

Sitecore CMS 7.2 Installation Guide

Installation guide for administrators and developers



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Chapter 1

Introduction

This document describes how to install Sitecore CMS.

The document contains the following chapters:

- Chapter 1 Introduction The chapter contains introduction to the Sitecore CMS 7.2 installation process
- Chapter 2 Sitecore CMS 7.2 Requirements Sitecore CMS 7.2 installation requirements
- Chapter 3 Using the Sitecore Installation Program The chapter describes how to use the Sitecore Installation Program
- Chapter 4 Installing from the .ZIP File How to install Sitecore CMS 7.2 from the .ZIP file
- Chapter 5 Limitations and Specific Requirements The information regarding limitations and requirements of Sitecore CMS 7.2
- Chapter 6 Post-Installation Steps The chapter describes some necessary actions after installation
- Chapter 7 Appendix The chapter contains the supplementary instructions that help to configure the environment



1.1 Getting Started

For small implementations including developer workstations and testing environments, Sitecore CMS 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.

Sitecore can be broken down into three logical components regardless of whether a setup .exe file or a .zip file is used to install a new instance of Sitecore and regardless of the database technology that is used.

The three logical components are:

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

Configuration is managed by files such as web.config and the files under the /App Config folder.

For information about hardening security when Sitecore is installed, see the Security Hardening Guide.

The Sitecore CMS can be distributed in two ways:

- As an executable installation program .exe file(s).
- As an archived copy of a Sitecore CMS solution in a file system . zip file.

The installation program should be used whenever possible. It contains a wizard, which guides you through the installation process.

Using the installation program requires considerably less manual effort than configuring the *zip* file.

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

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



1.2 Preparing to Install Sitecore CMS 7.2

There are several ways to install Sitecore. They depend on your choice of database technologies, the server administrator's preferences, and the environment you want to run — development, testing, content authoring, content delivery, and so on.

Before installing Sitecore CMS, you should decide on the:

- Project name and acronym, for instance ProjectName.
- Acronym/prefix, for instance PN.
- Target installation file system root, for instance C:\inetpub\wwwroot\ProjectName.
- Database technology:
 - o SQL Server 2008 R2 SP1, SQL Server 2012 or SQL Express.
 - Oracle Database 11g R2 (11.2).
- Database location locally or on a remote server.
- Appropriate Sitecore CMS 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.



Chapter 2

Sitecore CMS 7.2 Requirements

This chapter describes the prerequisites, hardware, and software requirements for Sitecore CMS 7.2 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 CMS 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 CMS 7.2 has some specific requirements towards the operating system, Web Server, .NET, Visual Studio and database server.

2.1.1 IIS Requirements

Sitecore CMS can be hosted on the following IIS versions running on supported operating systems:

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

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 CMS does not support any other ASP.NET web servers such as Visual Studio Cassini, 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 CMS 7.2 is compatible only with those Client and Server Operating Systems, which support .NET Framework 4.5. Sitecore CMS can be hosted on the following Microsoft operating systems:

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

Important

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

Windows 7

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

- Ultimate
- Professional
- Enterprise



It is possible to 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 the following article:

• Installing IIS 7.5 on Windows 7 Home Premium, Home Basic, or Home Starter.

For more information about the feature limitations in the various Windows 7 editions, see the following article:

Available Web Server (IIS) Role Services in IIS 7.5

Windows Vista

Sitecore CMS 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 the following articles:

- Why you need Vista Business / Ultimate for IIS 7?
- IIS 7.0 Features and Vista Editions

2.1.3 .NET Framework Requirements

Sitecore CMS 7 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

Sitecore CMS 7 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 CMS supports the following database servers:

- MS SQL Server 2008 R2 SP1.
- MS SQL Server 2012.
- MS SQL Server Express.
- Oracle Database 11g R2 (11.2).

Note

Sitecore recommends running the database on a separate server from the web server.

Note

You should have the Oracle specific license keys in your license file to run Sitecore with the Oracle database: Sitecore.Oracle and Sitecore.FireDB.

2.1.6 Hardware Requirements for a Server Running a Single Sitecore Installation

We recommend the following hardware requirements:



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.

2.1.7 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 <sc.variable name="dataFolder" ... /> setting in the web.config file.
- The folder that contains the actual Sitecore database files.
- The C:\Windows\Temp or {app pool user profile}\Temp folder.



2.2 Sitecore Client Requirements

This chapter describes requirements towards the software and hardware.

2.2.1 Software Requirements

Browser

Sitecore CMS clients are browser-based user interfaces. Sitecore clients can run on the following browsers:

- Microsoft Internet Explorer 11
- Microsoft Internet Explorer 10
- Microsoft Internet Explorer 9
- Mozilla Firefox 17+ (latest supported version by Mozilla)
- Google Chrome 25+ (current supported version by Chrome)
- Apple Safari 6 for Mac OS (Windows is not supported by Apple)

Note

Sitecore CMS 7.2 supports all current stable versions of these browsers unless stated otherwise.

Note

Sitecore CMS 7.2 does not support the Compatibility view in IE 9, IE 10 and IE 11.

For more information about configuring a browser, see the manual Browser Configuration Reference.

Silverlight

If you want to install Sitecore DMS, you must also install Microsoft Silverlight 4 or later.

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 CMS host.
- 1024x768 or greater screen resolution required for advanced operations.

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



Chapter 3

Using the Sitecore Installation Program

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

You can download the Sitecore installation program from the <u>Sitecore CMS</u> <u>Downloads page</u>.

This chapter contains the following sections:

- Windows Vista / Windows 7 Pre-installation Steps
- Installation Process
- Uninstalling Sitecore
- Troubleshooting



3.1 Windows Vista / Windows 7 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).

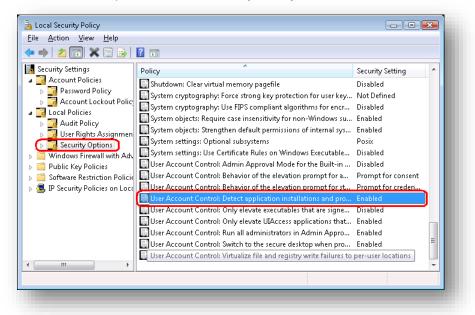
To check if this setting has been changed on your machine:

- 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.

