

Sitecore Experience Platform Upgrade Guide

Sitecore Experience Platform 8.2 Update 2

Step-by-step guide to the Sitecore 8.2 upgrade and conversion process



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	Upgrading the Databases.....	4
1.2.4	Installing the Upgrade Package.....	5
1.3	Post-Installation Steps	11
1.3.1	Review Custom Changes in Configuration Files	11
1.3.2	Update Solr Assemblies	11
1.3.3	Clear the Browser Cache	12
1.3.4	Publish the Site	12
1.3.5	Rebuild Search Indexes and the Link Database.....	12
1.3.6	Re-deploy Marketing Definitions.....	12
1.3.7	Upgrading Multiple Instances.....	13

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. 161221 (Update-2). 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>).

To download the database upgrade script file(s), 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.

Prerequisites for upgrading from Sitecore 8.1 or later:

- [Sitecore 8.1 rev. 151003 \(Initial Release\) or later](#).
- [Sitecore 8.2 rev. 161221 \(Update-2\) Update Package](#).
- [Sitecore Update Installation Wizard 2.0.1 rev. 161216.zip](#)
- For Microsoft SQL Server, you must download the following database upgrade scripts:

When upgrading from Sitecore XP 8.1:

- `SXP82U1_BeforeInstall.sql`
- `CMS82_BeforeInstall.sql`

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

- `SXP82U1_BeforeInstall.sql`

When upgrading from Sitecore XP 8.2 rev. 161115 (Update-1):

- No scripts are required

Note

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

1.2 Upgrade Process

If you have an earlier version of Sitecore installed and you want to upgrade to Sitecore XP 8.2 rev. 161221 (Update-2) follow the instructions in each section of this chapter.

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:

1. In the `Sitecore.Xdb.config` file, set the `Xdb.Enabled` setting to *false*.
2. In the `Sitecore.Xdb.config` file, set the `Xdb.Tracking.Enabled` setting to *false*.
3. Disable the `Sitecore.Analytics.Processing.Aggregation.Services.config` and `Sitecore.Analytics.Processing.Services.config` files by adding the `.disabled` extension to each file.
4. If you have installed Email Experience Manager (EXM), disable all the configuration files in the following folders by adding `.disabled` to the file extension:
 - o `\Website\App_Config\Include\EmailExperience`
 - o `\Website\App_Config\Include\Z.EmailExperience`
 - o `\Website\App_Config\Include\ExperienceProfile\Sitecore.ExperienceProfile.Reporting.Sitecore.EmailExperience.ExperienceProfile.config`
 - o `\Website\App_Config\Include\Sitecore.Services.Client.config`
5. If you have installed the Web Forms for Marketers module, disable the following configuration files by adding `.disabled` to the file extension:
 - o `\Website\App_Config\Include\Sitecore.EmailCampaign.config`
 - o `\Website\App_Config\Sitecore.Forms.config`

Important

After the upgrade is completed, ensure that you enable the Experience Database (xDB) by setting the `Xdb.Enabled` and `Xdb.Tracking.Enabled` parameters to *true*, and enable configuration files by removing the `.disabled` file extension.

1.2.3 Upgrading the Databases

On solutions running any version of Sitecore XP 8.1:

1. Execute the `CMS82_BeforeInstall.sql` script for the Core, Master, and Web databases.
2. Execute the `SXP82U1_BeforeInstall.sql` script for the Reporting database.

On solutions running Sitecore 8.2 rev. 160729 (Initial Release) except Sitecore 8.2 rev. 161115 (Update-1):

- Execute the `SXP82U1_BeforeInstall.sql` script for the Reporting database.

1.2.4 Installing 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. 161221 (Update-2), you must use the Update Installation Wizard.

Before you install the upgrade package:

- Back up your website.

To install the upgrade package:

1. Log in to the Sitecore Desktop, click the **Sitecore Start** button, **Development Tools, Installation Wizard**, and then install the Sitecore Update Installation Wizard 2.0.1 rev.161216.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. In the **Sitecore Launchpad**, click **Control Panel**, and in the **Administration** section, click **Install an update**.

