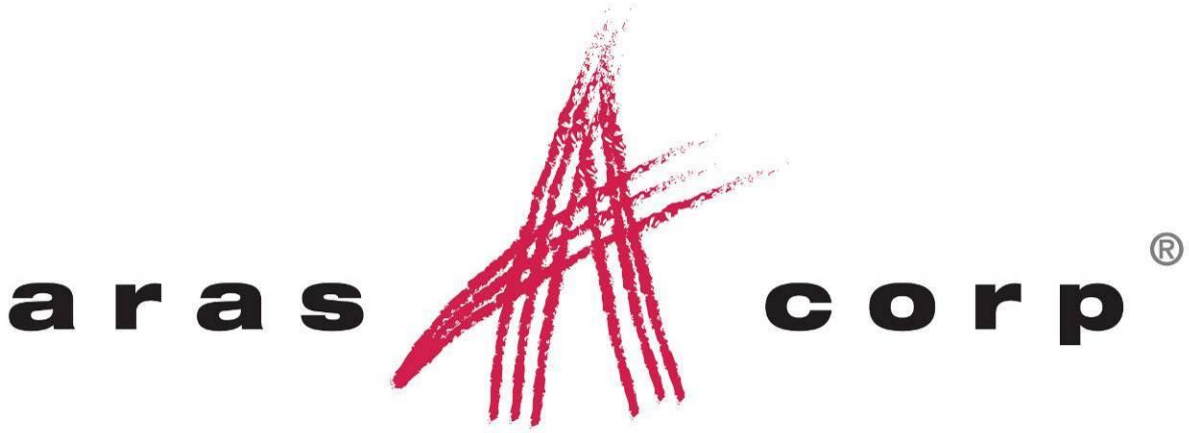
Aras Innovator .NET Client Security Policy Configuration



Aras Innovator 9.4

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Table of Contents

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1 Introduction

This document outlines the steps needed to configure client machines to run the Aras Innovator software. It presents options for how individual IT departments will deploy the .NET Framework Security policies to client PCs. The security policy outlined in this document will allow **only** the URL to the client controls to have full trust. This level of trust for the Innovator client controls is required to run in the .NET Framework. This document does contain the instructions for configuring the .NET Framework 3.5.

If you plan to perform the .NET Framework security configuration yourself for a single PC client machine, go to:

Section 2: Single PC Configuration

If you are an IT System Administrator and plan to push the .NET Framework security configuration out to PC client machines, go to:

Section 4: IT System Administrator Push Configuration

2 Single PC Configuration

IMPORTANT: YOUR IT SYSTEM ADMINISTRATOR CONTROLS THE SECURITY POLICIES ON YOUR PC AND YOUR NETWORK. ARAS RECOMMENDS THIS DOCUMENT BE REVIEWED BY YOUR COMPANY'S IT SYSTEM ADMINISTRATOR FOR ACTION.

The recommended method of configuring a .NET Framework Security Policy is to have the IT System Administrator deploy it. This will set the policies without having individual users configure their systems.

If you elect not to deploy the .NET Framework Security Policy, then it can be manually configured for a single PC client machine.

Aras Innovator requires the .NET Framework installed on PC client machines before proceeding.

Aras requires using .NET Framework Version 3.5 SP1

2.1 Downloading the Manual .NET Security Configuration Tool

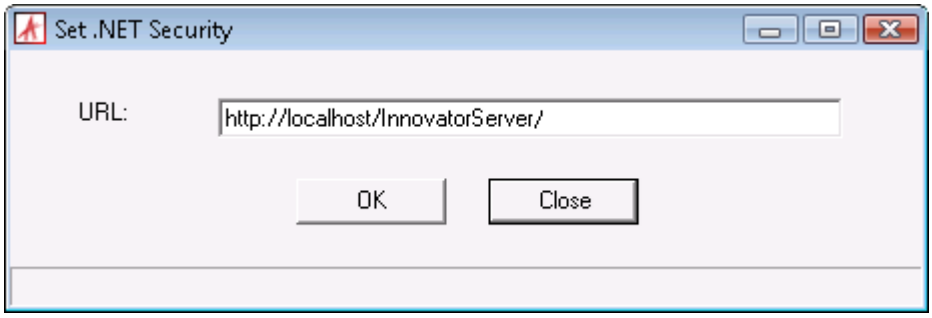
Aras has supplied an executable file that can be run on the PC client machine called the Manual .NET Security Configuration Tool. The file (sdns.exe) can be obtained from the Aras Corporation support website.

1. Open Internet Explorer
2. Type in the following web address http://www.aras.com/support/downloads/download.aspx
3. Download the "Manual .NET Security Config Tool [sdns.exe utility]" to your hard drive
    a. Click on the Download Now button next to the tool description.
    b. When prompted to Run or Save, select "Save".
    c. The desktop will be the easiest location to download to and find the file later.