The UAC (User Account Control) requests your permission to continue.

User Account (Control 🛛 💌
If you started	d this action, continue. Microsoft Management Console Microsoft Windows
✓ Details	Continue
User Account	Control helps stop unauthorized changes to your computer.

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 Installation Process

To start the installation process, you must launch the **Sitecore 7.2. rev.XXXXXX.exe** application, which starts the installation wizard. This section describes the steps in the wizard.

Note

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

Welcome screen



Review the welcome screen and click Next.

Upgrade or New Instance



Select the New Instance option to install a new instance.

Select the **Existing Instance** option to *remove an existing instance of Sitecore CMS*. This option is only active when an instance of Sitecore already exists on the machine.

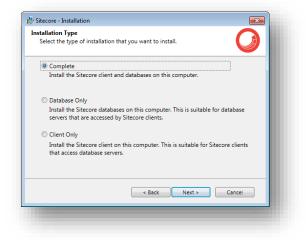


License Agreement



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

What to Install?



Select the type of installation that you want:

- Complete (client and database). This mode installs both the Sitecore databases and the Sitecore client on the local computer.
- Database only. This mode only installs the Sitecore databases.
- Client only. This mode installs everything except the databases.

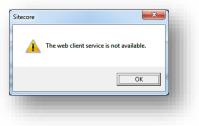
3.2.1 Full Mode (client and database)

This mode installs both Sitecore databases and Sitecore client on the local computer.

In the Installation Type window, select the **Complete** option.



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

tance Name	
Give this new instar	nce of Sitecore a unique name.
Instance Name:	MySyte
NOTE: This name id hostname of an IIS	lentifies this instance of the application. It is also the default + Web site.

Give a unique name to this new instance of Sitecore CMS. 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

icense File:	C:\Sitecore\LICENS~1.XML	Browse
ADDRESS	2 Glinky Street, Office 403 Dniepropetrovsk DP 49000	•
COMPANY		
COUNTRY ISO	UA	=
RESELLER		
PURPOSE		
LICENSEE	Sitecore Ukraine	*

Browse to the license file that you want to use. Click Next.

Database Server

Select the database server.

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



Select the database	server and authentication m	ethod to use.	J
Select the appropria	ite database vendor:	SQL Server	•
	available database servers. S	wse to select the database serv elect the login to use and enter	
Database Server: (local)		▼ Browse	
(sa		
Login ID:			
Login ID: Password:	••••		
-		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:

Verify that the wizard can connect to the database server. Database Prefix: Database Prefix: MySite Image: Add this prefix to the names of the physical files. OK Cancel	dvanced Database Optio Check the advanced opti	ns ions for the database server.
Database Prefix: MySite	Verify that the wizard ca	n connect to the database server.
Add this prefix to the names of the physical files.	Database Prefix:	
	Database Prefix:	MySite
OK Cancel	Add this prefix to the	names of the physical files.

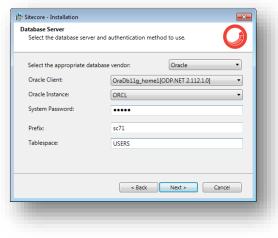
Specify the database prefix for this instance of Sitecore CMS and select whether to prefix physical files or not.

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.



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



Important

You must create the appropriate tablespace first. To do this, run the following SQL script:

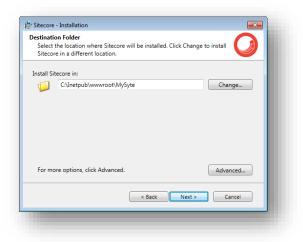
create tablespace sitecore logging datafile 'sitecore.dbf' size 200M reuse autoextend on next 100M extent management local segment space management auto;

Configure the Oracle database server. This dialog box contains the following fields:

- Oracle Client select the Oracle client.
- Oracle Instance select the Oracle instance.
- System password password for the system user of the Oracle instance.
- **Prefix** prefix to use for user schema names and passwords.
- **Tablespace** name of the tablespace for Sitecore data.

Click Next.

Destination Folder



Select the folder where Sitecore CMS 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:

Sele	ct the locations	where the database files will be installed.	<u> </u>
3	litecore Data:		
	C:\Inetpub\www	vroot\MySyte\Data	Browse
5	litecore Databas	es:	
	C:\Inetpub\www	vroot\MySyte\Database	Browse
	MDF Files:	C:\Inetpub\wwwroot\MySyte\Database\MI	Browse
L	DF Files:	C:\Inetpub\wwwroot\MySyte\Database\LD	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

Sitecore - Installatio	in	×
IS Web Site Create a new Web	o site.	Ø
Web Site Name:	MySyte	
For more options,	click Advanced.	Advanced
	< Back	Next > Cancel

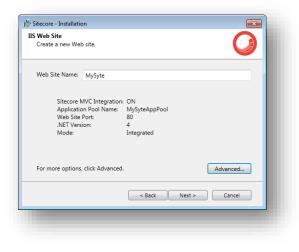


Enter the name of the new website. Click **Advanced** to edit a website port, application pool name and its mode and .NET Framework version.

S Advance	Installation ed Settings ome additional parame	eters for IIS.		
Application	Pool			
	plication pool named	MySyteAppPool		
Vebsite				
Port:	80			
			ОК	Cancel

Click OK.

The **IIS Web Site** dialog box will reflect the changes. In Sitecore CMS 7.2, the Sitecore ASP.NET MVC Integration is enabled by default, and you will see the corresponding field in the dialog box:



Click Next.

Ready to Install Sitecore

eview the options you selected stall Sitecore.	. Click Back to change an option or click Install to	
Option:	Value:	
Instance Name:	MySyte	
License File:	C:\Sitecore\LICENS~1.XML	
Database Server:	(local)	
Destination Folder:	C:\Inetpub\wwwroot\MySyte	
Web Site Name:	MySyte	
Application Pool Name:	MySyteAppPool	
	< Back Install Cancel	



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

Installing Sitecore

itecore Setup Installing S				
Sitecore is	being installed.			
Status:	Installing Config Keys and	Values		
		Back	Next	Cancel

After you click **Next**, you see a progress window which informs you about the installation process.

