



MOTOROLA SOLUTIONS

MOTOTRBO™ System Release Notes
Professional Commercial Radios (PCR)

Version: M2024.01.01 v01
15 May 2024

EMEA Region

Contents

Scope	3
Abbreviations	4
What's New in System Release M2024.01.01	5
What's New in System Release M2024.01	6
Product Versions	9
Product Availability	14
Documentation	17
Training Material	18
Important Notes	19
Open (Unresolved) Issues	24
Resolved Issues in M2024.xx System Releases	26
Open Source Software Legal Notice	29

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Scope

These MOTOTRBO System Release Notes cover the following MOTOTRBO products:

- DP540, DP1400, R2, SL1600, SL2600, DP4000Ex Series, MOTOTRBO R7/R7a, MOTOTRBO R2 and DP4000Ex Ma Series Portables
- DP2000e Series, DP3000e Series, DP4000e Series and SL4000e Series Portables
- DM1000 Series and DM2600 Mobiles
- DM4000e Series Mobiles
- SLR 1000, SLR 5500 and SLR8000 Repeaters
- Radio Management
- CPS 2.0
- Air Tracer
- Tuner
- RDAC
- Device Discovery and Mobility Service (DDMS)
- MOTOTRBO Network Interface Service (MNIS) Data Gateway
- MOTOTRBO Network Interface Service (MNIS) VRC Gateway
- MNIS Status Agent
- Capacity Max Bridge
- ESU Launchpad
- System Advisor
- System Design Tools
- Sensor Management Tool
- Second generation MOTOTRBO MPT1327 GOB
- MPT1327 GOB CPS
- Second generation MOTOTRBO Connect Plus GOB
- Connect Plus GOB CPS
- Connect Plus Infrastructure (XRC 9000 / 9100 Controller, XRT 9000 / 9100 Gateway, XRI 9100 Interconnect, Network Manager, Network Manager Connection Tool, XRT Configuration Tool)

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Abbreviations

CPS	Customer Programming Software
CFS	Charge for Software
OTAP	Over The Air Programming
RM	Radio Management
OB	Option Board
RDAC	Repeater Diagnostics and Controls

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What's New in System Release M2024.01.01

Radio New Features

There are no new radio features introduced with this release.

For specific DP540 and MOTOTRBO R7/R7a radio revisions this is a "Motorola Factory Only" Release. For that reason, DP540 and MOTOTRBO R7/R7a radio recovery package only is being made available, and there is no upgrade package for DP540 and MOTOTRBO R7/R7a radios in the field.

The MOTOTRBO R2 upgrade package is only being made available to resolve issues in the field, and there are no new radio features. Please refer to the "Resolved Issues in Product Release" section.

Infrastructure/System New Features

CMSS upgrade to RHEL 8.8 EUS

In order to keep up to date with recent operating system fixes, security enhancements and new features, the CMSS OS is being upgraded to Red Hat Enterprise Linux (RHEL) version 8.8 EUS.

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What's New in System Release M2024.01

RM/CPS New Features

Upgrade of the RM SQL Server to the latest 2022 version

The SQL Server installer included in the previous customer release version of RM installation is SQL Server 2017 Express. It has been upgraded to SQL Server 2022 Express version.

For the RDAC tool, the SQL Server version has been upgraded from the unsupported Compact edition to 2022 Express. Due to that change, the installer package size has increased. Also, the installer interface is changing.

There is also a dependency between the RM Server and RDAC installation, if they are both installed on the same machine - only one SQL installation is required, whichever is the first. Thus, during the installation of RDAC, if an older version of SQL Server is installed on the computer (because for example, there is still a previous version of RM Server installed), a message appears to upgrade the SQL Server version first and then continue the RDAC installation. When the SQL Server upgrade is planned, combine it with the RM Server upgrade as well, since the older RM Server versions are not compatible with SQL Server 2022.

The detailed instruction on how to upgrade the SQL Server, with the information about the upgrading to the Standard or Enterprise SQL edition, is described in the Radio Management System Planner (MN010425A01-AA) manual.

Support of the Windows Server 2022 for the RM

Starting from M2024.01 release, Radio Management Server supports the latest Windows Server 2022 operating system.

Radio New Features

Rental Timer on DP2000e series, DP3000e series, DP4000e series, MOTOTRBO R7/R7a, DP4000 Ex series, SL2600, SL4000e series, DM2600, and DM4000e series

Enable partners to define / limit the rental period of MOTOTRBO radios and upon expiry the radios go to inhibit state.

Radio Status Audio Announcement on Power Up on DP4000e series, MOTOTRBO R7/R7a and DP4000 Ex series

Announces channel name, radio alias and battery level when radio powers up.

MOTOTRBO R7 FKP UI/UX Improvement on Contact List Initiated Calls

Calls initiated / received and all other operations such as sending text from "Contacts" list in MOTOTRBO R7 radio menu will now revert to the previous screen similar to DP4000e series behavior rather than returning to Home screen.

Adding Partner Contact Information into the Radio (display models only) on DP2000e series, DP3000e series, DP4000e series, MOTOTRBO R7, DP4000 Ex series, DM2600 and DM4000e series

There is now a provision to enter name and phone number in RM / CPS which can be viewed from radio models with display.

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Time and Date Audio Announcement via Programmable Button on MOTOTRBO R7

Provide Time and Date audio announcements which are informative especially on non display radios.

Configurable IMPRES Battery End of Life Warning

Radio will notify the user when the IMPRES battery is at the end of its life based on the duration predefined by the user.

- On MOTOTRBO R7 FKP radio :
QR code notification appears.
- On display models only on the following radios - DP4000e series, DP4000 Ex series, DP3000e series, DP2000e series, SL2600 and SL4000e series :
"Battery EOSL - Service Code 0101" boxed message appears.
- On non-display models only on the following radios MOTOTRBO R7 NKP / R7a, DP4000e series, DP4000 Ex series, DP3000e series, DP2000e series :
"Battery End of Service Life, Service Code 0101" voice announcement can be heard.

Infrastructure/System New Features

Expanding Capacity Max up to 750 sites

It is now possible to configure and deploy a single Capacity Max system with up to 750 RF sites.

A single active Trunking Controller supports call processing in a huge Capacity Max system with up to 750 RF sites. As previously, adding new sites requires purchasing Capacity Max Site Connection Licenses for each additional site (HKVN4314A).

Orderability of CMSS SW upgrades

CMSS Upgrade SW Packages can be now downloaded directly from MyView portal. It is no longer required to order these part numbers. Upgrading to the new SW is only possible with a valid SMA license on a server. This applies to the current M2024.01 release as well as all previous releases with the exception of R2.10 which remains orderable. Ordering SW upgrade on USB stick is no longer available.

