Sitecore Experience Commerce Installation Guide for On-Premise Solutions

Sitecore Experience Commerce 9.2

August 9, 2019

Table of Contents

1. Getting started

This guide describes how to install Sitecore Experience Commerce™ (XC) solution in a single-server configuration (local environment).

> **NOTE**
>
> This document assumes that you have already installed the Sitecore Experience Platform software (using the XP Single configuration), as described in the *Sitecore Experience Platform Installation Guide*, available from dev.sitecore.net.

This chapter contains the following sections:

- Sitecore Experience Commerce solution
- System requirements
- Packages for on-premise installation

1.1. Sitecore Experience Commerce solution

Sitecore Experience Commerce (XC) is an e-commerce solution, built on the Sitecore Experience
Platform (Sitecore XP).

The Sitecore XC solution provides a core framework for rapidly delivering commerce functionality
through the following components:

- **Commerce Engine**
  An extensible commerce core framework, hosting commerce services such as Cart, Order,
  Pricing, Promotions, Catalogs, and Inventory. The Commerce Engine includes a pluggable
  framework for extending the engine to modify or add to existing functionality.

- **Commerce Business Tools**
  A set of rich business tools for merchandisers and customer service representatives. The
  business tools are built on the Angular framework, and can also be extended using the same
  pluggable framework.

- **Sitecore Experience Accelerator (SXA) Storefront**
  A sample storefront website that is integrated with the Commerce Engine. You can use the SXA
  Storefront as a starting point to building a customized storefront.

For more information about Sitecore XP, refer to the Sitecore Documentation site.

For assistance, or to report any discrepancies between this document and the product, please contact
https://support.sitecore.net/helpdesk/login.

With Sitecore 9.0 and later, the on-premises installation of the platform occurs in the context of the
Sitecore Installation Framework (SIF). The framework deploys Web Deploy Packages (WDP) by passing
parameters to configuration files through a Microsoft® PowerShell module.

1.2. System requirements

This section describes the system requirements for a Sitecore XC 9.2 hosting environment.

- Hardware requirements
- Hosting environment requirements

> **NOTE**
>
> You need a Braintree sandbox account to enable web payment functionality through the Commerce Engine. Follow the instructions on the Braintree website to set up an account, and note the MerchantID, Public Key and Private Key information. You need to specify the values for those parameters in the Sitecore XC deployment script.

1.2.1. Hardware requirements

The minimum hardware configuration requirements for running a single Sitecore XC installation are:

- 4 core processor
- 16 GB of RAM

> **NOTE**
>
> The recommended hardware requirements for running the software on a single computer. For more information about running Sitecore XC on different kinds of hardware, consult your Sitecore partner or technical sales representative.

1.2.2. Hosting environment requirements

The following table lists the software requirements for Sitecore XC 9.2 hosting environment.

Operating system	Windows Server 2016
	Windows Server 2019
	Windows 10 Professional (64-bit)
.NET Framework	.NET Framework 4.7.1 Developer Pack (including available updates)
	ASP.NET MVC 5.2 or later
	ASP.NET Core 2.1
	.NET Core Windows Server Hosting 2.1.3 or later versions of 2.1
	OData 7.2.0
Database	Microsoft SQL Server 2016 SP2
	Microsoft SQL Server 2017
	Microsoft Azure SQL
	Redis data store
	> **NOTE** > Sitecore recommends using Redis for Linux for production installations. The version for Windows should only be used for development or non-production single machine deployments.

Web server	IIS 10.0 FC: (XPO 9.2)
	Microsoft Web Deploy 3.6
	URL Rewriter
Development	Visual Studio 2017 + latest updates
	Visual Studio 2017 Tooling
	.NET Core 2.1.7 Windows Hosting module
	MSBuild Microsoft Visual Studio Web targets (available from Nuget)
	Git client
Deployment	PowerShell 5.1 or later
Runtime	.Net Core Runtime 2.1.
	Node.js
	OData Connected Service (available from Visual Studio Marketplace)
Search indexing	Solr 7.5
Sitecore software	Sitecore Experience Platform 9.2 (available on dev.sitecore.net)
	Sitecore Experience Accelerator (SXA) 1.9.0 (available on dev.sitecore.net)
	Sitecore PowerShell Extensions 5.0 for Sitecore 9.2 (available with SXA dowloads on dev.sitecore.net)
	NOTE Sitecore SXA and Sitecore PowerShell Extensions are installed when you run the Sitecore Experience Commerce deployment script, as part of the XC installation process.
Web browsers	Microsoft Edge
	Internet Explorer 11
	Mozilla Firefox
	Google Chrome
	Apple Safari