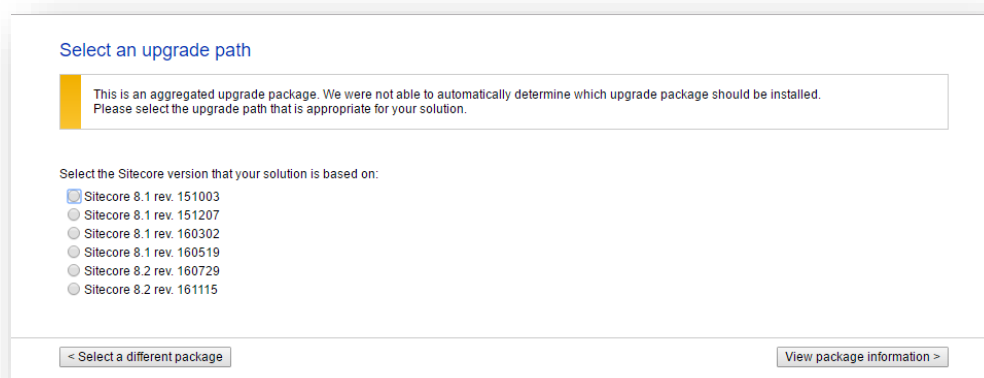
Alternatively, you can open the Update Installation Wizard by entering the following URL in your web browser:

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

4. On the **Welcome to Sitecore update installation wizard** page, click **Select a package**.
5. On the **Select a package** page, click **Choose File** and navigate to the folder where you saved the Sitecore 8.2 rev.161221.update file. Select the file, and then click **Open**.
6. Click **Package information**.

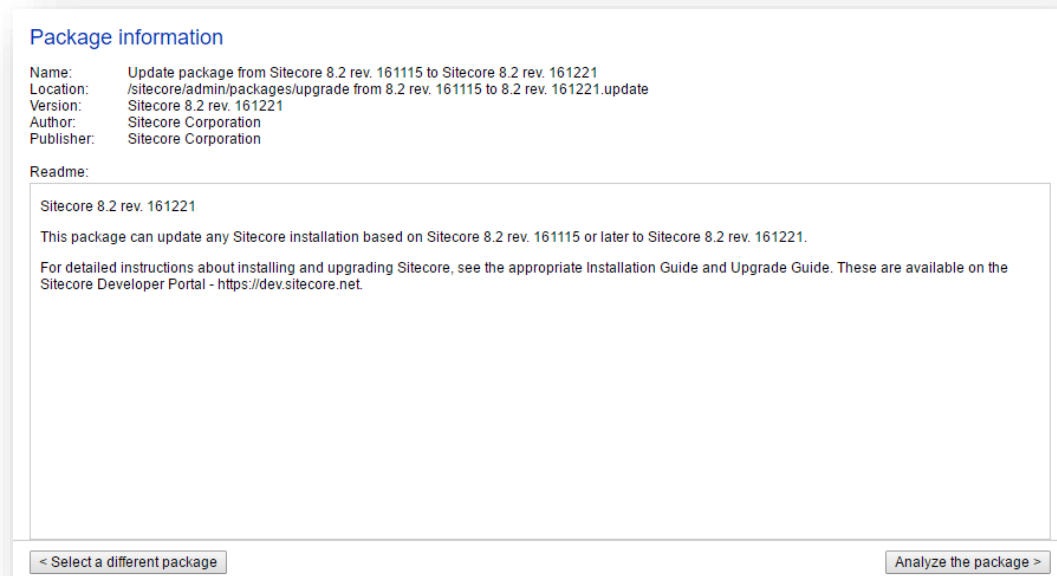
Note

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**.