New Part Numbers

Part Number	Description	Delivered As	How to Order
GMVN6241M	CPS 2.0 / Radio Management (and Tools)	DVD	Partner Hub Shop
GMVN5520V	RDAC Application	DVD	Partner Hub Shop

Cybersecurity

Motorola Solutions, Inc. (MSI) has delivered a PCR MOTOTRBO 2024.01 release. MSI development and operations teams continually make security updates as needed based on evaluated threats, determine protective measures, create response capabilities, and promote compliance. MSI interacts with and participates in several US and international security organizations, such as U.S. Department of Homeland Security's National Cybersecurity & Communications Integration Center (NCCIC), National Institute of

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Standards and Technology (NIST), The 3rd Generation Partnership Project (3GPP), Telecommunications Industry Association (TIA), European Telecommunications Standards Institute (ETSI), Digital Mobile Radio (DMR) Security standardization, and others. Standards from the aforementioned organizations can map to security controls in international standards such as Information System Standards (ISO / IEC 27001).

The PCR MOTOTRBO 2024.01 system release includes enhancements to security based on the National Vulnerability Database and industry standards:

- Ongoing vulnerability management remediation based on network scanning security tools
- Ongoing Software Lifecycle Management improvements (3rd party software)

In addition to ongoing releases for security updates, MSI has a Bug Submission Program for external entities to disclose to MSI possible security vulnerabilities or issues. Motorola Solutions encourages researchers to use the PGP key when sending sensitive information via email. Please send all security vulnerability reports to security@motorolasolutions.com.

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Product Versions

Listed below are the latest available MOTOTRBO Product Versions.

(Scroll down to the next table to see MOTOTRBO Product Versions associated with the different M2024.xx system releases)

MOTOTRBO Product	Latest version	MOTOTRBO Product	Latest version	MOTOTRBO Product	Latest version
DP540 Portables	R01.24.01.3000 (CP 23.42.07)	SLR 5500 Repeaters	R20.24.01.03 (CP 23.62.02)	Capacity Max System Advisor	UEM-PCR_24 .01.01.36-00
DP1400 Portables	R01.24.01.0000 (CP 23.42.04)	SLR 8000 Repeaters	R20.24.01.03 (CP 23.62.02)	System Design Tools	06.09
MOTOTRBO R2 Portables	R02.24.01.3002 (CP 24.21.04)	Radio Management	2.146.122.0	Sensor Management Tool	R01.00.01
SL1600 Portables	R01.24.01.0000 (CP 23.42.04)	CPS 2.0	2.146.122.0	R2.X MPT1327 GOB	R01.02.06
DP2000e Series Portables	R02.24.01.1002 (CP 24.21.04)	Air Tracer	11.0 (Build 39)	MPT1327 GOB CPS	R02.00.05
SL2600 Portables	R02.24.01.1002 (CP 24.21.04)	Tuner	24.1 (Build 2)	R2.X Connect Plus GOB	R02.07.38 (CP 1.1.19)
DP3000e Series Portables	R02.24.01.1002 (CP 24.21.04)	RDAC	24.1 (Build 2)	R2.X Connect Plus GOB CPS	R02.07.43
DP4000e Series Portables	R02.24.01.1002 (CP 24.21.04)	Device Discovery and Mobility Service (DDMS)	R24.01.0005	XRC 9000 / 9100 Controller	R02.100.05.1 036_1695
MOTOTRBO R7/R7a Portables	R02.24.01.1003 (CP 24.21.04)	MOTOTRBO Network Interface Service (MNIS) Data Gateway	R24.01.0023	XRT 9000 / 9100 Gateway	R02.100.05.1 036_1695
DP4000Ex/DP4000 Ex MA Series Portables	R02.24.01.1002 (CP 24.21.04)	MOTOTRBO Network Interface Service (MNIS) Status Agent	R22.3.1	XRI 9100 Interconnect	R02.100.05.1 030
SL4000e Series Portables	R02.24.01.1002 (CP 24.21.04)	Capacity Max ESU Launchpad	DESU_LP-R17.18. 10.56-02.rhel.iso	Network Manager (merged with XRC / XRI packages)	R02.100.05.1 030
DM1000 Series Mobiles	R01.24.01.0000 (CP 23.42.04)	Capacity Max System Server Installer Software Image	PC435S0EI00020 2010.iso	Network Manager Connection Tool	R02.100.05.1 030
DM2600 Mobiles	R02.24.01.1002 (CP 24.21.04)	MNIS Voice and Radio Command (VRC) Gateway	PCR-MNIS_24.01. 01.00-12	XRT Configuration Tool	R02.100.05.1 030
DM4000e Series Mobiles	R02.24.01.1002 (CP 24.21.04)	Capacity Max ESU	ESU-PCR_24.01.2 5.02-44		
SLR 1000 Repeaters	R20.24.01.03 (CP 23.62.02)	Capacity Max Trunk Controller	Cmxtc-pcr_20.24. 01.10-42		

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Listed below are all MOTOTRBO Product Versions associated with the different M2024.xx system releases. For products marked “-” in this table there were no new versions introduced with a system release.

MOTOTRBO Product	M2024.01	M2024.01.01
DP540 Portables	R01.24.01.0000 (CP 23.42.04)	R01.24.01.3000 (CP 23.42.07)
DP1400 Portables	R01.24.01.0000 (CP 23.42.04)	-
MOTOTRBO R2 Portables	R02.24.01.1002 (CP 24.21.04)	R02.24.01.3002 (CP 24.21.04)
SL1600 Portables	R01.24.01.0000 (CP 23.42.04)	-
DP2000e Series Portables	R02.24.01.1002 (CP 24.21.04)	-
SL2600 Portables	R02.24.01.1002 (CP 24.21.04)	-
DP3000e Series Portables	R02.24.01.1002 (CP 24.21.04)	-
DP4000e Series Portables	R02.24.01.1002 (CP 24.21.04)	-
MOTOTRBO R7/R7a Portables	R02.24.01.1002 (CP 24.21.04)	R02.24.01.1003 (CP 24.21.04)
DP4000Ex/DP4000 Ex MA Series Portables	R02.24.01.1002 (CP 24.21.04)	-
SL4000e Series Portables	R02.24.01.1002 (CP 24.21.04)	-
DM1000 Series Mobiles	R01.24.01.0000 (CP 23.42.04)	-
DM2600 Mobiles	R02.24.01.1002 (CP 24.21.04)	-
DM4000e Series Mobiles	R02.24.01.1002 (CP 24.21.04)	-
SLR 1000 Repeaters	R20.24.01.03 (CP 23.62.02)	-
SLR 5500 Repeaters	R20.24.01.03 (CP 23.62.02)	-
SLR 8000 Repeaters	R20.24.01.03 (CP 23.62.02)	-
Radio Management	2.146.122.0	-
CPS 2.0	2.146.122.0	-
Air Tracer	-	-
Tuner	24.1 (Build 2)	-
RDAC	24.1 (Build 2)	-
Device Discovery and Mobility Service (DDMS)	R24.01.0005	-
MOTOTRBO Network Interface Service (MNIS) Data Gateway	R24.01.0023	-
MOTOTRBO Network Interface	-	-

