VideoManager EX EX 24.1.8 Release Note

Software updated in 24.1.8

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

Updated role permissions

Permission	Section	Notes	On upgrade, granted to
View/Edit LTE APNs	Advanced permissions/Settings	2 permissions	Roles which previously had permission to view/edit device profiles

AZMV-14547	Previously, changing the device family when creating a device profile would attempt to apply the settings changed on to the new device family. This can lead to some settings not being applied correctly. Now there will be a warning to indicate the device profile will be reset to the defaults for the chosen device family.
AZMV-12534	A warning is produced when trying to delete a dock that belongs to an assignment group.
AZMV-13517	The SmartDock firmware upgrade progress indicator is now more accurate and detailed.



AZMV-14740 AZMV-15906 AZMV-15907 AZMV-15914	Made improvements to the LTE APN configuration to include better validation and feedback.
AZMV-1449	The option to enable Resilient Touch Assign (RTA) on a DockController in 'open' mode has been removed.
AZMV-14475	The non-feed video API was using the start date value rather than end date resulting in the filter producing incorrect results. This would only be noticed if this API was being used by a third-party client.
AZMV-14524	Form inputs were misaligned in some circumstances when displaying date format hints.
AZMV-14739	Download and upload when referring to data taken from a device and moved into another location is now being referred to as 'offload'.
AZMV-15402 AZMV-15403 AZMV-15405	Locations on the website that make reference to both the DockController and SmartDock will now be referred to as 'docks'.
AZMV-15736 AZMV-16089	The device battery percentage will be shown even when fully charged. If the battery life extender option has been enabled then this will reduce the maximum camera charge. This may mean that the battery will show as being fully charged even if it has not reached 100%.
AZMV-15786 AZMV-15787	Improved the page layout responsiveness in some of the admin pages.
AZMV-14365	Improved device error logging in the Boundary Service.
AZMV-16181	eSIM provisioning audit logs were not appearing in VM EX correctly.



AZMV-16850	Auto-sharing of media would share the media with the users or groups in the opposite direction.
AZMV-14839	Security improvement: Updated various third-party libraries to latest versions.

Software updated in 24.1

- Motorola Solutions VideoManager EX for Windows
- Motorola Solutions VideoManager EX for CentOS Linux
- VB400 firmware
- EdgeController firmware

Changes since 17.3.3

New Feature: Fleet Battery Health Indicator report

A new report has been added which reports on all VB400 devices which have recently run out of battery prematurely while in use and which might therefore have a degraded battery. Devices which were not fully charged when they were undocked or which were live streaming while in use are not included in the report. [AJMV-6970]

New Feature: Battery charge level

The battery charge level as a percentage is now available in Motorola Solutions VideoManager EX while the VB400 is docked and charging. The percentage is shown next to the device charge status icon. The battery may stop charging before reaching 100% when the ambient temperature is too high, or when the "Battery life extender" option is enabled. The reported charge level is less accurate at the start of charging (especially below 30%) and accuracy also decreases with older batteries and in high/low ambient temperatures. [AZMV-13496, AZMV-7426]

New feature: Custom LED pattern for standby

It is now possible to customise the LED colour & pattern used when the VB400 is in standby. When "Custom LED patterns" in enabled under "Notifications & Alarms" in the device profile, a new drop-down is available for "Standby LED pattern", providing the available customisation options. [AZMV-13601, AZMV-13876]

New role permissions

Permission	Section	Notes	On upgrade, granted to



Configure device for eSIM provisioning	Device permissions/Device	-	System administrator
View/Edit LTE APNs	Advanced permissions/Settings	2 permissions	System administrator

Issue Id	Summary
AZMV-9292	Device assignment would intermittently fail on a site manager if companion app is in used by not key replication from the central manager.
AZMV-13063	The Access Control Key Management page was unusable if thousands of keys were imported.
AZMV-13064	The Access Control Key Management page now has a search box and displays the total number of keys in the system (while only displaying the first few keys in the system).
AZMV-12641	Added device profile support for V700 WiFi.
AZMV-12623	Added device profile support for M500 + V700 Streaming outside of recording.
AZMV-12985	Added device profile support for M500 Keep background video.
AZMV-12777	Added device profile support for M500 left/right cameras.
AZMV-9079	Added device profile support for M500 RFID integration.
AZMV-12654	The video overlay for V700 now includes GPS coordinates.
AZMV-13393	Added device profile support for V700 SmartControl Mobile Password configuration.
AZMV-13189	Events audited when a camera is undocked now include the charge level of the device at the moment of undock.



