



e-Spirit

FirstSpirit™

FirstSpirit CMS Integration for Demandware Commerce

Documentation

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Date	09/20/2013
Department	Professional Services
Author	Michael Thal

e-Spirit Inc.
470 Atlantic Avenue
Boston, MA 02210

tel: +1 781-862-5511
fax: +1 781-862-5513

us-info@e-spirit.com
www.e-spirit.com



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1 Summary

FirstSpirit Content Management System Integration with the Demandware commerce platform gives your customers a richer, more engaging and personalized experience that boosts sales and drives repeat business. The integration enables retail marketers to update and enhance online stores with new content using variable layouts within a defined set of corporate templates. This makes it simple to accommodate local, regional and national needs or manage translation across global online representations.

Content can be published to a single site as well as to all sites in a family, including mobile versions, microsites or campaign-specific landing pages. This helps eliminate errors and inconsistencies, improves consumers' overall online experience with the brands and eventually reduces costs and effort.

This document outlines the technical aspects of the integration of FirstSpirit with Demandware. It furthermore gives a blueprint for interface specifications such as XML-files, directory structures and other technical aspects. All technical aspects in this document will allow customers and implementation partners with FirstSpirit and Demandware know-how to adapt their implementation on robust and proven interfaces.

The FirstSpirit CMS Integration consists of a FirstSpirit module – including a demo project setup for Site Genesis – and a Demandware cartridge. To apply this integration on customer side, a FirstSpirit server needs to be provided in the customer infrastructure.

→ To get your FirstSpirit license please contact us-info@e-spirit.com



2 Component Overview

2.1 Functional Overview

FirstSpirit CMS Integration with the Demandware commerce platform gives editors all the productivity and usability benefits of a high-end CMS without forcing them to jump from system to system.

2.1.1 Business Features

- Friendly and intuitive user interface with WYSIWYG editing.
- Live preview of both online store and other content elements merged together.
- Full-featured media asset management with built-in editing tools.
- Simple yet powerful tools for maintaining website structure and navigation.
- Mixture of content and product information (e.g. to feature specific products).
- Live access to product information to display shop items (e.g. product images, prizes) within the preview environment.
- Time-controlled display of content pages.
- Multi-language capability including translation support.
- Graphical workflows to streamline content development processes

2.1.2 Technical Features

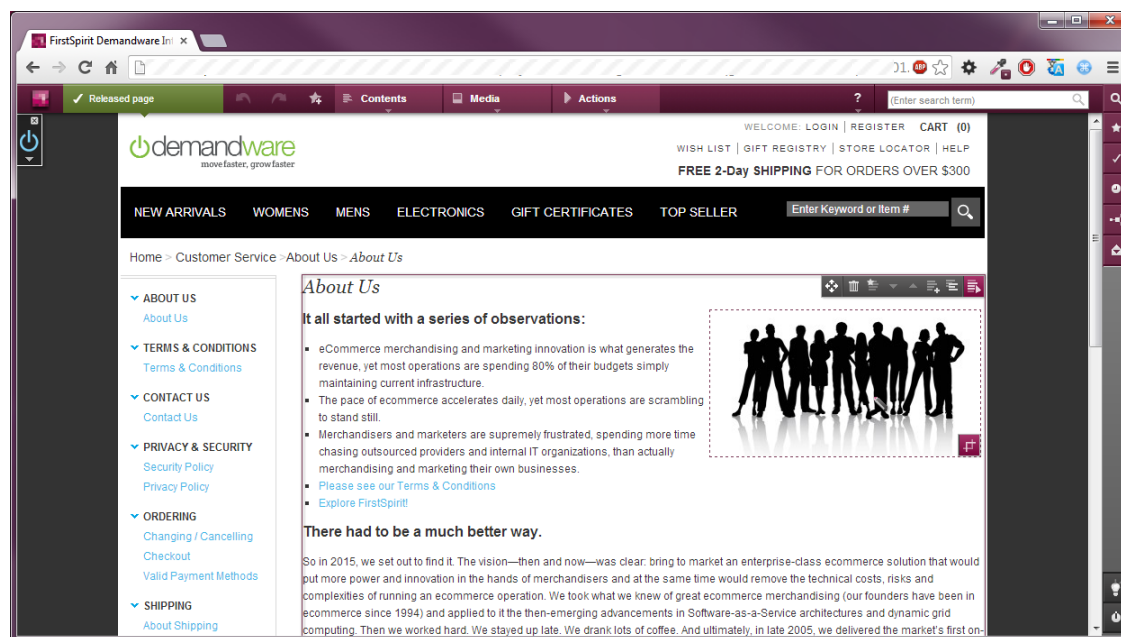
- Creation of native Demandware content assets through an external CMS.
- Direct connection to Demandware product information through Open Commerce API (Shop API).
- Content publication into the Demandware storage through WebDAV interface.
- Integration of Demandware Business Manager in FirstSpirit SiteArchitect.
- AppCenter demo integration of 3rd-party image databases (Fotolia and Pixelio) in FirstSpirit SiteArchitect.



