MOTOROLA SOLUTIONS

VIDEOMANAGER 15.3 RELEASE NOTE

Software updated in 15.3.0

- Motorola Solutions VideoManager for Windows
- VB400 firmware
- EdgeController firmware
- User Import Tool

Changes since 15.2.3

New feature: FIPS 140-2 certified encryption
A licence is required to use this feature.

FIPS 140-2 certified encryption is now supported on recent revisions of the VB400 and in Motorola Solutions VideoManager. When enabled in Motorola Solutions VideoManager settings, encryption of data at-rest and in-flight is performed with a FIPS 140-2 certified implementation on supported VB400 devices. Inbound HTTPS/TLS connections to the Motorola Solutions VideoManager server use a FIPS 140-2 certified encryption implementation as do outbound HTTPS/TLS connections from sites to Central VideoManager.

Other Motorola Solutions VideoManager cryptographic functions, if enabled, may not use a FIPS 140-2 implementation. [SW-2202, SW-2199, SW-2320, SW-2322]

New feature: Safety mode on undock
The VB400 now supports entering safety mode automatically after undocking, without the operator being required to perform an enter safety mode gesture. When this feature is enabled in the device profile, safety mode will be entered a few seconds after the operator undocks the device. If within this period the device is re-docked, or it becomes non-idle (because, for example a recording is started), then safety mode will not be entered. Exiting safety mode is the same as when entered manually (that is, either using an exit safety mode gesture, or by docking). The feature can be enabled by selecting "Enter safety mode if idle after undocking" in the Motorola Solutions VideoManager device profile. [SW-2173]

Software updated in 15.2.3

- Motorola Solutions VideoManager for Windows
- VT50 / VT100 firmware
- EdgeController firmware
- User Import Tool

New role permissions

Permission	Section	Notes	On upgrade, granted to
Cryptography settings view/edit	Advanced permissions/Settings	(2 permissions) Only visible if FIPS is licensed.	System Administrator

Minor enhancements and bug fixes (Motorola Solutions VideoManager)

Issue Id	Summary
SW-2280	When using Windows Authentication, the system can now be configured to update the user's groups to match the groups configured in Windows on login.
SW-2223	Access to a site's web API is now possible through the central web API using an centrally configured API key in both sessionless and session-based authentication.
SW-2057	The API query parameters for fetching device information have been extended so that details of devices connected to sites can be accessed.
SW-2229	Accessing the website of a connected site through the central manager now works even if the site to central HTTP traffic goes through a web proxy which buffers HTTP request bodies (e.g. Azure WAF v2).
SW-2302	Security issue: The Windows service registered by the installer did not have quotes around the executable name.
SW-2257	The web interface could show errors during initial installation if the administrator took a long time to complete initial setup.
SW-2270	Self-diagnosed faults detected by cameras on site are now displayed and reported in the central manager.
SW-2401	Errors would occasionally appear in the web after quickly navigating away from an incident with a very large number of clips.
SW-2222	Login by email now shows an error rather than silently failing if the user accesses the website with a URL which is not the public URL.
SW-2706	The save button did not appear when adding/removing remote sites in the Windows

	Authentication settings page.
SW-2696	When accessing a site's website through the central manager sites page, users with the system administrator role could not access features granted by other roles.
SW-1705	The application now prompts the user to close any unsaved modal edit dialog on the screen before navigating to another page.
SW-2319	The video metadata overlay was not correctly displayed when navigating to/from a media preparation.

Minor enhancements and bug fixes (VB400)

Issue Id	Summary
SW-2609	Provide estimates of remaining recording time to VB Companion.
SW-2572	Make all LEDs blink red if the assigned profile is too complex to be implemented on the device.
SW-2192	The VB400 could fail if the VB companion was used to playback footage and the video position was scrubbed forwards and backwards.
SW-2372	The VB400 could fail if the VB companion live view was in use at the same time as a recording was stopped.
SW-493	The VB400 could show the wrong status on the LEDs if it was powered up with an external X-100 or X-200 camera connected.
SW-486	The VB400 could fail if it was recording, and an external X-100 or X-200 camera was connected, and then disconnected just after the connection acknowledgement.
SW-2538	The VB400 could become unresponsive for a period just after a WiFi connection attempt is initiated.
SW-2116	The VB400 could hang on being docked, showing "Finding files to download" in Motorola Solutions VideoManager.
SW-2719	The VB400 could fail if it was configured for automatic pre-recording, was started up after having previously been powered off, and then safety mode was immediately requested.
SW-2428	The VB400 could fail if it was docked after initiating, but not completing peripheral pairing.

