

Sitecore Experience Platform Upgrade Guide

Sitecore Experience Platform 8.2 Update 7

How to upgrade to Sitecore 8.2 Update 7



sitecore[®]
Own the experience[™]

Table of Contents

1.1	Prerequisites	3
1.2	Upgrade Process	4
1.2.1	Content Testing	4
1.2.2	Preconditions for Installing the Upgrade Package	4
1.2.3	Upgrade the Databases.....	4
1.2.4	Install the Upgrade Package.....	5
1.2.5	Review Custom Changes in Configuration Files	10
1.2.6	Update Solr Schema and Configs	11
1.3	Upgrade modules.....	12
1.3.1	Upgrade the Web Forms for Marketers module.....	12
1.4	Post-Installation Steps	13
1.4.1	Clear the Browser Cache	13
1.4.2	Publish the Site	13
1.4.3	Rebuild Search Indexes and the Link Database.....	13
1.4.4	Redeploy Marketing Definitions.....	13
1.4.5	Rebuilding the Reporting Database.....	14
1.4.6	Upgrade Multiple Instances.....	14
1.4.7	Upgrade the Session Database.....	14

1.1 Prerequisites

If you are upgrading from Sitecore 8.1 rev. 151003 (Initial Release) or later, you can upgrade directly to Sitecore 8.2 rev. 180406 (Update-7). However, if your solution is based on an earlier version of Sitecore, you must first upgrade to Sitecore 8.1 rev. 151003 (Initial Release).

You can download all the prerequisite components from the Sitecore Developer Portal - <https://dev.sitecore.net>.

Prerequisites for upgrading from Sitecore 8.1 or later:

- [Sitecore 8.1 rev. 151003 \(Initial Release\) or later](#).
- [Sitecore 8.2 rev. 180406 \(Update-7\) Update Package](#).
- [Sitecore Update Installation Wizard 2.0.2 rev. 170703.zip](#)
- For Microsoft SQL Server, you must download the following database upgrade scripts:

When upgrading from Sitecore XP 8.1:

- CMS82_BeforeInstall.sql
- SXP82U1_BeforeInstall.sql
- SXP82U6_BeforeInstall.sql

Note

Upgrading a solution that uses Oracle databases is not supported in any version of Sitecore XP 8.1.

When upgrading from Sitecore XP 8.2 rev. 160729 (Initial Release):

- SXP82U1_BeforeInstall.sql
- SXP82U6_BeforeInstall.sql

When upgrading from Sitecore XP 8.2 rev. 161115 (Update-1) to Sitecore Experience Platform 8.2 rev. 170728 (8.2 Update-5):

- SXP82U6_BeforeInstall.sql

When upgrading from Sitecore Experience Platform 8.2 rev. 171121 (Update-6):

- No database upgrade scripts are required.

To download the database upgrade script files, on the Sitecore Developer Portal, navigate to the [Sitecore Experience Platform 8.2 page](#), and in the **Upgrade options** section, click *Configuration files for upgrade*. The upgrade scripts are located in the `\Database Upgrade Script.zip` folder.

The upgrade scripts apply changes to Sitecore databases across all versions of Sitecore for compatibility purposes, and they also modify certain tables to support new functionalities or to increase performance. These changes are applied once, and only if the database requires it.

1.2 Upgrade Process

This section describes how to upgrade to Sitecore XP 8.2 rev. 180406 (Update-7).

As part of the upgrade process, some solutions might require redesigning. If you need more help and guidance, refer to the administrator and developer documentation on the Sitecore Documentation site – <https://doc.sitecore.net>.

1.2.1 Content Testing

Before you upgrade your Sitecore installation, you must stop all content tests. This prevents the start date of the tests from being overwritten with the upgrade date.

1.2.2 Preconditions for Installing the Upgrade Package

To ensure that the upgrade process is not interrupted, you must disable the Sitecore Experience Database (xDB) functionality, if you are using it. You must also disable all the modules, including the Web Forms for Marketers and Email Experience Manager (EXM) modules.