2.2 Use Cases

The following use cases are covered by the FirstSpirit CMS Integration:

- Create and edit content assets within the FirstSpirit CMS.
- Maintain the navigation structure of content-driven parts of the website within the FirstSpirit CMS.
- Define time-controlled appearance of content-pages in the website navigation.
- Include and maintain rich-media assets (like images, videos, documents) within the integrated media asset management of FirstSpirit.
- Enrich content-pages with shop items (like featured products) that are automatically linked to shop-driven pages.
- Publish editorial changes through approval workflows into the Demandware storefront.
- Maintain content in multiple languages.



Ref: FirstSpirit ContentCreator / WYSIWYG editing environment



2.3 Limitations, Constraints

Content assets that are maintained within FirstSpirit will receive the unique identifier that is provided by FirstSpirit. A manually created content asset within Demandware, that is using the exact same ID, will be overwritten when the FirstSpirit content is published to Demandware.

2.4 Compatibility

2.4.1 Demandware Cartridge

The cartridge was built and tested against [Demandware release 13.5](#) and the [Site Genesis cartridge](#) included with that release.

2.4.2 FirstSpirit Integration Module

The FirstSpirit module and demo project was built and tested against [FirstSpirit release 5.0](#).

2.5 Privacy, Payment

Demandware serves as the leading interface to the frontend. The server-side communication between FirstSpirit and Demandware is established on the backend. In such, no customer data is being accessed and no payment processes are operated in regards of this integration.



3 Implementation

3.1 Setup

The FirstSpirit CMS Integration for Demandware Commerce consists of the following components:

- Demandware cartridge “firstspirit_cms_integration”
 - content import/synchronisation pipelines and scripts
 - enriched content templates
 - demo template for mixed content/product pages
- FirstSpirit module
 - real-time preview environment with integrated storefront
 - basic template set
 - *Content Page*
 - *Text/Image Section*
 - *Featured Products/Articles*
 - *Internal- and External Links*
 - basic release workflows
 - *Request for Publication (standard workflow)*
 - *Approve and Publish (for chief editors)*
 - content deployment
 - WebDAV deployment
 - FirstSpirit demo project setup
 - *Customer Service* demo content pages
 - multi-language setup (EN/default, DE)
 - Integration of Demandware Business Manager in FirstSpirit SiteArchitect



3.2 Configuration

The installation and setup of the FirstSpirit CMS Integration for Demandware is guided by FirstSpirit and Demandware implementation partners.

3.2.1 Pre-conditions / Requirements

FirstSpirit CMS is running on a stand-alone server instance that needs to be provided in the customer infrastructure. Please see the individual requirements for FirstSpirit in the separated technical datasheet document.

