



MOTOTRBO™ System Release Notes Professional Commercial Radios (PCR)

Version: M2024.01.01 v02
June 26, 2024

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What's new in the Release

Radio new features

There are no new radio features introduced with this release.

For specific CP100d and MOTOTRBO R7 radio revisions this is a "Motorola Factory Only" Release. For that reason, CP100d and MOTOTRBO R7 radio recovery package only is being made available, and there is no upgrade package for CP100d and MOTOTRBO R7 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.

Product Versions

Listed below are all MOTOTRBO Product types with a reference to the released version of software:

Notes: From M2020.01 onwards, only products (i.e. MOTOTRBO radios, repeaters and CMSS) which are either in warranty or under a service contract are entitled to software update.

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.

Canceled 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.

MOTOTRBO Product	Version Supported in Release
Subscriber – MOTOTRBO R2	R02.24.01.3002
Subscriber – MOTOTRBO R7	R02.24.01.3003 (NEW - Recovery only)
Subscriber – MOTOTRBO - CP100d	R02.24.01.1003 (NEW - Recovery only)
Subscriber – MOTOTRBO - XPR 4000/6000 Series	R01.24.01.3000 R01.24.01.3002 (NEW) Canceled.
Option Board – MOTOTRBO 2.0 (incl SL Series)	Canceled.
Option Board – MOTOTRBO - XPR 4000/6000 Series	Canceled.
Repeater - XPR 8380 / XPR 8400	R20.24.01.03
Repeater - MTR 3000	R20.24.01.03
Repeater - SLR 1000, SLR 5000, SLR 8000	R20.24.01.03
XRC 9000 / 9100 Controller	R02.100.05.1036_1695

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XRT 9000 / 9100 Gateway	R02.100.05.1036_1695
XRI 9100 Interconnect	R02.100.05.1030
Network Manager (merged with XRC / XRI packages)	R02.100.05.1030
Network Manager Connection Tool	R02.100.05.1030
XRT Configuration Tool	R02.100.05.1030
CPCPS	Canceled.
Paradise MPT1327 GOB CPS (not supported on Rajang series)	R02.00.05
CPS 2.0	2.146.122.0
Radio Management	2.146.122.0
RadioCentral Client	2.146.123.0
CPS	CPS V16.0 Build 828
Tuner	V24.1 Build 2
RDAC	V24.1 Build 2 (NEW)
AirTracer	V11.0 Build 39
Device Discovery and Mobility Service (DDMS)	R24.01.0005
Multi Channel Device Driver (MCDD)	Canceled
MNIS Data Gateway	R24.01.0023
MNIS Status Agent	R22.03.01
MOTOTRBO Motopatch	Canceled
Capacity Max ESU Launchpad	DESU_LP-R17.18.10.56-02.rhel.iso
Capacity Max System Server Installer Software Image	PC435S0EI000202010.iso (NEW)
MNIS Voice and Radio Command (VRC) Gateway	PCR-MNIS_24.01.01.00-12 (NEW)
Capacity Max ESU	ESU-PCR_24.01.25.02-44 (NEW)
Capacity Max Trunk Controller	Cmxtc-pcr_20.24.01.10-42 (NEW)
Capacity Max System Advisor	UEM-PCR_24.01.01.36-00 (NEW)
System Design Tools	Version 06.09
Sensor Management Tool	R01.00.01

3rd Party Applications	Version Supported in Release
GW3-TRBO	2.17.3.73
Avtec VP Gate	5.3.0.41
Avtec Scout Console/Scout Manager	5.3.0.54
Avtec VPGate Advanced Radio Support w/Encryption	5.3.0.16
Avtec Data Management Services - Scout Central Distributor	5.3.0.20
SmartPTT PLUS	SmartPTT-PLUS-9.14.0.62
TRBOnet PLUS	TRBOnet Plus 6.2.1.7429
ConSEL PLUS	ConSEL PLUS v7r69.3

ETSI DMR Specification	Version Supported in Release
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TS 102 361-1: the DMR air interface protocol	v2.6.1
TS 102 361-2: the DMR voice and generic services and facilities	v2.5.1
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