To disable the Sitecore Experience Database (xDB):

- In the `Sitecore.Xdb.config` file:
 - Set the `Xdb.Enabled` setting to `false`.
 - Set the `Xdb.Tracking.Enabled` setting to `false`.

Important

After the upgrade is completed, ensure that you enable the Sitecore Experience Database (xDB) by setting the `Xdb.Enabled` and `Xdb.Tracking.Enabled` parameters to `true`.

To disable the Email Experience Manager module:

1. Disable all the configuration files in the following folders by adding `.disabled` to the file extension:
 - `\Website\App_Config\Include\EmailExperience`
 - `\Website\App_Config\Include\Z.EmailExperience`
 - `\Website\App_Config\Include\ExperienceProfile\Sitecore.ExperienceProfile.Reporting.Sitecore.EmailExperience.ExperienceProfile.config`
2. In the `\Website\bin` folder of your website, disable all the files that begin with `Sitecore.EmailCampaign`, `Sitecore.EDS` or `Sitecore.EXM`.

To disable the Web Forms for Marketers module:

- Disable the following configuration file by adding `.disabled` to the file extension:
 - `\Website\App_Config\Include\Sitecore.Forms.config`

Important

When you have finished upgrading the Sitecore Experience Platform, you must also upgrade the modules. For more information about upgrading the modules, see the section *Upgrade modules*.

1.2.3 Upgrade the Databases

To upgrade the databases on solutions that are running any version of Sitecore XP 8.1:

1. Execute the `CMS82_BeforeInstall.sql` script for the *Core*, *Master*, and *Web* databases.

Sitecore Experience Platform Upgrade Guide

2. If you are using the Sitecore Experience Database (xDB) functionality, you must execute the `SXP82U1_BeforeInstall.sql` and the `SXP82U6_BeforeInstall.sql` scripts for the *Reporting* database.

To upgrade the databases on solutions that are running Sitecore 8.2 rev. 160729 (Initial Release):

- If you are using the Sitecore Experience Database (xDB) functionality, you must execute the `SXP82U1_BeforeInstall.sql` and the `SXP82U6_BeforeInstall.sql` scripts for the *Reporting* database.

To upgrade the databases on solutions that are running Sitecore 8.2 rev. 161115 (Update-1) to Sitecore Experience Platform 8.2 rev. 170728 (8.2 Update-5):

- If you are using the Sitecore Experience Database (xDB) functionality, you must execute the `SXP82U6_BeforeInstall.sql` script for the *Reporting* database.

To upgrade the databases on solutions that are running Sitecore Experience Platform 8.2 rev. 171121 (Update-6):

- No database upgrade scripts are required.

1.2.4 Install the Upgrade Package

To install the upgrade package and update your website from Sitecore XP 8.1 Initial or later to Sitecore XP 8.2 rev. 180406 (Update-7), you must use the Update Installation Wizard.

Important

If you are using Oracle, please contact Sitecore support.

Before you install the upgrade package, make a back-up your website.

To install the upgrade package:

1. On the the **Sitecore Launchpad**, click **Control Panel**, and in the **Administration** section, click **Install a package**.

Alternatively, you can open the Installation Wizard from the Sitecore Desktop. Enter the following URL in your web browser:

```
http://<hostname>/sitecore/shell/
```

and then click **Sitecore, Development Tools, Installation Wizard**.

Install the `Sitecore Update Installation Wizard 2.0.2 rev.170703.zip` package.

2. Ensure that Internet Information Services (IIS) is configured to allow access to the `\sitecore\admin` folder.

Note

This step may be necessary if you installed Sitecore XP using the `setup.exe` file. The `setup.exe` file configures IIS to disallow access to the `\sitecore\admin` folder, and prevents you from using the Update Installation Wizard.

3. On the **Sitecore Launchpad**, click **Control Panel**, and in the **Administration** section, click **Install an update**.

