# APX™ RADIO MANAGEMENT
## RADIO PROGRAMMING MADE SIMPLE



Managing your radio fleet is an important part of day-to-day operations. But it can also be expensive and time consuming. Updates to add or remove channels, upgrade firmware, or add purchased features through FLASHport upgrade, take substantial time and resources because each radio has to be programmed individually. Motorola's Customer Programming Software Radio Management application simplifies APX™ radio configuration and management, saving you time and money while ensuring your users can accomplish their mission without interruption.

The APX CPS Management application can program up to 16 radios at one time and track which radios have been successfully programmed, providing a clear view of the entire radio fleet and a codeplug history for each radio.

### ACCESS AND SHARE CODEPLUGS
When codeplug updates occur, the radio codeplug database can be stored on a network server allowing remote programmers to access and program radios and share a codeplug template across multiple radios. Changes to codeplug templates can be automatically applied to all affected radios while radio programming jobs can be scheduled ahead of time giving you more flexibility and operational efficiency.

### MINIMIZE DOWNTIME
Save time and fuel by programming radios either via a USB port on a local or remote PC, or with Over-the-Air-Programming (OTAP) on a Project 25 system. With USB programming, a Device Programmer application resides on a PC and you can connect up to 16 radios via a USB hub to expedite the programming. To read/write multiple radios through a single computer or USB hub, the radios must be programmed with a unique IP address the first time they are read/written.

No application knowledge or application interaction is necessary by the user to program a radio with the Device Programmer application. The user simply plugs the radio into a USB port and the application automatically reads and writes the updates from the server to the radio.
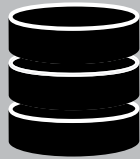
Radio Management batch programming of APX radios via OTAP can only occur with a Motorola ASTRO® 25 Project 25 system, which has voice priority over data, so a user's call, emergency notifications or critical communications will not be interrupted with OTAP. Should an OTAP session be interrupted with communications, programming will resume after the call without the need to restart, expediting the process.

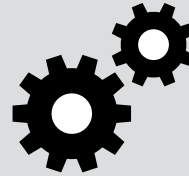## RADIO MANAGEMENT COMPONENTS

### RM CLIENT
Radio management user interface is integrated into the CPS, giving radio managers a unified view into their radio fleet from a single dashboard.
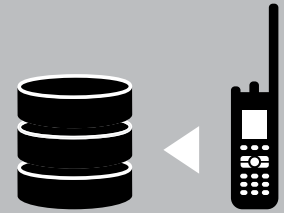
### RM SERVER
Provides radio managers with flexible options for managing radios, templates, codeplug data and programming jobs via a hardware or cloud based database.

### JOB PROCESSOR
Responsible for preprocessing of programming jobs by validating and transforming template and radio data into a format that can be written to the radio.

### DEVICE PROGRAMMER
Performs read and write jobs to the APX radios.

# FLEXIBLE ARCHITECTURE

### RM INSTALLED ON ONE COMPUTER

All Radio Management components are installed on a single machine.

**Use Case:** A small self-maintained agency can gain the benefit of the integrated database that maintains all the template versions and keeps tracks all radio information and updates without having to maintain separate spreadsheets and codeplug files in the computer directory. An administrator can schedule jobs on the terminal, log out or lock the computer, and allow radio users to update their APX radios via the connected USB cable on their own time, without his or her presence required.

- Install all three Radio Management parts – CPS, RM Server and RM Device Programmer on a single PC
- Configuration is automatically handled by the RM Device Programmer
- Simple installation with full RM functionality

### RM INSTALLED ON MULTIPLE COMPUTERS

Allows the Device Programmer to program radios at different locations by distributing the workload across multiple computers, a centrally located server and a remote RM client.

**Use Case:** A medium-sized agency can have two radio administrators. They can log into the centralized server located at the County IT building via the RM Clients on their personal laptops to make changes and schedule jobs. Meanwhile, there can be three programming kiosks (RM Device Programmers) throughout the county. Radio users can come to receive updates on their own convenience and avoid driving to and from the radio shop – one kiosk at the Fire Station, one at the Police Station, and one at City Hall. Fire-fighters, police officers and general government radio users all have a nearby kiosk for radio programming.

