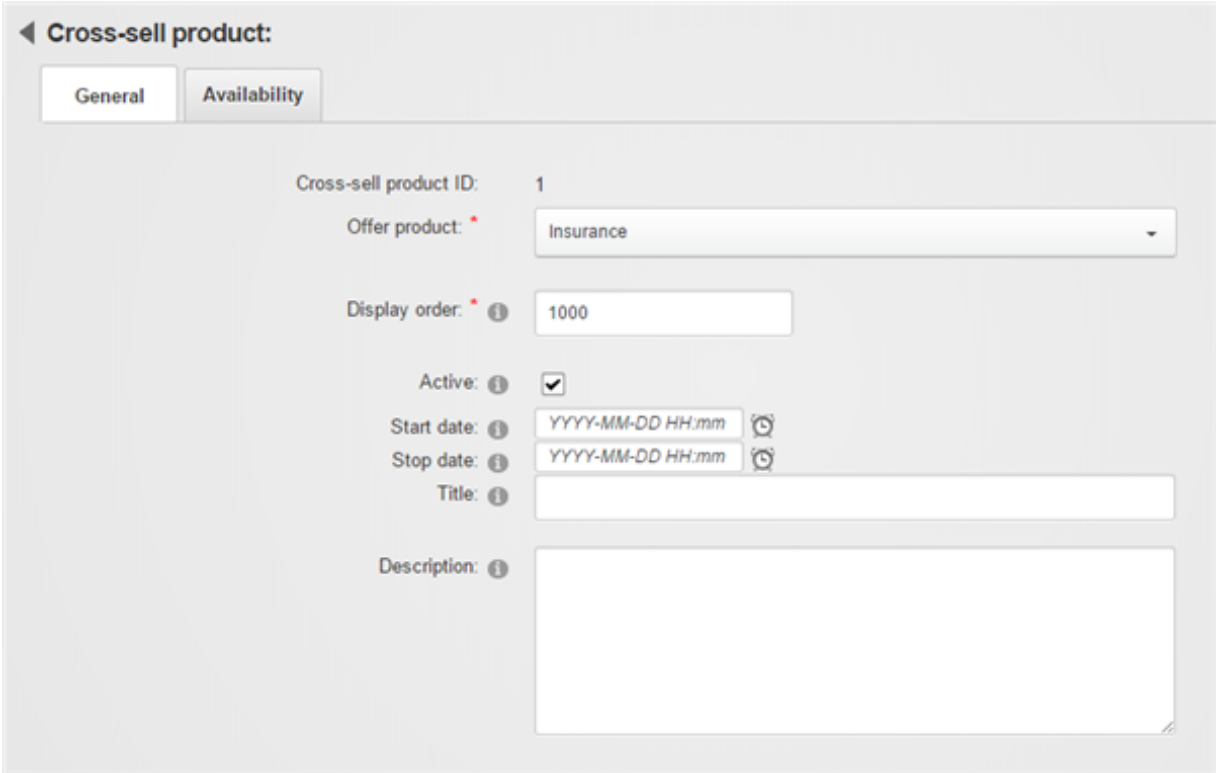
Cross-sell products

Cross-sell products are a great way to increase sales. For example, if you sell electronic toys, a quick easy way to increase your revenue per order is to remind the customer to buy batteries right before checkout. There are many cross-sell opportunities for almost every type of business. Many times, these are high margin products or services being sold to impulse buyers right at the last minute (e.g. insurance, gift wrap, etc.).



The cross-sell products are offered to the customer on the cart page right before they proceed to checkout. Therefore, when putting together your cross-sell products, think about what your customer will perceive at the moment before checkout. You want to offer one or two interesting products that are relevant to items in his cart at a small price tag relative to his total purchase. You definitely want to show a catchy title like "Don't forget your batteries!!!"

You must first enable the **Cross-sell products** feature under **Configuration > General**. Once enabled, you can offer cross-sell products such as batteries that are targeted to a few specific products you sell under **Catalog > Products** menu or you can offer products that are generally available to every product such as gift wrap under **Configuration > Cross-sell product** settings.



Revindex Storefront has a powerful rules engine that allows you to optimize your cross-selling effort by showing only qualified products that are relevant at the point of checkout. For example, you can offer $5 batteries when you detect electronic goods are purchased in the cart with missing batteries and his total purchase reached at least $40. You can even pair it with a promotion to entice your customers with a discount like "This product is offered only to you at 50% off because you spent over $100". Whatever the products you decide to offer, it should always make sense and add value for the customer.

How to create a simple product

Creating a simple product for sale is easy and takes a few minutes. Below are the typical steps to create a basic product:

1. From the **Catalog > Products** menu, click on **Add new**

2. On the General tab, give your product a meaningful name.

3. On the Description tab, enter the description for your product.

4. On the Display tab, select the categories this product should be associated with.

5. Click on Save. Your initial product is now created with a default variant.

6. On the Gallery tab, add some images to depict your product.

7. On the Variant tab, select the default variant:

    i. On the General tab, give it a name or leave blank. Enter the SKU for this product if you have one. You may fill up the other information about this variant such as manufacturer, inventory, etc.

    ii. On the Price tab, enter the base price for this product. If this is a recurring product (subscription), set a non-zero number for the Recurring value. Assign the variant to a Tax class if it is taxable.

    iii. On the Shipping tab, check the Require shipping checkbox if this product needs shipping.

    iv. On the Dimension tab, enter the weight and dimension of your variant to be used for shipping calculation. The values should include any packaging.

That's it. You have now created a new product ready to sell. You can always go back to edit your product and make changes.

How to create a recurring product

Revindex Storefront supports recurring products, also known as a subscription. The system will automatically create a new order for the customer when the recurring period has elapsed. You must first enable the **Recurring orders** feature under **Configuration > General**. Creating a recurring product for sale is easy and takes a few minutes. Below are the typical steps:

1. From the **Catalog > Products** menu, click on **Add new**

2. On the General tab, give your product a meaningful name.

3. On the Description tab, enter the description for your product.

4. On the Display tab, select the categories this product should be associated with.

5. Click on Save. Your initial product is now created with a default variant.

6. On the Gallery tab, add some images to depict your product.

7. On the Variant tab, select the default variant:

    i. On the General tab, give it a name or leave blank. Enter the SKU for this product if you have one. You may fill up the other information about this variant such as manufacturer, inventory, etc.

    ii. On the Price tab, enter the base price for this product. Assign the variant to a Tax class if it is taxable.

    iii. Set a non-zero number for the Recurring value and the desired recurring interval.

    iv. On the Shipping tab, check the Require shipping checkbox if this product needs shipping.

    v. On the Dimension tab, enter the weight and dimension of your variant to be used for shipping calculation. The values should include any packaging.

That's it. You have now created a new recurring product ready to sell. You can always go back to edit your product and make changes.

How to create a setup fee

In many businesses, especially for recurring products, you may want to charge a one-time setup fee. Please note you must first enable the **Required products** feature under **Configuration > Product** to use this functionality**.**

1. You can do so by first creating your usual product for sale (See "How to create a simple product (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-create-a-simple-product/rvdwkpvm/section)" and "How to create a recurring product (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-create-a-recurring-product/rvdwkpvm/section)").

2. Then create your setup fee as another new product following the same steps as your previous product. Under the Display tab, uncheck the **Published** checkbox to hide this product from public view. Configure the price for the default variant and any other settings you need. Make sure the variant's recurring interval is zero since this is a one-time setup fee. Save your product.

3. Go back to your previous product and associate the setup product as a requirement under the Required tab.

Now when the customer purchases the first product, it will automatically add the required setup fee.

How to create overridable price product

An overridable price product is a product that the customer can decide on the price to pay. A good example is a donation or gift certificate product. The customer can decide on how much to donate or how much money to put into the gift certificate. Please note you must first enable the **Custom fields** feature under **Configuration > Product** to use this functionality. Follow the steps below to create an overridable price product:

1. Create a regular product like you normally would do.
2. Select your product variant
3. Under custom field tab, select "Basic" for the dynamic form dropdown.
4. Click **Add new**
5. Select Field type to "TextBox".
6. Give the ID a name like "CustomPrice_TextBox"
7. Give the Label a name like "Custom price:"
8. Tick the Required checkbox.
9. Choose "Decimal" for the Data type.
10. Click **OK**.
11. Under Price tab, set the Modifier rule to "Override price"
12. Set the Field ID to the exact ID you named above ("CustomPrice_TextBox").
13. **Save** the variant.

How to create a configurable price product

A configurable price product is a product where the price varies depending on the features chosen by the customer. There are several ways to create configurable products using bundled products or custom fields with price modifier. Bundled products are more powerful and allows you to track inventory for each part included in the configurable product. Custom fields are simpler but does not track inventory for the individual parts. Please see Bundled products (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/bundled-products/rvdwkpvm/section) and Custom fields (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/product-custom-fields/rvdwkpvm/section) for more information.

Using bundled product

You must first enable the **Bundled product** feature under **Configuration > Product** to use this functionality.

1. Start by creating all your available parts as regular products like you normally would do (e.g create a Hard Drive storage product with several variants for 100GB, 200GB, 300GB). Make sure to assign a base price for each variant (e.g. $10 for 100GB, $20 for 200GB hard drive).
2. Now create a regular product like you normally would do for your main product.
3. Under the Variant tab, click on **Edit details**.
4. Under the Component tab, click **Add new** to create a new component.
5. Give your component a name (e.g. Storage) and select the Type to "Multiple selection". Click **Save**.
6. Click **Add New** to add a new part for the newly created component.
7. Select the product you created earlier to associate to this part (e.g. 100GB hard drive). Click **Save & Return**.
8. Repeat step 6 for as many parts you need (e.g. 200GB, 300GB hard drives).
9. Repeat the steps above if you have more than one type of component in your configurable product (e.g. Memory, Software, etc.)

Using custom fields and price modifier

You must first enable the **Custom fields** feature under **Configuration > Product** to use this functionality. Follow the steps below to create a configurable price product:

1. Create a regular product like you normally would do.
2. Under the custom field tab, select "Basic" for the dynamic form dropdown.

3. Click **Add new**
4. Select Field type such as "DropDownList".
5. Give the ID a name like "Custom_Storage_DropDownList"
6. Give the Label a name like "Storage:"
7. Add the available choices to the List items selection (e.g. 100GB, 200GB, 300GB). You must enter both the name and value (e.g. Name = 100GB, Value = 100). The value is the actual text that will be matched to adjust the price.
8. Click **OK**.
9. Repeat the steps above if you have more than one custom field.
10. Click **Save**.
11. In your variant, under Price tab, set the Modifier rule to "Configurable price".
12. Click **Add new**.
13. Set the Field ID to the exact ID you named above ("Custom_Storage_DropDownList").
14. Set the Operator to "Equal" and the Operand to one of the values (e.g. "100").
15. Set the price adjustment for that selected value.
16. Repeat the steps above for each available selection that you want to adjust the price.
17. **Save** the variant.

How to create downloadable products

Currently, Revindex Storefront allows you attach a downloadable file (e.g. PDF or software) to a product variant that the customer can download after purchasing the product. Simply associate a page, URL or a file to the product variant.

If you need more granular control such giving access to many downloadable files or need to revoke access after a certain time, you can follow these steps to create a download page instead:

1. Create a **Secure** folder from your **File Manager**.
2. Grant the folder **Read** access to a security role (e.g. "PDF Subscribers").
3. Upload your file(s) to that folder.
4. In your product variant, set the **Place order action** to grant the user that security role for the amount of time you like. Make sure you allowed this role to be granted from the **Configuration > Security** menu first.
5. Add the standard DotNetNuke **Documents** module on any page that will be used to list out the files in that folder. The user will only see the files and can only download them if he has the active security role.

How to email external license key

If you sell software or any product that needs to generate a license key or serial number from an external system, you can use the Place order action rule to retrieve external resources. Please see Actions (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/variant-actions/rvdwkpvm/section) for more information.

The following example shows how to create a Place order action rule that calls an external URL to retrieve the generated license key and send it to the customer by email.

```

<xsl:transform xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="2.0">
  <xsl:template match="/">
    <!--  Craft our URL to retrieve the license key passing any query parameter  -->
    <xsl:variable name="url" select="concat('http://a.com/gen.asp?o=',
/in/salesOrder/salesOrderNumber)"/>
    <!--  Expect license key in plain text. Use document() function to return complex XML instead.
 -->
    <xsl:variable name="key" select="unparsed-text($url)"/>
    <out>
      <!--  Send email to customer with their license key  -->
      <sendMail>
        <mailFrom>support@company.com</mailFrom>
        <mailTo>
          <xsl:value-of select="/in/user/email"/>
        </mailTo>
        <subject>Your license key</subject>
        <htmlBody>
          <h1>
            <xsl:value-of select="$key"/>
          </h1>
        </htmlBody>
      </sendMail>
    </out>
  </xsl:template>
</xsl:transform>


```

How to show product without category

If you want your product to show up when no category is selected by the customer, you need to tick the Featured checkbox under the product's Display tab. Products that are marked as featured will appear on the product list page even if no category is selected.

How to give first month recurring free

If you sell monthly subscriptions, a good marketing idea is to give the first month free to encourage users to sign up. The customer must always make a first purchase going through the Web checkout process in order for the Storefront to capture any billing and payment information necessary to charge the customer for future occurrences. There are two options to configure your first free product on checkout.

Using promotion to give first month free

One easy way is to create a promotion rule that gives the discount based on the origin.

1. Under **Marketing > Promotions** menu, click Add new.
2. Give your promotion a name (e.g. "Free first month")
3. Under the Promotion tab, select "Sales order detail" as your promotion type.
4. Choose "Custom rule" for your promotion rule.
5. Enter the following rule to check the order is originating from a Web checkout (origin = 1) and not system recurring. You may need to adjust the rule if you want to put more conditions such as limiting the discount to only a specific variant, etc.

```
<xsl:transform xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="2.0">
  <xsl:template match="/">
    <out>
      <discountAmount>
        <xsl:if test="/in/salesOrder/origin = 1">
          <xsl:value-of select="-1 * /in/this/salesOrderDetail/price * /in/this/salesOrderDetail/quantity"/>
        </xsl:if>
      </discountAmount>
    </out>
  </xsl:template>
</xsl:transform>
```

Using required product to give first month free

An alternative approach is to create a different secondary product (you can call it "First Trial" or give it any creative name you like). This simple product has a variant (non-recurring) that requires your actual subscription product. The customer will actually buy your "First Trial" product and the Storefront will automatically set up the future recurring product. You can hide the subscription product since the customer won't be interacting with it.

1. Under **Catalog > Products**, add a new product.

2. Give it a name like "Free Trial" and **Save**.
3. Edit the variant of this product. Notice this variant has a zero dollar price.
4. Under the **Required** tab, add your actual subscription product to it.
5. Uncheck the **Published** and set the **Defer date** to the first occurrence to happen (e.g. 1 month).
6. **Save**.

In both cases, you can choose to collect their credit card information during checkout, but the customer won't get charged since the amount is zero. Of course, if they don't cancel by the end of the month, their credit card will be charged for the renewal going forward. If you don't want to take their credit card information, you can adjust the Availability rule for your payment methods to allow the special "None" payment method when the total amount is zero, and likewise enable the "Credit Card" payment method if the reverse condition is true.

How to sell on eBay

You can increase your sales by selling on 3rd party channels like eBay. The Storefront makes it easy to publish and manage your products from a central location.

You must first enable the **Channel** feature under **Configuration > General**. Please read Channels (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/channels/rvdwkpvm/section) for more information.

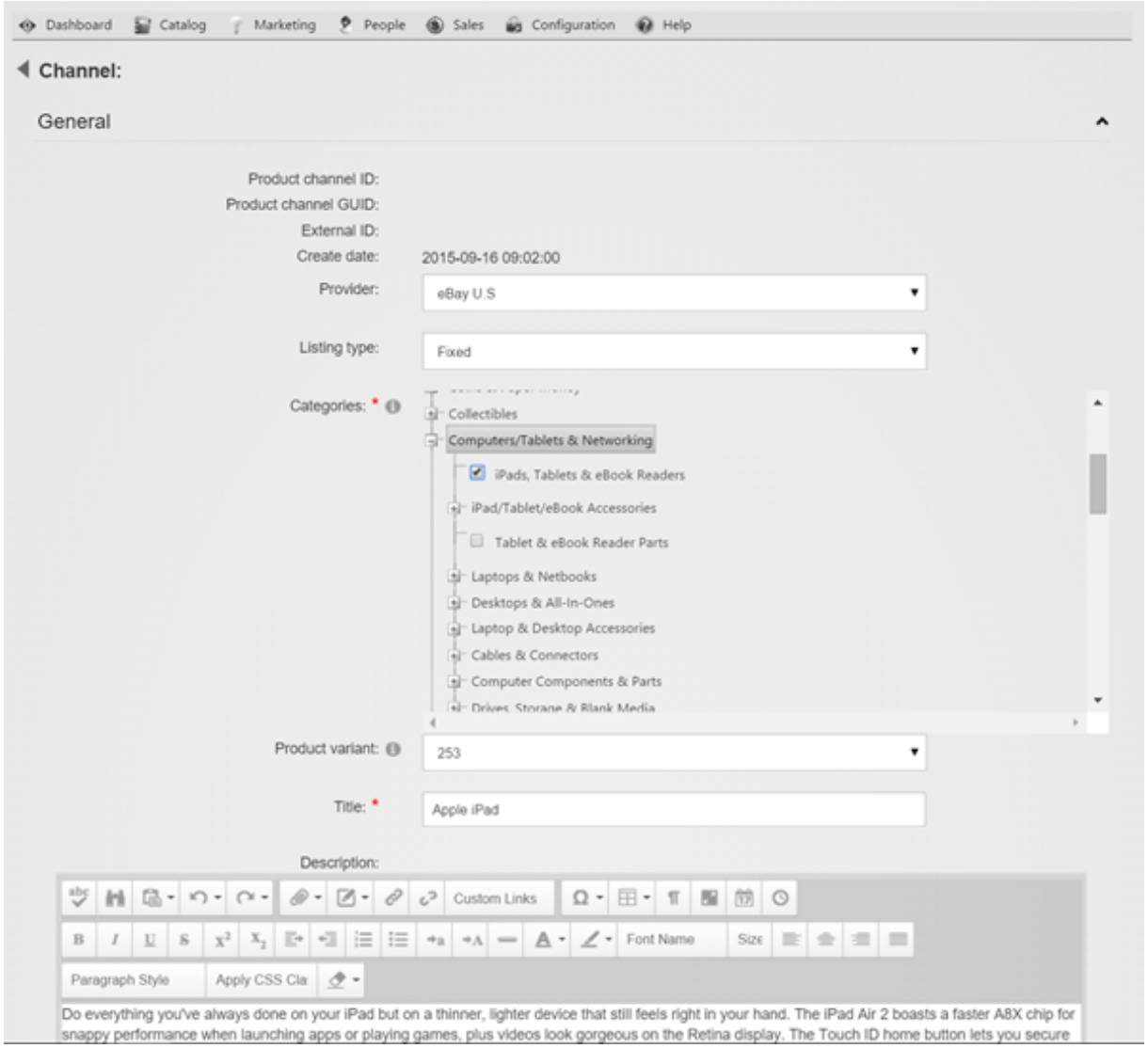
The following example shows how to list a product on eBay.com:

1. From the usual **Catalog > Products** page, select your desired product that you like to list on 3rd party channels.

   If you intend to use real-time shipping providers, make sure your product variant has the proper physical dimensions configured (width, height, depth, weight) as it may be used by eBay to calculate shipping cost.

   By default, the Storefront will use your detailed gallery images (largest images) to publish to eBay. Please note eBay has its own picture requirements (http://developer.ebay.com/DevZone/guides/ebayfeatures/Development/Pictures-Intro.html) so you may need to configure your Storefront products to adhere to these requirements first before publishing.

2. Under the **Channels** tab, click on **Add new**.
3. Select the desired provider (e.g. eBay U.S) and fill all the required information. Make sure to read the tooltip next to each field for more information on the different requirements subjected by the provider.

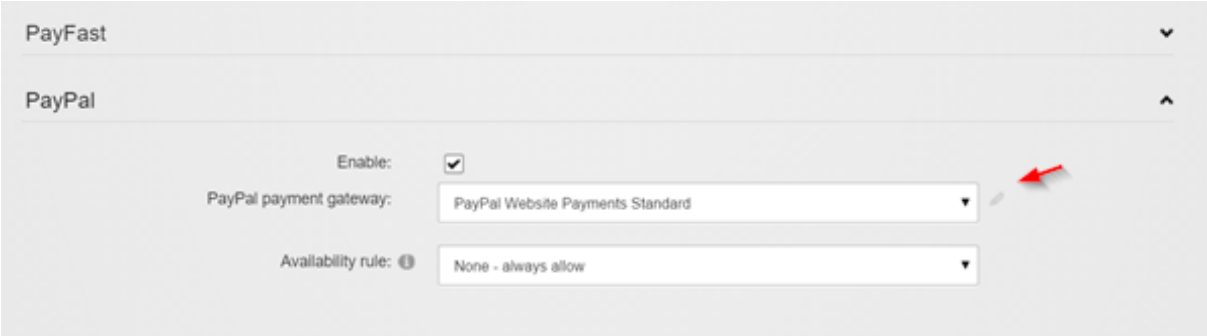


4. Make sure to select at least one category and no more than two categories. You must also specify a variant. If you have multiple variants, you must list them separately by repeating the steps above for each variant. Enter the quantity you have for sale. Please note inventory information is currently not synced back between the Storefront and eBay.

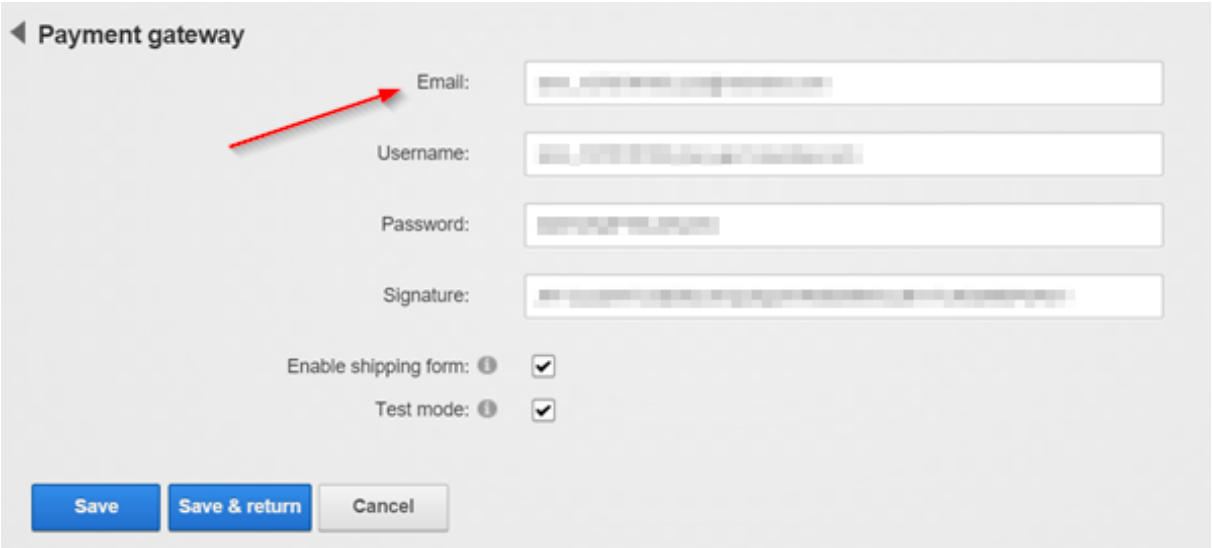
5. You must have at least one domestic shipping. Click on **Add new** to add a shipping method. Select the desired shipping service and click **OK**. All your shipping services must be using the same rate type (calculated or flat rate, but not mixed). eBay allows up to 3 shipping services per rate type.

6. Select the payment methods you will accept for this product listing.

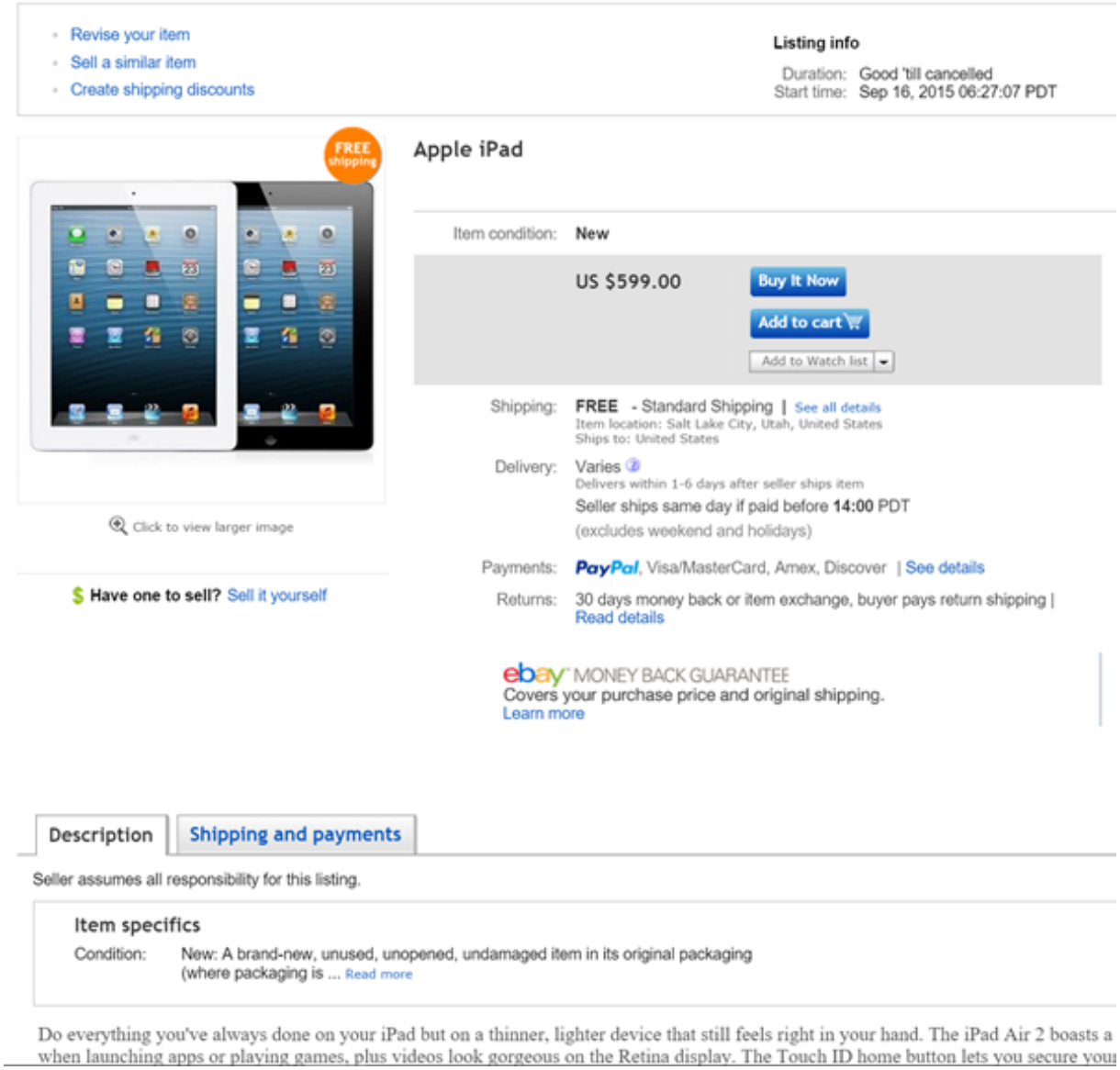
   If you intend to offer PayPal, please ensure you have configured your PayPal email address under **Configuration > Payment** for **PayPal Website Payments Standard**.



Click on the edit icon to enter your PayPal email address. Please note you can ignore the other fields and leave blank if your own site doesn't offer PayPal, but you only offer it for eBay customers. For eBay purposes, only your email address is required.



7. Click **Save.** Congratulations! Your listing is now published on eBay.



You can always update your listing as long as it's active on eBay. Once a product has sold or a bid has been placed for an auction, or the **Start Date** has passed, eBay normally does not allow updating the listing. Please verify your Event Viewer if you have any errors saving your channel products.

How advanced URL provider works

How you present your catalog URL is important for SEO and can help increase sales by making your products more easily discover-able by humans.

Consider a typical product URL contains some query string parameters to allow the computer to return the requested product. Traditionally, the format shown below with the query string parameter appearing after the question mark is the **normal URL form** and is the form that most underlying Web applications can consume and understand.

http://site.com/product?rvdsfpid=shoe-3

When you enable friendly URL rewriting (http://www.dnnsoftware.com/wiki/url-rewriting), the query string parameter may be rewritten as segments in the URL path to provide for a more friendly format. The challenge of rewriting a URL is to not lose any information and allow the friendly form to be converted back to its normal URL form, since that is the form expected by the Web server.

http://site.com/product/rvdsfpid/shoe-3

While the friendly URL is already a respectable form optimized for search engines and computers, it still contains gibberish data that are undesirable to human. Revindex Storefront 7.3 now includes an advanced URL provider that automatically rewrites your catalog URLs into even shorter and human friendlier form:

http://site.com/product/shoe

Clearly, the new form is a more human friendly representation of the product over the previous URLs. For the user on the Web browser, it's short to type, easy enough to remember and one can easily swap the keyword "shoe" for another product like "shirt" to locate the next product.

Once again, the challenge of rewriting the URL requires that all of the information can somehow be reversed back to its original normal URL form. We must, therefore, rely on certain strict rules to provide the mechanics to unwind the information. Such rules include the placement of the keyword in the URL path segments, the uniqueness of the "shoe" keyword and among other rules.

From a merchant perspective, you only need to ensure your product keywords are unique. By default, the keyword is chosen from your product name. If, however, a SEO URL name is provided, it will be used in place of the product name. If you have a collision in your product name or SEO URL name, the rewriter will reverse the friendly URL to the first product it found. It is, therefore, extremely important that you give unique product names or unique SEO URL names to your products when using the advanced URL provider. A good name should include just the right amount of keywords to allow for optimal search engine indexing while keeping it short and meangingful for humans. For example, the keywords "genuine leather shoe" provides a richer indexing information while keeping

your product URL names sufficiently unique and short. Please see SEO (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/products-seo/rvdwkpvm/section) for more information.

The advanced URL provider is not limited to products only. It also optimizes for categories, manufacturers, distributors and variants. Similarly, you want to make sure these catalog structures have unique names throughout your system.

http://site.com/products/apparels

http://site.com/product/apparels/shoe

http://site.com/product/apparels/shoe/brown

What happens to my old URL?

Your old URLs whether they are bookmarked or indexed by search engines will continue to function because the advanced URL provider is meant to be convertible between the two forms.

Do I need to notify search engines?

It is not necessary since the Storefront will automatically generate canonical hints and sitemap to search engines such that over time, when the crawler bots revisit, they will start indexing and replacing your old URLs with the new ones.

What happens if I disable advanced URL provider?

Any short friendly URL generated by the advanced URL provider will not be recognized once disabled since there is no engine to rewrite back to the normal URL form. Fortunately, the Storefront automatically publishes sitemap of your products and search engines are usually quite fast to pick up URL changes after a few visits.

How do I verify for unique keywords?

Firstly, you should have a business procedure for naming your products so that you and your staff is aware of the naming convention that minimizes conflicts to begin with. Once the procedure is in place, you only need to occasionally verify for correctness. The easiest way to visually inspect them is to export out the catalog data and glance through the keywords using Excel.

How to enable the advanced URL provider

By default, the advanced URL provider is enabled on new installations. If not, you can follow the steps below to enable it:

1. Change the urlFormat attribute to "advanced" in your Web.config

   <add name="DNNFriendlyUrl" type="DotNetNuke.Services.Url.FriendlyUrl.DNNFriendlyUrlProvider, DotNetNuke.HttpModules" includePageName="true" regexMatch="a-zA-Z0-9 _-"

urlFormat="advanced"/>

2. Under **Admin > Site Settings** page, make sure the **Revindex Storefront URL Extension Provider** is enabled under the **Advanced URL Settings** tab.

Are there other settings that I can tweak?

No additional settings are required. There is an unsupported 3rd party DNN URL Management module (http://dnnurlmanagement.codeplex.com/) that provides a user interface for managing general settings for the DNN advanced URL rewriter that you may want to investigate.

How to delete all products

For your security, we currently do not support deleting products permanently. Products are simply marked as deleted internally and that is the suggested mode.

If you have only been testing and need to permanently delete all products before starting production, you can try to execute these SQL queries. Please make sure to take a full backup, run the queries and test your system afterwards.

> We don't support nor encourage deleting products permanently. Use at your own risk.

```
DELETE FROM Revindex_Storefront_RecurringSalesOrder
DELETE FROM Revindex_Storefront_VoucherHistory
DELETE FROM Revindex_Storefront_SalesPayment
DELETE FROM Revindex_Storefront_SalesOrderDetail
DELETE FROM Revindex_Storefront_SalesOrder
DELETE FROM Revindex_Storefront_Gallery WHERE ProductID IS NOT NULL OR ProductVariantID IS NOT NULL
DELETE FROM Revindex_Storefront_ProductAttribute
DELETE FROM Revindex_Storefront_ProductCategory
DELETE FROM Revindex_Storefront_ProductReview
DELETE FROM Revindex_Storefront_ProductVariantOption
DELETE FROM Revindex_Storefront_WishListDetail
DELETE FROM Revindex_Storefront_RequiredProduct
DELETE FROM Revindex_Storefront_ProductVariant
DELETE FROM Revindex_Storefront_ProductVariantGroupOption
DELETE FROM Revindex_Storefront_ProductVariantGroup
DELETE FROM Revindex_Storefront_CrosssellProduct
DELETE FROM Revindex_Storefront_RelatedProduct
DELETE FROM Revindex_Storefront_Product
```

Vouchers

A voucher is a special form of payment method carrying a predefined monetary value that you can issue from your Storefront. It can only be used to redeem for purchases made on your site using a special code that the customer is required to enter. Common examples include gift cards, gift certificates, store credits, etc.

You must first enable the **Voucher** feature under **Configuration > General**. Once enabled, you can create a voucher definition from the **Catalog > Vouchers** menu to define properties of a voucher such as start, end dates, initial amounts, whether it is transferable to another user, etc. This definition acts as a template for actual vouchers that will be issued later on in bulk or singularly.

A transferable voucher will allow it to be used by anyone who has knowledge of the code and not just by the owner of the voucher.

Only voucher definitions with an Active status can be used for checkout. Since vouchers are usually printed to a physical medium and given away (e.g. gift card), it is recommended that you do not delete a voucher definition as it will also delete all issued vouchers belonging to this voucher definition. Instead, mark the voucher defintion as inactive to prevent being used.

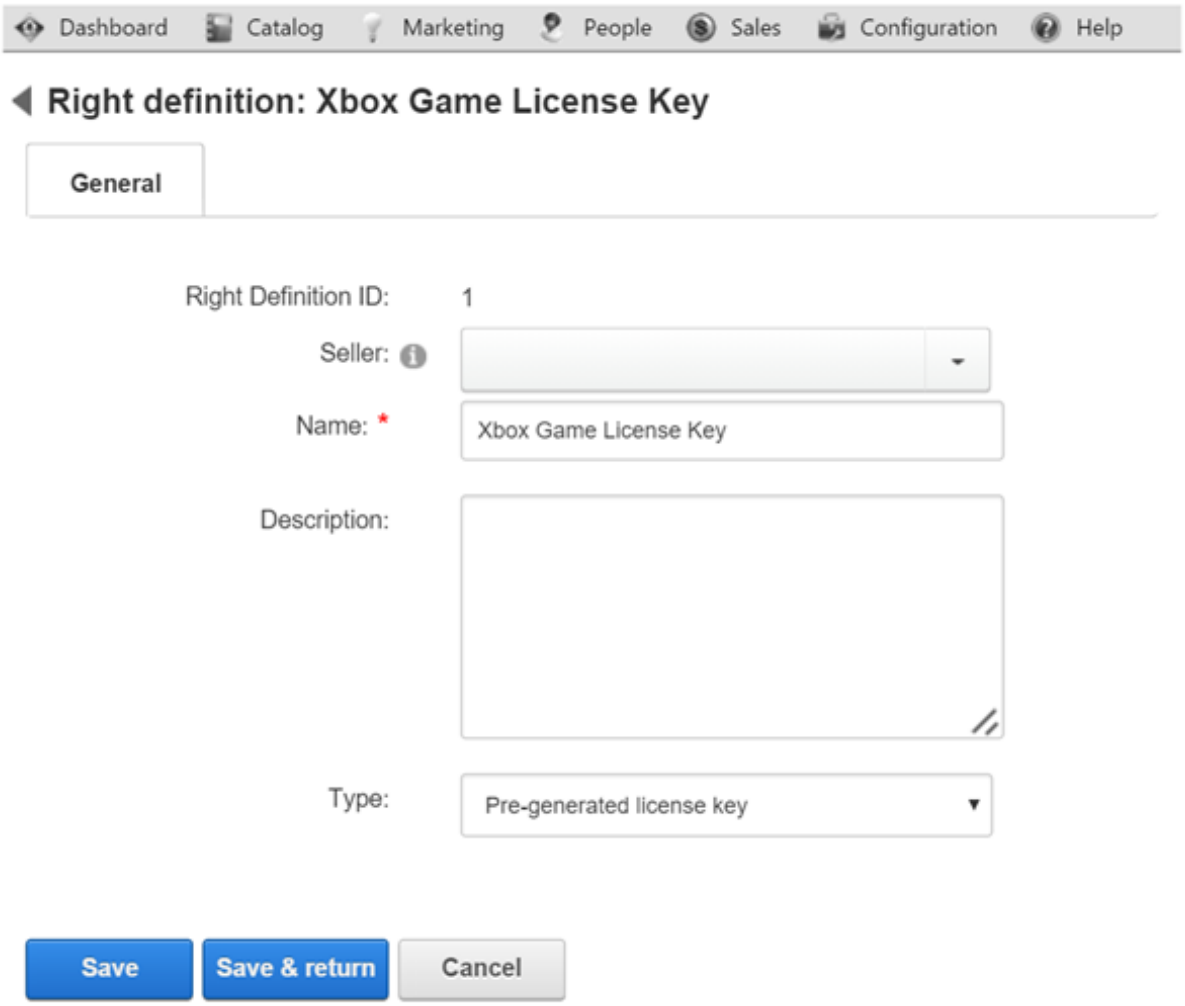
Once you have defined your voucher. You can associate your product variant to automatically generate a new voucher of this type when a customer purchases the product. Issues vouchers appear under the **Sales > Vouchers** menu. Please see Vouchers (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/sales-orders-vouchers/rvdwkpvm/section) for more information on issued vouchers.

Rights

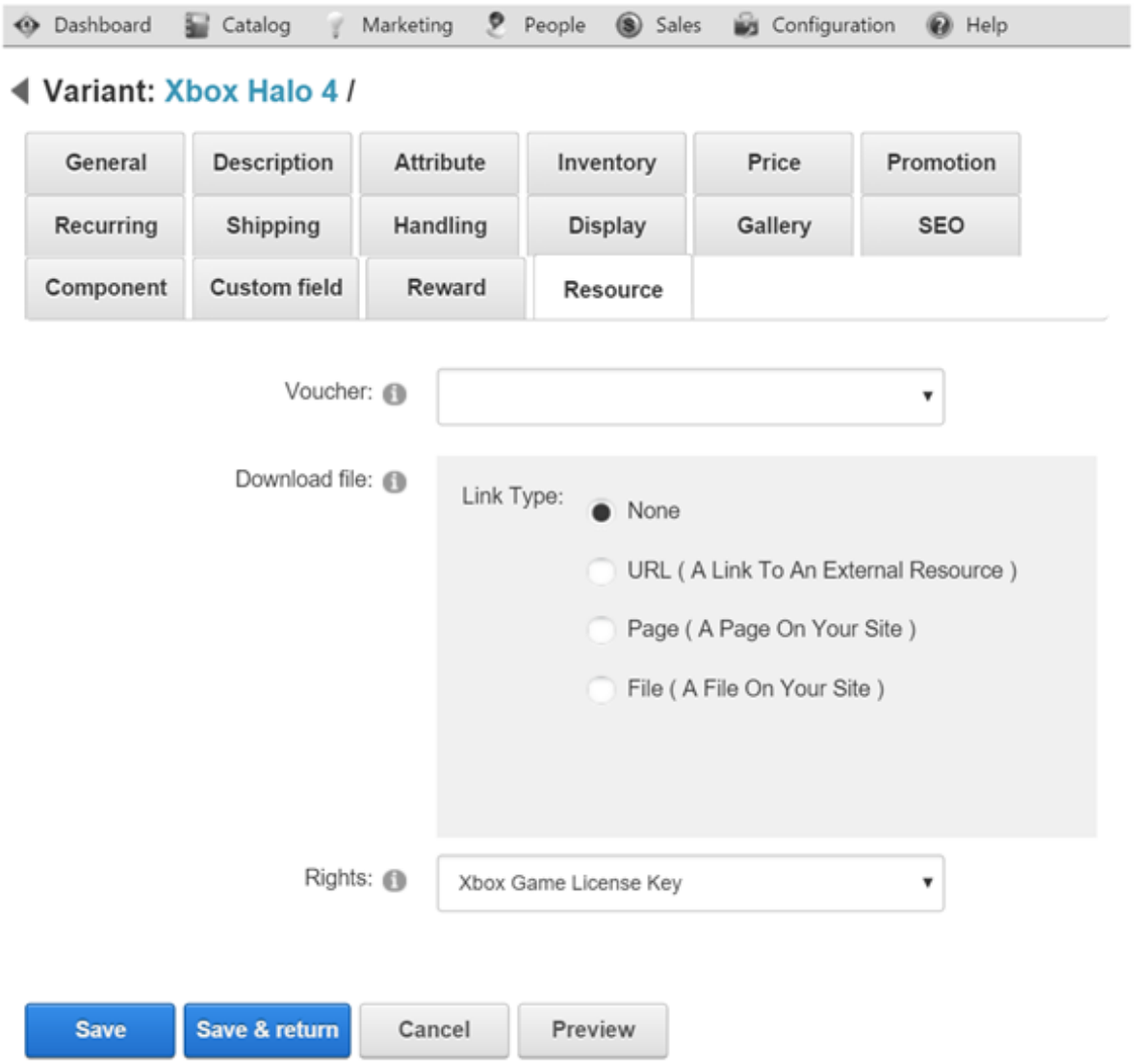
The Storefront supports the distribution of access rights such as license keys, serial numbers, password or any code from the purchase of a product on your site. If your site sells virtual goods (software, ebook, etc.) that needs to grant user access rights to unlock the purchased item. Please see Downloadable Products (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/downloadable-products/rvdwkpvm/section) for more information.

In the example of software license keys, you first pre-generate a list of codes and save into the Storefront. When the customer buys the software, the Storefront will automatically issue one of your unassigned license keys to the customer. The customer receives an email with the codes issued and is able to view them from the Manage Rights page.

You must first enable the **Rights** feature under **Configuration > General** settings. Once enabled, you must first define the type of access right under the **Catalog > Rights** menu. Click on **Add new** to create a new right definition. Give your type of right a name and description and **Save**.



You can then assign the right definition to your product variant under **Catalog > Products** menu. Choose your desired product and edit the details of your variant. Under the **Resource** tab, select the type of **Rights** to associate this product with your newly defined right.



You are now ready to import your list of codes into the Storefront. This last step is to seed the system with some actual codes that you want to be issued to customer when they purchase this product. Please see Rights (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/sales-rights/rvdwkpvm/section) for more information on uploading your new codes.

Sales

Orders

You can search and fulfill customer orders from the **Sales > Orders** menu. Customer orders contain all the information collected during checkout and payment processing including billing, shipping, order detail and payment information. It is important that you verify every order and payment received are valid.

Order, Payment & Shipping Status

The order, payment and shipping status drive the Storefront operations workflow and reports. For example, downloadable product is only made available to customers for download when the order is marked as “Paid”. Sales reporting numbers in the **Dashboard** are determined based on the status of the orders. In practice, individual businesses may interpret the status differently within the context of their operation. See Shopping Cart Flow (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/shopping-cart-flow/rvdwkpvm/section) for more information on how the different statuses work in different order-to-cash scenarios. Also read How to force order and payment status (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-force-order-and-payment-status/rvdwkpvm/section) to tell the system how you want it to automatically handle your order statuses after each checkout.

Order Status	**Description**
Incomplete	An open order that has not yet completed checkout.
Pending	Order is created but is awaiting for a resource or action from merchant or customer. E.g. The merchant suspects the order is missing information and is awaiting confirmation from the customer.
Preordered	Order is created earlier before its actual required date. This status is useful for pre-ordering products or generating invoices ahead of time to bill the customer.
Ordered	Order received but not yet verified. Order still needs to be processed.
Processing	Order is currently being processed.
Completed	Order is paid and shipped.
Cancelled	Order has been cancelled.
Declined	Payment was declined. Merchant declines to process the order.

Payment Status	**Description**
Pending	Payment has not been received or verified.

Paid	Payment is settled and verified.
Cancelled	Payment has been cancelled.
Refunded	Payment has been refunded.
Declined	Payment is declined by the payment processor.

Shipping Status	**Description**
Not Required	No shipping is required.
Not Shipped	Shipping is required but has not yet been shipped.
Packing	Products are being packed.
Packed	Products have been packed but not yet shipped.
Dispatching	Packages are sent off for shipping.
Shipped	Products shipped.
Undeliverable	Products failed to ship.

Payments

It is possible for an order to have more than one payment. For example, a customer may pay a partial amount in credit card and the remaining amount in check. The **Payments** tab keeps track of all payment transactions types including purchases and refunds. Credit card payments are always processed through your configured payment gateway. You can create a new payment transaction by clicking on **Add new.**

You can bypass the payment gateway by issuing manual transaction using any of the buttons marked as “Manual”. For example, you may use your virtual terminal to charge or refund amount to the customer’s credit card instead of the payment gateway and yet keep track of all the payment information in your store.

Transaction Type	**Description**
Invoice	Request for payment. Usually for invoices and PayPal payment requests.
Authorize	Payment is reserved but has not yet settled or withdrawn. Most credit card gateways will automatically cancel authorization if a capture is not performed within 24 to 48 hours. You must perform a Capture transaction to actually withdraw the money that you reserved. To cancel an authorization, you must perform a Void transaction.
Capture	Previously authorized payment has settled. To cancel a Capture transaction, you must perform a Refund transaction.
Purchase	Payment is settled and withdrawn. To cancel a purchase, you must perform a Refund transaction.
Void	Payment is cancelled for an authorization transaction.
Refund	Previously settled payment has been refunded.

How to accept offline orders

There are several ways you can handle offline orders (orders that come in by phone, fax, in-person, etc.).

Creating offline orders by impersonating as the customer

The easiest way to take offline orders is to open a new browser, register the user and go through the shopping checkout as the customer would. If the user account already exists, you may choose to use Revindex Impersonator (http://www.revindex.com/ProductDetail/tabid/138/rvdsfpid/revindex-impersonator-1-0-4/Default.aspx) to quickly login as the customer for the purpose of placing the order on his behalf, and easily restore back to your account once done.

Creating offline orders directly from the sales admin screen

You can also create new orders from the **Sales > Orders** menu in the Storefront module just like you could edit an existing order.

1. Click **Add new**
2. Click on **Manage user** if you need to create the user account first, otherwise enter the username.
3. Fill the form (billing, shipping address, etc.)
4. Click **Save**.
5. Under the Order detail tab, click **Add new** to add products to the order.
6. Search for the product to add in the dropdown list.
7. Fill any required fields in the form (quantity, custom fields, etc.).
8. Click **Save order detail**.
9. Now that you have added all the products to the order, go back to the order, click **Recalculate all**. This will recalculate the total amount, shipping, handling and taxes.
10. Under the Payment tab, click **Add new**.
11. Enter the amount equivalent to the total amount calculated for the order.
12. Select the payment method and fill the required fields.
13. Click **Purchase** or **Authorize** to take the payment.
14. Click **Decrement inventory** to reduce inventory of your products
15. Click **Run place order action** to execute any product or checkout actions you have.
16. Click **Email receipt** to send the order receipt to the customer.
17. Remember to change the order, payment and shipping statuses (e.g. "Completed", "Paid", "Shipped")

once you're done with the order.

Why do order numbers skip?

Starting with v6.5, Revindex Storefront maintains its own sequence ensuring order numbers are sequential and continuous. This improvement is especially important to ensure compliance with tax regulations (e.g. UK VAT laws (http://www.hmrc.gov.uk/vat/managing/charging/vat-invoices.htm) and New York tax laws (http://www.tax.ny.gov/pubs_and_bulls/tg_bulletins/st/record-keeping_requirements_for_sales_tax_vendors.htm) require that order numbers be serially continuous and any skipped numbers must be justified to the auditor or be subjected to penalties).

For older Storefront versions, on rare occasion, you may notice that your order numbers may have skipped some numbers (e.g. 1,2,3,5...). This is perfectly normal and does not indicate a lost of order. Revindex Storefront makes extensive use of SQL transactions to maintain database integrity. SQL server guarantees an identity sequence column to be unique but is allowed to skip a number when the transaction is rolled back or cancelled.

Furthermore, as of SQL Server 2012 and newer, order numbers may skip by as large as 1000 when the database server is restarted due to the new identity seeding algorithm used in Microsoft SQL Server. This behavior affects any database table and is not limited to Revindex Storefront tables. Because Revindex Storefront 6.5 and newer generates its own order number, it is immune from this problem. For older versions of Revindex Storefront, you can configure SQL Server to use the old method of allocating identity numbers by following the steps below:

1. Open SQL Server Configuration Manager.
2. Click **SQL Server Services** on the left pane.
3. Right-click on your SQL Server instance name on the right pane to open the Properties window. The default instance is "SQL Server(MSSQLSERVER)".
4. Click **Startup Parameters**.
5. On the "Specify a startup parameter" textbox, type "-T272"
6. Click **Add**.
7. Confirm the changes.

How to auto delete incomplete orders

Incomplete orders are orders placed by customers that haven't completed checkout. For example, a customer adds a product to his cart but failed to complete checkout due to insufficient funds in his credit card and decided to hold off the purchase. Keeping record of incomplete orders presents an opportunity to lure the customers back via cart abandon email (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/cart-abandon-email/rvdwkpvm/section) and provides good statistical information to better understand the shopping behavior of your customers. However, as time passes, it may be useful to delete some of these incomplete orders to shrink the amount of data and clutter.

To automatically delete incomplete orders, you must first enable the **Sales order** feature under **Configuration > General**. Once enabled, you can enter a value for the **Days before deleting incomplete orders** under **Configuration > Sales order** setting. Generally, the number of days should be greater than your cart abandon (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/cart-abandon-email/rvdwkpvm/section) and session timeout (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-increase-cart-session-time/rvdwkpvm/section) settings to avoid deleting an active customer cart still in progress.

Remember to consider the implications of deleting incomplete orders whether for statistics or tax liabilities. Once deleted, the orders cannot be retrieved.

How to delete all orders

For your security, we currently do not support deleting orders. Instead, we suggest you cancel the orders.

If you have only been testing and need to delete all orders before starting production, you can try to execute these SQL queries. Please make sure to take a full backup, run the queries and test your system afterwards.

> We don't support nor encourage deleting orders. Use at your own risk.

```
DELETE FROM Revindex_Storefront_RecurringSalesOrder
DELETE FROM Revindex_Storefront_VoucherHistory
DELETE FROM Revindex_Storefront_RewardsPointHistory
DELETE FROM Revindex_Storefront_SalesPayment
DELETE FROM Revindex_Storefront_SalesOrderDetail
DELETE FROM Revindex_Storefront_SalesOrder
```

Recurring Orders

If you sell subscription products, your customer may have active recurring orders in the system that will automatically re-order and charge the customer according to the recurring interval set for the product. You must first enable the **Recurring orders** feature under **Configuration > General** to use this functionality. Once enabled, you can search and manage customer recurring orders from the **Sales > Recurring Orders** menu. From this page, you can terminate a recurring order, change the next recurring date, modify the quantity and update the billing and shipping information.

Re-orders occur on day of the **Next recurring date**. You can delay or reset a recurring order by modifying the **Next recurring date** value.

A re-order happens in the system background and will create a new order entry visible under **Sales > Orders** menu. It is important that you verify that the order and payment are valid. If a customer has multiple recurring orders with the same billing and shipping information, by default, the Storefront is configured to automatically group the set of recurring orders into a single new order at the moment of the re-ordering to minimize shipping charges and payment transaction fees. You can also configure recurring orders so that they don't group together.

Depending on the payment gateway being used, a recurring order may be created with or without a corresponding payment. If an automatic payment failed (e.g. credit card expired) or is not able to be created (payment gateway doesn’t support recurring orders), you will have to manually contact the customer to collect payment. Please see the **Payment Gateways** section for more information.

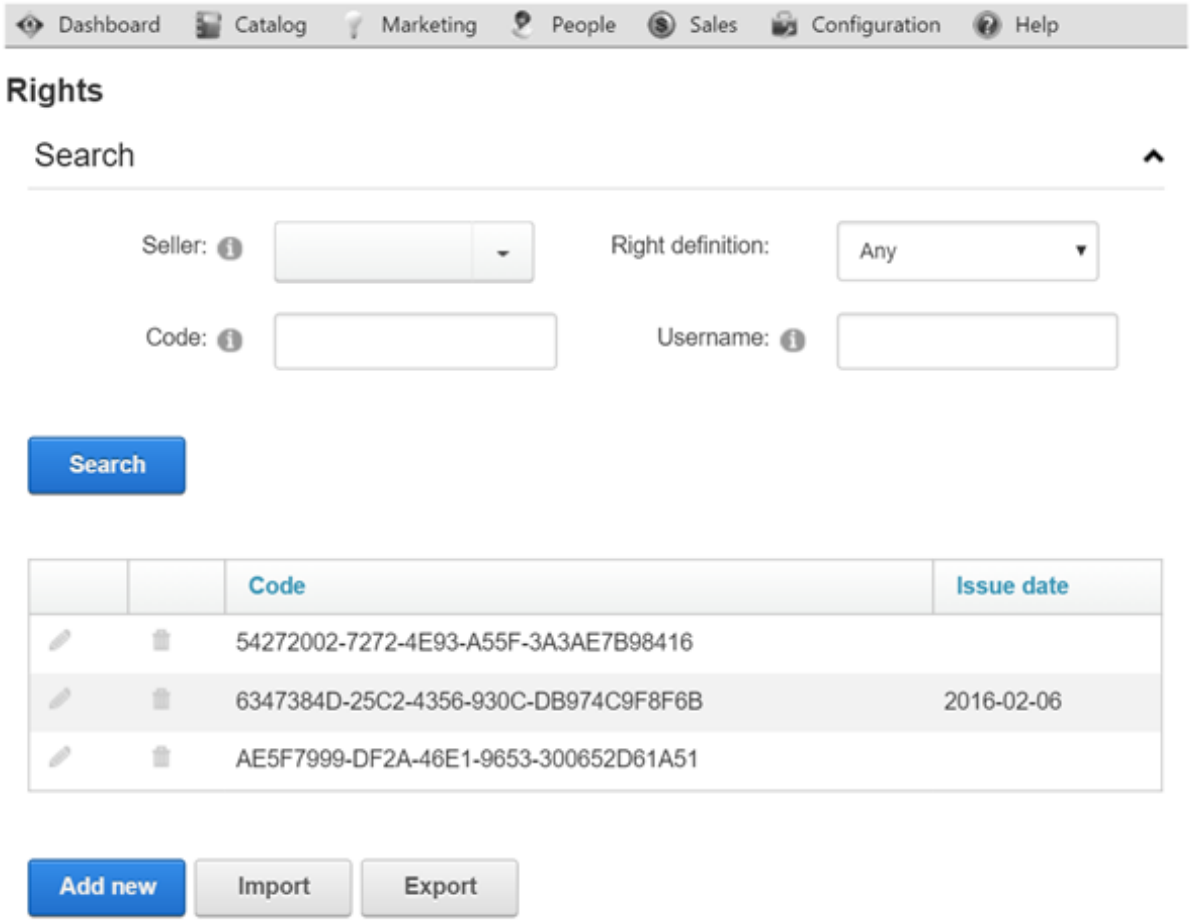
> If you're running tests on a development/staging machine with production data copied over and you sell recurring products, make sure to disable any recurring orders or change the payment gateway credentials, otherwise it will automatically charge your customer's credit card when the order is due for renewal.

Rights

A right is a secret code (license key, serial number, password, etc.) that is usually used to unlock access to a virtual product that you can issue from your Storefront. Please see Rights (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/catalog-rights/rvdwkpvm/section) for more information on how to create different types of rights.

You must first enable the **Rights** feature under **Configuration > General** settings. Once enabled, you can access the **Sales > Rights** menu to view, modify or issue new rights based on the right definitions you previously created. Unassigned rights stored here are ready to be issued to a new customer when they purchase your product. Customer will receive an email with their codes and can view their rights from the Manage Right module. Please see Manage Rights (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/manage-rights/rvdwkpvm/section) for more information.

For security purposes, access rights are only issued once the order is marked as "Paid" or "Completed". You can also search for rights that have already been issued.



To create multiple rights in bulk, you may import then into the Storefront. Please see Import and Export (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/import-and-export/rvdwkpvm/section) for more information.

Vouchers

A voucher is a special form of payment method carrying a predefined monetary value that you can issue from your Storefront. It can only be used to redeem for purchases made on your site using a special code that the customer is required to enter. Common examples include gift cards, gift certificates, store credits, etc.

You must first enable the **Voucher** feature under **Configuration > General**. Once enabled, you can access the **Sales > Vouchers** menu to view, modify or issue new vouchers based on the voucher definitions you previously created. Please see Vouchers (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/catalog-vouchers/rvdwkpvm/section) for more information. Each voucher carries a unique code that cannot be changed once issued. A voucher also has a running balance that will decrement when being used by the customer to purchase a product. Any monetary changes to the voucher by the store operator or by the customer making a purchase will be recorded under its history tab.

Only vouchers with an Active status can be used for checkout. Since vouchers are usually printed to a physical medium and given away (e.g. gift card, gift certificate), it is recommended that you do not delete a voucher as it becomes unrecoverable. Instead, set its status to Cancelled, Hold or Inactive to prevent usage. For security purposes, the voucher codes are strongly encrypted in the database to protect against hackers compromising your data and invalidating your customer voucher codes that have been issued. Voucher codes should be kept safely from unauthorized access on a need to know basis.

To create multiple vouchers in bulk, simply enter the desired quantity after clicking on the **Add new** button prior to saving.

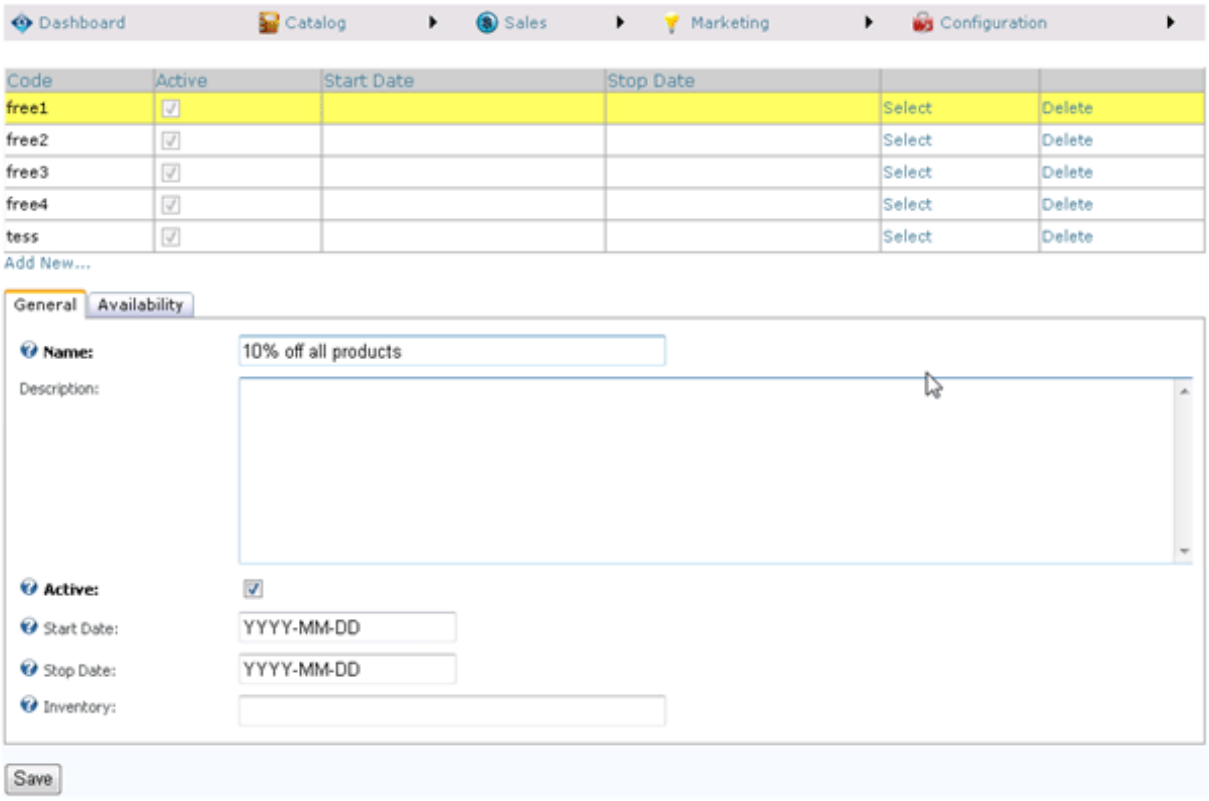
Marketing

Coupons

Create coupons from the **Marketing > Coupons** menu. Coupons are simply unique codes that you create to give to your customers and for them to hand-in during checkout. It's a useful way to limit a promotion given out to only those who have the code (e.g. give 10% discount to only users who read your newsletter).

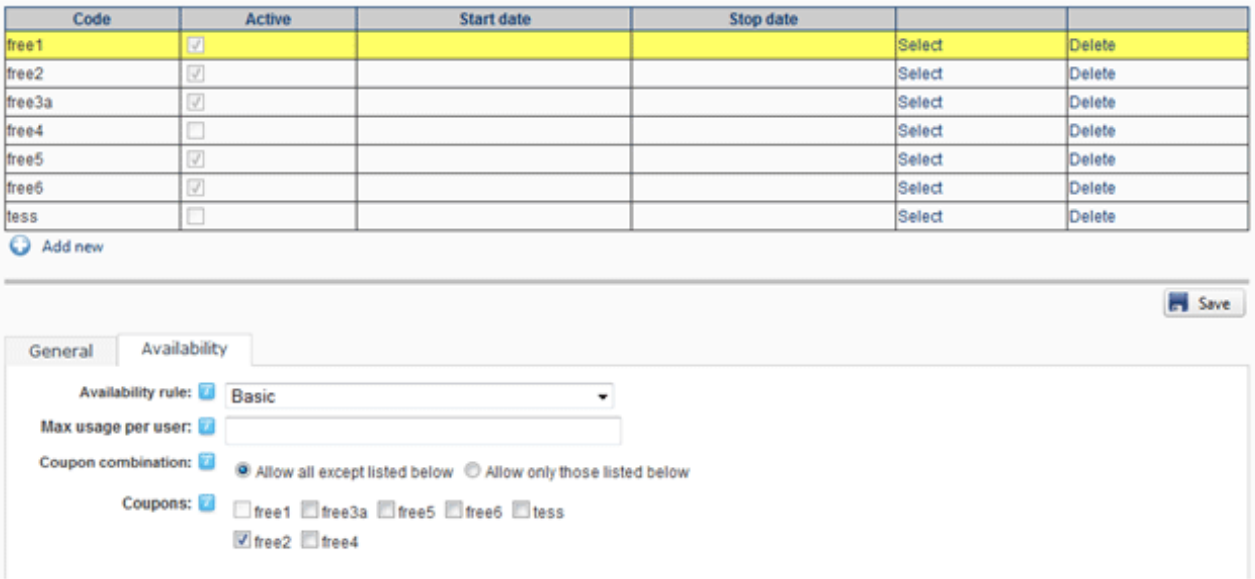
Coupons by themselves do not perform any action. They need to be associated to a marketing promotion or place order action rule. During checkout, the promotion and place order action rules can trigger against the collected coupon codes and determine what discount or action to take. Only promotion types that occur during checkout stage can trigger against coupon codes collected (i.e. Sales Order Detail, Shipping, Handling, Tax promotion types). Please see Promotions (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/promotions/rvdwkpvm/section) section for more information. Place order action rules can also trigger against the collected coupon codes and perform actions such as assigning a security role. See Actions (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/checkout-actions/rvdwkpvm/section) section for more information.

You can control when a coupon is valid using the **Start** and **Stop date** fields. You can also limit the number of available coupons using the **Inventory** field. The available coupons will be decremented by one every time a coupon is remitted.

