



e-Spirit

# FirstSpirit™

## FirstSpirit CMS Integration for Demandware Commerce

### Documentation

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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](mailto: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.
- Multi-language capability including translation support.
- Graphical workflows to streamline content development processes

#### 2.1.2 Technical Features

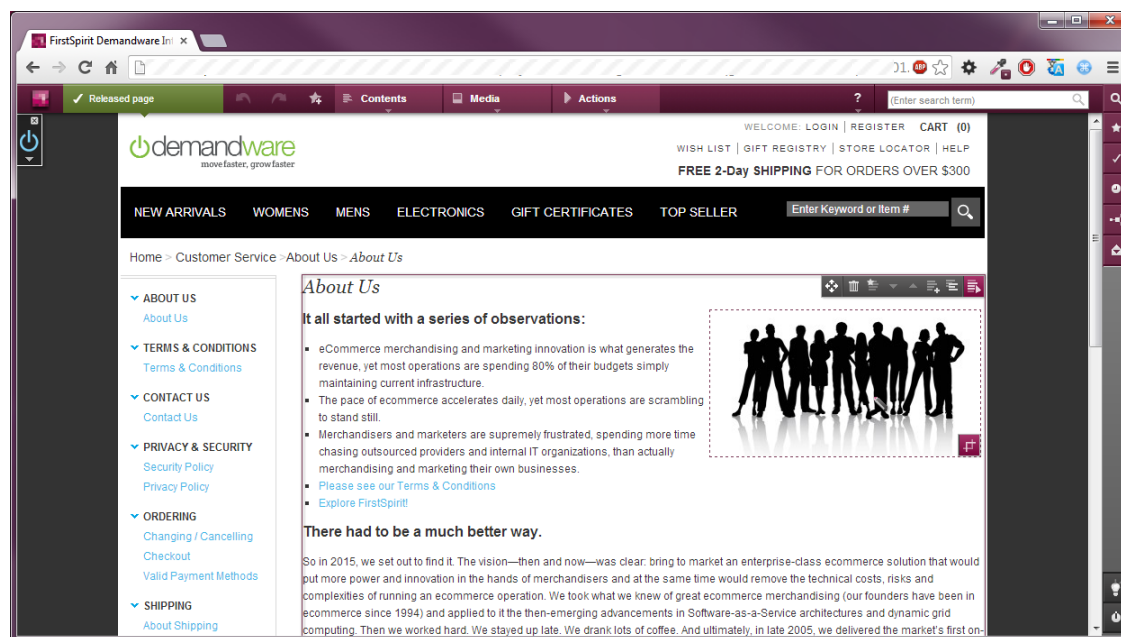
- Creation of native Demandware content assets through an external CMS.
- Direct connection to Demandware product information through Open Commerce API (Shop API).
- Content publication into the Demandware storage through WebDAV interface.
- AppCenter demo integration of 3<sup>rd</sup>-party web service (Video Integration) in FirstSpirit.



## 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.
- .
- 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 14.8](#) 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 5.1](#). The integrated product search is using the [OC Shop API v14.8](#), accessing the following resources:

