

Macromedia Flash Remoting for ASP.NET

End-to-End Setup Notes

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Topics:

Prerequisites to installing Flash Remoting for .NET:

- Computer operating system requirements
- Installing IIS
- Installing MDAC
- Installing the .NET framework
- XP Pro: turn off Simple File Sharing
- Set up a web site within IIS

IIS permissions

Directory security (aka NTFS) permissions

Flash Remoting for ASP.NET installation and setup

- Download Flash Remoting for ASP.NET
- Install Flash Remoting for ASP.NET
- Install the Flash Remoting for .NET Updater Release 1
- Enable Flash Remoting for your web site
- Critical Step: Set Application Name

Troubleshooting

Prerequisites to installing Flash Remoting

Computer requirements, operating system:

Windows 2000 or Windows XP Professional

Note: IIS will not run on Windows XP Home.

Install IIS (Internet Information Services) 5.x or later.

This is a Windows Component that is included with your operating system CD.

For instructions on how to install IIS, see a book like “Beginning ASP.NET x.x” from Wrox, or search on the web.

Test IIS. Try <http://localhost/iishelp/>

If you will be testing or using any Microsoft Access databases,

Download and install MDAC 2.7 or later *before* installing the .NET framework:

<http://msdn.microsoft.com/data/mdac/downloads/default.aspx>

Download and install the .NET framework

Either the .NET Framework Redistributable or the .NET Framework SDK will work.

<http://msdn.microsoft.com/netframework/downloads/updates/>

If using Windows XP Pro, be sure that Simple File Sharing is turned OFF:

This will allow you to change directory and file permissions down the road.

Open a windows explorer window.

Under the “Tools” menu, select “Folder Options”.

Select the “View” tab, scroll to the bottom of the list.

Uncheck “Use simple file sharing”.

Set up a web site within the IIS MMC (Microsoft Management Console):

Open the Control Panel, Classic View

Open “Administrative Tools”

Open “Internet Information Services”

Drill down to “Default Web Site”

Right-click on “Default Web Site”, select “New” -> “Virtual Directory”

Follow the wizard:

The “Alias” is what you will call your web site within a browser for testing.

Next you specify the path to the directory that contains your web site files.

Set access permissions: check “Read” and “Run scripts” only. If you have databases to be written to, it is better to set the write permissions on those directories later so only those directories can be written to.

Security Settings

I have a Flash Remoting for ASP.NET site that uses both ASP 3.0 and ASP.NET. These are the minimum security settings to make this work:

IIS permissions:

In the IIS MMC, right click the root virtual directory for the web site, select “properties”. Select the “Directory Security” tab

In the “Anonymous access and authentication control” area, click the “Edit” button.

In the upper area, the “Anonymous access” checkbox should be checked.

The Account used for anonymous access:

User name: Computer_Name\ASPNET.

If this is not displayed, click the “Browse” button, in the new window, click the “Advanced” button, click the “Find Now” button. Click the ASPNET user in the list at the bottom of the window. Press the “OK” buttons to close the windows.

Password: leave blank.

Check the box next to “Allow IIS to control password”

Click the “OK” button.

Click the “OK” button.

NTFS permissions:

These are the file permissions that are set on individual folders or files within a windows explorer window. Right-click on the folder, select permissions, select the “Security” tab, then Add or Remove users as necessary.

It is easiest to set these permissions on the root directory for the web site, or on the directory containing all of your web sites. The folders underneath should be set to inherit those permissions.

All directories for the web site should be set as follows, at a minimum, according to this Microsoft IIS documentation:

<http://www.microsoft.com/windows2000/en/server/iis/htm/core/iicnsc.htm>

Administrator – full control

Creator/Owner – full control

System – full control

From my own experimentation, for Flash Remoting to work:

USERS (Machine_Name\Users) will need to be enabled for the web site root directory and inherited down the line. The default permissions are most likely: Read & Execute, List Folder Contents, and Read permissions. Special Permissions may also be checked. These default permissions are sufficient for Flash Remoting for ASP.NET to work.

On the directory containing the database file:

The ASPNET user (Machine_Name\ASPNET) must be added and have Read and Write permissions.

