



## NetVanta 2000 Series FAQ

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# How to Open Ports to Allow (Webserver, FTP, Email, Terminal Service, etc.) to a server behind the NetVanta 2000 Series (Enhanced OS)



*This document is applicable to NetVanta 2600 series, 2700 series, and 2800 series units.*

### Feature/Application:

Manually opening Ports to allow (Webserver, FTP, Email, Terminal Service, etc.) from Internet to a server behind the NetVanta 2000 Series in SonicOS Enhanced involves the following steps:

Step 1: Creating the necessary Address Objects

Step 2: Defining the appropriate NAT Policies (Inbound, Outbound and Loopback)

Step 3: Creating the necessary WAN > Zone Access Rules for public access

**Recommendation:** The Public Server Wizard quickly configure your SonicWALL to provide public access to an internal server. The Public Server Wizard is the most ambitious and functional wizard developed to date. It simplifies the complex process of creating a publicly and internally accessible server resource by automating above mentioned steps.

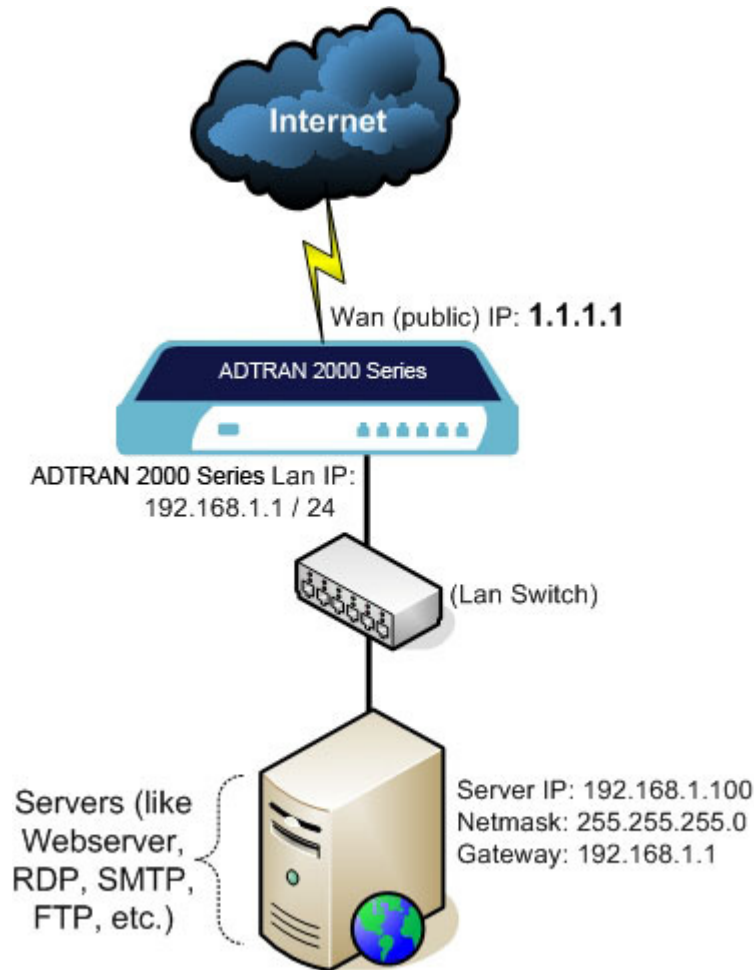
**Alert:** the NetVanta 2000 Series can be managed using HTTP (Port 80) or HTTPS (443) and a Web browser. Both HTTP and HTTPS are enabled by default. If you are using the NetVanta 2000 Series WAN IP address for HTTP or HTTPS port forwarding to a server, then the **default Management port** must be changed to another unused port number (e.g. 8080, 444, 4443, etc.). You can change this under the **System > Administration** page.

