



Extentrrix Web Access Management Console



Design Document

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Introduction

The Access Management Console extends your ability to manage your Citrix deployment by integrating many of the administrative features of your Citrix products into the Microsoft Management Console (MMC). The features are provided through a number of snap-ins that you can select when you install the Access Management Console or at any time later.

For each product, you administer your deployment items using the appropriate product node, which is located in the console tree under the Access Management Console node.

Controlling Citrix Presentation is usually done using Citrix Management console, Citrix Access suite, or using any developed applications that use the MFCOM APIs. All of those previous ways are hold in the presentation server itself, and you need to be logged in locally. Or you can use other ways to access them and manage your Citrix Presentation Server as connecting using limited RDP connection or install ICA client and connect to the presentation server using it.

Now with Extentrix Web Services 1.0 – Management Edition, you need just an access to the internet and you are willing to control your Presentation Server from anywhere.

Extentrix Web Services 1.0 – Management Edition suite comes with a very helpful web based client that utilizes the web services APIs. It has a nice UI with a familiar tree based design which is full of functionalities to perform tasks easily and with a detailed manual that describes and explains how to use it.

Save time in using the ready developed web based client. -- You can build your own application that is customized according to your need.

Our client program "Web Access Management Console Powered by Extentrix Web Services" is a web based program that simulates Citrix Access Management Console using Extentrix web services.

It supports a lot of functionalities, which mainly the administrator users need during their connection to Citrix Presentation Server. It will help them get information about Presentation Server (such as all information about servers, sessions, applications, Administrators...) for their specific credential, even if they are currently not logging to the system. In addition, it comes with a rich API in control action functionalities (such as delete Admin, enable session, disable application...).

Extentrix web services consist of a number of APIs that can support the same Citrix snap-ins functionality.

This manual shows how to use Extentrix Web services1.0 – Management Edition; create a proxy and invoke its APIs using a client program as a sample that verifies Extentrix Web services 1.0 – Management Edition idea and simulates Citrix Access Management Console.

Requirements

1. If the IIS is installed; you can host our client program using IIS without Visual Web Developer and browse it from there.
If the IIS is not installed, you will need Visual Web Developer Express Edition or any Visual Studio versions.
2. Any web browser.
3. To run the client's program no need for Citrix Presentation Server environment.
Instead we need a hosted Extentrix Web Services 1.0 – Management Edition. And that needs Citrix Presentation Server environment.

List of Files

1. SessionParameters.cs page

This class is a session information class. It is used when a session item is double clicked. So we create an instance of this class for each double clicked session in order to save its information. Then we save these instances in the program session to add them as sub-nodes under their calling product nodes of the tree.

2. CheckPermissions.cs page

This class is the administrator permissions class. It is used when the user adds a new administrator and wants to give him/her a custom privilege with special permissions. These permissions are saved, each one with its state and root node, in order to be added as the permissions of the new administrator.

3. Login.aspx page

This page is the first page in this program; it checks client login validation according to his/her username, password and domain.

In order to log in successfully:

- The client must be a system user on the server machine.
- The client must be added as administrator in Citrix Access Management Console.

When the client presses the log in button, the authentication API will be called. This API will check client log in validation according to the previous conditions. If the client logs in successfully, the authentication API will give him a ticket number that simulates his identity to the server. Also he/she will get the ability to enter the index page. Otherwise, he/she will receive a log in error message.

Also this page acts as a log off page that the user will be redirected to when he/she logs off. It gets him/her out of the program and gives him/her the ability to log in as a new user.

4. Index.htm page

This is the home page and the first page that the user is redirected to after logged in. It consists of three frames (parts):

a. Banner.htm page:

This is the upper part of the index page. It contains our Extentrix web services logo.

b. Tree.aspx page:

It contains all the products nodes which simulate the one located under the Access Management Console node.

By clicking one of the last list nodes, you can view its information, properties and its inner items. Also you can do special actions associated with each product node.

This page is filled by calling the required APIs during the page load. Each API is responsible of getting its one of the node internal items. Then they are added to the main tree as sub-nodes under their main nodes.

c. RecordsView.aspx page:

This page is responsible of viewing information as records about the selected product node.

- It contains a dropdown menu list for the selected product node. It is filled with the required displays during page load depending on the selected product node. Each list item is a link to one of the node displays views.
- The product information is filled by calling the required API during page load.
- The available displays are also filled by calling the required API during page load according to the selected product node.

d. TableView.aspx page:

This page is responsible of viewing the selected node display as a table.

- It contains a dropdown menu list for the selected product node. It is filled with the required displays during page load depending on the selected product node. Each list item is a link to one of the node displays views.
- The selected display table is filled by calling the required API during page load.

5. AddAdmin.aspx page

This page is the add administrator page. It helps the user add a new administrator with the required privileges: view only, full admin or custom with specific permissions.

6. Message.aspx page

This page is responsible for sending a message from an application session.

7. VIP.aspx page

This page is the virtual IP page. It is responsible for getting IP ranges, editing them and deleting them.

8. EditVIPRange.aspx page

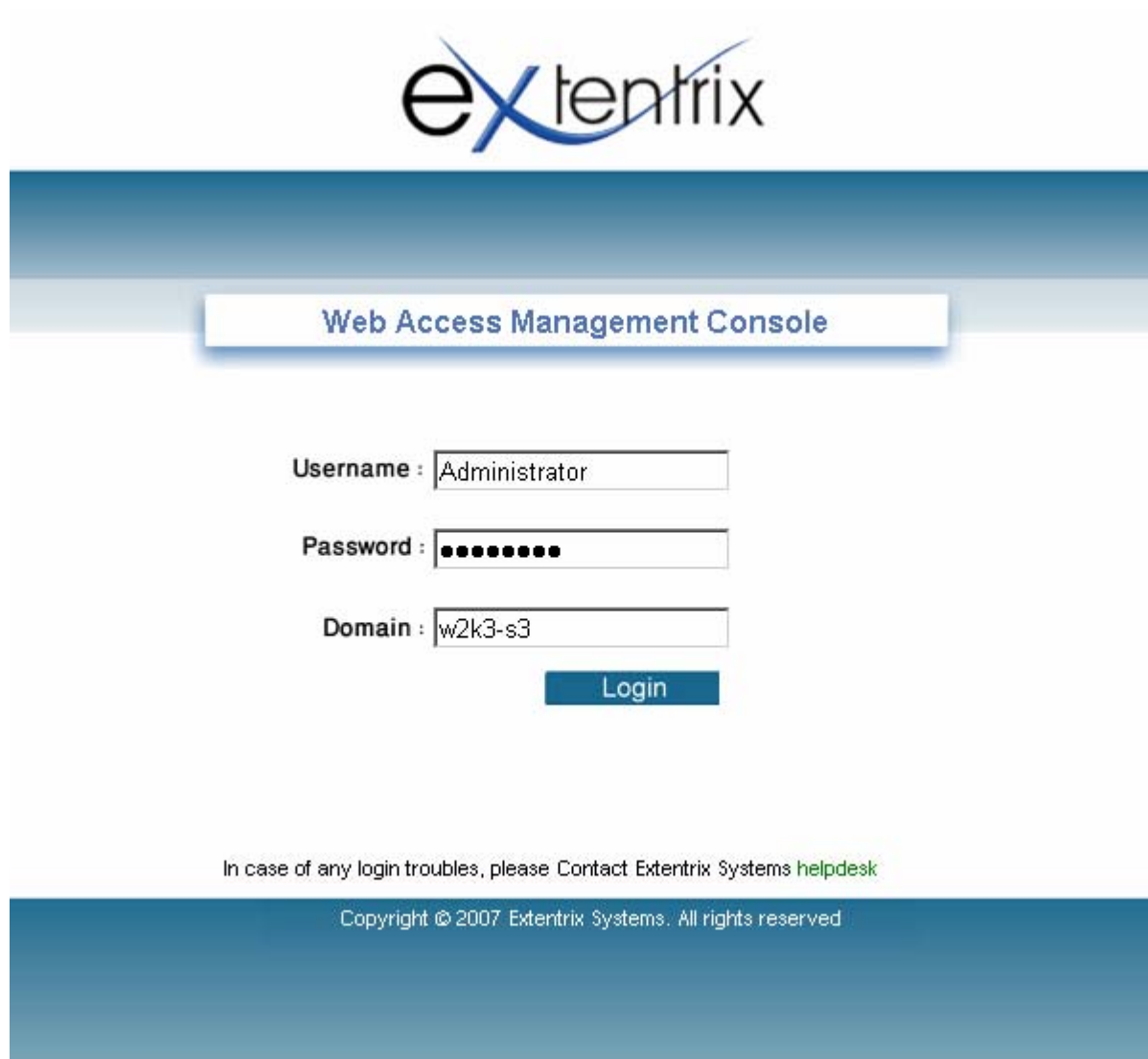
This page is the IP range editing page. It is responsible for editing starting IP address, ending IP address and the Subnet mask.

