



## Fireware v12.5.1 Update 1 Release Notes

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Supported Devices	Firebox T10, T15, T30, T35, T50, T55, T70, M200, M270, M300, M370, M400, M440, M470, M500, M570, M670, M4600, M5600 FireboxV, Firebox Cloud, WatchGuard AP
Release Date	Updated macOS applications - 11 November 2019 Fireware 12.5.1 Update 1 -- 24 October 2019 Fireware 12.5.1 -- 10 September 2019 AP Firmware Update -- 24 October 2019
Release Notes Revision	21 November 2019
Fireware OS Build	605447 -- Fireware 12.5.1 Update 1 601804 -- Fireware 12.5.1
WatchGuard System Manager Build	601717
WatchGuard AP Firmware	AP100, AP102: 1.2.9.16 AP300: 2.0.0.11 AP120, AP125, AP320, AP322, AP325, AP 327X, AP420: 8.8.0-192

## Introduction

On 11 November 2019, WatchGuard released updates for Mobile VPN with SSL, WatchGuard Mobile VPN with IPSec Client, and SSO Client for macOS. These releases add support for macOS Catalina 10.15, and require macOS High Sierra 10.13 or later. To learn more about support for Catalina, see [macOS Catalina 10.15 software compatibility](#).



On 24 October 2019, WatchGuard released Fireware v12.5.1 Update 1. This release resolves issues across a variety of features.

On 22 October 2019, WatchGuard released AP Firmware Update 8.8.0-192 for AP120, AP125, AP320, AP322, AP325, and AP420.

For more details about these updates, see [Enhancements and Resolved Issues](#).

Fireware v12.5.1 is a maintenance release for Firebox T Series, Firebox M Series, FireboxV, and Firebox Cloud appliances.

This release includes important bug fixes, and these feature improvements:

### ***Gateway Wireless Controller Enhancements***

Gateway Wireless Controller can now monitor the license status for connected AP devices, and has tools for AP license management. Gateway Wireless Controller will not manage or update AP devices with expired licenses, and the AP device will continue to function with the most recent configuration. For more information, see [WatchGuard AP License Enforcement for Basic Wi-Fi Subscriptions](#).

### ***WebBlocker Enhancements***

WebBlocker Override no longer allows users to specify the domain for override, and users no longer see repeated WebBlocker Warn messages after they click **Continue to Site**.

### ***WatchGuard Cloud Enhancements***

Fireware v12.5.1 includes updates to support new visualization options for SD-WAN in WatchGuard Cloud. Fireware v12.5.1 is a prerequisite to enable new historical reporting of jitter, latency, and packet loss, which will soon be available in WatchGuard Cloud.

### ***Firebox T35-DW***

This release adds support for the new Firebox T35-DW model, which is a DSL version of the Firebox T35. The Firebox T35-DW is only available through specific Telco service providers in a limited set of countries.

### ***Updated WatchGuard IPSec Mobile VPN Client for Windows***

The new v14.0 client features Quality of Service prioritization for outbound traffic through the Mobile VPN tunnel, as well as improvements to the Support Assistant to gather diagnostic log files.

For a full list of the enhancements in this release, see *Enhancements and Resolved Issues in Fireware v12.5.1 Update 1* or review the [What's New in Fireware v12.5.1 PowerPoint](#).

## Before You Begin

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Before you install this release, make sure that you have:

- A supported WatchGuard Firebox. This device can be a WatchGuard Firebox T Series or Firebox M Series device. You can also use this version of Fireware on FireboxV and Firebox Cloud for AWS and Azure. *We do not support Fireware v12.2.x or higher on XTM devices.*
- The required hardware and software components as shown below. If you use WatchGuard System Manager (WSM), make sure your WSM version is equal to or higher than the version of Fireware OS installed on your Firebox and the version of WSM installed on your Management Server.
- Feature key for your Firebox — If you upgrade your device from an earlier version of Fireware OS, you can use your existing feature key. If you do not have a feature key for your device, you can log in to the WatchGuard website to download it.
- If you are upgrading to Fireware v12.x from Fireware v11.10.x or earlier, we strongly recommend you review the [Fireware v11.12.4 release notes](#) for important information about significant feature changes that occurred in Fireware v11.12.x release cycle.
- Some Known Issues are especially important to be aware of before you upgrade, either to or from specific versions of Fireware. In this release, a change affects some inbound NAT policies with policy-based routing or an SD-WAN action. To learn more, see [Release-specific upgrade notes](#).

Note that you can install and use WatchGuard System Manager v12.x and all WSM server components<sup>1</sup> with devices running earlier versions of Fireware. In this case, we recommend that you use the product documentation that matches your Fireware OS version.

