Plesk Sitebuilder 4.1 for Windows Installation Guide
Copyright Notice

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Preface

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About Plesk Sitebuilder

Plesk Sitebuilder consists of two parts: the Wizard and the Administrator Panel.

The Wizard is a web application enabling its users to create web sites and publish them on the Internet.

The Administrator Panel is a tool for managing and maintaining web sites created in the Wizard.

About this Guide

This guide instructs you how to install, upgrade, remove and repair Sitebuilder software. This guide also contains instructions on clustering installation.

Who Should Read this Guide

This guide is intended for those who downloaded Sitebuilder and want to install it in their systems.
Typographical Conventions

Before you start using this guide, it is important to understand the documentation conventions used in it.

The following kinds of formatting in the text identify special information.

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<td>Items you must select, such as menu options, command buttons, or items in a list.</td>
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<td><em>Italicics</em></td>
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<td>URLs, names of commands, files, and directories.</td>
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Feedback

If you have found a mistake in this guide, or if you have suggestions or ideas on how to improve this guide, please send your feedback to `userdocs@swsoft.com`. Please include in your report the guide’s title, chapter and section titles, and the fragment of text in which you have found an error.
Software Requirements:

In order for Sitebuilder to work properly, the following software should be installed in the system prior to the Sitebuilder installation:

- Microsoft Windows 2000 Advanced Server with Service Pack 4
  or
- Microsoft Windows Server 2003 any edition with Service Pack 2
  or
- Microsoft Windows 2008 RC Server (x32, x34)

Note: It is very important to have the latest service packs installed in your operating systems prior to installing Sitebuilder.

- If you have Microsoft Windows 2000 Advanced Server with Service Pack 4 installed, then you need IIS 5.1 installed on your computer.
- If you have Microsoft Windows Server 2003 any edition with Service Pack 2, then you need IIS 6.0 installed on your computer.

Note: If your IIS works in the 64-bit mode, it will be automatically switched to the 32-bit mode.

- Internet Explorer 5.x or later

Below is the list of another type of software that should also be installed in the system prior to Sitebuilder installation. If this software is not installed in the system, the Sitebuilder Installation Wizard installs it automatically during the installation process:

- Microsoft .NET Framework 2.0
- Microsoft SQL Server 2005 Express Edition
- MDAC 2.8
- Windows Installer 3.1
- Role services required for configuring your web server (for Microsoft Windows 2008 RC Server only):
  - ASP.NET
  - .NET Extensibility
  - ISAPI Extensions
  - ISAPI Filters
  - IIS 6 Management Compatibility (IIS 6 Metabase Compatibility, IIS 6 WMI Compatibility)
Hardware requirements:

- Processor: 1-gigahertz (GHz) Pentium III-compatible or faster processor recommended
- Memory: 512 megabytes (MB) of RAM or more recommended
- Hard Disk: Approximately 350 MB of available hard-disk space for the recommended installation
- Drive: CD-ROM or DVD-ROM drive
CHAPTER 2

Installing Sitebuilder

Note that to install Sitebuilder, you must be logged on to the server as administrator.

➢ To install Sitebuilder software on a server:

2. Go to the folder where you have saved the Sitebuilder Installation Wizard bundle.
3. Run the Sitebuilder installer. You can do it in two ways:
   - Launch the file named sitebuilder-4.1.0_buildyymmdd.build-number_win.exe. This file itself does not contain any components required for Sitebuilder installation - the Installation Wizard will prompt you to download and install them.
   - Launch one of the files: sitebuilder-4.1.0_buildyymmdd.build-number_winx64.exe or sitebuilder-4.1.0_buildyymmdd.build-number_winx86.exe - depending on your Windows version. These files contain all required installation components, so you do not need to download anything from the Internet.
4. On the screen appeared, indicate what type of connection you have with the remote MS SQL server:
   - If you do not have a local MS SQL 2005 Express installed, but want to have it installed, select the I will use local SQLExpress option.
     When you select this option, the Sitebuilder Installation Wizard runs a check on your computer to detect this software. If the software selected is not found, MS SQL 2005 Express is installed on your computer prior to the Sitebuilder installation. If the Sitebuilder Installation Wizard detects this software on your computer, the installation process continues.
   - If you select the I will NOT use local SQLExpress option, set the parameters of connection with a remote or local SQL server (for advanced users only). Sitebuilder does not run a check for this software.
5. After the Sitebuilder Installation Wizard completes the software requirements check on your computer, the welcome screen appears. Click Next to continue the installation.
6. Read the license agreement and select the I Accept the terms of the License Agreement option. Click Next.
7. Select the type of installation (Typical or Custom) and click Next.
   - Typical Installation. Selecting typical installation will install Sitebuilder automatically using standard settings.
- **Custom installation** (for advanced users). During this installation you can customize the location where Sitebuilder and its components should be installed; change SQL server parameters and IIS settings.

