



# FortiCentral v7.0.0 GA

## Release Notes



## FortiCentral v7.0.0 GA Release Notes

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# Change Log

Date	Change Description
2014-12-02	Initial release.
2015-03-05	V1.1 GA
2015-07-09	V1.2 GA
2016-02-25	V1.3 GA
2016-06-10	V1.4 GA
2016-08-05	V1.4.1 GA
2016-12-22	V1.5 GA
2017-04-21	V1.6 GA
2018-02-09	V1.7 GA
2018-08-08	V1.7.1 GA
2019-01-24	V1.8.0 GA
2019-05-27	V1.9.0 GA
2020-03-11	V6.0.0 GA
2020-10-09	V6.0.1 GA
2020-12-08	V6.0.2 GA
2021-07-23	V6.4.0 GA
2021-09-09	V6.4.1 GA
2023-03-14	V7.0.0 GA

# Introduction

This document provides a summary of enhancements, installation instructions, deployment scenarios and performance guidelines for FortiCentral v7.0.0 release build 0020. Please review this document before installing or upgrading FortiCentral.

For more information, see the FortiCentral User Guide available at <http://docs.fortinet.com/fortirecorder/admin-guides>. Search for “FortiCentral”.

## Supported models

The following models are supported in FortiCentral v7.0.0:

- FortiRecorder-400F Network Video Recorder with 1x4TB (4x8TB max) HD
- FortiRecorder-400D Network Video Recorder with 2x3TB (4x4TB max) HD
- FortiRecorder-200D-Gen02 Network Video Recorder with 3TB HD
- FortiRecorder-200D Network Video Recorder
- FortiRecorder-100D Network Video Recorder
- FortiRecorder-100G Network Video Recorder      TBD
- FortiRecorder-VM (64bit) Network Video Recorder for
  - VMware vSphere Hypervisor ESX/ESXi v6.0, v6.7, v7.0 and higher
  - Microsoft Hyper-V 2008 R2, 2012, 2012 R2 and 2016
  - Citrix XenServer v5.6sp2, 6.0
  - KVM (qemu 2.12.1 and higher, OpenSource XenServer 7.4 and higher)
  - AWS (EC2 PAYG)
  - Azure (BYOL)
- FortiAPCam-214B Network Camera and Access Point
- FortiCam-20A Network Camera
- FortiCam-CB20 Network Camera
- FortiCam-CB50 Network Camera
- FortiCam-FB50 Network Camera
- FortiCam-FD20 Network Camera
- FortiCam-FD20B Network Camera
- FortiCam-FD40 Network Camera
- FortiCam-FD50 Network Camera
- FortiCam-FE120 Network Panoramic Camera
- FortiCam-MB13 Network Camera
- FortiCam-MB40 Network Camera
- FortiCam-MD20 Network Camera
- FortiCam-MD40 Network Camera
- FortiCam-MD50 Network Camera

- FortiCam-MD50B Network Camera
  - FortiCam-OB20 Network Camera
  - FortiCam-OB30 Network Camera
  - FortiCam-PD50 Network PTZ Camera
  - FortiCam-SD20 Network PTZ Camera
  - FortiCam-SD20B Network PTZ Camera
  - FortiCam-CD51 Camera
  - FortiCam-CD55 Camera
  - FortiCam-CD51-C Camera
  - FortiCam-CD55-C Camera
  - FortiCam-FE120B Camera
  - FortiCam-MC51 Camera
- TBD

## Summary of new features

The following is a list of enhancements in FortiCentral v7.0.0:

- Recorder Configuration Management
- Access control
- Scripting and Alarm management
- Usability Improvements
- GUI enhancements
- System/FRC Enhancements
- FortiView improvements
- Bugfixes

## FortiRecorder firmware for FortiCentral

Starting with FortiRecorder v2.0.0 firmware release FortiCentral is supported as a Windows client for all FortiRecorder models and FortiCameras.

It is recommended to use v7.0.0 of FortiCentral with v7.0.0 of FortiRecorder or higher.