Finish



The Sitecore Installation Wizard has finished. Click Finish to exit the wizard.

3.2.2 Databases Only Installation Mode

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

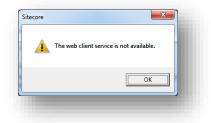


What to Install?



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

tance Name Give this new inst	ance of Sitecore a unique name.
Instance Name:	MySyte
NOTE: This name hostname of an II	identifies this instance of the application. It is also the default S6 + Web site.

Give this new instance of Sitecore CMS 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.

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

Select the database	server and authentication metho	od to use.	J
Select the appropria	ate database vendor:	SQL Server	•
rom a list of all the he password for th Database Server:	server from a list or click Browse available database servers. Selec at login.	t the login to use and ent	er
(local)		 Browse 	
Login ID:	sa		
Password:	••••		
For more options, c	lick Advanced.	Advance	d

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.

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

	ions for the database server.
Verify that the wizard ca	in connect to the database server.
Database Prefix:	
Database Prefix:	MySite
Add this prefix to the	names of the physical files.
	OK Cancel

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

Click Next.



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

atabase Server Select the database server and	d authentication r	method to use.	Ø
Select the appropriate databas	se vendor:	Oracle	•
Oracle Client:	OraDb11g_ho	me1[ODP.NET 2.112	1.0] •
Oracle Instance:	ORCL		•
System Password:	••••		
Prefix:	sc71		
Tablespace:	USERS		
	< Back	Next >	Cancel

Important

You must create the appropriate tablespace first. To do this, run the following SQL script:

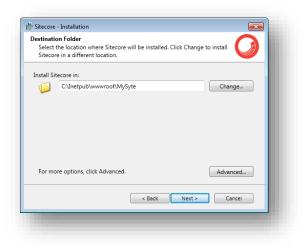
create tablespace sitecore logging datafile 'sitecore.dbf' size 200M reuse autoextend on next 100M extent management local segment space management auto;

Configure the Oracle database server. This dialog box contains the following fields:

- Oracle Client select the Oracle client.
- Oracle Instance select the Oracle instance.
- System password password for the system user of the Oracle instance.
- Prefix prefix to use for user schema names and passwords.
- **Tablespace** name of the tablespace for Sitecore data.

Click Next.

Destination Folder



Select the location where the databases will be installed.

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

Select the loca	ations where the database files will be installed.	Q
MDF Files:	C:\Inetpub\wwwroot\MySite\Database\MDF	Browse
LDF Files:	C:\Inetpub\wwwroot\MySite\Database\LDF	Browse
	ОК	Cancel

Enter destination folders and click **OK**.

Click Next.

Ready to Install Sitecore

		9
eview the options you selected stall Sitecore.	. Click Back to change an option or click Install to	
Option:	Value:	
Instance Name:	MySyte	
License File:	C:\Sitecore\LICENS~1.XML	
Database Server:	(local)	
Destination Folder:	C:\Inetpub\wwwroot\MySyte	
Web Site Name:	MySyte	
Application Pool Name:	MySyteAppPool	
	< Back Install Cancel	

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



Installing Sitecore

installing S	Sitecore
Sitecore is	s being installed.
Status:	Installing files
File: C:\Inetpu adients\ig	b Wwwroot (MySite (Website (sitecore (shell (Themes (Standard (Gr jhDlue 1.gif

After you click Next, you see a progress window which informs you about the installation process.

Finish



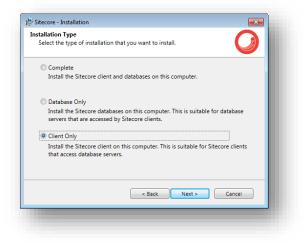
The Sitecore Installation Wizard has finished installation. Click **Finish** to exit the wizard.



3.2.3 Client Only Installation Mode

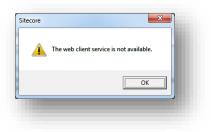
This section describes the Client Only installation mode. This mode installs everything except databases.

What to Install?



Select the **Client only** check box.

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. Click Next.

Instance Name

tance Name Give this new insta	ance of Sitecore a unique name.
one and new mate	
Instance Name:	MySyte
NOTE: This name i	identifies this instance of the application. It is also the default
NOTE: This name i hostname of an IIS	identifies this instance of the application. It is also the default 56 + Web site.

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

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License File

icense File:	C:\Sitecore\LICENS~1.XML	Browse
ADDRESS	2 Glinky Street, Office 403 Dniepropetrovsk DP 49000	*
COMPANY		
COUNTRY ISO	UA	=
RESELLER		
PURPOSE		
LICENSEE	Sitecore Ukraine	*

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 database	server and authentication met	hod to use.	Ø
Select the appropria	ite database vendor:	SQL Server	•
	server from a list or click Brow available database servers. Sel at login.		
Database Server: (local)		▼ Brows	•
Login ID:	sa		.
Password:	•••••		
For more options, c	lick Advanced.	Advanc	ed
	< Back	Next > Can	cel

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 Optio Check the advanced opt	ions for the database server.
Verify that the wizard ca	an connect to the database server.
Database Prefix:	
Database Prefix:	MySite
Add this prefix to the	names of the physical files.
	OK Cancel

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

Click Next.

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

atabase Server Select the database server and a	uthentication method	to use.	
Select the appropriate database	vendor:	Oracle •	
Oracle Client:	OraDb11g_home1[OI	DP.NET 2.112.1.0]	·
Oracle Instance:	ORCL		·
System Password:	•••••		
Prefix:	sc71		
Tablespace:	USERS		
	< Back	Next > Cancel)

Important

You must create the appropriate tablespace first. To do this, run the following SQL script:

create tablespace sitecore logging datafile 'sitecore.dbf' size 200M reuse autoextend on next 100M extent management local segment space management auto;

Configure the Oracle database server. This dialog box contains the following fields:

- Oracle Client select the Oracle client.
- Oracle Instance select the Oracle instance.
- System password password for the system user of the Oracle instance.
- **Prefix** prefix to use for user schema names and passwords.
- **Tablespace** name of the tablespace for Sitecore data.

Click Next.



Destination Folder

	- Installation		
	on Folder		
	the location where Sitecore will b	pe installed. Click Chang	ge to install
Siteco	re in a different location.		
nstall Si	tecore in:		
	C:\Inetpub\wwwroot\MySyte		Change
For m	ore options, click Advanced.		Advanced
	ore options, ellectriditationeed		Havanceam
		< Back Next >	Cancel
		< Back Next >	Cancel

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:

Sitecore Data:		
C:\Inetpub\www	wroot\MySite\Data	Browse
MDF Files: LDF Files:	C:\Inetpub\wwwroot\MySite\Database\MC C:\Inetpub\wwwroot\MySite\Database\LDf	Browse Browse
	ОК	Cancel

Enter destination folders and click **OK**. Click **Next**.

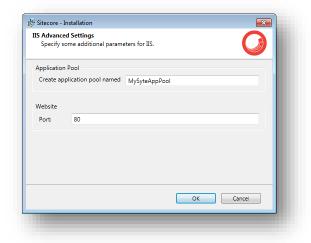


IIS Web Site

Web Site Create a new Web site.		
create a new web site.		
Web Site Name: MySyte		
wysyte		
For more options, click Advance	d.	Advanced
	< Back Next >	Cancel

Enter the name of the new website.

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



Click **OK**. Click **Next**.

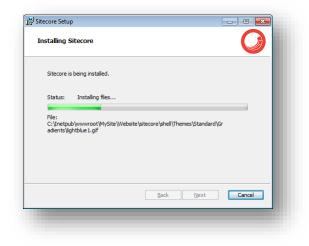


Ready to Install Sitecore

leview the options you selected. Click Back to change an option or click Install to sstall Sitecore.		
Option:	Value:	
Instance Name:	MySyte	
License File:	C:\Sitecore\LICENS~1.XML	
Database Server:	(local)	
Destination Folder:	C:\Inetpub\wwwroot\MySyte	
Web Site Name:	MySyte	
Application Pool Name:	MySyteAppPool	

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

Installing Sitecore



After you click Next, you see a progress window which will inform you about the installation process.

Finish





The Sitecore Installation Wizard has finished installation. Click **Finish** to exit the wizard.



3.3 Uninstalling Sitecore

To start the process of uninstalling Sitecore, perform one of the following actions:

- Open Windows Control Panel and select the **Programs and Features** option.
 - In the **Uninstall or change a program** window, locate the appropriate entry, right-click it and then click **Uninstall**:

Control Panel Home	Uninstall or change a program			
View installed updates	To uninstall a program, select it from the list and then	click Uninstall, Change, or Repair.		
Turn Windows features on or off	0		8== 🗸 🌘	3
Install a program from the	Organize Uninstall		8== 🔻 🄇	9
network	Name	Publisher	Installed Or	n ^
	MSXML 4.0 SP2 (KB973688)	Microsoft Corporation	14.12.12	
	Olicam 1.5.1 rev. 120307 - Nicam	Sitecore Corporation	21.12.12	
	📓 Notepad++		14.12.12	
	Paint.NET v3.5.10	dotPDN LLC	17.12.12	
	🚜 Realtek HDMI Audio Driver for ATI	Realtek Semiconductor Corp.	06.12.12	
	O Sitecore 6.5.0 rev. 120706 - CMS65	Sitecore Corporation	12.12.12	
	Sitecore 6.6.0 rev. 121015 - NewInstance1	Sitecore Corporation	11.12.12	
	Sitecore 7.0.0 rev. 130108 - NewInstance4	Sitecore Corporation	09.01.13	
	Skype™ 6.0	Skype Technologies S.A.	07.12.12	
	1.7.10.23359 (64 bit)	TortoiseSVN	12.12.12	
	P TrueCrypt	TrueCrypt Foundation	06.12.12	
	💷 Visual Studio 2010 Prerequisites - English	Microsoft Corporation	25.05.12	
	🖹 Visual Studio 2010 Tools for SQL Server Compact 3.5	Microsoft Corporation	25.05.12	
	WCF RIA Services V1.0 SP1	Microsoft Corporation	25.05.12	
	🟘 Web Deployment Tool	Microsoft Corporation	25.05.12	Ξ
	😥 Winamp	Nullsoft, Inc	18.12.12	
	Winamp Detector Plug-in	Nullsoft, Inc	18.12.12	
	Mindowe Live Freentiale	Microsoft Corporation	25.05.12	
		Microsoft Corneration		

• Launch the Sitecore 7.X rev.XXXXX.exe application, in the Add or Remove Sitecore Instance step; select the Existing Instance check box.

dd or Remove a Sitecore Instance Do you want to create a new instance of Sitecore or remove an existing instance?	
1	 New Instance Create a new instance of Sitecore. Existing Instance Remove an existing instance of Sitecore. To install another instance, you must run the installation wizard again. Sitecore Instance: CMS650R110602
	< Back Next > Cancel

After uninstalling Sitecore, restart the SQL Server and IIS services as appropriate.



