Sitecore Commerce Tips and tricks

November 2018



Sitecore Commerce History



Sitecore has a long history on Commerce:

- Sitecore E-Commerce Fundamental Edition 1.1
- Sitecore SES (Sitecore E-Commerce Services)
- Sitecore Insite ???
- Sitecore Commerce Server accuired in 2014 (Previously known as Microsoft Commerce Server-first release was in 1996)
- Sitecore Commerce powered by Commerce Server
- Sitecore Commerce powered by Microsoft Dynamics
- Sitecore Commerce 8.2.1 (April 2017)
- Sitecore Commerce 9 (January 2018)

Other commerce modules:

- UCommerce for Sitecore
- ActiveCommerce

Sitecore Commerce 9





The only cloud-enabled software platform that enables marketers and merchandisers to fully personalize the end-to-end shopping experience.

Sitecore Commerce 9





Sitecore Experience Commerce Platform Architecture



Sitecore Experience Commerce™



Shared Environments



Global



Shops



Authoring



Minions



DevOps



Catalog Items
Scope Index



Orders Items
Scope index



Customers Scope Index



BizFX



Identity Server

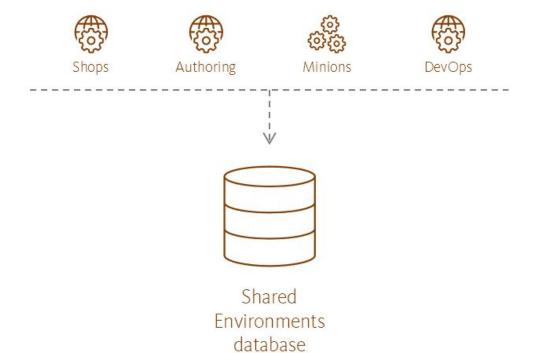
Sitecore Commerce 9 Databases



Shared Environments database

The Shared Environments database stores data that is used by multiple Commerce roles,

including the product catalog, customers, pricing information, and promotions.

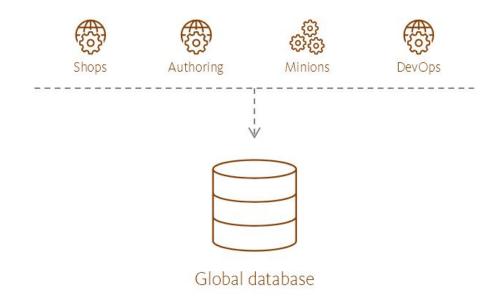


Sitecore Commerce 9 Databases



Global database

The Global database stores Commerce configuration data, such as policies.

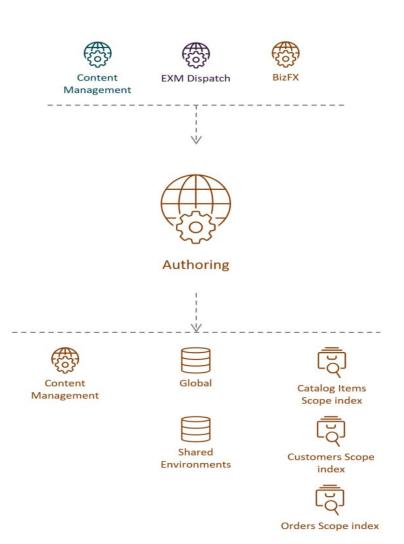




Commerce Authoring

The Commerce Authoring role is the instance of the Commerce Engine that serves traffic from the Commerce business tools.

Authoring environment: caching is minimal. This means merchandisers or customer service representatives using the Business Tools always see the latest data because the information is retrieved directly from the database (and not cached values).

