Release Notes for AsyncOS 12.5 for Cisco Web Security Appliances

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About Web Security Appliance

The Cisco Web Security Appliance intercepts and monitors Internet traffic and applies policies to help keep your internal network secure from malware, sensitive data loss, productivity loss, and other Internet-based threats.

What's New

What's New In AsyncOS 12.5.6-008 MD (Maintenance Deployment)

This release contains a number of bug fixes; see the Lists of Known and Fixed Issues in Release 12.5.6-008, on page 22 for additional information.

What's New In AsyncOS 12.5.5-008 MD (Maintenance Deployment)—Refresh

This release contains a number of bug fixes; see the Lists of Known and Fixed Issues in Release 12.5.5-008, on page 22 for additional information.

Note Currently for 12.5.5-008, Secure Email and Web Manager compatibility build is not available.

What's New In AsyncOS 12.5.5-004 MD (Maintenance Deployment)

This release contains a number of bug fixes; see the Lists of Known and Fixed Issues in Release 12.5.5-004, on page 22 for additional information.

What's New In AsyncOS 12.5.4-011 MD (Maintenance Deployment)—Refresh

This release contains a number of bug fixes; see the Lists of Known and Fixed Issues in Release 12.5.4-011, on page 22 for additional information.

What's New In AsyncOS 12.5.4-005 MD (Maintenance Deployment)

This release contains a number of bug fixes; see the Lists of Known and Fixed Issues in Release 12.5.4-005, on page 22 for additional information.

What's New In AsyncOS 12.5.3-002 MD (Maintenance Deployment)

This release contains a number of bug fixes; see the Lists of Known and Fixed Issues in Release 12.5.3-002 for additional information.

What's New In AsyncOS 12.5.2-011 MD (Maintenance Deployment)

This release contains a number of bug fixes; see the Lists of Known and Fixed Issues in Release 12.5.2-011 for additional information.

What's New In AsyncOS 12-5-2-007 MD (Maintenance Deployment)

This release contains a number of bug fixes; see the Lists of Known and Fixed Issues in Release 12.5.2-007 for additional information.

Feature	Description
New URL Categories Update notification	A new URL Categories Update notification is introduced in the banner. An email notification on the upcoming URL category updates is also sent to the users.

What's New In AsyncOS 12-5-1-043 GD (General Deployment)—Refresh

This release contains a number of bug fixes; see the Lists of Known and Fixed Issues in Release 12.5.1-043 and Changes in Behavior in AsyncOS 12.5.1-043 GD (General Deployment)–Refresh for additional information.

What's New In AsyncOS 12.5.1-035 GD (General Deployment)

This release contains a number of bug fixes; see the Lists of Known and Fixed Issues in Release 12.5.1-035 for additional information.

Feature	Description
Deprecation of TLS 1.0/1.1	Use TLS 1.2 or later versions to connect the appliance to the AMP File Reputation server. AMERICAS (Legacy) cloud-sa.amp.sourcefire.com is removed from the AMP File Reputation server list, so AMERICAS (Legacy) cloud-sa.amp.sourcefire.com cannot be configured on the appliance. Before you upgrade the appliance to the 12.5.1 version, the following is recommended: • If the AMP services are enabled and the File Reputation server is configured as AMERICAS (Legacy) cloud-sa.amp.sourcefire.com, change the File Reputation server to AMERICAS (cloud-sa.amp.cisco.com). • After you upgrade the appliance, check if the File Reputation server is retained as AMERICAS (cloud-sa.amp.cisco.com). **Note** If you configure Europe or APJC as the File Reputation server before upgrading the appliance, the preceding conditions will not be applicable. For more information, see Decommissioning Legacy File Reputation Servers for Cisco Web Security Appliances.
Enable Trusted Domain Lookup	**Enable Trusted Domain Lookup** option is added in the **Active Directory Account** section (**Network** > **Authentication** > **Add Realm**) to control the behavior of the trusted domain lookup for the realm. The option is enabled by default.

What's New In AsyncOS 12.5.1-011 LD (Limited Deployment)

The following introduced for this release:

Feature	Description
Support for High Performance	The Cisco AsyncOS 12.5 release provides Web Security Appliance with High Performance (HP) for platforms S680, S690, and S695. This increases the traffic handling performance of the existing high-end appliances. **Note** You can now upgrade to 12.5 version and avail the High Performance mode on the models (S680, S690, S695, S680F, S690F, and S695F), even if you have enabled the following features on your appliance: • Web Traffic Tap • Volume and Time Quotas • Overall Bandwidth Limits

