VideoManager 14.5.4 - Release Note

Changes since 14.5.2

Minor enhancements and bug fixes (Motorola Solutions VideoManager)

| Issue Id | Summary | |
|----------|--|--|
| VM-20333 | Some imported MP4 files with certain unusual encoding characteristics can now be played back in the web video player. | |
| VM-20315 | The auditing of partial incident exports now only audits the export against the videos which are exported. | |
| VM-20326 | Fixed an issue where DockControllers attempting to upgrade over slow network connections could result in filespace read errors when using S3 filespaces. | |
| VM-20408 | Allow files imported with the DEMS migration tool to show a blank FPS in the video details page. | |
| VM-20454 | Removed excessive logging in the service logs from the permissions checking logic. | |

Changes since 14.5.1

New feature: Deletion policy can preserve all files in a recording

If one file from a multi-file recording is added to an incident, the remaining files are eligible to be deleted. A new option in the deletion policy page can be used to specify that if any file in a recording is in an incident and is thus protected from deletion, then all files in the recording are protected from deletion.

An additional function on the deletion policy edit screen has been added to make it possible to preview the effect of changing the deletion policy, which takes the form of a report showing the changes in scheduled deletion date for all videos.

New feature: Selective clip export

You can now configure incident export profiles so that when creating an export, the user can select which incident clips to include in the export.

Minor enhancements and bug fixes (Motorola Solutions VideoManager)

| Issue Id | Summary |
|----------|---|
| VM-20221 | The Motorola colour scheme is now applied to customers upgrading from older versions. |



| VM-20234 | User-defined field definitions were not replicated to sites running pre-14.5 software until the sites were upgraded to the latest version. | | | |
|----------|--|--|--|--|
| VM-20300 | Intermittent errors were encountered when viewing supervised videos and incidents when complicated user group relationships are in use. (Did not affect customers using SQLServer.) | | | |
| VM-20215 | When setting incident clip start/end times, the "set clip start" and "set clip end" functions were not accurate to the exact frame; they now are. | | | |
| VM-20115 | It is now possible to use asset import at site (if licensed) and replicate the imported media to central manager. | | | |
| VM-20201 | The flashing red light displayed when a VB400 is sitting on the dock but is not connected to the server was previously not displayed if the VB400 had not been assigned since it was last upgraded or factory reset. | | | |
| VM-20322 | If auto-upgrade of a DockController failed, then the status of the DockController could get stuck in the "upgrading" state until the DockController is reset. | | | |
| VM-19882 | The web interface no longer uses "all caps" text in field labels. | | | |
| VM-20292 | The installer now creates an installation log file in the Program Files folder. | | | |
| VM-20272 | If the service heap size was overridden by the config folder in C:\ProgramData\Edesix folder, this did not take effect. | | | |
| VM-20210 | The appearance of tag list incident fields has been improved. | | | |
| VM-20199 | Export original files to Box storage previously didn't work if footage was stored in an encrypted filespace. | | | |
| VM-20283 | Computed fields which use the 'contains' function on tag list fields did not properly work when no tag options were selected. This also affected auto incident creation where the rule used the 'contains' function. | | | |
| VM-20205 | The licensing page now makes it clearer which device licence count applies to VB400s. | | | |
| VM-20199 | The "always pre-record when not charging" option was sometimes visible on the profile edit page for VT50/VT100. | | | |
| VM-20145 | Restrictions on which users can change the login mode have been removed. | | | |
| VM-19681 | User's Bluetooth (BLE) MAC address is now visible on the user details page. | | | |
| VM-20162 | A new option is available when configuring a site in central manager which enabled immediate deletion of all videos when they have been uploaded from site. | | | |



| VM-20209 | The count of files successfully imported is sometimes wrong on the asset import screen when an import completes. | |
|----------|--|--|
| VM-20332 | Restored the legend on the user-activity chart in live stats. | |

Changes since 14.4.4

New feature: Auto-upgrade of EdgeControllers and DockControllers

Motorola Solutions VideoManager can now be configured to automatically upgrade EdgeControllers and DockControllers to the latest firmware. In both cases, the system limits the number of simultaneous upgrades in order to limit the load on the system and the network. In the case of DockControllers, the time window where DockControllers can be upgraded can be restricted to minimize disruption.