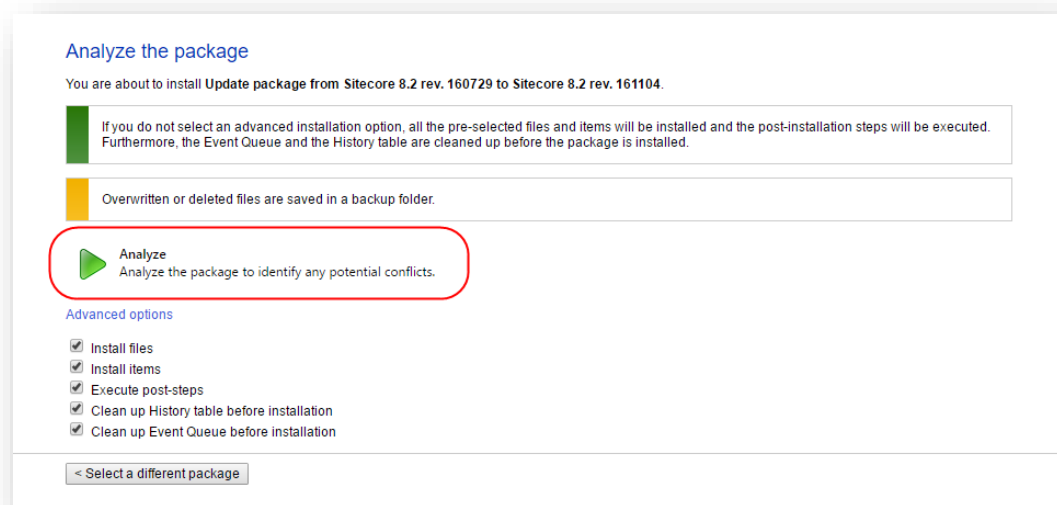


Sitecore Experience Platform Upgrade Guide

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



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



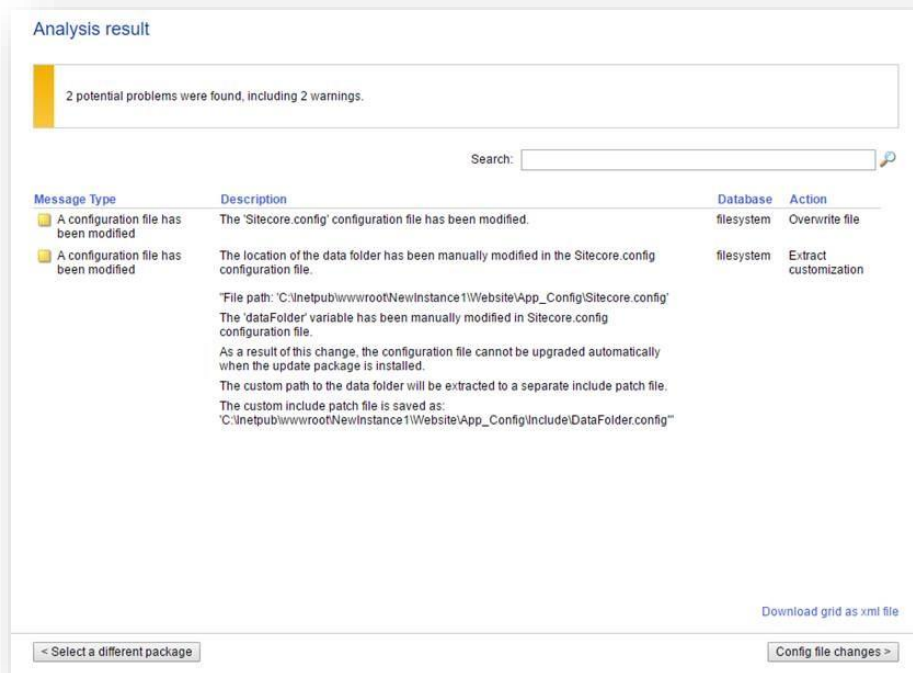
9. After the analysis process is complete, click **Analysis result**.

If the Update Installation Wizard did not find any conflicts, click **Install the package**, and skip to step 7 in the section *Analyzing the Update Package and Resolving Configuration Conflicts*.

