

## Configuring iPlanet 6.0 Web Server For SSL and non-SSL Redirect

### Introduction

This document describes the process for configuring an iPlanet web server for the following situation:

- Require that clients have SSL client certificates
- If a certificate is not valid or not available, redirect the client to a non-SSL portion of the server for further processing

This method uses virtual servers to allow the creation of both an SSL and non-SSL portion of the web server.

### Configuration Process

The following sections describe the process to create two virtual servers, one enabled with SSL and one without.

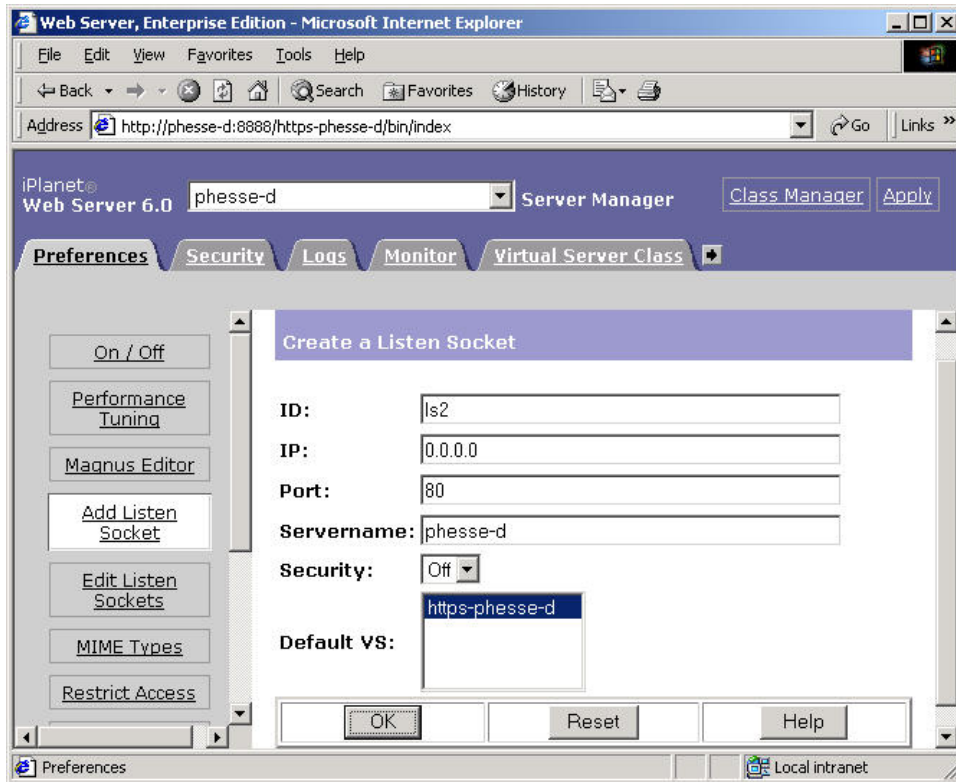
**A note on my configuration:** In my configuration, my server started as SSL and I was trying to add a non-SSL virtual server to it. Your configuration will vary appropriately depending on which you want to do, but your end result should be having two listen sockets and two virtual servers, one with security on and on port 443, and the other with security off and on port 80.

#### *Obtain and Install a Certificate*

In order to allow SSL connections, the web server must have a private key and digital certificate. To obtain a certificate, you should open the management console for the server, select the **Security** tab, and choose **Request a Certificate** from the left-side menu. This process will create your certificate request. Once your request is completed, you will need to send it to a certificate authority so the certificate can be generated. The response should contain your server's certificate, which you install using the management console. Select the **Security** tab and choose **Install Certificate**, being sure to select the radio button labeling that the certificate is for **This Server**.

