



# APX new feature brief: **SR2024.2**- feature release

Updated: October 2024

SR2024.2 is a New Feature Release (NFR) with incremental changes to the Baseline Release (2024.1). This NFR brings new features for all APX N line radios, APX standard portables and APX mobiles including SmartIncident CAD client software, Multi-factor authentication as a PIN and APX Zone Cloning tool. 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.



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To learn more about the features within this release, [visit our SR2024.2 subscriber release training course](#)



# A - APX Standard Portable and Mobiles

SUBSCRIBER APX R34.02.00

## 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
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## 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
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**New APX firmware version:** R34.02.00

**Previous APX firmware version:** R33.40.00

**APX VR Platforms:** DVR-LX/DVR/VRX1000

**New Version:** R1.95

**Previous Version:** R1.90

Companion Futurecom Repeater Configuration software, FRC 1.50

A.1

## Important Notes

Abstract: N/A

A.2

## New/Replacement Products

Abstract: N/A



## New Features

### Abstract: APX Zone Cloning Tool Support

- **System Platforms Affected:** APX Standard BN models (portables)
- **Special Configurations:** Radio needs to have Q52 or Q53 enabled.
- **Description:** The firmware will add support for the APX Zone Cloning Tool - a standalone zone cloning tool that provides the ability for the wildfire and disaster response community to build a zone template in a simple PC application and clone to radios. This significantly reduces opportunities for errors and speeds up the radio zone cloning process of large quantities of radios with high accuracy.

### Abstract: Location Format Enhancement - 6-Figure Grid Reference

- **System Platforms Affected:** APX Standard and APX N30/N50 which supports Location
- **Special Configurations:** Radios need to support location and QA00782/GA00229- GPS Activation
- **Description:** Configurable field to show UTM Grid Reference display and 100m grid square format together.

### Abstract: APX Initial Trunking Affiliation Tone

- **System Platforms Affected:** All radios
- **Special Configurations:** None
- **Description:** P25 Trunking radios play a series of three quick beeps upon initial successful affiliation upon power up or channel change. (LMR or SmartConnect Site)

### Abstract: Range Extension Enhancements for DVR-LX/VRX1000- Voice solution

- **System Platforms Affected:** All APX portables which support PSU operation, APX8500, APX6500 BN
- **Special Configurations:** SmartConnect QA07682/GA01630 (mobiles), DVRS MSU GA00631 (mobiles), DVRS PSU QA00631, SmartConnect QA09276AA/HKVN4963A (DVR-LX), SmartConnect QA09568AA/HKVN4979A (VRX1000).
- **Description:** This feature enables the customers to use SmartConnect and DVRS without any loss in trunked features for their PSUs. Trunked features will operate the same whether the MSU communicates over LMR or broadband and will now use the portable radio ID instead of the MSU ID..

### Abstract: WM800 XV Wireless RSM with ASTRO radios

- **System Platforms Affected:** APX N50/N30, APX Standard Portable and Mobiles
- **Special Configurations:** Standard Bluetooth Pairing Type or MPP required. Not supported by the Bluetooth gateway, PMMN409. Not supported with APX Standard radios with analog channels.
- **Description:** Support for WM800 wireless RSM with compatible radios via Standard Bluetooth pairing or MPP. Hardware availability Q4'2024.

### Abstract: Programmable Link Failure Holdoff Timer- SmartConnect

- **System Platforms Affected:** All SmartConnect Capable radios
- **Special Configurations:** SmartConnect Subscription, Infrastructure



- **Description:** Add a configuration for the “SmartConnect Fail Hold timer” in the SmartConnect Gateway configuration and provisioning tool, instead of the hard coded 60 second major link failure time; this is configured by LMR System ID.

### **Abstract: Support to detect & display wrong battery indication with PMNN4815A battery**

- **System Platforms Affected:** AP APX N30 and APX N50
- **Special Configurations:** Battery PMNN4815A
- **Description:** Displays “Wrong Battery” ergonomics when attaching a PMNN4815A battery to a APX N30/N50 UHF radio.



# B - APX NEXT Series Portables

SUBSCRIBER APX NEXT R07.02.00

## APX NEXT Portable Platforms

APX NEXT  
APX NEXTi  
APX NEXT XE  
APX NEXT XN

**New APX firmware version:** R07.02.00  
**Previous APX firmware version:** R06.04.00

B.1

## Important Notes

Abstract: N/A

B.2

## New/Replacement Products

Abstract: N/A

B.3

## New Features

### Abstract: Digital Tone Signaling Encode/Decode Balancing

- **System Platforms Affected:** APX NEXT radios
- **Special Configurations:** Radio needs to have Q52 or Q53 enabled
- **Description:** The firmware will add support for the APX Zone Cloning Tool - a standalone zone cloning tool that provides the ability for the wildfire and disaster response community to build zone templates in a simple PC application and clone to radios. This significantly reduces opportunities for errors and speeds up the radio zone cloning process of large quantities of radios with high accuracy.



