

Virtual Server in SP883

1 Introduction:

- 1.1 Micronet SP883 is a hard QoS broadband router, means its guaranteed service can provide absolute reservation of resource (bandwidth) for specific traffic ; Not only a soft QoS product – only treating some traffic with priority service.
- 1.2 Due to its policy functionality, virtual server function needs to be applied in Incoming policy for the activation.
- 1.3 This application note is aimed at easy configuration for the virtual server with customized service in SP883

2 System Requirements:

2.1 Hardware

- 2.1.1 One SP883 broadband routers
- 2.1.2 Two computers (One Acer notebook and one desktop computers are adopted) with an installed 10/100Mbps Ethernet interface for internal management functionality

2.2 Software & Protocols

Below components should be available or installed in the systems

- 2.2.1 Microsoft I.E.5.0 or later version or Netscape Navigator 4.0 or later version
- 2.2.2 TCP/IP protocol installed in both the testing computers' networking interface card

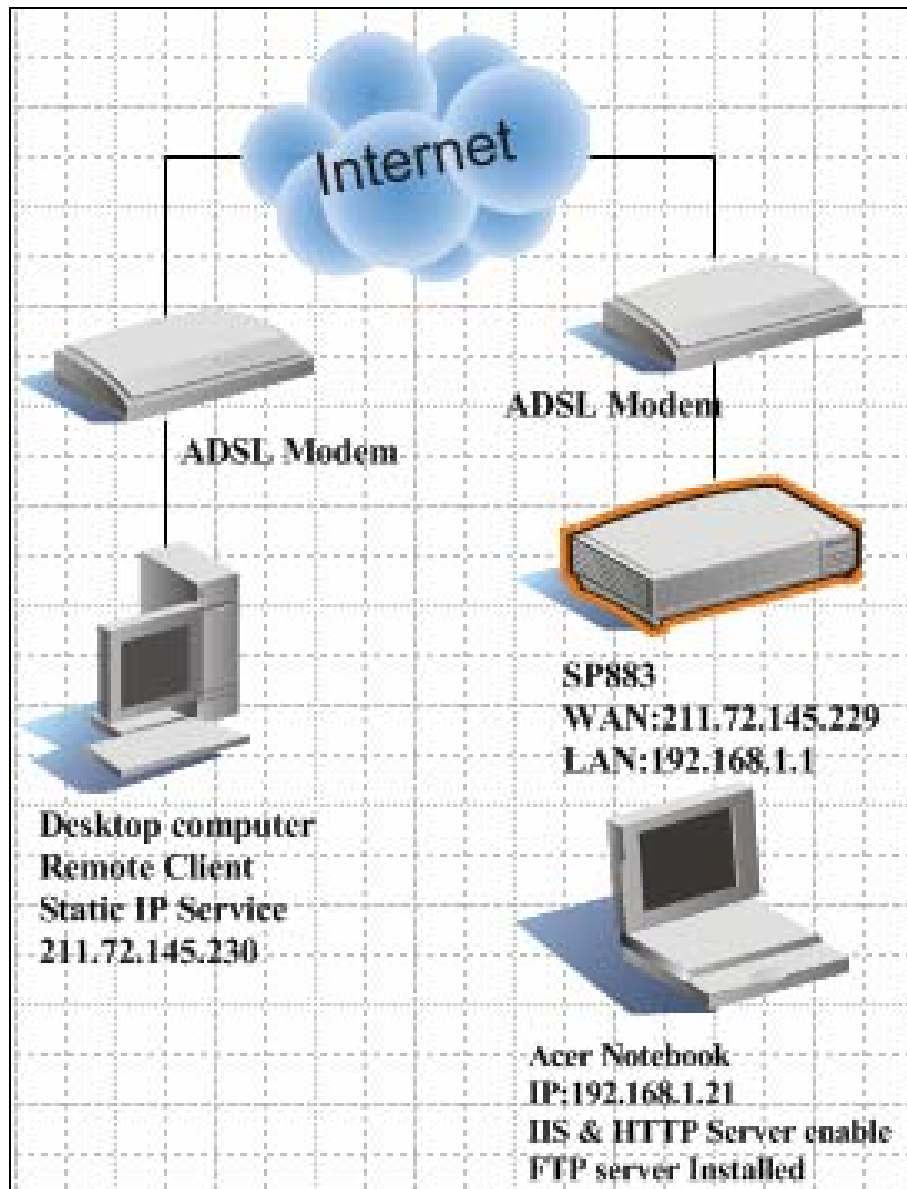
2.3 FTP server and HTTP server installed and enabled