→ [TDAT50EN_FirstSpirit_TechnicalDatasheet.pdf](#)

3.2.2 FirstSpirit demo project setup

1. Import the FirstSpirit demo project
 - a) Start the FirstSpirit ServerManager.
 - b) → *Project > Import > Local > [select "FS_demandware_integration_v1.0.tar.gz"]*
 - c) Select a project name and description and start the import.
2. Mount WebDAV folders to FirstSpirit:
 - a) /Sites/Libraries/SiteGenesis/default/firstspirit → for media assets
 - b) /Sites/impex/src/firstspirit → for xml content files

```
mount -t davfs -u fs5
https://[DWINSTANCE].demandware.net/on/demandware.servlet/webdav/Sites/Libraries/SiteGenesis/
default/firstspirit
/webdav/dwintegration/media

mount -t davfs -u fs5
https://[DWINSTANCE].demandware.net/on/demandware.servlet/webdav/Sites/impex/src/firstspirit
/webdav/dwintegration/impex
```

Ref: command example on Linux server

3. Configure the FirstSpirit schedule entry
 - a) Start the FirstSpirit ServerManager.
 - b) → *[select project] > Schedule management > [select "DW Deployment"]*

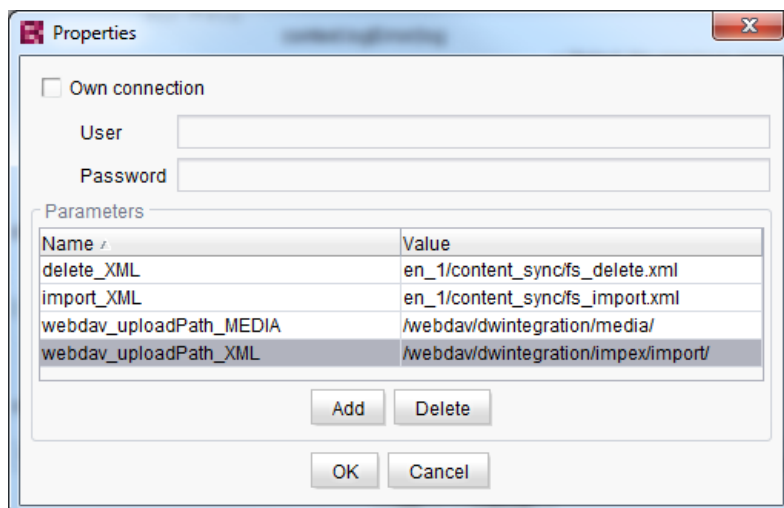


c) → *Actions* > [select “WebDAV Deployment”] > [edit Properties]

d) Enter the mounted deployment paths:

webdav_uploadPath_MEDIA → for media assets

webdav_uploadPath_XML → for xml content files



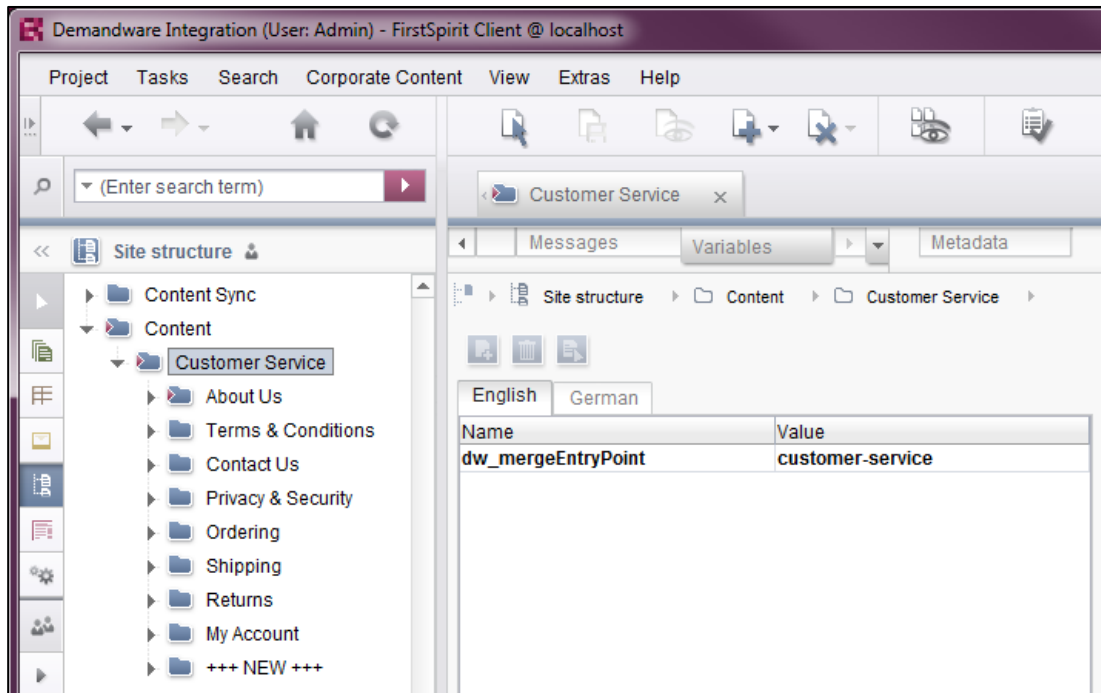
Ref: FirstSpirit schedule task “WebDAV Deployment” | Properties

