

# AnyMedia® Access System: System Software Release Description Release 1.2.3.0 Issue 1

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## **1. Overview**

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The purpose of this document is to provide information about the *AnyMedia Access System Software Release 1.2.3.0*. For more detailed information on the *AnyMedia Access System* see the *AnyMedia Access System Application, Planning, and Ordering Guide*, 363-211-101; the *AnyMedia Access System COT Feature Supplement*, 363-211-128; the *AnyMedia Access System Installation Manual*, 363-211-102; and the *AnyMedia Access System Commands and Procedures CD-ROM*, 363-211-103. These documents may be purchased by calling 888-LUCENT8.

This document contains the following sections:

- Features of the *AnyMedia Access System Software Release 1.2.3.0*
- System Notes—Information about R1.2.3.0 system.
- Operating Issues—Exceptions in Release 1.2.3.0 to the operating procedures that are documented in the customer documentation.
- System Configuration—Identifies the hardware version for Release 1.2.3.0.
- R1.2.2.0 to R1.2.3.0 System Conversion Procedures—Procedure for converting R1.2.2.0 COMDACs to R1.2.3.0 COMDACs.
- Turn-Up Procedure—Recommended steps to turn-up a R1.2.3.0 *AnyMedia Access System* for the first time.
- Operational and Maintenance Procedures—Procedures that will be useful during the operation and maintenance of Release 1.2.3.0.
- Glossary—A list of acronyms and their definitions.

## **2. Features**

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The following features are being delivered in this Central Office Terminal (COT) release when it is connected to a compatible Remote Terminal (RT).

### **2.1. Services**

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The following services are available:

- 2-wire loop-start POTS
- 2-wire ground-start
- Dial tone first COIN
- 2-wire Transmission Only (TO)
- 2-wire Foreign Exchange Station (FXS)
- DID 2-wire loop reverse battery (2RVO)
- DID DPO - Dial Pulse Originating
- P-Phone

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- 4-wire Foreign Exchange Station (FXS)
- 4-wire Duplex (DX)
- 4-wire Transmit Only (TO)
- 4-wire Equalized Transmission Only (ETO)
- 4-wire Foreign Exchange, Office End (FXO)
- 4-wire Tandem (TDM)
- 4-wire E&M (E&M)
- 2-wire Foreign Exchange, Office End (FXO)
- Pulse-Link Repeater, 4-wire (PLR)
- Dataport OCUDP
- Private Line, 2-wire point-to-point Manual Ringdown
- Private Line point-to-point Automatic Ring, 2-wire PLAR
- Switched 56 kbps, 4-wire, Uses DDS Network
- DC Alarms
- DC Bypass Pair
- ISDN BRITE

## **2.2. External Interfaces**

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- 20 INA Interfaces
  - SF and ESF Framing
- 20 TR-08 Virtual Banks
- Timing via
  - External BITS clock
  - External DS1
  - Internal free-running mode
  - DS1 loop-timed mode

## **2.3. Operations Interfaces**

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- CIT
  - RS-232 Interface supports TL1 ASCII interface
- Graphical Systems Interface (GSI) - GSI Release 2.0.0
  - Access to all TL1 messages both graphically and via command-line input
  - Graphical view of equipage

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- Alarm display
- Backup/Restore of Database
- TL1 System Interface (TL1SI) screen for command-line TL1 input
- LEDs at GSI synchronized with LEDs on circuit packs
- LAN (10BaseT with TCP/IP stack)
  - TL1
  - Telnet
  - FTP
- Remote Operations Channel (ROC)
  - TL1
  - Telnet
  - FTP

## **2.4. OAM&P Capabilities**

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- Alarms
  - Available via TR-08 datalink
  - Available via TL1 - autonomously and on-demand
  - Closures for Central Office, visual, audible and telemetry alarms
  - Summary LED on the *FAST* shelf Fuse Control Module<sup>1</sup>
  - Central Office alarms via Alarm Test Unit (ATU)
  - Programmable relay output closures for visual, audible and telemetry alarms via Alarm Test Unit (ATU)
  - Two (2) miscellaneous alarm (OFC1, OFC2) output closures
- Testing
  - TR-08 Pair Gain Test Controller (PGTC) Channel and Drop Testing
  - On-demand local Drop Test of AP drops
- Configuration Management
  - Database Backup via FTP
  - Database Restore via FTP

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1. *Requires AnyMedia FAST Shelf (J1C282AB-1 or J1C282AC-1)*

- Software Download via FTP
- User-provisionable IP Address
- User-provisionable synchronization source
- User-provisionable alarm severity
- Automatic inventory reporting
- Multiple user security levels (privileged, general, and reports-only)
- Maintenance
  - COMDAC Protection Switching
  - IODS1 Pack Protection Switching
  - DS1 Loopbacks
  - DS1 Performance Monitoring
  - Per-channel trunk processing
- AnyMedia COT to AnyMedia RT remote login capability. (This capability requires the COT system to be connected to a R1.2.2.5.0 *AnyMedia* RT release)
  - Remote RT communications via Universal Communication Channel (UCC)

### **3. System Notes**

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This section contains information about the R1.2.3.0 system.

#### **1. General**

- The R1.2.3.0 system when connected to a compatible, TR08 and/or INA, RT system supports:
  - POTS, SPOTS and COIN via the LPA150 application pack.
  - DID PBX CO trunk (2RVO) via the LPA350 or LPA380 application pack.
  - Special services via channel units in the MDS2 shelf. (Channel units are listed in section 5 of this document)
- Supports a maximum of 480 DS0(s)

#### **2. R1.2.3.0 AnyMedia COT release compatibility with AnyMedia RT releases.**

- AnyMedia RT release R1.2.2.0, R1.2.2.2 and R1.2.2.5.0 is compatible with this COT release.
- ISDN BRITE service requires a R1.2.2.5.0 AnyMedia RT release.
- COT to RT remote communications via UCC requires a R1.2.2.5.0 AnyMedia RT release.

#### **3. R2.0.0 GSI**

- The GSI Release 2.0.0 is compatible with software AnyMedia releases: R1.2.2.0, R1.2.2.2, R1.2.2.5.0, R1.7.0 and R1.2.3.0.
- The GSI Release 2.0.0 provides script files for provisioning COT and RT systems for various configurations.

#### **4. ATU remote channel and drop testing.**

- Up to 6ATU(s) may be daisy chained for remote channel and drop testing.

