# Upgrading Email Security Gateway v7.8.4 to TRITON AP-EMAIL v8.3

These instructions cover the upgrade of a Websense Email Security Gateway or TRITON AP-EMAIL solution to Forcepoint TRITON AP-EMAIL version 8.3. You can upgrade directly to version 8.3 from Email Security Gateway version 7.8.4 and TRITON AP-EMAIL version 8.x.

If you are currently running a version 7.6.x deployment, and you want to upgrade to version 8.3, you must upgrade to version 7.7.0 first, then upgrade to version 7.8.0, and then to version 7.8.4. See <u>Upgrading Email Security Gateway v7.6.x to v7.7.0</u>, <u>Upgrading Email Security Gateway v7.7.x to v7.8.0</u>, and <u>Upgrading Email Security Gateway v7.8.0</u> to v7.8.x for procedures.

If you are currently running a version 7.7.x deployment, and you want to upgrade to version 8.3, you must upgrade to version 7.8.0 first, and then upgrade to version 7.8.4 before you upgrade to version 8.3. See <u>Upgrading Email Security Gateway v7.7.x to v7.8.0</u> and <u>Upgrading Email Security Gateway v7.8.0 to v7.8.x</u> for procedures.

If you are running Email Security Gateway on an X10G security blade, you must upgrade to version 8.0.0 before performing an upgrade to version 8.3.

See Upgrading Email Protection Solutions for:

- Specific product upgrade paths
- Links to all intermediate upgrade instructions
- Important information about backing up your system before you upgrade. Having backup files is an important safeguard in the event of a power outage or other interruption during the upgrade process.



#### **Important**

Some older V10000 and V5000 appliances are not supported with version 8.0.0 and later. See <u>V-Series</u> appliances supported with version 8.0.

The upgrade process includes Forcepoint appliance components (V-Series appliance, virtual appliance, or X-Series chassis security blade), along with TRITON Manager and Email Log Server Windows components. Ensure that your deployment also includes TRITON AP-DATA for data loss prevention (DLP) capabilities. The upgrade process detects and upgrades this module during the TRITON Manager upgrade.



#### Warning

Please contact Technical Support before you begin the upgrade process if Forcepoint personnel have customized any Email Security Gateway or TRITON AP-EMAIL back-end configuration setting

Some customizations may be lost during the upgrade process.



#### **Important**

For version 8.3, the V-Series appliance has been re-architected. As a result, dual security mode (TRITON AP-EMAIL and TRITON AP-WEB or Web Filter & Security) is no longer supported. We recommend that you migrate the Email module off the dual-mode appliance to a new version 8.3 appliance (V-Series or virtual), leaving the web protection system on the existing appliance.

See <u>Upgrading V-Series Dual-Mode Appliances to</u>
<u>Version 8.3</u> for important upgrade instructions **before you begin your upgrade.** 

The email virtual appliance is also re-architected, and email data and messages must be migrated to a new version 8.3 appliance. See *Virtual appliance*, page 7, for more information.

#### **Contents:**

- *Upgrade preparation*
- Upgrade instructions
- Post-upgrade activities

# **Upgrade preparation**

Several issues should be considered before you begin an email protection solution upgrade.

 Verify current deployment. Ensure that your current deployment is functioning properly before you begin the upgrade. The upgrade process does not repair a non-functioning system.

- **Verify the system requirements** for the version to which you are upgrading to ensure your network can accommodate the new features and functions. See <a href="System requirements for this version">System requirements for this version</a> for a detailed description.
- **Prepare Windows components.** See <u>All Forcepoint TRITON solutions</u> for an explanation of general preparations for upgrading the Windows components in your email protection system.
- Ensure that your firewall is configured correctly so that the ports needed for proper email protection operation are open. See <a href="TRITON AP-EMAIL ports">TRITON AP-EMAIL ports</a> for information about all email protection system default ports, including appliance interface designations and communication direction.
- The upgrade to version 8.x renames the following default policy rules:
  - ThreatScope is renamed File Sandbox.
  - URL Scanning is renamed URL Analysis.

If you currently have custom rules with these new names, you should change them before the upgrade process begins, to avoid having duplicate rule names after the upgrade.