If you have a new Firebox, make sure you use the instructions in the *Quick Start Guide* that shipped with your device. If this is a new FireboxV installation, make sure you carefully review [Fireware help in the WatchGuard Help Center](#) for important installation and setup instructions. We also recommend that you review the [Hardware Guide](#) for your Firebox model. The *Hardware Guide* contains useful information about your device interfaces, as well as information on resetting your device to factory default settings, if necessary.

Product documentation for all WatchGuard products is available on the WatchGuard web site at <https://www.watchguard.com/wgrd-help/documentation/overview>.

<sup>1</sup>*The WatchGuard System Manager WebBlocker server component is not supported by Fireboxes with v12.2 or higher, and it is no longer possible to download a database for the WebBlocker server bundled with WatchGuard System Manager*



This page does not include every issue resolved in a release. Issues discovered in internal testing or beta testing are not usually included in this list.



On 11 November 2019, WatchGuard released multiple new client applications for macOS. These releases add support for macOS Catalina 10.15, and require macOS High Sierra 10.13 or later. [Click here](#) to see resolved issues for these client releases.

## Enhancements and Resolved Issues in Fireware v12.5.1 Update 1

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### General

- This release resolves TCP SACK panic kernel vulnerabilities (CVE-2019-11477, CVE-2019-11478, CVE-2019-11479). *[FBX-16840]*
- This release resolves a crash in the `wgagent` process. *[FBX-15899]*
- The Firebox can now queue more than 4096 active DNS requests. *[FBX-17148]*

### Networking

- Access Portal logins no longer fail because of browser caching. *[FBX-17287]*

### Proxies and Services

- This release resolves a SIP-ALG Proxy issue that would cause incoming call audio to fail. *[FBX-17288]*
- Gateway AntiVirus actions now correctly apply to HTTP uploads that exceed scan size limit. *[FBX-17562]*
- HTTP/HTTPS requests with zero length responses no longer cause Gateway AntiVirus scan errors. *[FBX-17434]*
- The Geolocation block page now displays correctly in multi-WAN environments. *[FBX-17610]*
- The TCP-UDP proxy now correctly identifies traffic from the TOTVS Smart Client application. *[FBX-17152]*
- The predefined Content Inspection exceptions list has been updated to include new WatchGuard AWS IoT domains for the AuthPoint Gateway. *[FBX-17739]*
- WebBlocker Override now works correctly with a custom Deny Message that exceeds 4KB in size. *[FBX-16914]*
- OCSP validation is now only performed for HTTPS connections that require content inspection. *[FBX-16583]*
- You can now use the CLI to set the `tcp-close-timeout` value for the HTTP and HTTPS proxies. *[FBX-17330]*
- This release resolves an issue with the HTTP Proxy that prevented HTTP Basic Authentication. *[FBX-16603]*

### VPN

- This release resolves a Branch Office VPN re-key failure that occurred with a shorter than expected Diffie-Hellman key. *[FBX-17636]*
- This release fixes a Mobile VPN with SSL server crash. *[FBX-16976]*

- The Firebox now correctly sends Branch Office VPN traffic through a tunnel route that includes a host range. *[FBX-16876]*

## Integrations

- Autotask now opens and re-opens tickets successfully without the need to disable and re-enable Autotask in your configuration. *[FBX-17331]*

## Resolved Issues in AP Firmware Update 8.8.0-192

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- The transmit power is now correctly reported for AP120 , AP320, and AP322 devices. *[AP-489]*
- APs can now correctly connect to WatchGuard servers if they receive a DNS suffix from DHCP. *[AP-534]*

## Enhancements and Resolved Issues in WSM and Fireware v12.5.1

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### General

- The Send Notification action in proxy policies no longer creates an incorrect Temporarily blocking host log message. *[FBX-16477]*
- Policy Manager does not consistently mark the configuration as modified when you make configuration changes in **Network > Configuration**. *[FBX-15831]*
- You can now deploy a Firebox Cloud instance to an Availability Set in Microsoft Azure. *[FBX-15943]*
- The Firebox no longer responds on TCP 443 when no policy is configured. *[FBX-15626]*
- Policy Manager no longer displays an incorrect INTERNAL\_ERROR message when you save the configuration to Firebox Cloud. *[FBX-16958, FBX-17427]*

### Networking

- You can now add or edit an SD-WAN action in Policy Manager when the action includes interfaces that do not have Link Monitoring configured. *[FBX-17078]*
- Firebox Cloud instances in Azure now load interfaces in the correct order after a reboot or upgrade. *[FBX-15788]*
- The list of interfaces for Link Monitoring now correctly updates when you delete a VLAN interface. *[FBX-16547]*
- The Firebox now generates meaningful log messages when it drops packets for a connection it is not aware of. *[FBX-16424]*

### Logging and Notification

- This release resolve a snmpd crash that causes the Firebox to reboot unexpectedly. *[FBX-16444]*

### Authentication

- WatchGuard System Manager no longer persistently changes default authentication for Firebox to Firebox-DB *[FBX-17133]*

### VPN

- The Mobile VPN with SSL client can download an updated version from the Firebox without error. *[FBX-16236]*

- An issue that triggered a Java Error message when editing a VIF BOVPN tunnel has been resolved. *[FBX-16703]*
- SD-WAN can no longer be enabled on the BOVPN-Allow Policies. *[FBX-16329]*
- Policy Manager no longer unexpectedly reassigns Virtual Interface routes to a new interface when you change the route metric. *[FBX-16845]*
- You can now use Policy Manager to change the login limits for the IKEv2-Users group. *[FBX-15688]*

## Wireless

- This release suppresses log messages from the gwcd process that display multiple authentication attempts during AP discovery and pairing. *[FBX-15592]*.
- Gateway Wireless Controller can now enforce AP license requirements. *[FBX-10242]*

## Resolved Issues in AP Firmware Update 8.8.0-179

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- This release resolves TCP SACK panic kernel vulnerabilities (CVE-2019-11477, CVE-2019-11478, CVE-2019-11479). *[AP-498]*
- The use of the Fast Roaming (802.11r) option no longer results in slow speeds after roaming on the AP325 and AP420. *[AP-323]*
- APs no longer reboot when they connect to switches with 802.3az enabled. 802.3az has been disabled on all APs to prevent connectivity issues. *[AP-275]*

## Enhancements and Resolved Issues in WatchGuard IPsec Mobile VPN Client v14.0 for Windows

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- This release supports QoS prioritization for outbound traffic through the Mobile VPN tunnel.
- You can now designate a zone as Home on a temporary basis.
- This release introduces Expert Mode for advanced client configuration.
- The client has new options to manage how internet connections function when the client is active.
- The Support Assistant now collects more useful log files for diagnosis of client issues by support.
- This release updates the directory structure for the Mobile VPN client installation for clarity and ease of troubleshooting.
- The NCP filter driver has been optimized for improved VPN throughput.
- The user interface now displays all options correctly when GUI scaling is enabled in Windows.

## Enhancements and Resolved Issues in Mobile VPN with SSL Client v12.5.2 for macOS

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- This release adds support for macOS 10.15 Catalina. *[FBX-17621]*

## Enhancements and Resolved Issues in WatchGuard IPsec Mobile VPN Client v4.00 r46079 for macOS

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- This release adds support for macOS 10.15 Catalina. *[FBX-17838]*
- The macOS client now uses a virtual network adapter to improve support for some VoIP applications.
- You can now connect and disconnect the selected connection with a right-click on the Dock menu icon.

- This release improves the handling of DNS requests for users with an active VPN connection.
- The Mobile VPN client now features an Always connection mode for continuous VPN connection or continuous attempts.

## **Enhancements and Resolved Issues in WatchGuard SSO Agent v12.5.2 for macOS**

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- This release introduces a 64-bit version of the SSO client for macOS Catalina 10.15 compatibility. [FBX-8387]

## Known Issues and Limitations

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Known issues for Fireware v12.5.1 Update 1 and its management applications, including workarounds where available, can be found on the [Technical Search > Knowledge Base](#) tab. To see known issues for a specific release, from the **Product & Version** filters you can expand the Fireware version list and select the check box for that version.

Some Known Issues are especially important to be aware of before you upgrade, either to or from specific versions of Fireware. To learn more, see [Release-specific upgrade notes](#).

## Download Software

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You can download software from the [WatchGuard Software Downloads Center](#).

There are several software files available for download with this release. See the descriptions below so you know what software packages you will need for your upgrade.

### WatchGuard System Manager

With this software package you can install WSM and the WatchGuard Server Center software:

WSM12\_5\_1.exe — Use this file to install WSM v12.5 or to upgrade WatchGuard System Manager from an earlier version.

### Fireware OS

If your Firebox is running Fireware v11.10 or later, you can upgrade the Fireware OS on your Firebox automatically from the Fireware Web UI **System > Upgrade OS** page.

If you prefer to upgrade from Policy Manager, or from an earlier version of Fireware, you can use download the Fireware OS image for your Firebox. Use the .exe file if you want to install or upgrade the OS using WSM. Use the .zip file if you want to install or upgrade the OS manually using Fireware Web UI. Use the .ova or .vhd file to deploy a new FireboxV device.



The file name for software downloads will always include the product group, such as T30-T50 for the Firebox T30 or T50.