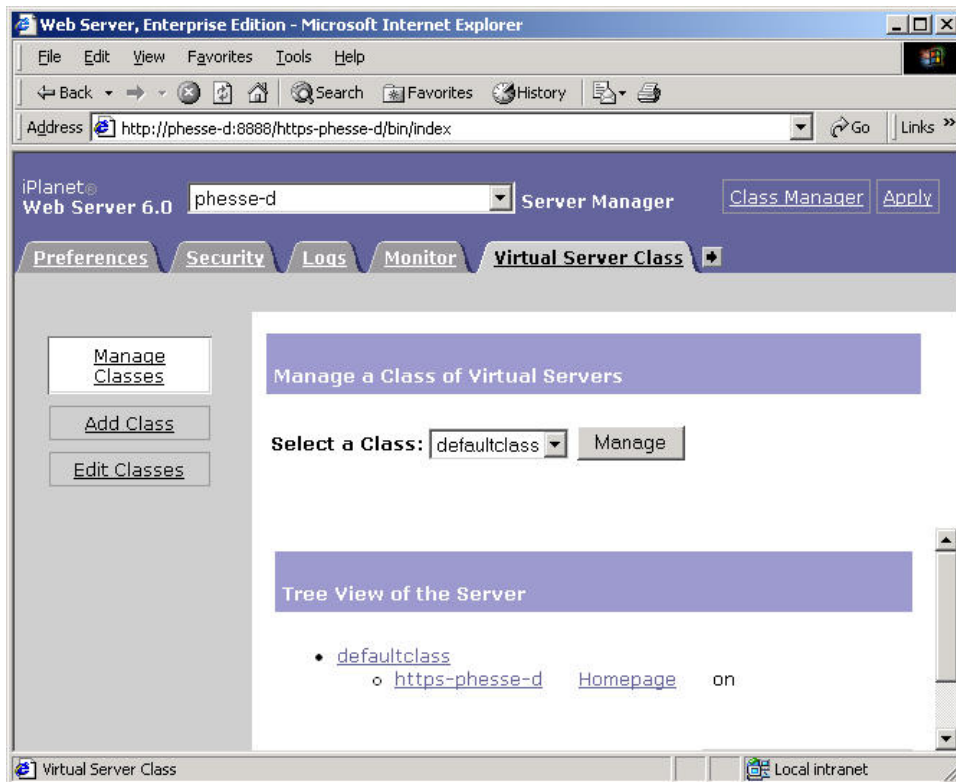
#### *Create Listen Sockets*

In the management console for the server, choose the **Preferences** tab and choose **Add Listen Socket**. You will see a screen similar to the following (except blank). You should fill in the values similar to what is shown to add your second listen socket. See the notes below the picture.

