# Installing the Sitecore Experience Platform

# Sitecore Experience Platform 8.0 Update 4

Installation guide for administrators and developers



# Table of Contents

Chapter 1	Introduction	4
1.1	Getting Started	5
1.2	Preparing to Install Sitecore XP	6
1.2.1	Install Latest Updates	6
1.2.2	UNC Share Not Supported	6
1.2.3	Sitecore Cannot Operate from a Virtual Directory	7
1.2.4	Install IIS before Updating .NET Framework	
Chapter 2	Sitecore XP Requirements	
2.1	Sitecore Hosting Environment Requirements	
2.1.1	IIS Requirements	
2.1.2	Operating System Requirements	-
2.1.3	.NET Framework Requirements	-
2.1.4	Visual Studio Requirements for Custom Solutions	
2.1.5	Database Requirements	
2.1.6	Antivirus Software Considerations	
2.1.7	Hardware Requirements for a Server Running a Single Sitecore Installation	
2.2	Sitecore Client Requirements	
2.2.1	Software Requirements	
2.2.2		
Chapter 3	Installing the Sitecore XP from the .EXE File	
3.1	Windows Vista / Windows 7 / Windows 8 Pre-installation Steps	
3.1.1	The UAC (User Account Control) Configuration	
3.2	The Installation Process	
3.2.1	Complete	
3.2.2	Databases Only	
3.2.3	Client Only Installation	
3.3	Troubleshooting	
Chapter 4		
4.1	Installation Process Overview	
4.2	Configuring Folder and Registry Permissions	
4.2.1	File System Permissions for Anonymous Requests	
4.2.2	File System Permissions for ASP.NET Requests	
4.2.3	File System Permissions for System Folders	
4.2.4		
4.2.5	Windows Registry Permissions	
	ding an Account to a User Group	
4.3	Configuring the IIS	
4.3.1	IIS 7, 7.5, 8, 8.5	
	eate the Application Pool	
	eate the Website	
	nit Access to Anonymous Users	
4.4	Microsoft SQL Server Configuration	
4.4	Creating a Database Account for Sitecore XP Databases on SQL Server 2008, 2012 and 2014	
4.4.2		-
4.4.2	Uninstalling Sitecore XP	
Chapter 5	Sitecore XP Post-Installation Steps	
5.1	Content Expiration	
5.1 5.2	Windows Authentication for Sitecore	
-	Setting Microsoft SQL Server Database Properties	
5.3 5.4	Rebuild the Search Index and the Link Database	
5.4 5.5	Cache Configuration	
5.5 5.6	Deploy the Marketing Definition Items	
5.0 5.7	Post Installation Steps	
<u>.</u> .	r oschistanation steps	

# Installing the Sitecore Experience Platform

5.7.1	Deploy the Experience Analytics Segments	56
Chapter 6	Configuring Sitecore Experience Database	
	Prerequisites	
6.2	Configuration Process	59
Chapter 7	Appendix	60
7.1	Server Configuration	61
7.1.1	Updating the Security Settings for a Folder	61
Ma	iking the Security Tab Visible	61
Ma	iking an Account Visible	61
7.2	Creating a Web Project in Visual Studio	63

# Chapter 1

# Introduction

This document describes how to install Sitecore Experience Platform 8.0 Update 4.

The document contains the following chapters:

- Chapter 1 Introduction An introduction to the Sitecore Experience Platform 8.0 installation process
- Chapter 2 Sitecore XP Requirements An outline of the installation requirements for Sitecore CMS
- 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
- Chapter 6 Configuring Sitecore Experience Database Step by step instructions for configuring Sitecore Experience Database
- Chapter 7 Appendix Supplementary instructions for configuring the environment

### 1.1 Getting Started

Sitecore® Experience Platform<sup>™</sup> (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 . <code>zip</code> file.

# 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, see <a href="http://sdn.sitecore.net/">http://sdn.sitecore.net/</a>.

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.

Configuration is stored in files such as web.config and the files under the /App Config folder.

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

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:
  - SQL Server 2014, SQL Server 2012, SQL Server 2008 R2 SP1.
  - MongoDB Database 2.6.x (for Sitecore xDB).
- Database location locally or on a remote server.
- Appropriate Sitecore license.
- Hardware.
- Administrative access to computers and databases.
- Access to Sitecore Developer Network (<u>http://sdn.sitecore.net</u>) contact a local sales office or partner manager.

IIS configuration – host headers, and so on.

### 1.2.1 Install Latest Updates

Visit Windows Update – <u>http://windowsupdate.microsoft.com</u> – 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.

### 1.2.4 Install IIS before Updating .NET Framework

To reduce the number of ASP.NET configuration issues on Sitecore hosts, install IIS before installing or updating the .NET framework.

If you have installed or updated .NET framework before installing the IIS, refer to the following article that contains instructions about troubleshooting an ASP.NET installation:

http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/187d0e2c-8e89-49ad-a89de26e4d76ee68.mspx?mfr=true



Chapter 2

# Sitecore XP Requirements

This chapter describes the prerequisites, hardware, and software requirements for Sitecore XP 8.0 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 8.0 has some specific requirements for the operating system, IIS Web Server, .NET Framework, and the database server.

#### 2.1.1 IIS Requirements

Sitecore XP can be hosted on the following IIS versions:

- 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 8.0 is only compatible with the client and server operating systems that support .NET Framework 4.5.

Sitecore XP can be hosted on the following Microsoft operating systems:

- Windows Server 2012 R2 (64-bit)
- Windows Server 2012 (64-bit)
- Windows Server 2008 R2 (64-bit) SP1+
- Windows Server 2008 (32/64-bit) SP2+
- Windows Vista (32/64-bit) SP2+
- Windows 8.1 (32/64-bit)
- Windows 8 (32/64-bit)
- Windows 7 (32/64-bit, Home Premium and higher) SP1+

#### Important

Go to Windows Update – <u>http://windowsupdate.microsoft.com</u> – and install all the appropriate service packs and security updates on all of your Sitecore XP host and client computers.

#### Windows 8.1

Sitecore XP supports the following editions of the Windows 8.1 operating system:

- Enterprise
- Professional
- Core

# Sitecore Experience Platform 8.0 Update 4

#### Windows 8

Sitecore XP supports the following editions of the Windows 8 operating system:

- Enterprise
- Professional
- Core

#### Windows 7

Sitecore XP supports the following editions of the Windows 7 operating system:

- Ultimate
- Professional
- Enterprise

You can run Sitecore on Windows 7 Home Premium if you install IIS 7.5 on it. For more information about installing IIS 7.5 on Windows 7 Home Premium, see <u>http://technet.microsoft.com/en-us/library/cc731911.aspx</u>.