#### **5. Modem settings for modem connected to the CIT**

- The GSI supports external modems only.
- When using a modem to connect to the CIT, the US Robotics Sportster modem is recommended for connection to the CTU. In addition to the modem, a null modem and a 25 pin to 9 pin adapter is required.
- The modem connected to the CTU must be set up as follows:
  - Baud=19200
  - Parity=N
  - Wordlen=8
  - DIAL=TONE
  - ON HOOK
  - IGNORE RTS

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- Auto Answer
- Suppress Results  
(Do not provision the modem to suppress results until all other provisioning is completed.)

**6. Virtual Circuit port numbers:**

The system's virtual circuits supports RAW TCP/IP and TELNET protocol:

- For TELNET protocol use port numbers: vc-1=11001 vc-2=11003, vc-3=11005, vc-4=11007
- For RAW TCP/IP use port numbers: vc-1=11002, vc-2=11004, vc-3=11006, vc-4=11008

**7. LAN Connections time-outs**

For security purposes all LAN connections are on a 15 minute inactivity timer that will log the user off if no command is entered for 15 minutes. This only applies to Privileged and General users, not to Report-Only users

**8. Periodic CORE (COMDAC) switching**

The system performs a periodic COMDAC switch every 7 days. The switch interval can be changed with the TL1 command SCHED-EX.

## **4. Operating Issues**

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This section lists information pertaining to recognized operating issues in Release 1.2.3.0:

**1. TL1 COMMANDS**

**A. Operating Issue:**

RTRV-PM and INIT-REG are not available with the AID=ALL or XXX-ALL.

**Action Needed:**

Retrieve the parameters using individual AIDS (e.g., RTRV-PM::ds1-1-2-1:00000::ESP,,,,1::).

**B. Operating Issue:**

The commands: OPR-LPBK, RLS-LPBK, ED-T1 and RTRV-T1 are not available by logical DS1 entity (i.e. v8fdr-(1-20)-(a-d), ina-(1-20)).

**Action Needed:**

Execute the commands using the physical DS1 entity (i.e., DS1-(1-5)-(1-4)).

**2. ALARMS**

**A. Operating Issue:**

Transient fail/clear messages and/or transient T0 out-of-service/in-service messages may occur while a pack is initializing after its insertion.

**Action Needed:**

No action needed. These will clear after pack initialization is complete.

**B. Operating Issue:**

MDS2 alarms may take up to 2 minutes to appear and clear.

**Action Needed:**

Wait 2 minutes before responding to any MDS2 shelf related alarms.

**3. R2.0.0 GSI**

**A. Operating Issue:**

The R2.0 GSI may not install or run properly on some PC's running Windows NT or Windows 98.

**Action Needed:**

If error pertains to a ".DLL" file perform a manual registration of the ".DLL" file.

Click on the windows "Start" button and then select Run ==> Run....

In the Run window enter the following:

==> regsvr32 "<file name.dll>"

then select the OK button.

If this fails try again but with the following:

==> regsvr32 "\Program Files\Lucent Technologies\AnyMedia\Gsi-r2.0.0\<file name.dll>"

then select the OK button.

Possible problem files are "LsSnmp2.dll" and "Msstdfmt.dll".

**B. Operating Issue:**

The R2.0.0 GSI does not support AFM software release R1.1.2.

**Action Needed:**

Use the R2-13 Data GSI with AFM software release R1.1.2.

**4. TEST ACCESS**

**A. Operating Issue:**

Bridging (CONN-TACC-DROP) on to drops in the MDS2 shelf is not supported.

If performed service on the drop will be interrupted. Service will be restored once bridging is removed (DISC-TACC-DROP)

**Action Needed:**

Do not perform bridging on drops in the MDS2 shelf.

**5. SYSTEM CLOCK**

**A. Operating Issue:**

The system clock (date and time) is accurate to +/- 10 seconds per day.

**Action Needed:**

If an accurate system clock is required, periodically set the system clock using the TL1 command, ED-DAT.

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## 6. ISDN BRITE Channel Unit - TELTRENDAUA293I2

### A. Operating Issue:

If the TELTRENDAUA293I2 channel unit resets, (i.e: channel unit removal and re-insertion, MDS2 shelf reset) service may not recover.

#### Action Needed:

Remove and re-insert channel unit until service recovers.

### B. Operating Issue:

The switch command, TST:DSL,MSMCH,DN=(subscriber number), to perform an ISDN BRITE loopback test on the TELTRENDAUA293I2 channel unit will put the lines out-of-service and requires the channel unit to be reset to recover service.

#### Action Needed:

If ISDN BRITE testing is required use the switch command, TST:DS1:{auto,ds or crc}, instead. If the command TST:DSL,MSMCH,DN=(subscriber number) is used the channel unit must be removal and re-insertion until service is restored.

### C. Operating Issue:

TELTRENDAUA293I2 inventory is not available.

#### Action Needed:

Ignore inventory. GSI displays pack as AUAXX.

## 5. System Configuration

- A. GSI Version 2.0.0 is required for use with Release 1.2.3.0 software. For more details, see the *AnyMedia* Access System COT Feature Supplement, 363-211-128.
- B. This following table identifies the *AnyMedia* circuit packs that are compatible with Release 1.2.3.0.

Type	Model	Description/Comments
COMDAC	COM101	Controller Pack (Core)
CTU	DTP101	Craft Test Unit
IODS1	FAC100	DS1 Feeder Pack Supports 4 DS1 feeders
PRCOIN_CS	LPA150	Application Pack All 32 lines support POTS and SPOTS like service First 16 lines also supports COIN
PROG32	LPA380	General Purpose Application Pack In COT applications supports 32 DID PBX CO trunk (2RVO) lines
COIN	LPA350	COIN Application Pack In COT applications supports 32 DID PBX CO trunk (2RVO) lines
MDSU	MSU100	Metallic Distribution Server Unit
MSC	MSC100	Metallic Server Controller
PTU	BDJ200	Power Test Unit

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Type	Model	Description/Comments
CU	AUA41B AUA45B AUA75 MCU5205 MCU5405 SPQ328 SPQ334 SPQ442 SPQ443 SPQ452 SPQ454 SPQ444 TELTREND AUA293I2	Channel Units

## **6. R1.2.2.0 to R1.2.3.0 COMDAC Conversion Procedure**

The COMDAC(s) from the factory are pre-loaded with the R1.2.2.0 AOS-NB not the R1.2.3.0 AOS-NB. The following procedure will convert two R1.2.2.0 COMDACs to R1.2.3.0 COMDACs. This procedure is an out-of-service procedure and takes approximately **2.5 hours** to complete.