Software updated in 15.2.3

- Motorola Solutions VideoManager for Windows

- Motorola Solutions VideoManager for CentOS Linux
- VT50 / VT100 firmware
- EdgeController firmware
- User Import Tool

Changes since 15.2.1

New feature: VT50 / VT100 microphone fault detection

VT50 / VT100 devices can now self-detect damage to the microphone. If a problem is detected, the fault is reported on the device details page and in the equipment report. Battery faults detected by cameras are reported in the same way. [SW-1739]

Minor enhancements and bug fixes (VT50 / VT100)

Issue Id	Summary
SW-1576	Devices unable to connect to Motorola Solutions VideoManager for a long time could become "Locked" and inoperable.

Software updated in 15.2.1

- Motorola Solutions VideoManager for Windows
- Motorola Solutions VideoManager for CentOS Linux
- VB400 firmware
- EdgeController firmware
- DockController firmware
- User Import Tool

Changes since 15.1.11

New feature: Transcriptions

There is now a transcription editor which makes it easy to manually enter a transcription of the audio on an incident clip. The resulting transcription can be overlaid on the video during export or included in evidence exports as a PDF file. [SW-1093]

Terminology change: Videos are now Media

In recognition of the fact that many customers use Motorola Solutions VideoManager to store media and assets which are not video files, the UI now uses the term "media" where previously it used the term "video" or "videos". [SW-1257]

New feature: VB400 WiFi access point mode

VB Companion can now be configured in WiFi Access Point mode. The VB400 will act as a WiFi access point which can be connected to by a mobile device running a version of VB Companion that supports this connectivity mode. In access point mode the WiFi status LED will blink when

the access point is ready and go solid when a device connects. When the VB companion is configured in access point mode in the selected device profile it is not possible to select a WiFi profile, because the VB400 cannot support being both a WiFi access point and a WiFi station. [S34W-1481, SW-1960]

New feature: VB companion proximity security mode
The VB Companion Settings in Motorola Solutions VideoManager can now configure a new "Proximity controlled security" mode. When used in conjunction with versions of the VB Companion that support this mode, the VB400 will connect with a nearby mobile device that is attempting to connect. To activate the connection on the VB400, a new "Connect device" button action can be configured in the device profile. [SW-1611]

New role permissions

Permission	Section	Notes	On upgrade, granted to
View transcription (new/existing/duplicate)	Incident permissions/Incident clips	(3 permissions)	System Administrator
Edit transcription (new/existing/duplicate)	Incident permissions/Incident clips	(3 permissions)	System Administrator
Import transcription (new/existing/duplicate)	Incident permissions/Incident clips	(3 permissions)	System Administrator
Export transcription (new/existing/duplicate)	Incident permissions/Incident clips	(3 permissions)	System Administrator
Edit user property (supervised/any)	User permissions/User	(2 permissions)	Roles with permission to edit authentication ID

Minor enhancements and bug fixes (Motorola Solutions VideoManager)

Issue Id	Summary
SW-1718	Added support for two new ways of connecting the VB Companion to a camera: Wifi Direct and Wifi AP mode (which requires a new 'connect peripheral' gesture for the device when used in conjunction with 'proximity security' mode). Note that not all versions of the VB Companion app support all connection methods.
SW-1680	Added support for "proximity security" model for the VB Companion app which