## Installation Information

For more information, see the FortiCentral User Guide.

- Enable connections to FortiCentral in the FortiRecorder Network Configuration: 'FRC-Central' access in the port interface (default).
- Connection between FortiRecorder and FortiCentral via TCP 8550 (configurable)
- After initial login admin/blank create a new admin with new password and add recorder connections in Settings.
- The user credentials presented for logging into FortiCentral are used to log into the connected recorders. Therefore, the local user account must be configured at the recorder as well for successful authentication. As an alternative a fixed login can be configured per recorder.
- FortiCentral does not require a plug-in to decode and display video from FortiCameras.
- To view video drag camera from device panel into pane.
- Fortinet recommends setting your monitor to a screen resolution of 1920x1080. This allows for sufficient desktop space so multiple videos can be viewed properly.

**Note:** Video analytics require a 64bit Windows version, so FortiCentral v6.0.x and higher is available in 32bit and 64bit versions.

Each analytics module is available as a separate file which should be placed in the same folder as the main installer.

If the main installer detects analytics packages it will ask whether to install each of them.

Download FortiCentral from <https://www.fortinet.com/support/product-downloads> in the FortiRecorder section.

Available AI modules are:

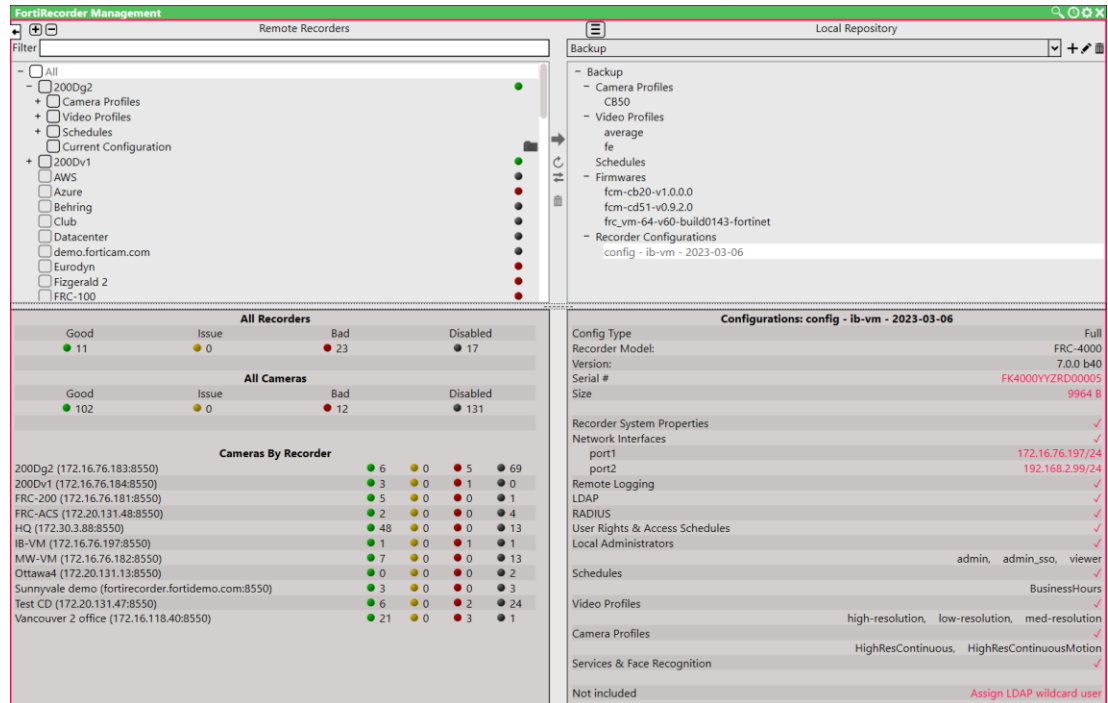
- Facial Recognition
- Object detection
- Video Privacy
- Face mask detection

# New Features

The following section highlights new features in the FortiCentral v7.0.0 release.