3.2.3 Assign the cartridge to business manager and customer site

1. Import the cartridge “firstspirit_cms_integration” to the active code version.
2. Assign the cartridge to the business manager.
 - a) → *Administration* > *Sites* > *Manage Sites* > *Business Manager* > *Settings*
 - b) Add “firstspirit_cms_integration:” to the cartridge path and click *Apply*.
3. Assign the cartridge to the instance of the customer site.
 - a) → *Administration* > *Sites* > *Manage Sites* > [Site Name] > *Settings*
 - b) Add “firstspirit_cms_integration:” to the cartridge path and click *Apply*.

3.2.4 Define entry-point for content assets

1. Select a folder ID (e.g. customer-service) from the existing library folders, where new content assets should be imported to.
2. Start the FirstSpirit SiteArchitect
3. Enter the folder ID as a site structure variable *dw_mergeEntryPoint*



Ref: FirstSpirit SiteArchitect | Preparing the content structure

3.2.5 Project configuration

1. Start the FirstSpirit SiteArchitect.
2. → *Global Settings > Project Settings*
3. Replace the e-Spirit sandbox URLs with Demandware customer URLs.

3.2.6 Create job schedules

Two job schedules need to be created: One for importing new and updating existing content assets, the other for deleting outdated content assets.

Notice: Time based or externally triggered execution of the job schedules can be setup to the individual demands of the customer project.

Schedules						
<p>Note, that the time based execution of custom schedules is disabled on Sandbox instances.</p> <p>The list below shows all job schedules defined for the Sites organization.</p>						
Select All	Name	Execution Scope	Sites	Resources	Enabled	Last Run
<input type="checkbox"/>	FS_ContentSync_Delete	Sites	Site Genesis	content	No	9/18/13 4:16:39 pm
<input type="checkbox"/>	FS_ContentSync_Update	Sites	Site Genesis	content	No	9/18/13 4:16:23 pm
<div> <input type="button" value="Enable"/> <input type="button" value="Disable"/> <input type="button" value="Run"/> </div> <div> <input type="button" value="New"/> <input type="button" value="Delete"/> </div>						

Ref: Demandware Business Manager | Job Schedule overview



3.2.6.1 Import/Update job

- General
 - Name: FS_ContentSync_Update
 - Execution Scope: Sites
 - Pipeline: ContentSync
 - Startnode: MERGE
- Sites: select site
- Resources: add system resource CONTENT
- Parameters: add parameter
 - Name: import_file
 - Value: /firstspirit/import/fs_import.xml

3.2.6.2 Delete job

- General
 - Name: FS_ContentSync_Delete
 - Execution Scope: Sites
 - Pipeline: ContentSync
 - Startnode: DELETE
- Sites: select site
- Resources: add system resource CONTENT
- Parameters: add parameter
 - Name: import_file
 - Value: /firstspirit/import/fs_delete.xml



3.3 Custom Code

A demo scenario to include product information (shop articles) into content assets is part of the integration. This optional demo feature consists of the following elements:

- FirstSpirit template set
 - Section templates “*Featured Articles*” and “*Article*”
 - Format template “*Get Product Info*”
- Demandware pipeline “*IncludeProduct.xml*”
- Demandware template “*productInfo.isml*”