8 If you chose typical installation, specify the installation path for Sitebuilder in the **Destination folder for Sitebuilder** field (or leave the default path) and click **Install**.

9 If you chose custom installation, perform the following steps.

10 Specify the installation path for Sitebuilder itself (**Destination folder for Sitebuilder core**) and its components (**Destination folder for Sitebuilder repository**), and specify the folder for storing Sitebuilder sites (**Destination folder for Sitebuilder sites**). Click **Next**.

11 Select where to install the shortcuts to Sitebuilder (Program Menu or/and Desktop). Click **Next**.

12 Set up the SQL server connection:

- Specify the SQL server name
- Select the type of authentication on the SQL server (**Windows authentication** or **SQL server authentication**). If you select windows authentication, then your Windows user account credentials will be used for connecting to the SQL server. If you select SQL server authentication, then you should provide your user name and password for connecting to the SQL server.

  **Note:** You must have Administrator's privileges on the SQL server.

- Provide a name to be assigned to the Sitebuilder database created for your Sitebuilder instance (or leave the default name).

- Click **Next**.

13 Set up the IIS-related settings:

- If you want to create a new IIS web site configuration on your hard disk, select the **New IIS web site** option.
  - Provide a name to be assigned to the created IIS web site
  - Specify a TCP port through which browsers can access your Sitebuilder server
  - If you want to assign multiple domain names to the IP address of the Sitebuilder server, specify desired domain names separating them with a comma in the **Host headers** field.

Host header names must be registered with the Domain Name System (DNS). A DNS server maps your registered host header name (domain name) to the IP address of your computer. The mapping of the host header name to the IP address of your computer enables requests that are addressed to your host header name to be routed to your computer.
- Select an IP address to be used for accessing your Sitebuilder server. If you do not select a specific IP address and leave the * ' sign in this field, than Sitebuilder responds to all IP addresses assigned to this computer and not assigned to other IIS sites. For an IP address to appear in the IP address list, it should be first added in Windows Control Panel (Control Panel > Network Connections > Internet connection's Properties dialog box > General tab > Internet Protocol (TCP/IP) Properties > Advanced > IP Addresses area > Add button).

- If you already have an IIS site on your server and want to deploy Sitebuilder within it, select the Existing IIS web site option.

- Select the IIS site to which you want to deploy Sitebuilder.

- To create a new virtual directory for Sitebuilder within the selected IIS site, select the Create virtual directory check box and provide a name for the directory. If you leave this check box unselected, Sitebuilder will be deployed to the root folder of the existing IIS site.

- Click Next.

14 Review all the previously specified settings to make sure that they are correct. If everything is alright, click Install.

When installation is completed, the installer will notify you that Sitebuilder was successfully installed. Click Finish to complete the installation. If you want to proceed to creating your Sitebuilder administrator account upon finishing the installation, select the Complete your system setup after installation check box. If you exit the installer having this check box cleared, account creation will be postponed till you launch Sitebuilder program for the first time.

To access Sitebuilder Administrator Panel, open your browser and go to

http://<Sitebuilder-host-name>:<port>/Admin

Or just double-click the shortcut to Sitebuilder Administrator Panel on your Desktop or Program Menu.

If it is first time you open Sitebuilder, you will be prompted to create first Sitebuilder administrator account. After you complete the form and click Next, you will be taken to the Desktop page of the Administrator Panel.

For instructions on working with Sitebuilder Administrator Panel, refer to the Sitebuilder 4.1 for Windows Administrator's Guide; and to learn about Sitebuilder Wizard, refer to the Sitebuilder 4.1 for Windows Wizard User's Guide (both available here (http://www.swsoft.com/en/products/sitebuilder/docs/)).

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Configuring Sitebuilder on Local Network with NAT

If the Sitebuilder server is on the local network with NAT enabled and uses a private IP address, there may be problems with external access to the Edit step of the Sitebuilder Wizard and with previewing sites.

➢ To configure your Sitebuilder server on local network with NAT:

1. Open <path_to_Sitebuilder>\HostingService\bin\HostingService.exe.config, find appSettings section and add entry
   <add key="PreconfiguredUrl" value="http://%host_name%:%port%/%virtual_path%"/>
   where
   - %host_name% is the public DNS host name or IP address of the virtual web server where Sitebuilder is installed
   - %port% is the TCP port web server is listening on
   - %virtual_path% can be derived from the value of the service.root key - part of the string following after W3SVC/n/ROOT/. For example if the value of the service.root key is "W3SVC/1/ROOT/sites", then %virtual_path% is sites.

2. If the Sitebuilder IIS web site has host header(s) specified upon installation, open %WINDIR%\system32\Drivers\etc\hosts file and append the line 127.0.0.1 %host_header_value% to the end of the file, where %host_header_value% - the Sitebuilder web site’s host header.