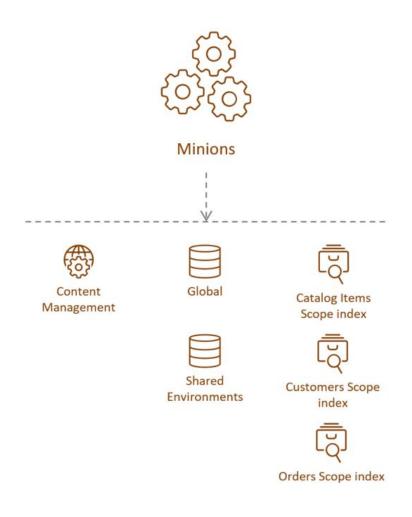




Commerce Minion

The Commerce Minions role is an instance of the Commerce Engine that runs independently and supports asynchronous processing.

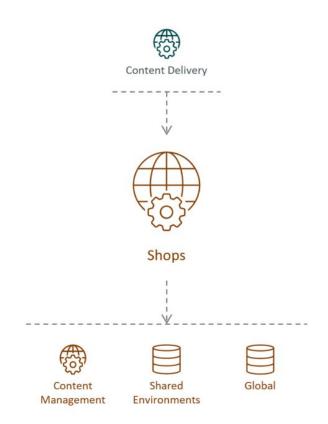
The Minions role is usually set up as a worker role (not a web role) and doesn't receive any web traffi This role contains a series of minions, each one with a specific task (for example, an importing minic that is used to import data from an external system)





Commerce Shops

The Shops role is the instance of the Commerce Engine that serves traffic from one or more storefronts (CD). This role can scale to support demand, and is usually installed in close proximity to the Sitecore XP instances that generate the traffic,

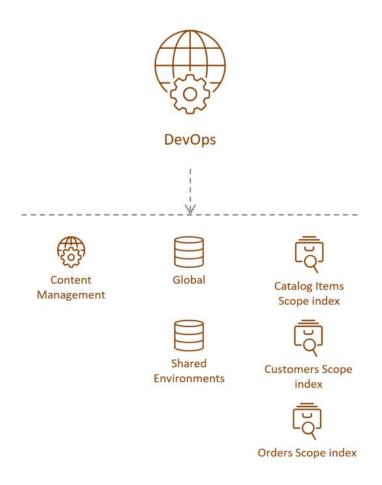




Commerce DevOps

The DevOps role is an instance of the Commerce Engine that is internal and only available to DevOps guys. This role can be assigned higher privileges allowing DevOps guys to perform maintenance tasks that are not permitted to other roles (for example, bootstrapping and environment initialization functions).





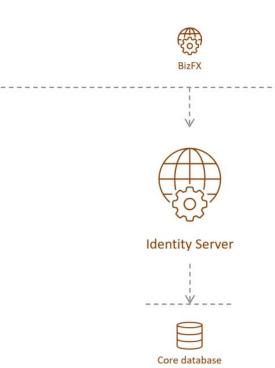


Identity Server

Sitecore's federated authentication service provider, for authenticating to the Business Tools and Commerce Engine.

Does not persist data and instead relies on Sitecore's underlying authentication mechanism.

It will be used on Sitecore Platform from version 9.1

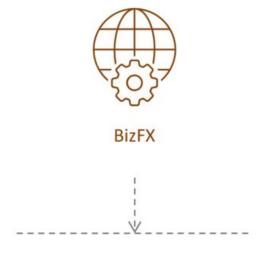




Commerce Bizfx (Content Editor for Commerce)

Contains an integrated suite of Sitecore XC business tools, built on the Angular application platform version 4. (Merchandising, Inventory, Orders, Customers, etc

Business tools interface used by internal users (They need to be part of Commerce Roles). They communicate directly with the Commerce engine services via a dedicated Commerce EntityView core API.





