Autodesk MapGuide Enterprise

Installing and Configuring on Windows

March 2010

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1 Installing Autodesk MapGuide Enterprise 2011 on Windows

There are several components to install for Autodesk MapGuide Enterprise 2011:

- Autodesk MapGuide Enterprise 2011 Server
- Autodesk MapGuide Enterprise 2011 Web Server Extensions
- Autodesk MapGuide Studio (optional)

If you have a previous release installed, see Upgrading From an Earlier Release (page 4).

To install the components

1. Review the system requirements. (page 1)
2. Locate your serial number and product code. (page 3)
3. Run the installation program. (page 6)
4. Configure Autodesk MapGuide Enterprise (page 11).

System Requirements

Before installing Autodesk MapGuide Enterprise 2011, be sure your server systems meet or exceed the minimum platform and system requirements.

The installation automatically determines whether your Windows operating system is 32-bit or 64-bit. The appropriate version of Autodesk MapGuide

Enterprise 2011 is installed. A 64-bit version of Autodesk MapGuide Enterprise 2011 cannot be installed on a 32-bit system and vice-versa.

For more information on determining your operating system, see *http://support.microsoft.com/kb/827218*.

Description	Autodesk MapGuide Enterprise 2011 (Server) and FDO Providers	MapGuide Studio 2011 (Desktop)
Operating System	■ Microsoft® Windows Server® 2003 R2 (32-bit) (SP2) ■ Microsoft® Windows Server® 2003 R2 (64-bit) (SP2) ■ Microsoft® Windows Server®2008 Enterprise (32-bit) (SP2) ■ Microsoft® Windows Server®2008 Enterprise (64-bit) (SP2) ■ Linux®: Red Hat® Enterprise Linux ES Version 5.3 (32-bit)	■ Microsoft® Windows XP Professional (32-bit) (SP3) ■ Microsoft® Windows Vista Ultimate (32-bit) (SP2) ■ Microsoft® Windows 7 Ultimate (32-bit) (SP2) ■ Microsoft® Windows XP Professional (64-bit) (SP2) * ■ Microsoft® Windows Vista Ultimate (64-bit) (SP2) * ■ Microsoft® Windows 7 Ultimate (64-bit) (SP2) * * MapGuide Studio 2011 is a 32-bit application but can run on these 64-bit operating systems
CPU Type	Intel® Pentium®-based PC with 1GB RAM, 1GHz processor	
Memory (RAM)	32-bit Operating Systems: 2 GB 64-bit Operating Systems: 4 GB	
Display Resolution	1024x768 with True Color	
Available Disk Space	**MapGuide Enterprise 2011 Server and FDO Providers:** Windows: 400 MB Linux: 550 MB **MapGuide Enterprise 2011 Web Server Extensions:** Windows: 500 MB Linux: 600 MB	**MapGuide Studio 2011 and FDO Providers** Windows: 500 MB

Description	Autodesk MapGuide Enterprise 2011 (Server) and FDO Providers	MapGuide Studio 2011 (Desktop)
Media	Installation from DVD or Electronic Software Download file (no CD support)	
Optional Software: Browsers	■ Microsoft Internet Explorer 7.0 or 8 ■ Mozilla Firefox 3.5 ■ Safari 3.2 or 4.0 ■ Google Chrome 3.0 or 4.1 **NOTE** Supported browsers are tested on Windows Vista Ultimate SP2 and Windows XP Professional SP3 only.	
Optional Software: Web Servers	■ Apache HTTP Server 2.2 (2.2.15) ■ Microsoft IIS 6.0 on Windows Server 2003 ■ Microsoft IIS 7.0 on Windows Server 2008	
Optional Software: Application Development	■ .NET Framework 2.0 (Windows only) ■ Java™ JDK™ 6.0 ■ PHP 5.3.1 ■ Tomcat™ Servlet Engine 6.0.24 ■ FDO Version 3.5 See FDO System Requirements	

See also:

- Locating Your Serial Number and Product Key (page 3)
- Running the Installation Program (page 6)

Locating Your Serial Number and Product Key

When you install Autodesk MapGuide Enterprise 2011, you are prompted for your serial number and product key in the Product and User Information page,

or you have the option of installing the product in trial mode. You may enter your product information at any time during your trial mode period if you opt to install the product in that mode.

The serial number and product key are located on the outside of the product packaging, or in the Autodesk® Upgrade and Licensing Information email.

The serial number must contain a three-digit prefix followed by an eight-digit number. The product key consists of five characters.

The information you enter is permanently retained with the product. To review the product information later, on the InfoCenter toolbar, click the drop-down arrow next to the Help button (the question mark). Then click About - Product Information.

NOTE If you lost your serial number or product key, contact the Autodesk Business Center (ABC) at 800-538-6401 for assistance.

See also:

- System Requirements (page 1)
- Running the Installation Program (page 6)

Upgrading From an Earlier Release

To upgrade from an earlier release of Autodesk MapGuide Enterprise, you must upgrade the repository. Instructions differ, depending on whether you are upgrading from a recent release (2009 or later) or an earlier release (2008 or earlier)

To upgrade from a recent release (2009 or later)

1. Stop the existing MapGuide Enterprise 2009 or 2010 Server, if it is running.
   - Open the Services applet.
   - Select "MapGuide Enterprise 2009 Server" or "MapGuide Enterprise 2010 Server"
   - Select Action > Stop.
2. Open a DOS window and change to the 2009 or 2010 RepositoryAdmin directory *C:\Program*

Files\Autodesk\MapGuideEnterprise2009\Server\RepositoryAdmin. or *C:\Program Files\Autodesk\MapGuideEnterprise2010\Server\RepositoryAdmin*.

3 In the DOS window, run *BackUpOfflineRepositories.bat*.
Check the output to make sure there are no errors.

4 In the DOS window, run *RestoreColdBackupRepositories.bat*.
Check the output to make sure there are no errors.

5 In the DOS window, run *RecoverRepositories.bat*.
Check the output to make sure there are no errors.

6 Install the Autodesk MapGuide Enterprise 2011 server. (page 6)

7 Stop the newly installed server, if it is running.

8 Delete the "empty" repositories found at *C:\Program Files\Autodesk\MapGuideEnterprise2011\Server\Repositories*.

9 Copy the MapGuide Enterprise repositories found at *C:\Program Files\Autodesk\MapGuideEnterprise2010\Server\Repositories* or *C:\Program Files\Autodesk\MapGuideEnterprise2009\Server\Repositories*to *C:\Program Files\Autodesk\MapGuideEnterprise2011\Server\Repositories*.

10 In the DOS window, change to the RepositoryAdmin directory *C:\Program Files\Autodesk\MapGuideEnterprise2011\Server\RepositoryAdmin*.

11 In the DOS window, run *SetupRepositoryIndices.bat*.
Check the output to make sure there are no errors.

12 Start your Autodesk MapGuide Enterprise 2011 server.

To upgrade from an earlier release (2008 or earlier)

1 Stop the existing MapGuide Enterprise 2008 (or earlier) Server, if it is running.
   - Open the Services applet.
   - Select "MapGuide Enterprise 2008 Server" (or whatever your version is called).
   - Select Action > Stop.

