Sitecore Publishing Service Module Installation and Configuration Guide

Sitecore Publishing Service Module 9.2.0

How to install and configure the Sitecore Publishing Service Module

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Chapter 1

Installing and Configuring the Sitecore

Publishing Service Module

The Sitecore Publishing Service Module is distributed as a standard Sitecore package. However, you must perform some manual configuration steps after the installation.

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1.1 Requirements

The Sitecore Publishing Service Module is distributed as a Sitecore package:

- Sitecore Publishing Service Module 9.2.0 zip file

  This package contains the UI for the publishing service.

The prerequisites for the Sitecore Publishing Service Module 9.2.0 are:

- Sitecore XP 9.2.0.

- A compatible Publishing Service version, for example, Publishing Service 4.1.

1.2 Installing the Sitecore Publishing Service Module

The Sitecore Publishing Service Module is distributed as a standard Sitecore package.

To install the package:

1. On the Sitecore Downloads page, download the installation package for the module.
2. On the Sitecore Launchpad, click **Control Panel**, and in the **Administration** section, click **Install a package**.

   The **Install a Package** wizard guides you through the installation process.
3. Before you close the wizard, select the **Restart the Sitecore Client** option.

1.3 Post-installation Configuration

You must configure the Sitecore Publishing Service Module before you can use it.

1.3.1 Service Endpoints

To configure the service endpoints:

1. In the *Website root* folder, go to the `App_Config\Modules\PublishingService\Sitecore.Publishing.Service.Config` file.

    Note
    Do not modify the file directly. Create a patch file that edits the configuration settings on runtime.

2. Add a configuration file that overrides the `PublishingService.UrlRoot` setting to point to your service module:

```
============================================================
***Important! Copy and save this information***
============================================================
   BEFORE YOU CLICK NEXT:
     - Ensure you have installed and configured the Sitecore Publishing Service (this
module only enables integration with the service)
          Documentation detailing how to install the service is available separately.

          [Warning] This module will not work without a properly configured service
instance. No items will be able to be published.

     AFTER YOU CLOSE THE WIZARD:
     After the package is installed, follow these steps to complete the Sitecore
Publishing Service installation:
     - Configure the service endpoints:
          Add a configuration file which overrides the 'PublishingService.UrlRoot'
setting to point to your service module
          Make sure the address contains a trailing slash
          e.g.
               <?xml version="1.0" encoding="utf-8"?>
               <configuration xmlns:patch="http://www.sitecore.net/xmlconfig/">
                 <sitecore>
                   <settings>
                     <setting name="PublishingService.UrlRoot"
value=http://sitecore.publishing/></setting>
                   </settings>
                 </sitecore>
               </configuration>
- Configure the Content Delivery Servers:
Ensure that the following file is in the website
'App_Config/Modules/PublishingService' directory:
* Sitecore.Publishing.Service.Delivery.config
 Ensure that the following files exist in the website 'bin' directory:
* Sitecore.Publishing.Service.dll
* Sitecore.Publishing.Service.Abstractions.dll
* Sitecore.Publishing.Service.Delivery.dll
* Sitecore.Framework.Condition.dll
```

Important
Make sure that the URL ends with a trailing slash and that it is formatted correctly.

1.3.2 Content Delivery Servers

You must use the delivery configuration file to configure the Content Delivery servers to use the publishing service.

To enable the configuration file:

1. In the `App_Config/Modules/PublishingService` folder, ensure that the following file is stored on the website:

   o `Sitecore.Publishing.Service.Delivery.config`

2. Ensure that the `Sitecore.Publishing.Service.Delivery.config` file is configured correctly to support your Sitecore installation.

   For more information about how to configure this file, see the section *Configuring Cache Clearing and Indexing*.

3. Ensure that the following files are in the website *bin* directory:

   o `Sitecore.Publishing.Service.dll`

   o `Sitecore.Publishing.Service.Abstractions.dll`

   o `Sitecore.Publishing.Service.Delivery.dll`

   o `Sitecore.Framework.Conditions.dll`

1.3.3 Configuring Cache Clearing and Indexing

The `Sitecore.Publishing.Service.Delivery.config` is responsible for raising events to rebuild the search indexes and clear data caches on the target instance.

If additional custom indexes have been created on a Sitecore instance, each index name must be added to the `publishingservice:searchindex.rebuild` setting in the `IndexNames` section:

```
<event name="publishingservice:searchindex:rebuild">
  <handler
type="Sitecore.Publishing.Service.Delivery.TargetSearchIndexRebuildHandler,
Sitecore.Publishing.Service.Delivery" method="RebuildTargetSearchIndex">
    <IndexNames hint="list:AddIndex">
      <index>sitecore_web_index</index>
      <customIndex>MyCustomIndex</customIndex>
    </IndexNames>
  </handler>
</event>
```

The following table describes the configuration that is required to support different setups:

Instance roles	Sitecore.Publishing.Service.Delivery.config, file	publishingservice:cache:clear, event, default processor	publishingservice:searchindex:rebuild, event, default processor
Indexing instance - for example, CM, CD, and so on.	Enable	Enable	Enable
CD – that is *not* responsible for indexing.	Enable	Enable	Disable

Instance roles	Sitecore.Publishing.Service.Delivery.config, file	publishingservice:cache:clear, event, default processor	publishingservice:searchindex:rebuild, event, default processor
CM – that is *not* responsible for indexing; and is supposed to check the data in the target DBs, for example, the *web* database from this CM.	Enable	Enable	Disable
CM – that is *not* responsible for indexing; and is *not* supposed to check the data in the target DBs, for example, the web database from this CM.	Disable	--	--

1.4 Recovery

If an item is modified during service downtime, a recovery process is activated and this process stores any modifications locally. When the service is available again, it recovers the stored changes and pushes them to the service.

