



APX New Feature Brief: SR2023.3- feature release

Updated: January 2024

This is a **New Feature Release (NFR)** with incremental changes to the Baseline Release. New orders from the factory must be flagged to use the latest NFR for a radio build. Please reach out to your Motorola Solutions representative to change new orders from the Baseline Release to the New Feature Release.

Options listed in the special configurations line under each feature must be added to the initial radio order, or added later in the field via Flashport.

The SR2023.1 Baseline Release is the major software release and will be the standard firmware shipped from the factory for a 1 year duration.

A - APX Standard Portable and Mobiles	2
B - APX NEXT Series Portables	5
C - APX N70 Series Portables	10
D - Device Management	15

To learn more about the features within this release, [visit our SR2023.3 subscriber release training course.](#)

A - APX Standard Portable and Mobiles

Subscriber APX R32.03.00

APX Portable Platforms			
APX 8000 APX 8000XE APX 8000H APX 8000HXE	APX 7000 APX 7000L APX 7000XE APX 6000 APX 6000XE APX 6000Li	APX N50 APX 4000 (1&2 knob) APX 4000H APX 3000	APX N30 APX 2000 APX 1000 APX 900 VX-P949 SRX 2200

APX Mobile Platforms			
APX 8500 APX 8500HP	APX 7500 APX 6500 APX 6500Li	APX 4500 APX 4500Li APX 2500 APX 1500	TXM 2000 VHF TXM 3000 v 2.4

New APX firmware version: R32.03.00

Previous APX firmware version: R31.02.00

APX VR Platforms: DVR-LX/DVR/VRX1000

New Version: R1.85

Previous Version: R1.85

Companion Futurecom Repeater Configuration software, FRC 1.40

A.1

Important Notes

Abstract: Scheduled Release

- **Description:** N/A



A.2

New/Replacement Products

Abstract: N/A

A.3

New Features

Abstract: Sorted Long Hunt/Intermediate Hunt List

- **System Platforms Affected:** All Freon based portables and mobiles including APX NEXT, APX N30/50 and APX N70
- **Special Configurations:** N/A
- **Description:** Provides a list to enable a dynamically managed list of frequencies while searching for a valid control channel.

Abstract: Remote Activation of Emergency enhancements

- **System Platforms Affected:** ALL
- **Special Configurations:** Emergency Profile Configuration needs to select the Encode and Decode option. The feature is supported on P25 Conventional and P25 Trunking. Not available on Conventional MDC, Conventional QCII, Trunking Type I or II.
- **Description:**
 1. Provide additional indications to the user to enhance the Remote Activation of Emergency feature.
 - If the call entry (Highlighted) is invalid to send remote emergency command - "Not available"
 - If the call entry (Highlighted) is valid to send remote emergency command - "PTT to send"
 - If the Last Remote Emergency ID (Highlighted) - "Enter ID" Note: Only appears on radios with keypads -Provide an Alternative option of pressing the PTT button - Send button
 - Users can scroll through the menu bar by pressing the Next button.
 2. Naming specifications:
 - The menu button that launches the Remote Emergency App - rEMG (previously REmg)
 - The Button that filter the Recent Calls list - Fltr (Previously Emer)

Abstract: Lock Menu Item

- **System Platforms Affected:** All APX Standard & APX N30/N50.
- **Special Configurations:** N/A
- **Description:** Allow users to configure a menu item to be locked at the same position on every menu frame.

Abstract: Conventional Radio Inhibit Revert

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Trunking support on Codeplug
- **Description:** Provide a power up mechanism for the administrators to force the radio to a mode where it could be disabled, when operating on a conventional system.



Abstract: APX Radio Muting upon Power up with Digital Tone Signaling

- **System Platforms Affected:** ALL
- **Special Configurations:** None
- **Description:** Allow customer to configure (radio wide) whether radio powers up in muted state when ICUA is enabled on current channel.
Note: This feature also improves the operation removing the restriction of turning on voice mute while in OOR state. Previously this operation was not allowed.

Abstract: Parity- Intelligent Priority Scan

- **System Platforms Affected:** APX N30/50
- **Special Configurations:** N/A
- **Description:** Ability to add/delete conventional channels/trunking talkgroups from multiple systems into priority scan list

Abstract: Parity- DVR NAC Linking and Persistent Talkaround

- **System Platforms Affected:** APX N30/50
- **Special Configurations:** Require DVRS PSU
QA00631: DVRS PSU Activation must be enabled
HA00677: DVRS PSU Conventional Scan must be enabled
- **Description:** Allow NAC Linking, Persistent Talkaround, and FDMA/TDMA Talkaround configuration in all APX N family including N30/N50 models.

Abstract: Parity-PSU conventional Scan (DVRS)

- **System Platforms Affected:** APX N30/50
- **Special Configurations:** Require DVRS options
QA00631: DVRS PSU Activation must be enabled
HA00677: DVRS PSU Conventional Scan must be enabled
- **Description:** Support PSU Conventional Scan through DVRS

Abstract: Cloning & FPP Enhancements for Wildland Fire (NIFC)

- **System Platforms Affected:**
Cloning enhancements: APX Portables model 2.5/3.5
Other enhancements: APX Portables and Mobiles
- **Special Configurations:** Required FPP options
<Q52> - Fed-FPP / Zone Cloning H-option or <Q53> - NonFed-FPP / Zone Cloning H-option
- **Description:**
 1. Cloning enhancements: Clone any APX Portable to any other APX Portable (including APX NEXT, APX N70), Scan list cloning, separate MPL configuration list for cloning, allows Direct Frequency for non cloneable zones.
 2. Other enhancements: Permanent MPL Alias display, auto create MPL menu.



B - APX NEXT Series Portables

Subscriber APX R05.05.00

APX NEXT Portable Platforms

APX NEXT
APX NEXTi
APX NEXT XE
APX NEXT XN

New APX firmware version: R05.05.00

Previous APX firmware version: R04.82.00

B.1

Important Notes

Abstract: Scheduled Release

- **Description:** N/A

B.2

New/Replacement Products

Abstract: APX NEXT XN Support of the XVN500 Knob Model

- **System Platforms Affected:** APX NEXT XN
- **Special Configurations:** N/A
- **Description:** APX NEXT XN radio support the new knob version of the XVN500 RSM



New Features

Abstract: Sorted Long Hunt/Intermediate Hunt List

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** N/A
- **Description:** Provides a list to enable a dynamically managed list of frequencies while searching for a valid control channel.

Abstract: Remote Activation of Emergency enhancements

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Emergency Profile Configuration needs to select the Encode and Decode option. The feature is supported on P25 Conventional and P25 Trunking. Not available on Conventional MDC, Conventional QCII, Trunking Type I or II.
- **Description:** Provide an enhanced distinctable icon for Remote Emergency.

Abstract: Conventional Radio Inhibit Revert

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Trunking support on Codeplug
- **Description:** Provide a power up mechanism for the administrators to force the radio to a mode where it could be disabled, when operating on a conventional system.

Abstract: Parity- Multisystem OTAR

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Only supported on HW Encryption
Also Require: GA01620AA/QA07680AA – ADD: MULTI SYSTEM OTAR and H868/W968 – ADD: OTAR and Multikey
- **Description:** Adding the MS-OTAR feature support for APX NEXT radios using CPS/RM only.
Note: This feature is not supported on RCP or RCMT. Once MS-OTAR is enabled on an APX NEXT device via CPS, that device can not be actively managed by RCP or RCMT. Users must disable MS-OTAR on device before using RCP and RCMT configuration tools.

Abstract: Support codeplug OTAP for APX NEXT

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Require the option G996.
- **Description:** This feature provides a parity support for OTAP on the APX N family.
Note: Not to use the TTS feature when using OTAP.



Abstract: CommandCentral Auto-Login

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** CC Admin configuration & Codeplug setup.
- **Description:** When CommandCentral Auto-Login is properly configured, the radio powers ON & uses a MSI signed certificate to authenticate the user automatically. CommandCentral Auto-Login can be enabled for APX NEXT radios that require authentication to App Services like SmartMapping & SmartMessaging. CommandCentral Auto-Login cannot be used with ViQi Virtual Partner or any service that accesses CJIS data. CommandCentral Admin (CC Admin) is the portal where CommandCentral Auto-Login is enabled and configured. It allows configuring new single devices, new multiple devices through an imported CSV file, & existing radios through an export/import workflow. CommandCentral Auto-Login requires the codeplug to be updated, too.

