

Configuration Aid To Ingate Firewall - How to Configure a Semi-Transparent FTP Relay in Ingate Firewall

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How To Configure a Semi-transparent FTP Relay

With an FTP server on the inside or a DMZ, incoming traffic is normally conveyed using an FTP relay. The flaw of this relay is that for the FTP server, all connections look like they originate from the firewall, which means that the server has no possibility of authenticating or blocking units based on their IP addresses.

The ideal function in this situation would be a semi-transparent FTP relay, analogous with the semi-transparent TCP relay, where the original sender IP address is kept when the packet is forwarded to the FTP server. Unfortunately, there is no such relay today, but with a combination of settings, the function can be achieved. Here are the necessary settings for a semi-transparent FTP relay.

Networks and Computers

On the **Networks and Computers** page, you need a network containing all IP addresses allowed to access the FTP server. Usually, this is the entire Internet.

You also need a network with the IP address of the FTP server itself.

Networks and Computers								
Edit	Name	Subgroup	Lower Limit		Upper Limit (for IP ranges)		Interface/VLAN	Delete
			DNS Name or IP Address	IP Address	DNS Name or IP Address	IP Address		
<input type="checkbox"/>	+ FTP server	-	172.16.0.4	172.16.0.4			DMZ (eth4 untagged)	<input type="checkbox"/>
<input type="checkbox"/>	+ Internet	-	0.0.0.0	0.0.0.0	255.255.255.255	255.255.255.255	External (eth1 untagged)	<input type="checkbox"/>

Relays

Then, go to the **Relays** page under **Relays** and add a new row to the table. Select the outside IP address and port 21 to listen for FTP requests. It is very important to use port 21, or this won't work properly. Enter the FTP server's private IP address to forward to, and select a Semi-transparent TCP port forwarding.

Edit	Listen To ...		Relay To ...			Relay Type	Allow Access From ...		Certificate for TLS/SSL	Time Class	Log Class	Delete
	IP Address	Port	DNS Name or IP Address	IP Address	Port		Network	IPsec Peer				
<input type="checkbox"/>	Outside (193.12.253.115)	21	172.16.0.4	172.16.0.4	21	Semi-transparent TCP port forwarding	Internet	-	-	24/7	Local	<input type="checkbox"/>

Rules

Go to the **Rules** page and create a rule for traffic from Internet to the FTP server. Use FTP as the service.

Edit	Rule No.	Rule State	Client	From IPsec Peer	Server	To IPsec Peer	Direction	Service	Action	Time Class	Log Class	Comment	Delete
<input type="checkbox"/>	1	On	Internet	-	FTP server	-	External -> DMZ	ftp	Allow	24/7	Local		<input type="checkbox"/>

Save/Load Configuration

Finally, go to the **Save/Load Configuration** page under **Administration** and apply the new settings by pressing **Apply configuration**.

Save/Load Configuration Show Configuration User Administration

Test Run and Apply Conf [\(Help\)](#)

Duration of limited test mode:

seconds

When the configuration has been applied, you should save a backup to file. Press **Save config to CLI file** to save the configuration.

Save/Load CLI Command File [\(Help\)](#)

The permanent configuration might be affected by loading a CLI file.

 Local file: