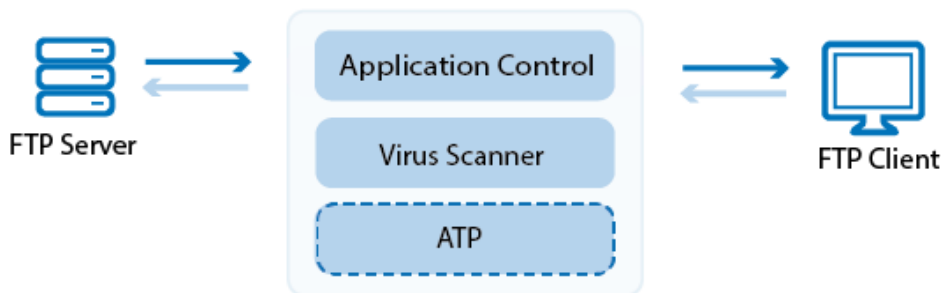


How to Configure Virus Scanning in the Firewall for FTP Traffic

<https://campus.barracuda.com/doc/73697792/>

The firewall scans FTP traffic for malware on a per-access-rule basis when FTP virus scanning in the firewall is enabled. Both active and passive FTP is supported; outgoing SSL-encrypted FTPS connections are also supported. Depending on the access rule, you can either protect your FTP server from uploads containing malware, or scan files downloaded from external FTP servers. Scanning incoming traffic for FTPS servers is not supported. Since the FTP protocol does not contain any MIME-type information, all files are scanned regardless of the MIME type list configured for the virus scanner. When an FTP download is initiated, the FTP client creates a local, zero-byte file. Normally, the transferred data would be written to this file until the download is finished. However, if the file is determined to be malware, the connection is terminated immediately, leaving the zero-byte file or file fragment (if data trickling is enabled) on the client. Depending on the FTP client, it may attempt to download the file multiple times; each time the connection will be reset by the firewall. If ATP is enabled, files passed by the virus scanner are then uploaded to be analyzed in the Barracuda ATP Cloud. ATP can be used only in the **deliver first, then scan** mode for FTP client connections. Files uploaded to FTP servers behind the firewall cannot be scanned by ATP.



Before You Begin

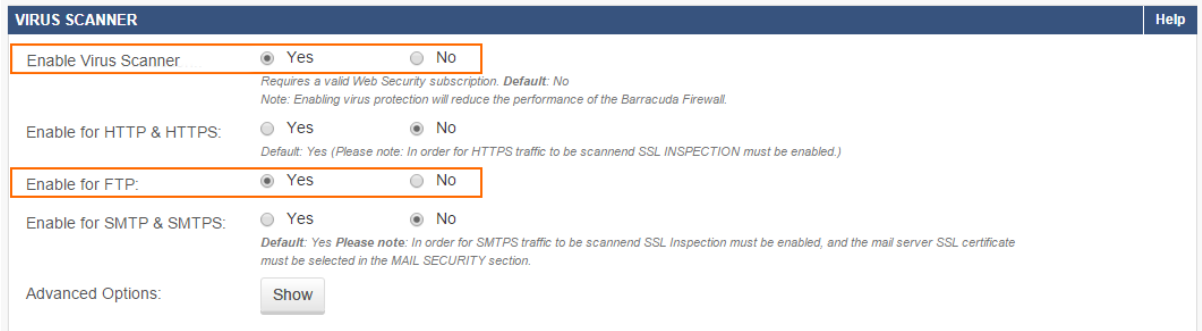
- (optional) Configure ATP in the firewall. For more information, see [How to Configure ATP in the Firewall](#).
- (optional) Configure SSL Interception for outbound FTPS traffic. For more information, see [How to Configure SSL Interception in the Firewall](#).

Step 1. Enable the Virus Scanner for FTP

Enable support for virus scanning FTP connections in the firewall.

1. Go to **FIREWALL > Settings**.
2. Make sure that **Application Control** is enabled.

3. In the **Virus Scanner** section:
 1. Set **Enable Virus Scanner** to **Yes**.
 2. Set **Enable for FTP** to **Yes**.



4. (optional) Click **Show** to configure **Advanced Options**:

Changing settings for the Virus Scanner also affects virus scanning for other services.

 1. Change the default behavior **If Virus Scanning is not available**.
 - **Block All** – (default) Block all files.
 - **Allow All** – All files will be allowed.
 2. Configure the following settings:
 - **Block Large Files / Large File Limit** – To block files that exceed the **Large File Limit**, enable **Block Large Files**. The large file policy is set to a sensible value for your appliance. The maximum value is 1024 MB. If disabled, large files will not be scanned. Instead, they will be delivered directly to the client.
 - **Data Trickling** – Change how fast and how much data is transmitted. Change these settings if your FTP client times out while waiting for the file to be scanned.
 3. Click **Save**.
5. Click **Save**.