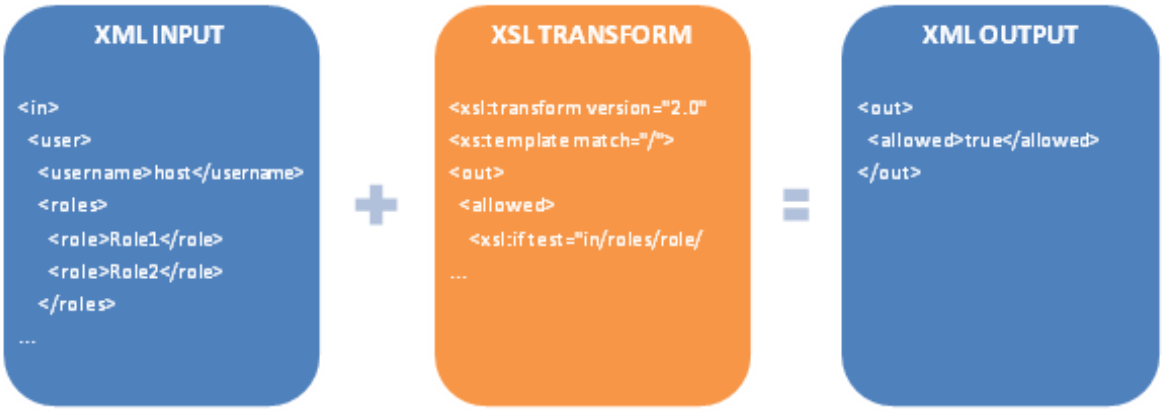


Coupon Availability

The coupon availability rule can be used to decide when and how a coupon can be used. For example, you may not allow the coupon to be combined with other coupons or you may want to limit the number of times a coupon can be used by the same user.

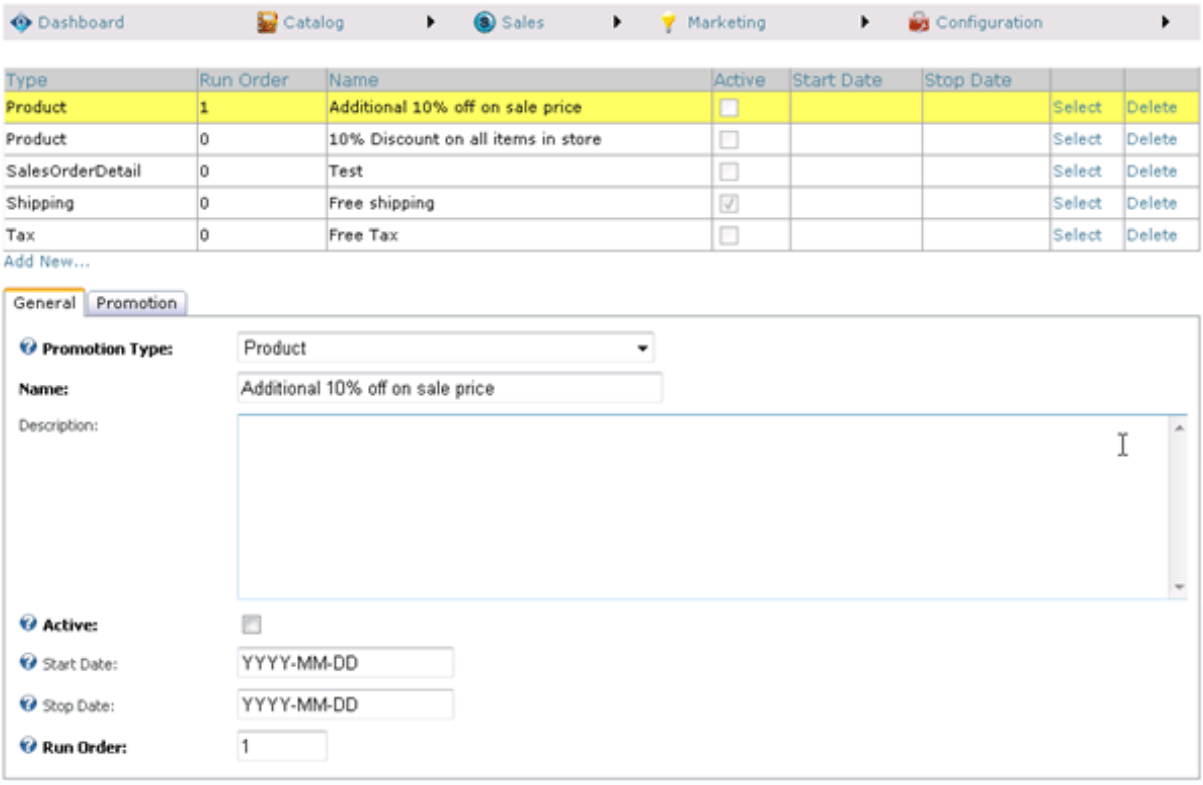


The coupon availability rule can also use XSL transform to determine whether this coupon is available for use. For example, you may restrict the coupon to a single use per customer or the coupon should not be allowed to combine with another coupon. You can also restrict the coupon to members only. The expected output should return "true" to indicate this coupon is available for use under the input conditions, otherwise "false" if disallowed. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.



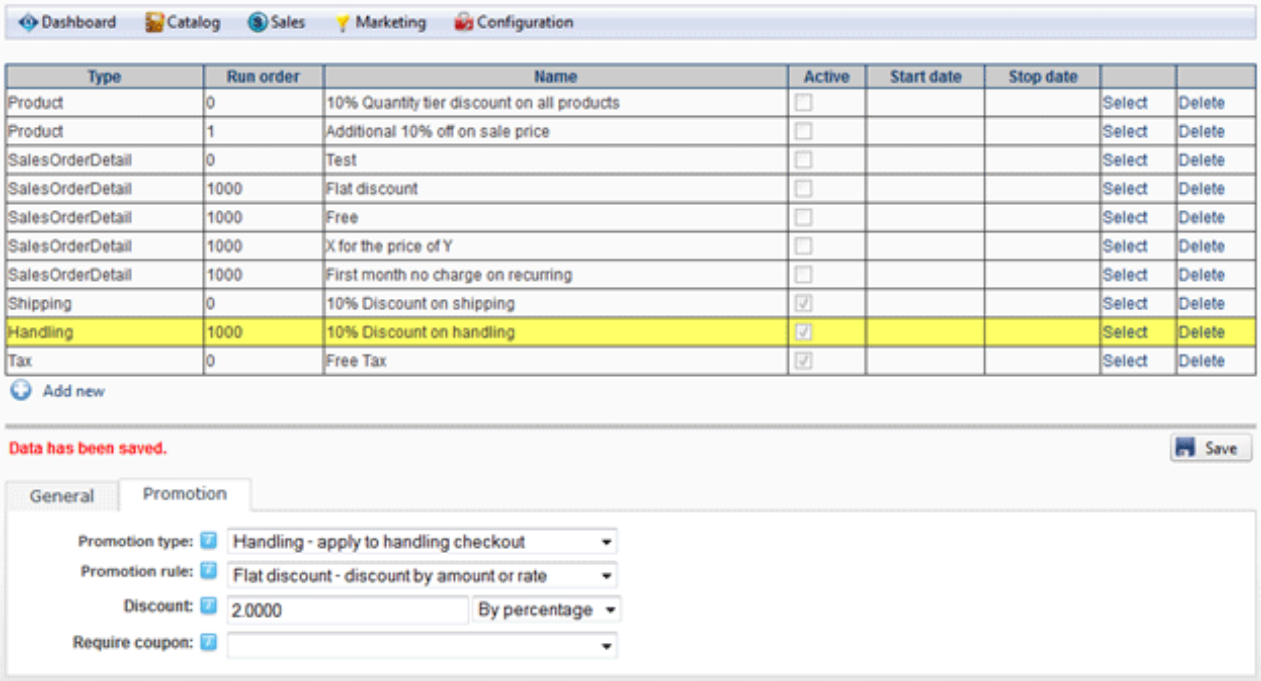
Promotions

Revindex Storefront supports your most creative promotion rules to help you sell more. Promotions are created from the **Marketing > Promotions** menu. Promotions can apply to different levels of the shopping cart from product, sales order detail, shipping, handling to tax types. You can set the promotion to run only within a time frame using the **Start** and **Stop Date** fields. The **Run order** determines which promotions within its type should execute first. For example, you may have a product type promotion that gives 10% discount on all items and another product type promotion that gives 50% discount on discontinued products, but it shouldn't include the first 10% discount (i.e. you don't want to give 50% discount on top of the 10% already discounted). In this case, you would run the 10% discount first and let the 50% discount run second with business logic to cancel the first discount.



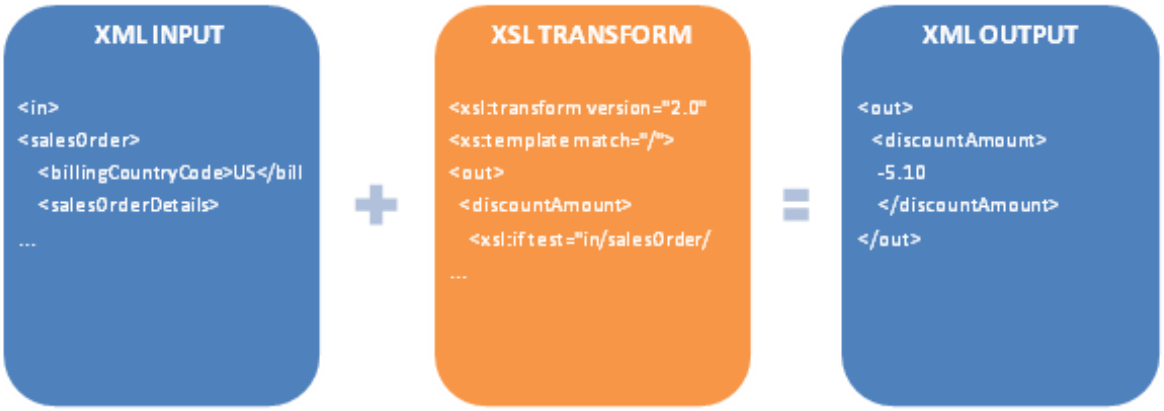
Handling Type Promotion

A handling type promotion allows you to offer a discount on handling fees during checkout (e.g. no handling fees on all products, or no handling fees if a coupon is presented). Customers will see the discount applied to the handling fee during checkout.



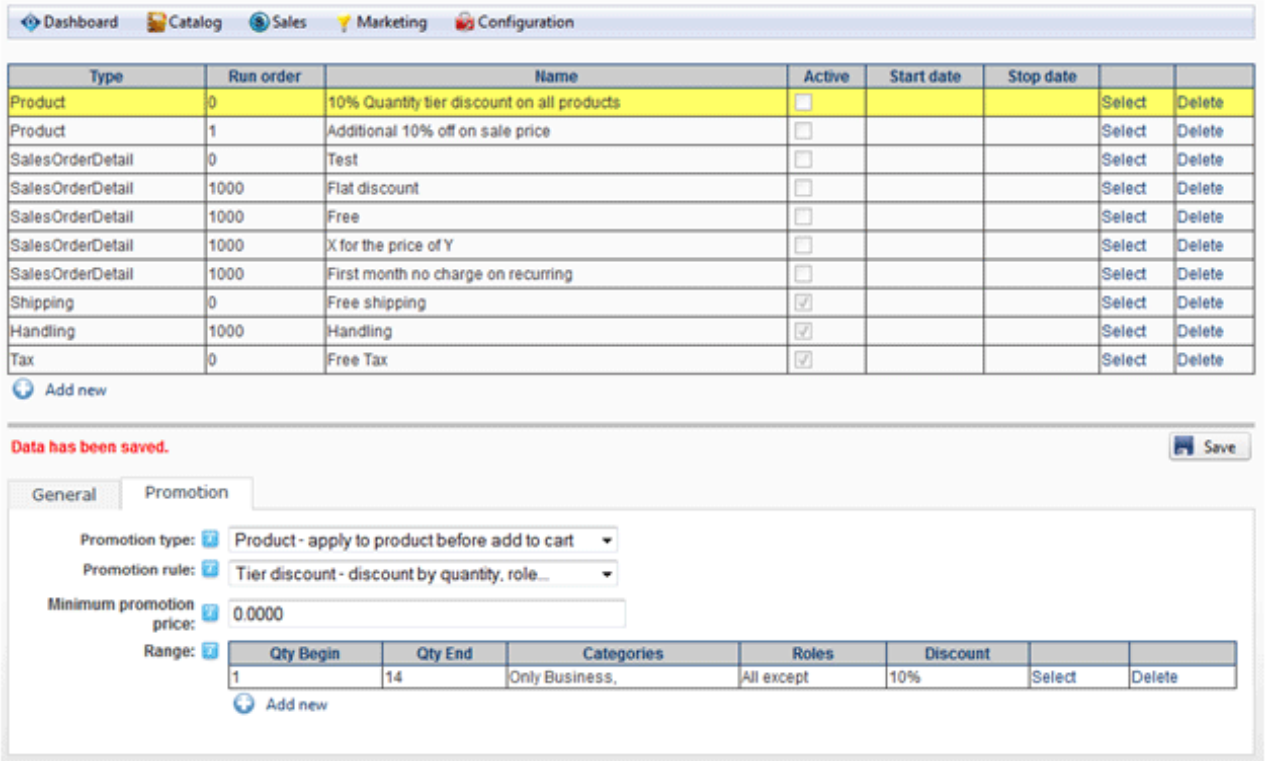
Type	Run order	Name	Active	Start date	Stop date		
Product	0	10% Quantity tier discount on all products	☐			Select	Delete
Product	1	Additional 10% off on sale price	☐			Select	Delete
SalesOrderDetail	0	Test	☐			Select	Delete
SalesOrderDetail	1000	Flat discount	☐			Select	Delete
SalesOrderDetail	1000	Free	☐			Select	Delete
SalesOrderDetail	1000	X for the price of Y	☐			Select	Delete
SalesOrderDetail	1000	First month no charge on recurring	☐			Select	Delete
Shipping	0	10% Discount on shipping	☑			Select	Delete
Handling	1000	10% Discount on handling	☑			Select	Delete
Tax	0	Free Tax	☑			Select	Delete

The promotion rule can also use XSL transform for complex promotions. The expected output should return the discount amount (a negative value) to apply, otherwise zero if no discount is to be given. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.

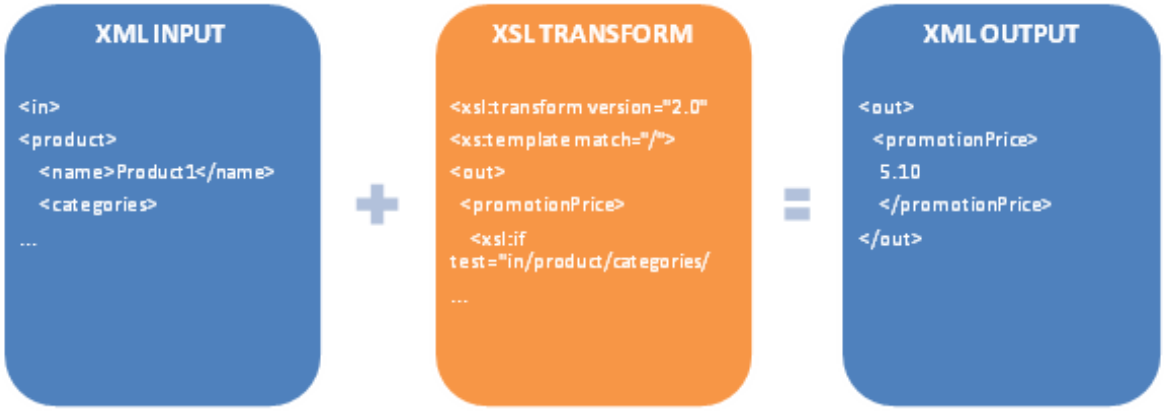


Product Type Promotion

A product type promotion allows you to offer a storewide price promotion on products (e.g. 10% discount on all the products in your store, or 10% discount on all products belonging to a category or perhaps even an additional 5% to members only on top of the first discount). Customers will see the discounted price before adding item to the shopping cart.

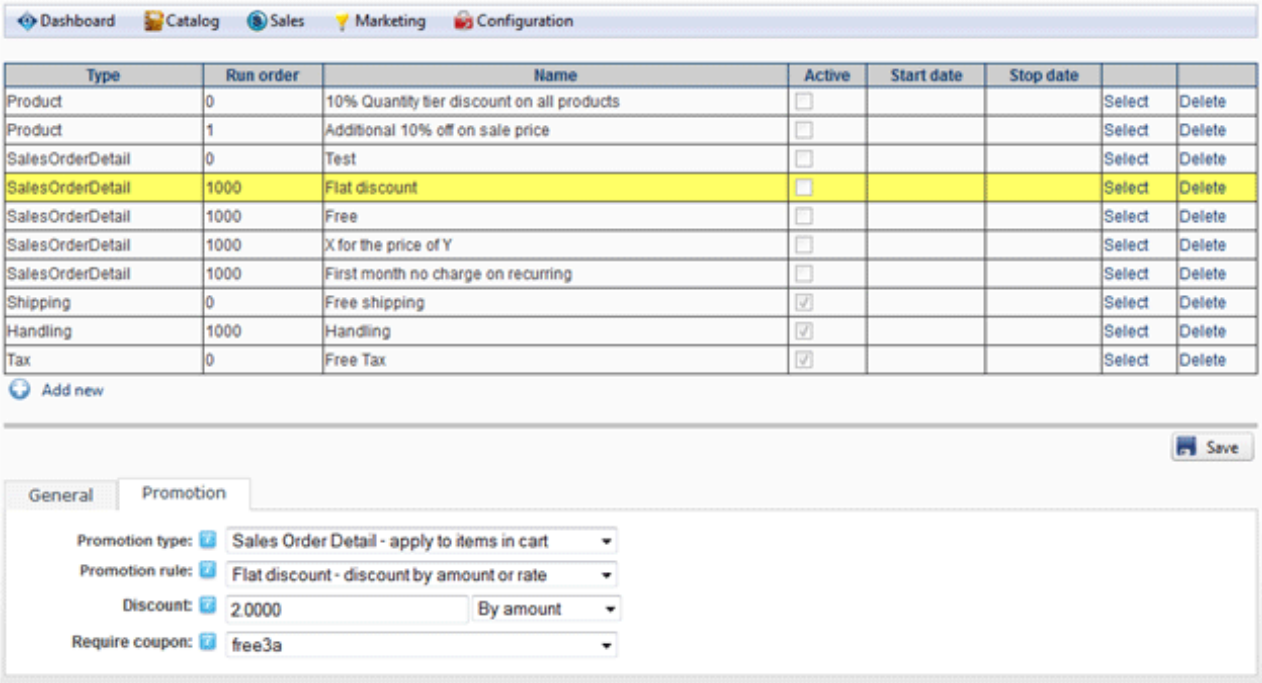


The promotion rule can also use XSL transform and will apply on products described in the rule. The expected output should return the discounted promotion price, otherwise the regular price. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.



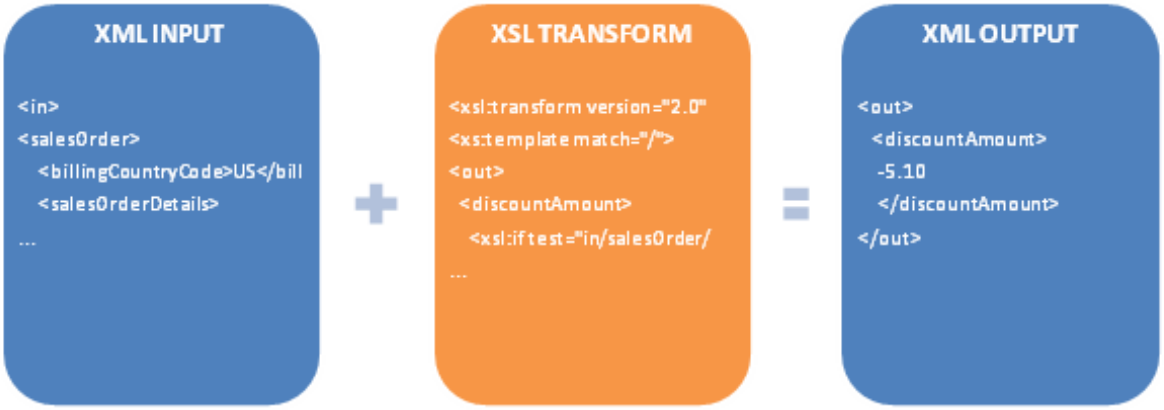
Sales Order Detail Type Promotion

A sales order detail type promotion allows you to offer a discount on purchases during checkout (e.g. buy 2 for the price of 1, or get additional 10% discount if a coupon is presented). Customers will see the discount applied during checkout.



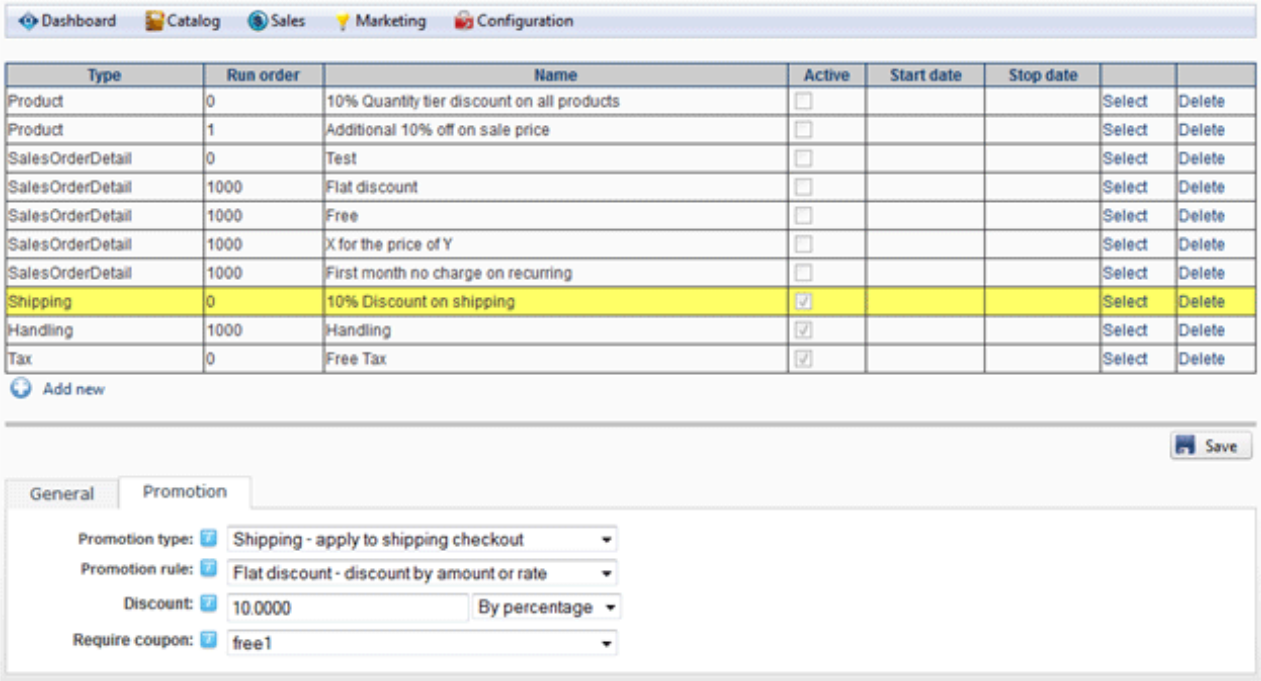
Type	Run order	Name	Active	Start date	Stop date		
Product	0	10% Quantity tier discount on all products	☐			Select	Delete
Product	1	Additional 10% off on sale price	☐			Select	Delete
SalesOrderDetail	0	Test	☐			Select	Delete
SalesOrderDetail	1000	Flat discount	☐			Select	Delete
SalesOrderDetail	1000	Free	☐			Select	Delete
SalesOrderDetail	1000	X for the price of Y	☐			Select	Delete
SalesOrderDetail	1000	First month no charge on recurring	☐			Select	Delete
Shipping	0	Free shipping	☑			Select	Delete
Handling	1000	Handling	☑			Select	Delete
Tax	0	Free Tax	☑			Select	Delete

The promotion rule can also use XSL transform. The expected output should return the discount amount (a negative value) to apply, otherwise zero if no discount is to be given. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.

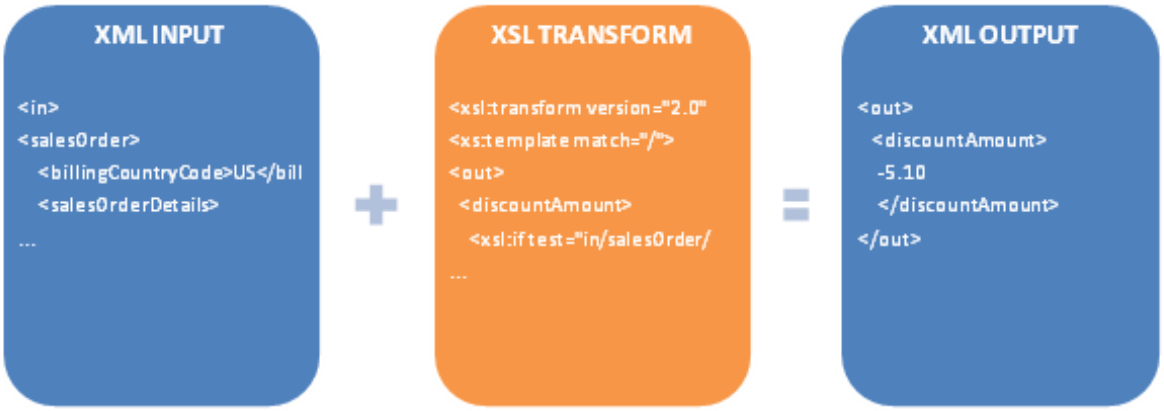


Shipping Type Promotion

A shipping type promotion allows you to offer a discount on shipping during checkout (e.g. free shipping on all products, or free shipping if a coupon is presented). Customers will see the discount applied to the shipping fee during checkout.

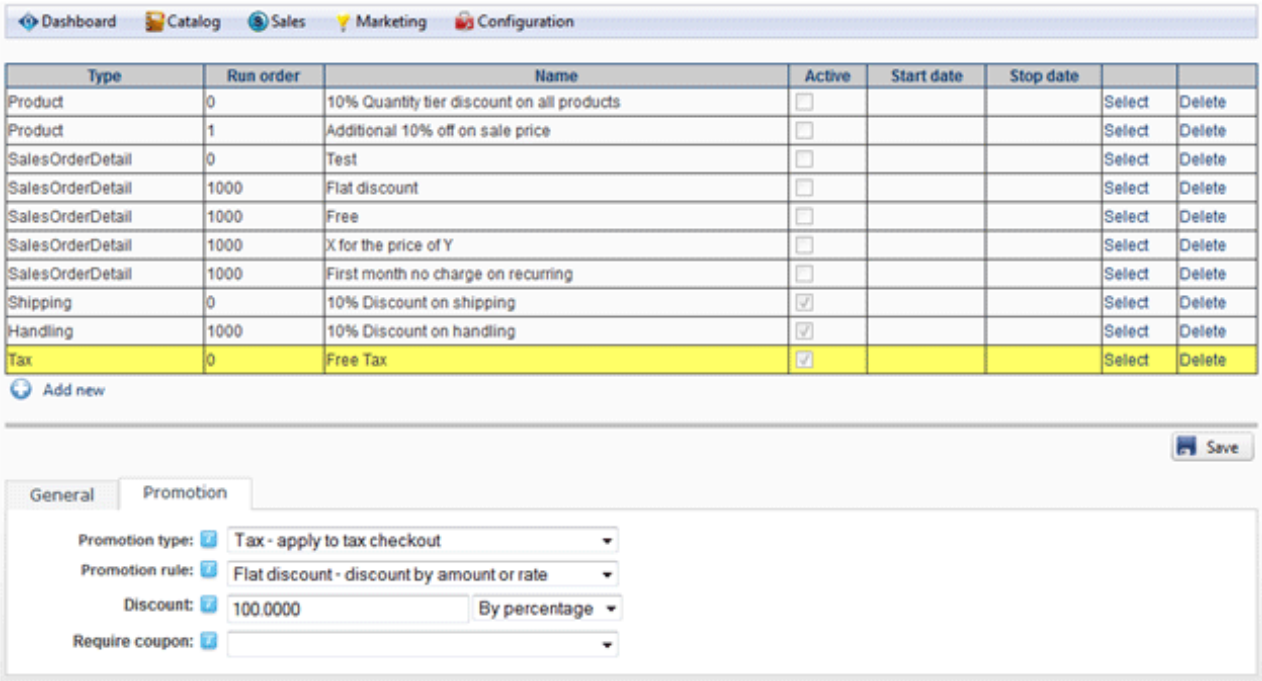


The promotion rule can also use XSL transform for complex promotion. The expected output should return the discount amount (a negative value) to apply, otherwise zero if no discount is to be given. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.



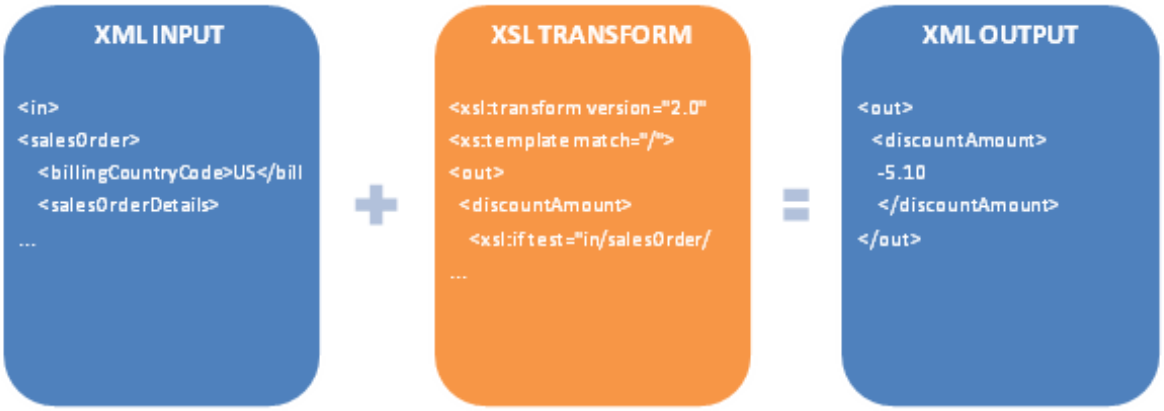
Tax Type Promotion

A tax type promotion allows you to offer a discount on taxes during checkout (e.g. No tax charges on Friday, or no tax if a coupon is presented). Customers will see the discount applied to the handling fee during checkout.



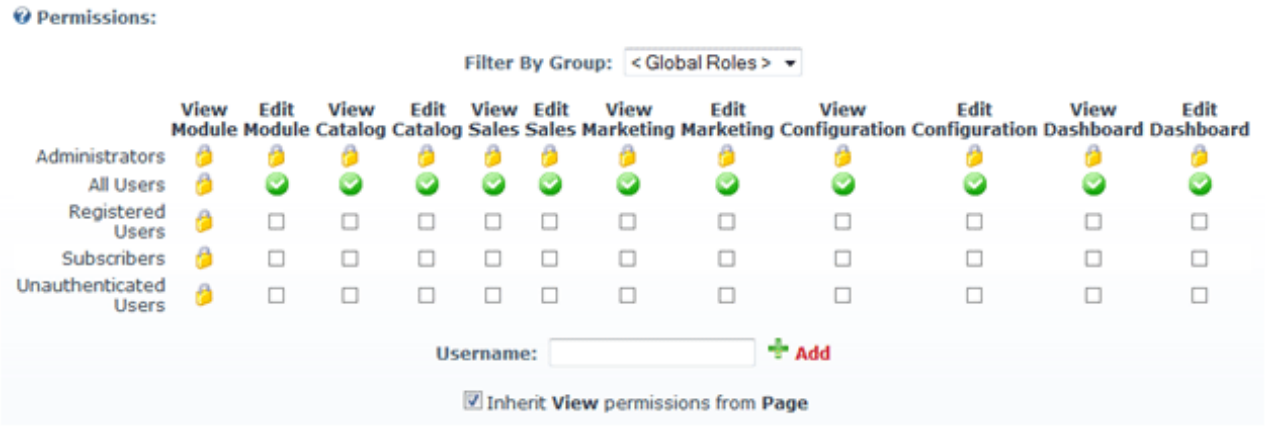
Type	Run order	Name	Active	Start date	Stop date		
Product	0	10% Quantity tier discount on all products	☐			Select	Delete
Product	1	Additional 10% off on sale price	☐			Select	Delete
SalesOrderDetail	0	Test	☐			Select	Delete
SalesOrderDetail	1000	Flat discount	☐			Select	Delete
SalesOrderDetail	1000	Free	☐			Select	Delete
SalesOrderDetail	1000	X for the price of Y	☐			Select	Delete
SalesOrderDetail	1000	First month no charge on recurring	☐			Select	Delete
Shipping	0	10% Discount on shipping	☑			Select	Delete
Handling	1000	10% Discount on handling	☑			Select	Delete
Tax	0	Free Tax	☑			Select	Delete

The promotion rule can also use XSL transform for complex promotions. The expected output should return the discount amount (a negative value) to apply, otherwise zero if no discount is to be given. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.



Access Control

Limit access to the RevindexStorefront module control can be controlled via the standard permissions module settings in DNN. You can restrict view or edit access to parts of the management screen to a selected number of employees in your company.



Log Level

You can configure how much information is being logged to the DotNetNuke Event Viewer by configuring the log level under **Configuration > General**. Currently, you can choose between errors only or include debug messages.

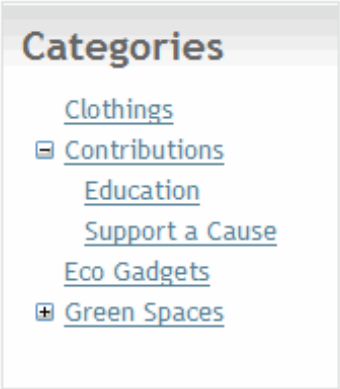
The debug log level is useful for displaying actual XSL transform input data. To view the debug data captured, you need to select the “Debug Info” type in the DotNetNuke Event Viewer page. If “Debug Info” is not in the list, you will need to explicitly add it from the Event Viewer page.

The debug log level writes a lot of data including all errors to the Event Viewer and may have an impact on performance. It is recommended to use error log level when in production.

Category

The **RevindexStorefrontCategory** module control displays the categories used for grouping products and helps improve the browsing experience. It is recommended to place this module on the left or right side pane on your page and set it to appear on all pages visible for all users. You may rename the module title to something friendlier like “Categories”.

To change the look-and-feel using a custom display template, set the **Display template** value from the **Configuration > Category** menu.



How to expand all categories

The latest Revindex Storefront uses a Telerik RadTreeView control to render the categories. To expand all the categories, you can create a custom display template and add a OnClientLoad event with some javascript.

```

<%@ Control Language="C#" AutoEventWireup="true" CodeBehind="Display.ascx.cs" Inherits="Revindex.Dnn.RevindexStorefront.Portals._default.Display.Category.Standard3.Display" %>
<%@ Register Assembly="DotNetNuke.Web" Namespace="DotNetNuke.Web.UI.WebControls" TagPrefix="dnn2" %>

<div class="rvdsfCategoryContainer">
  <dnn2:DnnTreeView ID="CategoryDnnTreeView" runat="server" ShowLineImages="false" CssClass="rvdsfCategoryTreeView" Skin="" OnClientLoad="CategoryDnnTreeView_Loaded">
    <NodeTemplate>
      <a href='<%# DataBinder.Eval(Container, "NavigateUrl") %>'>
        <%# DataBinder.Eval(Container, "Text") %></a>
    </NodeTemplate>
  </dnn2:DnnTreeView>
</div>

<script type="text/javascript">
function CategoryDnnTreeView_Loaded(treeView, args)
{
  var nodes = treeView.get_allNodes();
  for (var i = 0; i < nodes.length; i++)
  {
    if (nodes[i].get_nodes() != null)
      nodes[i].expand();
  }
}
</script>

```

How to add categories to Web site menu

By default, the Storefront displays your categories on the Category module, which can be placed anywhere on your page. Please see for more information.

If you also like the categories to appear on your Web site's main menu, you simply need to create actual pages and link to the category URL. Fortunately, most categories are relatively static and remains unchanged once created.

1. We recommend you first navigate to the page where you currently have the Category module so you can refer to it to find the category URL easily as you'll be doing a lot of repetitive copy and paste.
2. Hover over your Category module and copy the first category URL.
3. Click on **DNN:Pages > Add New Page** to add a new page.
4. Give the new page the same name as your category (e.g. "Cameras")
5. Select the appropriate **Parent Page** dropdown if this category should belong underneath a parent category.
6. Make sure to select the **Include In Menu** checkbox.
7. Under the **Permissions** tab, make sure to allow **View Page** permission to **All Users**.
8. Under the **Advanced Settings** tab and scroll to **Other Settings** section. In the **Link URL** property, select the **URL** type and paste your category URL. Select the **Permanently Redirect** checkbox to optimize for SEO ranking.
9. Save and repeat the steps above for all your other categories.

Distributor

The **RevindexStorefrontDistributor** module control displays the distributors used for navigating products by brands. It is recommended to place this module on the left or right side pane on your page and set it to appear on all pages visible for all users. You may rename the module title to something friendlier like "Suppliers" or "Distributors".

To change the look-and-feel using a custom display template, set the **Display template** value from the **Configuration > Distributor** menu.

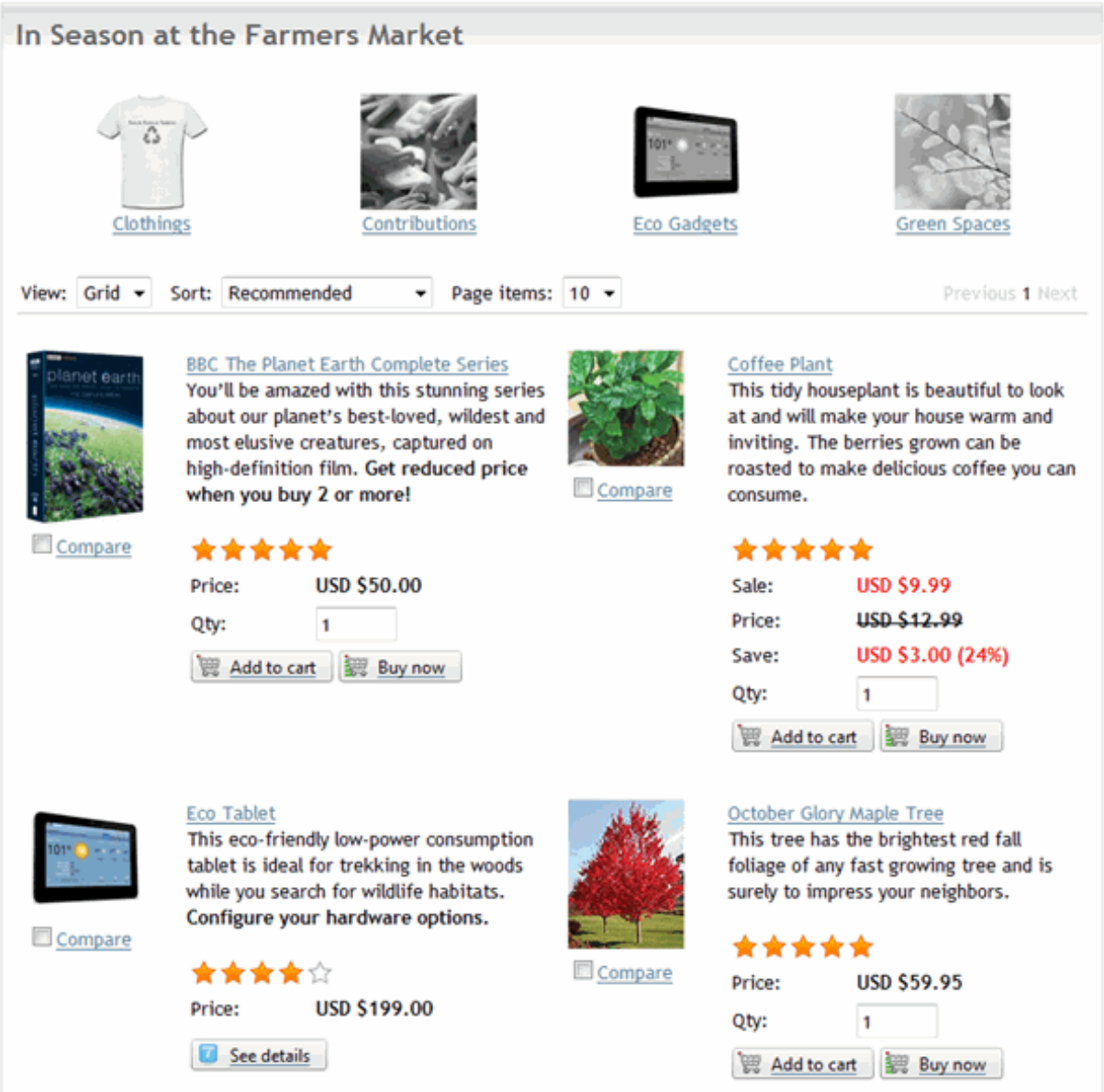
Manufacturer

The **RevindexStorefrontManufacturer** module control displays the manufacturers used for navigating products by brands. It is recommended to place this module on the left or right side pane on your page and set it to appear on all pages visible for all users. You may rename the module title to something friendlier like "Brands" or "Manufacturers".

To change the look-and-feel using a custom display template, set the **Display template** value from the **Configuration > Manufacturer** menu.

Product List

The **RevindexStorefrontProductList** module control lists all the products associated with the user-selected category. This module should be visible to all users. The module title automatically changes to take the category name. If a product is marked as “Featured”, the product will be displayed on the **RevindexStorefrontProductList** module control even if no category is selected.



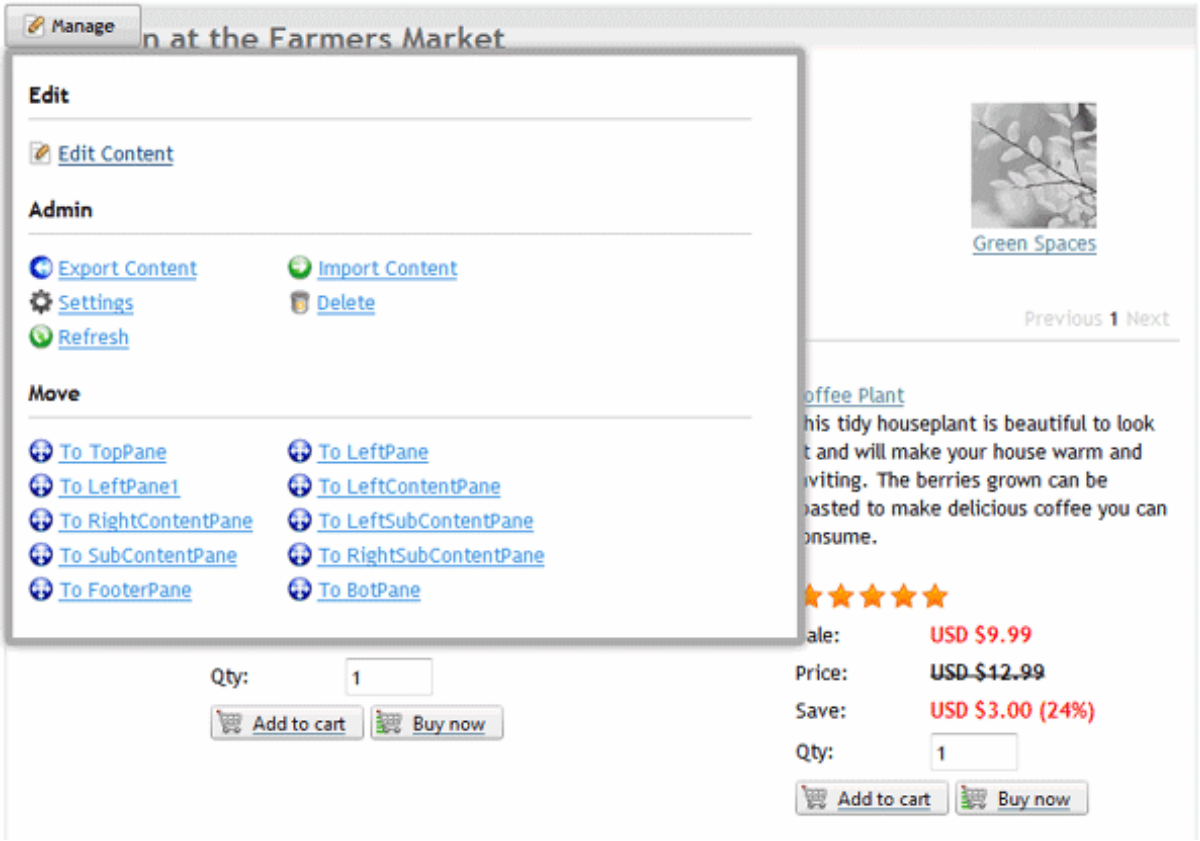
To change the look-and-feel using a custom display template, set the **Display template** value from the **Configuration > Product list** menu.

Hosting Multiple Module Controls

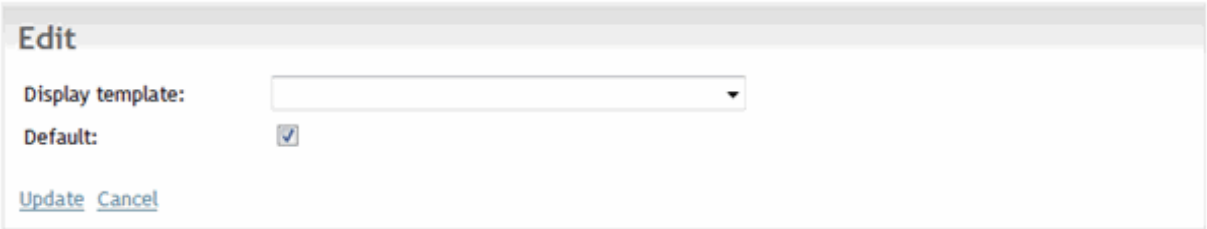
The Storefront supports hosting more than one instance of this module on the Web site. This is useful for displaying featured products on a different page like the home page. In this case, you would create a custom **Product List** display template from the **Configuration > Display templates** menu. In the custom template, you can force it to display products from a specific category by setting the ASP.NET hidden **Value** property to the category's ID value.

<asp:HiddenField ID="OverrideCategoryIDHiddenField" runat="server" **Value="57"** />

Then, return to the new module instance and click on **Edit Content** from the module's **Action** menu to change the display template.



Now you have two instances running, you need to mark the one of the two module instances as the default instance where all category navigation will point to. You can mark as default instance from the **Edit Content** on the module action menu.



How to change default sort order

To change the product list to sort by a different order:

1. Create a custom display template from the RevindexStorefront's **Configuration > Display templates** menu.

2. Select the "Product list" module control and **Add new**.

3. Give the new custom display template a name (e.g. CustomProductList)

4. Always choose the latest **Base display template** with the highest version number.

5. Look for the desired sort order line and add the **Selected="True"** attribute as shown in the example below:

   ```
   <asp:DropDownList ID="PageViewDisplayOrderDropDownList" runat="server" AutoPostBack="True"
   OnSelectedIndexChanged="PageViewDisplayOrderDropDownList_SelectedIndexChanged">
   <asp:ListItem Value="1"
   resourcekey="RecommendedPageViewDisplayOrderListItem">Recommended</asp:ListItem>
   <asp:ListItem Value="2" resourcekey="ProductNameAZPageViewDisplayOrderListItem" Selected="True"
   >Product Name A to Z</asp:ListItem>
   <asp:ListItem Value="3" resourcekey="ProductNameZAPageViewDisplayOrderListItem">Product Name Z to
   A</asp:ListItem>
   <asp:ListItem Value="4" resourcekey="PriceLowHighPageViewDisplayOrderListItem">Price Low to
   High</asp:ListItem>
   <asp:ListItem Value="5" resourcekey="PriceHighLowPageViewDisplayOrderListItem">Price High to
   Low</asp:ListItem>
   <asp:ListItem Value="6" resourcekey="RatingLowHighPageViewDisplayOrderListItem">Rating Low to
   High</asp:ListItem>
   <asp:ListItem Value="7" resourcekey="RatingHighLowPageViewDisplayOrderListItem">Rating High to
   Low</asp:ListItem>
   </asp:DropDownList>
   ```

6. Save the display template.

7. Under **Configuration > Product list** menu, set the **Display template** to your newly created custom display template.

How to change the number of grid columns

By default, the product list displays products arranged in grid view format of 2 columns. In order to change the number of columns, you need to:

1. Create a custom display template from the RevindexStorefront's **Configuration > Display templates** menu.

2. Select the "Product list" module control and **Add new**.

3. Give the new custom display template a name (e.g. CustomProductList)

4. Always choose the latest **Base display template** with the highest version number.

5. Look for the following line and change the **GroupItemCount** attribute value to the number of columns you wish to render:

   <asp:ListView ID="ProductListListView" runat="server" **GroupItemCount="2"** OnPagePropertiesChanging="ProductListListView_PagePropertiesChanging" OnItemDataBound="ProductListListView_ItemDataBound" DataKeyNames="ProductVariantID" OnItemCommand="ProductListListView_ItemCommand">

6. Save the display template.

7. Under **Configuration > Product list** menu, set the **Display template** to your newly created custom display template.

How to change page size

By default, the product list module control offers different selection choice of page size that affects the number of items displayed on the page at a time (e.g. 10, 20, 50). If you want to change the default selection, you can simply create a custom display template for the Product list module control and apply for the following changes. Please see Display Templates (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/display-templates/rvdwkpvm/section) for more info. Look for the following lines below and add a Selected="true" attribute to the desired list item.

```
<asp:DropDownList ID="PageViewSizeDropDownList" runat="server" AutoPostBack="True"
OnSelectedIndexChanged="PageViewSizeDropDownList_SelectedIndexChanged">
<asp:ListItem Value="10" resourcekey="TenPageViewSizeListItem">10</asp:ListItem>
<asp:ListItem Value="20" resourcekey="TwentyPageViewSizeListItem" Selected="true">20</asp:ListItem>
<asp:ListItem Value="50" resourcekey="FiftyPageViewSizeListItem">50</asp:ListItem>
<asp:ListItem Value="100000" resourcekey="AllPageViewSizeListItem">All</asp:ListItem>
</asp:DropDownList>
```

You can also change the number value of the list items (e.g. from 10 to 100 if you want to change the available page sizes). You will also need to change the text for the resource key pertaining to your custom display template that appears on screen from the static localization. Please see Static Localization and Language Packs (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/static-localization-and-language-packs/rvdwkpvm/section) for more info.

How to default to list view

By default, the product list displays products arranged in grid view format. In order to change the product list to display in list view by default, you need to:

1. Create a custom display template from the RevindexStorefront's **Configuration > Display templates** menu.

2. Select the "Product list" module control and **Add new**.

3. Give the new custom display template a name (e.g. CustomProductList)

4. Always choose the latest **Base display template** with the highest version number.

5. Look for the following line and add the **Selected="True"** attribute:

   <asp:ListItem resourcekey="ListPageViewModeListItem" Value="List" **Selected="True"**>List</asp:ListItem>

6. Save the display template.

7. Under **Configuration > Product list** menu, set the **Display template** to your newly created custom display template.

When in grid view, the HTML includes the CSS class "rvdsfPageViewModeGrid" and when in List view, the CSS class is "rvdsfPageViewModeList". You can use this information to customize the CSS to format the list and grid layout nicely to the way you want.

How to force products from a category

If you have multiple product list modules on different pages and you would like to specialize them to show products from a certain category when no category is being selected, you can do so using a custom display template.

1. Under **Configuration > Display templates** menu. Select "Product list".
2. Click **Add New**.
3. Give your template a name (e.g. "CustomCookwareList").
4. Look for the following line and enter the desired Category ID in the Value attribute.

   <asp:HiddenField ID="OverrideCategoryIDHiddenField" runat="server" **Value="12"** />

5. Save.
6. Go to your desired product list page and under the module's action menu, choose **Edit content**.
7. Set it to use the custom display template you created.
8. Select the default checkbox if you like this product list to act as the default product list module on your site.
9. Update.

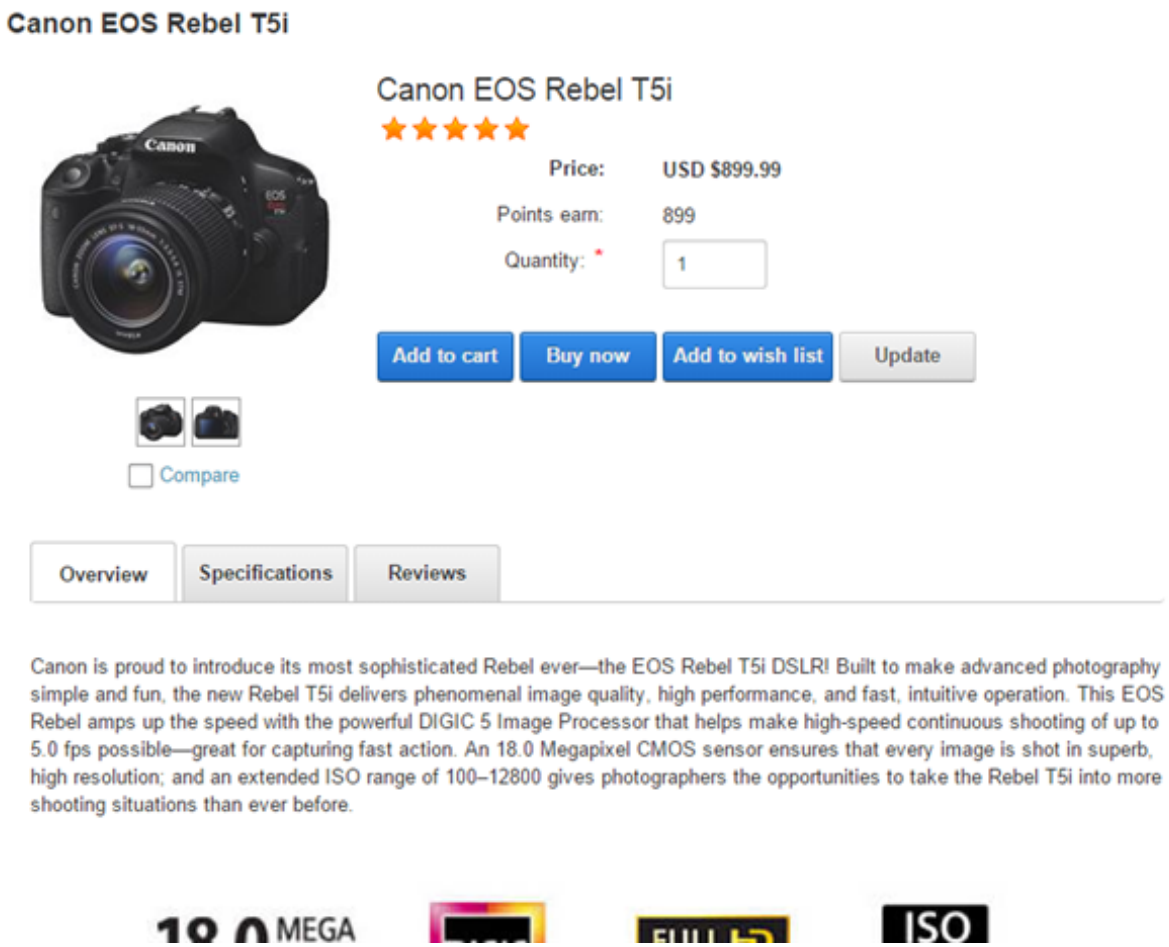
How to show featured products

The usual behavior of the product list is to display products primarily based on the selected category (e.g. "Cookware") and among other criteria. It's important to understand that when the customer first lands on your product list page, no category is initially being selected. You need to decide if you intend to show all your products or only the selected few products. If you have thousands of products, it is strongly recommended to show only a subset of products for performance reasons, typically your best selling featured products.

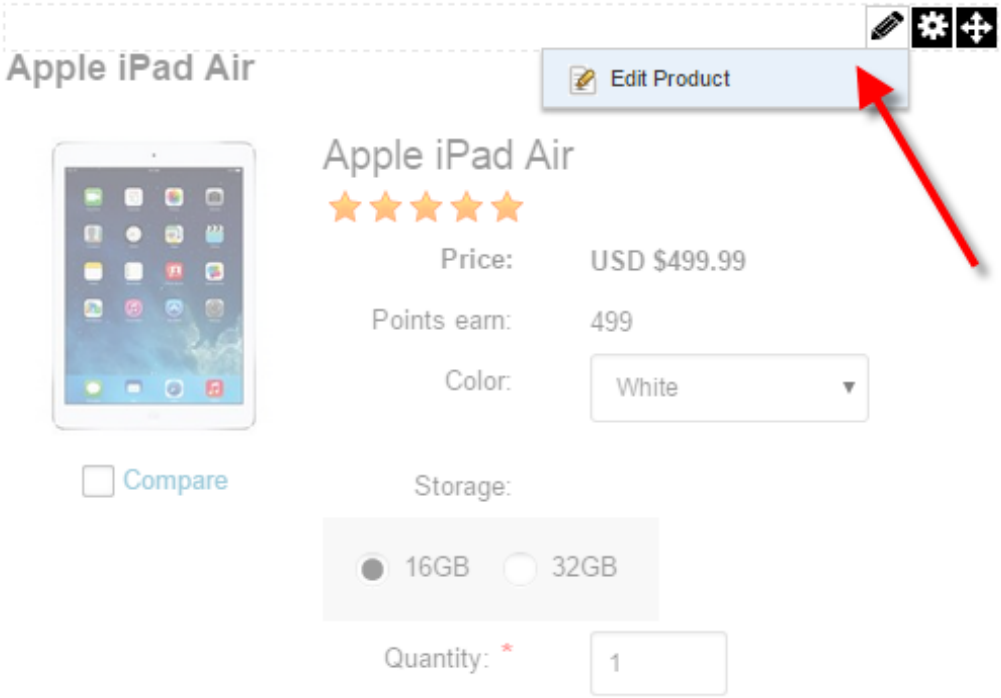
To show only the subset of products when no category is selected, you must mark your desired product's as "Featured" under the product's Category tab. So it follows that if you want to show all products when no category is selected, you will need to mark all your products as featured.

Product Detail

The **RevindexStorefrontProductDetail** module control displays the detailed information of the product to the customer. This module should be visible to all users. The module title automatically changes to take the product name.



When in page edit mode, you can also quickly edit your product simply by clicking on the **Edit product** link. This will direct you the product's administration page and allows you go back and review your changes easily.



To change the look-and-feel using a custom display template, set the **Display template** value from the **Configuration > Product detail** menu.

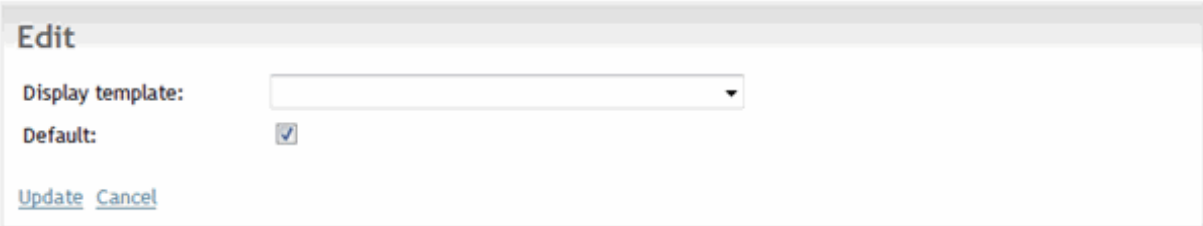
Hosting Multiple Module Controls

The Storefront supports hosting more than one instance of this module on the Web site. This is useful to single out a special product item on a different page for a promotional campaign. In this case, you would create a custom **Product Detail** display template from the **Configuration > Display templates** menu. In the custom template, you can force it to display a specific product by setting the ASP.NET hidden **Value** property to the product's ID value.

```
<asp:HiddenField ID="OverrideProductIDHiddenField" runat="server" Value="12" />
```

Then, return to the new module instance and click on **Edit Content** from the module's action menu to change the display template.

Now you have two instances running, you need to mark the one of the two module instances as the default instance where all product list navigation will point to. You can mark as default instance from the **Edit Content** on the module action menu.



How to set number of related products

To change the number of related products displayed on the product detail page, you need to create a custom display template for the Product detail module control and edit the **PageSize** number in your template.

1. Create a custom display template from the RevindexStorefront's **Configuration > Display templates** menu.

2. Select the "Product detail" module control and **Add new**.

3. Give the new custom display template a name (e.g. CustomProductDetail)

4. Always choose the latest **Base display template** with the highest version number.

5. Look for the following line and change the **PageSize** attribute value to the number of products you wish to display:

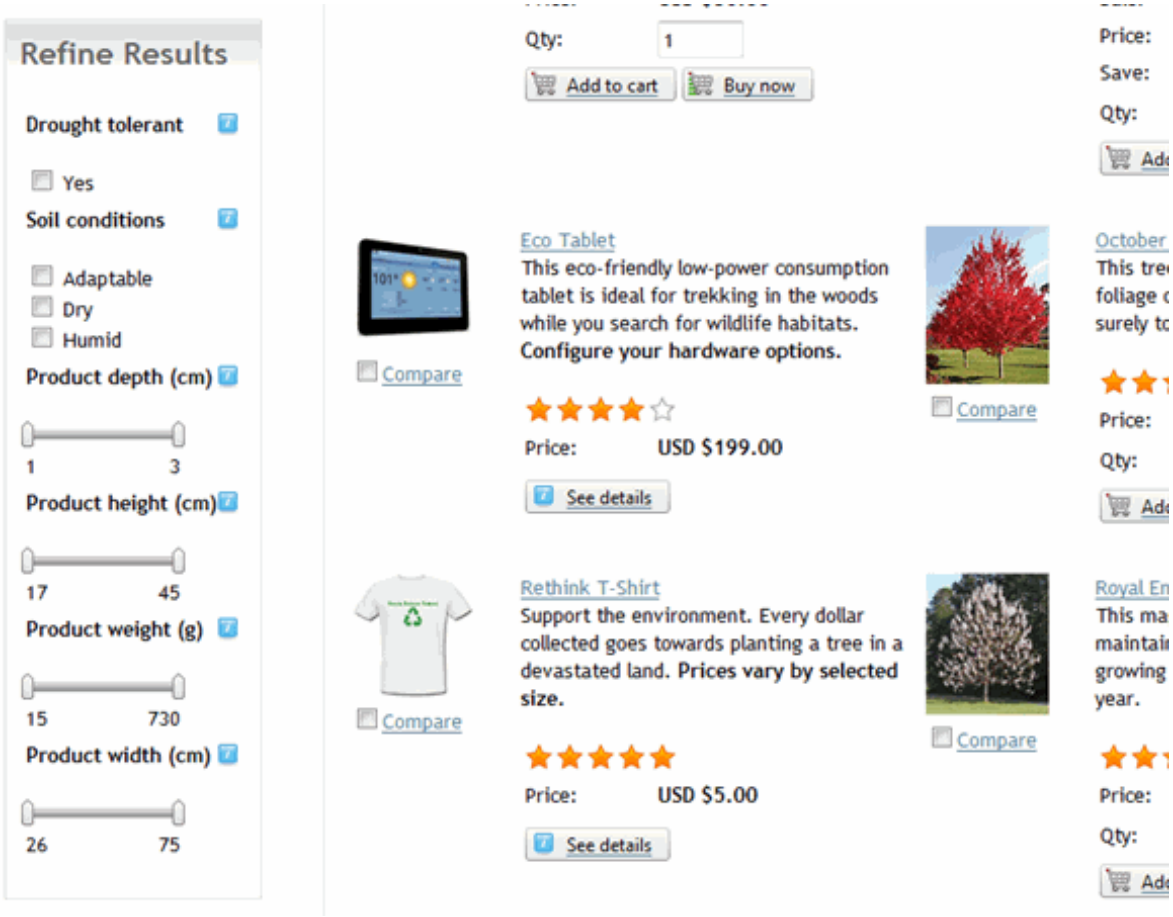
   <asp:DataPager ID="RelatedProductDataPager" runat="server" OnPreRender="RelatedProductDataPager_PreRender" PagedControlID="RelatedProductListView" **PageSize="3"**>

6. Save the display template.

7. Under **Configuration > Product detail** menu, set the **Display template** to your newly created custom display template.

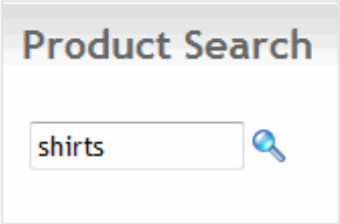
Product Filter

The **RevindexStorefrontProductFilter** module control is optionally used beside the product list module control to refine results. The filter works against product attribute definitions assigned to a product or variant. The product attribute definition (**Catalog > Attributes definitions**) must be marked as "Filterable" in order to be listed in the filter. Currently, only Boolean, Decimal, Integer and Selection attribute definition types can be filtered. See Product attributes (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/catalog-product-attributes/rvdwkpvm/section) for more info. You can also filter against certain core product properties such as the price, manufacturer and distributor.