## Recorder Configuration Management

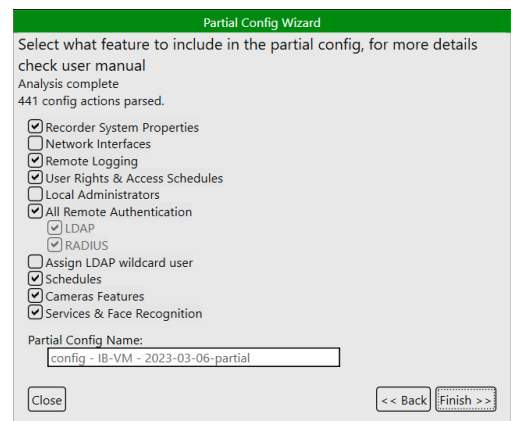
The FortiRecorder Management interface added enhanced configuration management functionality. Users can now distribute full and partial configurations between a central repository and any connected FortiRecorders. This includes setting up an initial set of users.



Partial config wizard is a tool to customize configurations, so they only contain parts of the full set. This allows selectively updating e.g. network settings or adding users.

For FortiRecorders running v7.0 Recorder management now supports:

- Global recorder and camera status overview
- Detailed remote and repo drill down view with diff comparison
- Camera profiles
- Video profiles
- Schedules
- Full and partial configurations



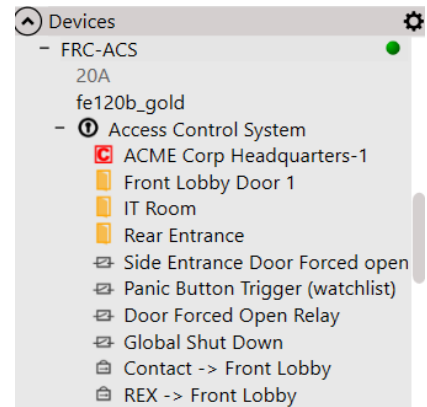
## Access Control System integration

FortiRecorder 7.0 supports integration with Kantech Entrapass Access control system.

FortiCentral 7.0 supports this new device class in multiple locations like the navigation bar, Event manager and 3D maps.

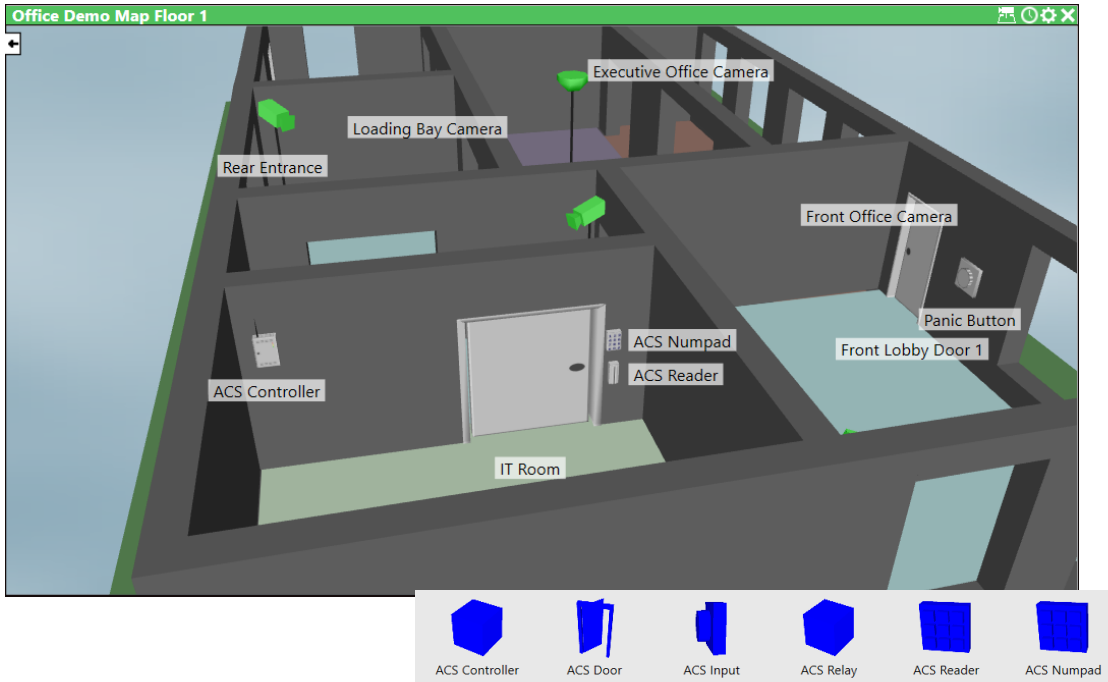
The **navigation bar** shows a new Access Control System tab on recorders that have ACS enabled. Icons represent different device types like ACS controller, ACS door, ACS reader, ACS input and ACS relay. The color indicates states like Active, Controlled or Error.

