Sitecore Experience Platform Installation Guide

Sitecore Experience Platform 8.2 Update 6

Installation guide for administrators and developers



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Chapter 1

Introduction

This document describes how to install Sitecore Experience Platform 8.2 rev. 171121 (Update-6).

The document contains the following chapters:

- Chapter 1 Introduction An introduction to the Sitecore Experience Platform 8.2 installation process.
- Chapter 2 Sitecore XP Requirements An outline of the installation requirements for Sitecore CMS.
- Chapter 3 Installing the Sitecore XP from the .EXE File Describes the pre-installation steps, configuration and installation process.
- Chapter 4 Installing the Sitecore XP from the .ZIP File Step-by-step instructions for installing Sitecore CMS from the .ZIP file.
- Chapter 5 Sitecore XP Post-Installation Steps Information about necessary actions after installation.



1.1 Getting Started

Sitecore® Experience Platform[™] (Sitecore XP) is the name of the entire Sitecore solution. It contains:

- Sitecore CMS the content management capabilities.
- Sitecore xDB the experience marketing and scalability, and analytics features.

These components are installed together. Sitecore XP is distributed as an .exe or .zip file.

The Sitecore Experience Database (xDB) is a central data repository for marketers. It collects and connects all customer interactions in a single view, and enables immediate, personalized, automated experiences. Sitecore xDB uses MongoDB as a collection database and it is included in the Sitecore XP package.



1.2 Preparing to Install Sitecore XP

For small implementations, including developer workstations and testing environments, Sitecore XP and the database server can be installed on a single computer. For larger implementations, the database server is typically separated from the application server. The content authoring environment for business users is also frequently separated from the content delivery environment that is accessed by Internet users.

For more information about scaling Sitecore XP solutions, refer to the Sitecore Documentation site – <u>https://doc.sitecore.net/sitecore_experience_platform</u>.

Sitecore XP can be broken down into three logical components regardless of the database technology that is used:

- The IIS document root ("the website").
- The supporting file system for logs and data.
- The supporting relational databases. These databases are often stored under the supporting file system.

The configuration is stored in files such as web.config and the files under the \product{App}_Config folder.

For information about hardening security after you install Sitecore, see the manual <u>Security Hardening Guide</u> in the Sitecore Documentation site.

You can create an archive of your Sitecore XP solution to move it from one computer to another.

For assistance or to report any discrepancies between this document and the product, please contact <u>http://support.sitecore.net/helpdesk/</u>.

Before installing Sitecore XP, you should decide on the:

- Project name and acronym, for example, *ProjectName*.
- Acronym/prefix, for instance PN.
- Target installation file system root, for instance C:\inetpub\wwwroot\ProjectName.
- Database technology:
 - o SQL Server
 - o MongoDB
- Database location locally or on a remote server.
- Appropriate Sitecore license.
- Hardware.
- Administrative access to computers and databases.
- IIS configuration host headers, and so on.

1.2.1 Install Latest Updates

Run Windows Update to install all the appropriate service packs and security updates on all of your Sitecore XP host and client computers.

1.2.2 UNC Share Not Supported

Sitecore XP must be installed on a local drive, not a UNC share.

1.2.3 Sitecore Cannot Operate from a Virtual Directory

Do not create a virtual directory for Sitecore, because the product cannot operate from a virtual directory.



Chapter 2

Sitecore XP Requirements

This chapter describes the prerequisites, hardware, and software requirements for Sitecore XP 8.2 host and client computers. In this document, the term "server" refers to a Windows OS Web server and the term "host" refers to an installation of Sitecore XP on either a server or a workstation.

This chapter contains the following sections:

- Sitecore Hosting Environment Requirements
- Sitecore Client Requirements

2.1 Sitecore Hosting Environment Requirements

Sitecore XP 8.2 has specific requirements for the operating system, IIS Web Server, .NET Framework, and the database server.

Important

When you configure the Sitecore Experience Database (xDB), you must synchronize all the servers in your solution to a single reliable time source, for example, by means of the Network Time Protocol (NTP). The aggregation of engagement automation states depends on the system time and changing this can lead to incorrect aggregation results or loss of data.

2.1.1 IIS Requirements

Sitecore XP can be hosted on the following IIS versions:

- IIS 10
- IIS 8.5
- IIS 8.0
- IIS 7.5
- IIS 7.0

You must use the version of IIS that is supported by your operating system. For more information about IIS and operating systems, see Microsoft's documentation.

Sitecore XP does not officially support any other ASP.NET web servers such as IIS Express, or Mono Web Server.

Important

Sitecore neither supports nor permits multiple IIS website definitions pointing to the same Sitecore web root.

2.1.2 Operating System Requirements

Sitecore XP 8.2 is only compatible with the client and server operating systems that support .NET Framework 4.5.2.

Sitecore XP has been tested, and can be hosted on the following Microsoft operating systems:

- Windows Server 2016
- Windows Server 2012 R2 (64-bit)
- Windows Server 2012 (64-bit)
- Windows Server 2008 R2 (32/64-bit) SP1
- Windows 8.1 (32/64-bit)
- Windows 8 (32/64-bit)
- Windows 10 (32/64-bit)

Important

Run Windows Update and install all the appropriate service packs and security updates on all of your Sitecore XP host and client computers.

Windows 10

Sitecore XP supports the following editions of the Windows 10 operating system:

• Home



- Education
- Professional

Windows 8.0 and 8.1

Sitecore XP supports the following editions of the Windows 8.0 and 8.1 operating systems:

- Enterprise
- Professional
- Core

2.1.3 .NET Framework Requirements

Sitecore XP requires .NET Framework 4.5.2.

You must apply any available updates to the .NET Framework to every Sitecore installation.

2.1.4 Visual Studio Requirements for Custom Solutions

Sitecore XP 8.2 requires Visual Studio 2012 or later.

2.1.5 Database Requirements

Sitecore XP supports the following database servers:

- Microsoft SQL Server 2016 SP1
- Microsoft SQL Server 2014
- Microsoft SQL Server 2012
- Microsoft SQL Server 2008 R2 SP1
- MongoDB Database:
 - o Mongo 2.6 MMAPv1
 - Mongo 3.0 MMAPv1 or WiredTiger
 - Mongo 3.2.1 MMAPv1 or WiredTiger
 - Mongo 3.2.1 Enterprise with data-at-rest encryption, WiredTiger only

Note

Sitecore recommends that you run the database on a separate server from the web server.

Oracle

The Oracle database storage setup is only available when Sitecore XP is running in Sitecore Experience Management mode (CMS-only mode), which lets you run Sitecore XP without the Experience Database (xDB) enabled.

Sitecore supports:

• Oracle Database 11g R2 (11.2)

2.1.6 Antivirus Software Considerations

Some antivirus software can have a detrimental effect on the performance of ASP.NET applications including Sitecore. We therefore recommend that you use only antivirus scanners that are certified for the operating system that you use.



For more information about the certified products, see the <u>Windows Server Catalog</u> website.

To ensure optimal performance, exclude the following folders from scanning by your antivirus software:

- The site root folder.
- The data folder that is defined in the web.config file.
- The folder that contains the actual Sitecore database files.
- TheC:\Windows\Temp or {app_pool user profile}\Temp folder.