3. If no host headers have been specified upon Sitebuilder installation - only IP address and TCP port, do the following:
   1. Go to Start > Administrative Tools > Internet Information Services (IIS) Manager.
   2. In the Web Sites directory, find the web site where Sitebuilder is installed.
   3. Right-click on the web site and select Properties on the menu.
   4. Open the Web Site tab and click Advanced in the Web site identification area.
   5. Click Add and in the IP address field, enter 127.0.0.1, and in the TCP port field, specify the TCP port of your web site. Click OK.
   6. Restart the Sitebuilder web site: right-click on the web site, click Stop item and then click Start item.
   7. Open <path_to_Sitebuilder>\Web\web.config in notepad, find the line: <appSettings file="appSettings.config"> and add the following string below this line: <add key="EnableNATSupport" value="true"/>.
   8. Save the web.config file.
Sitebuilder is shipped with a default number of templates, skins, and language packs. If you want to provide your customers with extra templates, skins, or languages, you can install them additionally. To obtain these extra components, you can:

- Create them yourself using SWsoft Sitebuilder Software Development Kit (including skins) (for more details, visit [SWsoft Developer Network](http://swdn.swsoft.com))
- Obtain them from 3rd party providers

To install additional template/skin/language pack, go to the folder where you have saved a template/skin/language pack and launch the file. The component is installed in Sitebuilder.

**Note:** If the installed packages do not appear in the list of available Sitebuilder components, reload the IIS service by running the `iisreset` command in the command line interface.

To uninstall a template/skin/language pack, open Control Panel > Add or Remove Programs, find the component you want to uninstall in the list of currently installed programs and click Remove.
Logical Architecture

Sitebuilder is based on layered architecture and supports several deployment scenarios in which system components may be distributed on multiple physical tiers. In terms of application deployment, components are grouped into logical tiers which form the deployment units. As shown in Figure 1, multi-tiered deployment architecture consists of Data, Storage and Application tiers.

Data Tier

Data tier consists of SQL Server database, which stores application business entities such as user accounts, sites, and system settings.

Storage Tier

Storage tier consists of file-based Repository components providing persistence service for user sites and their building blocks such as design templates, page sets and modules.

Application Tier

Application tier is composed of Web-based front-end application and Windows Service that are integrated with Internet Information Services (IIS). Web application provides user interface (UI) for the end users and system administrators and also exposes several Web Services for integration and remote administration. Preview hosting service provides design time IIS hosting for the user web sites and manages their life time.
You can install the logical tiers of the Sitebuilder server on one or more physical computers. In the context of this guide we will consider multi server deployment. Figure 2 shows typical implementation of Web Farm based on Network Load Balancing (NLB) clusters. For details of how to implement NLB cluster, see the deployment guide at Microsoft web site (http://technet2.microsoft.com/WindowsServer/en/Library/e1aaa9e3-1e8d-408f-b00d-7de6521c00251033.mspx?mfr=true). Additional details regarding IIS scalability with Network Load Balancing may be found at Microsoft web site (http://technet2.microsoft.com/WindowsServer/en/library/c40f7f5b-7d8c-48d9-81d0-dfcfa2fafa6b1033.mspx?mfr=true).

Web farm network segment represents NLB cluster consisting of two or more computers with NLB enabled network adapters. Application tier should be deployed on each web farm server which is part of virtual Sitebuilder cluster (within a single physical cluster there might be several virtual clusters distinguished by cluster address).

**Important:** NLB cluster should be configured to use a single client affinity to guaranty correct operations of Sitebuilder application tier components.

Storage and Data tiers reside within the private LAN segment. They might be deployed to storage and database servers correspondingly or installed on one computer. Though from the beginning it might be enough to have a single server with RAID 5 disk system for both storage and database tiers, it’s recommended to deploy these tiers to different computers in order to be able to scale out the machines independently on demand to load growth.
To increase availability of the storage server, you may install the storage tier on several machines and then setup Distributed File System (DFS) with File Replication Service (FRS). If you decide to do so, you should manually configure DFS and FRS services; for details, see the guide at Microsoft web site (http://technet2.microsoft.com/WindowsServer/en/library/42befce4-7c15-4306-8edc-a80b8c57c67d1033.mspx?mfr=true).

To increase availability of the database server, you may implement failover SQL Server 2005 cluster; for details, see the guide at Microsoft web site (http://msdn2.microsoft.com/en-us/library/ms179530.aspx).

**Figure 2: Web Farm**

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**Installation Walkthrough**

Sitebuilder components should be installed in a certain order. First you should prepare the database server and then install the storage tier components; Sitebuilder database is deployed as a part of the storage tier components installation. After you have completed the storage tier installation you are ready to deploy the application tier components to multiple nodes of Sitebuilder NLB cluster.

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Prerequisites

- Active Directory domain.
  To set up and configure a Sitebuilder Server in NLB cluster environment, you should use computers that are joined to an Active Directory domain.
- NLB cluster.
  It’s recommended to complete NLB cluster setup with at least one host before Sitebuilder installation.
- Two service accounts in the scope of AD for Sitebuilder server.
  One account will be used for the web application pool identity (Worker Process Account), the second one - for previewing hosting windows service.
- A user account for completing setup that is a member of the Administrator security group on application and storage server computers.
- SQL server login having SA rights or at least DBCreator and SecurityAdmin rights.

