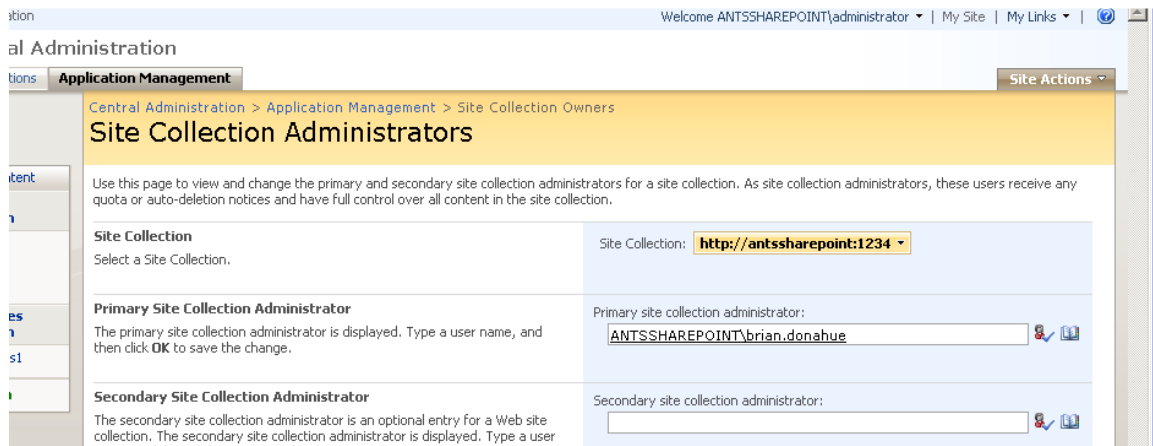




ANTS Profiler Version 4
SharePoint 2007, IIS 6, Windows Server 2003
20 August 2008

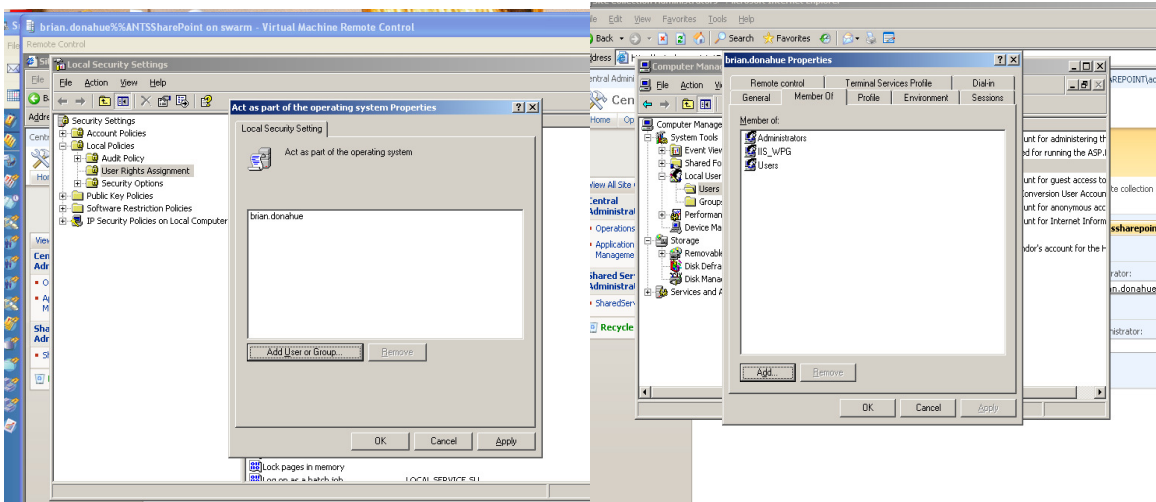
ANTS Profiler can easily configure profiling for many application types, including Windows Services, ASP .NET web applications, and desktop applications. Since Microsoft SharePoint 2007 is implemented as an ASP .NET web application, ANTS Profiler is capable of profiling managed code that runs on a Microsoft SharePoint server. Because SharePoint extends ASP .NET significantly in order to implement additional security and other configuration, some special setup work needs to be performed in order to allow ANTS Profiler access to the SharePoint 2007 application.

Part of the process of setting up a SharePoint 2007 site for profiling involves collecting information from the site itself. It is necessary to know the URL for the site collection that you want to profile, including the TCP port and the name of the administrator account for the site collection.