2 Open a DOS window and change to the 2008 RepositoryAdmin directory *C:\Program Files\Autodesk\MapGuideEnterprise2008\Server\RepositoryAdmin*. (or the appropriate directory for your version).

3 In the DOS window, run *BackUpOnlineRepositories.bat*.

NOTE Make sure that you do not use *BackUpOfflineRepositories.bat* for this step or the next step will fail.

Check the output to make sure there are no errors.

4 In the DOS window, run *RestoreHotBackupRepositories.bat*.

Check the output to make sure there are no errors.

5 Install the Autodesk MapGuide Enterprise 2011 server. (page 6)

6 Stop the newly installed server, if it is running.

7 Delete the "empty" repositories found at *C:\Program Files\Autodesk\MapGuideEnterprise2011\Server\Repositories*.

8 Copy the MapGuide Enterprise 2008 repositories found at *C:\Program Files\Autodesk\MapGuideEnterprise2008\Server\Repositories* to *C:\Program Files\Autodesk\MapGuideEnterprise2011\Server\Repositories*.

Replace 2008 with your version number as needed.

9 In the DOS window, change to the RepositoryAdmin directory *C:\Program Files\Autodesk\MapGuideEnterprise2011\Server\RepositoryAdmin*.

10 In the DOS window, run *UpgradeRepositories.bat*.

Check the output to make sure there are no errors.

11 In the DOS window, run *SetupRepositoryIndices.bat*.

Check the output to make sure there are no errors.

12 Start your Autodesk MapGuide Enterprise 2011 server.

See also:

- System Requirements (page 1)
- Locating Your Serial Number and Product Key (page 3)

Running the Installation Program

From the installation wizard, you can install Autodesk MapGuide Enterprise Server, Web Server Extension, and MapGuide Studio.

To install Autodesk MapGuide Enterprise

1. Review the system requirements (page 1).
2. Locate your serial number and product code (unless you are installing a trial version). (page 3)
3. Close all running applications.
4. Insert the Autodesk MapGuide Enterprise DVD. If the installer does not start automatically, or if you prefer to launch the installation program manually, run *Setup.exe* from the installation DVD.
5. Review the documentation.

   On the opening screen, to review the documentation, from within the installation wizard click **Read The Documentation** to see a list of documents.

   For late-breaking information, check the *Autodesk MapGuide Enterprise Readme*.
6. When you have reviewed the documentation, click **Install Products**.
7. Select the products to install and click **Next**.

   By default, Autodesk MapGuide Enterprise 2011 - Server, Autodesk MapGuide Enterprise 2011 - Web Server Extension, and Autodesk MapGuide Enterprise Studio 2011 are selected.
8. Click **I Accept** on the **Accept the License Agreement** screen. Then click **Next**.
9. On the **User And Product Information** screen, enter your information. Then click **Next**.

   If you have a serial number and product key (page 3), enter it here. You can install the trial version without a serial number and product key.
10. On the **Begin Installation** screen, you can configure the installation specifications for each product before you install it.
    - Select the product to configure from the drop-down list.
    - Click **Configure**.
    - After configuring one product, use the tabs at the top of the screen to configure the next one.
    - When you are finished, click **Configuration Complete** to return to the **Begin Installation** screen.

The following tables explain the configuration options for each product.

Autodesk MapGuide Enterprise 2011 - Server Option	Description
License Type	If you provided a serial number and product key on the **User And Product Information** screen, you can select only a registered installation. If you selected **Trial Installation**, only the evaluation intallation option is available.
Installation Type	A typical installation installs to *C:\Program Files\Autodesk\MapGuideEnterprise2011\Server*. To specify a different location, use the **Browse** button.
Server Configuration	By default, Autodesk MapGuide Enterprise 2011 - Server is installed on the same computer as Autodesk MapGuide Enterprise 2011 - Web Server Extension. To change this, deselect this option and specify the site server's routable IP address.

Autodesk MapGuide Enterprise 2011 - Web Server Extension Option	Description
Web Configuration Settings	The bundled configuration option installs and configures the Apache HTTP Server, PHP, and Tomcat. You can select this option even if you have an existing Apache installation. These versions are installed as part of the Web Server Extensions installation, and they do not interfere with any existing installations. The IIS configuration option installs PHP for the Site Administrator, and configures IIS for use with either PHP or ASP.NET. The manual configuration option installs and configures PHP, ASP.NET, and JSP, but it does not configure a web server.
Installation Type	A typical installation installs to *C:\Program Files\Autodesk\MapGuideEnter-*

Autodesk MapGuide Enterprise 2011 - Web Server Extension Option	Description
	prise2011\WebServerExtensions. To specify a different location, use the **Browse** button.

If you choose the bundled configuration option, select a port for the Apache HTTP Server. By default, the port is 8808, so it won't conflict with any existing web servers that listen on port 80. The service name for Apache is ApacheMapGuide2011.

Specify the development environment, either PHP or Java.

NOTE If you choose Java as the development environment, you must install the Java JDK, and configure Tomcat. See Setting Up Java for the Bundled Installation (page 12) for details.

See Configuring Autodesk MapGuide Enterprise Web Server Extensions on Windows (page 11) for details about configuration.

Autodesk MapGuide Studio 2011 Option	Description
Installation Type	A typical installation installs to *C:\Program Files\Autodesk\MapGuideStudio2011* in a 32-bit environment. In a 64-bit environment, the default is *C:\Program Files (x86)\Autodesk\MapGuideStudio2011*. To specify a different location, use the **Browse** button.

11 When you have returned to the **Begin Installation** screen, click **Install**.

12 When the installation has finished, click **Finish**.

13 See Configuring Autodesk MapGuide Enterprise Web Server Extensions on Windows (page 11) for informatioon on any further steps required.

Launching Autodesk MapGuide Studio

To launch Autodesk MapGuide Studio

1. From the Start menu, select Programs ➤ Autodesk ➤ Autodesk MapGuide Studio 2011 ➤ Autodesk MapGuide Studio.
2. When you are prompted for Site Authentication, use the following information:
   - Site: http://*servername*/mapguide2011

     NOTE The *servername* is a variable. Replace it with the name of the machine hosting the MapGuide Web Server Extensions.

   - User ID: Administrator
   - Password: admin

Uninstalling Autodesk MapGuide Enterprise 2011

When you uninstall Autodesk MapGuide Enterprise, all components are removed.

If you use Windows XP, use the **Add or Remove Programs** control panel.

If you use Windows Vista, use the **Uninstall or Change a Program** control panel.

Uninstall each product individually. Select the product to uninstall (Autodesk MapGuide Enterprise - Server, Autodesk MapGuide Enterprise - Web Server, or Autodesk MapGuide Studio), and then click **Remove** or **Uninstall** (depending on your operating system).

NOTE Even though Autodesk MapGuide Enterprise is removed from your system, the software license remains. If you reinstall Autodesk MapGuide Enterprise at some future time, you will not have to register and re-activate the program.