For more information about the feature limitations in the various Windows 7 editions, see <u>http://technet.microsoft.com/en-us/library/cc753473.aspx.</u>

#### Windows Vista

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

- Business
- Ultimate
- Enterprise

The other editions of Vista, such as Home Basic, have IIS server limitations. For more information about IIS configuration on different editions of Windows Vista, see

http://msmvps.com/blogs/bernard/archive/2007/04/03/why-you-need-vista-business-ultimate-for-iis-7.aspx and http://www.iis.net/learn/install/installing-iis-7/iis-features-and-vista-editions.

#### 2.1.3 .NET Framework Requirements

Sitecore XP requires .NET Framework 4.5.

Any available updates to the .NET Framework should be applied to every Sitecore host.

### 2.1.4 Visual Studio Requirements for Custom Solutions

Sitecore XP requires Visual Studio 2012 or later.

The Sitecore code is compiled in .NET 4.5, and you must therefore use Visual Studio 2012 to compile your projects.

#### 2.1.5 Database Requirements

Sitecore XP supports the following database servers:

- Microsoft SQL Server 2008 R2 SP1
- Microsoft SQL Server 2012
- Microsoft SQL Server 2014
- MongoDB Database 2.6.x (for Sitecore xDB)

# Installing the Sitecore Experience Platform

#### Note

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

### 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 Windows Server Catalog 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 requirement:

- 4 core processor (4 threads)
- 8GB of RAM

Recommended configuration:

- 4 core processor (8 threads)
- 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
- Microsoft Internet Explorer 10
- Microsoft Internet Explorer 9
- Mozilla Firefox 17+
- Google Chrome 25+
- Apple Safari 6 for Mac OS (Windows is not supported by Apple)

#### Note

Sitecore XP 8.0 supports all the current stable versions of these browsers unless stated otherwise. Sitecore XP 8.0 does not support the Compatibility view in IE 9, IE 10, and IE 11.

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

#### Silverlight

Some applications, such as xDB and Sitecore App Center require Microsoft Silverlight 4 or later.

#### Adobe Flash

To use the Report Designer in Sitecore xDB, you must also install Adobe Flash Player.

#### 2.2.2 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.
- 1024x768 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 the Sitecore XP.

You can download the Sitecore installation program from the on the <u>Sitecore Developer</u> <u>Portal</u>.

This chapter contains the following sections:

- Windows Vista / Windows 7 / Windows 8 Pre-installation Steps
- The Installation Process
- Troubleshooting

# 3.1 Windows Vista / Windows 7 / Windows 8 Pre-installation Steps

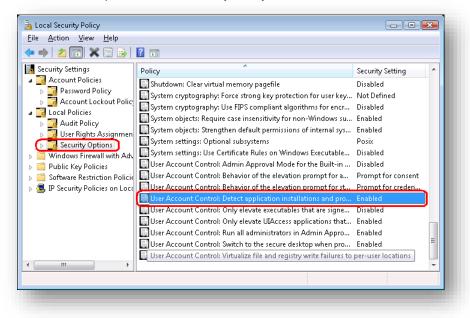
Before you can install Sitecore on Windows Vista or Windows 7, you must enable the *Detect application installations and prompt for elevation* UAC (User Account Control) configuration security policy.

# 3.1.1 The UAC (User Account Control) Configuration

To run the installation program on Windows Vista or Windows 7, the UAC (User Account Control) configuration security policy *Detect application installations and prompt for elevation* must be enabled (this setting is enabled by default).

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

- 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.



- 5. In the left-hand pane, expand the Local Policies node and select Security Options.
- 6. In the right-hand pane, 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.



# 3.2 The Installation Process

To start the installation, launch the *Sitecore 8.0 rev.XXXXXX.exe* application, which starts the installation wizard. The installation wizard will guide you through the installation process.

This section describes the important steps in the wizard.

#### Note

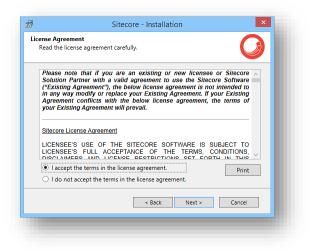
The Sitecore XP configuration files are automatically modified according to the settings provided in the wizard.

#### Welcome Window



Click Next.

#### License Agreement

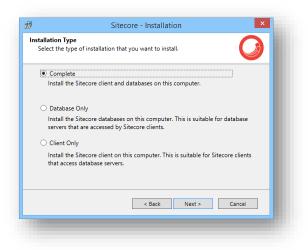


Read the license agreement and select the appropriate option. Click Next.



# Sitecore Experience Platform 8.0 Update 4

#### 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.

### 3.2.1 Complete

This installs both the Sitecore databases and the Sitecore client.

In the Installation Type window, select Complete.

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:

litecore	
	The web client service is not available.
	<u>OK</u>

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

To install the Sitecore client, you must have Microsoft ASP.NET MVC 5.1 on your computer. If MVC 5.1 is not installed, the following message appears:

ecore	The Sitecore client requires MVC 4.0. Unable to detect MVC 4.0 on this machine. Please install MVC 4.0 and try again.
	ОК

The installation cannot be completed without MVC 5.1. To proceed with the installation, close the error message, install ASP.NET MVC 5.1, and then click **Next**.



#### Instance Name

ļ	Sitecore - Installation X
nstance Nam Give this ne	e winstance of Sitecore a unique name.
Instance Na	ame: MySite
	name identifies this instance of the application. It is also the default of an IIS6 + Web site.
	< Back Next > Cancel

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

#### License File

License File:	D:\license\license.xml	E	Browse
EXPIRATION DATE	11/6/2014 12:00:00 PM		^
VERSION	5		
ADDRESS	2 Glinky Street, Office 403 Dniepropetrovsk DP 49000		
COMPANY			
COUNTRY ISO	UA		
RESELLER			$\sim$

Browse 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 m	ethod to use.	
Select the appropria	ate database vendor:	SQL Server	~
	server from a list or click Bro available database servers. S at login.		
Database Server:			
Database Server: (local)\SQLEXPRES	s	~	Browse
	S sa	~ [	Browse
(local)\SQLEXPRES		~ [	Browse
(local)\SQLEXPRES	sa •••••	· [	Browse Advanced

Select the database vendor. Select the database server from a list or click **Browse** to see a list of all the database servers available. Enter the login id (SQL server user name) and the corresponding password. The installation program will use these credentials to access SQL server.

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

Check the advanced opt	ions for the database server.
Verify that the wizard c	an connect to the database server.
Database Prefix:	
Database Prefix:	MySite
✓ Add this prefix to th	e names of the physical files.
Credentials to use in con	nection strings
Login ID:	sa
Password:	•••••
	OK Cancel
	OK Cancel

Specify the database prefix for this instance of Sitecore XP and select whether to prefix physical files or not.

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.



