IMPRES™ BATTERY FLEET MANAGEMENT

TURN BETTER DATA INTO BETTER DECISION-MAKING

MOTOROLA *SOLUTIONS*

MANAGE BATTERIES THAT WORK, WITHOUT THE GUESSWORK

A radio is only as good as the battery that powers it. So when a battery fails and communication is lost, it impacts every aspect of your organization from serving customers to saving lives. But monitoring and maintaining the status of a large fleet of batteries can be time-consuming, inefficient and potentially overwhelming.

That's why we created our proprietary IMPRES™ Battery Fleet Management technology. It saves you the guesswork, complexity and costs of managing hundreds even thousands of radio batteries and chargers wherever they're located, and makes it easier for your employees to do their work safely and successfully.

GET BETTER DATA TO MAKE BETTER OPERATIONAL DECISIONS

WHY IMPRES?

From the beginning, IMPRES batteries were designed as an integral part of our two-way radios for optimal performance. Now we've taken IMPRES technology a step further with software that automatically collects data from your entire IMPRES battery and charger fleet each time you place your battery in the charger, then quickly compiles it into valuable reports for "information at a glance." No other manufacturer delivers this patented technology and comprehensive capabilities.

HOW DOES IT WORK?

Our IMPRES Battery Fleet Management software automatically collects critical data from IMPRES batteries when they are inserted into an IMPRES charger including battery age, capacity, charge and recondition history, the dates manufactured and put into service. This software analyzes battery data and tells you how "healthy" a battery is and when it needs to be changed, so you can quickly and efficiently determine when to remove a poor-performing battery, purchase a new one or redeploy it to less demanding users, and even identify missing batteries.

MAKE EVERY WORK DAY MORE PRODUCTIVE AND EVERY WORKER SAFER

In the heat of a structure fire or the heart of a construction site, radio users must be confident their batteries will last an entire shift and be ready right when they need them. IMPRES Battery Fleet Management gives them the key information they need. Now they'll know how long batteries will last and feel confident they can communicate at full potential.

Radio users don't have to remember if a battery is charged or deal with the frustration of operating a device with a weak battery. Instead, batteries can be pulled out of service before a shift and proactively replaced before they reach end-of-life.