2 Configuring Autodesk MapGuide Enterprise Web Server Extensions on Windows

Possible Configuration Scenarios

Depending on the choices you made when installing Autodesk MapGuide Enterprise Web Server Extensions, you may have to perform different configuration steps. There are three installation methods, with some variations:

Installation Method	Description
Install with bundled Apache, PHP, and Tomcat	This installs separate versions of Apache, PHP, and Tomcat. Existing installations of these components are not affected. This method does not normally require additional configuration, but it does require setting up Java. See Setting Up Java for the Bundled Installation (page 12). If you use Apache as the web server for Autodesk MapGuide Enterprise Web Server Extensions, you have the choice of using either PHP or JSP to develop applications. See Configuration with Apache (page 30).
Install with IIS	This installs a separate version of PHP. If you have an existing installation of PHP, it is not affected. Configuration varies, depending on whether you are using IIS 6 or IIS 7. See Configuration with IIS 6 (page 13) or Configuration with IIS 7 (page 28).

Installation Method	Description
Install with manual configuration of web server	This also installs and configures PHP, ASP.NET, and Java. You must configure a web server manually.

If you use Apache as your web server, you can use either PHP or JSP for developing your own applications. If you use IIS as your web server, you can use either PHP or ASP.NET for developing your own applications.

If you choose either Apache or IIS as the web server when you install Autodesk MapGuide Enterprise, most of the configuration is done by the installer. If you need to do any site-specific customization, it may be useful to refer to the appropriate configuration details.

Directory Structure

If you use the installer program, the default installation directory (*`InstallDir`*) is

```
C:\Program Files\Autodesk\MapGuideEnterprise2011
```

and the Web Server Extensions directory (*`WebDir`*) is

```
C:\Program
Files\Autodesk\MapGuideEnterprise2011\WebServerExtensions\www
```

Make the appropriate substitutions for path names in the instructions that follow.

Setting Up Java for the Bundled Installation

If you install the Apache/PHP/Tomcat bundle and choose Java as the development environment, you must also perform the following steps:

- Install the Java JDK.
- Set up redirections for Apache.
- Set JAVA_HOME
- Start Tomcat.

To install Java

1. Download the JDK from java.sun.com.

2 Install using the default installation instructions.

3 Edit the Apache *httpd.conf* file. This is located in

C:\Program Files\Autodesk\MapGuideEnterprise2011\WebServerExtensions\Apache2\conf

Replace localhost with the name or IP address of your server plus the port number in the following lines:

```
Redirect /mapguide2011/mapviewerajax/
http://localhost:8808/mapguide2011/mapviewerjava/ajaxviewer.jsp
```

4 Restart Apache.

5 Set the environment variable JAVA_HOME to the root directory of your Java installation. For the JDK 5.0, update 6, this is

C:\Program Files\Java\jdk1.5.0_06

Different versions of the JDK will be installed in different locations.

6 To start Tomcat, go to the Tomcat bin directory and run *startup.bat*.

For the default installation, Tomcat is installed in the following location:

C:\Program Files\Autodesk\MapGuideEnterprise2011\WebServerExtensions\Tomcat

Configuration with IIS 6

If you use IIS as the web server for Autodesk MapGuide Enterprise Web Server Extensions, you have the choice of using either PHP or ASP.NET to develop applications.

In either case, if you want to run the Site Administrator from the machine, you must install PHP.

There are two ways to install Autodesk MapGuide Enterprise Web Server Extensions for use with IIS:

- Install and auto-configure using the installer program.
- Install using the installer program, but configure the web server manually.

If you use the installer to configure IIS, you do not need to do any more configuration. You may use this section as reference, to see what configuration steps have been done.

If you use the installer, but choose to configure a web server manually, you must perform the following steps:

- Set up virtual directories for the Web Server Extensions and the AJAX Viewer.
- Configure PHP or ASP.NET.

Many of the configuration steps for PHP and ASP.NET are the same.

See also:

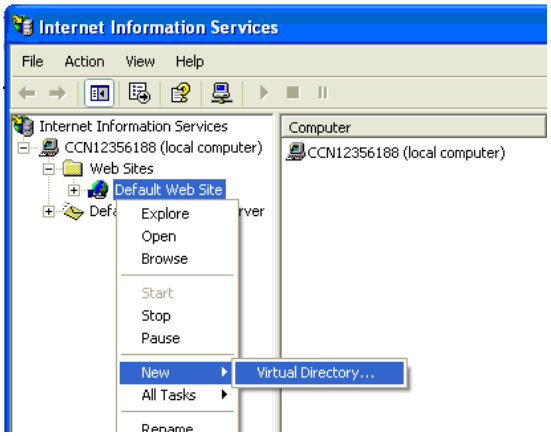
- Configuration with IIS 7 (page 28)

Setting Up Virtual Directories for IIS

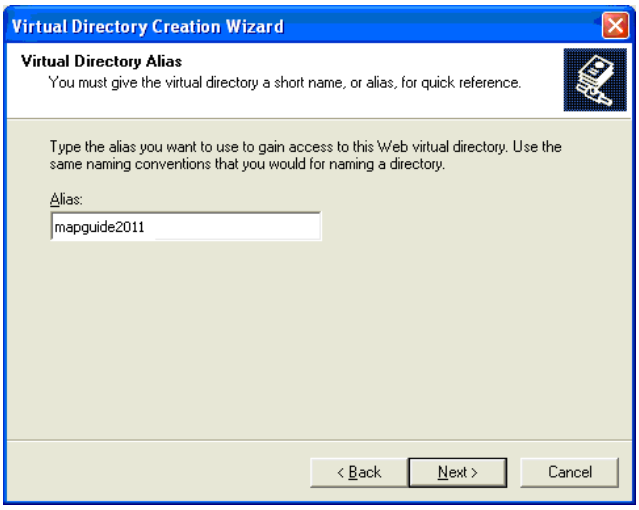
This is required if you choose to configure the server manually.

NOTE This document contains pictures of the IIS Administration Console version 5.1. Dialogs and menus may differ slightly in other versions.

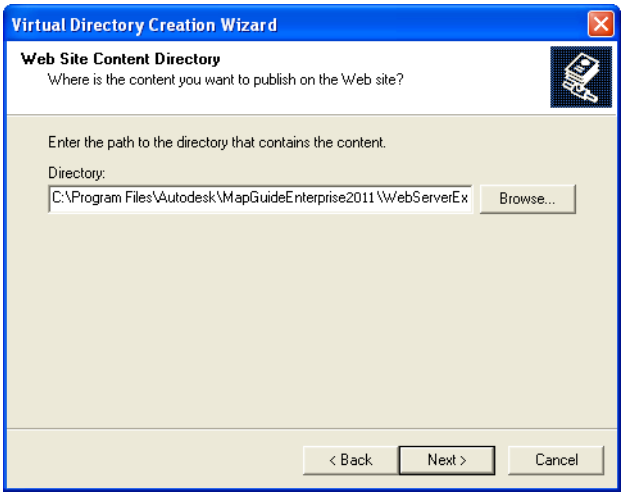
Start the IIS administration console and create a new virtual directory.



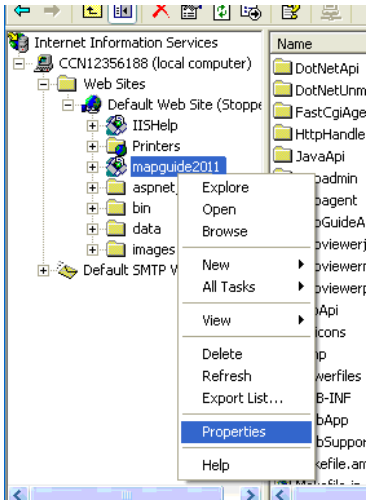
Name the virtual directory `mapguide2011`.