If you have...	Select from these Fireware OS packages
Firebox M4600/M5600	Firebox_OS_M4600_M5600_12_5_1_U1.exe firebox_M4600_M5600_12_5_1_U1.zip
Firebox M270/M370/M470/M570/M670	Firebox_OS_M270_M370_M470_M570_M670_12_5_1_U1.exe firebox_M270_M370_M470_M570_M670_12_5_1_U1.zip
Firebox M400/M500	Firebox_OS_M400_M500_12_5_1_U1.exe firebox_M400_M500_12_5_1_U1.zip
Firebox M440	Firebox_OS_M440_12_5_1_U1.exe firebox_M440_12_5_1_U1.zip
Firebox M200/M300	Firebox_OS_M200_M300_12_5_1_U1.exe firebox_M200_M300_12_5_1_U1.zip
Firebox T70	Firebox_OS_T70_12_5_1_U1.exe firebox_T70_12_5_1_U1.zip
Firebox T55	Firebox_OS_T55_12_5_1_U1.exe firebox_T55_12_5_1_U1.zip
Firebox T30/T50	Firebox_OS_T30_T50_12_5_1_U1.exe firebox_T30_T50_12_5_1_U1.zip
Firebox T35	Firebox_OS_T35_12_5_1_U1.exe firebox_T35_12_5_1_U1.zip
Firebox T15	Firebox_OS_T15_12_5_1_U1.exe firebox_T15_12_5_1_U1.zip
Firebox T10	Firebox_OS_T10_12_5_1_U1.exe firebox_T10_12_5_1_U1.zip
FireboxV All editions for VMware	FireboxV_12_5_1_U1.ova Firebox_OS_FireboxV_12_5_1_U1.exe firebox_FireboxV_12_5_1_U1.zip
FireboxV All editions for Hyper-V	FireboxV_12_5_1_U1_vhd.zip Firebox_OS_FireboxV_12_5_1_U1.exe Firebox_FireboxV_12_5_1_U1.zip
Firebox Cloud	FireboxCloud_12_5_1_U1.zip Firebox_OS_FireboxCloud_12_5_1_U1.exe

## Additional Firebox Software

The files in the list below are not directly used by the Firebox or for Firebox management, but are necessary for key features to work. In most cases, the file name includes the Fireware version that was current at the time of release.

Filename	Description	Updated in this release
WG-Authentication-Gateway_12_4.exe	Single Sign-On Agent software - required for Single Sign-On and includes optional Event Log Monitor for clientless SSO	
WG-Authentication-Client_12_3.msi	Single Sign-On Client software for Windows	
<b>WG-SSOCLIENT-MAC_12_5_2.dmg<sup>5</sup></b>	<b>Single Sign-On Client software for macOS</b>	✓
SSOExchangeMonitor_x86_12_0.exe	Exchange Monitor for 32-bit operating systems	
SSOExchangeMonitor_x64_12_0.exe	Exchange Monitor for 64-bit operating systems	
TO_AGENT_SETUP_11_12.exe	Terminal Services software for both 32-bit and 64-bit systems.	
<b>WG-MVPN-SSL_12_5.exe<sup>4</sup></b>	<b>Mobile VPN with SSL client for Windows</b>	✓
<b>WG-MVPN-SSL_12_5_2.dmg<sup>5</sup></b>	<b>Mobile VPN with SSL client for macOS</b>	✓
<b>WG-Mobile-VPN_Windows_x86_1400_45109.exe<sup>1</sup></b>	<b>WatchGuard IPsec Mobile VPN Client for Windows (32-bit), powered by NCP<sup>2</sup></b>	✓
<b>WG-Mobile-VPN_Windows_x86-64_1400_45109.exe<sup>1</sup></b>	<b>WatchGuard IPsec Mobile VPN Client for Windows (64-bit), powered by NCP<sup>2</sup></b>	✓
<b>WG-Mobile-VPN_macOS_x86-64_400_46079.dmg<sup>1,5</sup></b>	<b>WatchGuard IPsec Mobile VPN Client for macOS, powered by NCP<sup>2</sup></b>	✓
Watchguard_MVLS_Win_x86-64_200_rev19725.exe <sup>1</sup>	WatchGuard Mobile VPN License Server (MVLS) v2.0, powered by NCP <sup>3</sup>	

<sup>1</sup> This version number in this file name does not match any Fireware version number.

<sup>2</sup> There is a license required for this premium client, with a 30-day free trial available with download.

<sup>3</sup> Click [here](#) for more information about MVLS. If you have a VPN bundle ID for macOS, it must be updated on the license server to support the macOS 3.00 or later client. To update your bundle ID, contact WatchGuard Customer Support. Make sure to have your existing bundle ID available to expedite the update.

<sup>4</sup> With Fireware v12.5, the version of the Mobile VPN with SSL client updated to v12.5. This update is because of upgrades in our software development environment, which caused the md5 checksum of the Mobile VPN with SSL client installer to change. This release does not include any bug fixes or feature enhancements.