User Interface

1. Login.aspx page

This is the login page. It contains username, password and domain fields to be filled by the client; also it contains a log in button.

You can enter your username, password and domain here and click Login button. If you are logged in successfully, you will be redirected to the index page. Otherwise, you will get a log in error message and stay at the same page.



The screenshot displays the Extentrix Web Access Management Console login interface. At the top, the Extentrix logo is centered. Below it, a blue gradient bar contains the text "Web Access Management Console" in white. The login form consists of three input fields: "Username" with the value "Administrator", "Password" with masked characters (dots), and "Domain" with the value "w2k3-s3". A blue "Login" button is positioned below the domain field. At the bottom of the form area, there is a link: "In case of any login troubles, please Contact Extentrix Systems [helpdesk](#)". The footer of the page, within a blue gradient bar, reads "Copyright © 2007 Extentrix Systems. All rights reserved".

Figure1: Valid Login



Web Access Management Console

Username :

Password :

Domain :

Please fill Username, Password and Domain

In case of any login troubles, please Contact Extentrix Systems [helpdesk](#)

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Figure2: Missing username or password



The screenshot shows the Extentrix Web Access Management Console login interface. At the top, the Extentrix logo is displayed. Below it, a blue gradient bar contains the text "Web Access Management Console". The login form consists of three input fields: "Username" with the value "Administrator", "Password" (empty), and "Domain" with the value "w2k3-s3". A blue "Login" button is positioned below the domain field. A red error message, "Invalid Username, Password or Domain", is centered below the form. Below the error message, a link for "helpdesk" is provided. At the bottom of the page, a blue gradient bar contains the copyright notice: "Copyright © 2007 Extentrix Systems. All rights reserved".

Figure3: Invalid username or password

Also this page acts as a log off page that the user will be redirected to when he logs.

2. Index.htm page

This page consists of these three frames (parts):

a. Header part:

This is the upper part of this page. It contains our Extentrix web services logo.

b. Tree part:

This is the left part of this page. It contains all the products nodes which are same

as the one located under the Access Management Console node:

- Presentation Server node.
- Farm node.
- Administrators node.
- Servers node.
- Applications node.
- Zones node.

And their sub items nodes.

c. Main part:

This is the right part of the index page. It views the required information about the selected product node.

It is filled by one of these pages according to the selected display view:
RecordsView.aspx page or TableView.aspx page.

1. RecordsView.aspx page:

This page is responsible of viewing information as records about the selected product node.

It consists of these four parts:

- Product node name as a title.
- Dropdown list of the available displays for the selected node, you can choose the view that you want just by selecting it from the list.
- The main information of the selected product node viewed as records.
- The same available displays listed as links with brief description.

These are some examples:

As we can see in the figure below; if you click on the Notepad application node, its information page (RecordsView.aspx) appears.

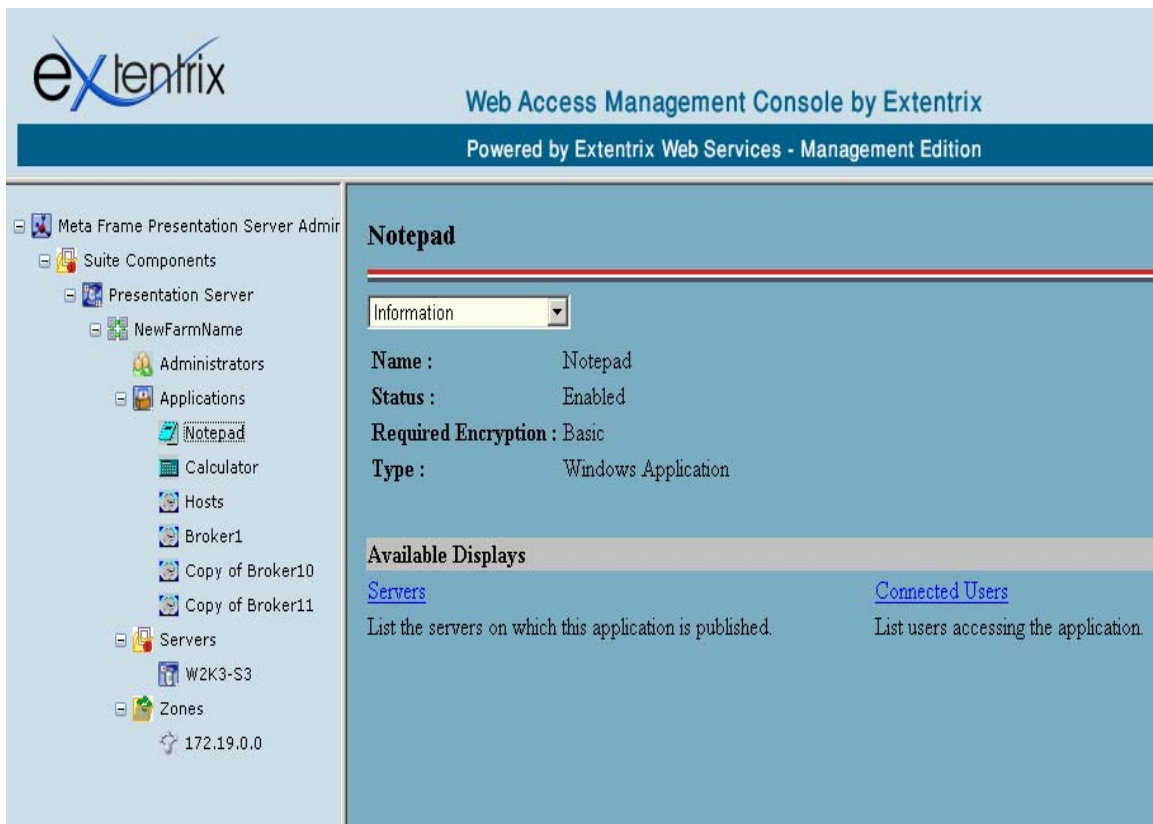


Figure4: Notepad node information

If you click also on the server (W2K3) node, its information page (RecordsView.aspx) appears as we can see in the figure below.

The screenshot displays the Extentrix Web Access Management Console interface. The top header includes the Extentrix logo and the text "Web Access Management Console by Extentrix" and "Powered by Extentrix Web Services - Management Edition". On the left, a navigation tree shows a hierarchy: Meta Frame Presentation Server Administration > Suite Components > Presentation Server > NewFarmName > Administrators > Applications > Servers > W2K3-S3. The main content area is titled "W2K3-S3" and features a dropdown menu set to "Information". Below this, a table lists server details:

Server:	W2K3-S3
Service Pack:	2006.10
Operating System Type:	ADV
TCP Address:	172.19.8.103
Session Count:	3
Version:	System__ComObject

Below the table, there is a section titled "Available Displays" with a grid of links and descriptions:

Users	Sessions
List user sessions on the server.	List sessions on the server.
Processes	Published Applications
List processes on the server.	List applications published on the server.
Hotfixs	
Hotfix management displays.	

Figure5: Server node information

2. TableView.aspx page:

This page is responsible of viewing the selected node display as a table.

It consists of four parts:

- Product node name.
- Dropdown menu list of the available displays for the selected product node, you can choose the view you want just by selecting it from the list.
- The selected display information appears in a table view.
- The available tasks associated with each item of the displayed table. These tasks appear only if the client selects (single click) that item.

