NorCal APCO Chapter Meeting

11/12/2020

Andrew Crawford

MOTOROLA SOLUTIONS

APX PORTFOLIO

APX NEXT	APX 8000		APX 6000	APX 4000	APX 3000	APX 1000 & 900	
ALL-BAND **SINGLE-BAND** SMART RADIO	**ALL-BAND HAZLOC** MISSION CRITICAL	**ALL-BAND**	**SINGLE-BAND** HIGH TIER	**SINGLE-BAND** STANDARD	**SINGLE-BAND** COVERT	**SINGLE-BAND** ENTRY TIER	**SINGLE-BAND** INDUSTRIAL

APX 8500   APX 6500   APX 4500   APX 1500

O7: MULTI-FUNCTIONALITY   **E5: COMPLETE FUNCTIONALITY**   **O3: HANDHELD FLEXIBILITY**   **O2: EXTREME USABILITY**

ENHANCED APX MOBILE RADIO LINEUP

APX 8500

UNLIMITED MOBILITY
MAXIMUM CONNECTIVITY

- All-band radio
- Built-in Wi-Fi
- Modem tethering
- SmartConnect
- ViQi virtual partner
- Impact detection
- AES/DES encryption
- O2 (green/gray), O3, O5, E5, O7 Control Heads
- Motorcycle configuration
- Multi control heads (4)

APX 6500

STAY INFORMED
STAY SAFE

- Built-in Wi-Fi
- Modem tethering
- SmartConnect
- ViQi virtual partner
- Impact detection
- AES/DES encryption
- O2 (green/gray), O3, O5, E5, O7 Control Heads
- Motorcycle configuration
- Dual control head option

APX 4500

UNCOMPROMISED PERFORMANCE
EFFICIENT OPERATIONS

- Built-in Wi-Fi
- Compact design
- Impact detection
- AES encryption
- O2 Control Head (green/gray)

APX 1500

P25 CONNECTIVITY
EXCEPTIONAL PRICE

- P25 Compatible
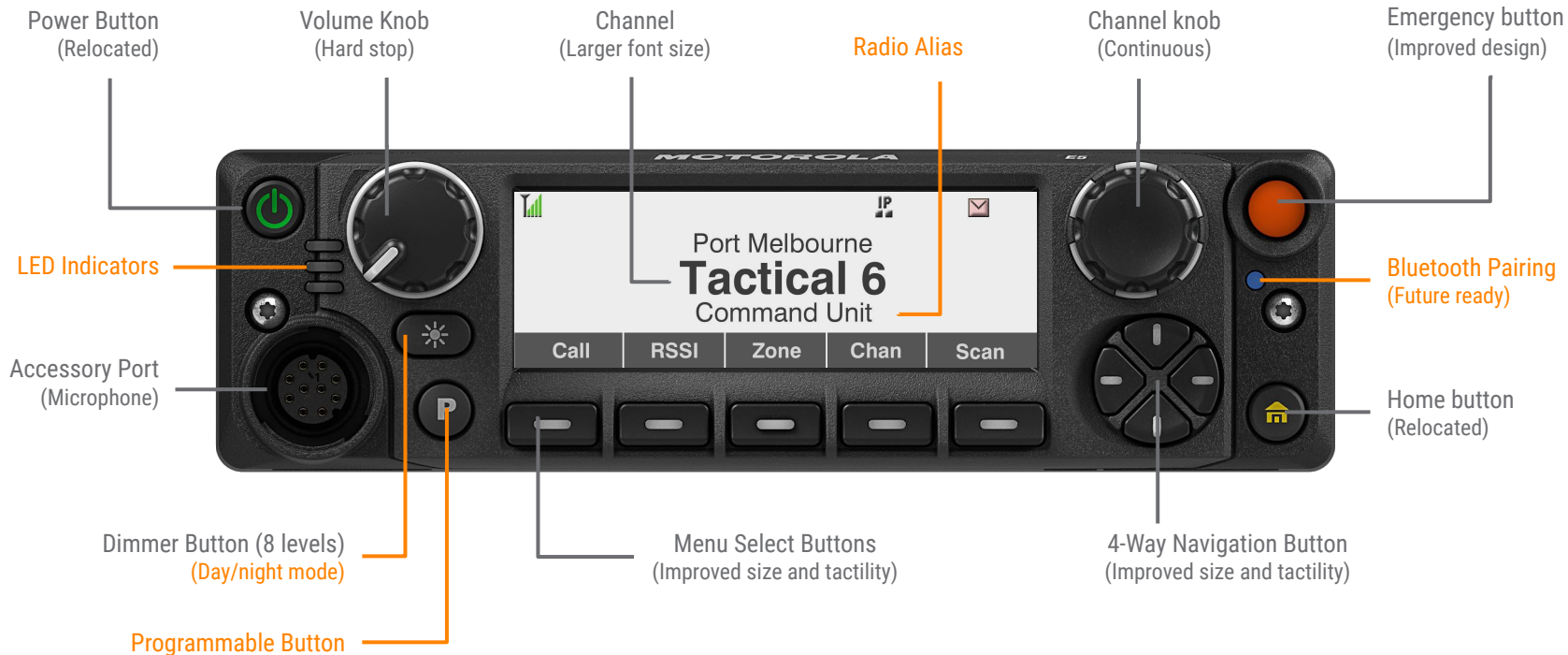- ADP software encryption
- O2 Control Head (gray)