- The upgrade to version 8.3 adds a default Spoofed Email policy filter, a Spoof policy action, and an Antispoof policy rule. If you currently have policy elements with these names, you should change them before the upgrade process begins, to avoid having duplicate names after the upgrade.
- New presentation reports are added in version 8.3 for spoofed email and URL analysis data. Examples include:

Outbound Spoofed Email Percentage Summary

Top Inbound Spoofed Email Sender Domains

Top Inbound Recipients of Spoofed Email

Top Outbound Embedded URL Categories Detected

Outbound Embedded URL Detection Volume Summary

The upgrade process may not be successfully completed if you have existing custom reports with the same names as the new version 8.3 reports.

- Back up and remove tomcat log files and remove temporary manager files (optional; recommended to facilitate timely TRITON console upgrade). Use the following steps:
  - 1. Log onto the Windows server where the TRITON manager resides.
  - 2. Navigate to the following directory:

C:\Program Files (x86)\Websense\Email Security\ESG Manager\tomcat\logs

- 3. Copy C:\Program Files (x86)\Websense\Email Security\ESG Manager\tomcat\logs to another location (for example, to C:\WebsenseBackup\Email), and then delete it in the directory mentioned in step 2.
- 4. Navigate to the following directory:

C:\Program Files (x86)\Websense\Email Security\ESG Manager\tomcat\tempEsgUploadFileTemp

5. Delete all the downloadFile\* files.



#### **Important**

If you are upgrading a virtual appliance, see *Virtual appliance*, page 7, for important upgrade issues specific to the virtual appliance.

# **Upgrade instructions**

Once you have completed the activities outlined in *Upgrade preparation*, you can perform the product upgrade. This section provides instructions for performing an upgrade of an email protection system deployment.



#### **Important**

If your network includes a Forcepoint web protection solution, you must upgrade the Policy Broker/Policy Server machine first, whether or not these components reside on an appliance. Other Forcepoint services located on the Policy Broker/Policy Server machine should be upgraded at the same time. See <u>Upgrade procedure for solutions that include web, email, and data protection</u> for more information.

This section provides a description of an email system upgrade to the following components:

- 1. Email Log Server
- 2. TRITON Manager Email Module
- 3. TRITON Appliances

# **Upgrade the Email Log Server**

Use the TRITON Enterprise upgrade installer from the Forcepoint My Account downloads page to upgrade Email Log Server if it is installed on a machine other than the one on which the TRITON Manager is installed. Follow the installation wizard instructions for Log Server.



#### **Important**

If you are upgrading multiple Log Servers, you should perform the upgrades one at a time to avoid possible upgrade process errors.

- The installer does not allow you to change existing configuration settings. Changes must be made after the upgrade.
- The upgrade installer stops the Email Log Server service, updates the Email Log Server and the Email Log Database, and then restarts the Email Log Server service.

# **Upgrade the TRITON Manager Email Module**

Use the TRITON Enterprise upgrade installer from the Forcepoint My Account downloads page. Ensure that TRITON AP-EMAIL and TRITON AP-DATA are selected for upgrade. The upgrade process includes TRITON AP-DATA and the Email Log Server if it is installed on the TRITON Manager machine.



#### Warning

On the Select Components screen in the upgrade installer, ensure that the **TRITON AP-EMAIL** option is selected. This option is required if you are running your email protection system on a V- or X-Series appliance or an on-premises (ESXi server) virtual appliance.

The **TRITON AP-DATA Email Gateway** option applies to a cloud-hosted virtual appliance running with TRITON AP-DATA. See the topic titled "Email Gateway for Microsoft Office 365" in the <u>TRITON AP-DATA</u>
<u>Installation Guide</u> for details about this product feature.

Follow the installation wizard instructions. The Data module upgrade occurs after the TRITON infrastructure upgrade. The Email module upgrade follows the Data module.

- The upgrade installer Configuration page shows the IP address of the database engine that manages the Email Log Database and logon type. If you have changed the database since your previous installation or upgrade, use this page to change these settings.
- The upgrade script stops the Email module service, updates the Email SQL Server databases (and Log Server if found), and then restarts the Email module service.



#### Note

The TRITON Manager Email module is not available until after the TRITON console upgrade completes.

# **Upgrade TRITON Appliances**

Email should not be directed through appliances during the upgrade process.

#### X-Series

For the X-Series hardware appliance, see the <u>TRITON X-Series upgrade guide</u> for upgrade instructions and command options on this platform.



#### **Important**

If you are running an X10G security blade version 8.0.0 or later, you may upgrade directly to version 8.3.

#### **V-Series**

These upgrade instructions apply only to a single-mode Email V-Series appliance. Dual security mode appliances are not supported in version 8.3. We recommend that you migrate the Email module off the dual-mode appliance to a new version 8.3 appliance. See <u>Upgrading V-Series Dual-Mode Appliances to Version 8.3</u> for details on upgrading a dual-mode (Web and Email) appliance.