### **Required assets:**

- Installed, powered *FAST* shelf
- CTU DTP101
- RS-232 Cable
- Two (2) factory COM101 COMDAC(s)
- PC loaded with *AnyMedia Access System R2.0 GSI (GSI-NB)*
- CD ROM containing R1.2.3.0 AOS-NB software

### **1. Boot Download of COMDAC (Loading AOS-NB onto COMDACs)**

#### **⇒ NOTE:**

If any steps from **a** to **s** fail, begin again at step **a**.

- a. If already installed, remove both COMDACs from the system
- b. If not already in place, install the CTU (DTP101) as follows:
  - Plug the DTP101 pack into the slot marked CTU.
  - Verify all CTU LEDs light momentarily on pack insertion.
  - Verify all CTU LEDs extinguish within 10 seconds.
- c. Connect the GSI to system as follows:
  - Turn on PC.
  - Connect a RS-232 cable between the GSI PC serial port com1 and the CTU serial port CIT.
  - Start GSI software. This will take about 30 seconds.
- d. Select BOOT download on GSI as follows:
  - From menu bar select `NE OPERATIONS ==> COMDAC BOOT DOWNLOAD`
  - Select `YES` when asked to confirm command.
  - In the `COMMUNICATIONS` window select the `COMDAC` tab and verify the following parameter settings; if settings are not correct, change settings:
    - `SELECT LINK = COM1`
    - `SETTINGS = (Maximum Speed=115200, Modem=not checked, Keep Alive=checked)`
  - After parameters have been verified to be correct, select the `CONNECT` button

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— Observe in the TL1SI window the following message:  
“To Start the Boot Download Operation, You Must Reset the COMDAC on Side 1 Now”.

- e. Insert one of the COMDACs into COM-1 (side 1).
- f. After inserting the COMDAC, wait approximately 3 minutes for the following menu selection to appear on the TL1SI view window:

```
d download
q quit
~ soft reset
! hard reset
? print menu
```

- g. At the `boot>` prompt enter: `d`
- h. The GSI will open a browser window. Go to the CD drive, highlight the file “`NVPSloader_044.dld`” and select `Open.\`
- i. After the selection the TL1SI window will display:

```
Start Time :.....
DATA TRANSFER IN PROGRESS...
```

- j. Wait for data transfer to complete. This operation should take about 10 seconds.
- k. Another menu will then appear.

```
d download
l erase ALL Local NVDS DATA
m erase Local NVDS skipping diagnostic results sectors
n erase Local NVDS diagnostic sectors only
q quit
? print menu
```

- l. At the `loader>` prompt enter (lower case L): `l`
- m. Wait for erase to complete. This operation will take approximately 2 minutes.
- n. When the erase is complete, the last menu will re-appear.
- o. At the `loader>` prompt now enter: `d`
- p. The GSI will open a browser window. Go to the CD drive and select the file “`aos_nb_r1230.dld`”
- q. The following message should appear on the GSI TL1SI View window.

```
Start Time :...
DATA TRANSFER IN PROGRESS...
```

- r. Wait for data transfer to complete. This operation takes about **90minutes** to complete. The GSI will display the progress of the download.

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- s. After you get the DATA TRANSFER COMPLETED! message.  
Disconnect the GSI:
- From menu bar select NE OPERATIONS ==> CONNECT/DISCONNECT
  - In the COMMUNICATION window select the COMDAC TAB and then select the DISCONNECT button
- t. Wait 5 minutes for the COMDAC to initialize.
- u. Log into system as follows:
- From menu bar select OPERATIONS ==> CONNECT/DISCONNECT
  - In the COMMUNICATIONS window select the COMDAC tab and verify the following parameter settings; if settings are not correct, change settings:
    - SELECT LINK = COM1
    - SETTINGS = (Maximum Speed=115200, Modem=not checked, Keep Alive=checked)
  - In the USER ID box enter the following user id: LUCENT01
  - In the PASSWORD box enter the following password: UI-PSWD-01
  - After parameters have been verified to be correct, select the CONNECT button.
  - You are now logged into the system and ready for command input.
- v. Verify System Software Version on COMDAC is R1.2.3.0 by retrieving system software version as follows:
- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> RTRV ==> EQPT
  - In the RTRV-EQPT window select:
    - Entity = COMDAC
    - P1 {shelf} = 1
    - P2 {slot} = 1
  - Select the EXECUTE button.
  - Observe on the TL1SI VIEW window that the COMDAC inventory has PVERSN = 1.2.3.0
- w. Insert the second COMDAC into COM-2 (side 2)
- Verify all LEDs light momentarily on pack insertion.
  - Wait at least 15 minutes and verify that all COMDAC LEDs go OFF. During this time the system is copying data memory from the active COMDAC to the standby COMDAC. The standby COMDAC Fault LED will blink during the copy. Do not enter any commands or remove and replace any packs until blinking has stopped.
- x. After the standby COMDAC Fault LED has stopped blinking, execute the CPY-MEM command as follows:

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- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> CPY ==> MEM
  - In the CPY-MEM window select the EXECUTE button.
  - GSI will ask you to confirm command.
  - Select the YES button.
  - The standby COMDAC Fault LED will start blinking now. During this time the system is copying the R1.2.3.0 software from the active COMDAC to the standby COMDAC. The standby COMDAC Fault LED will blink during the copy. This operation will take about **60 minutes**. Do not enter any commands or remove and replace packs until blinking has stopped.
- y. After the standby COMDAC Fault LED has stopped blinking verify System Software Version on the standby COMDAC is R1.2.3.0 by retrieving system software version:
- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> RTRV ==> EQPT
  - In the RTRV-EQPT window select:
    - Entity = COMDAC
    - P1 {shelf} = 1
    - P2 {slot} = 2
  - Select the EXECUTE button.
  - Observe on the TL1SI VIEW window that the COMDAC inventory has PVRSN = 1.2.3.0.
- z. Procedure complete.

 **NOTE:**

To upgrade an additional COMDAC to the R1.2.3.0 AOS-NB, install the COMDAC in the standby COMDAC position. Go to step **w**. Repeat as necessary.

## 7. Turn-Up Procedure

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This section describes the steps to turn up a system.