Step 2. Create an Access Rule for FTP Client Downloads

To scan files downloaded from external FTP servers, create a matching access rule and enable Application Control and the Virus Scanner.

1. Go to **FIREWALL > Access Rules**.
2. Create an access rule with the following settings:
 - **Action** – Select **Allow**.
 - **Connection** – Select **Dynamic NAT**.
 - **Source** – Select **Trusted LAN**, and click **+**.
 - **Network Services** – Select **FTP**, and click **+**.
 - **Destination** – Select **Internet**, and click **+**.
3. Enable **Application Control** and **Virus Scanner**.

Add Access Rule ?

General
Advanced

Action: Pass

➔

DNAT (port forwarding) - Redirect traffic to a specific IP address.
Redirect to Service - Redirect traffic to a service on the Barracuda Firewall.
Bi-directional - Source and destination networks are interchangeable.

Name: Virscan-External-FTP

Description: scan files downloaded from external FTP servers

Connection: Dynamic NAT

Adjust Bandwidth: Internet

The interface must have bandwidth management enabled on the NETWORK > IP Configuration page for this policy to be applied.

Bi-directional: Yes No

Disable: Yes No

IPS: Yes No

Application Control: Yes No

SSL Interception: Yes No

URL Filter: Yes No

Virus Scanner: Yes No

ATP: Yes No

Mail Security: Yes No

Safe Search: Yes No

Source

Internet + -

Ref: Trusted LAN

Network Objects IP Address Geo Loc.

Network Services

EXTENDED + -

FTP

Destination

Any + -

Ref: Internet

Network Objects IP Address Geo Loc.

4. Click **Save**.

Step 3. (optional) Create a Dst NAT Access Rule to Protect an Internal FTP Server

To protect an internal FTP server from receiving infected files, create a matching DNAT access rule, and enable Application Control and the Virus Scanner.

1. Go to **FIREWALL > Access Rules**.
2. Create an access rule with the following settings:
 - **Action** – Select **Dst NAT**.
 - **Connection** – Select **Original Source IP**.
 - **Source** – Select **Internet**, and click **+**.
 - **Network Services** – Select **FTP**, and click **+**.
 - **Destination** – Enter the public IP address or FQDN used for your FTP server, and click **+**.
 - **Redirect** – Enter the IP address of your internal FTP server. When using more than one FTP servers, select **Use Network Object as Target** and add a network object. For more information, see [How to Create Network Objects](#).
3. Enable **Application Control** and **Virus Scanner**.

Add Access Rule ?

General
Advanced

Action: Dst NAT

*DNAT (port forwarding) - Redirect traffic to a specific IP address.
Redirect to Service - Redirect traffic to a service on the Barracuda Firewall.
Bi-directional - Source and destination networks are interchangeable.*

Name: Virscan-Internal-FTP

Description: scan files uploaded to internal FTP server

Connection: Original Source IP

Adjust Bandwidth: Internet

The interface must have bandwidth management enabled on the NETWORK > IP Configuration page for this policy to be applied.

Bi-directional: Yes No

Disable: Yes No

IPS: Yes No

Application Control: Yes No

SSL Interception: Yes No

URL Filter: Yes No

Virus Scanner: Yes No

ATP: Yes No

Mail Security: Yes No

Safe Search: Yes No

Source

FTP Server +

Ref. Internet -

Network Objects IP Address Geo Loc

Network Services

EXTENDED +

FTP -

Destination

62.99.0.40 +

IP: 62.99.0.40 -

Network Objects IP Address Geo Loc

Redirect

Use Network Object as Target

172.16.0.13

Balancing: Off

ARP:

4. Click **Save**.

Monitoring and Testing

You can test the Virus Scanner setup by downloading EICAR test files from an FTP server. Files that are malware are not downloaded. 0-byte stub files are created by the FTP client.

To monitor detected viruses and malware, go to the **BASIC > Recent Threats** page.

Action	Severity (IPS)	Info	Last	Count	Firewall Rule	URL Category	Source IP	Destination IP	Protocol	Service	UserID	Type	Reference	Category
Add Exception	●	VIRUS Eicar test string	3w 3d 20h 31m 23s	37	LAN-2-INTERNET		10.0.10.9	188.40.238.250	TCP	80		IPS		VirusWorm
		HTTP direct - Virus Blocked (Eicar-Test-Signature)	3w 3d 20h 31m 23s	37			10.0.10.9	188.40.238.250	TCP	HTTP direct		Virus		

Next Steps

To combine ATP with virus scanning, see [Advanced Threat Protection \(ATP\)](#) and [How to Configure ATP in the Firewall](#).

Figures

1. virus_scanning_ftp_traffic_atp-01.png
2. virus_protection_ftp_68_02.png
3. virus_protection_ftp_68_03.png
4. virus_protection_ftp_68_04.png
5. virus_protection_ftp_68_05.png

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