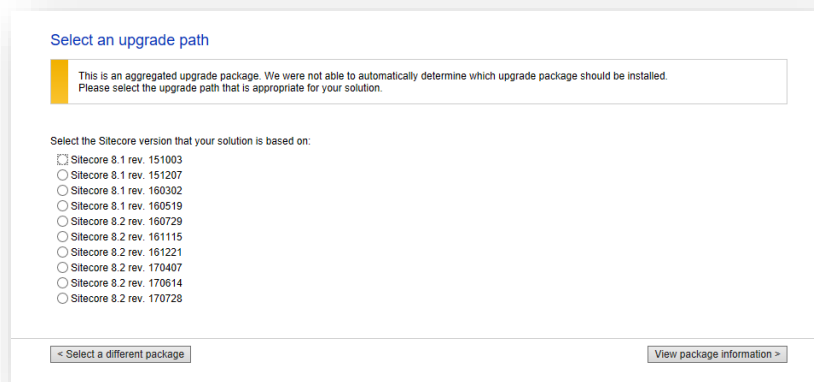
Alternatively, you can open the **Update Installation Wizard** by entering the following URL in your web browser:

```
http://<hostname>/sitecore/admin/UpdateInstallationWizard.aspx
```

4. On the **Welcome to Sitecore update installation wizard** page, click **Select a package**.

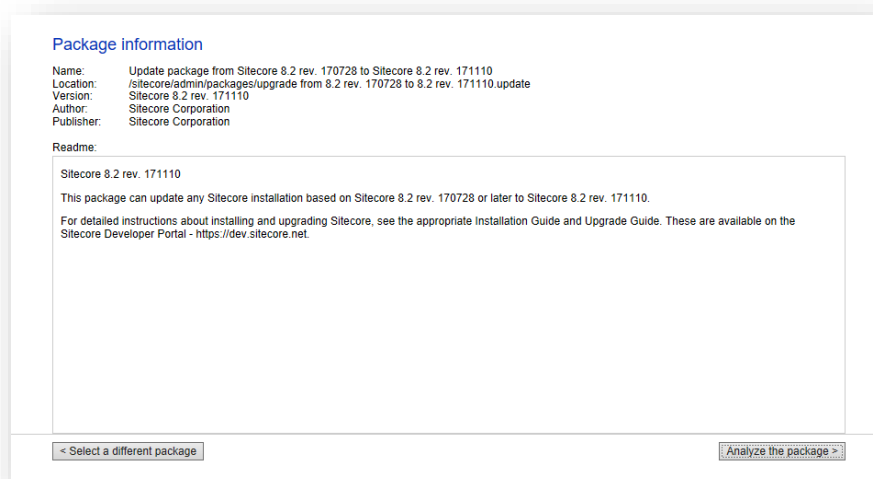
Sitecore Experience Platform Upgrade Guide

5. On the **Select a package** page, click **Choose File** and navigate to the folder where you saved the Sitecore 8.2 rev.180406.update file. Select the file, and then click **Open**.
6. Click **Package information**.

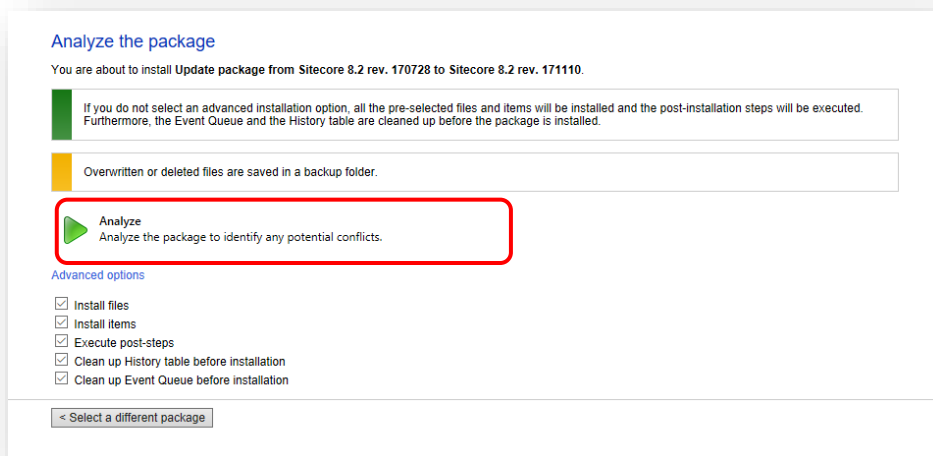


If the **Update Installation Wizard** fails to detect your current Sitecore version, on the **Select an upgrade path** page, manually select the Sitecore version and revision number that your solution is based on, and then click **View package information**.

7. On the **Package information** page, review the information about the package, and then click **Analyze the package**.



- On the **Analyze the package** page, click **Advanced options**, review the installation options, and then click **Analyze**.



Note

In the **Advanced options** section, you must select the **Execute post-steps** check box, regardless of what other check boxes you select.

The post-steps are performed at the end of the upgrade process. These steps can involve items or file operations that are executed by the Sitecore API, and can vary according to which Sitecore version you are upgrading from.

The installation wizard identifies any potential conflicts in the configuration files that are being upgraded, and lets you resolve them.

- After the analysis process is complete, click **Analysis result**.

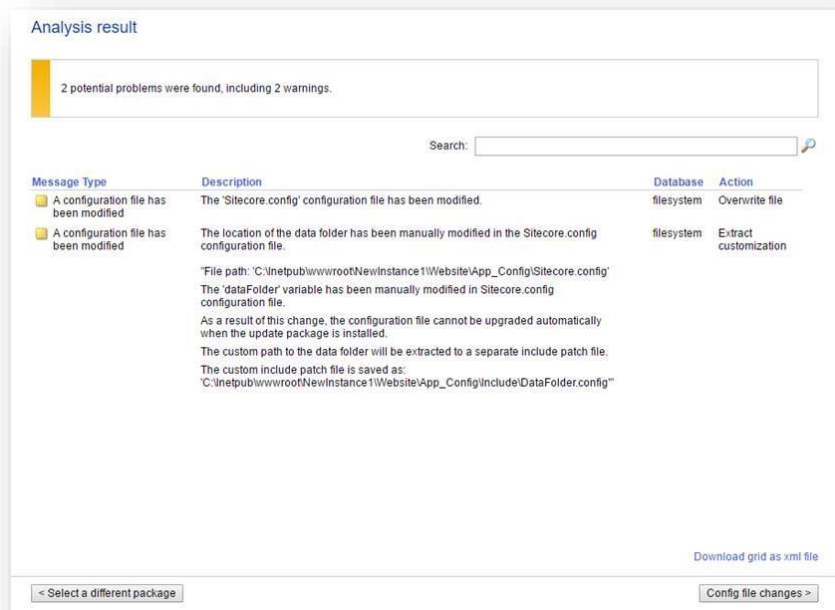
Analyzing the Update Package and Resolving Configuration Conflicts

If the **Update Installation Wizard** does not find any conflicts, click **Install the package**, and skip to step 7.

Sitecore Experience Platform Upgrade Guide

To analyze the package and resolve the configuration conflicts:

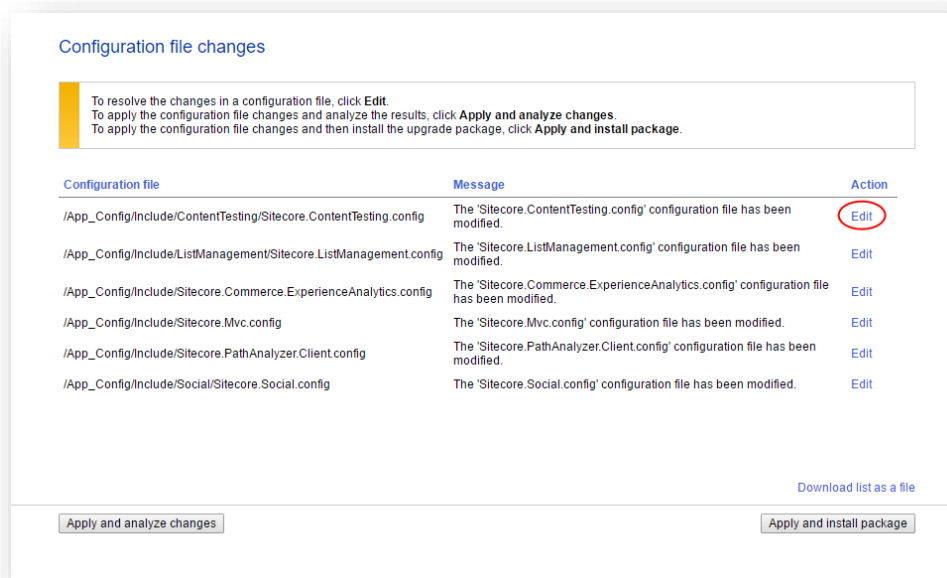
1. On the **Analysis result** page, click **Config file changes**.



Important

On the **Analysis result** page, in the **Message Type** column, if the **Update Installation Wizard** found *Configuration files that must be updated manually*, in the **Description** column, click the relevant description and read about the configuration file changes.

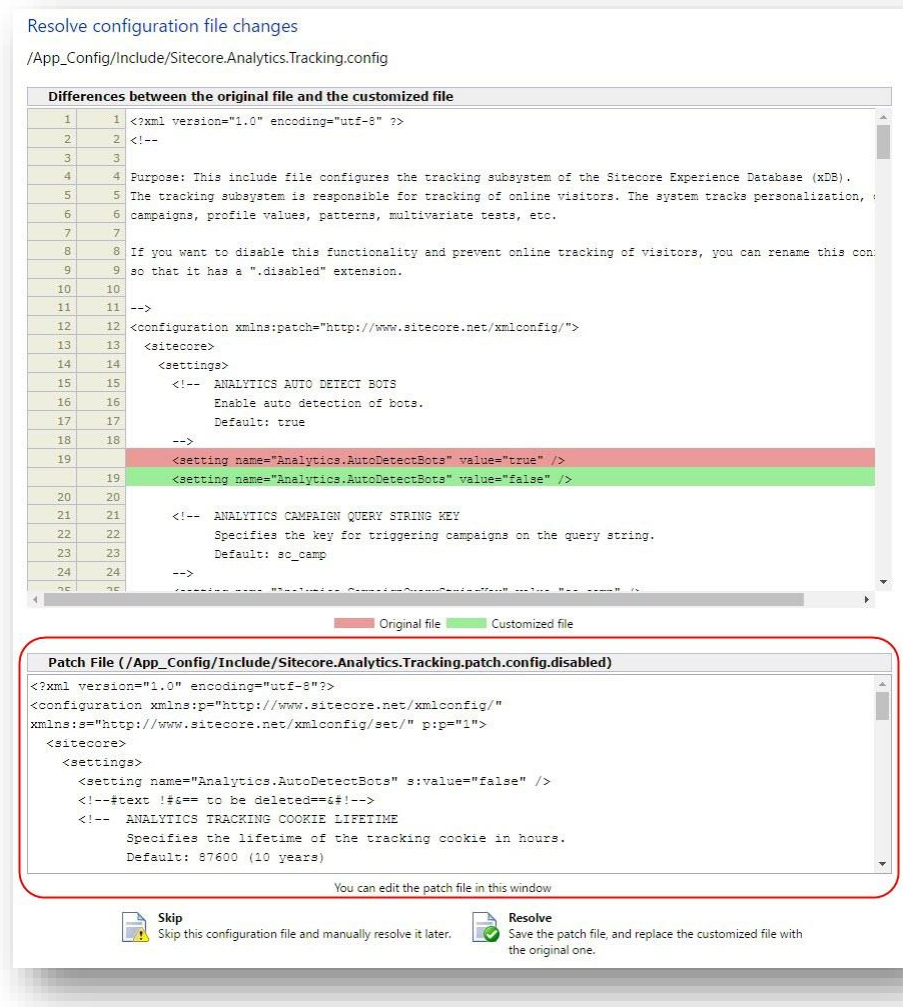
2. On the **Configuration file changes** page:



To automatically resolve all the configuration conflicts and install the package, click **Apply and install package**. When you are finished, skip to step 7.

