Chart 14

Add or Delete DS1 Service

PURPOSE

This procedure is used to add or delete DS1 (T1) drop group port to a new or in-service system.

PREREQUISITES

The following conditions must be met before starting this procedure:

- DMI and VTG units for port being placed in-service are equipped.
- User is logged on the NE using 1301 NMX.

GENERAL

Clear any unexpected alarms that occur during these procedures by referring to the 1603 SM Maintenance and Trouble Clearing manual.
Sequential or grouped VT1 and T1 access identifiers (AIDs) are used in this procedure. The AID format used is determined by the provisionable setting of VTFORMAT parameter of the SET-NE-ALL command (*Provision>Network Element>Settings, Parameters tab, VT1.5/DS1 Numbering Mode*). Retrieve common NE conditions to determine which AID format is in effect (*Alarm Surveillance>Current Conditions, Filter=COM*). The condition VTSEQ for sequential or VTGRP for grouped appears in Condition column.

Procedure

1. Do you want to add or delete DS1 service? go to step 2.

To add service, go to step 2.
To delete service, go to step 12.

ASSIGN DS1 (T1) FACILITY

1. ***NOTE:*** *DS1 ports require cross-connections at the VT1 level. VT1 cross-connections are*

made between VT1 paths contained in STS1 paths that are VT-structured (VT payload type). Since STS1 payloads are STS-structured by default, it may be necessary to edit these STS1 paths VT payload type that cross-connections will be made to. The drop group equipped for DS1 ports (DMI/VTG units) is automatically VT-structured and has no STS1 path to be provisioned.

Using site documentation, determine which STS1/VT1 paths will be cross-connected to or from this drop group.

2. If not already provisioned, assign DMI and VTG units:

    a. In the scope pane, right-click [*NE Name*] to display a context menu.

    b. From the context menu, select: **Provision>Equipment>DMI**

    c. Click on Parameters tab button.

    d. Click on Retrieve.

    e. Select DMI units being assigned (hold down the CTRL key to select more than one entity).

    f. Click on Modify.

    g. Click on Defaults.

    h. Select Equipment Type (same as DMI unit installed).

    i. Select Compatibility Code (code associated with installed DMI).

    j. Modify remaining parameters only if defaults are not correct for facility (Service State = In Service).

    k. Click on OK.

    l. Repeat from step 3 e for remaining DMIs that need to be assigned.

m. Click on Send.

n. Click on Close.

3. Assign VTG units:

a. In the scope pane, right-click [*NE Name*] to display a context menu.

b. From the context menu, select: **Provision>Equipment>VTG**

c. Click on Parameters tab button.

d. Click on Retrieve.

e. Select VTG units being assigned (hold down the CTRL key to select more than one entity).

f. Click on Modify.

g. Click on Defaults.

h. Select Equipment Type (same as VTG unit installed).

i. Select Compatibility Code (code associated with installed VTG).

j. Modify remaining parameters only if defaults are not correct for facility (Service State = In Service).

k. Click on OK.

l. Repeat from step 4 e for remaining VTGs that need to be assigned.

m. Click on Send.

n. Click on Close.

4. Do any STS1 paths that are STS-structured need to be VT-structured?

   If yes, go to step 6.
   If no, go to step 7.

5. Terminate STS1 paths and place in service, as required.

   a. In the scope pane, right-click [*NE Name*] to display a context menu.

   b. From the context menu, select: **Provision>Facilities>xxx>STS1**
   where: xxx = OC48, OC12, OC3, or EC1

   c. Click on Payload tab button.

   d. From the Provision xxx STS1 screen, click on Retrieve.

   e. Select the STS1 path(s) to be modified (hold down the CTRL key to select more than one entity).

      NOTE: *If line group is simplex (one HIF), select side associated with equipped HIF. If line group is duplex, select HIFA or HIFB.*

   f. Click on Modify.

   g. Select Service State = In-Service.

   h. Select STS Payload Type = VT.

   i. Click on OK.

   j. Click on Send (wait for command to complete).

k. Click on Parameters tab button.

l. Click on Retrieve.

m. Select the STS1 path(s) to be modified (same STS1 groups selected in step 6 e).

n. Click on Modify.

o. Select Service State = In-Service.

p. Click on OK.

q. Click on Send (wait for command to complete).

r. Click on Close.

ASSIGN DS1 (T1) PORT(S)

1. Have DS1 ports already been assigned (using the 1301 NM wizard, for example)?

   If yes, go to step 10.
   If no, go to step 8.

2. Determine which drop group (1, 2, or 3) and which VT1 path the T1 ports being entered in service are assigned to. Refer to Table A for the T1 port-to-VT1 path assignments.