<sup>5</sup> On 11 November 2019, WatchGuard released multiple new client applications for macOS. These releases add support for macOS Catalina 10.15, and require macOS High Sierra 10.13 or later. To learn more, see [macOS Catalina 10.15 software compatibility](#).

## Upgrade to Fireware v12.5.1 Update 1

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Important Information about the upgrade process:

- We recommend you use Fireware Web UI to upgrade to Fireware v12.x.
- We strongly recommend that you save a local copy of your Firebox configuration and create a Firebox backup image before you upgrade.
- If you use WatchGuard System Manager (WSM), make sure your WSM version is equal to or higher than the version of Fireware OS installed on your Firebox and the version of WSM installed on your Management Server. Also, make sure to upgrade WSM *before* you upgrade the version of Fireware OS on your Firebox.
- If your Firebox has Fireware v12.1.1 or later, the Firebox might temporarily disable some security services to free up enough memory to successfully perform a backup. To learn more, see [Backup and Restore for XTM 25, XTM 26, and Firebox T10](#).



If you want to upgrade a Firebox T10 device, we recommend that you reboot your Firebox before you upgrade. This clears your device memory and can prevent many problems commonly associated with upgrades in those devices. If your Firebox T10 has Fireware v12.1 or older, you might not be able to perform a backup before you upgrade the Firebox. This occurs because the memory use by Fireware v12.1 or older does not leave enough memory free to successfully complete the upgrade process on these devices. For these devices, we recommend you save a copy of the .xml configuration file with a distinctive name, as described here: [Save the Configuration File](#).

## Back Up Your WatchGuard Servers

It is not usually necessary to uninstall your previous v11.x or v12.x server or client software when you upgrade to WSM v12.x. You can install the v12.x server and client software on top of your existing installation to upgrade your WatchGuard software components. We do, however, strongly recommend that you back up your WatchGuard Servers (for example, your WatchGuard Management Server) to a safe location before you upgrade. You will need these backup files if you ever want to downgrade.



You cannot restore a WatchGuard Server backup file created with WatchGuard System Manager v12.x to a v11.x installation. Make sure to retain your older server backup files when you upgrade to v12.0 or later in case you want to downgrade in the future.

To back up your Management Server configuration, from the computer where you installed the Management Server:

1. From WatchGuard Server Center, select **Backup/Restore Management Server**.  
*The WatchGuard Server Center Backup/Restore Wizard starts.*
2. Click **Next**.  
*The Select an action screen appears.*
3. Select **Back up settings**.
4. Click **Next**.  
*The Specify a backup file screen appears.*
5. Click **Browse** to select a location for the backup file. Make sure you save the configuration file to a location you can access later to restore the configuration.
6. Click **Next**.  
*The WatchGuard Server Center Backup/Restore Wizard is complete screen appears.*
7. Click **Finish** to exit the wizard.

## Upgrade to Fireware v12.5.1 Update 1 from Web UI

If your Firebox is running Fireware v11.10 or later, you can upgrade the Fireware OS on your Firebox automatically from the **System > Upgrade OS** page. If your Firebox is running v11.9.x or earlier, use these steps to upgrade:

1. Before you begin, save a local copy of your configuration file.
2. Go to **System > Backup Image** or use the USB Backup feature to back up your current device image.
3. On your management computer, launch the OS software file you downloaded from the WatchGuard Software Downloads page.  
If you use the Windows-based installer on a computer with a Windows 64-bit operating system, this installation extracts an upgrade file called *[product-group].sysa-dl* to the default location of C:\Program Files(x86)\Common Files\WatchGuard\resources\FirewareXTM\12.5.1\[product-group].  
On a computer with a Windows 32-bit operating system, the path is: C:\Program Files\Common Files\WatchGuard\resources\FirewareXTM\12.5.1
4. Connect to your Firebox with the Web UI and select **System > Upgrade OS**.
5. Browse to the location of the *[product-group].sysa-dl* from Step 2 and click **Upgrade**.

If you have installed another release of this OS version on your computer, you must run the installer twice (once to remove the previous release and again to install this release).

## Upgrade to Fireware v12.5.1 Update 1 from WSM/Policy Manager

1. Before you begin, save a local copy of your configuration file.
2. Select **File > Backup and Restore...** or use the USB Backup feature to back up your current device image.
3. On a management computer running a Windows 64-bit operating system, launch the OS executable file you downloaded from the WatchGuard Portal. This installation extracts an upgrade file called *[product-group].sysa-dl* to the default location of C:\Program Files(x86)\Common files\WatchGuard\resources\FirewareXTM\12.5.1\[product-group].  
On a computer with a Windows 32-bit operating system, the path is: C:\Program Files\Common Files\WatchGuard\resources\FirewareXTM\12.5.1.
4. Install and open WatchGuard System Manager v12.5.1. Connect to your Firebox and launch Policy Manager.
5. From Policy Manager, select **File > Upgrade**. When prompted, browse to and select the *[product-group].sysa-dl* file from Step 2.