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Service (MNIS) Status Agent		
Capacity Max ESU Launchpad	DESU_LP-R17.18.1 0.56-02.rhel.iso	—
Capacity Max System Server Installer Software Image	PC435S0EI000202 009.iso	PC435S0EI000202 010.iso
MNIS Voice and Radio Command (VRC) Gateway	PCR-MNIS_20.24. 01.00-05	PCR-MNIS_24.01. 01.00-12
Capacity Max ESU	ESU-PCR_24.01.18 .10-68	ESU-PCR_24.01.25 .02-44
Capacity Max Trunk Controller	Cmxtc-pcr_20.24. 01.00-26	Cmxtc-pcr_20.24. 01.10-42
Capacity Max System Advisor	UEM-PCR_20.24.0 1.16-00	UEM-PCR_24.01.0 1.36-00
System Design Tools	—	—
Sensor Management Tool	—	—
R2.X MPT1327 GOB	—	—
MPT1327 GOB CPS	—	—
R2.X Connect Plus GOB	—	—
R2.X Connect Plus GOB CPS	—	—
XRC 9000 / 9100 Controller	—	—
XRT 9000 / 9100 Gateway	—	—
XRI 9100 Interconnect	—	—
Network Manager (merged with XRC / XRI packages)	—	—
Network Manager Connection Tool	—	—
XRT Configuration Tool	—	—

3 rd Party Application	M2024.01	M2024.01.01
SmartPTT PLUS	9.14.0.62	—
TRBOnet PLUS	6.2.1.7429	—
ConSEL PLUS	v7r69.3	—

Notes:

1. From M2020.01 onwards only products (i.e. MOTOTRBO radios, repeaters and CMSS) which are either in warranty or covered by a service package will accept software updates. Software Update Management (SUM) was introduced with the R2.10 system release and provides products with built-in intelligence to determine if they are eligible to accept a software update. Products on prior

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releases must therefore be upgraded to an R2.10 system release and be eligible to accept a software update before they can be upgraded to M2020.01 onwards.

2. The Capacity Max System Advisor (SA) client is not accessible for the System View, Grid View and Alarm Details view if Java version 8u211 or newer is used on the PC where the SA client resides. Downgrading Java to any version between and including 8u181 and 8u201 will work fine.
3. In M2024.01 fault management of CX6000-24G, ARUBA-2530-24, MSR2003, MSR2003X and MSR3016 was added to the System Advisor. To use it, SNMP shall be enabled in those network equipment configurations. For details please refer to Chapter 8 “Configuration Description for HPE infrastructure” in MOTOTRBO™ CAPACITY MAX Installation and Configuration manual. After enabling SNMP on network equipment, devices should be rediscovered in System Advisor using the context menu on System View or Network Database view. For details please refer to the System Advisor manual. Equipment without SNMP enabled will show up as Gray in System Advisor
4. With R2.8.0 and newer repeater releases, it is recommended to use USB 2.0 or USB 3.0 ports on the PC or connect repeater via USB 2.0 hub when upgrading the repeater via USB.
5. For CMSS (Capacity Max System Server):
 - a. Access to the MSI MyView portal to download MOTOTRBO M2024.01 Capacity Max System Server SW Upgrade as software iso image
6. For the PC used for CMSS upgrade only from M2022.01 and M2022.03 to M2024.01 (note: upgrading from 2023.01 to M2024.01 does not require ESU-LP):
 - a. If ESU-LP is required, order (1) T8486A, MOTOTRBO Capacity Max System Server SW Update Launch Pad which contains the ESU LP software files on a DVD.
 - b. Alternatively, for customers with access to the MSI MyView portal, you can order (1) T8483B, MOTOTRBO Capacity Max System Server SW Update Launch Pad where you will receive an e-mail with a unique link to access/download the ESU LP application files from the MyView portal. The T8483B will require an e-mail address at time of order.
 - c. Please refer to the section “Capacity Max System Upgrade from M2022.01, M2022.03 or M2023.01 to M2024.01” of Capacity Max System Release Upgrade Guide for additional details. It is available on Learning Experience Portal (LXP).
 - d. NOTICE: The DVD (T8486A) can take 2-3 weeks for delivery while the downloadable file via the MyView portal (T8483B) is generally available within a week. Please plan ahead and take the delivery times into consideration before scheduling your upgrade
 - e. The ESU Launchpad About page describes the target CMSS versions that it supports to ensure the appropriate ESU Launchpad version is ordered along with the CMSS upgrade installation files.

The feature sets supported in the release are compliant with the versions of ETSI DMR standard specifications listed below. Note that DMR Tier 3 protocol versions are not necessarily backwards compatible; it is recommended to ensure the supported protocol versions are compatible if using another manufacturer’s infrastructure or subscribers.

ETSI DMR Specification	M2024.01
TS 102 361-1: the DMR air interface protocol	v2.6.1
TS 102 361-2: the DMR voice and generic	v2.5.1

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services and facilities	
TS 102 361-3: the DMR data protocol	v1.3.1
TS 102 361-4: the DMR trunking protocol	v1.7.1 ~ 1.12.1

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Product Availability

The following table indicates which MOTOTRBO products covered by this document are set up as orderable parts (to order via Partner Hub Shop / Order Management) and which are available to download from MyView Portal.