Issue Id	Summary
AZMV-13385	The Sites page is now paginated and is usable even when there are a large number of sites in the system.
AZMV-13386	The Sites page now shows the total number of online and offline sites matching the filter.
AZMV-13808	An icon is now shown on the Sites page for sites which are experiencing congestion and you can now filter the Sites list to show only sites with this issue.
AZMV-13807	Only a single system warning is now raised if multiple sites are experiencing congestion.
AZMV-13808	The sites page now shows sites which are experiencing congestion and can be filtered to show just those sites.
AZMV-13190	A new audit type has been added for device shutdown events caused by low battery.
AZMV-12490	It is now possible to change the camera/microphone for an M500 live stream in the Tactical VideoManager EX preview panel.
AZMV-12489	It is now possible to change the camera/microphone for an M500 live stream in the Tactical VideoManager EX wall.
AZMV-13098	The fetch function sometimes attempted to fetch the video from the wrong site if that site had a partially downloaded copy of the video.
AZMV-13764	Client certificate authentication did not work if the user needed to accept the user agreement.
AZMV-13641	The "Operator Id" column in the operator activity report and operator record summary report was incorrectly output as "Incident Id".

ED-020-103-01 - 2024-05-08 - VMEX24.1.8 release note - **PUBLIC** Copyright © 2024 Motorola Solutions Inc. Page 5 of 18



Issue Id	Summary
AZMV-13088	If a grid worker was shutdown while writing an export to an external folder, it sometimes failed when export processing restarted.
AZMV-9092	If processing of an export writing to an external folder was restarted, the server now reuses the same export folder rather then creating a duplicate folder with a different date.
AZMV-12412	Security improvement: Updated various internal libraries to latest versions including Jetty webserver.

Minor enhancements and bug fixes (VB400)

Issue Id	Summary
AZMV-7145	Device audit log entries are now created when live streaming is started and stopped.
AZMV-13601	The standby LED indication was not working when custom LED indications were configured for recording or pre-recording.

Changes since 17.2.1

Enhancement: VB400 WiFi roaming

WiFi access point roaming is now supported on the VB400. Note that roaming is initiated by the access point, and may cause roaming to a band that the device may otherwise be configured not to use in the WiFi profile. [AZMV-9688]

New role permissions

Permission	Section	Notes	On upgrade, granted to
View/Edit DockController		2 permissions	System administrator
settings	permissions/Settings		



Resilient Touch Assign	Device	-	System administrator
configuration	permissions/Managem		
	ent		

Issue Id	Summary
AZMV-11264	Officer preferences are now replicated between sites and central manager.
AZMV-11549	Fixed a user import issue where group data could not be imported if Active Directory server had an LDAP max page size configured.
AZMV-3220	Accessibility: HTML heading structure has been improved on many pages to improve the experience for users using screen readers.
AZMV-11773	Accessibility: Improved test contrast in some area of the user interface.
AZMV-12172	After enabling email notifications, notifications for device stream start were not sent until the server was restarted.
AZMV-8654	Audit events generated by the user import tool are now recorded against the user who manually runs the user import tool.
AZMV-11105	The first login for a user using Windows single sign-on would sometimes fail.
AZMV-9102	If two recordings were made within 5 seconds of each other, VideoManager EX would treat recordings as if they overlap.
AZMV-6520	Fixed a bug where downloads from M500/V700 devices occasionally reported progress over 100%.
AZMV-6189 AZMV-9925	Add settings to control which "video wall" options are available in Tactical VideoManager EX.
AZMV-11092	Fix an issue where device locations were not correctly displaying in Tactical VideoManager EX.



Issue Id	Summary
AZMV-9926	Tactical VideoManager EX now displays all connected devices (not just those with a live stream available).
AZMV-10773	The equipment report could occasionally fail to run soon after adding a new DockController.
AZMV-9077	Added support for RFID assignment on the M500.
AZMV-10799	Add support for location searches by latitude/longitude.
AZMV-12212	Ensure that no WiFi profile is configured on a VB400 using VB SmartControl.
AZMV-11780	Fixed a bug where the device list would fail to load if a V700 was configured as an OnStream output.
AZMV-11894	The list of timezones in timezone selection drop-downs was not in the correct order.
AZMV-11954	The system displayed a poor error message if you attempted to download M500 configuration with no public address defined.
AZMV-11731	The risky option to skip database backups at busy times has been removed.
AZMV-8975	Column header names in CSV report can now be overriden with language packs.
AZMV-8975	Field names in CSV report metadata files can now be overriden with language packs.
AZMV-5934	Fixed the focus behaviour on keyboard shortcuts popup window.
AZMV-10926	In the API key management page, keys for companion app were shown with an incorrect role name.
AZMV-7368 AZMV-7369	Added the ability to import/export incident share reason field definitions.