New feature: System configuration export/import

It is now possible to export a file containing a large portion of the system configuration and import that configuration into another system. For customers who maintain a separate test system and live system, this makes it easier to transfer the latest configuration from their test system to their live system. The system can currently be used to copy:

- Shareable device keys
- Roles
- Password complexity rules
- Deletion policy
- Custom field configuration
- Device profiles
- Wifi profiles
- Import profiles
- Export profiles

New feature: Playback watermark

The system can superimpose a unique watermark on the playback window during video playback. This is intended to discourage illicit recording of videos: if a recording is made during playback, for example with a mobile phone, the user playing the video and the time of playback can be identified from the watermark on the recording.

New feature: Automatic incident creation

For customers who have media properties and incidents licensed, it is now possible to configure the system to automatically create incidents for videos which meet specified criteria. When used in conjunction with the VB companion app, this allows the system to automatically create incidents based on an officer's classification of a recording made in the field.

New feature: Service required status

If a device has been designated by an administrator as requiring servicing (for example, its battery has degraded to the point where it needs to be replaced), they can now put that device into the "service required" state in the device management page. Devices in this state will not be assignable. VB400



devices in this state will show an obvious yellow light making them easy to identify and remove from the dock for servicing.

Licensed feature: Bundled user-import tool

A stand-alone tool called the "user-import tool" has been available for some time allowing user and user group information to be imported into Motorola Solutions VideoManager from a spreadsheet, database, CSV file or from Azure Active Directory (in 14.5.0). This tool can now be invoked within Motorola Solutions VideoManager without the need for a standalone installation of the tool. The stand-alone tool will continue to be available.

A licence is required to use this feature.

New feature: Anti-virus integration

Customers with an asset import licence can now configure the system to perform an anti-virus scan of files as they are imported.

The scanning is provided by OPSWAT, and requires a paid-for licence from OPSWAT, who are a third-party company.

Minor enhancements and bug fixes (Motorola Solutions VideoManager)

| Issue Id | Summary | |
|----------|---|--|
| VM-19517 | VideoManager has been updated to match Motorola branding - colour scheme, fonts, icons, installer name and the default data folder name have all changed. | |
| VM-19773 | Bluetooth pairing information is now replicated between sites and the central manager, allowing the companion app and HolsterAware features to be used in installations with a central manager. | |
| VM-19630 | The battery report now includes information for VB400 devices. | |
| VM-18384 | You can now globally configure the incident viewer/editor so that it shows the values of important media field values in the list of clips. | |
| VM-19240 | You can now search for videos/media using a text filter which matches against multiple media fields - like the text search function for incidents. The set of fields matched is configurable. | |
| VM-19229 | The VB400 device profile now allows the Motorola Radio BT Smart Ready connection to be enabled. | |
| VM-19626 | The ability to edit custom field definitions has been removed from the VideoManager Administrator application. | |
| VM-19594 | Settings pages relating to login have been moved from "User Interface -> Login Settings" to | |



| | "People -> Two Factor Authentication" and "People -> Authentication". | | | |
|----------|---|--|--|--|
| VM-19775 | Security enhancement: Content-Security-Policy header could include unnecessary additional hostnames. | | | |
| VM-19236 | You can now filter the list of devices using a list of device serial numbers or names. | | | |
| VM-19681 | User's Bluetooth (BLE) MAC address is now included in the user export report. | | | |
| VM-19644 | The default expiry time for incident access links is now configurable. | | | |
| VM-19789 | Minor security enhancement: certain responses from the web server did not include the Strict-Transport-Security header. | | | |
| VM-19787 | Minor security enhancement: the UI is now using Bootstrap 3.4.1, which fixes a potential XSS vulnerability. | | | |
| VM-17549 | The layout of the upload dialog was improved when using a mobile device. | | | |
| VM-19516 | Incident clips can now be easily sorted by time. When adding multiple videos to an incident at once, the clips are now added in chronological order. | | | |
| VM-19415 | The permissions for configuring devices have been split into more granular permissions - see "New role permissions" below. | | | |
| VM-19170 | The VB400 device profile now allows configuration of post-record. | | | |
| VM-19620 | Asset import now supports import of GIF files. | | | |
| VM-19619 | Asset import now supports import of BMP files. | | | |
| VM-20069 | Asset import now supports import of MPEG1 video in an MPG file. | | | |
| VM-19982 | Asset import now supports import of XVID video in an AVI file. | | | |
| VM-19988 | Asset import now supports playback of MP4 files with AAC-HE audio. | | | |
| VM-20027 | The device list sometimes showed a spurious temporary error against a device during download if the connection to the device was unreliable. | | | |
| VM-20207 | Occasionally if a device was undocked very quickly after an RFID assignment, it would be reported as "unknown" rather than "in use" in the device list. | | | |
| VM-19885 | The Asset import UI showed the progress of the wrong import job if multiple import jobs were running at once. | | | |
| VM-19550 | System now rejects whitespace only values in mandatory incident/media fields. | | | |
| VM-18591 | You can now enable alternate password complexity on the "System Administrators" role. | | | |