2.2 Running the Manual .NET Security Configuration Tool

Once you have the file on your hard drive, you can now run the utility to set your security policy. For ease of explanation, we will assume you have put this file on the desktop of the logged in user.

1. Close all Internet Explorer windows
2. Double click on the file sdns.exe
    a. **Windows 8, Windows 7 or Windows Vista** users will need to right-click on the file and select "Run as administrator" from the context menu
    b. The following window should open.



3. In the "URL" field enter the full URL path, provided by your administrator, used to login.
    a. **Example:** In the case of a default local install, this would be something like http://localhost/InnovatorServer/
    b. **Example:** In the case of myInnovator.com, this would be http://myInnovator.com/
4. Select OK
    a. While your security policies are being set it will display its progress in the status bar
        i. "Setting security settings for .NET 2.0"
        Note: .NET 3.0 and .NET 3.5 are extensions of .NET 2.0 and therefore run off the .NET 2.0 policy
5. Once the security policies are set, Select Close
6. Open a new Internet Explorer window, when ready to log into the site.

If the configuration tool fails to load when double clicked, it indicates that no .NET Framework is installed. You should contact your system administrator about installing the .NET 3.5 SP1 framework. After installing .NET 3.5 SP1, please repeat the steps in this section.

3 Troubleshooting

In this section, we will outline some of the common problems people can encounter with the .NET Framework Configuration.

3.1 Manual .NET Security Configuration Tool errors

This section describes various issues logged with Aras support using the Manual .NET Client Configuration Tool.

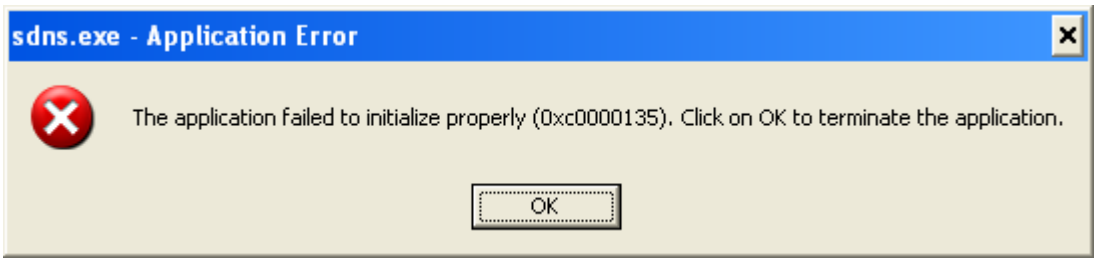
3.1.1 Running the Tool without Downloading

If you attempt to run the tool without downloading it to the local machine first, you will receive an error telling you the tool failed to run. Please follow these alternate steps for downloading the tool.

1. Open Internet Explorer
2. Type in the following web address http://www.aras.com/support/downloads/download.aspx
3. Download the "Manual .NET Security Config Tool [sdns.exe utility]" to your hard drive
    a. Right-Click on the Download Now button next to the tool description, so that the context menu appears.
    b. Select Save "Target As…"
    c. The desktop will be the easiest location to download to and find the file later.

3.1.2 Application Error Running sdns.exe

If the configuration tool fails to load when double clicked with the following error, it indicates that no .NET Framework is installed. You should contact your system administrator about installing the necessary framework.



If you wish to do this yourself, please use the following link to download the .NET Framework 3.5 SP1:

Microsoft .NET Framework 3.5 Service Pack 1

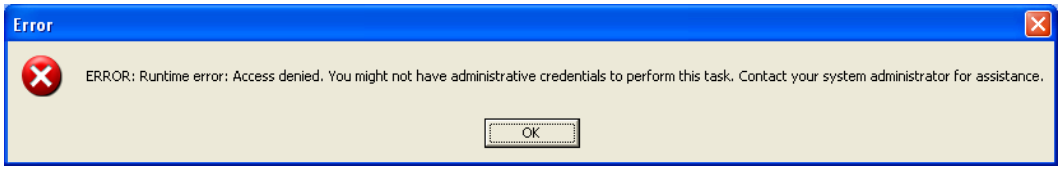
http://www.microsoft.com/en-us/download/details.aspx?id=22

After installing this, please repeat the steps in this section.