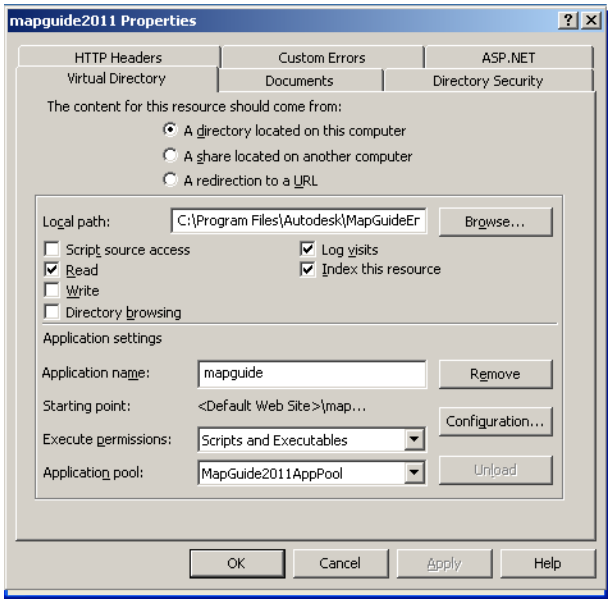
Set the physical path to *`WebDir`*.



Open the properties dialog for the virtual directory:



Set the properties for the virtual directory, as shown below:



See also:

- Setting Up the PHP Association (page 17)
- Setting Up the ISAPI Extension (page 19)

- Setting Up the Security Properties (page 20)
- Setting Up the Error Pages (page 21)
- Setting Up Virtual Directories for the Viewer (page 22)
- Configuring PHP (page 24)
- Configuring ASP.NET (page 26)
- Configuring Web Service Extensions for IIS 6 (page 27)

Setting Up the PHP Association

This is required if you will be using PHP as a development environment or if you will be running the Site Administrator on this machine.

You must set up an application mapping so IIS handles PHP files properly. You can choose to have PHP run as a CGI process or as an ISAPI extension.

Setting up the application mapping is the same in both cases, except that the executable path is different.

For CGI, the executable is

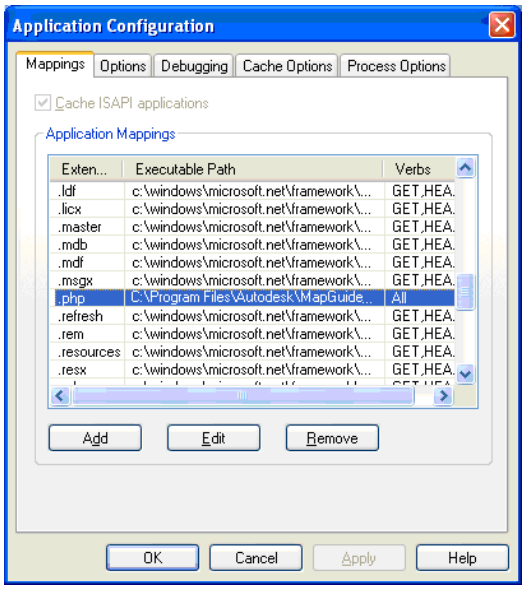
InstallDir\WebServerExtensions\Php\php-cgi.exe

For ISAPI, the executable is

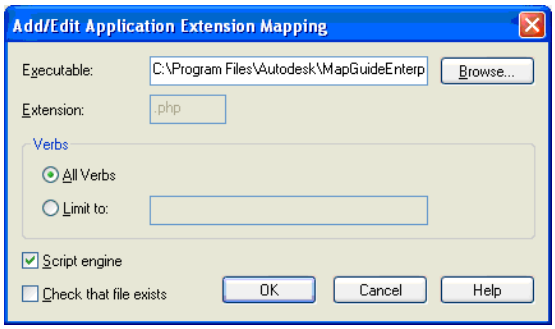
InstallDir\WebServerExtensions\Php\php5isapi.dll

NOTE There cannot be any spaces in the path to *php5isapi.dll*. If you install Autodesk MapGuide Enterprise to the default location under *C:\Program Files*, you must use *C:\Progra~1* in the path instead. For example, the default location is C:\Progra~1\Autodesk\MapGuideEnterprise2011\WebServerExtensions\Php\php5isapi.dll.

From the Properties dialog, click Configuration.



If a mapping for PHP has not been set up or is not set up properly, click Add or Edit to set up the mapping.



See also:

- Setting Up Virtual Directories for IIS (page 14)
- Setting Up the ISAPI Extension (page 19)
- Setting Up the Security Properties (page 20)
- Setting Up the Error Pages (page 21)
- Setting Up Virtual Directories for the Viewer (page 22)

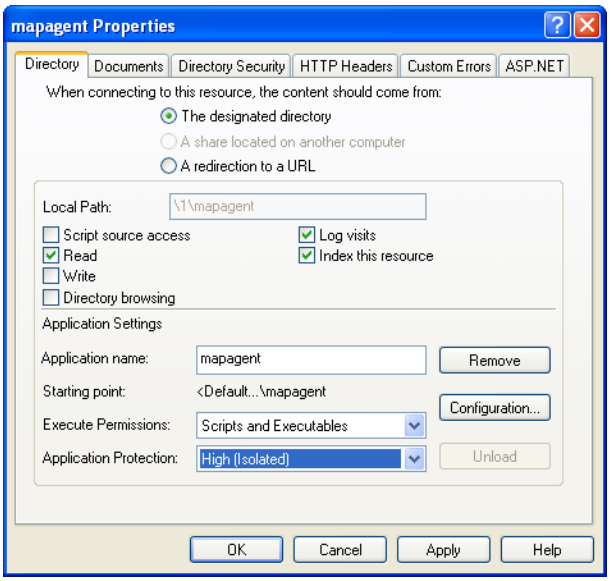
- Configuring PHP (page 24)
- Configuring ASP.NET (page 26)
- Configuring Web Service Extensions for IIS 6 (page 27)

Setting Up the ISAPI Extension

Autodesk MapGuide Enterprise uses an ISAPI extension to improve performance. To configure the ISAPI extension, perform the following steps.

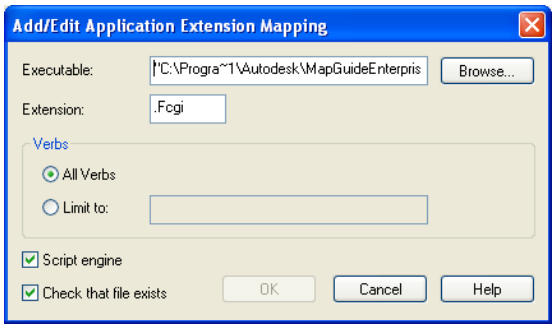
The file *isapi_mapagent.dll* is located in `WebDir\mapagent`.

In the IIS Administration Console, set the properties of the *mapguide\mapagent* folder. Create an application named `mapagent`. Set the application protection to High (Isolated) and the execute permissions to Scripts and Executables



Click Configuration and set up an application extension mapping to *isapi_mapagent.dll* for the .fcgi extension.