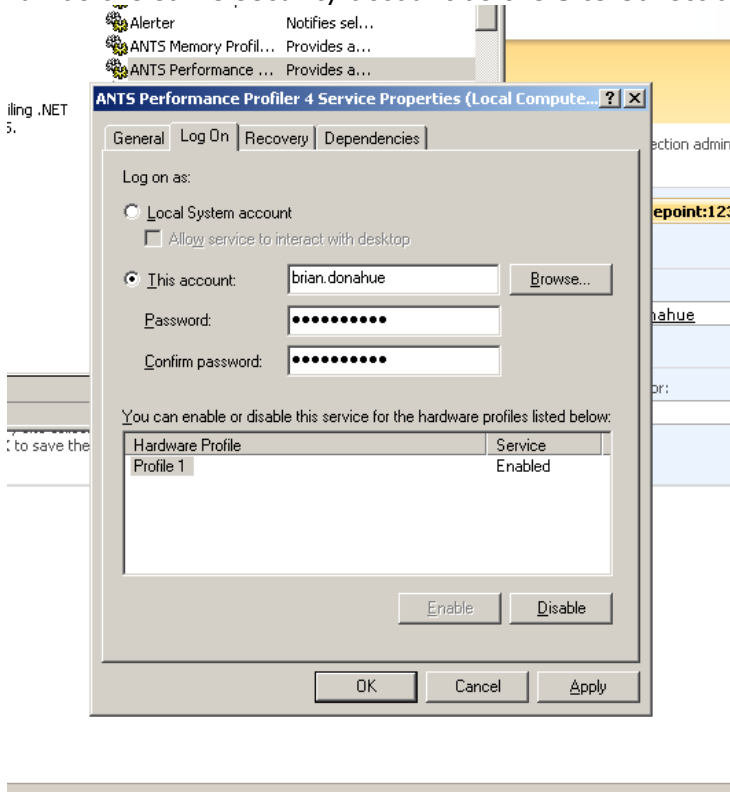
- Open the SharePoint Central Administration website using the Start menu item
- Click the 'Application Management' tab
- Click 'Site Collection Administrators' under the 'SharePoint Site Management' heading
- Select the name of the site collection hosting your web part from the dropdown list
- Make a note of the security account in the 'Primary Site Collection Administrator' box

The next step is to grant the Primary Site Collection Administrator account sufficient system privileges to launch an IIS 6 worker process.



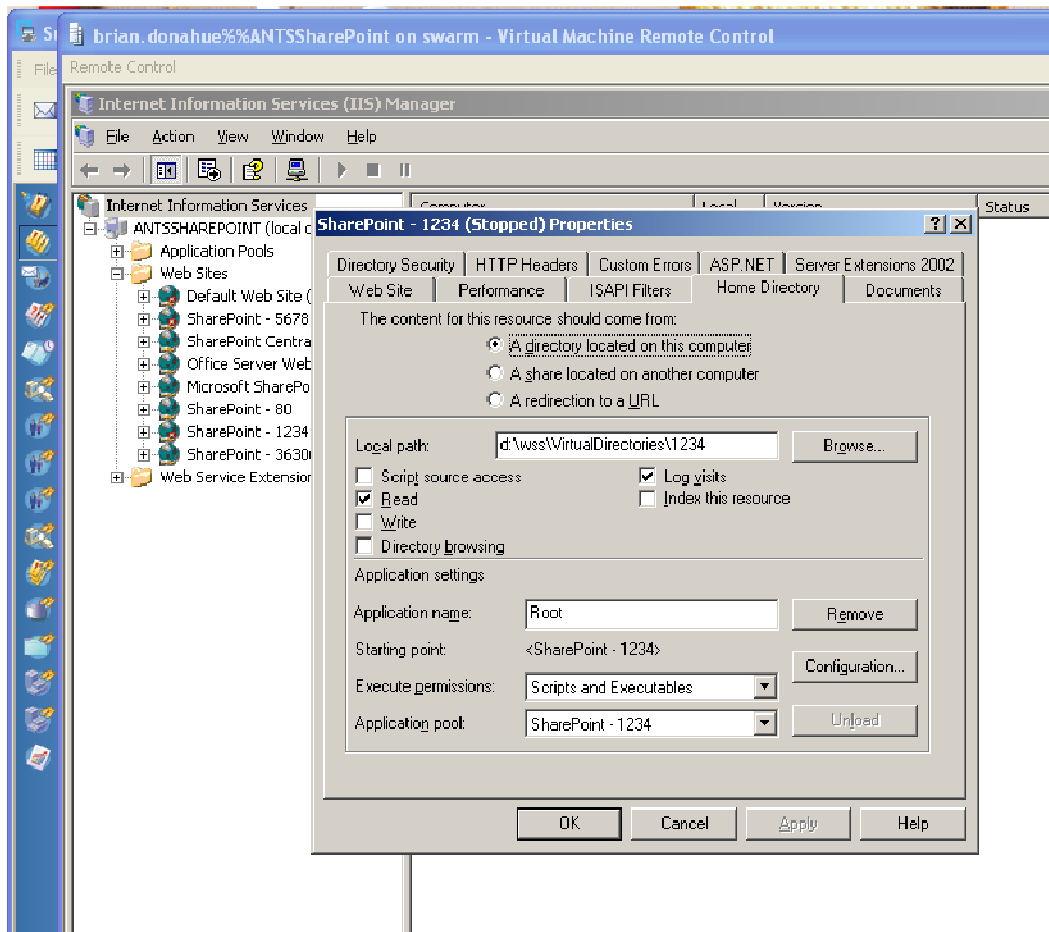
- Open Local Security Policy from the Administrative Tools program group
- Click 'User Rights Assignment'
- Click "Act as part of the operating system" and add your Primary Site Collection Administrator account
- Do the same for "Impersonate a client after authentication"
- Open a command prompt and run "gpupdate /force" to enforce the new settings
- Open Computer Management and add the Primary Site Collection Administrator to the local "Administrators" security group