To manually resolve a conflict in a configuration file and modify the patch, in the **Action** column for each configuration file, click **Edit**.

3. On the **Resolve configuration file changes** page, review the differences between the original configuration file and the customized file.



To manually resolve the conflicts, in the **Patch File** window, make the necessary changes, and then click **Resolve**.

To skip a conflict and manually resolve it later, click **Skip**. It is best practice to manually review your configuration patch files after the upgrade is complete.

Note

When you skip the a configuration file conflict, the **Update Installation Wizard** automatically detects any customizations in the Sitecore config file, creates the patch, and replaces the customized file with the new file.

4. After you resolve or skip all the configuration file conflicts, on the **Configuration file changes** page, click **Apply and analyze changes**.

The **Update Installation Wizard** restarts the analysis and ensures that all the configuration file conflicts are either resolved or skipped.

The **Update Installation Wizard** then creates patch files with the customization, and disables the patches by adding the `.disabled` extension to the files.

Note

In certain scenarios, the generated patch files can contain customizations that are critical for the Sitecore instance to run correctly. To avoid breaking changes, the **Update Installation Wizard** displays an error on the **Apply and analyze changes** page.

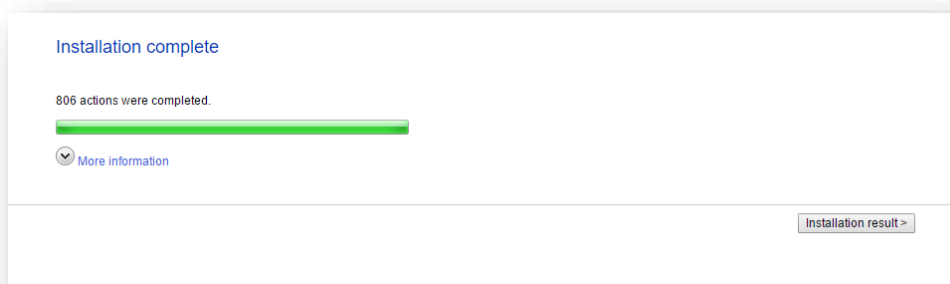
If this happens, you must enable the patch files by removing the `.disabled` extension, and then refresh the **Update Installation Wizard** page in your browser.

5. When the analysis is complete, click **Analysis result**.

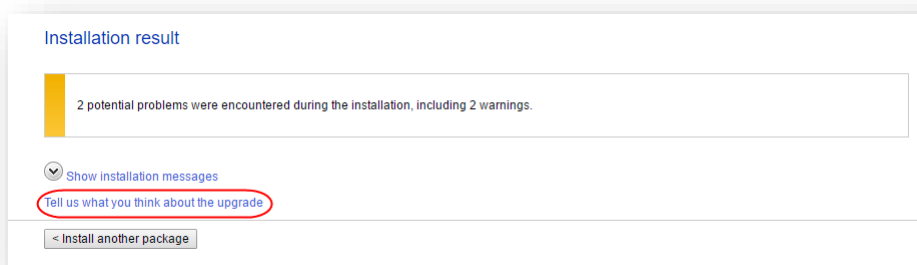
Note

If the analysis fails, you must restart the **Update Installation Wizard**. If this does not solve the problem, contact Sitecore support.

6. If the **Update Installation Wizard** does not find any more conflicted configuration files, click **Install the package**. Any conflicts that were skipped or left unresolved during the configuration are now resolved automatically.
7. On the **Installation complete** page, when the installation process is finished, click **Installation result**.