IMPRES BATTERY FLEET MANAGEMENT DELIVERS BATTERY-CRITICAL INFORMATION

- Tells you when batteries are below an acceptable capacity

- Helps ensure users have enough capacity for a full work shift

- Alerts you to low capacity batteries so you can remove them

- Eliminates unexpected downtime and work interruptions

- Avoids the expense of throwing batteries away prematurely

- Confirms chargers are optimally distributed and used

BOOST EFFICIENCIES AND BRING DOWN COSTS

Are you replacing all batteries on a certain date, whether you need to or not? Responding to worker complaints that batteries are losing their charge too quickly? Unsure if they're properly charged or reconditioned?
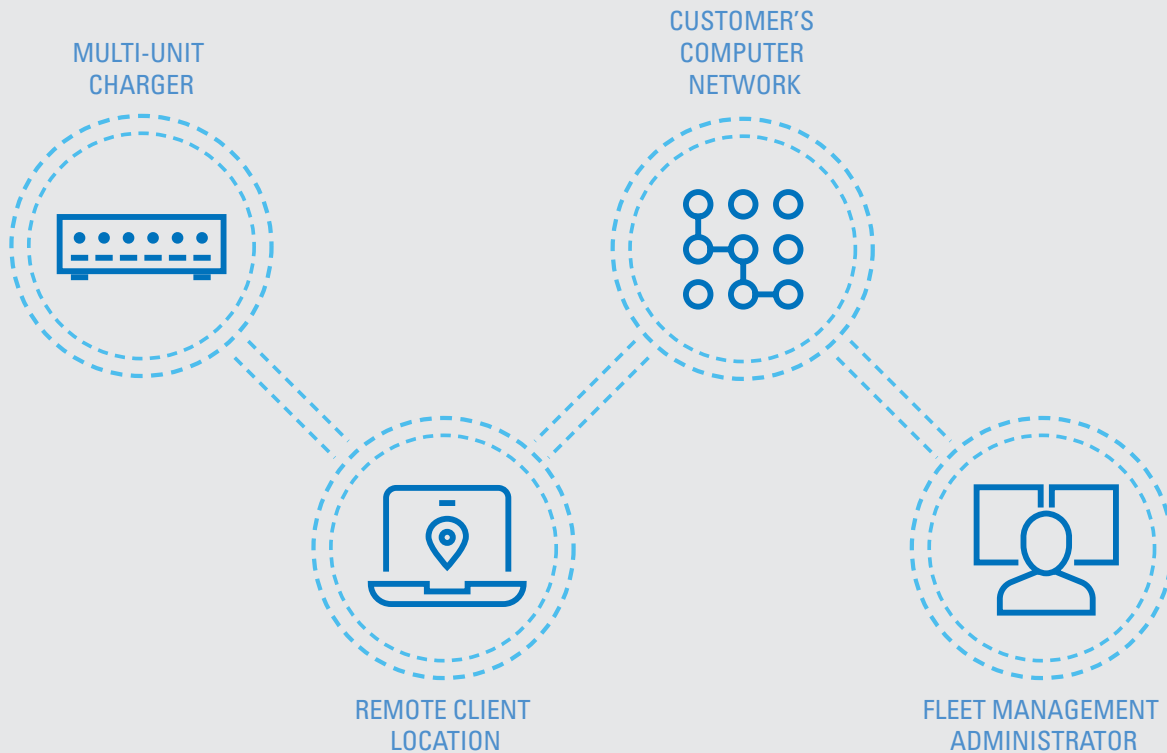
IMPRES Battery Fleet Management eliminates the guesswork, uncertainty and frustration. Because it automatically retrieves data on the exact status and health of every battery in your fleet, you avoid the waste and expense of replacing batteries prematurely. And help ensure that batteries aren't used beyond their recommended life — reducing downtime, work interruptions and operational inefficiencies.

The initial cost of IMPRES software is a shrewd investment that pays back over a long period of time. It not only is designed to increase battery reliability and performance, but can improve worker safety and productivity, too.

Motorola Solutions products have strong sustainability benefits. IMPRES Chargers have technology that avoids overcharging and our single-unit IMPRES chargers with external power supplies consume 40 percent less energy in standby mode than required by the U.S. Energy Independence and Security Act of 2007.

IMPRES BATTERY FLEET MANAGEMENT IN CHARGER

MULTI-UNIT
CHARGER

CUSTOMER'S
COMPUTER
NETWORK

REMOTE CLIENT
LOCATION

FLEET MANAGEMENT
ADMINISTRATOR

IMPRES BATTERY MANAGEMENT
OVER THE AIR

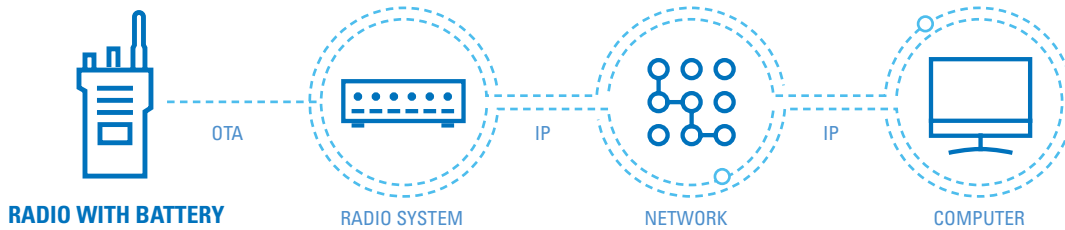## NEW IMPRES OVER THE AIR (OTA) BATTERY MANAGEMENT

IMPRES Battery Fleet Management, for APX XPR 7000 or XPR 3000 Series radios when used with IMPRES batteries, automatically collects battery information over the air while radios are in use. It eliminates the need for wired network connections and a computer at charger locations. It also enables real-time data querying of any radio