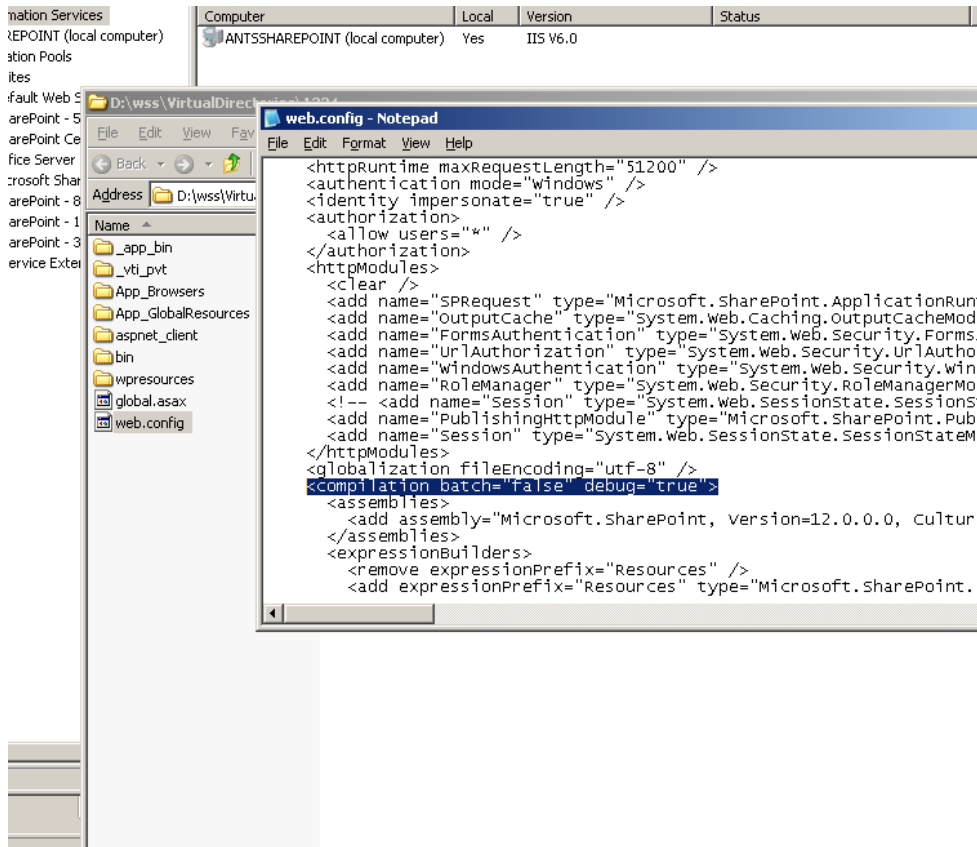
Now set the "ANTS Performance Profiler 4" and "ANTS Memory Profiler 4" Services to run as the same security account as the Site Collection administrator.



- Open your Control Panel, go to “Administrative Tools” and open Services
- Set the “ANTS Performance Profiler 4” Service to use the Primary Site Collection Administrator account as the startup account
- Set the “ANTS Memory Profiler 4” Service to use the Primary Site Collection Administrator account as the startup account
- Restart both ANTS Profiler services