#### **Destination Folder**

	Sitecore - Installation ×
Select	ion Folder the location where Sitecore will be installed. Click Change to install re in a different location.
Install S	itecore in:
	C:\Inetpub\wwwroot\MySite Change
For m	ore options, click Advanced. Advanced
	< Back Next > Cancel

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

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

Se	lect the location	ns where the database files will be installed.	<b>U</b>			
	Sitecore Data:					
	C:\Inetpub\w	wwroot\NewInstance1\Data	Browse			
	Sitecore Databases:					
	C:\Inetpub\w	Browse				
	MDF Files:	C:\Inetpub\wwwroot\NewInstance1\Databa	Browse			
	LDF Files:	C:\Inetpub\wwwroot\NewInstance1\Databa	Browse			
		ОК	Cancel			

Enter new destination folders and click **OK**.

Click Next.

#### Note

Make sure that SQL server has the permissions to write to the destination folder.



#### **IIS Web Site**

IIS Web Site Create a new Web site.	
Web Site Name: MySite	
For more options, click Advanced.	
< Back Next > Cancel	]

Enter the name of the new website. Click **Advanced** to edit a website port, application pool name and its mode and .NET Framework version.

	Sitecore - Installation
	v some additional parameters for IIS.
Applicat	on Pool
Create	application pool named MySiteAppPool
Website	
Port:	80
	OK Cancel

#### Click OK.

The **IIS Web Site** dialog box will reflect the changes. In Sitecore XP 8.0, the Sitecore ASP.NET MVC Integration is enabled by default, and you will see the corresponding field in the dialog box:

<b>-</b>	Sitecore - Installation ×
	Veb Site reate a new Web site.
w	/eb Site Name: MySite
	Application Pool Name: NewInstance1AppPool Web Site Port: 80 .NET Version: 4
Fo	or more options, click Advanced. Advanced
	< Back Next > Cancel

Click Next.



#### Ready to Install Sitecore

eview the options you selected astall Sitecore.	I. Click Back to change an option or click Install to
Option:	Value:
Instance Name:	NewInstance1
License File:	D:\license\license.xml
Database Server:	(local)\SQLEXPRESS
Destination Folder:	C:\Inetpub\wwwroot\NewInstance1
Web Site Name:	NewInstance1
	< Back Install Cancel

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

A progress window informs you about the installation process.

### 3.2.2 Databases Only

This section describes the Databases Only installation. This option only installs the Sitecore databases.

#### Installation Type

	allation Type
2	elect the type of installation that you want to install.
	○ Complete
	Install the Sitecore client and databases on this computer.
	Database Only
	Install the Sitecore databases on this computer. This is suitable for database servers that are accessed by Sitecore clients.
	O Client Only
	Install the Sitecore client on this computer. This is suitable for Sitecore clients that access database servers.
	< Back Next > Cancel

Select the **Databases only** option to only install the databases.

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



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



#### Instance Name

Sitec	ore - Installation	×
IS Web Site Create a new Web site.		Ø
Web Site Name: MySite		
For more options, click Advanced.		Advanced
	< Back Next >	Cancel

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

#### **Database Server**

Select the database server.

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

	Sitecore - Installa	tion	
atabase Server Select the database	e server and authentication me	thod to use.	Ø
Select the appropri	ate database vendor:	SQL Serve	· · · · ·
	e server from a list or click Brow e available database servers. Se nat login.		
Database Server			
Database Server: (local)\SQLEXPRES	s	~	Browse
batabase server	S sa	~	Browse
(local)\SQLEXPRES		v	Browse
(local)\SQLEXPRES	sa •••••	v 	Browse Advanced
(local)\SQLEXPRES Login ID: Password:	sa •••••	v Něxt >	

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.



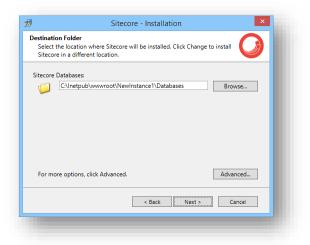
# Installing the Sitecore Experience Platform

To set the database prefix options, click **Advanced** and the **Check the Advanced options of the database server** dialog box appears.

dvanced Database Optio Check the advanced opt	ns ions for the database server.
Verify that the wizard can be added as a can	an connect to the database server.
Database Prefix:	MySite
Add this prefix to the	e names of the physical files.
	OK Cancel

Specify the database prefix for this instance of Sitecore and select whether to prefix physical files or not. Click **OK**.

#### **Destination Folder**



Select the location where the databases will be installed.



# Sitecore Experience Platform 8.0 Update 4

To change the database folder and the folder where various database files will be stored, click **Advanced**. The **Destination Folders** dialog box appears:

l	Sitecore - Installation	×
Destination Fo Select the lo	lders cations where the database files will be installed.	Ø
MDF Files: LDF Files:	C:\Inetpub\wwwroot\NewInstance1\Databases C:\Inetpub\wwwroot\NewInstance1\Databases	Browse Browse
	OK	Cancel

Enter destination folders and click **OK**.

#### **Ready to Install Sitecore**

eview the options you selec stall Sitecore.	ted. Click	Back to change an option or click Install to	
Option:		Value:	٦
Instance Name:		NewInstance1	
License File:		D:\license\license.xml	
Database Server:		(local)\SQLEXPRESS	
Destination Folder:		C:\Inetpub\wwwroot\NewInstance1	
Web Site Name:		NewInstance1	

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

A progress window informs you about the installation process.

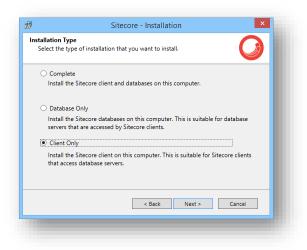
# 3.2.3 Client Only Installation

This section describes the Client Only installation. This installs everything except databases.



# Installing the Sitecore Experience Platform

#### Installation Type



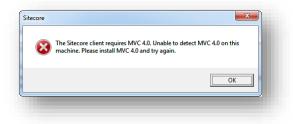
#### Select the Client only option.

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

litecore	
	The web client service is not available.
	ОК

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

To install the Sitecore client, you must have Microsoft ASP.NET MVC 5.1 installed on your computer. If MVC 5.1 is not installed, the following message appears:



The installation cannot be completed without MVC 5.1. To proceed with the installation, close the error message, install ASP.NET MVC 5.1, and then click **Next**.

#### Instance Name

ļ	Sitecore - Installation
Instance Nam Give this ne	e winstance of Sitecore a unique name.
Instance Na	me: MySite
	name identifies this instance of the application. It is also the default f an IIS6 + Web site.
	< Back Next > Cancel

Give a unique name to the new instance of Sitecore XP. If you choose to create a new site on a later step, the hostname of an IIS web site will also use this name.

#### License File

License File:	D:\license\license.xml	Browse
EXPIRATION DATE	11/6/2014 12:00:00 PM	^
VERSION	5	
ADDRESS	2 Glinky Street, Office 403 Dniepropetrovsk DP 49000	
COMPANY		
COUNTRY ISO	UA	
RESELLER		~

Select the license file. Click **Next**.

#### **Database Server**

Select the database server.