Product Search

The **RevindexStorefrontProductSearch** module control is optionally used beside the product list module control to search for products only. The search works against product name, description and attribute definitions assigned to a product or variant. The product attribute definition must be marked as "Filterable" in order to be searchable. The search uses keyword indexing for faster performance and reduces the database load on your server.



How search works

The Storefront product search makes use of the DNN internal search indexer to improve query performance and accuracy. Therefore, when you create a new product, it doesn't get indexed immediately until your DNN search scheduler has ran. Certain systems are configured to index the content once a day. You can force the search to re-index immediately by going to the **Host > Schedule** page and clicking on the **Search: Site Crawler** task and clicking on the **Run Now** button or you can configure it to run more frequently.

By default, the DNN search indexer will not index any keyword shorter than 4 characters and longer than 50 characters, and may omit certain common words and numbers. You can change this configuration under the **Host > Search Admin** page.

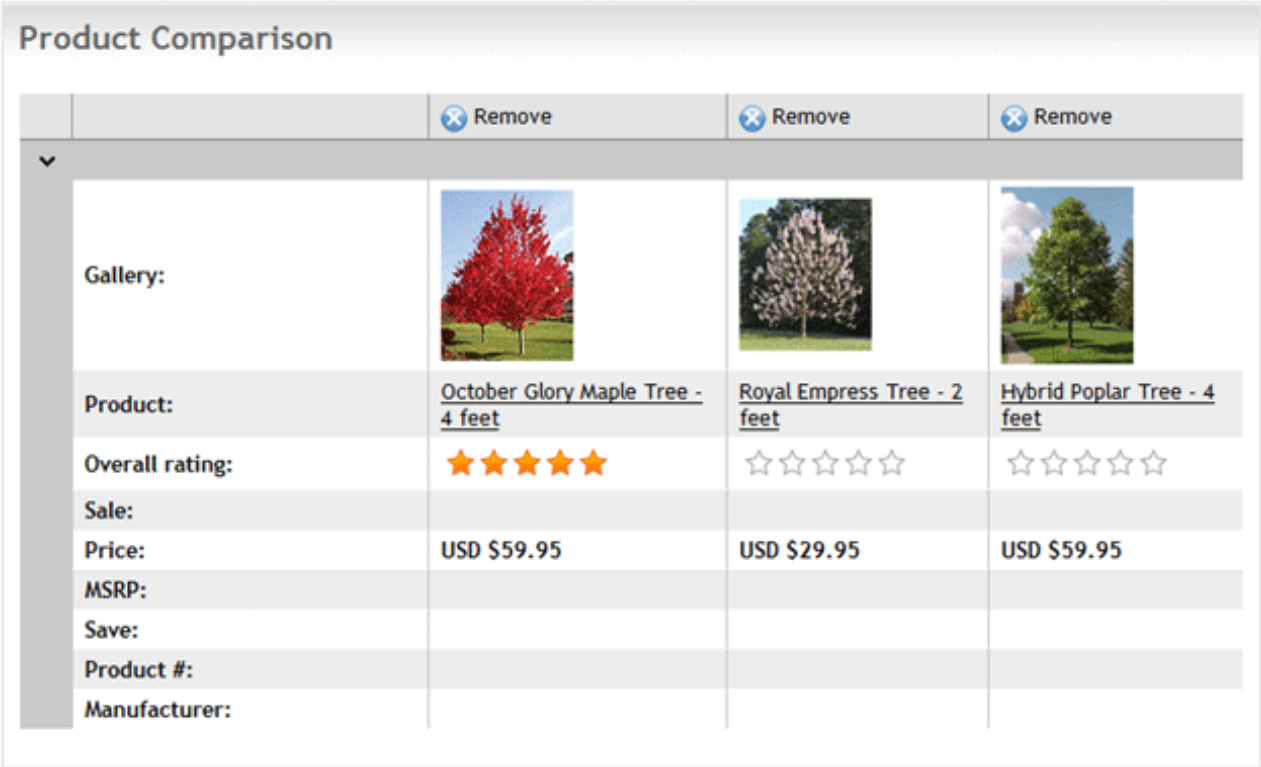
Product Showcase

The **RevindexStorefrontProductShowcase** module control is optionally used to promote one or many featured products, newest products, random products, etc. on your pages. It can be laid out horizontally or vertically with auto scrolling or using buttons by configuring the settings under **Configuration > Product showcase** or from the **Edit Content** action menu for each module control instance.

Product Comparison

The **RevindexStorefrontProductComparison** module control allows the customer to easily pick and compare different products in a grid view. Set this module control to appear on the page for all users.

Any product attribute defined for a product that are marked comparable and published will also appear in the product comparison grid. To change the look-and-feel using a custom display template, set the **Display template** value from the **Configuration > Product comparison** menu. You can also limit the maximum number of items to compare at a time to better fit your template and reduce server load.



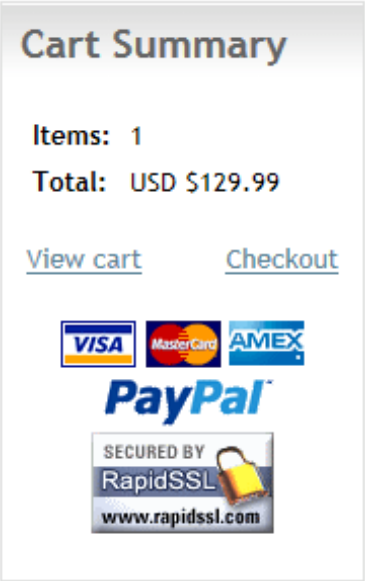
Product Comparison

	Remove	Remove	Remove
Gallery:			
Product:	October Glory Maple Tree - 4 feet	Royal Empress Tree - 2 feet	Hybrid Poplar Tree - 4 feet
Overall rating:	★★★★★	☆☆☆☆☆	☆☆☆☆☆
Sale:			
Price:	USD $59.95	USD $29.95	USD $59.95
MSRP:			
Save:			
Product #:			
Manufacturer:			

Cart Summary

The **RevindexStorefrontCartSummary** module control provides a quick display of the items currently in the shopping cart. It is recommended to place this module on the header, left or right side pane on your page and set it to appear on all pages visible for all users. You may rename the module title to something friendlier like “Cart Summary”.

To change the look-and-feel using a custom display template, set the **Display template** value from the **Configuration > Cart summary** menu. You can change the acceptance marks the same way you modify any localization static text under the DNN **Admin > Languages** menu.



How to change payment acceptance mark

The payment acceptance mark helps visually indicate to your customers the different form of payment methods that are accepted during checkout such as Amex, MasterCard or Amex. It can be changed in the same way as any static text through the site's **Admin > Languages** page. Click on edit for the site and language of your choice.

Drill down the tree node, where **<_default>** is the standard templates or your portal number if you have created custom display templates. **<StandardX>** is which ever template version you're currently using.

Local Resources
  DesktopModules
    Revindex.Dnn.RevindexStorefront
      Portals
        <_default>
          Display
            CartSummary
              <StandardX>
                App_LocalResources
                Display.ascx

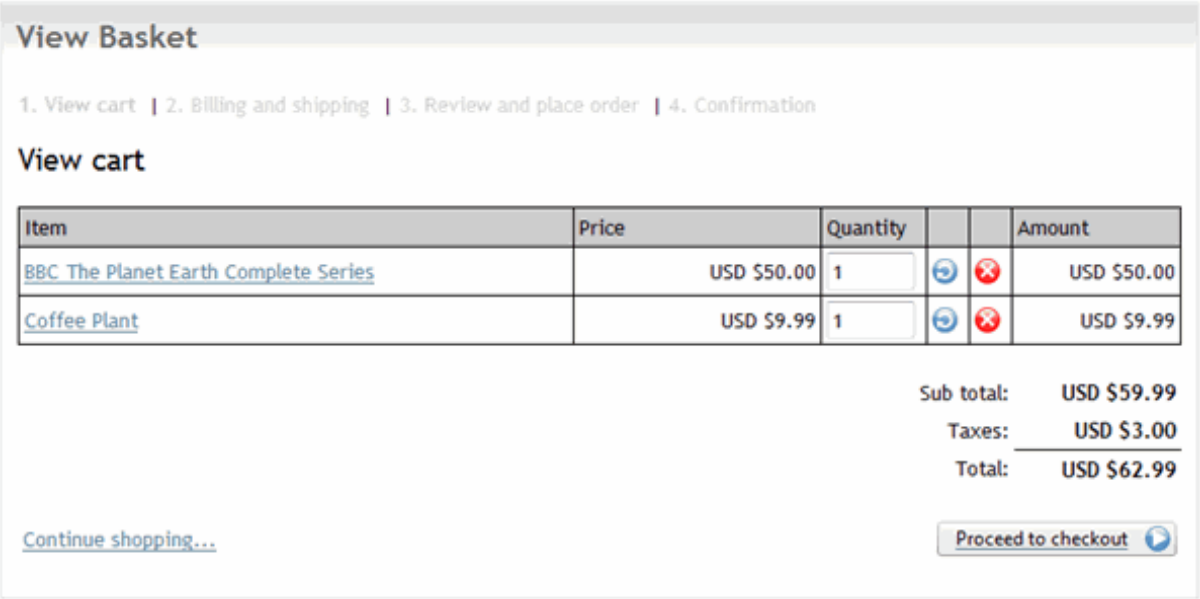
Look for the resource name and change the text (or HTML) to how you want it to be shown. Save and your cart summary will start using the new localized acceptance mark.

- **PaymentAcceptanceMarkLabel.Text**

Cart

The **RevindexStorefrontCart** module control displays products that have been added to the shopping cart. This module should reside on a SSL secure page visible to all users. To change the look-and-feel using a custom display template, set the **Display template** value from the **Configuration > Cart** menu.

Customers can remove or adjust the quantity of the items in the shopping cart before proceeding with the checkout.



If the customer is not already signed in, the customer will be presented with a login or register screen after clicking on the **Proceed to Checkout** button.

How to increase cart session time

By default, products added to cart will stay available for the same duration as your session is active. You must first enable the **Cart** feature under **Configuration > General**. Once enabled, you can configure a longer duration simply change the session timeout value in seconds under **Configuration > Cart** menu. This is a sliding expiry, which means as long as the customer continues to interact with the shopping cart, it will extend the session for another amount of period.

How to cleanup on logout

By default, Revindex Storefront will automatically clear the cart when a registered user logs out from your site. This security measure prevents other users sharing the same computer from viewing the cart items of another user.

If you want to perform additional clean up tasks after a user logs out, you can do so using a special page that will be redirected after logout by following the steps below:

1. Give your page a name e.g. "Logout".
2. Uncheck the **Include in Menu** checkbox.
3. Set the page permission to allow only "Unauthenticated Users".
4. Click **Update** to save.
5. On the newly created page, add the Razor Host module to the page.
6. On the action menu, click **Edit script**.
7. Click **Add new script file**.
8. Choose "CSHTML (C#)" file type.
9. Give it a file name (e.g. "Logout.cshtml")
10. Click **Add new script**.
11. Select the script you created. It may have an underscore prefix to the name.
12. Replace the Script Source with this code:

```
@{
  // Perform your steps here such as expiring cookie, closing session, clear cache, etc.
  Session.Abandon();
  Response.Cookies.Add(new HttpCookie("ASP.NET_SessionId", ""));
  Response.Cookies.Add(new HttpCookie("rvdsfcart|0", "") { Expires =  DateTime.Now.AddDays(-1d) });

  // Uncomment the line below if you want to redirect to your home page.
  // Warning: Once you uncomment it, you won't be able to access this page
  // anymore since it will redirect immediately.
  // You will have to go to your local folder to edit this script
  // under DesktopModules\RazorModules\RazorHost\Scripts\<file>.cshtml.
  // Response.Redirect("~/", false);
}
```

13. Check on the **Is Active** checkbox.
14. Click **Save Script and Return**.
15. Go to your **Admin > Site Settings** page.
16. Under the User Accounts Settings tab, change the **Redirect After Logout** dropdown to your newly created page.
17. Click **Update**.

Checkout

The **RevindexStorefrontCheckout** module control performs the checkout process. This module should reside on a SSL secured page visible to all users. To change the look-and-feel using a custom display template, set the **Display template** value from the **Configuration > Checkout** menu.

The checkout process is a step wizard. The first step is collecting customer billing and shipping information. The customer can select an existing address from his address book for quick fill. At this time, the customer can also apply coupons if applicable.

You can add dynamic fields to collect additional information by providing your HTML/ASP.NET code using the **Dynamic form** from the **Configuration > Checkout** menu.

Checkout

1. View cart | 2. Billing and shipping | 3. Review and place order | 4. Confirmation

Billing information

First name: John

Last name: Doe

Company:

Country: United States

Street: 1 Melrose

City: Beverley Hills

State/Province: California

Postal code: 90210

Phone: 111-111-1111

Email: customer@revindex.com

Payment method: VISA Wire transfer

Credit Card #:

Expiration: 01 2012 Security #:

Shipping information Same as billing address

Shipping method: Air USD $10.00

Other information

Coupon: Add

Back Review order

The 2nd step allows the customer to review the total charge before placing the order or go back to the previous screen to correct information.

Checkout

1. View cart | 2. Billing and shipping | 3. Review and place order | 4. Confirmation

Review and place order

Item	Price	Quantity	Amount
BBC The Planet Earth Complete Series	USD $50.00	1	USD $50.00
Coffee Plant	USD $9.99	1	USD $9.99

Discount:	USD $0.00
Sub total:	USD $59.99
Shipping:	USD $10.00
Handling:	USD $0.00
Taxes:	USD $3.00
Total:	USD $72.99
Total savings:	USD ($3.00)

Back

Place order now

If the order processed successfully, the customer will be redirected to the confirmation page, otherwise an error message will be presented to the customer allowing him to make adjustments and retry.

Anonymous Checkout

You must first enable the **Checkout** feature under **Configuration > General** to access this functionality. You can enable anonymous checkout mode to speed up the checkout process for customers by selecting the **Enable anonymous checkout** option from the **Configuration > Checkout** menu. The Storefront will automatically create a new guest account for the anonymous shopper upon placing order bypassing the standard login and registration forms in a normal checkout process. In anonymous mode, the customer will not be able to login to their newly created account unless you explicitly provide the login and password to the customer.

It's important to understand the Storefront creates a new account with the customer's email address captured during checkout. By default, your site allows multiple accounts with the same email address. If, however, you have explicitly enabled the **Requires unique email address** under **Admin > Site Settings** page, the Storefront will not be able to create the guest account if the email has already been used before. In such cases, you must also enable the **Reuse anonymous account** under the **Configuration > Checkout** settings.

Multiple step or single page checkout

Depending on your type of business clientele, you can choose to optimize your checkout flow to use the multiple step or single page checkout mode. The single page checkout will present a shorter number of steps toward checkout completion by displaying all form elements at once. The customer sees the entire flow upfront and needs only click a single button to complete checkout in a hurry.

Checkout

Billing information

Use address book:
First name: * John
Last name: * Doe
Company:
Country: * United States
Street: * 1 melrose place
City: * Beverley hills
State/Province: California
Postal code: * 90211
Phone: * 111-111-1111
Email: *
Business tax no.:
Save to my address book:
Update my profile:

Review order

Item	Qty	Amount
Green Mountain Coffee	1	USD $9.00

Discount:	USD $0.00
Sub total:	USD $9.00
Shipping:	USD $10.00
Handling:	USD $10.00
Taxes:	USD $2.10
Total:	USD $31.10
Paid:	USD $0.00
Balance due:	USD $31.10
Total savings:	USD ($1.00)
Points earn:	9

Edit cart

Shipping information

Same as billing address:
Shipping method: * Air USD $10.00

Other information

Coupon:

Payment

Order method: Regular purchase / Purchase order
PO number:
Points available: 9936
Redeem points:
Gift voucher:
Payment method: None / Cash

Place order now

In contrast, the multiple step checkout will gradually present related form elements a page at a time slowly leading the customer to the last payment step. The customer feels relief taking his time to enter every information meticulously and feels the information entered is validated along the way.

Checkout

1. View cart > 2. Billing and shipping > 3. Review and place order > 4. Confirmation

Billing information

Use address book:

First name: * John

Last name: * Doe

Company:

Country: * United States

Street: * 1 melrose place

City: * Beverley hills

State/Province: California

Postal code: * 90211

Phone: * 111-111-1111

Email: *

Business tax no.:

Save to my address book: ☑

Update my profile: ☑

Shipping information

Same as billing address: ☑

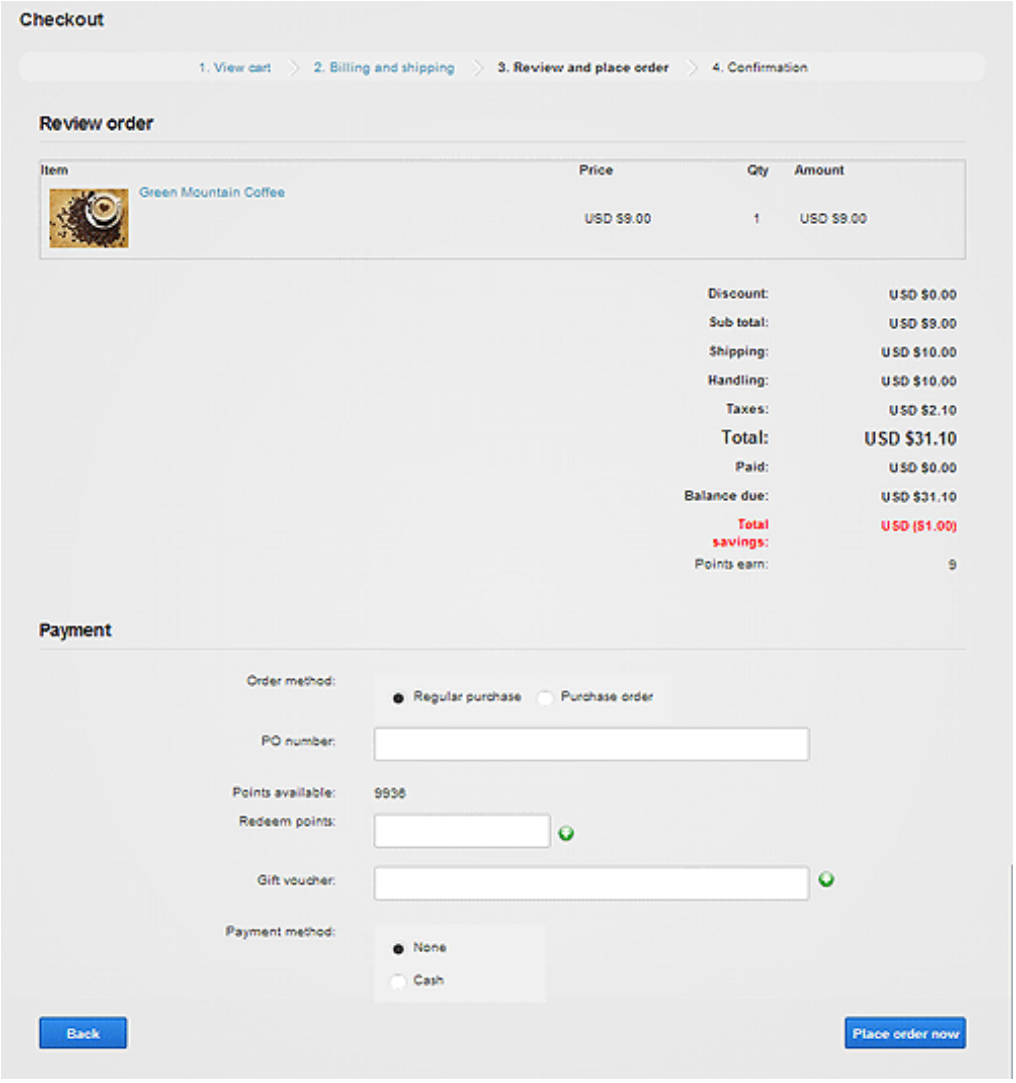
Shipping method: * Air USD $10.00

Other information

Coupon:

Back

Review order



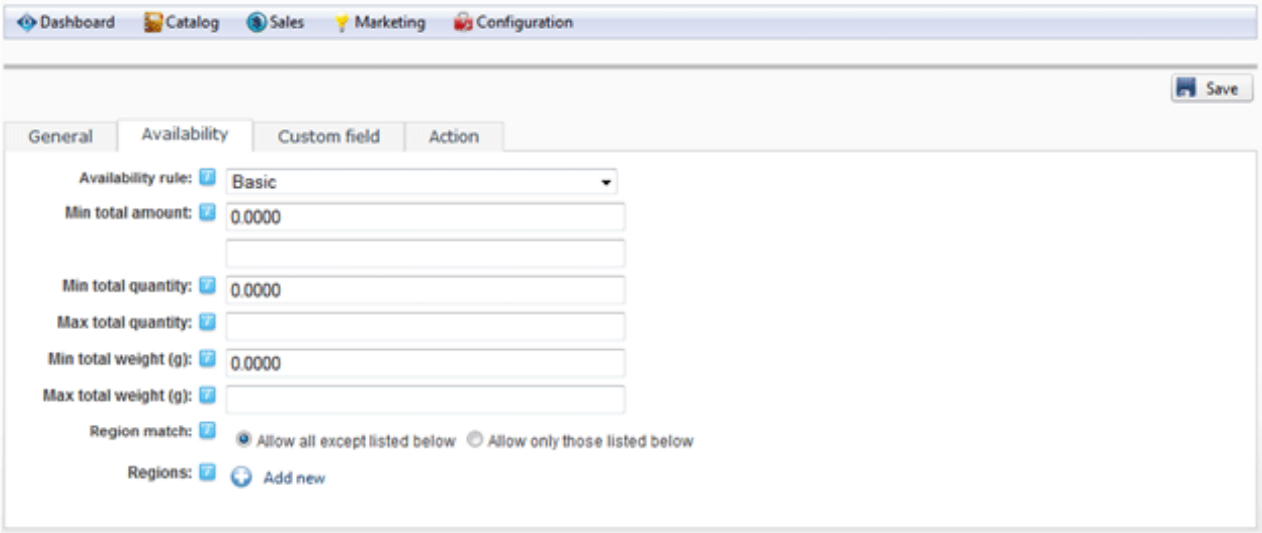
Single page checkout is usually recommended for businesses whose customers are tech savvy and generally purchase a few quick items. However, if your customers require more hand guiding, your checkout form has a lot of custom fields or you perform a lot of upselling of complex products, you will likely benefit from multiple step checkout.

Choosing the right approach can help increase your conversion rate. Do not simply assume a shorter form or quicker checkout will necessarily mean higher conversion rate. Many studies (http://www.proimpact7.com/ecommerce-blog/one-page-checkout-5-reasons-why-not/) have shown conflicting results where single page checkout can increase or even decrease conversion rate. For example, Amazon.com uses the multiple step approach whereas Gap.com chooses to use the single page checkout based on their own internal measurement. With Revindex Storefront, you can perform your own internal test to see which approach works best for your type of business.

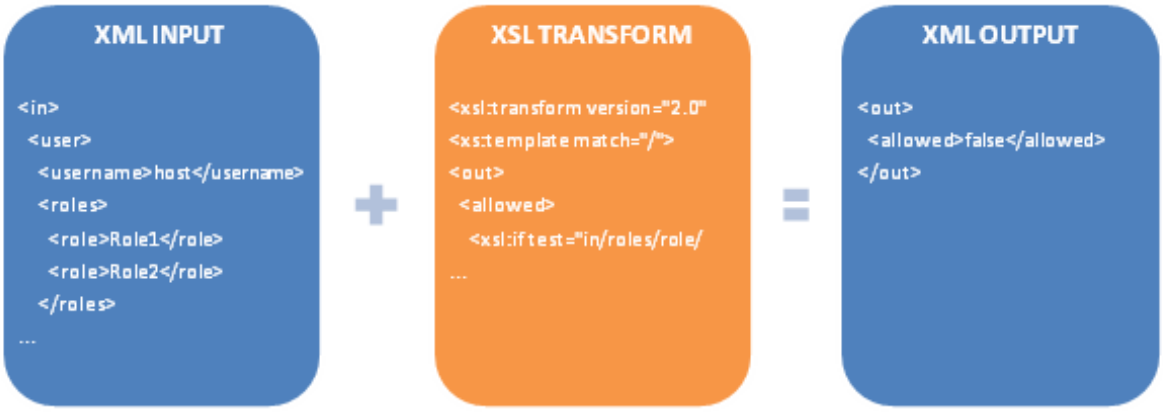
You must first enable the **Checkout** feature under **Configuration > General** to access this functionality. Once enabled, you can configure your Storefront to show a multiple step or single page checkout mode under the **Configuration > Checkout** menu.

Checkout Availability

You must first enable the **Checkout** feature under **Configuration > General** to access this functionality. The checkout availability rule determines if checkout is permitted based on conditions such as region, amount, quantity, etc.



The checkout availability rule can also use XSL transform to determine whether the checkout should be allowed for complex scenarios. The expected output should return "true" to indicate the checkout is allowed to proceed under the input conditions, otherwise "false" if disallowed. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.

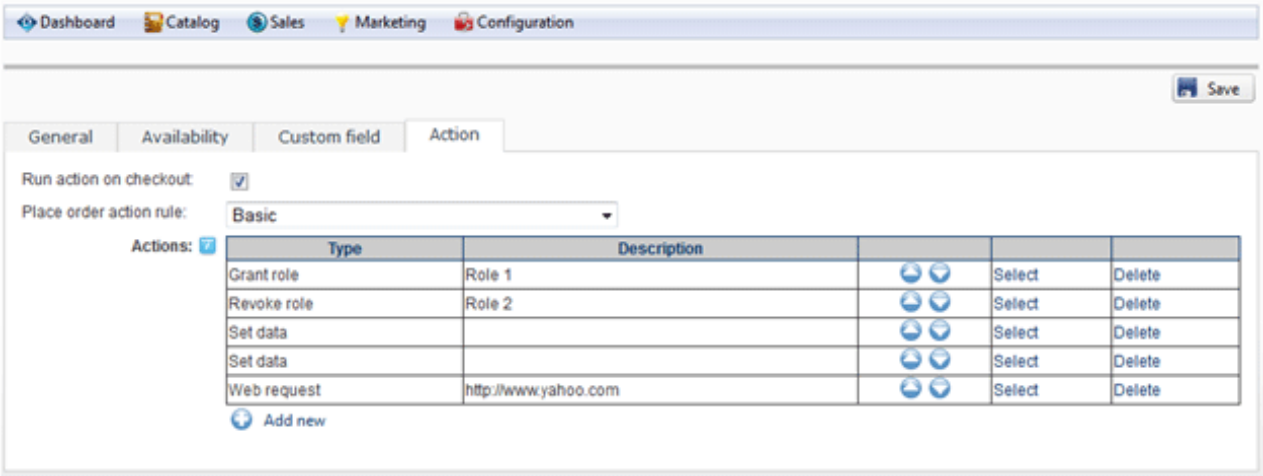


Actions

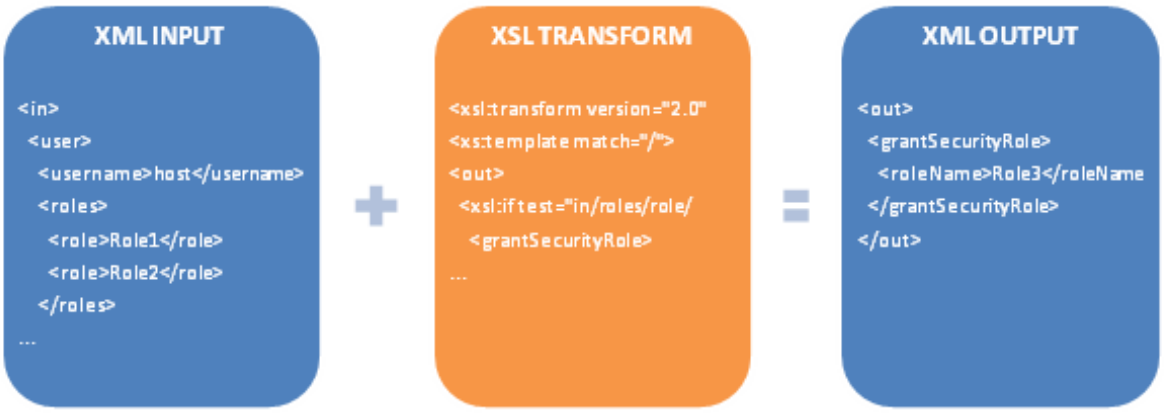
You can automatically grant or revoke security roles to customer on checkout, send email, increment/decrement inventory, update data or make a Web request to an external service. This feature is useful if you need to allow access to certain pages on your Web site after the customer paid or you have custom logic that needs to run.

You must first enable the **Checkout** feature under **Configuration > General**. Once enabled, you can configure your action rules under **Configuration > Checkout** menu.

You can only grant security roles that are allowed under the **Configuration > Security** menu settings. This security feature prevents staff operators from creating product action rules to grant themselves higher level roles (e.g. “Administrators” role).



The **Place order action rule** can also use XSL transform to determine what complex action rules to run. The Storefront comes with several pre-defined rules that you can simply modify the values without needing to know XSL. To learn more about XSL, please see the **XSL Transform** section.



How to assign security role on checkout

To assign one or more security roles (e.g. "Role1") during checkout, you must first authorize the role under the **Configuration > Security** menu. You can allow a single role or all the roles belonging to a Role Group. Role Groups in DotNetNuke are simply logical grouping and can be configured under **Admin > Security Roles** page. This security feature prevents employees from creating product action rules to grant themselves higher level roles (e.g. “Administrators” role).

You must first enable the **Checkout** feature under **Configuration > General** to enable this functionality. To assign the role for every checkout, you need to create an action rule under **Configuration > Checkout** menu. Under the Action tab, make sure the **Run action on checkout** checkbox is selected. For the **Place order action rule**, select Basic. Click on **Add new** and select **Grant role** and choose the role to assign. Click **OK** and the **Save**. You can assign multiple roles by repeating the Add new action step.

To assign the role only when a specific product is purchased during checkout, you need to create an action rule under **Catalog > Products** menu for the desired Product variant. Under the Action tab, for the **Place order action rule**, select Basic. Click on **Add new** and select **Grant role** and choose the role to assign. Click **OK** and the **Save**. You can assign multiple roles by repeating the Add new action step.

How to change payment acceptance mark

The payment acceptance mark helps visually indicate to your customers the different form of payment methods that are accepted during checkout such as Amex, MasterCard or Amex. It can be changed in the same way as any static text through the site's **Admin > Languages** page. Click on edit for the site and language of your choice.

Drill down the tree node, where **<_default>** is the standard templates or your portal number if you have created custom display templates. **<StandardX>** is which ever template version you're currently using.

Local Resources
  DesktopModules
    Revindex.Dnn.RevindexStorefront
      Portals
        <_default>
          Display
            Checkout
              <StandardX>
                App_LocalResources
                Display.ascx

Look for the resource names and change the text (or HTML) to how you want it to be shown. Save and your checkout will start using the new localized acceptance mark.

- **CashPaymentMethodListItem.Text**
- **CheckPaymentMethodListItem.Text**
- **CreditCardPaymentMethodListItem.Text**
- **MoneyOrderPaymentMethodListItem.Text**
- **PayFastPaymentMethodListItem.Text**
- **PayPalPaymentMethodListItem.Text**
- **WireTransferPaymentMethodListItem.Text**

How to hide unwanted country

If there are countries your business doesn't sell to, you can use Javascript to hide the available countries from the dropdown list. Simply, create a custom display template for the Checkout module control.

For example, you can put this Javascript right below your ASP panel tag to remove all countries except U.S and Canada:

```
<asp:Panel ID="BillingAndShippingPanel" runat="server">
<script type="text/javascript">
function pageLoad(sender, args)
{
        jQuery("select[id$='BillingCountryDropDownList'] option[value!='US']option[value!='CA']").remove();
        jQuery("select[id$='ShippingCountryDropDownList'] option[value!='US']option[value!='CA']").remove();
}
</script>
```

Make sure there is a space between the **select[xxx] option[aaa]option[bbb]** and no space between the **option[aaa]option[bbb]**. The correct spacing is important here.

How to set default country

Revindex Storefront will default to the user profile's country if available otherwise it will use the default country set under the DNN Profile properties. It will also default to the state/region if the user has state/region saved in his DNN profile. Otherwise, the state/region is listed alphabetically.

For DNN 7.3 and below, to set the default country, go to your **Admin > User Accounts** page and click on **Manage Profile Properties** and select **Country**. For example, set the **Default Value** = "US" for United States without the quotes.

For DNN 7.4 and higher, to set the default country, you must first obtain the EntryID number from the database by performing a SQL query. You can issue the query from the **Host > SQL** page as superuser.

SELECT EntryID, [Text] FROM Lists WHERE ListName = 'Country' ORDER BY [Text]

Take note of the EntryID number for your desired country. Go to your **Admin > Site Settings** page and look under **Profile Settings** and select **Country**. For example, set the **Default Value** to "221" for United States without the quotes.

How to create a single login & register page

To create a combined Login and Register page, simply follow these steps below. The following procedure may or may not work depending on your version of DotNetNuke.

1. Login as Host and go to **Admin > Site Settings** and then under Advanced Settings followed by Host Settings, include the "Users and Roles" and "Account Login" modules. These modules will now be available to be added to a page just like other modules.
2. Create a new page called "Login" and hide it from the menu. Make the page viewable by Administrators (default) and Unauthenticated Users.
3. Add the "Account Login" module and the "Users and Roles" module to the page. The DNN Users and Roles module comes with a bunch of module controls and you can remove the ones you don't need and keep only the one that looks like a registration form. Arrange them so they look nice.
4. Go to **Admin > Site Settings** and then under Advanced Settings and Page Management and set the Login selection to your newly created login page.

How numbers are calculated and rounded

Internally, the Storefront uses 4 decimal precision places to store and calculate numeric values. Using 4 decimal places allows greater precision to handle extremely price sensitive commodities such as jewelry, industrial chemicals, pharmaceutical drugs, manufacturing goods, etc. where amounts may need to be multiplied by fractional unit cost (e.g. $1.0381 per gram).

In addition, the higher level of precision allows for more accurate calculation of the total amount than typical 2 decimal places calculations. Suppose your business sells ceramic tiles at $10.00 each and you're giving a 1/3 discount for each item ordered in your store. The Storefront will calculate a fractional discount of $3.3333 per unit. If the customer orders 100 ceramic tiles, it will yield a total discount of $333.33. If the system had used a 2 decimal place precision, it would have calculated a less accurate total discount of $333 and the customer is overcharged by $0.33.

Even though using 4 decimal places internally is important for accurate calculation, it is customary for businesses to round the final amount to display 2 decimal places to accommodate the country's monetary system. Internally the values are always calculated with 4 decimal places without rounding, but the values shown on screen are rounded to 2 decimal places by the Storefront before being displayed. So even if you sell a product that has a fractional amount and the customer places 1000 items in the cart, the total sum will always be highly accurate. In contrast, where it would be wrong is if the Storefront had rounded it early during the discount calculation and later perform the sum of the total amount towards the end of the mathematical flow, the sway would be amplified by the number of items in the cart.

The rounding strategy follows your system's rounding algorithm and commonly follows the "Banker's rounding" algorithm:

- any fractional number less than 5 will round down to the previous nearest number
- any fractional number greater than 5 will round up to the next nearest number
- the fractional 5 itself will round up or down to the nearest even number (e.g. 1.745 will round down to 1.74 whereas 1.755 will round up to 1.76).

The Banker's rounding algorithm is considered more accurate and fair because it doesn't favor any side, and is preferred by bankers and accountants. In particular, the fractional 5 is evenly rounded up or down by perfectly half case.

How to require terms & agreement

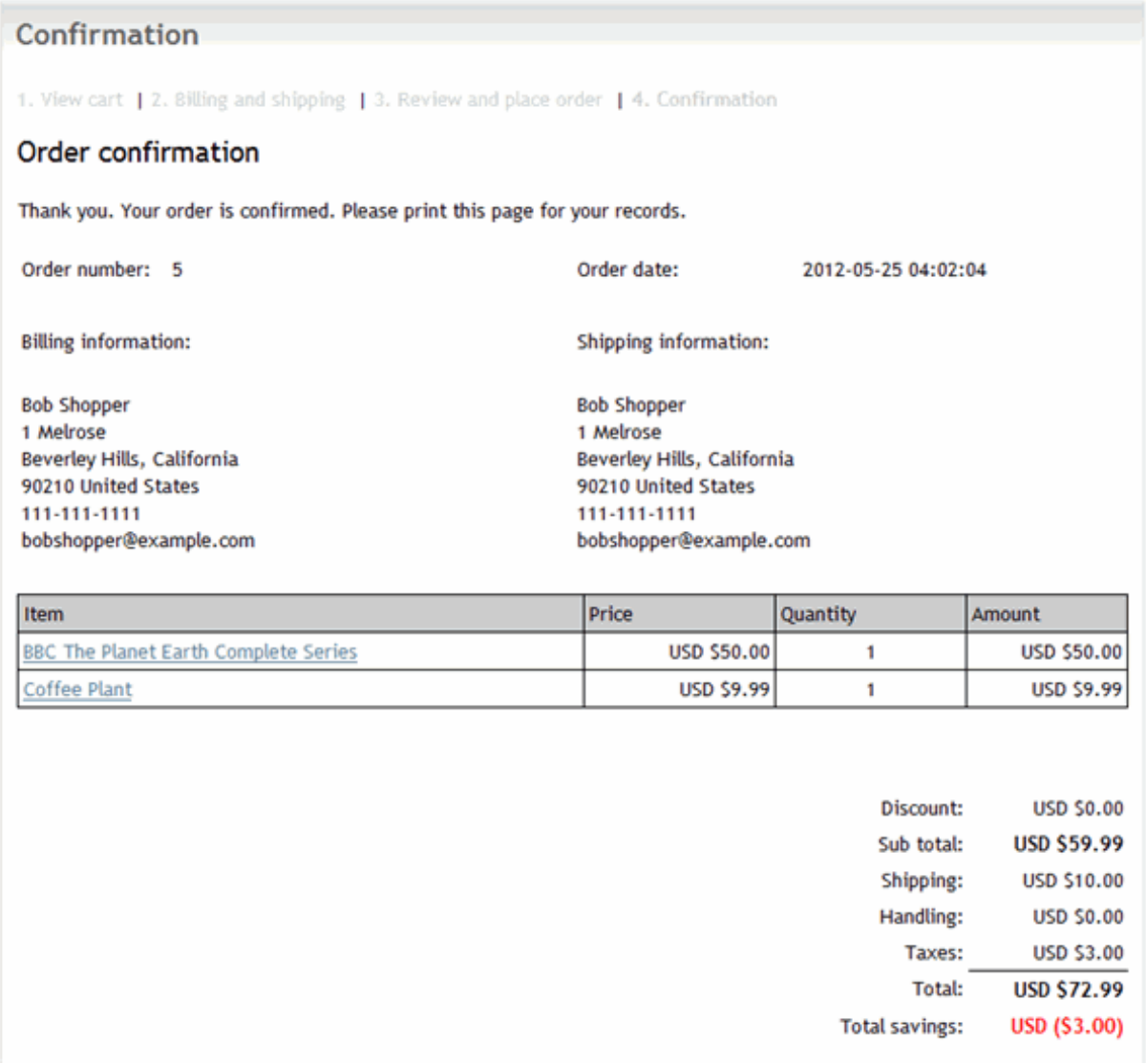
If you want your customers to agree to your terms and conditions before they complete checkout, you can easily add a checkbox to your checkout page by following the steps below:

1. You must first enable the **Checkout** feature under **Configuration > General**.
2. From your Storefront admin's **Configuration > Checkout** menu, select the Custom field tab.
3. Choose "Basic" for the dynamic form dropdown.
4. Click **Add new**.
5. In the Field type, select "CheckBox".
6. Give the ID a name like "AgreementCheckBox" without spaces.
7. Give the Label a title like "I agree to the terms and conditions:".
8. Check the Required checkbox.
9. In the Validator text, enter an error text like "You must agree to proceed."
10. Click **OK**.
11. Click **Save**.

If you want complete customization over the look and feel of the checkbox and text, you can use the "Custom code" instead of the "Basic". From there, you can select the "Require agreement" template under the **New from Template** menu. This will allow you to edit the full ASP.NET/HTML of how you would like it to appear.

Confirmation

The **RevindexStorefrontConfirmation** module control displays the confirmation after a successful checkout. This module should reside on a SSL secured page visible to all users. To change the look-and-feel using a custom display template, set the **Display template** value from the **Configuration > Confirmation** menu.



Confirmation

1. View cart | 2. Billing and shipping | 3. Review and place order | 4. Confirmation

Order confirmation

Thank you. Your order is confirmed. Please print this page for your records.

Order number: 5

Order date: 2012-05-25 04:02:04

Billing information:

Bob Shopper
1 Melrose
Beverley Hills, California
90210 United States
111-111-1111
bobshopper@example.com

Shipping information:

Bob Shopper
1 Melrose
Beverley Hills, California
90210 United States
111-111-1111
bobshopper@example.com

Item	Price	Quantity	Amount
BBC The Planet Earth Complete Series	USD $50.00	1	USD $50.00
Coffee Plant	USD $9.99	1	USD $9.99

Discount:	USD $0.00
Sub total:	USD $59.99
Shipping:	USD $10.00
Handling:	USD $0.00
Taxes:	USD $3.00
Total:	USD $72.99
Total savings:	USD ($3.00)

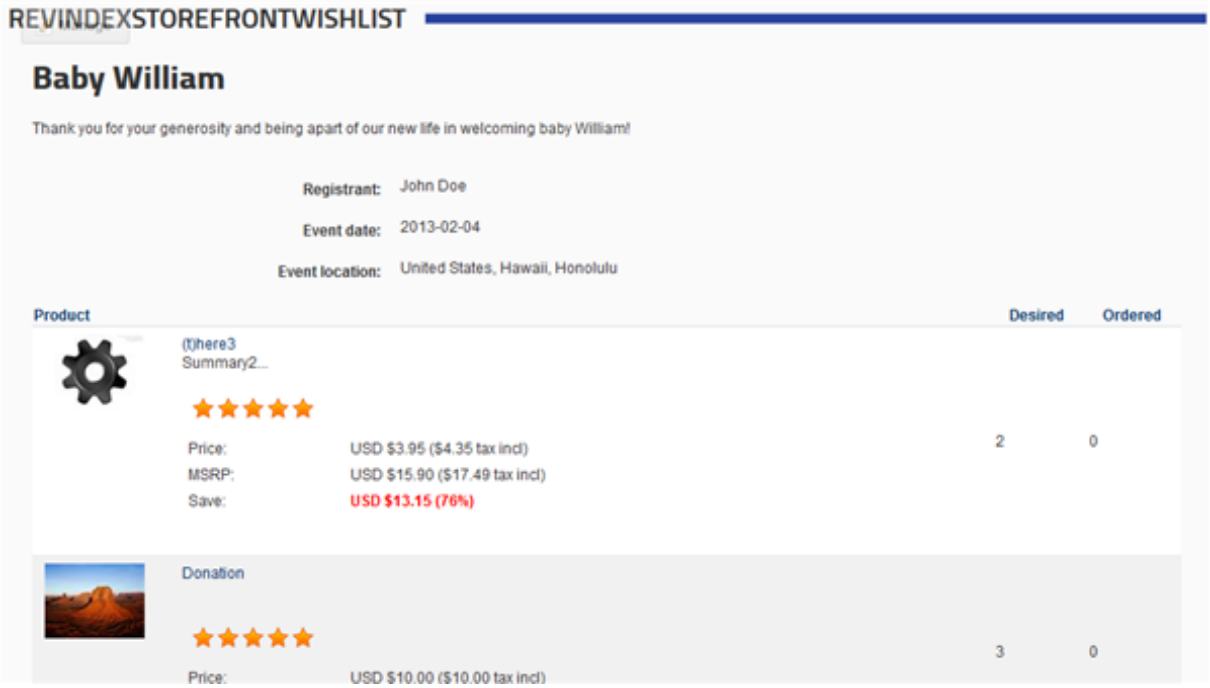
Wish List

A wish list allows customers to bookmark products that they are interested to buy in a future time. For example, customers can create a “Christmas” wish list to keep track of products that they would consider buying at the year end.
A gift registry is simply a more advanced form of wish list and allows you to input an event date, location, etc. For example, a wedding registry would usually include the names of the bride and groom, wedding date and location. For the purpose of this documentation, we shall simply refer to both of them simply as "wish list".

The **RevindexStorefrontWishList** module control allows customers to search other people's public wish list. This module control is usually placed on a page for all users to view.

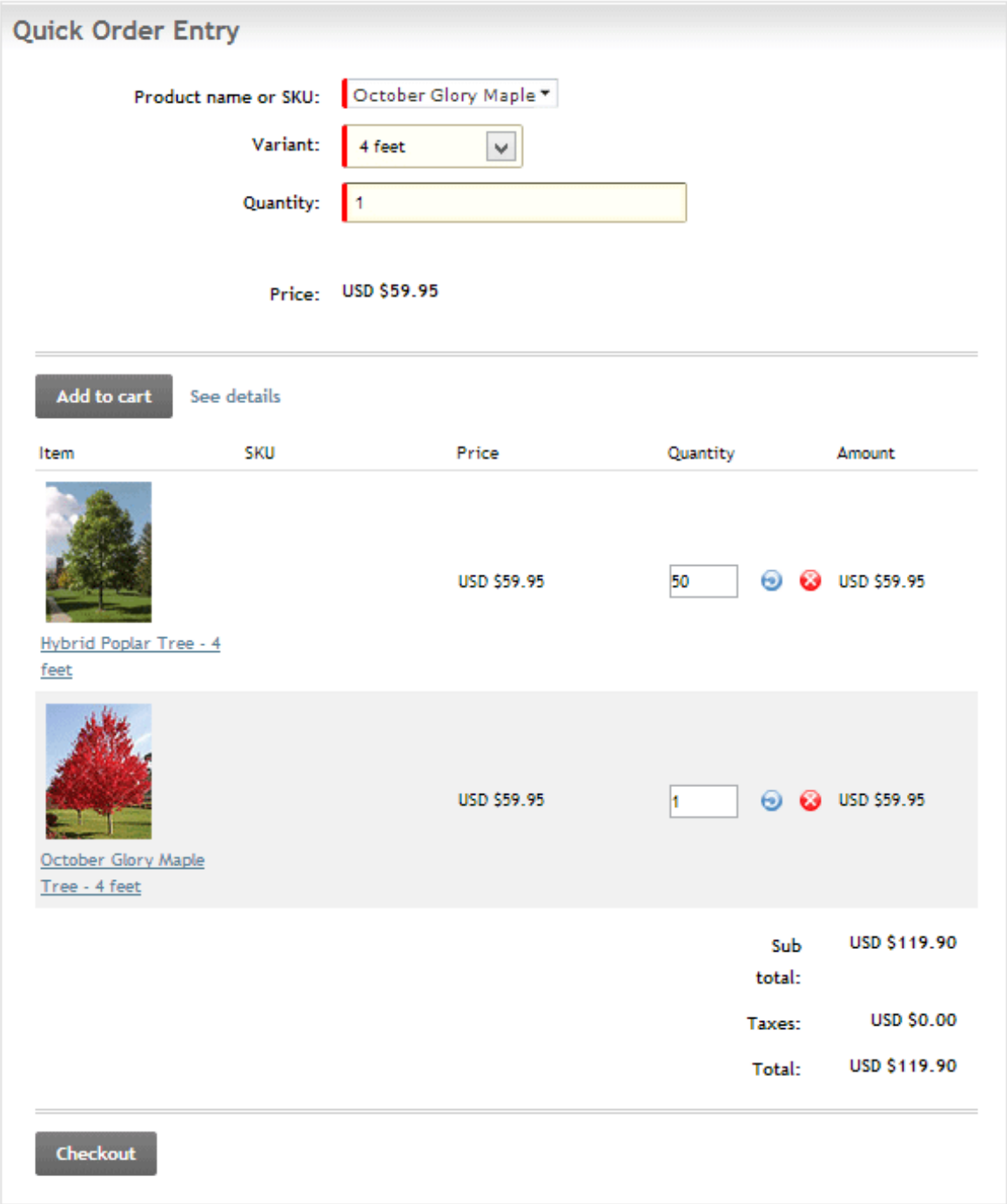
For example, a customer may search for the baby registry to purchase the gifts for his friend. During checkout, the page will automatically be populated with the correct shipping address and the purchase will be associated to the wish list.

Please see Manage Wish List (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/manage-wish-list/rvdwkpvm/section) for more information on managing a wish list.



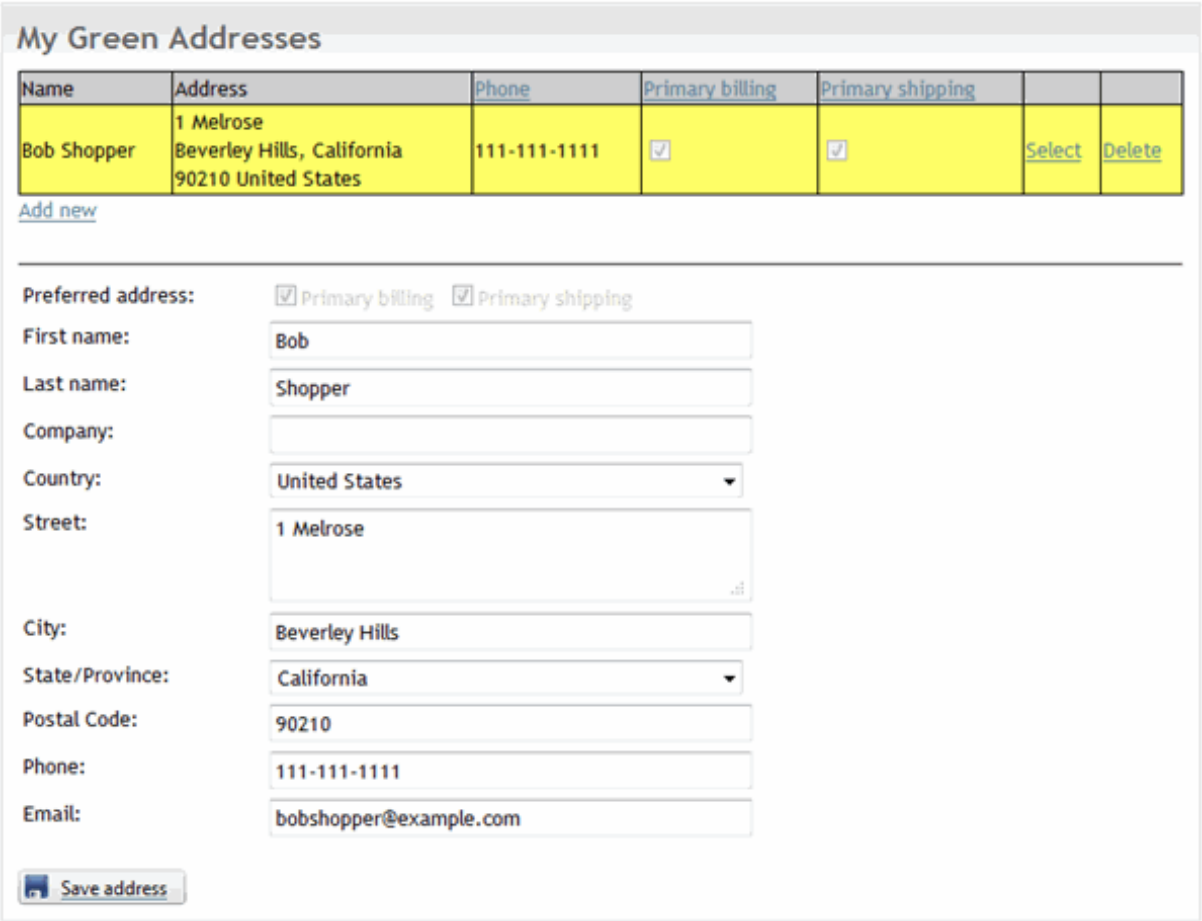
Quick Order

The **RevindexStorefrontQuickOrder** module allows customers to quickly order multiple products by name or SKU. If you sell many products and you have repeat customers that places large orders (e.g. a wholesaler that sells automobile parts or hardware tools) will benefit from being able to place the order for many products in bulk. You can search for products by name or SKU and quickly edit an order to checkout.



Manage Address

The **RevindexStorefrontManageAddress** module control allows customers to save their frequently used addresses for quick fill in other forms. This module should reside on a SSL secured page visible to registered users only (e.g. typically under some “My Account” page).



Manage Product Download

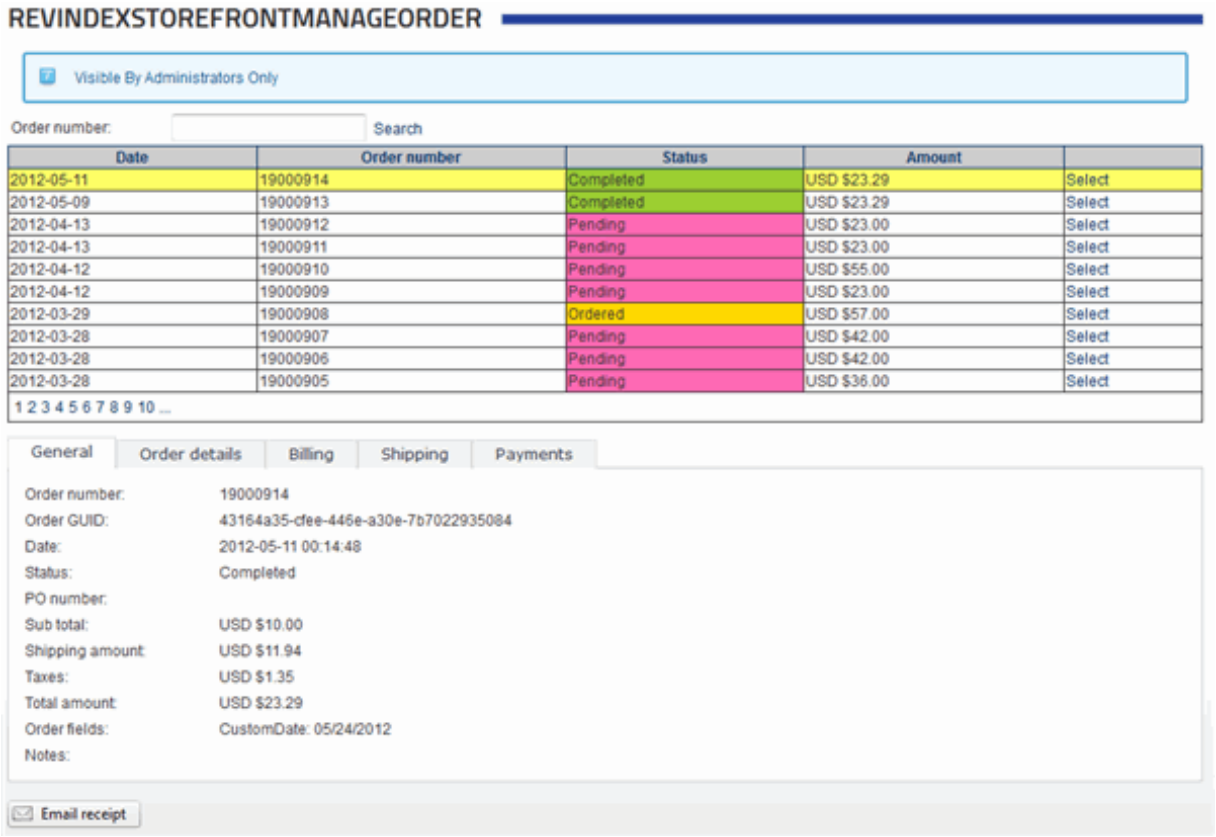
The **RevindexStorefrontManageProductDownload** module control allows customers to download virtual products they purchased (e.g. software, e-book, music, etc.). This module should reside on a SSL secured page visible to registered users only (e.g. typically under some “My Account” page).

As a security measure, the download link for a product will only appear once the order has been marked as “Paid” or "Completed".

Please see Downloadable Products (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/downloadable-products/rvdwkpvm/section) for more information.

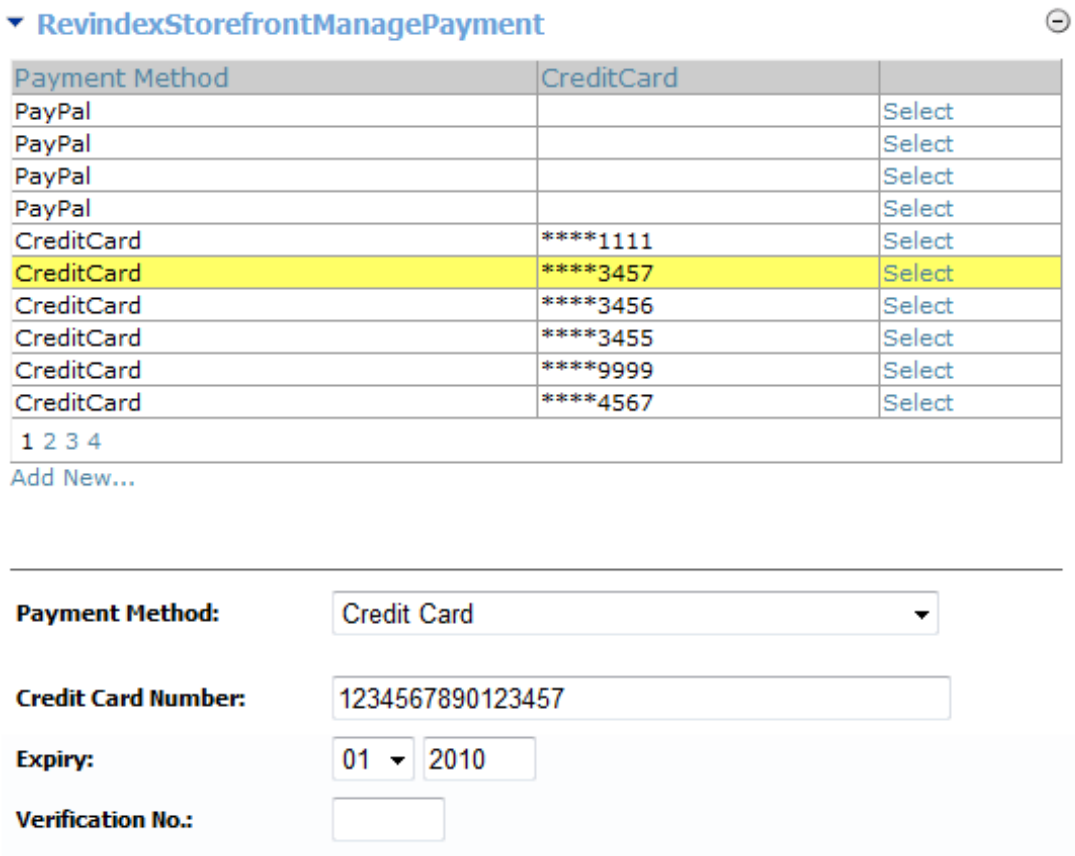
Manage Order

The **RevindexStorefrontManageOrder** module control allows customers to view orders they placed and the status of the order. This module should reside on a SSL secured page visible to registered users only (e.g. typically under some “My Account” page).



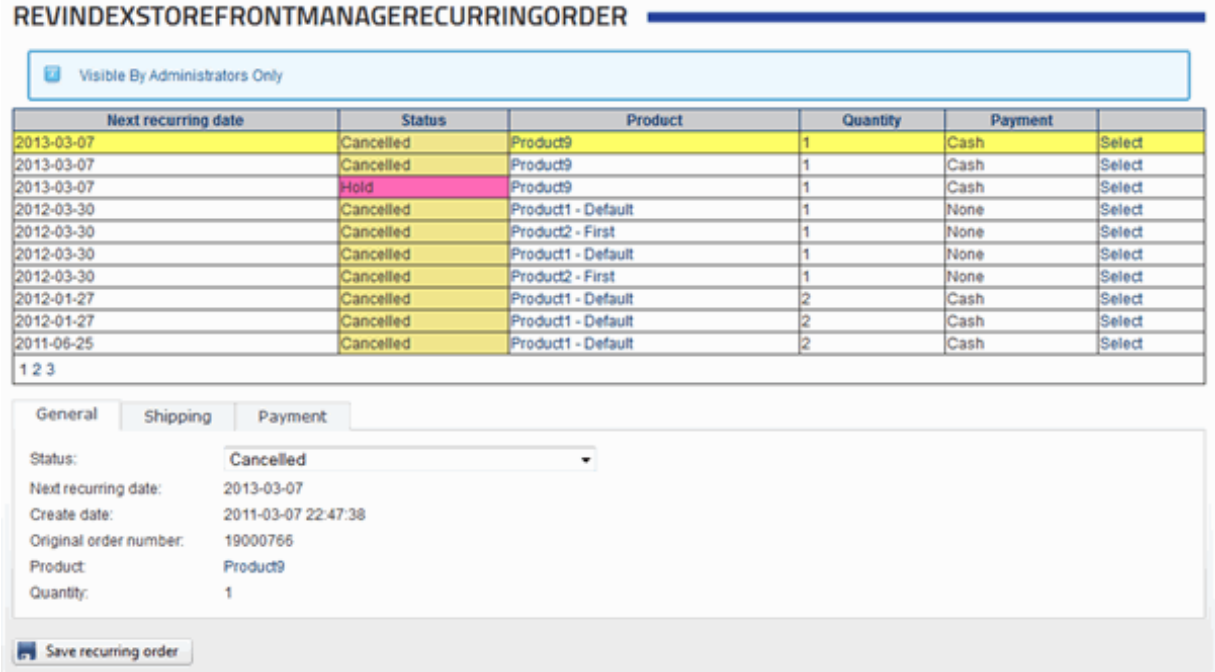
Manage Payment

The **RevindexStorefrontManagePayment** module control allows customers to manage their billing information needed for recurring orders. This module should reside on a SSL secured page visible to registered users only (e.g. typically under some “My Account” page).



Manage Recurring Order

The **RevindexStorefrontManageRecurringOrder** module control allows customers to manage recurring orders they placed. This module should reside on a SSL secured page visible to registered users only (e.g. typically under some “My Account” page).



Please see Subscription Products (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/subscription-products/rvdwkpvm/section) for more information.

Manage Rewards Points

The **RevindexStorefrontManageRewardsPoint** module control allows customers to view their current rewards points balance. This module should reside on a SSL secured page visible to registered users only (e.g. typically under some “My Account” page).

My Rewards Points

Status	Points	Points pending	Expire
Active	1093	0	

Please see Rewards points (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/rewards-points/rvdwkpvm/section) for more information.

Manage Rights

The **RevindexStorefrontManageRight** module control allows customers to view the access rights codes associated with their purchased products (e.g. software, e-book, music, etc.). This module should reside on a SSL secured page visible to registered users only (e.g. typically under some “My Account” page).

As a security measure, the access rights are only issued once the order has been marked as “Paid” or "Completed".

My Rights

Name	Code
Xbox Game License Key	6347384D-25C2-4356-930C-DB974C9F8F6B

Please see Rights (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/catalog-rights/rvdwkpvm/section) for more information.

Manage Vouchers

The **RevindexStorefrontManageVoucher** module control allows customers to view their voucher codes and the remaining balance. This module should reside on a SSL secured page visible to registered users only (e.g. typically under some “My Account” page).

As a security measure, the vouchers are only issued once the order has been marked as “Paid” or "Completed".

My Vouchers

Name	Code	Status	Amount	Valid from	Expire
Demox Gift Card	E2LQX7BI57VEJFNM	Active	USD $25.00		

Please see Vouchers (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/catalog-vouchers/rvdwkpvm/section) for more information.

Manage Wish List

The **RevindexStorefrontManageWishList** module control allows customers to view and manage products added to their wish list or gift registry.

A wish list allows customers to bookmark products that they are interested to buy in a future time. For example, customers can create a “Christmas” wish list to keep track of products that they would consider buying at the year end. A gift registry is simply a more advanced form of wish list and allows you to input an event date, location, etc. For example, a wedding registry would usually include the names of the bride and groom, wedding date and location. For the purpose of this documentation, we shall simply refer to both of them simply as "wish list".

You can create as many wish lists you like. A wish list can optionally be published for other users to see. This allows friends and family to search your wish list to purchase the gifts on your behalf (e.g. purchase a gift for your birthday or your upcoming wedding). Please see Wish List (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/wish-list/rvdwkpvm/section) for more information. You can also email a special link to your selected friends and family that will bring them directly to your wish list without sharing it with everyone.

My Green Wish List

Name	Event date	Type	Published		
Xmas		Other	✓	Select	Delete

Add new

General | Products

WishList ID: 2

Name: Xmas

Type: ○ Baby ○ Birthday ◉ Other ○ Wedding

Registrant first name: Bob

Registrant last name: Shopper

Co-registrant first name:

Co-registrant last name:

Personal message:

Published: ☑

Share link: http://demo.revindex.com/WishList/tabid/96/rvdsfwlguid/1302983543444afdbbdaef7fd61038ff/Default.aspx

Event

Event date: YYYY-MM-DD

Event country: Not applicable

Event state/province: Not applicable

Event city:

Shipping

Use address book:

Multi-seller marketplace

Revindex Storefront can help your business earn more money with little effort. You can turn your amazing store into a full-fledge marketplace that consists of your own products you already sell and new products from 3rd party sellers. For example, you can sell products that will drop ship directly from other vendors. There are literally hundreds of thousands of products from thousands of drop shippers ready to post their products on your site for sale.

