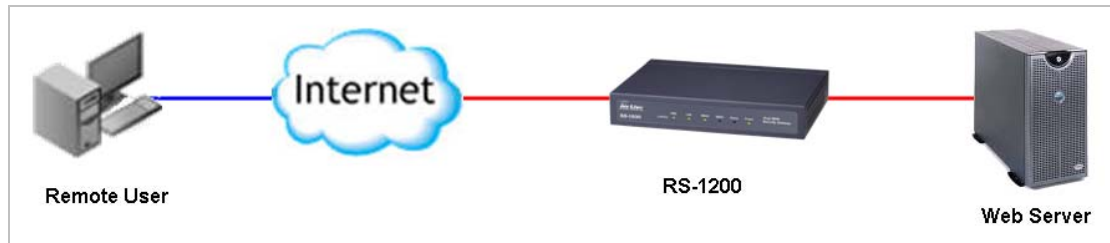# How to configure PAT (Port Address Translation) function at RS Gateway

Environment:

1. The default port of Web Server is set to TCP 8080
2. Remote user accesses website by using TCP 80
3. RS-1200 works to translate the packets between TCP 8080 and TCP 80

Preparation:

1. Assign DDNS domain name to RS-1200, so the remote user can type domain name instead of typing IP address in this example. The DDNS domain name is "**airlive15.dyndns.org**".

2. By default, the RS-1200 remote management port is TCP 80. If user would like to forward TCP 80 port to internal server, and also want to manage RS-1200 from remote side, he has to change remote port number of RS-1200 in **System → Configure → Setting**. For example, the remote management port number change to TCP 1234.

3. Configure Web Server and change its default port number as TCP 8080.
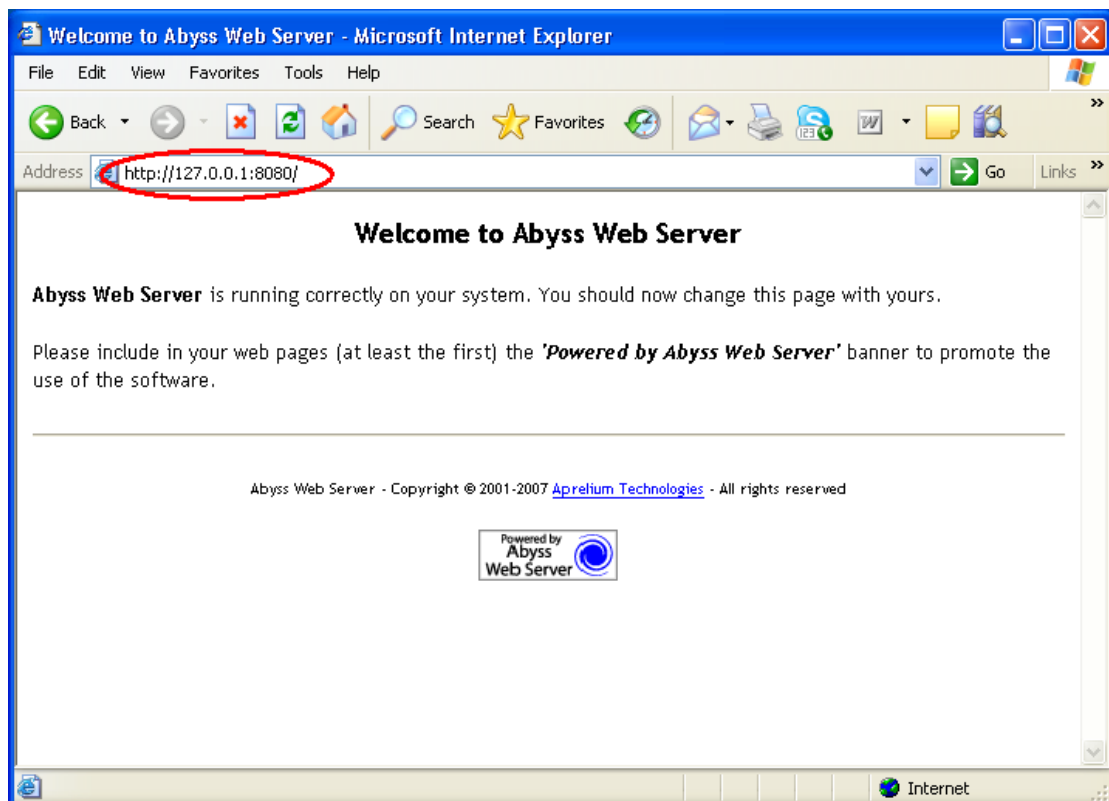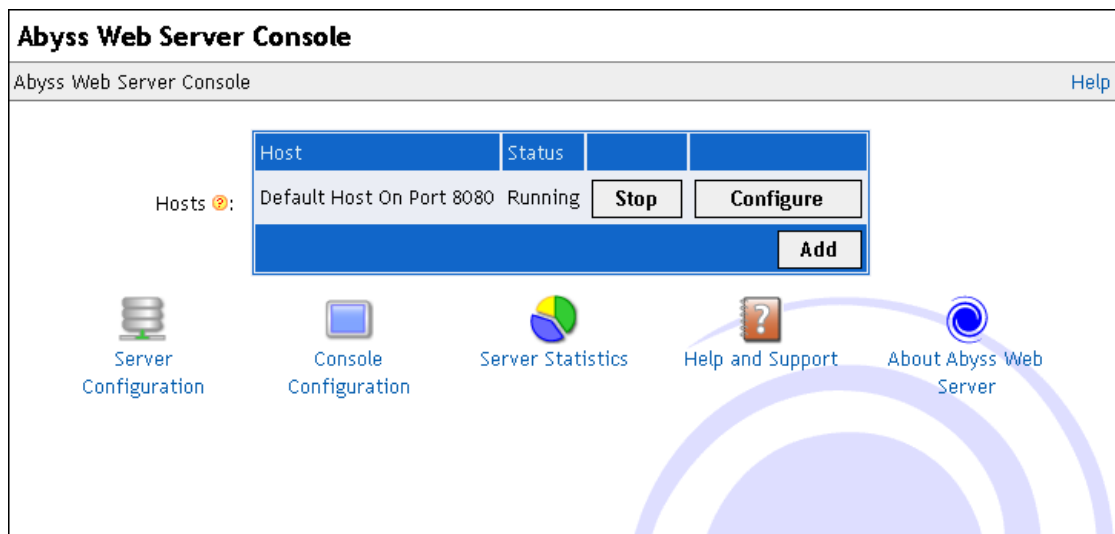
4. Now we can start to configure RS-1200 PAT function.