2.1.7 Hardware Requirements for a Server Running a Single Sitecore Installation

Minimum configuration requirements:

- 4 core processor
- 8GB of RAM

Recommended configuration:

- 4 core processor
- 16GB of RAM

Note

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



2.2 Sitecore Client Requirements

This section describes the software and hardware requirements.

2.2.1 Software Requirements

Browser

Sitecore XP clients are browser-based user interfaces and can run on the following browsers:

- Microsoft Internet Explorer 11
- Mozilla Firefox 17+
- Google Chrome 25+
- Microsoft Edge
- Apple Safari 6+ for Mac OS

Note

Sitecore XP 8.2 supports all the current stable versions of these browsers unless stated otherwise. Sitecore XP 8.2 does not support the Compatibility view in Internet Explorer 11.

For more information about configuring a browser, see the <u>Browser Configuration Reference</u> document on the Sitecore Developer Network.

Silverlight

Some applications, such as Engagement Automation, and Sitecore App Center require Microsoft Silverlight 5 or later.

2.2.2 Hardware Requirements

Sitecore XP 8.2 has the following hardware requirements:

- Processor: Intel Pentium 4, 2GHz or faster processor.
- RAM: 512 MB minimum, 1GB recommended.
- TCP/IP connection at 512Kbps or faster to the Sitecore XP host.
- 1024 x 768 or greater screen resolution required for advanced operations.

You do not need to install any additional software on the Sitecore XP clients that access Sitecore XP servers.

Chapter 3

Installing the Sitecore XP from the .EXE File

This chapter describes how to use the installation program to install Sitecore XP.

You can download the Sitecore installation program from the Sitecore Downloads page – <u>https://dev.sitecore.net</u>.

This chapter contains the following sections:

- The UAC (User Account Control) Configuration
- The Installation Process
- Troubleshooting

3.1 The UAC (User Account Control) Configuration

Before you run the installation program on Windows 8, Windows 8.1, or Windows 10, you must ensure that the UAC (User Account Control) configuration security policy *Detect application installations and prompt for elevation* is enabled.

To check if this setting has been changed on your computer:

- 1. Log in as an administrator.
- 2. Press WIN + R to open the **Run** window.
- 3. In the **Run** window, enter *secpol.msc* and press ENTER.
- 4. Click **Continue** to open the **Local Security Policy** window.

🕨 🔿 🔰 📰 🔀 📄	? 🖬		
 Security Settings Account Policies Password Policy Account Lockout Polici Local Policies Local Policies User Rights Assignmen Security Options Windows Firewall with Adt. Public Key Policies Software Restriction Policie IP Security Policies on Local 	Policy Sutdown: Clear virtual memory pagefile System cryptography: Force strong key protection for user key System cryptography: Use FIPS compliant algorithms for encr System objects: Require case insensitivity for non-Windows su System objects: Strengthen default permissions of internal sys System settings: Use Certificate Rules on Windows Executable User Account Control: Admin Approval Mode for the Built-in User Account Control: Behavior of the elevation prompt for a User Account Control: Detect application installations and pro User Account Control: Only elevate UIAccess applications that User Account Control: Only elevate UIAccess applications that User Account Control: Run all administrators in Admin Appro User Account Control: Switch to the secure desktop when pro	Disabled Enabled Enabled Posix Disabled Disabled Prompt for consent <u>Promet for creden</u> Enabled Disabled Enabled Enabled	4 III
4	User Account Control: Virtualize file and registry write failures to	per-user locations	Ŧ

- 5. In the pane on the left side, expand the *Local Policies* node and select *Security Options*.
- 6. In the pane on the right side, scroll to the bottom of the list of policies.
- 7. Verify that the User Account Control: Detect application installations and prompt for elevation policy is set to Enabled.

If this setting is not enabled, you must enable it.

3.2 The Installation Process

To start the installation, launch the *Sitecore.exe* application, which starts the **Installation Wizard**. The **Installation Wizard** guides you through the installation process.

This section describes the important steps in the wizard.

Note

The Sitecore XP configuration files are automatically modified according to the settings provided in the wizard.

Welcome page



License Agreement



Read the license agreement and select the appropriate option. Click **Next**.



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Installation Type

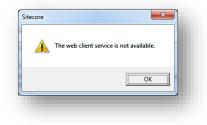


Select the type of installation that you want:

- Complete Installs both the Sitecore databases and the Sitecore client.
- Database Only Only installs the Sitecore databases.
- Client Only Installs everything except the databases.

Click Next.

To install Sitecore WebDAV features, you must have the WebClient service on your computer. If the WebClient service is not available, the following message appears:



Disregard this message if you do not want to install WebDAV features. Click Next.

Instance Name

-	ion X
nstance Name	
Give this new insta	ance of Sitecore a unique name.
Instance Name:	MySite
NOTE: This name i hostname of an IIS	identifies this instance of the application. It is also the default
nostilance of an in	
	< Back Next > Cancel



Give a unique name to this new instance of Sitecore. If you choose to create a new site at a later step, this name is also used as the hostname of an IIS web site.

License File

Note

If you selected the Database Only installation type, the **Installation Wizard** skips this step.

icense File:	Crysteend main Consuments (Licensed), c Browse
EXPIRATION DATE	9/29/2017 12:00:00 PM
VERSION	5
ADDRESS	2 Glinky Street, Office 403 Driagragetrassik GP #3000
COMPANY	
COUNTRY ISO	UA.
RESELLER	~

Click Browse to navigate to the license file that you want to use, and then click Next.

Database Server

Select the database server.

If you select SQL Server, you see the following Database Server dialog box:

Select the database	e server and authentication met	hod to ura
Select the database	e server and addrendcation met	
Select the appropri	ate database vendor:	SQL Server ~
	e server from a list or click Brow	
	e available database servers. Sele	ect the login to use and enter
the password for th	iat login.	
Database Server:		
Database Server: (local)\SQLEXPRES	S	~ Browse
Database server	S sa	• Browse
(local)\SQLEXPRES		Browse
(local)\SQLEXPRES	sa	Browse Advanced
(local)\SQLEXPRES Login ID: Password:	sa	

Select the database server from a list, or click **Browse** to see a list of all the database servers that are available. Enter the login ID (SQL server user name) and the corresponding password. The installation program uses these credentials to access the SQL server.

To set the database prefix options, click Advanced and the Advanced Database Options dialog box appears.

Verify that the wizard	can connect to the database server.
Database Prefix:	
Database Prefix:	MySite
Add this prefix to t	he names of the physical files.
Credentials to use in cor	nnection strings
Louis ID.	sa
Login ID:	

In the **Advanced Database Options** dialog box, specify the database prefix for this instance of Sitecore XP, and if you want the database prefix to be added to the names of the physical files, select the **Add this prefix** to the names of the physical files check box.

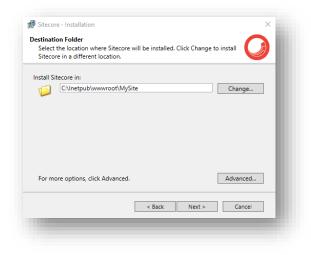
In the **Credentials to use in connection strings** section, enter the login ID (SQL server user name) and corresponding password. Sitecore applications will use these credentials to access the SQL server. Click **OK**.

Click Next.

Note

If you selected the Database Only or Client Only installation, the **Credentials to use in connection strings** section is not shown.

Destination Folder



Select the folder where the Sitecore web site should be installed.