	allows the app to be provisioned without connectivity between the app and Motorola Solutions VideoManager. Note that not all versions of the VB Companion app support this mode.
SW-1424	The system will automatically create three new "media" roles on new installs.
SW-1603	An auto-file export can now optionally include a metadata file created from a template.
SW-1549	Auto-file export now supports advanced template generation of file names and folders for auto export.
SW-1623	User's now have a new editable and importable field called "user property". This field can be accessed in filename and metadata file templates in export.
VM-22411	You can now configure which media fields are displayed in the "large" video summary view.
VM-22400	The list of columns shown in the media list view is now configurable.
VM-23076	The device profile now allows you to enable APX radio integration (if you enable this feature in the "Experimental Features" page).
VM-22294	You can now create a "preparation" on a video as well as a still image.
VM-22307	The media list view now has a "play" button which allows you to play all the videos in the list in turn.
VM-22891	The user import tool can now clear fields (e.g. touch assign ID) by importing the value 'NO_VALUE'.
VM-22293	Media support: import of MP4 files which use the Opus 3 audio codec is now supported.
SW-1790	The user import tool can now be configured to execute SQL statements prior to importing data to support advanced data manipulation.
SW-1564	In the device profile when radio integration is enabled, you can now configure a "regex" to control which radios the VB400 will attempt to connect to automatically (based on the Bluetooth name of the radio).
SW-955	The system can now be configured to send an HTTP notification when a live stream is no longer available.
SW-898	When live streaming via the VB Companion app, the device ID of the device running the app is now available via the device status API.
SW-199	A new installation now requires that the administrator enter a complex and long password for the initial account.
VM-23340	When using the config import function to import roles from different source systems,

	the roles assigned to users were wrongly swapped around in certain circumstances.
SW-935	Reduced the server-side CPU utilization required for VB400 live view.
VM-23241	The "include forgotten devices" checkbox in the device list filter was not cleared when the filter was reset.
VM-23124	Export profile import/export no longer attempts to import or export the "restrict to users/groups" setting.
VM-23142	The evidence export profile editor did not allow filename templates to be configured if the inclusion of that file was optional in the profile.
SW-1659	Configuring Video Metadata Overlay settings which were unsupported by old sites/EdgeControllers broke configuration replication to old sites/EdgeControllers.
SW-1780	Ensure that new settings use their default values when importing device profiles exported from older versions of the product.
SW-964	Added the API/Swagger documentation for the device status and assignment APIs.
SW-1284	Security change: the list of users in the system is no longer cacheable by the browser for auto completion purposes.
SW-1660	The login via email function now shows an error message if the user does not log in via the public web address.
SW-654	Security update: Updated many libraries used, including fixing some containing CVEs. None of these CVEs are believed to have represented a vulnerability in Motorola Solutions VideoManager.
VM-23242	The DockController list filter panel is no longer minimized when it is reset.
VM-23165	The system now better regulates the replication of metadata replication from sites to ensure that central manager systems with a slow database are not overwhelmed.
SW-1910	Minor improvements have been made to the way that columns are laid out in the video list and incident list.
VM-23021	The documentation shortcut installed in the Windows Start menu did not point to the correct file.
SW-1168	The system no longer produces a file in the backup folder containing a list of all files which are in incidents.

Minor enhancements and bug fixes (VB400)

Issue Id	Summary
SW-1481	Support has been added for WiFi access point mode.

SW-1960	
SW-1611	Support has been added for VB companion proximity security mode.
SW-1387	Support has been added for VB companion WiFi direct mode.
SW-1109 SW-1563	The Motorola radio integration now supports APX radio models & additional MOTOTRBO models.
SW-1618	The VB400 did not always reconnect to newly paired MOTOTRBO radios after reassignment.
SW-1558	On some recent revisions of the VB400 the GPS subtitle track was missing from MP4 video files.
SW-1595	The battery state of charge as shown in the VB companion and video metadata overlay is now available if the battery is being charged.
SW-1853	If the VB400 was docked with the VB companion connected with WiFi, then the VB400 could attempt to reconnect WiFi after reassigning & undocking even if the VB companion is no longer connected.
SW-1941	Live view in the VB companion did not work if the audio codec for VB400 recordings and streaming was configured as PCM.
VM-22200	Playback in the VB companion sometimes required a manual scrub to play beyond a certain point.
SW-1453 SW-2018	The LED battery status shown on a button press was not always correctly showing red for critical if the VB400 was docked and undocked without being charged to a non-critical level.