### **Abstract: Hardcode Interrupted Voice Announcement attempts**

- **System Platforms Affected:** APX NEXT XN radios
- **Special Configurations:** N/A
- **Description:** This feature limits the number of attempts to 1 for the voice announcements (VA) to be repeated when interrupted by received audio or higher priority voice announcements.

### **Abstract: APX Initial Trunking Affiliation Tone**

- **System Platforms Affected:** All radios
- **Special Configurations:** N/A
- **Description:** P25 Trunking radios play a series of three quick beeps upon initial successful affiliation upon power up or channel change. (LMR or SmartConnect Site)

### **Abstract: Range Extension Enhancements for DVR-LX/VRX1000- Voice solution**

- **System Platforms Affected:** All APX portables which support PSU operation, APX8500, APX6500 BN
- **Special Configurations:** SmartConnect QA07682/GA01630 (mobiles), DVRS MSU GA00631 (mobiles), DVRS PSU QA00631, SmartConnect QA09276AA/HKVN4963A (DVR-LX), SmartConnect QA09568AA/HKVN4979A (VRX1000).
- **Description:** This feature enables the customers to use SmartConnect and DVRS without any loss in trunked features for their PSUs. Trunked features will operate the same whether the MSU communicates over LMR or broadband and will now use the portable radio ID instead of the MSU ID.

### **Abstract: ViQi VC from BT SCBA Masks and BT ViQi VC Config (including WM800)**

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** ViQi VC from BT SCBA Masks and BT ViQi VC Config (including WM800)
- **Description:** This feature shall allow the mic from the BT SCBA Mask to be utilized for ViQi Voice Control or Virtual Partner. This feature shall also allow a user to configure both the Radio and the RSM ViQi VC/ VP active microphone to be remapped to one of three devices (RSM, Radio, or Wireless). This is done via the radios codeplug, with certain exceptions: target remap device set in codeplug must be present, and must have wideband microphone.



### **Abstract: Programmable Link Failure Holdoff Timer- SmartConnect**

- **System Platforms Affected:** All SmartConnect Capable radios
- **Special Configurations:** SmartConnect Subscription, Infrastructure
- **Description:** Add a configuration for the “SmartConnect Fail Hold timer” in the SmartConnect Gateway configuration and provisioning tool, instead of the hard coded 60 second major link failure time; this is configured by LMR System ID.

### **Abstract: SmartIncident with PremierOne support**

- **System Platforms Affected:** APX NEXT
- **Special Configurations:**  
PremierOne CAD on APX NEXT/N70, SmartLocate, SmartMapping
- **Description:** CAD-client Application Service running on APX NEXT devices, integrated with the App Services, CommandCentral and PremierOne CAD.

### **Abstract: Support Application Session Lock**

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Require SmartMapping, SmartIncident, SmartMessaging and/or ViQi VP Common Queries
- **Description:** When the device becomes idle and reaches a timeout, the device will require the field user to type a PIN to unlock SmartMapping, SmartIncident, SmartMessaging and ViQi VP Common Queries, which may carry sensitive data.

### **Abstract: MultiFactor Authentication PIN**

- **System Platforms Affected:** APX NEXT
- **Special Configurations:** Application services like SmartMessaging, SmartMapping, ViQi VP, SmartIncident
- **Description:** Allow users to enroll their radio to use MFA and login by entering a pin on that radio which is tied to their existing CC Admin account.  
Provides enhanced User authentication experience to login through Shift manager, that is faster and more secure by using an authenticator which is validated at the server (Public Key Cryptography)..

### **Abstract: Parity feature work for CPS**

- **System Platforms Affected:** CPS with APX NEXT radios
- **Special Configurations:** The customers currently using new web-based RadioCentral
- **Description:** The new web-based RadioCentral customers can customize the power-up image and radio inhibit image for the APX NEXT radios. The way is to 1st enable the settings in the CPS “Radio Wide” for the radios, and then use RCP to assign the specific image to the corresponding devices. Please note that the customers who are not using the new RadioCentral still can see these fields in the CPS view, but can not utilize this feature since there’s no new RadioCentral to assign the specific image.  
The new web-based RadioCentral customers can utilize the TKP (Touchless Key Provisioning) feature for the APX NEXT radios. The way is to enable the settings in the “OTAR Profile” in CPS. Please note that the customers who are not using the new RadioCentral still can see these TKP fields in the CPS view, but can not utilize this feature since there’s no new RadioCentral to support the TKP feature.