3.1.3 sdns.exe Error: Access denied

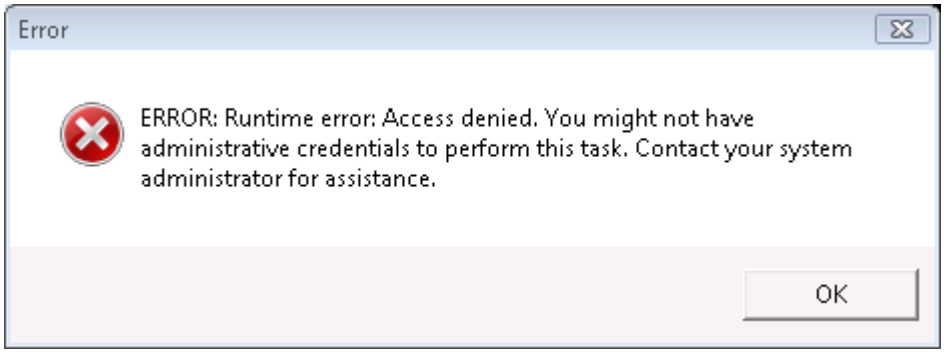
3.1.3.1 Windows XP

If the configuration tool gives the error "ERROR: Runtime error: Access denied. You might not have administrative credentials to perform this task. Contact your system administrator for assistance." It indicates that you do not have administrative privileges on your machine to modify the .NET security policies. You will need to contact your system administrator to request the change to the .NET Security policies on your machine.



3.1.3.2 Windows Vista or Windows 7 or Windows 8

If the configuration tool gives the error "ERROR: Runtime error: Access denied. You might not have administrative credentials to perform this task. Contact your system administrator for assistance." You should first make sure you ran the sdns.exe by right-clicking on the file and selecting "Run as administrator" from the context menu. If this menu option is not present, it indicates that you do not have administrative privileges on your machine to modify the .NET security policies. You will need to contact your system administrator to request the change to the .NET Security policies on your machine.

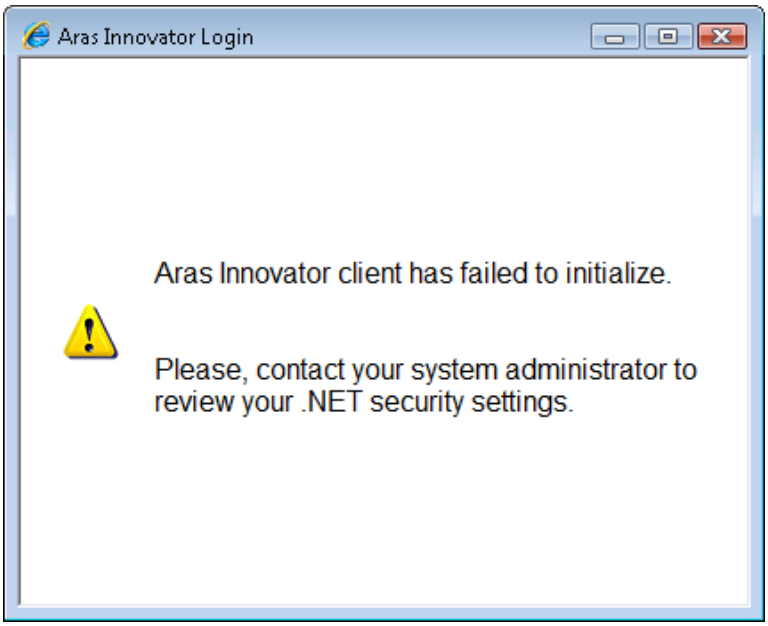


3.2 Errors During Login

This section describes the common error messages shown during login to Aras Innovator when there are problems with the .NET security policies.

3.2.1 .NET Error During login

If the login screen fails to load with the following error, this indicates one of two things. Either you do not have a security policy set, or you do not have any .NET Framework installed.



Please confirm that you have gone through the steps in section 2 to configure the security policy. To confirm the policy was set correctly, please run the following command in a command prompt:

```
C:\Windows\Microsoft.NET\Framework\v2.0.50727\CasPol.exe –a -ld
```

The URL for your Aras Innovator instance should be listed once in the return of this command. If your policy is listed in the response from the command, please contact your system administrator about installing the necessary .NET framework.

If you wish to do this yourself, please use the following link to download the .NET Framework 3.5 SP1:

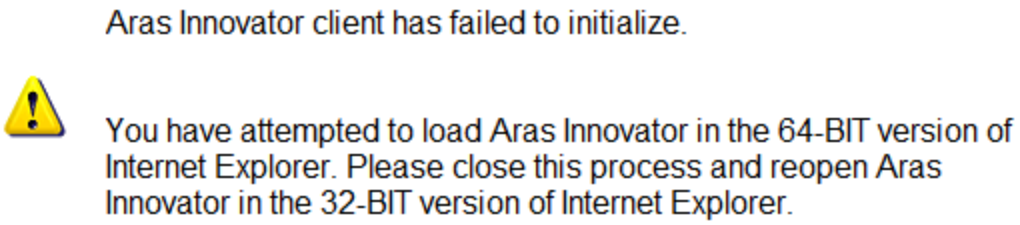
Microsoft .NET Framework 3.5 Service Pack 1

http://www.microsoft.com/en-us/download/details.aspx?id=22

After installing this, please repeat the steps in section 2 to configure your security policy.

3.2.2 Innovator attempting to load in 64-bit IE

If the login screen fails to load with the following error, this indicates that the 64-bit version of Internet Explorer is being used.