New/enhanced features in orange

NEW APX E5 CONTROL HEAD
REPLACEMENT FOR O5 CONTROL HEAD

O5 for comparison

Power Button
(Relocated)

Volume Knob
(Hard stop)

Channel
(Larger font size)

Radio Alias

Channel knob
(Continuous)

Emergency button
(Improved design)

LED Indicators

Bluetooth Pairing
(Future ready)

Accessory Port
(Microphone)

Home button
(Relocated)

Dimmer Button (8 levels)
(Day/night mode)

Menu Select Buttons
(Improved size and tactility)

4-Way Navigation Button
(Improved size and tactility)

Programmable Button

MOTOROLA E5

Port Melbourne
Tactical 6
Command Unit

| Call | RSSI | Zone | Chan | Scan |

- New
- Improved

FM battery cancelation Dec 2020

"NOTICE: As of 18 December 2020, MSI will no longer accept orders for replacement batteries for FM3610_88 radios. The FM3610_88 standard expired in 2012, afterwhich MSI began phasing out production of FM3610_88 radios and associated accessories, such as replacement batteries. Due to normal manufacturing component obsolescence pressures, regrettably, Motorola will no longer be able to build and sell FM batteries beyond the eight-year anniversary of the FM3610_88 expiration. The last date to order Motorola FM batteries is 18 December 2020, and only delivery terms no later than 31 March 2021 will be accepted."

Motorola Depot will not be able to conduct FM repairs/recertification after 2020

- Option to have the radio return unrepaired or repaired as a non FM radio.

- The radio will be returned with all FM certification labels removed if the Depot proceeds with the repair.

APX FM BATTERY CANCELATION

AFFECTED BATTERIES

Cancelled Battery Model Description	Last Order Date	Last Ship Date
APX 6000/APX 6000XE, APX 7000/APX 7000XE, SRX2200		
NNTN8092A BATT IMPRES FM LI ION 2350mAh T	18 Dec 2020	no later than 31 March 2021
NNTN7033A BATT IMPRES FM LI ION 4300mAh T	18 Dec 2020	no later than 31 March 2021
NNTN7035A ASSY,BTRY IMPRES FM NIMH 2200mAh T	18 Dec 2020	no later than 31 March 2021
APX 4000, APX 3000		
NNTN8129AR BATT IMPRES FM LI ION 2350mAh T	18 Dec 2020	no later than 31 March 2021