1.3. Packages for on-premise installation

The Sitecore XC release package does not include any Sitecore XP software. You must install all Sitecore XP pre-requisite software first.

The following table lists the software packages provided with the Sitecore XC release package for an on-premises installation.

The SIF.Sitecore.Commerce package contains Sitecore Installation Framework scripts and Web Deployment Packages (WDP). Each package has a unique version number.

Package	Description
SIF.Sitecore.Commerce	Contains Commerce-specific extensions to the Sitecore Installation Framework (SIF), including the master deployment script for Commerce packages, Commerce configuration, and Solr schema.
Sitecore.Commerce.Engine.OnPrem.Azure	Contains the binary (pre-compiled code) for the Commerce Engine, a lightweight, micro-service based framework for the development of commerce solutions. For deployment using Azure search.
Sitecore.Commerce.Engine.OnPrem.Solr	Contains the binary (pre-compiled code) for the Commerce Engine, a lightweight, micro-service based framework for the development of commerce solutions. For deployment using Solr search.
Sitecore.Commerce.Engine.SDK	Contains the development kit (source code) for compiling the Commerce Engine. Compiling the SDK programmatically fetches Commerce Engine plugins from Sitecore's public NuGet feed. This NuGet feed hosts plugins that are released and supported with the Sitecore XC release. Available as .ZIP package.
Sitecore.BizFX.OnPrem	Contains an integrated suite of Sitecore XC Business Tools (pre-compiled code), built on the Angular application platform version 4.
Sitecore.Biz.FX.SDK	Contains the development kit (source code) for compiling the Sitecore XC business tools. Available as .ZIP package.
Commerce Connect	
Sitecore Commerce Connect Core OnPrem	Contains a middleware integration layer between the Sitecore XC back-end and the Storefront front-end, and with the Sitecore Experience Platform.
Sitecore Commerce Engine Connect OnPrem	Contains a thin integration layer for integrating the Commerce Engine with Sitecore Commerce Connect Core. The package file format is a Team Development for Sitecore (TDS) .update package.
Sitecore Commerce ExperienceAnalytics Core OnPrem	Contains Commerce Experience Analytics installer and core files required for integration with Commerce.
Sitecore Commerce ExperienceProfile Core OnPrem	Contains Commerce Experience Profile installer and core files required to integrate Experience Profile with Commerce.
Sitecore Commerce Marketing Automation Core OnPrem	Contains Commerce Marketing Automation installation and core files.

Package	Description
Sitecore Commerce Marketing Automation for AutomationEngine	Contains Commerce Marketing automation files required to setup the Marketing Automation Engine service. Available as .ZIP package.
SXA Storefront	
Sitecore Commerce Experience Accelerator	Contains Commerce-specific extensions to the Sitecore Experience Accelerator (SXA) templated UX layouts (for example, UI renderings used to display a catalog on the Storefront).
Sitecore Commerce Experience Accelerator Storefront	Contains the sample and starter storefront as an integrated part of the Sitecore XC solution, built using SXA UX layouts.
Sitecore Commerce Experience Accelerator Storefront Themes	Contains the themes used for the SXA Storefront site.
Sitecore Commerce Experience Accelerator Habitat Catalog	Contains the Habitat sample catalog for the Storefront site.
Sitecore.Commerce.Habitat.Images.OnPrem	Contains images for the Habitat sample catalog.
Adventure Works Images.OnPrem	Contains images for the Adventure Works sample catalog.

2. Preparing for a Sitecore XC installation

This chapter outlines the tasks you must complete before installing the Sitecore XC solution on a
single machine in a non-production environment.