Feature	Description
Web Proxy IP Spoofing	You can now configure Web Proxy IP Spoofing by creating an IP spoofing profile and adding it to the routing policies. When IP spoofing profile is used in a routing policy, the web proxy changes the source IP address to custom IP address defined in the IP spoofing profile. You can now enable or disable client IP spoofing for native FTP requests in FTP proxy settings. **Prerequisite:** • Make sure you have selected the proxy mode and IP spoofing connection type in the web proxy settings (**Services** > **Web Proxy**.) See the "Intercepting Web Requests" chapter in the user guide.
Support for YouTube Categorization	You can now create a custom URL category for YouTube and set policies on the YouTube custom category for secure access control. **Prerequisites:** Make sure you have: • Enabled HTTPS proxy (**Security Services** > **HTTPS Proxy**). • Enabled Acceptable Use Controls (**Security Services** > **Acceptable Use Controls**). • Configured Custom and External URL categories (**Web Security Manager** > **Custom and External URL Categories**) with www.youtube.com and m.youtube.com. • Configured decryption policy using the Custom and External URL category for YouTube, with action as 'decrypt'. • Generated the Google API key using Google API services for YouTube. See the "Classify URLs for Policy Application" chapter in the user guide.
System Status Dashboard in the New Web Interface	In the new web interface, the appliance has a new page (**Monitoring** > **System Status**) to display the current status and configuration of the appliance. See the "Web Security Appliance Reports on the New Web Interface" chapter in the user guide.

Feature	Description
Cisco Success Network on Web Security Appliance	The Cisco Success Network (CSN) feature enables Cisco to collect telemetry of feature usage information of the appliance. These details are used by Cisco to identify the device information, list of free and licensed features and their activation statuses. **Note** By default, the Cisco Success Network feature is enabled on the appliance. If required, you can disable the feature through the web user interface (**System Administration** > **Cisco Success Network**) or by using the CLI command **csidconfig**. **Prerequisite:** • Make sure you have enabled Cisco Threat Response See the "Integrating with Cisco Threat Response" chapter in the user guide.
REST API for Network, Log Subscription, and Other Configurations.	You can now retrieve the configuration information, and perform any changes (such as modify existing information, add new information, or delete an entry) in the configuration data of the appliance by using REST APIs. See the *"AsyncOS API 12.5 for Cisco Web Security Appliances - Getting Started Guide."*

Changes in Behavior

Changes in Behavior in AsyncOS 12.5.5-004 MD (Maintenance Deployment)

networktuning	After an upgrade to Cisco AsyncOS 12.5, you will receive a prompt to restart the proxy process when you execute the *networktuning* command for the first time. **Note** For AsyncOS version earlier than 12.5, this prompt to restart the proxy process is not available. If the command was executed in any of the previous version before an upgrade, the prompt will not be triggered.

Changes in Behavior in AsyncOS 12.5.4-005 MD (Maintenance Deployment)

SSL Configuration	Beginning Cisco AsyncOS 12.5.4 version, TLSv1.2 is enabled by default for Appliance Management Web User Interface under **System Administrator** > **SSL Configuration** to support chrome browser version 98.0.4758.80 or later.
Session resumption	After an upgrade to Cisco AsyncOS 12.5.4 version, session resumption will be disabled by default.
Context Directory Agent (CDA)	Beginning Cisco AsyncOS 12.5.4 version, the following message is added to indicate the end of support for CDA in the CDA configuration section: "*Context Directory Agent (CDA) has reached EOS. It is recommended configuring ISE/ISE-PIC for transparent user authentication instead of CDA*".

Changes in Behavior in AsyncOS 12.5.1-043 GD (General Deployment)–Refresh

Warning messages for proxy malloc memory utilization	The following alert messages are displayed on the web user interface of the appliance (**System Administration** > **Alerts** > **View Top Alerts**):
	• when the proxy malloc memory crosses 90% of proxy malloc memory limit
	`Proxy malloc memory reached to 90%, proxy will restart whenever max limit exceed`
	• when the proxy gets restarted on reaching 100% of malloc memory
	`Proxy malloc memory exceed the max limit, restarting proxy`
	In both the cases, an e-mail notification is sent to all 'Alert recipients' configured to receive 'Web Proxy' critical alerts.
	The critical logs messages are now included in proxy logs.

Changes in Behavior in AsyncOS 12.5.1-035 GD (General Deployment)

Cache Size Configuration for Authentication	The configuration of cache size for authentication is not supported from AsyncOS 12.5.1-035 and later versions. The Cache Size option (**Network** > **Authentication** > **Authentication Settings** > **Credential Cache Options**) is removed from the web interface of the appliance from AsyncOS 12.5.1-035 and later versions.

Changes in Behavior in AsyncOS 12.5.1-011 LD (Limited Deployment)

Log Subscriptions	Following logs are modified to include more details:
	• The access logs now display the user name when authentication fails.
	• The authentication framework logs now display the client IP address for the following failed authentication protocols:
	  • NTLM
	  • BASIC
	  • SSO (Transparent)

Accessing the New Web Interface

The new web interface provides a new look for monitoring reports and tracking web services. To access the new web interface, do the following:

- Log in to the legacy web interface.
- Click **SecureWeb Appliance is getting a new look. Try it!!** that appears on the top of the UI.