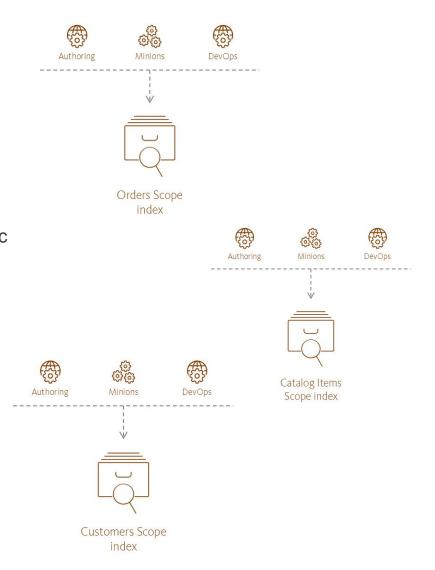


Sitecore Commerce 9 Indexes



- 1. The Orders Scope index allows merchandisers to search for and retrieve
 - a specific order
- The Catalog Items Scope index allows merchandisers to search for and retrieve a specific catalog item.
- 3. **The Customers Scope index** allows merchandisers to search for and retrieve a specific customer.

Q: How do you rebuild this indexes?

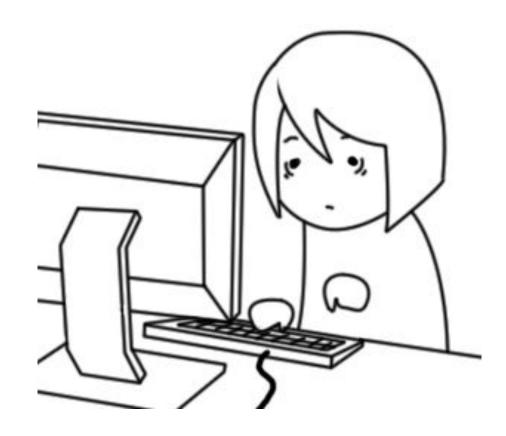


SOLR CLOUD IS NOT SUPPORTED FOR THESE INDEXES IN 9.0.1 RELEASE

Installation guide



Be prepared for



Installation guide



Instalation is made using SIF, is the most complex Sitecore installation.

Default scripts install SXA for Commerce (accelerator for Commerce)

Installation Guide:

- For On-Premises <u>http://commercesdn.sitecore.net/SitecoreXC_9.0/Installation-Guide/Sitecore-XC-9.0_Installation_Guide(On-Prem).pdf</u>
- for Azure App Service <u>oud).pdf</u>

Scripts for scaled environment:

- https://github.com/asmagin/sitecore-installation-scripts
- https://community.sitecore.net/technical_blogs/b/the_commerce_experience/posts/commerce-scaled-depl oyment-guidance

READ PRE REQUIREMENTS VERY CAREFULLY

Sitecore Commerce SSL Certificates



A range of certificates are generated during the install process

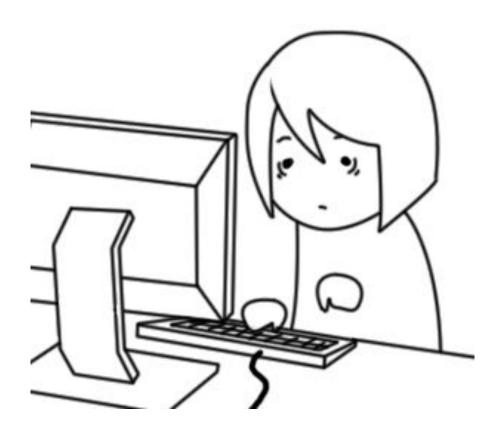
- 1. Commerce Engine IIS websites is an **SSL** server certificate
- 2. Identity Server Certificate: a code signing certificate and is used by Sitecore Identity Server to sign and validate identity
- 3. Sitecore Commerce Engine Connect Certificate: is a **SSL client certificate** required to authenticate clients to Commerce Engine using certificate authentication.

PAY ATTENTION TO CERTIFICATES

Documentation



Be prepared for



Documentation



Your best friend to do advanced stuff :

Dot Peek

II Spy

Reflector

• Other resources are described at:

https://tothecore.sk/2018/07/16/sitecore-experience-commerce-sxc-9-essentials-certific ation-study-guide/

Developement on local machine



- Download Commerce SDK from installation package
 (https://dev.sitecore.net/Downloads/Sitecore_Commerce/90/Sitecore_Experience_Commerce_90_Update2.aspx)
- 2. Unzip it
- 3. Install Sitecore.Commerce.Plugin.vsix extension
- 4. Start the VS Solution : Customer.Sample.Solution.sln