**CAUTION:**

*Failure to follow the procedures section may adversely affect or degrade system performance.*



**CAUTION:**

*When removing or inserting a pack always wait 15 seconds before removing or inserting the same or another pack.*

### 1. Install ACTIVE COMDAC (COM101)

- a. Plug COMDAC pack into slot marked COM-1
  - Verify that all COMDAC LEDs light momentarily on pack insertion.
  - Wait at least 15 minutes for COMDAC to complete its initialization.
    - The COMDAC FAULT LED will blink during initialization.
    - Ignore all other COMDAC LEDs while the COMDAC is initializing.
    - The ACTIVE LED will light when initialization has completed
  - After the COMDAC ACTIVE LED comes ON verify its FAULT LED is OFF.
  - Disregard all other COMDAC LEDs.

### 2. Install CTU (DTP101)

- a. Plug the DTP101 pack into the slot marked CTU.
  - Verify all CTU LEDs light momentarily on pack insertion.
  - Verify all CTU LEDs go OFF within 10 seconds.
- b. Perform LED TEST to determine if COMDAC and CTU are communicating properly.
  - Press LED TEST button located on the CTU pack.
  - Verify that all LEDs on all packs light for a few seconds.

### 3. Connecting R2.0.0 GSI to system (assuming R2.0.0 GSI software already loaded onto PC)

- a. Turn on PC.
- b. Connect an RS-232 cable between the GSI PC serial port com1 and the CTU serial port CIT.
- c. Start-up GSI software. This will take about 30 seconds.
- d. Log into system:

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- From menu bar select NE OPERATIONS ==> CONNECT/DISCONNECT
- In the COMMUNICATIONS window select the COMDAC tab and verify the following parameter settings; if settings are not correct, change settings:
  - SELECT LINK = COM1
  - SETTINGS = (Maximum Speed=9600, Modem=not checked, Keep Alive=checked)
- In the USER ID box enter the following user id: LUCENT01
- In the PASSWORD box enter the following password: UI-PSWD-01
- After parameters have been verified to be correct, select CONNECT.
- You are now logged into the system and ready for command input.

#### 4. Initializing system to default state (Clearing data memory)

a. Execute INIT-SYS command:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> INIT ==> SYS
- In the INIT-SYS window select the EXECUTE button.
- GSI will ask you to confirm command twice.
- The INIT-SYS command will log you out of the GSI and then ask you if you wish to log back-in. The FAULT LED will blink while the COMDAC is initializing. Wait for the FAULT LED to stop blinking before logging back into the system.

#### 5. Verify System Software Version on COMDAC is R1.2.3.0

To retrieve system software version, retrieve inventory of the COMDAC:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> RTRV ==> EQPT
- In the RTRV-EQPT window select:
  - Entity = COMDAC
  - P1 {shelf} =1
  - P2 {slot} =1
- Select the EXECUTE button.
- Observe on the TL1SI VIEW window that the COMDAC inventory has PVERSN = 1.2.3.0. If not replace COMDAC and start from step 1 again.

#### 6. Setting system ID (SID) (Optional)

To set the system ID:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SET ==> SID
- In the SET-SID window enter the site id specified in the Work Order.
- Select the EXECUTE button.

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- Select YES when asked to confirm command.
- Observe on the TL1SI VIEW window that the system ID entered is displayed.

#### **7. Setting system date and time (Optional)**

To set the system data and time:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> DAT
- In the ED-DAT window the enter the desired date and time. The default display is the PC's date and time setting.
- Select the EXECUTE button.
- Select YES when asked to confirm command.
- Observe on the TL1SI VIEW window that the date and time entered are displayed.

#### **8. Setting system IP address and Router (Optional)**

To set the system IP address:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SET ==> IP
- In the SET-IP window enter the IP parameters specified in the Work Order.
- Select the EXECUTE button.
- Select YES when asked to confirm command.
- Observe on the TL1SI VIEW window that the parameters entered is displayed.

To set the system Router:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ENT ==> ROUTE
- In the SET-ROUTE window enter the parameters specified in the Work Order.
- Select the EXECUTE button.
- Select YES when asked to confirm command.
- Observe on the TL1SI VIEW window that the parameters entered is displayed.

#### **9. Setting OS Application Context ID Map (OSACMAP): map logical port to a virtual circuit (Optional) (default: none mapped)**

To set the system OS Application Context ID Map:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ENT ==> OSACMAP
- In the ENT-OSACMAP window select specified in the Work Order:
  - ACID: (logical ports) TL1MAINTENCE, TL1MEMORYADMIN, TL1TEST, TL1OTHER
  - SNPA: (virtual circuits) vc-1,vc-2, vc-3,vc-4
- Select the EXECUTE button.

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— Observe on the TL1SI VIEW window that the OSAC MAP entered is displayed.

**10. Setting the Message Mapping (MSGMAP): allow/disable which messages to be sent to what ports (Optional)**  
(default: All MSGTYPES on all ports are ENABLED except for MSGTYPE=LED is DISABLED on EOC, TL1MAINTENCE, TL1MEMORYADMIN, TL1TEST, TL1OTHER)

— From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ENT ==> MSGMAP

— In the ENT-MSGMAP window select:

— INTID:

— (physical ports) CIT, EOC, TELNET-1, TELNET-2,

— (logical ports) TL1MAINTENCE, TL1MEMORYADMIN, TL1TEST, TL1OTHER

— MSGTYPE: ALL, ENV, SESSION, ALM, EVT, SW, DBCHG, LED, TCA

— ACTION: ENABLED, DISABLED

— Select the EXECUTE button.

— Observe on the TL1SI VIEW window that the MSGMAP entered is displayed.

**11. Install IODS1 (FAC100) packs**

a. Plug each IODS1 pack in one at a time into the FAC slot specified in Work Order. Do not plug in the IODS1 protection pack at this time.

— Verify that all IODS1 LEDs light momentarily on pack insertion.

— Wait 10 seconds and verify the pack's ACTIVE LED goes ON.

— Verify that all the other LEDs on the IODS1 pack are OFF.

b. Repeat step a. until all IODS1 packs specified in the Work Order are plugged in.

**12. Configuring system w/ or w/o IODS1 protection as specified in Work Order (default is w/protection)**

a. For operation w/ protection insert a IODS1 pack (FAC100) into slot marked FAC-P.

— Verify that all IODS1 LEDs light momentarily on pack insertion.

— Wait 10 seconds and verify that the protection IODS1 pack's LEDs go OFF, including ACTIVE LED.

b. For w/o protection operation execute the ED-CONFIG command to re-configure system.

— From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> CONFIG

— In the ED-CONFIG window select: IODS1p-1 and NR (not required)

— Select the EXECUTE button.

— Select YES when asked to confirm command.