Issue Id	Summary
AZMV-3127	It was possible to attempt multiple simultaneous manual firmware upgrade requests on a single DockController.
AZMV-10043	The import button is now disabled on the transcript page when the page is in read-only mode.
AZMV-9094	Failed imports are now not retried after the max retries has been reached.
AZMV-11668	Fixed a memory leak which could cause the server to run out of memory if it was repeatedly unable to connect to the database at startup.
AZMV-12059	Imrpoved the logging if the system failed to startup due to an internal listen port already being in use.
AZMV-10775	Fixed a problem where using SSL servers in a grid environment with client certificate authenticated devices could result in certificate verification errors.
AZMV-10778	Improved download efficiency when using client certificate authenticated devices in a grid environment.
AZMV-10444	The manage-service command-line tool can now be used to edit the SSL certificate for client certificate authenticated device listen addresses.
AZMV-9884	Security Improvement: Updated okio-1.15.0.jar used by user import tool

Minor enhancements and bug fixes (VB400)

Issue Id	Summary
AZMV-7462	Some devices would never complete charging in a high temperature environment.



Issue Id	Summary
AZMV-7466	Some devices would not be eligible for Touch Assign after completing charging in a high temperature environment.
AZMV-8283	Devices could get stuck in a loop of repeatedly failing to connect to WiFi access points, or to phones in WiFi Direct mode.
AZMV-10030	Devices could restart while disconnecting-from or reconnecting-to WiFi at the same time as renewing a DHCP lease.

Minor enhancements and bug fixes (DockController)

Issue Id	Summary
AZMV-10089	The reliability of Ethernet connectivity has been improved.

Software updated in 17.2.1

- Motorola Solutions VideoManager EX for Windows
- Motorola Solutions VideoManager EX for CentOS Linux

Changes since 17.1.2

New Feature: M500 Roaming

Support for M500 devices to be able to roam between different instances of Motorola Solutions VideoManager EX in a Site/Centre configuration. M500s can be bootstrapped at one Site (or Centre), and can offload footage or accept new configuration at another. For this to work, the user must enable the Roaming replication setting from the Admin > Connectivity > Configuration Replication section. This will replicate the unique Agency ID used by devices to identify Sites in their shared organisation. In certain situations, the configuration may not match from Site to Centre. For example, if the user has not enabled replication of device profiles, or if the Site is currently Isolated (unable to reach the Centre). In that case, the device will be able to offload its footage, but will not accept new configuration.

New Feature: Incident Share Reasons

You can now configure the system so that when an incident is shared with another user, the user sharing the incident must enter a reason for the sharing.

ED-020-103-01 - 2024-05-08 - VMEX24.1.8 release note - **PUBLIC** Copyright © 2024 Motorola Solutions Inc. Page 10 of 18



New role permissions

There are no new permissions in this release.

Issue Id	Summary
AZMV-9699	Correct DockController and EdgeController firmware was not automatically selected by default.
AZMV-9388	If M500 long tasks (like offloads) timed out, then the connection was occasionally getting dropped
AZMV-10034	The theme resource admin page would incorrectly reject PNG files added as a favicon.
AZMV-9173	It is now possible to configure the system to authenticate user logins with browser-provided SSL client certificates.
AZMV-10298	Sometimes Motorola Solutions VideoManager EX wasn't detecting M500s when they connected after bootstrapping for the first time.
AZMV-10629	M500s were being 'locked out' of system for up to 60s after Motorola Solutions VideoManager EX network reconfiguration
AZMV-172	International characters in User Import Tool output now display correctly in the User Import Tool admin page.
AZMV-1256	The camera/mic name is now accessible in evidence export metadata templates.
AZMV-9390	Changes to automatic import profiles did not always take effect immediately.
AZMV-9146	Security update: The embedded Postgres database has been updated to 13.12.
AZMV-9173	It is now possible to configure the system at startup to use an external Postgres database.