NOTE You cannot have spaces in the path to *isapi_mapagent.dll*. For example, you may need to replace `Program Files` with `Progra~1` in the path.



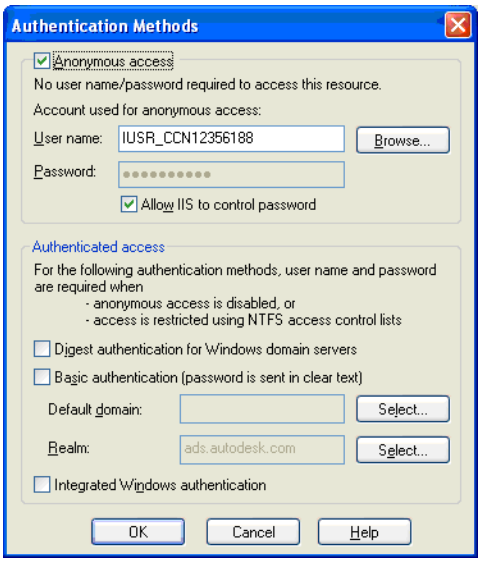
Another alternative is to disable the ISAPI extension and use a regular CGI agent instead. To do this, set the application mapping in IIS to `mapagent.exe` instead of `isapi_mapagent.dll`.

See also:

- Setting Up Virtual Directories for IIS (page 14)
- Setting Up the PHP Association (page 17)
- Setting Up the Security Properties (page 20)
- Setting Up the Error Pages (page 21)
- Setting Up Virtual Directories for the Viewer (page 22)
- Configuring PHP (page 24)
- Configuring ASP.NET (page 26)
- Configuring Web Service Extensions for IIS 6 (page 27)

Setting Up the Security Properties

To set the security properties, go to the Directory Security tab and click Edit. Set the options as shown in the dialog below. Note that the account information is already set for you by IIS and you don't need to change it.

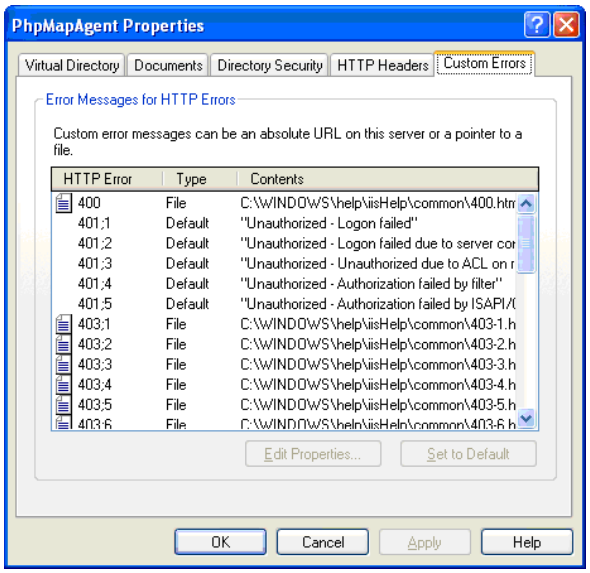


See also:

- Setting Up Virtual Directories for IIS (page 14)
- Setting Up the PHP Association (page 17)
- Setting Up the ISAPI Extension (page 19)
- Setting Up the Error Pages (page 21)
- Setting Up Virtual Directories for the Viewer (page 22)
- Configuring PHP (page 24)
- Configuring ASP.NET (page 26)
- Configuring Web Service Extensions for IIS 6 (page 27)

Setting Up the Error Pages

On the Custom Errors tab, select all the 401 errors, and click Set to Default. This ensures that Autodesk MapGuide Enterprise processes authorization requests properly.



See also:

- Setting Up Virtual Directories for IIS (page 14)
- Setting Up the PHP Association (page 17)
- Setting Up the ISAPI Extension (page 19)
- Setting Up the Security Properties (page 20)
- Setting Up Virtual Directories for the Viewer (page 22)
- Configuring PHP (page 24)
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Setting Up Virtual Directories for the Viewer

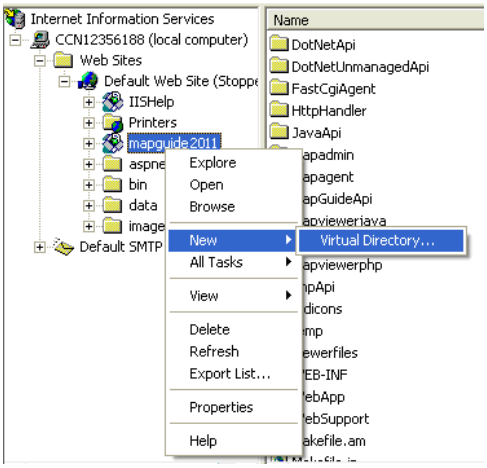
Create a virtual directory for the AJAX Viewer . For PHP, the physical path is

WebDir\mapviewerphp

and for ASP.NET, the physical path is

WebDir\mapviewernet

From the IIS administration console, create a new virtual directory for the AJAX viewer.



Set the alias name to `mapviewerajax`.

If you use PHP as your development language, set the physical path to *`WebDir`*`\mapviewerphp`. If you use ASP.NET as your development language, set the physical path to *`WebDir`*`\mapviewernet`.

Finally, set up the default document for the new virtual directory. Open the Documents tab of the Properties dialog, and add the appropriate document to the default list:

- For PHP development, add *ajaxviewer.php* to the default document list.
- For ASP.NET development, add *ajaxviewer.aspx* to the default document list.

See also:

- Setting Up Virtual Directories for IIS (page 14)
- Setting Up the PHP Association (page 17)
- Setting Up the ISAPI Extension (page 19)
- Setting Up the Security Properties (page 20)
- Setting Up the Error Pages (page 21)
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- Configuring ASP.NET (page 26)
- Configuring Web Service Extensions for IIS 6 (page 27)

Configuring PHP

You must configure PHP if you plan to use it as a development language for Autodesk MapGuide Enterprise applications or if you plan to use the Site Administrator. To configure PHP, edit the PHP configuration file, *php.ini*.

The *php.ini* file is installed in *InstallDir*\WebServerExtensions\Php.

See also:

- Setting Up Virtual Directories for IIS (page 14)
- Setting Up the PHP Association (page 17)
- Setting Up the ISAPI Extension (page 19)
- Setting Up the Security Properties (page 20)
- Setting Up the Error Pages (page 21)
- Setting Up Virtual Directories for the Viewer (page 22)
- Configuring ASP.NET (page 26)
- Configuring Web Service Extensions for IIS 6 (page 27)

Identifying the Correct php.ini File

PHP checks for *php.ini* in many different places. You must ensure that the Autodesk MapGuide Enterprise version is the one PHP uses. Read the PHP documentation for a complete explanation.

The recommended method is to create a system environment variable named PHPRC, and set it to the PHP directory containing *php.ini*.

With the default installation, this is

```
C:\Program
Files\Autodesk\MapGuideEnterprise2011\WebServerExtensions\Php
```

NOTE There may be a Windows registry entry that determines which *php.ini* will be processed. Check for the key `HKEY_LOCAL_MACHINE\SOFTWARE\PHP\IniFilePath`. Delete it if it exists.