3.3.1 FS section templates “*Featured Articles*” and “*Article*”

This template set is providing an input form to store the product IDs of the shop articles. The output channel for the Demandware storefront is generating a parameterized `$include` statement of the Demandware pipeline “*IncludeProduct*”.

```

1. <li class="grid-tile">
2.   $include('IncludeProduct-Start',
           'pid', '$CMS_VALUE(set_pid)$',
           'pname', '$CMS_VALUE(st_article_name,default:"NULL")$')$
3. </li>

```

Ref: Demo FirstSpirit template “Article”

For the FirstSpirit-internal preview, the product information of the selected shop articles is determined by an *Open Commerce API* call using the provided Shop API.

```

1. <script>
2.   jQuery(document).ready(function(){
3.     var call = "https://[DWINSTANCE]
                /s/SiteGenesis/dw/shop/v13_3/products/$CMS_VALUE(pid)$
                ?client_id=[CLIENTID]
                &expand=availability,bundled_products,
                images,links,options,prices,promotions,
                set_products,variations&pretty_print=true";
4.     jQuery.getJSON(call, function(data) {
5.       jQuery.each(data, function(key, val) {
6.         ...
7.       });
8.     });
9.   });
10.</script>

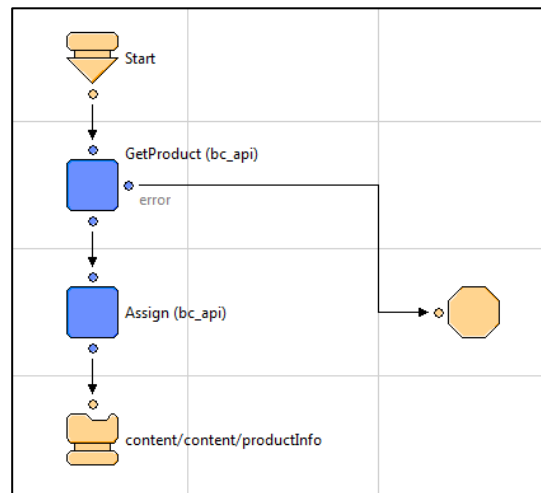
```

Ref: Demo FirstSpirit template “Get Product Info”



3.3.2 DW pipeline “IncludeProduct”

On the Demandware-side, the pipeline is taking the product ID and optional name parameter and assigns them to the “*productInfo*” template.

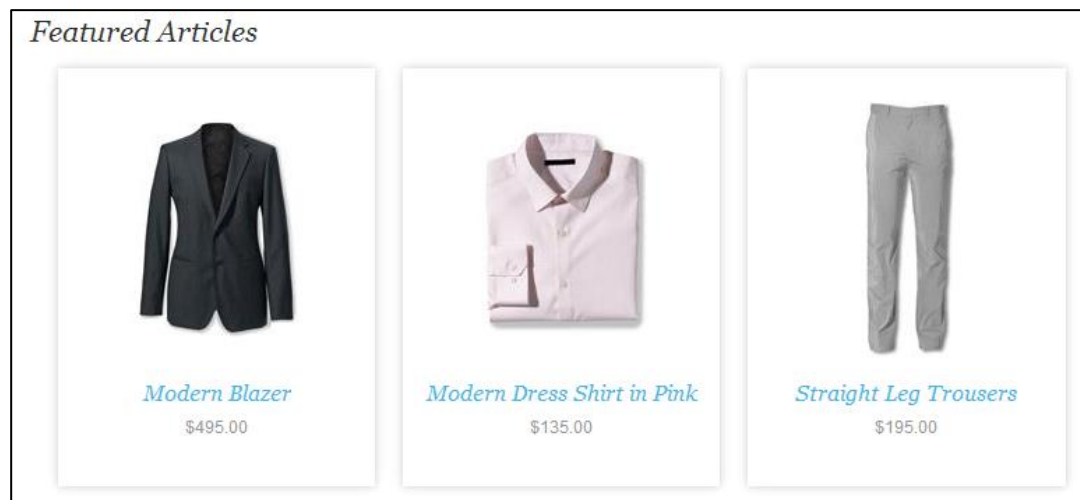


Ref: Demo Demandware pipeline “IncludeProduct.xml”

3.3.3 DW template “productInfo.isml”

The Demandware demo template “*productInfo*” creates a set of (max.) three product teaser elements. Each element shows the live product information of the selected shop item.