RS-1200 Configuration steps:

1. **Policy Object → Service → Custom:** Add a new service TCP 8080 for PAT function. While you configure **Custom** setting, please do not change **Client Port** setting, just leave it as default value.

#	Protocol (Range: 1 - 255)		Client Port (Range: 0 - 65535)		Server Port (Range: 0 - 65535)	
		PAT_Address		(Max. 16 characters)		
1	⦿ TCP ○ UDP ○ Other	6	0	65535	8080	8080
2	○ TCP ○ UDP ⦿ Other	0	0	0	0	0
3	○ TCP ○ UDP ⦿ Other	0	0	0	0	0

Service NAME : PAT_Address

2. **Policy Object → Virtual Server → Server1:** Click "Click here to configure" to configure **Virtual Server Real IP** setting. Then press "New Entry" to define virtual server rule.

Virtual Server Real IP	click here to configure		
Service	WAN Port	Server Virtual IP	Configure

Add New Virtual Server IP			
Virtual Server Real IP	61.229.43.27	WAN1 ▾	Assist

Virtual Server Real IP	61.229.43.27		
Service	WAN Port	Server Virtual IP	Configure
	New Entry		

3. Choose the custom service we just created at **Service** item, and change the **External Service Port** value to 80, then to define the server IP address. Click **OK** to save the setting.

Virtual Server Configuration		
Virtual Server Real IP	61.229.43.27	
Service	(Custom Service)PAT_Address ▾	
External Service Port	80	(Range: 0 - 65535)
Load Balance Server		Server Virtual IP
1		192.168.1.2
2		

4. **Policy → Incoming:** Click "**New Entry**" to create a new Incoming Policy, RS-1200 system will import Virtual Server setting to Incoming Policy automatically. You can enable Traffic Log, QoS, or else function for this rule, or just leave the rule as default and click OK to save the setting.

Source	Destination	Service	Action	Option	Configure	Move

New Entry

Add New Policy

Source Address	Outside_Any
Destination Address	Virtual Server 1(61.229.43.27)
Service	PAT_Address(80)
Schedule	None
Tunnel	None
Action	PERMIT
Traffic Log	☐ Enable
Statistics	☐ Enable
QoS	None
MAX. Bandwidth Per Source IP	Downstream 0 Kbps Upstream 0 Kbps (0: means unlimited)
MAX. Concurrent Sessions Per IP	0 (Range: 1 - 99999, 0: means unlimited)
MAX. Concurrent Sessions	0 (Range: 1 - 99999, 0: means unlimited)
NAT	☐ Enable

5. Remote user connects to web server by using TCP 80.