This link opens a new tab in your web browser and directs you to `https://wsa01-enterprise.com:<trailblazer-https-port>/ng-login` , where `wsa01-enterprise.com` is the appliance host name and `<trailblazer-https-port>` is the trailblazer HTTPS port configured on the appliance for accessing the new web interface.

Important!

- You must log in to the legacy web interface of the appliance.
- Ensure that your DNS server can resolve the hostname of the appliance that you specified.
- By default, the new web interface needs TCP ports 6080, 6443, and 4431 to be operational. Ensure that these ports are not blocked by the enterprise firewall.
- The default port for accessing new web interface is 4431. This can be customized using the **trailblazerconfig** command. For more information about the **trailblazerconfig** command, see Command Line Interface.
- The new web interface also needs AsyncOS API (monitoring) ports for HTTP and HTTPS. By default, these ports are 6080 and 6443. The AsyncOS API (monitoring) ports can also be customized using the **interfaceconfig** command. For more information about the **interfaceconfig** command, see Command Line Interface.
- If you change these default ports, ensure that the customized ports for the new web interface are not blocked by the enterprise firewall.
- The new web interface opens in a new browser window, and you must log in again to access it. If you want to log out of the appliance completely, you need to log out of both the new and legacy web interfaces of your appliance.

- For seamless navigation and rendering of HTML pages, Cisco recommends using the following browsers to access the new web interface of the appliance (AsyncOS 11.8 and later):
  - Google Chrome
  - Mozilla Firefox
- You can access the legacy web interface of the appliance with any of the supported browsers.
- The supported resolution for the new web interface of the appliance (AsyncOS 11.8 and later) is between 1280x800 and 1680x1050. The best viewed resolution is 1440 x 900, for all the browsers.

Note Cisco does not recommend viewing the new web interface of the appliance on higher resolutions.

Release Classification

Each release is identified by the release type (ED - Early Deployment, GD - General Deployment, etc.) For an explanation of these terms, see http://www.cisco.com/c/dam/en/us/products/collateral/security/web-security-appliance/content-security-release-terminology.pdf.

Supported Hardware

The build is available for upgrade on all the existing supported platforms, whereas the enhanced performance support is available only for the following hardware models:

- Sx80
- Sx90/F
- Sx95/F

  Before you upgrade or restart the appliance, disable LLDP on the connected fiber switch port interface. This automatically disables the FCoE traffic.

Virtual Models:

- S100v
- S300v

  The system CPU and memory requirements are changed from 12.5 release onwards. For more information, see Cisco Content Security Virtual Appliance Installation Guide.
- S600v

Note Use the Cisco SFPs which are shipped with the appliance.

Upgrade Paths

- Upgrading to AsyncOS 12.5.6-008, on page 9

Upgrading to AsyncOS 12.5.6-008

Note While upgrading, do not connect any devices (keyboard, mouse, management devices (Raritan) etc.) to the USB ports of the appliance.

You can upgrade to AsyncOS 12.5.6-008 for Cisco Web Security appliances from the following versions:

- 11.8.0-453
- 11.8.0-603
- 11.8.1-702
- 11.8.2-702
- 11.8.3-501
- 11.8.4-004
- 12.0.1-334
- 12.0.2-012
- 12.0.3-007
- 12.0.4-002
- 12.0.5-011
- 12.5.1-043
- 12.5.2-007
- 12.5.2-011
- 12.5.3-006
- 12.5.4-005
- 12.5.4-011
- 12.5.5-002
- 12.5.5-004
- 12.5.5-008

Upgrading to AsyncOS 12.5.5-008

Note While upgrading, do not connect any devices (keyboard, mouse, management devices (Raritan) etc.) to the USB ports of the appliance.

You can upgrade to AsyncOS 12.5.5-008 for Cisco Web Security appliances from the following versions:

- 11.7.2-011
- 11.8.1-702
- 11.8.2-702
- 11.8.3-021
- 11.8.3-501
- 12.0.1-334
- 12.0.5-011
- 12.5.1-043
- 12.5.2-011
- 12.5.3-004
- 12.5.4-005
- 12.5.4-011
- 12.5.5-004
- 12.5.5-005

Upgrading to AsyncOS 12.5.5-004

Note While upgrading, do not connect any devices (keyboard, mouse, management devices (Raritan) etc.) to the USB ports of the appliance.