Application server software requirements

- Windows Server 2003 Enterprise or Datacenter edition
- Internet Information Services (IIS) 6.0
- Microsoft .NET Framework 2.0

Storage server software requirements

- Microsoft .NET Framework 2.0

Database server software requirements

Installing Sitebuilder Server

➢ To install the storage tier components:

1 Install and complete prerequisites for the storage server computer.
   • Ensure that the computer is a member of Active Directory domain.
   • Install Microsoft .NET Framework 2.0.
   • Obtain two domain user accounts, see Prerequisites (on page 16).

2 Create batch file for launching storage tier installer
   (for complete parameters reference, see Appendix (on page 31)).
   • Set /qb - use basic GUI.
   • Set CLUSTER_INSTALLATION_TYPE=1.
   • Define SQL server connection parameters: SQLSRVER, SQLWINAUTH, SQLUSER and SQLPWD.
   • Define service accounts' parameters: SBWPA_USER, SBSERVICE_USER.
   • Define CLUSTER_ADDRESS parameter.
   • Optionally, define INSTALLDIR_SB parameter to specify installation folder.

3 Launch installation using created batch file.

Sample batch file

```text
SBInst.msi /qb CLUSTER_INSTALLATION_TYPE=1 SQLSERVER="tcp:dataserver,1433" SQLUSER=sa SQLPWD=sa SQLWINAUTH=false SB_DOMAIN=vmfarm SBWPA_USER="sbwpa" SBSERVICE_USER="sbservice" CLUSTER_ADDRESS=cluster.domain.com
```

Sitebuilder storage-tier installer creates new file share named Sitebuilder, prepares install_application_node.bat batch file, and several additional files necessary to run application-tier installation, within the folder named Installer.

Use the batch file created by the Installer to run application tier installation.

➢ To install the application-tier components:

1 Install and complete prerequisites for the application tier computer.
   • Ensure that the computer is a member of Active Directory domain.
   • Install Internet Information Services (IIS) 6.0.
   • Install Microsoft .NET Framework 2.0.

2 Launch install_application_node.bat batch file from command line with passwords for user accounts as parameters. Example:

```text
install_application_node.bat sqlPwd wpaPwd servicePwd
```

➢ To install a language pack:
A language pack should be deployed on the storage and application tiers. First you should install the language pack to the storage tier and then install on each node in the application tier.

**Note:** 1) The same language packs have to be deployed across all nodes in application tier.

2) You may see new languages in the admin panel\server\languages list, but users will not be able to use new languages until completion of the Sitebuilder installation registration procedure.

➢ **To install a template pack:**

A template pack should be installed on the data tier only. To install the template pack launch installer on the data tier machine. It will check Sitebuilder installation presence, extracts the templates’ files and register them within the Sitebuilder database. After installation you may add new templates to the users’ plans as necessary.

---

**Clustering Site Storage**

Sitebuilder enables site owners to preview their sites at any step of their work. Generated site previews are stored on the Sitebuilder server (about 3 MB per one site, plus additional user's data, such as custom images and the database for the page modules), so if the number of your customers' sites is quite big, storing site previews may consume a large amount of server's disc space.

To avoid disc space shortage, you can define one or more storage spaces (file shares) to store content of previewed sites and add additional spaces on demand.

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Enabling Clustered Site Storage

Configuring storage spaces is done by modifying the Sitebuilder configuration file (<path_to_Sitebuilder>\Web\web.config>.

- To enable clustered site storage:
  1. Open the web.config file.
  2. Find the siteRepository element.
  3. Add the useSparseStorage attribute after the path attribute of the siteRepository element and set its value to 'true'.

This attribute defines whether Sitebuilder should or should not use the extended storage configuration model. By default, web.config file does not contain this attribute, which means that site storage works in single-storage mode.
Adding New Storage Space

➢ To add a new storage space:

1. Open the web.config file.
2. Add the storageSpaces element inside the siteRepository element.

The storageSpaces element has one attribute and \( n \) sections (\( n \) is the number of spaces you want to add), containing parameters describing a space.

- The attribute is distributionStrategy - it defines the way how storage spaces should be distributed among sites. You can choose between three strategies:
  - RoundRobin - spaces are placed in cycle buffer and are used by rotation in the order they are defined in the web.config file.
  - Sequential - spaces are used in the order they are defined in the web.config file, and the next space cannot be used until the previous one is filled.
  - Balanced - Sitebuilder will try to equally distribute free space between all defined spaces, i.e. the spaces will receive weight factor based on free space available, and less loaded spaces will be used more often.