**13. Setting system sync clock (defaults is EXT64/composite clock) (Optional)**

- a. To set the system sync clock to free-running:
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SET ==> SYNCN
  - In the SET-SYNCN window.
    - FRNG (Free running).
  - Select YES when asked to confirm command.
  - Observe on the TL1SI VIEW window that the sync sources entered are displayed.
- b. To set the system sync clock to loop-timed on a DS1:
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SET ==> SYNCN
  - In the SET-SYNCN window, select the parameters specified in the Work Order.
    - LPD (looped time).
    - Select a LPPRI (primary) and LPSEC (secondary) sync source.
  - Select YES when asked to confirm command.
  - Observe on the TL1SI VIEW window that the sync sources entered are displayed.
- c. To set the system sync clock to time on an external source:
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SET ==> SYNCN
  - In the SET-SYNCN window, select the parameters specified in the Work Order.
    - EXT1544 (DS1) or EXT64 (composite clock).
      - If EXT1544 is selected also set the LINECDE and FMT as specified in the Work Order.
  - Select YES when asked to confirm command.
  - Observe on the TL1SI VIEW window that the sync sources entered are displayed.

**14. Installation of AP packs (PRCOIN\_CS:LPA150 / PROG32:LPA380 / COIN:LPA350)**

- a. Locate the AP slot specified in Work Order. Do not plug in the MDSU pack at this time.
- b. Remove the tip/ring cable from cable holder panel and remove the cable holder panel.
- c. Plug in the appropriate AP pack type into the AP slot.
  - Verify on pack insertion all AP LEDs light momentarily.
  - Wait at least 1 min and verify that all AP LEDs go OFF.
- d. Connect tip/ring cable to the AP pack.
- e. Repeat steps a–d until all AP packs specified in the Work Order are plugged in.

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**15. Check FAST shelf packs for faults**

- a. Verify that no FAULT LEDs are lit.
  - The COMDAC CR and NE alarm LEDs will be lit if the system is 'free running' due to lack of input clock.
- b. Perform LED TEST to determine if COMDAC, CTU, AP and IODS1 packs are communicating properly.
  - Press LED TEST button located on the CTU pack.
  - Observe all LEDs on all pack light for 10 seconds.
- c. For packs that fail step a or b:
  - Remove them, wait 15 seconds before re-inserting them.
  - Repeat step a. and b.
  - Replace the packs if the faults do not clear.

**16. If system is NOT to be configured with MDS2 shelf skip to step 22, else continue.**

**17. Installation of MDSU AP packs (MSU100)**

- a. Locate AP slot specified in Work Order. If the MDSUs are to be placed in slots other than the default slots of AP-14 and AP-15, the SET-MDS2 command must be executed.
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SET ==> MDS2
  - In the SET-MDS2 window, select the leftmost MDSU AP slot specified in the Work Order.
  - Select the EXECUTE button.

**⇒ NOTE:**

If at any time it becomes necessary to perform an INIT-SYS on the system and the MDSUs are NOT in the default slots of AP-14 and AP-15, remove the MDSUs from the FAST shelf before using the SET-MDS2 command.

- b. Plug the MDSU AP pack into the AP slot.
  - Verify that the MDSU FAULT LEDs light momentarily on pack insertion.
  - Wait 10 seconds and verify that the MDSU FAULT LED goes OFF.
  - The MDSU LINK LED will be ON because communication with the MDS2 shelf has not been established yet.
- c. Connect the appropriate MDS2 cable to the MDSU pack.
  - The cable marked MDSU-1 should be connected to the MDSU in the AP slot specified in the SET-MDS2 command.

- d. Repeat steps b–c if the two MDSU packs are specified in the Work Order. The second MDSU circuit pack must be installed in the slot immediately to the right of the first MDSU.

- Connect the cable marked MDSU-2 to the second MDSU.

**18. Installation of MSC packs into MDS2 shelf (MSC100)**

- a. On the Work Order, determine the slot (MSC-1 or MSC-2) for the MSC100.
- b. Plug the MSC pack into the MSC slot (MSC-1 controls CU slots 1-12. MSC-2 controls slots 13-24).
  - No LED will light.
- c. Repeat steps a–b if a second MSC pack is specified in the Work Order.

**19. Installation of PTU packs into MDS2 shelf (BDJ200)**

- a. On the Work Order, determine the slot (PTU-1 or PTU-2) for the PTU BDJ200.
- b. Plug the PTU pack into the PTU slot (PTU-1 supports CU slots 1-12. PTU-2 supports slots 13-24).
  - Verify on pack insertion the PTU FAULT LED and both MSC LEDs light momentarily.
  - Wait at least 20 seconds and verify that all LEDs on both the PTU and MSC are OFF.
  - Verify the MDSU LINK LED goes OFF.
- c. Repeat steps a–b if a second PTU pack is specified in the Work Order.

**20. Check FAST and MDS2 packs for faults**

- a. Verify all packs have their FAULT LEDs OFF.
  - The COMDAC CR and NE alarm LEDs will be lit if the system is ‘free running’ due to lack of input clock.
- b. Perform LED TEST to determine if COMDAC, CTU, AP, IODS1, MDSU, MSC and PTU packs are communicating properly.
  - Press LED TEST button located on the CTU pack.
  - Observe all LEDs on all pack on the FAST and MDS2 shelf light for 10 seconds.
  - Press LED TEST button located on the MDS2 shelf.
  - Verify that all LEDs on all packs on the FAST and MDS2 shelf light for 10 seconds.
- c. For packs that fail step a or b:
  - Remove them; wait 15 seconds before re-inserting them.
  - Repeat steps a. and b.
  - If they still fail, replace pack.

**21. Installation of CU packs into MDS2 shelf**

- a. Locate the CU slot specified in Work Order.
- b. Plug the appropriate CU pack type into the CU slot.

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- Ignore LED status.

- c. Repeat steps a–b if more CU packs are specified in the Work Order.

## 22. Provisioning the system for service (method defined in Work Order)

- a. If the Work Order specifies using one of the GSI default provisioning script files:

- From menu bar select PROVISIONING ==> SYSTEM TURNUP ==>TELEPHONY ==> DEFAULT CONFIGURATION SCRIPTS

- In the OPEN COT DEFAULT PROVISIONING FILE window select the file specified in Work Order then select the OPEN button.

- Select YES when asked to confirm.

- In the SCRIPT COMMAND window, select the RUN button to start execution of script.

- Each command will be highlighted as they are executed.

- b. If the Work Order specifies provisioning from a file using the GSI script mode capability:

- From menu bar select FILE ==> SCRIPTING ==> RUN

- In the FILE window select the file specified in Work Order then select the OPEN button.