1. The feature sets supported in the release are compliant with the versions of ETSI DMR standard specifications listed above. Though in DMR Tier 3 there have been some things changed to existing features that are not backwards compatible, Capacity Max complies to the newer versions so may not always work with other manufacturer's infrastructure on older versions.
2. The Capacity Max System Advisor (SA) client is not accessible for the System View, Grid View and Alarm Details view if the Java version 8u211 or newer is used on the PC where SA client resides in. Downgrading the Java to any version between and including 8u181 and 8u201 will work fine.
3. USB 3.0 port is not supported for the repeater upgrade. With R2.8.0 and newer repeater release, the recommendation is to use USB 2.0 port on the PC or connect repeater via USB 2.0 hub when upgrading the repeater via USB.
4. For CMSS (Capacity Max System Server),
 - a. Access to the MSI MyView portal to download MOTOTRBO M2024.01.01 Capacity Max System Server SW Upgrade as software iso image
5. For the PC used for CMSS upgrade only from M2022.01 and M2022.03 to M2024.01 or M2024.01.01 (note: upgrading from 2023.01 to M2024.01 or M2024.01.01 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, M2023.01 or M2024.01 to M2024.01.01" of Capacity Max System Release Upgrade Guide for additional details. It is available on the 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.

Overview

This section details the known MOTOTRBO product issues which remain outstanding at the time of this release of software to the field.

Known product issues are divided into two categories:

- Known issues contained within the current release
- Resolved Issues that have now been fixed within the current release

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Definitions

A known issue is a problem that is currently unresolved (open). The risk and workaround aspects are included in the release note description (Known Issues) for overall assessment of the problem.

A closed or resolved issue is one that has been repaired and no longer should occur in the product after upgrading to the new product version.

Known Issues in Product Release

Infrastructure Impact

Issue Number: **UEM-7280 / MTN-0063-24**
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 install the latest one (8u411). If Java 8u411 is installed for recovery, uninstall it using the 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**
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

Resolved Issues in Product Release

Resolved issues are the known product problems that were reported in product releases, but have now been fixed or closed. Following are the issue tracking number and issue descriptions that have been resolved in this release.

Device Impact

Issue Number: n/a
System/Product: **CP110d and MOTOTRBO R2**
Description: If subjected to radio upgrade or recovery with firmware version R02.24.01.3002 MOTOTRBO R2 and recovery with version

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R01.24.01.3000 CP100d, the radios listed below will exhibit minor transmitting frequency drift that may impede two way communications.

List of Radio Tanapas Impacted :

PMUE5847BAANAA: MOTOTRBO R2 400-480MHz 4W NKP
PMUE5847BAANEA: MOTOTRBO R2 400-480M 4W NKP ANALOG
PMUD3524BAANAA: MOTOTRBO R2 136-174M 5W NKP
PMUD3524BAANEA: MOTOTRBO R2 136-174M 5W NKP ANALOG
PMUE4526CAANAA: CP100D 403-480M 4W NKP
PMUE4527CACNAA: CP100D 403-480M 4W LKP
PMUE4528CADNAA: CP100D 403-480M 4W FKP
PMUE4526CAANEA: CP100D 403-480M 4W NKP ANALOG
PMUE4527CACNEA: CP100D 403-480M 4W LKP ANALOG

Issue Number: **PCR_SUB-46286 / INC0000304706**
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](#)

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 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