You can upgrade to AsyncOS 12.5.5-004 for Cisco Web Security appliances from the following versions:

- 10.6.0-244
- 11.7.0-704
- 11.7.1-501
- 11.7.2-011
- 11.7.3-025
- 11.8.0-603
- 11.8.1-702
- 11.8.2-702
- 11.8.3-501
- 11.8.4-004
- 12.0.1-334
- 12.0.2-012
- 12.0.3-007
- 12.0.4-002
- 12.0.5-011
- 12.5.1-043
- 12.5.2-011
- 12.5.3-006
- 12.5.4-011

Upgrading to AsyncOS 12.5.4-011

Note While upgrading, do not connect any devices (keyboard, mouse, management devices (Raritan) etc.) to the USB ports of the appliance.

You can upgrade to AsyncOS 12.5.4-011 for Cisco Web Security appliances from the following versions:

- 10.6.0-240
- 10.6.0-244
- 11.7.0-418
- 11.7.0-704
- 11.7.1-006
- 11.7.1-020
- 11.7.1-043
- 11.7.1-045
- 11.7.1-049
- 11.7.1-501
- 11.7.2-011
- 11.7.3-025
- 11.8.0-414
- 11.8.0-453
- 11.8.0-603
- 11.8.1-023
- 11.8.1-028
- 11.8.1-604
- 11.8.1-702
- 11.8.2-009
- 11.8.2-702
- 11.8.3-018
- 11.8.3-021
- 11.8.3-501
- 11.8.4-004
- 12.0.1-268
- 12.0.1-334
- 12.0.2-004
- 12.0.2-012
- 12.0.3-005
- 12.0.3-007
- 12.0.4-002
- 12.5.0-701
- 12.5.1-011
- 12.5.1-035
- 12.5.1-043
- 12.5.2-007
- 12.5.2-011
- 12.5.3-002
- 12.5.4-005

Upgrading to AsyncOS 12.5.4-005

Note While upgrading, do not connect any devices (keyboard, mouse, management devices (Raritan) etc.) to the USB ports of the appliance.

You can upgrade to AsyncOS 12.5.4-005 for Cisco Web Security appliances from the following versions:

- 10.6.0-240
- 10.6.0-244
- 11.7.0-418
- 11.7.0-704
- 11.7.1-006
- 11.7.1-020
- 11.7.1-043
- 11.7.1-045
- 11.7.1-049
- 11.7.1-501
- 11.7.2-011
- 11.7.3-025
- 11.8.0-414
- 11.8.0-453
- 11.8.0-603
- 11.8.1-023
- 11.8.1-028
- 11.8.1-604
- 11.8.1-702
- 11.8.2-009
- 11.8.2-702
- 11.8.3-018
- 11.8.3-021
- 11.8.3-501
- 11.8.4-004
- 12.0.1-268
- 12.0.1-334
- 12.0.2-004
- 12.0.2-012
- 12.0.3-005
- 12.0.3-007
- 12.0.4-002
- 12.5.0-701
- 12.5.1-011
- 12.5.1-035
- 12.5.1-043
- 12.5.2-007
- 12.5.2-011
- 12.5.3-002

Upgrading to AsyncOS 12.5.3-002

Note While upgrading, do not connect any devices (keyboard, mouse, management devices (Raritan) etc.) to the USB ports of the appliance.

You can upgrade to AsyncOS 12.5.3-002 for Cisco Web Security appliances from the following versions:

- 10.6.0-240
- 10.6.0-244
- 11.7.0-418
- 11.7.0-704
- 11.7.1-006
- 11.7.1-020
- 11.7.1-043
- 11.7.1-045
- 11.7.1-049
- 11.7.1-501
- 11.7.2-011
- 11.7.3-025
- 11.8.0-414
- 11.8.0-453
- 11.8.0-603
- 11.8.1-023
- 11.8.1-028
- 11.8.1-604
- 11.8.1-702
- 11.8.2-009
- 11.8.2-702
- 11.8.3-018
- 11.8.3-021
- 11.8.3-501
- 11.8.4-004
- 12.0.1-268
- 12.0.1-334
- 12.0.2-004
- 12.0.2-012
- 12.0.3-005
- 12.0.3-007
- 12.0.4-002
- 12.5.0-701
- 12.5.1-011
- 12.5.1-035
- 12.5.1-043
- 12.5.2-007
- 12.5.2-011

Upgrading to AsyncOS 12.5.2-011

Note While upgrading, do not connect any devices (keyboard, mouse, management devices (Raritan) etc.) to the USB ports of the appliance.