To change the database folder and the folder where various data files are stored — log files, packages, and so on — click **Advanced** and the **Destination Folders** dialog box appears:

Select the locati	ons where the database files will be installed.	Ð
Sitecore Dat	a:	
C:\Inetpub\	wwwroot\MySite\Data Browse	
Sitecore Dat	abases:	
C:\Inetpub\	wwwroot\MySite\Databases Browse	
MDF Files:	C:\Inetpub\wwwroot\MySite\Databases\MD Browse	
LDF Files:	C:\Inetpub\wwwroot\MySite\Databases\LDI Browse	
	OK Cancel	

Note

If you selected the Database Only installation, the **Sitecore Data** and **Sitecore Databases** fields are not shown.

If you selected the Client Only installation, the Sitecore Databases field is not shown.

Enter new destination folders, and click OK.

Click Next.

Note

Ensure that SQL server has the permissions to write to the destination folder(s).

IIS Web Site

Note

If you selected the Database Only installation, the IIS Web Site step is not shown.

5 Web Site						
Create a new Web	site.					Ø
Web Site Name:	MySite]
For more options,	click Advanced.				Advanced	
		< Back	Ne	ext >	Cancel]



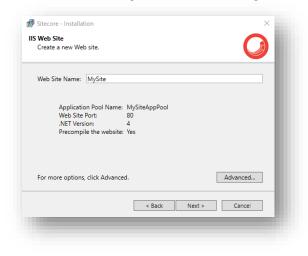
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Enter the name of the new website. Click **Advanced** to edit a website port and create an Application Pool. Select the **Precompile the website to improve the initial response time** check box.

Specify some additional par	ameters for IIS.
Application Pool	
Create application pool name	ed MySiteAppPool
	o improve the initial response time.

Click OK.

The IIS Web Site dialog box reflects the changes.



Click Next.

Ready to Install Sitecore

leview the options you selecte nstall Sitecore.	d. Click Back to change an option or click Install to
Option:	Value:
Instance Name:	MySite
License File:	C10sen/ymin/@souments/Excense/Excense 2
Database Server:	and the second
Destination Folder:	C:\Inetpub\wwwroot\NewInstance1
Web Site Name:	MySite
<	>
	< Back Install Cancel

Review the options you selected. Click Install to install Sitecore XP.



A progress window informs you of the installation process. Start the browser and enter the following URL: http://MySite/sitecore



3.3 Troubleshooting

If there is an error during installation

If the installation program fails, a log file is automatically created. You can find the <code>SitecoreInstaller.log</code> file in the <code>\%Temp%</code> folder.

Ensure that you save the log file, and if necessary, attach it to your support request.

Important

The log file is recreated during each installation attempt. If there are errors during installation, you must save and copy the log file to another location right after an unsuccessful installation. Otherwise, the file will be overwritten.

"Database '...' cannot be upgraded" error message while using SQL Server

When using SQL Server, the installer returns the "*Database '...' cannot be upgraded*" error message. To avoid this, the user account configured to run the SQL server application must have full access permissions to the website root folder.

Typically, the SQL server application runs in the context of the NETWORK SERVICE account.

For more information, see the section File System Permissions for SQL Server Files.

Chapter 4

Installing the Sitecore XP from the .ZIP File

This chapter describes how to install Sitecore XP 8.2 from the ZIP file of the website root.

This chapter contains the following sections:

- Installation Process Overview
- Configuring Folder and Registry Permissions
- Configuring the IIS
- Microsoft SQL Server Configuration
- Oracle Database Storage Setup
- Uninstalling Sitecore XP



4.1 Installation Process Overview

This section describes how to install Sitecore from a ZIP archive of the Sitecore XP site root.

You can download the Sitecore XP ZIP archive from the Sitecore Downloads page - https://dev.sitecore.net.

To install an instance of Sitecore:

- 1. Ensure that the ASP.NET feature is enabled for Internet Information Services (IIS).
- 2. Choose a parent directory path for the project, for example:

C:\InetPub\wwwroot\ProjectName

3. Extract the . zip archive to create the following folders:

```
C:\InetPub\wwwroot\ProjectName\Website
C:\InetPub\wwwroot\ProjectName\Data
C:\InetPub\wwwroot\ProjectName\Databases
```

- 4. Set permissions as described in the section *Configuring Folder and Registry Permissions*.
- 5. In the Website \App_Config \Include folder, enable the DataFolder.config file and change the following setting to the absolute location of the \Data folder.

```
<sc.variable name="dataFolder">
     <patch:attribute name="value">/data</patch:attribute>
     </sc.variable>
```

For example: C: \InetPub\wwwroot\ProjectName\Data

- 6. Copy the appropriate license.xml file to the \Data folder.
- 7. Attach the SQL databases from the **\Databases** folder to the SQL server.

For more information about working with SQL Server, see the section *Microsoft SQL Server Configuration*.

8. Edit the ConnectionStrings.config file located in the \Website\App Config \ folder.

Enter a connection string for each database, for example:

```
<add name="core" connectionString="user
id= sql server user ;password= user password ;Data
Source=_sqlserver_;Database=_core_database_name_" />
```

- 9. In the IIS, configure the website as described in the section *Configuring the IIS*.
- 10. Configure the Internet Explorer browser as described in the Browser Configuration Reference manual.
- 11. Start the browser and enter the following URL:

http://ProjectName/sitecore

The Sitecore login screen appears:



The default password for the Admin user is "b".



4.2 Configuring Folder and Registry Permissions

This section describes the NTFS permissions for folders and files, as well as Windows registry permissions required by Sitecore XP to function properly. For practical advice on how to edit NTFS permissions and registry permissions, please refer to the Microsoft Developer Network website.

4.2.1 Updating the Security Settings for a Folder

To update the security settings for a folder:

- 1. In Windows Explorer, right-click the folder and select Properties.
- 2. In the **Properties** dialog box, click the **Security** tab.
- 3. In the **Group or user names** field, select a user or group and grant them the appropriate permissions in the **Permissions for** field.
- 4. In the **Security** tab, click **Advanced**.
- 5. In the Advanced Security Settings dialog box, select the Replace permission entries checkboxes.

4.2.2 File System Permissions for Anonymous Requests

Certain types of browser requests (generally for directory lookups and static resources) are executed with the permissions of the anonymous Internet user account. This account requires *Read* permission for all the files, folders, and subfolders under the \Website folder.

The following table contains the default name for this account in different versions of IIS:

IIS version	Default anonymous Internet user account name	
7, 7.5, 8.0, 8.5	IUSR	

If IIS is not configured to use the default IUSR account for processing anonymous requests or if Anonymous authentication is not enabled for the website, the previously mentioned permissions must be granted to the corresponding account(s).

4.2.3 File System Permissions for ASP.NET Requests

Sitecore XP executes requests for ASP.NET resources and all the .NET code running within the application with the permissions of the account configured as an identity for the website's application pool.

This account requires *Modify* permissions for all the files, folders, and subfolders under the \Website and \Data folders.

The following table contains the default account used for processing ASP.NET requests in the different versions of IIS:

IIS version	Default ASP.NET account name
7	NETWORK SERVICE
7.5	NETWORK SERVICE
8.0	NETWORK SERVICE
8.5	NETWORK SERVICE

IIS 7 and later lets you change the user account that is used for processing ASP.NET requests.

If you select a different user account to process the ASP.NET requests, you must also grant this account the *Modify* permissions.