MOTOTRBO Product	Orderable Part Number	MyView Portal* (up to M2021.04) Product Name / Product Line	MyView Portal* (currently or from M2022.01) Product Name / Product Line
Upgrade Package for DP540, DP1400 and SL1600 Portables	N/A	MOTOTRBO EMEA Commercial Devices Release <Release> / MOTOTRBO EMEA Commercial Devices	MOTOTRBO EMEA Devices Release <Release> / MOTOTRBO EMEA Devices
Upgrade Package for MOTOTRBO R2, DP2000e Series, SL2600, DP3000e Series, DP4000e Series, MOTOTRBO R7/R7a, DP4000Ex Series and DP4000Ex Ma Series Portables	N/A	MOTOTRBO EMEA Professional Devices Release <Release> / MOTOTRBO EMEA Professional Devices	MOTOTRBO EMEA Devices Release <Release> / MOTOTRBO EMEA Devices
Upgrade Package for SL4000e Series Portables	N/A	MOTOTRBO EMEA Professional Devices Release <Release> / MOTOTRBO EMEA Professional Devices	MOTOTRBO EMEA Devices Release <Release> / MOTOTRBO EMEA Devices
Upgrade Package for DM1000 Series Mobiles	N/A	MOTOTRBO EMEA Commercial Devices Release <Release> / MOTOTRBO EMEA Commercial Devices	MOTOTRBO EMEA Devices Release <Release> / MOTOTRBO EMEA Devices
Upgrade Package for DM2600 Mobiles	N/A	MOTOTRBO EMEA Professional Devices Release <Release> / MOTOTRBO EMEA Professional Devices	MOTOTRBO EMEA Devices Release <Release> / MOTOTRBO EMEA Devices
Upgrade Package for DM4000e Series Mobiles	N/A	MOTOTRBO EMEA Professional Devices Release <Release> / MOTOTRBO EMEA Professional Devices	MOTOTRBO EMEA Devices Release <Release> / MOTOTRBO EMEA Devices
Upgrade Package for SLR 1000, SLR 5500 and SLR 8000 Repeaters	N/A	MOTOTRBO EMEA Repeaters Release <Release> / MOTOTRBO EMEA Repeaters	MOTOTRBO EMEA Repeaters Release <Release> / MOTOTRBO EMEA Repeaters
RDAC	GMVN5520_ (DVD)	N/A	N/A
CPS 2.0	GMVN6241_ (DVD)	MOTOTRBO EMEA Software Release <Release> / MOTOTRBO EMEA Software	MOTOTRBO CPS and RM Release <Release> / MOTOTRBO CPS and RM
Radio Management	GMVN6241_ (DVD)	MOTOTRBO EMEA Software Release <Release> / MOTOTRBO EMEA Software	MOTOTRBO CPS and RM Release <Release> / MOTOTRBO Software
Air Tracer	GMVN6241_ (DVD)	MOTOTRBO EMEA General Software Tools / MOTOTRBO EMEA Software	MOTOTRBO EMEA General Software Tools / MOTOTRBO EMEA Software
Tuner	GMVN6241_ (DVD)	MOTOTRBO EMEA General Software Tools / MOTOTRBO EMEA Software	MOTOTRBO EMEA General Software Tools / MOTOTRBO EMEA Software
Device Discovery Mobility Service (DDMS)	GMVN6241_ (DVD)	MOTOTRBO EMEA General Software Tools / MOTOTRBO EMEA Software	MOTOTRBO EMEA General Software Tools / MOTOTRBO EMEA Software
MOTOTRBO Network Interface Service (MNIS) Data Gateway	GMVN6241_ (DVD)	MOTOTRBO EMEA General Software Tools / MOTOTRBO EMEA Software	MOTOTRBO EMEA General Software Tools / MOTOTRBO EMEA Software

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MOTOTRBO Network Interface Service (MNIS) Status Agent	GMVN6241_ (DVD)	MOTOTRBO EMEA General Software Tools / MOTOTRBO EMEA Software	MOTOTRBO EMEA General Software Tools / MOTOTRBO EMEA Software
MOTOTRBO Capacity Max System Server SW Update Launch Pad	T8486A** (DVD)	N/A	N/A
MOTOTRBO Capacity Max System Server SW Update Launch Pad	T8483B** (MyView Portal)	ESU Launchpad 1.0 (<Release>)***/ MOTOTRBO Capacity Max	ESU Launchpad 1.0 (<Release>)***/ MOTOTRBO Capacity Max
MOTOTRBO Capacity Max System Server (CMSS) Windows Update	T8735A** (DVD)	N/A	N/A
MOTOTRBO Capacity Max System Server (CMSS) Windows Update	T8736B** (MyView Portal)	CMSS Windows Motopatch*** / MOTOTRBO Capacity Max	CMSS Windows Motopatch*** / MOTOTRBO Capacity Max
MOTOTRBO 2.9.X Capacity Max System Server SW Upgrade	N/A	CMSS Upgrade Package 2.9.8 Full / MOTOTRBO Capacity Max	CMSS Upgrade Package 2.9.8 Full / MOTOTRBO Capacity Max
MOTOTRBO 2.10.X Capacity Max System Server SW Upgrade	T8482A** (USB & DVD)	N/A	N/A
MOTOTRBO 2.10.X Capacity Max System Server SW Upgrade	T8481A** (MyView Portal)	CMSS Upgrade Package 2.10.X*** / MOTOTRBO Capacity Max	CMSS Upgrade Package 2.10.X*** / MOTOTRBO Capacity Max
MOTOTRBO M2020.01 Capacity Max System Server SW Upgrade	N/A	CMSS Upgrade Package M2020.01 / MOTOTRBO Capacity Max	CMSS Upgrade Package M2020.01 / MOTOTRBO Capacity Max
MOTOTRBO M2020.02 Capacity Max System Server SW Upgrade	N/A	CMSS Upgrade Package M2020.02 / MOTOTRBO Capacity Max	CMSS Upgrade Package M2020.02 / MOTOTRBO Capacity Max
MOTOTRBO M2021.01 Capacity Max System Server SW Upgrade	N/A	CMSS Upgrade Package M2021.01 / MOTOTRBO Capacity Max	CMSS Upgrade Package M2021.01 / MOTOTRBO Capacity Max
MOTOTRBO M2021.02 Capacity Max System Server SW Upgrade	N/A	CMSS Upgrade Package M2021.02 / MOTOTRBO Capacity Max	CMSS Upgrade Package M2021.02 / MOTOTRBO Capacity Max
MOTOTRBO M2021.04 Capacity Max System Server SW Upgrade	N/A	CMSS Upgrade Package M2021.04 / MOTOTRBO Capacity Max	CMSS Upgrade Package M2021.04 / MOTOTRBO Capacity Max
MOTOTRBO M2022.01 Capacity Max System Server SW Upgrade	N/A	CMSS Upgrade Package M2022.01 / MOTOTRBO Capacity Max	CMSS Upgrade Package M2022.01 / MOTOTRBO Capacity Max
MOTOTRBO M2022.03 Capacity Max System Server SW Upgrade	N/A	CMSS Upgrade Package M2022.03 / MOTOTRBO Capacity Max	CMSS Upgrade Package M2022.03 / MOTOTRBO Capacity Max
MOTOTRBO M2023.01 Capacity Max System Server SW Upgrade	N/A	CMSS Upgrade Package M2023.01 / MOTOTRBO Capacity Max	CMSS Upgrade Package M2023.01 / MOTOTRBO Capacity Max
MOTOTRBO M2024.01 Capacity Max System Server SW Upgrade	N/A	CMSS Upgrade Package M2024.01 / MOTOTRBO Capacity Max	CMSS Upgrade Package M2024.01 / MOTOTRBO Capacity Max
HPE Switch Sample Configurations for Capacity Max	N/A	HPE Switch Sample Configurations for Capacity Max <Release> / MOTOTRBO Transport	HPE Switch Sample Configurations for Capacity Max <Release> / MOTOTRBO Transport
Juniper Switch and Router Sample Configurations	N/A	Juniper Switch and Router Sample Configurations <Release> / MOTOTRBO Transport	Juniper Switch and Router Sample Configurations <Release> / MOTOTRBO Transport
R2.X MPT1327 GOB Upgrade Kit	N/A	MOTOTRBO MPT1327 GOB CPS and Upgrade Kits / MOTOTRBO EMEA Software	MOTOTRBO MPT1327 GOB CPS and Upgrade Kits / MOTOTRBO EMEA Software

