



Integration Guide

a guide to automated product integration

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Automated Integration: The Basics

What is Automated Integration?

Automated integration is a way of managing your product information, stock levels and pricings in Hubsta via business-to-business automation. This is done by Hubsta via its own 'pull'-style integration service. This scheduled service will pick up product feeds provided by suppliers and import the data into its own databases. It relies therefore on suppliers providing two things:

- Product information (Product Data)
- A way of getting that product information (Integration Transport)

If you can provide these two things on a regular basis then you can integrate.

Benefits of Automated Integration

Automated integration offers a number of benefits over traditional manual product management including the spreadsheet-based manual upload process:

- Less time and effort managing data in another system (Hubsta)
- More reliable data, less human error
- More up-to-date stock and price quantities on shopping sites
- Ability to manage larger quantities of products than via manual processes

The Integration Workflow

The Hubsta automated integration workflow is fairly straight forward. It is essentially a scheduled task for importing data from a file provided by the supplier into its own database.

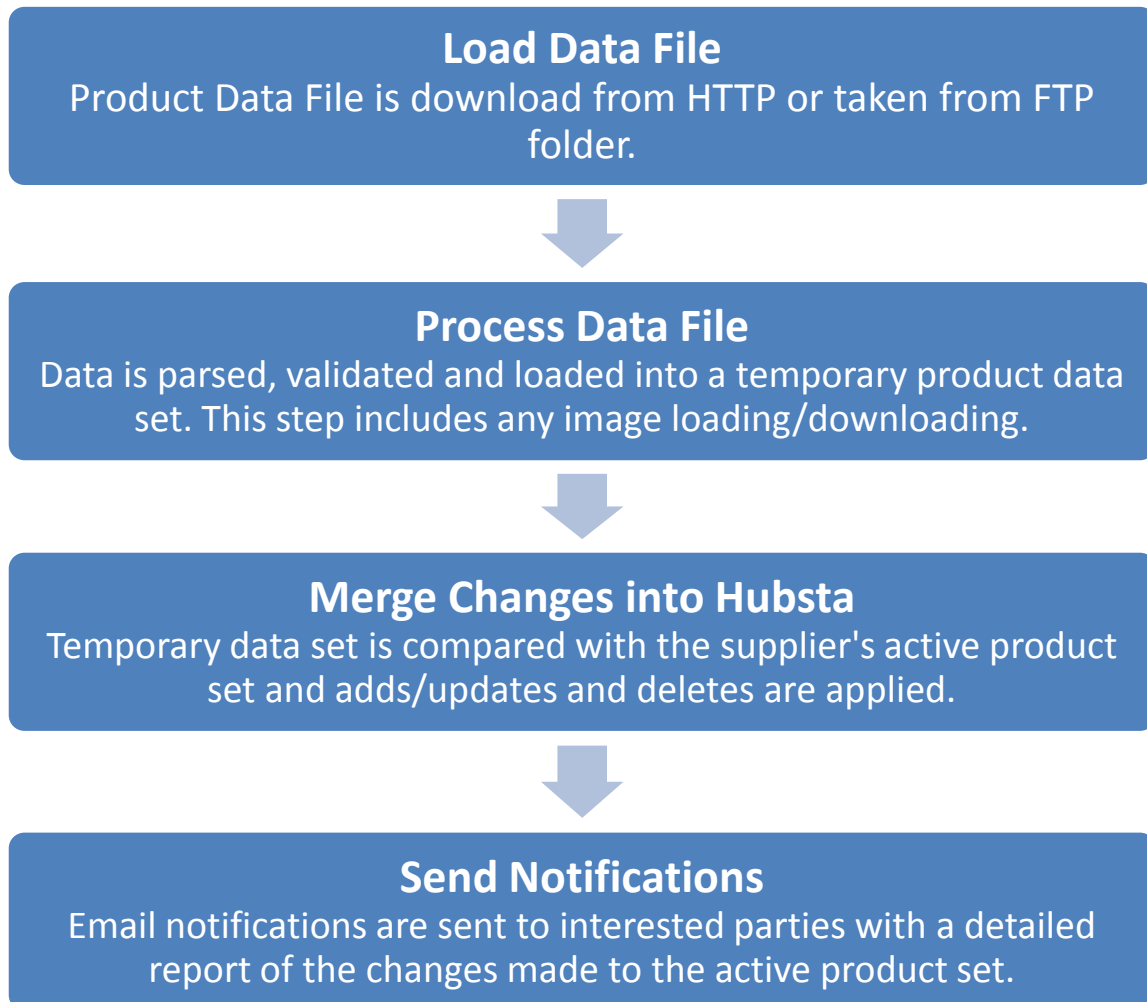
The Integration Schedule

Each supplier that provides an automated product feed will be set up in Hubsta with a schedule for integrating. This schedule represents how often the source data from the supplier's system is updated. For example if a supplier is to refresh their product feed every night at midnight then Hubsta would be scheduled to check that feed once a day.

In reality a feed is typically scheduled to integrate more often than the data will be refreshed as it only performs the import if the product data has changed since the last import. Scheduling provides the balance between keeping the data in Hubsta up to date and the technical/performance issues resulting in constantly polling for data potentially across the web.

The Product Feed Import

When the Hubsta integration service determines it is time to pull in the latest data for a supplier it will initiate a Product Feed Import. This import follows the following workflow.



Some important notes around the import process are:

- Products from the feed that do not pass validation will be skipped. If the product exists already in the active product set in Hubsta it will be untouched.
- Any product in the active product set in Hubsta that does not appear in the imported product data will be deactivated in Hubsta.

There are three statuses an import can have once it is completed.

Failed – the import failed to run due to an unexpected exception. This may be related to a networking error issue or a corrupt data file etc.

SucceededWithErrors – The import ran successfully however one or more products did not pass

validation. These errors will be available in the product import report. From this report you should be able to make the necessary changes to ensure you get a full success next import.

Succeeded – The import ran successfully and all product data was validated. This is the optimum result as it means your full lasted product data set is now in sync with Hubsta.

| Product Feed Import Report | |
|---------------------------------|--|
| Supplier | zz_test |
| Import Date | 26 Jan 2010 14:29 |
| Import Status | Succeeded |
| Import File | ProductFeedExample.xml |
| Exceptions (0) | |
| Description | |
| No exceptions occurred | |
| Validation Errors (0) | |
| Description | |
| No validation errors occurred | |
| Validation Warnings (0) | |
| Description | |
| No validation warnings occurred | |
| Products Added (6) | |
| SKU | Name |
| S52321 | Supplier 1 Dress Socks |
| S53412S | Supplier1 eXtreme Snowboard |
| S2124 | Supplier1 Leather Men's Belt |
| S1242R16 | Supplier1 Mens T-Shirt |
| S2412 | Supplier1 Possum Beanie |
| S1542R16 | Supplier1 Women's T-Shirt |
| Products Updated (0) | |
| SKU | Name |
| No products were updated | |
| Products Deleted (0) | |
| SKU | Name |
| No products were deleted | |

A Product Import Report

Product Data Requirements

There are two main components of the data set required by Hubsta for automated integration:

- Product Data File
- Product Images

The **Product Data File** is a specially formatted list of the products you wish to make available via Hubsta's shopping sites. It will contain all product information name, price, freight, description etc. For a full list of the product data you can provide in the product data file see the associated **Hubsta Product Data Guide** document. The data file can be in one of the following document formats.

- .xlsx (Microsoft Excel)
- .xls (Microsoft Excel pre-2007)
- .csv (Comma Separated Values)
- .xml (XML)

You can find more information about the different formats in the Hubsta Product Data Guide and below in this document.

Each product, to be available on the shopping sites, needs at least one associated product image. These must be provided via standard image files and together with the Product Data File make up the data set required for import into Hubsta.

The Excel/CSV Data Format

The CSV data format may be the easiest to produce automatically from a system as it uses a single flat structure similar to a relational database table. Most of the columns are required however there are a number of optional columns you can also provide. You may also enter lines for product variants. Please consult the Hubsta Product Data Guide for all the details.

| | A | B | C | D | E | F | G | H | I | J |
|----|------------------------------|----------|----------|------------|-------------------|--------------------------|--------|------|------------------|-------------|
| 1 | Product Name | SKU | RRP | Sale Price | Daily Deals Price | Description | Colour | Size | Quantity On Hand | Brand |
| 2 | Supplier1 Mens T-Shirt | S1242R16 | \$29.95 | 19.95 | | Description of shirt | Red | 16 | 21 | The Limit |
| 3 | | S1242R22 | | | | | Red | 22 | 23 | |
| 4 | | S1242R18 | | | | | Red | 18 | 14 | |
| 5 | | S1242B16 | | | | | Blue | 16 | 52 | |
| 6 | | S1243B22 | | | | | Blue | 22 | 42 | |
| 7 | Supplier1 Women's T-Shirt | S1542R16 | \$29.95 | 19.95 | | Description of shirt | Red | 16 | 21 | The Limit |
| 8 | | S1542R22 | | | | | Red | 22 | 23 | |
| 9 | | S1542R18 | | | | | Red | 18 | 14 | |
| 10 | | S1542B16 | | | | | Blue | 16 | 52 | |
| 11 | | S1543B22 | | | | | Blue | 22 | 42 | |
| 12 | | S1543B20 | | | | | Blue | 26 | 4 | |
| 13 | Supplier1 Leather Men's Belt | S2124 | \$15.95 | 9.95 | | Description of belt | | | 112 | The Limit |
| 14 | Supplier1 Possum Beanie | S2412 | \$39.95 | 29.95 | | Description of beanie | | | 42 | Aragona |
| 15 | Supplier1 eXtreme Snowboard | S53412 | \$399.95 | 350.95 | | Description of snowboard | Maroon | | 15 | Riders |
| 16 | | S53412R | | | | | Red | | 7 | |
| 17 | Supplier 1 Dress Socks | S52321 | 9.95 | 7.95 | | Description of socks | | | 42 | Leisureline |