**Event manager** includes filter masks for ACS type events like Access granted or Door forced. If cardholder details are available they can be viewed directly.



Time	Source	Attached Device	Event Type	Sub Type	Details
Thu May/02/23 3:59:58 PM	ACS	ACME Corp Headquarters-1	Access Control System	Output Activated	
Thu May/02/23 3:59:58 PM	ACS	Rear Entrance	Access Control System	Access Granted	Ashley Axion <178949>
Thu May/02/23 3:59:58 PM	CAM	20A	Access Control System	Access Granted	Ashley Axion <178949>
Thu May/02/23 3:59:48 PM	ACS	LED Trigger	Access Control System	Door Forced	
Thu May/02/23 3:59:43 PM	ACS	ACME Corp Headquarters-1	Access Control System	Controller Failure	
Thu May/02/23 3:59:43 PM	ACS	Controller #1 Door #3	Access Control System	Access Granted	Ashley Axion <178949>
Thu May/02/23 3:59:42 PM	ACS	Contact -> Front Lobby			
Thu May/02/23 3:59:33 PM	ACS	Controller #1 Door #3			
Thu May/02/23 3:59:33 PM	ACS	Vault Door			
Thu May/02/23 3:59:33 PM	ACS	ACME Corp Headquarters-1			
Thu May/02/23 3:59:28 PM	ACS	Controller #1 Relay #1			
Thu May/02/23 3:59:28 PM	ACS	Rear Entrance			
Thu May/02/23 3:59:28 PM	CAM	20A			
Thu May/02/23 3:59:28 PM	CAM	20A			
Thu May/02/23 3:59:13 PM	ACS	Orangeburg KT-400			
Thu May/02/23 3:58:58 PM	ACS	Controller #1 Door #3			
Thu May/02/23 3:58:58 PM	ACS	IP Link CUT Power KT300 SI			
Thu May/02/23 3:58:58 PM	ACS	ACME Corp Headquarters-1			
Thu May/02/23 3:58:42 PM	ACS	Alarm Input for Global Shut			
Thu May/02/23 3:58:42 PM	ACS	Panic Button Trigger (watchlist)			
Thu May/02/23 3:58:28 PM	ACS	Controller #1 Door #3			
Thu May/02/23 3:58:28 PM	ACS	Orangeburg KT-400			
Thu May/02/23 3:57:57 PM	ACS	REX -> Side Entrance			

**Live animated 3D maps** support ACS elements that are linked to the physical devices. Easy editing with snap ACS elements onto walls. Door element snaps into opening and is animated flashing in case of an event.



Drag and drop ACS elements from navigation bar or 3D maps into panes queries events related to this device. If cameras are associated with the element live video of the door e.g is automatically shown. When a past event is dragged from the event manager onto a pane or double clicked, the playback of video from that event is looped in the dropped pane or a scratch pane. If multiple cameras show the same e.g. door a cameras are shown.

## Scripting and Alarm management

Scripting has been added to FortiCentral. This powerful and flexible automation feature allows the execution of different actions based on triggers like the occurrence of qualified events from selected devices or manual activation through buttons. A library of actions offers functionality like ACS door control or showing a camera on a pane.