These are some examples:

- If you click on the server (W2K3) node and choose the processes display view from the dropdown menu, its table information page (TableView.aspx) appears as shown in the figure below.

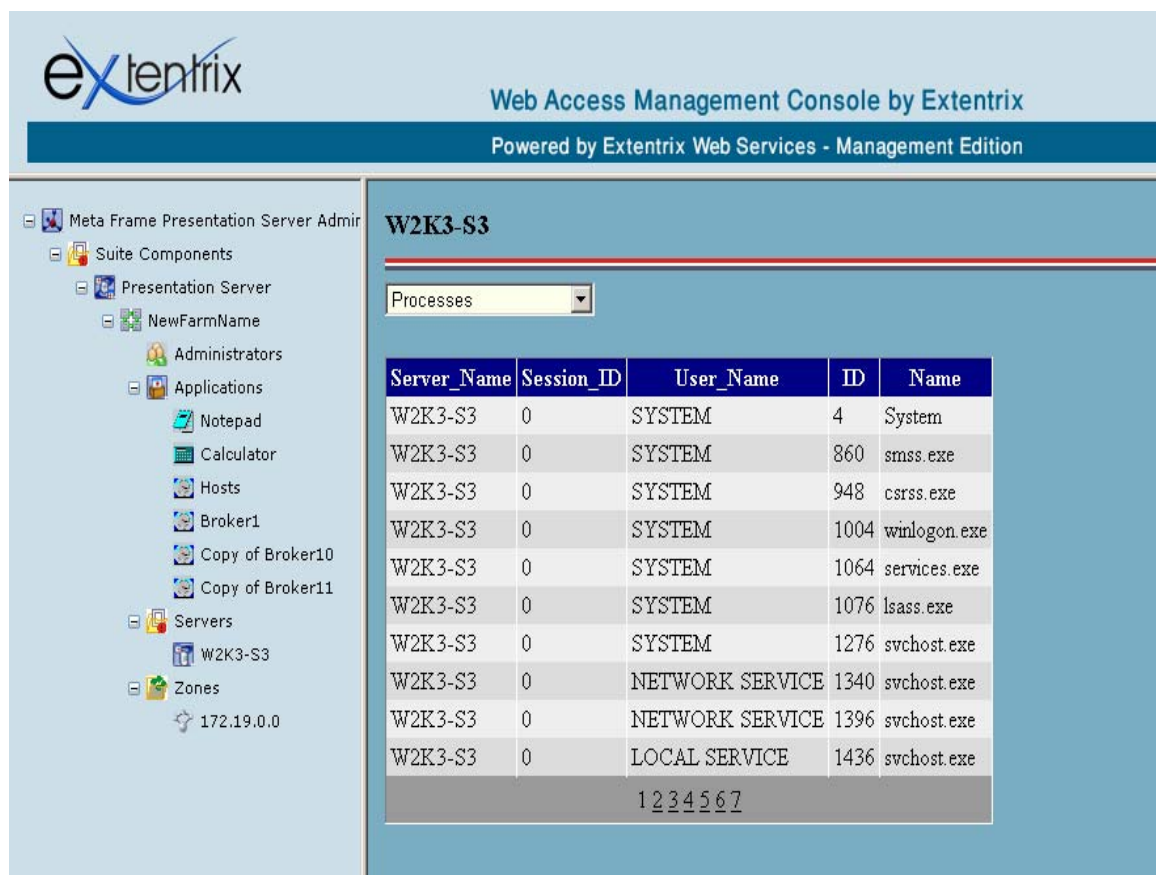


Figure6: Server node processes

- If you click on the Zones node, its table information page (TableView.aspx) appears as shown in the figure below.

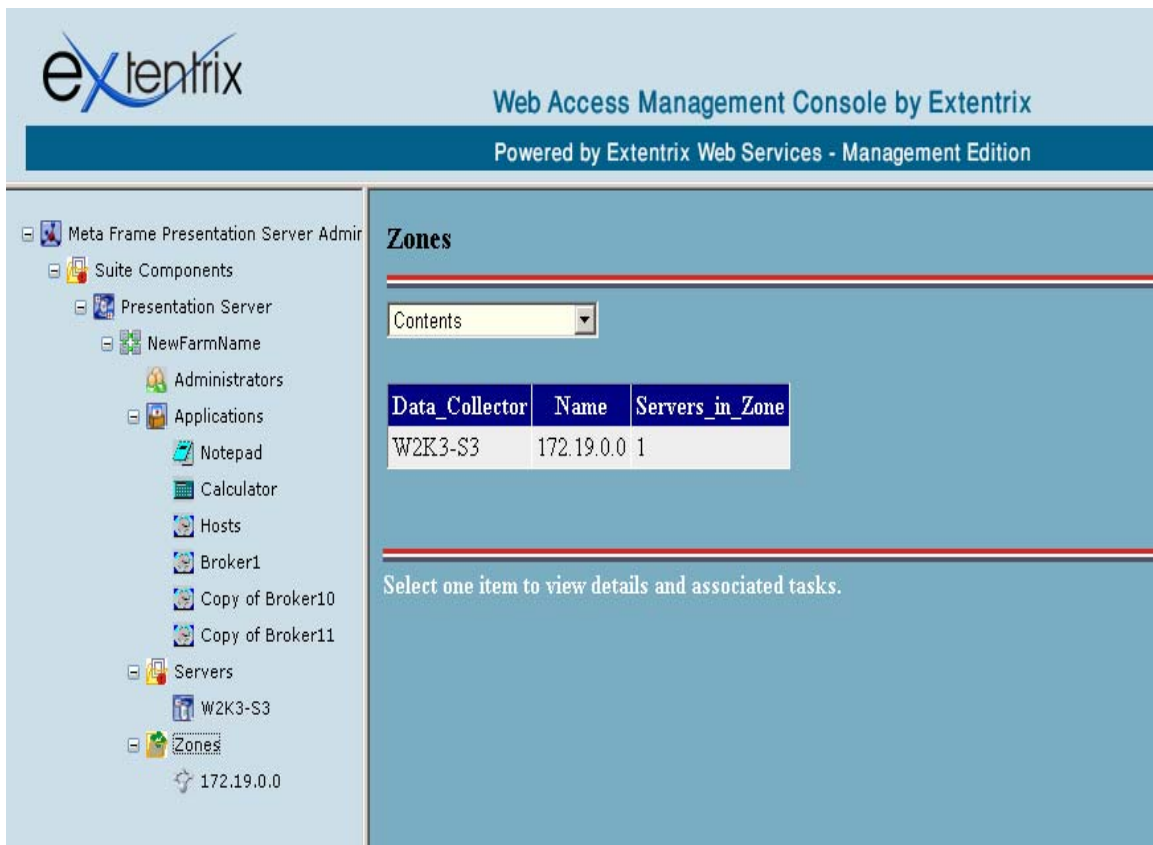


Figure7: Zones node contents

- If you click on the Farm node and choose users display view from the dropdown list, its table information page (TableView.aspx) appears as shown in the figure below.