| VM-19777 | The warning displayed when you navigate away from the asset import page has been improved to make it clear if import will continue in the background. | | | |
|----------|---|--|--|--|
| VM-19889 | When using SQLServer, if you accidentally created a user containing a particular unicode special character, it was then impossible to remove the character from the username, even by deleting and recreating the user. | | | |
| VM-19823 | The system had to be manually restarted once after upgrade in order to make passthrough authentication work. | | | |
| VM-18281 | The count of selected videos was not displayed when doing a video bulk edit. | | | |
| VM-19621 | MP4 export failed for an incident containing still images. | | | |
| VM-19744 | The VB400 device profile now includes settings for X series devices. | | | |
| VM-19729 | The licensing system could sometimes report a system warning, even after the problem had been resolved. | | | |
| VM-20137 | The maximum file size which can be played back by the system is now overridable in the setting file. | | | |
| VM-20130 | Invalid filename templates in the evidence export profile caused export failures, even if they were not in use. | | | |
| VM-20105 | Auto creation of users when using OAuth2 login mode can now be disabled. | | | |
| VM-19852 | Attempting to download a video at central manager where the file has not been uploaded from site would give an error. | | | |
| VM-20064 | Imported media files which contain a comma in their name did not play back correctly in systems using S3 object storage. | | | |
| VM-20111 | The login page now shows an error message if you attempt to login and the server is offline. | | | |
| VM-20063 | The placement of the background video on the login page has been changed to keep the whole video visible if your browser window is not 16:9. | | | |
| VM-18358 | The unused resolution selector in the VT50/VT100 device profile has been removed. | | | |
| VM-20000 | The "Available for assignment" filter in the devices page can now show devices on EdgeControllers and sites, not just devices connected to the local system. | | | |
| VM-19870 | The audit report creation dialog was confusing and showed a meaningless "start date" and "end date". | | | |
| VM-20011 | The audit report did not apply the "search by file hash" filter if it was specified. | | | |
| VM-19524 | The DOWNLOAD_FILE_DOWNLOADED audit entry sometimes didn't record the location of the download if the device disconnected around the time that download completed. | | | |



| VM-19681 | The BLE MAC address for a user is now visible in the user bluetooth pairings dialog and in the "user export" report. | | | |
|----------|--|--|--|--|
| VM-19515 | A search for a non-existent group in the users admin page showed a misleading error message. | | | |
| VM-19909 | An "undelete" tool is now available to reinstate permanently deleted video files from a customer's own filespace backup. | | | |
| VM-19593 | The email server password for notifications was corrupted on upgrade from versions earlier than 14.2. | | | |
| VM-19856 | The System Information panel on the home page showed the server time formatted incorrectly. | | | |
| VM-19790 | The Strict-Transport-Security header was incorrectly included in responses when the server was using HTTP only. | | | |
| VM-19872 | The terminology in the device profile dialog for configuring the maximum length of a recorded video was improved. | | | |
| VM-19793 | Some mandatory fields in the "Media playback reason" dialog were not being enforced. | | | |
| VM-16357 | On certain videos, during playback, no thumbnail was displayed when scrubbing to the end of the video. | | | |
| VM-20126 | Custom field validators misbehaved if the regular expression contained a ^ or \$ character. | | | |
| VM-20121 | Automatic device configuration updates did not work if you edited a user's wifi profile or a user's default profile while a device assigned to the user is docked. | | | |
| VM-18723 | Creation and edit of bandwidth rules is now audited. | | | |
| VM-20053 | Media grid workers could crash and restart in a system with terrible file I/O performance accessing filespaces. | | | |
| VM-19561 | If you created an incident from a rotated video, the "video metadata overlay" was not shown by default on the created incident. | | | |
| VM-20038 | A spurious exception was logged on grid workers on startup. | | | |
| VM-20062 | The bundled Java JRE was updated to version 11.0.8r10. | | | |
| VM-19662 | Tag list values which are numbers were not displayed correctly in the incident properties and video properties editors. | | | |
| VM-19739 | Under some circumstances, live stats would stop updating if the service is running on a PC which goes to sleep. | | | |
| VM-19973 | The deprecated assignment report has been removed (replaced by the device field trip | | | |