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

tabase Server Select the databas	e server and authentication me	thod to use.
Select the appropr	iate database vendor:	SQL Server ~
	e available database servers. Se	rse to select the database server lect the login to use and enter
8.1.1		
Database Server: (local)\SOI EXPRES	55	- Browse
(local)\SQLEXPRE	SS	• Browse
		Browse
(local)\SQLEXPRE	sa •••••	Browse      Advanced

Select the database vendor. Select the database server from a list or click **Browse** to see a list of all the database servers available. Enter the login id — SQL Server user name — and the corresponding password. The installation program will use these credentials to access the SQL server.

To set the database prefix options, click **Advanced** and the **Check the advanced options of the database server** dialog box appears.

dvanced Database O	Sitecore - Installation otions options for the database server.	×
check the advanced	options for the database server.	
Verify that the wizar Database Prefix:	d can connect to the database server.	
Database Prefix:	MySite	
	ОК	Cancel

Specify the database prefix for this instance of Sitecore XP and select whether to prefix physical files or not. Click **OK**.

Click Next.

# Sitecore Experience Platform 8.0 Update 4

#### **Destination Folder**

ge
ced
ncel

Select the location where Sitecore will be installed.

To change the database folder and the folder where various database files will be stored, click **Advanced** and the **Destination Folders** dialog box appears:

esti	nation Folders	Sitecore - Installation	×
Se	lect the locations	where the database files will be installed.	
1	Sitecore Data:		
	C:\Inetpub\ww	wroot\MySite\Data	Browse
	MDF Files: LDF Files:	C:\Inetpub\wwwroot\NewInstance1\Databa C:\Inetpub\wwwroot\NewInstance1\Databa	Browse Browse
		ОК	Cancel

Enter destination folders and click **OK**.

#### IIS Web Site

Sitec	ore - Installation	×
IIS Web Site Create a new Web site.		Ø
Web Site Name: MySite		
For more options, click Advanced.		Advanced
	< Back Ne	xt > Cancel



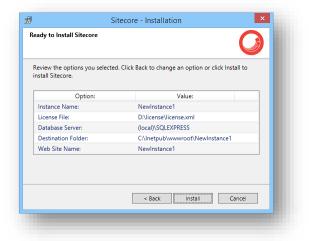
Enter the name of the new website.

Click **Advanced** to edit a website port, application pool name and mode, .NET Framework version.

	Sitecore - Installation ×
	ed Settings some additional parameters for IIS.
Applicatio	n Pool
Create ap	pplication pool named MySiteAppPool
Website	
Port:	80
	OK Cancel

Click OK.

#### **Ready to Install Sitecore**



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

A progress window informs you about the installation process.



# 3.3 Troubleshooting

#### If the installation program fails

If the installation program fails, archive the log file and attach it to your support request.

If the installation program fails after you click **Install** in the **Ready to Install** dialog box, the log file is automatically created at: %TEMP%\SitecoreInstaller.log.

#### Note

The log file is recreated during each installation. You should therefore copy it 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, 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.



# Chapter 4

# Installing the Sitecore XP from the .ZIP File

This chapter describes how to install Sitecore XP 8.0 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
- 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 SDN.

To install an instance of Sitecore:

- 1. Install Microsoft .NET Framework 4.5.
- 1. Make sure the ASP.NET feature is enabled for Internet Information Services.
- 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. Place the appropriate license.xml file to the /Data folder. The location of the /Data folder is determined by the following setting in the web.config file:

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

This setting should be changed to the absolute location of the folder, such as: C:\InetPub\wwwroot\ProjectName\Data

- 6. Attach SQL databases from / Databases folder to the SQL server.
- 7. 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\_" />

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

http://ProjectName/sitecore

You should see the Sitecore login screen:



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 and Windows registry permissions required by Sitecore XP for proper functioning. For practical advice on how to edit NTFS permissions and registry permissions, please refer to the section *Server Configuration*, and to the MSDN website and Windows help application.

### 4.2.1 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 to 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 aforementioned permissions should be granted to the corresponding account(s).

### 4.2.2 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 to 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	S 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 allows you to 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 grant this account the aforementioned permissions.

Note

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

# 4.2.3 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 the Sitecore XP but installed as a part of Windows OS and .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 <a href="http://learn.iis.net/page.aspx/140/understanding-built-in-user-and-group-accounts-in-iis-7/">http://learn.iis.net/page.aspx/140/understanding-built-in-user-and-group-accounts-in-iis-7/</a>

### 4.2.4 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.

### 4.2.5 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.

#### Note

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

To avoid the 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"



# Sitecore Experience Platform 8.0 Update 4

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

For more information about the net localgroup command, refer to <a href="http://www.microsoft.com/resources/documentation/windows/xp/all/proddocs/en-us/net\_localgroup.mspx">http://www.microsoft.com/resources/documentation/windows/xp/all/proddocs/en-us/net\_localgroup.mspx</a>

# Installing the Sitecore Experience Platform

# 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 Windows Server 2008, Windows Vista
- IIS 7.5 Windows Server 2008 R2 SP1, Windows 7
- IIS 8 Windows Server 2012, Windows 8
- IIS 8.5 Windows Server 2012 R2, Windows 8.1

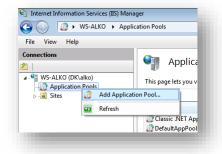
## 4.3.1 IIS 7, 7.5, 8, 8.5

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

#### **Create the Application Pool**

To create the application pool for Sitecore on IIS 7, 7.5, 8 and 8.5 (Windows 7, Windows Server 2008, Windows 8, and Windows 8.1):

- 1. Start the IIS Manager.
- 2. In the **Connections** panel, select **Application Pools**.



3. Right-click **Application Pools** and click **Add Application Pool**.



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

Field	Value
Name	ProjectNameAppPool
.NET Framework version	4.0 XXXXX
Managed pipeline mode	Integrated



- 5. Click OK.
- 6. In the Application Pools panel, select the application pool you have just created.

Sonnections  WS-ELY (DK\ely)  Gradient Application Pools  F-C Sites	Application Pool: This page lets you view and managy pools are associated with worker pri isolation among different applicatio	e the list of app ocesses, contai ns.		pplications, and pr	ovide	Se A ▶ St	ss dd Application Pool et Application Pool Defaults pplication Pool Tasks art op
	Name	Status	.NET Fram	Managed Pipel	⊊ Identif	🤣 R	ecycle
	ASP.NET v4.0 ASP.NET v4.0 Classic Classic .NET AppPool Classic SAPPPool DefaultAppPool NewInstancetAppPool NicamAppPool ProjectNameAppPool SCG6 SCG6 SCG6	Started Started Started Started Started Started Started Started Started Started Started	v4.0 v4.0 v4.0 v4.0 v4.0 v4.0 v4.0 v4.0	Integrated Classic Lassic Integrated Integrated Integrated Integrated Integrated Classic Integrated Integrated Integrated	Applic Applic Applic Applic Netwo Netwo Netwo Netwo Netwo Netwo Netwo		lit Application Pool sis: Settings excuting excuting ename emove ew Applications elp nline Help
					,		

7. In the Actions panel, click Advanced Settings.

E			
	NET Framework Version	v4.0	
N	nable 32-Bit Applications	False	
	Aanaged Pipeline Mode	Integrated	
Ν	lame	ProjectNameAppPool	E
Q	Jueue Length	1000	
S	tart Automatically	True	
- C	PU		
L	imit	0	
Ľ	imit Action	NoAction	
Ľ	imit Interval (minutes)	5	
P	rocessor Affinity Enabled	False	
Р	rocessor Affinity Mask	4294967295	
P	rocess Model		
Ic	dentity	ApplicationPoolIdentity	
Ic	dle Time-out (minutes)	20	
L	oad User Profile	True	
Ν	Aaximum Worker Processes	1	
Ρ	ing Enabled	True	-

- 8. In the Advanced Settings dialog box:
  - Set the .NET Framework version to *v4.o*.
  - 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*.