The recovery strategy determines how often the recovery process attempts to recover the changes and push them to the publishing service.

To change the frequency of the recovery attempts, change the `interval` setting:

```xml
<?xml version="1.0" encoding="utf-8" ?>
<configuration xmlns:patch="http://www.sitecore.net/xmlconfig/">
  <sitecore>
    <settings>
      <setting name="PublishingService.TimedRecoveryStrategyInterval" value="300"></setting>
    </settings>
  </sitecore>
</configuration>
```

1.5 Publisher Operations Service

To capture the scenarios where the service is down, the `Publisher Operations` service executes requests inside a circuit breaker. When the circuit breaker detects a request error, it tracks the number of failures. When the service detects that the maximum allowed number of failures has been reached, it stops sending requests for a specified period.

You can configure the number of failures and the length of the timeout period:

```xml
<?xml version="1.0" encoding="utf-8" ?>
<configuration xmlns:patch="http://www.sitecore.net/xmlconfig/">
  <sitecore>
    <settings>
                <!-- Number of exceptions to trigger the circuit breaker-->
                    <setting name="PublishingService.ExceptionsAllowedBeforeBreak"
value="3"></setting>
                    <!-- Number of seconds to wait before retrying-->
                    <setting name="PublishingService.SecondsBeforeRetrying"
value="300"></setting>


    </settings>
  </sitecore>
</configuration>
```

1.6 Security

When you install the Publishing Service Module, the *Publishing Service Administrator* role is created. This role has full access to the Publishing Service features, including the full republish functionality on the Publishing Dashboard.

Note

The *Sitecore Client Publishing* and the *Sitecore Client Advanced Publishing* roles do not grant access to the full republish functionality.

To avoid security permission conflicts, ensure that the users who must be able to perform a full republish are members of the *Publishing Service Administrator* role and not members of the *Sitecore Client Publishing* or *Sitecore Client Advanced Publishing* roles.

If you are using custom roles, make sure that these roles do not inherit permissions from the *Sitecore Client Publishing* or *Sitecore Client Advanced publishing* roles.

- To enable users in your custom roles to perform a full publish, you must edit the configuration file and specifically grant the custom security roles permission to perform a full site publish.

Important

You can only grant permission to perform a full site publish to a security role, not an individual user. Furthermore, you cannot grant permission to perform a full site publish to a security role by only editing the security roles in Sitecore.

1.6.1 Granting Permission to Perform a Full Republish

You can only explicitly grant permission to perform a full site publish to specific security roles in the configuration file:

```xml
<?xml version="1.0" encoding="utf-8" ?>
<configuration xmlns:patch="http://www.sitecore.net/xmlconfig/">
  <sitecore>
    <publishing.service>
      <api>
        <services>
          <allowFullPublishRoles>
            <role>sitecore\Publishing Service Administrator</role>
          </allowFullPublishRoles>
        </services>
      </api>
    </publishing.service>
  </sitecore>
</configuration>
```

1.6.2 Granting Permission to Publish

Users who are members of the *Publishing Service Administrator*, or the *Sitecore Client Publishing* security roles can use the publishing service dialogs in Sitecore. You can add additional roles to this list.

You define the roles that have permission to use the publishing service dialogs in the `Sitecore.Publishing.Service.config` configuration file, in the `allowedPublishRoles` section.

```xml
<?xml version="1.0" encoding="utf-8" ?>
<configuration xmlns:patch="http://www.sitecore.net/xmlconfig/">
  <sitecore>
    <publishing.service>
      <api>
```

```xml
        <services>
          <allowedPublishRoles>
            <!--This is a list of the roles that are able to perform a publish-->
            <role>sitecore\Publishing Service Administrator</role>
            <role>sitecore\Sitecore Client Publishing</role>
          </allowedPublishRoles>
        </services>
      </api>
    </publishing.service>
  </sitecore>
</configuration>
```

1.7 Operation Emitter

The operation emitter buffers and streams item changes to the publishing service. You can configure it to stream content more frequently or in larger batches.

```xml
<?xml version="1.0" encoding="utf-8" ?>
<configuration xmlns:patch="http://www.sitecore.net/xmlconfig/">
  <sitecore>
    <settings>
        <!-- Interval in ms of the buffering window-->
            <setting name="PublishingService.EventBufferingWindowsMaxInterval"
value="2000"></setting>
            <!-- The buffer size-->
            <setting name="PublishingService.EventBufferingMaxCount" value="50"></setting>
    </settings>  </sitecore>
</configuration>
```

1.8 Events

The Publishing Service Module exposes a new event in Sitecore:

- publishingservice:publishend

When the publishing service completes a publishing job, this event is triggered once for the entire job in addition to the three events from the existing publishing system:

- publish:begin
- publish:complete
- publish:fail

Chapter 2

Publishing with the Sitecore Publishing Service

Module

Content authors need to know how to publish a website or an item with the Sitecore Publishing module.