Issue Id	Summary
AZMV-3211	Record audit log entry when a Mobile App field is added or modified
AZMV-5866	Make question-circle buttons focus/hover behaviour in Permissions table consistent with rest of application
AZMV-5905	Make 'Delete default device' button in Role edit page accessible
AZMV-7608	Always validate text list field value content against its 'Max Items' limit
AZMV-7844	Remove inapplicable 'Group Member Stop' and 'Allow Manual Stop' options from M500 device profile
AZMV-7987	Accessibility: Make the focus state clearer on toggle buttons
AZMV-8002	When changing M500 name, prevent device from resetting to previous name
AZMV-8663	Changes to the Vehicle Auto Upgrade setting at CVM now immediately replicate to sites
AZMV-4493	Remove references to iOS version of VB Companion (End of Life)
AZMV-7306 AZMV-7307 AZMV-8877 AZMV-7572 AZMV-9444	Security updates: various embedded third-party libraries have been updated.

Software updated in 17.1.2

- Motorola Solutions VideoManager EX for Windows
- Motorola Solutions VideoManager EX for CentOS Linux

Changes since 17.1.1

New role permissions

There are no new permissions in this release.



Minor enhancements and bug fixes (Motorola Solutions VideoManager EX)

Issue Id	Summary
AZMV-9312	M500 connections are now less likely to timeout when using slower LTE connections.
AZMV-9666	Client certificate forwarding for "client certificate authenticated devices" listen ports now support certificates forwarded in PEM format.
AZMV-10044	The server SSL certificate is now configurable for "client certificate authenticated devices" listen ports.
AZMV-10252	Database upgrade could fail when upgrading certain databases with very large numbers of records.
AZMV-10290	When using automatic imports, the system could leak file handles which would eventually cause the service to fail.

Earlier changes

See the V17.1.1 release notes for earlier changes.

End-of-support (EOS) for VideoManager EX 15.0

VideoManager EX 15.0 (and earlier) are now at end-of-support, and VideoManager EX 17.2 is the recommended upgrade for customers with software assurance.

End-of-support for specific VideoManager EX software versions means that they are longer supported or serviced, and will not receive further security or feature updates.

Existing VideoManager EX 15.0 and earlier installations will continue to operate, but you should be aware that when you use software after its end-of-support, you are potentially exposing your organisation to security vulnerabilities.

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]

ED-020-103-01 - 2024-05-08 - VMEX24.1.8 release note - **PUBLIC** Copyright © 2024 Motorola Solutions Inc. Page 13 of 18



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 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 overridden 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.

Changing server timezone while cameras are offloading footage Changing the timezone of the server while cameras are offloading footage may trigger the deletion policy to delete the video files before the upload finishes. The record of those video files will appear in your search results but cannot be played back as the video file no longer exists.

Upgrade notes

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 EX 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 EX database, be aware that SQL Server must support TLS 1.2 encryption or the Motorola Solutions VideoManager EX 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 14 February 2023. 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.

Officer preferences roaming

M500 users roaming between sites who have updated officer preferences may see their preferences revert to an older version after upgrade. Subsequent preferences changes will be preserved across all sites

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 EX 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.

DockController DHCP client changes

In 16.1.0 the version of the DHCP client used by the DockController was updated. This update has caused a change in the way the DHCP client identifier is generated. Please contact support if further information is required.

Supported platforms

Motorola Solutions VideoManager EX is supported on the following platforms:

- 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 * **

* Accessing the Motorola Solutions VideoManager EX 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 EX service.

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

Supported browsers

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

- Microsoft Edge 79+ (Windows 10/11)
- Chrome 48+ (Windows 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 EX web application from working correctly. In particular, some browsers may silently prevent the download of files from the Motorola Solutions VideoManager EX web application. Adding Motorola Solutions VideoManager EX web application to the list of trusted websites will normally fix this.

Accessing the Motorola Solutions VideoManager EX 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 EX includes the following firmware:

VB400 firmware	V24.1.0
----------------	---------

VT50 / VT100 firmware	V17.0.2
DockController firmware	V17.3.0

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.
- The following MOTOTRBO radios:

Region	Model
North America	R7, XPR 7000e series
Europe and the Middle East	R7, DP4401e, DP4601e, DP4801e, DP3441e, DP3661e
Asia-Pacific	R7, XiR P8668i, XiR P8628i, XiR P8608i, XiR E8608i, XiR E8628i
Latin America	R7, DGP 8000e/5000e series, DGP 8050e Elite