#### **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 Website**.

<u>S</u> ite name:		lication pool:		
ProjectName	Proj	ectNameAppPool		S <u>e</u> lect
Content Directory				
Physical path:				
C:\InetPub\Project	Name\Website			
Pass-through auth	entication			
-				
<u>C</u> onnect as	Test Settings			
Binding				
<u>T</u> ype:	IP address:		Port	t
http	<ul> <li>All Unassigned</li> </ul>		- 80	
Host name:				
projectname				
Example: www.con	toso.com or marke	ting.contoso.com		
Example minicon				
Start Web site imm	odiately			
· start web site imn	iculately			
		_		
			OK	Cancel

4. In the Add Website 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

5. Click OK.

-

6. Open the hosts file - C: \Windows\System32\drivers\etc - 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.



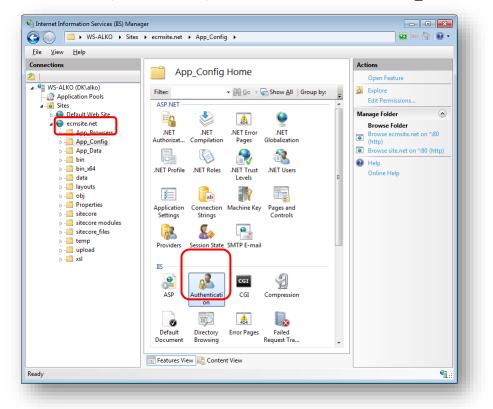
#### Limit Access to Anonymous Users

You should prevent anonymous users from accessing the following folders:

- /App\_Config
- /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.
- 4. In the Authentication panel, ensure that the Anonymous Authentication is disabled.

🗲 🕥 📔 🕨 WS-ALKO 🕨 Sit	es 🕨 ecmsite.net 🕨 App_Config 🕨			🖅 🖂 🕻	
<u>F</u> ile <u>V</u> iew <u>H</u> elp					
Connections	Authentication			Actions	
2	Authentication			Enable	
a 🛀 WS-ALKO (DK\alko)	Group by: No Grouping -			Edit	
Application Pools ⊿ oo Sites	Name	Status	Response Type	🕜 Help	
Default Web Site	Anonymous Authentication	Disabled		Online Help	
a 🌍 ecmsite.net	ASP.NET Impersonation	Disabled			
App_Browsers	Forms Authentication	Disabled	HTTP 302 Logi		
> Conng					
⊳ 🧾 bin					
⊳ 🧰 bin_x64					



# Installing the Sitecore Experience Platform

- 5. Repeat steps 2-4 for the other folders you want to secure.
- 6. Restart the IIS.



# 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 this article: <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 <a href="http://msdn.microsoft.com/en-us/library/ff647396.aspx">http://msdn.microsoft.com/en-us/library/ff647396.aspx</a>

# 4.4.1 Creating a Database Account for Sitecore XP Databases on SQL Server 2008, 2012 and 2014

This section describes how to create a database account for Sitecore databases under SQL Server 2008 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.

electapage PiGeneral	🛒 Script 🔻 🛐 Help				
P General Server Roles					
Tuser Mapping	Login <u>n</u> ame:	SC user			Search
	Mindows authentication				
	<u>SQL</u> Server authentication				
	Password:	•••••			
	Confirm password:				
	Specify old password				
	Old password:				
	Enforce password policy				
	<ul> <li>Enforce password policy</li> <li>Enforce password expiration</li> </ul>				
	User must change pass				
	<ul> <li>Mapped to certificate</li> </ul>				
	<ul> <li>Mapped to asymmetric key</li> </ul>				
Connection	Map to Credential				Add
Server:	Mapped Credentials	Credential	Provider		
(local)					
Connection:					
sa					
View connection properties					
Progress					Remove
Ready					Theme Ke
neauy	Default <u>d</u> atabase:	master			
	Default language:	<default></default>		•	
				01	0
				ОК	Cancel

- 5. In the Login New window, select the General page and specify the login name.
- 6. Select the **SQL Server authentication** option and clear the **User must change password at next login** checkbox (this option is not supported on some Windows operating systems).