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MPT1327 GOB CPS	N/A	MOTOTRBO MPT1327 GOB CPS and Upgrade Kits / MOTOTRBO EMEA Software	MOTOTRBO MPT1327 GOB CPS and Upgrade Kits / MOTOTRBO EMEA Software
SmartPTT PLUS	N/A****	SmartPTT Plus / MOTOTRBO Sold and Supported	SmartPTT Plus / MOTOTRBO Sold and Supported
TRBOnet PLUS	N/A****	TRBOnet Plus / MOTOTRBO Sold and Supported	TRBOnet Plus / MOTOTRBO Sold and Supported
ConSEL PLUS	N/A****	Not available via MyView, visit https://conselplus.com/	

* Login to MyView at <https://myview.motorolasolutions.com> , expand Entitlements on the left side menu, and click Software, then check for Product Name and Product Line as described in the table

** This Capacity Max System Software can only be ordered via Order Management

*** Only becomes available if MyView Portal part number was ordered via Order Management.

**** Relevant license part numbers must be purchased to use these applications.

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Documentation

The MOTOTRBO System Release Notes are available on MyView Portal in Entitlements / Software under Product Name and Product Line “MOTOTRBO EMEA System Release Notes” at:

<https://myview.motorolasolutions.com>

The latest MOTOTRBO User Guides, Quick Reference Guides, Basic Service Manuals, Installation Manuals, Accessory Leaflets, EME Safety Booklets, RED Leaflets, UL/TIA Manuals, ATEX Safety and Approved Accessory leaflets, System Planner (68007024085_), Radio Management System Planner (MN004686A01_) and Capacity Max System Advisor Guide (MN002730A01_) are available on the Learning Experience Portal (LXP) at:

<https://learning.motorolasolutions.com>

The latest MOTOTRBO Declaration of Conformity (DoC) documents with attached ATEX DEKRA certificates (where applicable) are available on the EMEA “Documents of Compliance” Website at:

https://www.motorolasolutions.com/en_xu/support/emea-compliance.html

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Training Material

The following courses are available on the Learning Experience Portal (LXP) and open for enrolment to Partners and Customers.

New courses

N/A

Registration

Registration for these classes is open and available through the LXP at:

<https://learning.motorolasolutions.com>

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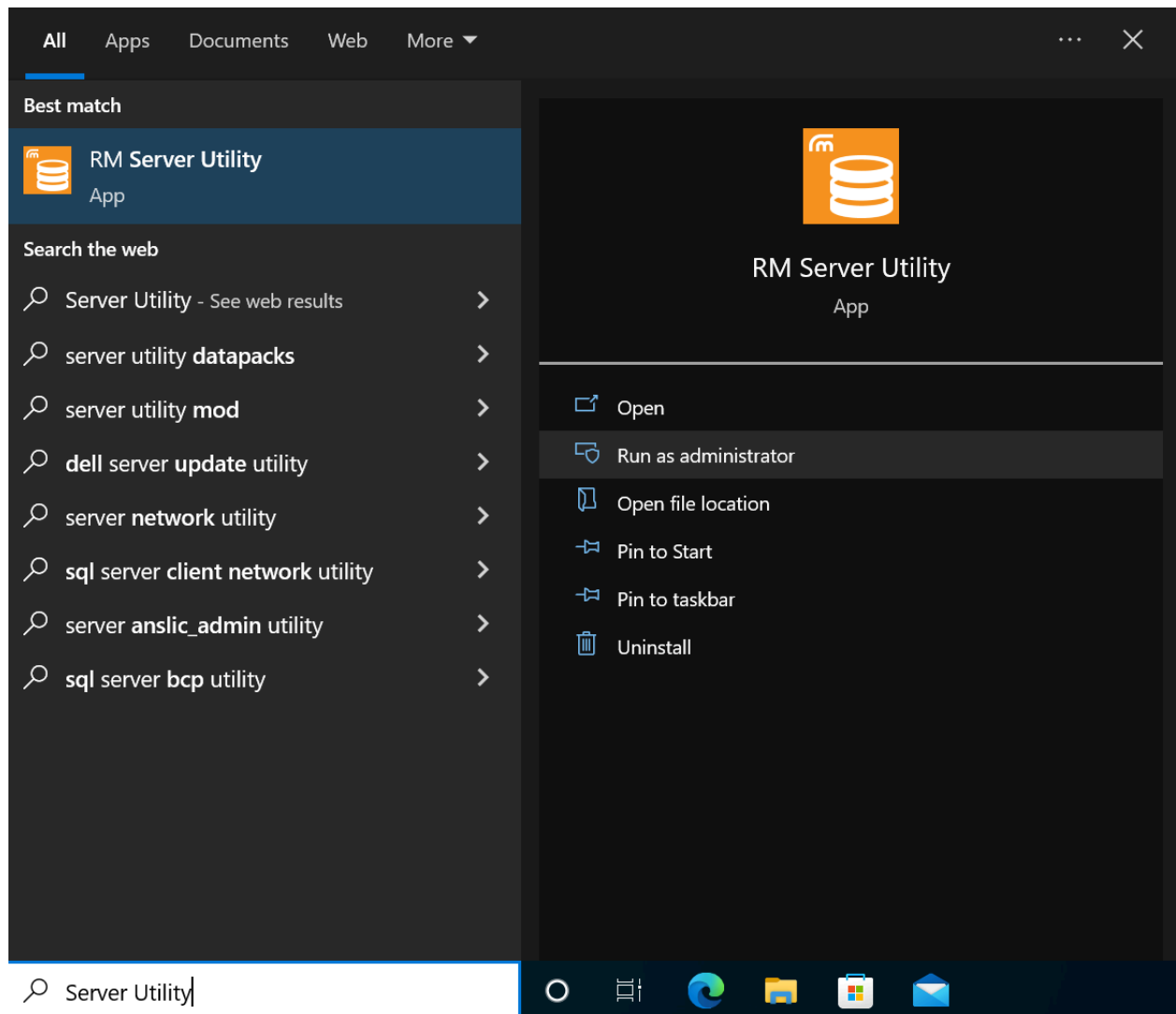
Important Notes

RM Access Control Feature Note

Important note for the customers who DO NOT need to use RM Access Control:

After upgrading an existing RM deployment to version 2.134.77.0 or later, there are some necessary steps to take to ensure normal operation, otherwise, users may not have access to the security keys and Radio View operations that they had prior to the upgrade.