Customers are happy to shop at your site with your newly extended catalog and will be able to purchase any combination of your products in a single checkout. Your shop will process the payment and you will in turn distribute the money to your sellers after deducting any commission you take.

Your sellers are happy to have sold their products quickly through your site. They will have access to self-manage their own warehouses, products, inventory and prices on your site so you don't have to do the grunt work. They will receive the same email confirmations as you do when a checkout completes and can view the order information through the same familiar Storefront interface that you use except they can only view information pertinent to them and not information from other sellers or from your side of business. Just as you would optimize your business operations, your sellers can define their own packing, shipping, handling and fulfillment methods to optimize their micro-business operation within your store. They will also be able to define their own tax methods so that their products sold on your site respect their tax jurisdiction since these products originate from their business location or their warehouses (e.g. you operate a store in California, but your seller ships products out from Ohio. You are legally required to collect tax based on Ohio tax rate since the sale of the product falls under the Ohio tax jurisdiction, which is an origin-based tax collection state).

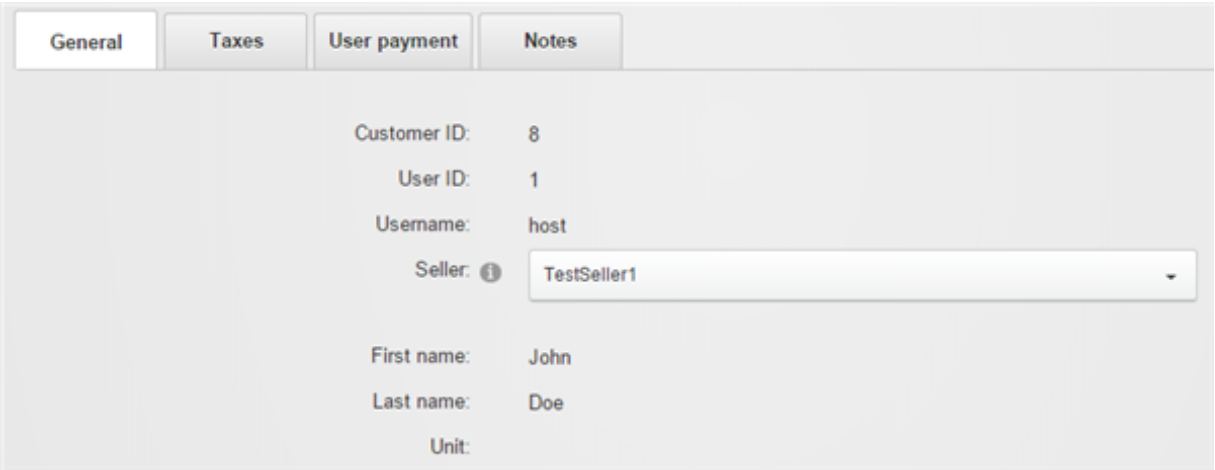
Sellers

A seller (sometimes called a "vendor") is a business entity that will be placing their products for sale on your site. A seller account can be managed by any number of designated users in your system. Given that you can have an unlimited number of sellers and each one of them can create and manage products on your site, you need to be conscious of security to ensure they only have access to information pertinent to them and not be able to view data from other sellers or from your general business.

You must first enable the **Marketplace** feature under **Configuration > General** settings.

You also need to decide on a security role under **Configuration > Security** settings (e.g. create a security role called "Sellers" that will be used to regroup all users who are seller representatives). This role should only be granted to users who will be managing their respective seller accounts and will help you to secure access to important seller information easily later on.

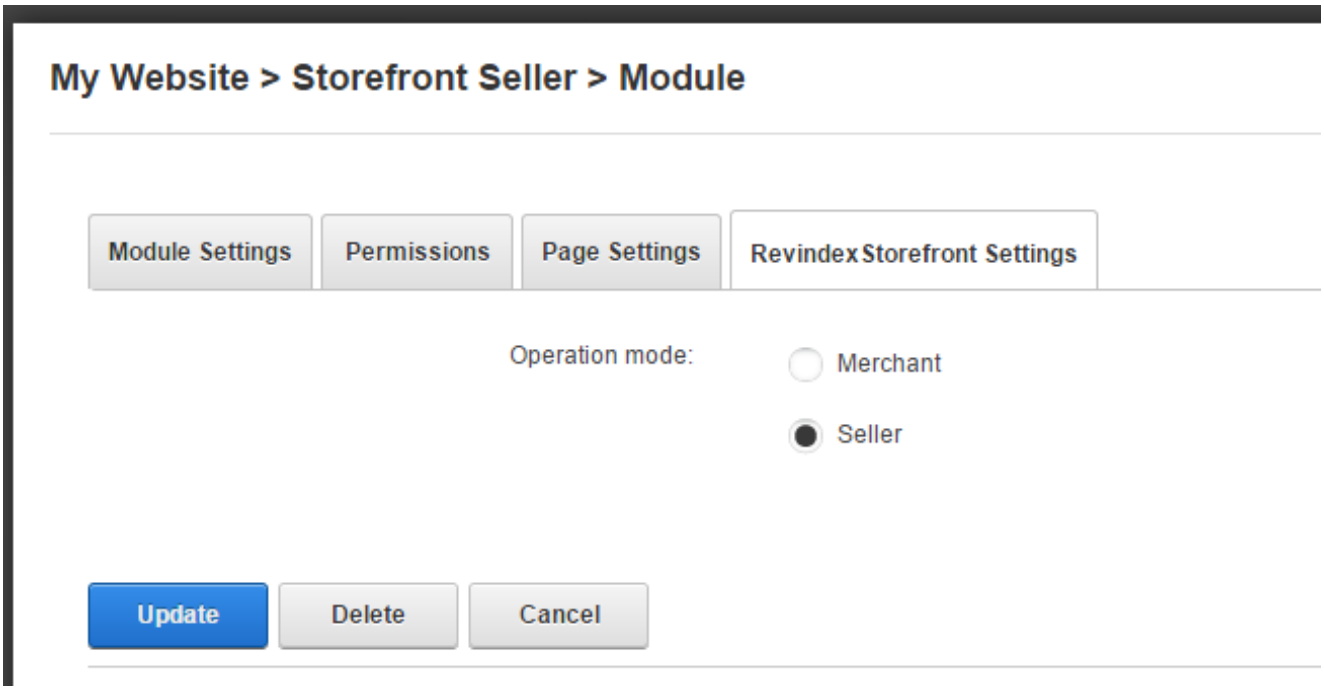
You can add new seller accounts to your system from the **People > Sellers** menu. After adding a new seller, you need to associate one or more registered users who will own and manage this seller account from the **People > Customers** menu.



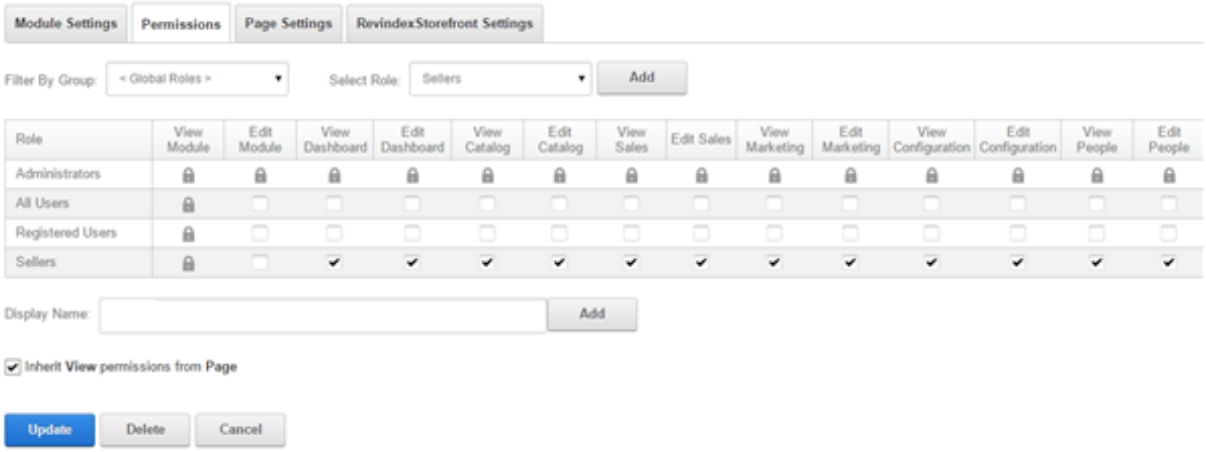
Administration

Each seller is able to self-manage her own warehouses, products, inventory, prices, packing, shipping, handling, fulfillment and tax methods using the same familiar Storefront administrative panel as you use today.

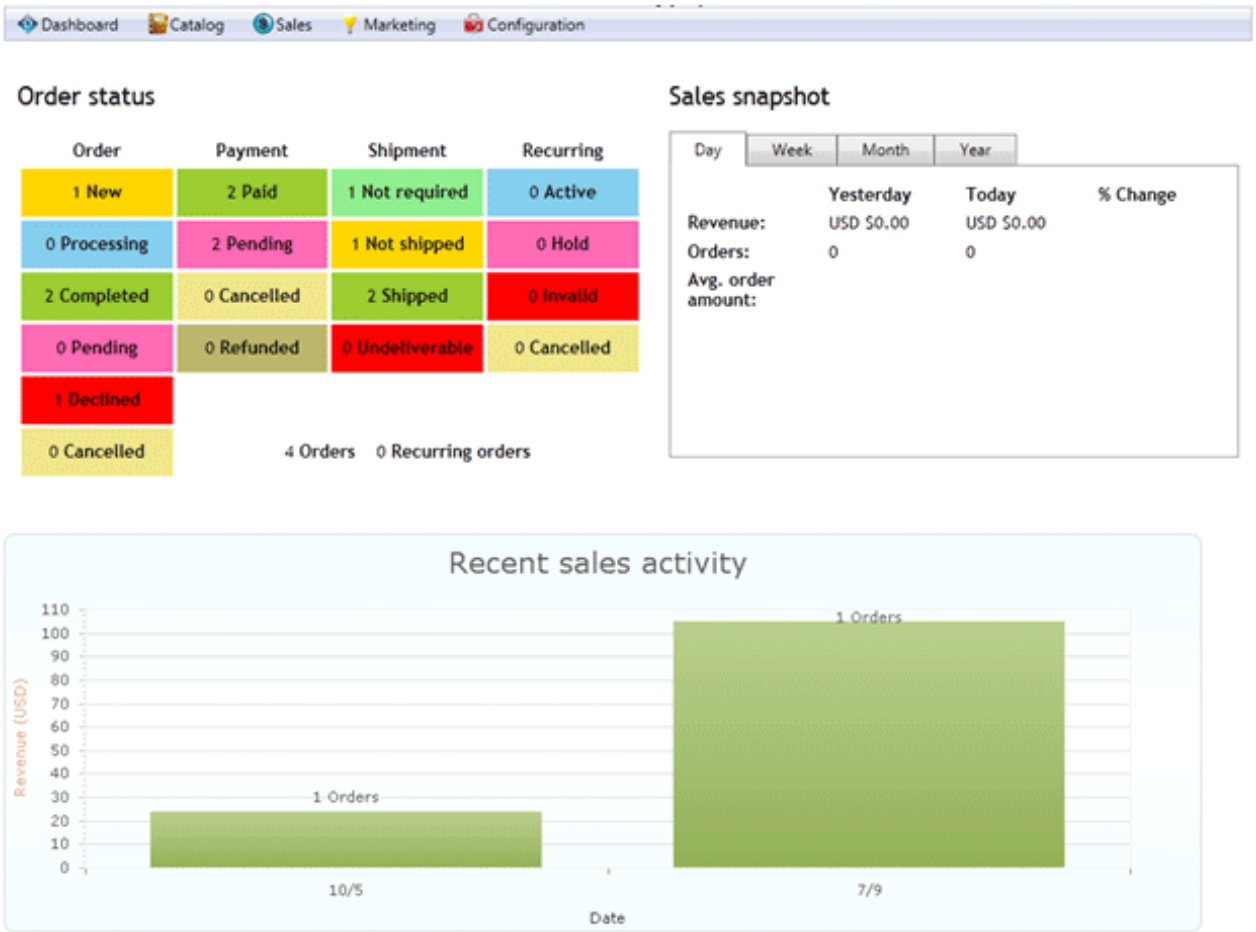
Create a new page (e.g. "My sellers") and grant the view access to the seller role that you defined earlier. Under **Configuration > Installer**, add a new RevindexStorefront module to the newly created page. Set the new module's settings for the **Operation mode** to "Seller".



You also want to grant view and edit access to all or some of the Storefront functionality for users who have your sellers role. For security purposes, sellers can only view data that is pertinent to them and not data from other sellers or from your general business.



When one of the registered users belonging to a seller account logs into that page, they will be presented with a limited view of the Storefront administrative panel allowing them to access information pertinent to their seller account.



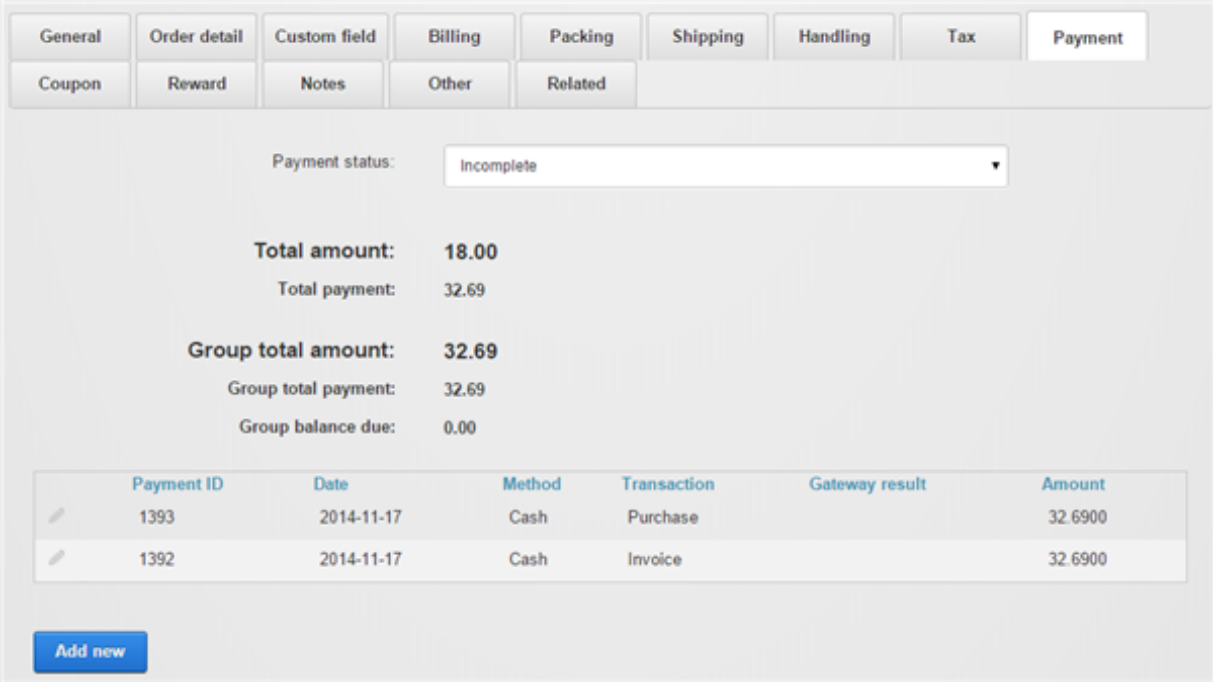
Order splitting

It's important to understand how Revindex Storefront treats orders when several products from different sellers or warehouse origins are being purchased together in a single cart transaction.

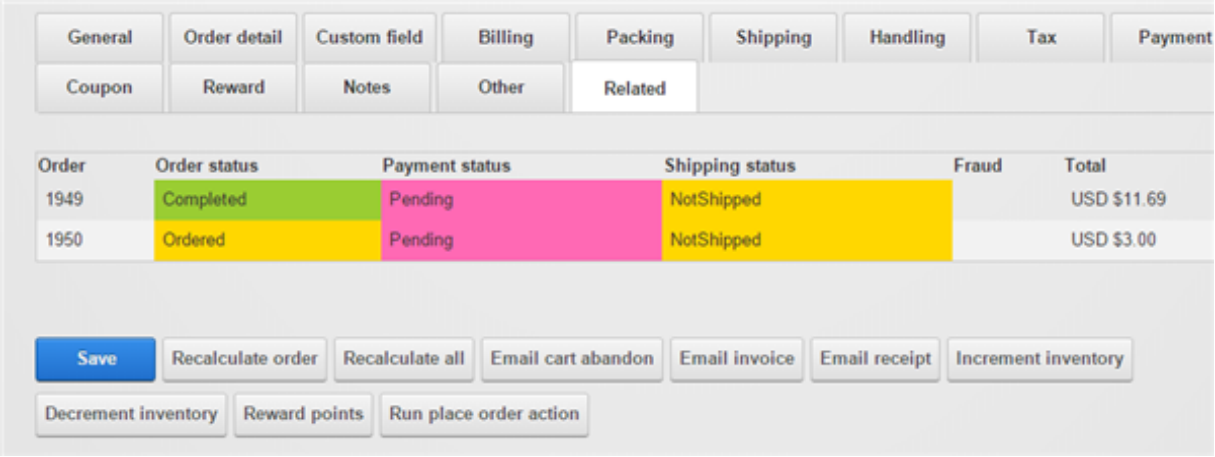
Many shipping and tax providers (Revindex Storefront is Avalara tax certified) expect a single origin address for a sales order used for accurate shipping and tax calculation. However, in reality, every seller and warehouse has a different business address where they will ship out the products from. Therefore, products from different sellers or warehouse purchased together in a single cart transaction are automatically split into separate orders internally for each seller and warehouse. From a usability standpoint, the customer will not notice any difference during checkout and will only make a single payment for all the products in his shopping cart resulting in less cart abandonment.

Aside from the obvious shipping and tax accuracy, the seller benefits from order splitting because the split order now consists only of her products that she needs to focus her attention on for fulfillment. It also provides a layer of privacy so that a seller cannot know what other products are purchased from other sellers on your site and prevents them from marketing to the customer unethically. Any cancellation from one seller will not affect the rest of the orders from other sellers.

Even though the orders are split, the payments are still applied to only a single order since the customer made one lump sum payment for all the products in his cart. Among the split orders, one of the orders is automatically chosen to be a parent order with the remaining orders becoming known as the child orders. Collectively, they belong to the group of orders. Any payment collected is to be made to the parent order. The sum of payments is always considered to apply to the group total amount. In other words, payment made to the parent order is also used to pay for the child orders.



You can view the parent or child orders by looking at the Related tab. It will display all the orders that are related to this order as a group.



Text and languages

There are two kinds of text (static and content localized text) utilized by DNN and the Storefront. Static localized text is available as part of the software and is usually found in form labels such as "First name:" or title headings. Content localized text is text created by the user such as product name and description. For example, "brown shoes" is a content text because you created a product with that name.

International languages

Revindex Storefront supports all languages used by both static and content localization for customer facing pages. For example, your Web site may display products in the default English (United States) language as well as in French (France). When a customer visits your store, the Storefront will automatically detect the customer’s preferred culture and displays the appropriate text and number format in their culture. If the localized content is not available, the Storefront will automatically try the fallback language and finally the system language (e.g. English is displayed if French is not enabled).

Static Localization and Language Packs

Static localization is for non-data driven text such as a button label on a page that doesn't change (e.g. the button "Buy now" is static localized text).

Revindex provides translated text in the form of languages packs for various languages (e.g. Spanish, French, Italian, German, etc.). To install a language pack, log in as Host and add the language under **Admin > Languages** page. Once the language has been added, you can install the language pack under **Host > Extensions** page by following the installation wizard.

If the language pack is not available, you can manually localize static text from the **Admin > Languages** page. Edit the static resources for the Site next to the desired language. Expand the nodes under:

Local Resources
  DesktopModules
    Revindex.Dnn.RevindexStorefront
      App_LocalResources

and under**:**

Local Resources
  DesktopModules
    Revindex.Dnn.RevindexStorefront
      WebUserControls

Repeat for each of the templates where **<_default>** is the standard templates or your portal number if you have created custom display templates. **<ModuleControl>** is one of the module controls and **<StandardX>** is which ever template name you're currently using.

Local Resources
  DesktopModules
    Revindex.Dnn.RevindexStorefront
      Portals
        <_default>
          Display
            <ModuleControl>
              <StandardX>
                App_LocalResources
                Display.ascx

Check out the video tutorial below on how to change static localized text from the DNN Language editor.

You can also quickly edit the resource files (*.resx) in your site folder using Visual Studio or Notepad if you're comfortable editing an XML file.

How to format the currency symbol

Currency symbol is determined by your Web site's selected language (also better known as culture) and the matching currency configured in your Storefront's **Configuration > Currencies** settings.

For example, if your site displays in both in English (U.S) and French (France) languages, and you have configured your Storefront's currency settings to match both languages, the currency symbol displayed will be "USD $" and "EUR €" respectively. If, however, you only enabled English (U.S) in your Storefront's currency settings, the system will automatically fallback to the primary currency.

To format the actual display of the currency, you can do so through the static localization from the site **Admin > Languages** and edit the static localization for your language. Then drill down to the node and look for the **Format.Currency.Text** and **Format.CurrencyTaxInclusive.Text** values.

Local Resources
  DesktopModules
    Revindex.Dnn.RevindexStorefront
      App_LocalResources
        SharedResources

The {0} token is replaced with the currency symbol, the {1:c} token is replaced with the amount and the {2:c} token is replaced with the amount tax included. Depending on how you configured your **Configuration > General** price display settings, it will use one of the two formats.

You can find more information about string formatting here:

http://msdn.microsoft.com/en-us/library/dwhawy9k.aspx (http://msdn.microsoft.com/en-us/library/dwhawy9k.aspx)

How to create your own language pack

You can also create entire install-able language pack for a translation that we don't currently support. The easiest way is to use the free DotNetNuke Translator (http://dnntranslator.codeplex.com) application. It allows you create and edit resource keys quickly from your desktop.

Alternatively, you can also create the language pack manually by following the steps below. Suppose you have a language (e.g. ru-RU for Russian) that we don't have the language pack for it.

1. Download any of the localized language package extract it to a temp folder. Preferably, it should match the version of the software you're installing. In this example, we'll use the French language pack **Revindex.Dnn.RevindexStorefront.LanguagePack.fr-FR.04.01.00.zip** and extract it to the following file path:

   C:\Temp\Revindex.Dnn.RevindexStorefront.LanguagePack.fr-FR.04.01.00

2. Open the **.dnn** text file content and rename all occurences of the original language code to your desired language code. For example, open C:\Temp\Revindex.Dnn.RevindexStorefront.LanguagePack.fr-FR.04.01.00\RevindexStorefront.LanguagePack.fr-FR.dnn with notepad and do a Find/Replace all from "fr-FR" to "ru-RU". Save it.

3. Use the following Powershell command to bulk replace all filenames from French to Russian. Change the command to match your source and destination language codes. Rename the file path, source and destination language codes if it's different from the example.

   ```
   get-childitem  -recurse -include *.resx,*.dnn -path "C:\\Temp\\Revindex.Dnn.RevindexStorefront.LanguagePack.fr-FR.04.01.00" | foreach-object {rename-item -path $_.FullName -newname ($_.Name.Replace("fr-FR", "ru-RU"))}
   ```

4. Open each resource file (.resx) using notepad or preferably using Visual Studio to translate the text to your desired language. You may decide to omit translating older display template resource files if you know you're not using them. If you don't want to translate the text from a text editor now, you may do so later on from DotNetNuke **Admin > Languages page** after installing your new language pack.

5. Zip up the folder so that it looks like the original package. Install it on your DNN and you will now have a new translated language for the Storefront.

How to format page title

By default, the Storefront will append the product name to your page title (e.g. "MySite > Product"). To change the page title format, you can change adjust the static localization from the site **Admin > Languages** and edit the static localization for your language. Then drill down to the node and look for the **Format.PageTitle.Text** values.

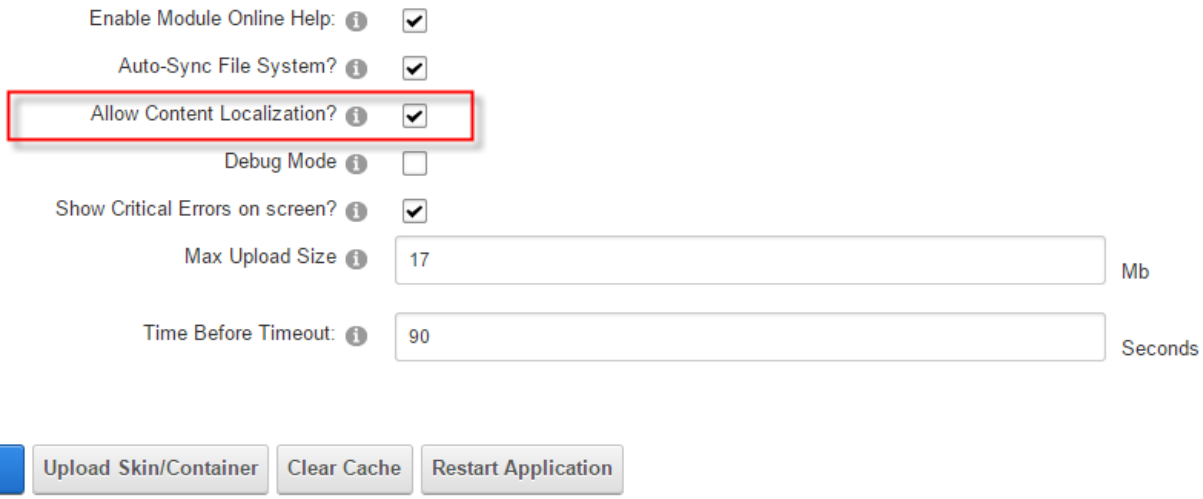
Local Resources
- **DesktopModules**
  - **Revindex.Dnn.RevindexStorefront**
    - **App_LocalResources**
      - **SharedResources**

The {0} token is replaced with the Web site name as defined in your DotNetNuke settings, the {1} token is replaced with the product name.

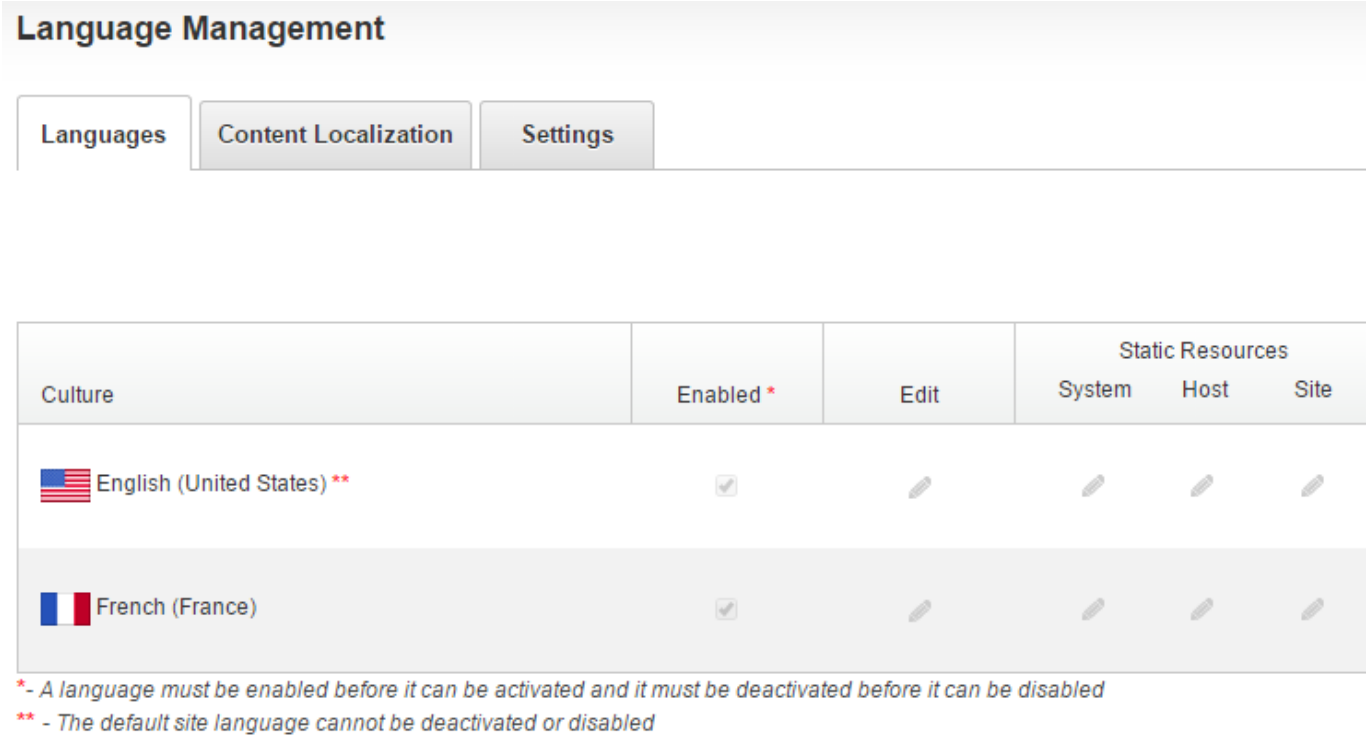
Content Localization

Content localization is for data driven text such as the product name or product description (e.g. “DVD Player” in French is shown as “Lecture DVD”). Revindex Storefront supports content localization for virtually any customer visible data driven text including category names, product attributes, image gallery, alternate text, SEO keywords, etc..

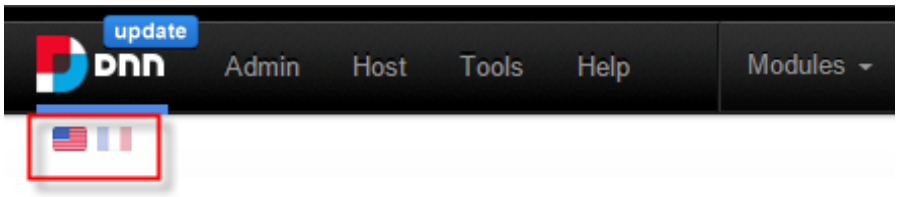
Starting DNN 5.5 and above supports page content localization. You must first enable content localization under **Host > Host Settings** page under the Other Settings tab.



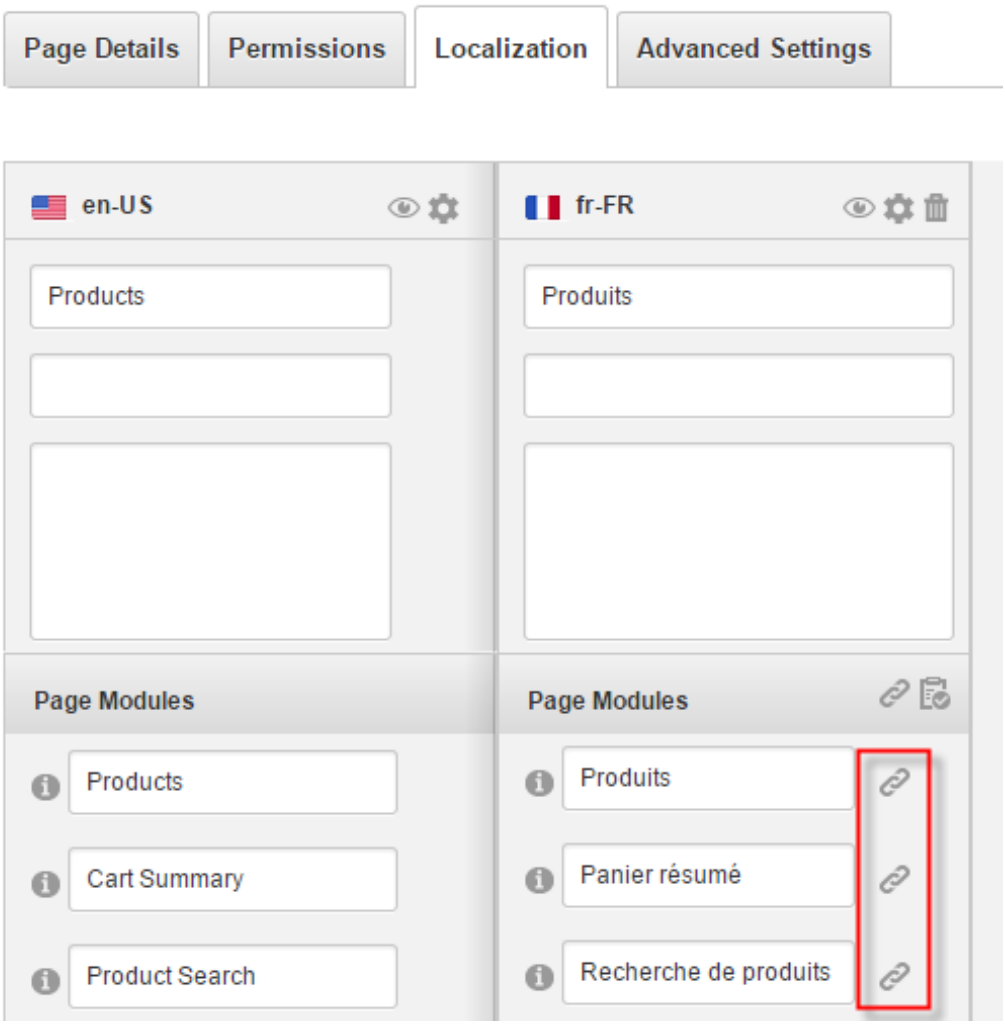
The rest of the language management is performed under the usual **Admin > Languages** page. From there, you can add your new language(s).



Adding a new language will allow you to select the page's language (or country flag) to set the edit mode in the desired language. As you edit any text fields, it will automatically save the text in that selected language.



Internally, DNN implements content localization by making copies of the page along with copies of all the module controls (also known as "detaching" a module) on the page. In practice, it allows the editor to make text changes for different languages since you now have a duplicate page for every language enabled. Since Revindex Storefront handles its own internal content localization, there is no need to duplicate the module controls. Therefore, you need to configure your page settings to keep all the Revindex Storefront modules in "attached" mode (i.e. not "detached"). From that same page settings, you can now localize the text for each of the enabled languages.


Page Details
Permissions
Localization
Advanced Settings
en-US
Products
Page Modules
Products
Cart Summary
Product Search
fr-FR
Produits
Page Modules
Produits
Panier résumé
Recherche de produits

How to localize XSL email template

Customer can receive email receipts in their preferred language and currency in the same way they would expect when shopping at your Web site. Email templates can be localized in the same way as any text fields.

To localize the email templates, simply select the desired country flag from your page and translate the email templates in the **Configuration > Communication** menu. If you don't provide a translation, the customer will receive the fallback email template.

To format numbers in your culture, you may want to modify how numbers are being grouped and how decimals are being displayed (e.g. in French, a decimal point uses a comma). The decimal-format instruction tells the system how to handle number formatting.

```
<xsl:decimal-format decimal-separator="." grouping-separator="," />
```

Design and Styling

When it comes to designing and creativity, you have full HTML control to completely modify the look-and-feel of all the public module controls (e.g. product detail, list, cart, checkout, etc.). You can even go as far as modify and in certain cases rearrange ASP.NET controls and their properties to affect the control behaviors and layouts.

Revindex also sells amazing looking DNN skins that are optimized for the Storefront. You may prefer to purchase a ready-made skin to get a nice look and feel of the site for a quick and cost-effective implementation.

Display Templates

All the Revindex Storefront module controls use the native DNN container skins so you have a consistent look across your Web site that you can modify from your normal **Admin > Skins** page. The user interface design and CSS styles follow the DNN UX Guide (http://uxguide.dotnetnuke.com/) best practices closely so that it can be modified easily in a consistent manner across your site. In addition, the content and internal look-and-feel of public facing module controls can be customized per portal.

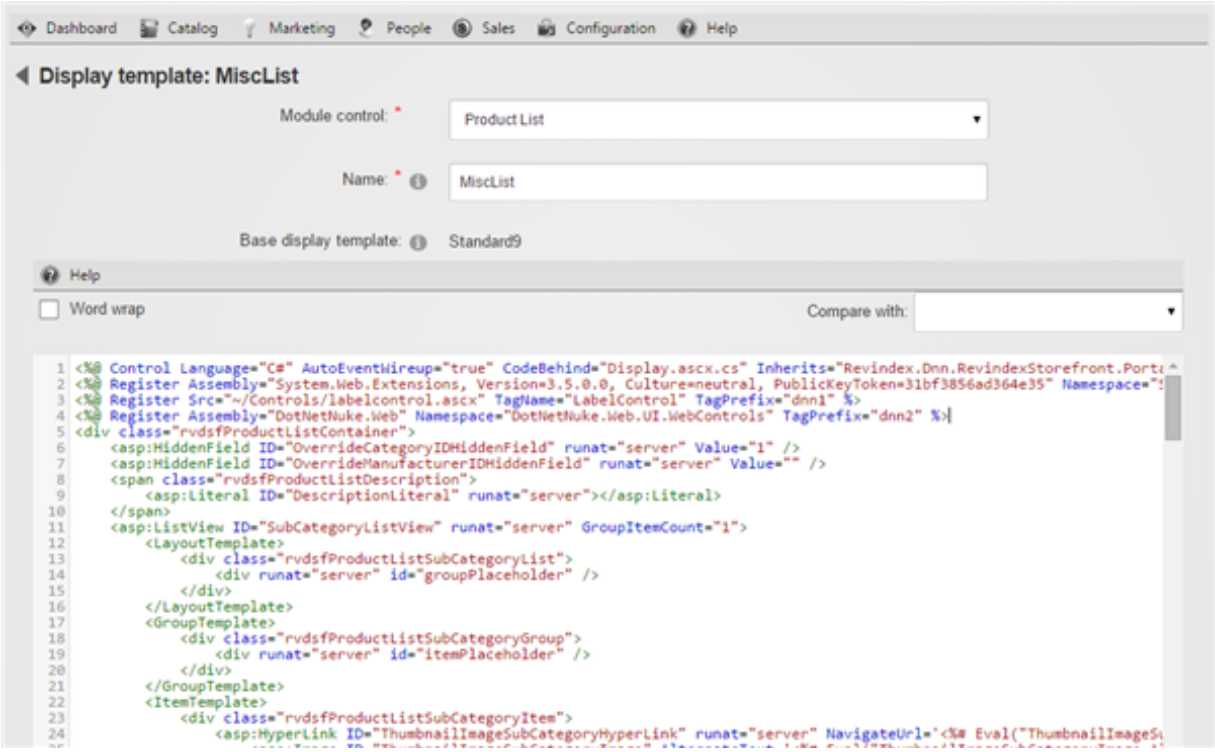
You must first enable the **Display templates** feature under **Configuration > General**. Once enabled, you can create display templates from the **Configuration > Display templates** menu. For example, you can customize the **Product Detail** module to change the layout, color, font, CSS style, add text and images.

You can delete unwanted HTML elements but never delete any server-side ASP.NET elements as these controls are needed by the application to run. Instead, you can use CSS style “display:none” or “visibility:hidden” to hide elements.

```
<asp:Label ID="SavingsValueLabel" runat="server" style="display:none" />
<div style="visibility:hidden" />

```

Start by choosing the module you wish to customize and click **Add new**. Give it a meaningful name (e.g. “FeaturedList1”). You now need to choose a **Base display template** as a starting point (e.g. "Standard5". The higher the version number, the newer the base template with more features.). The base template you selected provides the programming logic for your new template. Make the HTML, ASP.NET or Javascript changes needed to your new template. For security to prevent unauthorized access to data, you cannot modify any server-side code unless it is explicitly allowed by your Host user under **Configuration > Security** settings. Server-side code is usually any code that is in between <% %> tags. Once saved, your new custom template is now ready to be used.



For example, if you created a new custom template for the **Product Detail** module, you can change the default template portal-wide under **Display template** in the **Configuration > Product detail** menu. Please note you must first enable the **Product detail** feature under **Configuration > General** to access this functionality. You could also change the default template module-wide under the module's **Settings**. Alternatively, you can configure your individual product to use this new custom template in place of any of the portal or module default template.

As the software evolves, new features introduced in base display templates carry a different version number (e.g. "Standard1", "Standard2", "Standard3") providing an upgrade path for users who are not ready to upgrade their custom template. Base display templates older than 1 or 2 years become obsolete and will be removed from future versions eventually. Custom display templates based on these removed templates will no longer function. You are, therefore, encouraged to continuously upgrade any custom templates to use the latest base display templates as they become available to avoid disruption to your site.

Always start by making small incremental changes, save and view your changes you just made. Once you get comfortable, go back, repeat and make more changes. It's also a good practice to write HTML comments next to your line edits so you remember what changed.

```
<!-- This is a comment ignored by the browser... Changed layout to show a darker color -->
<div style="background-color:darkred">
```

Make use of 3rd party tool such as WinMerge (http://winmerge.org/) to find line differences to help upgrade your custom templates. If you want syntax highlighting, you may prefer to copy the code into a local file and edit it using the free Microsoft Visual Web Developer Express or Visual Studio.

How to upgrade display templates

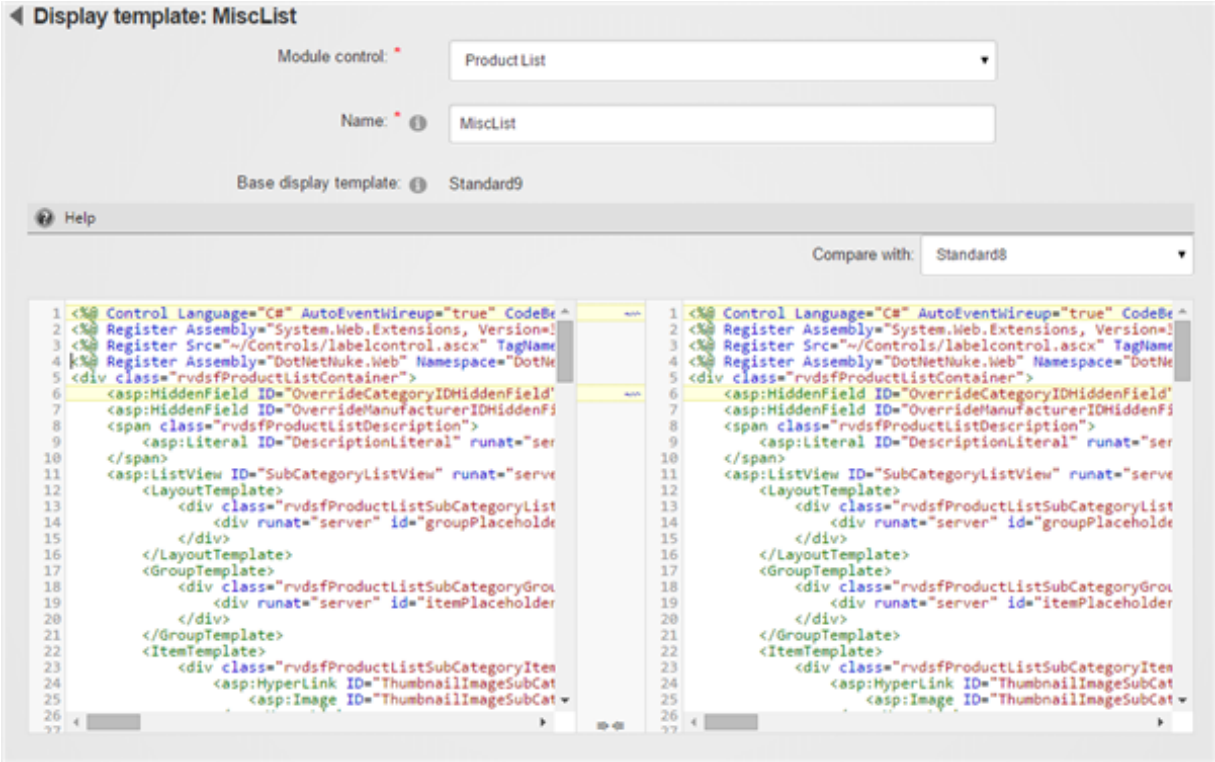
As time passes with new each new release of the software, older base display templates (e.g. "Standard1", "Standard2", etc.) may be removed from newer installation. Therefore, any custom display templates referencing the older base display templates may no longer work. You will receive an error message if you try to use them.

The Storefront comes with a basic online code merge editor to help compare line differences. You may want to employ a 3rd party merge editor like WinMerge (http://winmerge.org/) if you're more comfortable merging from a desktop application instead of performing the merge online.

There are several ways you can upgrade your display template (merge changes into a new template or merge changes to an existing template). We recommend to merge changes to a new display template as it is the safest approach and allows you to incrementally test your new template before overwriting your old display template.

Merge changes to a new display template

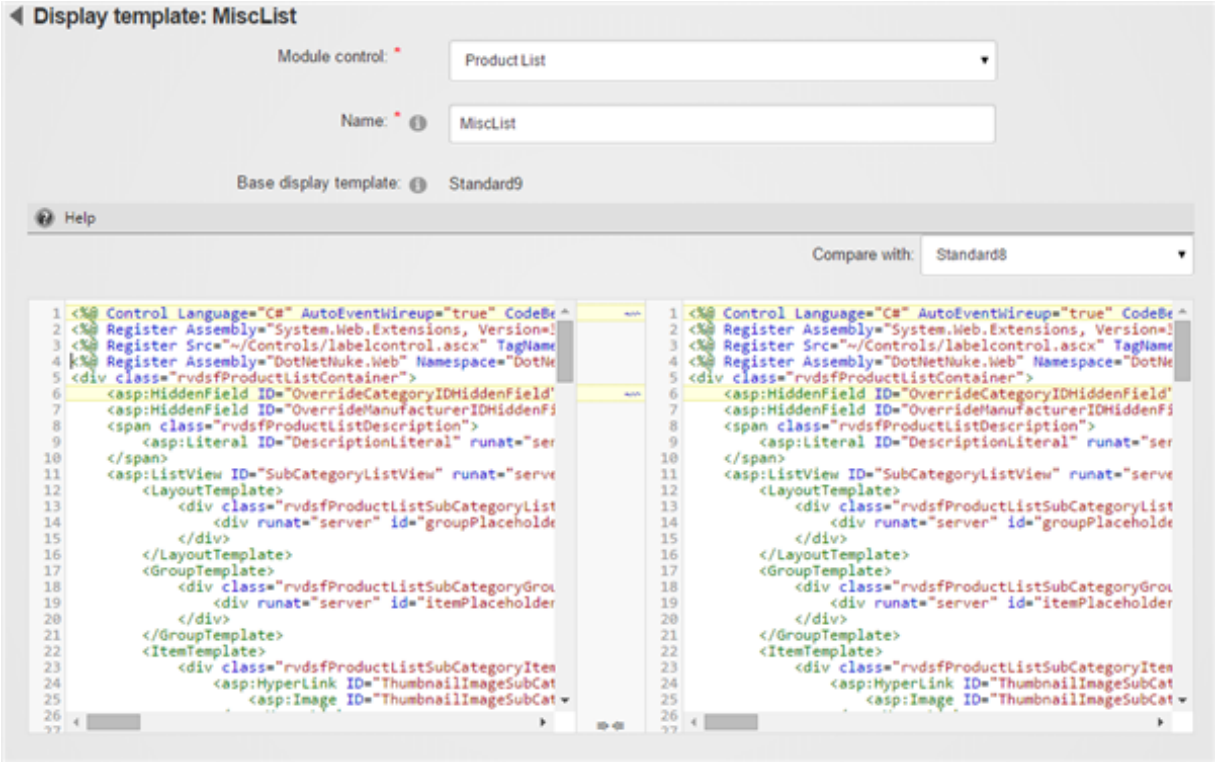
1. Navigate to the **Configuration > Display templates** menu.
2. Create new custom display template of the same module control type that you want to upgrade.
3. Give it a name (e.g. "CustomTemplate2") and make sure you select the latest base display template with the highest suffix number (e.g. "Standard8").
4. In the **Compare with** drop down, choose your old custom display template that you want to upgrade from (e.g. "CustomTemplate1"). The left textarea should now show your new display template and the right textarea should show your old custom display template.



5. Look for your line changes and click on the left wiggly arrows to merge only the lines that you want to affect into the new display template (right to left). Merging code requires careful attention to details. Failure to understand what each line does may break the structure of the code. In this case, you're looking for code changes you made to the old display template and your goal is to replicate those changes into the new display template.
6. Save your new display template.
7. Go to your configuration settings to set the respective module control to use your new custom display template.
8. Once everything is tested. You can now delete the old custom display template.

Merge changes to an existing display template

1. Navigate to the **Configuration > Display templates** menu.
2. Select your custom display template (e.g. "CustomTemplate1") that you want to upgrade.
3. In the **Compare with** drop down, choose the newest display template with the highest suffix number (e.g. "Standard8"). The left textarea should now show your custom display template and the right textarea should show the new base display template.



4. Look for your line changes and click on the left wiggly arrows to merge the lines from the base display template into your current display template (right to left). Merging code requires careful attention to details. Failure to understand what each line does may break the structure of the code. In this case, your goal is to preserve the code changes you made in the custom display template and merge in the new code structure from the new base display template.

5. Save your custom display template and perform test.

How to style buttons

Running the latest Revindex Storefront, styling buttons is as easy as styling any element on the page. The best approach is to locate the relevant CSS class and override the styles (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-override-css-styles/rvdwkpvm/section) from your portal stylesheet under **Admin > Site settings** page.

By default, the buttons automatically apply the same styles as the rest of the buttons on your site achieving a consistent look-and-feel across all your pages. Revindex Storefront makes it easy for you to override the look-and-feel of a single button or all the same buttons (e.g. "Add to cart" buttons). The easiest way is to use the developer tool on your browser (typically by pressing F12 or CTRL+SHIFT+I on your browser). The developer tool allows you to select the button and inspect the CSS class name being applied.

As an example, let's try to style the "Add to cart" button.

1. Browse to your product list page.
2. From your IE or Chrome browser, press F12 to launch the developer tool.
3. With the selector tool (usually an arrow or magnifying glass icon), click on the "Add to cart" button. The developer tool will pinpoint the corresponding HTML that is responsible for rendering the button.

```

<a id="dnn_ctr427_ViewRevindexStorefrontProductDetail_ctl00_AddToCartLinkButton" title="Add to cart" class="dnnPrimaryAction rvdsfAddToCartAction" href='javascript:WebForm_DoPostBackWithOptions(new WebForm_PostBackOptions("dnn$ctr427$ViewRevindexStorefrontProductDetail$ctl00$AddToCartLinkButton", "", true, "ProductDetailDisplayTemplateControl", "", false, true))'>Add to cart</a>

```

4. Note the CSS class responsible for the styling the button is called "dnnPrimaryAction rvdsfAddToCartAction".
5. Suppose we like to change the background color of the button to green and add an image icon next to the text. We can override the default style of your skin from the stylesheet under **Admin > Site settings** page by pasting the following CSS rule below. The URL of the icon should be relative to where you store your images. Depending on your skin being used, you may need to adjust the margin and padding to align the text. This rule will change all the "Add to cart" buttons on your site.

```
a.dnnPrimaryAction.rvdsfAddToCartAction
{
    background-color: green;
    background-image: url(/Icons/Sigma/Add_16x16_Standard.png);
    background-position: 5px center;
    background-repeat: no-repeat;
    margin-left: 10px;
    padding-left: 25px;
    vertical-align: middle;
}
```

Styling Telerik controls

Many of the Storefront controls utilize the Telerik controls and are officially supported by DNN (any control you see that has the **Dnn<Control>** prefix are all RadControls from Telerik such as "DnnCalendar"). To style the Telerik controls, you have several options:

1. Either create a custom display template and edit the HTML/ASP.NET properties of the controls to change the button styles. Here's some demo and property reference online at Telerik (you'll also find examples for other Telerik controls on that same page on the left menu):

http://demos.telerik.com/aspnet-ajax/... (http://demos.telerik.com/aspnet-ajax/button/examples/overview/defaultcs.aspx)

http://www.telerik.com/help/aspnet-aj... (http://www.telerik.com/help/aspnet-ajax/button_overview.html)

2. You can make use of the Telerik style builder site (http://stylebuilder.telerik.com/New.aspx). Give the Skin name "Default" and select any Base skin. Then select the control you want to adjust and click **Create**. Edit the styles and click **Save**. Download the CSS package and extract it to open up the included CSS file. Copy and paste the entire CSS styles to the bottom of your portal CSS file under **Admin > Site Settings** page.

3. The other way is to modify/include CSS as part of your skin templates under the WebControlSkin folder for each control type. You can follow the example of standard DNN skin (_default or MinimalEntropy) that already includes some WebControlSkin CSS if you look under your Web site folder:

\Portals_default\Skins_default\WebControlSkin

Follow the CSS reference on the Telerik web site:

http://www.telerik.com/help/aspnet-aj... (http://www.telerik.com/help/aspnet-ajax/button_appearancecssfileselectors.html)

4. If you simply what to modify it to follow a theme, you can also try to use certain standard skins that are included with Telerik controls by setting the **Skin="xxx"** property on the Dnn<Control> tag. Not every skin is included but the common ones should work. For example:

<dnn2:DnnRadButton ... Skin="Simple" ...

You can see the examples here by clicking on the top right button to switch skin or see the reference:

http://demos.telerik.com/aspnet-ajax/... (http://demos.telerik.com/aspnet-ajax/button/examples/default/defaultcs.aspx)

http://www.telerik.com/help/aspnet-aj... (http://www.telerik.com/help/aspnet-ajax/button-appearance-skins.html)

Understanding CSS Precedence

If you're styling the Web page or controls using CSS, it's important to understand DotNetNuke CSS precedence. There are many CSS files loaded on a page and the order they get loaded affects the final appearance on the page. Below shows the order and sequence that CSS files get loaded onto your page.

1. **/DesktopModule/<ModuleName>/Module.css**
   The module CSS gets loaded onto the page first if you have modules on the page.

2. **/Portals/_default/Default.css**
   This is the default CSS that comes included with DotNetNuke.

3. **/Portals/<PortalID or _default>/Skins/<SkinName>/Skin.css**
   Your site's skin also includes a CSS file.

4. **/Portals/<PortalID or _default>/Skins/<SkinName>/<SkinName>.css**
   Your site's skin may also includes a CSS file.

5. **/Portals/<PortalID or _default>/Containers/<ContainerName>/Container.css**
   Your site's container includes a CSS file.

6. **/Portals/<PortalID or _default>/Containers/<ContainerName>/<ContainerName>.css**
   Your site's container includes a CSS file.

7. **/Portals/<PortalID>/Portal.css**
   Your portal's CSS file gets downloaded last, which also means it overrides all other CSS files for the same rule.

8. **Inline styles**
   Lastly, any CSS inline styles will always override any CSS rules in the files.

Knowing how the precedence works, if you need to override a CSS rule, the easiest way is to copy or write the new rules in the Portal.css file if you don't have access to the skin packages.

How to override CSS styles

You'll find the CSS styles used in Revindex Storefront follows closely to the DNN UX (http://uxguide.dotnetnuke.com/) standard therefore making it very easy to style module elements simply by overriding the style rules in your portal CSS. Please see the video tutorial below on how to override styles from your portal CSS.

Page action

You can add a product to wish list, cart or checkout immediately by triggering an action over URL using the following query string name value pair on any page where the **RevindexStorefrontProductDetail** module control is hosted. This is useful if, for example, you need to create a hyperlink that immediately sends the customer to checkout.

> Tell search bots not to index this link by adding the rel="nofollow" attribute to your anchor.

Name	Value	Required	Description
rvdspact	1	Yes	Perform “Add to Cart” action.
	2	Yes	Perform “Buy Now” action.
	3	Yes	Perform “Add to wish list” action.
rvdsfpvqty	A valid quantity value	No	The product quantity to add. If not specified, the default quantity for the product will be used.
rvdsfpid	A valid product ID	Yes	The ProductID of the product.
rvdsfpvid	A valid product variant ID	No	The ProductVariantID of the product variant to add. If not specified, the default product variant will be triggered by the action.
rvdsfdfr	Dynamic form result for custom fields. Agree=true&Name=John	No	The dynamic form result is a set of values used to populate the custom fields for a product or variant. Individual set of values should be delimited using the querystring format and escaped as needed.
rvdsfppartids	List of ProductPartID 13|89|56	No	List of ProductPartID separated by the pipe "|" delimiter used to indicate the product parts participating in a bundled product.
rvdsfppartsels	True/false (1/0) to indicate which respective product part is selected.	No	List of boolean values separated by the pipe "|" delimiter to indicate which participating product part is selected in a bundled product. To use the default

	1|0|1		selection, leave the value empty for that respective product part.
rvdsfppartqtys	The quantity number for the respective product part. 1||2	No	List of integers separated by the pipe "|"delimited to indicate the quantity set for the participating product part in a bundled product. To use a default quantity, leave the value empty for that respective product part.
returnurl	Any URL	No	Redirect user back to the specified URL after adding a product to cart or to a wish list. You can use this parameter to add multiple products by chaining the different URLs together.
rvdsfrcart	1	No	Reset shopping cart to empty before adding product to cart.

Examples

Below are several examples you may find helpful.

1. To add a single product to cart with a quantity of 1:

```
http://a.com/product/tabid/138/rvdsfpid/product-1/rvdspact/1/rvdsfpvqty/1/default.aspx
```

2. To reset the cart before adding a single product with a quantity of 2:

```
http://a.com/product/tabid/138/rvdsfpid/product-1/rvdspact/1/rvdsfpvqty/2/rvdsfrcart/1/default.aspx
```

3. To add a single specific variant with a quantity of 5:

```
http://a.com/product/tabid/138/rvdsfpid/product-1/rvdspact/1/rvdsfpvqty/5/rvdsfpvid/3/default.aspx
```

4. You can also pass the parameters using normal querystring if your site is not configured with friendly URL:

```
http://a.com/default.aspx?tabid=138&rvdsfpid=1&rvdspact=1&rvdsfpvqty=1&rvdsfpvid=3
```

5. To add a single product and populate the custom fields (dynamic form), you need to pass the name & value pairs through the **rvdsfdfr** parameter. Suppose you created 2 custom fields for your product with the IDs "MyPrice" and "MyDesc".

   You start by crafting your custom fields parameters as if it's a querystring:

```
MyPrice=10.00&MyDesc=Hello
```

   Then you encode it (http://www.revindex.com/Resources/Tools/URLEncoderDecoder.aspx) and append it to the **rvdsfdfr** parameter so you end up with a URL like this:

```
http://a.com/default.aspx?tabid=138&rvdsfpid=1&rvdspact=1&rvdsfpvqty=1&rvdsfpvid=3&rvdsfdfr=MyPrice%3D10.00%26MyDesc%3DHello
```

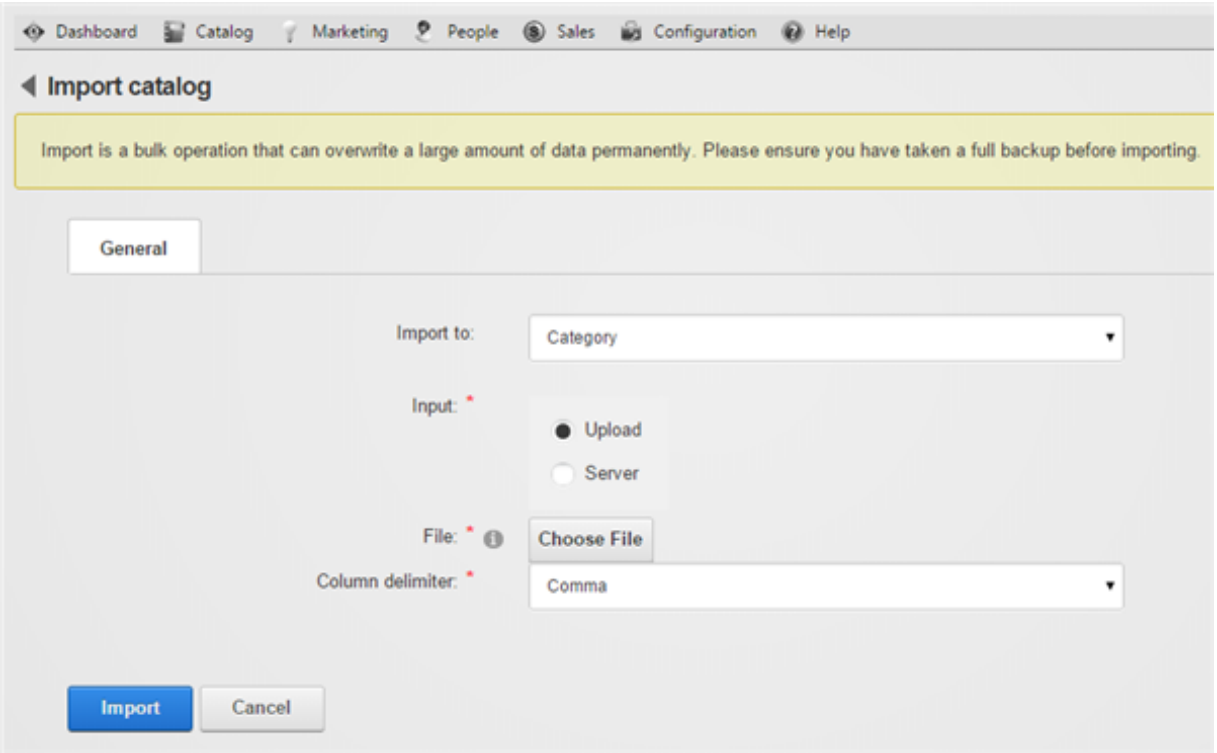
6. To add multiple products, you can chain a new URL using the **returnurl** parameter. You can chain as many URLs as you like (up to the limitation of your browser, usually 2000 characters). You must remember to encode the URL

(http://www.revindex.com/Resources/Tools/URLEncoderDecoder.aspx) that you're chaining to so that any special characters don't conflict. If you're chaining multiple URLs, you need encode over the previously encoded URL (even if it's already encoded).

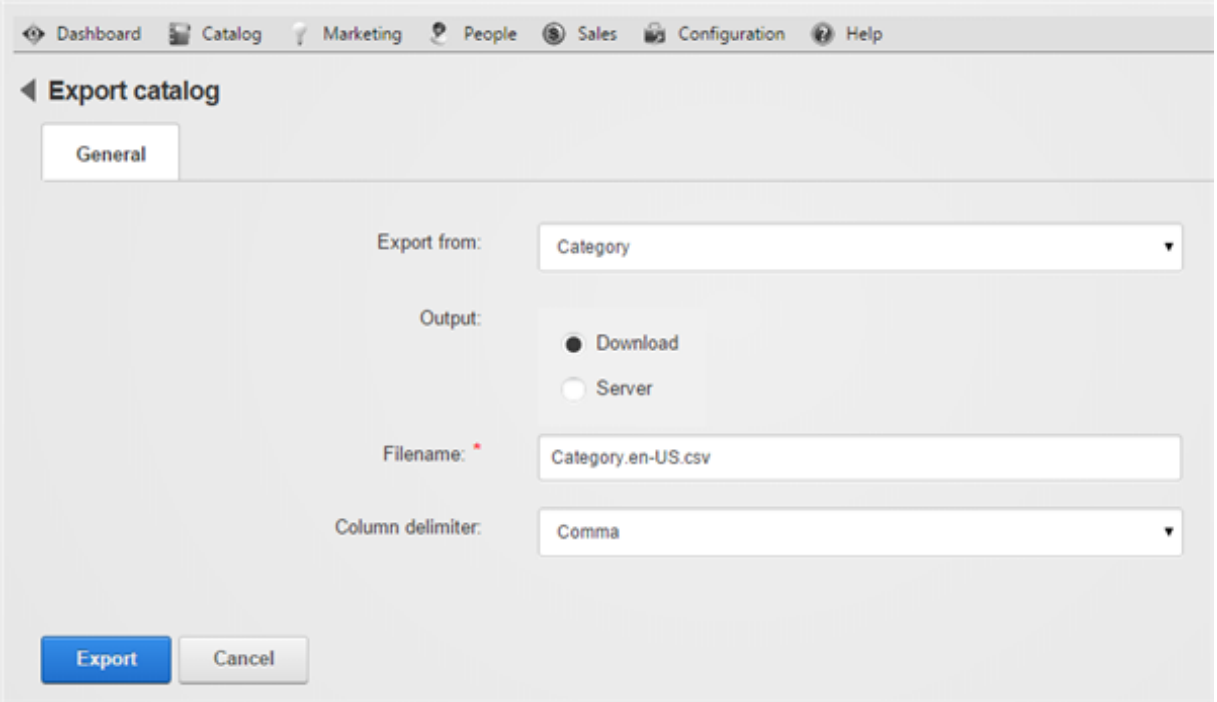
```
 http://a.com/default.aspx?tabid=138&rvdsfpid=1&rvdspact=1&rvdsfpvqty=1&rvdsfpvid=3&returnurl=http%3A%2F%2Fa.com%2Fdefault.aspx%3Ftabid%3D138%26rvdsfpid%3D2%26rvdspact%3D1%26rvdsfpvqty%3D1
```

Import and Export

The Storefront has a powerful import and export capability allowing you to bulk create almost every type of catalog and sales objects (category, manufacturer, product, variant, voucher, etc.).