This chapter contains the following sections:

- Verify your Sitecore XP setup
- Download the Sitecore XC release package

2.1. Verify your Sitecore XP setup

The instructions in this document assume that you have already installed the Sitecore XP software on your system, as described in the *Sitecore Experience Platform Installation Guide*.

These instructions also assume that you have .NET Core SDK 2.1.7 installed in your development environment and have the following installed in your deployment environment:

- .NET Core Windows Server Hosting 2.1.7

- Solr 7.5 deployment (with HTTPs enabled)

- Sitecore Experience Platform 9.2 (XP Single deployment)

2.1.1. Search provider setup
Solr is the recommended search provider for a single-server installation. However, Sitecore also supports Azure Search as a search provider.

If you are using Solr as a search provider, make sure that Solr is running properly before you install the Sitecore XC solution by rebuilding the search indexes and the link databases in the Sitecore client (**Control Panel > Indexing Manager**). See the *Sitecore Experience Platform Installation Guide* for detailed instructions.

In addition, make a note of the values you used for the Solr installation ($SolrUrl, $SolrRoot, $SolrService) during the Sitecore XP installation. You must specify these values in the Sitecore XC deployment script.

If you are using Azure Search as a search provider, you must create an Azure Search Service and make a note of the values for the service name, the service admin key, and the service query key. You must specify these values in the Sitecore XC deployment script.

2.1.2. SQL server setup
The Sitecore Installation Framework (SIF) installs the required databases during Sitecore XP deployment, but you must set up the correct user roles for authentication. Ensure that you add a recognized user (for example, collectionuser) to the xDB shared databases (as described in the *Sitecore Experience Platform Installation Guide*).

Sitecore XP uses SQL authentication during installation (for example, $SqlAdminUser = "sa"). Sitecore XC uses Windows Authentication during installation, which means that the user identity running the Sitecore XC deployment script is typically the current Windows logon user. This user account must have proper database permissions (for example, sysadmin at the SQL instance level) during the installation.

In addition, make a note of the value you used for the SQL installation ($SqlServer) during the Sitecore XP installation. You must specify this value in the Sitecore XC deployment script.

2.2. Download the Sitecore XC release package and prerequisites

You can download the Sitecore XC release package from the Sitecore Experience Commerce Download page.

To download the Sitecore XC 9.2 release package and prerequisites:

1. Download and install Redis.

    > **NOTE**
    > Sitecore recommends using Redis for Linux for production installations. The version for Windows should only be used for development or non-production single machine deployments.

2. Open a browser and go to the Sitecore Experience Commerce Download page.

3. Download the Sitecore Experience Commerce release package (`Packages for On-Premises 2019.08-x.x.xxx`).

4. Extract the contents of the zip file to the location from which you are deploying Sitecore XC (for example, `c:\deploy`).
   The extraction process results in multiple .zip files.

5. Extract the content of the `SIF.Sitecore.Commerce.zip` file.

6. Download the following software to a folder in your local deployment folder:

    • Sitecore PowerShell Extensions 5.0 for Sitecore 9.2 (available from the Sitecore Experience Accelerator Download page)

    • Sitecore Experience Accelerator 1.9 (available from the Sitecore Experience Accelerator Download page)

    • MSBuild Microsoft Visual Studio Web targets (available from Nuget)

    > **NOTE**
    > When you unpack the Web targets NuGet package, copy the `\tools \VSToolsPath\Web\Microsoft.Web.XmlTransform.dll` file into a folder and note the path.

3. Installing Sitecore XC

The Sitecore XC release package includes PowerShell scripts for installing Sitecore XC. The `Deploy-Sitecore-Commerce.ps1` script (located in the *SIF Sitecore Commerce* folder) installs all of the Sitecore XC modules and the SXA Storefront site.

This chapter contains the following sections:

- Customize the deployment script
- IIS setup
- Run the deployment script

3.1. Customize the deployment script

The Sitecore XC deployment script executes a single command to deploy Sitecore XC, and includes a number of parameters that you must change. Sitecore recommends that you modify the existing deployment script and save it with a new name (to preserve a record of the factory default script).