You can upgrade to AsyncOS 12.5.2-011 for Cisco Web Security appliances from the following versions:

- 10.6.0-240
- 10.6.0-244
- 11.7.0-418
- 11.7.0-704
- 11.7.1-006
- 11.7.1-020
- 11.7.1-043
- 11.7.1-045
- 11.7.1-049
- 11.7.1-501
- 11.7.2-011
- 11.7.3-025
- 11.8.0-414
- 11.8.0-453
- 11.8.0-603
- 11.8.1-023
- 11.8.1-028
- 11.8.1-604
- 11.8.1-702
- 11.8.2-009
- 11.8.2-702
- 11.8.3-018
- 11.8.3-021
- 11.8.3-501
- 12.0.1-268
- 12.0.1-334
- 12.0.2-004
- 12.0.2-012
- 12.0.3-005
- 12.0.3-007
- 12.5.0-701
- 12.5.1-011
- 12.5.1-035
- 12.5.1-043
- 12.5.2-007

Upgrading to AsyncOS 12.5.2-007

Note While upgrading, do not connect any devices (keyboard, mouse, management devices (Raritan) etc.) to the USB ports of the appliance.

You can upgrade to AsyncOS 12.5.2-007 for Cisco Web Security appliances from the following versions:

- 10.6.0-240
- 10.6.0-244
- 11.7.0-418
- 11.7.0-704
- 11.7.1-006
- 11.7.1-020
- 11.7.1-043
- 11.7.1-045
- 11.7.1-049
- 11.7.1-501
- 11.7.2-011
- 11.7.3-025
- 11.8.0-414
- 11.8.0-453
- 11.8.0-603
- 11.8.1-023
- 11.8.1-028
- 11.8.1-604
- 11.8.1-702
- 11.8.2-009
- 11.8.2-702
- 11.8.3-018
- 11.8.3-021
- 11.8.3-501
- 12.0.1-268
- 12.0.1-334
- 12.0.2-004
- 12.0.2-012
- 12.0.3-005
- 12.0.3-007
- 12.5.0-701
- 12.5.1-011
- 12.5.1-035
- 12.5.1-043

Upgrading to AsyncOS 12.5.1-043

Note While upgrading, do not connect any devices (keyboard, mouse, management devices (Raritan) etc.) to the USB ports of the appliance.

You can upgrade to AsyncOS 12.5.1-043 for Cisco Web Security appliances from the following versions:

- 10.1.4-017
- 10.1.5-004
- 10.1.5-034
- 10.1.5-037
- 10.5.2-072
- 10.5.3-025
- 10.5.4-018
- 10.5.5-005
- 10.5.6-022
- 10.5.6-024
- 10.6.0-240
- 10.6.0-244
- 11.5.1-125
- 11.5.1-504
- 11.5.1-603
- 11.5.1-706
- 11.5.2-020
- 11.5.3-007
- 11.5.3-016
- 11.5.3-504
- 11.7.0-407
- 11.7.0-418
- 11.7.0-704
- 11.7.1-006
- 11.7.1-020
- 11.7.1-043
- 11.7.1-045
- 11.7.1-049
- 11.7.1-501
- 11.7.2-011
- 11.8.0-414
- 11.8.0-453
- 11.8.0-603
- 11.8.1-023
- 11.8.1-028
- 11.8.1-604
- 11.8.1-702
- 11.8.2-009
- 11.8.2-702
- 12.0.1-268
- 12.0.1-334
- 12.0.2-004
- 12.0.2-012
- 12.5.0-701
- 12.5.1-011
- 12.5.1-035

Upgrading to AsyncOS 12.5.1-035

Note While upgrading, do not connect any devices (keyboard, mouse, management devices (Raritan) etc.) to the USB ports of the appliance.

You can upgrade to AsyncOS 12.5.1-035 for Cisco Web Security appliances from the following versions:

- 10.1.4-017
- 10.1.5-004
- 10.1.5-034
- 10.5.2-072
- 10.5.3-025
- 10.5.4-018
- 10.5.5-005
- 10.5.6-022
- 10.5.6-024
- 10.6.0-240
- 10.6.0-244
- 11.5.1-125
- 11.5.1-504
- 11.5.1-603
- 11.5.1-706
- 11.5.2-020
- 11.5.3-007
- 11.5.3-016
- 11.5.3-504
- 11.7.0-407
- 11.7.0-418
- 11.7.0-704
- 11.7.1-006
- 11.7.1-020
- 11.7.1-043
- 11.7.1-045
- 11.7.1-049
- 11.7.2-011
- 11.8.0-453
- 11.8.1-023
- 11.8.1-028
- 11.8.1-604
- 11.8.1-702
- 11.8.2-009
- 11.8.2-702
- 12.0.1-268
- 12.0.1-334
- 12.0.2-004
- 12.5.0-701
- 12.5.1-011

Upgrading to AsyncOS 12.5.1-011

Note While upgrading, do not connect any devices (keyboard, mouse, management devices (Raritan) etc.) to the USB ports of the appliance.