Installing Flash Remoting for ASP.NET

Download Flash Remoting for ASP.NET

There is a download link in this article:

http://www.macromedia.com/devnet/mx/flashremoting/articles/intro_fremoting_net.html

Install Flash Remoting for ASP.NET

Run the installer. The following are the critical (necessary) files it will install:

It creates the following directory (if installed in Windows XP Professional, or Windows 2000):

C:\Inetpub\wwwroot\flashremoting

That directory contains the files: **gateway.aspx**, and **web.config**

And the directory: **\bin**,

which contains the files: **flashgateway.dll**, and **frconfig.txt**

You should then install the Flash Remoting for .NET Updater Release 1. All this does is replace the flashgateway.dll file. You'll need to do this manually:

Open the Flash Remoting-net-updater-r1.zip file, and replace the original flashgateway.dll file with the new one in the zip file. That's it. Note that if you view the HTML file containing instructions, it erroneously describes how to update the Flash Remoting MX *Components* for Flash MX, not the Flash Remoting server installation...

The proper instructions (which are as I've described above) are available here:

http://www.macromedia.com/support/flashremoting/updaters/release_1/installation.html

Enable Flash Remoting for your web site

The instructions for doing this are on pages 145 and 146 of the PDF document "Using Flash Remoting for Flash MX 2004 and ActionScript 2.0" available from Macromedia here: http://www.macromedia.com/support/documentation/en/flash_remoting/index.html

Summary as follows:

The following files need to be copied to the root directory of your Flash Remoting web site: gateway.aspx, web.config (needed only for ASP.NET applications), and the \bin directory with the flashgateway.dll file. "Root directory of your web site" means the folder pointed to by the root virtual directory of your site in the IIS console.

For the \bin directory, the ASPNET user must have Write permissions.

If you are setting up an ASP.NET site, you do not need to use the web.config file provided by Macromedia, but you will need to incorporate these lines (or the equivalent) from their web.config file in yours:

```
<httpModules>
  <add name="GatewayController"
    type="FlashGateway.Controller.GatewayController,flashgateway" />
</httpModules>
```

If you are having your site hosted by a third party, you may be able to copy all these folders from your own Flash Remoting installation into the appropriate directories on your web site. All the host has to do is the base Flash Remoting installation to the server.

Critical Step: Set Application Name

Now here is the real kicker, especially if you are having the site hosted: Whatever directory you are using as the root directory for your Flash Remoting site must have a virtual directory pointing toward it from within IIS and *must be given an application name from the properties dialog box for that virtual directory within the IIS console*. In order to use Flash Remoting service calls (i.e. to use Flash Remoting for .NET at all), you will need to know what that application name is too.

Troubleshooting

More documentation from Macromedia

Pretty much everything available from Macromedia regarding Flash Remoting is available from this link:

<http://www.macromedia.com/support/flashremoting//>

Problems with the Flash Remoting installation after 30 days

If you (or your web host) installed a trial version of Flash Remoting and didn't upgrade to the full version before the trial expired, it will revert to a limited developer installation. There is an issue with upgrading from developer to full. Here is a link to the solution: <http://radio.weblogs.com/0113514/> (Reference.NET: Problems Converting From Developer Version)

Setting up the frconfig.txt file

in the server root (probably C:\Inetpub\wwwroot\flashremoting\bin)

You most likely will not need to mess with this file. One function of this file is to hold the serial number for the valid Flash Remoting installation. If you do need to mess with this file, there is some help information available here:

<http://www.macromedia.com/support/flashremoting/installation.html>

For what it's worth, I have not seen a case yet on a testing server or on a live web server where an IP address needed to be entered in the frconfig.txt file.

Installing Macromedia Flash Remoting MX for .NET

For .NET, the Flash Remoting installation creates a directory, by default named flashremoting, in your IIS webroot. In the directory, the installation program copies a number of files to your computer, including samples, system and configuration files, and documentation.

When you insert the Flash Remoting CD-ROM into a computer running the Windows operating system, a CD-ROM browser should appear automatically. In the CD-ROM browser, you choose to install Macromedia Flash Remoting MX, view the documentation, and so on.

Note: If the CD-ROM browser does not appear, execute the demo32.exe file on the Macromedia Flash Remoting MX CD-ROM.

After the installation, you can change the serial number or add an additional IP

address with the `frconfig.txt` file, which is located in the `bin` folder of the webroot directory created by the Flash Remoting installation.

Entering Serial Numbers for Flash Remoting

During the installation, you are prompted for a valid Macromedia Flash Remoting serial number. If you are evaluating the product, you can leave the serial number blank and begin a 30-day full-feature trial period. At the end of the 30 days, you must enter a valid serial number or Flash Remoting reverts to Developer Edition, which allows localhost plus a single IP address or host name to connect.

If you are updating an Evaluation or Developer Edition to a licensed version, you do not need to run the installer again. To enter the new serial number, edit the `frconfig.txt` file. On Java, for the changes to take effect, you must restart your application server.