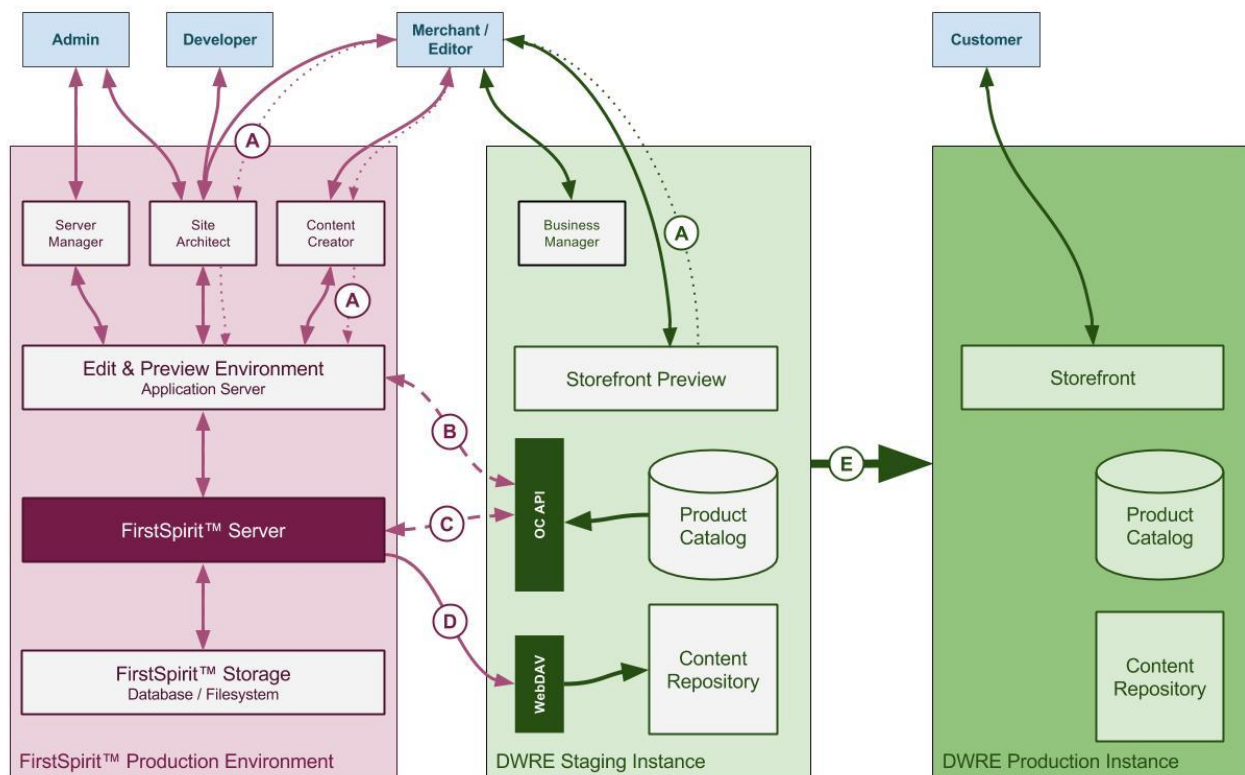
- [/product](#)
- [/product\\_search](#)
- [/categories](#)

## 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.



## 2.5.1 Data Flow



### A. Preview Pages

- on-demand preview taken from storefront of DWRE staging instance
- no data replication / persistence in FirstSpirit

### B. Product Data (Preview)

- on-demand preview of product data
- no data replication / persistence in FirstSpirit

### C. Product Data (Search)

- integrated product data search
- product ID copied to create product reference

### D. Content Publication

- editorial content (e.g. articles) and media assets
- transferred and imported into DWRE Content Library of staging instance

### E. DWRE Replication

- DWRE internal replication process from staging to production instance
- no direct connection between FirstSpirit and production instance
- no sensitive data (e.g. personal- and financial data) transferred from production instance to FirstSpirit





## 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 pipeline
  - enriched demo content templates
  - demo pipeline for mixed content/product pages
- FirstSpirit module
  - real-time preview environment with integrated storefront
  - basic template set
    - *Homepage Slideshow*
    - *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)



## 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.

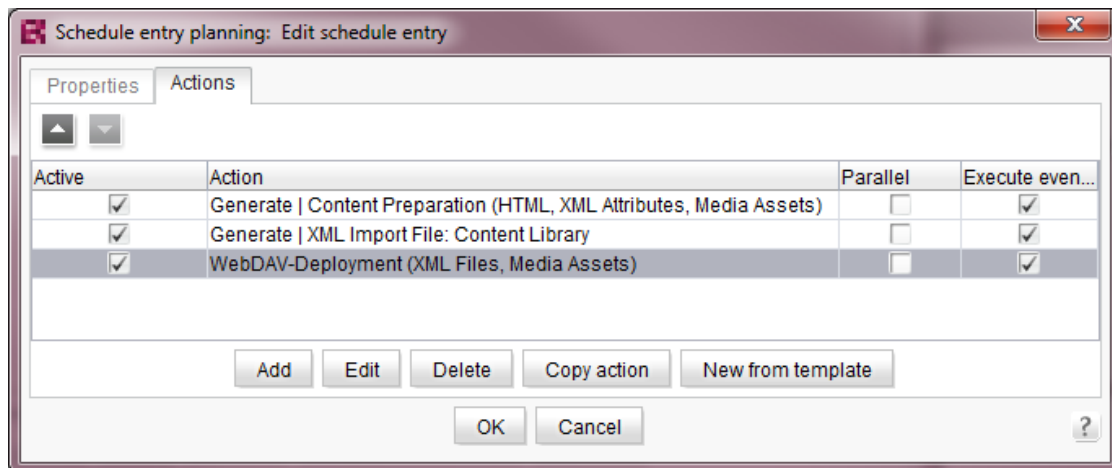
→ [TDAT51EN\\_FirstSpirit\\_TechnicalDatasheet.pdf](#)