XTS FM BATTERY CANCELATION

AFFECTED BATTERIES

Cancelled Battery Model Description	Last Order Date	Last Ship Date
XTS5000		
NNTN4437B BATT 1800 mAh FM RUGGED NIMH	18 Dec 2020	no later than 31 March 2021
NNTN4436B BATT 1800 mAh FM NIMH	18 Dec 2020	no later than 31 March 2021
NNTN7453B BATT IMPRES FM LIION 4500mAh T	18 Dec 2020	no later than 31 March 2021
RNN4007AR BATTERY PACK,PREM BATT NIMH 3500 mAh 7.5V IS	18 Dec 2020	no later than 31 March 2021
XTS2500/XTS1500		
NTN9857C BATTERY IMPRES NIMH FM 2000mAh	18 Dec 2020	no later than 31 March 2021
NNTN6263C BATTERY IMPRES NiMH FM IMMERSIBLE 2000 mAh	18 Dec 2020	no later than 31 March 2021

APX NEXT/XE
NEW
FEATURES

APX NEXT XE OVERVIEW

HDR Microphone

3x Programmable Buttons

Exaggerated PTT Button

Exaggerated Emergency Button

Exaggerated Crash Bar

ViQi Button

Standard Battery 4400mAh, UL Div 2

Display Sleep/Wake & Home Button

Exaggerated Channel Selector

Exaggerated On/Off/Volume

HDR Microphone

Touchscreen

Black Standard Color

MOTOROLA

En Route
My Status

East Zone
TAC 1

Zone   Contacts   More

Miller, David
Arriving to staging on Kedzie Ave.

New Message   All Messages

Night Mode   Brightness   Settings

11:30

XVE500 RSM OVERVIEW

Channel Knob

Windporting Grill

4x HDR Microphones

ViQi Button

Speaker

IP68 rated

Strobe Light

Recessed PTT Button

Programmable Button

Field Replaceable Extreme Temp Cable

MOTOROLA

XT

Available in Black

Clip w/ D-ring

Protected Emergency Button

Transmit/Receive LED

Volume Up/Down

SMART**CONNECT**
MULTI-SYSTEM SCAN

Feature Overview
- Ability to Scan other Conventional & Trunking Systems while on SmartConnect PTT Gateway.
  - Currently radio reduces Multi-system scan list to Priority monitor scan when in SmartConnect.
  - Requirement is to be able to continue to multisystem scan while in SmartConnect

Use Case
- When the gateway is on the home system the radio can scan to conventional channels and trunked talkgroups on other systems as secondary systems.

Requirements
- Included with SmartConnect
- Available on APX BN series and APX NEXT radios

SMART**MESSAGING** UPDATES

- Deployment in Canada now available
- UI enhancements for improved responsiveness, smooth transitions
  - Radio user presence throughout
  - Unread Message indicator on Widget
  - Canned Messages from the Codeplug
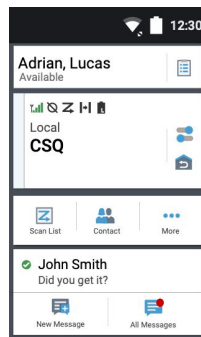
Unread Message Indication
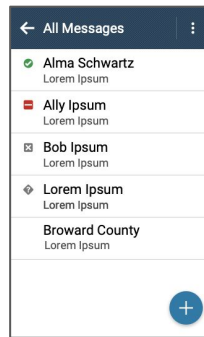
User Presence Throughout
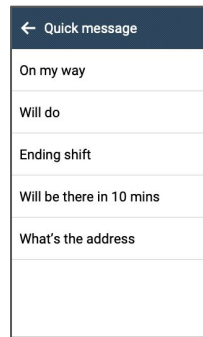
Canned Messages

SMART**MAPPING** UPDATES

- Iconography enhancements
- Add and edit Waypoints from map
- Show user information
- Clustering

Icons and colors as defined in CC Admin
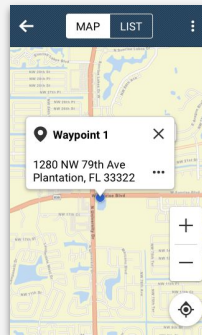
Add/edit waypoints from map
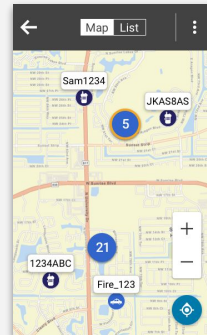
Clustering

ViQi VIRTUAL PARTNER LOCATION INTENTS

Feature Overview

- Users who have a ViQi Virtual Partner Subscription and their device location in the cloud (via SmartLocate or IMW Cloud Connector) can ask ViQi for their location or the location of other units.