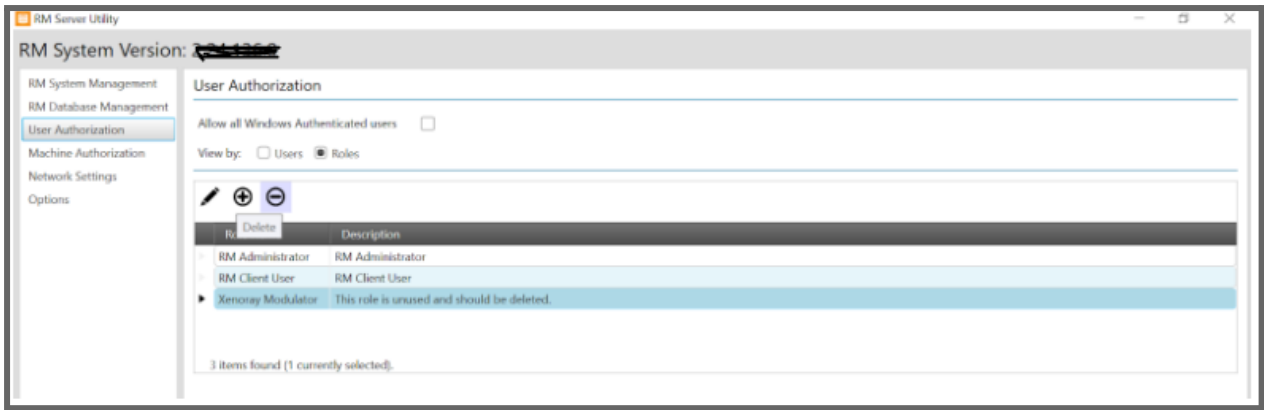
- 1) After performing the upgrade the user should open the RM Server Utility App on the machine that hosts the RM Server.



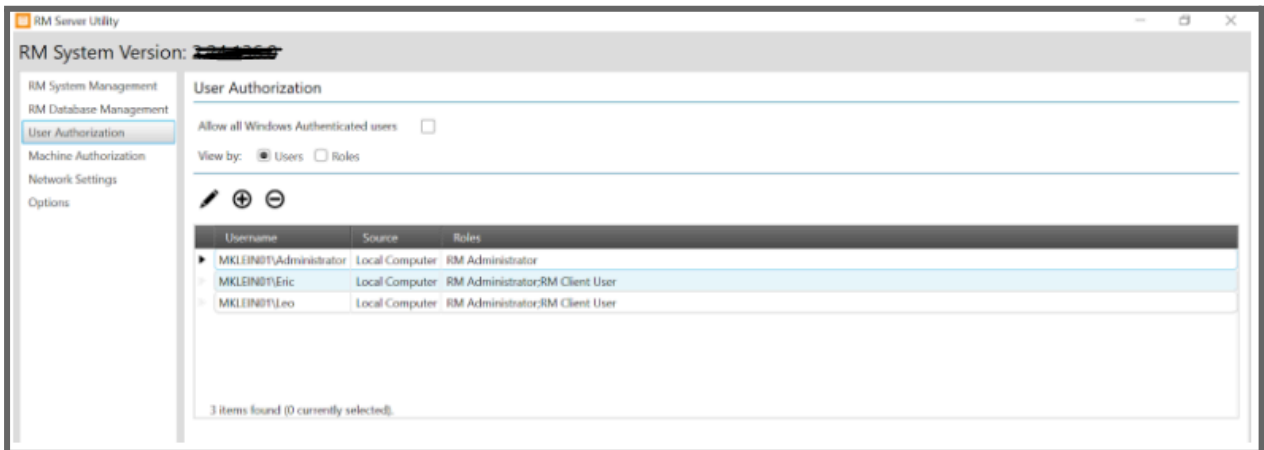
- 2) From the User Authorization tab, with the Roles radio button selected, delete any unnecessary roles that may have been created prior to the upgrade, leaving only the RM Administrator and RM Client User roles.

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- 3) For users that do not wish to use the Access Control features at this time, select the Users radio button and ensure that each user that will be accessing RM remotely has both RM Administrator and RM Client User roles assigned to them.



- 4) This completes the necessary steps for users that do not wish to use the Access Control features. The RM Server Utility can be closed at this point. Users should be able to use the RM Configuration Client to connect to the RM Server and perform normal operations.

New Upgrade Package Zip Format

Starting from M2022.03, MSI will start to release the MOTOTRBO firmware upgrade package in zip format. Below are the instructions on how to install the firmware upgrade package.

1. Create a new folder of your choice in the C:\drive. We will use "Packages" as an example.
2. Download zip file to C:\Packages
3. Extract All

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Name	Date modified	Type
MOTOTRBO_2.0_R0222021000_222213_Portable_NA.zip	8/30/2022 11:09 AM	Compressed (zipp...

Open

Open in new window

Extract All...

Select Left Folder for Compare

4. Open Folder

Name	Date modified	Type	Size
MOTOTRBO_2.0_R0222021000_222213_Portable_NA.zip	8/30/2022 11:09 AM	Compressed (zipp...	58,252 KB
MOTOTRBO_2.0_R0222021000_222213_Portable_NA	10/11/2022 1:45 PM	File folder	

5. Run the Exe

program files	10/11/2022 1:45 PM	File folder	
0x0409.ini	10/1/2014 11:41 AM	Configuration sett...	22 KB
MOTOTRBO 2.0 R0222021000_222213 Portable Update Packages.msi	8/30/2022 11:09 AM	Windows Installer ...	663 KB
MOTOTRBO_2.0_R0222021000_222213_Portable_NA.exe	8/30/2022 11:09 AM	Application	1,269 KB
Setup.ini	8/30/2022 11:09 AM	Configuration sett...	6 KB

6. To save space, the folder can be deleted after successful installation

Upgrades to M2020.01 Onwards

From M2020.01 onwards only products (i.e. MOTOTRBO radios, repeaters and CMSS) which are either in warranty or covered by a service package will accept software updates. Software Update Management (SUM) was introduced with the R2.10 system release and provides products with built-in intelligence to determine if they are eligible to accept a software update. Products on prior releases must therefore be upgraded to an R2.10 system release and be eligible to accept a software update before they can be upgraded to M2020.01 onwards.

Cancelled products that are still under a service contract at time of cancellation will be entitled to the software update in line with the Motorola Solutions Software Support Policy. Following cancellation only critical bug fixes will be tested for these products. Please refer to the MOTOTRBO Post Cancellation Support Policy for further information.

When a service package is purchased, a SUM license is issued and pre-registered (in the Motorola Solutions licensing database) to the product serial number. The SUM license is then available for retrieval and activation in the product using Radio Management (RM) or the Customer Programming Software 2.0 (CPS). Once a SUM license has been activated in a product, that product is then eligible to accept software updates for the duration of the MOTOTRBO Service Package.