Note that in version 8.3, the V-Series Appliance Manager is replaced with the TRITON Appliance command-line interface (CLI).

The upgrade process for a single mode appliance begins in the Appliance Manager, as usual, using the Appliance Manager patch facility to download the appropriate version patch and apply it to the appliance. The process ends with you accessing the v8.3 CLI to perform several post-upgrade tasks. See the <u>TRITON V-Series upgrade guide</u> for upgrade instructions.

For an introduction to the CLI, see <u>V-Series Appliances: Visual Primer for the v8.3</u> <u>Appliance CLI</u>.

The V-Series appliance upgrade process includes a check for

- Adequate disk space for TRITON AP-EMAIL (at least 8 GB required)
- Cached message log file size (cannot exceed 10 MB)

A backup and restore function to save existing appliance configuration settings is also included. You are prompted to contact Technical Support if any configuration file is missing.



#### **Note**

Appliance services are not available while the upgrade patch is being applied and until the appliance completes its restart.

If your V-Series appliances are configured in a cluster, the primary box should be upgraded first, followed by all its secondary machines, 1 at a time. You do not need to release the appliances from the cluster in order to perform the upgrade.



#### **Note**

You may need to restart the appliance if you cannot establish an **ssh** connection after the upgrade is complete.

#### Virtual appliance

The TRITON AP-EMAIL virtual appliance is re-architected for version 8.3. As a result, email protection system data and email messages that reside on a pre-version 8.3 virtual appliance must be migrated off that appliance to a new version 8.3 appliance (virtual appliance or V-Series hardware). The migration is accomplished via a command-line interface (CLI) **migrate** command performed on the version 8.3 appliance.

You should consider the following issues before you initiate your virtual appliance migration process:

- Ensure that your source and destination appliances in the migration are configured in the same subnet. If they are not, the migration process may complete, but the version 8.3 appliance interfaces are not correctly updated.
- You must release your virtual appliances from a cluster before performing the migration. Migrate each appliance, and then rebuild your cluster after the migration process is complete.
- You may need to reconfigure some network settings for the migration process. The version 8.3 and later virtual appliance supports 3 network interfaces: C, P1, and P2. In the migration, the C interface retains the setting you assigned it during firstboot. The P1 and P2 interfaces (eth0 and eth1) inherit the settings of P1 and P2 when migrating from a V5000, or the E1 and E2 settings when migrating from a V10000.
- Dynamic Host Configuration Protocol (DHCP) is not supported in version 8.3. If your existing appliance has enabled DHCP, you should note that those network settings are not migrated. You must configure static network interface IP addresses for your appliance.
- Calculate the disk space used on your existing appliance and ensure that the new appliance has adequate disk space for all data you wish to migrate.

Use the following steps to migrate TRITON AP-EMAIL data and email messages to a version 8.3 virtual appliance:

- Install a new version 8.3 virtual appliance. The VMware virtual machine requires ESXi version 6.0 or later. See the topic titled *Virtual Appliance Setup* in the <u>TRITON Appliances Getting Started Guide</u> for detailed instructions for downloading and creating a virtual machine.
- 2. On the new version 8.3 appliance, run the firstboot wizard to select appliance security mode (email), enter appliance management settings (e.g., C interface IP address, hostname, DNS server IP addresses), and define some basic

configuration settings (e.g., hostname, administrator password, system time zone). See the topic titled *Firstboot Wizard* in the <u>TRITON Appliances Getting Started</u> Guide for detailed firstboot instructions.



#### Note

Note that the source appliance hostname is not migrated to the destination appliance. The destination appliance uses the hostname set during firstboot, and then the upgrade process adds "-esg" to the end of the name.

3. Log on to the version 8.3 appliance CLI and enter "config" mode. Set the appliance P1 interface using the **set interface ipv4** command with the following syntax:

```
set interface ipv4 --interface p1 --ip <ipv4_address>
[--mask <ipv4_netmask>] --gateway <ipv4_address>
```

The P1 interface you configure in the CLI is displayed as "E1" in the TRITON Manager.



#### **Note**

If you use a client interface like PuTTY to connect to the appliance, you will want to configure a longer connection session to accommodate a somewhat lengthy migration process.

For example, in the PuTTY configuration interface, select the Connection category. Enter 30 in the Seconds between keepalives (0 to turn off) entry field.