### 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\_v1.3.tar.gz"]*
  - c) Select a project name and description and start the import.
2. Configure the FirstSpirit schedule entry
  - a) Start the FirstSpirit ServerManager.
  - b) → *[select project] > Schedule management > [select "DW Deployment"]*
  - d) → *Actions > [select "WebDAV Deployment"] > [edit Properties]*
3. Configure the WebDAV connection settings:
  - a) url
  - b) mediurl
  - c) user
  - d) password
  - e) purge [true|false]

Please see more details in the separated WebDAV documentation.

→ [WebDAVDeployment Installation.pdf](#)



*Ref: FirstSpirit schedule job "DW Deployment"*

### 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 Project configuration

1. Start the FirstSpirit SiteArchitect.
2. → *Global Settings > Project Settings*

The screenshot shows the 'Project Settings' configuration page. At the top, the breadcrumb navigation is 'Global settings (root) > Project Settings'. Below this, the 'Global Page Title (Prefix)' is set to 'FirstSpirit Demandware Integration (EN)'. The main section is titled 'Demandware Preview / Integration Settings'. It contains several fields and checkboxes:

- DWRE URL Protocol:** Radio buttons for 'http' and 'https'. 'https' is selected.
- DWRE Instance:** Text field with value 'esprit-tech-prtnr-na03-dw'.
- DWRE Site ID:** Text field with value 'DEV\_MASTER'.
- DWRE Content Asset ID Prefix:** Text field with value 'fs'.
- Display FirstSpirit edit icon in Storefront Toolkit:** A section with two checkboxes: 'Edit in ContentCreator' (checked) and 'Edit in SiteArchitect' (unchecked).
- Highlight DWRE Placeholder in FirstSpirit Preview:** Checkbox (unchecked).
- Preview Protection (BasicAuth):** Checkbox (checked).
- User:** Text field with value 'storefront'.
- Password:** Password field with masked characters '\*\*\*\*\*'.

3. Configure following setting:
  - a) Connection Protocol (http or https)
  - b) DWRE Instance Name
  - c) DWRE Site ID
  - d) DWRE Content Asset ID Prefix
  - e) BasicAuth User/Password (optional)



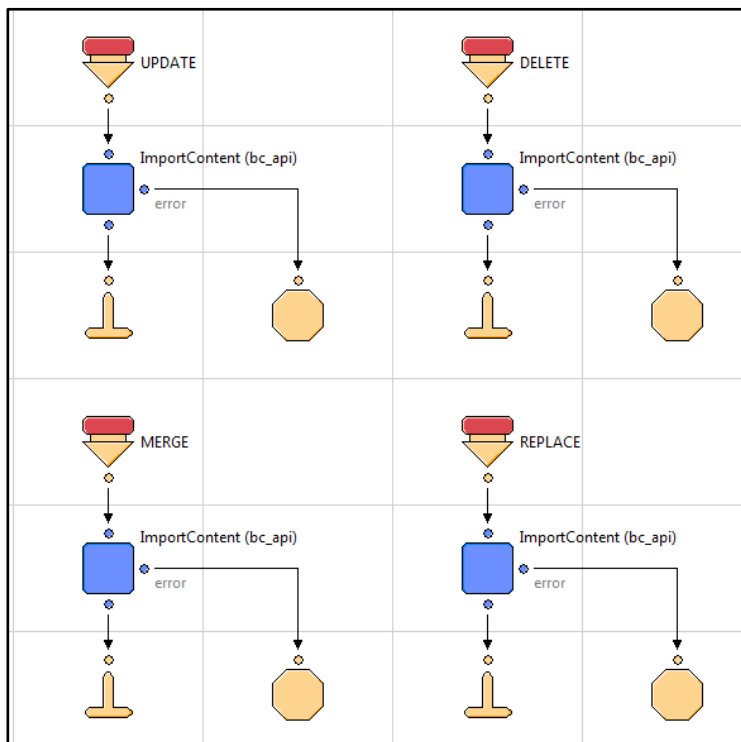
### 3.2.5 Create job schedules

Time based or externally triggered execution of the job schedules can be setup to the individual demands of the customer project. For the purpose of a demo sandbox integration, the import jobs are started manually.