See also:

- Configuring PHP (page 24)
- Editing php.ini (page 25)
- Adding the PHP Directory to the PATH (page 26)

Editing php.ini

When you use the installer program, most of the required PHP configuration is done for you. However, if you run PHP as a CGI process, you must make the following change to *php.ini*. Change

```
; cgi.force_redirect = 1
```

to

```
cgi.force_redirect = 0
```

The *php.ini* supplied with Autodesk MapGuide Enterprise contains some modifications from the standard *php.ini*. These modifications increase resource limits to allow the use of larger data sets:

```
output_buffering = 4096
max_execution_time = 60
memory_limit = 64M
post_max_size = 64M
upload_max_filesize = 64M
```

See also:

- Configuring PHP (page 24)
- Identifying the Correct php.ini File (page 24)
- Adding the PHP Directory to the PATH (page 26)

Adding the PHP Directory to the PATH

If you run PHP as an ISAPI extension, you must add the PHP directory to the system PATH environment variable. This ensures that the PHP DLLs can be loaded properly.

Add

```
C:\Program
Files\Autodesk\MapGuideEnterprise2011\WebServerExtensions\Php
```

to the system PATH environment variable.

See also:

- Configuring PHP (page 24)
- Identifying the Correct php.ini File (page 24)
- Editing php.ini (page 25)

Configuring ASP.NET

If you use the installer, ASP.NET should be configured properly.

Verify that you are using the correct version of ASP.NET. Autodesk MapGuide Enterprise requires version 2.0.50727 or higher. Older versions will not work. To verify the version, open the IIS administration console. Navigate to the mapguide site and open the site properties. On the ASP.NET tab, check the version number. Upgrade if necessary.

See also:

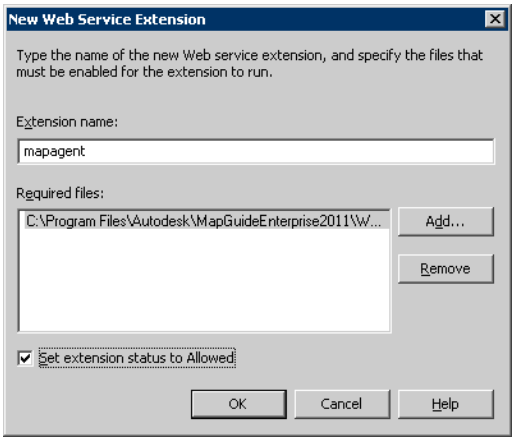
- Setting Up Virtual Directories for IIS (page 14)
- Setting Up the PHP Association (page 17)
- Setting Up the ISAPI Extension (page 19)
- Setting Up the Security Properties (page 20)
- Setting Up the Error Pages (page 21)
- Setting Up Virtual Directories for the Viewer (page 22)
- Configuring PHP (page 24)

■ Configuring Web Service Extensions for IIS 6 (page 27)

Configuring Web Service Extensions for IIS 6

IIS 6, running on Windows Server 2003, requires some additional configuration to enable PHP and the Map Agent to run.

From the IIS Manager, select the Web Service Extensions folder. Click Add a new Web Service Extension. Enter `mapagent` as the extension name, and `C:\Program Files\Autodesk\MapGuideEnterprise2011\WebServerExtensions\www\mapagent\isapi_mapagent.dll` as the required file. Set the extension status to Allowed.



Repeat for the PHP CGI module. Enter `php` as the extension name, and `C:\Program Files\Autodesk\MapGuideEnterprise2011\WebServerExtensions\Php\php-cgi.exe` as the required file.

NOTE If you use the regular CGI agent instead of the ISAPI extension, replace `isapi_mapagent.dll` with `mapagent.exe` in the instructions above.

See also:

- Setting Up Virtual Directories for IIS (page 14)
- Setting Up the PHP Association (page 17)
- Setting Up the ISAPI Extension (page 19)

- Setting Up the Security Properties (page 20)
- Setting Up the Error Pages (page 21)
- Setting Up Virtual Directories for the Viewer (page 22)
- Configuring PHP (page 24)
- Configuring ASP.NET (page 26)

Configuration with IIS 7

These steps do not require IIS 6 compatibility mode to be installed.

1. Install the web tier, using Manual Configuration.
2. Start the IIS Manager applet.
3. On the Default Web Site, right-click and select Add Virtual Directory. In the dialog box, enter the following:
   - Alias: `mapguide`
   - Physical path: `C:\Program Files\MapGuideEnterprise2011\WebServerExtensions\www`
4. Select your newly added mapguide node, double-click Handler Mappings, and select Add Script Map. Enter the following:
   - Request Path: `*.php`
   - Executable: `C:\Program Files\MapGuideEnterprise2011\WebServerExtensions\Php\php5isapi.dll`
   - Name: `PHP`
   - After clicking OK, click Yes on the Add Script Map dialog box.
5. Right-click Mapagent, and select Convert to Application.
   Use the default values. Then click OK.
6. Select Mapagent, and double-click Handler Mapping. Select CGI-exe, click Edit Feature Permissions, and select Execute. Then click OK.
7. Continuing from above, select Add Module Mapping. Enter the following:
   - Request path: `mapagent.fcgi`

- Module: `IsapiModule`
- Executable: `C:\Program Files\MapGuideEnterprise2011\WebServerExtensions\www\mapagent\isapi_MapAgent.dll`
- Name: `MapGuide ISAPI agent`
- Click OK. Then click Yes in the subsequent dialog box. This will enable the mapping.

8. Edit `php.ini` so that the extension_dir points to `C:\Program Files\MapGuideEnterprise2011\WebServerExtensions\Php\ext`.
9. Add PHP to the system path. (`C:\Program Files\MapGuideEnterprise2011\WebServerExtensions\Php`) Then, you will need to restart Windows.
10. Select Mapguide, double-click error pages, and select the 401 line. Then click Remove.
11. Right-click Mapguide. Then select Convert to Application.
12. For using the PHP API, do the following:

    Right-click Mapguide. Then select Add Virtual Directory. Enter the following:

    - Alias: `mapviewerajax`
    - Physical path: `C:\Program Files\MapGuideEnterprise2011\WebServerExtensions\www\mapviewerphp`

    Select Mapviewerajax, and double-click Default Document. Then click Add. Enter the following:

    - Name: `ajaxviewer.php`

13. For using the .NET API, do the following:

    Right click on Mapguide. Then select Add Virtual Directory. Enter the following:

    - Alias: `mapviewerajax`
    - Physical path: `C:\Program Files\MapGuideEnterprise2011\WebServerExtensions\www\mapviewernet`

Select Mapviewerajax, and double-click Default Document. Then click Add. Enter the following:

- Name: `ajaxviewer.aspx`

Right-click Mapviewerajax. Then click Convert to Application.

NOTE NOTE: Any other applications you create (e.g., Sheboygan sample) will also need to be converted to an application.

See also:

- Configuration with IIS 6 (page 13)

Configuration with Apache

If you use Apache as the web server for Autodesk MapGuide Enterprise Web Server Extensions, you have the choice of using either PHP or JSP to develop applications.

In either case, if you want to run the Site Administrator from the machine, you must install PHP.

There are two ways to install Autodesk MapGuide Enterprise Web Server Extensions for use with Apache:

- Install with a bundle containing Apache, PHP, and optionally Tomcat.
- Install using the installer program, but configure the web server manually.