4. Download TRITON AP-EMAIL Hotfix 300 for your source virtual appliance version (7.8.4, 8.0.0, 8.0.1, 8.1.0, or 8.2.0) from the <u>Forcepoint My Account Downloads</u> page.

Contact Forcepoint Technical Support for assistance to apply the hotfix to your previous version appliance.

See the ReadMe file packaged with the hotfix for more information about hotfix contents.

5. In the version 8.3 appliance CLI, ensure you are still in **config** mode and then log in to the email module:

```
login email
```

6. You may perform the migration using the **migrate** CLI command on the version 8.3 appliance with 1 of 2 options: interactive or silent.

**Interactive mode** is a step-by-step process that requires user input during the process.

An example of the interactive mode command is (user entries highlighted):

```
sg83(config)(Email)# migrate
interactive silent
esg83(config)(Email)# migrate interactive
Welcome to the TRITON AP-EMAIL Migration Tool.
Destination TRITON AP-EMAIL System Information:
    Platform: TRITON AP-EMAIL UMMare Virtual Platform running software version 8.3.0 build 83016
    Hostname: esg83-esg
    Eth0:10.206.12.42 Mask:255.255.255.0
    9728MB of 99670MB disk space used for running the system
    60MB of 95863MB disk space used for the email messages
Checking TRITON AP-EMAIL services...
TRITON AP-EMAIL services check has been successfully completed.
Would you like to migrate the source system to this appliance? [yes/no]
Preparing certificates...
Certificates have been successfully prepared.
Please enter the TRITON AP-EMAIL interface IP address for the source appliance:
10.206.15.66
```

You enter the following information:

- Source appliance (pre-version 8.3) IP address
- Confirmation for the start of the migration
- Selection of a transfer option:

Example CLI for this section of the migration looks like:

Would you like to start the migration process from the source appliance: 10.206.15.66 to this appliance (services on both appliances will stop)? [yes/no]

#### yes

Please select a transfer option: [1/2/3]

- 1. Transfer only configuration files, defer logs, and policy incidents.
- 2. Transfer configuration files, defer logs, policy incidents, and email messages.
- 3. Quit

#### 2

Are you sure you want to transfer all configuration files, defer logs, policy incidents, and email messages? [yes/no]

#### yes

:If you migrate email message queues in addition to configuration settings, be aware that the transfer of large-volume queues may take a few hours to complete.

**Silent mode** requires the user to enter only the source appliance (pre-version 8.3) IP address. In our example:

```
migrate silent --host <10.206.15.66>
```

The second transfer option is automatically selected for silent mode, and the migration runs without the need for subsequent user input.



#### **Important**

You must use your existing TRITON Manager Windows machine. Use of a newly installed TRITON Manager for an upgrade is not currently supported.

You should consider the following issues after you perform your virtual appliance migration process:

- The migration log accumulates warning messages from any previous unsuccessful migration. Each time you attempt (or complete) a subsequent migration, error messages from your previous migration attempts still appear.
- If you have an email DLP policy configured to use a TRITON AP-DATA quarantine action, and the **Settings** > **General** > **Remediation** page Release Gateway is set to **Use the gateway that detected the incident**, you should change the Release Gateway to the IP address of your new appliance. Otherwise, when a Data module administrator releases a pre-migration quarantined message, an "Unable to release incident" error is generated.
- Virtual IP address settings in filter actions are not retained after an appliance migration. You need to reconfigure virtual IP address settings manually.



#### **Important**

Please contact Technical Support if Forcepoint personnel have customized your appliance iptables settings. These customizations are not preserved by the migration process.

# Post-upgrade activities

Your system should have the same configuration after the upgrade process as it did before the upgrade. Any configuration changes can be made after the upgrade process is finished.

After your upgrade is completed, redirect email traffic through your system to ensure that it performs as expected.

Email hybrid service registration information is retained during the upgrade process, so you do not need to complete the registration again, unless you have performed an appliance migration (e.g, from a virtual appliance to a new virtual appliance). See *Update appliance management interface configuration settings (for migration only)*,

page 12, for information.

You should perform the following tasks in the TRITON Manager:

- Update data loss prevention policies and classifiers
- Update Forcepoint databases
- Update Email module backup file
- Configure email DNS lookup
- Update appliance management interface configuration settings (for migration only)
- *Update Log Database (for migration only)*

# Update data loss prevention policies and classifiers

- 1. Select the Data module.
- 2. Follow the prompts that appear for updating data loss prevention policies and classifiers.
  - Depending on the number of policies you have, this can take up to an hour. During this time, do not restart the server or any of the services.
- 3. Click **Deploy**.