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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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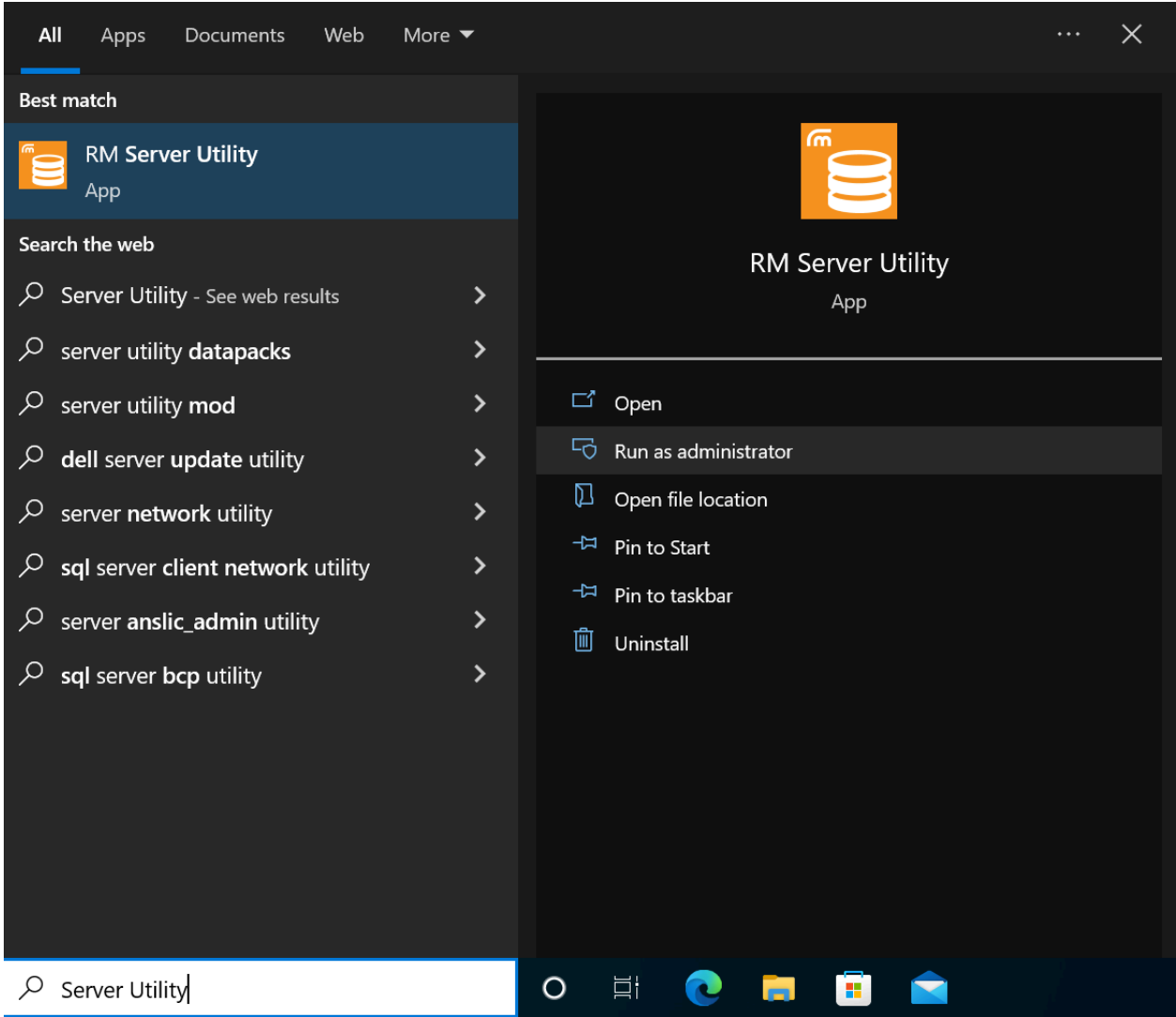
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RM Access Control Feature Note

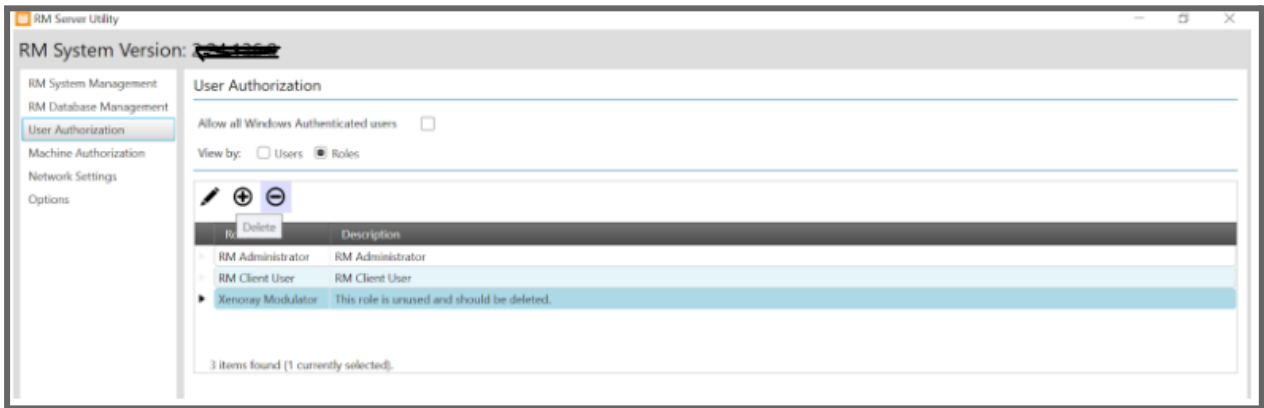
Important note for customers who DO NOT need to use RM Access Control:

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.