In the demo showcase, the editor is able to overwrite the product name within the FirstSpirit template. This optional information will only effect the teaser elements of the featured article section – not the product data itself.



Ref: Output of Demandware template “productInfo.isml”



```

1. <iscomment>e-Spirit | demo template to for mixed content/product pages</iscomment>
2.
3. <div class="product-tile" style="height: 234px;">
4.     <div class="product-image">
5.         <a class="thumb-link"
6.             href="${URLUtils.http('Product-Show','pid', pdict.Product.ID)}"
7.             title="${pdict.Product.name}"
8.             
9.         </a>
10.    </div>
11.    <div class="product-name">
12.        <h2>
13.            <a class="name-link"
14.                href="${URLUtils.http('Product-Show','pid', pdict.Product.ID)}"
15.                title="${pdict.Product.name}"
16.                <isif condition="${pdict.FS_Name.equals('NULL')}">
17.                    <isprint value="${pdict.Product.name}" />
18.                <iselse>
19.                    <isprint value="${pdict.FS_Name}" />
20.                </isif>
21.            </a>
22.        </h2>
23.    </div>
24.    <div class="product-pricing">
25.        <span class="product-sales-price" title="Sale Price">
26.            <isset name="showTieredPrice" value="${true}" scope="page" />
27.            <isinclude template="product/components/pricing" />
28.        </span>
29.    </div>
30.</div>

```

Ref: Demo Demandware template "productInfo.isml"

3.4 External Interfaces

FirstSpirit CMS provides two editing environments for best usability to maintain the content. Based on the user's role as either an editor or administrator, the users simply chose the tool they need to get their jobs done quickly and efficiently.

3.4.1 FirstSpirit ContentCreator

A browser-based WYSIWYG environment for online editors

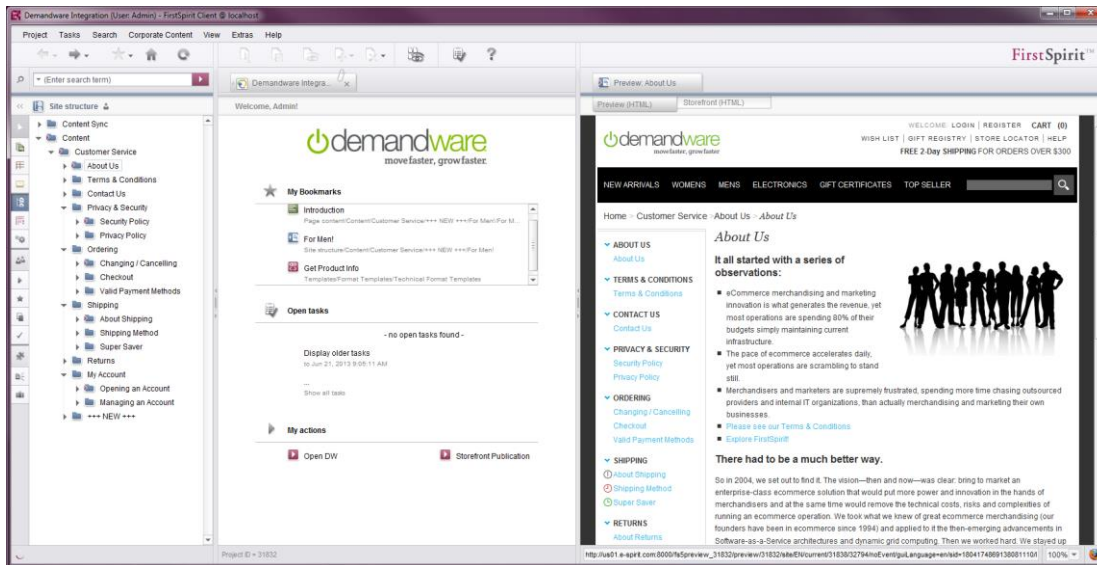
No matter if the editor is an occasional user only working rarely within the CMS or a professional who has to do a lot of content updates every day. The FirstSpirit ContentCreator is an extremely easy to use, intuitive interface, which editors can utilize very efficiently and without training.