Analyzing the Update Package and Resolving Configuration Conflicts

To analyze the package and resolve the configuration conflicts:

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



The screenshot shows the 'Analysis result' page with a summary of 2 potential problems. Below is a table of configuration file changes:

Message Type	Description	Database	Action
A configuration file has been modified	The 'Sitecore.config' configuration file has been modified.	filesystem	Overwrite file
A configuration file has been modified	The location of the data folder has been manually modified in the Sitecore.config configuration file. File path: 'C:\inetpub\wwwroot\NewInstance1\Website\App_Config\Sitecore.config' The 'dataFolder' variable has been manually modified in Sitecore.config configuration file. As a result of this change, the configuration file cannot be upgraded automatically when the update package is installed. The custom path to the data folder will be extracted to a separate include patch file. The custom include patch file is saved as: 'C:\inetpub\wwwroot\NewInstance1\Website\App_Config\Include\DataFolder.config'	filesystem	Extract customization

At the bottom of the page, there are two buttons: '< Select a different package' and '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 changes.

To avoid breaking changes, after the Update Installation Wizard finishes installing the update package, you must perform the post-installation steps indicated in the description.

2. On the **Configuration file changes** page:
 - o To automatically resolve all configuration conflicts and install the package, click **Apply and install package**. When you are finished, skip to step 7.

Sitecore Experience Platform Upgrade Guide

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

Configuration file changes

To resolve the changes in a configuration file, click **Edit**.
To apply the configuration file changes and analyze the results, click **Apply and analyze changes**.
To apply the configuration file changes and then install the upgrade package, click **Apply and install package**.

Configuration file	Message	Action
/App_Config/Include/ContentTesting/Sitecore.ContentTesting.config	The 'Sitecore.ContentTesting.config' configuration file has been modified.	Edit
/App_Config/Include/ListManagement/Sitecore.ListManagement.config	The 'Sitecore.ListManagement.config' configuration file has been modified.	Edit
/App_Config/Include/Sitecore.Commerce.ExperienceAnalytics.config	The 'Sitecore.Commerce.ExperienceAnalytics.config' configuration file has been modified.	Edit
/App_Config/Include/Sitecore.Mvc.config	The 'Sitecore.Mvc.config' configuration file has been modified.	Edit
/App_Config/Include/Sitecore.PathAnalyzer.Client.config	The 'Sitecore.PathAnalyzer.Client.config' configuration file has been modified.	Edit
/App_Config/Include/Social/Sitecore.Social.config	The 'Sitecore.Social.config' configuration file has been modified.	Edit

[Download list as a file](#)

[Apply and analyze changes](#) [Apply and install package](#)

3. On the **Resolve configuration file changes** page, review the differences between the original 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 file, the Update Installation Wizard automatically detects any customization(s) in the Sitecore config files, creates the patch, and replaces the customized file with the original file.

The screenshot displays the 'Resolve configuration file changes' window. At the top, it shows the path `/App_Config/Include/ContentTesting/Sitecore.ContentTesting.config`. Below this is a table titled 'Differences between the original file and the customized file' with columns for line numbers and the content of the original and customized files. The content includes XML headers, comments about content testing features, and configuration settings for automatic content testing, test candidate notifications, and command route prefixes. A legend at the bottom indicates that red highlights represent the original file and green highlights represent the customized file.

Below the differences table is a 'Patch File (/App_Config/Include/ContentTesting/Sitecore.ContentTesting.patch.config.disabled)' window. This window contains XML code for a patch that defines a custom path for generated files. The patch includes a comment: '`<!-- CONTENT TESTING - CUSTOM PATH FOR GENERATED FILES`' and a setting: '`<setting name="ContentTesting.CustomFileGenerationPath"`'. A note below the patch file states: 'You can edit the patch file in this window'.

At the bottom of the window, there are two options: 'Skip' (with a warning icon) and 'Resolve' (with a checkmark icon). The 'Skip' option is described as 'Skip this configuration file and manually resolve it later.' The 'Resolve' option is described as 'Save the patch file, and replace the customized file with the original one.'

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

At this point, the Update Installation Wizard restarts the analysis and ensures that all 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.