After you specify values and paths to reflect your own deployment environment you can run the script to install the solution. If there are any parameters for which no value is specified, the script prompts you to enter a value during installation.

To customize the deployment script:

1. Navigate to the `SIF Sitecore Commerce` folder that you unzipped earlier (for example, `c:\deploy\SIF.Sitecore.Commerce.x.x.xxx\`).

2. Open the `Deploy-Sitecore-Commerce.ps1` script file in a text editor.

3. Save a copy of the file with a new name (for example, `MyDeploy-Sitecore-Commerce.ps1`).

4. Specify values for the following parameters, according to your own environment. In particular, you should make sure that the path values correspond to the locations where you unzipped or copied files needed for the installation.

> **NOTE**
> By default, Sitecore XC parameters values are aligned with the Sitecore Experience Platform (XP0) default parameters values. If your Sitecore XP deployment uses custom value, make sure to customize the Sitecore XC deployment script accordingly.

Parameter	Description
SiteNamePrefix	Prefix used as a variable for SOLR, the website and the database instances. The default value matches the Sitecore XP default (for example "`xp0`").
skipInstallDefaultStorefront	Specifies whether or not to by pass the installation of the default SXA Storefront. By default, the XC installation script also deploys the SXA Storefront.
SqlUser	Variable used for `SqlAdminUser` (A SQL user with sysadmin privileges).
SqlPass	Variable used for `SqlAdminPassword`.
IdentityServerSiteName	Variable used to compose the value of the `SitecoreIdentityServerUrl`. (This parameter is used as value for other parameters, for example, `SitecoreIdentityServerApplicationName`, `SitecoreIdentityServerUrl`)
Path	The path to the `Master_SingleServer.json` file provided in the `SIF.Sitecore.Commerce` package.
SiteName	Name of your Sitecore site (for example, "`xp0`")
SiteHostHeaderName	Host header for your Sitecore site.
InstallDir	Location of the Sitecore site
XConnectInstallDir	Location of the xConnect site.

Parameter	Description
CommerceInstallRoot	The path to the inetpub folder where Commerce is installed.
CommerceServicesDbServer	Location of the database server where you want to deploy the Commerce databases.
CommerceServicesDbName	Name of the database for the Commerce Services shared database.
CommerceServicesGlobalDbName	Name of the database for the Commerce Services global database.
SitecoreDbServer	Location of the database server hosting the Sitecore databases (same value used for $SqlServer during Sitecore XP installation).
SitecoreCoreDbName	Name of the Sitecore core database.
SqlDbPrefix	Parameter variable (string) used as part of the name of the Sitecore core database and master database.
SqlAdminUser	A SQL user with sysadmin privilege.
SqlAdminPassword	The password for the SQL user with sysadmin privilege (SqlAdminUser)
SitecoreDomain	The name of the Sitecore domain.
SitecoreUsername	Name of the Sitecore user account.
SitecoreUserPassword	Password for the Sitecore XP user account, as define in your Sitecore XP deployment.
CommerceSearchProvider	The type of Search provider you are using for your deployment (Solr or Azure).
SolrUrl	URL for the Solr service (same value used for the Sitecore XP installation), if the Search provider is Solr.
SolrRoot	Path to Solr installation (same value used for the Sitecore XP installation), if the Search provider is Solr.
SolrService	Name of the Solr service (same value used for the Sitecore XP installation), if the Search provider is Solr.
SolrSchemas	Path to the Commerce Solr schemas (provided as part of the SIF.Sitecore.Commerce package), if the Search provider is Solr.
CommerceServicesPostfix	Postfix appended to Commerce services folders names and site names. The postfix allows you to host more than one Commerce installment on one server.
CommerceServicesHostPostfix	Postfix used as the root domain name (two-levels) to append as the hostname for Commerce services. By default, all Commerce services are configured as sub-domains of the domain identified by the postfix. **NOTE** Postfix validation enforces the following rules: • The first level (TopDomainName) must be 2-7 characters in length and can contain alphabetical characters (a-z, A-Z) only. Numeric and special characters are not valid. • The second level (DomainName) can contain alpha-numeric characters (a-z, A-Z, and 0-9) and can include one hyphen (-) character. Special characters (wildcard (*), for example, are not valid.