Alarm management is implemented through the AlarmManagement action and allows automated placement of cameras into panes based on incoming events. Parameters define the behavior. For example if motion was detected on a camera, this camera is switched on a pane, the playback of the event starts in a loop next to the live video and nearby cameras are displayed in the same row of panes. The next alarm is displayed similarly in the row below the last.

<b>AlarmManagement</b>	Display cameras when an alarm occurs (Alarms go in alarm panes, nearby go in scratch panes)
<b>ControlAccess</b>	Utilize ACS devices to open doors, set of buzzers, etc
<b>DisplayInfoMessage</b>	Display a message in the info box. Optionally halt the script pending confirmation.
<b>PlayAudio</b>	Plays a sound to alert user.
<b>Wait</b>	Pauses the script for a specified period of time.
<b>PTZ_To_Preset</b>	Tell a PTZ camera to face a preset
<b>PlaceCameraInPane</b>	Place an item in a specified pane or first free pane in a set of panes.
<b>Place3DMapInPane</b>	Place an item in a specified pane or first free pane in a set of panes.
<b>PlaceMediaInPane</b>	Place an item in a specified pane or first free pane in a set of panes.
<b>PlaceSequencerInPanels</b>	Place an item in a specified pane or first free pane in a set of panes.
<b>Goto3DMap</b>	Changes the currently selected pane to a different map or sector.
<b>DisplayClearAlarmInfoMessage</b>	Clears the alarms displayed by this script.
<b>ClearPaneSet</b>	Clears a set of panes.

AlarmManagement

Parameters

#	Details	Type	Range	Value
1	Orientation	Enum	Columns, Rows	Columns
2	Target Area	Panes		W1
3	Playback Offset (s)	Number	-25:-5	-15
4	Playback Length (s)	Number	10:60	35
5	Include Nearby Cameras	Boolean		False
6	Ordering	Enum	Top Left - Bottom Right, Bot	Top Left - Bottom Right
7	Cycling	Enum	Shift Alarms, Round Robin	Shift Alarms

Application Settings

Scripts

Enabled	Name	Trigger	Actions
	Access Control Script	Event: Access Control System from 29 Dev	AlarmManagement
✓	autoConvert-CameraNamePreset	Manual	PTZ_To_Preset
✓	autoConvert-CameraNamePreset	Manual	PTZ_To_Preset
✓	autoConvert-CameraNamePreset	Manual	PTZ_To_Preset
✓	beep beep	Manual	PlayAudio, PTZ_To_Preset, Wait, PTZ_To_Preset, Wait, PTZ_To_...
✓	Beep on Prohibit	Event: Few from Any Devices	Wait, DisplayInfoMessage, AlarmManagement, PlayAudio, PlayAu...
✓	Clear Alarms	Manual	ClearPaneSet
✓	Door Card Access	Manual	ControlAccess

Access Control Script    Event Listener    Event Filter    Device Filter    New    Clone    Apply    Delete

Actions    Access Control System    29 Devices

Action	Description	Primary Parameter
AlarmManagement	Display cameras when an alarm occurs (Alarms go in alarm panes, nearby go in scratc	w1