You can even export out data to a friendly CSV file that you can then edit using Excel or Notepad and import back into the Storefront to perform bulk updates or deletes.



Category.en-US (1).csv - Microsoft Excel

	A	B	C	D	E	F	G	H	I	J	K	
1	Act	CategoryID	CategoryKey	CreateDate	Availabilit	Description	DisplayOrder	DisplayTemplate	Extension	MetaDescription	MetaKeywords	Name
2	u	1	ff969e40-0e2f-49e6-9d2	10/3/2009 9:49		Some text here...	1					Arts
3	u	2	f00c0150-bb76-4c1e-a62	10/3/2009 9:49		This release is a ...	0			bla	Bla	Business

Overview

The import procedure accepts delimited data files (CSV delimited using either a comma, pipe, tab or semicolon). The first row must contain the header row with the column names. The actual column ordering may vary. Even if a column is not a required field, the column must still be present in the CSV file. It’s recommended to enclose all column data in double quotes (e.g. "Apple iPad" or "149.99") to escape any delimiter characters present in the text.

CSV files are processed row by row from top to bottom. For new insertions, if you have any parent child dependency, you should ensure the parent's row appears before the child's row. The row sequence is not needed for updates or deletes. For example, the "Laptop" category has a parent category called "Computers". If you're inserting both categories at once, the "Computers" row should appear before the "Laptop" row. Similarly, you cannot insert product variants if the product does not yet exist since product variant has a dependency on the product.

Action

The actual type of operation performed by the import routine depends on the action specified in the **Act** column (Insert, Update, Delete). In your CSV file, you can have a few rows that insert, followed by other rows that update or delete as long as those actions are allowed by that entity type. See each entity type for the available actions.

Columns

Most of the columns map directly to the same fields you find the Storefront admin interface. Therefore, it's good idea to start by creating a few sample entries in your Storefront to understand how the data is being used and export out the file to see what the actual data looks like.

When inserting new data, you can leave the database object identifier blank (e.g. ProductID) as it will be automatically generated by your database. However, when you perform an update or delete action, you need to make sure the database object identifier is specified. When deleting, only the database object identifier is required. Therefore, in order to obtain the database object identifier, you must have exported out the data first before performing an update or delete action. It is good practice to always export and use the latest data before updating because the data may have changed by another user from the Storefront adminstration page or automatically changed by the system (e.g. the product variant inventory count may have decreased from customer purchases).

Object keys are available for many entities such as category, product, manufacturer, etc. that you can use in place of object identifiers to reference related objects by their unique key rather than with the database generated object identifier. For example, you can name your product key "apple-ipad" to make it easier to recall when you need import product categories rather than referencing by its identifier number "831". To display the object keys in the merchant interface, you must first enable the **Show object key** feature under **Configuration > General**.

Language Localization

If your site operates in multiple languages, the data exported out or being imported into depends on the currently viewed page language. For example, if you're browsing your site in English (United States), any localizable string value in the CSV file will be treated in the en-US locale. If you later switch over to French (France), any localizable string value in the CSV file will be treated in the fr-FR locale.

Validating Errors

During import, when possible, the Storefront will perform a series of validation row by row and will automatically rollback the entire data changes if any incorrect data is detected to protect the integrity of your system. Even with the automatic validation and transaction rollback, we still recommend that you perform a complete backup of your system before performing any import.

Limitations

Please note that Web applications are limited by network, CPU and allowed memory consumption. When importing large amount of data, it is recommended to run multiple smaller imports (e.g. import 10,000 records at a time instead of 100,000 records at once).

Microsoft Excel

In most cases, you can simply double click the CSV file you exported to open it in Excel for editing. Please note, however, that Excel by default will attempt to convert numbers into its own native format. This may present a problem for fields like SKU that is normally a text field. For example, if your SKU values consist of only long numbers such as "12231231243", Excel will convert it to a number format and it will end up showing on your screen as "1.22E+10". The proper way to open a CSV file is to start with a blank Excel spreadsheet and perform a data import.

1. Open a new blank spreadsheet.
2. Under the Excel's Data tab, click on the **From Text** button
3. Select your CSV file to import
4. Choose **Delimited** file type and **Start Import at row = 1** and click **Next**.
5. Select **Comma** as your delimiters and **Text qualifier = "** (double-quote) and click **Next**.
6. Click **Finish** on the next screen.
7. Place the imported data on your first cell.

Data Types

The import/export uses the following data type convention in order to correctly return and consume the import file.

Data Type	Description	Valid Values
Boolean	A logical boolean.	"True" or "False" (without the quotes)
Byte	A Base64 encoded string of the byte array data.	YTM0NZomIzI2OTsmIzM0NTueYQ==
DateTime	A valid date with time component.	2001-01-01T12:00:00
Decimal	A numeric value that can contain a decimal point (x.xx)	12.49
Double	A numeric value that can contain decimal point (x.xx)	3289.3243
GUID	Globally unique identifier.	4F43B5CD-6817-4a64-9B32-640076F2A3A6
Integer	A 32-bit numeric value without decimals.	12345
Long	A 64-bit numeric value without decimals.	432432483244
String	Any text value.	"Hello world" (without the quotes)
XML	XML data.	Any valid XML data.
XML Code	XML data containing a "code" element with a "version" and "type" attribute. The enclosed value is the actual formula.	<code version="1.0" type="aspnetmarkup">...</code>
XML Locale	XML element named "locale" with any number of culture codes as attributes to hold the localized string.	<locale en-US="Hello" fr-FR="Bonjour" />
XML Rule	XML data containing a "rule" element with a "version" and "type" attribute. The enclosed value	<rule version="1.0" type="xslt">... </rule>

	is the actual formula.	

Entities

The Storefront supports importing and exporting most of the catalog entities and some sales order entities allowing you to bulk insert, update and delete data to many aspects of your store quickly and easily. Please note certain entities cannot perform update actions, but can achieve similar results using delete, followed by a new insert action.

Category

To import/export categories, go to **Catalog > Categories** from the Storefront module menu. Click on the **Import** or **Export** link. All columns must still be present in the CSV file even if a column is not a required data field.

Column	Type	Data required	Description	Example
Act	String	Yes	Type of import action to perform (Insert = i, Update = u, Delete = d)	u
CategoryID	Integer	Yes/No	Database object identifier. This value must be specified when performing an update. Only this value is required when performing a delete action.	12
CategoryKey	String	Yes/No	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID. If you don't specify a value, the system will generate a unique key for you. This value must be specified when performing an update action.	business-finance
AvailabilityRule	XML Rule	No	The rule to describe the conditions when the category can be shown.	
CreateDate	DateTime	No		
Description	String	No	Category description.	Buy the latest books
DisplayOrder	Integer	Yes	Sort display order from smallest to largest number.	1000

DisplayTemplate	String	No	Custom display template name.	Custom12
Extension	XML	No	Extra data in XML string.	<data> <misc>True</misc> </data>
MetaDescription	String	No	Meta description.	Popular books, magazines
MetaKeywords	String	No	Meta keywords.	Books, magazines
Name	String	Yes	Category name.	Books
PageTitle	String	No	Page title.	Popular books
ParentCategoryID	Integer	No	For sub-category, reference to a parent object by its CategoryID. If you specify ParentCategoryID, the ParentCategoryKey will be ignored.	10
ParentCategoryKey	String	No	For sub-category, reference to a parent object by its CategoryKey instead of its CategoryID. If you specify ParentCategoryID, the ParentCategoryKey will be ignored.	business
Published	Boolean	Yes	Enable display of the category.	True
UrlName	String	No	Name to appear in URL for SEO purposes.	Popular books
UpdateDate	DateTime	No		

Distributor

To import/export distributors, go to **Catalog > Distributors** from the Storefront module menu. Click on the **Import** or **Export** link. All columns must still be present in the CSV file even if a column is not a required data field.

Column	Type	Data required	Description	Example
Act	String	Yes	Type of import action to perform (Insert = i, Update = u, Delete = d)	u
DistributorID	Integer	Yes/No	Database object identifier. This value must be specified when performing an update. Only this value is required when performing a delete action.	12
DistributorKey	String	Yes/No	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID. If you don't specify a value, the system will generate a unique key for you. This value must be specified when performing an update action.	allied
CreateDate	DateTime	No		
Description	String	No	Short description.	
DisplayOrder	Integer	Yes	Sort display order from smallest to largest number.	1000
DisplayTemplate	String	No	Custom display template name.	Custom12
Email	String	No		
Extension	XML	No	Extra data in XML string.	<data> <misc>True</misc> </data>

MetaDescription	String	No	Meta description.	Popular books, magazines
MetaKeywords	String	No	Meta keywords.	Books, magazines
Name	String	Yes	Distributor name.	Allied
PageTitle	String	No	Page title.	
Phone	String	No		
Published	Boolean	Yes	Enable display of the category.	True
UpdateDate	DateTime	No		

Gallery

To import/export gallery images, go to **Catalog > Products** from the Storefront module menu. Click on the **Import** or **Export** link. Then select "Gallery". You must first upload the physical image files to a temporary staging folder under your portal root before starting the import procedure. After running the import, you can remove the image files you had uploaded to the temporary folder. All columns must still be present in the CSV file even if a column is not a required data field.

Column	**Type**	**Data required**	**Description**	**Example**
Act	String	Yes	Type of import action to perform (Insert = i, Delete = d)	i
GalleryID	Integer	Yes/No	Database object identifier. Only this value is required when performing a delete action.	9
AlternateText	String	No	SEO alternate text for the image.	Popular mechanics.
CategoryID	Integer	Yes/No	Associate this gallery to the Category object by its CategoryID. If you specify the CategoryID, the CategoryKey will be ignored.	
CategoryKey	String	Yes/No	Associate this gallery to the Category object by its CategoryKey. If you specify the CategoryID, the CategoryKey will be ignored.	
CreateDate	DateTime	No		
DisplayOrder	Integer	Yes	Gallery sort order from smallest to largest number.	1000
Format	Integer	Yes	Detailed = 1, Display = 2, Thumbnail = 3	2

ProductID	Integer	Yes/No	Associate this gallery to a product by its ProductID. If you specify ProductID, the ProductKey will be ignored.	1
ProductKey	String	Yes/No	Associate this gallery to a product by its ProductKey. If you specify ProductID, the ProductKey will be ignored.	
ProductVariantID	Integer	Yes/No	Associate this gallery to a product variant by its ProductVariantID. If you specify ProductVariantID, the ProductVariantKey will be ignored.	1
ProductVariantKey	String	Yes/No	Associate this gallery to a product variant by its ProductVariantKey. If you specify ProductVariantID, the ProductVariantKey will be ignored.	
StageFile	String	Yes	The file path of the image is relative to the portal root.	Temp\1.jpg
UpdateDate	DateTime	No		

Manufacturer

To import/export manufacturer, go to **Catalog > Manufacturers** from the Storefront module menu. Click on the **Import** or **Export** link. All columns must still be present in the CSV file even if a column is not a required data field.

Column	Type	Data required	Description	Example
Act	String	Yes	Type of import action to perform (Insert = i, Update = u, Delete = d)	u
ManufacturerID	Integer	Yes/No	Database object identifier. This value must be specified when performing an update. Only this value is required when performing a delete action.	12
ManufacturerKey	String	Yes/No	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID. If you don't specify a value, the system will generate a unique key for you. This value must be specified when performing an update action.	toyota
CreateDate	DateTime	No		
Description	String	No	Short description.	
DisplayOrder	Integer	Yes	Sort display order from smallest to largest number.	1000
DisplayTemplate	String	No	Custom display template name.	Custom12
Email	String	No		
Extension	XML	No	Extra data in XML string.	<data> <misc>True</misc> </data>

MetaDescription	String	No	Meta description.	Makes cars and trucks
MetaKeywords	String	No	Meta keywords.	cars, suv, trucks
Name	String	Yes	Manufacturer name.	Toyota
PageTitle	String	No	Page title.	
Phone	String	No		
Published	Boolean	Yes	Enable display of the category.	True
UpdateDate	DateTime	No		

Product

To import/export products, go to **Catalog > Products** from the Storefront module menu. Click on the **Import** or **Export** link. A product consists of at least one or more product variants; therefore, you should also import the product variant after you are done. All columns must still be present in the CSV file even if a column is not a required data field.

Column	**Type**	**Data required**	**Description**	**Example**
Act	String	Yes	Type of import action to perform (Insert = i, Update = u, Delete = d)	u
ProductID	Integer	Yes/No	Database object identifier. This value must be specified when performing an update. Only this value is required when performing a delete action.	12
ProductKey	String	Yes/No	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID. If you don't specify a value, the system will generate a unique key for you. This value must be specified when performing an update action.	apple-ipad
AllowInternetOrder	Boolean	Yes	Allow purchase online.	True
AllowPhoneOrder	Boolean	Yes	Allow phone order.	False
AllowProductReview	Boolean	Yes	Allow customers to post reviews and ratings.	True
AvailabilityRule	XML Rule	No	The rule to describe the conditions when the product can be purchased.	

BuyingGuide	String	No	Buying guide text.	
BuyingGuideName	String	No	Override default name for the buying guide description.	
CreateDate	DateTime	No		
DisplayOrder	Integer	Yes	Product sort order from smallest to largest number.	1000
DisplayTemplate	String	No	Custom display template name.	Custom12
DynamicFormCode	XML Code	No	Custom HTML or input form elements.	
Extension	XML	No	Extra data in XML string.	<data> <misc>True</misc> </data>
FAQ	String	No	FAQ text.	
FAQName	String	No	Override default name for the FAQ description.	
Featured	Boolean	Yes	Indicate if product is “featured” and should be displayed on product list module control even if no category is selected.	False
MetaDescription	String	No	Meta description.	Popular mechanics
MetaKeywords	String	No	Meta keywords.	mechanics, engineers
Name	String	Yes	Product name.	Popular Mechanics
Overview	String	No	Overview text.	
OverviewName	String	No	Override default name for the overview description.	
PageTitle	String	No	Page title.	Popular books
			Specify a custom product detail	

ProductDetailUrl	String	No	page for this product or set to empty or null to use the default product detail page. Enter a valid Tab ID number for the page.	
ProductType	Integer	Yes	Regular = 1	1
Published	Boolean	Yes	Enable display of the product.	True
RedirectUrl	String	No	Redirect product detail page to URL location. Useful for maintaining SEO value for a discontinued product.	
SellerID	Integer	No	Associate this product to a valid seller ID.	3
ShowAddToCart	Boolean	Yes		True
ShowAddToWishList	Boolean	Yes		True
ShowBuyNow	Boolean	Yes		True
ShowInventory	Boolean	Yes		True
ShowMSRP	Boolean	Yes		True
ShowPrice	Boolean	Yes		True
ShowQuantity	Boolean	Yes		True
ShowRewardPoints	Boolean	Yes		True
ShowSavings	Boolean	Yes		True
ShowSeeDetails	Boolean	Yes		True
ShowSKU	Boolean	Yes		True
ShowSocialShare	Boolean	Yes		True
ShowUpdate	Boolean	Yes		True

Specifications	String	No	Specifications text.	
SpecificationsName	String	No	Override default name for the specifications description.	
StartDate	DateTime	No	When to start publishing product.	2010-10-15
StopDate	DateTime	No	When to stop publishing product.	2012-01-18
Summary	String	No	Summary text.	
Terms	String	No	Terms text.	
TermsName	String	No	Override default name for the terms description.	
UpdateDate	DateTime	No		
UrlName	String	No	Name to appear in URL for SEO purposes.	Popular mechanics magazine

Product Attribute

To import/export product attributes, go to **Catalog > Products** from the Storefront module menu. Click on the **Import** or **Export** link, then select "Product attribute" and upload the CSV file. All columns must still be present in the CSV file even if a column is not a required data field.

Column	**Type**	**Data required**	**Description**	**Example**
Act	String	Yes	Type of import action to perform (Insert = i, Delete = d)	i
ProductAttributeID	Integer	Yes/No	Database object identifier. This value must be specified when performing a delete action.	9
BooleanValue	Boolean	No	Boolean type value. If you specify a value here, you must not specify the DecimalValue, IntegerValue, SelectionValue or StringValue.	True
CreateDate	DateTime	No		
DecimalValue	Decimal	No	Decimal type value. If you specify a value here, you must not specify the BooleanValue, IntegerValue, SelectionValue or StringValue.	1.2
IntegerValue	Integer	No	Integer type value. If you specify a value here, you must not specify the BooleanValue, DecimalValue, SelectionValue or StringValue.	2
ProductAttributeDefinitionID	Integer	Yes/No	Associate this attribute to the Product Attribute Definition by its ProductAttributeDefinitionID. If you specify ProductAttributeDefinitionID, the ProductAttributeDefinitionKey will be ignored.	1
			Associate this attribute to the	

ProductAttributeDefinitionKey	String	Yes/No	Product Attribute Definition by its ProductAttributeDefinitionKey. If you specify ProductAttributeDefinitionID, the ProductAttributeDefinitionKey will be ignored.	
ProductID	Integer	Yes/No	Associate this attribute to the product by its ProductID. If you specify ProductID, the ProductKey will be ignored. If you specify the ProductID, you must not specify the ProductVariantID or ProductVariantKey.	12
ProductKey	String	Yes/No	Associate this attribute to the product by its ProductKey. If you specify ProductID, the ProductKey will be ignored. If you specify the ProductID, you must not specify the ProductVariantID or ProductVariantKey.	apple
ProductVariantID	Integer	Yes/No	Associate this attribute to the product variant by its ProductVariantID. If you specify ProductVariantID, the ProductVariantKey will be ignored. If you specify the ProductVariantID, you must not specify the ProductID.	14
ProductVariantKey	String	Yes/No	Associate this attribute to the product variant by its ProductVariantKey. If you specify ProductVariantID, the ProductVariantKey will be ignored. If you specify the ProductVariantID, you must not specify the ProductID.	apple-ipad-white
SelectionValue	String	No	Pipe delimited list of integer selection values. Value must correspond to the possible ProductAttributeDefinitionSelectionID values. If you specify a value here, you must not specify the BooleanValue, DecimalValue, IntegerValue or StringValue.	12|32|1

StringValue	String	No	Localized string type value. If you specify a value here, you must not specify the BooleanValue, DecimalValue, IntegerValue or SelectionValue.	
UpdateDate	DateTime	No		

Product Attribute Definition

To export product attribute definitions, go to **Catalog > Attribute definitions** from the Storefront module menu. Click on the **Export** link. All columns must still be present in the CSV file even if a column is not a required data field.

Column	**Type**	**Data required**	**Description**	**Example**
Act	String	No	No import action supported at the moment.	
ProductAttributeDefinitionID	Integer	Yes/No	Database object identifier.	45
ProductAttributeDefinitionKey	String	Yes/No	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID. If you don't specify a value, the system will generate a unique key for you. This value must be specified when performing an update action.	color
Comparable	Boolean	Yes	Determines if this attribute type can be used for product comparison.	True
CreateDate	DateTime	No		
Description	String	No	Localized description.	
DisplayOrder	Integer	Yes	Sort display order.	1000
Filterable	Boolean	Yes	Product list can filter by this attribute type.	False
HelpText	String	No	Help displayed in tooltip.	
Name	String	Yes	Localized name.	Color

ProductAttributeGroupID	Integer	No	Associate this attribute to a product attribute group by its ProductAttributeGroupID.	
ProductAttributeType	Integer	Yes	Boolean = 1,Integer = 2, Decimal = 3, String = 4, Selection = 5	3
Published	Boolean	Yes		True
Searchable	Boolean	Yes	Product search can index this attribute.	False
StepSize	Decimal	Yes	The incremental change for decimal attribute type input.	1.0
UpdateDate	DateTime	No		

Product Attribute Group

To export product attribute groups, go to **Catalog > Attribute groups** from the Storefront module menu. Click on the **Export** link. All columns must still be present in the CSV file even if a column is not a required data field.

Column	**Type**	**Data required**	**Description**	**Example**
Act	String	No	No import action supported at the moment.	
ProductAttributeGroupID	Integer	Yes/No	Database object identifier.	45
CreateDate	DateTime	No		
Description	String	No	Localized description.	
DisplayOrder	Integer	Yes	Sort display order.	1000
Name	String	Yes	Localized name.	Color
UpdateDate	DateTime	No		

Product Category

The product category is the relationship that determines which product is associated to which category. To import/export product categories, go to **Catalog > Products** from the Storefront module menu. Click on the **Import** or **Export** link. Then select "Product category". All columns must still be present in the CSV file even if a column is not a required data field.

Column	**Type**	**Data required**	**Description**	**Example**
Act	String	Yes	Type of import action to perform (Insert = i, Delete = d)	i
ProductCategoryID	Integer	Yes/No	Database object identifier. This value must be specified when performing a delete action.	9
CategoryID	Integer	Yes/No	Associate the category object by its CategoryID. If you specify CategoryID, the CategoryKey will be ignored.	4
CategoryKey	String	Yes/No	Associate the category object by its CategoryKey. If you specify CategoryID, the CategoryKey will be ignored.	business
CreateDate	DateTime	No		
ProductID	Integer	Yes/No	Associate the product object by its ProductID. If you specify ProductID, the ProductKey will be ignored.	12
ProductKey	String	Yes/No	Associate the product object by its ProductKey. If you specify ProductID, the ProductKey will be ignored.	apple

Product Component

To export product components, go to **Catalog > Products** from the Storefront module menu. Click on the **Export** link. Select Export from "Product component".

Column	Type	Data required	Description	Example
Act	String	No	Type of import action to perform (Insert = i, Delete = d)	i
ProductComponentID	Integer	Yes/No	Database object identifier. Only this value is required when performing a delete action.	38
ProductComponentKey	String	Yes/No	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID. If you don't specify a value, the system will generate a unique key for you. This value must be specified when performing an update action.	apple-bundled
ComponentType	Integer	Yes	Specify the type of component Implicit = 1, Explicit = 2, Multiple = 3, Single = 4	1
CreateDate	DateTime	No		
DisplayOrder	Integer	Yes	Sort display order.	1000
ProductVariantID	Integer	Yes/No	Associate this component to the product variant by its ProductVariantID. If you specify ProductVariantID, the ProductVariantKey will be ignored. If you specify the ProductVariantID, you must not specify the ProductID.	12
			Associate this component to the product variant by its	

ProductVariantKey	String	Yes/No	ProductVariantKey. If you specify ProductVariantID, the ProductVariantKey will be ignored. If you specify the ProductVariantID, you must not specify the ProductID.	
UpdateDate	DateTime	No		

Product Part

To export product parts, go to **Catalog > Products** from the Storefront module menu. Click on the **Export** link. Select Export from "Product part".

Column	Type	Data required	Description	Example
Act	String	No	Type of import action to perform (Insert = i, Delete = d)	i
ProductPartID	Integer	Yes/No	Database object identifier. Only this value is required when performing a delete action.	38
CreateDate	DateTime	No		
DefaultQuantity	Integer	Yes	The default quantity for the product part.	1
DisplayOrder	Integer	Yes	Sort display order.	1000
MaxOrderQuantity	Integer	No	The maximum quantity for this product part that can be ordered in the bundle.	
MinOrderQuantity	Integer	No	The minimum quantity for this product part that can be ordered in the bundle.	
ModifierRule	XML Rule	No	Product part modifier rule.	
ProductComponentID	Integer	Yes/No	Reference the corresponding product component by its ProductComponentID. If you specify ProductComponentID, the ProductComponentKey will be ignored.	35
ProductComponentKey	String	Yes/No	Reference the corresponding product component by its ProductComponentKey. If you specify ProductComponentID, the ProductComponentKey will be ignored.	

ProductVariantID	Integer	Yes/No	Associate this product part to the product variant by its ProductVariantID. If you specify ProductVariantID, the ProductVariantKey will be ignored. If you specify the ProductVariantID, you must not specify the ProductID.	75
ProductVariantKey	String	Yes/No	Associate this component to the product variant by its ProductVariantKey. If you specify ProductVariantID, the ProductVariantKey will be ignored. If you specify the ProductVariantID, you must not specify the ProductID.	
Selected	Boolean	Yes	Specify if this product part is selected by default and participate in the bundled product.	True
ShowPrice	Boolean	Yes	Specify if the price of the product part is shown to the customer.	True
ShowQuantity	Boolean	Yes	Specify if the customer is allowed to edit the quantity.	False
UpdateDate	DateTime	No		

Product Review

To export product reviews, go to **Catalog > Products** from the Storefront module menu. Click on the **Export** link. Then select "Product review". All columns must still be present in the CSV file even if a column is not a required data field.

Column	**Type**	**Data required**	**Description**	**Example**
Act	String	No	No import action supported at the moment.	
ProductReviewID	Integer	Yes/No	Database object identifier.	45
Approved	Boolean	Yes		True
Comment	String	No		
CreateDate	DateTime	No		
Email	String	No		
FirstName	String	No		
LastName	String	No		
OverallRating	Integer	Yes	Rating between 1 to 5.	5
ProductID	Integer	Yes/No	Associate the product by its ProductID. If you specify ProductID, the ProductKey will be ignored.	3
ProductKey	String	Yes/No	Associate the product by its ProductKey. If you specify ProductID, the ProductKey will be ignored.	apple-ipad
Title	String	No		
UpdateDate	DateTime	No		
UserHostAddress	String	No	IP address of the user.	

UserID	Integer	No	Associate the user by its UserID. If anonymous user, leave blank.	234

Product Variant

To import/export product variants, go to **Catalog > Products** from the Storefront module menu. Click on the **Import** or **Export** link. Then select "Product variant". All columns must still be present in the CSV file even if a column is not a required data field.

Column	**Type**	**Data required**	**Description**	**Example**
Act	String	Yes	Type of import action to perform (Insert = i, Update = u, Delete = d)	u
ProductVariantID	Integer	Yes/No	Database object identifier. This value must be specified when performing an update. Only this value is required when performing a delete action.	12
ProductVariantKey	String	Yes/No	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID. If you don't specify a value, the system will generate a unique key for you. This value must be specified when performing an update action.	apple-ipad-white
AllowProductComparison	Boolean	Yes	Allow product to be compared with others.	True
			Allow this variant to be	

AllowRecurringGroupOrders	Boolean	Yes	grouped together with other similar orders if this variant is due for recurring.	True
AllowRewardsPoint	Boolean	Yes	Allow this variant to participate in rewards point program.	True
AvailabilityRule	XML Rule	No	The rule to describe the conditions when the product can be purchased.	
BasePrice	Decimal	Yes	Product base price.	15.00
BuyingGuide	String	No	Buying guide text.	
BuyingGuideName	String	No	Override default name for the buying guide description.	
CreateDate	DateTime	No		
Depth	Decimal	Yes	Product depth in cm. Enter zero if not used.	15.5
DisplayOrder	Integer	Yes	Product sort order from smallest to largest number.	1000
DistributorID	Integer	No	Associate this variant to a distributor by its DistributorID. If you specify DistributorID, the DistributorKey will be ignored.	9
			Associate this variant to a distributor by its DistributorKey. If you	

DistributorKey	String	No	specify DistributorID, the DistributorKey will be ignored.	allied
DistributorSKU	String	No	Distributor SKU number.	
DownloadFile	String	No	The URL, file or page associated to the product.	
DynamicFormCode	XML Code	No	Custom HTML or input form elements.	
Extension	XML	No	Extra data in XML string.	<data> <misc>True</misc> </data>
FAQ	String	No	FAQ text.	
FAQName	String	No	Override default name for the FAQ description.	
HandlingPrice	Decimal	Yes	The handling price to charge if handling rule uses it.	0.00
Height	Decimal	Yes	Product height in cm. Enter zero if not used.	10
Inventory	Integer	No	Inventory level.	2000
InventoryEmptyBehavior	Integer	Yes	How product behaves when inventory is empty. DisallowOrder = 1 DisableProduct = 2 AllowBackorder = 3	1

ManufacturerID	Integer	No	Associate this variant to a manufacturer by its ManufacturerID. If you specify ManufacturerID, the ManufacturerKey will be ignored.	3
ManufacturerKey	String	No	Associate this variant to a manufacturer by its ManufacturerKey. If you specify ManufacturerID, the ManufacturerKey will be ignored.	
ManufacturerSKU	String	No	Manufacturer SKU number.	
MaxInventory	Integer	No	The desirable max inventory to keep.	
MaxOrderQuantity	Integer	No	Maximum order quantity.	10
MetaDescription	String	No	Localized meta description.	
MetaKeywords	String	No	Localized meta keywords.	
MinInventory	Integer	No	The desirable min inventory to keep.	
MinOrderQuantity	Integer	No	Minimum order quantity.	1
ModifierRule	XML Rule	No	Product modifer rule.	
MSRP	Decimal	No	Manufacturer suggested retail price.	25.00
Name	String	Yes	Product variant name.	Best of Popular Mechanics

Overview	String	No	Overview text.	
OverviewName	String	No	Override default name for the overview description.	
PackageType	Integer	Yes	Shipping package type used for shipping calculation.	2000
PageTitle	String	No	Localized page title.	
PreorderInterval	Integer	Yes	The days to preorder a recurring order ahead of time.	0
PriceText	String	No	Any text specified here will be shown to the customer instead of the actual price.	Call for price
ProductCost	Decimal	No	Cost of product.	8.00
ProductID	Integer	Yes/No	Reference the corresponding product by its ProductID. If you specify ProductID, the ProductKey will be ignored.	1
ProductKey	String	Yes/No	Reference the corresponding product by its ProductKey. If you specify ProductID, the ProductKey will be ignored.	apple-ipad
PromotionRule	XML Rule	No	Product promotion rule.	
PromotionStartDate	DateTime	No	Product promotion start	

			date.	
PromotionStopDate	DateTime	No	Product promotion stop date.	
Published	Boolean	Yes	Enable display of the product.	True
RecurringInterval	Integer	Yes	The recurring repeat interval for the RecurringIntervalType. Enter zero for non-recurring.	12
RecurringIntervalType	Integer	Yes	Day = 1 Week = 2 Month = 3 Year = 4	3
RecurringMaxRepeat	Integer	No	The number of times to repeat the recurring order or leave blank to repeat perpetually.	1
RequireHandling	Boolean	Yes	Product requires handling.	True
RequireShipping	Boolean	Yes	Product requires shipping.	True
RewardPoints	Integer	No	The custom number of rewards points to award. Leave empty if awarding the default number of points based on the selling price.	10
			If this value is set, the	

RightDefinitionID	Integer	No	customer will be issued the access rights when order is paid or completed.	
ShippingCode	String	No	Shipping code may be used by your shipping provider to classify this package to obtain a more accurate quote.	
ShippingPrice	Decimal	Yes	The shipping price to charge if shipping rule uses it.	0.00
SKU	String	No	Product SKU	RVD1000.V1
Specifications	String	No	Specifications text.	
SpecificationsName	String	No	Override default name for the specifications description.	
StartDate	DateTime	No	When to start publishing product.	2010-10-15
StartRecurringDate	DateTime	No	Initialize a different recurring start date by interval amount.	
StartRecurringInterval	Integer	Yes	Initialize a different recurring start date by interval amount.	0
StartRecurringIntervalType	Integer	Yes	The interval type (Day = 1, Week = 2, Month = 3, Year = 4).	1
StopDate	DateTime	No	When to stop publishing product.	2012-01-18

Summary	String	No	Summary text.	
TaxClassID	Integer	No	Product tax class. Database tax class ID.	3
Terms	String	No	Terms text.	
TermsName	String	No	Override default name for the terms description.	
UniversalProductCode	String	No	Universal product code.	
UpdateDate	DateTime	No		
UrlName	String	No	Localized URL name for SEO.	
VoucherDefinitionID	Integer	No	If this value is set, a new voucher of this type will be automatically generated and emailed to customer when order is paid or completed.	
WarehouseID	Integer	No	Indicate if this product in kept at a specific warehouse. Reference the warehouse by its WarehouseID. If the WarehouseID is specified, the WarehouseKey is ignored.	8
WarehouseKey	String	No	Indicate if this product in kept at a specific warehouse. Reference the warehouse by its WarehouseKey. If the WarehouseID is	

			specified, the WarehouseKey is ignored.	
Weight	Decimal	Yes	Product weight in gram. Enter zero if not used.	100
Width	Decimal	Yes	Product width in cm. Enter zero if not used.	10.2

Product Variant Group

The product variant group allows you to regroup the different options available for your variants. To import/export product variant groups, go to **Catalog > Products** from the Storefront module menu. Click on the **Import** or **Export** link. Then select "Product variant group". All columns must still be present in the CSV file even if a column is not a required data field.

Column	**Type**	**Data required**	**Description**	**Example**
Act	String	Yes	Type of import action to perform (Insert = i, Update = u, Delete = d)	i
ProductVariantGroupID	Integer	Yes/No	Database object identifier. This value must be specified when performing an update or delete action.	9
ProductVariantGroupKey	String	Yes/No	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID. If you don't specify a value, the system will generate a unique key for you. This value must be specified when performing an update action.	apple-ipad-colors
CreateDate	DateTime	No		
DisplayOrder	Integer	Yes	Sort order for display.	1000
FieldType	Integer	Yes	The type of control to display. DropDownList = 1, RadioButtonList = 2, ColorPicker = 3	2
HelpText	String	No	Localized help text.	
Name	String	Yes	Localized name.	
ProductID	Integer	Yes/No	Associate the product object by its ProductID. If you specify ProductID, the ProductKey will be ignored.	12

ProductKey	String	Yes/No	Associate the product object by its ProductKey. If you specify ProductID, the ProductKey will be ignored.	apple
UpdateDate	DateTime	No		

Product Variant Group Option

The product variant group options are the individual selections (e.g. red, blue, green) that make up a product variant group (e.g. colors). To import/export product variant group options, go to **Catalog > Products** from the Storefront module menu. Click on the **Import** or **Export** link. Then select "Product variant group option". All columns must still be present in the CSV file even if a column is not a required data field.

Column	**Type**	**Data required**	**Description**	**Example**
Act	String	Yes	Type of import action to perform (Insert = i, Update = u, Delete = d)	i
ProductVariantGroupOptionID	Integer	Yes/No	Database object identifier. This value must be specified when performing an update or delete action.	16
ProductVariantGroupOptionKey	String	Yes/No	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID. If you don't specify a value, the system will generate a unique key for you. This value must be specified when performing an update action.	apple-ipad-colors-blue
CreateDate	DateTime	No		
DisplayOrder	Integer	Yes	Sort order for display.	1000
Name	String	Yes	Localized name.	
ProductVariantGroupID	Integer	Yes/No	Associate the product variant group object by its ProductVariantGroupID. If you specify ProductVariantGroupID, the	12

			ProductVariantGroupKey will be ignored.	
ProductVariantGroupKey	String	Yes/No	Associate the product object by its ProductVariantGroupKey. If you specify ProductVariantGroupID, the ProductVariantGroupKey will be ignored.	apple
UpdateDate	DateTime	No		

Product Variant Option

The product variant options is the relationship between the product variant and the product variant group option (e.g. blue). To import/export product variant options, go to **Catalog > Products** from the Storefront module menu. Click on the **Import** or **Export** link. Then select "Product variant option". All columns must still be present in the CSV file even if a column is not a required data field.

Column	**Type**	**Data required**	**Description**	**Example**
Act	String	Yes	Type of import action to perform (Insert = i, Update = u, Delete = d)	i
ProductVariantOptionID	Integer	Yes/No	Database object identifier. This value must be specified when performing an update or delete action.	
CreateDate	DateTime	No		
ProductVariantGroupOptionID	Integer	Yes/No	Associate the product variant group option object by its ProductVariantGroupOptionID. If you specify ProductVariantGroupOptionID, the ProductVariantGroupOptionKey will be ignored.	16
ProductVariantGroupOptionKey	String	Yes/No	Associate the product variant group option object by its ProductVariantGroupOptionKey. If you specify ProductVariantGroupOptionID, the ProductVariantGroupOptionKey will be ignored.	apple-ipad-colors-blue
			Associate the product variant object by its ProductVariantID. If	

ProductVariantID	Integer	Yes/No	you specify ProductVariantID, the ProductVariantKey will be ignored.	14
ProductVariantKey	String	Yes/No	Associate the product variant object by its ProductVariantKey. If you specify ProductVariantID, the ProductVariantKey will be ignored.	apple-ipad-white
UpdateDate	DateTime	No		

Recurring Sales Order

To export recurring sales orders, go to **Sales > Recurring orders** from the Storefront module menu. Click on the **Export** link. All columns must still be present in the CSV file even if a column is not a required data field.

Column	Type	Data required	Description	Example
Act	String	No	No import action supported at the moment.	
RecurringSalesOrderID	Integer	Yes	Database object identifier.	
CreateDate	DateTime	No		
CultureCode	String	Yes	The culture code.	
DynamicFormResult	XML	No	The result collected from custom fields.	
MaxRepeat	Integer	No	The number of times this recurring order is allowed to repeat.	
NextRecurringDate	DateTime	Yes	The next recurring date.	
OriginalSalesOrderID	Integer	No	The associated SalesOrder.	
ProductVariantID	Integer	Yes	The ProductVariant object identifier.	
Quantity	Integer	Yes		
RepeatCount	Integer	Yes	The number of times this recurring order has repeated.	
SellerID	Integer	No	Indicates if this object belongs to a seller.	
ShippingCity	String	Yes		
ShippingCompany	String	No		

ShippingCountryCode	String	Yes		
ShippingEmail	String	Yes		
ShippingFirstName	String	Yes		
ShippingLastName	String	Yes		
ShippingMethodID	Integer	No	ShippingMethod object identifier.	
ShippingPhone	String	No		
ShippingPostalCode	String	Yes		
ShippingStreet	String	Yes		
ShippingSubdivisionCode	String	Yes		
Status	Integer	Yes	Recurring order status (Active = 1, Hold = 2, Invalid = 3, Cancelled = 4)	
UpdateDate	DateTime	No		
UserID	Integer	Yes	UserID object identifier.	
UserPaymentID	Integer	Yes	UserPayment object identifier.	

Related Product

To import/export related products, go to **Catalog > Products** from the Storefront module menu. Click on the **Import** or **Export** link. Then select "Related product". All columns must still be present in the CSV file even if a column is not a required data field.

Column	Type	Data required	Description	Example
Act	String	Yes	Type of import action to perform (Insert = i, Delete = d)	i
RelatedProductID	Integer	Yes/No	Database object identifier. This value must be specified when performing an update or delete action.	
CreateDate	DateTime	No		
ProductID	Integer	Yes/No	Associate the product object by its ProductID. If you specify ProductID, the ProductKey will be ignored.	16
ProductKey	String	Yes/No	Associate the product object by its ProductID. If you specify ProductID, the ProductKey will be ignored.	apple-ipad
RelationProductID	Integer	Yes/No	Associate the related product object by its ProductID. If you specify ProductID, the ProductKey will be ignored.	14
RelationProductKey	String	Yes/No	Associate the related product object by its ProductKey. If you specify ProductID, the ProductKey will be ignored.	apple-ipad-white

Required Product

To import/export required products, go to **Catalog > Products** from the Storefront module menu. Click on the **Import** or **Export** link. Then select "Required product". All columns must still be present in the CSV file even if a column is not a required data field.

Column	Type	Data required	Description	Example
Act	String	Yes	Type of import action to perform (Insert = i, Delete = d)	i
RequiredProductID	Integer	Yes/No	Database object identifier. This value must be specified when performing an update or delete action.	
CreateDate	DateTime	No		
DeferDate	DateTime	No	Defer the start of the required product until the date specified.	
DeferInterval	Integer	Yes	Defer the start of the required product by the amount of interval time. Enter zero to start immediately.	0
DeferIntervalType	Integer	Yes	The interval type for the deferral. Day = 1, Week = 2, Month = 3, Year = 4	1
ProductVariantID	Integer	Yes/No	Associate the product variant object by its ProductVariantID. If you specify ProductVariantID, the ProductVariantKey will be ignored.	15
ProductVariantKey	String	Yes/No	Associate the product variant object by its ProductVariantKey. If you specify ProductVariantID, the ProductVariantKey will be	apple-ipad-white

			ignored.	
Published	Boolean	Yes	Determine if the required product is disclosed to the customer.	True
Quantity	Integer	Yes	A non-zero value will match the quantity ordered (e.g. if you set a value of 2 and the customers places an order for 2 items, the total required products will equal 4). Enter a value of 1 if you want to have a one to one match. If you want a single required product regardless of any number of items purchased, enter a value of 0.	1
RequiredProductVariantID	Integer	Yes/No	Associate the required product variant object by its ProductVariantID. If you specify ProductVariantID, the ProductVariantKey will be ignored.	16
RequiredProductVariantKey	String	Yes/No	Associate the required product variant object by its ProductVariantID. If you specify ProductVariantID, the ProductVariantKey will be ignored.	apple-ipad-cover
UpdateDate	DateTime	No		

Right

To import rights, go to **Sales > Rights** from the Storefront module menu. Click on the **Import** link and upload the CSV file. All columns must still be present in the CSV file even if a column is not a required data field.

Column	Type	Data required	Description	Example
Act	String	Yes	Type of import action to perform (Insert = i, Delete = d)	i
RightID	Integer	Yes/No	Database object identifier. This value must be specified when performing a delete action.	9
AdminNotes	String	No	Notes visible to store administrators only. You should leave this field blank when inserting new unassigned rights.	
AssignedUserID	Integer	No	Optionally associate this right to a user.	1401
Code	String	Yes	The secret code that will be shown to the user.	ds52-dad3
CreateDate	DateTime	No		
IssueDate	DateTime	Yes	The date this right was initially issued to the user.	2013-01-01 00:00:00
RightDefinitionID	Integer	Yes	The right definition object identifier associated with this right. The right definition is the template that determines type of right.	23
SalesOrderDetailID	Integer	No	The SalesOrderDetailID that is associated with this issued right after the purchase is completed. You should leave this field blank when inserting new unassigned rights.	
UpdateDate	DateTime	No		

Sales Order

To export sales orders, go to **Sales > Orders** from the Storefront module menu. Click on the **Export** link. All columns must still be present in the CSV file even if a column is not a required data field.

Column	Type	Data required	Description	Example
Act	String	No	No import action supported at the moment.	
AdminNotes	String	No	Notes intended for store administrators.	
AffiliateID	Integer	No	The Affiliate ID tracked to the order if it originated from a referral.	
BillingCity	String	Yes		
BillingCompany	String	No		
BillingCountryCode	String	Yes		
BillingEmail	String	Yes		
BillingFirstName	String	Yes		
BillingLastName	String	Yes		
BillingPhone	String	No		
BillingPostalCode	String	Yes		
BillingStreet	String	Yes		
BillingSubdivisionCode	String	Yes		
BusinessTaxNumber	String	No	Business tax number (e.g. VAT number).	

CouponCodes	String	No	Pipe delimited coupon codes.	
CreateDate	DateTime	No		
CultureCode	String	Yes	The display culture.	
CurrencyCultureCode	String	Yes	The currency culture.	
CustomerNotes	String	No	Notes intended for customer.	
DynamicFormResult	XML	No	The result collected from DynamicForm.	
ExchangeRate	Decimal	Yes	The exchange rate relative to the primary currency.	
FraudScore	Integer	No	The registered fraud score from 0 to 100 if available.	
FraudRiskGateway	String	No	The risk gateway provider.	
HandlingAmount	Decimal	Yes	Handling amount.	
HandlingDiscountAmount	Decimal	Yes	Handling discount.	
HandlingMethodID	Integer	No	The HandlingMethod object identifier.	
HandlingTaxAmount1	Decimal	Yes		
HandlingTaxAmount2	Decimal	Yes		
HandlingTaxAmount3	Decimal	Yes		
HandlingTaxAmount4	Decimal	Yes		
HandlingTaxAmount5	Decimal	Yes		
OrderDate	DateTime	Yes	The order date.	
OrderLocked	Boolean	Yes	Lock the order to prevent customer from changing the order details when resuming an incomplete order.	

Origin	Integer	Yes	Where the order originated (Web Checkout = 1, System Recurring = 2).	
PackingMethodID	Integer	No	PackingMethod object identifier.	
ParentSalesOrderID	Integer	No	The parent sales order if this order belonged in a sales order set.	
PreferredUserPaymentID	Integer	No		
PurchaseOrderNumber	String	No	Purchase order number.	
RewardsPointsQualified	Integer	Yes	The number of rewards points earned from the purchase of this order.	
RewardsPointsRewarded	Integer	Yes	The estimated number of points actually rewarded to the customer for this order so far.	
SalesOrderGUID	GUID	Yes	SalesOrder globally unique identifier.	
SalesOrderID	Integer	Yes	The object identifier.	
SalesOrderNumber	String	Yes	The order number shown to customer and printed on receipts.	
SalesPaymentStatus	Integer	Yes	Sales payment status (Pending = 1, Paid = 2, Cancelled = 3, Refunded = 4).	
SellerID	Integer	No	The seller associated with this sales order.	
ShippedDate	DateTime	No	The date the order is shipped, if available.	
ShippingAmount	Decimal	Yes		

ShippingCity	String	Yes		
ShippingCompany	String	No		
ShippingCountryCode	String	Yes		
ShippingDiscountAmount	Decimal	Yes		
ShippingEmail	String	Yes		
ShippingFirstName	String	Yes		
ShippingLastName	String	Yes		
ShippingMethodID	Integer	No	ShippingMethod object identifier.	
ShippingPhone	String	No		
ShippingPostalCode	String	Yes		
ShippingStatus	Integer	Yes	Shipping status (Not Required = 1, Not Shipped = 2, Shipped = 3, Undeliverable = 4).	
ShippingStreet	String	Yes		
ShippingSubdivisionCode	String	Yes		
ShippingTaxAmount1	Decimal	Yes		
ShippingTaxAmount2	Decimal	Yes		
ShippingTaxAmount3	Decimal	Yes		
ShippingTaxAmount4	Decimal	Yes		
ShippingTaxAmount5	Decimal	Yes		
ShippingTrackingCode	String	No	Shipping tracking code.	
ShippingUniversalServiceName	String	No	The globally unique name generated by the system that corresponds to the shipping	

			gateway's service name used internally to match a real-time shipping method.	
Status	Integer	Yes	Sales order status (Pending = 1, Ordered = 2, Processing = 3, Completed = 4, Cancelled = 5, Declined = 6, Incomplete = 7)	
SubTotalAmount	Decimal	Yes	Sub-total.	
TaxAmount1	Decimal	Yes		
TaxAmount2	Decimal	Yes		
TaxAmount3	Decimal	Yes		
TaxAmount4	Decimal	Yes		
TaxAmount5	Decimal	Yes		
TaxDiscountAmount	Decimal	Yes		
TotalAmount	Decimal	Yes		
UpdateDate	DateTime	No		
UserHostAddress	String	No	User IP address.	
UserID	Integer	No	UserID object identifier.	
WarehouseID	Integer	No	The warehouse associated to this sales order.	

Sales Order Detail

To export sales order details, go to **Sales > Orders** from the Storefront module menu. Click on the **Export** link. Then select "Sales order detail". All columns must still be present in the CSV file even if a column is not a required data field.

Column	Type	Data required	Description	Example
Act	String	No	No import action supported at the moment.	
BasePrice	Decimal	Yes		
CreateDate	DateTime	No		
Depth	Decimal	Yes		
DiscountAmount	Decimal	Yes		
DynamicFormResult	XML	No		
HandlingPrice	Decimal	Yes		
Height	Decimal	Yes		
PackageType	Integer	Yes	Package type for shipping calculation (Unspecified = 1, Envelope = 1000, Box = 2000, Bag = 3000, Tube = 4000).	
ParentSalesOrderDetailID	Integer	No	Indicates if this SalesOrderDetail item is a product part and child of a parent SalesOrderDetail object usually in a bundled product scenario.	
Price	Decimal	Yes		
ProductCost	Decimal	No		

ProductName	String	Yes	Localized product name.	
ProductPartID	Integer	No	References the ProductPart object usually from a bundled product purchase.	
ProductVariantExtension	XML	No		
ProductVariantID	Integer	Yes	ProductVariant object identifier.	
ProductVariantName	String	No	Localized product variant name.	
Quantity	Integer	Yes		
RecurringInterval	Integer	Yes	The recurring interval.	
RecurringIntervalType	Integer	Yes	The interval type (Day = 1, Week = 2, Month = 3, Year = 4).	
RecurringSalesOrderID	Integer	No	The associated RecurringSalesOrder object identifier if this SalesOrderDetail object was created from a recurring order.	
RequireShipping	Boolean	Yes	Indicate if product requires shipping.	
SalesOrderDetailID	Integer	Yes	The object identifier.	
SalesOrderID	Integer	Yes	The associated SalesOrder object identifier.	
ShippingPrice	Decimal	Yes		
ShippingStatus	Integer	Yes	Shipping status (Not Required = 1, Not Shipped = 2, Shipped = 3, Undeliverable = 4).	
SKU	String	No		
TaxAmount1	Decimal	Yes		
TaxAmount2	Decimal	Yes		
TaxAmount3	Decimal	Yes		

TaxAmount4	Decimal	Yes		
TaxAmount5	Decimal	Yes		
UpdateDate	DateTime	No		
Weight	Decimal	Yes		
Width	Decimal	Yes		

Voucher

To import vouchers, go to **Sales > Vouchers** from the Storefront module menu. Click on the **Import** link and upload the CSV file. All columns must still be present in the CSV file even if a column is not a required data field.

Column	Type	Data required	Description	Example
Act	String	Yes	Type of import action to perform (Insert = i, Delete = d)	i
VoucherID	Integer	Yes/No	Database object identifier. This value must be specified when performing a delete action.	7
AdminNotes	String	No	Notes visible to store administrators only.	
Amount	Decimal	Yes	The balance amount currently available in the voucher.	10.00
AssignedUserID	Integer	No	Optionally associate this voucher to a user such that only the registered is allowed to redeem the voucher.	1401
Code	String	Yes	The voucher code must be a unique alphanumeric number (A-Z, 0-9). The code is treated as case-insensitive.	A60PB98Z0L123
CreateDate	DateTime	No		
InitialAmount	Decimal	Yes	The starting amount of the voucher when it was first created.	25.00
IssueDate	DateTime	Yes	The date this voucher was initially issued. This date is used to determine the expiry date if the voucher definition determines there	2013-01-01 00:00:00

			is an applicable expiration on this voucher.	
SalesOrderDetailID	Integer	No	The SalesOrderDetailID that is associated with this voucher after the purchase is completed. You should leave this field blank when inserting new vouchers.	
Status	Integer	Yes	The status of this voucher. Inactive = 1, Active = 2, Hold = 3, Cancelled = 4	2
UpdateDate	DateTime	No		
VoucherDefinitionID	Integer	Yes	The voucher definition object identifier associated with this voucher. The voucher definition is the template that determines how this voucher can be used.	23

Warehouse

To import/export warehouses, go to **Catalog > Warehouses** from the Storefront module menu. Click on the **Import** or **Export** link. All columns must still be present in the CSV file even if a column is not a required data field.

Column	Type	Data required	Description	Example
Act	String	Yes	Type of import action to perform (Insert = i, Update = u, Delete = d)	u
WarehouseID	Integer	Yes/No	Database object identifier. This value must be specified when performing an update. Only this value is required when performing a delete action.	98
WarehouseKey	String	Yes/No	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID. If you don't specify a value, the system will generate a unique key for you. This value must be specified when performing an update action.	westcoast
City	String	Yes		
CountryCode	String	Yes		US
CreateDate	DateTime	No		
Description	String	No	Short description.	
Email	String	No		
Name	String	Yes	Localized name.	West Coast Warehouse
Phone	String	No		

PostalCode	String	Yes		
SellerID	Integer	No	Associate the seller object by its SellerID.	
Street	String	Yes		
SubdivisionCode	String	Yes	The state, province or region code.	US-CA
UpdateDate	DateTime	No		

Examples

Sample import files are provided on the Downloads (http://www.revindex.com/MyAccount/MyDownloads.aspx) page. We recommend you start by configuring a few items in your Storefront and export out the data to see what the actual CSV files look like.

Export products

You can easily export products from your Storefront by following the steps below:

1. Go to the **Catalog > Products** page.
2. Click **Export** button.
3. Choose the options you want.
4. Click **Export** button.

You will likely want to export the product variants too:

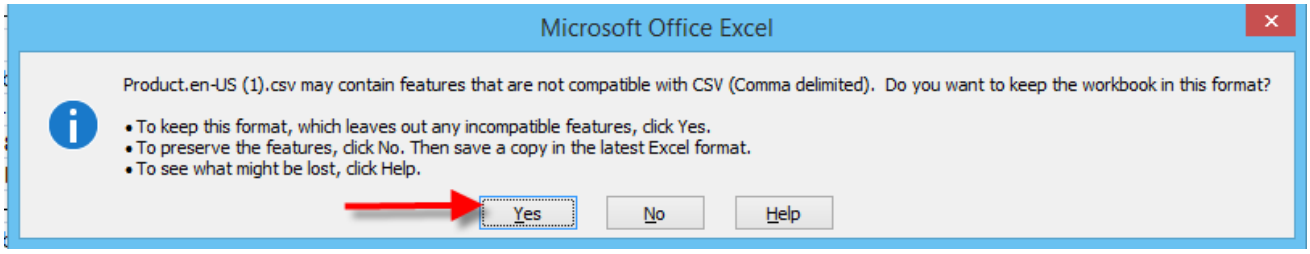
1. From the same screen, select export from "Product variant".
2. Choose the options you want.
3. Click **Export** button.

The full product consists of many data points from various entities. Simply repeat the steps above to export out the desired related entities such as Gallery, Product attribute, Category, etc.

Insert products

Before you start inserting new products, we recommend that you first create a few sample products in your Storefront through the normal administrative interface. Then follow the steps to export out the product file to see what the data looks like. See Export products (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/import-export-export-products/rvdwkpvm/section) for more information.

1. You will need to build your product CSV file according to the product file format specification (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/import-export-product/rvdwkpvm/section). The best way is to open a previously exported CSV file using Excel (you may also use Notepad or any text editor).
2. The first row is the header row and needs to match the column names according to the entity file format.
3. Start entering data into the next row. Pay attention to the required columns. Even if a column is indicated as not data required, the column must still be present but the value may be blank.
4. Make sure the **Act** column value is set to "i" for insert.
5. You can leave the database object identifier ProductID empty since this will be auto-generated by your database.
6. Enter a memorable unique ProductKey for this product (e.g. "apple-ipad"). It will be useful when you need to reference it elsewhere in your other imports by key name instead of by its ID number.
7. Fill up the remaining required fields like Name, etc.
8. Repeat steps 3 to 7 for additional products you want to insert.
9. Save the file. Click **Yes** if Excel prompts you to save the file with features that are not compatible with CSV and keeping this format.



10. Go to the **Catalog > Products** page. Click **Import**.
11. Choose the options.
12. Click **Import**.
13. Make sure there are no errors. If any error occurred, the system will rollback any changes by default. Correct

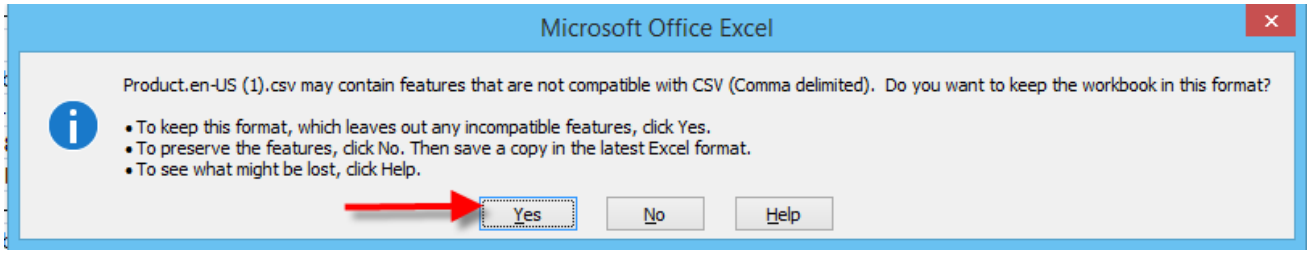
any error and re-import again.

You will want to repeat the similar steps at least for the Product variant and any related entities such as Gallery, Product Category, etc.

Update products

Follow the steps to export out the product file to see what the data looks like. See Export products (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/import-export-export-products/rvdwkpvm/section) for more information.

1. You will need to build your product CSV file according to the product file format specification (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/import-export-product/rvdwkpvm/section). The best way is to open a previously exported CSV file using Excel (you may also use Notepad or any text editor).
2. The first row is the header row and needs to match the column names according to the entity file format.
3. Start entering data into the next row. Pay attention to the required columns. Even if a column is indicated as not data required, the column must still be present but the value may be blank.
4. Make sure the **Act** column value is set to "u" for update. Please note not all entities support the update action. In this case, you may need to perform a delete followed by an insert to simulate an update action.
5. The database object identifier ProductID is required since this value will be used to retrieve the product to update.
6. Fill up the remaining required fields like Name, etc.
7. Repeat steps 3 to 6 for additional products you want to update.
8. Save the file. Click **Yes** if Excel prompts you to save the file with features that are not compatible with CSV and keeping this format.

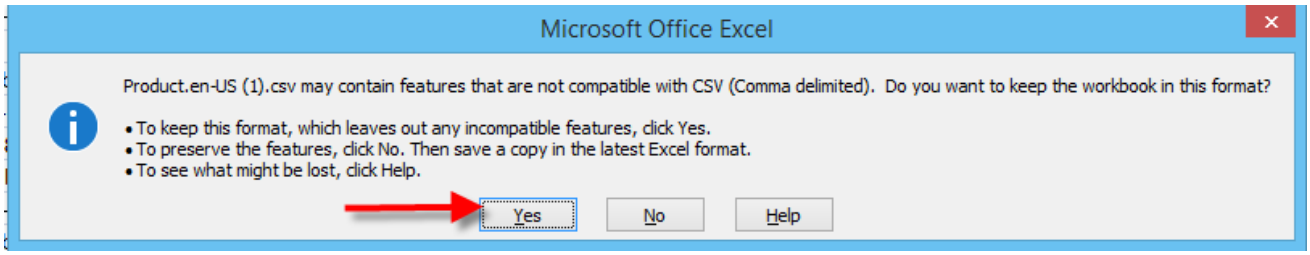


9. Go to the **Catalog > Products** page. Click **Import**.
10. Choose the options.
11. Click **Import**.
12. Make sure there are no errors. If any error occurred, the system will rollback any changes by default. Correct any error and re-import again.

Delete products

Follow the steps to export out the product file to see what the data looks like. See Export products (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/import-export-export-products/rvdwkpvm/section) for more information.

1. You will need to build your product CSV file according to the product file format specification (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/import-export-product/rvdwkpvm/section). The best way is to open a previously exported CSV file using Excel (you may also use Notepad or any text editor).
2. The first row is the header row and needs to match the column names according to the entity file format.
3. Start entering data into the next row. Pay attention to the required columns. Even if a column is indicated as not data required, the column must still be present but the value may be blank.
4. Make sure the **Act** column value is set to "d" for delete.
5. The database object identifier ProductID is required since this value will be used to retrieve the product to delete. For delete operations, other column fields are usually not required.
6. Repeat steps 3 to 5 for additional products you want to delete.
7. Save the file. Click **Yes** if Excel prompts you to save the file with features that are not compatible with CSV and keeping this format.



8. Go to the **Catalog > Products** page. Click **Import**.
9. Choose the options.
10. Click **Import**.
11. Make sure there are no errors. If any error occurred, the system will rollback any changes by default. Correct any error and re-import again.

Export products (SQL)

You can also export products to a CSV file is using the **Host > SQL** module with the latest DNN 7.2 or higher. You will require host account access to run this operation. This allows you to manipulate the data to suit your file format.

1. Login as host.
2. Go to **Host > SQL** page.
3. Choose "SiteSqlServer" for your **Connection** dropdown.
4. Enter the following SQL query where X is your portal ID number.

```

SELECT *
FROM {databaseOwner}{objectQualifier}Revindex_Storefront_Product
WHERE PortalID = X

SELECT *
FROM {databaseOwner}{objectQualifier}Revindex_Storefront_ProductVariant
WHERE PortalID = X

```

5. Click **Run Script**.
6. Once the results are displayed, click on the **Export to CSV** or **Export to Excel** buttons depending on the file format you like to safeguard.

SQL query is very flexible as it allows you to specify only the columns you want. For example, you can modify the query above to show only the columns ProductID, Name and Overview:

```

SELECT ProductID, Name, Overview
FROM {databaseOwner}{objectQualifier}Revindex_Storefront_Product
WHERE PortalID = X

```

You can also limit the number of records to return only 100 records and order by descending order like this:

```

SELECT TOP 100 ProductID, Name, Overview
FROM {databaseOwner}{objectQualifier}Revindex_Storefront_Product
WHERE PortalID = X
ORDER BY ProductID DESC

```

You'll find countless online tutorials (http://www.w3schools.com/sql/default.asp) on how to manipulate SQL queries.

Export orders (SQL)

You can also export to CSV or Excel file using the **Host > SQL** module with the latest DNN 7.2 or higher. You will require host account access to run this operation. This allows you to manipulate the data to suit your file format.

1. Login as host.
2. Go to **Host > SQL** page.
3. Choose "SiteSqlServer" for your **Connection** dropdown.
4. Enter the following SQL query where X is your portal ID number.

```

SELECT *
FROM {databaseOwner}{objectQualifier}Revindex_Storefront_SalesOrder
WHERE PortalID = X

SELECT sod.*
FROM {databaseOwner}{objectQualifier}Revindex_Storefront_SalesOrderDetail sod
JOIN {databaseOwner}{objectQualifier}Revindex_Storefront_SalesOrder so
ON so.SalesOrderID = sod.SalesOrderID
WHERE so.PortalID = X
```

5. Click **Run Script**.
6. Once the results are displayed, click on the **Export to CSV** or **Export to Excel** buttons depending on the file format you like to safeguard.

SQL query is very flexible as it allows you to specify only the columns you want. For example, you can modify the query above to show only the columns SalesOrderID, OrderDate and TotalAmount:

```

SELECT SalesOrderID, OrderDate, TotalAmount
FROM {databaseOwner}{objectQualifier}Revindex_Storefront_SalesOrder
WHERE PortalID = X

```

You can also limit the number of records to return only 100 records and order by descending order like this:

```

SELECT TOP 100 SalesOrderID, OrderDate, TotalAmount
FROM {databaseOwner}{objectQualifier}Revindex_Storefront_SalesOrder
WHERE PortalID = X
ORDER BY SalesOrderID DESC

```

You'll find countless online tutorials (http://www.w3schools.com/sql/default.asp) on how to manipulate SQL queries.

REST API

Revindex Storefront provides a powerful Application Programming Interface (API) that allows you to query, insert, update or delete almost any object in your store programmatically including categories, products, gallery images, distributor, manufacturer, coupons, sales orders, etc.. You may use the API to create specialized screens for your end users, synchronize data between servers or portals or perhaps to export data into your own internal reporting system.

The API is provided in the form of a REST Web service and is therefore easily accessible from any location as long as your network and permissions permit it. Since it follows the REST architecture, which primarily uses the familiar XML over HTTP, it is also incredibly simple to use by any programming languages such as C#, Java, Javascript, PHP, Ruby, VB.NET or even plain HTML.

Please note you must first enable the **API** feature under **Configuration > General** to access this functionality.

Our goal is to provide a stable platform for the API. Although infrequent, the API specifications may still change over time to reflect new feature additions or fixes. It is your responsibility to test and ensure your applications adapt and follow the latest specifications. If you're using the API, we strongly recommend that you perform internal testing on a development or staging machine after every Storefront upgrades to ensure it is working correctly before upgrading on production.

We recommend that you take a full backup before using any API service.