The **Installation result** page contains an overview of any problems that arose during the installation of the update.



When the installation is complete, you can give feedback to the Sitecore development team about your upgrade experience. The feedback is anonymous and the feedback form does not collect instance or license-specific information.

8. To provide feedback, click **Tell us what you think about the upgrade**.

1.2.5 Review Custom Changes in Configuration Files

When the installation is complete, you must enable the patch files with the customizations that were generated by the **Update Installation Wizard**.

Sitecore Experience Platform Upgrade Guide

For example, during analysis, if the `Sitecore.Mvc.config` file has been customized, the **Update Installation Wizard** creates a patch file with your customizations and creates a back up of the configuration file that is disabled.

The patch files are created and stored in the same folder as the the original configuration files, and are saved in the following file format: `<filename>.patch.config.disabled`.

For better traceability and debugging, the wizard also saves the original file with your customizations in the following file format: `<filename>.custom.config.disabled`.

To enable the patch files with the customizations that were generated by the **Update Installation Wizard**:

- Remove the `.disabled` extension from the file name.

Important

Sometimes the **Update Installation Wizard** cannot generate the configuration file patches, for example, when there are non-Sitecore sections in the `web.config` file.

When this happens, the **Update Installation Wizard** extracts the customizations from the configuration file, and merges the customizations with the corresponding file from the upgrade package.

The merged configuration file is then saved as `<filename>.merged.config.disabled` and the original file with custom changes is saved as `<filename>.custom.config.disabled`.

To replace the original file with the merged file for files that could not be patched:

1. Rename the original file `<filename>.config` file, to `<filename>.config.old`.
2. Rename the merged file `<filename>.merged.config.disabled` to `<filename>.config`.

Note

It is best practice to create a *Custom* folder to store all the generated patches in the `\Website\App_Config\Include` path.

1.2.6 Update Solr Schema and Configs

If you are using the Solr search provider, you must upgrade the corresponding assemblies.

To update the Solr assemblies:

1. Re-generate the `schema.xml` file and reload Solr.
2. Enable all new Solr files located in the `\Website\App_config\Include` folder.

Starting with Sitecore XP 8.2, the default installation includes a default implementation of the Solr connector. This connector can be used without a third-party Inversion of Control (IOC) and it is automatically enabled after the upgrade is complete.

The third-party IOC is no longer available on the **Sitecore Downloads** page. However, if you want to continue using it, you can download it from the Sitecore [GitHub page](#).

1.3 Upgrade modules

After you have completed the upgrade of the Sitecore Experience Platform, you must upgrade any Sitecore modules that you have installed. To upgrade modules, refer to the corresponding module upgrade documentation on the Sitecore Developer Portal (<https://dev.sitecore.net>).

Note

If you have installed Email Experience Manager (EXM), the module upgrade guide can ask you to enable the module before you perform the upgrade.

To enable the module, you must undo the changes described in the *Preconditions for Installing the Upgrade Package* section for EXM.

1.3.1 Upgrade the Web Forms for Marketers module

To upgrade the Web Forms for Marketers module, you must download the [Web Forms for Marketers 8.2 rev. 180329 \(Update-7\) Update Package](#) from the Sitecore Developer Portal. To install the Web Forms for Marketers 8.2 Upgrade Package, use the **Update Installation Wizard**.

To install the upgrade package:

1. On the **Sitecore Launchpad**, click **Control Panel**, and in the **Administration** section, click **Install an update**.

Alternatively, to open the **Update Installation Wizard**, enter the following URL in your web browser:

```
http://<hostname>/sitecore/admin/UpdateInstallationWizard.aspx
```

The wizard guides you through the update process and helps you:

- Upload the upgrade package.
- Analyze the package.
- Install the package.

Note

For more information about the steps required to upgrade the Web Forms for Marketers module, see the *Install the Upgrade Package*, and *Review Custom Changes in Configuration Files* sections.