- The parameters describing a space are the following:
  - name - a unique name of the storage space (mandatory)
  - path - UNC path to the file share (mandatory)
  - enabled - true by default; if false, then the message saying that the site is temporary unavailable is displayed when a user attempts to perform any operation with site located at this storage space. Used in reallocation scenarios.
  - allowNewSites - true by default; defines permission to create new sites at this storage space. May be used to temporarily disable sites allocation.
  - freeSpaceThreshold - defines threshold for the minimal free space allowed. When this threshold is reached, Sitebuilder stops to create new sites on this space. The value may be defined in megabytes (100MB, for example) or in percent. The default value is 10MB.
  - sitesThreshold - defines threshold for the maximum number of sites allowed. When this threshold is reached, Sitebuilder stops to create new sites on this space. This parameter may be useful when you want to ensure that certain space amount will be available for each site.

Note: To maximize space usage, threshold values are rechecked every time a new site is created.

Here is a sample configuration file with three spaces added:

```xml
...<siteRepository path="..\Sites" useSparseStorage="true">
  <caching enabled="false" expiration="00:01:00"/>
```
<storageSpaces distributionStrategy="RoundRobin">
  <add name="space1" path="\\server1\sites" enabled="true" freeSpaceThreshold="3%" sitesThreshold="5000"/>
  <add name="space2" path="\\server2\sites" enabled="true" allowNewSites="false"/>
  <add name="space3" path="\\server3\sites" enabled="false"/>
</storageSpaces>
</siteRepository>

Moving Sites to Another Storage Space

Physical movement of a large number of sites is a time consuming operation, so it is recommended to disable respective space for the time necessary to complete this operation. This will ensure that site content remains consistent before and after moving. Otherwise, Sitebuilder may try to load a site from the old location and then will be unable to save its state back. After successful movement, you can enable the disabled space back and update the path as necessary.

➢ To move sites from one storage space to another:
  1 Disable the initial space (set the value of the enabled parameter to false).
  2 Move the sites to the new location.
  3 Enable the disabled space.

Merging Storage Spaces

➢ To merge storage spaces:
  1 Disable the initial space (set the value of the enabled parameter to false).
  2 Move the sites to the new location.
  3 Remove the initial space's definition from the configuration file.
Removing Storage Space

To remove a space, simply delete a corresponding section from configuration file.

You can remove only empty spaces, so if a space you want to remove contains sites, you should first disable the space and then move the sites to another location (see page 21). When Sitebuilder receives a request for a site located on removed space, it will try to find the site in other defined spaces and update site allocation table as necessary.
CHAPTER 5

Migrating Sitebuilder from Standalone Server to Clustered Environment

The information in this chapter applies to Sitebuilder starting from version 4.x. To migrate a standalone Sitebuilder 3.x installation to a clustered environment, you first need to upgrade your Sitebuilder to version 4.x.

Considerations

Before migrating a standalone Sitebuilder installation to a clustered environment:

- Consider prospective network topology and plan physical tiers deployment basing on the information given in the Installing Sitebuilder in Clustered Environment chapter (see page 13):
  - Where the Sitebuilder database resides now and where it should be after cluster deployment
  - What machine will carry out storage tier responsibilities (keep system repository and sites storage)
  - Which machines to be part of the web farm
- Consider to set up a failover cluster for the database and/or storage server
- Back up the current Sitebuilder database
- Back up all Sitebuilder configuration files (.config)
- Back up the current preview sites (located in the <path_to_Sitebuilder>\Sites folder)
- Back up the Sitebuilder server certificate used in the current installation (it is used to secure communication between Sitebuilder server and published sites).

There are two ways to back up Sitebuilder server certificate:

- Using certificates management console:
  1. Start the MMC environment (Start > Command Prompt > mnc.exe).
  2. On the File menu, select Add/Remove Snap-in and click Add.
  3. From the appeared list, select ‘Certificates’ and click Add and click Close.
  4. Select Computer account option and click Next.
  5. Select Local computer option and click Finish. Click OK on the Add/Remove Snap-in dialog box.
  6. Go to Console Root > Certificates > Personal > Certificates, right-click on ‘Sitebuilder’ certificate and select Export.
  7. Follow the instructions provided in the Certificate Export Wizard.

**Important:** Be sure to include the private key into the exported certificate.
Migrating Sitebuilder from Standalone Server to Clustered Environment

- Using the `certexchange.exe` utility located in `<path_to_Sitebuilder>\Utils` folder.
  
  For example:
  ```
  certexchange -x -pfx -n Sitebuilder -file
  C:\backup\certificate\sitebuilder.pfx
  
  where `C:\backup\certificate` is the path to the destination folder for the exported certificate file named `sitebuilder.pfx`.
  ```

- Backup the Sitebuilder public key using the `certexchange.exe` utility located in `<path_to_Sitebuilder>\Utils` folder.
  
  For example:
  ```
  certexchange -x -pxml -n Sitebuilder -file
  C:\backup\certificate\PublicKey.xml
  
  where `C:\backup\certificate` is the path to the destination folder for the backed up certificate file named `PublicKey.xml`.
  ```

Once the above considerations are taken into account, you can start the migration procedure.