Internet Explorer 9

In Internet Explorer 9, there are two executables that are available on 64-bit operating systems. Please confirm that you are loading the "iexplore.exe" process from the following Windows directory:

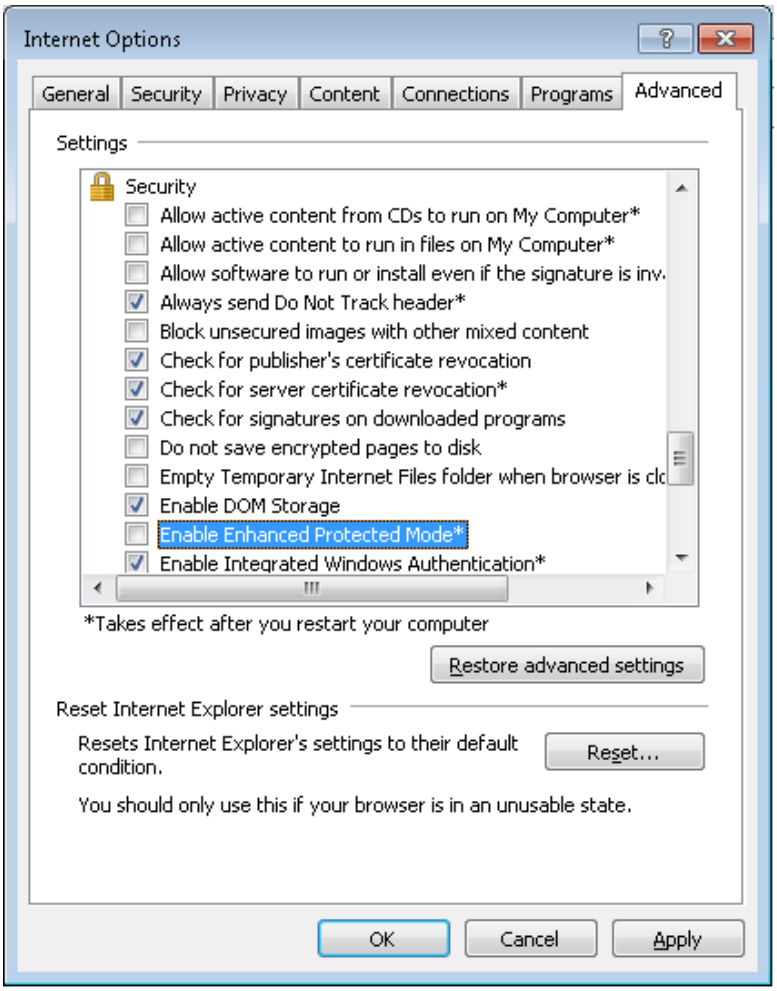
`C:\Program Files (x86)\Internet Explorer\iexplore.exe`

If you are using the 64-bit version of Internet Explorer, the following will be displayed in the "Help" → "About":

Internet Explorer 10

In Internet Explorer 10, the main "iexplore.exe" process is always run using the 64-bit Internet Explorer. Depending on the following settings, the tabs within Internet Explorer will run using either the 32-bit or the 64-bit process.

Please confirm that "Enable Enhanced Protected Mode*" is disabled. Please note that any changes to this flag require that the computer be restarted.



In addition to this setting, there is a registry entry that can prevent the tabs of Internet Explorer from loading using the 32-bit iexplore.exe process. Please confirm that the following entry does not have a value of "0" set:

```
HKEY_CURRENT_USER\Software\Microsoft\Internet Explorer\Main
"TabProcGrowth"=dword:00000001
```

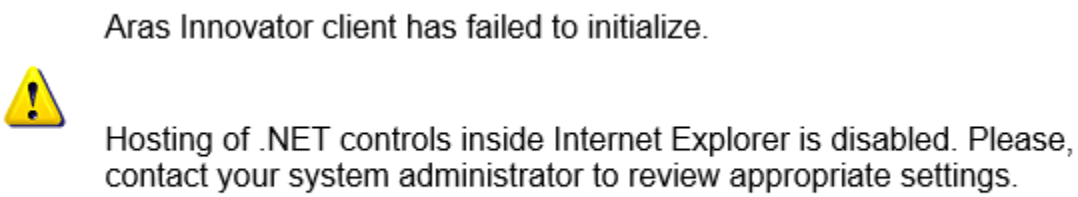
If this entry is set to value of "0", you will need to modify the value to some integer value larger than "0" (for example, "1").

For more information on this setting, please see the following Microsoft KB article:

http://support.microsoft.com/kb/2716529

3.2.3 Microsoft .NET 4.5

When .NET 4.5 is installed, you will see a message that indicates your .NET policy must be applied again.