Note: Selected radio models shipped since 18-Nov-2019 with enhanced warranties are eligible to accept software updates for a period of up-to 5 years.

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R2.10.10 Upgrade Packages

The R2.10.10 radio upgrade packages are only able to upgrade radios already containing R2.10 system release firmware. For radios containing pre-R2.10 system release firmware they first need to be upgraded to a previous R2.10 system release before they can be upgraded to R2.10.10. This restriction does NOT apply to the R2.10.10 repeater upgrade packages.

MOTOTRBO™ CPS 2.0

The new MOTOTRBO CPS 2.0 was introduced with MOTOTRBO system release R2.10. The MOTOTRBO CPS 2.0 provisioning and license management functionality is tested for up to three previous releases while the MOTOTRBO CPS 2.0 software update support is tested for up to five previous releases.

Use of Old Archive Codeplugs

It is generally good practice to use codeplugs generated from the default codeplug associated with the latest firmware release rather than reuse very old archived codeplugs which is not recommended.

Upgrade of Early Firmware

When an upgrade spanning multiple releases is to be performed it is strongly recommended that the upgrade be performed in multiple steps spanning no more than 3 major releases.

Upgrading Radio Systems Running Applications

To avoid unforeseen issues resulting from upgrading deployed radio systems running Applications, we recommend that you check first with your Application provider to ensure that the version of Application you are running is fully compatible with the new version of radio system.

Repeater Update Duration

When updating MOTOTRBO repeaters, it's important to ensure that the update process is not interrupted until the "Device Update Successful" message appears on the CPS screen.

Repeater Knockdown

It is recommended that the Repeater is not in the Repeater Knockdown state while performing a CPS Read or Write operation.

PN, DDMS and MNIS Applications

The Device Discovery and Mobility Service (DDMS) application replaces the legacy Presence Notifier (PN) application. Additionally, the DDMS is backwards compatible with the PN such that existing applications that interface with the PN do not require any changes to receive presence notifications from the DDMS.

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The Device Discovery and Mobility Service (DDMS) and MOTOTRBO Network Interface Service (MNIS) applications are included on the CPS 2.0 DVD and are also available to download from MyView Portal.

The DDMS and MNIS applications are not installed automatically from the CPS 2.0 DVD, instead they need to be manually installed from the Additional_Apps folder which can be easily accessed by clicking the Additional Applications button in the CPS 2.0 DVD installer.

SMA / MX Connector Antennas

Even though the SMA antennas are non-GPS, the SMA portable models still support GPS / GNSS since all DP4x01e series portables contain internal GPS / GNSS antennas.

Only SMA antennas should be attached to SMA portable models. Attaching a standard (MX) antenna to an SMA portable will damage the SMA connector centre pin on the portable.

Conversely, only standard (MX) antennas should be attached to standard (MX) portables. Attaching an SMA antenna to a standard (MX) portable will degrade performance.

Control Head Cable Flex

The cable flex (part 30012045001) supplied with older (Numeric / Colour Display) Control Head, Remote Mount Control Head and Handheld Control Heads kits is not compatible with the new DM4000e series mobiles.

To determine if a given Numeric Display Model Control Head kit is compatible with the new DM4000e series mobile radios, refer to its part number. If the part number is PMLN5677_, then the cable flex (part 30012045001) needs to be replaced with a newer cable flex (part 30012045002) before the Numeric Display Control Head kit can be used with the DM4000e series mobile radios. If the part number is PMLN7500_, then the Numeric Display Control Head kit is already compatible with the DM400e series mobiles.

To determine if a given Colour Display Model Control Head kit is compatible with the new DM4000e series mobile radios, refer to its part number. If the part number is PMLN5678_, then the cable flex (part 30012045001) needs to be replaced with a newer cable flex (part 30012045002) before the Colour Display Control Head kit can be used with the DM4000e series mobile radios. If the part number is PMLN7501_, then the Colour Display Control Head kit is already compatible with the DM400e series mobiles.

To determine if a given Remote Mount Control Head kit (PMLN6404_) is compatible with the new DM4000e series mobile radios, refer to the part number on the Remote Transceiver Interface. If the part number is PMLN6402_, then the cable flex (part 30012045001) needs to be replaced with a newer cable flex (part 30012045002) before the Remote Mount Control Head kit can be used with the DM4000e series mobile radios. If the part number is PMLN7504_, then the Remote Mount Control Head kit is already compatible with the DM400e series mobiles.

To determine if a given Handheld Control Head kit (PMLN7131_) is compatible with the new DM4000e series mobile radios, refer to the part number on the Handheld Control Head Transceiver Adapter. If the part number is PMLN7033_, then the cable flex (part 30012045001) needs to be replaced with a newer cable flex (part 30012045002) before the Handheld Control Head kit can be used with the DM4000e series mobile

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radios. If the part number is PMLN7502_, then the Handheld Control Head kit is already compatible with the DM400e series mobiles.

RSSI Display Value

To make a MOTOTRBO subscriber display its current RSSI value, press the left arrow three times and immediately press the right arrow three times, all within 5 seconds of power up.

R2.X MPT1327 GOB Upgrade Kit

The R2.X MPT1327 GOB Upgrade Kit supports Windows 7.

When installing and launching the R2.X MPT1327 GOB Upgrade Kit on a Windows 7 computer, select “Run as administrator”.

The R1.X and R2.X MPT1327 GOB Upgrade Kits cannot be installed together on the same computer. So if the R1.X MPT1327 GOB Upgrade Kit is already installed then this will have to be un-installed before the R2.X MPT1327 GOB Upgrade Kit can be installed.

The R2.X MPT1327 GOB Upgrade Kit does NOT preserve the R2.X MPT1327 GOB configuration, so before upgrading the R2.X MPT1327 GOB firmware read the R2.X MPT1327 GOB configuration using the MPT1327 GOB CPS and save it to a *.rad file. After upgrading the R2.X MPT1327 GOB firmware, the saved *.rad file can be written back to the R2.X MPT1327 GOB using the MPT1327 GOB CPS.

MPT1327 GOB CPS

The MPT1327 GOB CPS supports Windows 7.

When installing and launching the MPT1327 GOB CPS on a Windows 7 computer, select “Run as administrator”.

MPT1327 / Connect Plus Options

Certain radio models can be ordered with factory fitted MPT1327 / Connect Plus option boards.

(NOTE: the generic option board can NOT be field upgraded to support MPT1327)

MPT1327 / Connect Plus GOB Firmware Compatibility

Where a radio contains an MPT1327 / Connect Plus option board it's important to adhere to the following simple rules in order to ensure full compatibility between the option board firmware and the radio firmware:

1. On installing an MPT1327 / Connect Plus option board, ensure that both the option board and the radio contain the latest available firmware versions.
2. On upgrading a radio to the latest available firmware version, ensure that the option board also contains the latest available firmware version.