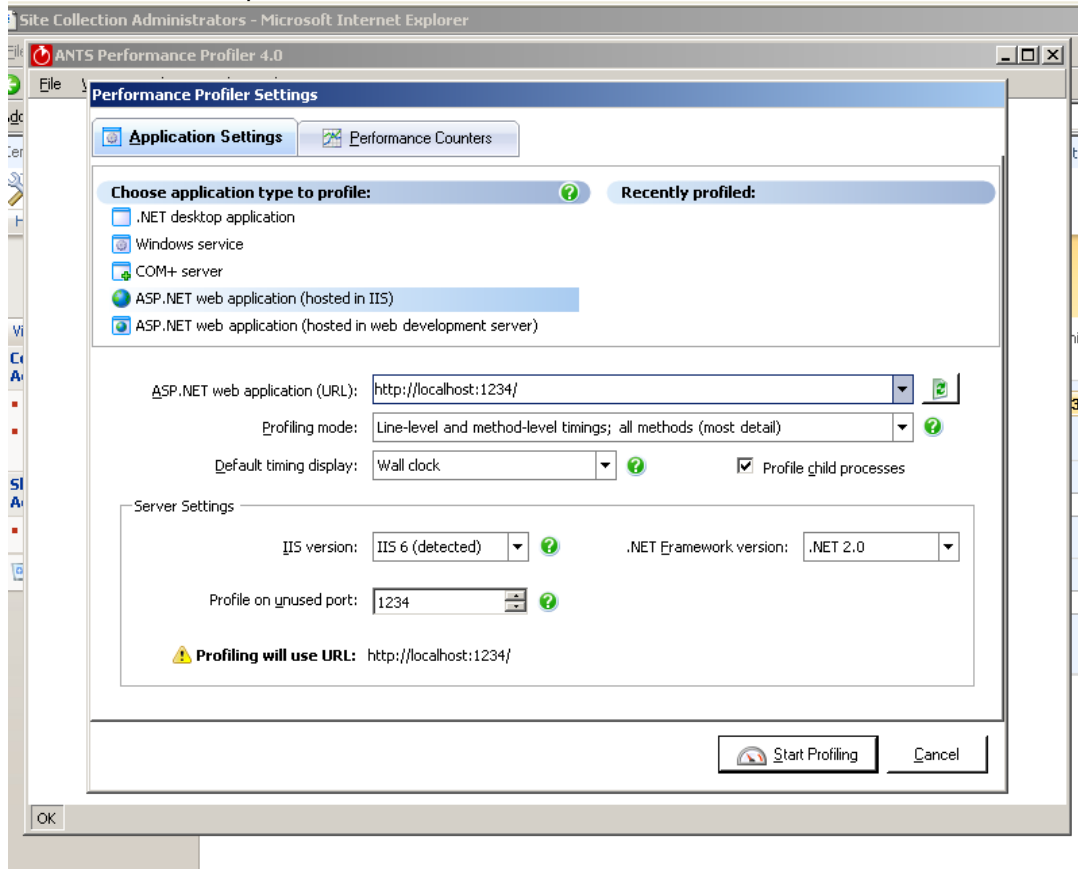
The final step in preparing the SharePoint site collection for profiling is to make sure that the ASP .NET compilation will be done in DEBUG configuration. This will allow ANTS Profiler to locate the source code for any web parts or other extensions you have written for the site collection as well as relaxing some unmanaged code restrictions that prevent profiling and stopping the site from timing out. You must locate the physical path to the root of the site collection website and edit the web.config file using Notepad.exe. To locate the path, open Administrative Tools->Internet Information Server, right-click the website containing the site collection, click Properties, then the “Home Directory” tab.





- Navigate to the home directory using Windows Explorer and right-click the web.config file
- Open the web.config file using notepad.exe. Search for the text 'Debug'.
- Change Debug="False" to Debug="True" and save the file.
- Go back into Internet Information Services Manager and "stop" the website.

Now that the environment has been set up correctly, the SharePoint Site Collection can be profiled.



- Launch ANTS Performance Profiler and set the profiler type and click next
- Select ASP .NET Web Application hosted in IIS and click Next
- Enter the path to the ASP .NET web application that hosts your site collection. The path should be `http://server:port/`. The Server should be the name of the local server and the port should be the TCP port that the web application normally runs on. The trailing slash at the end is also important, if the site collection is on the root virtual directory for the site.
- Ensure that the .NET Framework Version is 2.0 and the IIS version is 'IIS 6'
- Set the Port to the port number that your web application normally uses. Do not accept the default of 8013!
- At this point, you may profile only methods with source code if you have copied any web part DLLs and PDB files into the site's home directory under `app_bin`.

Once your SharePoint 2007 Site Collection is up and running, you may use it as you normally do. Any additions that you have coded, such as web parts and lists, will be reflected in the ANTS Performance Profiler results if these objects have been accessed. Furthermore, it is possible to filter out all methods except the ones run by your code, provided that the filtering options are set to "only methods with source code" and you have included the PDB files in your `app_bin` folder.