If you have installed another release of this OS version on your computer, you must run the installer twice (once to remove the previous release and again to install this release).



If you like to make updates to your Firebox configuration from a saved configuration file, make sure you open the configuration from the Firebox and save it to a new file after you upgrade. This is to make sure that you do not overwrite any configuration changes that were made as part of the upgrade.

## Update AP Devices

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Beginning with Fireware v11.12.4, AP firmware is no longer bundled with Fireware OS. All AP device firmware is managed by the Gateway Wireless Controller on your Firebox. The Gateway Wireless Controller automatically checks for new AP firmware updates and enables you to download the firmware directly from WatchGuard servers.

### Important Upgrade Steps

If you have not previously upgraded to Fireware 12.0.1 or higher and the latest AP firmware, you must perform these steps:

1. Make sure all your APs are online. You can check AP status from Fireware Web UI in **Dashboard > Gateway Wireless Controller** on the **Access Points** tab, or from Firebox System Manager, select the **Gateway Wireless Controller** tab.
2. Make sure you are not using insecure default AP passphrases such as **wgwap** or **watchguard**. Your current AP passphrase must be secure and at least 8 characters in length. You can change your AP passphrase in **Network > Gateway Wireless Controller > Settings**.



If you do not have a secure passphrase correctly configured before the upgrade, you will lose the management connection with your deployed APs. If this occurs, you must physically reset the APs to factory default settings to be able to manage the APs from Gateway Wireless Controller.

Depending on the version of Fireware you are upgrading from, you may need to mark APs as trusted after the upgrade to Fireware v12.0.1 or higher. You can mark APs as trusted from Fireware Web UI in **Dashboard > Gateway Wireless Controller** on the **Access Points** tab, or from Firebox System Manager, select the **Gateway Wireless Controller** tab.

## AP Firmware Upgrade

The current AP firmware versions for each AP device model are:

AP Device Model	Current Firmware Version
AP100, AP102	1.2.9.16
AP300	2.0.0.11
AP120, AP125, AP320, AP322, AP325, AP420	8.8.0-192

To manage AP firmware and download the latest AP firmware to your Firebox:

- From Fireware Web UI, select **Dashboard > Gateway Wireless Controller**. From the **Summary** tab, click **Manage Firmware**.
- From Firebox System Manager, select the **Gateway Wireless Controller** tab, then click **Manage Firmware**.

Note that you cannot upgrade an AP120, AP320, AP322, or AP420 to 8.3.0-657 or higher unless your Firebox is running Fireware v11.12.4 or higher. If your Firebox does not run v11.12.4. or higher, you will not see an option to upgrade to AP firmware v8.3.0-657 or higher.

If you have enabled automatic AP device firmware updates in Gateway Wireless Controller, your AP devices are automatically updated between midnight and 4:00am local time.

To manually update firmware on your AP devices:

1. On the **Access Points** tab, select one or more AP devices.
2. From the **Actions** drop-down list, click **Upgrade**.
3. Click **Yes** to confirm that you want to upgrade the AP device.

## Upgrade your FireCluster to Fireware v12.5.1 Update 1

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You can upgrade Fireware OS for a FireCluster from Policy Manager or Fireware Web UI. To upgrade a FireCluster from Fireware v11.10.x or lower, we recommend you use Policy Manager.

As part of the upgrade process, each cluster member reboots and rejoins the cluster. Because the cluster cannot do load balancing while a cluster member reboot is in progress, we recommend you upgrade an active/active cluster at a time when the network traffic is lightest.

For information on how to upgrade your FireCluster, see [this Help topic](#).

Before you upgrade to Fireware v11.11 or higher, your Firebox must be running:

- Fireware XTM v11.7.5
- Fireware XTM v11.8.4
- Fireware XTM v11.9 or higher



If you try to upgrade from Policy Manager and your Firebox is running an unsupported version, the upgrade is prevented.

If you try to schedule an OS update of managed devices through a Management Server, the upgrade is also prevented.

If you use the Fireware Web UI to upgrade your device, you see a warning, but it is possible to continue so you must make sure your Firebox is running v11.7.5, v11.8.4, or v11.9.x before you upgrade to Fireware v11.11.x or higher or your Firebox will be reset to a default state.