After you have completed the upgrade process for the Web Forms for Marketers module, you must continue with the *Post-Installation Steps* section.

Upgrade multiple Web Forms for Marketers instances

For every Sitecore instance in your environment that you want to upgrade, you must repeat all the steps described in this section on the Content Management server (CM).

Note

If you have Content Delivery servers (CD), use the [Web Forms for Marketers CD 8.2 rev. 180329 Upgrade Package](#) and modify the `Sitecore.Forms.config` file as described in the *Sitecore Web Forms for Marketers 8.2 Update-7 Installation Guide* available on the [Sitecore Developer Portal](#).

1.4 Post-Installation Steps

After installing the upgrade package, to complete the installation, you must:

- Clear the browser cache.
- Publish the site.
- Rebuild the search indexes and the link database.
- Redeploy marketing definitions.

1.4.1 Clear the Browser Cache

After you change the configuration files, you must clear your browser cache.

Note

These steps can vary depending on the browser and version of the browser that you are using.

To clear your browser cache:

1. In Internet Explorer, click **Tools, Internet Options**.
2. In the **Internet Options** dialog box, in **Browsing History**, click **Delete**, and then delete all your **Temporary Internet Files**.

1.4.2 Publish the Site

You must publish the entire site (including system items, templates, and so on) to every publishing target.

To publish the entire site:

1. In the Sitecore Desktop, click the **Sitecore Start** button, and then click **Publish Site**.
2. In the **Publish Site** dialog box, select **Republish**.

1.4.3 Rebuild Search Indexes and the Link Database

After publishing your website, you must rebuild your search indexes and the *Link* database.

To rebuild all the `ContentSearch` indexes:

1. On the **Sitecore Launchpad**, click **Control Panel**, and in the **Indexing** section, click **Indexing manager**.
2. In the **Indexing Manager** dialog box, click **Select all**, and then click **Rebuild**.

To rebuild the *Link* database for the *Master* and *Core* databases:

1. On the **Sitecore Launchpad**, click **Control Panel**, and in the **Database** section, click **Rebuild Link Databases**.
2. Select the *Master* and *Core* databases and then click **Rebuild**.

1.4.4 Redeploy Marketing Definitions

To complete the upgrade process, you must redeploy marketing definitions.

Important

If you are using the Sitecore Experience Database (xDB) functionality, you must set the `Xdb.Enabled` and `Xdb.Tracking.Enabled` parameters to *true*.

If you do not do this, you cannot redeploy marketing definitions.

To redeploy marketing definitions:

1. On the **Sitecore Launchpad**, click **Control Panel, Analytics**, and then click **Deploy Marketing Definitions**.
2. In the **Deploy marketing definitions** dialog box, select all the definitions and taxonomies and click **Deploy**.

If you do not do this, the binary data stored in the **Data** column in the definition tables (*CampaignActivityDefinitions*, *GoalDefinitions*, and so on) might not be compatible with Sitecore XP 8.2 rev. 180406 (Update-7).

1.4.5 Rebuilding the Reporting Database

Due to changes in the reporting database schema and aggregation pipeline, and in order to have accurate data in it, you must rebuild the *Reporting* database. Although performing this step is optional, it is best practice to [rebuild the reporting database](#) when you upgrade from any version of Sitecore.

Note

This process is resource intensive and may take a long time to complete.

1.4.6 Upgrade Multiple Instances

Repeat all the steps in the upgrade process for every Sitecore instance that you want to upgrade.

Note

If you want to skip installing files, items, executing post-steps or other options, in the Update Installation Wizard, in the **Advanced Options** section, ensure that you clear the relevant check boxes.

1.4.7 Upgrade the Session Database

If you are using an out of process session state provider, you must:

1. Stop all the Sitecore XP instances that use the same *Session* database.
2. If you are using the MongoDB session state provider, drop the *Session* database.
3. If you are using the SQL Server session state provider, replace the *Session* database with a clean one from the Sitecore XP installation package.
4. Start all the Sitecore XP instances.