- In the SCRIPT COMMAND window, select the RUN button to start execution of script.

- Each command will be highlighted as they are executed.

- c. If the Work Order specifies using one of the systems default VRT configurations:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> VEQPT

- In the ED-VEQPT window select the VCFG parameters specified in the Work Order.

- VCFG (VRT configuration):

- vcfg-2: five (5) TR-08 VRTs: 20 T1 and 480 T0 cross connections.

- Select the EXECUTE button.

- This command takes approximately 10 minutes to complete. Wait for COMPLD message to appear on TL1SI VIEW window.

- d. If the Work Order specifies use of individual provisioning commands:

- If the Work Order specifies to create a T1 cross-connect use the command ENT-CRS-T1:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ENT ==> CRS-T1

- In the ENT-CRS-T1 window select the parameters specified in the Work Order.

- For PHYSICAL AID parameters are:

- ENTITY (IODS1 pack): DS1

- P1 (shelf number): 1

- P2 (IODS1 pack number): 1-5

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- P3 (IODS1 pack feeder number): 1-4
- For LOGICAL AID parameters are:
  - ENTITY (feeder type: INA, TR-08): ina, v8fdr
  - P1 (VRT or Virtual Bank number): 1-20 (ina), 1-20 (v8fdr)
  - P2 (applies for ENTITY=v8fdr: feeder number): 1-4 (v8fdr)
- Select the EXECUTE button.
- Repeat for all ENT-CRS-T1s specified in Work Order.
- If the Work Order specifies to create a T0 use the command ENT-T0:
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ENT ==> T0
  - In the ENT-T0 window select the parameters specified in the Work Order.
    - For LOGICAL AID parameters are:
      - ENTITY (line type: INA, TR-08): inads0, v8dp
      - P1 (VRT or Virtual Bank number): 1-20 (inads0), 1-20 (v8dp)
      - P2 (CRV number):1-24 (inads0), 1-96 (v8dp)
  - Select the EXECUTE button.
  - Repeat for all ENT-T0s specified in Work Order.
- If the Work Order specifies to create a T0 cross-connect using the command ENT-CRS-T0:
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ENT ==> CRS-T0  
In the ENT-CRS-T0 window select the parameters specified in the Work Order.
    - For LOGICAL AID parameters are:
      - ENTITY (line type: INA, TR-08): inads0, v8dp
      - P1 (VRT or Virtual Bank number): 1-20 (inads0), 1-20 (v8dp)
      - P2 (CRV number):1-24 (inads0), 1-96 (v8dp)
    - For PHYSICAL AID parameters are:
      - ENTITY: drop,m2drop,roc
      - P1 (shelf number): 1
      - For ENTITY=drop
        - P2 (AP slot number): 1-16
        - P3 (AP drop number): 1-32
      - For ENTITY=m2drop
        - P2 (CU slot number): 1-24
        - P3 (CU drop number): 1-4
  - Select the EXECUTE button.
  - Repeat for all ENT-CRS-T0s specified in Work Order.

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**23. Configuring system for SIMPLEX or DUPLEX as specified in Work Order (system default is DUPLEX)**

- a. For DUPLEX operation insert another COM101 COMDAC into slot marked COM-2.
  - Verify that all LEDs light momentarily on pack insertion.
  - Wait at least 15 minutes and verify that all COMDAC LEDs go OFF.  
During this time the system is copying data memory from the active side to the standby side. The standby COMDAC Fault LED will blink during the copy. Do not enter any commands or remove and replace any packs until the blinking has stopped.
  - Verify System Software Version on COMDAC is R1.2.3.0 by retrieving system software version:
    - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> RTRV ==> EQPT
    - In the RTRV-EQPT window select:
      - Entity = COMDAC
      - P1 {shelf} = 1
      - P2 {slot} = 2
      - Select the EXECUTE button.
    - Observe on the TL1SI VIEW window that the COMDAC inventory has PVERSN = 1.2.3.0.
  - If System Software Version on COMDAC is NOT R1.2.3.0, replace COMDAC with a R1.2.3.0 COMDAC or perform a CPY-MEM to convert the COMDAC to a R1.2.3.0 COMDAC.
    - To perform a CPY-MEM
      - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> CPY ==> MEM
        - In the CPY-MEM window select the EXECUTE button.
        - GSI will ask you to confirm command.
        - Select the YES button.
      - The standby COMDAC Fault LED will start blinking now. During this time the system is copying the R1.2.3.0 software from the active COMDAC to the standby COMDAC. The standby COMDAC Fault LED will blink during the copy. This operation will take about 60 minutes. Do not enter any commands or remove and replace packs until the blinking has stopped.
      - After the standby COMDAC Fault LED has stopped blinking, verify the System Software Version on the standby COMDAC is R1.2.3.0 by retrieving system software version:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> RTRV ==> EQPT
  - In the RTRV-EQPT window select:
    - Entity = COMDAC
    - P1 {shelf} = 1
    - P2 {slot} = 2
    - Select the EXECUTE button.
  - Observe on the TL1SI VIEW window that the COMDAC inventory has PVRSN = 1.2.3.0.
- b. For SIMPLEX operation execute the ED-CONFIG command to re-configure system
- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> CONFIG
  - In the ED-CONFIG window select: COMDAC-1-2 and NR (not required).
  - Select the EXECUTE button.
  - Select YES when asked to confirm command.

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## **8. Operational and Maintenance Procedures**

This section contains procedures to perform normal operational or maintenance actions.

**▲ CAUTION:**  
*When removing or inserting a pack always wait 15 seconds before removing or inserting the same or another pack.*

**▲ CAUTION:**  
*Executing the `opr-lpbk` command on a feeder that an Remote Terminal (RT) is looped-time on is not recommended.*

### **1. Simple pack diagnostic procedure:**

- a. Remove pack and wait 15 seconds before re-inserting pack.
- b. If pack still fails, remove and replace with another pack.

### **2. Replacement of a COMDAC:**

- a. Check whether the COMDAC to be replaced is active or standby.
- b. If the COMDAC is active use this procedure to make the COMDAC standby.
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SW ==> TOPROTN
  - In the SW-TOPROTN window select: CORE-1
  - Select the FRCD button to force the standby side active.
  - Select YES when asked to confirm command.
  - From the menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SW ==> TOWKG
  - In the SW-TOWKG window select: CORE-1
  - Select YES when asked to confirm command.
- c. Remove the COMDAC to be replaced.
- d. Insert the new COMDAC.
  - Wait until COMDAC has completed all initialization.
- e. Press the LED test button. Verify that the LEDs on the replacement COMDAC light.