# C - APX N70 Series Portables

SUBSCRIBER APX N70 R04.02.00

## APX N70 Portable Platforms

APX N70

**New APX firmware version:** R04.02.00

**Previous APX firmware version:** R03.06.00

C.1

## Important Notes

N/A

C.2

## New/Replacement Products

**Abstract:** N/A

C.3

## New Features

### **Abstract: APX Zone Cloning Tool Support**

- **System Platforms Affected:** APX N70
- **Special Configurations:** Radio needs to have Q52 or Q53 enabled.
- **Description:** The firmware will add support for the APX Zone Cloning Tool - a standalone zone cloning tool that provides the ability for the wildfire and disaster response community to build a zone template in a simple PC application and clone to radios. This significantly reduces opportunities for errors and speeds up the radio zone cloning process of large quantities of radios with high accuracy.

### **Abstract: APX Initial Trunking Affiliation Tone**

- **System Platforms Affected:** All radios
- **Special Configurations:** N/A
- **Description:** P25 Trunking radios play a series of three quick beeps upon initial successful affiliation upon power up or channel change (LMR or SmartConnect Site).

### **Abstract: Range Extension Enhancements for DVR-LX/VRX1000- Voice solution**



- **System Platforms Affected:** APX N70
- **Special Configurations:** SmartConnect QA07682/GA01630 (mobiles), DVRS MSU GA00631 (mobiles), DVRS PSU QA00631, SmartConnect QA09276AA/HKVN4963A (DVR-LX), SmartConnect QA09568AA/HKVN4979A (VRX1000).
- **Description:** This feature enables the customers to use SmartConnect and DVRS without any loss in trunked features for their PSUs. Trunked features will operate the same whether the MSU communicates over LMR or broadband and will now use the portable radio ID instead of the MSU ID.

### **Abstract: WM800 XV Wireless RSM with ASTRO radios**

- **System Platforms Affected:** APX N70
- **Special Configurations:** Requires QA00583: Bluetooth
- **Description:** Support for WM800 wireless RSM. Hardware availability Q4'2024..

### **Abstract: ViQi VC from BT SCBA Masks and BT ViQi VC Config (including WM800)**

- **System Platforms Affected:** APX N70
- **Special Configurations:** ViQi VC from BT SCBA Masks and BT ViQi VC Config (including WM800)
- **Description:** This feature shall allow the mic from the BT SCBA Mask to be utilized for ViQi Voice Control or Virtual Partner. This feature shall also allow a user to configure both the Radio and the RSM ViQi VC/ VP active microphone to be remapped to one of three devices (RSM, Radio, or Wireless). This is done via the radios codeplug, with certain exceptions: target remap device set in codeplug must be present, and must have wideband microphone.

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### **Abstract: SmartIncident with PremierOne support**

- **System Platforms Affected:** APX N70
- **Special Configurations:** CAD on APX NEXT/N70, SmartLocate, SmartMapping
- **Description:** CAD-client Application Service running on APX NEXT devices, integrated with the App Services, CommandCentral and PremierOne CAD.

### **Abstract: Support Application Session Lock**

- **System Platforms Affected:** APX N70
- **Special Configurations:** Require SmartMapping, SmartIncident, SmartMessaging and/or ViQi VP Common Queries
- **Description:** When the device becomes idle and reaches a timeout, the device will require the field user to type a PIN to unlock SmartMapping, SmartIncident, SmartMessaging and ViQi VP Common Queries, which may carry sensitive data.



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- **Description:** Allow users to enroll their radio to use MFA and login by entering a pin on that radio which is tied to their existing CC Admin account.  
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- **System Platforms Affected:** CPS with N70 radios
- **Special Configurations:** The customers currently using new web-based RadioCentral
- **Description:**
  - The new web-based RadioCentral customers can customize the power-up image and radio inhibit image for the N70 radios. The way is to 1st enable the settings in the CPS “Radio Wide” for the radios, and then use RCP to assign the specific image to the corresponding devices. Please note that the customers who are not using the new RadioCentral still can see these fields in the CPS view, but can not utilize this feature since there’s no new RadioCentral to assign the specific image.
  - The new web-based RadioCentral customers can utilize the TKP (Touchless Key Provisioning) feature for the N70 radios. The way is to enable the settings in the “OTAR Profile” in CPS. Please note that the customers who are not using the new RadioCentral still can see these TKP fields in the CPS view, but can not utilize this feature since there’s no new RadioCentral to support the TKP feature.



# D - Device Management

**CPS New Version:** R34.00.00

**CPS Previous Version:** R33.00.01

**RadioCentral New Version:** 2.150.244

**RadioCentral Previous Version:** 2.148.193

## 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 2022
  - SQL server 2022

#### **Note:**

Please see the APX\_CPS\_Readme file and the CPS HELP for additional information.