Abstract: SmartMapping – Zoom out to turn units into small dots

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Requires SmartMapping to be enabled on the device and the SmartMapping clustering feature to be turned off.
- **Description:** In map view, as the user zooms out, the units on the map turn into smaller dots and the unit ID label disappears, for a cleaner view.

Abstract: Parity- Dynamic Zone Programming

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** N/A
- **Description:** Allows channel to add, replace & delete in the channel display slot from selection of zones marked as Dynamic in codeplug configuration.

Abstract: Parity- Intelligent Priority Scan

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** N/A
- **Description:** Ability to add/delete conventional channels/trunking talkgroups from multiple systems into priority scan list

Abstract: Parity- DVR NAC Linking and Persistent Talkaround

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Require DVRS PSU
- **Description:** Allow NAC Linking, Persistent Talkaround, and FDMA/TDMA Talkaround configuration.

Abstract: Parity-PSU conventional Scan (DVRS)

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Require DVRS options
QA00631: DVRS PSU Activation must be enabled
HA00677: DVRS PSU Conventional Scan must be enabled
- **Description:** Support PSU Conventional Scan through DVRS



Abstract: Parity- Front Panel Programming (FPP)

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Required FPP options
Q52/GA00243 - FED FPP (No dongle required) (FED FPP And Zone Cloning), Q53/G53 - Non-FED FPP (password required) (Non-FED FPP And Zone Cloning)
- **Description:** Allows user to configure the radio codeplug via FPP application

Abstract: Parity- Radio to Radio and Zone to Zone Cloning

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Required FPP options
Q52/GA00243 - FED FPP (No dongle required) (FED FPP And Zone Cloning)
Q53/G53 - Non-FED FPP (password required) (Non-FED FPP And Zone Cloning)
- **Description:** Ability for APX Portable Radios to copy the zone and channel information from a cloneable zone in one radio to a cloneable zone in another radio

Abstract: Parity-Multi-PL

- **System Platforms Affected:** APX NEXT, APX N70
- **Special Configurations:** N/A
- **Description:** The MPL feature allows the user to modify the current mode's PL/DPL codes by selecting from a predefined list of codes. This can be used to eliminate the need to program multiple channels of the same frequency with different PL/DPL codes (for the purpose of accessing different communication sub-groups, repeaters, etc).

Abstract: Parity- Secure Data Through DVRS

- **System Platforms Affected:** APX NEXT, APX N70
- **Special Configurations:** Required Secure and DVRS options
QA00631/QA00631 - DVRS PSU Activation H-option
Q498/G298 - OTAR And Multikey H-option
- **Description:** Encrypt PSU Data while MSU is on a P25 trunked system

Abstract: Cloning & FPP Enhancements for Wildland Fire (NIFC)

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Required FPP options
<Q52> - Fed-FPP / Zone Cloning H-option or
<Q53> - NonFed-FPP / Zone Cloning H-option
- **Description:**
 1. Cloning enhancements: Clone any APX Portable to any other APX Portable (including APX NEXT, APX N70), Scan list cloning, separate MPL configuration list for cloning, allows Direct Frequency for non cloneable zones.
 2. Other enhancements: Permanent MPL Alias display, auto create MPL menu.



Abstract: Additional Voice Control Commands for SR2023.3

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Enabled Voice Control
- **Description:** Additional Voice Commands for Change to Preset.

CHANGE TO PRESET (52 variations with M= 1-13)

1. "preset M"
2. "change to preset M"
3. "switch to preset M"
4. "go to preset M"

Abstract: On-device Unit Management - Unit ID and primary unit status

- **System Platforms Affected:** APX NEXT
- **Special Configurations:**
This feature can be enabled in CC Admin.
APX NEXT/N70 Shift Manager. SmartLocate to report locations, SmartMapping and CC Aware to visualize locations, SmartMessaging to send/receive messages.
- **Description:** The device Shift Manager is enabled to allow field users to update their own Unit ID and Unit on/off duty status from the device. Unit updates will be displayed in CommandCentral Aware.

Abstract: ViQi Virtual Partner - Unit Management, Duty Status and Where am I capabilities

- **System Platforms Affected:** APX NEXT, APX NEXT XE
- **Special Configurations:** Virtual Partner Enabled. ViQi Virtual Partner Subscription Service and enablement.
- **Description:** Adding the capability to Virtual Partner to be able to change and query the unit ID and duty status from the radio. Also, the officer can request their location and the location of another officer using their unit ID. Unit updates will be displayed in CommandCentral Aware.