In .NET 4.5, the .NET browser hosting controls for Internet Explorer have been removed. When .NET 4.5 is installed the existing hosting is also disabled for .NET 3.5. You will need to manually enable this hosting for Internet Explorer to return to your previous working state.

To fix this issue you will have to add the following registry key on the client PC:

- For 32-BIT environments:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\.NETFramework
"EnableIEHosting"=dword:00000001
```

- For 64-BIT environments:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\.NETFramework
"EnableIEHosting"=dword:00000001
```

4 IT System Administrator Push Configuration

The .NET Framework comes with a GUI configuration tool that can be used by the system administrator to create and deploy this policy. Microsoft® provides documentation on how to use this tool at the following link:

http://msdn.microsoft.com/en-us/library/2bc0cxhc(v=vs.90).aspx

Microsoft® provides documentation on how to deploy this software, as well, at the following link:

http://msdn.microsoft.com/en-us/library/13wcxx6y(v=vs.90).aspx

In this section, we will outline the use of the .NET Framework Configuration tool. This tool must be used to set the security policies that will be deployed. The .NET Framework 2.0 GUI requires the .NET Framework 2.0 SDK in addition to .NET 3.5 SP1 in order to access this configuration UI.

.NET 3.5 SP1 can be obtained through Windows Updates, through "Turn Windows Features on or off", or from the following Microsoft link:

Microsoft .NET Framework 3.5 Service Pack 1

http://www.microsoft.com/en-us/download/details.aspx?id=22

The SDK can be obtained through the following Microsoft links:

.NET Framework Version 2.0 Software Development Kit (x86)

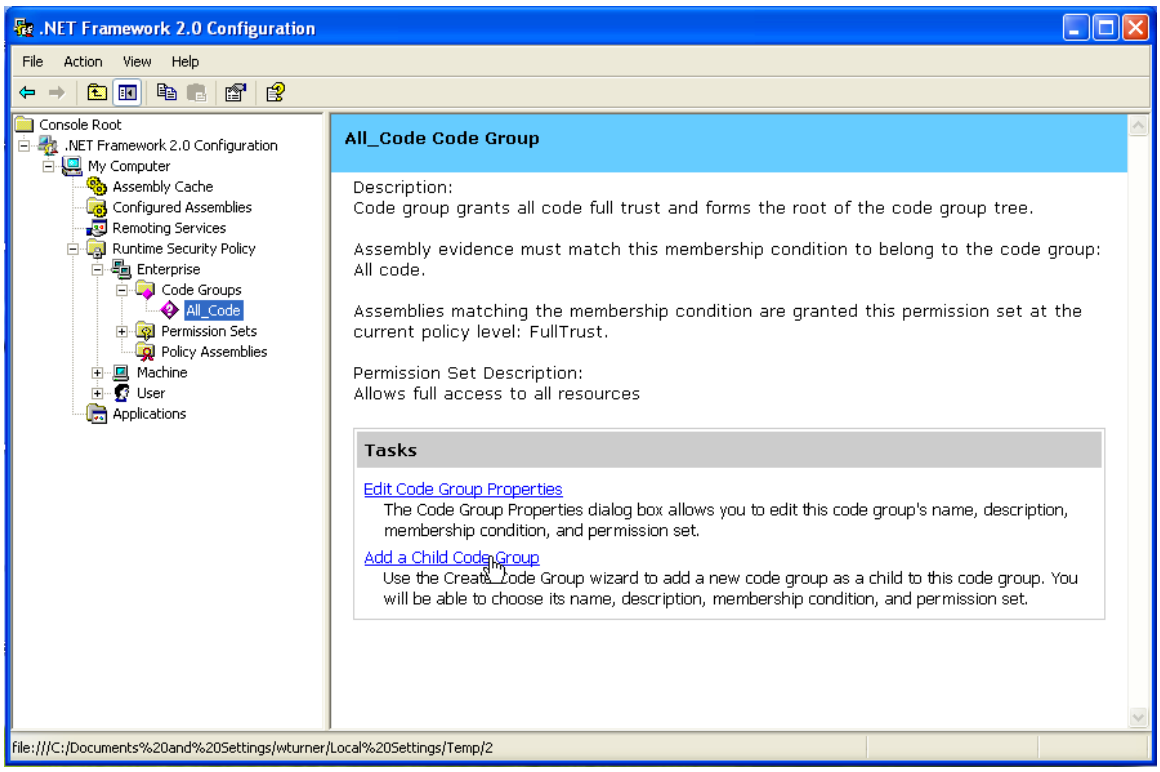
http://www.microsoft.com/en-us/download/details.aspx?id=19988

.NET Framework Version 2.0 Software Development Kit (x64)