- Install the RM Server and RM Device Programmer at a central location at your shop
- Install the CPS on one or more PCs
- Share the same configuration database with multiple users who can access it remotely

### FULLY DISTRIBUTED RM SYSTEM

Multiple Job Processors, RM Clients and RM Device Programmers share the workload and allow configuration and programming from different locations.

**Use Case:** A large-scale operation has a centrally-located RM Server in an IT server room along with four Job Processor servers that enable a higher throughput of jobs. RM Device Programmers are installed at each of the programming kiosks in the key government buildings, police stations, fire stations, and correctional facilities. The RM Device Programmers are also installed in all the MW810 mobile computers in the police vehicle fleet. These mobile computers can be used to program the APX mobile radios in the vehicle using the front microphone port USB interface on the APX control head. The radio shop has three RM Device Programmer computers and each one has a USB hub with 16 programming cables so that 48 radios can be programmed in parallel whenever future firmware upgrades need to be deployed. The RM Clients are also installed in the five personal laptops of the respective Radio Fleet Technicians.
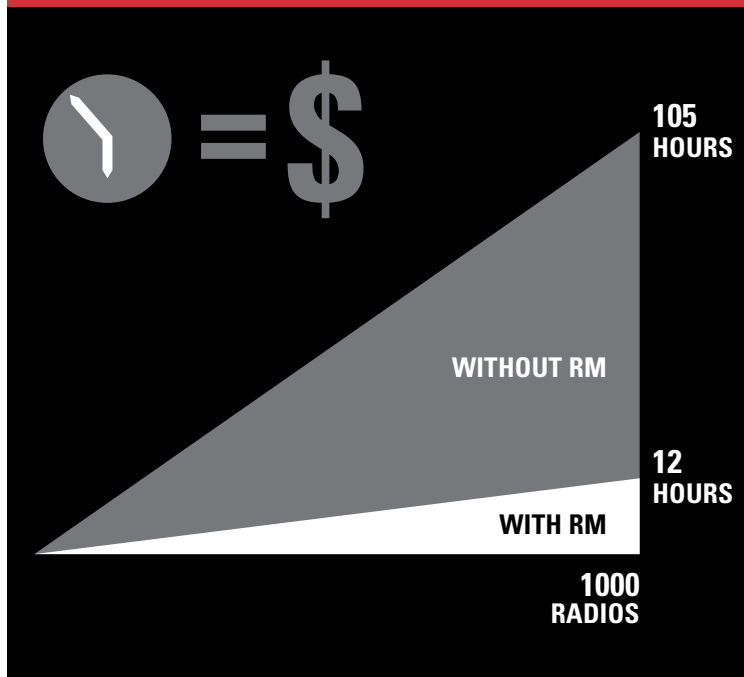
- Install the CPS, RM Server and up to five wired RM Device Programmer's on separate PCs
- Keep the RM Server at your shop
- Conveniently and remotely access codeplug configurations on the RM Server from your CPS
- Install light-weight RM Device Programmers at customer's site
- It's green! No more driving around burning up fossil fuels for codeplug changes

## RADIO MANAGEMENT ADVANTAGES

- Efficient radio inventory management

- Centralized radio configuration and codeplug management

- Automated radio updates of both codeplugs and software flash versions

- Remote over the air programming via the P25 radio system

- Batch programming via USB configuration (up to 16 radios at one time)

- No missed calls with Over-the-Air Programming due to voice priority with Motorola's ASTRO 25 systems

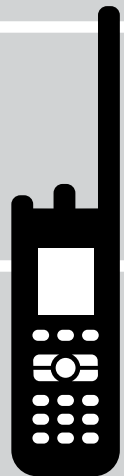## CPS RADIO MANAGEMENT (RM) REDUCES TOTAL COST OF OWNERSHIP

⏱ = $

105 HOURS

WITHOUT RM

12 HOURS

WITH RM

1000 RADIOS

### HOW LONG DOES IT TAKE TO FLASH 1,000 RADIOS?

**WITHOUT RM**
**105** HOURS
**13** WORKING DAYS

**WITH RM**
**12** HOURS
**1.5** WORKING DAYS

* Time shown are average estimates based on small sample of actual data on APX 7000

For additional information contact your Motorola representative, or visit **www.motorolasolutions.com/caribbean/apx**

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