Schedules						
<b>Note, that the time based execution of custom schedules is disabled on Sandbox instances.</b>						
The list below shows all job schedules defined for the Sites organization.						
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> <div>Enable</div> <div>Disable</div> <div>Run</div> </div> <div> <div>New</div> <div>Delete</div> </div>						

*Ref: Demandware Business Manager / Job Schedule overview*

The import schedule job is using the ContentSync-Pipeline that is part of the cartridge. This pipeline is using standard DWRE ImportContent Pipelets.



*Ref: Demo Demandware pipeline "ContentSync.xml"*



### 3.2.5.1 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/[Site ID]/fs\_import\_library.xml



### 3.2.6 Set up OC API connection

1. Grant access for FirstSpirit Server in the Demandware Business Manager
  - a) → *Administration > Site Development > Open Commerce API Settings*
  - b) Add FirstSpirit Server URL to the list of allowed origins
2. Configure OC API connection settings in FirstSpirit
  - a) Start the FirstSpirit ServerManager.
  - b) → *Project Components > FS DW Connect – Project Configuration*
  - c) Configure the following parameters:
    - i) Client ID
    - ii) Base URL

The screenshot shows a 'Configure' dialog box with the following fields and values:

- Client-ID:** aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
- Base-URL:** https://esprit-tech-prtnr-na03-dw.demandware.net/s/DEV\_MASTER
- Category search:** ☒
- View type priority:** medium,large,small
- Image Service b...:** (empty field)

At the bottom of the dialog are three buttons: 'Test', 'OK', and 'Cancel'.

*Ref: FirstSpirit project component "FS DW Connect – Project Configuration"*



### 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 “*Featured Products*”
- Demandware pipeline “*IncludeProduct.xml*”
- Demandware template “*productInfo.isml*”

#### 3.3.1 FS section template “*Featured Products*”

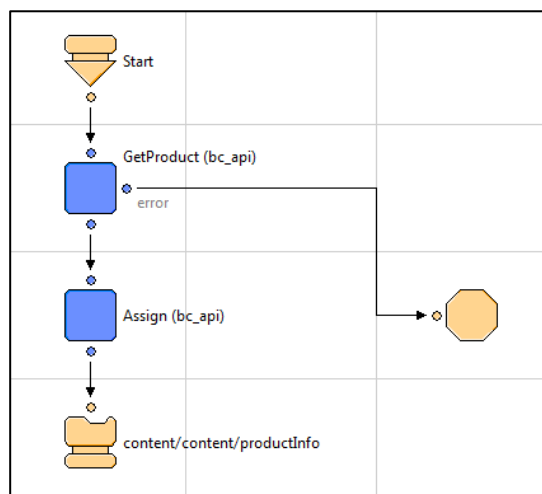
This template set is providing an input form to store the product IDs of the shop articles. The output channel for the Demandware storefront is generating a parameterized `$include` statement of the Demandware pipeline “*IncludeProduct*”.

```
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*”

#### 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.





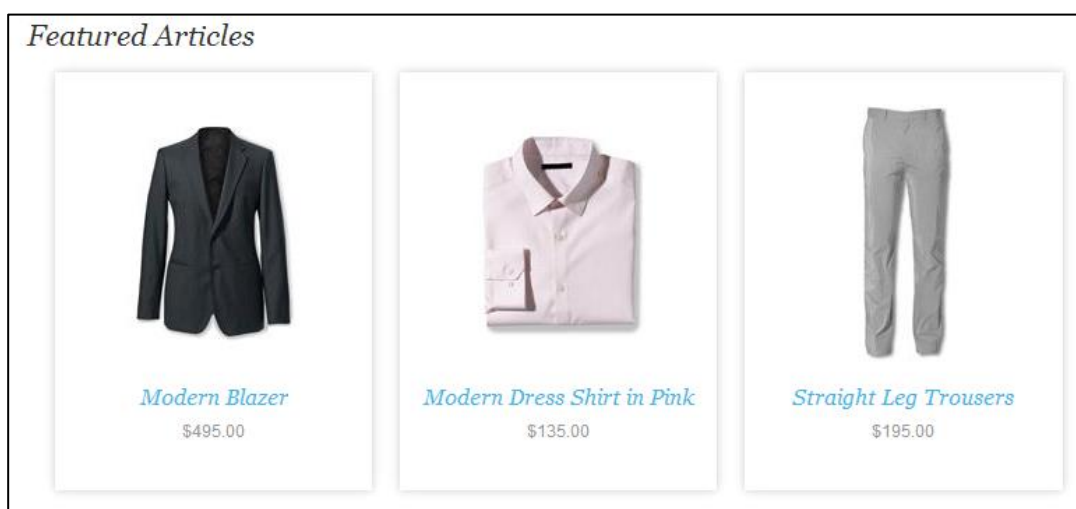


Ref: Demo Demandware pipeline "IncludeProduct.xml"

### 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>