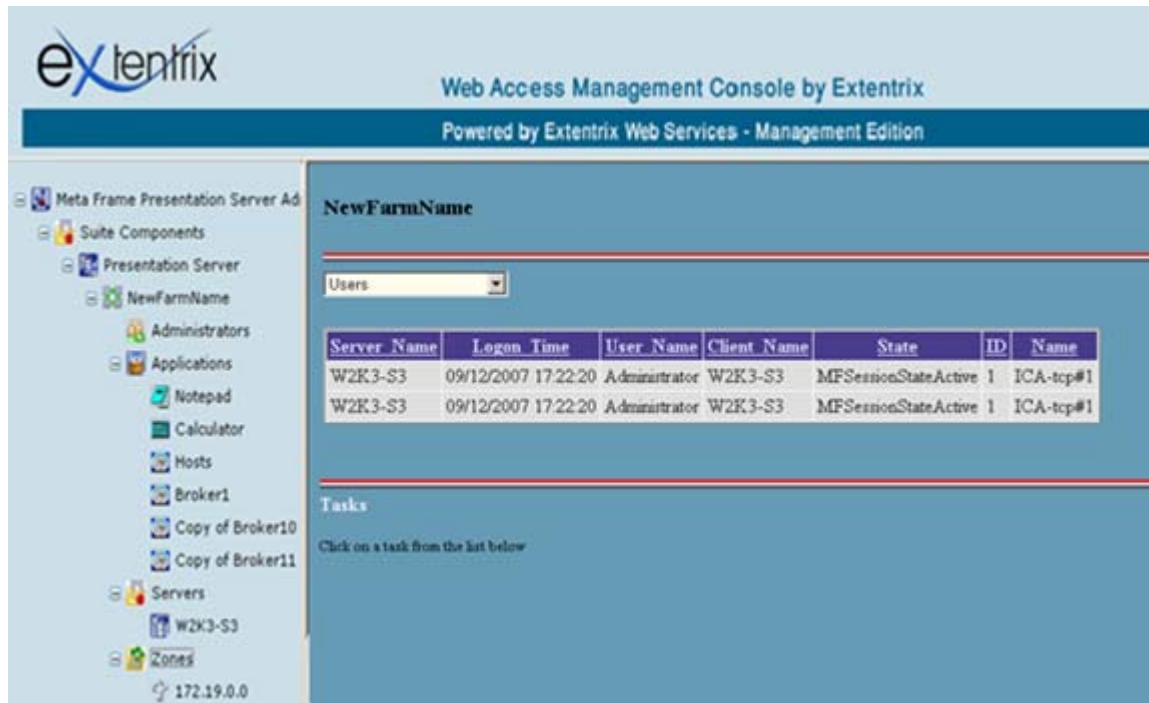


Figure8: Farm node users

- The tasks of each table item appear under the table when the client selects (single click) that item. Each task represents an item action and is implemented using the required API.

For example; if you select (single click) one of the previous users, its associated tasks appear under the information table.

The screenshot displays the Extentrix Web Access Management Console interface. The title bar reads "Web Access Management Console by Extentrix" and "Powered by Extentrix Web Services - Management Edition". The left sidebar shows a tree view with nodes for "Meta Frame Presentation Server Ad", "Suite Components", "Presentation Server", "NewFarmName", "Administrators", "Applications", "Servers", and "Zones". The main content area is titled "NewFarmName" and features a "Users" dropdown menu. Below the dropdown is a table with the following data:

Server Name	Logon Time	User Name	Client Name	State	ID	Name
W2K3-S3	09/12/2007 17:22:20	Administrator	W2K3-S3	MFSessionStateActive	1	ICA-tcp#1
W2K3-S3	09/12/2007 17:22:20	Administrator	W2K3-S3	MFSessionStateActive	1	ICA-tcp#1

Below the table is a "Tasks" section with the instruction "Click on a task from the list below" and three links: "Log off", "Disconnect", and "Send Message".

Figure9: Selected user tasks

- When the client double clicks one of the product table items, he/she will be redirected to that item information page.

If the product node is sessions or users, the double clicked item will be added under its main calling node of the main tree as sub-node, in addition to redirecting the client to that item information page.

For example; if you double click any of the previous users, it will be added as a sub-node under a Temporary Items node under the Farm node and also you will be redirected to that user information (RecordsView.aspx) page.

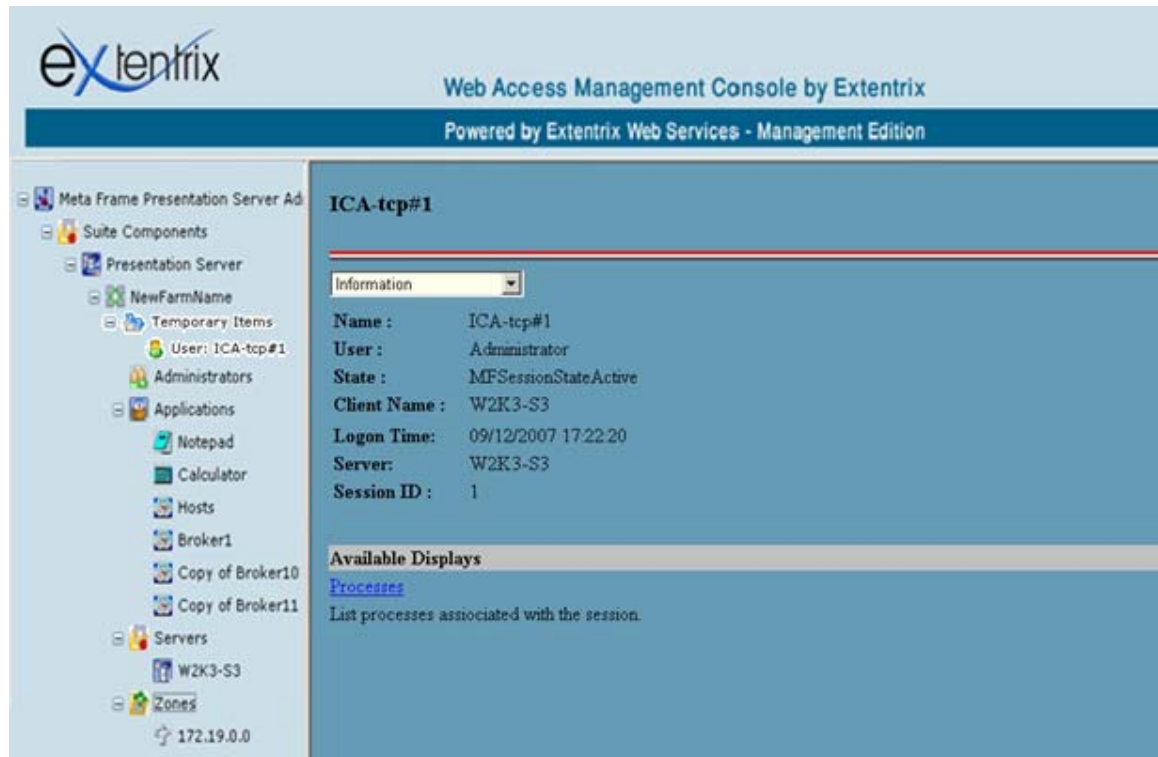


Figure10: User information page after double clicking it

3. AddAdmin.aspx page

This page is responsible of adding a new administrator. It appears when you click on Add Administrator from the administrators view, as shown below.