### Scenario:

The following example covers allowing **HTTP (webserver)** service from the Internet to a server on the LAN with private IP address as **192.168.1.100**. Once the configuration is complete, Internet users can access the HTTP (webserver) service behind the NetVanta 2000 Series through the **WAN (Public) IP** address **1.1.1.1**.

Procedure:

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## Procedure:

In this example we have chosen to demonstrate using HTTP service, however the following steps apply to any service you wish to use (like HTTPS, SMTP, FTP, Terminal Services, SSH, etc).

### Step 1: Creating the necessary Address Objects

1. Select **Network > Address Objects**.
2. Click the **Add a new address object** button and create two address objects one for **Server IP on LAN** and another for **Public IP** of the server:

<p><b>Address Object for Server on LAN</b></p> <p>Name: <b>Mywebserver Private</b></p> <p>Zone Assignment: <b>LAN</b></p> <p>Type: <b>Host</b></p> <p>IP Address: <b>192.168.1.100</b></p>	 <p>The screenshot shows the configuration window for an address object named 'Mywebserver Private'. The fields are: Name: Mywebserver Private, Zone Assignment: LAN (dropdown), Type: Host (dropdown), and IP Address: 192.168.1.100. At the bottom, there is a 'Ready' status bar and 'OK' and 'Cancel' buttons.</p>
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<p><b>Address Object for Server's Public IP</b></p> <p>Name: <b>Mywebserver Public</b></p> <p>Zone Assignment: <b>WAN</b></p> <p>Type: <b>Host</b></p> <p>IP Address: <b>1.1.1.1</b></p>	 <p>The screenshot shows the configuration window for an address object named 'Mywebserver Public'. The fields are: Name: Mywebserver Public, Zone Assignment: WAN (dropdown), Type: Host (dropdown), and IP Address: 1.1.1.1. At the bottom, there is a 'Ready' status bar and 'OK' and 'Cancel' buttons.</p>
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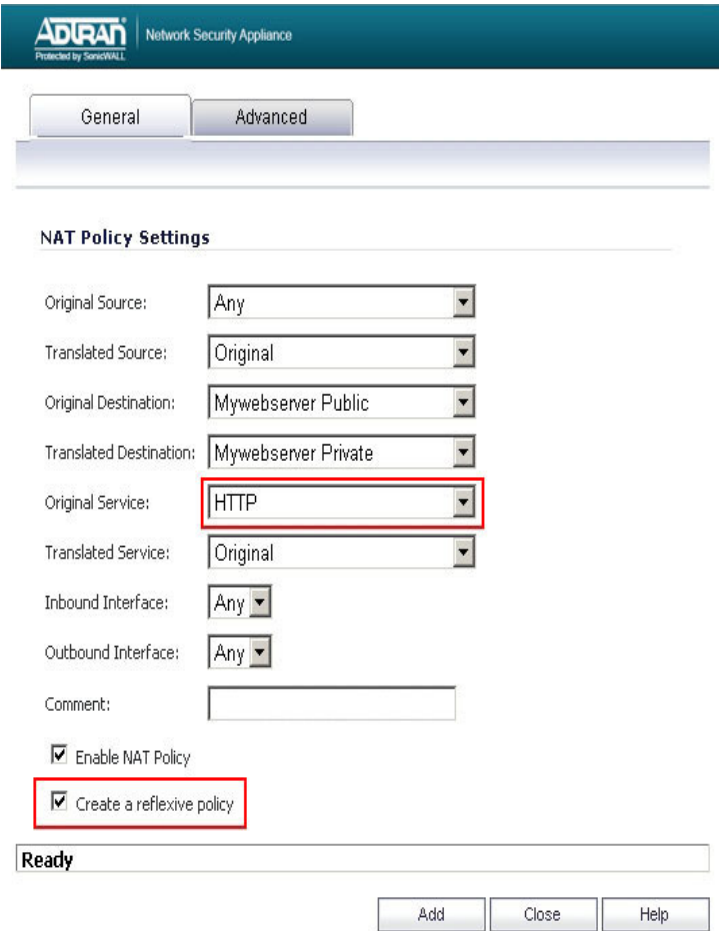
3. Click the **OK** button to complete creation of the new address objects.