C - APX N70 Series Portables

Subscriber APX R02.04.00

APX N70 Portable Platforms

APX N70

New APX firmware version: R02.04.00

Previous APX firmware version: R01.62.00

C.1

Important Notes

N/A

C.2

New/Replacement Products

N/A

C.3

New Features

Abstract: Sorted Long Hunt/Intermediate Hunt List

- **System Platforms Affected:** APX N70
- **Special Configurations:** N/A
- **Description:** Provides a list to enable a dynamically managed list of frequencies while searching for a valid control channel.

Abstract: Remote Activation of Emergency enhancements

- **System Platforms Affected:** APX N70
- **Special Configurations:** Emergency Profile Configuration needs to select the Encode and Decode option. The feature is supported on P25 Conventional and P25 Trunking. Not available on Conventional MDC, Conventional QCII, Trunking Type I or II.
- **Description:** Provide an enhanced distinctable icon for Remote Emergency.



Abstract: Conventional Radio Inhibit Revert

- **System Platforms Affected:** APX N70
- **Special Configurations:** Trunking support on Codeplug
- **Description:** Provide a power up mechanism for the administrators to force the radio to a mode where it could be disabled, when operating on a conventional system.
-

Abstract: Parity- Multisystem OTAR

- **System Platforms Affected:** APX N70
- **Special Configurations:** Only supported on HW Encryption
Also Require: GA01620AA/QA07680AA – ADD: MULTI SYSTEM OTAR and H868/W968 – ADD: OTAR and Multikey

- **Description:** Adding the MS-OTAR feature support for APX N70 radios using CPS/RM only.

Note: This feature is not supported on RCP or RCMT. Once MS-OTAR is enabled on an APX NEXT device via CPS, that device can not be actively managed by RCP or RCMT. Users must disable MS-OTAR on device before using RCP and RCMT configuration tools.

Abstract: Support codeplug OTAP for APX N70

- **System Platforms Affected:** APX N70
- **Special Configurations:** Require the option G996.
- **Description:** This feature provides a parity support for OTAP on the APX N family.
Note: Not to use the TTS feature when using OTAP.

Abstract: CommandCentral Auto-Login

- **System Platforms Affected:** APX N70
- **Special Configurations:** CC Admin configuration & Codeplug setup.
- **Description:** When CommandCentral Auto-Login is properly configured, the radio powers ON & uses a MSI signed certificate to authenticate the user automatically. CommandCentral Auto-Login can be enabled for APX N70 radios that require authentication to App Services like SmartMapping & SmartMessaging. CommandCentral Auto-Login cannot be used with ViQi Virtual Partner or any service that accesses CJIS data. CommandCentral Admin (CC Admin) is the portal where CommandCentral Auto-Login is enabled and configured. It allows configuring new single devices, new multiple devices through an imported CSV file, & existing radios through an export/import workflow. CommandCentral Auto-Login requires the codeplug to be updated, too.

Abstract: SmartMapping – Zoom out to turn units into small dots

- **System Platforms Affected:** APX N70
- **Special Configurations:** Requires SmartMapping to be enabled on the device and the SmartMapping clustering feature to be turned off.
- **Description:** In map view, as the user zooms out, the units on the map turn into smaller dots and the unit ID label disappears, for a cleaner view.



Abstract: Parity- Dynamic Zone Programming

- **System Platforms Affected:** APX N70
- **Special Configurations:** N/A
- **Description:** Allows channel to add, replace & delete in the channel display slot from selection of zones marked as Dynamic in codeplug configuration.

Abstract: Parity- Intelligent Priority Scan

- **System Platforms Affected:** APX N70
- **Special Configurations:** N/A
- **Description:** Ability to add/delete conventional channels/trunking talkgroups from multiple systems into priority scan list

Abstract: Parity- DVR NAC Linking and Persistent Talkaround

- **System Platforms Affected:** APX N70
- **Special Configurations:** Require DVRS PSU
- **Description:** Allow NAC Linking, Persistent Talkaround, and FDMA/TDMA Talkaround configuration.