```



```
17.         </a>
18.     </h2>
19. </div>
20. <div class="product-pricing">
21.     <span class="product-sales-price" title="Sale Price">
22.         <isset name="showTieredPrice" value="${true}" scope="page"/>
23.         <isinclude template="product/components/pricing"/>
24.     </span>
25. </div>
26. </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

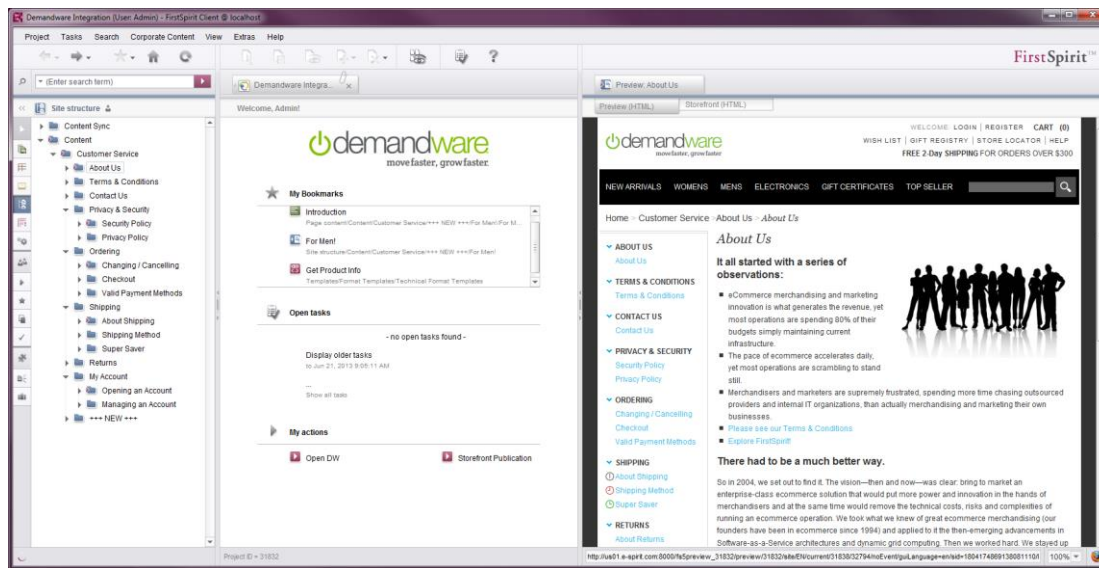
No matter if the editor is an occasional user only working rarely within the CMS or a professional who has to do a lot of content updates every day. The FirstSpirit ContentCreator is an extremely easy to use, intuitive interface, which editors can utilize very efficiently and without training.