3.4.2 FirstSpirit SiteArchitect

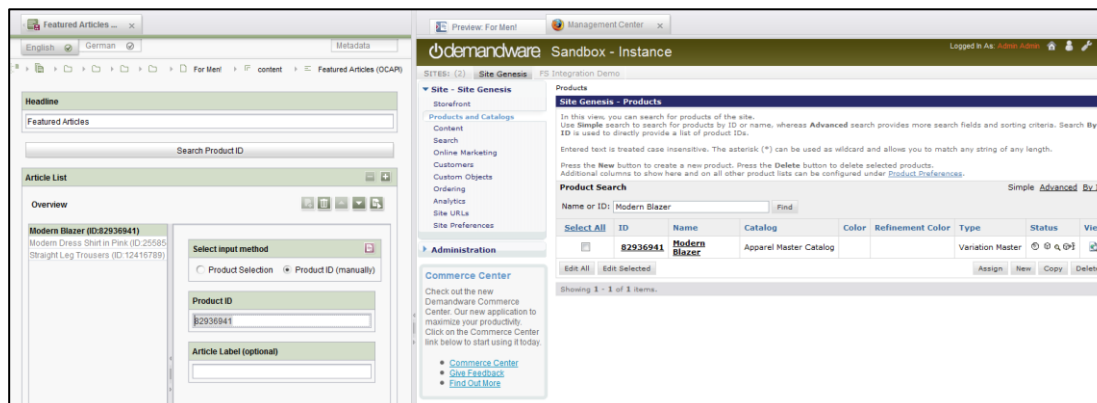
A Java-based RichClient for discerning users and administrators

The FirstSpirit SiteArchitect is the central editing cockpit, which provides all functions and required tools in one interface. Here professional editors and administrators can easily implement complex tasks and organize the overall site structure. Merging and sending content to and from a variety of sources can be dealt with quickly and easily.



Ref: FirstSpirit SiteArchitect | advanced content management desk

Part of the FirstSpirit module is a demo AppCenter integration of the Demandware Business Manager. The FirstSpirit AppCenter enables the integration of existing web applications into the FirstSpirit SiteArchitect – serving as a central editing cockpit. In case of the FirstSpirit CMS Integration for Demandware, editors can access the Business Manager through the FirstSpirit SiteArchitect to search for product information.