You can upgrade to AsyncOS 12.5.1-011 for Cisco Web Security appliances from the following versions:

- 10.1.4-017
- 10.1.5-004
- 10.5.2-072
- 10.5.3-025
- 10.5.4-018
- 10.5.5-005
- 10.5.6-022
- 10.5.6-024
- 10.6.0-240
- 10.6.0-244
- 11.5.1-125
- 11.5.1-504
- 11.5.1-603
- 11.5.1-706
- 11.5.2-020
- 11.5.3-007
- 11.5.3-016
- 11.5.3-504
- 11.7.0-407
- 11.7.0-418
- 11.7.0-704
- 11.7.1-006
- 11.7.1-020
- 11.7.1-043
- 11.7.1-045
- 11.7.1-049
- 11.8.0-453
- 11.8.1-023
- 11.8.1-028
- 12.0.1-268
- 12.0.1-334
- 12.5.0-701

Post–Upgrade Requirements

After you upgrade to 12.5.5-008, perform the following steps:

Procedure

Step 1 Create a user account in the Cisco Threat Response portal with admin access rights.

To create a new user account, navigate to the Cisco Threat Response portal login page using the following URL- https://visibility.amp.cisco.com and click ‘Create a Cisco Security Account’. If you are unable to create a new user account, contact Cisco TAC for assistance.

Step 2 For registering your appliance with Security Services Exchange (SSE) cloud portal, generate token from SSE portal corresponding to your region.

While registering with SSE cloud portal, select the following FQDN based on your region from the web user interface of your appliance:

- AMERICAS (*api-sse.cisco.com*)
- EUROPE (*api.eu.sse.itd.cisco.com*)
- APJC (*api.apj.sse.itd.cisco.com*)

Step 3 Make sure that you enable Cisco Threat Response under Cloud Services on the Security Services Exchange portal. Ensure that you open HTTPS (In and Out) 443 port on the firewall for the FQDN *api-sse.cisco.com* (America) to register your appliance with the Security Services Exchange portal.

To deploy a virtual appliance, see the *Cisco Content Security Virtual Appliance Installation Guide*, available at http://www.cisco.com/c/en/us/support/security/web-security-appliance/products-installation-guides-list.html.

Compatibility Details

Compatibility with Cisco AsyncOS for Security Management

For compatibility between this release and AsyncOS for Cisco Content Security Management releases, see the compatibility matrix at: https://www.cisco.com/c/dam/en/us/td/docs/security/security_management/sma/sma_all/web-compatibility/index.html.

IPv6 and Kerberos Not Available in Cloud Connector Mode

When the appliance is configured in Cloud Connector mode, unavailable options for IPv6 addresses and Kerberos authentication appear on pages of the web interface. Although the options appear to be available, they are not supported in Cloud Connector mode. Do not attempt to configure the appliance to use IPv6 addresses or Kerberos authentication when in Cloud Connector mode.

Functional Support for IPv6 Addresses

Features and functionality that support IPv6 addresses:

- Command line and web interfaces. You can access the appliance using http://[2001:2:2::8]:8080 or https://[2001:2:2::8]:8443
- Performing proxy actions on IPv6 data traffic (HTTP/HTTPS/SOCKS/FTP)
- IPv6 DNS Servers
- WCCP 2.01 (Cat6K Switch) and Layer 4 transparent redirection
- Upstream Proxies
- Authentication Services
  - Active Directory (NTLMSSP, Basic, and Kerberos)
  - LDAP
  - SaaS SSO
  - Transparent user identification through CDA (communication with CDA is IPv4 only)
  - Credential Encryption

- Web Reporting and Web Tracking
- External DLP Servers (communication between the appliance and DLP Server is IPv4 only)
- PAC File Hosting
- Protocols: NTP, RADIUS, SNMP, and Syslog over the management server

Features and functionality that require IPv4 addresses:

- Internal SMTP relay
- External Authentication
- Log subscription push methods: FTP, SCP, and Syslog
- NTP servers
- Local update servers, including proxy servers for updates
- Authentication services
- AnyConnect Security Mobility
- Novell eDirectory authentication servers
- Custom logo for end-user notification pages
- Communication between the Web Security Appliance and the Security Management Appliance
- WCCP versions prior to 2.01
- SNMP

Availability of Kerberos Authentication for Operating Systems and Browsers

You can use Kerberos authentication with these operating systems and browsers:

- Windows servers 2003, 2008, 2008R2, and 2012.
- Latest releases of Safari and Firefox browsers on Mac (OSX Version 10.5 and later)
- IE (Version 7 and later) and latest releases of Firefox and Chrome browsers on Windows 7 and later.

Kerberos authentication is not available with these operating systems and browsers:

- Windows operating systems not mentioned above
- Browsers not mentioned above
- iOS and Android

Deploying a Virtual Appliance

To deploy a virtual appliance, see the *Cisco Content Security Virtual Appliance Installation Guide*, available at http://www.cisco.com/c/en/us/support/security/web-security-appliance/products-installation-guides-list.html.