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3. On upgrading an option board to the latest available firmware version, ensure that the radio also contains the latest available firmware version.

Options boards for DP4000/DM4000 series radios are NOT forward compatible with DP3000e/DP4000e/DM4000e series radios and option boards for DP3000e/DP4000e/DM4000e series radios not backwards compatible with DP4000/DM4000 series radios.

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Open (Unresolved) Issues

Open (Unresolved) issues are all known or reported issues that still exist in this current software release and may occur under certain circumstances.

Infrastructure Impact

No known issues

CPS-RM / RDAC Impact

No known issues

Radio Impact

Issue Number: PCR_SUB-44459
System/Products: DP4800e / DP4801e only
Description: Next radio power up time will take longer than usual if the radio is interrupted by a power down action within 20 seconds of the initial power up.
Workaround: No current workaround. Customers are advised not to perform power off action immediately until the power up sequence is completed.

Issue Number: PCR_SUB-44406
System/Products: MOTOTRBO R7
Description: CFS license write failure observed when a user attempted to register a second CFS license after the first by using a different write method (WIFI Otap or USB).
Workaround: If error 679 appears on RM or CPS kindly read back the radio before performing the next license purchase.

Resolved Issues in M2024.xx System Releases

Resolved issues are the known product problems that were reported in products releases, but have now been fixed or closed.

Resolved in M2024.xx:

Infrastructure Impact

Issue Number: UEM-7280/MTN_PCR-63 (Resolved in M2024.01.01)
System/Products: Capacity Max/System Advisor
Description: After upgrading Java to 8u411 (released on 16 April) on Windows, System View and Grid View in SA client are not working. Blank page is displayed instead of System View
Workaround: For issue avoidance if any of previous releases of Java is installed, then do not

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install the latest one (8u411). If Java 8u411 is installed for recovery uninstall it using Control Panel. For further details please refer to [MTN-0063-24 Capacity Max System Advisor System View and Grid View are not opening on Java 1.8.411](#)

Issue Number: UEM-7269 (Resolved in M2024.01.01)
System/Products: Capacity Max/System Advisor
Description: System Advisor java app is not starting properly with some errors visible in console log
Workaround: Try starting SA again

Issue Number: ENG_INFRA_PCR-16111 (Resolved in M2024.01)
System/Products: TRBOnet PLUS and Linked Capacity Plus (LCP)
Description: When 2 or more Capacity Plus multi-site systems are set up to use a single MNIS gateway with a dispatch console, only one system will be able to work correctly, while the other systems will fail to communicate with the dispatch console.

Issue Number: UEM-6670 (Resolved in M2024.01)
System/Products: CMSS/UEM
Description: During the upgrade to M2022.03 or M2023.01, the ATIA logs are not automatically saved and they will be lost, so users will not be able to access historical calls information

Issue Number: ENG_INFRA_PCR-16303 (Resolved in M2024.01)
System/Products: CMSS
Description: CMSS defective hardware (incl. SD card) causes upgrade from 2022.03 to 2023.01 to fail

Issue Number: ENG_INFRA_PCR-16386 (Resolved in M2024.01)
System/Products: CMB - Capacity Max Bridge
Description: After the upgrade from M2022.01 to M2023.01, CMB license is not preserved, which can be seen in System Advisor, CMB webpage. Without a license, CMB will not operate.

Issue Number: UEM-6738 (Resolved in M2024.01)
System/Products: CMSS/System Advisor
Description: Grid View and Raw View may display incorrect information about ongoing calls in the system. This issue is related to the number of simultaneous calls in the system. When there are many calls started and ended in a short period of time, System Advisor is not able to process all of them and starts to display incorrect information on Grid View and Raw View.

Issue Number: PBI00000044200 (Resolved in M2024.01)
System/Products: TRBOnet PLUS/MNIS Gateway
Description: User presses the PTT icon and they get a message saying "equipment not available". All the registered talkpath between TRBOnet PLUS and the MNIS Gateway become unregistered, then a short time later the problem resolves itself and the talk paths are re-register. Rebooting the MNIS Gateway also resolved the issue. Issue was affecting versions M2022.03 and M2023.01.

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Issue Number: INC000008066797/MTN-0122-23 (Resolved in M2024.01)
System/Products: CMSS
Description: When trying to schedule a Write Job using Radio Management software, users may very rarely get an "Error 1562".

Issue Number: INC000007702571 (Resolved in M2024.01)
System/Products: MNIS Gateway
Description: MNIS Gateway does not forward packets from repeaters into the tunnel

Issue Number: MTN-0153-23 (Resolved in M2024.01)
System/Products: CMSS
Description: MNIS Gateway backup fails to restore when upgrading a CMSS to firmware M2022.03 using M2023.01 ESU Launchpad

Issue Number: MTN-0163-23 (Resolved in M2024.01)
System/Products: SLR 1000, SLR 5500, SLR 8000 repeaters
Description: Unable to open repeater webpage with latest versions of Chromium-based browsers including Google Chrome and Microsoft Edge

CPS-RM / RDAC Impact

Issue Number: RFC_PCR-238/INC0000161483 (Resolved in M2024.01)
System/Product: CPS 2.0, Radio Management/DP4000e series radios
Description: Multi Button PTT option is not available in the RM/CPS for DP4600e / DP4601e radios.

Device Impact

Issue Number: PCR_SUB-46286 /INC0000304706 (Resolved in M2024.01.01)
System/Product: MOTOTRBO R2
Description: Under very rare circumstances after turning the radio off, it may not be possible to turn the radio back on.
For further details please refer to [MTN-0071-24](#)

Issue Number: PCR_SUB-43735/INC000008188234 (Resolved in M2024.01)
System/Product: DP3661e, DP4600e / DP4601e / DP4800e / DP 4801e, DP4801Ex, SL4000e series and DM4600e / DM4601e
Description: Upgrading from Firmware R02.22.03.1001 (M2022.03) or earlier to R02.23.01.3001 (M2023.01) will impair Text to Speech feature in Connect Plus mode.

Issue Number: PCR_SUB-44482/INC0000161478 (Resolved in M2024.01)
System/Product: MOTOTRBO R7 capable radios
Description: Fall alert (formerly known as Man Down) license missing after performing radio recovery.

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Issue Number: PCR_SUB-44943/INC0000196268 (Resolved in M2024.01)
System/Product: DP3000e series, DP4000e series, MOTOTRBO R7/R7a series, DP4000Ex series, SL4000e series, DM4000e series
Description: Radio with Unified Single Block Data (USBD) Polling Service that is using Location Information Protocol (LIP) introduced in M2023.01 does not work in 3rd party DMR Tier III network using color code other than 0.

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