Parameter	Description
SearchIndexPrefix	Prefix for the Search index. Using the `SiteName` value for the prefix is recommended.
EnvironmentsPrefix	String used as a prefix in the `EnvironmentName` setting in the `config.json` file for each CE role.
Environments	The list of environments where to run `EnsureSyncDefaultContentPaths` and `InitializeCommerceServices` tasks.
EnvironmentsGuids	Commerce environments GUIDs used to clean existing REDIS cache during deployment. **NOTE** Default parameter values correspond to the default Commerce environment GUIDS.
MinionEnvironments	The environments running the minions service. (This is required for running the `FullIndexMinion` on `CatalogItems` list.)
AzureSearchServiceName	Name of the Azure Search service, if the Search provider is Azure.
AzureSearchAdminKey	The value of the admin API-key to access the Azure Search service, if the Search provider is Azure.
AzureSearchQueryKey	The value of the query API-key to access the Azure Search service, if the Search provider is Azure.
CommerceEngineWdpFullPath	Full path to the Commerce Engine service WDP package.
CommerceOpsServicesPort	Port for the Commerce Ops Service. Default value is 5015.
CommerceShopsServicesPort	Port for the Commerce Shops Service. Default value is 5005.
CommerceAuthoringServicesPort	Port for the Commerce Authoring Service. Default value is 5000.
CommerceMinionsServicesPort	Port for the Commerce Minions Service. Default value is 5010.
BizFxPackage	Full path to the Sitecore BizFx Server WDP package.
BizFxPort	Port for the Commerce Business Tools. Default value is 4200.
CommerceEngineCertificateName	The name of the certificate generated during the installation process and that is used for communication between CE Connect and Commerce Engine roles.
RedisConfiguration	URL of the Redis service.
RedisInstanceName	The name of the Redis instance.
RedisInstallationPath	Path to the Redis installation, for example, `C:\Program Files\Redis`.
SiteUtilitiesSrc	Path to the `SiteUtilityPages` folder (part of the SIF Sitecore Commerce package).
HabitatImagesWdpFullPath	Path to the `Sitecore.Commerce.Habitat.Images.OnPrem.scwdp.zip` file.
AdventureWorksImagesWdpFullPath	Path to the Adventure Works Images.OnPrem.scwdp.zip file
CommerceConnectWdpFullPath	Path to the `Sitecore Commerce Connect Core <version>.scwdp.zip` file.
CommercexProfilesWdpFullPath	Path to the `Sitecore Commerce ExperienceProfile Core <version>.scwdp.zip` file.
CommercexAnalyticsWdpFullPath	Path to the `Sitecore Commerce ExperienceAnalytics Core <version>.scwdp.zip` file.

Parameter	Description
`CommerceMAWdpFullPath`	Path to the `Sitecore Commerce MarketingAutomation Core <version>.scwdp.zip` file.
`CommerceMAForAutomationEngineZIPFullPath`	Path to the `Sitecore Commerce Marketing Automation for AutomationEngine <version>.zip` file.
`CEConnectWdpFullPath`	Path to the `Sitecore Commerce Engine Connect OnPrem <version>.scwdp.zip` file.
`PowerShellExtensionsModuleZIPFullPath`	Path to the location where you downloaded Sitecore PowerShell Extensions package.
`SXAModuleZIPFullPath`	Path to the location where you downloaded Sitecore Experience Accelerator package.
`SXACommerceWdpFullPath`	Path to the `Sitecore Commerce Experience Accelerator <version>.scwdp.zip`file.
`SXAStorefrontWdpFullPath`	Path to the `Sitecore Commerce Experience Accelerator Storefront <version>.scwdp.zip` file.
`SXAStorefrontThemeWdpFullPath`	Path to the file `Sitecore Commerce Experience Accelerator Storefront Themes <version>.scwdp.zip`.
`SXAStorefrontCatalogWdpFullPath`	Path to the `Sitecore Commerce Experience Accelerator Habitat Catalog <version>.scwdp.zip` file.
`MergeToolFullPath`	Path to the location where you downloaded the `Microsoft.Web.XmlTransform.dll` file. **NOTE** This DLL file is included as part of the Nuget package you downloaded previously.
`UserDomain`	Domain of the local account used for the various application pools created as part of the deployment
`UserName`	User name for a local account to be set up for the various application pools that are created as part of the deployment.
`UserPassword`	User password for authentication.
`SitecoreIdentityServerApplicationName`	Name of the Sitecore Identity server application. (Determined by the value of the `IdentityServerSiteName` variable.
`SitecoreIdentityServerHostUrl`	Url of the Sitecore Identity server.
`BizFxSiteName`	Name of the Sitecore XC Business Tools server.
`BraintreeMerchantId`	The Braintree Merchant Id
`BraintreePublicKey`	The Braintree Public Key
`BraintreePrivateKey`	The Braintree Private Key
`BraintreeEnvironment`	The Braintree Environment