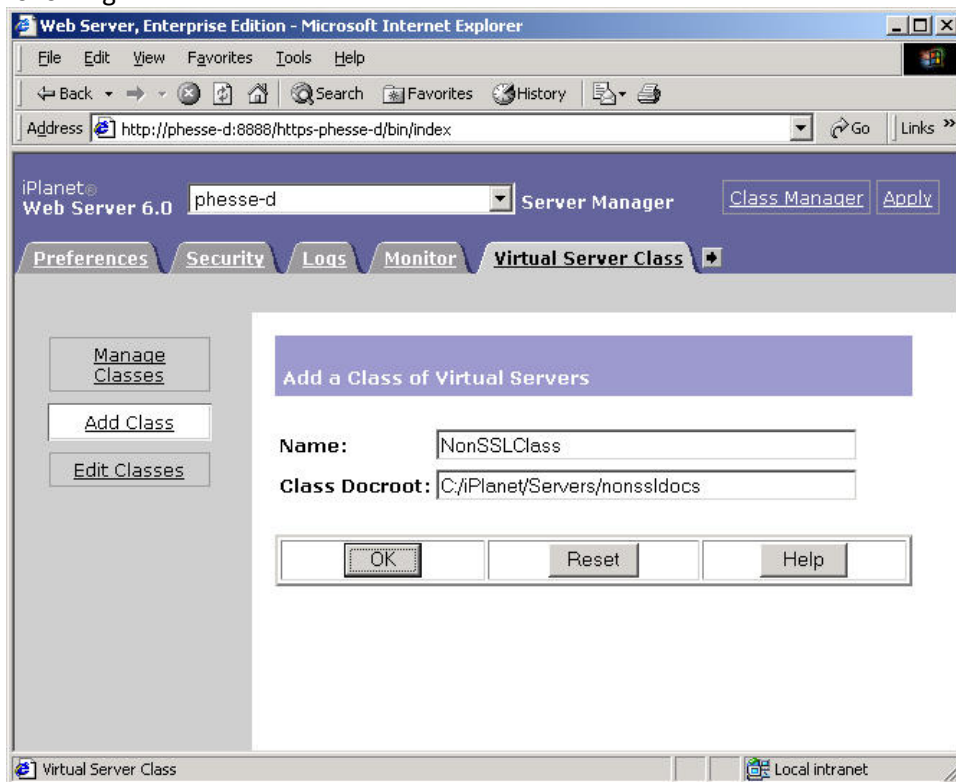


## ***Add Virtual Server Class and Virtual Server***

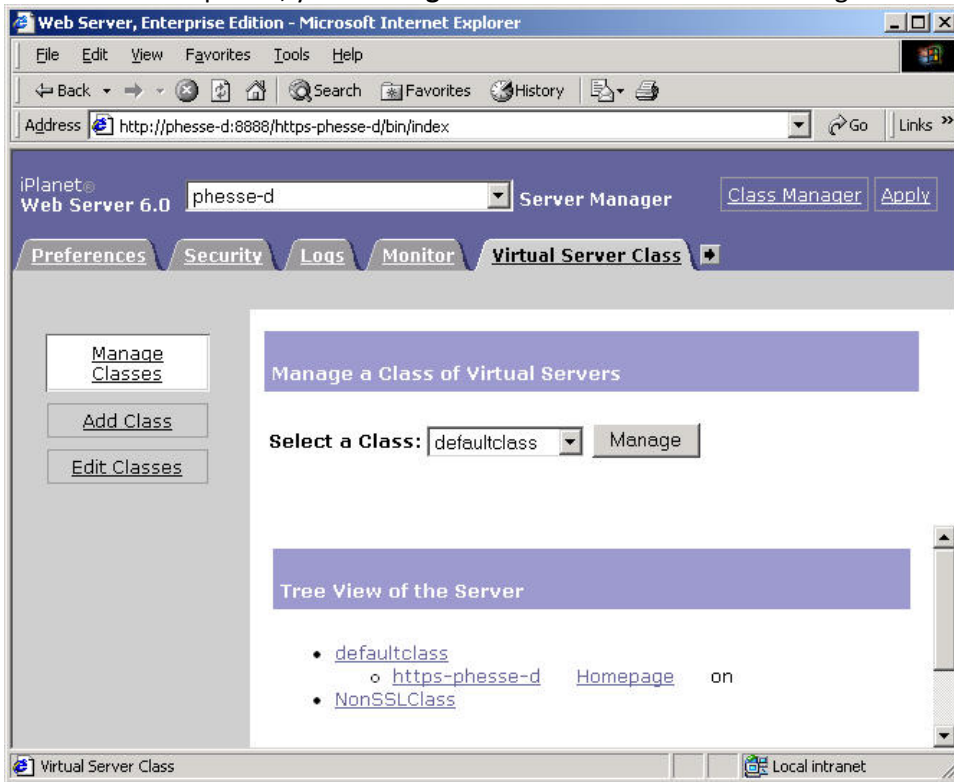
In the management console, select the **Virtual Server Class** tab. You will see a screen similar to the following:



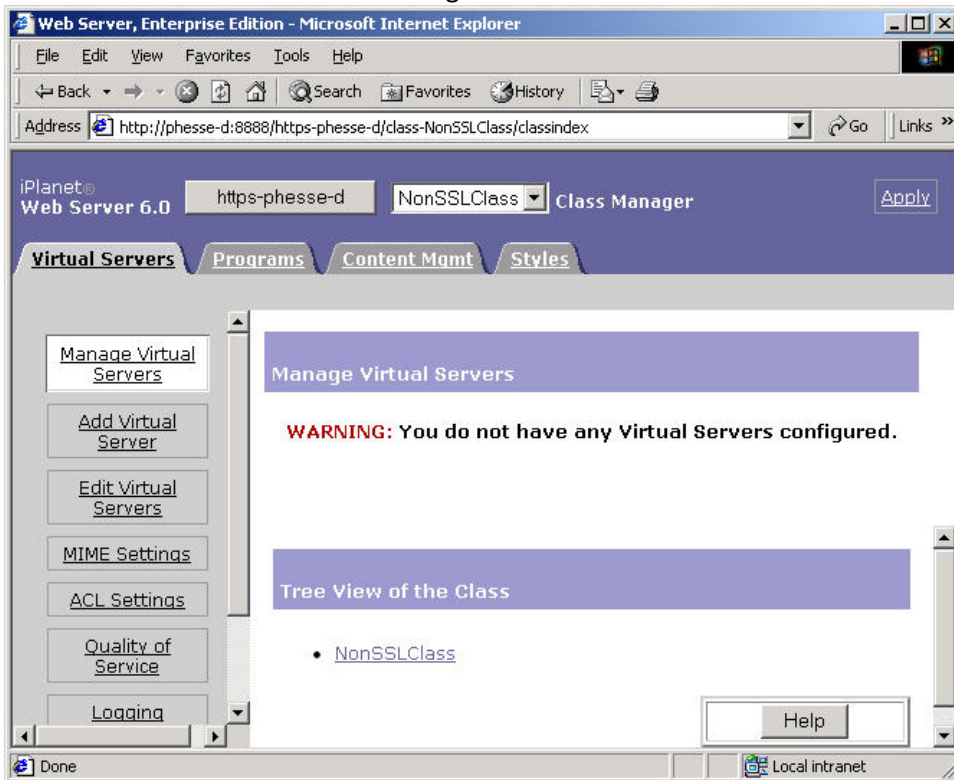
You will add a virtual server class by clicking **Add Class** on the left, and filling in the form similar to the following:



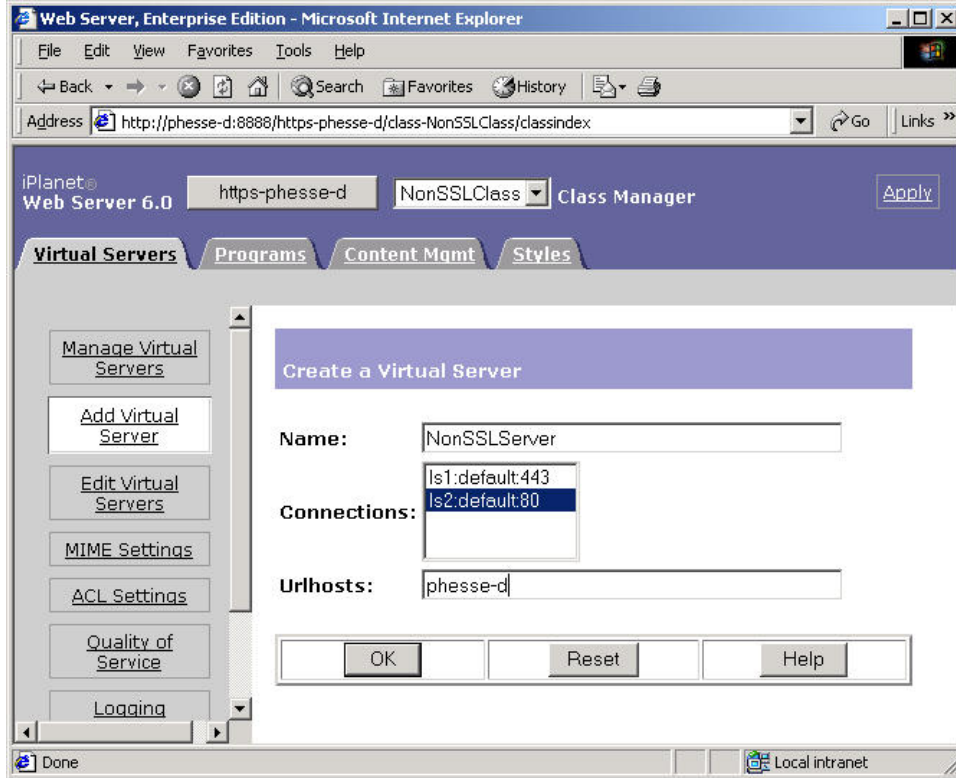
Once that is completed, your **Manage Classes** view will look something like this:



Click the name of the new class to begin to add the virtual server. You will see the following:



Click the **Add Virtual Server** link to add a virtual server under your virtual server class. You will see the following:

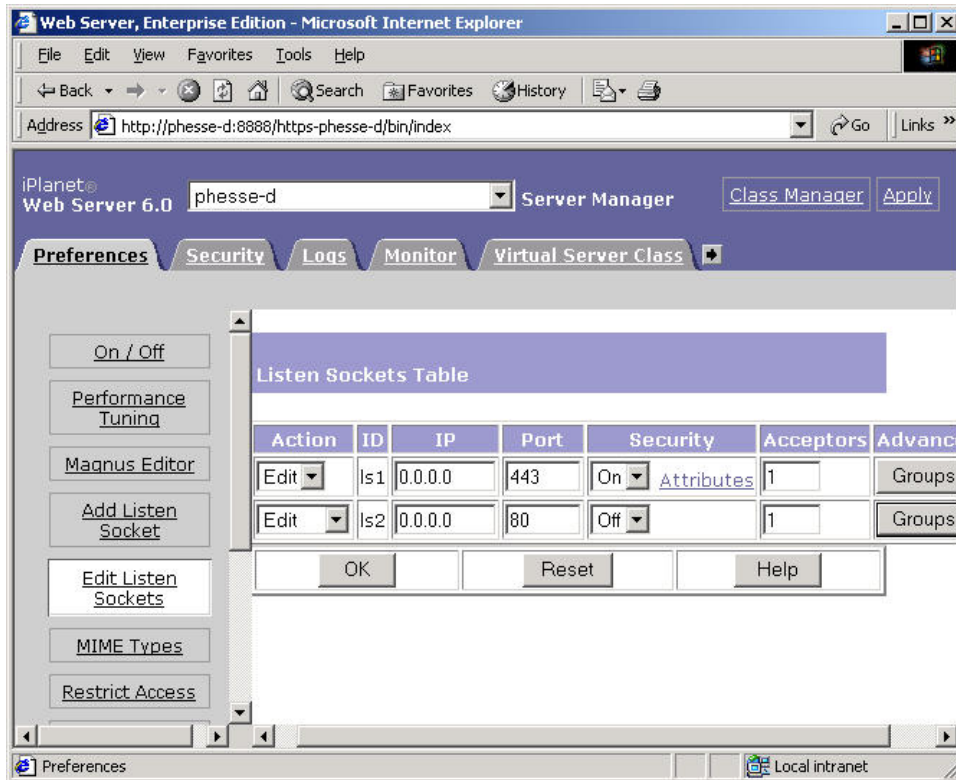


Configure a name for the server, and choose your new listen socket as appropriate. (If your second server is the SSL server, you would reverse the choice for the connections shown.)

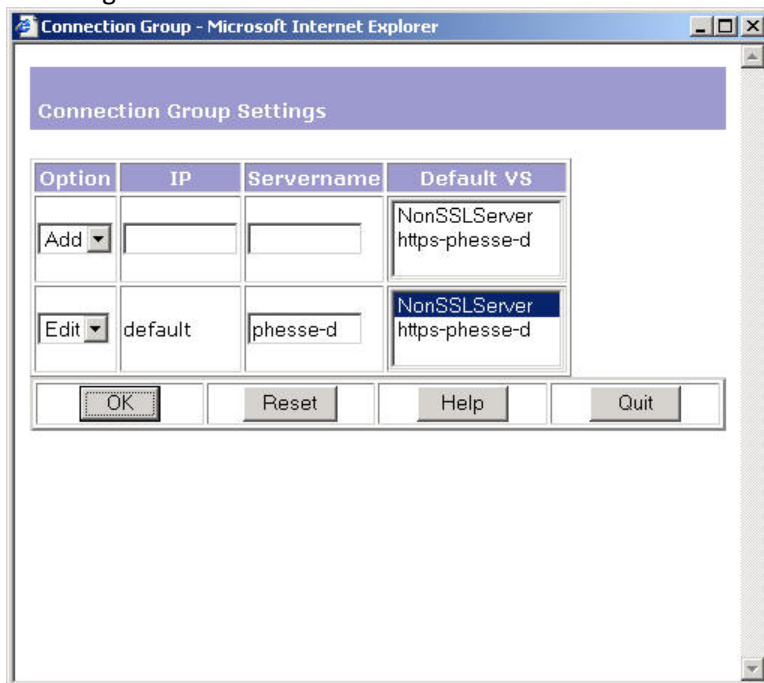
Now that your virtual server is created, there is just one more step. You must bind the listen socket to the virtual server.