3.4 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 from the .ZIP File

This chapter describes how to install Sitecore CMS using the ZIP archive of the Web site root. You can download the ZIP archive from the following page:

http://sdn.sitecore.net/SDN5/Resources/Sitecore%207/Sitecore%20CMS.aspx

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 (ZIP installation)



4.1 Installation Process Overview

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

You can download the Sitecore CMS ZIP archive from the following page:

http://sdn.sitecore.net/SDN5/Resources/Sitecore%207/Sitecore%20CMS.aspx

To install an instance of Sitecore:

- 1. Install Microsoft .NET Framework V4.5.
- 2. Choose a parent directory path for the project, for example C:\InetPub\ProjectName.
- 3. Extract the .zip archive to create the following folders:

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

- 4. Set permissions as described in **Section 4.2**, **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\ProjectName\Data

- 6. If you are running SQL Server, attach SQL databases from /Databases folder to the SQL server.
- 7. If you are running SQL Server, edit the ConnectionStrings.config file located in the /Website/App_Config/ folder. Enter the appropriate values in a line for each database, for instance:

```
<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 web site as described in Section 4.3, Configuring the IIS.
- 9. Configure the Internet Explorer browser as described in 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 now:

-	
Welcome to Sitecore	License Holder: Sitecore Ukraine License ID: 20121205220054
	Sitecore.NET 7.0.0 (rev. 130108)
User Name:	
Password:	
Login	
Forgot Your Password Change Password	Browser Notes
Options	Welcome to Sitecore CMS 7.0. You are running Mozilla Firefox.
User Interface:	Sitecore supports this browser.
Desktop 🚺 Content Editor	
User Interface Language:	
Close Options	

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 CMS 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 web site 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* permissions to all 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 and 7.5	IUSR

If IIS is configured not to use the default IUSR account for processing anonymous requests or Anonymous authentication is not enabled for the web site, the aforementioned permissions should be granted to the corresponding account(s).

4.2.2 File System Permissions for ASP.NET Requests

Requests for ASP.NET resources and all the .NET code running within the application is executed with the permissions of the account configured as an identity for the web site's application pool. This account requires *Modify* permissions to all files, folders, and subfolders under the /Website and /Data folders.

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

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

IIS 6 and later versions allow changing the user account used for processing ASP.NET requests.

If you choose a different user account for processing 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, refer to the following 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 CMS application requires access to multiple system files and folders that are not distributed as a part of the Sitecore CMS 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.

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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_* users require the modify access rights to the \temp folder to install Sitecore CMS.

These variables mentioned 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/

4.2.4 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 CMS 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 CMS web application:



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

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 CMS.

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

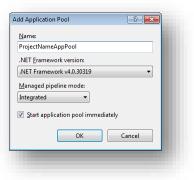
This section describes how to create the application pool for Sitecore on IIS 7, 7.5, 8 and 8.5 (Windows 7, Windows Server 2008, Windows 8, and Windows 8.1).

To create the application pool:

- 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:

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

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

<u>F</u> ile <u>V</u> iew <u>H</u> elp						
Connections Image: Second state Image: Second	This page lets you view and mana pools are associated with worker p isolation among different applicat	Application Pools This page lets you view and manage the list of application pools on the server. Application pools are associated with worker processes, contain one or more applications, and provide isolation among different applications. Filter:				Actions Add Application Pool Set Application Pool Defaults Application Pool Tasks Start Stop
	Name	Status		Managed Pipel	.	Recycle
	ASP. NET v4.0 ASP. NET v4.0 Classic Classic .NET AppPool DefaultAppPool NewInstancetAppPool NicsmAppPool NicsmAppPool Scot Scot Scot	Started 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 Classic Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated	Applic Applic Applic Applic Applic Applic Netwo Netwo Netwo Netwo Netwo Netwo Netwo	Edit Application Pool Besic Settings Recycling Advanced Settings Rename Rename View Applications Help Online Help
Ready	Features View Content View	/			4	

7. In the Actions panel, click Advanced Settings.

T Framework Version ble 32-Bit Applications naged Pipeline Mode ne sue Length	v4.0 False Integrated ProjectNameAppPool	