- 2.3.1 In this note, we use one static IP internet access service for SP883 site and Acer notebook behind the SP883
- 2.3.2 HTTP server is created using IIS service and enabled the service in Acer notebook
- 2.3.3 FTP server is created using Serv-U software and enabled in Acer notebook

2.4 The testing desktop computer also gets the Internet surfing service

3 Application networking architecture:

- 3.1 In this application note, the Acer notebook will host HTTP and FTP server services for the remote client usage.
- 3.2 All the service hosting is configured as customized service but using the original port number.
- 3.3 We conclude the networking architecture as the figure below. For more detailed information, please go the later paragraphs.



4 SP883 Virtual Server configuration:

4.1 Interface Configuration:

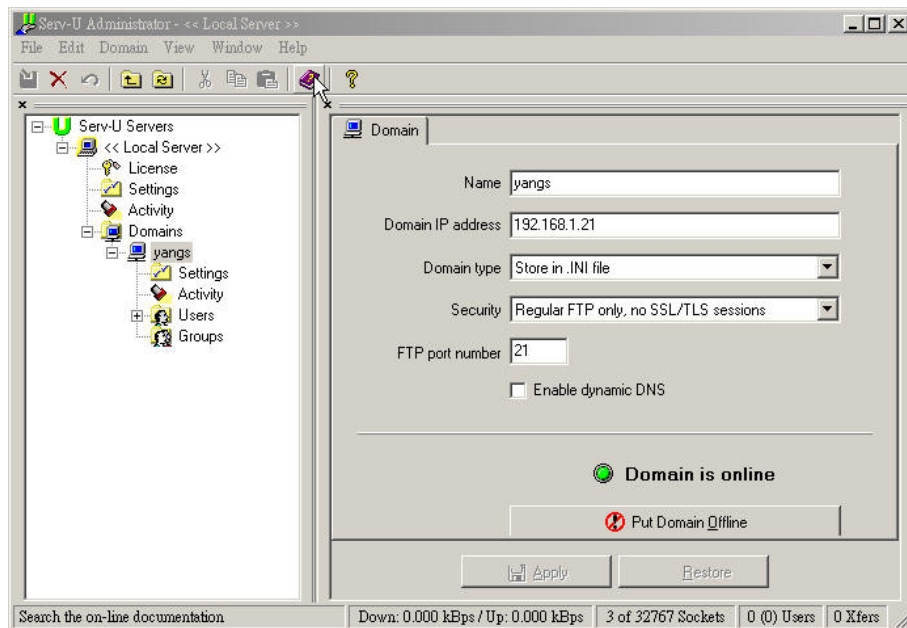


4.2 For Acer notebook behind the SP883:

4.2.1 Install IIS 5 and open HTTP service

4.2.2 Create a simple HTML page for the test.

4.2.3 Install Serv-U application and configure the FTP server information and testing account.



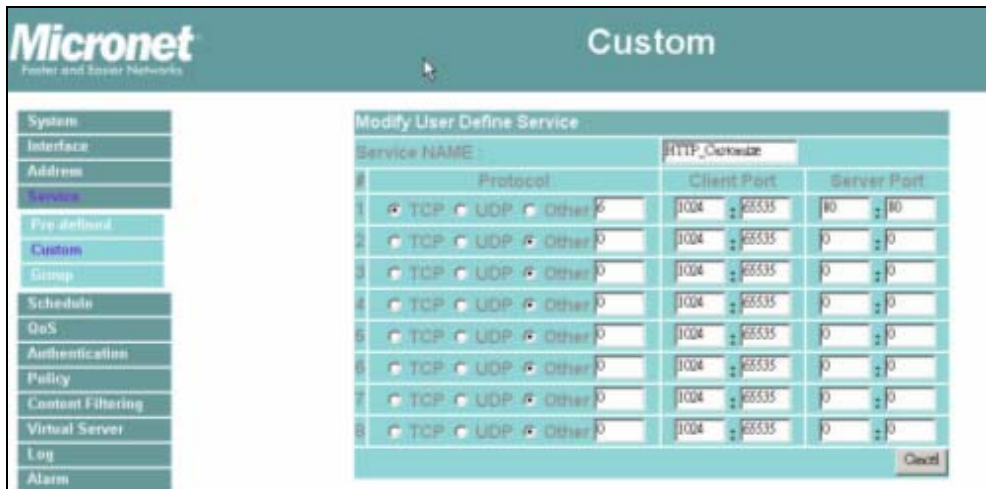
4.3 Customized Service add:

4.3.1 For more applications usage, we use customize services for the case

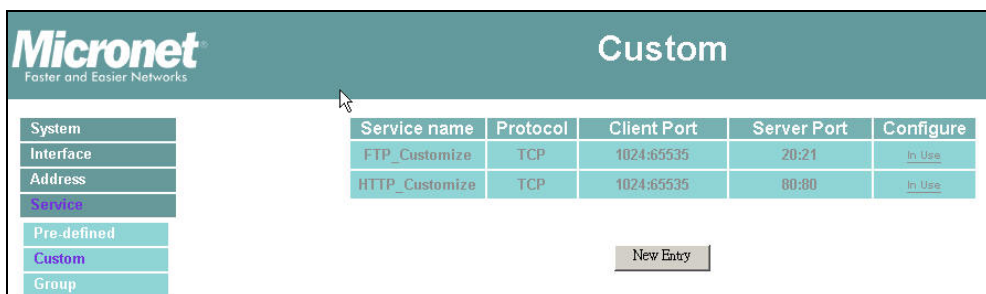
4.3.2 Go to **Service** → **Custom** and add the FTP service using original port number as 20 and 21 (do not change the default client port number if you are not 100% sure your application service port number usage)



4.3.3 Add the HTTP service port (using port 80) via the same process



4.3.4 After the customized service added, the Custom service will show the setup result as the figure below.



4.4 SP883 Virtual Server configuration:

4.4.1 The next step is the virtual server configuration

4.4.2 Please go to **Virtual Server** → **Virtual Server 1**

4.4.3 You have to assign the virtual server IP at first time clicking the virtual server 1. You can click the assistance for the available external IPs list (which is according to your interface configuration)

4.4.4 Select a external IP in the IP list, we use 211.72.145.229 in the case

4.4.5 Select the **FTP_Customize** option from **Service Name (Port)** list (the customize service normally located at the bottom of the list)

Load Balance Server	Server Virtual IP
1	192.168.1.21
2	
3	
4	

4.4.6 Configure the HTTP virtual server via the same process.

4.4.7 After configuration, the virtual server will show as figure below.

4.4.8 As the customized service, when the rule is used in later system configuration, the Configure field will show In Use and will not allow to change the using rule! (You have to remove the policy or virtual server first)

Service Name (Port)	External Port	Server Virtual IP	Configure
FTP_Customize	From-Service (Custom)	192.168.1.21	In Use
HTTP_Customize	80	192.168.1.21	In Use

4.5 Incoming Policy configuration

4.5.1 Normally we decide the direction according to the traffic activating location, for example:

- **Outgoing:** Clients are located in LAN networks and servers are in the WAN networks.
- **Incoming:** Clients are located in WAN networks and servers are in the LAN networks.

4.5.2 So the Internet service hosting should configure the policy in incoming direction.

4.5.3 Go Policy → Incoming, the section will allow to be set after virtual server is configured.

4.5.4 Configure the FTP incoming policy using FTP_customize virtual server.



4.5.5 Configure the HTTP incoming policy using HTTP_customize virtual server via the same process

4.5.6 After two rules are configured, the policy will show the figure below.



5 SP883 Internet Service application for remote client

- 5.1 After all the necessary configurations in the Acer notebook and SP883 site, all the remote clients in Internet can enjoy the server's service.
- 5.2 The figure below shows the FTP service from the internet.



- 5.3 The figure below shows the HTTP service from the Internet