## Fireware 12.5.1 Update 1 Operating System Compatibility Matrix

Last revised 21 November 2019

WSM/ Fireware Component	Microsoft Windows 7, 8.1, 10	Microsoft Windows Server 2008 R2, 2012, & 2012 R2	Microsoft Windows Server 2016 & 2019	macOS v10.13, v10.14, & v10.15	Android 6.x, 7.x, 8.x, & 9.x	iOS v8, v9, v10, v11, & v12
<b>WatchGuard System Manager</b>	✓	✓	✓			
<b>WatchGuard Servers</b> <i>For information on WatchGuard Dimension, see the <a href="#">Dimension Release Notes</a>.</i>	✓	✓	✓			
<b>Single Sign-On Agent (Includes Event Log Monitor)<sup>1</sup></b>		✓	✓			
<b>Single Sign-On Client</b>	✓	✓	✓	✓ <sup>4</sup>		
<b>Single Sign-On Exchange Monitor<sup>2</sup></b>		✓	✓			
<b>Terminal Services Agent<sup>3</sup></b>		✓	✓			
<b>Mobile VPN with IPSec</b>	✓ <sup>4</sup>			✓ <sup>4,5</sup>	✓ <sup>5</sup>	✓ <sup>5</sup>
<b>Mobile VPN with SSL</b>	✓			✓ <sup>4</sup>	✓ <sup>6</sup>	✓ <sup>6</sup>
<b>Mobile VPN with IKEv2</b>	✓			✓ <sup>4</sup>	✓ <sup>7</sup>	✓
<b>Mobile VPN with L2TP</b>	✓			✓ <sup>5</sup>	✓	✓

Notes about Microsoft Windows support:

- Windows 8.x support does not include Windows RT, Windows 8.
- For Windows Server 2008 R2, we support 64-bit only.

The following browsers are supported for both Fireware Web UI and WebCenter (Javascript required):

- IE 11
- Microsoft Edge<sup>42</sup>
- Firefox v66

- Safari 12
- Safari iOS 12
- Safari (macOS Mojave 10.14.1)
- Chrome v74

<sup>1</sup>The Server Core installation option is supported for Windows Server 2016.

<sup>2</sup>Microsoft Exchange Server 2010 SP3 and Microsoft Exchange Server 2013 is supported if you install Windows Server 2012 or 2012 R2 and .NET Framework 3.5.

<sup>3</sup>Terminal Services support with manual or Single Sign-On authentication operates in a Microsoft Terminal Services or Citrix XenApp 6.0, 6.5, 7.6, or 7.12 environment.

<sup>4</sup>On 11 November 2019, WatchGuard released multiple new client applications for macOS. These releases add support for macOS Catalina 10.15, and require macOS High Sierra 10.13 or later. To learn more, see [macOS Catalina 10.15 software compatibility](#).

<sup>5</sup>Native (Cisco) IPsec client is supported for all recent versions of macOS and iOS.

<sup>6</sup>OpenVPN is supported for all recent versions of Android and iOS.

<sup>7</sup>StrongSwan is supported for all recent versions of Android.

## Authentication Support

This table gives you a quick view of the types of authentication servers supported by key features of Fireware. Using an authentication server gives you the ability to configure user and group-based firewall and VPN policies in your Firebox or XTM device configuration. With each type of third-party authentication server supported, you can specify a backup server IP address for failover.



Fully supported by WatchGuard - Not supported by WatchGuard

	Active Directory	LDAP	RADIUS	SecurID	Firebox (Firebox-DB) Local Authentication	SAML
Mobile VPN with IPsec for iOS, Windows, and macOS	✓	✓	✓	✓	✓	–
Mobile VPN with IPsec for Windows by Shrew Soft	✓	✓	✓ <sup>1</sup>	–	✓	–
Mobile VPN with IPsec for Android	✓	✓	✓	–	✓	–
Mobile VPN with SSL	✓	✓	✓	✓	✓	–
Mobile VPN with IKEv2 for Windows	✓ <sup>2</sup>	–	✓	–	✓	–
Mobile VPN with L2TP	✓ <sup>2</sup>	–	✓	–	✓	–
Built-in Web Page on Port 4100 and 8080	✓	✓	✓	✓	✓	–
Access Portal	✓	✓	✓	✓	✓	✓
AD Single Sign-On Support (with or without client software)	✓	✓	–	–	–	–
Terminal Services Manual Authentication	✓	✓	✓	✓	✓	–
Terminal Services Authentication with Single Sign-On	✓	–	–	–	–	–

<sup>1</sup>The Shrew Soft client does not support two-factor authentication with challenge responses.

<sup>2</sup>Active Directory authentication methods are supported only through a RADIUS server.

## System Requirements

	If you have WatchGuard System Manager client software only installed	If you install WatchGuard System Manager and WatchGuard Server software
Minimum CPU	Intel Core or Xeon 2GHz	Intel Core or Xeon 2GHz
Minimum Memory	1 GB	2 GB
Minimum Available Disk Space	250 MB	1 GB
Minimum Recommended Screen Resolution	1024x768	1024x768

## FireboxV System Requirements

With support for installation in both VMware and a Hyper-V environments, a WatchGuard FireboxV virtual machine can run on a VMware ESXi 5.5, 6.0, or 6.5 host, or on Windows Server 2012 R2 2016, or 2019, or Hyper-V Server 2012 R2, 2016, or 2019.

