



# SMARTPTT RADIO NETWORK BRIDGING

SmartPTT bridging service provides bridging of separate radio networks into single communication infrastructure. SmartPTT bridging is able to involve different radio configurations to build heterogeneous environment. The bridging service is implemented by SmartPTT Enterprise Radioserver and provides intelligent means of bridging for voice and data streams between different radio networks.

## **Bridged Radio Network Configurations**

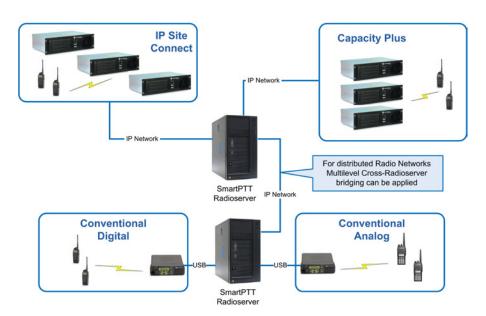
- IP Site Connect networks
- Capacity Plus sites

- Digital conventional channels
- Analog conventional channels

## **Advantages of Bridging Service**

- Ability to bridge different radio networks
- Cross-Radioserver bridging to cover distributed regions
- Selective voice and data routing

- Dynamic routing for private and group calls
- Direct connection to the repeaters via IP
- Breaks the limit of 15 repeaters per IP Site Connect



## Dynamic Routing for Private and Group Calls

SmartPTT bridging service introduces intelligent way of bridging private and group calls playing as a site controller for all connected digital sites. The sites with no participants of the current group or private calls are not lighted up and available for other calls. This greatly reduces power consumption and increases channel availability for large distributed systems. So with dynamic routing the operation of the system will cost you much less than in traditional system.

- Dynamic Routing for Private Calls. Being applied, it automatically searches destination subscriber of a private call through all connected networks and forwards the call to destination site.
- Dynamic Routing for Group Calls. SmartPTT implements Multi Group concept to identify the participants of group calls. It allows to automatically key up only those sites, where such radios are registered.

#### Cross-Radioserver Bridging

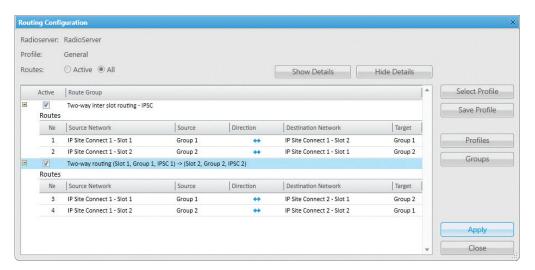
SmartPTT bridging is a unique solution for interconnection of geographically distributed sites. Besides call routing between radio networks, SmartPTT provides call patch between Radioservers. This feature allows building complex multilevel bridging configurations. A good example of Cross-Radioserver bridging is interconnection between distributed analog or Capacity Plus sites which can't be controlled by single SmartPTT Radioserver.

Rules for voice and data stream routing are defined by the routing table. Routing rules use following criteria to patch streams between radio networks:

- Dynamic routing for private and group calls
- Direct connection to the repeaters via IP
- Breaks the limit of 15 repeaters per IP Site Connect

#### The routing table is managed by a visual tool integrated into SmartPTT dispatch console

Bridging configuration in SmartPTT is specially adjusted for easy management of complex route tables consisting of multiple records. The service provides opportunity to apply predefined routing profile completely describing radio network interconnection or dynamically add necessary routes just in several clicks.



Routing Profile – saved configuration of all routing rules specific for the given interconnection schema. Different routing profiles are defined for industry specific requirements for radio communication. For example, it can be general profile, profiles to perform some planned maintenance works, profiles to apply for some known emergency cases.

Route Group – a group of several route records. Route groups are used to provide structured presentation of routing profile. In the routing configuration window groups can be easily activated or deactivated to apply or stop interconnection defined by group route records.

SmartPTT – Dispatch Software for MOTOTRBO™ Professional Digital Two-Way Radio System

### SmartPTT Main Features



Radio Dispatch





Radio Network Bridging



GPS Tracking



Text and Data
Transfer



Monitoring



Events and Voice Logging



Web Client