# Installing the Sitecore Experience Platform

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

Select a page	C Script	▼ 📑 Help		
🚰 General				
Server Roles Server Mapping		to all the		
Securables		appe <u>d</u> to this login: Database	User	Default Schema 🔺
T Status	Мар	Database	User	Default Schema A
		master		
		model		
		SC100104ECM100331 Analytics		E
		SC100104ECM100331Sitecore Core	SC user	
		SC100104ECM100331Sitecore Master	SC user	
		SC100104ECM100331Sitecore Web	SC user	
		SC100104ECMWIN7 Analytics	SC user	
		SC100104ECMWIN7Sitecore Core		
				*
		III t account enabled for: SC100104ECM100331Sitecon a role membersbin for: SC100104ECM100331Sitecon	-	,
Connection	Guest     Database	t account enabled for: SC100104ECM100331Sitecon a tole membership for: SC100104ECM100331Sitecon	-	•
	Database	t account enabled for: SC100104ECM100331Stecor e gole membership for: SC100104ECM100331Stecor et, Membership, BasicAccess	-	Þ
Connection Server: (ocal)	Guest Database	t account enabled for: SC100104ECM100331Sitecon a tole membership for: SC100104ECM100331Sitecon	-	Þ
Server: (local)	Guest	t account enabled for: SC100104ECM100331Sitecon e gole membership for: SC100104ECM100331Sitecon et, Membership, <u>FoulAccess</u> et, <u>Membership, FoulAccess</u> et, <u>Membership, Faporiing Access</u> et, <u>Personalizion, BasicAccess</u>	-	
Server:	Guest Database V aspri V aspri aspri aspri aspri	t account enabled for: SC100104ECM100331Stecor a role membership for: SC100104ECM100331Stecor et_ <u>Membership_FallAccess</u> et_Membership_FallAccess et_Personalization_BasicAccess et_Personalization_FulAccess	-	, E
Server: (local) Connection:	Guest Database V aspn V aspn aspn aspn aspn	t account enabled for: SC100104ECM100331Sitecon e gole membership for: SC100104ECM100331Sitecon et, Membership, <u>FoulAccess</u> et, <u>Membership, FoulAccess</u> et, <u>Membership, Faporiing Access</u> et, <u>Personalizion, BasicAccess</u>	-	
(local) Connection: sa	Guest Database V aspn aspn aspn aspn v aspn v aspn v aspn v aspn	t account enabled for: SC100104ECM100331Stecor s tole membership for: SC100104ECM100331Stecor et_Membership_FullAccess et_Membership_FepotingAccess et_Personalization_BasicAccess et_Personalization_BasicAccess et_Personalization_ReportingAccess et_Profile_BasicAccess et_Profile_BasicAccess et_Profile_BasicAccess et_Profile_BasicAccess et_Profile_BasicAccess	-	
Server: (local) Connection: sa Wew connection properties	Guest Database V aspn aspn aspn aspn v aspn v aspn v aspn v aspn v aspn	t account enabled for: SC100104ECM100331Stecor a tole membership for: SC100104ECM100331Stecor et. Membership: BasicAccess et, Membership: PeopotingAccess et, Membership: PeopotingAccess et, Personalization, FaleAccess et, Personalization, FaleAccess et, Profile, BasicAccess et, Profile, BasicAccess et, Profile, FaleAccess et, Profile,	-	
Server: (ocal) Connection: sa <u>Wew connection properties</u> Progress	Guest Database V aspri aspri aspri aspri aspri v aspri v aspri v aspri v aspri v aspri v aspri	t account enabled for: SC100104ECM100331Stecor s tole membership for: SC100104ECM100331Stecor et_Membership_FullAccess et_Membership_FepotingAccess et_Personalization_BasicAccess et_Personalization_BasicAccess et_Personalization_ReportingAccess et_Profile_BasicAccess et_Profile_BasicAccess et_Profile_BasicAccess et_Profile_BasicAccess et_Profile_BasicAccess	-	
Server: (local) Connection: sa J View connection properties	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	t account enabled for: SC100104ECM100331Stecor a role membership for: SC100104ECM100331Stecor et_Membership_FaulAccess et_Membership_ReportingAccess et_Personalization_FaulAccess et_Personalization_FulAccess et_Portie_BackAccess et_Portie_BackAccess et_Portie_FackAccess et_Portie_FackAccess et_Portie_FackAccess et_Portie_FackAccess et_Portie_FackAccess et_Portie_FackAccess et_Roles_FactAccess et_Roles_FactAccess et_Roles_FactAccess et_Roles_FactAccess et_Roles_FactAccess	-	Î
Server: (ocal) Connection: sa <u>W 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	t account enabled for: SC100104ECM100331Stecor e gole membership for: SC100104ECM100331Stecor et, <u>Menchentip: BasicAccess</u> et, <u>Menchentip: PeluAccess</u> et, <u>Menchentip: DasicAccess</u> et, <u>Personalization _FulAccess</u> et, <u>Personalization _FulAccess</u> et, <u>Personalization _FulAccess</u> et, <u>Personalization _FulAccess</u> et, <u>Personalization _FulAccess</u> et, <u>Profile _FulAccess</u> et, <u>Profile _FulAccess</u> et, <u>Profile _BasicAccess</u> et, <u>Polies _BasicAccess</u> et, <u>Folies _BasicAccess</u>	-	
Server: (ocal) Connection: sa <u>W 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	t account enabled for: SC100104ECM100331Stecor a role membership for: SC100104ECM100331Stecor et_Membership_FaulAccess et_Membership_ReportingAccess et_Personalization_FaulAccess et_Personalization_FulAccess et_Portie_BackAccess et_Portie_BackAccess et_Portie_FackAccess et_Portie_FackAccess et_Portie_FackAccess et_Portie_FackAccess et_Portie_FackAccess et_Portie_FackAccess et_Roles_FactAccess et_Roles_FactAccess et_Roles_FactAccess et_Roles_FactAccess et_Roles_FactAccess	-	Î

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 (if you have CEP installed):

- o db\_datareader
- o db\_datawriter
- o public

For the Core database:

- db\_datareader
- db\_datawriter
- o public
- aspnet\_Membership\_BasicAccess
- aspnet\_Membership\_FullAccess
- aspnet\_Membership\_ReportingAccess
- aspnet\_Profile\_BasicAccess
- aspnet\_Profile\_FullAccess
- aspnet\_Profile\_ReportingAccess
- aspnet\_Roles\_BasicAccess
- aspnet\_Roles\_FullAccess

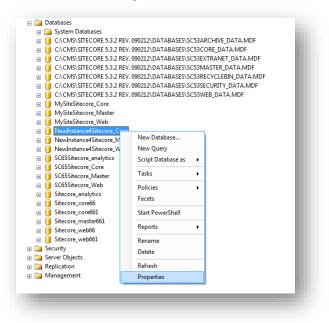


- aspnet\_Roles\_ReportingAccess
- 9. Click **OK** to create the user.

#### 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 the click Properties.

" General	Scopt • D Help							
Flen Flegoups Optom	Server name		ALEXKISQLEXP	RESS				
Personal Personal	Yes any permittion							
Extended Properties	Database pamer CNNET		C VINET PUB VINA	ETPUBWWWROOT\SITECORE\SC TEST INSTALL\DW				
	Users or soles:							
	Name			Type				
	A SC unw			Use				
	A str				UH			
	A skecce				Ue			
	A test_user				Ue	54		
	K							
	Effective Pe	micsions			644	Ben	048	
annesten.	Explicit germissions for Si							
Server	Pannission	Granter	6	art	With Grant	Derg		
ALD/K\SQLE/PRESS	Create XML schema							
Connection	Delete	do					_	
18	Execute	dbo	1	Ð		0		
BJ Very convertion properties	Incert	db0						
	References	dbo						
10210	Select	dbo			0			
Peads	Show plan	do						
0	Subscribe query notifi				0			
	Take ownenhip	dbo		0		0	M	
							-	
					OK.	Cano		

- 3. In the **Database Properties** window, select 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.

Repeat this procedure for the other Sitecore databases.



# Installing the Sitecore Experience Platform

#### Important

The analytics database for Sitecore xDB runs on MongoDB. For more information about configuring Sitecore xDB on MongoDB see the *xDB Configuration Guide*.



# 4.5 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: 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 recommend steps that you should take after installing Sitecore XP.

This chapter contains the following sections:

- Content Expiration
- Windows Authentication for Sitecore
- Setting Microsoft SQL Server Database Properties
- Rebuild the Search Index and the Link Database
- Cache Configuration
- Deploy the Marketing Definition Items
- Post Installation Steps

## 5.1 Content Expiration

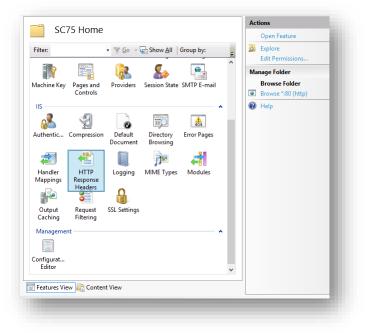
Set the IIS Expire Web content header to improve performance.