Abstract: Parity-PSU conventional Scan (DVRS)

- **System Platforms Affected:** APX N70
- **Special Configurations:** Require DVRS options
QA00631: DVRS PSU Activation must be enabled
HA00677: DVRS PSU Conventional Scan must be enabled
- **Description:** Support PSU Conventional Scan through DVRS

Abstract: Parity- Front Panel Programming (FPP)

- **System Platforms Affected:** APX NEXT, APX N70
- **Special Configurations:** Required FPP options
Q52/GA00243 - FED FPP (No dongle required) (FED FPP And Zone Cloning)
Q53/G53 - Non-FED FPP (password required) (Non-FED FPP And Zone Cloning)
- **Description:** Allows user to configure the radio codeplug via FPP application

Abstract: Parity- Radio to Radio and Zone to Zone Cloning

- **System Platforms Affected:** APX N70
- **Special Configurations:** Required FPP options
Q52/GA00243 - FED FPP (No dongle required) (FED FPP And Zone Cloning)
Q53/G53 - Non-FED FPP (password required) (Non-FED FPP And Zone Cloning)
- **Description:** Ability for APX Portable Radios to copy the zone and channel information from a cloneable zone in one radio to a cloneable zone in another radio



Abstract: Parity-Multi-PL

- **System Platforms Affected:** APX N70
- **Special Configurations:** N/A
- **Description:** The MPL feature allows the user to modify the current mode's PL/DPL codes by selecting from a predefined list of codes. This can be used to eliminate the need to program multiple channels of the same frequency with different PL/DPL codes (for the purpose of accessing different communication sub-groups, repeaters, etc).

Abstract: Parity- Secure Data Through DVRS

- **System Platforms Affected:** APX N70
- **Special Configurations:** Required Secure and DVRS options
QA00631/QA00631 - DVRS PSU Activation H-option
Q498/G298 - OTAR And Multikey H-option
- **Description:** Encrypt PSU Data while MSU is on a P25 trunked system

Abstract: Cloning & FPP Enhancements for Wildland Fire (NIFC)

- **System Platforms Affected:** APX N70
- **Special Configurations:** Required FPP options
<Q52> - Fed-FPP / Zone Cloning H-option or
<Q53> - NonFed-FPP / Zone Cloning H-option
- **Description:**
 1. Cloning enhancements: Clone any APX Portable to any other APX Portable (including APX NEXT, APX N70), Scan list cloning, separate MPL configuration list for cloning, allows Direct Frequency for non cloneable zones.
 2. Other enhancements: Permanent MPL Alias display, auto create MPL menu.

Abstract: Additional Voice Control Commands for SR2023.3

- **System Platforms Affected:** APX N70
- **Special Configurations:** Enabled Voice Control
- **Description:** Additional Voice Commands for Pair Bluetooth and Change to Preset.

Abstract: On-device Unit Management

- **System Platforms Affected:** APX N70
- **Special Configurations:** This feature can be enabled in CC Admin. APX NEXT/N70 Shift Manager. SmartLocate to report locations, SmartMapping and CC Aware to visualize locations SmartMessaging to send/receive messages.
- **Description:** The Shift Manager is enabled to allow field users to update their own Unit ID and Unit On/Off duty status from the device. Unit updates will be displayed in CommandCentral Aware.



Abstract: Virtual Partner - Unit Management, Duty Status and Where am I capabilities

- **System Platforms Affected:** APX N70
- **Special Configurations:** Virtual Partner Enabled. ViQi Virtual Partner Subscription Service and enablement.
- **Description:** Adding the capability to Virtual Partner to be able to change and query the unit ID and duty status from the radio. Also, the officer can request their location and the location of another officer using their unit ID. Unit updates will be displayed in CommandCentral Aware.



D - Device Management

CPS New Version: R32.00.00

CPS Previous Version: R31.00.01

RadioCentral New Version: 2.144.167.0

RadioCentral Previous Version: 2.140.125.0

D.1

Important Notes

Abstract: ASTRO RM-CPS Operating Systems Support

- **System Platforms Affected:** ALL
- **Special Configurations:** N/A
- **Description:** Starting with version R29.00.00, APX RM/CPS is only supported on 64 bit versions of the following operating systems:
 - Windows 11
 - Windows 10 (from 1607 version)
 - Windows Server 2016

Note:

Please see the APX_CPS_Readme file and the CPS HELP for additional information.