Use Case

- Officers who are moving around through backyards, alleys, or in areas with poor visibility can ask ViQi for their location.
- Officers who are wondering if units are in position or where a fellow unit is at can request the specific unit's location from

ViQi VIRTUAL PARTNER HOT HITS IN CC AWARE

Feature Overview

- Ability to automatically send ViQi Virtual Partner queries that generate a hot hit to an Aware map with dynamic location.

Use Case

- Officers who run a query that generates a hot hit can automatically send their dynamic location to an intelligence operator monitoring the incident over an Aware map thereby increasing officer safety.

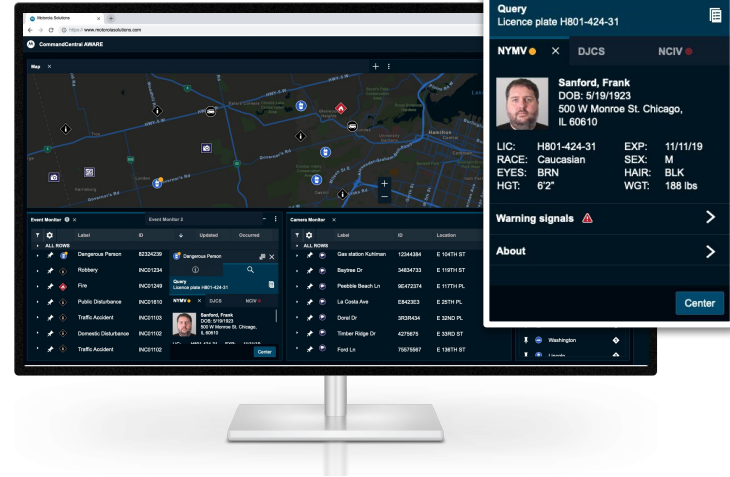- Intelligence operators can increase their situational awareness of an active situation.

TOUCHLESS KEY PROVISIONING (TKP)

Reduce Time and Effort Spent on Enabling Encryption

- **TODAY**: requires a KVL to physically connect to each device to enable encryption

- **WITH TKP**: Leveraging RadioCentral, TKP Provides users with *the option* to remove the manual process of loading keys on to APX NEXT through the KVL. Encrypt each device w/ the KMF via OTAR

Requirements

- KMF with license
- OTAR
- For more information, reference pre-sales training video

RADIOCENTRAL RBAC (Role Based Access Control)

RADIOCENTRAL CUSTOMER

SAM

SALLY

BOB

SHARED SYSTEM USERS

ROLE BASED ACCESS

Administrator
View configuration, create/update/delete configuration elements, licensing & schedule jobs

Technician
View configuration, create/update/delete configuration elements & schedule jobs