Minor enhancements and bug fixes (VT50/VT100)

Issue Id	Summary
SW-1496	The device can now self-detect damage to the microphone.
SW-1576	Devices unable to connect to Motorola Solutions VideoManager for a long time could become "Locked" and inoperable.

Minor enhancements and bug fixes (DockController)

Issue Id	Summary
SW-1341	Security update: use the latest version of OpenSSL.

Minor enhancements and bug fixes (EdgeController)

Issue Id	Summary
SW-1341	Security update: use the latest version of OpenSSL.

Minor enhancements and bug fixes (User Import Tool)

Issue Id	Summary
VM-22891	The user import tool can now clear fields (e.g. touch assign ID) by importing the value 'NO_VALUE'.
SW-1790	The user import tool can now be configured to execute SQL statements prior to importing data to support advanced data manipulation.

Earlier changes

See the V15.1.11 release notes for earlier changes.

Known issues

VB400 may not start automatic pre-recording after a factory reset

If a factory reset is performed on a VB400 multiple times, or only once while FIPS is enabled, and if the device is subsequently assigned with a device profile with automatic pre-record enabled, then pre-recording will not start. The problem can be worked around by power cycling the VB400. [SW-2977, SW-1750]

VB400 Bluetooth and Wifi are incompatible

WiFi streaming and download over WiFi cannot be used on a VB400 when it is configured to connect to the VB Companion App over Bluetooth.

VB400 Live-view for Android companion app does not work with X-100 or X-200

The Live-view for Android companion app feature does not currently work if the X-100 or X-200 external cameras are attached.

VB400 WiFi offload of footage can make X-100 or X-200 unreliable

If you configure the device to offload footage over WiFi, then in-progress offloads can sometimes cause the operation of an X-100 or X-200 external camera to be unreliable. It is not currently recommended to enable WiFi offload if using an external camera.

DockController assignment groups with overriden device settings

If you set up multiple DockControllers to share a single RFID reader, then you must ensure that all the DockControllers in the group share the same RFID assignment charge criteria (these can

now be overridden for each DockController). If the charge criteria for the DockControllers in the group are not the same, then you may unexpectedly be unable to assign a device in some circumstances.

Large Numbers of Incident Clip Counts

The system performs poorly when more than 200 incident clips are created in a single incident. You should not create incidents with more than this many clips. Some functions may not work properly if this limit is exceeded, e.g. export may fail.

Evidence Export Simulation does not work

If a user creates an incident and attempts to run an evidence export simulation, nothing happens. The user can still export an incident as expected via MP4 and Evidence Export methods.

Upgrade notes

Internet Explorer support has ended

Internet Explorer is no longer a supported browser.

Postgres database upgrade

If you are using the bundled Postgres database server rather than Microsoft SQL Server, and you are upgrading a version earlier than 15.1.0, be aware that when this release is installed, the database must be upgraded to Postgres 13.3. Depending on the size of your database, this can be a time consuming process and it temporarily consumes a significant amount of disk space.

HTTP Basic Authentication Disabled

Some security analysts now consider the ability to authenticate HTTP requests with "Basic" authentication to be a security vulnerability. For this reason, the Motorola Solutions VideoManager web APIs no longer allow clients to use HTTP Basic authentication. If you directly access the API and you use Basic authentication then you should either switch to using HTTP Digest authentication, or you can re-enable Basic authentication by adding the following text to *Admin > System > Advanced Settings*:

```
api.key.basic.auth=true
```

You should only do this if you are satisfied this does not constitute a security risk in your environment.

Microsoft SQL Server TLS requirements

For installations which use Microsoft SQL Server as the Motorola Solutions VideoManager database, be aware that SQL Server must support TLS 1.2 encryption or the Motorola Solutions VideoManager service cannot connect to it. If you are using SQL Server 2012 and 2014 please ensure that you have the latest service packs installed to ensure TLS 1.2 compatibility.

Software assurance requirement for upgrade

In order to upgrade to this version from an older version, you must have software assurance coverage up to 10 September 2021. If you are upgrading from a version older than 10.2, then you must upgrade to 10.2 and install software assurance before installing this version.