- **To migrate Sitebuilder from a standalone server to a clustered environment:**

  1. Remove Sitebuilder, together with additionally installed template packs and language packs (if any).
  2. Move the Sitebuilder database to the destination Data tier SQL server.
  3. Run Storage tier installation and point it to the Sitebuilder database prepared at step 2.
  4. Move Sitebuilder preview sites files to the destination location at the Storage tier server.
     
     In order to preserve the correct NTFS permissions set by the installer, copy the subfolders nested in the `<path_to_Sitebuilder>\Sites` folder (not the entire `Sites` folder).
  5. Replace the Sitebuilder public key (`publickey.xml`) stored in the `<path_to_Sitebuilder>\Repository\Common` folder with the one you have kept from the previous Sitebuilder installation.
  6. Replace the new Sitebuilder certificate file stored in the `<path_to_Sitebuilder>\Install` folder with the one you have kept from the previous Sitebuilder installation.
  7. For each Application tier machine, ensure that there are no existing Sitebuilder certificates in the local certificate store using the Certificates MMC snap-in.
  8. Install Application tiers from the Sitebuilder share to the Storage tier server.
  9. Install template packs and language packs, if necessary.
     
     Make sure that the installed templates appear in Sitebuilder plans.
You may need to repair Sitebuilder if:

- Some Sitebuilder files copied to your computer during the Sitebuilder installation have been removed or corrupted.
- The shortcuts to Sitebuilder Administrator Panel or Wizard have been removed or do not function properly.

During the repair process, the Sitebuilder Installation Wizard checks your system for Sitebuilder data and copies Sitebuilder elements if they are found as missing from the system.

To repair Sitebuilder:

1. Go to Control Panel > Add or Remove Programs.
2. Click Change beside the Sitebuilder icon.
3. On the welcome screen, click Next.
4. Select the Repair option and click Next.
5. Click Repair.
   - The repair process is automatic. Sitebuilder informs you about its progress in the Status bar displayed on the Repairing Sitebuilder screen.
6. After the repair process is completed, click Finish.
This chapter tells you how to upgrade from earlier Sitebuilder versions (2.0.5 or 3.x) to Sitebuilder 4.x.

In this chapter:

Migrating from 2.0.5 to 4.x Version ................................................................. 26
Upgrading from 3.x to 4.x Version ................................................................. 29

Migrating from 2.0.5 to 4.x Version

Overview:

Migration from Sitebuilder 2.0.5 to Sitebuilder 4.x is performed from the command line only. The Migration Utility, which is included into Sitebuilder 4.x distribution, transforms and adds the contents of Sitebuilder 2.0.5 for Windows database, including file repository of sites and other data not stored in MSSQL, to Sitebuilder 4.x for Windows. The global settings, settings of existing users in Sitebuilder 4.x for Windows, site settings, or other Sitebuilder settings are not re-configured.

Prior to migration, we recommend to backup Sitebuilder 2.0.5 for Windows and Sitebuilder 4.x for Windows installations, including databases, file repositories of sites, etc.

Prerequisites:

- Fully installed Sitebuilder 2.0.5 for Windows (including full configuration of database and root)
- Fully installed Sitebuilder 4.x for Windows (including fully completed configuration of administrator account and Sitebuilder license)

In this section:

General Migration Rules .................................................................................. 27
Starting Migration ............................................................................................ 28
General Migration Rules

User Accounts

- Administrator and reseller accounts (except root administrator account) existing in Sitebuilder 2.0.5 are transferred to Sitebuilder 4.x without any changes.

- Site owner accounts (which were introduced only since Sitebuilder 3.x and therefore do not exist in Sitebuilder 2.0.5) will be created for each regular site registered in Sitebuilder 2.0.5. User names of created site owner accounts will be the same as the names of the corresponding sites.

- In Sitebuilder 2.0.5, it is possible to create user accounts with the same e-mail addresses, which cannot be done in Sitebuilder 4.x. Therefore, if there are user accounts with equal e-mail addresses, then upon migration, this common e-mail address is assigned to that user account which is migrated in a first place. For the rest of the user accounts the program generates fake e-mail addresses (looking like 31383555-AC4A-4489-B438-9CA6567F8CA7@C3872C42-DEB0-43CB-BDE8-FA9A409BC57. AA544D41-28CB-11D3-BD22-0000F80849BD), which you should replace with real e-mails when you log in to Sitebuilder 4.x.

- Users’ old passwords for accessing Sitebuilder are replaced with the new ones, which are generated randomly and stored in the new_users_pwd file, also containing user names and e-mail addresses.

Sites

- Trial sites belonging to users with reseller accounts remain belonging to respective reseller accounts. For each regular site a site owner account - dependent to the reseller who previously owned the site - is created.

