DLP-129

Provision Manual Area Address (MAADDR)

PURPOSE

This procedure describes how to provision the manual area address (MAADDR).

PREREQUISITES

Adhere to the following rules when provisioning the MAADDR on any NE in the network:

1. If possible, place all NEs into a single area where each NE has only one MAADDR and the MAADDR is the same on all NEs. Use default values for MAADDR and ULSDCC provisioning so all NEs are level 1 Intermediate System (IS) NEs. (See Figure 1.)
2. If multiple areas are required, each NE in an area should still have only one MAADDR entry, including the NEs provisioned for level 2 routing. Also NEs in the same area should have the same MAADDR entry.
3. If areas are connected through level 2 IS NEs to create larger networks, MAADDRs on NEs in one area must be different than the MAADDRs on NEs in other areas.
4. To collapse areas to create a single area, make sure that no more than three manual area addresses exist for all NEs in the newly created area. One way to achieve this is to go back to the NEs after the areas are collapsed and delete any unwanted MAADDR entries from the NEs.

GENERAL

There are several different ways to collapse areas. One way to collapse two areas that are linked using two level 2 IS NEs is to determine the MAADDR of an NE in one area and enter that same address on an NE in the other area.
If more than three MAADDR entries exist in a newly created area, some addresses may be dropped by the routing protocols and the user won't be aware of it. Depending on the addresses dropped (which follows an algorithm that is described in ISO 10589) some of the NEs in the network may be isolated from the network. Also, remote connections to and from these NEs may fail. To correct this situation, do the following:

1. Examine MAADDR provisioning on each NE in the area and determine how many different manual area addresses exist in the areas.
2. If there are more than three different addresses in the problem area, delete the excess MAADDRs.

After any MAADDR changes are made, allow 30 minutes for the changes to take effect and for the old information in the network to be eliminated.
Figure 1. Example Telecommunications Management Network

Procedure

1. **CAUTION: Possibility of service interruption. Changing the MAADDR alters the routing behavior of a network and can cause loss of communication between NEs. When changing the MAADDR of any NE in the network, follow the rules that appear in the Prerequisites and also review the information in the General section.**

2. See Figure 2 for a diagram of the Network Service Access Point (NSAP) address format.

3. Starting on the browser context menu, select the following menu items:

   Provision>Network Element>Settings

4. On NE Settings dialog, select NSAP tab.

5. Click on Retrieve.

6. In Address ID select 1.

7. Click on Modify.

8. On Modify NSAP dialog, select In Service from the drop list beside Service State.

9. In the Organization field, enter the Layer 3 Organization Identification part of the NSAP (six hexadecimal digits).

10. In the Area Address field, enter the Layer 3 Routing and Area parts of the NSAP (eight hexadecimal digits - first four hexdigits are Level 2 Routing Domain and second four hexdigits are Level 1 Routing Area).

11. Click on OK.

12. Click on Send, then Close (do not enter Address ID 2 or 3).

13. STOP. This procedure is complete.

Figure 2. Network Service Access Point (NSAP) Format