**Step 2: Defining the appropriate NAT Policies**

1. Select **Network > NAT Policies**.

2. Click the **Add a new NAT Policy** button and chose the following settings from the drop-down menu:

Understanding how to use NAT policies starts with the construction of an IP packet. Every packet contains addressing information that allows the packet to get to its destination, and for the destination to respond to the original requester. The packet contains (among other things) the requester's IP address, the protocol information of the requestor, and the destination's IP address. The NAT Policies engine in the Enhanced OS can inspect the relevant portions of the packet and can dynamically rewrite the information in specified fields for incoming, as well as outgoing traffic.

<p><b>Adding appropriate NAT Policies</b></p> <p>Original Source: <b>Any</b></p> <p>Translated Source: <b>Original</b></p> <p>Original Destination: <b>Mywebserver Public</b></p> <p>Translated Destination: <b>Mywebserver Private</b></p> <p>Original Service: <b>HTTP</b></p> <p>Translated Service: <b>Original</b></p> <p>Inbound Interface: <b>Any</b></p> <p>Outbound Interface: <b>Any</b></p> <p>Comment: Webserver behind SonicWALL.</p> <p>Enable NAT Policy: <b>Checked</b></p> <p>Create a reflexive policy: <b>Checked</b></p>	
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**NOTE** *Create a reflexive policy: When you check this box, a mirror outbound or inbound NAT policy for the NAT policy you defined in the Add NAT Policy window is automatically created.*

3. Click the **Add** button.

### Loopback Policy:

If you wish to access this server from other internal zones using the Public IP address 1.1.1.1 consider creating a Loopback NAT Policy else go to next step:

- **Original Source:** Firewalled Subnets
- **Translated Source:** Mywebservers Public
- **Original Destination:** Mywebservers Public
- **Translated Destination:** Mywebservers Private
- **Original Service:** HTTP
- **Translated Service:** Original
- **Inbound Interface:** Any
- **Outbound Interface:** Any
- **Comment:** Loopback policy
- **Enable NAT Policy:** Checked
- **Create a reflexive policy:** unchecked

#	Source		Destination		Service		Interface		Priority	Comment	Enable	Configure
	Original	Translated	Original	Translated	Original	Translated	Inbound	Outbound				
<input type="checkbox"/> 1	Firewalled Subnets	My webservers Public	My webservers Public	My webservers Private	HTTP	Original	Any	Any	17		<input checked="" type="checkbox"/>	
<input type="checkbox"/> 2	My webservers Private	My webservers Public	Any	Original	HTTP	Original	Any	Any	18		<input checked="" type="checkbox"/>	
<input type="checkbox"/> 3	Any	Original	My webservers Public	My webservers Private	HTTP	Original	Any	Any	19		<input checked="" type="checkbox"/>	