Reader
View configuration
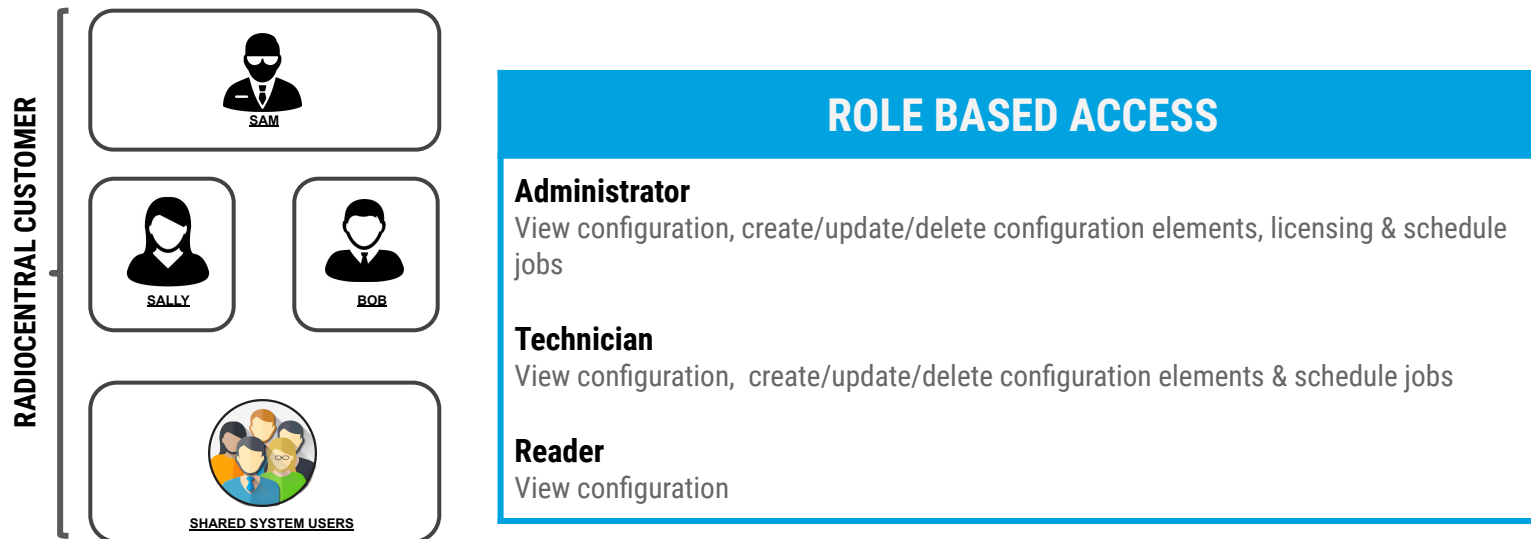
AVAILABLE AS A PREVIEW: Included standard for one full year at no additional charge. During this time Motorola Solutions will be collecting customer feedback before the full market release.
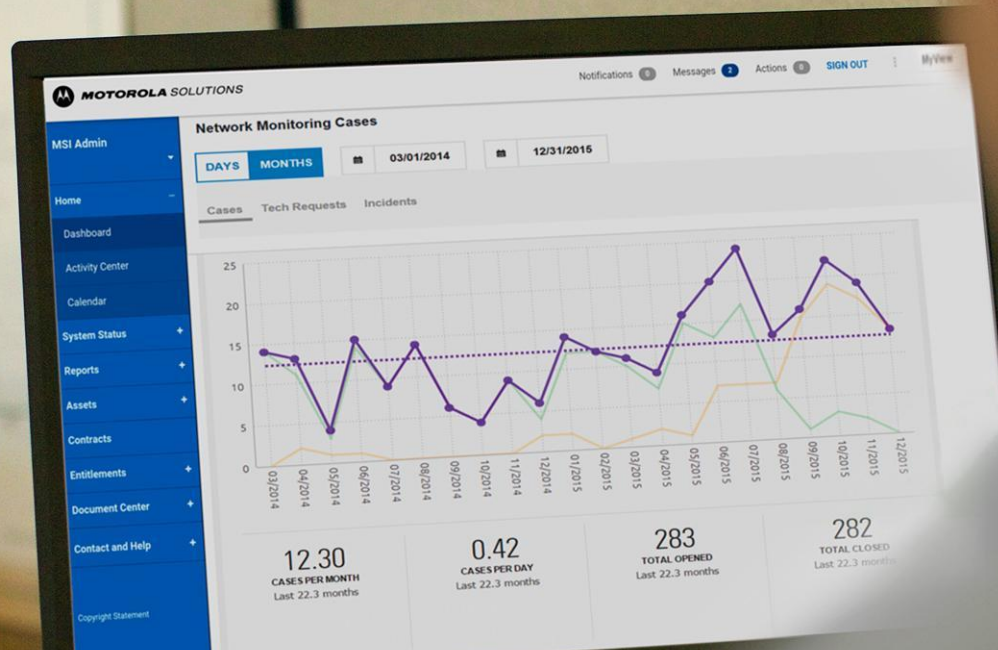
MYVIEW PORTAL

A one-stop resource for all your fleet management assets

- Check your order status
- Download the RadioCentral client
- Access your fleet management database

