Motorola Solutions, Inc.

MOTOTRBO® System Release Notes
Professional Commercial Radios (PCR) & Accessories

North America Region

Version: R2.10.5
Date: September 20, 2019

Contents

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

Definitions

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

What's new in the Release

Capacity Max New Features

Site Restriction via Talkgroup Authentication

A Cap Max system may now be configured to refuse a radio's registration request when important affiliation TGs are not allowed at the site.

Infrastructure New Features

Data MNIS Support of Multiple Systems

Allows the user to configure the Data MNIS to connect to multiple IP Site Connect or multiple Multisite Capacity Plus (LCP) systems at the same time. Cross-system deployments (i.e. one IP Site Connect and one Multisite Capacity Plus) is not supported. The data console application is responsible for determining which system to send the message to.

Radio New Features

Keypad Lock Enhancement

Enhancement for the XPR 7550e/XPR 7580e keypad lock feature to include an option to lock the channel selector knob. It provides a safety feature to lock radio current channel. It is ideal for customers working in an environment where they could inadvertently change the channel selector knob and that could be a safety concern.

Wi-Fi Roaming Enhancements

Provides the ability for the user to configure roaming aggressiveness, boost the transmit power and voice jitter buffer to cater for their Wi-Fi network environment.

Tool New Features

TLS-PSK - CPS/RM - Radio/Repeater Authentication

Provides data security on the communication between radio/repeater and CPS/RM over WI-FI network or USB connection. This feature shall allow radio/repeater and MOTOTRBO application tools to have more secure end-to-end communication using TLS-PSK protocol.

Device Discovery Message Routing

Enable Device Programmer of the Radio Management solution to discover Wi-Fi enabled radio when the Device Programmer and the radio do not reside in the same Wi-Fi network segment.

Cybersecurity Update

Motorola Solutions, Inc. (MSI) has delivered a PCR MOTOTRBO 2.10.5 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 2.10 and 2.10.5 system releases include enhancements to security based on the National Vulnerability Database, improved architecture, and industry standards:

- Authentication: updates to IP stack to improve web server authentication
- Hardening: refreshed and updated Ports and Protocols hardening
- Lifecycle management: third-party software was updated, for example RHEL, Microsoft Windows…
- Introduction of Software Update Management

In addition to ongoing releases for security updates, MSI has a <u>Bug Submission Program</u> 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.

Versions

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

MOTOTRBO Product	Version Supported in Release
Subscriber – MOTOTRBO (incl SL Series)- XPR 7000/7000e, XPR 5000/5000e, XPR 3000/3000e, SL 7000/7000e, SL 3500e	R02.10.05.0002 (CP 15.05.06)
Subscriber – MOTOTRBO - SL300/CP200d/CM200d/CM300d/XPR 2500	R01.01.45.0001 (CP 12.05.39)
Subscriber – MOTOTRBO - XPR 4000/6000	R01.12.17
CP Option Board – MOTOTRBO 2.0 (incl SL Series) - XPR 7000/7000e, XPR 5000/5000e, SL 7000/7000e	R02.07.38 (CP 1.1.19)
CP Option Board – MOTOTRBO - XPR 4000/6000	R01.07.45 (CP 1.0.16)
Repeater - XPR 8300 / XPR 8400 Repeater - MTR3000 Repeater - SLR 1000, 5000, SLR 8000	R02.10.00.11_R20.00.02 R02.10.00.11_R20.00.02 R02.10.00.11_R07.00.08
XRC 9000 / 9100 Controller	R02.100.05.1036_1695
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
Capacity Max Bridge (CMB)	R02.10.05.1043_953
CPCPS	R02.07.43
Radio Management / CPS 2.0	2.21.61.0
CPS	CPS V16.0 Build 828
Tuner	V17.5 Build 249
RDAC	V10.0 Build 109
AirTracer	V11.0 Build 38
Device Discovery Mobility Service (DDMS)	R03.100.5001
Multi Channel Device Driver (MCDD)	R2.1.3
MNIS Data Gateway	R02.105.0011
MNIS Voice and Radio Command (VRC) Gateway	R02.105.0010
MNIS Status Agent	R02.90.5000
Capacity Max ESU	DESU-R17.01.03.19 (DESU-PCR-02.10.01.03-19.iso)
Capacity Max Trunk Controller	cmxtc-pcr-20.10.55.03-00.iso
Capacity Max System Advisor	UEM-PCR-02.10.00.64-00.iso
Capacity Max ESU Launchpad	DESU_LP-R17.01.03.19 (DESU_LP-R17.01.01.03-01.rhel.iso)

Capacity Max System Server One-Click Upgrade	*CVN7213B.iso*
MNIS VRC Gateway	*R02.105.0011* *(vrcgw-pcr-02.105.0010.iso)*
System Design Tools	*Version 06.08*

3rd Party Applications	Version Supported in Release
GW3-TRBO	*2.16.3.2*
Avtec VP Gate	*4.8.2*
Avtec Scout Console/Scout Manager	*4.8.2*
Avtec VPGate Advanced Radio Support w/Encryption	*4.8.2*
Avtec Data Management Services - Scout Central Distributor	*4.8.2*
SmartPTT PLUS	9.5.14.0
TRBOnet PLUS	*5.4.0.2092*

ETSI DMR Specification	Version Supported in Release
TS 102 361-1: the DMR air interface protocol	*v2.5.1*
TS 102 361-2: the DMR voice and generic services and facilities	*v2.4.1*
TS 102 361-3: the DMR data protocol	*v1.3.1*
TS 102 361-4: the DMR trunking protocol	*v1.7.1 ~ 1.9.2*