How to select the right nuget package



- Sitecore Platform Nuget Packages has the version number like the Sitecore Release Number
- Commerce nuget packages doesn't follow the structure from Sitecore platform, the version number doesn't have any logic

	Version	Size	Last updated	Downloads	Mirrored?
~ (9.0.180604	15 KB	Mon, 16 Jul 2018 06:59:41 GMT	5560	~
0	9.0.171219	15 KB	Thu, 18 Jan 2018 08:17:54 GMT	7298	~
0	9.0.171002	15.01 KB	Mon, 30 Oct 2017 10:18:40 GMT	254	~

Sitecore.Commerce.Core nuget package

	Version	Size	Last updated	Downloads	Mirrored?
~ ()	2.2.29	209.44 KB	Thu, 12 Jul 2018 11:51:29 GMT	26	✓
0	2.1.6	199.65 KB	Wed, 14 Mar 2018 23:05:08 GMT	16	~
0	2.0.884	196.86 KB	Wed, 14 Mar 2018 23:04:08 GMT	4	✓
0	1.3.153	165.99 KB	Tue, 29 May 2018 18:23:37 GMT	3	~
0	1.2.159	163.81 KB	Thu, 02 Nov 2017 15:28:30 GMT	100	~
0	1.1.819	162.29 KB	Wed, 12 Apr 2017 21:14:46 GMT	23	✓

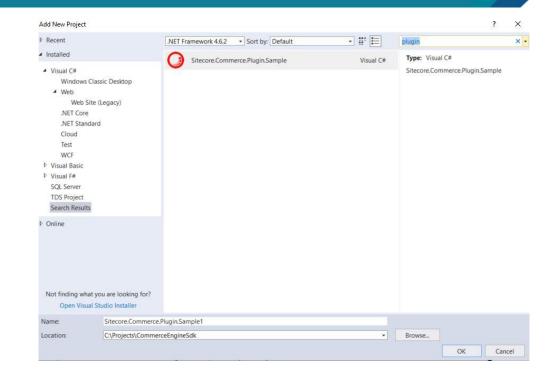
Sitecore.Commerce.Plugin.Catalog nuget package

		Version	Size	Last updated	Downloads	Mirrored?
N	0	2.2.46	276.39 KB	Thu, 12 Jul 2018 14:48:50 GMT	17	✓
	0	2.1.10	225.34 KB	Thu, 15 Mar 2018 17:39:01 GMT	17	✓
	0	2.0.1022	212.65 KB	Tue, 30 Jan 2018 15:49:02 GMT	5	✓
	0	1.3.153	45.64 KB	Tue, 29 May 2018 18:24:20 GMT	3	✓
	0	1.2.159	46.51 KB	Thu, 02 Nov 2017 15:28:43 GMT	102	✓

Create first plugin



- 1. Add a new plugin Visual Studion Project:
- 2. Clean the plugin (commands, controllers, entities, etc)
- 3. Start your plugin (later on demo).



Debug your plugin



- 1. You can **NOT** debug your code like on Sitecore using "Attach w3p process"
- 2. Debug the code using Commerce SDK running your code with "F5"

Sitecore Commerce Data Provider



- 1. The products (sellableitems,catalogs, categories) are persistent in Commerce Engine not in Sitecore databases.
- 2. You can view products inside sitecore content editor under:

/sitecore/Commerce/Catalog Management/Catalogs

- 3. Sitecore XP uses a data provider to access the product catalog database, creating virtual Sitecore items that appear within the Sitecore UI. Product and category data are not stored as "real Sitecore items" in the sense that they live in the standard Sitecore master or web databases.
- 4. Items are virtual items, can not be modified, serialize/export to other system
- 5. To export catalog items use postman or implement your own logic to import/export products.



Advices



- 1. Do not underestimate the commerce task if is your first commerce project.
- 2. If you are blocked on some task, ask on Sitecore Slack or Sitecore Stack Exchange.

Demo Time