Table A. DS1 (T1)-to-VT1 Assignment (Sequential and Grouped AID Formats)

	VTG 1				**VTG 2**				**VTG 3**				**VTG 4**				**VTG 5**				**VTG 6**				**VTG 7**			
T. SEQ	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
VT 1.5 SEQ	1	8	15	22	2	9	16	23	3	10	17	24	4	11	18	25	5	12	19	26	6	13	20	27	7	14	21	28
VT 1.5 an	1-1	1-2	1-3	1-4	2-1	2-2	2-3	2-4	3-1	3-2	3-3	3-4	4-1	4-2	4-3	4-4	5-1	5-2	5-3	5-4	6-1	6-2	6-3	6-4	7-1	7-2	7-3	7-4

d T1 gr p																									

1. ***NOTE:*** *Alarms may be reported if signal is not present on facility and the port Primary State is In Service (IS).*

   Assign DS1 ports:

   a. In the scope pane, right-click [*NE Name*] to display a context menu.

   b. From the context menu, select: **Provision>Facilities>DS1>DS1 Facility**

   c. From the Provision DS1 screen, click on Parameters tab button.

   d. Click on Retrieve.

   e. Select DS1 port(s) to be assigned (rows for selected units become highlighted).

   f. Click on Modify.

   g. Click on Defaults.

   h. Select Service State = In Service.

   i. Modify remaining parameters only if defaults are not correct for facility.

   j. Click on OK.

   k. Click on Send.

   l. Click on Close.

2. Retrieve system alarms by performing the following

a. In the scope pane, right-click [*NE Name*] to display a context menu.

b. From the context menu, select: **Alarm Surveillance.**

c. Click on Current Alarms tab button.

d. Click on Retrieve.

e. Clear any alarms that are reported. If any of the following alarms are reported, retrieve and edit the entities to place them in service and clear the alarm:

- EQPTMA (equipment is OOS-MA)
- FACMA (facility is OOS-MA)
- PATHMA (cross-connected path is OOS-MA)
- SYNCMA (NESYNC or BITSSYNC synchronization list is OOS-MA)

3. STOP. This procedure is complete.

DELETE DS1 FACILITY

1. **CAUTION: Possibility of service interruption. This procedure interrupts service and removes provisioning information concerning the DS1 port from the NE database. If service is being disconnected temporarily, the DS1 port, instead, can be edited (placed in the OOS-MA state) to silence alarms until service is restored.**

2. Retrieve VT1.5 cross-connections:

a. In the scope pane, right-click [*NE Name*] to display a context menu.

b. From the context menu, select: **Provisioning>Cross Connects**

c. In the View for T1 Tribs field, select VT to view sequential (VT1.5/DS1 Numbering Mode) AIDs in VT format or select T1 to view sequential AIDs in DS1 format.

NOTE: *This selection does not affect grouped AIDs format.*

d. Click on Retrieve to view cross-connections.

3. If equipped with VSCC101, VSCC30x, or VSCC50x cross-connect units, delete the VT1.5 cross-connections associated with the DS1 ports:

a. From VT1.5 Cross-Connection screen, select cross-connection(s) to be deleted.

b. Click on Delete.

c. Click on Close.

4. Delete the DS1 port(s):

a. In the scope pane, right-click [*NE Name*] to display a context menu.

b. From the context menu, select: **Provision>Facilities>DS1>DS1 Facility**

c. From the Provision DS1 Facility screen, click on Parameters tab button.

d. Click on Retrieve.

e. Select DS1 port(s) to be deleted.

f. Click on Modify.

g. Select Service State = Unassigned.

h. Click on OK.

i. Click on Send.

j. Click on Close.

5. Repeat from step 13 at far-end NE, if necessary.

6. ***NOTE:*** *The DS1 signal can now be removed from the DS1 ports without generating any near-end alarms.*

   Do you want to delete DMI and VTG equipment?
   If yes, go to step 18
   If no, STOP. This procedure is complete.

7. **CAUTION: Possibility of service interruption. The VTG plug-in unit provides service for four DS1 low speed ports. The VTG should only be removed if all four DS1 ports are removed from service. Also, equipped VTG plug-ins provide the protection switch path to the protection VTG plug-in (VTG-P) for all higher numbered VTG slots in the same drop group. If the VTG-P plug-in is equipped (i. e. , 1:3 DS1 protection is provided), do not (permanently) remove any VTG plug-in if any higher numbered VTG slots are equipped in the same drop group.**

8. Delete the VTG unit:

   a. In the scope pane, right-click [*NE Name*] to display a context menu.

   b. From the context menu, select: **Provision>Equipment>VTG**

   c. From the Provision VTG screen, click on Parameters tab button.

   d. Click on Retrieve.

   e. Select VTG units to be deleted.

   f. Click on Modify.

g. Select Service State = Unassigned.

h. Click on OK.

i. Click on Send.

j. Click on Close.

9. **CAUTION: Possibility of service interruption. All VTGs and supported DS1 ports in drop group must be deleted before both DMIs can be deleted.**

10. Remove the VTG plug-in.

11. To delete the DMI units, perform the following:

    a. In the scope pane, right-click [*NE Name*] to display a context menu.

    b. From the context menu, select: **Provision>Equipment>DMI**

    c. From the Provision DMI screen, click on Parameters tab button.

    d. Click on Retrieve.

    e. Select DMI units to be deleted.

    f. Click on Modify.

    g. Select Service State = Unassigned.

    h. Click on OK.

    i. Click on Send.

j. Click on Close.

12. Remove the DMI plug-in.

13. STOP. This procedure is complete.