naged Pipeline Mode ne	Integrated	
ne		
	ProjectNameAppPool	
ue Length		E
ac congen	1000	
t Automatically	True	
J		
it	0	
it Action	NoAction	
it Interval (minutes)	5	
cessor Affinity Enabled	False	
cessor Affinity Mask	4294967295	
cess Model		
ntity	ApplicationPoolIdentity	
Time-out (minutes)	20	
d User Profile	True	
kimum Worker Processes	1	
g Enabled	True	-
	i ti ta Action it Interval (minutes) cessor Affinity Enabled cessor Affinity Mask cess Model tity Time-cout (minutes) d User Profile imum Worker Processes	t 0 it Action NoAction it Action NoAction it Interval (minutes) 5 cessor Affinity Brabled False cessor Affinity Mask 4294967295 cess Model tity ApplicationPoolIdentity tity ApplicationPoolIdentity Time-out (minutes) 20 d User Profile True imum Worker Processes 1 g Enabled True

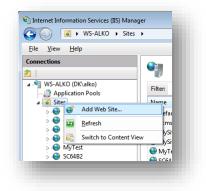
- 8. In the Advanced Settings dialog box:
 - Set the .NET Framework version to v4.0.
 - Set the **Identity** setting to the built-in account called *ApplicationPoolIdentity* or *NetworkService*.
 - Ensure that the Maximum Worker Processes setting is set to 1.
 - Set the Load User Profile setting to True.



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.

ite name:		App <u>l</u> ication pool:				
ProjectName		ProjectNameAppPool			S <u>e</u> lect	
Content Directory						
Physical path:						
C:\InetPub\Project	Name\Website					
Pass-through auth	entication					
Connect as	Test Settings					
Connect as	Test Settings	•				
Binding						
-	IP address:			Port:		
<u>T</u> ype:				_		
http	 All Unassig 	ned	•	80		
Host name:						
projectname						
Example: www.con	toso.com or ma	rketing.contoso.com				
		-				
Start Web site imm	ediately					
			OK		Canc	el
			UK		Cunc	<u>.</u>

4. In the Add Web Site dialog box, fill in the required fields, for example:

Site name: ProjectName Application pool: ProjectNameAppPool Physical path: C:\InetPub\ProjectName\Website Host name: projectname

- 5. Click OK.
- 6. Add the following line to your hosts file that is located at C:\Windows\System32\drivers\etc:

127.0.0.1 projectname

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



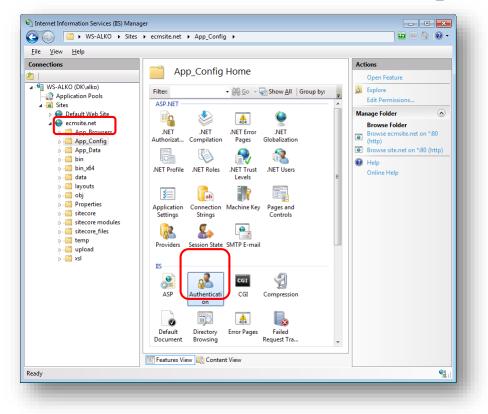
Limit Access to Anonymous Users

You should prevent anonymous users from accessing the following folders:

- /App_Config
- /sitecore/admin
- /sitecore/debug
- /sitecore/shell/WebService

For instance, to limit anonymous access to the /App Config folder:

- 1. Open the IIS.
- 2. In the Connections panel, browse 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.

Sites	ecmsite.net App_Config			🖸 🔝 🖾 🔞 🔹
ile <u>V</u> iew <u>H</u> elp				
onnections	Group by: No Grouping			Actions Enable Edit
Application Pools	Name	Status	Response Type	😢 Help
🕟 🎱 Default Web Site	Anonymous Authentication	Disabled		Online Help
ecmsite.net effect App_Browsers Green Config effect App_Data effect Din fin fin	ASP.NET Impersonation Forms Authentication	Disabled Disabled	HTTP 302 Logi	

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- 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 the following article:

http://technet.microsoft.com/en-us/library/ms188670.aspx

Note

It is also possible to use Windows authentication to connect to the SQL server. For more information on connecting to the SQL server, refer to http://msdn.microsoft.com/en-us/library/ff647396.aspx

4.4.1 Creating a Database Account for Sitecore CMS Databases on SQL Server 2008

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.
- In SQL Server Management Studio, in the Object Explorer pane, expand the Security 3. folder

	🛒 Script 🔻 🛐 Help				
Select a page	Scubt 🔺 🔲 Heib				
Server Roles User Mapping Securables Status	Login <u>n</u> ame:	SC user		Search	ı
	Output: Server authentication Password:				
	Confirm password:	•••••			
	Specify old password				
	Old password: Contemposities of the second policy	, ,			
	Enforce password expira				
	 User must change pass Mapped to certificate 	word at next login		-	
	Mapped to asymmetric key				
	Map to Credential			▼ Add	
Connection Server: (local)	Mapped Credentials	Credential	Provider		
Connection: sa					
View connection properties					
Progress				Remo	ve

- 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).



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

electapage General	Script	🔻 🚺 Help		
Server Roles User Mapping	Users ma	apped to this login:		
Securables	Мар	Database	User	Default Schema 🔺
P Status		master		
		model		
		msdb		
		SC100104ECM100331 Analytics		E
		SC100104ECM100331Sitecore Core	SC user	
		SC100104ECM100331Sitecore Master	SC user	
		SC100104ECM100331Sitecore Web	SC user	
		SC100104ECMWIN7 Analytics		
		SC100104ECMWIN7Sitecore_Core		
		-		
		III t account enabled for: SC100104ECM100331Sitecon to the membership for: SC100104ECM100331Sitecon	-	•
onnection	Gues Databas	t account enabled for: SC100104ECM100331Steco e gole membership for: SC100104ECM100331Stecor et, Membership_BascAccess	-	A
erver:	☐ Gues Database ♥ aspn ♥ aspn	t account enabled for: SC100104ECM100331Stecor e role membenship for: SC100104ECM100331Stecor et_Membenship_BasicAccess et_Membership_BasicAccess	-	
ierver: ocal)	Gues Database V aspn V aspn V aspn	t account enabled for: SC100104ECM100331Stecor e tole membership for: SC100104ECM100331Stecor et <u>Membership BasicAccess</u> et <u>Membership FullAccess</u> et <u>Membership ReportingAccess</u>	-	,