# **Update Forcepoint databases**

Click **Update Now** in the **Settings > General > Database Downloads** page. This action performs an immediate database download update.

# Update Email module backup file

Due to a change in implementation at version 8.1, the TRITON Manager Email module backup file format is not compatible with versions earlier than 8.1. You must remove any pre-version 8.1 backup log file before you create a new backup file for version 8.x. If you don't remove the old log file before you create the new file, the backup/restore function can become inaccessible.

Use the following steps:

- Navigate to the following directory on the TRITON management server machine:
   C:\Program Files (x86)\Websense\Email Security\ESG Manager
- 2. Locate and remove the following file:

ESGBackupRestore

Copy this file to another location if you want to save it.

3. Create a new backup file for version 8.2 on the **Settings > General > Backup/Restore** page.

# Configure email DNS lookup

The virtual appliance firstboot process includes the entry of DNS server settings. You can enhance DNS lookup query performance by configuring a second set of DNS server entries specifically for the Email module. Use the following CLI commands, as needed:

```
set interface dns --module email --dns1 <DNS_IP>
set interface dns --module email --dns2 <DNS_IP>
set interface dns --module email --dns3 <DNS_IP>
```

# Update appliance management interface configuration settings (for migration only)

If your upgrade to version 8.3 included a data migration, you need to re-configure some functions that use the appliance management (C) interface after the migration and upgrade are complete. The management (C) interface is new for virtual appliance users at version 8.3.

These configuration settings include:

- Data loss prevention
- Email hybrid service
- Personal Email Manager notification message

# **Data loss prevention**

Re-register the TRITON AP-EMAIL appliance with the Data module as follows:

- 1. Select the TRITON Email module and navigate to the **Settings > General > Data Loss Prevention** page.
- 2. Click **Unregister** to remove the DLP registration.
- 3. In the TRITON Data module, navigate to the **Settings > Deployment > System Modules** page. Select the TRITON AP-EMAIL module.
- 4. In the upper left corner, click **Delete**.
- 5. In the TRITON Email module **Settings > General > Data Loss Prevention** page, ensure the appliance management (C) interface IP address appears in the **Communication IP address** field.
- 6. Click **Register** to register the appliance with the Data module.
- 7. Select the Data module and click **Deploy**.

# **Email hybrid service**

Re-register the TRITON AP-EMAIL appliance with the email hybrid service as follows:

- 1. Select the TRITON Email module and navigate to the **Settings > Hybrid Service** > **Hybrid Configuration** page.
- 2. Click **Edit** at the bottom of the page.
- 3. Replace the SMTP server IP address with the new C interface IP address.
- 4 Click **OK**

### Personal Email Manager notification message

You may need to enter your destination appliance management interface IP address for the proper distribution of Personal Email Manager notification messages.

- 1. Select the TRITON Email module and navigate to the **Settings > Personal Email** > **Notification Message** page.
- 2. Enter the new appliance management (or C) interface in the **IP address or hostname** entry field.
- 3. Click OK.

# **Update Log Database (for migration only)**

If you encounter the following warnings after your upgrade, you may need to update the Email Log Database with new values for appliance hostname, management interface IP address, C interface IP address, and device ID:

```
[*]: TRITON AP-EMAIL migration has been successfully completed.

Please read the following warnings:

[WARNING]:[Errno -3] Temporary failure in name resolution
[WARNING]:Cannot update TRITON AP-EMAIL management interface.

For problems, please contact Forcepoint Technical Support.

esg123(config)(Email)#
```

- 1. Open SQL Server Management Studio.
- 2. Click New Query.
- 3. In the query window, enter the following command:

```
USE [esglogdb76]
```

Select the **esg\_device\_id**, **admin\_manage\_ip**, and **device\_c\_port\_ip** from the dbo.esg\_device\_list.

- 4. Enter **GO**.
- 5. Locate the **esg\_device\_id** associated with either the admin\_manage\_ip or the device c port ip of the source appliance.
- 6. Execute the following command using the values you obtained in the previous steps:

```
UPDATE dbo.esg_device_list SET esg_name = '<host name>',
admin manage ip = '<appliance management IP address>',
```

```
device_c_port_ip = '<C IP address>' WHERE esg_device_id =
'<device id>'
```

- 7. Enter **GO**.
- 8. Run the query.