Data storage location change

The default data storage location is now c:\ProgramData\Motorola Solutions\VideoManager for a new installation. If you upgrade from a version of Motorola Solutions VideoManager older than 14.5.0, you will already have data stored in c:\ProgramData\Edesix\VideoManager. In this case, the system continues to use the data in c:\ProgramData\Edesix\VideoManager (which might include your database, configuration and/or filespace data), but all log files are written to c:\ProgramData\Motorola Solutions\VideoManager\pss-service-logs.

Central manager site upgrades

When upgrading a central manager installation, replication of certain configuration settings from the central manager to sites (including EdgeControllers) will not occur until those sites are upgraded.

If you use any of the "Shared configuration settings" - on the Auto-fetch settings page - to replicate configuration information to sites, then the site will use out-of-date configuration information until upgraded to the minimum required version for that setting. Configuration changes made on the central system will have no effect until the site is upgraded.

The following table shows the minimum required version of Motorola Solutions VideoManager running at the site in order for each shared configuration setting to replicate correctly.

Shared configuration setting	Minimum compatible site version
Keys	5.1.0
Roles & Password Rules	6.4.0
Users	14.5.0 **
User Groups	14.0.0

Device Profiles	6.4.1
Deletion policies	6.4.0
User-defined fields	14.1.0 if you enable playback reason auditing
	14.0.0 if you define any tag list fields
	6.4.0 otherwise
Device states and locations	10.0.0

** - users can be replicated to sites running 7.0.1 to 14.4.x, but an incompatibility warning will be shown and bluetooth pairing information will not be replicated.

Supported platforms

Motorola Solutions VideoManager is supported on the following platforms:

- Windows 8.1 Pro & Enterprise 64-bit‡
- Windows 10 Pro & Enterprise 64-bit
- Windows 11 Pro & Enterprise
- Windows Server 2012 Essentials, Standard & Datacenter *
- Windows Server 2012 R2 Essentials, Standard & Datacenter *
- Windows Server 2016 Essentials, Standard & Datacenter * **
- Windows Server 2019 Essentials, Standard & Datacenter * **
- Windows Server 2019 Essentials, Standard & Datacenter * **
- Windows Server 2022 Essentials, Standard & Datacenter * **

‡ **This is the last major version of VideoManager that will support Windows 8.1.** Users still running VideoManager on Windows 8.1 should plan to upgrade to Windows 10 or a suitable server edition of Windows before the next major release of VideoManager.

* Accessing the Motorola Solutions VideoManager web application from a web browser running on a Windows Server desktop is not supported. However, Windows Server can be used for running the Motorola Solutions VideoManager service.

** USB attached devices are not supported on Windows Server 2016 and later.

Supported browsers

The Motorola Solutions VideoManager web application is supported on the following browsers:

- Microsoft Edge 79+ (Windows 10/11)
- Chrome 48+ (Windows 7/8.1/10/11, MAC OS X v10.10)
- Firefox 68 ESR+ (Windows 10/11, Ubuntu 18.04+) *

The security settings of your browser may prevent some features of the Motorola Solutions VideoManager web application from working correctly. In particular, some browsers may silently prevent the download of files from the Motorola Solutions VideoManager web application. Adding Motorola Solutions VideoManager web application to the list of trusted websites will normally fix this.

Accessing the Motorola Solutions VideoManager web application from a web browser running on a Windows Server desktop is not supported.

* When using Firefox on Windows, you may need to run Windows Media Player once to install codecs before video playback will work. Firefox video playback only works if the operating system provides an MP3 codec. When using Firefox on Ubuntu, you must install a package which provides H.264 and AAC codecs for Firefox, e.g. libavcodec-extra.

Supported device firmware

We do not support assignment of devices running firmware older than version 6.0. These devices will still connect but only for the purposes of upgrading them.

Included device firmware

This release of Motorola Solutions VideoManager includes the following firmware:

VB400 firmware	**V15.3.0**
VB200 / VB300 firmware	**V14.4.4**
VT50 / VT100 firmware	**V15.2.3**
DockController firmware	**V15.2.0**

Supported radios

The VB400 Motorola radio integration features are supported in conjunction with the following models:

- Any TETRA Radio with Bluetooth hardware and MR19 software or higher with Bluetooth Connectivity and Bluetooth Radio Control features enabled.