5. If you want to install the Sitecore XC solution in a Commerce-Engine only deployment (that is, without installing the SXA Storefront), you can specify that the script omits the SXA modules in the `Install-SitecoreConfiguration` command, after the parameters block:

```
Install-SitecoreConfiguration @params -Skip
InstallSXASolrCores, InstallPowershellExtensions, InstallSXAFrameworkModule,
InstallSXAStorefrontModule, CreateDefaultTenantAndSite, PopulateSXAIndexesSchema,
RebuildSXAIndexes
```

6. When you have made your changes to the custom deployment script, save the file.

3.2. IIS setup

If the Sitecore XP IIS site name is different from its application pool name (by default, they are the same), you must change the values in the Sitecore XC deployment scripts for the `StopAppPool` and `StartAppPool` parameters in the `SXAStorefront.Preconfigure.json` file to reflect the correct application pool name.

3.3. Run the deployment script

To run your customized Sitecore XC deployment script:

1. In IIS Manager, restart the Sitecore Identity service.

   IMPORTANT

   After you have restarted the service, do not browse to the Sitecore Identity service. Run the deployment script (by performing the following steps) before accessing the Sitecore Identity service.

2. Launch PowerShell as an administrator

3. Run the customized deployment script by executing the following command (using the file name you used for your deployment script), for example:

   ```
   c:\deploy\<path-to-SIF-folder>\MyDeploy-Sitecore-Commerce.ps1
   ```

   NOTE

   The installation script performs tasks that update the Sitecore databases. If you attempt to re-run the Sitecore XC deployment script after a Sitecore database was altered by a previous installation attempt, the script fails with an error message. To avoid this error, you can modify the script to skip or remove the tasks previously completed and run the script again. Otherwise, you must uninstall and re-install Sitecore Experience Platform and Sitecore Commerce XC.

4. Post-installation steps

After you have successfully installed the Sitecore XC software, you must complete the following tasks to complete your deployment:

- Update the Storefront theme (optional)
- Configure user accounts

4.1. Update the Storefront theme (optional)

By default, the Sitecore XC deployment script installs the SXA Storefront site with the *Storefront Mock-up* theme.

You can assign a new Storefront-branded theme, as described in the topic on the Sitecore Documentation site.

You must re-publish the Storefront site for your changes to take effect.

4.2. Configure user accounts

After you have deployed your Sitecore XC solution, you must create user accounts and assign the appropriate roles.

> **NOTE**
> Every Sitecore XC user who requires access to the Business Tools must have the *Commerce Business User* role assigned, at a minimum.

You create users and   assign roles using the **User Manager** tool on the **Sitecore Launchpad**.

Refer to the User roles and permissions topic for information on the the pre-defined roles and associated permissions for the Sitecore XC Business Tools.

5. Uninstall the Sitecore XC

You can uninstall Sitecore XC when you want to start with a fresh deployment. You use the Sitecore Installation Framework (SIF) to uninstall the Sitecore XC on-premise topology.