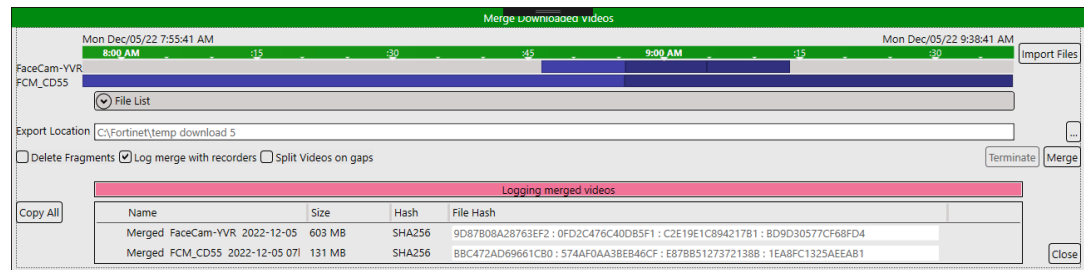
OK    Cancel

## Usability Improvements

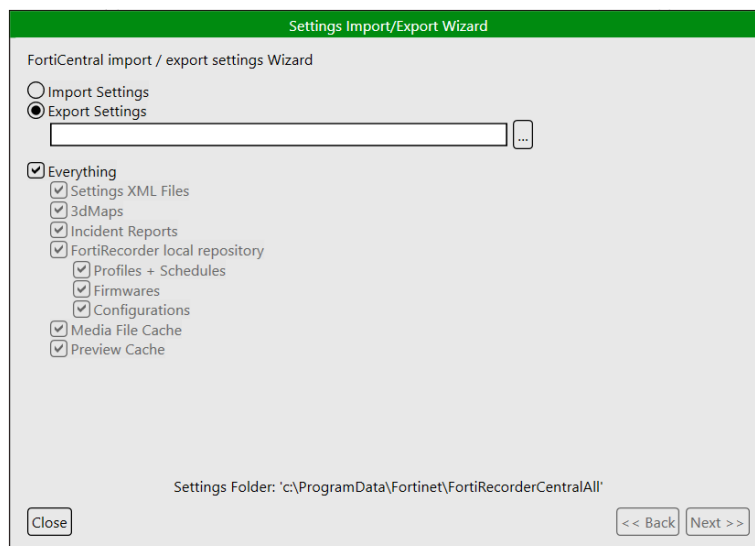
- Improved pan/zoom video using touchpad. L+R button for pans and sliding up and down on right edge of video pane for zooms.
- When downloading videos either as bulk or individually, clicking cancel now shows cancelled immediately
- PTZ Expander now autohides when autohide empty resource tabs is enabled
- Added a mask detection media sample to FRCC (Thank you message)
- Installer supports customized initial configuration settings. Add a FRCC configuration file ending in .fcsetting.zip to install files for an automated setup with installation.

## GUI enhancements

- Switched embedded browser from IE to CEF
- Nearby cameras can now be picked in the 3D Map editor. Optionally using a physical range.
- Added Refresh-Login menu item to FortiRecorder Web Manager
- Settings chapters to sort columns alphabetically up/down/none
- Added merge video dialog displayed after bulk download. Allows combining multiple video segments into one file.



- Redesigned Import/Export dialog
- Added FortiCentral Settings Import Export Wizard



## System/FRC Enhancements

- Master Audio volume setting is now saved to the config
- Improved German Language support
- Improved Spanish Language support
- FRCC can be installed on Windows machines with FIPS mode enabled
- Upgraded FFMPEG to avoid known security vulnerabilities
- Improved loop playbacks for alarms avoiding waiting loop and minimizing start delay

## FortiView improvements

- FOS Version 7.x support
  - More Dashboard Widgets for FGT
  - New version selector in Connections for FGT
- Fabric API to support v7.0 FRC

## Bugfixes

Fix	Changing user autologin status prevents recorder communication
Fix	Recorder Manager crash when certificate is denied by user
Fix	Global maps would sometimes not load
Fix	Restored missing Google maps overlay
Fix	Wrong datetime was shown in incident reports for video paused from live
Fix	Changing users privilege "May control other clients" requires restart

# Firmware Upgrade/Downgrade Information

## Upgrading from earlier versions

Upgrading FortiCentral to v7.0.0 from v6.4.x is fully supported.

**Note:** For upgrading from older versions first upgrade to v6.4.1.

Fortinet always recommends backing up the configuration before performing an upgrade. The configuration file is located at  
c:\ProgramData\Fortinet\FortiRecorderCentral\ and renamed upon upgrade to a new version  
e.g. FortiRecorderCentral.exe.SettingsV13.xml

The complete configuration can be exported from the Settings menu.

## Downgrading to earlier versions

Fortinet does generally not recommend downgrading because there may be a loss of configuration information.