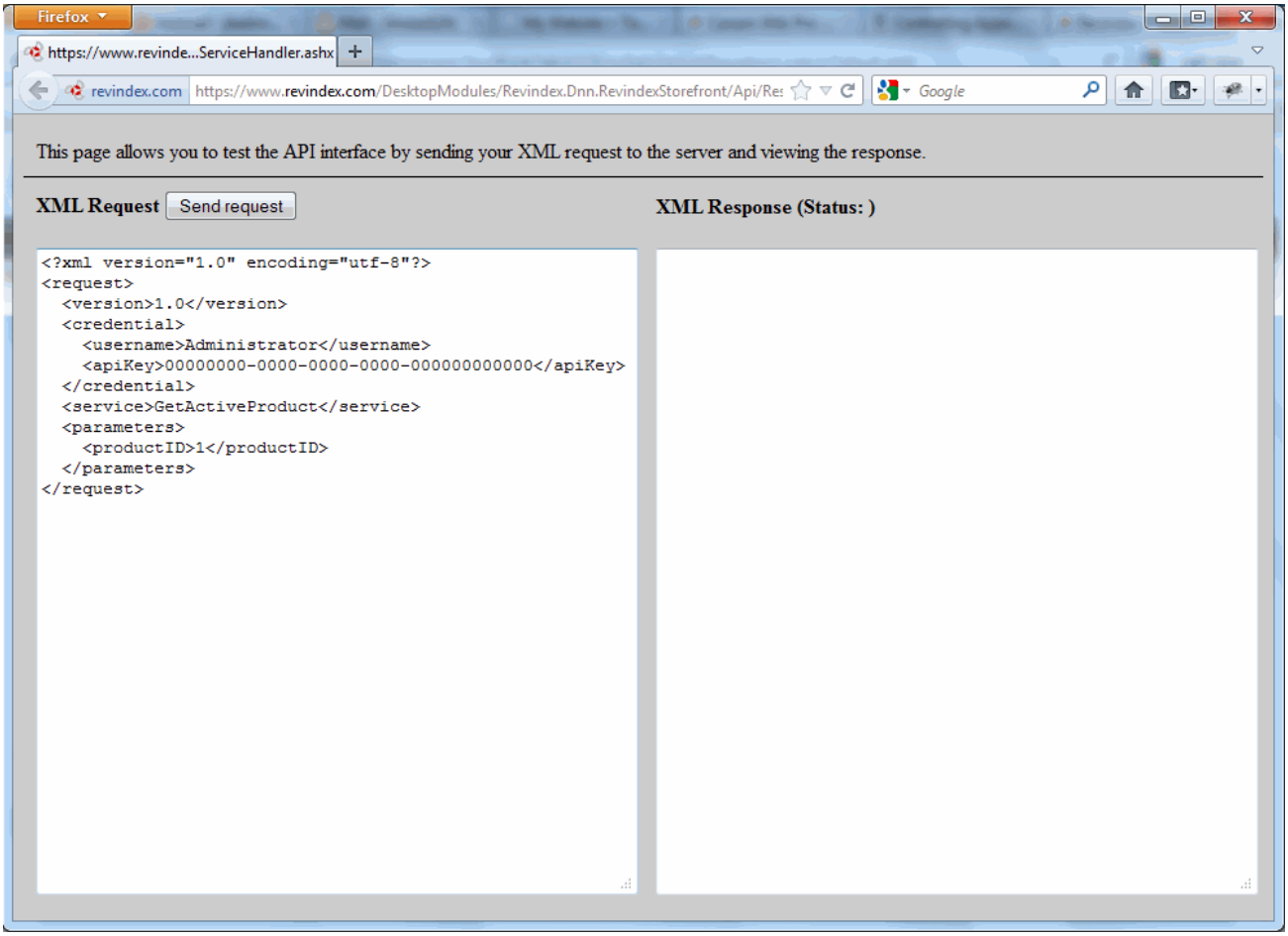
Overview

You must first enable the **API** feature under **Configuration > General** to access this functionality. Once enabled, you can login as host superuser to access the **Configuration > API** menu to generate your API keys.

You will also need some basic understanding of how the API service uses XML and the HTTP protocol to transmit data.

HTTP Transmission

The API service uses Internet HTTP protocol to transmit data like ordinary Web pages. However, it will only accept POST method calls similar to form submissions by a Web page. If a GET request is received (such as navigating directly to the URL of the API service from the Web browser), the API service will return a useful HTML page that you can use, in turn, to send a simple POST request for quick tries (any request made here will affect your environment's data).



Because it uses the same HTTP protocol as your Web site, it follows that the same timeout and server limitations apply to the API service as they do to your Web site. You may want to consider changing the default request timeout for your API call if you expect to initiate a long running request.

For security purposes, it is recommended to use the API service on a HTTPS (SSL) URL address to encrypt your transmissions.

Request

The API service expects to receive a HTTP posted data in properly formatted XML for each method call. Any XML reserved characters must be properly encoded. A typical request will consist of the following nodes:

Node	**Required**	**Data Type**	**Description**
request	Yes	XML	Root node.
version	Yes	Decimal	Indicates the API version. Currently, you should specify "1.0".
credential	Yes	XML	
username	Yes	String	API username.
apiKey	Yes	String	API Key.
service	Yes	String	Any valid supported service name (e.g. "GetActiveProduct")
parameters	Yes	XML	
param1...	Conditional		Parameter as required by the service being invoked.
param2...	Conditional		Parameter as required by the service being invoked.

Response

After submitting a request, you can expect to receive a typical HTTP status code response (200 OK, 403 Forbidden, etc.) as you would expect in normal Web requests. The common HTTP status codes are noted below. For a complete list, please consult the W3.org web site (http://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html). The first verification is to ensure you are receiving the **200 OK** status to ensure you are at least successfully communicating with the API service over the network.

Status Code	**Description**
200	OK
400	Bad request

401	Unauthorized
403	Forbidden

If the operation succeeded, you can expect to receive the response data in XML format. A typical XML response will consist of the following nodes below.

Node	Data Type	Description
response	XML	Root node
code	Integer	The service response code indicating success or failure.
message	String	The success or failure message.
return	XML	Any data being returned is stored underneath this node.
data1...		Actual data being returned, if any.
data2...		Actual data being returned, if any.

The following table lists the possible service response codes returned in the XML. It is important to verify the XML for the **2000 Success** code to ensure there are no errors.

Code	Description
2000	Success
4001	XML Parsing error
4002	Authentication error
4003	Service execution error.
4004	Service not found.
4005	Access permission error.

4006	Validation error.

Data Types

The API uses XML to hold parameter values being passed and returned. You need to follow the data type convention used in the API in order to correctly pass the parameters and consume the return values.

Data Type	Description	Valid Values
Boolean	A logical boolean.	"True" or "False" (without the quotes)
Byte	A Base64 encoded string of the byte array data.	YTM0NZomIzI2OTsmIzM0NTueYQ==
DateTime	A valid date with time component.	2001-01-01T12:00:00
Decimal	A numeric value that can contain a decimal point (x.xx)	12.49
Double	A numeric value that can contain decimal point (x.xx)	3289.3243
GUID	Globally unique identifier.	4F43B5CD-6817-4a64-9B32-640076F2A3A6
Integer	A 32-bit numeric value without decimals.	12345
Long	A 64-bit numeric value without decimals.	432432483244
String	Any text value.	"Hello world" (without the quotes)
XML	XML data.	Any valid XML data.
XML Code	XML data containing a "code" element with a "version" and "type" attribute. The enclosed value is the actual formula.	<code version="1.0" type="aspnetmarkup">...</code>
XML Locale	XML element named "locale" with any number of culture codes as attributes to hold the localized string.	<locale en-US="Hello" fr-FR="Bonjour" />
XML Rule	XML data containing a "rule" element with a "version" and "type" attribute. The enclosed value	<rule version="1.0" type="xslt">... </rule>

	is the actual formula.	

Authentication

Currently, only Administrators and Host users are allowed to connect to the API service. In order to authenticate with the API service, you will need to obtain your **Username** and **API Key** from your configuration panel. The API Key is different than your normal Web site password. Every request must include the credential node in your XML.

Examples

The example below authenticates as Administrator while calling the GetActiveProduct service.

```
<?xml version="1.0" encoding="utf-8"?>
<request>
    <version>1.0</version>
    <credential>
       <username>Administrator</username>
       <apikey>00000000-0000-0000-0000-000000000000</apikey>
    </credential>
    <service>GetActiveProduct</service>
    <parameters>
        <productid>1</productid>
    </parameters>
</request>
```

Services

The following pages describes the available services provided by the API.

Please pay close attention to the request parameters and return data. For security purposes, you can only query or change data belonging to the same portal (e.g. for the given API URL belonging to portal 0, you can only query or affect data from its own portal. You cannot request the CategoryID belonging to a different portal).

Category

The category is used to group products together in a display list. See ProductCategory (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/rest-api-productcategory/rvdwkpvm/section) section for setting up the relationship between products and categories.

DeleteCategory

This service is used to delete a Category object.

Request Parameters

Node	Required	Data Type	Description
categoryID	Yes	Integer	The object identifier.

Return Data

None

GetCategory

This service is used to query the Category object.

Request Parameters

Node	Required	Data Type	Description
categoryID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
category	XML	Container node.
availabilityRule	XML Rule	The rule to describe the conditions when the category can be shown.
categoryID	Integer	The object identifier.

categoryKey	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
createDate	DateTime	Creation date.
description	XML Locale	Localized description.
displayOrder	Integer	Sort order for display.
displayTemplate	String	The associated display template.
extension	XML	Additional data in XML.
metaDescription	XML Locale	Localized meta description.
metaKeywords	XML Locale	Localized meta keywords.
name	XML Locale	Localized name.
pageTitle	XML Locale	Localized page title.
parentCategoryID	Integer	The object identifier of the parent category if this is a child category.
portalID	Integer	
published	Boolean	If category should be published and visible by end users.
updateDate	DateTime	Update date.
urlName	XML Locale	Localized URL name for SEO.

GetCategories

This service is used to get all the Category objects belonging to the portal.

Request Parameters

None

Return Data

Node	Data Type	Description
categories	XML	Container node
category	XML	Zero or more category nodes with same data structure as GetCategory service return data.

InsertCategory

This service is used to create a new Category object.

Request Parameters

Node	Required	Data Type	Description
availabilityRule	No	XML Rule	The rule to describe the conditions when the category can be shown.
categoryKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
description	No	XML Locale	Localized description.
displayOrder	Yes	Integer	Sort order for display.
displayTemplate	No	String	The associated display template.
extension	No	XML	Additional data in XML.
metaDescription	No	XML Locale	Localized meta description.

metaKeywords	No	XML Locale	Localized meta keywords.
name	Yes	XML Locale	Localized name.
pageTitle	No	XML Locale	Localized page title.
parentCategoryID	No	Integer	The object identifier of the parent category if this is a child category.
published	Yes	Boolean	If category should be published and visible by end users.
urlName	No	XML Locale	Localized URL name for SEO.

Return Data

Same as GetCategory service return data.

UpdateCategory

This service is used to update a Category object.

Request Parameters

Node	**Required**	**Data Type**	**Description**
availabilityRule	No	XML Rule	The rule to describe the conditions when the category can be shown.
categoryID	Yes	Integer	The object identifier.
categoryKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
description	No	XML Locale	Localized description.

displayOrder	Yes	Integer	Sort order for display.
displayTemplate	No	String	The associated display template.
extension	No	XML	Additional data in XML.
metaDescription	No	XML Locale	Localized meta description.
metaKeywords	No	XML Locale	Localized meta keywords.
name	Yes	XML Locale	Localized name.
pageTitle	No	XML Locale	Localized page title.
parentCategoryID	No	Integer	The object identifier of the parent category if this is a child category.
published	Yes	Boolean	If category should be published and visible by end users.
urlName	No	XML Locale	Localized URL name for SEO.

Return Data

Same as GetCategory service return data.

Coupon

The coupon is a token used to trigger certain promotion rules such as giving a discount for purchases.

DeleteCoupon

This service is used to delete a Coupon object.

Request Parameters

Node	Required	Data Type	Description
couponID	Yes	Integer	The object identifier.

Return Data

None

GetCoupon

This service is used to query the Category object.

Request Parameters

Node	Required	Data Type	Description
couponID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
coupon	XML	Container node.
active	Boolean	Flag to indicate if coupon is active and can be used.
availabilityRule	XML Rule	The rule to describe the conditions when the coupon can be used.
code	String	The coupon code.

couponID	Integer	The object identifier.
createDate	DateTime	Creation date.
description	XML Locale	Localized description.
inventory	Integer	The number of remaining inventory of coupons.
portalID	Integer	
startDate	DateTime	The start date when the coupon is valid for using.
stopDate	DateTime	The stop date the coupon is no longer valid for using.
updateDate	DateTime	Update date.

GetCoupons

This service is used to get all the Coupon objects belonging to the portal.

Request Parameters

None

Return Data

Node	**Data Type**	**Description**
coupons	XML	Container node
coupon	XML	Zero or more coupon nodes with same data structure as GetCoupon service return data.

InsertCoupon

This service is used to create a new Coupon object.

Request Parameters

Node	Required	Data Type	Description
active	Yes	Boolean	Flag to indicate if coupon is active and can be used.
availabilityRule	No	XML Rule	The rule to describe the conditions when the coupon can be used.
code	Yes	String	The coupon code must be unique across your portal.
description	No	XML Locale	Localized description.
inventory	No	Integer	The number of remaining inventory of coupons. Value must be greater or equal to zero.
startDate	No	DateTime	The start date when the coupon is valid for using.
stopDate	No	DateTime	The stop date the coupon is no longer valid for using.

Return Data

Same as GetCoupon service return data.

UpdateCoupon

This service is used to update a Coupon object.

Request Parameters

Node	Required	Data Type	Description
active	Yes	Boolean	Flag to indicate if coupon is active and can be used.
availabilityRule	No	XML Rule	The rule to describe the conditions when the coupon can be used.
code	Yes	String	The coupon code must be unique across your portal.
couponID	Yes	Integer	The object identifier.
description	No	XML	Localized description.

		Locale	
inventory	No	Integer	The number of remaining inventory of coupons. Value must be greater or equal to zero.
startDate	No	DateTime	The start date when the coupon is valid for using.
stopDate	No	DateTime	The stop date the coupon is no longer valid for using.

Return Data

Same as GetCoupon service return data.

CrosssellProduct

CrosssellProduct is the object relationship associating cross-sell products together.

DeleteCrosssellProduct

This service is used to delete a CrosssellProduct object.

Request Parameters

Node	Required	Data Type	Description
crosssellProductID	Yes	Integer	The object identifier.

Return Data

None

GetCrosssellProduct

This service is used to query the CrosssellProduct object.

Request Parameters

Node	Required	Data Type	Description
crosssellProductID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
crosssellProduct	XML	Container node.
active	Boolean	
availabilityRule	XML Rule	The rule to describe the conditions when the offer can be purchased.
createDate	DateTime	Creation date.

crosssellProductID	Integer	The object identifier.
description	XML Locale	The description to provide an explanation for the offer.
displayOrder	Integer	Sort order for display.
offerProductID	Integer	The Product object identifier offered.
portalID	Integer	
productID	Integer	Product object identifier in this relation. If null, the cross-sell product is offered for any purchase.
startDate	DateTime	The start date when the offer is available for purchase.
stopDate	DateTime	The stop date when the offer is no longer available for purchase.
title	XML Locale	The offer title to grab the customer's attention.
updateDate	DateTime	Update date.

GetCrosssellProductsByProduct

This service is used to get all the CrosssellProduct objects belonging to the product.

Request Parameters

Node	Required	Data Type	Description
productID	No	Integer	The Product object identifier. If null, the cross-sell product is offered for any purchase.

Return Data

Node	Data Type	Description
crosssellProducts	XML	Container node

crosssellProduct	XML	Zero or more crosssellProduct nodes with same data structure as GetCrosssellProduct service return data.

InsertCrosssellProduct

This service is used to create a new CrosssellProduct object.

Request Parameters

Node	Required	Data Type	Description
active	Yes	Boolean	
availabilityRule	No	XML Rule	The rule to describe the conditions when the offer can be purchased.
description	No	XML Locale	The description to provide an explanation for the offer.
displayOrder	Yes	Integer	Sort order for display.
offerProductID	Yes	Integer	The Product object identifier offered.
productID	No	Integer	The Product object identifier. If null, the cross-sell product is offered for any purchase.
startDate	No	DateTime	The start date when the offer is available for purchase.
stopDate	No	DateTime	The stop date when the offer is no longer available for purchase.
title	No	XML Locale	The offer title to grab the customer's attention.

Return Data

Same as GetCrosssellProduct service return data.

UpdateCrosssellProduct

This service is used to update the CrosssellProduct object.

Request Parameters

Node	Required	Data Type	Description
active	Yes	Boolean	
availabilityRule	No	XML Rule	The rule to describe the conditions when the offer can be purchased.
crosssellProductID	Yes	Integer	The object identifier.
description	No	XML Locale	The description to provide an explanation for the offer.
displayOrder	Yes	Integer	Sort order for display.
offerProductID	Yes	Integer	The Product object identifier offered.
productID	No	Integer	The Product object identifier. If null, the cross-sell product is offered for any purchase.
startDate	No	DateTime	The start date when the offer is available for purchase.
stopDate	No	DateTime	The stop date when the offer is no longer available for purchase.
title	No	XML Locale	The offer title to grab the customer's attention.

Return Data

Same as GetCrosssellProduct service return data.

Distributor

The distributor is usually a company that supplies the product to you.

DeleteDistributor

This service is used to delete a Distributor object.

Request Parameters

Node	Required	Data Type	Description
distributorID	Yes	Integer	The object identifier.

Return Data

None

GetDistributor

This service is used to query the Distributor object.

Request Parameters

Node	Required	Data Type	Description
distributorID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
distributor	XML	Container node.
createDate	DateTime	Creation date.
description	XML Locale	Localized description.

displayOrder	Integer	Sort order for display.
displayTemplate	String	The associated display template.
distributorID	Integer	The object identifier.
distributorKey	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
email	String	
extension	XML	Additional data.
metaDescription	XML Locale	Localized meta description.
metaKeywords	XML Locale	Localized meta keywords.
name	XML Locale	Localized name.
pageTitle	XML Locale	Localized page title.
phone	String	
portalID	Integer	
published	Boolean	If distributor should be published and visible by end users.
updateDate	DateTime	Update date.
urlName	XML Locale	Localized URL name for SEO.

GetDistributors

This service is used to get all the Distributor objects belonging to the portal.

Request Parameters

None

Return Data

Node	Data Type	Description
distributors	XML	Container node
distributor	XML	Zero or more distributor nodes with same data structure as GetDistributor service return data.

InsertDistributor

This service is used to create a new Distributor object.

Request Parameters

Node	Required	Data Type	Description
description	No	XML Locale	Localized description.
displayOrder	Yes	Integer	Sort order for display.
displayTemplate	No	String	The associated display template.
distributorKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
email	No	String	
extension	No	XML	Additional data.
metaDescription	No	XML Locale	Localized meta description.

metaKeywords	No	XML Locale	Localized meta keywords.
name	Yes	XML Locale	Localized name.
pageTitle	No	XML Locale	Localized page title.
phone	No	String	
published	Yes	Boolean	If distributor should be published and visible by end users.
urlName	No	XML Locale	Localized URL name for SEO.

Return Data

Same as GetDistributor service return data.

UpdateDistributor

This service is used to update a Distributor object.

Request Parameters

Node	**Required**	**Data Type**	**Description**
description	No	XML Locale	Localized description.
displayOrder	Yes	Integer	Sort order for display.
displayTemplate	No	String	The associated display template.
distributorID	Yes	Integer	The object identifier.
distributorKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
email	No	String	

extension	No	XML	Additional data.
metaDescription	No	XML Locale	Localized meta description.
metaKeywords	No	XML Locale	Localized meta keywords.
name	Yes	XML Locale	Localized name.
pageTitle	No	XML Locale	Localized page title.
phone	No	String	
published	Yes	Boolean	If distributor should be published and visible by end users.
urlName	No	XML Locale	Localized URL name for SEO.

Return Data

Same as GetDistributor service return data.

Gallery

The gallery is used to store media data such as images.

DeleteGallery

This service is used to delete a Gallery object.

Request Parameters

Node	Required	Data Type	Description
galleryID	Yes	Integer	The object identifier.

Return Data

None

GetGallery

This service is used to query the Gallery object.

Request Parameters

Node	Required	Data Type	Description
galleryID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
gallery	XML	Container node.
alternateText	XML Locale	
		The Category object identifier if this gallery is associated to a category

categoryID	Integer	object.
createDate	DateTime	Creation date.
displayOrder	Integer	Sort order for display.
format	Integer	The gallery format type (Detailed = 1, Display = 2, Thumbnail = 3).
galleryID	Integer	The object identifier.
height	Integer	Height in pixels.
mediaFile	XML Locale	The localized file name saved to disk.
mediaData	XML Locale	The localized media data in Base64 encoding. e.g. <locale en-US="TWFuIGlzIGRpc3RXNoZ..." fr-FR="AbSTWFuIG1aXNoZ..."/>
mediaType	XML Locale	The localized media type (image/gif, image/jpeg or image/png). e.g. <locale en-US="image/jpeg" fr-FR="image/jpeg" />
portalID	Integer	
productID	Integer	The Product object identifier if this gallery is associated to a product object.
productVariantID	Integer	The ProductVariant object identifier if this gallery is associated to a product variant object.
updateDate	DateTime	Update date.
width	Integer	The width in pixels.

GetGalleriesByCategory

This service is used to get all the Gallery objects belonging to the category.

Request Parameters

Node	Required	Data Type	Description
categoryID	Yes	Integer	The Category object identifier.

Return Data

Node	Data Type	Description
galleries	XML	Container node
gallery	XML	Zero or more gallery nodes with same data structure as GetGallery service return data.

GetGalleriesByProduct

This service is used to get all the Gallery objects belonging to the product.

Request Parameters

Node	Required	Data Type	Description
productID	Yes	Integer	The Product object identifier.

Return Data

Node	Data Type	Description
galleries	XML	Container node
gallery	XML	Zero or more gallery nodes with same data structure as GetGallery service return data.

GetGalleriesByProductVariant

This service is used to get all the Gallery objects belonging to the product variant.

Request Parameters

Node	Required	Data Type	Description
productVariantID	Yes	Integer	The ProductVariant object identifier.

Return Data

Node	Data Type	Description
galleries	XML	Container node
gallery	XML	Zero or more gallery nodes with same data structure as GetGallery service return data.

InsertGallery

This service is used to create a new Gallery object.

Request Parameters

Node	Required	Data Type	Description
alternateText	No	XML Locale	
categoryID	No	Integer	The Category object identifier if this gallery is associated to a category object. If you specify this value, you must not specify the productID or productVariantID.
displayOrder	Yes	Integer	Sort order for display.
format	Yes	Integer	The gallery format type (Detailed = 1, Display = 2, Thumbnail = 3).

height	Yes	Integer	Height in pixels.
mediaFile	Yes	XML Locale	The localized file name saved to disk. You can set a random filename using a GUID value.
mediaData	Yes	XML Locale	The localized media data in Base64 encoding. e.g. <locale en-US="TWFuIGlzIGRpc3RpNoZ..." fr-FR="AbSTWFuIp1aXNoZ..."/>
mediaType	Yes	XML Locale	The localized media type (image/gif, image/jpeg or image/png). e.g. <locale en-US="image/jpeg" fr-FR="image/jpeg" />
productID	No	Integer	The Product object identifier if this gallery is associated to a product object. If you specify this value, you must not specify the categoryID or productVariantID.
productVariantID	No	Integer	The ProductVariant object identifier if this gallery is associated to a product variant object. If you specify this value, you must not specify the categoryID or productID.
width	Yes	Integer	The width in pixels.

Return Data

Same as GetGallery service return data.

Locale

The following service will retrieve information about the portal languages and cultures available.

GetLocale

This service is used to query the Locale object.

Request Parameters

Node	Required	Data Type	Description
code	Yes	String	The locale code (e.g. "en-US" or "fr-FR").

Return Data

Node	Data Type	Description
locale	XML	
code	String	
createdOnDate	DateTime	
englishName	String	
fallback	String	
isPublished	Boolean	
languageID	Integer	
lastModifiedOnDate	DateTime	
nativeName	String	
portalID	Integer	
text	String	

GetLocales

This service is used to query all the available portal Locales object.

Request Parameters

None

Return Data

Node	Data Type	Description
locales	XML	Container node
locale	XML	Zero or more locale nodes with same data structure as GetLocale service return data.

Manufacturer

The manufacturer is typically a company that fabricates the product.

DeleteManufacturer

This service is used to delete a Manufacturer object.

Request Parameters

Node	Required	Data Type	Description
manufacturerID	Yes	Integer	The object identifier.

Return Data

None

GetManufacturer

This service is used to query the Manufacturer object.

Request Parameters

Node	Required	Data Type	Description
manufacturerID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
manufacturer	XML	Container node.
createDate	DateTime	Creation date.
description	XML Locale	Localized description.

displayOrder	Integer	Sort order for display.
displayTemplate	String	The associated display template.
email	String	
extension	XML	Additional data.
manufacturerID	Integer	The object identifier.
manufacturerKey	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
metaDescription	XML Locale	Localized meta description.
metaKeywords	XML Locale	Localized meta keywords.
name	XML Locale	Localized name.
pageTitle	XML Locale	Localized page title.
phone	String	
portalID	Integer	
published	Boolean	If manufacturer should be published and visible by end users.
updateDate	DateTime	Update date.
urlName	XML Locale	Localized URL name for SEO.

GetManufacturers

This service is used to get all the Manufacturer objects belonging to the portal.

Request Parameters

None

Return Data

Node	Data Type	Description
manufacturers	XML	Container node
manufacturer	XML	Zero or more manufacturer nodes with same data structure as GetManufacturer service return data.

InsertManufacturer

This service is used to create a new Manufacturer object.

Request Parameters

Node	Required	Data Type	Description
description	No	XML Locale	Localized description.
displayOrder	Yes	Integer	Sort order for display.
displayTemplate	No	String	The associated display template.
email	No	String	
extension	No	XML	Additional data.
manufacturerKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
metaDescription	No	XML Locale	Localized meta description.
metaKeywords	No	XML Locale	Localized meta keywords.

name	Yes	XML Locale	Localized name.
pageTitle	No	XML Locale	Localized page title.
phone	No	String	
published	Yes	Boolean	If manufacturer should be published and visible by end users.
urlName	No	XML Locale	Localized URL name for SEO.

Return Data

Same as GetManufacturer service return data.

UpdateManufacturer

This service is used to update a Manufacturer object.

Request Parameters

Node	**Required**	**Data Type**	**Description**
description	No	XML Locale	Localized description.
displayOrder	Yes	Integer	Sort order for display.
displayTemplate	No	String	The associated display template.
manufacturerID	Yes	Integer	The object identifier.
email	No	String	
extension	No	XML	Additional data.
manufacturerKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.

metaDescription	No	XML Locale	Localized meta description.
metaKeywords	No	XML Locale	Localized meta keywords.
name	Yes	XML Locale	Localized name.
pageTitle	No	XML Locale	Localized page title.
phone	No	String	
published	Yes	Boolean	If manufacturer should be published and visible by end users.
urlName	No	XML Locale	Localized URL name for SEO.

Return Data

Same as GetManufacturer service return data.

Portal

The following service is useful to query information about the portal.

GetPortalInfo

This service is used to query the Portal object.

Request Parameters

None

Return Data

Node	Data Type	Description
portalInfo	XML	
administratorID	Integer	
administratorRoleID	Integer	
administratorRoleName	String	
adminTabID	Integer	
backgroundFile	String	
bannerAdvertising	Integer	
createdByUserID	Integer	
createdOnDate	DateTime	
cultureCode	String	
currency	String	
defaultLanguage	String	
description	String	
email	String	

expiryDate	DateTime	
footerText	String	
guid	GUID	
homeDirectory	String	
homeTabID	Integer	
hostFee	Double	
hostSpace	Integer	
keyID	Integer	
keyWords	String	
lastModifiedByUserID	Integer	
lastModifiedOnDate	DateTime	
loginTabID	Integer	
logoFile	String	
pageQuota	Integer	
pages	Integer	
portalGroupID	Integer	
portalID	Integer	
portalName	String	
registeredRoleID	Integer	
registeredRoleName	String	
registerTabID	Integer	
searchTabID	Integer	

splashTabID	Integer	
superTabID	Integer	
userQuota	Integer	
userRegistration	Integer	
users	Integer	
userTabID	Integer	
version	String	

Product

DeleteProduct

This service is used to delete a Product object.

Request Parameters

Node	Required	Data Type	Description
productID	Yes	Integer	The object identifier.

Return Data

None

GetActiveProduct

This service is used to query the Product object.

Request Parameters

Node	Required	Data Type	Description
productID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
product	XML	Container node.
allowInternetOrder	Boolean	Allow taking orders over the Internet.
allowPhoneOrder	Boolean	Allow taking order over the phone.
allowProductReview	Boolean	Allow users to write review for this product.

availabilityRule	XML Rule	The rule to describe the conditions when the product can be purchased.
buyingGuide	XML Locale	Localized description.
buyingGuideName	XML Locale	Override buying guide description name.
createDate	DateTime	Creation date.
displayOrder	Integer	Sort order for display.
displayTemplate	String	The associated display template.
dynamicFormCode	XML Code	Custom HTML or input form elements.
extension	XML	Additional data in XML.
faq	XML Locale	Localized description.
faqName	XML Locale	Override FAQ description name.
featured	Boolean	Localized description.
metaDescription	XML Locale	Localized meta description.
metaKeywords	XML Locale	Localized meta keywords.
name	XML Locale	Localized name.
overview	XML Locale	Localized description.
overviewName	XML Locale	Override overview description name.
pageTitle	XML	Localized page title.

	Locale	
portalID	Integer	
productDetailUrl	String	Specify a custom product detail page for this product or set to empty or null to use the default product detail page. Enter a valid Tab ID number for the page.
productID	Integer	The object identifier.
productKey	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
productType	Integer	The type of product (Regular = 1).
published	Boolean	If product should be published and visible by end users.
redirectUrl	String	Redirect product detail page to URL location. Useful for maintaining SEO value for a discontinued product.
sellerID	Integer	Indicate if this product belongs to a seller.
showAddToCart	Boolean	
showAddToWishList	Boolean	
showBuyNow	Boolean	
showInventory	Boolean	
showMSRP	Boolean	
showPrice	Boolean	
showQuantity	Boolean	
showRewardPoints	Boolean	
showSavings	Boolean	
showSeeDetails	Boolean	

showSKU	Boolean	
showSocialShare	Boolean	
showUpdate	Boolean	
specifications	XML Locale	Localized description.
specificationsName	XML Locale	Override specifications description name.
startDate	DateTime	The start date when the product is available for purchase.
stopDate	DateTime	The stop date when the product is no longer available for purchase.
summary	XML Locale	Localized description.
terms	XML Locale	Localized description.
termsName	XML Locale	Override terms description name.
updateDate	DateTime	Update date.
urlName	XML Locale	Localized URL name for SEO.

GetActiveProducts

This service is used to get all the Product objects belonging to the portal.

Request Parameters

None

Return Data

Node	Data Type	Description
products	XML	Container node

product	XML	Zero or more product nodes with same data structure as GetActiveProduct service return data.

InsertProduct

This service is used to create a new Product object.

Request Parameters

Node	Required	Data Type	Description
allowInternetOrder	Yes	Boolean	Allow taking orders over the Internet.
allowPhoneOrder	Yes	Boolean	Allow taking order over the phone.
allowProductReview	Yes	Boolean	Allow users to write review for this product.
availabilityRule	No	XML Rule	The rule to describe the conditions when the product can be purchased.
buyingGuide	No	XML Locale	Localized description.
buyingGuideName	No	XML Locale	Override buying guide description name.
displayOrder	Yes	Integer	Sort order for display.
displayTemplate	No	String	The associated display template.
dynamicFormCode	No	XML Code	Custom HTML or input form elements.
extension	No	XML	Additional data in XML.
faq	No	XML Locale	Localized description.
faqName	No	XML	Override FAQ description name.

		Locale	
featured	Yes	Boolean	Localized description.
metaDescription	No	XML Locale	Localized meta description.
metaKeywords	No	XML Locale	Localized meta keywords.
name	Yes	XML Locale	Localized name.
overview	No	XML Locale	Localized description.
overviewName	No	XML Locale	Override overview description name.
pageTitle	No	XML Locale	Localized page title.
productDetailUrl	No	String	Specify a custom product detail page for this product or set to empty or null to use the default product detail page. Enter a valid Tab ID number for the page.
productKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
productType	Yes	Integer	The type of product (Regular = 1).
published	Yes	Boolean	If product should be published and visible by end users.
redirectUrl	No	String	URL or Tab ID number.
sellerID	No	Integer	Indicate if this product belongs to a seller.
showAddToCart	Yes	Boolean	
showAddToWishList	Yes	Boolean	

showBuyNow	Yes	Boolean	
showInventory	Yes	Boolean	
showMSRP	Yes	Boolean	
showPrice	Yes	Boolean	
showQuantity	Yes	Boolean	
showRewardPoints	Yes	Boolean	
showSavings	Yes	Boolean	
showSeeDetails	Yes	Boolean	
showSKU	Yes	Boolean	
showSocialShare	Yes	Boolean	
showUpdate	Yes	Boolean	
specifications	No	XML Locale	Localized description.
specificationsName	No	XML Locale	Override specifications description name.
startDate	No	DateTime	The start date when the product is available for purchase.
stopDate	No	DateTime	The stop date when the product is no longer available for purchase.
summary	No	XML Locale	Localized description.
terms	No	XML Locale	Localized description.
termsName	No	XML Locale	Override terms description name.
urlName	No	XML	Localized URL name for SEO.

		Locale	

Return Data

Same as GetActiveProduct service return data.

UpdateProduct

This service is used to update a Product object.

Request Parameters

Node	Required	Data Type	Description
allowInternetOrder	Yes	Boolean	Allow taking orders over the Internet.
allowPhoneOrder	Yes	Boolean	Allow taking order over the phone.
allowProductReview	Yes	Boolean	Allow users to write review for this product.
availabilityRule	No	XML Rule	The rule to describe the conditions when the product can be purchased.
buyingGuide	No	XML Locale	Localized description.
buyingGuideName	No	XML Locale	Override buying guide description name.
displayOrder	Yes	Integer	Sort order for display.
displayTemplate	No	String	The associated display template.
dynamicFormCode	No	XML Code	Custom HTML or input form elements.
extension	No	XML	Additional data in XML.
faq	No	XML Locale	Localized description.
faqName	No	XML	Override FAQ description name.

		Locale	
featured	Yes	Boolean	Localized description.
metaDescription	No	XML Locale	Localized meta description.
metaKeywords	No	XML Locale	Localized meta keywords.
name	Yes	XML Locale	Localized name.
overview	No	XML Locale	Localized description.
overviewName	No	XML Locale	Override overview description name.
pageTitle	No	XML Locale	Localized page title.
productDetailUrl	No	String	Specify a custom product detail page for this product or set to empty or null to use the default product detail page. Enter a valid Tab ID number for the page.
productID	Yes	Integer	The object identifier.
productKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
productType	Yes	Integer	The type of product (Regular = 1).
published	Yes	Boolean	If product should be published and visible by end users.
redirectUrl	No	String	URL or Tab ID number.
sellerID	No	Integer	Indicate if this product belongs to a seller.
showAddToCart	Yes	Boolean	
showAddToWishList	Yes	Boolean	

showBuyNow	Yes	Boolean	
showInventory	Yes	Boolean	
showMSRP	Yes	Boolean	
showPrice	Yes	Boolean	
showQuantity	Yes	Boolean	
showRewardPoints	Yes	Boolean	
showSavings	Yes	Boolean	
showSeeDetails	Yes	Boolean	
showSKU	Yes	Boolean	
showSocialShare	Yes	Boolean	
showUpdate	Yes	Boolean	
specifications	No	XML Locale	Localized description.
specificationsName	No	XML Locale	Override specifications description name.
startDate	No	DateTime	The start date when the product is available for purchase.
stopDate	No	DateTime	The stop date when the product is no longer available for purchase.
summary	No	XML Locale	Localized description.
terms	No	XML Locale	Localized description.
termsName	No	XML Locale	Override terms description name.

urlName	No	XML Locale	Localized URL name for SEO.

Return Data

Same as GetActiveProduct service return data.

ProductAttribute

A ProductAttribute is the attribute value defined for a product or product variant usually seen under the specifications tab in the product detail page.

DeleteProductAttribute

This service is used to delete a ProductAttribute object.

Request Parameters

Node	Required	Data Type	Description
productAttributeID	Yes	Integer	The object identifier.

Return Data

None

GetProductAttribute

This service is used to query the ProductAttribute object.

Request Parameters

Node	Required	Data Type	Description
productAttributeID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
productAttribute	XML	Container node.
booleanValue	Boolean	Boolean type value.
createDate	DateTime	Creation date.

decimalValue	Decimal	Decimal type value.
integerValue	Integer	Integer type value.
productAttributeDefinitionID	Integer	The ProductAttributeDefinition object identifier.
productAttributeID	Integer	The object identifier.
productID	Integer	The Product object identifier if attribute belongs to product.
productVariantID	Integer	The ProductVariant object identifier if attribute belongs to product variant.
selectionValue	String	Pipe delimited list of integer selection values.
stringValue	XML Locale	Localized string type value.
updateDate	DateTime	Update date.

GetProductAttributesByProduct

This service is used to get all the ProductAttribute objects belonging to the product.

Request Parameters

Node	Required	Data Type	Description
productID	Yes	Integer	The Product object identifier.

Return Data

Node	Data Type	Description
productAttributes	XML	Container node
productAttribute	XML	Zero or more productAttribute nodes with same data structure as GetProductAttribute service return data.

GetProductAttributesByProductVariant

This service is used to get all the ProductAttribute objects belonging to the product variant.

Request Parameters

Node	Required	Data Type	Description
productVariantID	Yes	Integer	The ProductVariant object identifier.

Return Data

Node	Data Type	Description
productAttributes	XML	Container node
productAttribute	XML	Zero or more productAttribute nodes with same data structure as GetProductAttribute service return data.

InsertProductAttribute

This service is used to create a new ProductAttribute object.

Request Parameters

Node	Required	Data Type	Description
booleanValue	No	Boolean	Boolean type value. If you specify a value here, you must not specify the decimalValue, integerValue, selectionValue or stringValue.
decimalValue	No	Decimal	Decimal type value. If you specify a value here, you must not specify the booleanValue, integerValue, selectionValue or stringValue.
integerValue	No	Integer	Integer type value. If you specify a value here, you must not specify the booleanValue, decimalValue, selectionValue or stringValue.

productAttributeDefinitionID	Yes	Integer	The ProductAttributeDefinition object identifier.
productID	No	Integer	The Product object identifier if attribute belongs to product. If you specify the productID, you must not specify the productVariantID.
productVariantID	No	Integer	The ProductVariant object identifier if attribute belongs to product variant. If you specify the productVariantID, you must not specify the productID.
selectionValue	No	String	Pipe delimited list of integer selection values. Value must correspond to the possible ProductAttributeDefinitionSelectionID values. If you specify a value here, you must not specify the booleanValue, decimalValue, integerValue or stringValue.
stringValue	No	XML Locale	Localized string type value. If you specify a value here, you must not specify the booleanValue, decimalValue, integerValue or selectionValue.

Return Data

Same as GetProductAttribute service return data.

ProductAttributeDefinition

A ProductAttributeDefinition is used to describe the properties of a product attribute.

GetProductAttributeDefinition

This service is used to query the ProductAttributeDefinition object.

Request Parameters

Node	Required	Data Type	Description
productAttributeDefinitionID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
productAttributeDefinition	XML	
comparable	Boolean	Determines if this attribute type can be used for product comparison.
createdDate	DateTime	
description	XML Locale	
displayOrder	Integer	
filterable	Boolean	Product list can filter by this attribute type.
helpText	XML Locale	Help displayed in tooltip.
name	XML Locale	
portalID	Integer	

productAttributeDefinitionID	Integer	The object identifier.
productAttributeDefinitionKey	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
productAttributeGroupID	Integer	The attribute type belongs to a ProductAttributeGroup.
productAttributeType	Integer	Boolean = 1,Integer = 2, Decimal = 3, String = 4, Selection = 5
published	Boolean	
searchable	Boolean	Product search can index this attribute.
stepSize	Decimal	The incremental change for decimal attribute type input.
updateDate	DateTime	

GetProductAttributeDefinitions

This service is used to query all the ProductAttributeDefinition objects.

Request Parameters

None

Return Data

Node	Data Type	Description
productAttributeDefinitions	XML	Container node
productAttributeDefinition	XML	Zero or more ProductAttributeDefinition nodes with same data structure as GetProductAttributeDefinition service return data.

ProductAttributeGroup

A ProductAttributeGroup is used to group ProductAttributeDefinitions.

GetProductAttributeGroup

This service is used to query the ProductAttributeGroup object.

Request Parameters

Node	Required	Data Type	Description
productAttributeGroupID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
productAttributeGroup	XML	
createDate	DateTime	
description	XML Locale	
displayOrder	Integer	
name	XML Locale	
portalID	Integer	
productAttributeGroupID	Integer	The object identifier.
updateDate	DateTime	

GetProductAttributeGroups

This service is used to query all the ProductAttributeGroup objects.

Request Parameters

None

Return Data

Node	Data Type	Description
productAttributeGroups	XML	Container node
productAttributeGroup	XML	Zero or more ProductAttributeGroup nodes with same data structure as GetProductAttributeGroup service return data.

ProductCategory

ProductCategory is the relationship that joins the Product to the Category object.

DeleteProductCategory

This service is used to delete a ProductCategory object.

Request Parameters

Node	Required	Data Type	Description
productCategoryID	Yes	Integer	The object identifier.

Return Data

None

GetProductCategory

This service is used to query the ProductCategory object.

Request Parameters

Node	Required	Data Type	Description
productCategoryID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
productCategory	XML	Container node.
categoryID	Integer	The Category object identifier.
createDate	DateTime	Creation date.
productCategoryID	Integer	The object identifier.

productID	Integer	The Product object identifier.

GetProductCategoriesByCategory

This service is used to get all the ProductCategory objects belonging to the category.

Request Parameters

Node	Required	Data Type	Description
categoryID	Yes	Integer	The Category object identifier.

Return Data

Node	Data Type	Description
productCategories	XML	Container node
productCategory	XML	Zero or more productCategory nodes with same data structure as GetProductCategory service return data.

GetProductCategoriesByPortal

This service is used to get all the ProductCategory objects belonging to the category.

Request Parameters

None

Return Data

Node	Data Type	Description
productCategories	XML	Container node
productCategory	XML	Zero or more productCategory nodes with same data structure as GetProductCategory service return data.

GetProductCategoriesByProduct

This service is used to get all the ProductCategory objects belonging to the product.

Request Parameters

Node	Required	Data Type	Description
productID	Yes	Integer	The Product object identifier.

Return Data

Node	Data Type	Description
productCategories	XML	Container node
productCategory	XML	Zero or more productCategory nodes with same data structure as GetProductCategory service return data.

InsertProductCategory

This service is used to create a new ProductCategory object.

Request Parameters

Node	Required	Data Type	Description
categoryID	Yes	Integer	The Category object identifier.
productID	Yes	Integer	The Product object identifier.

Return Data

Same as GetProductCategory service return data.

ProductComponent

The ProductComponent is used to group the product parts in a bundled product.

DeleteProductComponent

This service is used to delete a ProductComponent object.

Request Parameters

Node	Required	Data Type	Description
productComponentID	Yes	Integer	The object identifier.

Return Data

None

GetActiveProductComponent

This service is used to query the ProductComponent object.

Request Parameters

Node	Required	Data Type	Description
productComponentID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
productComponent	XML	Container node.
createDate	DateTime	Creation date.
displayOrder	Integer	Sort order for display.
		The type of component. Implicit = 1, Explicit = 2, Multiple = 3,

componentType	Integer	Single = 4
name	XML Locale	Localized name.
productComponentID	Integer	The object identifier.
productComponentKey	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
productVariantID	Integer	The product variant object identifier associated to this component.
updateDate	DateTime	Update date.

GetActiveProductComponentsByProductVariant

This service is used to get all the ProductComponent objects belonging to the ProductVariant.

Request Parameters

Node	Required	Data Type	Description
productVariantID	Yes	Integer	The ProductVariant object identifier.

Return Data

Node	Data Type	Description
productComponents	XML	Container node
productComponent	XML	Zero or more productComponent nodes with same data structure as GetActiveProductComponent service return data.

InsertProductComponent

This service is used to create a new ProductComponent object.

Request Parameters

Node	Required	Data Type	Description
displayOrder	Yes	Integer	Sort order for display.
componentType	Yes	Integer	The type of component. Implicit = 1, Explicit = 2, Multiple = 3, Single = 4
name	Yes	XML Locale	Localized name.
productComponentKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
productVariantID			The reference ProductVariant identifier this ProductComponent belongs to.

Return Data

Same as GetActiveProductComponent service return data.

ProductPart

The ProductPart is used to indicate the product variant participating for sale in a bundled product.

DeleteProductPart

This service is used to delete a ProductPart object.

Request Parameters

Node	Required	Data Type	Description
productPartID	Yes	Integer	The object identifier.

Return Data

None

GetActiveProductPart

This service is used to query the ProductPart object.

Request Parameters

Node	Required	Data Type	Description
productPartID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
productPart	XML	Container node.
createDate	DateTime	Creation date.
defaultQuantity	Integer	The default quantity for the product part.
displayOrder	Integer	Sort order for display.

maxOrderQuantity	Integer	The maximum quantity that can be ordered in this bundle.
minOrderQuantity	Integer	The minimum quantity that can be ordered in this bundle.
modifierRule	XML Rule	Product part modifier.
productComponentID	Integer	Reference the corresponding ProductComponent by its object identifier.
selected	Boolean	Indicate if the product part is selected and participating in the bundle.
showPrice	Boolean	Indicate if the price is displayed to the customer.
showQuantity	Boolean	Indicate if the customer can override the quantity.
updateDate	DateTime	Update date.

GetActiveProductPartsByProductComponent

This service is used to get all the ProductPart objects belonging to the ProductComponent.

Request Parameters

Node	Required	Data Type	Description
productComponentID	Yes	Integer	The ProductComponent object identifier.

Return Data

Node	Data Type	Description
productParts	XML	Container node
productPart	XML	Zero or more productPart nodes with same data structure as GetActiveProductPart service return data.

InsertProductPart

This service is used to create a new ProductPart object.

Request Parameters

Node	Required	Data Type	Description
defaultQuantity	Yes	Integer	Indicate the default quantity.
displayOrder	Yes	Integer	Sort order for display.
maxOrderQuantity	No	Integer	The maximum quantity that can be ordered in this bundle.
minOrderQuantity	No	Integer	The minimum quantity that can be ordered in this bundle.
modifierRule	No	XML Rule	The product part modifier rule.
productComponentID	Yes	Integer	The reference ProductComponent identifier this ProductPart belongs to.
selected	Yes	Boolean	Indicate if the product part is selected and participating in the bundle.
showPrice	Yes	Boolean	Indicate if the price is displayed to the customer.
showQuantity	Yes	Boolean	Indicate if the customer can override the quantity.

Return Data

Same as GetActiveProductPart service return data.

ProductVariant

DeleteProductVariant

This service is used to delete a ProductVariant object.

Request Parameters

Node	Required	Data Type	Description
productVariantID	Yes	Integer	The object identifier.

Return Data

None

GetActiveProductVariant

This service is used to query the ProductVariant object.

Request Parameters

Node	Required	Data Type	Description
productVariantID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
productVariant	XML	Container node.
allowProductComparison	Boolean	Allow this variant for product comparison.
allowRecurringGroupOrders	Boolean	Allow this variant to be grouped together with other similar orders if this variant is due for recurring.

allowRewardsPoint	Boolean	Allow this variant to participate in rewards point program.
availabilityRule	XML Rule	The rule to describe the conditions when the product can be purchased.
basePrice	Decimal	The base price.
buyingGuide	XML Locale	Localized description.
buyingGuideName	XML Locale	Override the default buying guide description name.
createDate	DateTime	Creation date.
depth	Decimal	Product depth usually including packaging for shipping calculation (cm).
displayOrder	Integer	Sort order for display.
distributorID	Integer	The Distributor object identifier.
distributorSKU	String	
downloadFile	String	The URL, file or page associated to the product.
dynamicFormCode	XML Code	Custom HTML or input form elements.
extension	XML	Additional data in XML.
faq	XML Locale	Localized description.
faqName	XML Locale	Override the default FAQ description name.
handlingPrice	Decimal	Handling price may be used by handling rule.
height	Decimal	Product height usually including packaging for shipping calculation (cm).
inventory	Integer	Product inventory.

inventoryEmptyBehavior		How product behaves when inventory is empty. DisallowOrder = 1 DisableProduct = 2 AllowBackorder = 3
manufacturerID	Integer	The Manufacturer object identifier.
manufacturerSKU	String	
maxInventory	Integer	The desirable max inventory to keep.
maxOrderQuantity	Integer	Maximum quantity per order.
metaDescription	XML Locale	Localized meta description.
metaKeywords	XML Locale	Localized meta keywords.
minInventory	Integer	The desirable min inventory to keep.
minOrderQuantity	Integer	Minimum quantity per order.
modifierRule	XML Rule	Product modifer rule.
msrp	Decimal	Manufacturer suggested retail price.
name	XML Locale	Localized name.
overview	XML Locale	Localized description.
overviewName	XML Locale	Override the default overview description name.
packageType	Integer	Package type for shipping calculation (Unspecified = 1, Envelope = 1000, Box = 2000, Bag = 3000, Tube = 4000).
pageTitle	XML Locale	Localized page title.
portalID	Integer	

preorderInterval	Integer	The days to preorder a recurring order ahead of time.
priceText	XML Locale	Any text specified here will be shown to the customer instead of the actual price.
productCost	Decimal	The product cost.
productID	Integer	The Product object identifier.
productVariantID	Integer	The object identifier.
productVariantKey	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
promotionRule	XML Rule	Product promotion rule.
promotionStartDate	DateTime	Product promotion start date.
promotionStopDate	DateTime	Product promotion stop date.
published	Boolean	Allow product to be displayed.
recurringInterval	Integer	The recurring interval.
recurringIntervalType	Integer	The interval type (Day = 1, Week = 2, Month = 3, Year = 4).
recurringMaxRepeat	Integer	The number of times to repeat the recurring product. Empty indicates repeat perpetually.
requireHandling	Boolean	Indicate if product requires handling.
requireShipping	Boolean	Indicate if product requires shipping.
rewardPoints	Integer	The custom number of rewards points to award.
rightDefinitionID	Integer	The RightDefinition identifier to issue upon purchase.If this value is set, the customer will be issued the access right when order is paid or completed.
shippingCode	String	Shipping code may be used by your shipping provider to classify this package to obtain a more accurate quote.
shippingPrice	Decimal	Shipping price may be used by shipping rule.

sku	String	
specifications	XML Locale	Localized description.
specificationsName	XML Locale	Override the default specifications description name.
startDate	DateTime	The start date when the product is available for purchase.
startRecurringDate	DateTime	Initialize a different recurring start date.
startRecurringInterval	Integer	Initialize a different recurring start date by interval amount.
startRecurringIntervalType	Integer	The interval type (Day = 1, Week = 2, Month = 3, Year = 4).
stopDate	DateTime	The stop date when the product is no longer available for purchase.
summary	XML Locale	Localized description.
taxClassID	Integer	TaxClass object identifier.
terms	XML Locale	Localized description.
termsName	XML Locale	Override the default terms description name.
universalProductCode	String	Universal product code.
updateDate	DateTime	Update date.
urlName	XML Locale	Localized URL name for SEO.
voucherDefinitionID	Integer	If this value is set, a new voucher of this type will be automatically generated and emailed to customer when order is paid or completed.
warehouseID	Integer	Indicate if this product is stored at a warehouse.

weight	Decimal	Product weight usually including packaging for shipping calculation (g).
width	Decimal	Product width usually including packaging for shipping calculation (cm).

GetActiveProductVariants

This service is used to get all the ProductVariant objects belonging to the product.

Request Parameters

Node	Required	Data Type	Description
productID	Yes	Integer	The Product object identifier.

Return Data

Node	Data Type	Description
productVariants	XML	Container node
productVariant	XML	Zero or more productVariant nodes with same data structure as GetActiveProductVariant service return data.

GetActiveProductVariantsByPortal

This service is used to get all the ProductVariant objects by portal.

Request Parameters

None

Return Data

Node	Data Type	Description
productVariants	XML	Container node

productVariant	XML	Zero or more productVariant nodes with same data structure as GetActiveProductVariant service return data.

GetActiveProductVariantsBySku

This service is used to get all the ProductVariant objects with matching SKU.

Request Parameters

Node	Required	Data Type	Description
sku	Yes	String	The SKU value.

Return Data

Node	Data Type	Description
productVariants	XML	Container node
productVariant	XML	Zero or more productVariant nodes with same data structure as GetActiveProductVariant service return data.

InsertProductVariant

This service is used to create a new ProductVariant object.

Request Parameters

Node	Required	Data Type	Description
allowProductComparison	Yes	Boolean	Allow this variant for product comparison.
allowRecurringGroupOrders	Yes	Boolean	Allow this variant to be grouped together with other similar orders if this variant is due for

			recurring.
allowRewardsPoint	Yes	Boolean	Allow this variant to participate in rewards point program.
availabilityRule	No	XML Rule	The rule to describe the conditions when the product can be purchased.
basePrice	Yes	Decimal	The base price.
buyingGuide	No	XML Locale	Localized description.
buyingGuideName	No	XML Locale	Override the default buying guide description name.
depth	Yes	Decimal	Product depth usually including packaging for shipping calculation (cm).
displayOrder	Yes	Integer	Sort order for display.
distributorID	No	Integer	The Distributor object identifier.
distributorSKU	No	String	
downloadFile	No	String	The URL, file or page associated to the product.
dynamicFormCode	No	XML Code	Custom HTML or input form elements.
extension	No	XML	Additional data in XML.
faq	No	XML Locale	Localized description.
faqName	No	XML Locale	Override the default FAQ description name.
handlingPrice	Yes	Decimal	Handling price may be used by handling rule.
height	Yes	Decimal	Product height usually including packaging for shipping calculation (cm).

inventory	No	Integer	Product inventory.
inventoryEmptyBehavior	Yes	Integer	How product behaves when inventory is empty. DisallowOrder = 1 DisableProduct = 2 AllowBackorder = 3
manufacturerID	No	Integer	The Manufacturer object identifier.
manufacturerSKU	No	String	
maxInventory	No	Integer	The desirable max inventory to keep.
maxOrderQuantity	No	Integer	Maximum quantity per order.
metaDescription	No	XML Locale	Localized meta description.
metaKeywords	No	XML Locale	Localized meta keywords.
minInventory	No	Integer	The desirable min inventory to keep.
minOrderQuantity	No	Integer	Minimum quantity per order.
modifierRule	No	XML Rule	Product modifer rule.
msrp	No	Decimal	Manufacturer suggested retail price.
name	No	XML Locale	Localized name.
overview	No	XML Locale	Localized description.
overviewName	No	XML Locale	Override the default overview description name.
packageType	Yes	Integer	Package type for shipping calculation (Unspecified = 1, Envelope = 1000, Box = 2000, Bag = 3000, Tube = 4000).

pageTitle	No	XML Locale	Localized page title.
preorderInterval	Yes	Integer	The days to preorder a recurring order ahead of time.
priceText	No	XML Locale	Any text specified here will be shown to the customer instead of the actual price.
productCost	No	Decimal	The product cost.
productID	Yes	Integer	The Product object identifier.
productVariantKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
promotionRule	No	XML Rule	Product promotion rule.
promotionStartDate	No	DateTime	Product promotion start date.
promotionStopDate	No	DateTime	Product promotion stop date.
published	Yes	Boolean	Allow product to be displayed.
recurringInterval	Yes	Integer	The recurring interval. A zero value indicates non-recurring.
recurringIntervalType	Yes	Integer	The interval type (Day = 1, Week = 2, Month = 3, Year = 4).
recurringMaxRepeat	No	Integer	The number of times to repeat the recurring product. Empty indicates repeat perpetually.
requireHandling	Yes	Boolean	Indicate if product requires handling.
requireShipping	Yes	Boolean	Indicate if product requires shipping.
rewardPoints	No	Integer	The custom number of rewards points to award.
rightDefinitionID	No	Integer	The RightDefinition identifier to issue upon purchase.If this value is set, the customer will be issued the access right when order is paid

			or completed.
shippingCode	No	String	Shipping code may be used by your shipping provider to classify this package to obtain a more accurate quote.
shippingPrice	Yes	Decimal	Shipping price may be used by shipping rule.
sku	No	String	
specifications	No	XML Locale	Localized description.
specificationsName	No	XML Locale	Override the default specifications description name.
startDate	No	DateTime	The start date when the product is available for purchase.
startRecurringDate	No	DateTime	Initialize a different recurring start date.
startRecurringInterval	Yes	Integer	Initialize a different recurring start date by interval amount.
startRecurringIntervalType	Yes	Integer	The interval type (Day = 1, Week = 2, Month = 3, Year = 4).
stopDate	No	DateTime	The stop date when the product is no longer available for purchase.
summary	No	XML Locale	Localized description.
taxClassID	No	Integer	TaxClass object identifier.
terms	No	XML Locale	Localized description.
termsName	No	XML Locale	Override the default terms description name.
universalProductCode	No	String	Universal product code.
		XML	

urlName	No	Localized	Localized URL name for SEO.
voucherDefinitionID	No	Integer	If this value is set, a new voucher of this type will be automatically generated and emailed to customer when order is paid or completed.
warehouseID	No	Integer	Indicate if this product is stored at a warehouse.
weight	Yes	Decimal	Product weight usually including packaging for shipping calculation (g).
width	Yes	Decimal	Product width usually including packaging for shipping calculation (cm).

Return Data

Same as GetActiveProductVariant service return data.

UpdateProductVariant

This service is used to update a ProductVariant object.

Request Parameters

Node	**Required**	**Data Type**	**Description**
allowProductComparison	Yes	Boolean	Allow this variant for product comparison.
allowRecurringGroupOrders	Yes	Boolean	Allow this variant to be grouped together with other similar orders if this variant is due for recurring.
allowRewardsPoint	Yes	Boolean	Allow this variant to participate in rewards point program.
availabilityRule	No	XML Rule	The rule to describe the conditions when the product can be purchased.
basePrice	Yes	Decimal	The base price.
		XML	

buyingGuide	No	Locale	Localized description.
buyingGuideName	No	XML Locale	Override the default buying guide description name.
depth	Yes	Decimal	Product depth usually including packaging for shipping calculation (cm).
displayOrder	Yes	Integer	Sort order for display.
distributorID	No	Integer	The Distributor object identifier.
distributorSKU	No	String	
downloadFile	No	String	The URL, file or page associated to the product.
dynamicFormCode	No	XML Code	Custom HTML or input form elements.
extension	No	XML	Additional data in XML.
faq	No	XML Locale	Localized description.
faqName	No	XML Locale	Override the default FAQ description name.
handlingPrice	Yes	Decimal	Handling price may be used by handling rule.
height	Yes	Decimal	Product height usually including packaging for shipping calculation (cm).
inventory	No	Integer	Product inventory.
inventoryEmptyBehavior	Yes	Integer	How product behaves when inventory is empty. DisallowOrder = 1 DisableProduct = 2 AllowBackorder = 3
manufacturerID	No	Integer	The Manufacturer object identifier.

manufacturerSKU	No	String	
maxInventory	No	Integer	The desirable max inventory to keep.
maxOrderQuantity	No	Integer	Maximum quantity per order.
metaDescription	No	XML Locale	Localized meta description.
metaKeywords	No	XML Locale	Localized meta keywords.
minInventory	No	Integer	The desirable min inventory to keep.
minOrderQuantity	No	Integer	Minimum quantity per order.
modifierRule	No	XML Rule	Product modifer rule.
msrp	No	Decimal	Manufacturer suggested retail price.
name	No	XML Locale	Localized name.
overview	No	XML Locale	Localized description.
overviewName	No	XML Locale	Override the default overview description name.
packageType	Yes	Integer	Package type for shipping calculation (Unspecified = 1, Envelope = 1000, Box = 2000, Bag = 3000, Tube = 4000).
pageTitle	No	XML Locale	Localized page title.
preorderInterval	Yes	Integer	The days to preorder a recurring order ahead of time.
priceText	No	XML Locale	Any text specified here will be shown to the customer instead of the actual price.
productCost	No	Decimal	The product cost.

productID	Yes	Integer	The Product object identifier.
productVariantID	Yes	Integer	The object identifier.
productVariantKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
promotionRule	No	XML Rule	Product promotion rule.
promotionStartDate	No	DateTime	Product promotion start date.
promotionStopDate	No	DateTime	Product promotion stop date.
published	Yes	Boolean	Allow product to be displayed.
recurringInterval	Yes	Integer	The recurring interval. A zero value indicates non-recurring.
recurringIntervalType	Yes	Integer	The interval type (Day = 1, Week = 2, Month = 3, Year = 4).
recurringMaxRepeat	No	Integer	The number of times to repeat the recurring product. Empty indicates repeat perpetually.
requireHandling	Yes	Boolean	Indicate if product requires handling.
requireShipping	Yes	Boolean	Indicate if product requires shipping.
rewardPoints	No	Integer	The custom number of rewards points to award.
rightDefinitionID	No	Integer	The RightDefinition identifier to issue upon purchase.If this value is set, the customer will be issued the access right when order is paid or completed.
shippingCode	No	String	Shipping code may be used by your shipping provider to classify this package to obtain a more accurate quote.
shippingPrice	Yes	Decimal	Shipping price may be used by shipping rule.
sku	No	String	

specifications	No	XML Locale	Localized description.
specificationsName	No	XML Locale	Override the default specifications description name.
startDate	No	DateTime	The start date when the product is available for purchase.
startRecurringDate	No	DateTime	Initialize a different recurring start date.
startRecurringInterval	Yes	Integer	Initialize a different recurring start date by interval amount.
startRecurringIntervalType	Yes	Integer	The interval type (Day = 1, Week = 2, Month = 3, Year = 4).
stopDate	No	DateTime	The stop date when the product is no longer available for purchase.
summary	No	XML Locale	Localized description.
taxClassID	No	Integer	TaxClass object identifier.
terms	No	XML Locale	Localized description.
termsName	No	XML Locale	Override the default terms description name.
universalProductCode	No	String	Universal product code.
urlName	No	XML Locale	Localized URL name for SEO.
voucherDefinitionID	No	Integer	If this value is set, a new voucher of this type will be automatically generated and emailed to customer when order is paid or completed.
warehouseID	No	Integer	Indicate if this product is stored at a warehouse.
weight	Yes	Decimal	Product weight usually including packaging for

			shipping calculation (g).
width	Yes	Decimal	Product width usually including packaging for shipping calculation (cm).

Return Data

Same as GetActiveProductVariant service return data.

ProductVariantGroup

The ProductVariantGroup is used to group related variants such as Size or Color.

DeleteProductVariantGroup

This service is used to delete a ProductVariantGroup object.

Request Parameters

Node	Required	Data Type	Description
productVariantGroupID	Yes	Integer	The object identifier.

Return Data

None

GetProductVariantGroup

This service is used to query the ProductVariantGroup object.

Request Parameters

Node	Required	Data Type	Description
productVariantGroupID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
productVariantGroup	XML	Container node.
createDate	DateTime	Creation date.
displayOrder	Integer	Sort order for display.
		The type of control to display. DropDownList = 1,

fieldType	Integer	RadioButtonList = 2, ColorPicker = 3
helpText	XML Locale	Localized help text.
name	XML Locale	Localized name.
productID	Integer	The reference Product identifier this product variant group belongs to.
productVariantGroupID	Integer	The object identifier.
productVariantGroupKey	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
updateDate	DateTime	Update date.

GetProductVariantGroups

This service is used to get all the ProductVariantGroup objects belonging to the Product.

Request Parameters

Node	Required	Data Type	Description
productID	Yes	Integer	The Product object identifier.

Return Data

Node	Data Type	Description
productVariantGroups	XML	Container node
productVariantGroup	XML	Zero or more productVariantGroup nodes with same data structure as GetProductVariantGroup service return data.

InsertProductVariantGroup

This service is used to create a new ProductVariantGroup object.

Request Parameters

Node	Required	Data Type	Description
displayOrder	Yes	Integer	Sort order for display.
fieldType	Yes	Integer	The type of control to display. DropDownList = 1, RadioButtonList = 2, ColorPicker = 3
helpText	No	XML Locale	Localized help text.
name	Yes	XML Locale	Localized name.
productID	Yes	Integer	The reference Product identifier this product variant group belongs to.
productVariantGroupKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.

Return Data

Same as GetProductVariantGroup service return data.

UpdateProductVariantGroup

This service is used to update a ProductVariantGroup object.

Request Parameters

Node	Required	Data Type	Description
displayOrder	Yes	Integer	Sort order for display.
			The type of control to display. DropDownList = 1,

fieldType	Yes	Integer	RadioButtonList = 2, ColorPicker = 3
helpText	No	XML Locale	Localized help text.
name	Yes	XML Locale	Localized name.
productID	Yes	Integer	The reference Product identifier this product variant group belongs to.
productVariantGroupID	Yes	Integer	The object identifier.
productVariantGroupKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.

Return Data

Same as GetProductVariantGroup service return data.

ProductVariantGroupOption

The ProductVariantGroupOption is the individual selectable options in a product variant group such as Small or Blue.

DeleteProductVariantGroupOption

This service is used to delete a ProductVariantGroupOption object.

Request Parameters

Node	Required	Data Type	Description
productVariantGroupOptionID	Yes	Integer	The object identifier.

Return Data

None

GetProductVariantGroupOption

This service is used to query the ProductVariantGroupOption object.

Request Parameters

Node	Required	Data Type	Description
productVariantGroupOptionID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
productVariantGroupOption	XML	Container node.
createDate	DateTime	Creation date.
displayOrder	Integer	Sort order for display.

name	XML Locale	Localized name.
productVariantGroupID	Integer	The reference ProductVariantGroup identifier this product variant group option belongs to.
productVariantGroupOptionID	Integer	The object identifier.
productVariantGroupOptionKey	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.
updateDate	DateTime	Update date.

GetProductVariantGroupOptions

This service is used to get all the ProductVariantGroupOption objects belonging to the ProductVariantGroup.