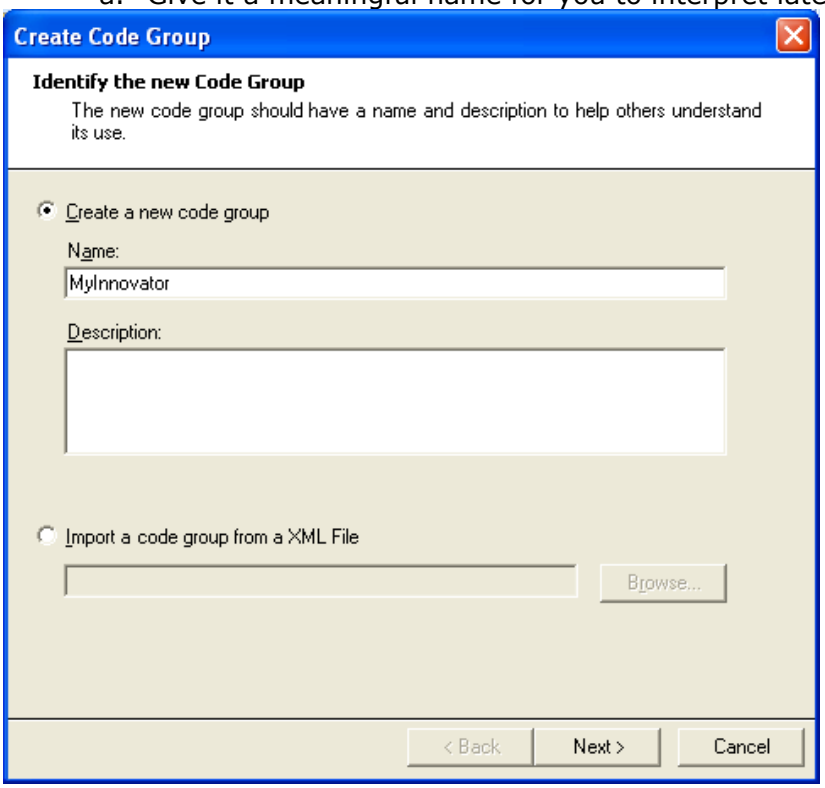
http://www.microsoft.com/en-us/download/details.aspx?id=15354

4.1 .NET Framework 2.0 Configuration

1. Go to the Windows Control Panel
    a. Start → Settings → Control Panel
2. Double click on Administrative Tools
3. Double click on Microsoft .NET Framework 2.0 Configuration
4. Open this path in the tree on the left hand side of the window.
    a. My Computer → Runtime Security Policy → Enterprise → Code Groups → All Code.
5. Click on "All Code"
6. In the frame to the right, Select "Add a Child Code Group"

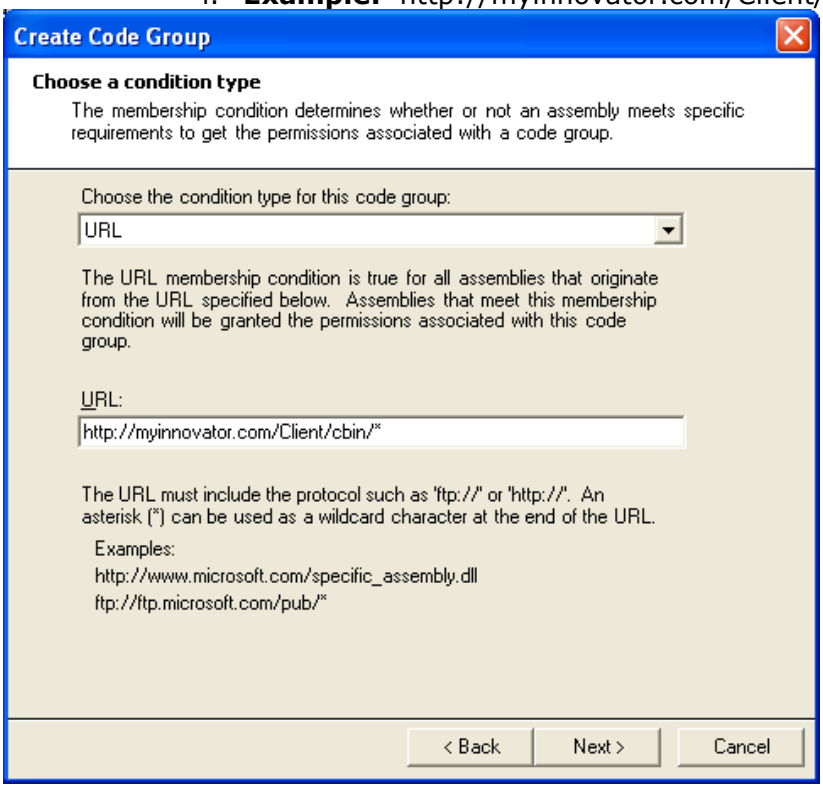


7. Select “Create a new code group”
    a. Give it a meaningful name for you to interpret later



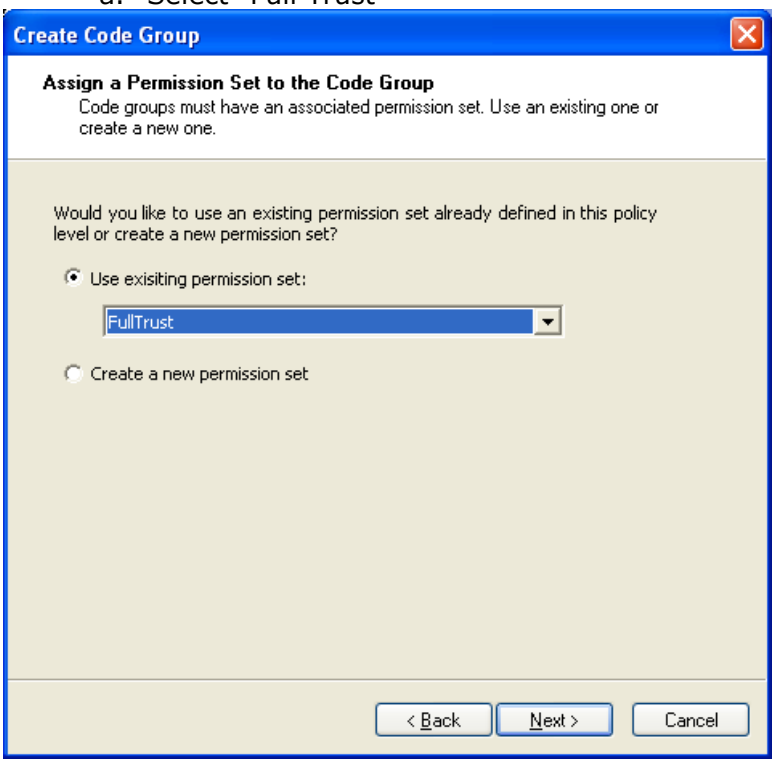
8. Select “Next”

9. For "Choose a condition type"
    a. Select "URL"
    b. Enter the full site name of the site plus the "/Client/cbin/*" web folder
        i. **Example:** http://myinnovator.com/Client/cbin/*