The hardware requirements for FireboxV are the same as for the hypervisor environment it runs in.

Each FireboxV virtual machine requires 5 GB of disk space. CPU and memory requirements vary by model:

FireboxV Model	Memory (recommended)	Maximum vCPUs
Small	2048 MB <sup>1</sup>	2
Medium	4096 MB	4
Large	4096 MB	8
Extra Large	4096 MB	16

<sup>1</sup> 4096 MB is required to enable Intelligent AV.

## Downgrade Instructions

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### Downgrade from WSM v12.5.1 to earlier WSM v12.x or v11.x

If you want to revert from WSM v12.5.1 to an earlier version, you must uninstall WSM v12.5.1. When you uninstall, choose **Yes** when the uninstaller asks if you want to delete server configuration and data files. After the server configuration and data files are deleted, you must restore the data and server configuration files you backed up before you upgraded to WSM v12.5.1.

Next, install the same version of WSM that you used before you upgraded to WSM v12.5.1. The installer should detect your existing server configuration and try to restart your servers from the **Finish** dialog box. If you use a WatchGuard Management Server, use WatchGuard Server Center to restore the backup Management Server configuration you created before you first upgraded to WSM v12.5.1. Verify that all WatchGuard servers are running.

### Downgrade from Fireware v12.5 Update 1 to earlier Fireware v12.x or v11.x

If you want to downgrade from Fireware v12.5 to an earlier version of Fireware, the recommended method is to use a backup image that you created before the upgrade to Fireware v12.5 Update 1. With a backup image, you can either:

- Restore the full backup image you created when you upgraded to Fireware v12.5 Update 1 to complete the downgrade; or
- Use the USB backup file you created before the upgrade as your auto-restore image, and then boot into recovery mode with the USB drive plugged in to your device.

If you need to downgrade a Firebox without a backup file after you complete the upgrade to Fireware v12.x, we recommend you [Downgrade with Web UI](#). This process deletes the configuration file, but does not remove the device feature keys and certificates. After you downgrade the Firebox, you can use Policy Manager to [Save the Configuration File](#) to the Firebox.



If you use the Fireware Web UI or CLI to downgrade to an earlier version, the downgrade process resets the network and security settings on your device to their factory-default settings. The downgrade process does not change the device passphrases and does not remove the feature keys and certificates.

See [Fireware Help](#) for more information about these downgrade procedures, and information about how to downgrade if you do not have a backup image.

### Downgrade Restrictions

See this [Knowledge Base article](#) for a list of downgrade restrictions.



When you downgrade the Fireware OS on your Firebox, the firmware on any paired AP devices is not automatically downgraded. We recommend that you reset the AP device to its factory-default settings to make sure that it can be managed by the older version of Fireware OS.

## Technical Assistance

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For technical assistance, contact WatchGuard Technical Support by telephone or log in to the WatchGuard Portal on the Web at <https://www.watchguard.com/wgrd-support/overview>. When you contact Technical Support, you must supply your registered Product Serial Number or Partner ID.

	Phone Number
U.S. End Users	877.232.3531
International End Users	+1 206.613.0456
Authorized WatchGuard Resellers	206.521.8375

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## Localization

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This release includes updates to the localization for the management user interfaces (WSM application suite and Web UI) through Fireware v12.2.1. UI changes introduced since v12.2.1 may remain in English. Supported languages are:

- French (France)
- Japanese
- Spanish (Latin American)

Note that most data input must still be made using standard ASCII characters. You can use non-ASCII characters in some areas of the UI, including:

- Proxy deny message
- Wireless hotspot title, terms and conditions, and message
- WatchGuard Server Center users, groups, and role names

Any data returned from the device operating system (e.g. log data) is displayed in English only. Additionally, all items in the Web UI System Status menu and any software components provided by third-party companies remain in English.

### Fireware Web UI

The Web UI will launch in the language you have set in your web browser by default.

### WatchGuard System Manager

When you install WSM, you can choose what language packs you want to install. The language displayed in WSM will match the language you select in your Microsoft Windows environment. For example, if you use Windows 10 and want to use WSM in Japanese, go to Control Panel > Language and select Japanese as your Display Language.

### Dimension, WebCenter, Quarantine Web UI, and Wireless Hotspot

These web pages automatically display in whatever language preference you have set in your web browser.

### Documentation

The latest version of localized Fireware Help is available on the [Fireware documentation page](#). Updated documentation to match the localization updates in the UI will be released in several weeks.