Note

For more information about application pool identities and specifically about assigning rights to the AppPoolIdentity account, see the following article: <u>http://learn.iis.net/page.aspx/624/application-pool-identities/</u>

4.2.4 File System Permissions for System Folders

To be able to load .NET runtime and ASP.NET resources used for processing the ASP.NET requests, the worker process hosting the Sitecore XP application requires access to multiple system files and folders that are not distributed as a part of Sitecore XP, but are installed as a part of the Windows Operating System and the .NET framework.

Most of these permissions are granted by IIS to all ASP.NET applications, automatically making the application pool identity account a member of the *IIS_IUSRS* security group.

However, on certain environments it is necessary to manually grant permissions for the application pool identity to the following system locations:

Default location	Required permissions	Comments
%WINDIR%\temp\	Modify	
%WINDIR%\Globalization\	Modify	Required for registering custom languages by the .NET Framework correctly.
%PROGRAMDATA%\Microsoft\Crypto	Modify	Required for storing cryptographic keys used for encrypting/decrypting data.

Note

ASP.NET and/or IUSR account require the modify access rights to the \temp folder to install Sitecore XP.

These variables have the following default values:

Variable	Default value
%WINDIR%	C:\Windows
%PROGRAMDATA%	C:\ProgramData for IIS 7 and later

Note

For more information about built-in groups and accounts in IIS, refer to http://learn.iis.net/page.aspx/140/understanding-built-in-user-and-group-accounts-in-iis-7/

4.2.5 File System Permissions for SQL Server Files

If you are using SQL Server, the user account configured to run the SQL server application requires *Full access* to the \Databases folder containing MDF and LDF database files. Typically, the SQL Server application runs within the context of the *NETWORK SERVICE* account.

4.2.6 Windows Registry Permissions

Sitecore XP contains a built-in functionality that reads and updates the Windows performance counters that can be used for monitoring and troubleshooting the Sitecore application. This functionality requires access to Windows registry keys. This access can be granted by making the application pool identity a member of the built-in *Performance Monitor Users* group.



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Note

If the required registry permissions are not granted, the "Access to the registry key 'Global' is denied" error will be registered in the Sitecore log files whenever the application attempts to access Windows performance counters.

To avoid this error, you must prevent Sitecore from updating the performance counters. To do that, in the web.config file, set the Counters.Enabled setting to *false*.

Adding an Account to a User Group

To add a Windows account to a user group, use the net localgroup command.

For example, to add the *NETWORK SERVICE* account to the *Performance Monitor Users* group, run the following command on the server hosting the Sitecore XP web application:

net localgroup "Performance Monitor Users" /add "NETWORK SERVICE"

An IIS reset is required for the changes to take effect.

For more information about the net localgroup command, refer to http://www.microsoft.com/resources/documentation/windows/xp/all/proddocs/en-us/net_localgroup.mspx



4.3 Configuring the IIS

The following sections describe how to configure different versions of IIS (versions 7, 7.5, 8 and 8.5) for Sitecore XP.

The following list shows which operating systems use which IIS versions:

- IIS 7.5 Windows Server 2008 R2 SP3, Windows 7
- IIS 8 Windows Server 2012, Windows 8, Windows 10
- IIS 8.5 Windows Server 2012 R2, Windows 8.1
- IIS 10 Windows 10, Windows Server 2016.

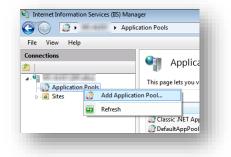
4.3.1 IIS 7, 7.5, 8, 8.5 and 10

This section contains the instructions for IIS 7, 7.5, 8, 8.5, and 10 for Sitecore XP.

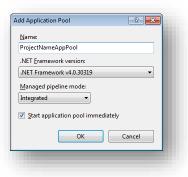
Create the Application Pool

To create the application pool for Sitecore on IIS 7, 7.5, 8, 8.5 and 10:

- 1. Start the **IIS Manager**.
- 2. In the Connections panel, right-click Application Pools and click Add Application Pool.



3. In the Add Application Pool dialog box, enter the following values:



Field	Value
Name	ProjectNameAppPool
.NET Framework version	4.X.X
Managed pipeline mode	Integrated

4. Click OK.

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5. In the **Application Pools** panel, click the application pool you have just created, and in the **Actions** panel, click **Advanced Settings**.

Application Pools	Application Poo This page lets you view and manag pools are associated with worker p isolation among different applicati	ge the list of app rocesses, conta ions.	in one or more a	applications, and pr		Actions Add Application Pool Set Application Pool Defaults Application Pool Tasks Start
	Filter: • 🗰	<u>Go</u> - 🙀 Show	/ <u>A</u> ll Group by		÷	Stop Recycle
	Name	Status	.NET Fram	Managed Pipel	Identif	
	ASP.NET v4.0	Started	√4.0	Integrated	Applic	Edit Application Pool
	ASP.NET v4.0 Classic	Started	√4.0	Classic	Applic	Basic Settings
	Classic .NET AppPool	Started	√4.0	Classic	Applic	Recycling
	CMS65AppPool	Started	√4.0	Integrated	Applic	Advanced Settings
	DefaultAppPool	Started	√4.0	Integrated	Applic	Rename
	NewInstance1AppPool	Started	√4.0	Integrated	Netwo	X Remove
	NewInstance4AppPool	Started	∨4.0	Integrated	Netwo	••
	NicamAppPool	Started	v4.0	Integrated	Netwo	View Applications
	ProjectNameAppPool	Started	∨4.0	Integrated	Applic	😢 Help
	1 sc53	Started	v2.0	Classic	Netwo	Online Help
	SC66	Started	∨4.0	Integrated	Netwo	
	SC661	Started	v4.0	Integrated	Netwo	
	•				F.	

- 6. In the Advanced Settings dialog box:
 - Set the .NET Framework version to v4.0
 - Set the **Identity** setting to the built-in account called *ApplicationPoolIdentity* or *NetworkService*.
 - Ensure that the Maximum Worker Processes setting is set to 1.
 - Set the Load User Profile setting to True

	(General)		*
	NET Framework Version	v4.0	
	Enable 32-Bit Applications	False	
	Managed Pipeline Mode	Integrated	
	Name	ProjectNameAppPool	E
	Queue Length	1000	
	Start Automatically	True	
-	CPU		
	Limit	0	
	Limit Action	NoAction	
	Limit Interval (minutes)	5	
	Processor Affinity Enabled	False	
	Processor Affinity Mask	4294967295	
Ξ	Process Model		
	Identity	ApplicationPoolIdentity	
	Idle Time-out (minutes)	20	
	Load User Profile	True	
	Maximum Worker Processes	1	
	Ping Enabled	True	-

Create the Website

To configure the website:

1. Start the **IIS Manager**.



2. In the **Connections** panel, expand Sites.



- 3. Right-click Sites and then click Add Web Site.
- 4. In the Add Web Site dialog box, fill in the required fields, for example:

Field	Value
Site name	ProjectName
Application pool	ProjectNameAppPool
Physical path	C:\InetPub\ProjectName\Website
Host name	Projectname

ite name:		Application pool:			
ProjectName		ProjectNameAppPool			S <u>e</u> lect
Content Directory <u>P</u> hysical path:					
C:\InetPub\Proje	ectName\Websit	e			
Pass-through au	thentication				
Connect as	Test Settings				
Binding					
<u>T</u> ype:	IP address	:		Port:	
http		igned	•	80	
Host name:					
projectname			1		
Example: www.c	ontoso.com or n	narketing.contoso.com			
Start Web site in	nmediately				
			OK	_	Cancel
			OK		Cancel

- 5. Click OK.
- 6. Open the hosts file C:\Windows\System32\drivers\etc\hosts and add the following line:

127.0.0.1 projectname

Now you can access your website by entering the *http://projectname* address in your browser.