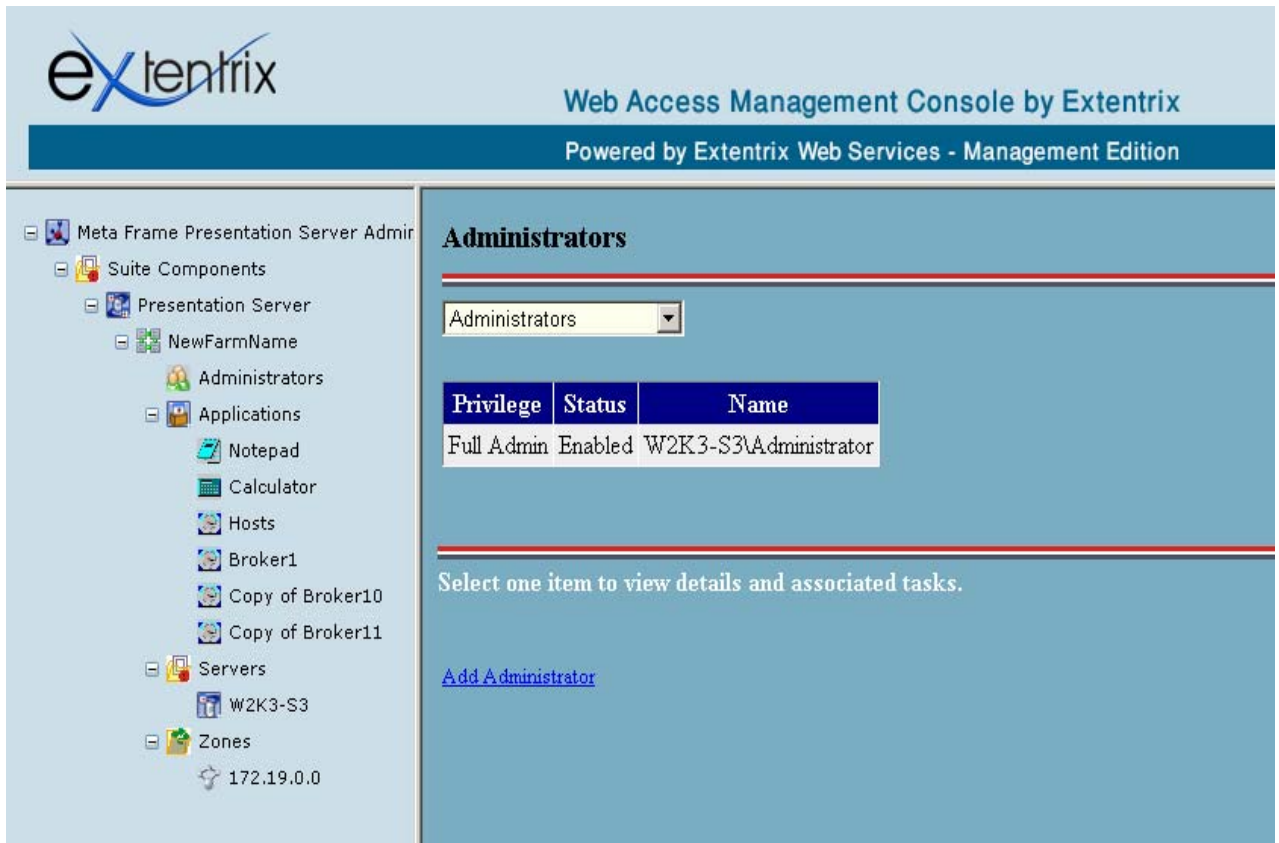


Figure11: Administrators view

Then Add Admin.aspx will open, as shown below:

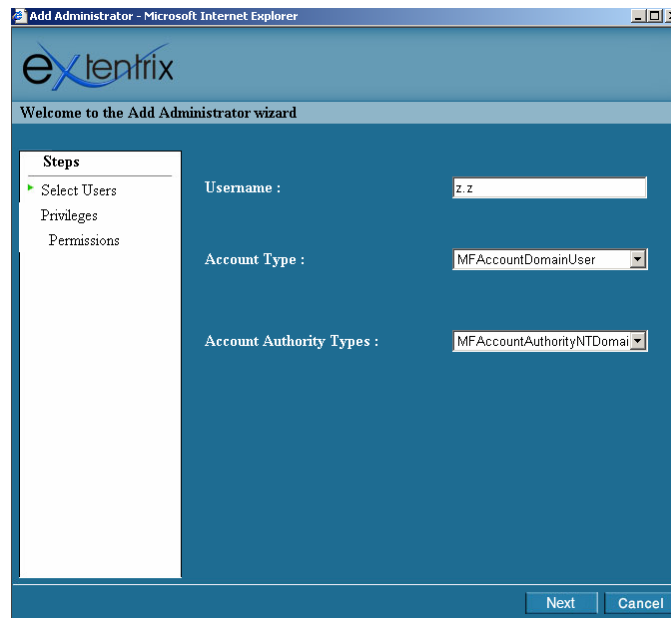


Figure12: Add administrator first page (select users)

Now you can enter your username, Account Type and Account Authority Types then click **Next**.

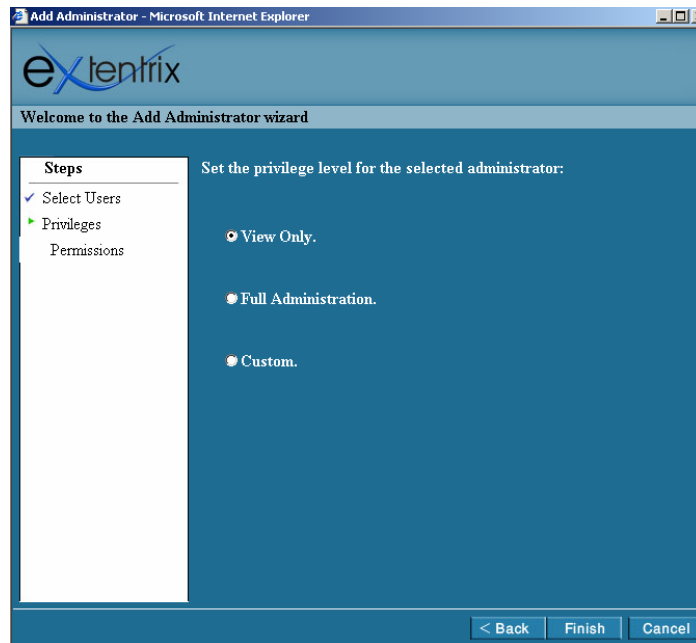


Figure13: Add administrator second page (select privilege level)

Now you can choose your privilege level. If you choose View Only or Full Administration, then you can click **Finish** to add this administrator.

If you choose Custom level, then you can click **Next** to select the required permissions, as shown below:

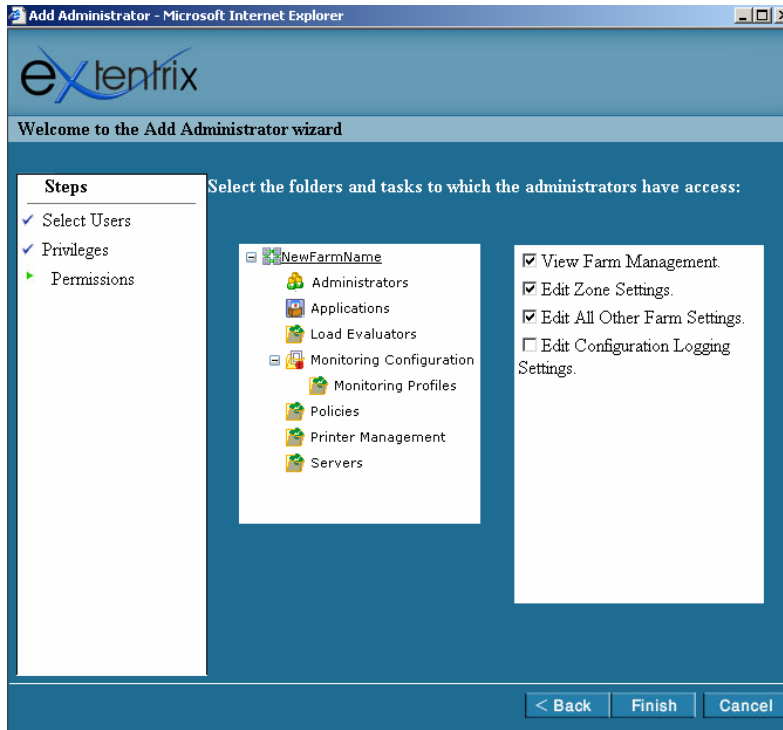


Figure14: Add administrator second page (select permissions)

Now you can choose the required permissions from each node and click **Finish**. Then your new administrator will be added as shown below:

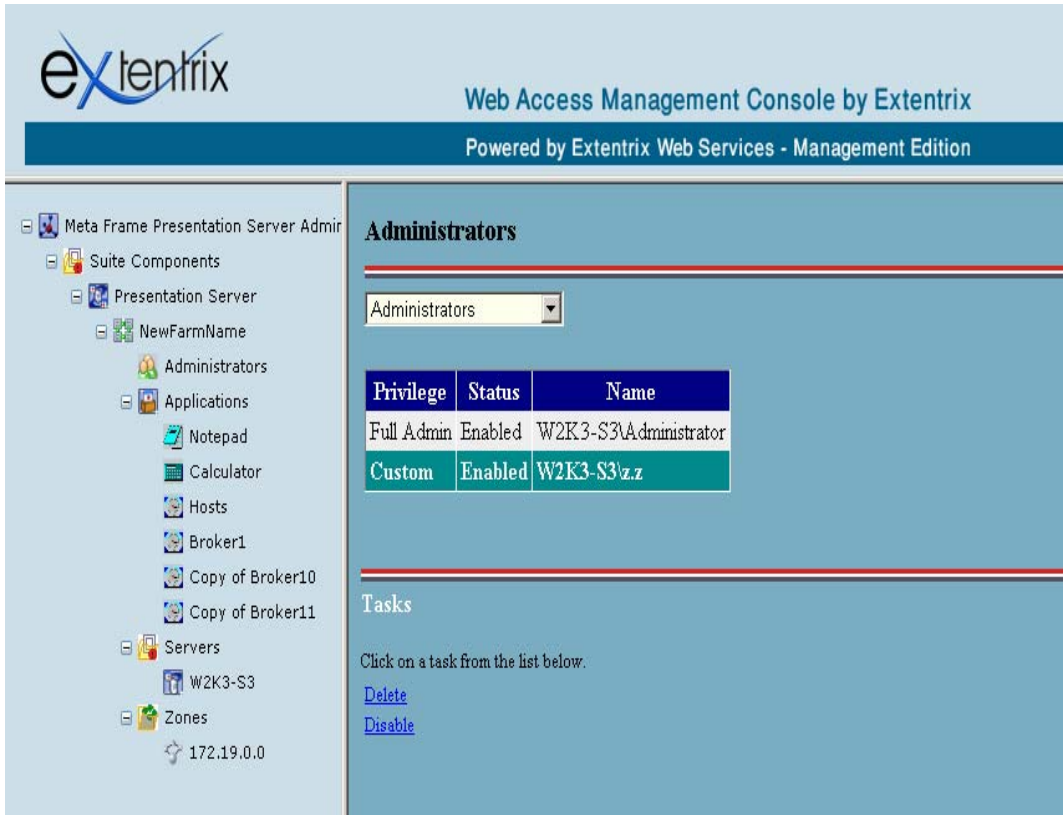


Figure15: Administrators view after adding the new administrator

When you select it, its associated tasks are shown.

4. VIP.aspx page

This page is responsible for modifying the virtual IP properties. It appears when you click on Modify VIP properties from the farm view, as shown below:

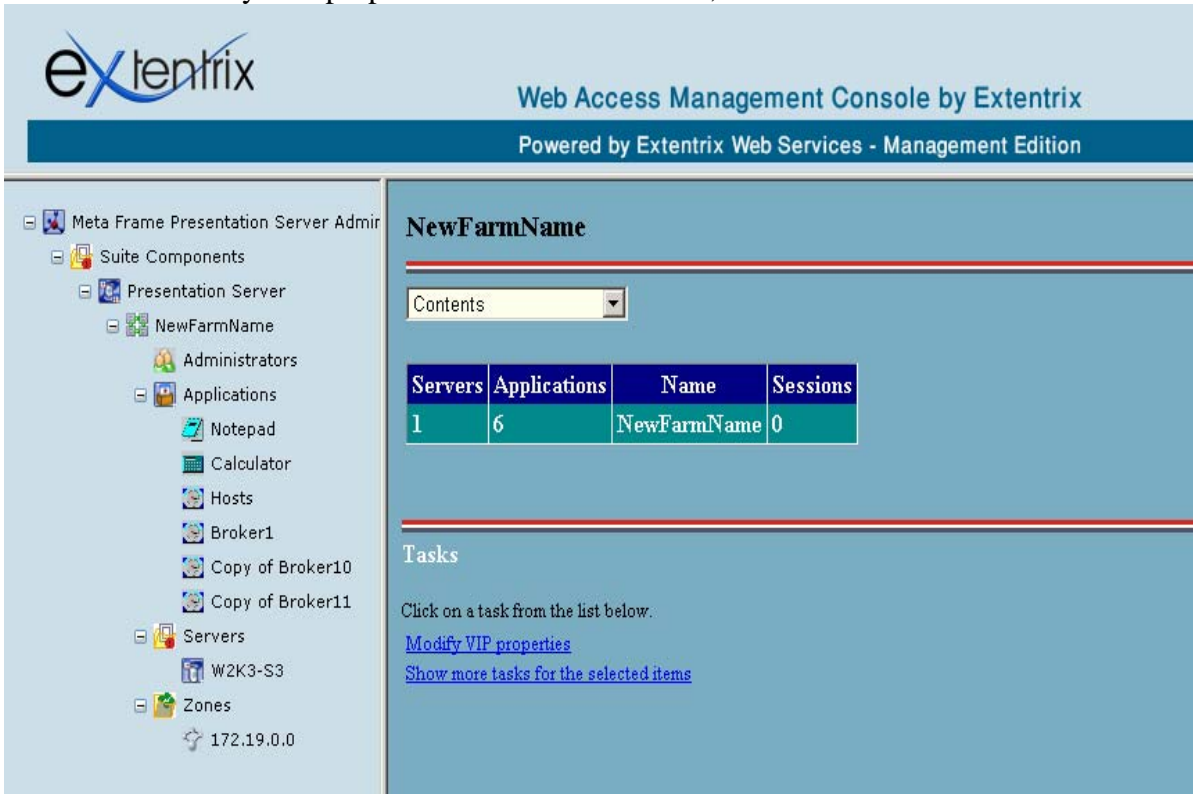


Figure16: Farm view that contains a link to modify VIP properties

After that, VIP.aspx page will appear as shown below:

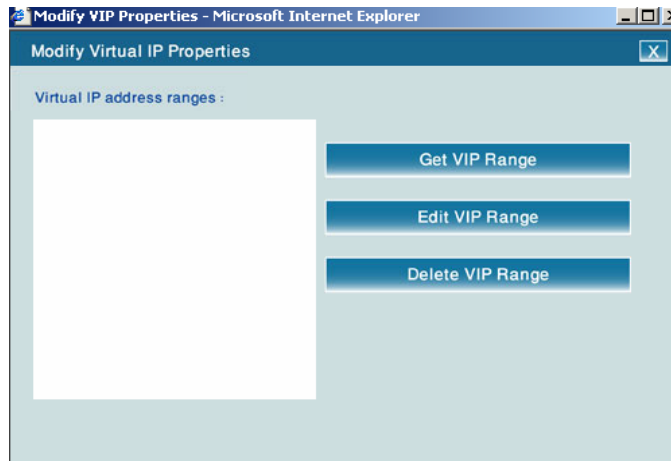


Figure17: Modify VIP properties form

You can click on **Get VIP Ranges** to get the available VIP ranges as shown below:

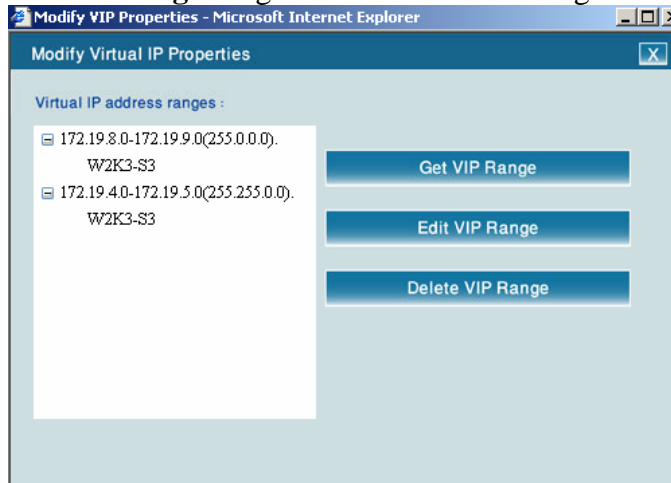


Figure18: View VIP ranges

Also you can delete VIP range by selecting it and click **Delete VIP Range** as shown below:

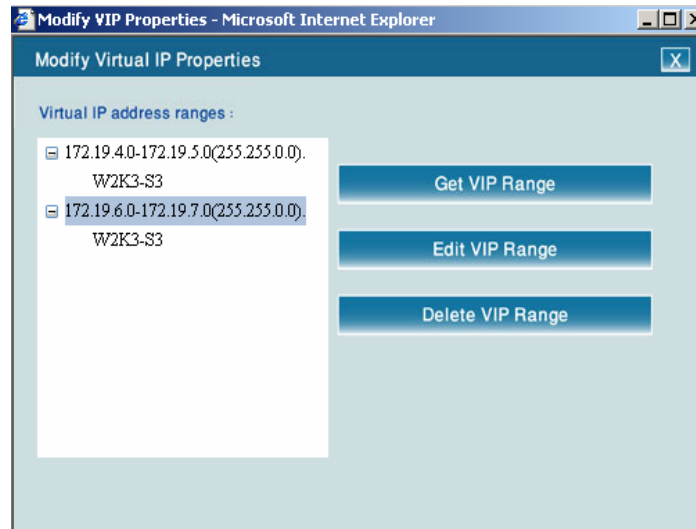


Figure19: Selecting one VIP range to delete

So after clicking **Delete VIP Range**, the selected range will be removed as shown below:

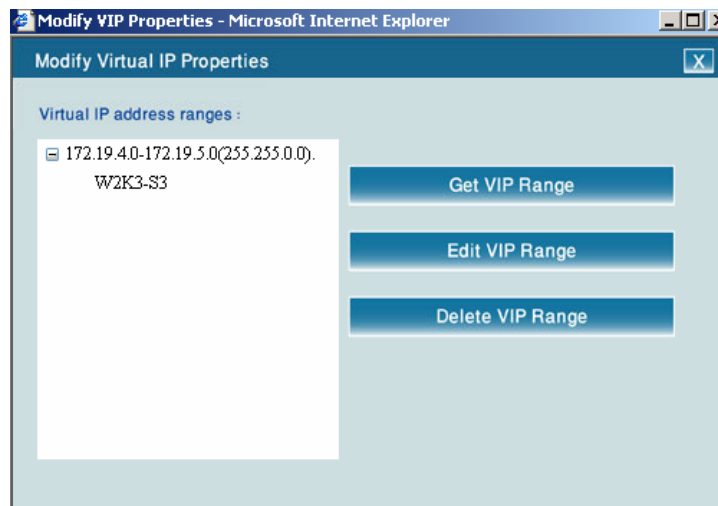


Figure20: View VIP ranges after deleting that range

In addition, you can edit VIP range by selecting it and click **Edit VIP Range**. The EditVIPRange.aspx page will appear containing the selected range fields as will appear in the next page.

5. EditVIPRange.aspx page

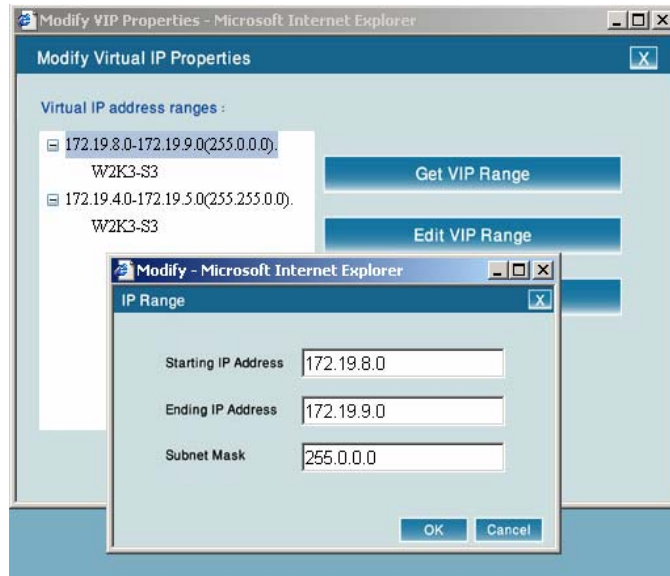


Figure21: Modify VIP properties form

This page is responsible of editing a VIP range. You can put your new range and subnet as shown below, and then click **OK**.

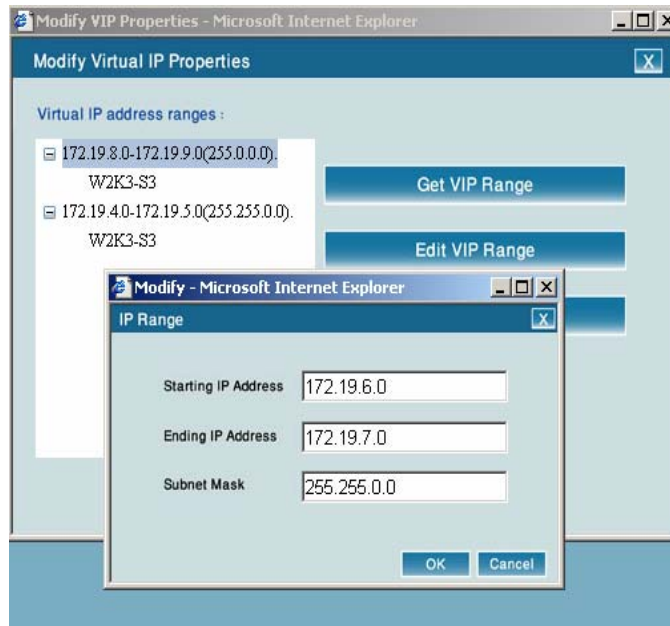


Figure22: Put a new VIP range

So the selected VIP range will be modified with the new range as shown below:

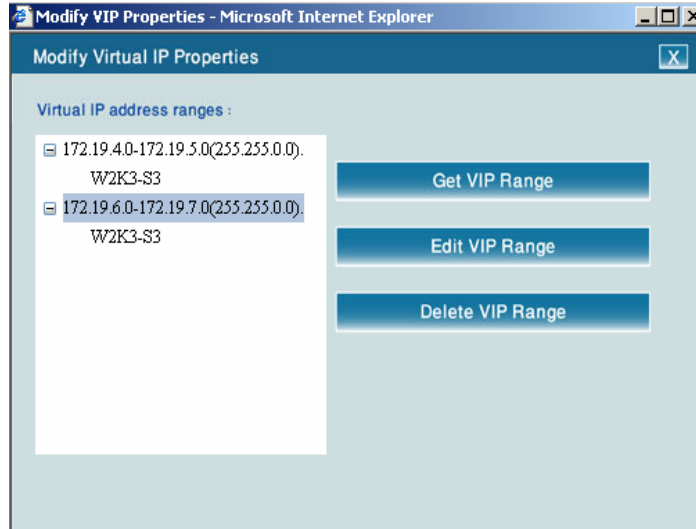


Figure23: View VIP properties after modify

6. Message.aspx page

This page is responsible of sending message from a selected session. It appears when you click Send Message from a selected opened session as shown below:

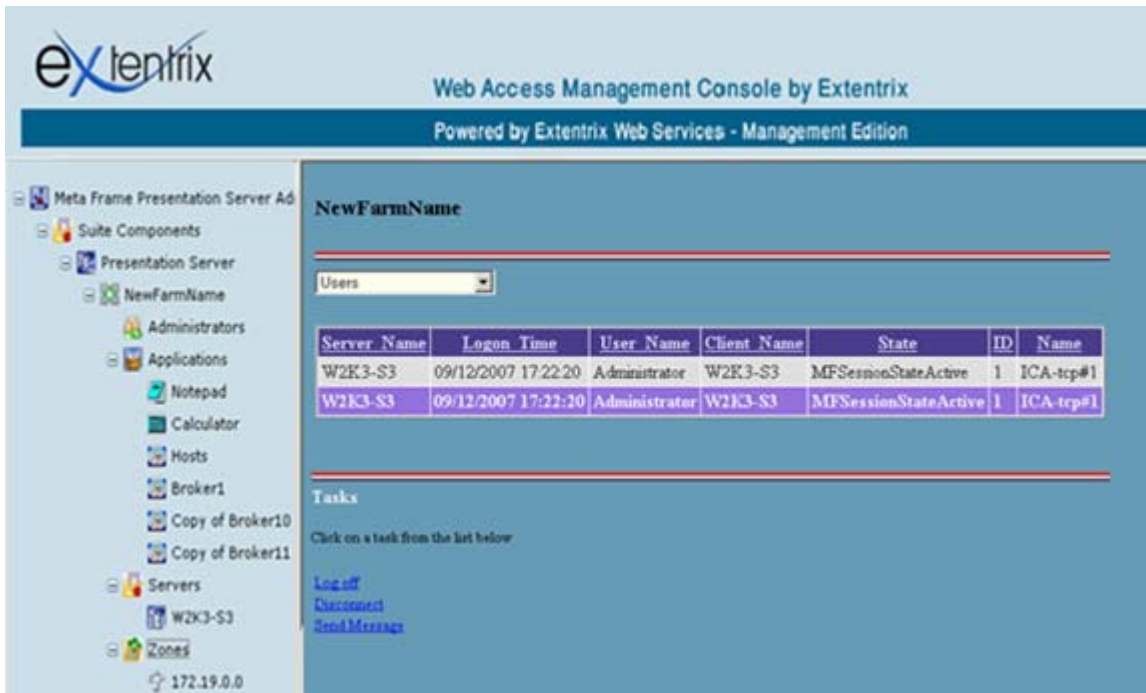
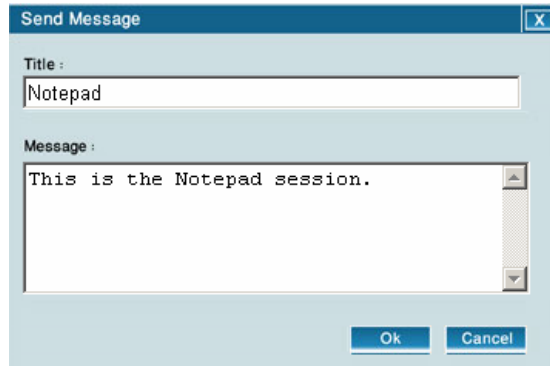


Figure24: Selecting one opened session from users view

After that Message.aspx will appear. Now you can write your message as shown below and click **OK**:



The image shows a standard Windows-style dialog box titled "Send Message". It has a blue title bar with a close button (X) on the right. Below the title bar, there are two main sections: "Title:" and "Message:". The "Title:" section has a text input field containing the word "Notepad". The "Message:" section has a larger text area containing the text "This is the Notepad session.". At the bottom right of the dialog box, there are two buttons: "Ok" and "Cancel".

Figure25: Send message form

How to integrate Extentrix Web Services 1.0 – Management Edition with your client using Visual Studio

1. You need to add a web reference to Extentrix Web Services 1.0 – Management Edition by following these steps:

- a. Right click your project node and select **Add Web Reference** as in the figure below.

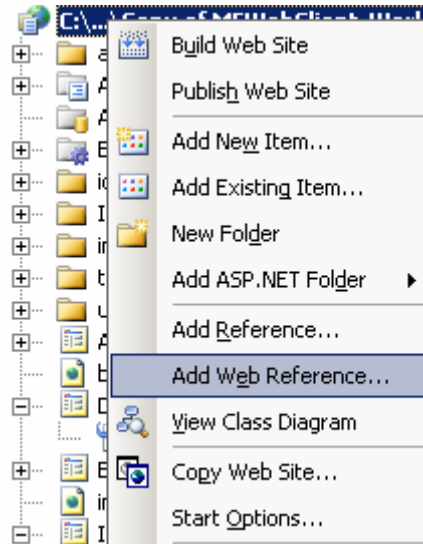


Figure26: Adding a web reference

- b. A window named “**Add Web Reference**” will appear. Add the URL of your Extentrix Management Web Services in **URL** field and click **GO**.

<http://localhost/Extentrix/AdminWS3/ExtentrixManagementWebServices.asmx>

For more information, refer to [Administrator’s Guide](#).

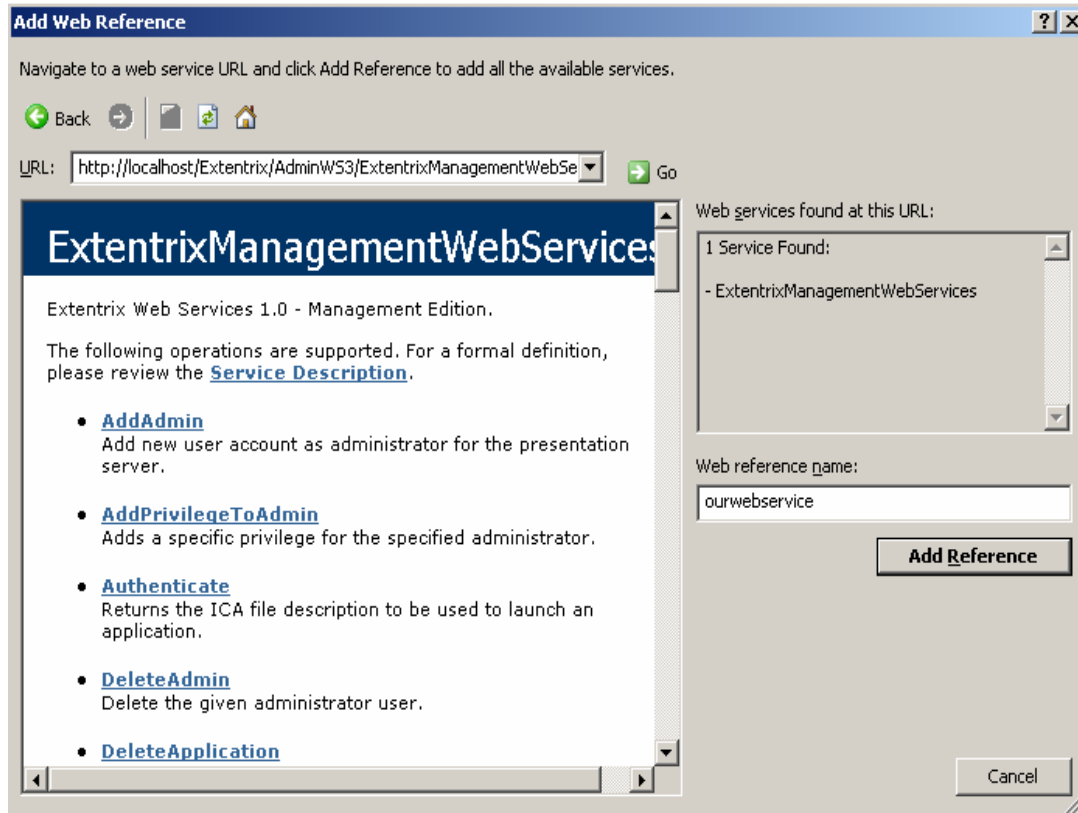


Figure27: Integrating the web service

c. In **Web reference name** field, give a suitable name for the web reference and click **Add Reference**.

2. If you want to use our web based client then you need to name the web reference as “ourwebservice” because we use it internally with this name.

If you want to use your own client, you need to add the following Using statements to invoke the web services:

```
Using webservice;  
webservice : the name of the your web reference.
```

How to Call Extentrix Web Services 1.0 – Management Edition APIs using ASP.Net

1. You need to create an object from the created web service reference.

```
ourwebservice.ExtentrixManagementWebServices proxy = new  
ourwebservice.ExtentrixManagementWebServices();
```

2. Invoke an API.

For example to call GetServers API:

```
ourwebservice.Server [] servers = proxy.GetServers (ticket);
```

Where:

`Server`: is a built in structure in the created web service reference that contains the required server attributes.

`ticket`: is the client ticket number.

Here we invoke GetServers API that gets all the servers in the farm.

We retrieve these servers information in an array of server structure.

Another example to call LogOffSession API:

```
bool success = proxy.LogOffSession (sessID, ticket);
```

Where:

`sessID`: is the selected session id number to be logged off.

`ticket`: is the client ticket number.

`success`: is the Boolean result of implementing LogOffSession API. If this API is done successfully, success will be true. Otherwise, it will be false.

Here we invoke LogOffSession API that logs off the session.

Support

For any support issues, please email your questions or problems to:
support@extentrix.com

Glossary

Web Service A Web Service is a software component that is described via WSDL and is capable of being accessed via standard network protocols such as but not limited to SOAP over HTTP.

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About Extentrix

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