- The content and structure of the migrated sites are copied with the following limitations:
  - Modules content is not migrated. Instead of modules, Sitebuilder 4.x inserts the placeholders with messages and module names.
  - It may be necessary to do some additional manual correction work on some of the references since the find/replace scheme of src- and href- references on the pages is based on the simple and regular expressions. Only src- and href- of regular attributes are replaced automatically, but for scripts and other elements, this replacement is not supported.

Hosts

For hosts registered in Sitebuilder 2.0.5 for Windows as a range of hosts, one new host is created per one IP address of this range.

Plans

- Service plans are transferred to Sitebuilder 4.x without permissions existing only in the 2.0.5 version of the program.

- Design templates and modules included in plans created in Sitebuilder 2.0.5 but not included in Sitebuilder 4.x are not migrated. If components included in a Sitebuilder 2.0.5 service plan, are not present in Sitebuilder 4.x, then Sitebuilder 4.x plan may include default limits, license limits, or limits contained in the “parents” plan.
Starting Migration

Before starting migration procedure, verify that you have fully installed Sitebuilder 2.0.5 and Sitebuilder 4.x. Once migration is successfully completed, you can remove Sitebuilder 2.0.5 from your computer.

➢ To start migration procedure:

1. Change to `<path_to_Sitebuilder_4.x>\Utils`
2. Run the following command:
   
   ```
   SBMigrationTool.exe <path to Sitebuilder 2.0.5 for Windows installation>
   ```

   If the Migration Utility fails to retrieve the connection string to Sitebuilder 2.0.5 database, you may need to specify it manually:

   ```
   SBMigrationTool.exe <path to Sitebuilder 2.0.5 for Windows installation> <connection string to Sitebuilder 2.0.5 for Windows database>
   ```

   For example:

   ```
   SBMigrationTool.exe C:\Program Files\Sitebuilder 2.0.5 Data Source=.;Integrated Security=true;Database=sitebuilderDBname
   ```

   You can redirect the log of the migration process to a file, for example:

   ```
   SBMigrationTool.exe C:\Program Files\Sitebuilder 2.0.5 Data Source=.;Integrated Security=true;Database=sitebuilderDBname > log-file-name.txt
   ```
Upgrading from 3.x to 4.x Version

When upgrading from Sitebuilder 3.x to Sitebuilder 4.x, all object present in the 3.x version are transferred as they are, requiring no manual interaction.

If in Sitebuilder 3.x you have the default license installed, then upon upgrading, you will be given the default license for Sitebuilder 4.x. If you have uploaded a regular license in Sitebuilder 3.x, then upon upgrading, an equal 4.x license will be installed (with all the permissions allowed in 3.x, plus new features introduced only since 4.x version).

**Note:** You need to have active Software Update Service (SUS) to upgrade from SiteBuilder 3.x to SiteBuilder 4.x.

➢ *To upgrade Sitebuilder from 3.x to 4.x version:*

1. Start Sitebuilder 4.x installation (see page 8). The Installation Wizard detects the earlier version of Sitebuilder and prompts you to upgrade.
2. Click Next.
3. Read the license agreement and select the *I Accept the terms of the License Agreement* option.
4. Click Upgrade.

**Note:** Your security settings are not preserved during upgrade and will be reset to the settings you had before installing Sitebuilder 3.x.

Upgrading Sitebuilder in Clustered Environment

Upgrading Sitebuilder in clustered environment has absolutely the same procedure as clustered installation (see page 13).
To uninstall Sitebuilder:

1. Go to Control Panel > Add or Remove Programs.
2. Click Remove beside the Sitebuilder icon.

Sitebuilder will be removed from your computer (together with all additionally installed skins, language packs, and design templates).

Remaining Data

After the Sitebuilder uninstalling process is completed, the following elements copied to your system during the Sitebuilder installation remain in the system:

- Sitebuilder operation logs
- Trial and regular web sites created in your Sitebuilder
- File containing public key data in the subfolder Repository\Common\bin
- Additional programs which the Sitebuilder Installation Wizard might have copied to your system during the installation process, such as:
  - Microsoft .NET Framework 2.0
  - Microsoft SQL Server 2005 Express Edition
  - MDAC 2.8
  - Windows Installer 4.0
# Appendix. Installer Parameters for Unattended Installation