Limit Access to Anonymous Users

You must prevent anonymous users from accessing the following folders:

• \App_Config



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- \sitecore\admin
- \sitecore\debug
- \sitecore\shell\WebService

For example, to limit anonymous access to the \App Config folder:

- 1. Open the IIS.
- 2. In the **Connections** panel, browse to your Sitecore site and select the \App_Config folder.
- 3. In the **App_Config Home** panel, double-click **Authentication** to configure the authentication settings for this folder.

ile ⊻iew <u>H</u> elp	
onnections	MySite Home
Sites Default Wel Site MySite P - App_Browsers App_Config	ASP.NET
▷ App_Data ▷ Areas ▷ bin ▷ Data	.NET Profile JNET Roles JNET Trust JNET Users Levels
 	Application Connection Machine Key Pages and Controls
b - (∭ xs l	ASP ASP CGI Rules
	Compression Default Directory Error Pages Document Browsing
	Failed Lister Litte Litte
	Features View 🕂 Content View

4. In the Authentication panel, ensure that Anonymous Authentication is disabled.

G G i + Site	es			
<u>F</u> ile <u>V</u> iew <u>H</u> elp				
Connections	Authentication Group by: No Grouping -			Actions Enable Edit
Application Pools	Name	Status	Response Type	Help
🕟 🍚 Default Web Site	Anonymous Authentication	Disabled		Online Help
 ecmsite.net App_Browsers App_Config App_Data Din bin bin_x64 	ASP.NET Impersonation Forms Authentication	Disabled Disabled	HTTP 302 Logi	

To prevent anonymous users from accessing the <code>\sitecore\admin\</code>, <code>\sitecore\debug</code>, and <code>\sitecore\shell\WebService</code> folders, repeat steps 2-4 for each folder.

5. Restart IIS.



Note

If you have one or more processing, dedicated publishing, and/or indexing servers that does not handle requests, you must ensure that you use <u>Application Initialization</u> (IIS 8.0) or the <u>appropriate module</u> (IIS 7.5), so you can successfully start Sitecore after you recycle the application pool.

If you do not do this, Sitecore will not be launched and its application pool can be shut down due to inactivity.



4.4 Microsoft SQL Server Configuration

When you install Microsoft SQL Server, select **Mixed Mode** authentication (Windows Authentication and SQL Server Authentication).

If you have already installed MS SQL and you need to change the security authentication mode, refer to the following: <u>http://technet.microsoft.com/en-us/library/ms188670.aspx</u>

Note

You can also use Windows authentication to connect to the SQL server. For more information on connecting to the SQL server, see <u>http://msdn.microsoft.com/en-us/library/ff647396.aspx</u>

4.4.1 Creating a Database Account for Sitecore XP Databases on SQL Server

This section describes how to create a database account for Sitecore databases under SQL Server 2008 (or later) with the minimum required permissions.

- 1. Start SQL Server Management Studio.
- 2. Make sure the Sitecore databases are attached.
- 3. In **SQL Server Management Studio**, in the **Object Explorer** pane, expand the *Security* folder.
- 4. Right-click the *Logins* folder and click **New Login** to create a new login.
- 5. In the Login New window, select the General page and specify the login name.

Select a page Manager Select a page	🖾 Script 🔻 🚺 Help		
☆ Server Roles ☆ User Mapping ☆ Securables	Login <u>n</u> ame:	SC user	S <u>e</u> arch
Tatus Status	 <u>Windows authentication</u> <u>SQL</u> Server authentication 		
	Password:	•••••	
	Confirm password:	•••••	
	Specify old password		
	Old password:		
	Enforce password policy		
	Enforce password expiration	tion	
	User must change pass	vord at next login	
	Mapped to certificate		v
	Mapped to asymmetric key		
	Map to Credential		Add
Connection	Mapped Credentials	Credential Provider	
Server: (local)			
Connection:			
sa			
View connection properties			
Progress			Remove
Ready	D.C. N.L.	master	
	Default <u>d</u> atabase:	<pre>cdefault></pre>	
	Default language:	<default></default>	▼
			OK Cancel
			OK Cancel

6. Select the **SQL Server authentication** option and clear the **User must change password at next login** check box (this option is not supported on some Windows operating systems).

 Click the User Mapping page and in the User mapped to this login field, select the Sitecore databases.

Select a page A General	Script	▼ 🚺 Help		
Server Roles				
Securables	Users ma Map	pped to this login: Database	User	Default Schema
🚰 Status	map	master	030	Deradit Schema =
		model		
		msdb		
		SC100104ECM100331 Analytics		=
		SC100104ECM100331Sitecore Core	SC user	
		SC100104ECM100331Sitecore Master	SC user	
		SC100104ECM100331Sitecore Web	SC user	
		SC100104ECMWIN7 Analytics		
		SC100104ECMWIN7Sitecore Core		
		III account enabled for: SC100104ECM100331Sitecon		4
Connection	Database	account enabled for: SC100104ECM100331Stecon a gole membership for: SC100104ECM100331Stecon at Membership. Basic-Access		Þ
Server:	Guest Database	account enabled for: SC100104ECM100331Sitecon s role membership for: SC100104ECM100331Sitecon st_Membership_BasicAccess st_Membership_FulAccess		· ·
Server:	Guest Database V aspre aspre aspre	account enabled for: SC100104ECM100331Stecon gole membership for: SC100104ECM100331Stecon et Membership [BasicAccess et, Membership [FullAccess et, Membership FeortingAccess		,
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Server: (local) Connection: sa	Guest Database V aspn V aspn aspn aspn aspn	account enabled for: SC100104ECM100331Stecon grole membership for: SC100104ECM100331Stecon <u>H_Membership_EastoAccess</u> et_Membership_FullAccess et_Personalization_BasicAccess et_Personalization_FullAccess et_Personalization_ReportingAccess		Î
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Server: (local) Connection: sa	Guest Database V aspri aspri aspri aspri aspri v aspri v aspri v aspri v aspri v aspri v aspri v aspri	account enabled for: SC100104ECM100331Stecon a role membership for: SC100104ECM100331Stecon at <u>Membership FollAccess</u> at <u>Membership FollAccess</u> at <u>Personalization BasicAccess</u> at <u>Personalization FolgottingAccess</u> at <u>Personalization FolgottingAccess</u> at <u>Personalization FolgottingAccess</u> at <u>Profile BasicAccess</u> at <u>Profile BasicAccess</u> at <u>Profile ReportingAccess</u> at <u>Profile ReportingAccess</u> at <u>Profile ReportingAccess</u> at <u>Profile ReportingAccess</u> at <u>Profile ReportingAccess</u> at <u>Profile ReportingAccess</u> at <u>Profile Access</u> at <u>Profile ReportingAccess</u> at <u>Profile ReportingA</u>		Î
Server: (ocal) Connection: sa I View connection properties	Guest Database V aspn V aspn aspn aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn	account enabled for: SC100104ECM100331Stecore s gle membership for: SC100104ECM100331Stecore et <u>Membership: BasicAccess</u> et <u>Membership: PelpAccess</u> et <u>Membership: PelpAccess</u> et <u>Personalization FullAccess</u> et <u>Personalization FullAccess</u> et <u>Personalization FullAccess</u> et <u>Personalization FullAccess</u> et <u>Profile FacAccess</u> et <u>Profile FacAccess</u> et <u>Profile BasicAccess</u> et <u>Roles FullAccess</u> et <u>Roles FullAccess</u>		Â
Server: (ocal) Connection: sa <u>If View connection properties</u> Progress	Guest Database V aspn V aspn aspn aspn aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn	account enabled for: SC100104ECM100331Stecor a gele membership for: SC100104ECM100331Stecor at <u>Menbership EstroAccess</u> at <u>Menbership FullAccess</u> at <u>Personalization BasicAccess</u> at <u>Personalization FlopotingAccess</u> at <u>Personalization FlopotingAccess</u> at <u>Profile FullAccess</u> at <u>Profil</u>		Â
Server: (ocal) Connection: sa <u>View connection properties</u> rogress	Guest Database V aspn V aspn aspn aspn aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn	account enabled for: SC100104ECM100331Stecore s gle membership for: SC100104ECM100331Stecore et <u>Membership: BasicAccess</u> et <u>Membership: PelpAccess</u> et <u>Membership: PelpAccess</u> et <u>Personalization FullAccess</u> et <u>Personalization FullAccess</u> et <u>Personalization FullAccess</u> et <u>Personalization FullAccess</u> et <u>Profile FacAccess</u> et <u>Profile FacAccess</u> et <u>Profile BasicAccess</u> et <u>Roles FullAccess</u> et <u>Roles FullAccess</u>		Î
Perver: local) Connection: a <u>Wew connection properties</u> rogress	Guest Database V aspn V aspn aspn aspn aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn V aspn	account enabled for: SC100104ECM100331Stecor a gele membership for: SC100104ECM100331Stecor at <u>Menbership EstroAccess</u> at <u>Menbership FullAccess</u> at <u>Personalization BasicAccess</u> at <u>Personalization FlopotingAccess</u> at <u>Personalization FlopotingAccess</u> at <u>Profile FullAccess</u> at <u>Profil</u>		Â