| | report). | | |
|----------|---|--|--|
| VM-18363 | Auditing has been added for several DockController actions (change bandwidth rule, restart configure). | | |
| VM-18594 | Deleting a resources filespace containing device images and/or theme resources now correctly cleans up those resources. | | |
| VM-20018 | On a new install, the system now uses the locale configured in your browser to select the UI language by default. | | |
| VM-19908 | Two device profiles can now have the same name if they are in different device profile families. | | |
| VM-19869 | Public web address validation in the web server settings page now allows domain names which begin with a digit. | | |
| VM-19977 | The obsolete "video badge view" option has been removed from the wifi profile edit page. | | |
| VM-19655 | The video gallery view did not always correctly load new videos as you scrolled down. | | |
| VM-19821 | The "include clip footage" option was incorrectly visible in the MP4 and DVD incident export profile configuration page. | | |
| VM-19889 | If a user was created with certain spurious Unicode control characters in the user name, it was not possible to delete and recreate a user with the correct name. | | |
| VM-19810 | The firmware version of Holster Aware devices is now displayed in the user bluetooth pairings page. | | |
| VM-20044 | The pages for viewing sections of the audit log now make it clear in the title what is being viewed. | | |

New role permissions

| Permission | Section | Notes | On upgrade, granted to |
|----------------------------------|----------------------------------|---|---|
| View/edit auto incident creation | Advanced Permissions/Settings | Requires incident and media properties licences | System Administrator |
| Change device custom status | Device Permissions/Management | Replaces the "change device settings" permission. | roles which had "change device settings" permission |
| Change device name | Device Permissions/Management | - | roles which had "change device settings" permission |

| Set/clear service required | Device Permissions/Management | - | roles which had "change device settings" permission |
|---|----------------------------------|------------------------------------|---|
| Change auto upgrade | Device Permissions/Management | - | roles which had "change device settings" permission |
| Change static IP | Device Permissions/Management | - | roles which had "change device settings" permission |
| Change touch assign | Device Permissions/Management | - | roles which had "change device settings" permission |
| Force unassign | Device Permissions/Assignment | - | roles which had "change device settings" permission |
| View/Edit user import tool settings | Advanced Permissions/Settings | Requires user import tool licence. | System Administrator |
| View/Edit anti-virus policy settings | Advanced Permissions/Settings | Requires asset import licence. | System Administrator |
| View/Edit import/export config settings | Advanced Permissions/Settings | - | System Administrator |
| Import system config | Advanced Permissions/Settings | - | System Administrator |
| Export system config | Advanced Permissions/Settings | - | System Administrator |

Earlier changes

See the V14.4.x release notes for earlier changes.

Known issues

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.

Cannot Compute File Hash for Audit Log Search when using Internet Explorer

In the audit log screen, it is possible to filter the audit log by the SHA-256 of the file. On most browsers, the page lets you select a local file and the page then computes the hash of the file. This function isn't available in Internet Explorer. However, you can still search by file hash if you know the SHA-256 hash of



the file you are searching for. If you need to compute the SHA-256 hash of a file on Windows, you can do it using the "certutil" command-line tool on Windows, e.g. "CertUtil -hashfile <filepath> SHA256".

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.

Upgrade notes

Software assurance requirement for upgrade

In order to upgrade to this version from an older version, you must have software assurance coverage up to 01 June 2020. If you are upgrading from a version older than 10.2, then you must upgrade to 10.2 and apply 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.

VB400 Device downgrades restricted

It is no longer possible to downgrade a VB400 device running 14.3.3 (or later) firmware to a firmware version earlier than 14.3.3.

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 Server 2012 Essentials, Standard & Datacenter
- Windows Server 2012 R2 Essentials, Standard & Datacenter
- Windows Server 2016 Essentials, Standard & Datacenter **
- Windows Server 2019 Essentials, Standard & Datacenter **

Note that 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.

Supported browsers

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

- Microsoft Internet Explorer 11 (Windows 7/8.1/10) **
- Microsoft Edge 14+ (Windows 10)
- Firefox 47+ * (Windows 7/8.1/10).
- Chrome 48+ (Windows 7/8.1/10, MAC OS X v10.10)

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.

^{* -} USB attached devices are not supported on Windows Server 2016 and later.



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.

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:

| VB200/VB300 firmware | V14.4.4 |
|-------------------------|---------|
| VB400 firmware | V14.5.3 |
| VT firmware | V14.5.0 |
| DockController firmware | V14.4.4 |

^{**} When using Internet Explorer, audio is not supported on Device live view page.