This chapter contains the following sections:

- The Sitecore Publishing Service Module

- Publishing an Item

- Publishing a Website

- Publish all Items

- The Sitecore Commerce Server Connect Publishing Extension Package

2.1 The Sitecore Publishing Service Module

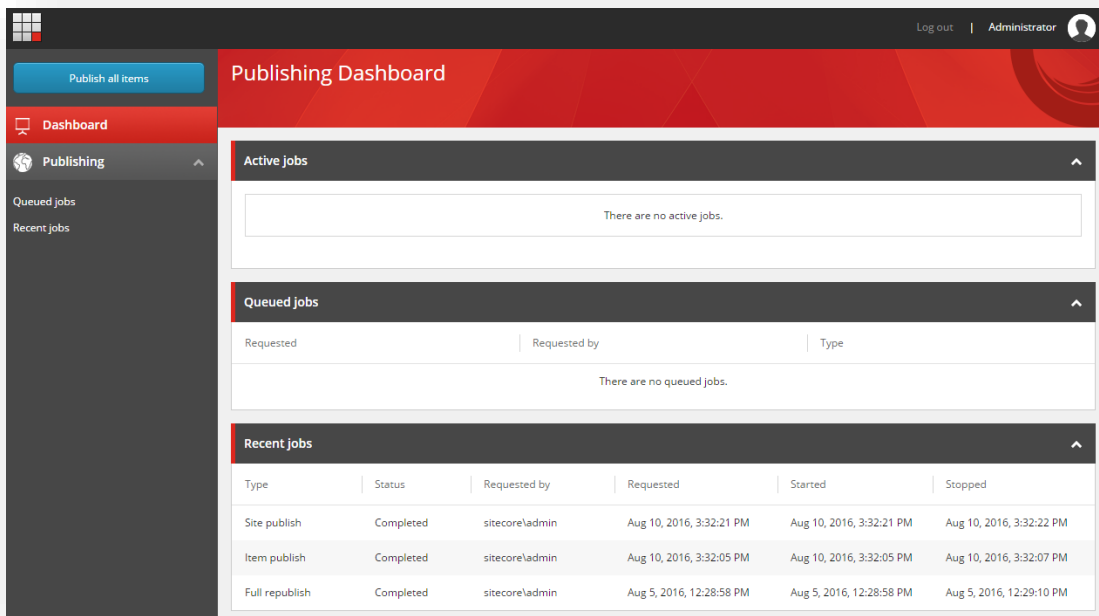In the Sitecore Publishing Service Module, you can choose to publish the entire website or a single item:

- **Item publishing** – publishes the item you select in either the Content Editor or the Experience Editor. The item can only be published if all its ancestors are publishable.

  When you publish an item, you can choose to include all its subitems and related items.

- **Site publishing** – publishes all the changes that have been made on your entire website since the last time the website was published. You can publish a site from the Content Editor or from the Sitecore Desktop.

- **Publish all items** – when you publish all items, you have the following two publishing options:

  o Publish the items that in the *Master* database are different from the equivalent item in the target database.

  o Publish all the items in your Sitecore installation regardless of when the items were last published. This requires a considerable amount of time and resources.

  Note
  Only users with the required access rights have the permission to perform this type of publishing.

2.1.1 The Publishing Dashboard

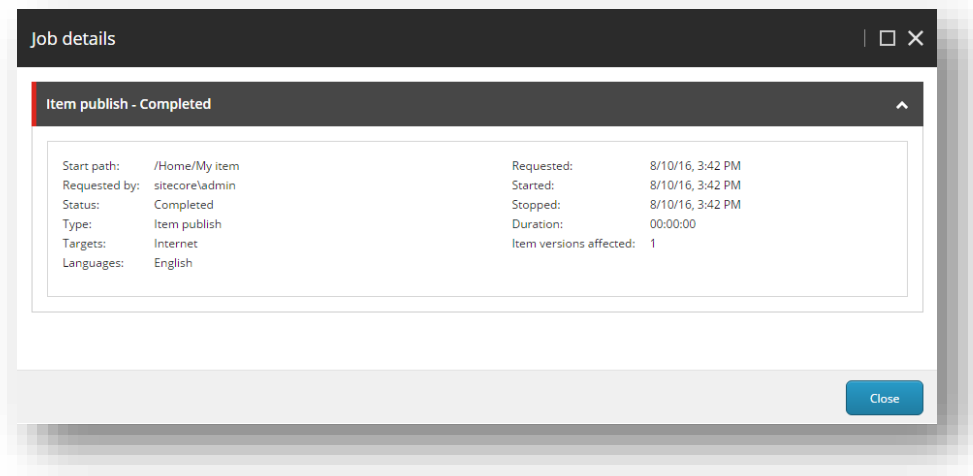The Publishing Dashboard gives you an overview of all the active, queued, and recent publishing jobs:

- **Active jobs** – the publishing jobs that are currently being published.
- **Queued jobs** – the publishing jobs that are waiting to be published.