### 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.

## FirstSpirit CMS Integration for Demandware Commerce



Ref: *FirstSpirit SiteArchitect / advanced content management desk*



## 4 Operations, Maintenance

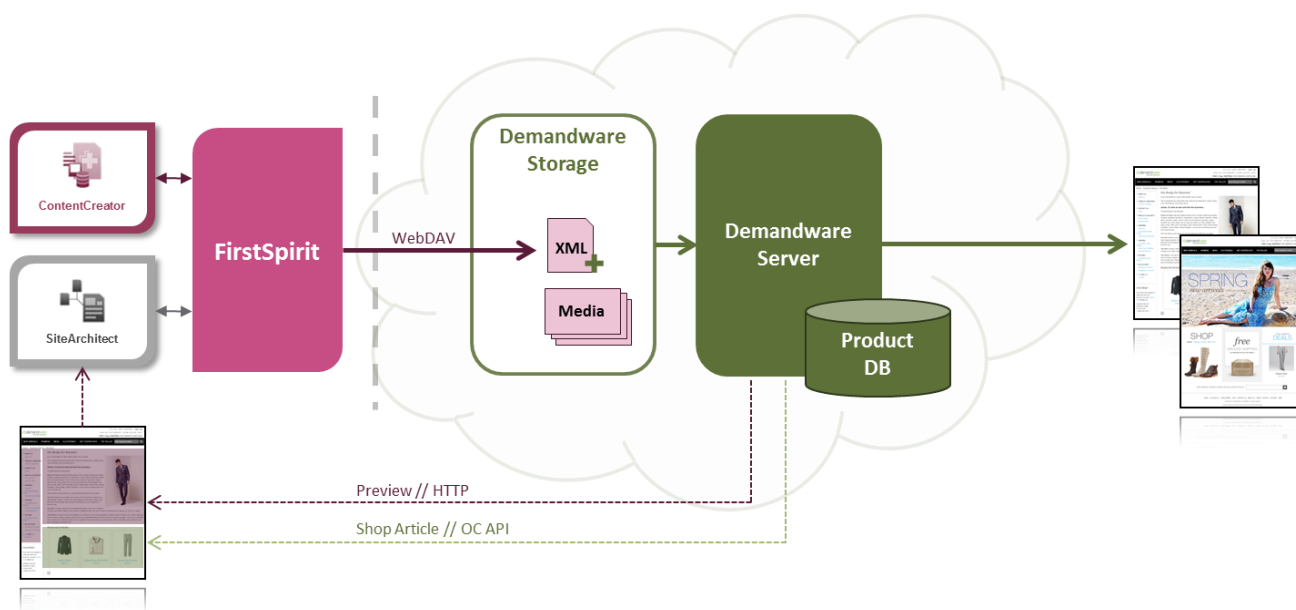
### 4.1 Architecture

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.

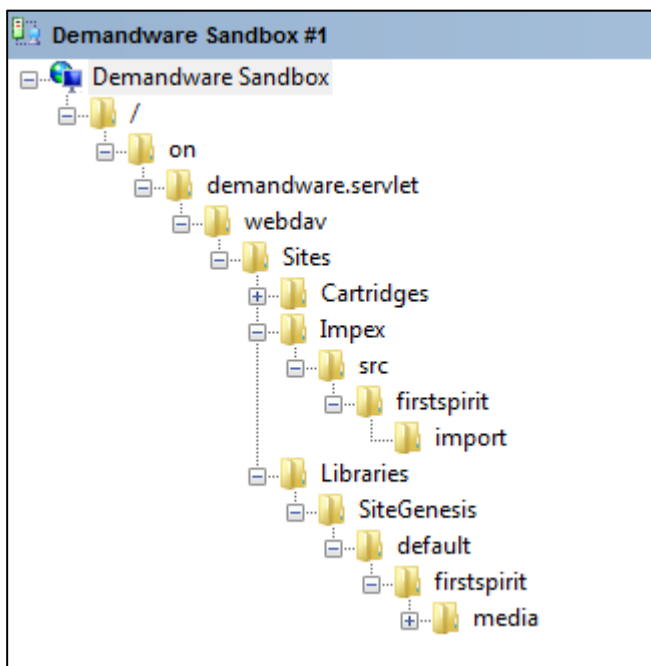


## 4.2 Data Storage

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
1.1	10/08/2013	Update
1.2	12/29/2014	<div>Update<ul style="list-style-type: none"><li>• OC API 14.8 Support</li><li>• Project / Module Configuration</li><li>• DWRE XML Collector</li><li>• Product Search for SiteArchitect</li><li>• BasicAuth Support</li><li>• DWRE Image Service Support</li></ul></div>