Request Parameters

Node	Required	Data Type	Description
productVariantGroupID	Yes	Integer	The ProductVariantGroup object identifier.

Return Data

Node	Data Type	Description
productVariantGroupOptions	XML	Container node
productVariantGroupOption	XML	Zero or more productVariantGroupOption nodes with same data structure as GetProductVariantGroupOption service return data.

InsertProductVariantGroupOption

This service is used to create a new ProductVariantGroupOption object.

Request Parameters

Node	Required	Data Type	Description
displayOrder	Yes	Integer	Sort order for display.
name	Yes	XML Locale	Localized name.
productVariantGroupID	Yes	Integer	The reference ProductVariantGroup identifier this product variant group belongs to.
productVariantGroupOptionKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.

Return Data

Same as GetProductVariantGroupOption service return data.

UpdateProductVariantGroupOption

This service is used to update a ProductVariantGroupOption object.

Request Parameters

Node	Required	Data Type	Description
displayOrder	Yes	Integer	Sort order for display.
helpText	No	XML Locale	Localized help text.
name	Yes	XML Locale	Localized name.
productVariantGroupID	Yes	Integer	The reference ProductVariantGroup identifier this product variant group belongs to.
productVariantGroupOptionID	Yes	Integer	The object identifier.

productVariantGroupOptionKey	Yes	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.

Return Data

Same as GetProductVariantGroupOption service return data.

ProductVariantOption

The ProductVariantOption is the association between the ProductVariant and the individual selectable options in a ProductVariantGroupOption.

DeleteProductVariantOption

This service is used to delete a ProductVariantOption object.

Request Parameters

Node	Required	Data Type	Description
productVariantOptionID	Yes	Integer	The object identifier.

Return Data

None

GetProductVariantOption

This service is used to query the ProductVariantOption object.

Request Parameters

Node	Required	Data Type	Description
productVariantOptionID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
productVariantOption	XML	Container node.
createDate	DateTime	Creation date.
productVariantGroupOptionID	Integer	The reference ProductVariantGroupOption identifier.
productVariantID	Integer	The reference ProductVariant identifier.

productVariantOptionID	Integer	The object identifier.
updateDate	DateTime	Update date.

GetProductVariantOptionsByProductVariant

This service is used to get all the ProductVariantOption objects belonging to the ProductVariant.

Request Parameters

Node	Required	Data Type	Description
productVariantID	Yes	Integer	The ProductVariant object identifier.

Return Data

Node	Data Type	Description
productVariantOptions	XML	Container node
productVariantOption	XML	Zero or more productVariantOption nodes with same data structure as GetProductVariantOption service return data.

GetProductVariantOptionsByProductVariantGroupOption

This service is used to get all the ProductVariantOption objects associated with the ProductVariantGroupOption.

Request Parameters

Node	Required	Data Type	Description
productVariantGroupOptionID	Yes	Integer	The ProductVariantGroupOption object identifier.

Return Data

Node	Data Type	Description
productVariantOptions	XML	Container node
productVariantOption	XML	Zero or more productVariantOption nodes with same data structure as GetProductVariantOption service return data.

InsertProductVariantOption

This service is used to create a new ProductVariantOption object.

Request Parameters

Node	Required	Data Type	Description
productVariantGroupOptionID	Yes	Integer	The reference ProductVariantGroupOption identifier.
productVariantID	Yes	Integer	The reference ProductVariant identifier.

Return Data

Same as GetProductVariantOption service return data.

RecurringSalesOrder

The RecurringSalesOrder controls the repeat of sales orders.

GetRecurringSalesOrder

This service is used to query the RecurringSalesOrder object.

Request Parameters

Node	Required	Data Type	Description
recurringSalesOrderID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
recurringSalesOrder	XML	Container node.
createDate	DateTime	Creation date.
cultureCode	String	The culture code.
dynamicFormResult	XML	The result collected from custom fields.
maxRepeat	Integer	The number of times this recurring order is allowed to repeat.
nextRecurringDate	DateTime	The next recurring date.
originalSalesOrderID	Integer	The associated SalesOrder.
portalID	Integer	
productVariantID	Integer	The ProductVariant object identifier.
quantity	Integer	
recurringSalesOrderID	Integer	The object identifier.

repeatCount	Integer	The number of times this recurring order has repeated.
sellerID	Integer	Indicates if this object belongs to a seller.
shippingCity	String	
shippingCompany	String	
shippingCountryCode	String	
shippingCountryName	String	
shippingEmail	String	
shippingFirstName	String	
shippingLastName	String	
shippingMethodID	Integer	ShippingMethod object identifier.
shippingPhone	String	
shippingPostalCode	String	
shippingStreet	String	
shippingSubdivisionCode	String	
shippingSubdivisionName	String	
status	Integer	Recurring order status (Active = 1, Hold = 2, Invalid = 3, Cancelled = 4)
updateDate	DateTime	Update date.
userID	Integer	UserID object identifier.
userPaymentID	Integer	UserPayment object identifier.

GetRecurringSalesOrders

This service is used to get all the RecurringSalesOrder objects belonging to the portal.

Request Parameters

None

Return Data

Node	Data Type	Description
recurringSalesOrders	XML	Container node
recurringSalesOrder	XML	Zero or more recurringSalesOrder nodes with same data structure as GetRecurringSalesOrder service return data.

GetRecurringSalesOrdersByOriginalSalesOrder

This service is used to get all the RecurringSalesOrder objects belonging to the original sales order.

Request Parameters

Node	Required	Data Type	Description
salesOrderID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
recurringSalesOrders	XML	Container node
recurringSalesOrder	XML	Zero or more recurringSalesOrder nodes with same data structure as GetRecurringSalesOrder service return data.

UpdateRecurringSalesOrder

This service is used to update a RecurringSalesOrder object.

Request Parameters

Node	Required	Data Type	Description
recurringSalesOrderID	Yes	Integer	The object identifier.
status	Yes	Integer	Recurring order status (Active = 1, Hold = 2, Invalid = 3, Cancelled = 4)

Return Data

Same as GetRecurringSalesOrder service return data.

RelatedProduct

RelatedProduct is the object relationship associating two related products together.

DeleteRelatedProduct

This service is used to delete a RelatedProduct object.

Request Parameters

Node	Required	Data Type	Description
relatedProductID	Yes	Integer	The object identifier.

Return Data

None

GetRelatedProduct

This service is used to query the RelatedProduct object.

Request Parameters

Node	Required	Data Type	Description
relatedProductID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
relatedProduct	XML	Container node.
createDate	DateTime	Creation date.
productID	Integer	Product object identifier in this relation.
relatedProductID	Integer	The object identifier.

relationProductID	Integer	The Product object identifier related to the productID.

GetRelatedProductsByProduct

This service is used to get all the RelatedProduct objects belonging to the product.

Request Parameters

Node	Required	Data Type	Description
productID	Yes	Integer	The Product object identifier.

Return Data

Node	Data Type	Description
relatedProducts	XML	Container node
relatedProduct	XML	Zero or more relatedProduct nodes with same data structure as GetRelatedProduct service return data.

InsertRelatedProduct

This service is used to create a new RelatedProduct object.

Request Parameters

Node	Required	Data Type	Description
productID	Yes	Integer	The Product object identifier.
relationProductID	Yes	Integer	The Product object identifier related to the Product.

Return Data

Same as GetRelatedProduct service return data.

RequiredProduct

RequiredProduct is the object relationship associating two required products together.

DeleteRequiredProduct

This service is used to delete a RequiredProduct object.

Request Parameters

Node	Required	Data Type	Description
requiredProductID	Yes	Integer	The object identifier.

Return Data

None

GetRequiredProduct

This service is used to query the RequiredProduct object.

Request Parameters

Node	Required	Data Type	Description
requiredProductID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
requiredProduct	XML	Container node.
createDate	DateTime	Creation date.
deferDate	DateTime	Defer the start of the required product until the date specified.
deferInterval	Integer	Defer the start of the required product by the amount of interval

		time. Enter zero to start immediately.
deferIntervalType	Integer	The interval type for the deferral. Day = 1, Week = 2, Month = 3, Year = 4
productVariantID	Integer	The ProductVariant object identifier.
published	Boolean	Determine if the required product is disclosed to the customer.
quantity		A non-zero value will match the quantity ordered (e.g. if you set a value of 2 and the customers places an order for 2 items, the total required products will equal 4). Enter a value of 1 if you want to have a one to one match. If you want a single required product regardless of any number of items purchased, enter a value of 0.
requiredProductID	Integer	The object identifier.
requiredProductVariantID	Integer	The ProductVariant object identifier required by the productVariantID.
updateDate	DateTime	

GetRequiredProductsByProductVariant

This service is used to get all the RequiredProduct objects belonging to the product.

Request Parameters

Node	Required	Data Type	Description
productVariantID	Yes	Integer	The ProductVariant object identifier.

Return Data

Node	Data Type	Description
requiredProducts	XML	Container node

requiredProduct	XML	Zero or more requiredProduct nodes with same data structure as GetRequiredProduct service return data.

InsertRequiredProduct

This service is used to create a new RequiredProduct object.

Request Parameters

Node	Required	Data Type	Description
deferDate	No	DateTime	Defer the start of the required product until the date specified.
deferInterval	Yes	Integer	Defer the start of the required product by the amount of interval time. Enter zero to start immediately.
deferIntervalType	Yes	Integer	The interval type for the deferral. Day = 1, Week = 2, Month = 3, Year = 4
productVariantID	Yes	Integer	The ProductVariant object identifier.
published	Yes	Boolean	Determine if the required product is disclosed to the customer.
quantity	Yes	Integer	A non-zero value will match the quantity ordered (e.g. if you set a value of 2 and the customers places an order for 2 items, the total required products will equal 4). Enter a value of 1 if you want to have a one to one match. If you want a single required product regardless of any number of items purchased, enter a value of 0.
requiredProductVariantID	Yes	Integer	The ProductVariant object identifier required by the ProductVariant.

Return Data

Same as GetRequiredProduct service return data.

Right

A Right is used to issue access rights such as license key to customer upon purchase.

GetRight

This service is used to query the Right object.

Request Parameters

Node	Required	Data Type	Description
rightID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
right	XML	
adminNotes	String	Administrator notes not shown to customer.
assignedUserID	Integer	The right may be assigned to a user.
code	String	The unique code.
createDate	DateTime	
issueDate	DateTime	The date when the right was first issued.
rightDefinitionID	Integer	The right definition object identifier associated with this right. The right definition is the template that determines type of right.
rightID	Integer	The object identifier.
salesOrderDetailID	Integer	The corresponding sales order detail object identifier if this right was generate from the order.
updateDate	DateTime	

GetRightByCode

This service is used to query the Right object.

Request Parameters

Node	Required	Data Type	Description
code	Yes	String	The right code.

Return Data

Same data structure as GetRight service return data.

GetRights

This service is used to query all the Right objects.

Request Parameters

None

Return Data

Node	Data Type	Description
rights	XML	Container node
right	XML	Zero or more Right nodes with same data structure as GetRight service return data.

GetRightsByRightDefinition

This service is used to query all the Right objects.

Request Parameters

Node	Required	Data Type	Description
rightDefinitionID	Yes	Integer	The RightDefinition object identifier.

Return Data

Node	Data Type	Description
rights	XML	Container node
right	XML	Zero or more Right nodes with same data structure as GetRight service return data.

RightDefinition

A RightDefinition is a definition template used to create Right objects.

GetRightDefinition

This service is used to query the RightDefinition object.

Request Parameters

Node	Required	Data Type	Description
rightDefinitionID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
rightDefinition	XML	
createdDate	DateTime	
description	XML Locale	
name	XML Locale	
portalID	Integer	
rightDefinitionID	Integer	The object identifier of the right definition.
rightType	Integer	The type of right. PregeneratedLicenseKey = 1
sellerID	Integer	Indicate if this product belongs to a seller.
updateDate	DateTime	

GetRightDefinitions

This service is used to query all the RightDefinition objects.

Request Parameters

None

Return Data

Node	Data Type	Description
rightDefinitions	XML	Container node
rightDefinition	XML	Zero or more Right nodes with same data structure as GetRightDefinition service return data.

SalesOrder

The SalesOrder object tracks Storefront sales.

GetSalesOrder

This service is used to query the SalesOrder object.

Request Parameters

Node	Required	Data Type	Description
salesOrderID	Yes	Integer	The object identifier.

Request Parameters

Node	Data Type	Description
salesOrder	XML	Container node.
adminNotes	String	Notes intended for store administrators.
affiliateID	Integer	The Affiliate ID tracked to the order if it originated from a referral.
billingCity	String	
billingCompany	String	
billingCountryCode	String	
billingCountryName	String	
billingEmail	String	
billingFirstName	String	
billingLastName	String	
billingPhone	String	

billingPostalCode	String	
billingStreet	String	
billingSubdivisionCode	String	
billingSubdivisionName	String	
businessTaxNumber	String	Business tax number (e.g. VAT number).
couponCodes	String	Pipe delimited coupon codes.
createDate	DateTime	Creation date.
cultureCode	String	The display culture.
currencyCultureCode	String	The currency culture.
customerNotes	XML Locale	Notes intended for customer.
dynamicFormResult	XML	The result collected from DynamicForm.
exchangeRate	Decimal	The exchange rate relative to the primary currency.
fraudScore	Integer	The registered fraud score from 0 to 100 if available.
fraudRiskGateway	String	The risk gateway provider.
handlingAmount	Decimal	Handling amount.
handlingDiscountAmount	Decimal	Handling discount.
handlingMethodID	Integer	The HandlingMethod object identifier.
handlingTaxAmount1	Decimal	
handlingTaxAmount2	Decimal	
handlingTaxAmount3	Decimal	
handlingTaxAmount4	Decimal	

handlingTaxAmount5	Decimal	
orderDate	DateTime	The order date.
orderLocked	Boolean	Lock the order to prevent customer from changing the order details when resuming an incomplete order.
origin	Integer	Where the order originated (Web Checkout = 1, System Recurring = 2).
packingMethodID	Integer	PackingMethod object identifier.
parentSalesOrderID	Integer	The parent sales order if this order belonged in a sales order set.
portalID	Integer	
preferredUserPaymentID	Integer	
purchaseOrderNumber	String	Purchase order number.
rewardsPointsQualified	Integer	The number of rewards points earned from the purchase of this order.
rewardsPointsRewarded	Integer	The estimated number of points actually rewarded to the customer for this order so far.
salesOrderGUID	GUID	SalesOrder globally unique identifier.
salesOrderID	Integer	The object identifier.
salesOrderNumber	String	The order number shown to customer and printed on receipts.
salesPaymentStatus	Integer	Sales payment status (Pending = 1, Paid = 2, Cancelled = 3, Refunded = 4).
sellerID	Integer	The seller associated with this sales order.
shippedDate	DateTime	The date the order is shipped, if available.
shippingAmount	Decimal	
shippingCity	String	

shippingCompany	String	
shippingCountryCode	String	
shippingCountryName	String	
shippingDiscountAmount	Decimal	
shippingEmail	String	
shippingFirstName	String	
shippingLastName	String	
shippingMethodID	Integer	ShippingMethod object identifier.
shippingPhone	String	
shippingPostalCode	String	
shippingStatus	Integer	Shipping status (Not Required = 1, Not Shipped = 2, Shipped = 3, Undeliverable = 4).
shippingStreet	String	
shippingSubdivisionCode	String	
shippingSubdivisionName	String	
shippingTaxAmount1	Decimal	
shippingTaxAmount2	Decimal	
shippingTaxAmount3	Decimal	
shippingTaxAmount4	Decimal	
shippingTaxAmount5	Decimal	
shippingTrackingCode	String	Shipping tracking code.
shippingUniversalServiceName	String	The globally unique name generated by the system that corresponds to the shipping gateway's service name used internally to match a real-time shipping method.

status	Integer	Sales order status (Pending = 1, Ordered = 2, Processing = 3, Completed = 4, Cancelled = 5, Declined = 6, Incomplete = 7)
subTotalAmount	Decimal	Sub-total.
taxAmount1	Decimal	
taxAmount2	Decimal	
taxAmount3	Decimal	
taxAmount4	Decimal	
taxAmount5	Decimal	
taxDiscountAmount	Decimal	
totalAmount	Decimal	
updateDate	DateTime	Update date.
userHostAddress	String	User IP address.
userID	Integer	UserID object identifier.
warehouseID	Integer	The warehouse associated to this sales order.

GetSalesOrderBySalesOrderNumber

This service is used to get the SalesOrder object belonging to the portal.

Request Parameters

Node	Required	Data Type	Description
salesOrderNumber	Yes	String	The order number shown to customer and printed on receipts.

Request Parameters

Same as GetSalesOrder service return data.

GetSalesOrders

This service is used to get all the SalesOrder objects belonging to the portal.

Request Parameters

None

Request Parameters

Node	Data Type	Description
salesOrders	XML	Container node
salesOrder	XML	Zero or more salesOrder nodes with same data structure as GetSalesOrder service return data.

GetSalesOrdersByDateRange

This service is used to get all the SalesOrder objects belonging to the portal by date range.

Request Parameters

Node	Required	Data Type	Description
startDate	Yes	DateTime	Start date.
stopDate	Yes	DateTime	Stop date.

Request Parameters

Node	Data Type	Description
salesOrders	XML	Container node
salesOrder	XML	Zero or more salesOrder nodes with same data structure as GetSalesOrder service return data.

UpdateSalesOrder

This service is used to update a SalesOrder object.

Request Parameters

Node	Required	Data Type	Description
salesOrderID	Yes	Integer	The object identifier.
salesPaymentStatus	Yes	Integer	Pending = 1, Paid = 2, Cancelled = 3, Refunded = 4
shippingStatus	Yes	Integer	NotRequired = 1, NotShipped = 2, Shipped = 3, Undeliverable = 4
shippingTrackingCode	No	String	The shipping tracking code for the order. Leave empty if none.
status	Yes	Integer	Pending = 1, Ordered = 2, Processing = 3, Completed = 4, Cancelled = 5, Declined = 6, Incomplete = 7

Request Parameters

Same as GetSalesOrder service return data.

SalesOrderDetail

The SalesOrderDetail object tracks individual sales items within a sales order.

GetSalesOrderDetail

This service is used to query the SalesOrderDetail object.

Request Parameters

Node	Required	Data Type	Description
salesOrderDetailID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
salesOrderDetail	XML	Container node.
basePrice	Decimal	
createDate	DateTime	
depth	Decimal	
discountAmount	Decimal	
dynamicFormResult	XML	
handlingPrice	Decimal	
height	Decimal	
packageType	Integer	Package type for shipping calculation (Unspecified = 1, Envelope = 1000, Box = 2000, Bag = 3000, Tube = 4000).
parentSalesOrderDetailID	Integer	Indicates if this SalesOrderDetail item is a product part and child of a parent SalesOrderDetail object usually in a bundled product scenario.

price	Decimal	
productCost	Decimal	
productName	XML Locale	Localized product name.
productPartID	Integer	References the ProductPart identifier usually from a bundled product purchase.
productVariantExtension	XML	
productVariantID	Integer	ProductVariant object identifier.
productVariantName	XML Locale	Localized product variant name.
quantity	Integer	
recurringInterval	Integer	The recurring interval.
recurringIntervalType	Integer	The interval type (Day = 1, Week = 2, Month = 3, Year = 4).
recurringSalesOrderID	Integer	The associated RecurringSalesOrder object identifier if this SalesOrderDetail object was created from a recurring order.
requireShipping	Boolean	Indicate if product requires shipping.
salesOrderDetailID	Integer	The object identifier.
salesOrderID	Integer	The associated SalesOrder object identifier.
shippingPrice	Decimal	
shippingStatus	Integer	Shipping status (Not Required = 1, Not Shipped = 2, Shipped = 3, Undeliverable = 4).
sku	String	
taxAmount1	Decimal	
taxAmount2	Decimal	

taxAmount3	Decimal	
taxAmount4	Decimal	
taxAmount5	Decimal	
updateDate	DateTime	Update date.
weight	Decimal	
width	Decimal	

GetSalesOrderDetails

This service is used to get all the SalesOrderDetail objects belonging to the SalesOrder.

Request Parameters

Node	Required	Data Type	Description
salesOrderID	Yes	Integer	The SalesOrder object identifier.

Return Data

Node	Data Type	Description
salesOrderDetailDetails	XML	Container node
salesOrderDetail	XML	Zero or more salesOrderDetail nodes with same data structure as GetSalesOrderDetail service return data.

UpdateSalesOrderDetail

This service is used to update a SalesOrderDetail object.

Request Parameters

Node	Required	Data Type	Description

salesOrderDetailID	Yes	Integer	The object identifier.
shippingStatus	Yes	Integer	NotRequired = 1, NotShipped = 2, Shipped = 3, Undeliverable = 4

Return Data

Same as GetSalesOrderDetail service return data.

SalesPayment

The SalesPayment object tracks payments belonging to a sales order.

GetSalesPayment

This service is used to query the SalesPayment object.

Request Parameters

Node	Required	Data Type	Description
salesPaymentID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
salesPayment	XML	Container node.
amount	Decimal	
city	String	
company	String	
countryCode	String	
countryName	String	
createDate	DateTime	
email	String	
firstName	String	
lastName	String	
		The payment origin. See Payment origin types (http://www.revindex.com/Resources/Knowledge-

origin	Integer	Base/Revindex-Storefront/payment-origin-types/rvdwkpvm/section).
parentSalesPaymentGUID	GUID	The related parent payment object identifier or null.
parentSalesPaymentID	Integer	The related parent payment object identifier or null.
paymentDate	DateTime	
paymentGateway	String	The gateway used or empty if manual transaction.
paymentGatewayResponseCode	Integer	The gateway response code. Payment Gateway Response Code Types (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/payment-gateway-response-code-types/rvdwkpvm/section).
paymentMethod	Integer	The payment method type. See Payment Method Types (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/payment-method-types/rvdwkpvm/section).
paymentNumber	String	Identifier associated with the payment gateway's payment profile record.
phone	String	
postalCode	String	
profileNumber	String	Identifier associated with the payment gateway's payment profile record.
salesOrderID	Integer	The associated SalesOrder object identifier.
salesPaymentGUID	GUID	Indicate if product requires shipping.
salesPaymentID	Integer	The object identifier.
street	String	
subdivisionCode	String	

subdivisionName	String	
transactionType	Integer	Payment transaction type. See Sales Payment Transaction Types (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/sales-payment-transaction-types/rvdwkpvm/section).
updateDate	DateTime	
userHostAddress	String	

GetSalesPayments

This service is used to get all the SalesPayment objects belonging to the SalesOrder.

Request Parameters

Node	Required	Data Type	Description
salesOrderID	Yes	Integer	The SalesOrder object identifier.

Return Data

Node	Data Type	Description
salesPayments	XML	Container node
salesPayment	XML	Zero or more salesPayment nodes with same data structure as GetSalesPayment service return data.

SalesPromotion

The SalesPromotion is used to give a discount on purchases.

DeleteSalesPromotion

This service is used to delete a SalesPromotion object.

Request Parameters

Node	Required	Data Type	Description
salesPromotionID	Yes	Integer	The object identifier.

Return Data

None

GetSalesPromotion

This service is used to query the Category object.

Request Parameters

Node	Required	Data Type	Description
salesPromotionID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
salesPromotion	XML	Container node.
active	Boolean	Flag to indicate if promotion is active and can be used.
createDate	DateTime	Creation date.
description	XML	Localized description.

	Locale	
name	XML Locale	Localized name.
portalID	Integer	
promotionRule	XML Rule	The promotion rule.
promotionType	Integer	Product = 1, SalesOrderDetail = 2, Shipping = 3, Handling = 4, Tax = 5
runOrder	Integer	The execution order for this promotion among other promotions of the same type.
startDate	DateTime	The start date when the promotion is valid.
stopDate	DateTime	The stop date the promotion is no longer valid.
updateDate	DateTime	Update date.

GetSalesPromotions

This service is used to get all the SalesPromotion objects belonging to the portal.

Request Parameters

None

Return Data

Node	**Data Type**	**Description**
salesPromotions	XML	Container node
salesPromotion	XML	Zero or more salesPromotion nodes with same data structure as GetSalesPromotion service return data.

InsertSalesPromotion

This service is used to create a new SalesPromotion object.

Request Parameters

Node	Required	Data Type	Description
active	Yes	Boolean	Flag to indicate if promotion is active and can be used.
description	No	XML Locale	Localized description.
name	Yes	XML Locale	Localized name.
promotionRule	No	XML Rule	The promotion rule.
promotionType	Yes	Integer	Product = 1, SalesOrderDetail = 2, Shipping = 3, Handling = 4, Tax = 5
runOrder	Yes	Integer	The execution order for this promotion among other promotions of the same type.
salesPromotionID	Yes	Integer	The object identifier.
startDate	No	DateTime	The start date when the promotion is valid.
stopDate	No	DateTime	The stop date the promotion is no longer valid.

Return Data

Same as GetSalesPromotion service return data.

UpdateSalesPromotion

This service is used to update a SalesPromotion object.

Request Parameters

Node	Required	Data Type	Description

active	Yes	Boolean	Flag to indicate if promotion is active and can be used.
description	No	XML Locale	Localized description.
name	Yes	XML Locale	Localized name.
promotionRule	No	XML Rule	The promotion rule.
promotionType	Yes	Integer	Product = 1, SalesOrderDetail = 2, Shipping = 3, Handling = 4, Tax = 5
runOrder	Yes	Integer	The execution order for this promotion among other promotions of the same type.
salesPromotionID	Yes	Integer	The object identifier.
startDate	No	DateTime	The start date when the promotion is valid.
stopDate	No	DateTime	The stop date the promotion is no longer valid.

Return Data

Same as GetSalesPromotion service return data.

ShippingMethod

A ShippingMethod object is to manage shipping during checkout.

GetActiveShippingMethod

This service is used to query the ShippingMethod object.

Request Parameters

Node	Required	Data Type	Description
shippingMethodID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
shippingMethod	XML	
availabilityRule	XML Rule	The rule to describe the conditions when the shipping is available.
createdDate	DateTime	
displayOrder	Integer	
name	XML Locale	
portalID	Integer	
rateRule	XML Rule	Shipping rate calculation rule.
sellerID	Integer	Indicate if this object belongs to a seller.
shippingMethodID	Integer	The object identifier.
taxClassID	Integer	The TaxClass object identifier if this shipping method is taxable.
		The globally unique name generated by the system that

universalServiceName	String	corresponds to the shipping gateway's service name used internally to match a real-time shipping method.
updateDate	DateTime	

GetActiveShippingMethods

This service is used to query all the ShippingMethod objects.

Request Parameters

None

Return Data

Node	**Data Type**	**Description**
shippingMethods	XML	Container node
shippingMethod	XML	Zero or more ShippingMethod nodes with same data structure as GetActiveShippingMethod service return data.

TaxClass

A TaxClass object is used to calculate taxes during checkout.

GetTaxClass

This service is used to query the TaxClass object.

Request Parameters

Node	Required	Data Type	Description
taxClassID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
taxClass	XML	
createDate	DateTime	
exemptionRule	XML Rule	Tax exemption rule.
name	XML Locale	
portalID	Integer	
rateRule	XML Rule	Tax rate calculation rule.
sellerID	Integer	The seller associated with this tax method.
taxClassID	Integer	The object identifier.
updateDate	DateTime	

GetTaxClasses

This service is used to query all the TaxClass objects.

Request Parameters

None

Return Data

Node	Data Type	Description
taxClasses	XML	Container node
taxClass	XML	Zero or more TaxClass nodes with same data structure as GetTaxClass service return data.

User

The following service is useful to query information about users.

GetUser

This service is used to query the User object.

Request Parameters

Node	Required	Data Type	Description
userID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
user	XML	
affiliateID	Integer	
createdByUserID	Integer	
createdOnDate	DateTime	
displayName	String	
email	String	
firstName	String	
isSuperUser	Boolean	
lastIPAddress	String	
lastName	String	
portalID	Integer	
roles	String	

userID	Integer	
username	String	

GetUsers

This service is used to query all the user objects.

Request Parameters

None

Return Data

Node	Data Type	Description
users	XML	Container node
user	XML	Zero or more User nodes with same data structure as GetUser service return data.

UserPayment

The UserPayment object tracks payments belonging to a user usually associated with recurring orders.

GetUserPayment

This service is used to query the UserPayment object.

Request Parameters

Node	Required	Data Type	Description
userPaymentID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
userPayment	XML	Container node.
city	String	
company	String	
countryCode	String	
countryName	String	
createDate	DateTime	
email	String	
firstName	String	
lastName	String	
paymentMethod	Integer	The payment method type. See Payment Method Types (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/payment-method-types/rvdwkpvm/section).
paymentNumber	String	Identifier associated with the payment gateway's payment profile record.
phone	String	
portalID	Integer	
postalCode	String	
profileNumber	String	Identifier associated with the payment gateway's payment profile record.
street	String	
subdivisionCode	String	
subdivisionName	String	
updateDate	DateTime	
userID	Integer	Identifier associated with the user account.
userPaymentID	Integer	The object unique identifier.

GetUserPaymentsByUser

This service is used to get all the UserPayment objects belonging to the user.

Request Parameters

Node	Required	Data Type	Description
userID	Yes	Integer	The user object identifier.

Return Data

Node	Data Type	Description
userPayments	XML	Container node
userPayment	XML	Zero or more userPayment nodes with same data structure as GetUserPayment service return data.

Voucher

A Voucher is a payment method often used as gift certificate, gift card, store credit, etc..

GetVoucher

This service is used to query the Voucher object.

Request Parameters

Node	Required	Data Type	Description
voucherID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
voucher	XML	
adminNotes	String	Administrator notes not shown to customer.
amount	Decimal	The remaining balance in the voucher.
assignedUserID	Integer	The voucher may be assigned to a user.
code	String	The unique code to redeem the voucher.
createDate	DateTime	
initialAmount	Decimal	The initial starting amount when the voucher was created.
issueDate	DateTime	The date when the voucher was first created.
portalID	Integer	
salesOrderDetailID	Integer	The corresponding sales order detail object identifier if this voucher was generate from the order.
		The status of the voucher. Inactive = 1, Active = 2, Hold = 3,

status	Integer	Cancelled = 4
updateDate	DateTime	
voucherDefinitionID	Integer	The object identifier of the voucher definition.
voucherID	Integer	The object identifier.

GetVoucherByCode

This service is used to query the Voucher object.

Request Parameters

Node	Required	Data Type	Description
code	Yes	String	The voucher code.

Return Data

Same data structure as GetVoucher service return data.

GetVouchers

This service is used to query all the Voucher objects.

Request Parameters

None

Return Data

Node	Data Type	Description
vouchers	XML	Container node
voucher	XML	Zero or more Voucher nodes with same data structure as GetVoucher service return data.

GetVouchersByVoucherDefinition

This service is used to query all the Voucher objects.

Request Parameters

Node	Required	Data Type	Description
voucherDefinitionID	Yes	Integer	The VoucherDefinition object identifier.

Return Data

Node	Data Type	Description
vouchers	XML	Container node
voucher	XML	Zero or more Voucher nodes with same data structure as GetVoucher service return data.

VoucherDefinition

A VoucherDefinition is a definition template used to create Voucher objects.

GetVoucherDefinition

This service is used to query the VoucherDefinition object.

Request Parameters

Node	Required	Data Type	Description
voucherDefinitionID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
voucherDefinition	XML	
active	Boolean	Indicates if definition is valid and vouchers can be redeemed.
amount	Decimal	The default amount to create in the voucher.
createdDate	DateTime	
description	XML Locale	
expiryInterval	Interval	A non-zero value indicates the voucher will expire after the amount of period from the issue date.
expiryIntervalType	Integer	Day = 1, Week = 2, Month = 3, Year = 4
name	XML Locale	
paymentLimitType	Integer	The maximum amount that can be redeemed in a single order. Total amount = 1, Sub total amount = 2

portalID	Integer	
startDate	DateTime	If non-empty, indicates the start date when voucher is redeemable.
stopDate	DateTime	If non-empty, indicates the stop date when voucher is no longer redeemable.
transferable	Boolean	Indicates if the voucher can be used by any user or only by the current assigned user.
updateDate	DateTime	
voucherDefinitionID	Integer	The object identifier of the voucher definition.

GetVoucherDefinitions

This service is used to query all the VoucherDefinition objects.

Request Parameters

None

Return Data

Node	**Data Type**	**Description**
voucherDefinitions	XML	Container node
voucherDefinition	XML	Zero or more Voucher nodes with same data structure as GetVoucherDefinition service return data.

Warehouse

A Warehouse object is to manage warehouses in your system.

GetActiveWarehouse

This service is used to query the Warehouse object.

Request Parameters

Node	Required	Data Type	Description
warehouseID	Yes	Integer	The object identifier.

Return Data

Node	Data Type	Description
warehouse	XML	
city	String	
countryCode	String	
countryName	String	
createDate	DateTime	
description	XML Locale	
email	String	
name	XML Locale	
phone	String	
portalID	Integer	

postalCode	String	
sellerID	Integer	The seller object identifier.
street	String	
subdivisionCode	String	
subdivisionName	String	
updateDate	DateTime	
warehouseID	Integer	The object identifier.
warehouseKey	String	A unique key that can be used to uniquely identify this object. This could be a short meaningful text or simply a GUID.

GetActiveWarehouses

This service is used to query all the Warehouse objects.

Request Parameters

None

Return Data

Node	**Data Type**	**Description**
warehouses	XML	Container node
warehouse	XML	Zero or more Warehouse nodes with same data structure as GetActiveWarehouse service return data.

Examples

Export order (Powershell)

Here's a simple example using Powershell to export pending orders to send for fulfillment via email.

```
# SalesOrderExport.ps1
#
# This script will export all pending orders with products belonging to
# a distributor and send the CSV file using email.
# It will keep track of all the order details fulfilled in a local file.
# It will mark the order as shipped and completed when every order detail
# has been fulfilled.
#####################################################################


# Configuration
#####################################################################


$APIKey = '00000000-0000-0000-0000-000000000000'
$APIUrl =
'http://domain.com/DesktopModules/Revindex.Dnn.RevindexStorefront/Api/Rest/V1/ServiceHandler.
ashx?portalid=0'
$APIUsername = 'host'


# Number of days to look back at orders
$BackOrderDays = -7


# The distributor to match
$DistributorID = 1


$FulfillmentEmailBody = 'Order fulfillment text body'


# The email(s) to send fulfillment file. Separated multiple emails by semicolon.
$FulfillmentEmailRecipient = 'vendor@localhost.com'


$FulfillmentEmailSender = 'support@localhost.com'
$FulfillmentEmailSubject = 'Order fulfillment'
$FulfillmentFileName = ('Fulfillment.' + [DateTime]::Now.ToString('yyyyMMdd') + '.txt')


$LogFileName = ('Log.' + [DateTime]::Now.ToString('yyyyMMdd') + '.txt')


$NetworkTimeout = 30000


# The email(s) to notify on success/error. Separated multiple emails by semicolon.
$NotificationRecipient = 'support@localhost.com'


$NotificationSender = 'support@localhost.com'


$OrderCompletionFileName = 'OrderCompletion.txt'


$SMTPPassword = 'xxxxxx'
$SMTPServer = 'mail.localhost.com'
$SMTPUser = 'mailer'


# The folder to store files, logs, etc. defaults to the current execution path
$WorkingFolder = ((Split-Path $MyInvocation.MyCommand.Path) + '\')


# Functions
#####################################################################


# Function to help post HTTP request to web service
Function PostWebRequest([String] $url, [String] $data, [int] $timeout)
{
    $buffer = [System.Text.Encoding]::UTF8.GetBytes($data)
    [System.Net.HttpWebRequest] $webRequest = [System.Net.WebRequest]::Create($url)
    $webRequest.Timeout = $timeout
    $webRequest.Method = "POST"
    $webRequest.ContentType = "application/x-www-form-urlencoded"
    $webRequest.ContentLength = $buffer.Length;


    $requestStream = $webRequest.GetRequestStream()
```

```
    $requestStream.Write($buffer, 0, $buffer.Length)
    $requestStream.Flush()
    $requestStream.Close()


    [System.Net.HttpWebResponse] $webResponse = $webRequest.GetResponse()
    $streamReader = New-Object System.IO.StreamReader($webResponse.GetResponseStream())
    $result = $streamReader.ReadToEnd()
    return $result
}


# Function to send email
Function SendEmail([String]$smtpServer, [String] $smtpUser, [String] $smtpPassword, [String]
$sender, [String] $recipient, [String] $subject, [String] $body, [String] $attachment)
{
    $msg = New-Object System.Net.Mail.MailMessage
    $msg.From = $sender
    $msg.ReplyTo = $sender

    foreach ($r in $recipient.Split(';'))
    {
        if ($r)
        {
            $msg.To.Add($r)
        }
    }
    $msg.subject = $subject
    $msg.body = $body

    if ($attachment -and [System.IO.File]::Exists($attachment))
    {
        $att = New-Object System.Net.Mail.Attachment($attachment)
        $msg.Attachments.Add($att)
    }


    $smtp = New-Object System.Net.Mail.SmtpClient($smtpServer)
    $smtp.Credentials = New-Object System.Net.NetworkCredential($smtpUser, $smtpPassword);
    $smtp.Send($msg)
}


# Start program
#######################################################################


Try
{
    # Load order completion data into array
    $OrderCompletion = @()
    if ([System.IO.File]::Exists($WorkingFolder + $OrderCompletionFileName))
    {
        $OrderCompletion = @(Import-Csv ($WorkingFolder + $OrderCompletionFileName))
    }


    # Get sales orders needing to be fulfilled
    $StartDate = [DateTime]::Now.AddDays($BackOrderDays).ToString("s")
    $StopDate = [DateTime]::Now.ToString("s")


    $xRequest = [Xml] "

1.0

$APIUsername
$APIKey

GetSalesOrdersByDateRange

$StartDate
$StopDate

"
[Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
if ($xResponse.response.code -ne '2000')
{
Throw New-Object System.InvalidOperationException("Error executing GetSalesOrdersByDateRange.
Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
}
[System.Xml.XmlElement]$salesOrders =
$xResponse.SelectSingleNode('/response/return/salesOrders')
foreach ($salesOrder in $salesOrders.SelectNodes('salesOrder'))
```

```
{
# Look for pending order status
if ($salesOrder.status -eq '1')
{
# Query sales order details
$xRequest = [Xml] ("

1.0

$APIUsername
$APIKey

GetSalesOrderDetails

" + $salesOrder.salesOrderID + "
$StopDate

")
[Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
if ($xResponse.response.code -ne '2000')
{
Throw New-Object System.InvalidOperationException("Error executing GetSalesOrderDetails.
Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
}
[System.Xml.XmlElement]$salesOrderDetails =
$xResponse.SelectSingleNode('/response/return/salesOrderDetails')
foreach ($salesOrderDetail in $salesOrderDetails.SelectNodes('salesOrderDetail'))
{
# Make sure we haven't already fulfilled this sales order detail otherwise we can skip it
if (($OrderCompletion | Where-Object {$_.SalesOrderDetailID -eq
$salesOrderDetail.salesOrderDetailID }))
{
continue
}
# Query product info for matching distributor
$xRequest = [Xml] ("

1.0

$APIUsername
$APIKey

GetActiveProductVariant

" + $salesOrderDetail.productVariantID + "

")
[Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
if ($xResponse.response.code -ne '2000')
{
Throw New-Object System.InvalidOperationException("Error executing GetActiveProductVariant.
Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
}
$productVariant = $xResponse.response.return.productVariant
if ($productVariant.distributorID -eq $DistributorID)
{
# Append data to CSV file
if (![System.IO.File]::Exists($WorkingFolder + $FulfillmentFileName))
{
# Write CSV headers
('Date,SalesOrderID,SalesOrderDetailID,SKU,DistributorSKU,Quantity') >> ($WorkingFolder +
$FulfillmentFileName)
}
# Append data to CSV
($salesOrder.orderDate + ',' + $salesOrder.salesOrderID + ',' +
$salesOrderDetail.salesOrderDetailID + ',' + $productVariant.sku + ',' +
$productVariant.distributorSKU + ',' + $salesOrderDetail.quantity) >> ($WorkingFolder +
$FulfillmentFileName)
# Keep track of completed sales order details. Add order detail to our tracking array
$OrderCompletion += New-Object -TypeName PSObject -Property @{ DistributorID = $DistributorID
Date = [DateTime]::Now.ToString("s")
SalesOrderID = $salesOrder.salesOrderID
SalesOrderDetailID = $salesOrderDetail.salesOrderDetailID }
}
}
# Update order status to Completed and Shipped if all sales order details have been accounted
for.
$orderIsComplete = $true
foreach ($salesOrderDetail in $salesOrderDetails.SelectNodes('salesOrderDetail'))
{
if (!($OrderCompletion | Where-Object {$_.SalesOrderDetailID -eq
$salesOrderDetail.salesOrderDetailID }))
{
```

```
{
$orderIsComplete = $false
break
}
}
if ($orderIsComplete)
{
# Update order status to shipped (3) and order completed (4).
$xRequest = [Xml] ("

1.0

$APIUsername
$APIKey

UpdateSalesOrder

" + $salesOrder.salesOrderID + "
" + $salesOrder.salesPaymentStatus + "
3
4

")
[Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
if ($xResponse.response.code -ne '2000')
{
Throw New-Object System.InvalidOperationException("Error executing UpdateSalesOrder. Response:
" + $xResponse.response.code + ' ' + $xResponse.response.message)
}
# Remove records from order completion tracking belonging to this order
$OrderCompletion = @($OrderCompletion | Where-Object { $_.SalesOrderID -ne
$salesOrder.salesOrderID })
}
}
}
# Send email to fulfill orders
if ([System.IO.File]::Exists($WorkingFolder + $FulfillmentFileName))
{
SendEmail $SMTPServer $SMTPUser $SMTPPassword $FulfillmentEmailSender
$FulfillmentEmailRecipient $FulfillmentEmailSubject $FulfillmentEmailBody ($WorkingFolder +
$FulfillmentFileName)
}
# Persist tracking to order completion file
$OrderCompletion | Export-Csv -NoTypeInformation ($WorkingFolder + $OrderCompletionFileName)
# Log completion
([DateTime]::Now.ToString("s") + "`t" + 'Fufillment completed successfully') >> ($WorkingFolder
+ $LogFileName)
# Notify progress
SendEmail $SMTPServer $SMTPUser $SMTPPassword $NotificationSender $NotificationRecipient
'Fulfillment completed successfully' 'Fulfillment completed successfully' ($WorkingFolder +
$LogFileName)
}
Catch
{
# Log errors
([DateTime]::Now.ToString("s") + "`t" + $_.Exception.Message) >> ($WorkingFolder +
$LogFileName)
# Notify error
SendEmail $SMTPServer $SMTPUser $SMTPPassword $NotificationSender $NotificationRecipient
'Fulfillment failed' 'Fulfillment failed' ($WorkingFolder + $LogFileName)
}
```

Export order 2 (Powershell)

Here's a simple example using Powershell to export pending orders to send for fulfillment via email.

```
# SalesOrderExport2.ps1
#
# This script will export all pending orders with products belonging to
# a distributor and send the CSV file using email.
# It will mark the SalesOrderDetail object as shipped and the entire
# SalesOrder as completed when every order detail has been fulfilled.
#######################################################################


# Configuration
#######################################################################

$APIKey = '00000000-0000-0000-0000-000000000000'
$APIUrl = 'http://domain.com/DesktopModules/Revindex.Dnn.RevindexStorefront/Api/Rest/V1/ServiceHandler.ashx?portalid=0'
$APIUsername = 'host'

# Number of days to look back at orders
$BackOrderDays = -7

# The distributor to match
$DistributorID = 1

$FulfillmentEmailBody = 'Order fulfillment text body'


# The email(s) to send fulfillment file. Separated multiple emails by semicolon.
$FulfillmentEmailRecipient = 'vendor@localhost.com'

$FulfillmentEmailSender = 'support@localhost.com'
$FulfillmentEmailSubject = 'Order fulfillment'
$FulfillmentFileName = ('Fulfillment.' + [DateTime]::Now.ToString('yyyyMMdd') + '.txt')

$LogFileName = ('Log.' + [DateTime]::Now.ToString('yyyyMMdd') + '.txt')

$NetworkTimeout = 30000


# The email(s) to notify on success/error. Separated multiple emails by semicolon.
$NotificationRecipient = 'support@localhost.com'

$NotificationSender = 'support@localhost.com'

$SMTPPassword = 'xxxxxx'
$SMTPServer = 'mail.localhost.com'
$SMTPUser = 'mailer'

# The folder to store files, logs, etc. defaults to the current execution path
$WorkingFolder = ((Split-Path $MyInvocation.MyCommand.Path) + '\')


# Functions
#######################################################################


# Function to help post HTTP request to web service
Function PostWebRequest([String] $url, [String] $data, [int] $timeout)
{
    $buffer = [System.Text.Encoding]::UTF8.GetBytes($data)
    [System.Net.HttpWebRequest] $webRequest = [System.Net.WebRequest]::Create($url)
    $webRequest.Timeout = $timeout
    $webRequest.Method = "POST"
    $webRequest.ContentType = "application/x-www-form-urlencoded"
    $webRequest.ContentLength = $buffer.Length;

    $requestStream = $webRequest.GetRequestStream()
    $requestStream.Write($buffer, 0, $buffer.Length)
    $requestStream.Flush()
    $requestStream.Close()

    [System.Net.HttpWebResponse] $webResponse = $webRequest.GetResponse()
    $streamReader = New-Object System.IO.StreamReader($webResponse.GetResponseStream())
    $result = $streamReader.ReadToEnd()
    return $result
}


# Function to send email
Function SendEmail([String]$smtpServer, [String] $smtpUser, [String] $smtpPassword, [String] $sender, [String] $recipient, [String] $subject, [String] $body, [String] $attachment)
{
```

```
{
    $msg = New-Object System.Net.Mail.MailMessage
    $msg.From = $sender
    $msg.ReplyTo = $sender

    foreach ($r in $recipient.Split(';'))
    {
        if ($r)
        {
            $msg.To.Add($r)
        }
    }
    $msg.subject = $subject
    $msg.body = $body

    if ($attachment -and [System.IO.File]::Exists($attachment))
    {
        $att = New-Object System.Net.Mail.Attachment($attachment)
        $msg.Attachments.Add($att)
    }

    $smtp = New-Object System.Net.Mail.SmtpClient($smtpServer)
    $smtp.Credentials = New-Object System.Net.NetworkCredential($smtpUser, $smtpPassword);
    $smtp.Send($msg)
}


# Start program
#######################################################################


Try
{
    # Get sales orders needing to be fulfilled
    $StartDate = [DateTime]::Now.AddDays($BackOrderDays).ToString("s")
    $StopDate = [DateTime]::Now.ToString("s")

    $xRequest = [Xml] "<?xml version='1.0' encoding='utf-8'?>
                        <request>
                          <version>1.0</version>
                          <credential>
                            <username>$APIUsername</username>
                            <apiKey>$APIKey</apiKey>
                          </credential>
                          <service>GetSalesOrdersByDateRange</service>
                          <parameters>
                            <startDate>$StartDate</startDate>
                            <stopDate>$StopDate</stopDate>
                          </parameters>
                        </request>"


    [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
    if ($xResponse.response.code -ne '2000')
    {
        Throw New-Object System.InvalidOperationException("Error executing GetSalesOrdersByDateRange. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
    }
    [System.Xml.XmlElement]$salesOrders = $xResponse.SelectSingleNode('/response/return/salesOrders')

    foreach ($salesOrder in $salesOrders.SelectNodes('salesOrder'))
    {
        # Look for pending order status
        if ($salesOrder.status -eq '1')
        {
            # Query sales order details
            $xRequest = [Xml] ("<?xml version='1.0' encoding='utf-8'?>
                                <request>
                                  <version>1.0</version>
                                  <credential>
                                    <username>$APIUsername</username>
                                    <apiKey>$APIKey</apiKey>
                                  </credential>
                                  <service>GetSalesOrderDetails</service>
                                  <parameters>
                                    <salesOrderID>" + $salesOrder.salesOrderID + "</salesOrderID>
                                  </parameters>
                                </request>")


            [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
```

```
            if ($xResponse.response.code -ne '2000')
            {
                Throw New-Object System.InvalidOperationException("Error executing GetSalesOrderDetails. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
            }
            [System.Xml.XmlElement]$salesOrderDetails = $xResponse.SelectSingleNode('/response/return/salesOrderDetails')

            foreach ($salesOrderDetail in $salesOrderDetails.SelectNodes('salesOrderDetail'))
            {
                # Make sure we haven't already fulfilled this sales order detail otherwise we can skip it
                if ($salesOrderDetail.shippingStatus -ne '2')
                   {
                    continue
                }

                # Query product info for matching distributor
                $xRequest = [Xml] ("<?xml version='1.0' encoding='utf-8'?>
                                    <request>
                                      <version>1.0</version>
                                      <credential>
                                        <username>$APIUsername</username>
                                        <apiKey>$APIKey</apiKey>
                                      </credential>
                                      <service>GetActiveProductVariant</service>
                                      <parameters>
                                        <productVariantID>" + $salesOrderDetail.productVariantID + "</productVariantID>
                                      </parameters>
                                    </request>")


                [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
                if ($xResponse.response.code -ne '2000')
                {
                    Throw New-Object System.InvalidOperationException("Error executing GetActiveProductVariant. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
                }
                $productVariant = $xResponse.response.return.productVariant

                if ($productVariant.distributorID -eq $DistributorID)
                {
                    # Append data to CSV file
                    if (![System.IO.File]::Exists($WorkingFolder + $FulfillmentFileName))
                    {
                        # Write CSV headers
                        ('Date,SalesOrderID,SalesOrderDetailID,SKU,DistributorSKU,Quantity') >> ($WorkingFolder + $FulfillmentFileName)
                    }

                    # Append data to CSV
                    ($salesOrder.orderDate + ',' + $salesOrder.salesOrderID + ',' + $salesOrderDetail.salesOrderDetailID + ',' + $productVariant.sku + ',' + $productVariant.distributorSKU + ',' + $salesOrderDetail.quantity) >> ($WorkingFolder + $FulfillmentFileName)

                    # Mark SalesOrderDetail as shipped
                    $salesOrderDetail.shippingStatus = '3'

                    # Update order detail shipping status to shipped (3).
                    $xRequest = [Xml] ("<?xml version='1.0' encoding='utf-8'?>
                                <request>
                                  <version>1.0</version>
                                  <credential>
                                    <username>$APIUsername</username>
                                    <apiKey>$APIKey</apiKey>
                                  </credential>
                                  <service>UpdateSalesOrderDetail</service>
                                  <parameters>
                                    <salesOrderDetailID>" + $salesOrderDetail.salesOrderDetailID + "</salesOrderDetailID>
                                    <shippingStatus>3</shippingStatus>
                                  </parameters>
                                </request>")

                    [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
                    if ($xResponse.response.code -ne '2000')
                    {
                        Throw New-Object System.InvalidOperationException("Error executing UpdateSalesOrderDetail. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
```

```
                }
            }
        }

        # Update order status to Completed and Shipped if all sales order details have been accounted for.
        $orderIsComplete = $true
        foreach ($salesOrderDetail in $salesOrderDetails.SelectNodes('salesOrderDetail'))
        {
            if ($salesOrderDetail.shippingStatus -eq '2' -or $salesOrderDetail.shippingStatus -eq '4')
            {
                $orderIsComplete = $false
                break
            }
        }

        if ($orderIsComplete)
        {
            # Update order status to shipped (3) and order completed (4).
            $xRequest = [Xml] ("<?xml version='1.0' encoding='utf-8'?>
                           <request>
                             <version>1.0</version>
                             <credential>
                               <username>$APIUsername</username>
                               <apiKey>$APIKey</apiKey>
                             </credential>
                             <service>UpdateSalesOrder</service>
                             <parameters>
                               <salesOrderID>" + $salesOrder.salesOrderID + "</salesOrderID>
                               <salesPaymentStatus>" + $salesOrder.salesPaymentStatus + "</salesPaymentStatus>
                               <shippingStatus>3</shippingStatus>
                               <status>4</status>
                             </parameters>
                           </request>")

            [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
            if ($xResponse.response.code -ne '2000')
            {
                Throw New-Object System.InvalidOperationException("Error executing UpdateSalesOrder. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
            }
        }
    }
}

# Send email to fulfill orders
if ([System.IO.File]::Exists($WorkingFolder + $FulfillmentFileName))
{
    SendEmail $SMTPServer $SMTPUser $SMTPPassword $FulfillmentEmailSender $FulfillmentEmailRecipient $FulfillmentEmailSubject $FulfillmentEmailBody ($WorkingFolder + $FulfillmentFileName)
}

# Log completion
([DateTime]::Now.ToString("s") + "`t" + 'Fufillment completed successfully') >> ($WorkingFolder + $LogFileName)

# Notify progress
SendEmail $SMTPServer $SMTPUser $SMTPPassword $NotificationSender $NotificationRecipient 'Fulfillment completed successfully' 'Fulfillment completed successfully' ($WorkingFolder + $LogFileName)
}
Catch
{
    # Log errors
    ([DateTime]::Now.ToString("s") + "`t" + $_.Exception.Message) >> ($WorkingFolder + $LogFileName)

    # Notify error
    SendEmail $SMTPServer $SMTPUser $SMTPPassword $NotificationSender $NotificationRecipient 'Fulfillment failed' 'Fulfillment failed' ($WorkingFolder + $LogFileName)
}
```

Export products (Powershell)

The following simple example exports out all the products to an XML file.

```
# BidOrBuyExport.ps1
#
# This script will export all active products to a XML file.
#######################################################################


# Configuration
#######################################################################
$APIKey = '0000000-0000-0000-0000-000000000'
$APIUrl = 'http://site.com/DesktopModules/Revindex.Dnn.RevindexStorefront/Api/Rest/V1/ServiceHandler.ashx?portalid=0'
$APIUsername = 'host'

$Condition = 'New'

$FeedFileName = ('Feed.' + [DateTime]::Now.ToString('yyyyMMdd') + '.xml')

$Location = 'Johannesburg'

$LogFileName = ('Log.' + [DateTime]::Now.ToString('yyyyMMdd') + '.txt')

$NetworkTimeout = 30000


# The email(s) to notify on success/error. Separated multiple emails by semicolon.
$NotificationRecipient = 'support@localhost.com'
$NotificationSender = 'support@localhost.com'

$ShippingOption = 'MediumShipping'

$SiteUrl = 'http://site.com'

$SMTPPassword = 'xxxxxx'
$SMTPServer = 'mail.localhost.com'
$SMTPUser = 'mailer'


# The folder to store files, logs, etc. defaults to the current execution path
$WorkingFolder = ((Split-Path $MyInvocation.MyCommand.Path) + '\')


# Functions
#######################################################################

# Function to help post HTTP request to web service
Function PostWebRequest([String] $url, [String] $data, [int] $timeout)
{
    $buffer = [System.Text.Encoding]::UTF8.GetBytes($data)
    [System.Net.HttpWebRequest] $webRequest = [System.Net.WebRequest]::Create($url)
    $webRequest.Timeout = $timeout
    $webRequest.Method = "POST"
    $webRequest.ContentType = "application/x-www-form-urlencoded"
    $webRequest.ContentLength = $buffer.Length

    $requestStream = $webRequest.GetRequestStream()
    $requestStream.Write($buffer, 0, $buffer.Length)
    $requestStream.Flush()
    $requestStream.Close()

    [System.Net.HttpWebResponse] $webResponse = $webRequest.GetResponse()
    $streamReader = New-Object System.IO.StreamReader($webResponse.GetResponseStream())
    $result = $streamReader.ReadToEnd()
    return $result
}


# Function to send email
Function SendEmail([String]$smtpServer, [String] $smtpUser, [String] $smtpPassword, [String] $sender, [String] $recipient, [String] $subject, [String] $body, [String] $attachment)
{
    $msg = New-Object System.Net.Mail.MailMessage
    $msg.From = $sender
    $msg.ReplyTo = $sender

    foreach ($r in $recipient.Split(';'))
    {
        if ($r)
        {
            $msg.To.Add($r)
        }
    }
```

```
    }
    $msg.subject = $subject
    $msg.body = $body

    if ($attachment -and [System.IO.File]::Exists($attachment))
    {
        $att = New-Object System.Net.Mail.Attachment($attachment)
        $msg.Attachments.Add($att)
    }

    $smtp = New-Object System.Net.Mail.SmtpClient($smtpServer)
    $smtp.Credentials = New-Object System.Net.NetworkCredential($smtpUser, $smtpPassword);
    $smtp.Send($msg)
}


# Start program
#######################################################################
Try
{
    # Create feed
    [Xml]$xFeed = [Xml] "<?xml version='1.0' encoding='utf-8'?>
<Root/>"

    $xProducts = $xFeed.CreateElement('Products')
    $xFeed.SelectSingleNode("/Root").AppendChild($xProducts)

# Get categories
$xRequest = [Xml] "<?xml version='1.0' encoding='utf-8'?>
                      <request>
                        <version>1.0</version>
                        <credential>
                          <username>$APIUsername</username>
                          <apiKey>$APIKey</apiKey>
                        </credential>
                        <service>GetCategories</service>
                        <parameters>
                        </parameters>
                      </request>"

[Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
    if ($xResponse.response.code -ne '2000')
    {
        Throw New-Object System.InvalidOperationException("Error executing GetCategories. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
    }
    [System.Xml.XmlElement]$categories = $xResponse.SelectSingleNode('/response/return/categories')

# Get product categories
$xRequest = [Xml] "<?xml version='1.0' encoding='utf-8'?>
                      <request>
                        <version>1.0</version>
                        <credential>
                          <username>$APIUsername</username>
                          <apiKey>$APIKey</apiKey>
                        </credential>
                        <service>GetProductCategoriesByPortal</service>
                        <parameters>
                        </parameters>
                      </request>"

[Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
    if ($xResponse.response.code -ne '2000')
    {
        Throw New-Object System.InvalidOperationException("Error executing GetProductCategories. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
    }
    [System.Xml.XmlElement]$productCategories = $xResponse.SelectSingleNode('/response/return/productCategories')

  # Get variants
$xRequest = [Xml] "<?xml version='1.0' encoding='utf-8'?>
                      <request>
                        <version>1.0</version>
                        <credential>
                          <username>$APIUsername</username>
                          <apiKey>$APIKey</apiKey>
                        </credential>
                        <service>GetActiveProductVariantsByPortal</service>
                        <parameters>
                        </parameters>
                      </request>"
```

```
    [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
    if ($xResponse.response.code -ne '2000')
    {
        Throw New-Object System.InvalidOperationException("Error executing GetActiveProductVariantsByPortal. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
    }
    [System.Xml.XmlElement]$productVariants = $xResponse.SelectSingleNode('/response/return/productVariants')

    # Get products
    $xRequest = [Xml] "<?xml version='1.0' encoding='utf-8'?>
                        <request>
                          <version>1.0</version>
                          <credential>
                            <username>$APIUsername</username>
                            <apiKey>$APIKey</apiKey>
                          </credential>
                          <service>GetActiveProducts</service>
                          <parameters>
                          </parameters>
                        </request>"

    [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
    if ($xResponse.response.code -ne '2000')
    {
        Throw New-Object System.InvalidOperationException("Error executing GetActiveProducts. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
    }
    [System.Xml.XmlElement]$products = $xResponse.SelectSingleNode('/response/return/products')

    foreach ($product in $products.SelectNodes('product'))
    {
        # Create feed
        $xProduct = $xFeed.CreateElement('Product')
        $xProducts.AppendChild($xProduct)

        $xProductCode = $xFeed.CreateElement('ProductCode')
        $xProductCode.InnerText = $product.productID
        $xProduct.AppendChild($xProductCode)

$xTitle = $xFeed.CreateElement('Title')
if (![String]::IsNullOrEmpty($product.name))
{
        $xTitle.InnerText = $product.name.locale.GetAttribute("en-US")
}
        $xProduct.AppendChild($xTitle)

# Find first category associated with product
foreach ($productCategory in $productCategories.SelectNodes('productCategory'))
    {
if ($productCategory.productID -eq $product.productID)
{
foreach ($category in $categories.SelectNodes('category'))
    {
if ($category.categoryID -eq $productCategory.categoryID)
{
$xCategory = $xFeed.CreateElement('Category')

if (![String]::IsNullOrEmpty($category.name))
{
$xCategory.InnerText = $category.name.locale.GetAttribute("en-US")
}
$xProduct.AppendChild($xCategory)

break
}
}
break
}
}

# Find product variant
foreach ($productVariant in $productVariants.SelectNodes('productVariant'))
    {
if ($productVariant.productID -eq $productVariant.productID)
{
$xPrice = $xFeed.CreateElement('Price')
$xPrice.InnerText = $productVariant.basePrice
$xProduct.AppendChild($xPrice)

$xQuantity = $xFeed.CreateElement('Quantity')
```

```
$xQuantity.InnerText = $productVariant.inventory
$xProduct.AppendChild($xQuantity)

break
}
}

$xCondition = $xFeed.CreateElement('Condition')
$xCondition.InnerText = $Condition
$xProduct.AppendChild($xCondition)

$xLocation = $xFeed.CreateElement('Location')
$xLocation.InnerText = $Location
$xProduct.AppendChild($xLocation)

$xShippingOption = $xFeed.CreateElement('ShippingOption')
$xShippingOption.InnerText = $ShippingOption
$xProduct.AppendChild($xShippingOption)

# Get galleries
$productID = $product.productID
$xRequest = [Xml] "<?xml version='1.0' encoding='utf-8'?>
                      <request>
                        <version>1.0</version>
                        <credential>
                          <username>$APIUsername</username>
                          <apiKey>$APIKey</apiKey>
                        </credential>
                        <service>GetGalleriesByProduct</service>
                        <parameters>
  <productID>$productID</productID>
                        </parameters>
                      </request>"

   [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
   if ($xResponse.response.code -ne '2000')
   {
       Throw New-Object System.InvalidOperationException("Error executing GetGalleriesByProduct. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
   }
   [System.Xml.XmlElement]$galleries = $xResponse.SelectSingleNode('/response/return/galleries')

# Find display gallery
$xImageURL = $xFeed.CreateElement('ImageURL')
foreach ($gallery in $galleries.SelectNodes('gallery'))
    {
if ($gallery.format -eq 2)
{
if (![String]::IsNullOrEmpty($gallery.mediaFile))
{
$xImageURL.InnerText = $SiteUrl + '/DesktopModules/Revindex.Dnn.RevindexStorefront/Portals/0/Gallery/' + $gallery.mediaFile.locale.GetAttribute("en-US")
}

break
}
}
$xProduct.AppendChild($xImageURL)

$xDescription = $xFeed.CreateElement('Description')

if (![String]::IsNullOrEmpty($product.overview))
{
$xDescription.InnerText = $product.overview.locale.GetAttribute("en-US") + " " + $product.summary.locale.GetAttribute("en-US")
}

if (![String]::IsNullOrEmpty($product.summary))
{
$xDescription.InnerText += " " + $product.summary.locale.GetAttribute("en-US")
}

$xProduct.AppendChild($xDescription)
    }

# Output file to disk
Out-File -FilePath ($WorkingFolder + $FeedFileName) -Encoding "UTF8" -InputObject $xFeed.InnerXml

    # Notify progress
    SendEmail $SMTPServer $SMTPUser $SMTPPassword $NotificationSender $NotificationRecipient 'Fulfillment completed successfully' 'Fulfillment completed successfully' ($WorkingFolder + $LogFileName)
```

```
}
Catch
{
    # Log errors
    ([DateTime]::Now.ToString("s") + "`t" + $_.Exception.Message + "`t") >> ($WorkingFolder + $LogFileName)

    # Notify error
    SendEmail $SMTPServer $SMTPUser $SMTPPassword $NotificationSender $NotificationRecipient 'Feed failed' 'Feed failed' ($WorkingFolder + $LogFileName)
}
```

QuickBooks export customer (Powershell)

You can use the following Powershell script to export your customers information to an IIF file suitable for importing into your QuickBooks software.

```

# QuickBooksCustomerExport.ps1
#
# This script will export all customer information
# to a QuickBooks IIF file.
#######################################################################

# Configuration
#######################################################################
param
(
    [parameter(Mandatory = $false)][string]$APIKey = 'xxxxx-xxxxx',
    [parameter(Mandatory = $false)][string]$APIUrl = 'http://my.com/.../Revindex.Dnn.RevindexStorefront/Api/Rest/V1/ServiceHandler.ashx?portalid=0',
    [parameter(Mandatory = $false)][string]$APIUsername = 'host',
    [parameter(Mandatory = $false)][string]$OutFile = 'C:\Customers.iif',
    [parameter(Mandatory = $false)][DateTime]$StartDate = '2001-01-01',
    [parameter(Mandatory = $false)][DateTime]$StopDate = [DateTime]::Now,
    [int]$NetworkTimeout = 30000
)


# Functions
#######################################################################
# Function to help post HTTP request to web service
Function PostWebRequest([String] $url, [String] $data, [int] $timeout)
{
    $buffer = [System.Text.Encoding]::UTF8.GetBytes($data)
    [System.Net.HttpWebRequest] $webRequest = [System.Net.WebRequest]::Create($url)
    $webRequest.Timeout = $timeout
    $webRequest.Method = "POST"
    $webRequest.ContentType = "application/x-www-form-urlencoded"
    $webRequest.ContentLength = $buffer.Length;


    $requestStream = $webRequest.GetRequestStream()
    $requestStream.Write($buffer, 0, $buffer.Length)
    $requestStream.Flush()
    $requestStream.Close()


    [System.Net.HttpWebResponse] $webResponse = $webRequest.GetResponse()
    $streamReader = New-Object System.IO.StreamReader($webResponse.GetResponseStream())
    $result = $streamReader.ReadToEnd()
    return $result
}

# Start program
#######################################################################
Try
{
    # We need to construct our XML request using the parameter list
    $strRequest = "<?xml version='1.0' encoding='utf-8'?>
                  <request>
                    <version>1.0</version>
                    <credential>
                      <username>$APIUsername</username>
                      <apiKey>$APIKey</apiKey>
                    </credential>
                    <service>GetSalesOrdersByDateRange</service>
                    <parameters>
                      <startDate>$StartDate</startDate>
                      <stopDate>$StopDate</stopDate>
                    </parameters>
                  </request>"

    # Execute the API call
    $xRequest = [Xml] $strRequest
    [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
    if ($xResponse.response.code -ne '2000')
    {
        Write-Host "Error executing GetSalesOrders. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message
        return
    }


    [System.Xml.XmlElement]$salesOrders = $xResponse.SelectSingleNode('/response/return/salesOrders')

    $userIDs = @()