- **Recent jobs** – the most recent publishing jobs that have been processed.

To see the details of a recent publishing job or a queued publishing job, click the job in one of the lists.
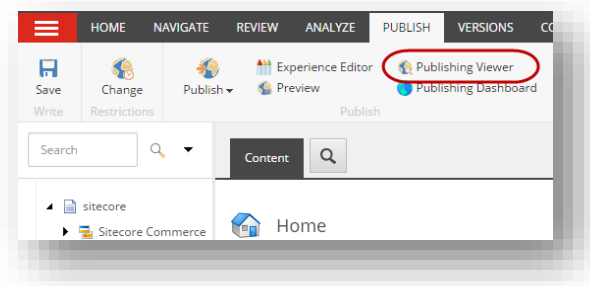

Note
There are no details to view for active publishing jobs.
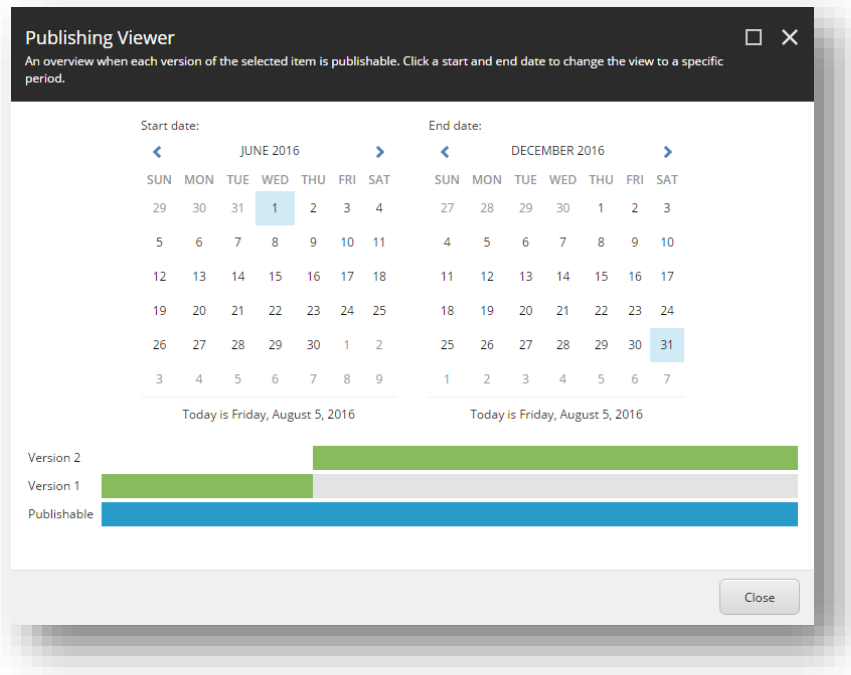
2.1.2 Publishing Viewer

Use the Publishing Viewer to get an overview of when the various versions of an item are publishable.

To see the Publishing Viewer for an item:

1. In the Content Editor, click the relevant item.

2. On the **Publish** tab, in the **Publish** group, click **Publishing Viewer**.

3. In the **Publishing Viewer** dialog box, specify a start and end date to see if the items' versions are publishable during that period.
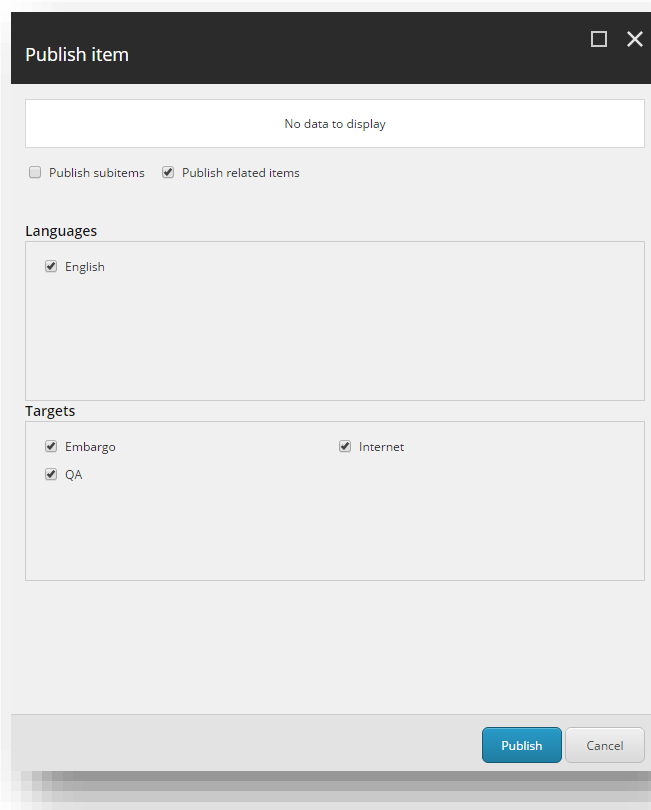
2.2 Publishing an Item

When you want to publish a single item to your website in one or more language versions, you perform an item publish from the Content Editor or the Experience Editor.