A Sample Excel/CSV product data file

Excel Rules

Although unlikely to be used in automated integration the import process supports both the new .xlsx and the old .xls document format.

CSV Rules

The comma separated txt file is the most common choice for integration. We use the following standard CSV rules.

- Field delimiter is the comma
- Use double-quotes around field if field contains comma *"My field, with a comma"*
- Escape double quotes within a quoted field by using two e.g. *"Field with ""quotes"" in it"*

The XML Data Format

The Hubsta xml data format will allow you to provide the same information as in the CSV/Excel format but in a more structured, modern way. The XML data file must adhere to the schema definition found here:

<http://www.hubsta.co.nz/schemas/xmlproductfeed>

```
<?xml version="1.0" encoding="utf-8" ?>
<ProductImportBatch SupplierID="123786" DateGenerated="2002-05-30T09:00:00" xmlns="http://www.
  <Products>
    <Product Sku="S1242R16" Name="Supplier1 Mens T-Shirt" RRP="29.95" SalePrice="19.95" Descri
    <Product Sku="S1542R16" Name="Supplier1 Women's T-Shirt" RRP="29.95" SalePrice="19.95" Des
    <Product Sku="S2124" Name="Supplier1 Leather Men's Belt" RRP="15.95" SalePrice="9.95" Desc
  </Products>
  <Skus>
    <Sku ProductSku="S1242R16" Code="S1242R16" Colour="Red" Size="16" QuantityOnHand="21" />
    <Sku ProductSku="S1242R16" Code="S1242R22" Colour="Red" Size="22" QuantityOnHand="23" />
    <Sku ProductSku="S1242R16" Code="S1242R18" Colour="Red" Size="18" QuantityOnHand="14" />
    <Sku ProductSku="S1242R16" Code="S1242B16" Colour="Blue" Size="16" QuantityOnHand="52" />
    <Sku ProductSku="S1242R16" Code="S1242B22" Colour="Blue" Size="22" QuantityOnHand="42" />
  </Skus>
  <Images>
    <Image Sku="S53412S" Url="http://localhost/TheHub/schemas/testimages/S53412S.jpg"/>
    <Image Sku="S2412" Url="http://localhost/TheHub/schemas/testimages/S2412.jpg"/>
    <Image Sku="S1242R16" Url="http://localhost/TheHub/schemas/testimages/S1242R16.jpg"/>
  </Images>
</ProductImportBatch>
```

A sample XML Product Feed file

Product Images

Product images are often the trickiest part of the integration process as unlike a single product data file there can be thousands of these and they can take a lot of space/bandwidth. How you approach the integration of images will depend on how they are stored on your local system and how easy it is for you to get them out/expose them for the Hubsta integration.

You specify which images each product should have in the product data file. You can do this one of two ways:

Image File Name

| W |
|--------------|
| Image1 |
| S1242R16.jpg |

If just the image file name is provided the import process will attempt to locate the image locally. It will firstly check the FTP images folder for the supplier. If the supplier does not have an FTP folder or the image is not found there it will then check the Hubsta application website for the image. You can add images to the website directly through the Hubsta Portal website.

Image File URL

| W |
|---------------------------------------|
| Image1 |
| http://mysupplier/images/S1242R16.jpg |

Specifying a full URL will cause the import to look for the file at that URL and download if necessary via HTTP.

If the import can successfully find the image the image will be copied to the website, if the product image cannot be found or downloaded the product will be flagged with a validation error and not imported.

Data Transfer Requirements

There are two ways of getting your product data from your system into Hubsta. Both approaches are handled by the Hubsta integration service which offers scheduled pickup and import of your product data. These two options have pros and cons so you should choose whichever is easiest and fits your current technical set-up the best.