1. **The feature sets supported in the release are compliance 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 each CMSS (Capacity Max System Server),**
   a. **Order (1) agil, MOTOTRBO 2.10.x Capacity Max System Server SW Upgrade which contains the CVN7213B.zip file loaded on a USB drive.**
   b. **Alternatively, for customers with access to the MSI MyView portal, you can order (1) T8700A, MOTOTRBO 2.10.5 Capacity Max System Server SW Upgrade where you will receive an e-mail with a unique link to access/download the CVN7213B.zip file from the MyView portal. The T8700A will require an e-mail address at time of order.**
   c. **NOTICE: The USB drive (T8699A) can take 2-3 weeks for delivery while the downloadable file via the MyView portal (T8700A) is generally available within a week. Please plan ahead and take the delivery times into consideration before scheduling your upgrade.**

5. For the PC used for CMSS upgrade,
   a. Order (1) T8486A, MOTOTRBO Capacity Max System Server SW Update Launch Pad which contains the ESU LP software files on a DVD. (The R2.10.5 upgrade requires this new ESU LP version).
   b. Alternatively, for customers with access to the MSI MyView portal, you can order (1) T8483A, 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 T8483A will require an e-mail address at time of order.
   c. Please refer to the section "Upgrading a *Capacity Max System from R2.10 to R2.10.5*" of Capacity Max System Release Upgrade Guide for additional details. It is available on MOL and the Upgrade Guide applies for the patch upgrade as well.
   d. NOTICE: The DVD (T8486A) can take 2-3 weeks for delivery while the downloadable file via the MyView portal (T8483A) 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.

Known Issues in Product Release

Infrastructure Impact

Issue Number: UEM-6012

System/Product: Capacity Max System Advisor Client

Description: If Java version 8u211 is used, the user will not be able to access the System View, Grid View and Alarm Details view although there is no data loss and the GridView will still be available from the web browser

Workarounds: Downgrading Java to any version between and including 8u181 and 8u201 will work fine.

CPS/RM Impact

Issue Number: **DMGMT-1454**

System/Product: MOTOTRBO RM

Description: When attempting to edit Cap Max Site Selection List set, RM freezes. It takes minutes to display and edit Cap Max Site Selection List from the set view.

Workarounds: Show and edit Cap Max Site Selection List from the configuration view instead of the set view.

Radio Impact

None.

Resolved Issues In Product Release

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

Defect ID	Release Introduced	Product	Headline
ENG_INFRA_PCR-2308	MOTOTRBO2.6.0	MTR 3000/ Cypher	Subscriber having issue to register/establish communication for sites using MTR3000. C3: 26652700
ENG_INFRA_PCR-2221	MOTOTRBO2.6.0	SLR 1000	Third party SLC should work for the entire UHF band C3:26637236
ENG_INFRA_PCR-2190	MOTOTRBO2.6.0	SLR 1000, SLR 5000 series, SLR 8000	A very specific timing situation can lead to CCM flickering. C3:26724269
ENG_INFRA_PCR-2624	MOTOTRBO2.10.0	SLR 8000	Repeaters do not lock in VSWR. C3: 26873720
ENG_INFRA_PCR-1190	MOTOTRBO2.6.0	SLR 1000, SLR 5000 series, SLR 8000	System periodically locks up and does not process calls. C3:26470045
ENG_INFRA_PCR-1453	MOTOTRBO2.7.0	SLR 1000, SLR 5000 series, SLR 8000	In a CapMax system with greater than 15 sites, a user may see an incorrect value (non-zero and out-of range) in the Receiver Site ID field in System Advisor.
ENG_INFRA_PCR-2360	MOTOTRBO2.10.0	Capacity Max System Server	System Advisor reporting an alarm for CVE-2018-3646 C3:26839693
ENG_INFRA_PCR-2766	MOTOTRBO2.10.0	Capacity Max System Server	ESXi upgrade failure C3:26877786
PCR_SUB-10523 (C3: 26844274)	MOTOTRBO2.7	XPR 7000/7000e portable	Unable to activate the Transmit Inhibit Feature in R2.8 using Radio Wide Parameter XCMP command
PCR_SUB-10510 (C3: 26791112)	N/A	XPR 7000/7000e portable	CPS can't program (write) radio when OB is switching channels (propagated - MOTOTRBO2.10.5)
PCR_SUB-10509 (C3: 26791112)	N/A	CP200d/	CPS can't program (write) radio when OB is switching channels (propagated - PLIGHT1.1.45)
PCR_SUB-10278 (C3: 26656909)	MOTOTRBO2.9	XPR 7000/7000e portable	XPR7550e_CTM_InvalidAccessory (propagated - MOTOTRBO2.10.5)
PCR_SUB-9941 (C3: 26563809)	MOTOTRBO2.9	XPR 7000/7000e portable	VOX self-activates by audio output from RSM (propagated - MOTOTRBO 2.10.5)
PCR_SUB-8284 (C3: 26640007)	N/A	XPR 7000/7000e portable	Quality issue on PDT encryption call (propagated - MOTOTRBO2.10.5)
DMCI-639 (RFC/FRB: 26828769)	N/A	RM	OTAP not working on Orion network after upgrading to RM 2.10
DMCI-646 (C3: 26826409)	N/A	RM	RM_CTM_Unable to select a configuration for a radio after modifying and importing a .CSV