Ref: FirstSpirit SiteArchitect | advanced content management desk



4 Operations, Maintenance

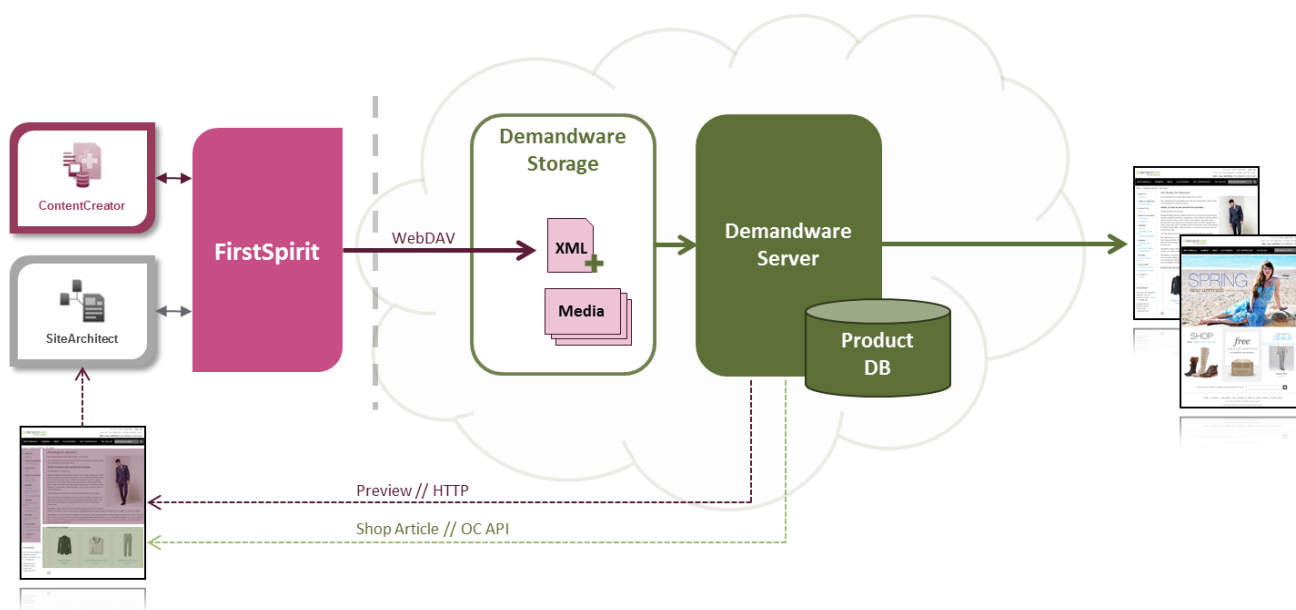
4.1 Architecture

As Demandware provides the core features for any e-commerce web site such as product and customer information, login and checkout processes and other dynamic data, websites are delivered to the front end by Demandware. In all FirstSpirit/Demandware installations, Demandware serves as the leading environment.

All content that is maintained within CMS is persisted and generated by FirstSpirit and seamlessly integrated into the Demandware-driven shop frontend.

FirstSpirit deploys content to the Demandware storage system from where it is imported as native content-assets. The content assets are processed and ultimately delivered to the end user when requested.

From an infrastructural point of view, both environments are technically decoupled. The content delivery and storefront functionality is fully controlled by Demandware and can be scaled as required.



Ref: High-level overview of the integration

In general, FirstSpirit delivers two types of files to the Demandware environment: Static rich-media assets and XML control files containing the content information.

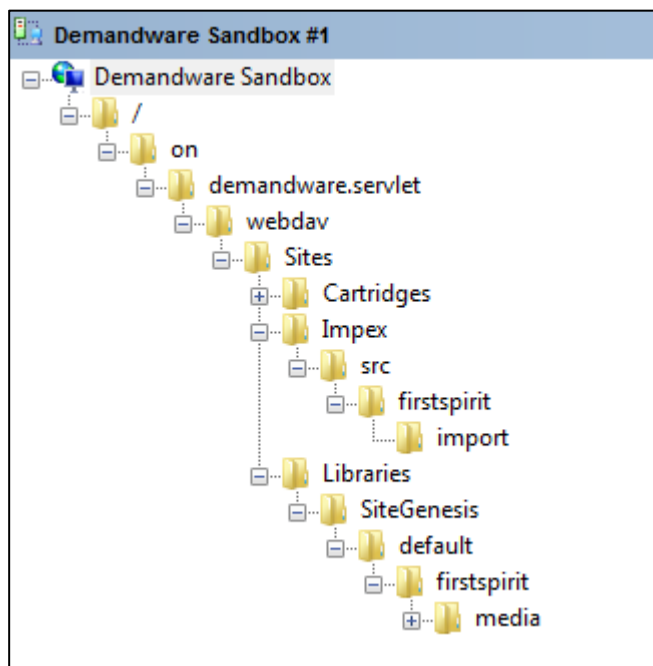


4.2 Data Storage

The data that is delivered by the FirstSpirit server is synchronized to two locations within Demandware.

Rich-media assets, maintained within the media asset management of FirstSpirit – like images (e.g. JPG, PNG), documents (e.g. DOC, PDF), or videos – are published to `/Sites/Libraries/SiteGenesis/default/firstspirit`.

XML control and content files are published to `/Sites/impex/src/firstspirit`.



Ref: High-level overview of the integration

In both cases, dedicated cleanup jobs are not required since FirstSpirit is synchronizing the complete target locations. Outdated objects (that are no longer released) will be deleted within the synchronization process.

4.3 Availability

The FirstSpirit server is running on an independent environment and can even be shut down (e.g. for maintenance reasons) without affecting the frontend delivery.



4.4 Support

e-Spirit provides their customers access to a support ticket system. Direct contact via e-mail communication and access to the FirstSpirit customer and partner community is also provided.



5 Release History

Version	Date	Changes
1.0	09/20/2013	Initial Release