You can even mix and match these options by providing your product list data file to us via one method and using the other to integrate your product images.

Option 1: Pushing Data to Hubsta via FTP

With this option we will provide you an FTP location on the Hubsta servers up to which you can FTP your product and image data. All you have to provide is the name of the data file you plan to upload and the Hubsta service will start looking for that file in your FTP folder. When the import runs it will look in the FTP image folder for the product images.

| Filename | Filesize | Filetype | Last modified |
|----------------|----------|---------------|---------------|
| .. | | | |
| images | | File Folder | 8/12/2009 |
| hubstafeed.xls | 92,884 | Microsoft ... | 8/12/2009 |

Supplier FTP folder

The above image demonstrates a supplier's FTP folder within the Hubsta environment. All images should be uploaded to the images folder and your product data file just sits in the root. If you can keep these two up to date the integration service will take care of the rest.

Benefits of using FTP

- Offers the fastest and most robust imports as the data is all on the Hubsta servers when the import occurs.
- Does not require the public publishing of your product data on the web.

Drawbacks of using FTP

- A little more work to setup perhaps.
- Have to manage your product images at a remote site.

Option 2: Publishing Data via HTTP

With this option all you have to do is provide Hubsta with a URL to your product list. At present this must be publicly available via HTTP. A more secure connection may be available in future. When the Hubsta service runs it will download your product data file from the URL and begin the import. You may also specify your product images as full URLs so that during the import Hubsta will grab your images over HTTP.

Benefits of using Http

- Easiest to implement.

Drawbacks of using Http

- May result in performance and bandwidth ramifications, especially if used for product images.

Setting Up Your Own Integration

So now you know how the ins and out of Hubsta integration work you may be wondering 'where to from here?' Getting set up as an integrated supplier can be quite straight forward; just follow these steps.

Step 1: Analyse your own capabilities

The first step to integrating with Hubsta is to determine how much effort is required in getting the necessary data from your own system in the shape needed by Hubsta. This will vary depending on

your current systems you run and the technical resources at hand.

Step 2: Get your own Hubsta account

Once you have agreed to be a Hubsta supplier we will set you up with a new account giving you access to the [Hubsta Portal Site](#). Through this site you can view and manage your products and keep track of the sales performance through Hubsta's partner shopping sites. It also provides tools and documentation to help you create your product data file feed. If you have chosen to integrate via FTP then you will be provided with an FTP account and folder on the Hubsta servers.

Step 3: Create your Product Data File

Now you are set up with an account you can begin to create your product data file. This and the Hubsta Product Data guide document, along with the provided integration samples and resources should be enough to go on when it comes to generating your feed. Remember you can call Hubsta for any technical questions you may have.

During the creation of your product data file you may decide you want to map your product categories to Hubsta's rather than putting Hubsta categories in your data file. This can be done via the Hubsta Portal website the details of which can be found in the [Hubsta Portal Manual](#) document.

Step 4: Testing your Product Data File

You can test your product data file via the Integration Test Page found in the Hubsta Portal. This page will tell you if your data file has any formatting errors and/or problems with the data itself. As well as informing you of issues with your feed it will also give you an overview of the product data as it would be imported via this file during a live import.

Product Feed Test Page

This page is designed to aid in the development and debugging of automated product feeds into Hubsta. When testing feeds on this page no product information on Hubsta will be created, edited or deleted - it is purely a test page. Valid file types include .xml, .xls, .xlsx and .csv

Choose a file to upload:

OR

Enter the URL of your feed:

Validate Images:

Test results for feed: File: ProductFeedExample.xml

| Exceptions (0) | |
|------------------------|--|
| Description | |
| No exceptions occurred | |

| Validation Errors (2) | |
|--|--|
| Description | |
| Product (Supplier1 Mens T-Shirt - S1242R16) - Category 'Wine & Food' could not be found | |
| Product (Supplier1 eXtreme Snowboard) - Failed to download image from http://localhost/TheHub/schemas/testimages/S2d124.jpg: The remote server returned an error: (404) Not Found. | |

The Product feed test page in Hubsta Portal

Step 5: Turn on the Product Feed

Once you are happy that your product data file is complete and valid it is time to turn on the integration and see how it goes. You just need to contact your Hubsta contact with the following details:

1. Name/URL of product data file (depending on FTP or HTTP integration)
2. How frequently you plan for this file to be refreshed.
3. The email address you would like integration notifications to be sent.

With these details your produce feed will be added to the Hubsta integration service schedule and you should see the results as soon as the first import takes place. You can keep tabs on how they went by checking your product list in the Hubsta portal or checking the individual product import reports sent via email.