**3. Growth of an IODS1 pack [non-protection pack]**

Plug an IODS1 pack into the FAC slot specified in Work Order.

- Verify that all LEDs light momentarily on pack insertion.
- Wait at least 1 minute and verify ACTIVE LED goes ON.
- Verify all other pack LEDs are OFF.

**4. Degrowth of an IODS1 pack [non-protection pack]**

a. Locate the IODS1 pack specified in Work Order.

b. Prevent the IODS1 pack from switching to protection before removing pack:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SW ==> TOPROTN
- In the SW-TOPROTN-EQPT window select: IODS1-1-{slot # of pack to be removed} and LOCKOUT.
- Select YES when asked to confirm command.

c. Remove IODS1 pack specified in Work Order.

d. Clear the pack missing alarm using ED-CONFIG command:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> CONFIG
- In the ED-CONFIG window select: IODS1-1-{slot # pack removed from} and NR (not required)
- Select YES when asked to confirm command.

**5. Growth of an IODS1 protection pack**

Insert an IODS1 pack (FAC100) into slot marked FAC-P.

- Verify all LEDs light momentarily on pack insertion.
- Wait at least 1 minute and verify that the ACTIVE LED goes ON.
- Verify all other LEDs on the pack are OFF.

**6. Degrowth of an IODS1 protection pack**

a. Remove IODS1 protection pack.

b. Clear pack missing alarm using ED-CONFIG command:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> CONFIG
- In the ED-CONFIG window select: IODS1p-1 and NR (not required)
- Select YES when asked to confirm command.

**7. Replacement of an Active IODS1 pack**

a. To prevent possible dropped calls, place the IODS1 on protection.

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SW ==> TOPROTN

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- In the SW-TOPROTN window select: IODS1-1-{slot IODS1 is being removed from} and FRCD
- Select YES when asked to confirm command.

b. Remove the IODS1 pack.

c. Insert the replacement IODS1 pack. Wait until pack initialization is complete.

d. Press the LED Test button. Verify that the LEDs on the replacement IODS1 light.

e. Release the protection switch by executing the following procedure.

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SW ==> TOWKG
- In the SW-WKG window select: IODS1-1-{slot IODS1 replaced} and RESET
- Select YES when asked to confirm command.

## 8. Growth of an AP pack

a. Locate the AP slot specified in Work Order.

b. Remove the tip/ring cable from cable holder panel and remove the cable holder panel.

c. Plug the appropriate AP pack type into the AP slot.

- Verify that the FAULT LED lights momentarily on pack insertion.
- Wait at least 1 minute and verify that all pack LEDs go OFF.

d. Connect tip/ring cable to the AP pack.

## 9. Degrowth of an AP pack

a. Disconnect tip/ring cable from AP specified in Work Order.

b. Remove AP pack specified in Work Order.

c. Insert cable holder panel into AP slot and insert tip/ring cable into panel.

d. Clear pack missing alarm using ED-CONFIG command:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> CONFIG
- In the ED-CONFIG window select: AP-1-{slot # pack removed from} and NR (not required)
- Select YES when asked to confirm command.

## 10. Growth of the MDS2 shelf

### 1. Installation of MDSU AP packs (MSU100)

A. Locate AP slot specified in Work Order. If the MDSUs are to be placed in slots other than the default slots of AP-14 and AP-15, the SET-MDS2 command must be executed prior to their insertion and provisioning m2drop cross connects.

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SET ==> MDS2
- In the SET-MDS2 window, select the AP slot specified in the Work Order.
- Select the EXECUTE button.

**⇒ NOTE:**

If at any time it becomes necessary to perform an INIT-SYS on the system and the MDSUs are NOT in the default slots of AP-14 and AP-15, remove the MDSUs from the FAST shelf before using the SET-MDS2 command.

**B. Determine if any T0 cross connects exists for the AP slot to be used by the MDSU.**

- To retrieve T0 cross-connects use the command RTRV-CRS-T0:
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> RTRV ==> CRS-T0
  - In the RTRV-CRS-T0 window select: Entity=All
  - Select the EXECUTE button.

**C. Delete any T0 cross-connect assigned to the AP slot to be used by the MDSU.**

- To delete a T0 cross-connect use the command DLT-CRS-T0
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> DLT ==> CRS-T0
  - In the DLT-CRS-T0 window select the parameters based on the results of step B.
  - Select the EXECUTE button.

**D. Plug the MDSU AP pack into the AP slot.**

- Verify that the MDSU FAULT LEDs light momentarily on pack insertion
- Wait 10 seconds and verify the MDSU FAULT LED goes OFF.
- The MDSU LINK LED will be ON because communication with the MDS2 shelf has not been established yet.

**E. Connect the appropriate MDS2 cable to the MDSU pack.**

- Connect the cable marked MDSU-1 to the MDSU in the left slot.

**F. Repeat steps B-E if the two MDSU packs are specified in the Work Order. The second MDSU circuit pack must be installed in the slot immediately to the right of the first MDSU.**

- Connect the cable marked MDSU-2 to the MDSU in right slot.

**2. Installation of MSC packs into MDS2 shelf (MSC100)****A. On the Work Order, determine the slot (MSC-1 or MSC-2) for the MSC100.****B. Plug the MSC pack into the MSC slot (MSC-1 controls CU slots 1-12. MSC-2 controls slots 13-24).****C. No LED will light.****D. Repeat steps A–B if a second MSC pack is specified in the Work Order.**

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### 3. Installation of PTU packs into MDS2 shelf (BDJ200)

- A. On the Work Order, determine the slot (PTU-1 or PTU-2) for the PTU BDJ200
- B. Plug the PTU pack into the PTU slot (PTU-1 supports CU slots 1-12. PTU-2 supports slots 13-24).
- C. Verify on pack insertion the PTU FAULT LED and both MSC LEDs light momentarily.
- D. Wait at least 20 seconds and verify that all LEDs on both the PTU and MSC are OFF.
- E. Verify the MDSU LINK LED goes OFF.
- F. Repeat steps A-E if a second PTU pack is specified in the Work Order.