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.

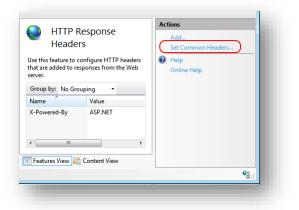
By setting Expire Web content to something other than immediately, you can reduce second-access load times by 50 to 70 percent. This setting does not affect dynamically generated content.

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.
- 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.



# Installing the Sitecore Experience Platform

6. Select the After check box and set the number of days to its default (7).

Exp	ire <u>W</u> eb conten	t:					
$\bigcirc$	Immediately						
۲	<u>A</u> fter:			_			
	7	Day(s)		-			
$\bigcirc$	<u>O</u> n (in Coordir	nated Un	iversal Time	e (UTC)):			
	Thursday ,	June	09, 2011		. 12	MA 00:00	A
				_			
					ОК	Cano	el

7. Click OK.



## 5.2 Windows Authentication for Sitecore

You can configure Sitecore to use Windows Authentication for SQL connection (SQL 2008/Windows 2008 (R2)) 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		
Þ	Generate Process Model Event L		
	Identity	dk\ely .	
	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		~
id s			ork
		OK Cance	

- 2. In the SQL Server register the domain user and grant security permissions on Sitecore databases for the domain user. For more information, see the section *Creating a Database Account for Sitecore XP Databases on SQL Server 2008, 2012*.
- 3. On the machine that hosts Sitecore, add the domain user to the IIS\_IUSRS group.
  - 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 the trusted connection=yes option:

xml version="1.0" encoding="utf-8"?
<connectionstrings></connectionstrings>
<add connectionstring="Data&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Source=.\sql2008;Database=Sandbox6 Core;Trusted Connection=Yes" name="core"></add>
<add connectionstring="Data&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Source=.\sql2008;Database=Sandbox6 Master;Trusted Connection=Yes" name="master"></add>
<add connectionstring="Data&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Source=.\sql2008;Database=Sandbox6 Web;Trusted Connection=Yes" name="web"></add>

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

#### Note

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

```
<add name="reporting" connectionString="Data
Source=<Data-Source>;Database=Sandbox6 Analytics;Trusted Connection=Yes" />
```



# 5.3 Setting Microsoft SQL Server Database Properties

There are some Microsoft SQL Server database properties that, when configured correctly, can increase performance:

#### **Compatibility Level**

Compatibility Level effects 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 (1/10 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's 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 over Full and Bulk-logged, which is crucial to the performance requirements needed for the Sitecore XP databases.

To set these properties:

- 1. Open MS SQL Server Management Studio.
- 2. In the **Object explorer**, right click the **CMS Master** database and select **Properties**.

3. Select the **Options** page and set the parameters as shown in the following image:

Seneral Files	Script 🔻 🚺 Help		
🚰 Filegroups	Collation: SQL_	Latin1_General_CP1_CI_AS	•
P Options	Recovery model: Simpl		- <b>)</b>
Change Tracking Permissions		Server 2008 (100)	
Permissions Extended Properties	Compatibility level: SQL	berver 2008 (100)	)
	Other options:		
	Automatic		*
	Auto Close	True	
	Auto Create Statistics	True	
	Auto Shrink	False	
	Auto Update Statistics	True	
	Auto Update Statistics Asynchronously	False	E
	Cursor		
	Close Cursor on Commit Enabled	False	
	Default Cursor	GLOBAL	
	Miscellaneous		
Connection	ANSI NULL Default	False	
<u>.</u>	ANSI NULLS Enabled	False	
Server: WS-ELY	ANSI Padding Enabled	False	
	ANSI Warnings Enabled	False	
Connection:	Arithmetic Abort Enabled	False	
sa	Concatenate Null Yields Null	False	
View connection properties	Cross-database Ownership Chaining Enable		
	Date Correlation Optimization Enabled	False	
Progress	Numeric Round-Abort	False	<b>v</b>
Ready	ANSI NULL Default		
-D-		ОК	Cancel

- 4. In the Compatibility Level field, select SQL Server 2008(100).
- 5. Set the **Auto Close** property to *false*.
- 6. Set the **Auto Shrink** property to *false*.
- 7. In the **Recovery Model** field, select *Simple*
- 8. Click **OK**.

Repeat these actions for the Sitecore Core and Web databases.

## 5.4 Rebuild the Search Index and the Link Database

Follow these instructions after you install Sitecore.

You should rebuild the Search Index for the core database and the Quick search index.

#### **Rebuilding the Search Indexes**

To rebuild the Search Index:

• Log in to the Sitecore Desktop, click **Control Panel**, and then click **Indexing**. In the **Indexing Manager**, you can choose which database indexes you want to rebuild.

#### **Rebuilding the Link Database**

To rebuild the Link Database:

• Log in to the Sitecore Desktop and click **Control Panel**, **Database**, **Rebuild the Link Database** and select all the available databases.



# 5.5 Cache Configuration

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

For more information about cache configuration, see the <u>Cache Configuration Reference</u> document on SDN.

# 5.6 Deploy the Marketing Definition Items

If you want to use XMarketing functionality, you must deploy the marketing definition items. To do this:

- 1. Login to the Sitecore Experience Platform desktop.
- 2. Click **Control Panel** and navigate to the **ANALYTICS** section.

Retrieve status information	
Deploy Marketing Definitions	

- 3. Click Deploy Marketing Definitions.
- 4. Check all checkboxes and click **Deploy**.

Deploy Marketing Definitions	□×	ł.
		L
Select the definitions you would like to deploy © Campaigns © Goals		l
<ul> <li>Marketing Assets</li> <li>Outcomes</li> </ul>		L
Taxonomies Publish Taxonomies Deploy		l
Note: The deployment operation may take a long time.		L
	Close	

## 5.7 Post Installation Steps

## 5.7.1 Deploy the Experience Analytics Segments

If this is a new installation and you want to start collecting data for Experience Analytics, you must deploy the Experience Analytics segments. These segments determine what data is analyzed.

To deploy the Experience Analytics segments:

- 1. Log in to your Sitecore installation.
- 2. In the browser, enter this path in the address field: yoursitecoreinstallation/sitecore/admin/RedeployMarketingData.aspx.