8. In the **Database role membership for** field, select the following check boxes:

For the Master and the Web databases:

- db_datareader
- db_datawriter
- o public

For the Analytics database:

- db_datareader
- o db_datawriter
- o public

If you perform Historical Aggregation:

- In SQL Server Management Studio, connect to the SQL Server instance that will be used for Historical Aggregation.
- 2) Find the database that will be used for Historical Aggregation.
- 3) Open a New Query window.
- 4) Execute the following:

GRANT ALTER TO [Username];

GRANT REFERENCES TO [Username];

For the Core database:

- o db_datareader
- db_datawriter
- o public
- aspnet_Membership_BasicAccess



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- aspnet_Membership_FullAccess
- aspnet_Membership_ReportingAccess
- aspnet_Profile_BasicAccess
- aspnet_Profile_FullAccess
- aspnet_Profile_ReportingAccess
- aspnet_Roles_BasicAccess
- aspnet_Roles_FullAccess
- aspnet_Roles_ReportingAccess

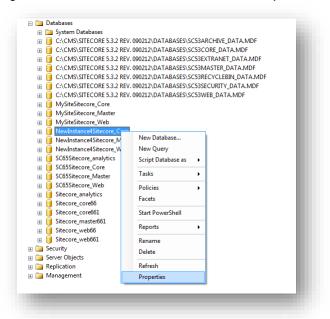
For the Sitecore.Sessions database:

- db_datareader
- db_datawriter
- o public
- 9. Click **OK** to create the user.

4.4.2 Granting Execute Rights to Stored Procedures

To grant execute rights to stored procedures:

- 1. In the SQL Server Management Studio window, expand Databases.
- 2. Right-click a Sitecore database, and then click Properties.



3. In the **Database Properties** window, click the **Permissions** section and select the user that you want to grant rights to.



4. In the **Users or roles** field, select the user and in the **Explicit permissions for** field, in the **Grant** column, give the user *Execute* permission.

Tiles Filegroups Options	Server name:						
		12.18	RANY INCOMPAGNATION	81			
Change Tracking	View server permissio	09					
Permissions	Database name:	1000					
Extended Properties	Users or roles:					Search	
	Name				Type		
	SC_user				User	2	
Connection	Permissions for SC_use Explicit Effective	c					
Connection Server:		Grantor	Grant	With Grant	Deny	^	
Server:	Explicit Effective Permission Create XML schem		Grant	With Grant	Deny	^	
Server: Connection: DKv	Explicit Effective Permission Create XML schem Delete			With Grant	Deny		
Server:	Explicit Effective Permission Create XML schem Delete Execute		Grant	With Grant	Deny	^	
Server: Connection: DKv Vew connection properties	Explicit Effective Permission Create XML schem Delete Execute Insert			With Grant	Deny	^	
Server: Connection: DK JV Vew connection properties	Explicit Effective Permission Create XML schem Delete Execute Insert References			With Grant	Deny		
Server: Connection: DKv Vew connection properties	Explicit Effective Permission Create XML schem Delete Execute Insert			With Grant	Deny		

Repeat this procedure for the other Sitecore databases.

Important

The analytics database for Sitecore xDB runs on MongoDB. For more information about configuring Sitecore xDB on MongoDB see the <u>xDB Configuration Guide</u>.



4.5 Oracle Database Storage Setup

This section describes how to set up the Oracle database storage for Sitecore CMS.

The Oracle database storage setup is only available when Sitecore XP is running in Sitecore Experience Management mode (CMS-only mode), which lets you run Sitecore XP without the Experience Database (xDB) enabled.

For more information about Experience Management, refer to the Sitecore Documentation site – <u>https://doc.sitecore.net</u>.

Database Server Preparations

To set up the Oracle database storage, the database server must run a supported version of an Oracle database instance that meets the following requirements:

- The Oracle instance must be configured in shared server mode.
- The Oracle instance must contain a tablespace for Sitecore, having at least 200MB of free hard disk space.
- Additional hard disk space will be needed as the Sitecore database grows.

To load Sitecore data into the Oracle database, to set up Oracle databases for Sitecore CMS, on the Oracle Database Server (or a workstation PC with the administration tools for the Oracle instance):

- 1. Download the Sitecore 8.2 rev. 171121 (oracle dbs).zip file from the <u>Sitecore</u> <u>Downloads page</u> and unzip the file.
- 2. In a text editor, open the createdata.bat file located in the \Databases\Oracle folder and find the following node:

if	"%DATABASE%" == ""	set	DATABASE=sitecore
if	"%PASSWORD%" == ""	set	PASSWORD=manager
if	"%TBS%" == ""	set	TBS=sitecore
if	"%PREFIX%" == ""	set	PREFIX=sc

User-level variables	Description
DATABASE	The name of the Oracle Database instance that will host Sitecore data (as set up on the PC).
TBS	Name of the tablespace for Sitecore data.
PASSWORD	Password for the system user of the Oracle instance.
PREFIX	Prefix to use for user schema names and passwords. (Default: sc)

- 3. Specify the user-level variables as required and save your changes.
- 4. Launch the createdata.bat file from the \Databases\Oracle\ folder.