Note
To get an overview of when the different versions of an item are publishable, in the Content Editor, on the **Publish** tab, click **Publishing Viewer**.
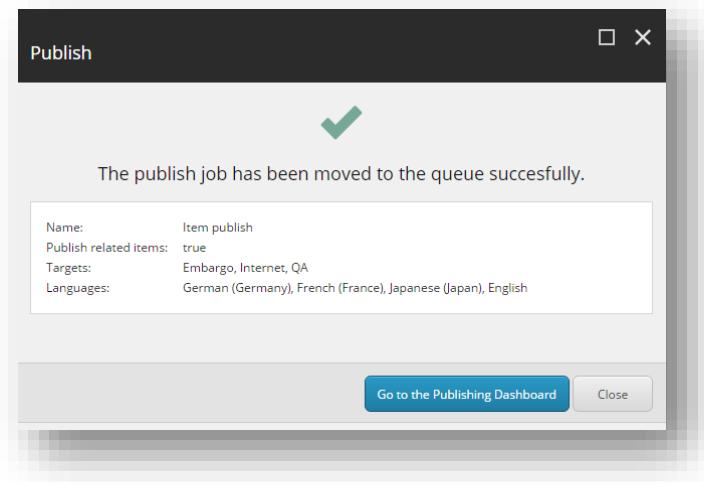
To publish a single item:

1. Open the **Publish** dialog box:

   o In the Content Editor, select the item that you want to publish. On the **Publish** tab, in the **Publish** group, click the **Publish** drop-down arrow, and then select **Publish item**.

   o In the Experience Editor, navigate to the page that you want to publish, and then on the **Home** tab, in the **Publish** group, click **Publish**.

2. In the **Publish item** dialog box, verify the item details and select:

   o **Publish subitems** to publish the current item and all its subitems.

   o **Publish related items** to publish the current item and all its related items, such as clone references, media references, and alias references.

3. Select the language versions of the item that you want to publish and the targets that you want to publish the item to.

4. To move the publishing job to the publishing queue, click **Publish**.

5. To get an overview of the active, queued, and recent publishing jobs, click **Go to the Publishing Dashboard**.
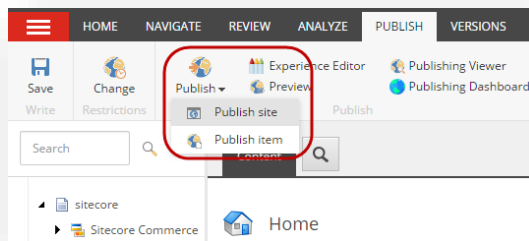
2.3 Publishing a Website

When you perform a site publish, you only publish the items that have changed since the site was last published.

Note
Users with the required access rights can publish all the items in your Sitecore installation at the same time regardless of when they were last published. This requires a considerable amount of time and resources. To publish all items, in the **Publishing Dashboard** click **Publish all items**.

To publish the changes made to your website:
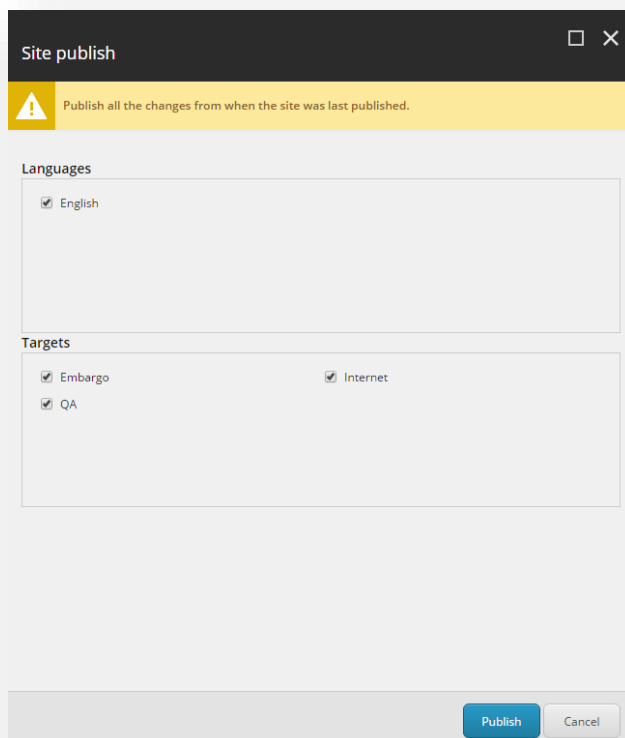
1. In the Content Editor, on the **Publish** tab, in the **Publish** group, click the **Publish** drop-down arrow, and then click **Publish site**.