Locate the SmartInsight Menu
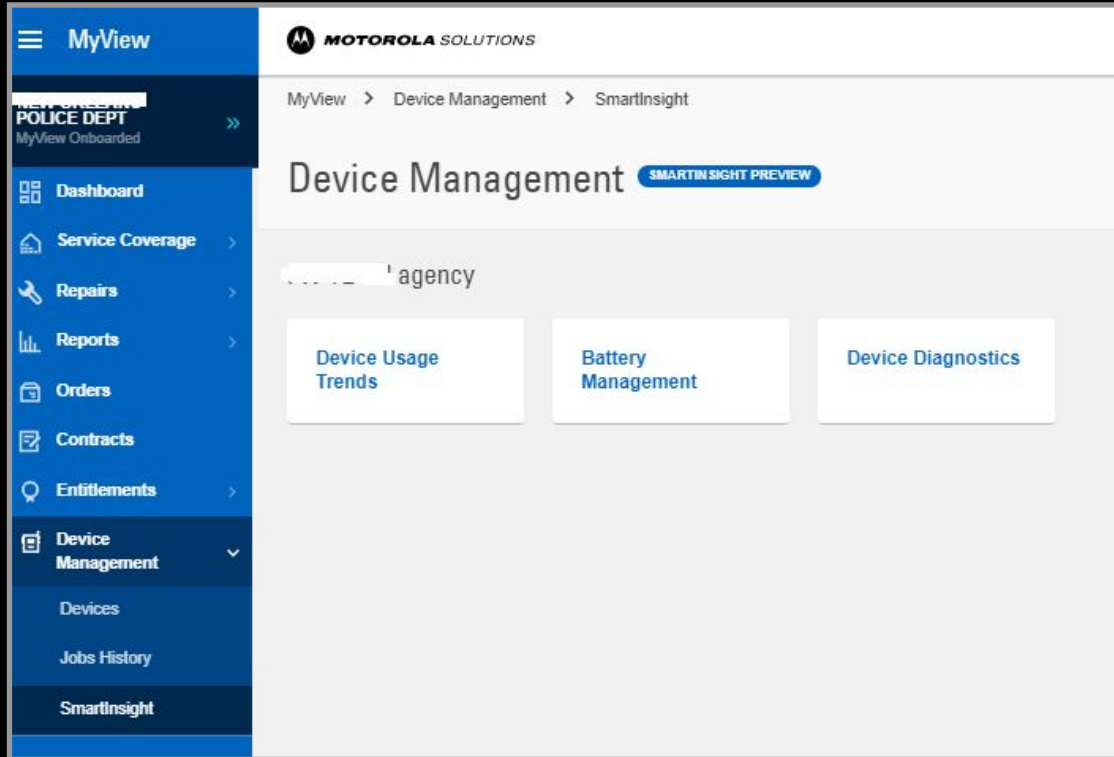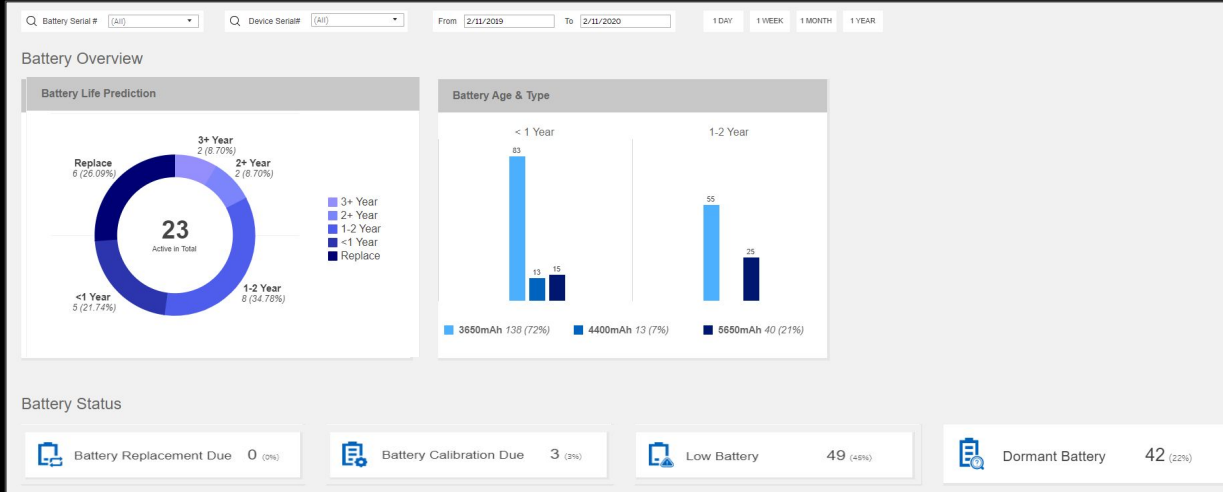