At this point, installation scripts set up the following 3 user schemas:

- %PREFIX%core
- %PREFIX%master
- %PREFIX%web

Website Server Setup

The following instructions describe a web server setup where the Sitecore CMS file system is hosted.



Note

When you install the Oracle Data Provider in a 64-bit environment, you must use Oracle Client for Windows x64.

To set up a web server:

 Install Sitecore XP. If you are installing Sitecore XP from a ZIP archive (and not from an .exe file setup) you must configure the dataFolder setting and copy a valid license.xml file to the \Data folder before proceeding to the next steps.

For more information, see the section Installing the Sitecore XP from the .ZIP File.

- 2. Back up the original Web.config file and rename the Web.config.Oracle file to Web.config.
- 3. Back up the original Sitecore.config file and rename the Sitecore.config.Oracle file to Sitecore.config.
- 4. Modify the connection strings in the \App_Config\ConnectionStringsOracle.config file to point to the valid Oracle instance.
 - The Data Source parameter must point to the local Oracle instance name as configured in the Oracle Net Manager.
 - User names and passwords must be adjusted to match those installed on the database server. The default usernames and passwords are:

Username	Password
sccore	sccore
scmaster	scmaster
scweb	scweb

Configure IIS as you normally would for a Sitecore installation, and then run Sitecore.

4.6 Uninstalling Sitecore XP

Before uninstalling Sitecore:

- Delete the IIS Website or update it to reference a different directory, or stop IIS by executing the following command:
 - o net stop w3svc.
- Remove the Sitecore file system.
- Remove any databases on remote or local servers that are used by this instance of Sitecore.



Chapter 5

Sitecore XP Post-Installation Steps

This chapter describes the recommended steps that you should take after installing Sitecore XP 8.2 rev. 171121 (Update-6).

This chapter contains the following sections:

- Content Expiration
- Windows Authentication for Sitecore
- Setting Microsoft SQL Server Database Properties
- Rebuild the Search Indexes and the Link Database
- Configure the Sitecore Experience Database (xDB)
- Deploy Marketing Definitions

5.1 Content Expiration

You set the IIS Expire Web content header to improve performance.

The Expire Web content header (located in common HTTP Response headers) is how IIS determines whether to return a new version of the requested web page if the request is made after the web page content has expired. IIS marks each web page before it is sent, using the settings that you provide for content expiration. The website visitor's browser translates the expiration mark.

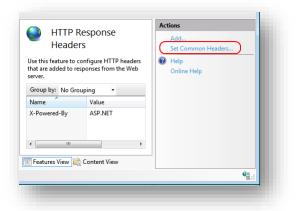
By setting Expire Web content to something other than *immediately*, you can reduce second-access load times by 50 to 70 percent. This setting does not affect dynamically-generated content.

To enable the Expire Web content header in IIS 7.x:

- 1. Launch IIS Manager.
- 2. Navigate to the site that you want to enable the Expire Web content header for.
- 3. In the **IIS** section, double click **HTTP Response Headers**.



4. In the Actions panel, click Set Common Headers...



5. Select the **Expire Web content** check box.

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6. Click After, and set the number of days to its default (7).

 Enabl Expire 	on HTTP Resp e HTTP <u>k</u> eep- : <u>W</u> eb content nmediately				8
A	fter:	Day(s) ated Universal Tin	▼ ne (UTC)):		
	Thursday ,	June 09, 2011		 2:00:00 AM	M ×

7. Click OK.



5.2 Windows Authentication for Sitecore

To configure Sitecore to use Windows Authentication for SQL connection (Windows Server 2008 R2 SP3) and effectively remove the user name and password from the connectionStrings.config file:

1. Open IIS and find the application pool that Sitecore is running under. Open **Advanced Settings** and in the **Identity** field, set the identity to the domain user.

	Processor Affinity Enabled	False	^
	Processor Affinity Mask	4294967295	
	Processor Affinity Mask (64-bit o	4294967295	
۵	Process Model		
\triangleright	Generate Process Model Event L		
	Identity	ApplicationPoolIdentity	
	Idle Time-out (minutes)	20	
	Idle Time-out Action	Terminate	
	Load User Profile	True	
	Maximum Worker Processes	1	
	Ping Enabled	True	
	Ping Maximum Response Time	90	
	Ping Period (seconds)	30	
	Shutdown Time Limit (seconds)	90	
	Startup Time Limit (seconds)	90	
۵	Process Orphaning		
	Enabled	False	
	Executable		
	Executable Parameters		v
ļu ne	eue Length JeueLength] Maximum number o	f requests that HTTP.sys will queue fo Je is full, new requests receive a 503	r
		OK Cancel	

2. In the SQL Server, register the domain user and grant the appropriate security permissions to the Sitecore databases for the domain user.

For more information, see the section *Creating a Database Account for Sitecore XP Databases on SQL Server.*

3. On the computer that hosts Sitecore XP, add the domain user to the IIS_IUSRS group.

Note

You must adjust the permissions for the IIS_IUSRS group according to the instructions in the sections: *File System Permissions for ASP.NET Requests* and *File System Permissions for System Folders*.

4. Edit the \App_Config\ConnectionStrings.config file and replace the user id and password parameters with trusted connection=Yes.

- 5. Prepare your identity so that it can be used as a service account with the aspnet_regils.exe file and the <u>-ga switch</u>.
- 6. To add your domain service account to the local *Performance Monitor Users* group, follow the instructions in the *Windows Registry Permissions* section.

Note

If you use the Sitecore Experience Database (xDB), the same configuration must be repeated for the Reporting database. The connection string for the Analytics database must be:



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<add name="reporting" connectionString="Data Source=<Data-Source>;Database=Sandbox6_Analytics;Trusted_Connection=Yes" />



5.3 Setting Microsoft SQL Server Database Properties

The following Microsoft SQL Server database properties, when configured correctly, can increase performance.

Compatibility Level

Compatibility Level affects SQL syntax and query parsing, and should have no impact on performance. Setting the Compatibility Level to a value of *SQL Server 2008(100)* takes advantage of new T-SQL features, which are used in many of the scripts/commands.

Auto Close

When MS SQL Server opens a database, resources are allocated to maintain that state. Memory for locks, buffers, security tokens, and so on are all assigned. These operations take time. The *Auto Close* property defines how these resources are handled. If it is set to *true* or *ON*, then when the last connection is closed, these resources are deallocated. If a new connection comes in within a short period of time (1/10th of a second or quicker), then all of those resources need to be activated again. Setting the *Auto Close* property to *false* or *OFF* prevents this from happening.

Auto Shrink

The Auto Shrink property uses many resources when it is called, and you have no control over when it is called. If you combine *Auto Shrink* with *Auto Growth*, you can get into a spiral of constantly growing and shrinking the database, taking valuable resources away from other database tasks as well as causing fragmentation issues. If a database or file requires a SHRINK command, it should be done via a script, a command, or a scheduled maintenance plan. Setting the *Auto Shrink* property to *false* or *OFF* disables this feature.

Recovery Model

In the Simple Recovery Model, MS SQL Server records a minimal amount of information in the transaction log. MS SQL Server truncates the transaction log whenever the transaction log becomes 70 percent full or the active portion of the transaction log exceeds the size that MS SQL Server can recover in the amount of time that is specified in the Recovery Interval server level configuration. Setting the Recovery Model to Simple has the lowest amount of overhead compared to *Full* and *Bulk-logged*, which is crucial to the performance requirements needed for the Sitecore XP databases.