Note
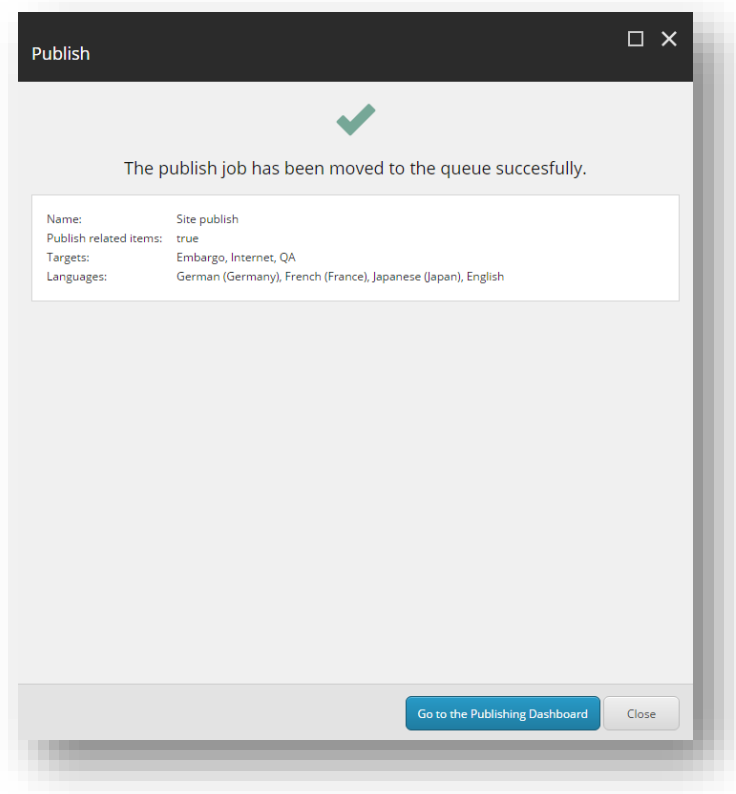You can also perform a site publish from the Sitecore Start menu.

2. In the **Publish** dialog, select the language versions that you want to publish and the targets that you want to publish the site to.

3. To move the publishing job to the publishing queue, click **Publish**.

4. To see an overview of the active, queued, and recent publishing jobs, click **Go to the Publishing Dashboard**.

2.4 Publish all Items

In the Publishing Dashboard, if you have the appropriate access rights, you can:

- Publish all the items in the *Master* database that are different from the corresponding items in the target database.

- Publish all the items in your Sitecore installation regardless of when the items were last published.

  When you publish all the items, the database and the publishing service are subject to a much larger load than usual and this requires a considerable amount of time and resources.
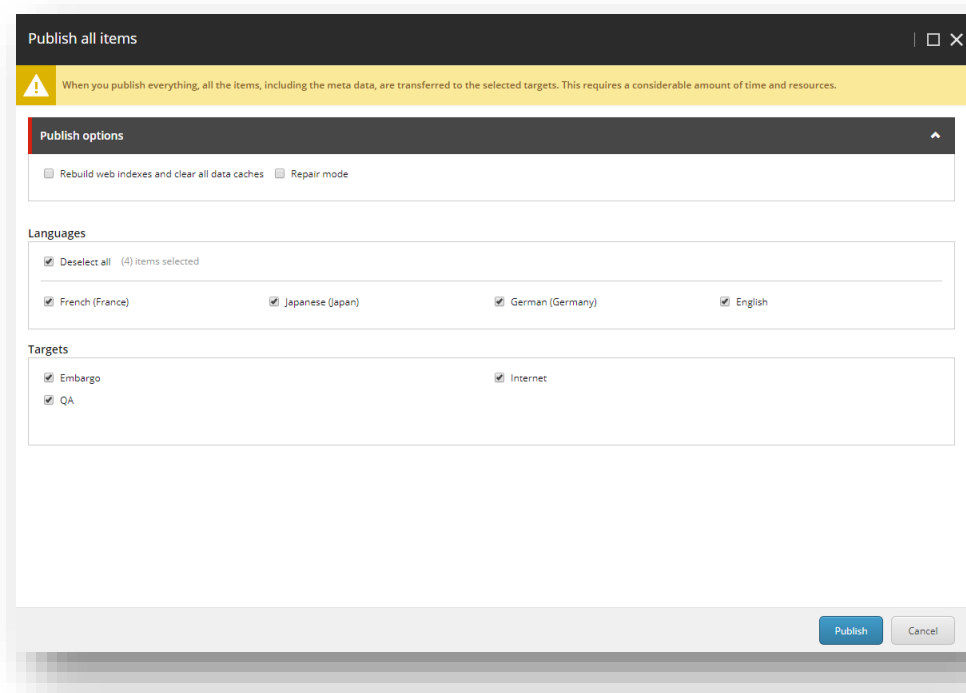
> **Note**
> To grant a specific security role permission to publish all items, you must configure the `Sitecore.Publishing.Service.Config` file. For more information, see the section Security

To publish items from the Publishing Dashboard:

1. In the Publishing Dashboard, click **Publish all items**.

   > **Note**
   > To see the **Publish all items** button, users must have the appropriate access rights.
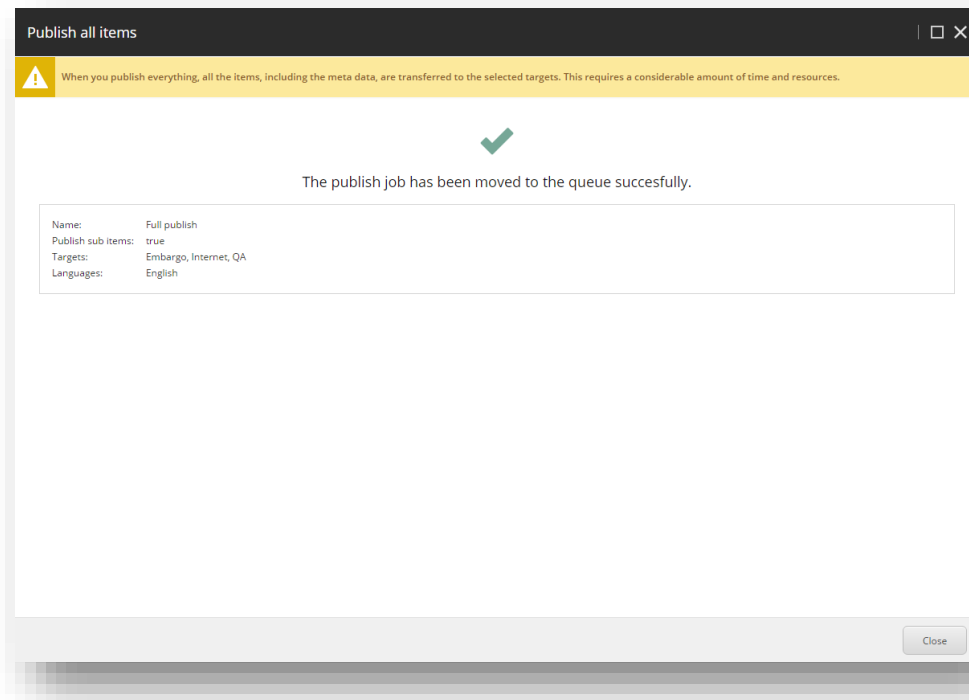

2. In the **Publish all items** dialog box:

   o To publish all the items in your installation regardless of when they were last published, select the **Full republish** check box.

   o To publish all the items in the *Master* database that are different from the corresponding items in the selected target database, clear the **Full republish** check box.

o   To publish a large number of items or to publish to a new publishing target, select the **Rebuild web indexes and clear all data caches** check box.

This clears the data level caches that contain references to the items that are published and re-builds the web indexes.

3. Select the language versions that you want to publish and the publishing targets that you want to publish the items to.

4. To move the publishing job to the publish queue, click **Publish**.

5. To see an overview of the active, queued, and recent publishing jobs, close the **Publish all items** dialog box.

2.5 The Sitecore Commerce Server Connect Publishing Extension Package

If you have the Sitecore Commerce Server Connect Publishing extension package installed, you can start staging projects directly from the **Site publish** dialog or the **Item publish** dialog and execute staging and publishing in parallel.
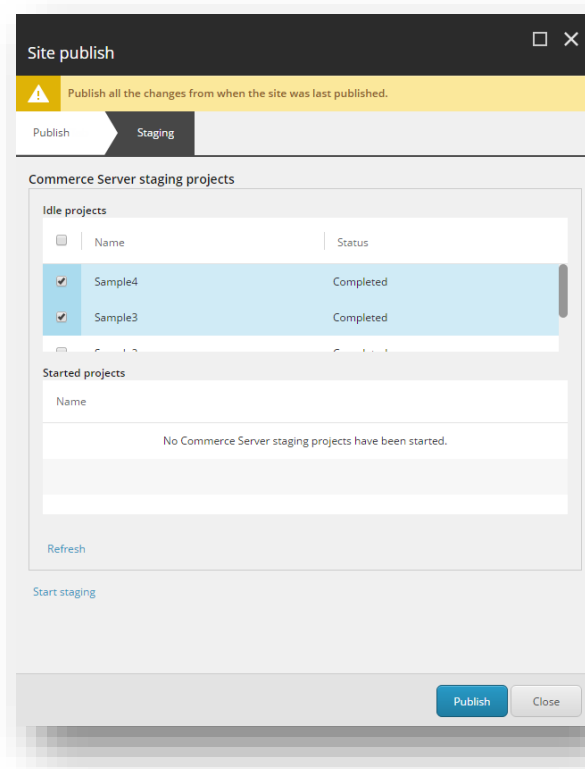
To install the extension package:

1. [Download](#) the `Sitecore Commerce Server Connect Publishing Extensions.8.2.update` package.

2. In a browser, go to `http://<your site>/sitecore/admin/UpdateInstallationWizard.aspx` and then follow the steps in the installation wizard.

Note
When the installation has finished, you see a summary of the installation. The potential problems that are listed can generally be ignored.

To start a staging project when you publish:

1. In the **Site publish** or **Item publish** dialog, click the **Staging** tab.

2. In the **Idle projects** list, select the projects that you would like to start and then click **Start staging**.

A notification appears indicating that the projects have started successfully and the *Idle projects* and the *Started projects* lists are updated accordingly.

3. If you want to move the publishing job to the publishing queue, click **Publish**, otherwise click **Close**.

4. To view the status of the started staging projects, refresh the lists in the publishing dialog.

5. If you have closed the publishing dialog, just open the dialog again to see the updated status of the projects. Alternatively, you can open the Commerce Server Staging Manager.

Chapter 3

Upgrading from Version 2.x to Version 9.2.0

You can upgrade to Sitecore Publishing Service Module 9.2.0 from version 2.x.

Note
To upgrade the Publishing Service, follow the instructions in the *Publishing Service Installation and Configuration Guide*.

Note
To upgrade Sitecore Publishing Service Module to version 9.2.0, you must first upgrade Sitecore Experience Platform to version 9.2.0. Before you upgrade from Sitecore XP 8.2 to Sitecore XP 9.2.0, you must disable the Sitecore Publishing Service. For more information, see this article.

