Guidelines for setting up subscriber fleet map
for MOTOTRBO Connect Plus multi-site systems

Introduction

There are certain guidelines that should be followed when setting up radios in separate Connect Plus multi-site systems that may be linked together at a later date. These guidelines are related to how the radio fleet map is designed by the System Manager and how the fleet map information is entered in the Connect Plus Network Manager (NM).

The fleet map design guidelines are intended to minimize radio programming and NM updates at the time of linking one or more systems together.

Note: As of October 2010 MOTOTRBO Connect Plus trunking release 1.0 supports up to six (6) RF sites in a multi-site configuration. Additional sites will be supported in future releases.

Guidelines

Basically, radio, talk group, and multi group ID assignment should be looked at as if there was one single system from the beginning. Let's assume as an example that a customer is setting up today two (2) separate systems where all assigned ID's are unique. **System A** (5 RF sites) and **System B** (4 RF sites) and is planning to link all nine (9) sites at a later date to form **System C**.

1) Do not duplicate radio ID's.

Radio ID's should be unique across all systems. For example: if user ID 05 is being used in **System A**, then user ID 05 should not be used in **System B**. This practice will minimize radio programming and NM database updates at the time of linking the systems.

2) Do not duplicate Talk Group ID's

Talk group ID's should be unique across all systems. For example: if talk group ID 01 is being used in **System A**, then talk group ID 01 should not be used in **System B**. This practice will minimize radio programming and NM database updates at the time of linking the systems.

3) Do not duplicate Multi Group ID's.

Multi groups ID's should be unique across the system. Example, if multi group ID 10000 is being used on **System A** then multi group ID 10000 should not be used on **System B.** This practice will minimize radio programming and NM database updates at the time of linking the systems.

One possibility for this 2 system scenario for example, is to use ODD ID's for **System A** and EVEN ID's for **System B**.

4) Site ID's must be unique.

Ensure each site ID is unique after liking both **Systems A and B** together.

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This is how the site ID assignment may look on this example before linking the systems.

System A	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Site ID	1	2	3	4	5	-

System B	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Site ID	1	2	3	4	-	-

This is how the site ID assignment will look after linking the 2 systems.

System C	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9
Site ID	1	2	3	4	5	6	7	8	9

5) Use same Network ID (NID) for all controllers.

Having all controllers in **System A** and **System B** setup with the same NID from the beginning ensures that the XRC 9000 controllers will not need to be updated with the final NID.

Similarly, having all radios with the same NID from the beginning ensures that the radios will not be required to be brought in for reprogramming with the new NID. A new frequency file will have to be sent over-the-air (OTA) in order to let the radios know about the new sites available in the final **System C** configuration.

6) Network Manager user data base.

It is expected that some data base updates will be required when joining **System A** and **System B** together but these could be minimized by following some simple guidelines. **System A** database may be transferred to the new sites coming from **System B** (sites 6, 7, 8, and 9 on this example) as a starting point. Final system database must be updated to reflect all new subscriber and site records.

Example for Radios ID's (same could apply to talk group and multi group ID's):

Initial Setup
Both system data bases are initially independent since **System A** and **System B** are separate systems. ODD ID's are being used for **System A** and EVEN ID's are being used for **System B**.
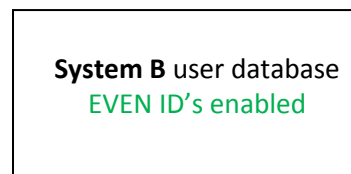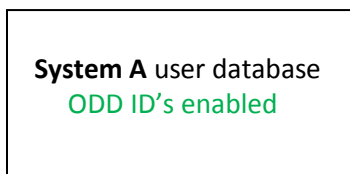
System A user database
ODD ID's enabled

System B user database
EVEN ID's enabled

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<u>Interim Setup</u>
Let's assume **System A** database will be the one used for final configuration of **System C**. In the time prior to linking the 2 systems together, **System A** database can be prepared in advance by creating the EVEN ID's from **System B** but keeping them disabled.

Both system data bases are still independent but now (EVEN) ID's from **System B** exist on **System A** data base although they are disabled.

System A user database ODD ID's enabled EVEN ID's disabled	**System B** user database EVEN ID's enabled

<u>Final Setup</u>
At the time of linking the 2 systems together all EVEN ID's in **System A** database will be enabled and as a result we will have a **System C** database ready.

System A data base now includes all combined ID's required so it can be considered the final **System C** data base.

System C user database ODD ID's enabled EVEN ID's disabled
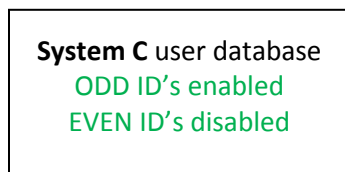
Alternate option for user data base management.

I**f the two (or multiple) systems have different frequencies**, you can use an alternate method of managing both systems by using one system as the main entry point for all user information.

Example, Enter all the users information for BOTH systems on **System A**, make a back up copy of the user database for **System A**. Access the Network Manager for **System B**, restore the user database from **System A** to **System B**. Both systems will now have the complete user database for all users. When the two systems are connected together to form **System C**, the databases will already be common between the two systems.

Note: Although you are using a common data base for both **Systems A and B,** guidelines 1, 2, and 3 still apply: you need to keep every radio, talk group, and multi group ID unique across all systems.