To configure all these Microsoft SQL Server database properties to improve performance:

- 1. Open MS SQL Server Management Studio.
- 2. In the Object explorer, right click the CMS Master database and click Properties.
- 3. Click the **Options** page and set the following parameters:
 - In the **Compatibility Level** field, select *SQL Server 2008(100)*.
 - Set the **Auto Close** property to *false*.
 - Set the Auto Shrink property to false.
 - In the **Recovery Model** field, select *Simple*.

Sitecore Experience Platform 8.2 Update 6

electapage PGeneral	🖾 Script 🔻 🚺 Help		
🚰 Files 🚰 Filegroups	Collation:	QL Latin1 General CP1 CI AS	•
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Permissions	Compatibility level:	QL Server 2008 (100)	-
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	Auto Shrink	False	
	Auto Update Statistics	True	
	Auto Update Statistics Asynchronously	False	E
	Cursor		
	Close Cursor on Commit Enabled	False	
	Default Cursor	GLOBAL	
	Miscellaneous		
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		ОК	Cancel

4. Click OK.

Repeat these steps for the Sitecore Core and Web databases.

5.3.1 Warm up the Servers

To ensure that your Sitecore websites are available at all times, even after restarting a server, you should enable the IIS auto-start feature for the application pools on all the servers that you have configured.

For more information about the auto-start feature, see Microsoft's documentation.



5.4 Rebuild the Search Indexes and the Link Database

After you install Sitecore, you must rebuild the search indexes, and the Link database.

To rebuild all the 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 click **Rebuild**.

5.4.1 Cache Configuration

When Sitecore XP is installed, you must optimize caching to improve solution performance, reduce server load, and increase system capacity.

For more information, see the <u>cache API changes</u> topic for Sitecore 8.2 in the Sitecore Documentation Site – <u>https://doc.sitecore.net/</u>

For more information about cache configuration, see the <u>Cache Configuration Reference</u> document on the Sitecore Developer Network. – <u>https://sdn.sitecore.net/</u>



5.5 Configure the Sitecore Experience Database (xDB)

This section describes how to configure the Sitecore Experience Database (xDB).

Note

If you do not plan to use Sitecore xDB, you do not have to perform these steps.

There are three steps to configure Sitecore xDB:

- Configure the reporting database attach the Sitecore.Analytics.mdf database to SQL Server. This database is used for reporting.
 - o In the ConnectionStrings.config file, customize the following string:

```
<add name="reporting" connectionString="user id= username ;password= password ;Data
Source=_server_;Database=Sitecore_Analytics" />
```

Note

You can create a database account with the minimum required permissions for the Analytics database as described in the section *Microsoft SQL Server Configuration*.

- Install MongoDB download and install the latest version of MongoDB. For more information on how to install MongoDB, see http://docs.mongodb.org/manual/.
- Configure Sitecore to use Mongo databases perform the actions outlined in the following
 procedure for each Mongo server.

To configure Sitecore to use Mongo databases:

 In the ConnectionStrings.config file, specify the connection strings to your MongoDB server:

```
<add name="analytics" connectionString="mongodb://localhost/analytics" />
<add name="tracking.live" connectionString="mongodb://localhost/tracking live" />
<add name="tracking.history" connectionString="mongodb://localhost/tracking history" />
<add name="tracking.contact" connectionString="mongodb://localhost/tracking contact" />
</add name="tracking.contact" connectionString="tracking.contact" // >>
```

- 2. In the Sitecore.Analytics.config file, in the relevant settings, update the Analytics.EmailFromAddress (for sending out reports as emails) attributes value.
- 3. In the Sitecore.config file, in the relevant settings, update the MailServer attributes value.
- 4. If you want to use Sitecore XP with Sitecore MVC, in the \App_Config\Include folder, rename the Sitecore.MvcAnalytics.config.disabled file to Sitecore.MvcAnalytics.config.
- 5. To limit the lookup activity to one server, in the \App_Config\Include\Sitecore.Analytics.config file, update the Analytics.PerformLookup setting.
- 6. To hash IP addresses before they are stored in xDB, in the Sitecore.Analytics.config file, update the RedactIpAddress setting.

Important

To ensure that hashing is secure, you must also change the default salt value in the Sitecore.Analytics.config file, in the geoIpManager section.

7. Restart Internet Information Services (IIS).

For more information about configuring Sitecore xDB to use with Sitecore XP, as well as the scalability of Sitecore xDB architecture, see the Sitecore Documentation site – <u>https://doc.sitecore.net/</u>.



5.6 Deploy Marketing Definitions

If you want to use the Sitecore Experience Marketing functionality, you must deploy marketing definitions.

Note

If you do not plan to use Sitecore xDB, you do not have to perform these steps.

To deploy 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**.

Deploy marketing definitions	
Select the definitions	
✓ Campaigns	
✓ Funnels	
✓ Marketing assets	
✓ Outcomes	
✓ Taxonomies	
Deploy	
Note: Deployment can take a long time.	
	Close



5.7 Deploy Path Analyzer Maps

You must deploy the Path Analyzer maps before they can aggragate data.

To deploy the Path Analyzer maps :

- 1. Open the Path Analyzer's administration page: /sitecore/admin/pathanalyzer.aspx
- To deploy all the maps, in the Maps Manager section, click Deploy all maps that are not deployed.
 Alternatively, to deploy individual maps, click Deploy next to the maps that you want to deploy.

Organic non-branded search channel map {EAF98858-0839-4A30-93A3-031BEECA8953} Deploy Organic search channel group map {25002A7E-31F8-4A0C-80D3-EB30A7A3D1FB} Deploy Paid search channel group map {C9DD95DD-E736-48F6-806C-58EEEC680E06} Deploy Referral channel group map {A519694F-8C26-4850-A28A-7C37C4F064D1} Deploy Social channel group map {EC940646-7AB5-4C27-8DEE-E115B11CD48A} Deploy Experience Map with Goals {FE1E048F-9394-46AE-B954-88833B4E13FC} Deploy Experience Map with Page Events {8856056A-B949-4EEF-937-4747197B9C23} Deploy Experience Map with Value Goals Only {11B0C73B8-7702-4B3C-AD80-708995DCB97F} Deploy Contact acquisition outcome map {C2F4DE43-DAAE-4828-A213-3200B98CE2E3} Deploy	Organic branded search channel map {	{A19DBC7A-A3A7-4CBD-8512-A38E0A64A132}	Deploy
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Experience Map with Value Goals Only {1B0C73B8-7702-4B3C-AD80-708995DCB97F} Deploy Contact acquisition outcome map {C2F4DE43-DAAE-4828-A213-3200B98CE2E3} Deploy	Experience Map with Goals {	{FE1E048F-9394-46AE-B954-88833B4E13FC}	Deploy
Contact acquisition outcome map {C2F4DE43-DAAE-4828-A213-3200B98CE2E3}	Experience Map with Page Events {	{8856056A-B949-4EEF-9937-4747197B9C23}	Deploy
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Deploy all maps that are not deployed	Contact acquisition outcome map {	{C2F4DE43-DAAE-4828-A213-3200B98CE2E3}	Deploy
	Deploy all maps that are not deployed		