This chapter contains the following sections:

- Upgrade the Publishing Service Module (CM Server)

- Upgrade the Publishing Service Module (CD servers)

3.1 Upgrade the Publishing Service Module (CM Server)

To upgrade the Publishing Service Module on your CM server:

1. On the Sitecore Downloads Page, download the installation package for the relevant module.

2. On the Sitecore Launchpad, click **Control Panel**, and in the **Administration** section, click **Install a package**. The **Install a Package** wizard guides you through the installation process.

3. When the wizard prompts you, choose to overwrite the files.

4. When the wizard displays the *Role 'sitecore\Publishing Service Administrator' will not be installed since it already exists* message, click **Continue**.

5. Copy your custom patch configuration files from `App_Config/Include` to `App_Config/Modules/PublishingService`.

6. In the `App_Config/Include` folder, delete all the `Sitecore.Publishing.Service.*` configuration files and your custom patch files.

7. Before you close the wizard, select the **Restart the Sitecore Client** option.

3.2 Upgrade the Publishing Service Module (CD servers)

To upgrade the Publishing Service Module on your CD servers:

1. Copy and replace the following files from the `\files\bin` directory in the installation package to each of your CD servers:

    o `Sitecore.Publishing.Service.dll`

    o `Sitecore.Publishing.Service.Abstractions.dll`

    o `Sitecore.Publishing.Service.Delivery.dll`

    o `Sitecore.Framework.Conditions.dll`

2. From the `App_Config/Modules/PublishingService` directory in the installation package, copy the `Sitecore.Publishing.Service.Delivery.config` file to each of your CD servers.

3. Copy your custom patch configuration files from the `App_Config/Include` folder to `App_Config/Modules/PublishingService`.

4. In the `App_Config/Include` folder, delete all the `Sitecore.Publishing.Service.*` configuration files and your custom patch files.

Chapter 4

Upgrading from Version 3.1.x / 4.0.0 to Version 9.2.0

You can upgrade to Sitecore Publishing Service Module 9.2.0 from version 3.1 or version 4.0.0.

Note
To upgrade the Publishing Service, follow the instructions within the Publishing Service Installation and Configuration Guide.

This chapter contains the following sections:

- Upgrade the Publishing Service Module (CM Server)

- Upgrade the Publishing Service Module (CD servers)

4.1 Upgrade the Publishing Service Module (CM Server)

To upgrade the Publishing Service Module on your CM server:

1. On the Sitecore Developer Portal, download the installation package for the relevant module.

2. On the Sitecore Launchpad, click **Control Panel**, and in the **Administration** section, click **Install a package**. The **Install a Package** wizard guides you through the installation process.

3. When the wizard prompts you, choose to overwrite files.

4. When the wizard displays the *Role 'sitecore\Publishing Service Administrator' will not be installed since it already exists* message, click **Continue**.

5. Before you close the wizard, select the **Restart the Sitecore Client** option.

4.2 Upgrade the Publishing Service Module (CD servers)

To upgrade the Publishing Service Module on your CD servers, copy and replace the following files from the `\files\bin` directory in the installation package to each of your CD servers:

- `Sitecore.Framework.Conditions.dll`
- `Sitecore.Publishing.Service.dll`
- `Sitecore.Publishing.Service.Abstractions.dll`
- `Sitecore.Publishing.Service.Delivery.dll`

Chapter 5

Publishing Service Support Matrix

Beginning with Sitecore XP 9.2.0, the versioning of the Sitecore Publishing Service Module corresponds with the versioning of the Sitecore Experience Platform and not the Publishing Service. The Publishing Service uses its own versioning.

We recommend that you update to the latest version of the Publishing Service and Publishing Service Module at the earliest opportunity.

The support matrix lists which versions of the Sitecore Experience Platform support which versions of the Sitecore Publishing Service Module and the Sitecore Publishing Service:

Sitecore Platform	Publishing Service Module	Publishing Service
8.2 Initial Release – 8.2 Update 1	1.1 Initial Release	1.1 Initial Release
8.2 Update-2	2.0 Initial Release	2.0 Initial Release
8.2 Update-2 – 8.2 Update-3	2.0 Update-1	2.0 Update-1
8.2 Update-2 – 8.2 Update-5	2.1 Initial Release	2.1 Initial Release
8.2 Update-2 – 8.2 Update-7	2.2 Initial Release	2.2 Initial Release
8.2 Update-2 – 8.2 Update-7	2.2 Update-1	2.2 Update-1
9.0 Initial Release	3.0 Initial Release	3.0 Initial Release
9.0 Initial Release – 9.0 Update-1	3.1 Initial Release	3.1 Initial Release
9.0 Initial Release – 9.0 Update-2	3.1 Update-1	3.1 Update-1
9.0 Initial Release – 9.0 Update-2	3.1 Update-2	3.1 Update-2
9.0 Initial Release – 9.0 Update-2	3.1 Update-3	3.1 Update-3
9.1 Initial Release – 9.1 Update-1	4.0 Initial Release	4.0 Initial Release
9.2.0 Initial Release	9.2.0 Initial Release	4.1.0 Initial Release