Upon login user will see this window.

"SmartInsight" menu located in the left column under "Device Management". (see the red circle)

Selecting the "SmartInsight" menu will reveal the 3 dashboard tiles.

Selection of any tile will route to dashboard view.

Battery Management - Fleet Overview

Key Values
- Define accurate budget plan based on data
- Precise insight to replace batteries only when necessary
- Full awareness of battery fleet health status in a consolidated view

- **Battery life prediction** - Total active battery and remaining life information for the battery fleet, e.g. replace immediately, within 1 year, 1-2 years...
- **Battery Age & Type** -
  - Regular vs. high cap batteries in the fleet
  - Service age.
- **Battery status** -
  - Batteries requiring replacement
  - calibration required
  - Devices experiencing low battery
  - Dormant batteries.

All items can be clicked to reveal further details in a list view.

Device Usage Trends - Talkgroup and Feature Usage
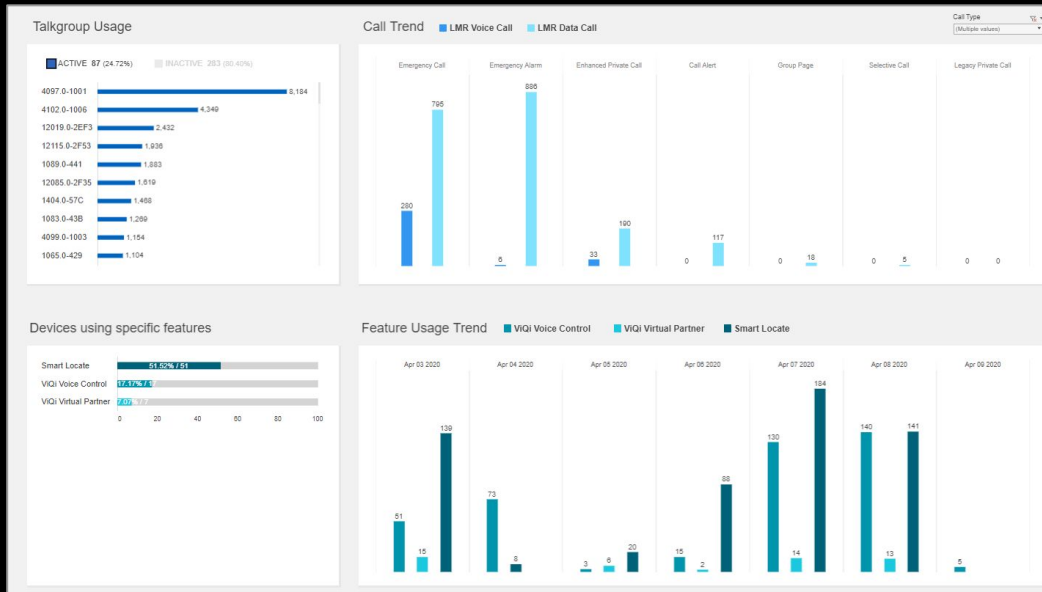
- **Talkgroup Usage** - Talkgroup utilization rate and resource optimization action, e.g. retire a non active talk group.
- **Call Trend** - Itemize different call transactions types in the fleet.
- **Feature Usage & Trend** - Captures which features are being used on which devices and usage trends over time.

Key Values
- Talkgroup and call type usage rate awareness for optimal resource allocation.
- Feature usage awareness to improve training and budget resource planning.

Q&A

APX
NEXT

MOTOROLA SOLUTIONS