Migrating from a Hardware Appliance to a Virtual Appliance

Procedure

Step 1 Set up the virtual appliance with this AsyncOS release. See Post–Upgrade Requirements.

Note Ensure that the Security Services updates are successful

Step 2 Upgrade your hardware appliance to this AsyncOS release.

Step 3 Save the configuration file from your upgraded hardware appliance.

Step 4 Load the configuration file from the hardware appliance onto the virtual appliance.

If your hardware and virtual appliances have different IP addresses, deselect Load Network Settings before loading the configuration file.

Step 5 Commit the changes.

Step 6 Go to **Network** > **Authentication** and join the domain again. Otherwise identities won't work.

Upgrading AsyncOS for Web

Before you begin

- Perform preupgrade requirements, including updating the RAID controller firmware.
- Log in as Administrator.

Procedure

Step 1 On the **System Administration** > **Configuration File** page, save the XML configuration file from the Web Security Appliance.

Step 2 On the **System Administration** > **System Upgrade** page, click **Upgrade Options**.

Step 3 You can select either **Download and install**, or **Download only**.

Choose from the list of available upgrades.

Step 4 Click **Proceed**.

If you chose **Download only**, the upgrade will be downloaded to the appliance.

Step 5 If you chose **Download and install**, when the upgrade is complete, click **Reboot Now** to reboot the Web Security Appliance.

Note To verify the browser loads the new online help content in the upgraded version of AsyncOS, you must exit the browser and then open it before viewing the online help. This clears the browser cache of any outdated content.

Important! Actions Required After Upgrading

In order to ensure that your appliance continues to function properly after upgrade, you must address the following items:

- Change the Default Proxy Services Cipher Suites to Cisco Recommended Cipher Suites
- Virtual Appliances: Required Changes for SSH Security Vulnerability Fix
- File Analysis: Required Changes to View Analysis Result Details in the Cloud
- File Analysis: Verify File Types To Be Analyzed
- Unescaped Dots in Regular Expressions

Change the Default Proxy Services Cipher Suites to Cisco Recommended Cipher Suites

From AsyncOS 9.1.1 onwards, the default cipher suites available for Proxy Services are modified to include only secure cipher suites.

However, if you are upgrading from AsyncOS 9.x.x and later releases, the default Proxy Services cipher suites are not modified. For enhanced security, Cisco recommends that you change the default Proxy Services cipher suites to the Cisco recommended cipher suites after the upgrade. Do the following:

Procedure

Step 1 Log in to your appliance using the web interface.

Step 2 Click **System Administration** > **SSL Configuration**.

Step 3 Click **Edit Settings**.

Step 4 Under **Proxy Services**, set the **Cipher(s) to Use** field to the following field:

```
EECDH:DSS:RSA:!NULL:!eNULL:!aNULL:!EXPORT:!3DES:!SEED:!CAMELLIA:!SRP:!IDEA:!DHE-
DSS-AES256-SHA:!AES256-SHA:DHE-RSA-AES128-SHA:TLS_AES_256_GCM_SHA384
```

Caution Make sure that you paste the above string as a single string with no carriage returns or spaces.

Step 5 Submit and commit your changes.

You can also use the **sslconfig** command in CLI to perform the above steps.

Virtual Appliances: Required Changes for SSH Security Vulnerability Fix

Requirements in this section were introduced in AsyncOS 8.8.

The following security vulnerability will be fixed during upgrade if it exists on your appliance:

http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20150625-ironport.

Note This patch is required only for virtual appliance releases that were downloaded or upgraded before June 25, 2015.

If you did not patch this issue before upgrading, you will see a message during upgrade stating that it has been fixed. If you see this message, the following actions are required to return your appliance to full working order after upgrade:

- Remove the existing entry for your appliance from the known hosts list in your ssh utility. Once the new key has been created, connect to the appliance via ssh and accept the connection.
- Clear the old SSH host key for the appliance on the remote server if you are using SCP push to transfer logs to a remote server (including Splunk).
- If your deployment includes a Cisco Content Security Management Appliance, see important instructions in the Release Notes for that appliance.

File Analysis: Required Changes to View Analysis Result Details in the Cloud

If you have deployed multiple content security appliances (web, email, and/or management) and you want to view detailed file analysis results in the cloud for all files uploaded from any appliance in your organization, you must configure an appliance group on each appliance after upgrading. To configure appliance groups, see File Reputation Filtering and File Analysis.

File Analysis: Verify File Types To Be Analyzed

The File Analysis cloud server URL changed in AsyncOS 8.8, and as a result, the file types that can be analyzed may have changed after the upgrade. You should receive an alert if there are changes. To verify the file types selected for analysis, select **Security Services** > **Anti-Malware and Reputation** and look at the Advanced Malware Protection settings.