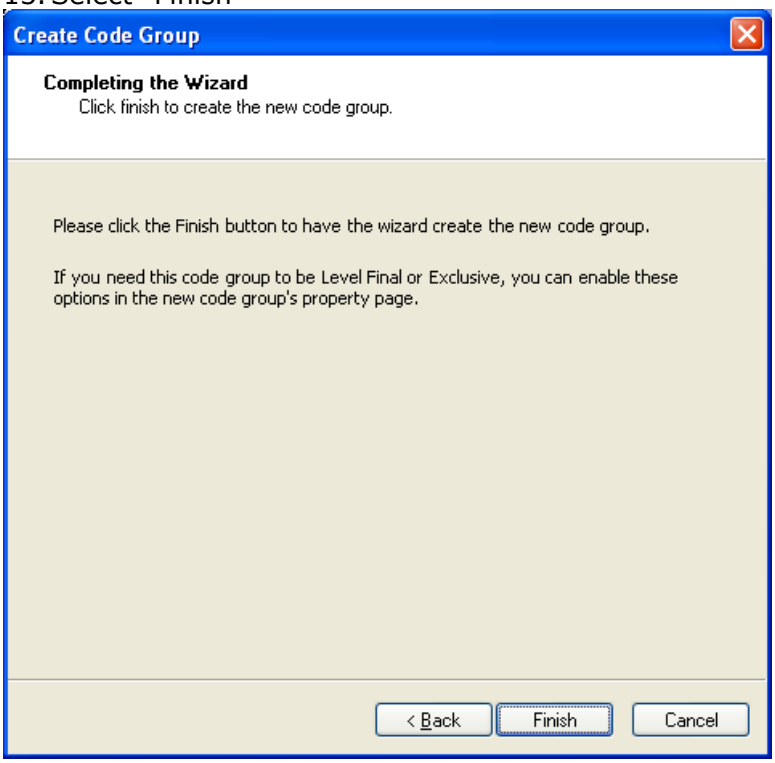


10. Select "Next"

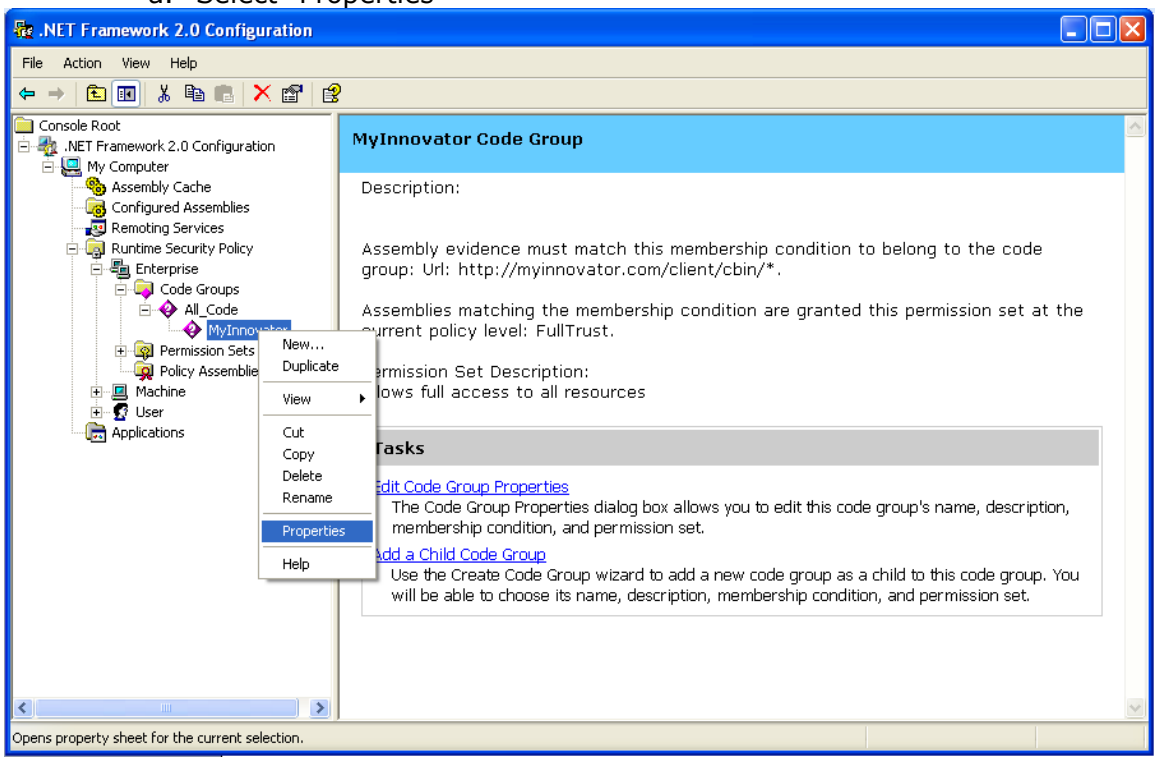
11. Select "Use existing permission set"
    a. Select "Full Trust"



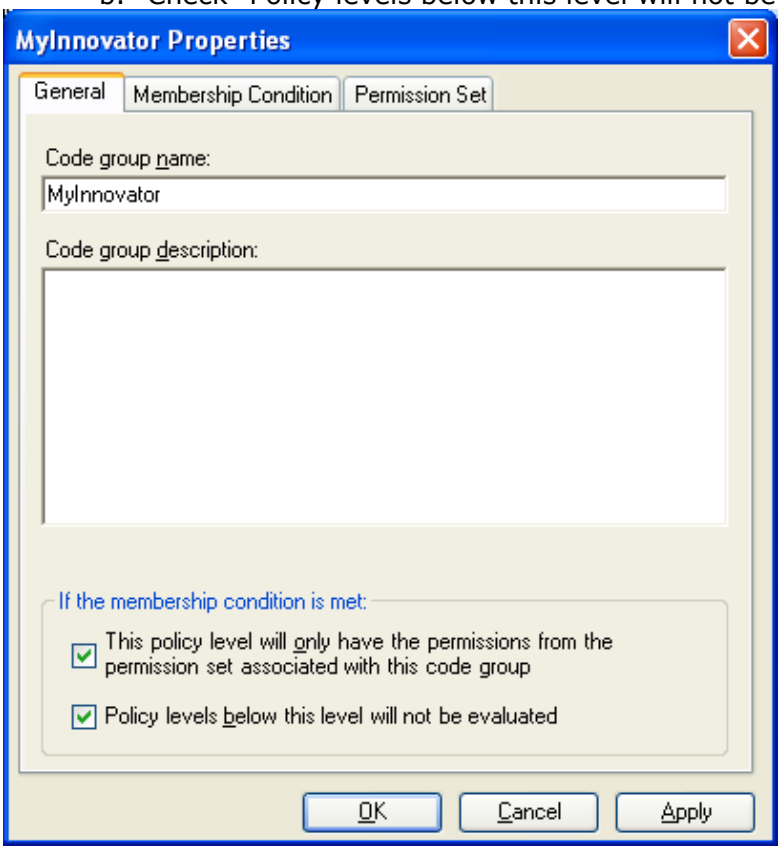
12. Select "Next"
13. Select "Finish"



14. In the Microsoft .NET Framework 2.0 Configuration window right click on the newly created node in the Code Group (name you just assigned).
    a. Select "Properties"



15. On the General Tab
    a. Check "This policy level will only have the permissions from the permission set associated with the code group."
    b. Check "Policy levels below this level will not be evaluated."



16. Select "OK"
17. Close the Microsoft .NET Framework 2.0 Configuration window