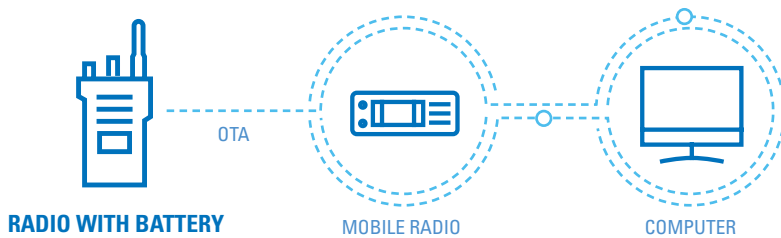in the field and adds radio related data for radio asset tracking and other uses.

IMPRES Battery Fleet Management requires APX or MOTOTRBO XPR 7000 and XPR 3000 radios with the supporting radio software and IMPRES Battery Management software and a software license key. See ordering guide on page 6 for detailed information.

When using MOTOTRBO radios, the IMPRES Battery Fleet Management application communicates with the radio system through an IP Data Gateway in one of two ways, through the Motorola Network Interface Service (MNIS), which communicates via IP to the system, or a mobile radio configured as a control station.
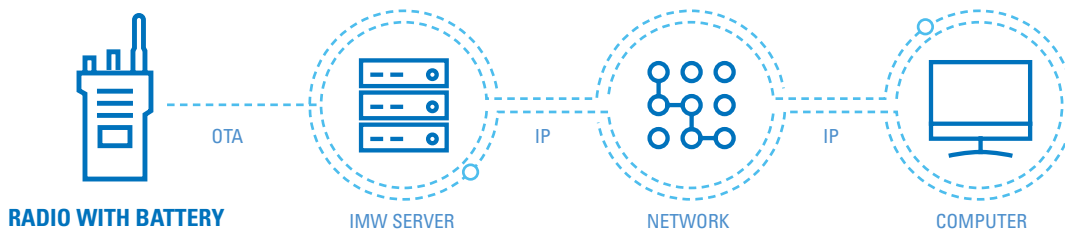
Motorola Network Interface Service (MNIS)

RADIO WITH BATTERY	RADIO SYSTEM	NETWORK	COMPUTER

OTA   IP   IP

Motorola Network Interface Service (MNIS)

RADIO WITH BATTERY	MOBILE RADIO	COMPUTER

OTA

When using APX radios, The IMPRES Battery Fleet Management application communicates with the radio system through an IP Data Gateway, the Intelligent Middleware (IMW) server, which then communicates via IP to the subscriber radios in the system.
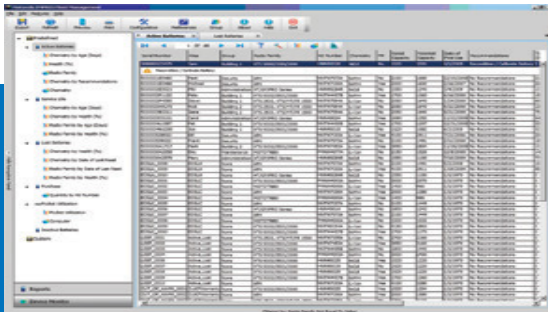
RADIO WITH BATTERY	IMW SERVER	NETWORK	COMPUTER