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Possible Values</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTALLDIR_SB</td>
<td>Full path</td>
<td>No</td>
<td>Install folder for main product files.</td>
</tr>
<tr>
<td>INSTALLDIR_REP</td>
<td>Full path</td>
<td>No</td>
<td>Install folder for System Repository. Not used for clustering installation.</td>
</tr>
<tr>
<td>INSTALLDIR_SITES</td>
<td>Full path</td>
<td>No</td>
<td>Folder for user’s sites storage. Not used for clustering installation.</td>
</tr>
<tr>
<td>INSTALLSCENARIO</td>
<td>1</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>WEBSITESERVERCOMMENT</td>
<td>string</td>
<td>No</td>
<td>Name to locate existing Web site (second scenario).</td>
</tr>
<tr>
<td>WEBSITEPORT</td>
<td>Number 0 - 65534</td>
<td>No</td>
<td>Listening Port; used to configure the existing Web Site (second scenario).</td>
</tr>
<tr>
<td>WEBSITEIP</td>
<td>IP</td>
<td>*</td>
<td>No</td>
</tr>
<tr>
<td>WEBSITEHH</td>
<td>string</td>
<td>No</td>
<td>Host headers; used to configure the existing Web Site (second scenario).</td>
</tr>
<tr>
<td>CREATEDWEBSESVERCOMMENT</td>
<td>string</td>
<td>No</td>
<td>Name of the new Web site (first scenario).</td>
</tr>
<tr>
<td>CREATEDWEBSITEPORT</td>
<td>Number 0 - 65534</td>
<td>No</td>
<td>Listening Port; used to configure the new Web Site (first scenario).</td>
</tr>
<tr>
<td>CREATEDWEBSITEIP</td>
<td>IP</td>
<td>*</td>
<td>No</td>
</tr>
<tr>
<td>CREATEDWEBSITEHH</td>
<td>string</td>
<td>No</td>
<td>Host headers; used to configure the new Web Site (first scenario).</td>
</tr>
<tr>
<td>SBVDNAME</td>
<td>string</td>
<td>No</td>
<td>Virtual directory under Web site to install web application; leave blank to install into web site root.</td>
</tr>
<tr>
<td>VDCREATE</td>
<td>1</td>
<td>0</td>
<td>No</td>
</tr>
<tr>
<td>Parameter</td>
<td>Possible Values</td>
<td>Required</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------</td>
<td>----------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SQLSERVER</td>
<td>string</td>
<td>Yes</td>
<td>SQL Server name to connect to for database deployment.</td>
</tr>
<tr>
<td>SQLUSER</td>
<td>string</td>
<td>No</td>
<td>User name for SQL Server connection (install time only). Ignored when SQLWINAUTH = “1”</td>
</tr>
<tr>
<td>SQLPWD</td>
<td>string</td>
<td>No</td>
<td>User password for SQL Server connection (install time only). Ignored when SQLWINAUTH = “1”</td>
</tr>
<tr>
<td>SQLWINAUTH</td>
<td>1</td>
<td>0</td>
<td>Yes</td>
</tr>
<tr>
<td>DBNAME</td>
<td>string</td>
<td>No</td>
<td>Database name.</td>
</tr>
<tr>
<td>INSTALL_DESKTOP_SHORTCUTS</td>
<td>1</td>
<td>0</td>
<td>No</td>
</tr>
<tr>
<td>INSTALL_PMENU_SHORTCUTS</td>
<td>1</td>
<td>0</td>
<td>No</td>
</tr>
<tr>
<td>WSB_USER</td>
<td>string</td>
<td>No</td>
<td>User name for Sitebuilder administrator account to create during the installation process. If blank or not set, Sitebuilder will show registration form to create administrator account on first request to application.</td>
</tr>
<tr>
<td>WSB_USER_PWD</td>
<td>string</td>
<td>No</td>
<td>User password for Sitebuilder administrator account created during the installation process.</td>
</tr>
</tbody>
</table>
| CLUSTER_INSTALLATION_TYPE  | 0 | 1 | 2          | Yes | Cluster installation node type:  
  0 – Single server (default)  
  1 – Storage tier  
  2 – Application tier |
| CLUSTER_FILESERVER_NETWORK_PATH | string     | No       | Storage tier server NetBIOS name or IP.  
Example: \fs.domain.com |
<p>| CLUSTER_ADDRESS            | string          | Yes      | Cluster address; IP or domain name.                                         |
| SB_DOMAIN                  | string          | Yes      | NetBIOS domain name for process accounts defined bellow.                     |</p>
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Possible Values</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBWPA_USER</td>
<td>string</td>
<td>Yes</td>
<td>User name for Sitebuilder worker process account (Web App pool identity).</td>
</tr>
<tr>
<td>SBWPA_PWD</td>
<td>string</td>
<td>Yes</td>
<td>Password for Sitebuilder worker process account.</td>
</tr>
<tr>
<td>SBSERVICE_USER</td>
<td>string</td>
<td>Yes</td>
<td>User name to run Sitebuilder hosting service process.</td>
</tr>
<tr>
<td>SBSERVICE_PWD</td>
<td>string</td>
<td>Yes</td>
<td>Password for service process account.</td>
</tr>
<tr>
<td>FORCELICENSEUPGRADE</td>
<td>true</td>
<td>No</td>
<td>Install Sitebuilder even if it is impossible to upgrade the license. The license is reset to default.</td>
</tr>
<tr>
<td>FORCEIIS6MGTCOMPRESSMODE</td>
<td>true</td>
<td>No</td>
<td>Install necessary web server role services in silent mode.</td>
</tr>
</tbody>
</table>