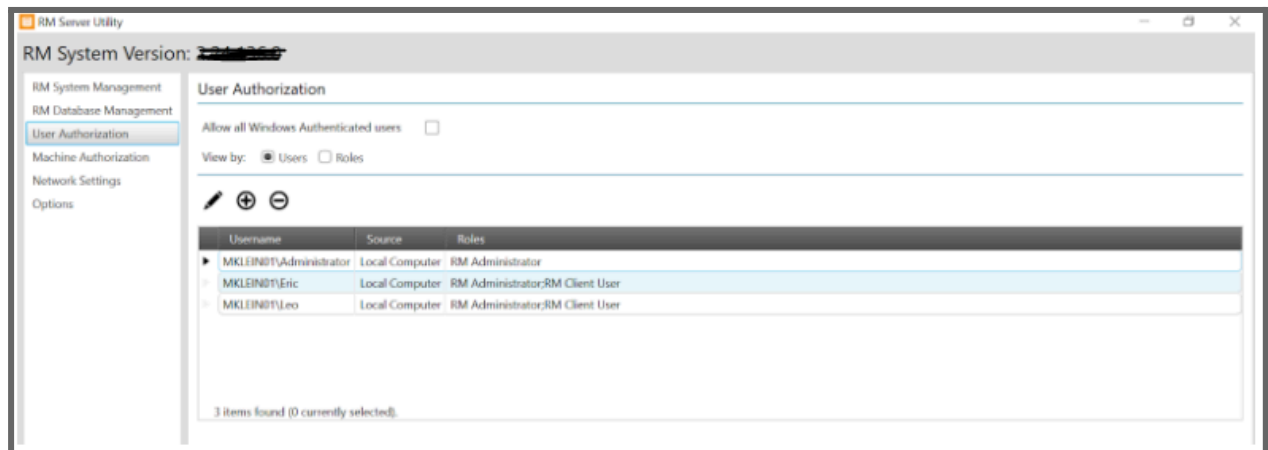
2. From the User Authorization tab, with the Roles radio button selected, delete any unnecessary roles that may have been created prior to the upgrade, leaving only the RM Administrator and RM Client User roles.



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- 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.

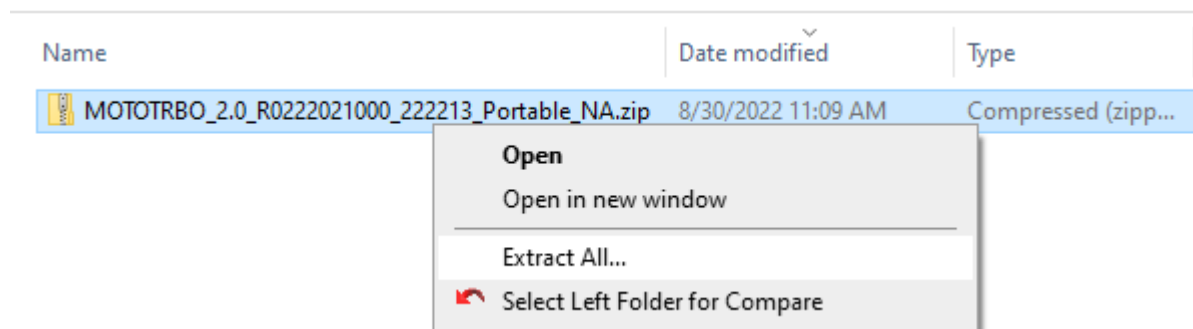


- This completes the necessary steps for users that do not wish to use the Access Control features. The RM Server Utility can be closed at this point. Users should be able to use the RM Configuration Client to connect to the RM Server and perform normal operations.

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.

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



- 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	

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5. Run the .exe file

 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