OTA   IP   IP

SIMPLE, SEAMLESS AND SCALABLE

IMPRES Battery Fleet Management consists of two major components: the application software and a software license key.
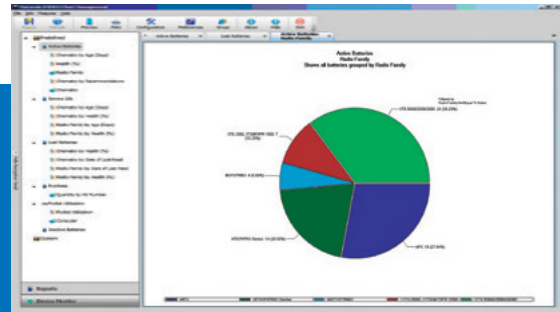
The IMPRES Battery Fleet Management application software is scalable from a single site to a multi-site networked system and can be networked to support up to 25,000 batteries in the same location or over geographically dispersed areas.
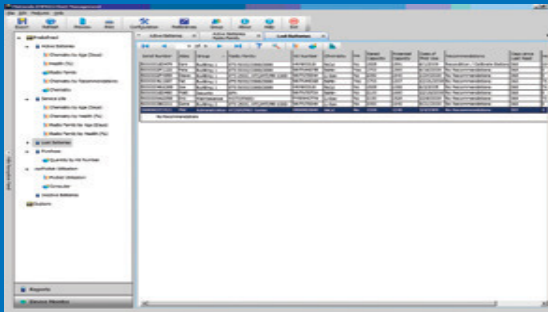
EACH SOFTWARE LICENSE SUPPORTS:

- 1 System Administrator Server
- 19 Remote Clients
- 25 IMPRES Multi-Unit Chargers per client
- 25,000 IMPRES Batteries (the total number of batteries for the entire system cannot exceed 25,000)
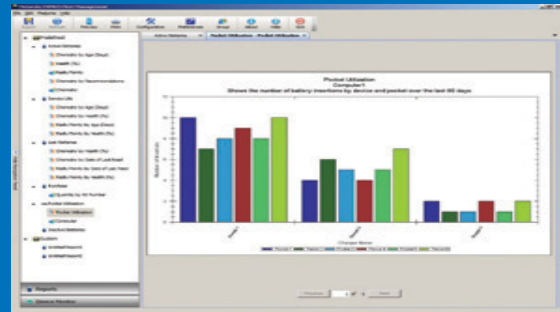

Active battery report

Batteries in use by radio family

Lost battery by location

Charger pocket utilization

VIEW CURRENT REPORTS OR CREATE CUSTOM ONES

Use existing reports or customize new ones to see the most relevant information for your organization. Data is stored in your database and can be exported to an Excel file or printed. IMPRES Battery Fleet Management software records and organizes a variety of data so you can:

- See a status snapshot of your entire battery fleet
- Evaluate whether batteries are meeting your performance criteria
- Determine when batteries are nearing their end-of-life
- Decide exactly when to buy new batteries

- Get a lost battery report
- Optimize your charger utilization
- Monitor all devices in the system

IMPRES BATTERY FLEET MANAGEMENT
ORDERING GUIDE

IN THE CHARGER

FOR APX, XTS, MOTOTRBO XPR 3000, XPR 6000 AND XPR 7000 SERIES AND HT PROFESSIONAL RADIOS

To deploy IMPRES Battery Management:

- Download NNTN7676 IMPRES Battery Management Software

- Purchase HKVN4036 Entitlement ID(s) for up to 20 PCs

- Each computer can have up to 25 Multi-Unit Charger connected to it

- USB hub is required when the number of devices that need to be connected to a single PC exceeds the available USB ports

OVER THE AIR

FOR MOTOTRBO XPR 7000 AND XPR 3000 SERIES RADIOS

To deploy IMPRES OTA Battery Management:

- Download NNTN7676 IMPRES Battery Management Software

- Purchase HKVN4036 Entitlement ID(s) for up to 20 PCs

- Upgrade radio software to 2.4 or later

IMPRES OTA Battery Management is supported by the following MOTOTRBO Systems:

- Direct Mode (12.5e and 6.25e)

- Single Site Repeater

- IP Site Connect

- Capacity Plus

- Linked Capacity Plus

NOTE: Not compatible with Connect Plus

FOR APX SERIES RADIOS

To deploy IMPRES OTA Battery Management:

- Download NNTN7676 IMPRES Battery Management Software

- Purchase HKVN4036 Entitlement ID(s) for up to 20 PCs

- Upgrade radio software to 7.18.5 or later

IMPRES OTA Battery Management is supported on ASTRO 25 Systems. Uses classic IVD (Enhanced data not required).

NOTE: Free 90 day trial version available at IMPRES Battery Management Software

For more information, please visit us on the web at: www.motorolasolutions.com/impresbatteries

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