ierver: ocal) ionnection:	Gues Database Jaspn Jaspn Jaspn Jaspn Jaspn Jaspn	t account enabled for: SC100104ECM100331Steco a role membership for: SC100104ECM100331Stecor at <u>Membership FallAccess</u> et <u>Membership FallAccess</u> et <u>Personalization</u> <u>FallAccess</u> et <u>Personalization</u> <u>FallAccess</u> et <u>Personalization</u> <u>FallAccess</u>	-	,
ierver: ocal) ionnection: a	Gues Databasa V aspn V aspn aspn aspn aspn aspn	t account enabled for: SC100104ECM100331Stecor a gole membership for: SC100104ECM100331Stecor at <u>Membership BasicAccess</u> et, <u>Membership FoulfAccess</u> et, <u>Personalization BasicAccess</u> et, <u>Personalization FulfAccess</u> et, <u>Personalization FulfAccess</u> et, <u>Personalization FulfAccess</u>	-	
ierver: ocal) ionnection:	Gues Databasu V aspn V aspn aspn aspn aspn aspn v aspn	t account enabled for: SC100104ECM100331Steco a gole membenship for: SC100104ECM100331Stecor et <u>Monchenship BasicAccess</u> et <u>Membenship ReportingAccess</u> et <u>Personalization FulAccess</u> et <u>Personalization FulAccess</u>	-	
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ierver: ocal) ionnection: a	Guese Database V aspn V aspn aspn aspn V aspn V aspn V aspn V aspn V aspn V aspn	t account enabled for: SC100104ECM100331Stecor a tole membership for: SC100104ECM100331Stecor at	-	
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8. In the **Database role membership for** field, select the following check boxes:

For the Master and the Web databases:

- o db_datareader
- o db_datawriter
- o public

For the Analytics database (if you have DMS installed):

- o db_datareader
- o db_datawriter
- o public

For the Core database:

- o db_datareader
- o 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

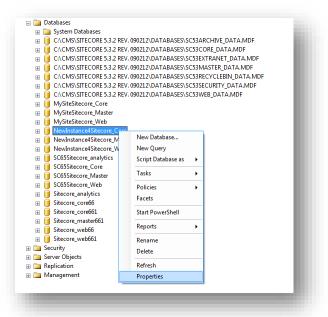


- aspnet_Roles_ReportingAccess
- 9. Click OK to create the user.

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** and the **Database Properties** window appears.

" General " Files							
Filegroups	Servernane	A.	ALEX/SQLEXPRESS				
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Extended Properties	Database pame	0	INETPUB/W/W/WROOT	SITECORE SC	TEST INSTAL	LIDA	
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- 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.

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Repeat this procedure for the other Sitecore CMS databases, including the Analytics database if you have Sitecore DMS installed.



4.5 Oracle Database Storage Setup

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

4.5.1 Oracle Storage Setup

This section describes setting up a Sitecore CMS with Oracle databases in detail.

Database Server Preparations

Database server must run a supported version of Oracle database instance, which meets the following requirements:

- 1. Oracle instance must be configured in shared server mode.
- Oracle instance must contain a tablespace for Sitecore having at least 200MB of free space initially. More space will be needed as Sitecore database grows. Perform these steps on the Oracle Database Server (or a workstation PC with the administration tools for the Oracle) to set up Oracle databases for Sitecore CMS:
- Install Sitecore CMS Databases (*DB.exe setup executable, version 6.0.2 or higher). Alternatively you can copy the /Databases/Oracle folder from an existing Sitecore 6 installation.
- 4. Load Sitecore data into the Oracle database:
 - a. In the computer's System Properties/Advanced/Environment Variables set up user-level variables as follows:
 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).
 - b. Launch the createdata.bat file from the /Databases/Oracle/ folder.
 - c. Remove DATABASE, TBS, PASSWORD, PREFIX variables from the environment.

Installation scripts will set up three user schemas: %PREFIX%core, %PREFIX%master, %PREFIX%web (default: sccore, scmaster, scweb). User passwords are the same as the user names.

Website Server Setup Instructions

The following instructions describe a web server setup where Sitecore CMS file system will be hosted.

 Install Oracle Client matching the Oracle Database version. Make sure Oracle Data Provider for .NET 2.0 is installed. Add a connection to the appropriate Oracle instance (created as described in the Database Server Preparations section). For detailed instructions on this topic, refer to Section Error! Reference source not found., Error! Reference source not und..

Note

When installing Oracle Data Provider in a 64-bit Environment, make sure you use Oracle Client for Windows x64.

- Install Sitecore CMS 6. If you are installing Sitecore from a ZIP archive (not an exe setup executable) you should configure the dataFolder setting and put a valid license.xml file into the data folder before proceeding to next steps.
- 3. Copy dataFolder variable definition from Web.config to Web.config.Oracle.

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For example <sc.variable name="dataFolder" value="c:\sitecore\data"/>

- 4. In the Web.config.Oracle, in **runtime/assemblyBinding** section set **bindingRedirect** to the Oracle.DataAccess assembly version installed on your system:
 - a. Open Global Assembly Cache by running the 'assembly' command in the command prompt of the Run console (Win+R).
 - b. Locate Oracle.DataAccess.dll for your Oracle Client version, right-click, choose Properties and copy the Version value which can be in one of the following formats:
 - i. 10.2.x.x (Oracle Client versions prior to 10.2.0.2).
 - ii. 2.102.x.x or 2.111.x.x (Oracle Client versions 10.2.0.2 and higher).
 - c. Modify the assemblyBinding setting. Replace 10.2.0.100 with your assembly version:

```
<dependentAssembly>
  <assemblyIdentity name="Oracle.DataAccess"
ublicKeyToken="89b483f429c47342"/>
  <bindingRedirect oldVersion="9.2.0.401"
newVersion="10.2.0.100"/>
</dependentAssembly>
```

- 5. Backup the original Web.config and rename Web.config.Oracle to Web.config.
- 6. Modify connection strings in /App_Config/ConnectionStringsOracle.config to point to the valid Oracle instance.
 - a. Data Source parameter must point to the local Oracle instance name as configured in the Oracle Net Manager.
 - b. User names and passwords must be adjusted to match those installed on the database server. Default names/passwords are sccore/sccore, scmaster/scmaster and scweb/scweb.

Configure IIS as for a usual Sitecore installation and run Sitecore.



4.6 Uninstalling Sitecore (ZIP installation)

Before uninstalling Sitecore, delete the IIS Web site or update it to reference a different directory, or stop IIS by executing the following command:

net stop w3svc.

Stop the SQL Server process:

- for SQL Server Express: net stop "sql server (sqlexpress)"
- for every other edition of SQL Server: net stop "sql server (instancename)"

Remove the Sitecore file system.

Remove any databases on remote or local servers that are used by this instance of Sitecore.



Chapter 5

Limitations and Specific Requirements

This chapter describes various limitations and environment-specific requirements.

This chapter contains the following sections:

- Maximum Number of Worker Processes
- Miscellaneous



5.1 Maximum Number of Worker Processes

Sitecore does not support configuration when the **Maximum number of worker processes** is set to two or higher. You must set this setting to "1".

On multiple processor servers, this value may automatically be set higher than "1" when you install the OS/IIS. On these servers, it is therefore especially important to check this setting as it will likely be higher than "1".



5.2 Miscellaneous

This section contains miscellaneous uncategorized requirements.

5.2.1 Install Latest Updates

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

5.2.2 UNC Share Not Supported

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

5.2.3 Sitecore Cannot Operate from a Virtual Directory

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

5.2.4 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-8e89-49ada89d-e26e4d76ee68.mspx?mfr=true



Chapter 6

Post-Installation Steps

This chapter describes the steps that we recommend you to take after installing Sitecore CMS.

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



6.1 Content Expiration

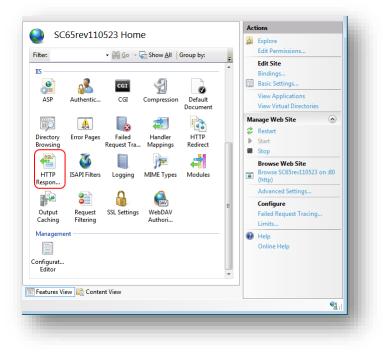
Set IIS Expire Web content header to improve performance.

The Expire Web content header (located in common HTTP Response headers) is how IIS determines whether or not to return a new version of the requested web page if the request is made after the web page content has expired. IIS will mark each web page before it's sent using the settings you provide for content expiration. The browser of the website visitor will translate the expiration mark.

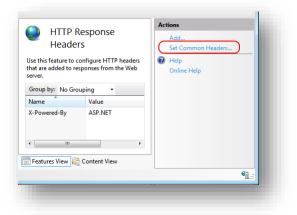
By setting Expire Web content to something other than immediately, you can reduce second-access load times by 50 to 70 percent. This setting will not affect dynamically generated content.

To enable the Expire Web content header in IIS 7.x and 8.x:

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



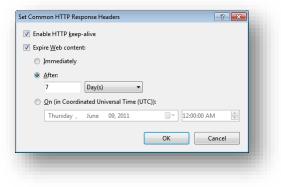
4. In the Actions panel, click on Set common headers...



5. Select the Expire Web content check box.



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



7. Click **OK** when finished.



6.2 Windows Authentication for Sitecore

You can configure Sitecore to use Windows Authentication for SQL connection (SQL 2008 / Windows 2008 (R2)) and effectively remove the username and password from the connectionStrings.config file.

- 1. Find the application pool that your Sitecore is running under. Open Properties and set the identity to the domain user on the corresponding tab.
- 2. On the SQL Server box, register the domain user and grant security permissions on Sitecore databases for the domain user according to the section "4.4.1 Creating a Database Account for Sitecore CMS Databases on SQL Server 2008" of the Installation Guide.
- 3. On the machine that hosts Sitecore, add this domain user to the IIS_IUSRS group.
- 4. Adjust the permissions for the IIS_IUSRS group according to these sections of the Installation Guide":
 - "4.2.2 File System Permissions for ASP.NET Requests"
 - o "4.2.3 File System Permissions for System Folders".
- 5. Edit the /App_Config/ConnectionStrings.config file and replace the user id and password parameters with the trusted connection=yes option:

- Prepare your identity so it can be used as a service account with "aspnet_regiis.exe" and the <u>ga switch</u>.
- 7. Add your domain service account to the local "Performance Monitor Users" group as per this section: "4.2.5 Windows Registry Permissions"

Note

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

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



6.3 Setting Microsoft SQL Server Database Properties

There are a few Microsoft SQL Server database properties that, when configured correctly, will help increase performance:

Compatibility Level

Compatibility Level effects SQL syntax and query parsing, and should have no impact of performance. Setting the Compatibility Level to a value of *SQL Server 2008(100)* will take 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, etc. 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 second or quicker), then all of those resources need to be activated again. Setting the *Auto Close* property to *false* or *OFF* will prevent this from happening.

• Auto Shrink

The Auto Shrink property uses a lot of resources when it's called, and you have no control over when it is being called. If you combine *Auto Shrink* with *Auto Growth*, you can get into a spiral of constantly growing and shrink 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 so via a script, command or scheduled Maintenance Plan. Setting the *Auto Shrink* property to *false* or *OFF* will disable this feature.

Recovery Model

In Simple Recovery Model MS SQL Server logs minimal amount of information in the transaction log. MS SQL Server basically 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 could recover in the amount of time which is specified in the Recovery Interval server level configuration. Setting 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 CMS databases.

To set these properties:

- 1. Launch MS SQL Server Management Studio.
- 2. In the object explorer, right click on the CMS Master database and select Properties.



3. Select the **Options** page and set the parameters as it is presented on the following image:

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🚰 Files 🚰 Filegroups	Collation:	SQL_Latin1_General_CP1_CI_AS	
Plicgroups Options			
Change Tracking	Recovery model:	Simple	▼]
Permissions	Compatibility level:	SQL Server 2008 (100)	-
Extended Properties			
_	Other options:		
	2↓ 🖾		
	Automatic		A
	Auto Close	True	
	Auto Create Statistics	True	
	Auto Shrink	False	
	Auto Update Statistics	True	
	Auto Update Statistics Asynchrono	usly False	E
	Cursor		
	Close Cursor on Commit Enabled	False	
	Default Cursor	GLOBAL	
	Miscellaneous		
Connection	ANSI NULL Default	False	
Server: WS-ELY	ANSI NULLS Enabled	False	
	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 Chainin		
	Date Correlation Optimization Enab		
Progress	Numeric Round-Abort	False	T
C Ready	ANSI NULL Default		
		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 CMS Core and Web databases.



6.4 Rebuild the Search Index and the Link Database

Follow these instructions only if you install Sitecore using the ZIP archive of the Web site root.

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.* Select all available databases.



6.5 Cache Configuration

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

For more information about cache configuration, see Cache Configuration Reference on SDN.



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

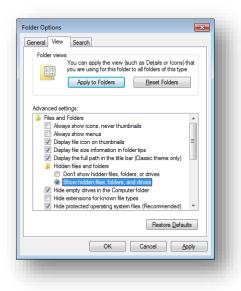
To update the security settings for a folder:

- 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**.

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- 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.

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**, and then click **Project**. The new project dialog appears.
- 2. In the new project dialog, in the Project Types tree, expand Visual C#, and then click Web.
- 3. In the new project dialog, in the Templates list, click ASP.NET Web Application.
- 4. In the new project dialog, select the version of the .NET Framework. While installing Sitecore CMS, in the **IIS Website** step you selected the version of the .NET Framework: 4.5.
 - o Select .NET Framework 4 in the Visual Studio project.
- 5. In the new project dialog, in the **Name** field, enter the name of the project, for example MyWebSite. Visual studio will use this name as the default .NET namespace and assembly name.
- 6. In the new project dialog, in the Location field, enter the document root of the Sitecore solution, for example C:\inetpub\sitecore\MyWebSite\WebSite.
- 7. In the new project dialog, 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.
- 9. Click **OK**. Visual Studio creates the project in a subdirectory of the directory specified by **Location**, and then opens that project.
- 10. In Solution Explorer, right-click References and click Add Reference.
- 11. Click the Browse tab and select the Sitecore.Kernel.dll file, and then click OK.
- 12. 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:

13. In the Solution Explorer, click Show All Files.

🖻 🔂 🖉 🍅
ScShow All Files

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