> **WARNING**
>
> The uninstall script removes Commerce Engine roles and their respective databases. The script to uninstall Sitecore Experience Commerce (XC) does not remove Sitecore Experience Platform (XP). After you uninstalled Sitecore XC, your Sitecore XP deployment may become unstable. Sitecore recommends that you also uninstall the Sitecore Experience Platform (XP) after you uninstall Sitecore XC.

To uninstall Sitecore Experience Commerce, change the `Install-SitecoreConfiguration` cmdlet to `Uninstall-SitecoreConfiguration`. For example:

Change:

```
Install-SitecoreConfiguration @params -Verbose *>&1 | Tee-Object "$PSScriptRoot\XC-Install.log
```

to:

```
Uninstall-SitecoreConfiguration @params -Verbose *>&1 | Tee-Object "$PSScriptRoot\XC-Unstall.log
```

Run the script and the topology is removed.

For instructions on how to uninstall your Sitecore XP single topology deployment, refer to the Sitecore XP *Quick Installation Guide for Developer Workstation*, available on the Sitecore Download site .

6. Troubleshooting

This section lists issues that can arise during the initial deployment of Sitecore Experience Commerce and proposes possible solutions.

- Installation script fails to create a tenant and storefront site
- Default storefront site fails to load or loads without catalog navigation bar
- Install-SitecoreConfiguration: The service cannot accept control messages at this time
- Remove completed tasks from the script to resume deployment

6.1. Installation script fails to create a tenant and storefront site

If the installation process fails to create a tenant and default storefront site, you can manually create a tenant and storefront site by following steps described in this topic.

6.2. Default storefront site fails to load or loads without catalog navigation bar

If, after completing the deployment procedure, the default storefront site fails to load or loads without displaying the catalog navigation bar, you can perform the following procedures as possible solutions:
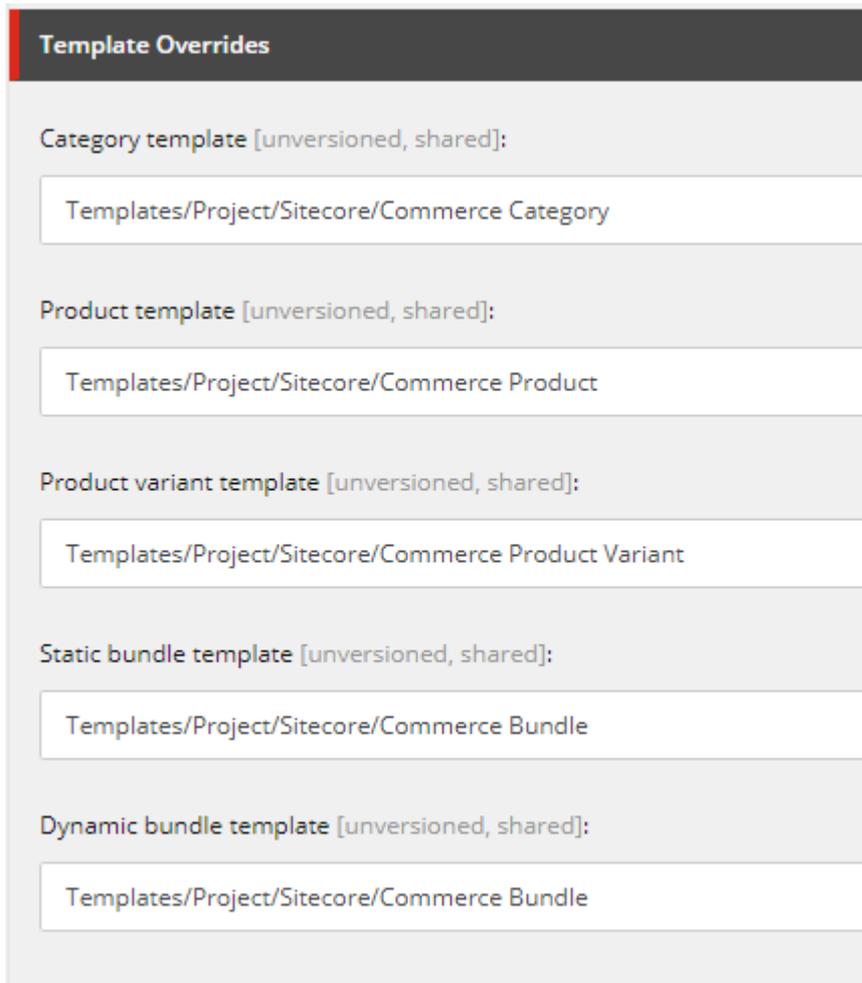
- Verify the template overrides values
- Verify catalog configuration
- Verify the site grouping configuration
- Refresh the Commerce cache and data templates
- Republish the site
- Rebuild the Solr index