Sitecore Experience Platform Upgrade Guide

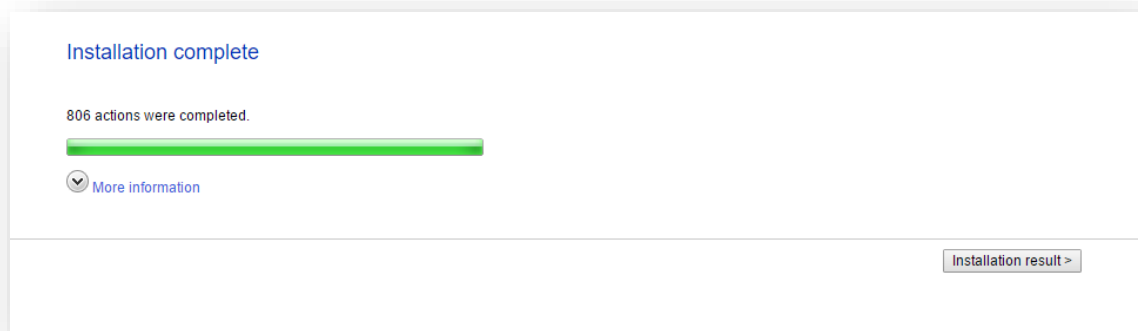
If this happens, you must enable the patch files by removing the `.disabled` extension, and then refresh the **Update Installation Wizard** page in your browser.

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**.

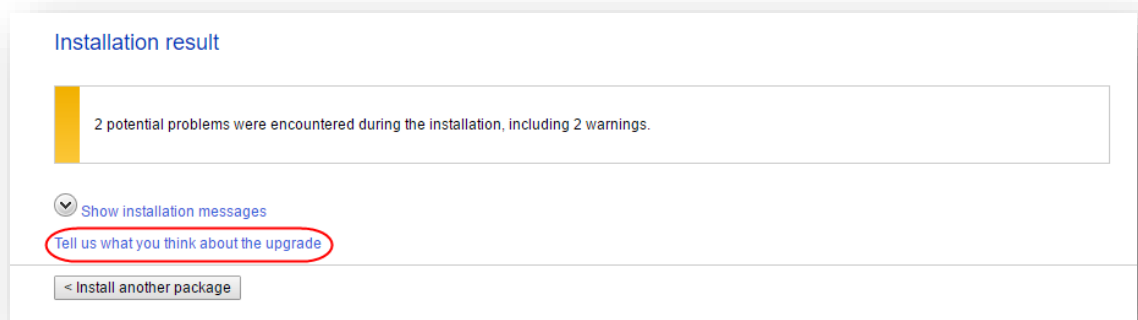


Tip

When the installation is complete, you can give feedback to the Sitecore development team about your upgrade experience.

On the **Installation result** page, click **Tell us what you think about the upgrade**.

The feedback is anonymous and the feedback form does not collect instance or license-specific information.



1.3 Post-Installation Steps

After installing the upgrade package, to complete the installation of Sitecore XP 8.2 rev. 161221 (Update-2), you must complete the following post-installation steps:

- Review custom changes in configuration files.
- Update the Solr assemblies.
- Clear the browser cache.
- Publish the site.
- Rebuild the search indexes and the link database.
- Re-deploy the marketing definitions.

1.3.1 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.

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 config file in a disabled state.

The patch files are created and stored in the same folder where the original configuration files are located, 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 config 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.

1.3.2 Update Solr Assemblies

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 `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](#).

1.3.3 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**.

1.3.4 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**.

1.3.5 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**.

1.3.6 Re-deploy Marketing Definitions

To complete the upgrade process, you must re-deploy marketing definitions.

To re-deploy marketing definitions:

1. On the **Sitecore Launchpad**, click **Control Panel, Analytics**, and then click **Deploy Marketing Definitions**.
2. Select all the definitions and taxonomies and click **Deploy**.

Important

If you do not do this, the binary data stored in the **Data** column in the definition tables (*CampaignActivityDefinitions*, *GoalDefinitions*, and so on) may not be compatible with Sitecore XP 8.2 rev. 161221 (Update-2).

1.3.7 Upgrading Multiple Instances

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

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.