Unescaped Dots in Regular Expressions

Following upgrades to the regular-expression pattern-matching engine, you may receive an alert regarding unescaped dots in existing pattern definitions after updating your system. Any unescaped dot in a pattern that will return more than 63 characters after the dot will be disabled by the Velocity pattern-matching engine, and an alert to that effect will be sent to you. You will continue to receive an alert following each update until you correct or replace the pattern. Generally, unescaped dots in a larger regular expression can be problematic and should be avoided.

Documentation Updates

The user guide and and other documentation for this product is available in Related Documentation.

Known and Fixed Issues

- Bug Search Tool Requirements
- Lists of Known and Fixed Issues
- Finding Information about Known and Resolved Issues

Bug Search Tool Requirements

Register for a Cisco account if you do not have one. Go to https://identity.cisco.com/ui/tenants/global/v1.0/enrollment-ui.

Lists of Known and Fixed Issues

Lists of Known and Fixed Issues in Release 12.5.6-008

- Fixed Issues
- Known Issues

Lists of Known and Fixed Issues in Release 12.5.5-008

- Fixed Issues
- Known Issues

Lists of Known and Fixed Issues in Release 12.5.5-004

- Fixed Issues
- Known Issues

Lists of Known and Fixed Issues in Release 12.5.4-011

- Fixed Issues
- Known Issues

Lists of Known and Fixed Issues in Release 12.5.4-005

- Fixed Issues
- Known Issues

Lists of Known and Fixed Issues in Release 12.5.3-002

- Fixed Issues

- Known Issues

Lists of Known and Fixed Issues in Release 12.5.2-011

- Fixed Issues
- Known Issues

Lists of Known and Fixed Issues in Release 12.5.2-007

- Fixed Issues
- Known Issues

Lists of Known and Fixed Issues in Release 12.5.1-043

- Fixed Issues
- Known Issues

Lists of Known and Fixed Issues in Release 12.5.1-035

- Fixed Issues
- Known Issues

Lists of Known and Fixed Issues in Release 12.5.1-011

- Fixed Issues
- Known Issues

Finding Information about Known and Resolved Issues

Use the Cisco Bug Search Tool to find current information about known and resolved defects.

Before you begin

Register for a Cisco account if you do not have one. Go to https://identity.cisco.com/ui/tenants/global/v1.0/enrollment-ui.

Procedure

Step 1 Go to https://tools.cisco.com/bugsearch/.

Step 2 Log in with your Cisco account credentials.

Step 3 Click **Select from list** > **Security** > **Web Security** > **Cisco Web Security Appliance**, and click **OK**.

Step 4 In **Releases** field, enter the version of the release, for example, x.x.x.

Step 5 Depending on your requirements, do one of the following:

- To view the list of resolved issues, select **Fixed in these Releases** from the **Releases** drop-down.

- To view the list of known issues, select **Affecting these Releases** from the **Releases** drop-down and select **Open** from the **Status** drop-down.

Note If you have questions or problems, click the **Help** or **Feedback** links at the top right side of the tool. There is also an interactive tour; to view it, click the link in the orange bar above the search fields.

Related Documentation

Documentation	Location
Cisco Secure Web Appliance User Guide	http://www.cisco.com/c/en/us/support/security/web-security-appliance/tsd-products-support-series-home.html
Cisco Content Security Management Appliance User Guide	https://www.cisco.com/c/en/us/support/security/content-security-management-appliance/series.html
Virtual Appliance Installation Guide	https://www.cisco.com/c/en/us/support/security/email-securityappliance/products-installation-guides-list.html
Compatibility Matrix for Cisco Secure Email and Web Manager with Secure Web Appliance	https://www.cisco.com/c/dam/en/us/td/docs/security/security_management/sma/sma_all/web-compatibility/index.html
API Guide	https://www.cisco.com/c/en/us/support/security/web-security-appliance/products-programming-reference-guides-list.html

Support

Cisco Support Community

Cisco Support Community is an online forum for Cisco customers, partners, and employees. It provides a place to discuss general web security issues as well as technical information about specific Cisco products. You can post topics to the forum to ask questions and share information with other Cisco users.

Access the Cisco Support Community for web security and associated management:

https://supportforums.cisco.com/community/5786/web-security

Customer Support

Note To get support for virtual appliances, call Cisco TAC and have your Virtual License Number (VLN) number ready.

Cisco TAC: Visit http://www.cisco.com/en/US/support/tsd_cisco_worldwide_contacts.html.

Support Site for legacy IronPort: Visit http://www.cisco.com/web/services/acquisitions/ironport.html.

For non-critical issues, you can also access customer support from the appliance. For instructions, see the User Guide or online help.

The documentation set for this product strives to use bias-free language. For purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. Exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on standards documentation, or language that is used by a referenced third-party product.