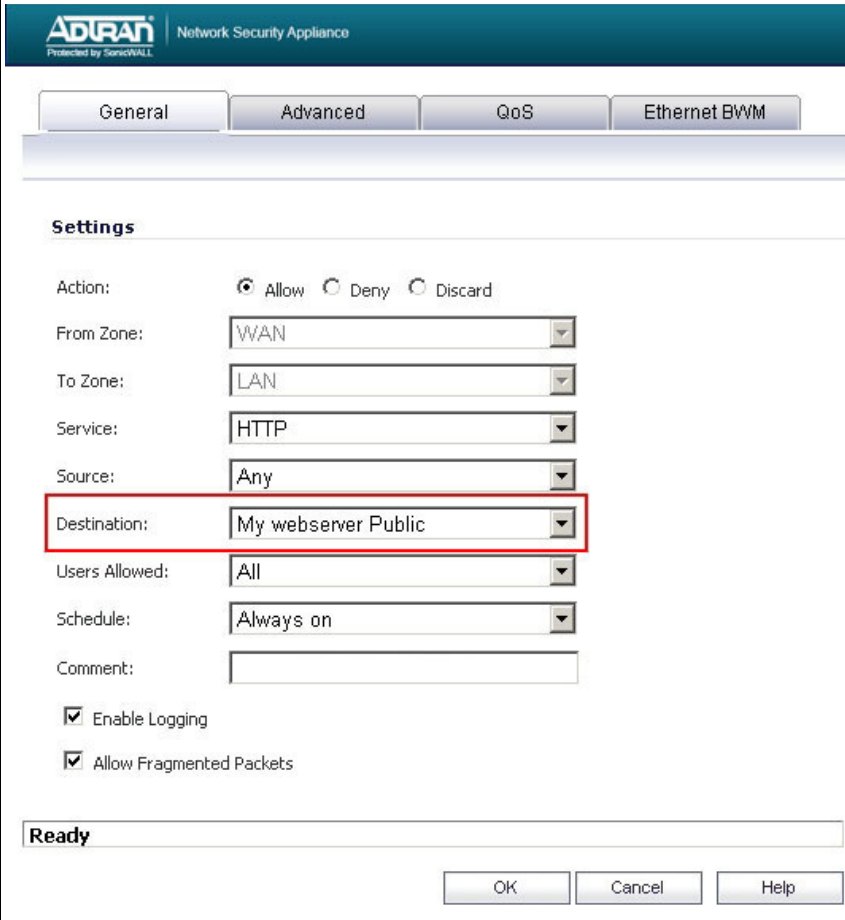
4. Upon completion under **Network > Nat Policies** tab the above **Inbound** and **Outbound** NAT policies will be created.

### Step 3: Creating Firewall Access Rules

1. Click **Firewall > Access Rules** tab.
2. Select the type of view in the **View Style** section and go to **WAN to LAN** access rules.
3. Click **Add a new entry** and create the rule by entering the following into the fields:

**Caution:** The ability to define network access rules is a very powerful tool. Using custom access rules can disable firewall protection or block all access to the Internet. Use caution when creating or deleting network access rules.

Procedure:

<p>Action: <b>Allow</b></p> <p>From Zone: <b>WAN</b></p> <p>To Zone: <b>LAN</b></p> <p>Service: <b>HTTP</b></p> <p>Source: <b>Any</b></p> <p>Destination: <b>My webserver Public</b></p> <p>Users Allowed: <b>All</b></p> <p>Schedule: <b>Always on</b></p> <p>Enable Logging: <b>checked</b></p> <p>Allow Fragmented Packets: <b>checked</b></p>	 <p>ADTRAN Network Security Appliance Protected by SonicWALL</p> <p>General Advanced QoS Ethernet BWM</p> <p><b>Settings</b></p> <p>Action: <input checked="" type="radio"/> Allow <input type="radio"/> Deny <input type="radio"/> Discard</p> <p>From Zone: WAN</p> <p>To Zone: LAN</p> <p>Service: HTTP</p> <p>Source: Any</p> <p>Destination: My webserver Public</p> <p>Users Allowed: All</p> <p>Schedule: Always on</p> <p>Comment:</p> <p><input checked="" type="checkbox"/> Enable Logging</p> <p><input checked="" type="checkbox"/> Allow Fragmented Packets</p> <p>Ready</p> <p>OK Cancel Help</p>
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4. Under the **Advanced** tab, you can leave the “**Inactivity Timeout in Minutes**” at 15 minutes. Some protocols, such as Telnet, FTP, SSH, VNC and RDP can take advantage of longer timeouts where increased values like 30 or 60 minutes can be tried with caution in those cases. Longer timeout values will not help at all for HTTP or HTTPS.

5. Click **OK**.