This proce	ss performs two tasks:	
sta	wes each deployed segment that does not have any data in the <i>Analytics</i> database to the <i>Initializing</i> workflow te: deploys each segment.	I
Note: Only redeploye	r segments that are in the <i>Deployed</i> workflow state and that do not have any data in the <i>Analytics</i> database will be d.	
Redeplo	y segments	
	loy maps the default Path Analyzer maps and populate the database.	I
Redeploy This proce 1. Me 2. Re	the default Path Analyzer maps and populate the database. ss performs two tasks: wes each deployed map that does not have any data in the <i>Analytics</i> database to the <i>Initializing</i> workflow state. deploys each map.	l
Redeploy This proce 1. Me 2. Re	the default Path Analyzer maps and populate the database. ss performs two tasks: wes each deployed map that does not have any data in the <i>Analytics</i> database to the <i>Initializing</i> workflow state. deploys each map. rmaps that are in the <i>Deployed</i> workflow state and that do not have any data in the <i>Analytics</i> database will be	l
Redeploy This proce 1. Me 2. Re Note: Only	the default Path Analyzer maps and populate the database. ss performs two tasks: wes each deployed map that does not have any data in the <i>Analytics</i> database to the <i>Initializing</i> workflow state. deploys each map. r maps that are in the <i>Deployed</i> workflow state and that do not have any data in the <i>Analytics</i> database will be d.	l
Redeploy This proce 1. M 2. Re 2. Note: Only redeploye	the default Path Analyzer maps and populate the database. ss performs two tasks: wes each deployed map that does not have any data in the <i>Analytics</i> database to the <i>Initializing</i> workflow state. deploys each map. r maps that are in the <i>Deployed</i> workflow state and that do not have any data in the <i>Analytics</i> database will be d.	l

3. Click Redeploy segments.

# **Chapter 6**

# **Configuring Sitecore Experience Database**

This chapter describes how to configure the Sitecore Experience Database.

The Sitecore Experience Database (Sitecore 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.

This chapter contains the following sections:

- Prerequisites
- Configuration Process

## 6.1 Prerequisites

The Sitecore xDB 8.0 requires the following prerequisites for installation:

- Sitecore XP 8.0 (8.0 Initial Release) or later
- Sitecore License file supporting Sitecore xDB
- Microsoft SQL Server 2008 R2 SP1, SQL Server 2012 or SQL Server 2014
- Microsoft Silverlight 4 or later
- MongoDB 2.6.x

For more information on how to install MongoDB, see <u>http://docs.mongodb.org/manual/</u>.



## 6.2 Configuration Process

Sitecore xDB is included into the Sitecore XP package. You do not need to install it separately.

There are three overall steps to configuring Sitecore xDB:

- Configuring 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.

- Installing MongoDB download and install the latest version of MongDB.
- Configuring Sitecore to use Mongo databases perform the actions outlined in the following
  procedure for each Mongo server.

To configure Sitecore to use Mongo databases:

1. In the ConnectionStrings.config file, specify 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"
/>
```

- 2. Update the relevant web.config and Sitecore.Analytics.config settings, such as *MailServer* and *Analytics.EMailFromAddress* (for sending out reports as emails).
- If you wish to use DMS with Sitecore MVC, in /App\_Config/Include/ folder, rename the Sitecore.MvcAnalytics.config.disabled file to Sitecore.MvcAnalytics.config.
- 4. To limit the lookup activity to one server, in the /App\_Config/Include/Sitecore.Analytics.config file, update the Analytics.PerformLookup setting.

#### Note

You can enable lookups on either a CM or a CD instance. The Sitecore instance should be able to access the MaxMind web service.

For more information about GeoIP lookup functionality, see MaxMind Signup and Purchase.

5. Restart Internet Information Services (IIS).

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

# Sitecore Experience Platform 8.0 Update 4

# Chapter 7

# Appendix

This chapter contains the supplementary instructions that help you to configure your environment.

This chapter contains the following sections:

- Server Configuration
- Creating a Web Project in Visual Studio

## 7.1 Server Configuration

The following sections contain miscellaneous information and techniques concerning the server configuration.

### 7.1.1 Updating the Security Settings for a Folder

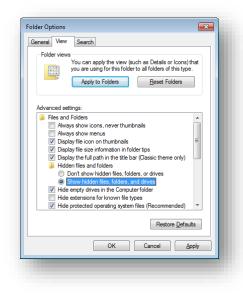
To update the security settings for a folder:

- 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.

#### Making the Security Tab Visible

If the **Security** tab is not visible, – this can occur after upgrading from Windows XP Home to Professional:

- 1. In Windows Explorer, click **Organize**, **Folder and search options**.
- 2. In the Folder Options dialog box, click the View tab.



3. Ensure that the **Use simple file sharing** check box is not selected.

If an account is not visible in the **Security** tab, you must make it visible.

#### Making an Account Visible

To make an account visible in the **Security** tab:

- 1. In the **Properties** dialog box, click the **Security** tab.
- 2. In the **Security** tab, click **Add**.
- 3. In the **Select Users, Computers, or Groups** dialog box, in the **From this location** field, ensure that the local computer is selected.
- 4. In the Enter the object names to select field, enter the name of the account, and click Check Names.

# Sitecore Experience Platform 8.0 Update 4

Alternatively, you can click **Advanced** and then click **Find Now** and select the account you want to add.

## 7.2 Creating a Web Project in Visual Studio

Sitecore supports the Visual Studio Web Application project model for Sitecore solutions.

#### Important

Create a Visual Studio solution and at least one project for each Sitecore solution that uses Visual Studio. Follow the steps outlined below as a single sequence once for each new Sitecore solution, then add new projects to the existing solution as appropriate.

To create a Visual Studio Web Application project for an existing Sitecore solution:

- 1. In Visual Studio, click the File menu, then click New, Project.
- 2. In the **New Project** dialog box, in the **Project Types** tree, expand **Visual C#**, and then click **Web**.
- 3. In the **Templates** list, click **ASP.NET Web Application**.
- 4. Select the version of the .NET Framework. While installing Sitecore XP, in the **IIS Website** step you selected the version of the .NET Framework: 4.5.
  - Select .NET Framework 4.5 in the Visual Studio project.
- 5. In the Name field, enter the name of the project, for example MyWebSite. Visual studio uses this name as the default .NET namespace and assembly name.
- 6. In the Location field, enter the document root of the Sitecore solution, for example C:\inetpub\sitecore\MyWebSite\WebSite.
- 7. In the **Solution Name** field, enter the name of the solution, which is typically the name of the project, for example MyWebSite.
- 8. Select the **Create directory for solution** check box, and then click **OK**. Visual Studio creates the project in a subdirectory of the directory specified by **Location**, and then opens your project.
- 9. In Solution Explorer, right-click References and click Add Reference.
- 10. Click the Browse tab and select the Sitecore.Kernel.dll file, and then click OK.
- 11. In Solution Explorer, select the Sitecore.Kernel.dll file and set the Copy Local property to false.

To edit files in Visual Studio, you must make them visible and include them in the project.

To make the files visible:

1. In the Solution Explorer, click **Show All Files**.



- 2. You must now include the files you want to edit. For example, right-click the XSL folder and click *Include in Project*.
- 3. Finally, double click the files to edit them.