If you use the installer to install the Apache/PHP/Tomcat bundle and you will be using PHP for application development, you do not need to do any more configuration.

If you will be using JSP for development, ensure that you have performed the necessary steps described in Setting Up Java for the Bundled Installation (page 12).

If you select the option to configure the web server manually, the installer installs and configures a version of Apache and Tomcat, but does not start the Apache server.

By default, the configuration is set up to use PHP as the development environment. If you want to use JSP instead, you must remove the PHP configuration directives described in Configuring Apache to Use PHP (page

32)and add the JSP directives described in Configuring Apache to Use JSP (page 33).

Most of the configuration is done by editing *httpd.conf*, in the *conf* directory of the Apache installation.

NOTE Some directives have been split over multiple lines in this document, but they must be written on one line in the configuration file.

Common Configuration Steps

There are some steps you must perform whether you are using PHP or JSP as a development environment.

- If you are using the Site Administrator or plan to use PHP as a development environment, configure Apache to process files with the *.php* extension. Edit *httpd.conf*. Look for the configuration of the PHP engine. Ensure it is set as follows, or add the following to the file as necessary.

```
ScriptAlias /php/ "C:/Program Files/Autodesk/
    /MapGuideEnterprise2011/WebServerExtensions/Php/"
PHPIniDir "C:/Program Files/Autodesk/
    /MapGuideEnterprise2011/WebServerExtensions/php"
AddType application/x-httpd-php .php
LoadModule php5_module modules/php5apache2_2.dll
LoadModule mgmapagent_module modules/mod_mgmapagent.so
LoadFile ../Php/php5ts.dll
LoadFile ../Php/ACE.dll
LoadFile ../Php/MgFoundation.dll
LoadFile ../Php/MgGeometry.dll
LoadFile ../Php/MgHttpHandler.dll
LoadFile ../Php/MgMapGuideCommon.dll
LoadFile ../Php/MgMdfModel.dll
LoadFile ../Php/MgMdfParser.dll
LoadFile ../Php/MgPlatformBase.dll
LoadFile ../Php/MgWebApp.dll
```

- In the Dynamic Shared Object Support section, ensure that the rewrite module is enabled. If there is a comment character at the beginning of the line, remove it so it looks like this:

```
LoadModule rewrite_module modules/mod_rewrite.so
```

See also:

- Configuration with Apache (page 30)
- Configuring Apache to Use PHP (page 32)
- Configuring Apache to Use JSP (page 33)

Configuring Apache to Use PHP

To use PHP as the development environment with the Apache HTTP Server, add the following declarations at the end of *httpd.conf*.

```
ScriptAlias /mapguide2011/mapagent/mapagent.fcgi
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    www/mapagent/mapagent.fcgi"
AliasMatch ^/mapguide2011/mapviewerajax/([^\?])(.*)$
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    www/mapviewerphp/\$1\$2"
AliasMatch ^/mapguide2011/mapviewerajax/(.*)$
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    www/mapviewerphp/ajaxviewer.php\$1"
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    www/mapviewerphp/\$1\$2"
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
Alias /mapguide2011
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    www/"
<Directory
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    WebServerExtensions/www/">
  AllowOverride All
  Options All
  Order allow,deny
  Allow from all
  AddHandler mgmapagent_handler .fcgi
  RewriteEngine on
  RewriteRule .* - [E=REMOTE_USER:%{HTTP:Authorization},L]
</Directory>
```

Save the changes and restart the Apache server.

Configuring Apache to Use JSP

To use JSP as the development environment with the Apache HTTP Server, you must install the following components:

- Java JDK 6.0
- Tomcat
- The Apache/Tomcat connector.

Download the Java JDK from *java.sun.com*. Install using the default installation instructions. Set the environment variable `JAVA_HOME` to the root directory of your Java installation.

Download Tomcat and the Tomcat-Apache connector from *tomcat.apache.org*. Install using the default installation instructions.

You must also perform the following steps:

- Edit the Apache configuration file, *httpd.conf*.
- Add a *workers.properties* configuration file for the Tomcat connector.
- Configure and start Tomcat.

See also:

- Setting Up Java for the Bundled Installation (page 12)
- Configuration with Apache (page 30)
- Common Configuration Steps (page 31)

Apache Configuration for JSP

Add the following declarations at the end of *httpd.conf*.

```
ScriptAlias /mapguide2011/mapagent/mapagent.fcgi
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    WebServerExtensions/www/mapagent/MapAgent.exe"
AliasMatch ^/mapguide2011/mapviewerajax/([^\?])(.*)$
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    WebServerExtensions/www/mapviewerjava/$1$2"
Alias /mapguide2011/mapviewerajax
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    WebServerExtensions/www/mapviewerjava/ajaxviewer.jsp"
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    WebServerExtensions/www/mapviewerjava/$1$2"
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/

Alias /mapguide2011
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    WebServerExtensions/www/"
<Directory
   "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    WebServerExtensions/www/">
  AllowOverride All
  Options All
  Order allow,deny
  Allow from all
  AddHandler mgmapagent_handler .fcgi
  RewriteEngine on
  RewriteRule .* - [E=REMOTE_USER:%{HTTP:Authorization},L]
</Directory>
```

Add the following to the configuration file. These declarations are necessary for the Tomcat connector. Replace *<HostName>:<Port>* with the correct name and port. `localhost` will not work for the redirection.

```
LoadModule jk_module  modules/mod_jk.so

JkWorkersFile
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    WebServerExtensions/Apache2/conf/workers.properties"

# Where to put jk logs
JkLogFile
    "C:/Program Files/Autodesk/MapGuideEnterprise2011/
    WebServerExtensions/Apache2/logs/mod_jk.log"
# Set the jk log level [debug/error/info]
JkLogLevel info
# Select the log format
JkLogStampFormat "[%a %b %d %H:%M:%S %Y] "
# JkOptions indicate to send SSL KEY SIZE,
JkOptions +ForwardKeySize +ForwardURICompat -ForwardDirectories
# JkRequestLogFormat set the request format
JkRequestLogFormat "%w %V %T"
# Send everything for context /examples to worker named
# worker1 (ajp13)
JkMount /mapguide2011/mapviewerjava/* worker1

Redirect /mapguide2011/mapviewerajax/
    http://<Hostname>:<Port>/mapguide2011/mapviewerjava/ajaxview
er.jsp
```

See also:

- Setting Up Java for the Bundled Installation (page 12)
- Common Configuration Steps (page 31)
- Connector Configuration (page 35)
- Tomcat Configuration (page 37)

Connector Configuration

Rename the pre-built Apache/Tomcat connector binary to *mod_jk.so* and place it in the Apache *modules* directory. The original file includes the version

number and should be *mod_jk-apache-2.2.15.so* (for a 32-bit installation) or *mod_jk-apache-2.2.x64.so* (for a 64-bit installation).