### ***Binding Listen Socket to Virtual Server***

To bind the new listen socket to the new virtual server, you should go back to the **Preferences** tab in the management console. You should then choose **Edit Listen Sockets**. You will be presented with your two listen sockets as shown below:



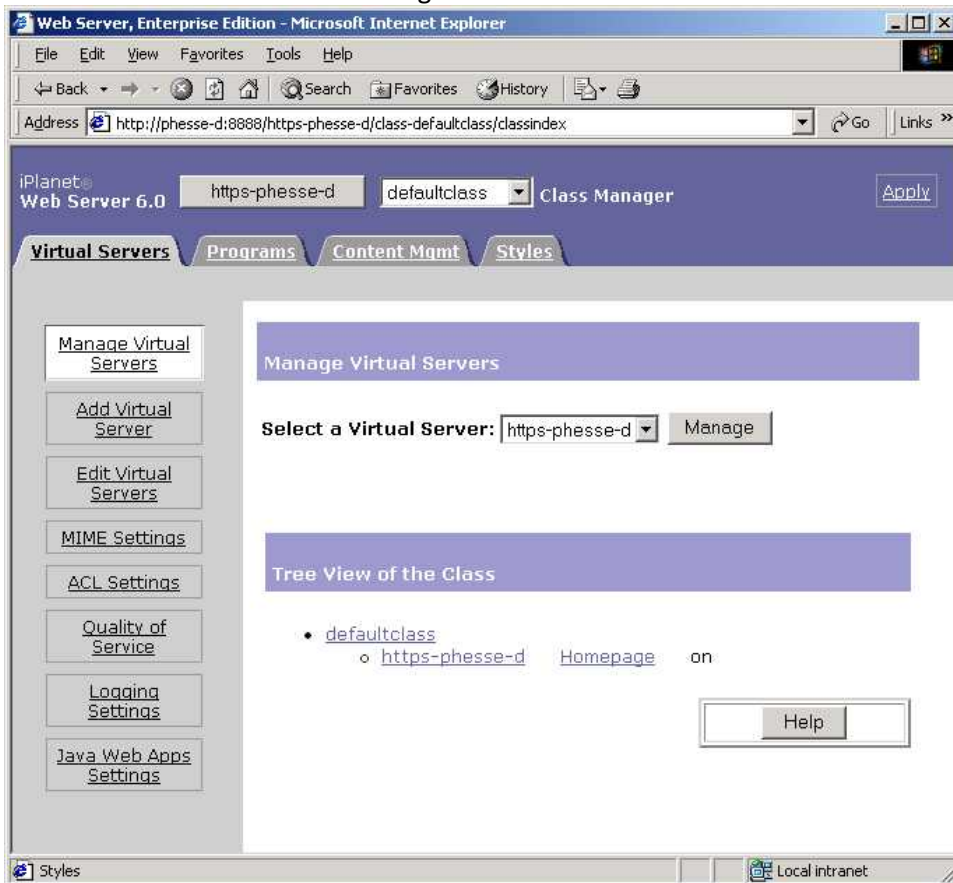
Depending on which listen socket you've added (in my case it's the non-secure port 80 socket), click the corresponding **Groups** button next to the new listen socket. You will see a screen similar to the following:



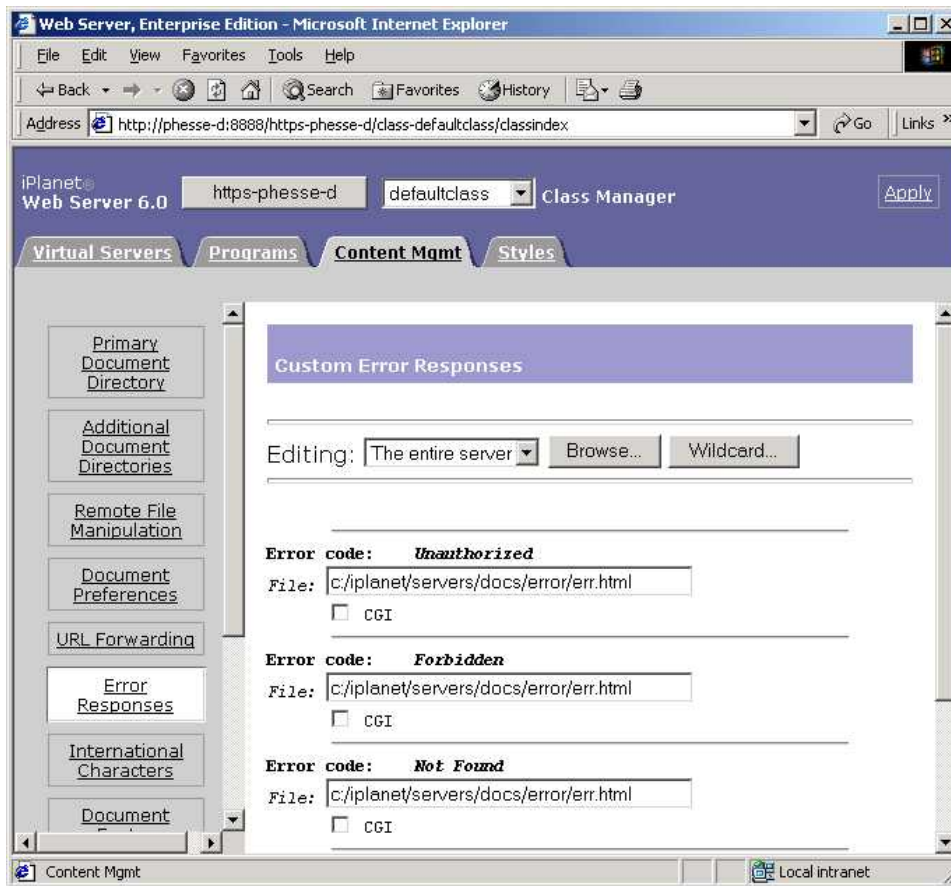
Next to the Edit option, you should select the name of the virtual server that will be the default for that listen socket (just by highlighting it) and then clicking the **OK** button. This will bind the new listen socket to that virtual server.

## Setting up Redirection

This can be done in any number of ways, the method I chose was quite simplistic. First choose the **Virtual Server Class** tab. Click on the name of your SSL server class (not the server, the class!). You will see a screen similar to the following:



Click the **Content Mgmt** tab and choose the **Error Responses** link on the left. You will see a page similar to the following:



I caused all the errors to load a file that contained an HTML redirection. The HTML file redirected to my non-secure interface. The contents of that file are as follows:

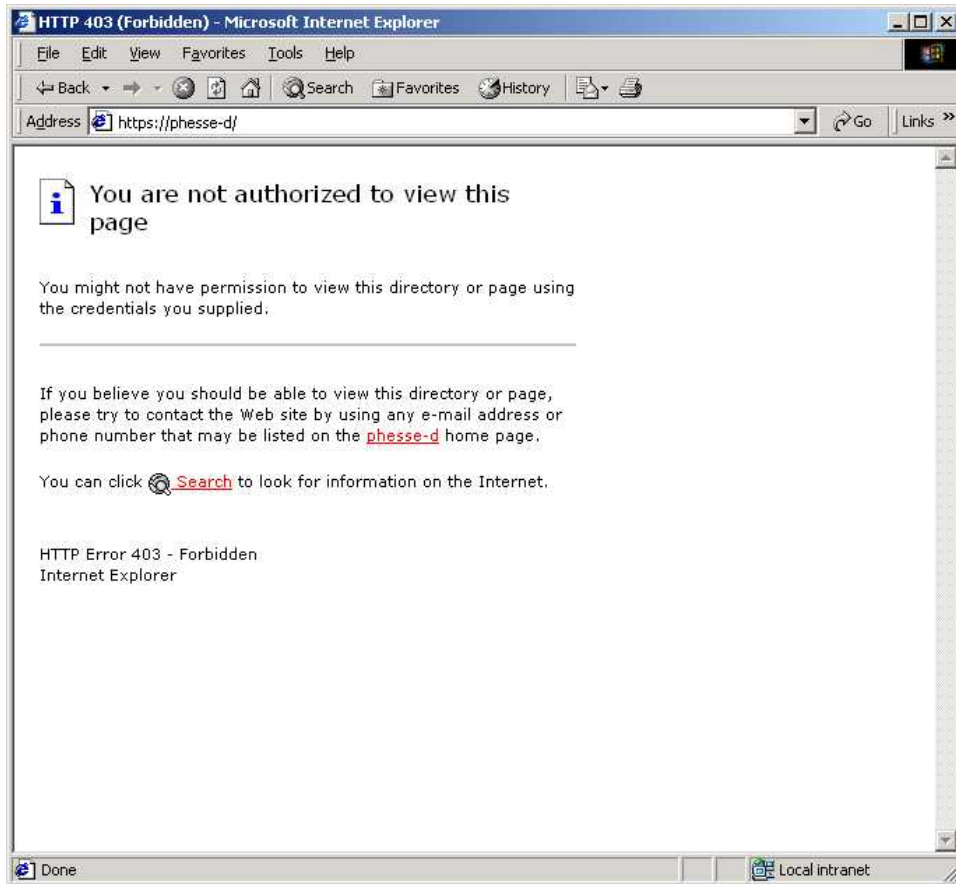
```
<HTML>
<HEAD>
  <TITLE>Redirecting now</TITLE>
  <META HTTP-EQUIV="REFRESH" CONTENT="0;
URL=http://www.geminisecurity.com/">
</HEAD>

<BODY>
  Please stand by for redirection...
</BODY>
</HTML>
```

**See section 0 below** for another example that works better with the Internet Explorer browser.

## Internet Explorer Friendly Error Messages

Unfortunately, the default installation of Internet Explorer causes the redirection to not occur. The reason for this is the HTTP status code that is returned with the error page. Internet Explorer (by default) is configured to return “friendly” error messages, so instead of getting the page with a redirection you might see something similar to the following:



The easy solution to prevent this from happening and to actually follow your redirection is to configure as follows: Tools -> Internet Options -> Advanced Tab -> Uncheck "Show Friendly Error Messages". Unfortunately since this is a default setting, this may not be easy to do.

We have found through research that Internet Explorer clients will only return a friendly error message if the returned error page is smaller than some threshold size, which is specified in a registry setting. Information about that registry setting and threshold size can be found here: <http://support.microsoft.com/kb/218155/EN-US/>

Most error thresholds are either 256 or 512 bytes. So, when you create your redirection page, ensure that it is longer than 512 bytes. If the page downloaded is greater than the threshold specified in the registry, the Internet Explorer browser will render the redirection page rather than showing the friendly error message. This will allow the redirection to occur properly.

The following page has a sample HTML file which performs a redirection and is greater than 512 bytes.

```
<HTML>
<HEAD>
  <TITLE>Redirecting now</TITLE>
  <META HTTP-EQUIV="REFRESH" CONTENT="0;
URL=http://www.geminisecurity.com/">
</HEAD>

<BODY>
  Please stand by for redirection...
<form>
  <input type="hidden" name="extra_space" value="This extra space is to
prevent internet explorer browsers from showing friendly error
messages.
0123456789012345678901234567890123456789012345678901234567890123456789
0123456789012345678901234567890123456789012345678901234567890123456789
0123456789012345678901234567890123456789012345678901234567890123456789
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</form>
</BODY>
</HTML>
```