**Note:** Downgrading to an earlier version may revert to the configuration that was left when the upgrade occurred. So all changes to the configuration since then are lost.

# Performance Guidelines

Video playback is very CPU intensive. If you are experiencing choppy video playback and cameras “freezing” during playback, you may have a client performance problem. Use the diagnostic tools available in FortiCentral to narrow down the problem.

In the toolbar area are performance meter symbols that show

- **Network bandwidth of incoming data and frame skip rate**  
If a recorder cannot send out video streams fast enough it will start skipping frames. If this occurs the bar turns yellow and then red. It is an indication that the network bandwidth is too low to support the number of video streams that are currently displayed.
- **Memory usage**  
Shows how much memory the application is using. The total amount of available memory is indicated as well in the tooltip.
- **Rendering performance**  
Indicates how many MPixels are decoded per second. A 1MP image at 30fps requires 30MPixel/s for example. If more video is displayed in FortiCentral the performance limit of the PC will eventually be reached. At this point the video decoder has to drop frames to keep up with the incoming video stream. This drop rate is displayed at the tooltip and if it occurs the bar turns yellow and red in more severe situations. This indicates that the CPU/graphics performance of the PC where FortiCentral is running has reached its limit.

The performance bottleneck in a FortiCamera deployment will likely be the client, which must decode and render the video streams from the NVR. Displaying multiple video streams on the client is very CPU intensive.

## Camera profiles

If you need to display 8 or more camera live views, you may need to configure the camera stream so that viewing is done at a lower frame rate or resolution, depending on how powerful the client PC is.

To optimize client performance, use the video and camera profiles to define and assign a video stream for each camera. To increase the number of live and playback views the client computer can display, or to reduce the CPU requirement for a given number of live views, reduce the resolution, quality and/or frames per second of the related video streams.

10 FPS is a good general setting for live views. 10 FPS provides a reasonable frame rate for the live views, but significantly reduces the load on the client (compared to 30 FPS).

FortiCentral v1.3 and higher can use either of the live or recording streams configured in the recorder for display. Playback always accesses the recording stream.

# Image Checksums

To verify the integrity of the firmware file, use a checksum tool and compute the firmware file's MD5 checksum. Compare it with the checksum indicated by Fortinet. If the checksums match, the file is intact.

MD5 checksums for Fortinet software and firmware releases are available from [Fortinet Customer Service & Support](#). After logging in to the web site, near the bottom of the page, click the *Firmware Checksums* button. (The button appears only if one or more of your devices have a current support contract.) In the *File Name* field, enter the firmware image file name including its extension, then click *Get Checksum Code*.

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About To Expire 1

### Customer Support Bulletin

1. IPS Engine update Updates to the IPS engine that runs on the FortiGate platforms periodically are made available on the FortiGuard distribution network that permit devices with...
2. FortiGuard updates to FortiOS 2.8 to finish The AntiVirus (AVE) and IPS (IPSE) engines associated with FortiOS 2.8 software reached end of life in February 2013. As of February...
3. FortiGate System Freeze with FortiOS 5.0.5 Certain models of FortiGates as listed below, may experience a hang or system freeze condition when a very heavy load of HTTP ...

More

### Asset

Register/Renew  
Register HW/virtual appliance or software: Activate service contract or license on your registered product.

Manage Products  
Search, update or generate report for your registered products. Like product entitlement, description, location, entitlement and reseller etc.

### Assistance

Create a Ticket  
The recommended way to contact Fortinet support team for your registered product. Please provide detailed information in the ticket to ensure efficient support.

View Active Tickets  
Check latest active tickets for current user, update ticket information or change ticket status.

Contact Support  
Contact information of Fortinet worldwide support centers.

Manage Tickets  
Check ticket status, add comment, update contact or view history etc.

Technical Web Chat  
Provide quick answers on-line for general technical questions.

### Download

Service Updates

Firmware Images

Firmware Checksums

### Quick Links

- Forti-Companion
- Tickets Creation Guide
- Product Life Cycle
- CSS Reference Guide