```

```
    $qbIIF = @()
    foreach ($salesOrder in $salesOrders.SelectNodes('salesOrder'))
    {
        # Only export unique users
        if ($userIDs -contains $salesOrder.userID)
        {
            continue
        }
        else
        {
            $userIDs += $salesOrder.userID
        }

        # Append data to CSV (IIF Format)
        # http://support.quickbooks.intuit.com/support/Articles/HOW12778
        # http://www.qblittlesquare.com/2011/07/import-lists-into-quickbooks-with-iif/
        $qbIIF += New-Object -TypeName PSObject -Property @{
                                                "!CUST" = "CUST"
                                                "NAME" = $salesOrder.billingLastName +", " + $salesOrder.billingFirstName
                                                "BADDR1" = $salesOrder.billingStreet.Replace("`r", "").Replace("`n", ", ")
                                                "BADDR2" = $salesOrder.billingCity
                                                "BADDR3" = $salesOrder.billingSubdivisionCode
                                                "BADDR4" = $salesOrder.billingCountryCode
                                                "BADDR5" = $salesOrder.billingPostalCode
                                                "SADDR1" = $salesOrder.shippingStreet.Replace("`r", "").Replace("`n", ", ")
                                                "SADDR2" = $salesOrder.shippingCity
                                                "SADDR3" = $salesOrder.shippingSubdivisionCode
                                                "SADDR4" = $salesOrder.shippingCountryCode
                                                "SADDR5" = $salesOrder.shippingPostalCode
                                                "PHONE1" = $salesOrder.billingPhone
                                                "PHONE2" = ''
                                                "FAXNUM" = ''
                                                "EMAIL" = $salesOrder.billingEmail
                                                "CONT1" = ''
                                                "CONT2" = ''
                                                "CTYPE" = 'Residential'
                                                "TERMS" = ''
                                                "TAXABLE" = 'Y'
                                                "LIMIT" = ''
                                                "RESALENUM" = ''
                                                "REP" = ''
                                                "TAXITEM" = ''
                                                "NOTEPAD" = ''
                                                "SALUTATION" = ''
                                                "COMPANYNAME" = $salesOrder.billingCompany
                                                "FIRSTNAME" = $salesOrder.billingFirstName
                                                "MIDINIT" = ''
                                                "LASTNAME" = $salesOrder.billingLastName
                                                "CUSTFLD1" = ''
                                                "CUSTFLD2" = ''
                                                "CUSTFLD3" = ''
                                                "CUSTFLD4" = ''
                                                "CUSTFLD5" = ''
                                                "CUSTFLD6" = ''
                                                "CUSTFLD7" = ''
                                                "CUSTFLD8" = ''
                                                "CUSTFLD9" = ''
                                                "CUSTFLD10" = ''
                                                "CUSTFLD11" = ''
                                                "CUSTFLD12" = ''
                                                "CUSTFLD13" = ''
                                                "CUSTFLD14" = ''
                                                "CUSTFLD15" = ''
                        }
    }

    # Persist fulfillment to file
    # Create CSV with headers and append data
    $qbIIF | Select-Object "!CUST",
                           "NAME",
                           "BADDR1",
                           "BADDR2",
                           "BADDR3",
                           "BADDR4",
                           "BADDR5",
                           "SADDR1",
                           "SADDR2",
                           "SADDR3",
                           "SADDR4",
```

```
                            "SADDR4",
                            "SADDR5",
                            "PHONE1",
                            "PHONE2",
                            "FAXNUM",
                            "EMAIL",
                            "CONT1",
                            "CONT2",
                            "CTYPE",
                            "TERMS",
                            "TAXABLE",
                            "LIMIT",
                            "RESALENUM",
                            "REP",
                            "TAXITEM",
                            "NOTEPAD",
                            "SALUTATION",
                            "COMPANYNAME",
                            "FIRSTNAME",
                            "MIDINIT",
                            "LASTNAME",
                            "CUSTFLD1",
                            "CUSTFLD2",
                            "CUSTFLD3",
                            "CUSTFLD4",
                            "CUSTFLD5",
                            "CUSTFLD6",
                            "CUSTFLD7",
                            "CUSTFLD8",
                            "CUSTFLD9",
                            "CUSTFLD10",
                            "CUSTFLD11",
                            "CUSTFLD12",
                            "CUSTFLD13",
                            "CUSTFLD14",
                            "CUSTFLD15" | Export-Csv -NoTypeInformation $OutFile
}
Catch
{
    Write-Output $_.Exception.Message
}
```

QuickBooks export sales order (Powershell)

You can use the following Powershell script to export your completed sales orders information to an IIF file suitable for importing into your QuickBooks software.

```

# QuickBooksSalesOrderExport.ps1
#
# This script will export all completed sales order information
# to a QuickBooks IIF file.
#######################################################################

# Configuration
#######################################################################

param
(
    [parameter(Mandatory = $false)][string]$APIKey = 'xxxxxxxxx',
    [parameter(Mandatory = $false)][string]$APIUrl = 'http://my.com/.../Revindex.Dnn.RevindexStorefront/Api/Rest/V1/ServiceHandler.ashx?portalid=0',
    [parameter(Mandatory = $false)][string]$APIUsername = 'host',
    [parameter(Mandatory = $false)][string]$OutFile = 'C:\SalesOrders.iif',
    [parameter(Mandatory = $false)][DateTime]$StartDate = '2001-01-01',
    [parameter(Mandatory = $false)][DateTime]$StopDate = [DateTime]::Now,
    [string]$QBBankAccount = 'Bank account',
    [string]$QBIncomeAccount = 'Income account',
    [int]$NetworkTimeout = 30000
)


# Functions
#######################################################################


# Function to help post HTTP request to web service
Function PostWebRequest([String] $url, [String] $data, [int] $timeout)
{
    $buffer = [System.Text.Encoding]::UTF8.GetBytes($data)
    [System.Net.HttpWebRequest] $webRequest = [System.Net.WebRequest]::Create($url)
    $webRequest.Timeout = $timeout
    $webRequest.Method = "POST"
    $webRequest.ContentType = "application/x-www-form-urlencoded"
    $webRequest.ContentLength = $buffer.Length;

    $requestStream = $webRequest.GetRequestStream()
    $requestStream.Write($buffer, 0, $buffer.Length)
    $requestStream.Flush()
    $requestStream.Close()

    [System.Net.HttpWebResponse] $webResponse = $webRequest.GetResponse()
    $streamReader = New-Object System.IO.StreamReader($webResponse.GetResponseStream())
    $result = $streamReader.ReadToEnd()
    return $result
}


# Start program
#######################################################################

Try
{
    # Create IIF file
    # http://support.quickbooks.intuit.com/support/Articles/HOW12778
    # http://www.qblittlesquare.com/2011/07/import-lists-into-quickbooks-with-iif/
    # Write headers
    ('"!TRNS","DATE","ACCNT","NAME","CLASS","AMOUNT","MEMO"') >> $OutFile
    ('"!SPL","DATE","ACCNT","NAME","AMOUNT","MEMO"') >> $OutFile
    ('"!ENDTRNS"') >> $OutFile

    # We need to construct our XML request using the parameter list
    $strRequest = "<?xml version='1.0' encoding='utf-8'?>
                   <request>
                     <version>1.0</version>
                     <credential>
                       <username>$APIUsername</username>
                       <apiKey>$APIKey</apiKey>
                     </credential>
                     <service>GetSalesOrdersByDateRange</service>
                     <parameters>
                       <startDate>$StartDate</startDate>
                       <stopDate>$StopDate</stopDate>
                     </parameters>
                   </request>"

    # Execute the API call
    $xRequest = [Xml] $strRequest
    [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
```

```
    [xml]$xResponse = $xRequestClient.ProcessRequest($xRequestDoc.OuterXml, $xSessionTicket)
    if ($xResponse.response.code -ne '2000')
    {
        Write-Host "Error executing GetSalesOrders. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message
        return
    }

    [System.Xml.XmlElement]$salesOrders = $xResponse.SelectSingleNode('/response/return/salesOrders')


    $qbIIF = @()
    foreach ($salesOrder in $salesOrders.SelectNodes('salesOrder'))
    {
        # Export only completed orders
        if ($salesOrder.status -ne '4')
        {
            continue
        }

        ('"TRNS", "' + ([DateTime]$salesOrder.orderDate).ToString("yyyy-MM-dd") + '","' + $QBBankAccount.Replace('"', '""') + '","' + $salesOrder.billingFirstName.Replace('"', '""') + ' ' + $salesOrder.billingLastName.Replace('"', '""') + '","' + $salesOrder.totalAmount + '","SalesOrder","""') >> $OutFile

        ('"SPL", "' + ([DateTime]$salesOrder.orderDate).ToString("yyyy-MM-dd") + '","' + $QBIncomeAccount.Replace('"', '""') + '","' + $salesOrder.billingFirstName.Replace('"', '""') + ' ' + $salesOrder.billingLastName.Replace('"', '""') + '","' + (-([Decimal]$salesOrder.totalAmount)) + '","""') >> $OutFile

        ('"ENDTRNS"') >> $OutFile
    }
}
Catch
{
    Write-Output $_.Exception.Message
}
```

Shipwire export order (Powershell)

The following script will export orders to Shipwire for fulfilling.

```
# ShipwireFulfillment.ps1
#
# This script will export all pending orders that needs to be fulfilled
# by Shipwire.
# It will mark the SalesOrderDetail object as shipped and the entire
# SalesOrder as completed when every order detail has been fulfilled.
#######################################################################




# Configuration
#######################################################################


$APIKey = '00000000-0000-0000-0000-000000000000'
$APIUrl = 'http://domain.com/DesktopModules/Revindex.Dnn.RevindexStorefront/Api/Rest/V1/ServiceHandler.ashx?portalid=0'
$APIUsername = 'host'


# Number of days to look back at orders
$BackOrderDays = -7


$LogFileName = ('Log.' + [DateTime]::Now.ToString('yyyyMMdd') + '.txt')


$NetworkTimeout = 30000


# The email(s) to notify on success/error. Separated multiple emails by semicolon.
$NotificationRecipient = 'support@localhost.com'


$NotificationSender = 'support@localhost.com'


# The platform or software which is referring this order.
$ShipwireReferer = ''


$ShipwirePassword = 'nokuwi'


# Enter the word 'Test' if you wish to run a test but not send orders for fulfillment. Leave blank in production.
$ShipwireTest = 'Test'


$ShipwireUsername = 'testuser'


$SMTPPassword = 'xxxxxx'
$SMTPServer = 'mail.localhost.com'
$SMTPUser = 'mailer'


# The folder to store files, logs, etc. defaults to the current execution path
$WorkingFolder = ((Split-Path $MyInvocation.MyCommand.Path) + '\')




# Functions
#######################################################################




# Function to help post HTTP request to web service
Function PostWebRequest([String] $url, [String] $data, [int] $timeout)
{
    $buffer = [System.Text.Encoding]::UTF8.GetBytes($data)
    [System.Net.HttpWebRequest] $webRequest = [System.Net.WebRequest]::Create($url)
    $webRequest.Timeout = $timeout
    $webRequest.Method = "POST"
    $webRequest.ContentType = "application/x-www-form-urlencoded"
    $webRequest.ContentLength = $buffer.Length;


    $requestStream = $webRequest.GetRequestStream()
```

```
    $requestStream = $webRequest.GetRequestStream()
    $requestStream.Write($buffer, 0, $buffer.Length)
    $requestStream.Flush()
    $requestStream.Close()


    [System.Net.HttpWebResponse] $webResponse = $webRequest.GetResponse()
    $streamReader = New-Object System.IO.StreamReader($webResponse.GetResponseStream())
    $result = $streamReader.ReadToEnd()
    return $result
}




# Function to send email
Function SendEmail([String]$smtpServer, [String] $smtpUser, [String] $smtpPassword, [String] $sender, [String] $recipient, [String] $subject, [String] $body, [String] $attachment)
{
    $msg = New-Object System.Net.Mail.MailMessage
    $msg.From = $sender
    $msg.ReplyTo = $sender

    foreach ($r in $recipient.Split(';'))
    {
        if ($r)
        {
            $msg.To.Add($r)
        }
    }
    $msg.subject = $subject
    $msg.body = $body

    if ($attachment -and [System.IO.File]::Exists($attachment))
    {
        $att = New-Object System.Net.Mail.Attachment($attachment)
        $msg.Attachments.Add($att)
    }


    $smtp = New-Object System.Net.Mail.SmtpClient($smtpServer)
    $smtp.Credentials = New-Object System.Net.NetworkCredential($smtpUser, $smtpPassword);
    $smtp.Send($msg)
}




# Start program
#######################################################################




Try
{
$xShipRequest = [Xml] "<?xml version='1.0' encoding='utf-8'?>
<OrderList>
<Username>$ShipwireUsername</Username>
  <Password>$ShipwirePassword</Password>
  <Server>$ShipwireTest</Server>
  <Referer>$ShipwireReferer</Referer>
</OrderList>"


    # Get sales orders needing to be fulfilled
    $StartDate = [DateTime]::Now.AddDays($BackOrderDays).ToString("s")
    $StopDate = [DateTime]::Now.ToString("s")


    $xRequest = [Xml] "<?xml version='1.0' encoding='utf-8'?>
                        <request>
                          <version>1.0</version>
                          <credential>
                            <username>$APIUsername</username>
                            <apiKey>$APIKey</apiKey>
                          </credential>
                          <service>GetSalesOrdersByDateRange</service>
                          <parameters>
                            <startDate>$StartDate</startDate>
                            <stopDate>$StopDate</stopDate>
                          </parameters>
                        </request>"

```

```
164
165
166
167     [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
168     if ($xResponse.response.code -ne '2000')
169     {
170         Throw New-Object System.InvalidOperationException("Error executing
GetSalesOrdersByDateRange. Response: " + $xResponse.response.code + ' ' +
$xResponse.response.message)
171     }
172     [System.Xml.XmlElement]$salesOrders =
$xResponse.SelectSingleNode('/response/return/salesOrders')
173
174
175     foreach ($salesOrder in $salesOrders.SelectNodes('salesOrder'))
176     {
177         # Look for pending order status
178         if ($salesOrder.status -eq '1')
179         {
180 # Create Shipwire fulfillment request
181 $xShipRequestOrder = $xShipRequest.CreateElement('Order')
182 $xShipRequestOrder.SetAttribute('id', $salesOrder.salesOrderID)
183 $xShipRequest.OrderList.AppendChild($xShipRequestOrder)
184
185 $xShipRequestWarehouse = $xShipRequest.CreateElement('Warehouse')
186 $xShipRequestWarehouse.InnerText = '00'
187 $xShipRequestOrder.AppendChild($xShipRequestWarehouse)
188
189 $xShipRequestOrderAddressInfo = $xShipRequest.CreateElement('AddressInfo')
190 $xShipRequestOrderAddressInfo.SetAttribute('type', 'ship')
191 $xShipRequestOrder.AppendChild($xShipRequestOrderAddressInfo)
192
193 $xShipRequestOrderAddressInfoName = $xShipRequest.CreateElement('Name')
194 $xShipRequestOrderAddressInfoNameFull = $xShipRequest.CreateElement('Full')
195 $xShipRequestOrderAddressInfoNameFull.InnerText = $salesOrder.shippingFirstName + ' ' +
$salesOrder.shippingLastName
196 $xShipRequestOrderAddressInfoName.AppendChild($xShipRequestOrderAddressInfoNameFull)
197 $xShipRequestOrder.AddressInfo.AppendChild($xShipRequestOrderAddressInfoName)
198
199 $xShipRequestOrderAddressInfoAddress1 = $xShipRequest.CreateElement('Address1')
200 $xShipRequestOrderAddressInfoAddress1.InnerText = $salesOrder.shippingStreet.Replace("`r",
'').Split("`n")[0]
201 $xShipRequestOrderAddressInfo.AppendChild($xShipRequestOrderAddressInfoAddress1)
202
203 $xShipRequestOrderAddressInfoAddress2 = $xShipRequest.CreateElement('Address2')
204 $xShipRequestOrderAddressInfoAddress2.InnerText = $salesOrder.shippingStreet.Replace("`r",
'').Split("`n")[1]
205 $xShipRequestOrderAddressInfo.AppendChild($xShipRequestOrderAddressInfoAddress2)
206
207 $xShipRequestOrderAddressInfoCity = $xShipRequest.CreateElement('City')
208 $xShipRequestOrderAddressInfoCity.InnerText = $salesOrder.shippingCity
209 $xShipRequestOrderAddressInfo.AppendChild($xShipRequestOrderAddressInfoCity)
210
211 $xShipRequestOrderAddressInfoState = $xShipRequest.CreateElement('State')
212 if ($salesOrder.shippingCountryCode -eq 'US' -or $salesOrder.shippingCountryCode -eq 'CA')
213 {
214 $xShipRequestOrderAddressInfoState.InnerText = $salesOrder.shippingSubdivisionCode
215 }
216 else
217 {
218 $xShipRequestOrderAddressInfoState.InnerText = $salesOrder.shippingSubdivisionName
219 }
220 $xShipRequestOrderAddressInfo.AppendChild($xShipRequestOrderAddressInfoState)
221
222 $xShipRequestOrderAddressInfoCountry = $xShipRequest.CreateElement('Country')
223 $xShipRequestOrderAddressInfoCountry.InnerText = $salesOrder.shippingCountryCode
224 $xShipRequestOrderAddressInfo.AppendChild($xShipRequestOrderAddressInfoCountry)
225
226 $xShipRequestOrderAddressInfoZip = $xShipRequest.CreateElement('Zip')
227 $xShipRequestOrderAddressInfoZip.InnerText = $salesOrder.shippingPostalCode
228 $xShipRequestOrderAddressInfo.AppendChild($xShipRequestOrderAddressInfoZip)
229
230 $xShipRequestOrderAddressInfoPhone = $xShipRequest.CreateElement('Phone')
231 $xShipRequestOrderAddressInfoPhone.InnerText = $salesOrder.shippingPhone
232 $xShipRequestOrderAddressInfo.AppendChild($xShipRequestOrderAddressInfoPhone)
233
234 $xShipRequestOrderAddressInfoEmail = $xShipRequest.CreateElement('Email')
235 $xShipRequestOrderAddressInfoEmail.InnerText = $salesOrder.shippingEmail
236 $xShipRequestOrderAddressInfo.AppendChild($xShipRequestOrderAddressInfoEmail)
237
238 # Query shipping method
239            $xRequest = [Xml] ("<?xml version='1.0' encoding='utf-8'?>
240                               <request>
```

```
                                <version>1.0</version>
                                <credential>
                                  <username>$APIUsername</username>
                                  <apiKey>$APIKey</apiKey>
                                </credential>
                                <service>GetActiveShippingMethod</service>
                                <parameters>
                                  <shippingMethodID>" + $salesOrder.shippingMethodID + "</shippingMethodID>
                                </parameters>
                              </request>")




            [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
            if ($xResponse.response.code -ne '2000')
            {
                Throw New-Object System.InvalidOperationException("Error executing GetActiveShippingMethod. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
            }
            $shippingMethod = $xResponse.response.return.shippingMethod

if (!$shippingMethod.universalServiceName.StartsWith("SHIPWIRE:"))
{
continue
}

$xShipRequestOrderCarrier = $xShipRequest.CreateElement('Carrier')
$xShipRequestOrderCarrier.InnerText = $shippingMethod.universalServiceName.Replace("SHIPWIRE:", "")
$xShipRequestOrder.AppendChild($xShipRequestOrderCarrier)

            # Query sales order details
            $xRequest = [Xml] ("<?xml version='1.0' encoding='utf-8'?>
                              <request>
                                <version>1.0</version>
                                <credential>
                                  <username>$APIUsername</username>
                                  <apiKey>$APIKey</apiKey>
                                </credential>
                                <service>GetSalesOrderDetails</service>
                                <parameters>
                                  <salesOrderID>" + $salesOrder.salesOrderID + "</salesOrderID>
                                  <stopDate>$StopDate</stopDate>
                                </parameters>
                              </request>")




            [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
            if ($xResponse.response.code -ne '2000')
            {
                Throw New-Object System.InvalidOperationException("Error executing GetSalesOrderDetails. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
            }
            [System.Xml.XmlElement]$salesOrderDetails = $xResponse.SelectSingleNode('/response/return/salesOrderDetails')

$itemNum = 0
            foreach ($salesOrderDetail in $salesOrderDetails.SelectNodes('salesOrderDetail'))
            {
                # Make sure we haven't already fulfilled this sales order detail otherwise we can skip it
                if ($salesOrderDetail.shippingStatus -ne '2')
                {
                    continue
                }

                # Query product info for matching distributor
                $xRequest = [Xml] ("<?xml version='1.0' encoding='utf-8'?>
                                  <request>
                                    <version>1.0</version>
                                    <credential>
                                      <username>$APIUsername</username>
                                      <apiKey>$APIKey</apiKey>
                                    </credential>
                                    <service>GetActiveProductVariant</service>
                                    <parameters>
                                      <productVariantID>" + $salesOrderDetail.productVariantID + "</productVariantID>
```

```
</productVariantID>
                                    </parameters>
                                  </request>")




               [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
               if ($xResponse.response.code -ne '2000')
               {
                   Throw New-Object System.InvalidOperationException("Error executing GetActiveProductVariant. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
               }
               $productVariant = $xResponse.response.return.productVariant

# Append Shipwire item to fulfillment request
$xShipRequestOrderItem = $xShipRequest.CreateElement('Item')
$xShipRequestOrderItem.SetAttribute('num', $itemNum)
$xShipRequestOrder.AppendChild($xShipRequestOrderItem)

$xShipRequestOrderItemCode = $xShipRequest.CreateElement('Code')
$xShipRequestOrderItemCode.InnerText = $salesOrderDetail.sku
$xShipRequestOrderItem.AppendChild($xShipRequestOrderItemCode)

$xShipRequestOrderItemQuantity = $xShipRequest.CreateElement('Quantity')
$xShipRequestOrderItemQuantity.InnerText = $salesOrderDetail.quantity
$xShipRequestOrderItem.AppendChild($xShipRequestOrderItemQuantity)

$itemNum = $itemNum + 1

               # Mark SalesOrderDetail as shipped
               $salesOrderDetail.shippingStatus = '3'

               # Update order detail shipping status to shipped (3).
               $xRequest = [Xml] ("<?xml version='1.0' encoding='utf-8'?>
                           <request>
                             <version>1.0</version>
                             <credential>
                               <username>$APIUsername</username>
                               <apiKey>$APIKey</apiKey>
                             </credential>
                             <service>UpdateSalesOrderDetail</service>
                             <parameters>
                               <salesOrderDetailID>" + $salesOrderDetail.salesOrderDetailID + "</salesOrderDetailID>
                               <shippingStatus>3</shippingStatus>
                             </parameters>
                           </request>")

               [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
               if ($xResponse.response.code -ne '2000')
               {
                   Throw New-Object System.InvalidOperationException("Error executing UpdateSalesOrderDetail. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
               }
           }

           # Update order status to Completed and Shipped if all sales order details have been accounted for.
           $orderIsComplete = $true
           foreach ($salesOrderDetail in $salesOrderDetails.SelectNodes('salesOrderDetail'))
           {
               if ($salesOrderDetail.shippingStatus -eq '2' -or $salesOrderDetail.shippingStatus -eq '4')
               {
                   $orderIsComplete = $false
                   break
               }
           }

           if ($orderIsComplete)
           {
               # Update order status to shipped (3) and order completed (4).
               $xRequest = [Xml] ("<?xml version='1.0' encoding='utf-8'?>
                             <request>
                               <version>1.0</version>
                               <credential>
                                 <username>$APIUsername</username>
                                 <apiKey>$APIKey</apiKey>
                               </credential>
                               <service>UpdateSalesOrder</service>
```

```
                                <parameters>
                                  <salesOrderID>" + $salesOrder.salesOrderID + "</salesOrderID>
                                  <salesPaymentStatus>" + $salesOrder.salesPaymentStatus + "</salesPaymentStatus>
                                  <shippingStatus>3</shippingStatus>
                                  <status>4</status>
                                </parameters>
                              </request>")

               [Xml]$xResponse = PostWebRequest $APIUrl $xRequest.InnerXml $NetworkTimeout
               if ($xResponse.response.code -ne '2000')
               {
                   Throw New-Object System.InvalidOperationException("Error executing UpdateSalesOrder. Response: " + $xResponse.response.code + ' ' + $xResponse.response.message)
               }
            }
        }
    }


# Submit to Shipwire fulfillment
$shipwireAPIUrl = 'https://api.shipwire.com/exec/FulfillmentServices.php'
if ($ShipwireTest -ne '')
{
$shipwireAPIUrl = 'https://api.beta.shipwire.com/exec/FulfillmentServices.php'
}
[Xml]$xResponse = PostWebRequest $shipwireAPIUrl $xShipRequest.InnerXml $NetworkTimeout
[System.Xml.XmlElement]$xSubmitOrderResponse = $xResponse.SelectSingleNode('/SubmitOrderResponse')
    if ($xSubmitOrderResponse.Status -eq '0')
    {
        # Log completion
    ([DateTime]::Now.ToString("s") + "`tSuccess`t" + $xShipRequest.InnerXml) >> ($WorkingFolder + $LogFileName)

# Notify progress
    SendEmail $SMTPServer $SMTPUser $SMTPPassword $NotificationSender $NotificationRecipient 'Fulfillment completed successfully' 'Fulfillment completed successfully' ($WorkingFolder + $LogFileName)
    }
    else
{
    # Log completion
    ([DateTime]::Now.ToString("s") + "`t" + $xSubmitOrderResponse.ErrorMessage.InnerText + "`t" + $xShipRequest.InnerXml) >> ($WorkingFolder + $LogFileName)

# Notify progress
    SendEmail $SMTPServer $SMTPUser $SMTPPassword $NotificationSender $NotificationRecipient 'Fulfillment failed' 'Fulfillment failed' ($WorkingFolder + $LogFileName)
    }
}
Catch
{
    # Log errors
    ([DateTime]::Now.ToString("s") + "`t" + $_.Exception.Message + "`t") >> ($WorkingFolder + $LogFileName)

    # Notify error
    SendEmail $SMTPServer $SMTPUser $SMTPPassword $NotificationSender $NotificationRecipient 'Fulfillment failed' 'Fulfillment failed' ($WorkingFolder + $LogFileName)
}
```

Retrieve product (C#)

The following code shows how to perform a simple POST request using C# to retrieve a Product object:

```

using System;
using System.IO;
using System.Net;
using System.Text;
using System.Xml;
using System.Xml.Ling;
...
...
...


HttpWebRequest req =
(HttpWebRequest)WebRequest.Create("http://a.com/.../Api/Rest/V1/ServiceHandler.ashx");

req.Timeout = 30000;
req.Method = "POST";
req.ContentType = "application/x-www-form-urlencoded";

// Initialize post string
string postString = @"<?xml version=""1.0"" encoding=""utf-8""?>
<request>
  <version>1.0</version>
  <credential>
    <username>Administrator</username>
    <apiKey>00000000-0000-0000-0000-000000000000</apiKey>
  </credential>
  <service>GetActiveProduct</service>
  <parameters>
    <productID>1</productID>
  </parameters>
</request>";

req.ContentLength = Encoding.UTF8.GetByteCount(postString);
using (Stream sw = req.GetRequestStream())
{
    byte[] bytes = Encoding.UTF8.GetBytes(postString);
    sw.Write(bytes, 0, bytes.Length);
}

HttpWebResponse resp = (HttpWebResponse)req.GetResponse();

// Verify HTTP for 200 OK status code
if (resp.StatusCode == HttpStatusCode.OK)
{
    using (StreamReader sr = new StreamReader(resp.GetResponseStream(), Encoding.UTF8))
    {
        string responseData = sr.ReadToEnd();

        // Parse the XML return data
        XDocument doc = XDocument.Parse(responseData);

        // Verify XML for 2000 Success
        if (((XElement)doc.FirstNode).Element("code").Value == "2000")
        {
            // Read the rest of the XML...
        }
    }
}

```

CSV bulk import

Revindex Storefront spots a powerful API for selecting, inserting, updating or deleting almost any data. The API has a more extensive support for manipulating bulk data than the regular CSV import on the screen.

Paired together with a Powershell script that you can just run on the command line from any computer to import a CSV file to almost any Storefront data (products, variants, categories, gallery, etc.) including any Insert, Update or even Delete operations that the API can perform. Because internally it calls the API, it benefits from validation check as well as the ability to operate on almost every field.

http://www.revindex.com/Resources/Kno... (http://www.revindex.com/Resources/KnowledgeBase/RevindexStorefront/tabid/174/rvdwktid/csv-import-powershell-223/Default.aspx)

This script takes any CSV file and call any of the API operations. E.g. It can call the "InsertProductAttribute" service. All you need to do is make sure your CSV file header follows the request parameter list of that service call (double quotes around CSV fields are optional but highly recommended).

http://www.revindex.com/Resources/Kno... (http://www.revindex.com/Resources/KnowledgeBase/RevindexStorefront/tabid/174/rvdwktid/productattribute-14/Default.aspx)

```

"booleanValue","decimalValue","integerValue","productAttributeDefinitionID","productID","productVariantID",...
"TRUE","[NULL]","[NULL]","12","7","[NULL]",...
"[NULL]","[NULL]","[NULL]","15","[NULL]","8",...

```

You just need to enable the API under **Configuration > API** menu after logged in as Admin or Host. Then run the command line with the correct parameters specifying the operation you want to do and the location of your CSV file:

```

&"C:\CsvImport.ps1"  -APIKey 'xxxx' -APIService 'InsertProductAttribute' -APIUrl 'http://url/...' -APIUsername 'admin' -ParamsFile 'C:\Params.csv'

```

Remember to take a full backup before doing any major import.

Shopping Cart Flow

The typical checkout flow consists of the following steps. The flow determines how and when various price, discount, shipping and tax calculations are performed base on the available data collected from the user (e.g. Shipping cost can only be calculated after user supplies his shipping address during checkout. Similarly, taxes can only be calculated after user supplies his billing address).

Customer initiates checkout

The following steps below are typical of how a customer progresses from browsing to completing a purchase. Every business is different and the actual steps may vary.

1. System generates list of available products.
2. Customer views products page.
3. Customer select product of interest.
4. System generates product detail, calculates price, apply any promotion and verifies product availability.
5. Customer adds product to cart.
6. System verifies order and approximates sub-total before shipping/handling cost and taxes.
7. Customer proceeds to checkout.
8. System prompts customer to login, register or checkout as guest user.
9. Customer enters billing, shipping information.
10. System determines the available shipping methods.
11. Customer selects the desired shipping method.
12. Customer enters coupon.
13. System verifies order; apply discounts, shipping cost, handling cost and taxes before calculating final total.
14. Customer reviews final total and enters voucher and payment information.
15. Customer places order.
16. System validates order. If order is invalid, customer is redirected back to checkout page.
17. System processes payment. If payment fails, customer is redirected back to checkout page.
18. System saves the order and payment information.

    Order Status = Ordered
    Payment Status = Pending
    Shipping Status = Not Required/Not Shipped

    For a purchase order, the Order Status will be set to Pending since no payment is actually collected.

19. System decrements product & coupon inventory. For a purchase order, the product and coupon inventories are unchanged since no actual order has taken place.

20. If the **Configuration > Checkout** has the **Run action on checkout** option selected, the system will automatically run the place order action rule (e.g. grant security role, execute Web request).
21. System generates confirmation details and sends out notification to customer and Storefront administrator.
22. Customer views the confirmation page and receives receipt.

Merchant fulfills new order

The following steps below are typical of how the store operates. Every business is different and your own steps may vary. You can also automate many of these tasks by using the action rules to automatically change statuses immediately after checkout. Please see How to force order and payment status (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-force-order-and-payment-status/rvdwkpvm/section) for more information.

1. Merchant reviews order and updates progress so customers can see that the order is being processed. You can skip this step if your order to fulfillment steps are very quick.

   Order Status = Processing

2. Merchant verifies payment for fraud and marks payment as completed if received.

   Payment Status = Paid

3. Merchant runs place order action (e.g. grant security role, execute Web request). This step is not required if the **Configuration > Checkout** has the **Run action on checkout** option selected, which automatically runs the action rule during customer checkout. If you're selling vouchers and issuing access rights, you want to issue them now. You can also award loyalty points to your customer at this stage.

4. If product requires shipping, merchant ships product once paid. In the case of Cash on Delivery (C.O.D), the product may be shipped first before receiving payment. If you have a tracking number from your post office, you may enter it with the order detail so that your customers can also view it for their own follow-up.

   Shipping Status = Shipped

5. Merchant completes order. Any downloadable product (virtual goods) will automatically become available when order is marked Completed or payment is Paid.

   Order Status = Completed

Merchant cancels bad order

The following steps below are typical of how the store operates. Every business is different and your own steps may vary. You can also automate many of these tasks by using the action rules to automatically change statuses immediately after checkout. Please see How to force order and payment status (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-force-order-and-payment-status/rvdwkpvm/section) for more information.

1. Merchant reviews order and updates progress.

   Order Status = Processing

2. If payment failed or money is never received, the merchant cancels payment.

   Payment Status = Cancelled/Declined

   If payment is received, you want to select that payment and perform a add new to refund it.

   Payment Status = Refunded

3. Merchant increments product/coupon inventory and undo any custom action (e.g. revoke security role, etc.). You should also revoke any issued voucher or rights.
4. Merchant closes order.

   Order Status = Cancelled/Declined

Merchant fulfills recurring order

The following steps below are typical of how the store operates. Every business is different and your own steps may vary. You can also automate many of these tasks by using the action rules to automatically change statuses immediately after checkout. Please see How to force order and payment status (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-force-order-and-payment-status/rvdwkpvm/section) for more information.

1. When a previously saved order is due to recur, the system generates a new order for customer. When the preferred payment uses credit card, the system will automatically attempt to charge the card and upon success will decrement the inventory. Also, if the **Configuration > Checkout** has the **Run action on checkout** option selected, the system will automatically run the place order action rule. In all other cases where the system is not able to automatically collect the payment successfully (e.g. wire transfer, cash payment, credit card declined, etc.), the inventory is not adjusted. Discounts, shipping, handling costs and taxes are automatically applied to order.

   Because recurring order normally repeats over a long period of time and many factors can affect the validity of the order (e.g. customer credit card expired, product features changed, inventory is empty, changes to available shipping methods, changes to business and legal requirements, etc.), it is the responsibility of the merchant to verify the new order is valid and issue the payment collection manually as needed.

   Order Status = Pending
   Payment Status = Pending
   Shipping Status = Not Required/Not Shipped

2. Merchant reviews order and marks order as valid.

   Order Status = Ordered

3. Merchant decrements product inventory level. If payment was automatically collected successfully, you don't need to adjust inventory level.

4. Merchant creates a new payment and collects the money if payment is not already collected. In the case of credit card, the system will attempt to collect the payment automatically.

   Payment Status = Paid

5. Merchant runs place order actions (e.g. grant security role, execute Web request). This step is not required if the **Configuration > Checkout** has the **Run action on checkout** option selected, which automatically runs the action rule on recurring order creation.

6. If product requires shipping, administrator ships product once paid. In the case of Cash on Delivery (C.O.D), the product may be shipped first before receiving payment.

Shipping Status = Shipped

7. Merchant closes order. Any downloadable product (virtual goods) will automatically become available when order is marked Completed or payment is Paid.

   Order Status = Completed

Understanding payment risk

By default, for your security and best practices, Revindex Storefront will mark the payment as "Pending" to encourage the store admin to manually verify each order for fraud, validity of the order, etc. There is no confusion between paid and unpaid. "Pending" status simply means the payment is received but should be verified for correctness. If the credit card failed to charge in the first place, the order would go into the "Incomplete" status. If your site receives very few fraud depending on what you sell, you can create a Place order action rule to mark all orders as "Paid" immediately. A place order action rule only runs when the order is completed (payment received and customer got all the way to the confirmation page). Please see How to force order and payment status (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/how-to-force-order-and-payment-status/rvdwkpvm/section) for more information.

Certain payment gateways such as PayPal will report payment approved but still places it on hold internally for international payments, payment received in another currency or when a high fraud risk has been detected. In this case, the money is authorized but not yet deposited and the merchant needs to log into PayPal to manually confirm the payment for the money to be deposited into the account. If you didn't confirm the payment in PayPal, you may find out days later that the money never got deposited or the customer cancelled the payment in between while your product has shipped.

Another example, if you're accepting credit card on your site, you may have fraud and this is indicated by the AVS response code. AVS stands for Address Verification System and can report street address match, postal code match only or full match. The credit card payment gateway will always approve the transaction, but in reality, the store owner needs to decide if the AVS result is acceptable for your store depending on what you sell, the amount of risk you are willing to tolerate. For example, some shops will reject the order if the AVS reports street address match only and not postal code match to avoid high number of charge backs.

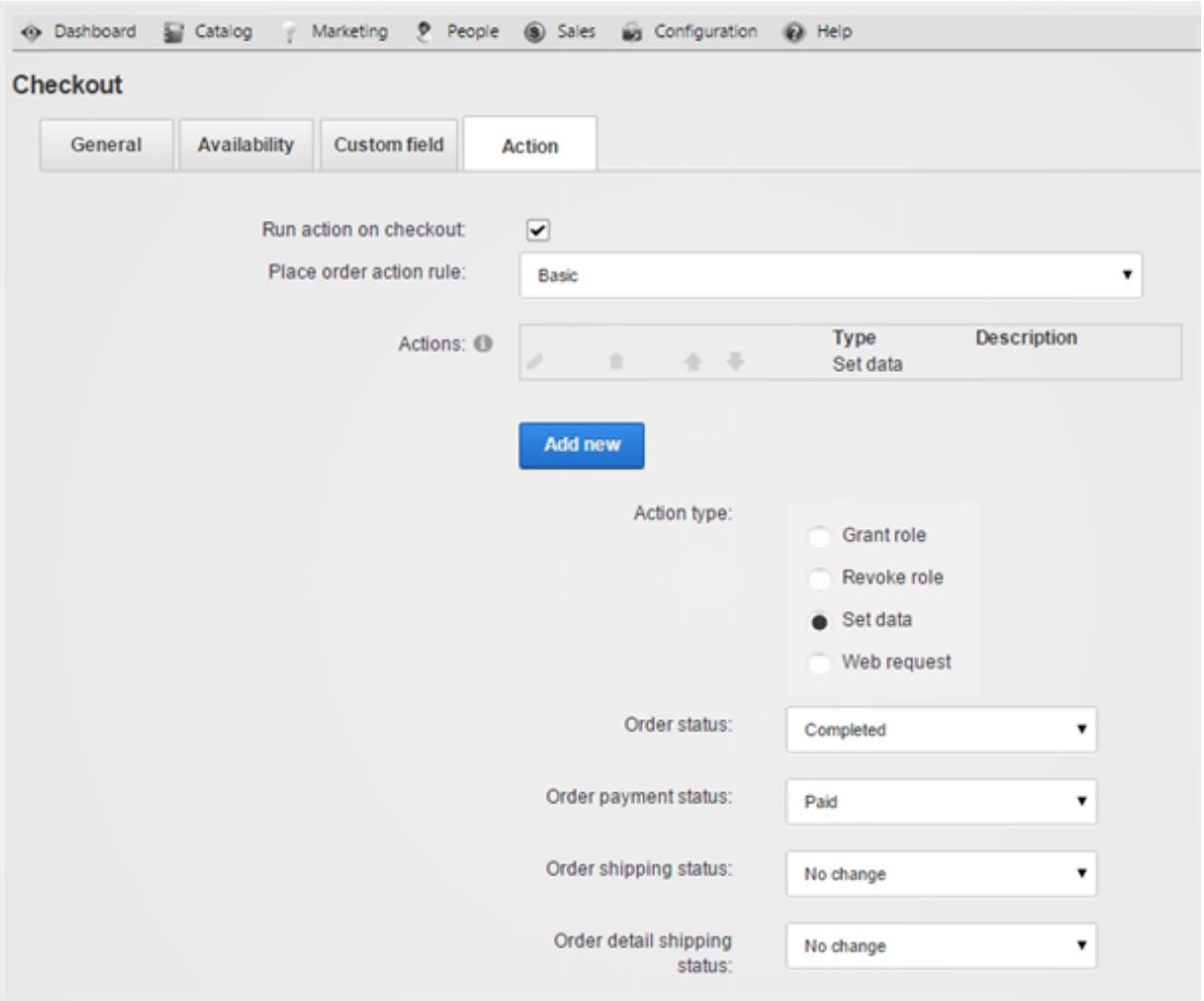
Yet, another possibility is your site charged the order to a recently stolen credit card and the payment gateway approved the order. Usually the cardholder will report the card as stolen within 24 hours and the funds will be reversed. If your business suffers from high risk of fraud, you may want to wait a fixed amount of time prior to shipping out products.

Revindex Storefront is built with security in mind to encourage best practices but you are certainly welcome to automate certain steps where it makes sense for your kind of business. Please see Fraud risk (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/fraud-risk/rvdwkpvm/section) for more information on using fraud score to manage your business risk.

How to force order and payment status

If your business has a low risk for fraud, you may want to automatically mark all orders as "Completed" and payments as "Paid". Please see the topic on Understanding payment risk (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/understanding-payment-risk/rvdwkpvm/section) for more information on fraud and reversable payments.

To do so, you can simply create a **Place order action rule** under **Configuration > Checkout** menu and set it to automatically mark all order status as "Completed" and payment status as "Paid". You can also use the custom rule to only set the statuses when certain conditions are met (e.g. update status only for Credit card payments and not by Wire transfer or large amounts exceeding $500).



Please note if you sell recurring products, you should employ the Custom rule in your **Place order action** to test for successful payment prior to setting the order as "Completed". In a typical checkout flow when the credit card declines, the customer is prompted to retry entering his credit card until it succeeds therefore there is no need to test for successful payment since the checkout form handles it for you. A recurring order is different than a normal checkout because the process is automatic and happens behind the scene. The Storefront creates the recurring order even if the credit card declined since there is no way to prompt the

user to retry. As such, it's important to test for successful payment in your custom rule before setting the order status as "Completed". For example, you can use an xls:if instruction to test for successful payment prior to executing the other instructions. Please see Payment Gateway Response Code Types (http://www.revindex.com/Resources/Knowledge-Base/Revindex-Storefront/payment-gateway-response-code-types/rvdwkpvm/section) for more information.

XML and XSL

Revindex Storefront uses XML and XSLT rules to carry data and to transform it into usable business logic. Both technology are well defined and governed by the W3C standard.

There are numerous tutorials and books that teaches about XML and XSLT. Below are a few online tutorials that could be useful.

XML Tutorials

- http://www.w3schools.com/xml/ (http://www.w3schools.com/xml/)
- http://www.xmlfiles.com/xml/ (http://www.xmlfiles.com/xml/)
- http://www.quackit.com/xml/tutorial/ (http://www.quackit.com/xml/tutorial/)

XSLT Tutorials

- http://www.w3schools.com/xsl/ (http://www.w3schools.com/xsl/)
- http://www.tizag.com/xmlTutorial/xslttutorial.php (http://www.tizag.com/xmlTutorial/xslttutorial.php)
- http://www.learn-xslt-tutorial.com/ (http://www.learn-xslt-tutorial.com/%20)

XSL Transform

Every business has its own set of unique business rules, which gives its competitive edge and allows it to comply with regulations. For example, you may have a business rule that gives a $10 discount to repeat customers who purchased over $50 worth of products or your ground shipping method in the United States should never ship to Hawaii.

Revindex Storefront employs powerful XSL 2.0 transform to apply dynamic business rules and calculate the resulting values. XSL (Extensible Stylesheet Language) is the industry standard XML transform language and can be found in different DNN core modules such as the Reports, XML, News Feed module and throughout the Internet. Although not necessary to operate the Revindex Storefront, understanding the basics of XSL will open endless possibility to describe your most complicated business rules needed to run your business.

To learn XSL, you must first understand XML (Extensible Markup Language). XML is very similar to HTML, the language used to describe Web pages. XML is made up of elements contained in open and close right-angle brackets. e.g. <element attribute="Some value">My value</element>

Computer is able to interpret the tags into useful value. XML language has a few simple rules:

1. **XML is case-sensitive.**

2. **All elements must be properly closed.**
   e.g. <myTag>1.00</myTag> or use the short form <myTag /> if no value is enclosed.

3. **All elements must be properly nested.**
   e.g. <a>1.00 is correct. <a>1.00 is wrong.

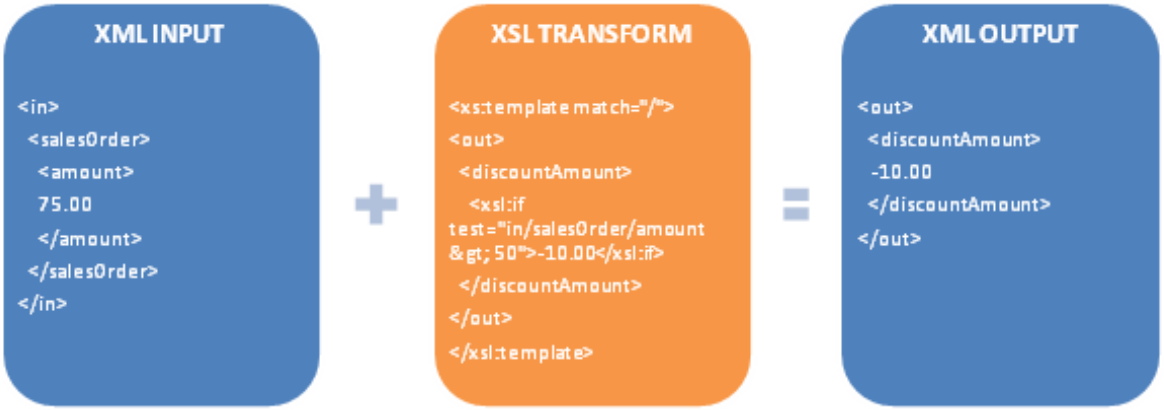
4. **Comments use the special open and close tags and are ignored by the computer.**
   e.g. <!-- this is some comment -->

5. **Reserved characters must be encoded when used as value.**
   e.g. <myTag>John & Jane</myTag>

Reserved Characters	**Encoded Characters**
<	<
>	>

&	&
'	'
"	"

The structure of XSL looks like XML. It uses open and close right-angle brackets and follows the same syntax as XML. In addition, it has built-in special purpose elements and functions that can manipulate XML data. The following example shows a sample XML input with a $75 sales order. The XSL business rule has an “if” condition that prints the $10 discount if the amount is greater than $50.



To write XSL, start with how you expect the XML output to be. In the previous example, you would write the <out> and <discountAmount> open and close tags as you see them. Add to the header and footer the standard <xsl:transform> and <xsl:template> open and close tags respectively. These tags tell the computer that you're writing XSL and match up with start of the XML input data. Finally, add the <xsl:if> condition and check for the $50 amount. Here, the "in/salesOrder/amount" is used to navigate and select the XML input data.

The common XSL special purpose elements for transforming XML data are listed below.

XSL Elements	**Description**
<xsl:variable name="varname" select="expression" />	Hold the value of an expression in a variable that can be referenced later using $varname.
<xsl:value-of select="expression" />	Used to select and print a value from XML input.
<xsl:if test="expression">value</xsl:if>	Only print the value if condition succeeds.
<xsl:choose> <xsl:when test="expression">value</xsl:when>	Print first value if condition succeeds, otherwise print next value.

<xsl:when test="expression">value</xsl:when> <xsl:when test="expression">value</xsl:when> <xsl:otherwise>value</xsl:otherwise> </xsl:choose>	Unlike the xsl:if instruction, the xsl:choose instruction allows for one or multiple xsl:when test conditions. The result of the first test condition that succeeds will returned. If no test condition succeeds, the last optional xsl:otherwise result is returned.
<xsl:for-each select="expression">value</xsl:for-each>	Loop each occurrence of the expression and print the value.

The XSL expressions can contain these operators.

XSL Operators	Description	Example	Result
+	Addition.	1 + 2	3
-	Subtraction.	3 - 1	2
*	Multiplication.	2 * 6	12
div	Division.	6 div 2	3
=	Test for equality.	amount = 1.00	True if amount is 1.00 False if amount is 1.10
!=	Test for not equal.	amount != 1.10	True if amount is 1.00 False if amount is 1.10
<	Less than.	amount < 1.10	True if amount is 1.00 False if amount is 1.10
<=	Less than or equal.	amount <= 1.00	True if amount is 1.00 False if amount is 1.10
>	Greater than.	amount > 1.00	True if amount is 1.10 False if amount is 1.00
>=	Greater than or equal.	amount >= 1.00	True if amount is 1.00 False if amount is 0.90

or	Conditional or.	amount = 1.00 or amount = 1.10	True if amount is 1.00 False if amount is 1.20
and	Conditional and.	amount > 1.00 and amount < 1.10	True if amount is 1.05 False if amount is 0.90

XSL also provides hundreds of functions to manipulate data, such as rounding a decimal number, etc. The common functions are listed below. To see a full list of functions, please see http://www.w3schools.com/xpath/xpath_functions.asp (http://www.w3schools.com/xpath/xpath_functions.asp)

XSL Functions	**Description**
ceiling(num)	Returns the smallest integer number that is greater than the number argument.
floor(num)	Returns the largest integer number that is smaller than the number argument.
round(num)	Round the number argument to the nearest integer number.
concat(string, string, ..., sep)	Returns a string by concatenating with the separator argument.
substring(string, start, length)	Returns the sub-string from the start position to the specified length. Index of the first character is 1. If length is omitted it returns the substring from the start position to the end.
string-length(string)	Returns the length of the string argument.
upper-case(string)	Returns the string in all upper case.
lower-case(string)	Returns the string in all lower case.
contains(string1, string1)	Returns true if string1 contains string2, otherwise false.
starts-with(string1, string2)	Returns true if string1 starts with string2, otherwise false.

ends-with(string1, string2)	Returns true if string1 ends with string2, otherwise false.
matches(string, pattern)	Returns true if the string argument matches the pattern, otherwise false.
replace(string, pattern, replace)	Returns a string that is created by replacing the given pattern with the replace argument.
not(arg)	Returns true if the boolean value is false, and false if the boolean value is true.
count((item, item, ...))	Returns the count of nodes.
avg((arg, arg,...))	Returns the average of the argument values.
max((arg, arg,...))	Returns the argument that is greater than the others.
min((arg, arg, ...))	Returns the argument that is less than the others.
sum(arg, arg, ...)	Returns the sum of the numeric value of each node in the specified node-set.

To learn more about XML, please see http://www.w3schools.com/xml/default.asp (http://www.w3schools.com/xml/default.asp) and to learn more about XSL, please see http://www.w3schools.com/xsl/ (http://www.w3schools.com/xsl/). You'll also find more help and example of XSL in the Revindex Forum and Support pages.

XSL Tokens

Rich text editors are useful for designing static HTML content, however, it lacks the ability to inject data dynamically. Revindex Storefront supports XSL tokens to replace values and provide powerful logic manipulation in specially indicated rich text editors. XSL tokens makes it possible to inject a single line of dynamic data like name, or an entire table of data such as order details.

Simply, XSL tokens are actual XSL statements wrapped in specially enclosed double brackets [[xsl:value-of /]] instead of the usual right angles <xsl:value-of />. For example, the familiar XSL statement:

<xsl:value-of select="in/salesOrder/billingFirstName" />

can be tokenized and safe for use in rich text editors by replacing the right angles with double brackets:

[[xsl:value-of select="in/salesOrder/billingFirstName" /]]

This allows the rich text editor such as the email template editor or the report visualizer editor to render an editable HTML representation of your design while allowing XSL syntax to seemingly and safely co-exist with your HTML code.

Debugging XSL

You can debug XSL transforms by enabling "Debug" mode in the Storefront's **Configuration > General** menu under the **Log level** settings.

Once enabled, the Storefront will start recording the XML input in the DNN's Event Viewer. In the Event Viewer, you may need to select the "Debug Info" type log to view the data recorded by the Storefront. If the "Debug Info" type is not present, you will need to explicitly add it from the **Edit Log Settings** followed by **Add Log Setting** and enabling the "Debug Info" type.

You can then browse your Web site and it will start recording the input as seen by the Storefront. The debug log level writes a lot of data including all errors to the Event Viewer and may have an impact on performance. It is recommended to use error log level when in production.

Lookup Values

For performance reasons, Revindex Storefront occasionally uses alternate lookup values internally to represent statuses, country or subdivision codes. Certain lookup values are also ISO compliant and is internationally recognized for compatibility.

Country and Subdivision Codes

Country Name	Country Code	Subdivision Code
Afghanistan	AF	
Åland Islands	AX	
Albania	AL	
Algeria	DZ	
American Samoa	AS	
Andorra	AD	
Angola	AO	
Anguilla	AI	
Antarctica	AQ	
Antigua and Barbuda	AG	
Argentina	AR	
Armenia	AM	
Aruba	AW	

Australia	AU	
Austria	AT	
Azerbaijan	AZ	
Bahamas	BS	
Bahrain	BH	
Bangladesh	BD	
Barbados	BB	
Belarus	BY	
Belgium	BE	
Belize	BZ	
Benin	BJ	
Bermuda	BM	
Bhutan	BT	
Bolivia	BO	
Bosnia and Herzegovina	BA	
Botswana	BW	

Bouvet Island	BV	
Brazil	BR	
British Indian Ocean Territory	IO	
Brunei Darussalam	BN	
Bulgaria	BG	
Burkina Faso	BF	
Burundi	BI	
Cambodia	KH	
Cameroon	CM	
Canada	CA	Alberta (CA-AB), British Columbia (CA-BC), Manitoba (CA-MB), New Brunswick (CA-NB), Newfoundland and Labrador (CA-NL), Northwest Territories (CA-NT), Nova Scotia (CA-NS), Nunavut (CA-NU), Ontario (CA-ON), Prince Edward Island (CA-PE), Quebec (CA-QC), Saskatchewan (CA-SK), Yukon Territory (CA-YT)
Cape Verde	CV	
Cayman Islands	KY	
Central African Republic	CF	

Chad	TD	
Chile	CL	
China	CN	
Christmas Island	CX	
Cocos (Keeling) Islands	CC	
Colombia	CO	
Comoros	KM	
Congo	CG	
Congo, The Democratic Republic Of The	CD	
Cook Islands	CK	
Costa Rica	CR	
Côte D'Ivoire	CI	
Croatia	HR	

Cuba	CU	
Cyprus	CY	
Czech Republic	CZ	
Denmark	DK	
Djibouti	DJ	
Dominica	DM	
Dominican Republic	DO	
Ecuador	EC	
Egypt	EG	
El Salvador	SV	
Equatorial Guinea	GQ	
Eritrea	ER	
Estonia	EE	
Ethiopia	ET	
Falkland Islands (Malvinas)	FK	

Faroe Islands	FO	
Fiji	FJ	
Finland	FI	
France	FR	
French Guiana	GF	
French Polynesia	PF	
French Southern Territories	TF	
Gabon	GA	
Gambia	GM	
Georgia	GE	
Germany	DE	
Ghana	GH	
Gibraltar	GI	
Greece	GR	
Greenland	GL	

Grenada	GD	
Guadeloupe	GP	
Guam	GU	
Guatemala	GT	
Guernsey	GG	
Guinea	GN	
Guinea-Bissau	GW	
Guyana	GY	
Haiti	HT	
Heard and McDonald Islands	HM	
Holy See (Vatican City State)	VA	
Honduras	HN	
Hong Kong	HK	
Hungary	HU	
Iceland	IS	

India	IN	
Indonesia	ID	
Iran, Islamic Republic Of	IR	
Iraq	IQ	
Ireland	IE	
Isle of Man	IM	
Israel	IL	
Italy	IT	
Jamaica	JM	
Japan	JP	
Jersey	JE	
Jordan	JO	
Kazakhstan	KZ	
Kenya	KE	
Kiribati	KI	

Korea, Democratic People's Republic Of	KP	
Korea, Republic of	KR	
Kuwait	KW	
Kyrgyzstan	KG	
Lao People's Democratic Republic	LA	
Latvia	LV	
Lebanon	LB	
Lesotho	LS	
Liberia	LR	
Libyan Arab Jamahiriya	LY	
Liechtenstein	LI	
Lithuania	LT	
Luxembourg	LU	
Macao	MO	

Macedonia, the Former Yugoslav Republic Of	MK	
Madagascar	MG	
Malawi	MW	
Malaysia	MY	
Maldives	MV	
Mali	ML	
Malta	MT	
Marshall Islands	MH	
Martinique	MQ	
Mauritania	MR	
Mauritius	MU	
Mayotte	YT	
Mexico	MX	
Micronesia, Federated States Of	FM	

Moldova, Republic of	MD	
Monaco	MC	
Mongolia	MN	
Montenegro	ME	
Montserrat	MS	
Morocco	MA	
Mozambique	MZ	
Myanmar	MM	
Namibia	NA	
Nauru	NR	
Nepal	NP	
Netherlands	NL	
Netherlands Antilles	AN	
New Caledonia	NC	
New Zealand	NZ	

Nicaragua	NI	
Niger	NE	
Nigeria	NG	
Niue	NU	
Norfolk Island	NF	
Northern Mariana Islands	MP	
Norway	NO	
Oman	OM	
Pakistan	PK	
Palau	PW	
Palestinian Territory, Occupied	PS	
Panama	PA	
Papua New Guinea	PG	
Paraguay	PY	

Peru	PE	
Philippines	PH	
Pitcairn	PN	
Poland	PL	
Portugal	PT	
Puerto Rico	PR	
Qatar	QA	
Réunion	RE	
Romania	RO	
Russian Federation	RU	
Rwanda	RW	
Saint Barthélemy	BL	
Saint Helena	SH	
Saint Kitts And Nevis	KN	
Saint Lucia	LC	
Saint Martin	MF	

Saint Pierre And Miquelon	PM	
Saint Vincent And The Grenedines	VC	
Samoa	WS	
San Marino	SM	
Sao Tome and Principe	ST	
Saudi Arabia	SA	
Senegal	SN	
Serbia	RS	
Seychelles	SC	
Sierra Leone	SL	
Singapore	SG	
Slovakia	SK	
Slovenia	SI	
Solomon Islands	SB	

Somalia	SO	
South Africa	ZA	
South Georgia and the South Sandwich Islands	GS	
Spain	ES	
Sri Lanka	LK	
Sudan	SD	
Suriname	SR	
Svalbard And Jan Mayen	SJ	
Swaziland	SZ	
Sweden	SE	
Switzerland	CH	
Syrian Arab Republic	SY	
Taiwan, Province Of China	TW	
Tajikistan	TJ	

Tanzania, United Republic of	TZ	
Thailand	TH	
Timor-Leste	TL	
Togo	TG	
Tokelau	TK	
Tonga	TO	
Trinidad and Tobago	TT	
Tunisia	TN	
Turkey	TR	
Turkmenistan	TM	
Turks and Caicos Islands	TC	
Tuvalu	TV	
Uganda	UG	
Ukraine	UA	

United Arab Emirates	AE	
United Kingdom	GB	
United States	US	Alabama (US-AL), Alaska (US-AK), American Samoa (US-AS), Arizona (US-AZ), Arkansas (US-AR), California (US-CA), Colorado (US-CO), Connecticut (US-CT), Delaware (US-DE), District of Columbia (US-DC), Florida (US-FL), Georgia (US-GA), Guam (US-GU), Hawaii (US-HI), Idaho (US-ID), Illinois (US-IL), Indiana (US-IN), Iowa (US-IA), Kansas (US-KS), Kentucky (US-KY), Louisiana (US-LA), Maine (US-ME), Maryland (US-MD), Massachusetts (US-MA), Michigan (US-MI), Minnesota (US-MN), Mississippi (US-MS), Missouri (US-MO), Montana (US-MT), Nebraska (US-NE), Nevada (US-NV), New Hampshire (US-NH), New Jersey (US-NJ), New Mexico (US-NM), New York (US-NY), North Carolina (US-NC), North Dakota (US-ND), Northern Mariana Islands (US-MP), Ohio (US-OH), Oklahoma (US-OK), Oregon (US-OR), Pennsylvania (US-PA), Puerto Rico (US-PR), Rhode Island (US-RI), South Carolina (US-SC), South Dakota (US-SD), Tennessee (US-TN), Texas (US-TX), United States Minor Outlying Islands (US-UM), Utah (US-UT), Vermont (US-VT), Virgin Islands, U.S. (US-VI), Virginia (US-VA), Washington (US-WA), West Virginia (US-WV), Wisconsin (US-WI), Wyoming (US-WY)
United States Minor Outlying Islands	UM	
Uruguay	UY	
Uzbekistan	UZ	
Vanuatu	VU	
Venezuela, Bolivarian Republic of	VE	

Viet Nam	VN	
Virgin Islands, British	VG	
Virgin Islands, U.S.	VI	
Wallis and Futuna	WF	
Western Sahara	EH	
Yemen	YE	
Zambia	ZM	
Zimbabwe	ZW	

Package Types

Name	Value
Bag	3000
Box	2000
Envelope	1000
Tube	4000
Unspecified	1

Payment Gateway Response Code Types

Name	Value
Approved	1
Declined	100
Gateway Error	200
Network Error	300

Payment Method Types

Name	Value
Authorize.Net CIM	18
Authorize.Net SIM	13
Cash	1
Check	2
Credit Card	3
MasterCard IGS Hosted	14
Mollie	11
Money Order	4
None	7
PayFast	8
PayPal	6
Paystation 3 Party	15
Rewards Points	16
Sage Pay Form	17
Suomen Verkkomaksut	12
Towah	9
Voucher	10
Wire Transfer	5

Payment origin types

	Value
Checkout	1
ManageOrder	2
Storefront	3
Recurring	4

Recurring Interval Types

Name	Value
Day	1
Week	2
Month	3
Year	4

Sales Order Origin Types

Name	Value
Checkout	1
Storefront	3
Recurring	2

Sales Order Status Types

Name	Value
Pending	1
Ordered	2
Processing	3
Completed	4
Cancelled	5
Declined	6
Incomplete	7
Preordered	8

Recurring Sales Order Status Types

Name	Value
Active	1
Hold	2
Invalid	3
Cancelled	4

Sales Payment Status Types

Name	Value
Pending	1
Paid	2
Cancelled	3
Refunded	4
Declined	5
Incomplete	6

Sales Payment Transaction Types

Name	Value
Authorize	1
Purchase	2
Void	3
Refund	4
Invoice	5
Capture	6

Shipping Status Types

Name	Value
Not Required	1
Not Shipped	2
Packing	5
Packed	6
Dispatching	7
Shipped	3
Undeliverable	4

Rewards points status types

Name	Value
Inactive	1
Active	2
Hold	3
Cancelled	4

Rewards points operation types

Name	Value
Usage	1
AdminModified	2
Issuance	3
Award	4

Voucher Interval Types

Name	Value
Day	1
Week	2
Month	3
Year	4

Voucher Status Types

Name	Value
Inactive	1
Active	2
Hold	3
Cancelled	4

QuickBooks

You can sync customers, products and orders between the Storefront and QuickBooks (Online or Desktop) using a 3rd party connector sold by JMA Technologies (http://www.jmawebtechstore.com/?affiliateid=6). Please contact JMA Technologies for more information about their QuickBooks connector use with Revindex Storefront.

PCI Compliance

Your customer personal information is important to us. Revindex Storefront is built with security in mind from the ground up and complies with all PCI requirements.

The Payment Card Industry Data Security Standard (http://www.pcisecuritystandards.org) (PCI DSS) governs how companies should process, store and transmit credit card information in a secure environment. Revindex Storefront complies with all PCI requirements including:

- Credit card information is never stored unless you configure it to store or you sell recurring products.
- Credit card encryption using AES 256-bit military strength cryptography.
- Encryption key can be changed once a year or anytime.
- Credit card verification numbers (CVV, CID, CVD) are never stored.
- Support for SSL (HTTPS) transactions.
- Validate against SQL injection and other cross site scripting attacks
- Voucher codes are encrypted in the database.