6.2.1. Verify the template overrides values

If the template overrides values of the Habitat Master catalog do not match the default storefront
values, the storefront site fails to load properly.

To verify the template overrides for the default storefront catalog:

1. In the Content Editor, navigate to `/sitecore/content/Sitecore/Storefront/Home/
Catalogs/Habitat_Master`.

2. Go to the **Template Overrides** section, and verify that the value template override. The values
for the Habitat_Master should be as follows:

6.2.2. Verify the catalog configuration

If the default Habitat catalog configuration contains errors, the storefront site or catalog information
may fail to load properly.

To verify the default storefront catalog configuration:

1. In the Content Editor, navigate to `/sitecore/content/Sitecore/Storefront/Settings/
Commerce/Catalog Configuration`.

2. Go to the **Commerce** section, and verify that values for the **Catalog** and **Start Navigation
Category** fields are set as follows:

6.2.3. Verify the site grouping configuration

If the host name value specified in the storefront site grouping configuration does not match the default storefront hostname, the default storefront site cannot load.

To verify the site grouping configuration:

1. In the Content Editor, navigate to `/sitecore/content/Sitecore/Storefront/Settings/ Site Grouping/Storefront`.

2. Go to the **Basic** section, and verify that the field **Host Name (use* as wild card and | to list more values)** is set to *sxa.storefront.com*.

6.2.4. Refresh the Commerce cache and data templates

A staled Commerce cache or obsolete data templates may prevent the default storefront from loading or displaying properly.

To refresh the Commerce cache:

1. In the Content Editor, click the **Commerce** tab.

2. On the ribbon, click **Refresh Commerce Cache**.

To refresh data templates:

1. In the Content Editor, click the **Commerce** tab.

2. On the ribbon, click **Delete Data Templates**.

3. On the ribbon, click **Update Data Templates**.

6.2.5. Re-publish the site

If you made any changes to the storefront configuration or settings, you must republish the default storefront site.

6.2.6. Rebuild the Solr index

After you publish the storefront, you should rebuild the Solr XP index.

6.3. Install-SitecoreConfiguration: The service cannot accept control messages at this time

If the Sitecore XC deployment script fails with an error message similar to the one below, perform the following procedure.

```
Install-SitecoreConfiguration: The service cannot accept control messages at this time. (Exception
from HRESULT: 0x80070425) At C:\Program Files\WindowsPowerShell\Modules\SitecoreInstallFramework
\2.1.1\Public\Install-SitecoreConfiguration.ps1:641 char:25 + & $entry.Task.Command @paramSet |
Out-Default + ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ + CategoryInfo : NotSpecified: (:) [
```

To resolve this issue:

1. In IIS manager, re-start the app pool and the application.

2. Run the deployment script again.

6.4. Remove completed tasks from the script to resume deployment

As a general rule, when a script task fails during execution, you can remove the completed tasks from the `\Configuration\Commerce\Master_SingleServer.json` file, and attempt to resume the deployment.

To remove completed tasks from the script:

1. In the folder where you deployed the `SIF.Sitecore.Commerce` package, open the `Configuration\Commerce\Master_SingleServer.json`.

2. In the `Master_SingleServer.json`, locate the `"Tasks"` section, remove completed tasks, and save your changes.

3. Run the `Deploy-Sitecore-Commerce.ps1` script again. The script performs the remaining deployment tasks.