Add a *workers.properties* file in the Apache *conf* folder, containing the following:

```
# Define 1 real worker using ajp13
worker.list=worker1
# Set properties for worker1 (ajp13)
worker.worker1.type=ajp13
worker.worker1.host=localhost
worker.worker1.port=8009
worker.worker1.lbfactor=50
worker.worker1.cachesize=10
worker.worker1.cache_timeout=600
worker.worker1.socket_keepalive=1
worker.worker1.recycle_timeout=300
```

See also:

- Setting Up Java for the Bundled Installation (page 12)
- Common Configuration Steps (page 31)
- Apache Configuration for JSP (page 34)
- Tomcat Configuration (page 37)

Tomcat Configuration

In the Tomcat *conf\Catalina\localhost* directory, add a context file named *mapguide.xml* with the following content:

```
<!--

    Context configuration file for the Tomcat Manager Web App

-->

<Context
    docBase=
    "C:\Program Files\Autodesk\MapGuideEnterprise2011\
    WebServerExtensions\www"
    privileged="true" antiResourceLocking="false"     antiJARLock
ing="false">

    <!-- Link to the user database we will get roles from -->
    <ResourceLink name="users" global="UserDatabase"
                  type="org.apache.catalina.UserDatabase"/>

</Context>
```

To start Tomcat, execute

```
startup.bat
```

in the Tomcat *bin* directory.

See also:

- Setting Up Java for the Bundled Installation (page 12)
- Common Configuration Steps (page 31)
- Apache Configuration for JSP (page 34)
- Connector Configuration (page 35)

Verifying the Configuration

You can run some simple tests to ensure that the Map Agent and Web Server Extensions are configured properly.

Testing the Map Agent

Ensure that the Autodesk MapGuide Enterprise Server is running. The installer configures Autodesk MapGuide Enterprise Server as a service. Check that the service status is Started.

Open a web browser and go to the following URL. If the Web Server Extensions are not running on your local machine, replace `localhost` with the name or IP address of your server.

http://localhost/mapguide2011/mapagent/mapagent.fcgi?
OPERATION=ENUMERATERESOURCES&VERSION=1.0.0&
LOCALE=en&RESOURCEID=Library://&TYPE=&DEPTH=-1

Note that if your web server is listening on a different port you must include the port number in the HTTP request. For example, if Apache is listening on port 8700, you must go to the following URL:

http://localhost:8700/mapguide2011/mapagent/mapagent.fcgi?
OPERATION=ENUMERATERESOURCES&VERSION=1.0.0&
LOCALE=en&RESOURCEID=Library://&TYPE=&DEPTH=-1

Enter *Administrator* for the user id and *admin* for the password. Both are case-sensitive.

If the Map Agent is running properly, you will get an XML document describing the resources in the repository.

See also:

- Testing the Site Administrator (page 38)
- Testing the Web Server Extensions (page 39)

Testing the Site Administrator

Ensure that the MapGuide Server is running. Open a web browser and go to the following URL.

http://localhost/mapguide2011/mapadmin/login.php

Note that if your web server is listening on a different port you must include the port number in the HTTP request. For example, if Apache is listening on port 8700, you must go to the following URL:

http://localhost:8700/mapguide2011/mapadmin/login.php

Enter `Administrator` for the user id and `admin` for the password. Both are case-sensitive.

If the Site Administrator is configured properly, you will get a Manage Servers page which lists all the servers configured in the MapGuide Site.

See also:

- Testing the Map Agent (page 38)
- Testing the Web Server Extensions (page 39)

Testing the Web Server Extensions

You can check that the Web Extensions are correctly set up. If your application development language is PHP, go to this URL in a web browser:

http://localhost/mapguide2011/mapviewerajax/ajaxviewer.php?WEBLAYOUT=Library://ATest.WebLayout

---

NOTE If your web server is listening on a different port, include the port number in the HTTP request. For example, if Apache is listening on port 8700, you must go to *http://localhost:8700/mapguide2010/mapviewerajax/ajaxviewer.php?WEBLAYOUT=Library://ATest.WebLayout*

If your application development language is ASP.NET, go to this URL in a web browser:

http://localhost:8808/mapguide2011/mapviewerajax/ajaxviewer.aspx?WEBLAYOUT=Library://ATest.WebLayout

---

NOTE If your web server is listening on a different port, include the port number in the HTTP request. For example, if Apache is listening on port 8700, go to *http://localhost:8700/mapguide2010/mapviewerajax/ajaxviewer.jsp?WEBLAYOUT=Library://ATest.WebLayout.*

If your application development language is JSP, go to this URL in a web browser:

http://localhost:8808/mapguide2011/mapviewerajax/ajaxviewer.jsp?WEBLAYOUT=Library://ATest.WebLayout

---

NOTE If your web server is listening on a different port, include the port number in the HTTP request. For example, if Apache is listening on port 8700, go to *http://localhost:8700/mapguide2011/mapviewerajax/ajaxviewer.jsp?WEBLAYOUT=Library://ATest.WebLayout.*

Because the web layout ATest does not exist in the Autodesk MapGuide Enterprise repository, you should see the following error:

```
Resource was not found: Library://ATest.WebLayout
```

This error is returned by the AJAX Viewer script. This shows that the Web Server Extensions are correctly enabled to receive and process requests.

See also:

- Testing the Map Agent (page 38)
- Testing the Site Administrator (page 38)

Troubleshooting 3

This section provides solutions to installation issues and answers to commonly asked questions that may arise while installing your product(s). Additional troubleshooting information and support is also available at *http://autodesk.com/servicesandsupport*

General Installation Issues

This section outlines common issues and their solutions that may arise while performing a general install of your product(s).

How can I check my graphics card driver to see if it needs to be updated?

Verify and update your graphics card driver to optimize your program. Use the following procedure to identify your current graphics card driver.

To identify your graphics card driver

1. On the Start menu (Windows), click Settings ➤ Control Panel.
2. Click the Display icon to access the Display Properties.

   In Vista, click Settings ➤ Control Panel ➤ Personalization ➤ Display Settings.
3. Open the Settings tab and click the Advanced button.
4. Click the Adapter tab to check the adapter type.
5. Click the Properties button and open the Driver tab to check driver version and see if newer drivers are available.

TIP Many newer graphic cards offer tabbed pages where you can learn more precise information about your specific graphic card. If specific tab pages are present, refer to them instead of the Adapter tab.

How do I access my product documentation?

During the installation process, you can access specific installation and licensing topics by selecting the Read the Documentation or Documentation links in the installation wizards.

A product *Readme*contains late-breaking information on your product. The *Readme* is also available from the Installation Complete page.

Uninstall and Maintenance Issues

This section outlines common issues and their solutions with regards to adding and removing features, reinstalling or repairing your installation, and uninstalling products.

Is it possible to change the installation folder when adding or removing features?

Once your product is installed, you cannot change the installation path from the Add/Remove Features page. Changing the path while adding features results in program corruption, so it is not an option.

When should I reinstall the product?

You should reinstall your product if you accidentally delete or alter files that are required by the program. Missing or altered files adversely affect the performance of your product and cause error messages when you try to execute a command or find a file.

Do I need my original disc(s) to reinstall my product?

When performing a reinstall of the product, you are prompted to load your original disc(s). Installation data is cached locally on your drive and that data is reused when reinstalling.

When I uninstall my software, what files are left on my system?

If you uninstall the product, some files remain on your system such as files you created or edited (drawings or custom menus).

Your license file also stays on your workstation when you uninstall your product. If you reinstall on the same workstation, the license information remains valid and you do not have to reactivate the product.