DLP-022

Use of MTA101 Metallic Test Access Plug-in Unit

PURPOSE

This procedure describes provisions related to using the MTA101 plug-in unit.

Procedure

1. ***WARNING: Possibility of damage to equipment. This equipment contains static-sensitive devices. Refer to DLP-002 for special handling instructions.***

2. **CAUTION: Possibility of service interruption. Use of the MTA101 unit results in traffic loss for any VTG or LDR slots that are carrying traffic.**

3. ***NOTE:*** *The MTA101, 625643-000-001 (see Figure 1), is a passive plug-in unit that provides front access to metallic lines connected to the 1603 SM shelf. By inserting the MTA101 into one of the VTG or LDR slots on the 1603 SM shelf, the DS1 or DS3 circuits wired to that slot can be accessed using the MTA101 front panel mounted test connectors. Figure 2 shows this arrangement.*

NOTE: For DS1, the MTA101 provides dual Bantam style jacks (one for input and one for output connections) - one pair of jacks for each of the four DS1 circuits on the VTG plug-in units. The DS1 test jacks provide direct coupling to the facility pairs for dc continuity testing.
NOTE: For DS3, the MTA101 provides two WECO440 style coaxial connectors (one for input and one for output). The test jacks are AC-coupled to the facility and dc testing is not possible.
Is slot wired for DS1 (VTG) or DS3 (LDR) being tested?
If DS1, go to step 11.
If DS3, go to step 4.
Figure 1. MTA101 Plug-in Unit
Figure 2. MTA101 Application

DS3 Test Connections

1. ***NOTE:*** *Changing the Service State is optional; it prevents alarms from occurring when plug-in units are removed.*

   If LDR units for DS3 port being tested are installed and assigned in-service, change Service State:

   a. Select the following menu items: **Provision>Equipment>LDR**

   b. Select Parameters tab.

   c. Click on Retrieve.

   d. Select LDRs being removed.

   e. Click on Modify.

   f. From Service State drop-down list, select Maintenance.

   g. Click on OK.

   h. Click on Send, then Close.

2. If installed, remove both LDR units (LDR-xA and LDR-xB) for DS3 port being tested.

3. Insert the MTA101 into either LDR slot (LDR-xA or LDR-xB) (both slots are wired to the same facility connections on the backplane).

4. Connect test equipment to DS3 IN and OUT test jacks on MTA101 unit (see Figure 1).

5. When testing is complete, remove MTA101 and reinstall LDR units (if previously installed).

6. If LDRs were placed in maintenance state (step 4), change Service State:

   a. With LDRs selected, click on Modify.

   b. From Service State drop-down list, select In Service.

   c. Click on OK.

   d. Click on Send, then Close.

7. STOP. This procedure is complete.

DS1 Test Connections

1. Is VTG unit equipped and assigned (entered into service)?

   If yes, go to step 12.
   If no, go to step 15.

2. For VTG (drop group and port number) being removed, inhibit switching to protection:

   a. Select the following menu items: **Provision>Equipment>VTG**

   b. Select Allow/Inhibit tab.

   c. Click on Retrieve.

   d. Select VTG to be removed.

   e. Click on Modify.

   f. From Switch to Protection drop-down list, select Inhibit.

   g. Click on OK.

h. Click on Send, then Close.

3. Verify VTG is active (switch if necessary):

    a. Select the following menu items: **Manual Controls>Switching>Equipment**

    b. Select VTG tab.

    c. Click on Retrieve.

    d. If VTG is standby, select unit, select Switch Mode = Release, then click on Send.

    e. With VTG active, click on Close.

4. ***NOTE:*** *Changing the Service State is optional; it prevents alarms from occurring when plug-in units are removed.*

    Change Service State of VTG to Maintenance:

    a. Select the following menu items: **Provision>Equipment>VTG**

    b. Select Parameters tab.

    c. Click on Retrieve.

    d. Select VTG being removed.

    e. Click on Modify.

    f. From Service State drop-down list, select Maintenance.

    g. Click on OK.

h. Click on Send, then Close.

5. If necessary, remove the VTG unit in slot being tested.

6. Insert the MTA101 into the VTG slot.

7. Connect test equipment to Bantam test jacks for DS1 facility being tested.

8. When testing is complete, remove MTA101 and reinstall VTG (if VTG was previously installed).

9. If switching was inhibited (step 12), perform the following:

    a. Select the following menu items: **Provision>Equipment>VTG**

    b. Select Allow/Inhibit tab.

    c. Click on Retrieve.

    d. Select VTG that was inhibited in step 12.

    e. Click on Modify.

    f. From Switch to Protection drop-down list, select Allow.

    g. Click on OK.

    h. Click on Send, then Close.

10. If VTG was placed in maintenance state (step 14), place unit back in service:

    a. On VTG Provisioning screen, select Parameters tab.

b. Click on Retrieve.

c. Select VTG being tested.

d. Click on Modify.

e. From Service State drop-down list, select In Service.

f. Click on OK.

g. Click on Send, then Close.

11. STOP. This procedure is complete.