### 4. Check FAST and MDS2 packs for faults

- A. Verify all packs have their FAULT LEDs OFF.
  - The COMDAC CR and NE alarm LEDs may be lit if the system is “free running”, e.g., if DS1 signals are not available for timing input.
- B. Perform LED TEST to determine if COMDAC, CTU, AP, IODS1, MDSU, MSC and PTU packs are communicating properly.
  - Press LED TEST button located on the CTU pack.
  - Observe all LEDs on all pack on the FAST and MDS2 shelf light for 10 seconds.
  - Press LED TEST button located on the MDS2 shelf.
  - Verify that all LEDs on all packs on the FAST and MDS2 shelf light for 10 seconds.
  - For packs that fail step a or b:
    - Remove them; wait 15 seconds before re-inserting them.
    - Repeat steps a. and b.
    - If they still fail, replace pack.

## 11. Degrowth of the MDS2 Shelf.

### NOTE:

The following steps must be followed in the specified order to clear all alarms.

- e. Remove the MDSU from the slot specified in the Work Order
- f. Clear the AP (MDSU) alarm using the ED-CONFIG command
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> CONFIG
  - In the ED-CONFIG window select: AP-1-{slot # pack removed from} and NR (not required).
  - Select YES when asked to confirm command.
- g. Remove the MSC specified in the Work Order

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- h. Remove the PTU specified in the Work Order
- i. Remove the cable from the front faceplate of the MDSU specified in the Work Order.
- j. Clear the MSC alarm using the ED-CONFIG command
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> CONFIG
  - In the ED-CONFIG window select: MSC-1-{slot # pack removed from} and NR (not required).
  - Select YES when asked to confirm command.
- k. Clear the PTU alarm using the ED-CONFIG command
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> CONFIG
  - In the ED-CONFIG window select: PTU-1-{slot # pack removed from} and NR (not required).
  - Select YES when asked to confirm command.

## 12. Growth of an Channel Unit

- a. Locate the CU slot in the MDS2 shelf specified in Work Order.
- b. Plug the appropriate CU type into the CU slot.
  - Upon pack insertion, the LEDs may light momentarily.
  - Wait at least 1 minute and verify that all pack LEDs go OFF.

## 13. Degrowth of an Channel Unit

- a. Remove CU pack specified in Work Order.
- b. Clear the pack missing alarm using ED-CONFIG command:
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> CONFIG
  - In the ED-CONFIG window select: CU-1-{slot # pack removed from} and NR (not required).
  - Select YES when asked to confirm command.

## 14. Creation of a T1 cross-connect

To create a a T1 cross-connect use the command ENT-CRS-T1:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ENT ==> CRS-T1
- In the ENT-CRS-T1 window select the parameters specified in the Work Order.
- Select the EXECUTE button.

## 15. Deletion of a T1 cross-connect

To delete a T1 cross-connect: DLT-CRS-T1

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> DLT ==> CRS-T1
- In the DLT-CRS-T1 window select the parameters specified in the Work Order.
- Select the EXECUTE button.

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#### 16. Creation of a T0 cross-connect

To create a a T0 cross-connect use the command ENT-CRS-T0:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ENT ==> CRS-T0
- In the ENT-CRS-T0 window select the parameters specified in the Work Order.
- Select the EXECUTE button.

#### 17. Deletion of a T0 cross-connect

To delete a T0 cross-connect use the command DLT-CRS-T0:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> DLT ==> CRS-T0
- In the DLT-CRS-T0 window select the parameters specified in the Work Order.
- Select the EXECUTE button.

#### 18. Creation of a T0

To create a T0 use the command ENT-T0:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ENT ==> T0
- In the ENT-T0 window select the parameters specified in the Work Order.
- Select the EXECUTE button.

#### 19. Deletion of a T0

To delete a T0: DLT-T0

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> DLT ==> T0
- In the DLT-T0 window select the parameters specified in the Work Order.
- Select the EXECUTE button.

#### 20. Editing a T0

To edit a T0 use the command ED-T0:

- From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> ED ==> T0
- In the ED-T0 window select the parameters specified in the Work Order.
- Select the EXECUTE button.

#### 21. Initializing an IN-SERVICE system to default state (Clearing data memory).



**CAUTION:**

*Performing the INIT-SYS command on an in-service system will take it out of service.*

- a. Execute INIT-SYS command:
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> INIT ==> SYS
  - In the INIT-SYS window select the EXECUTE button.
  - The GSI will ask you to confirm command twice.
- b. The INIT-SYS command will log you out of the GSI and then ask you if you wish to log back in.
  - If in SIMPLEX: wait for COMDAC ACTIVE LED to light and wait another 5 minutes, for system to stabilize, before logging back in.
  - If in DUPLEX: wait for one of the COMDAC ACTIVE LEDs to light and then wait for the other COMDAC FAULT LED to stop blinking before logging back in.
- c. To turn-up a system from this point go to **Turn-Up Procedure, Setting system ID (SID) (Optional) on page 17.**

## 22. Configuring *AnyMedia* Access System and GSI/PC for LOCAL LAN access

- **Required assets:**
  - PC loaded with R2.0.0 GSI
  - PC with Ethernet card, RJ-45 connector, with TCP/IP protocol installed
  - Cross-over LAN cable (Manufacture: Example, Black Box, P/N: EYN737M-0010)
- a. Login into system
  - Connecting GSI to system serial CIT port.
    - Turn on PC
    - Connect a RS-232 cable between the GSI PC serial port com1 and the CTU serial port CIT.
    - Start-up GSI software. This will take about 30 seconds.
  - Log into system:
    - From menu bar select NE OPERATIONS ==> CONNECT/DISCONNECT
  - In the COMMUNICATIONS window select the COMDAC tab and verify the following parameter settings; if settings are not correct, change settings:
    - SELECT LINK = COM1
    - SETTINGS = (Maximum Speed=19200, Modem=not checked, Keep Alive=checked)
    - In the USER ID box enter the following user id: LUCENT01
    - In the PASSWORD box enter the following password: UI-PSWD-01
    - After parameters have been verified to be correct, select CONNECT button
  - You are now logged into the system and ready for command inputs.

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## b. Configure the R1.2.3.0 system for LOCAL LAN.

- Retrieve system IP and ROUTE parameters from CIT serial port.
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> RTRV ==> IP
  - In the RTRV-IP window select the EXECUTE button.
  - Observe the system IP parameters on the TL1SI VIEW window.
  - **Record this data for later use if system needs to be restored to its original IP.**
- Change system IP address for LOCAL LAN use.
  - From menu bar select TL1 COMMANDS ==> ALL COMMANDS ==> SET ==> IP
  - In the SET-IP window enter the following parameters:
    - ENTITY = ETH
    - P1 = 1
    - INTSTATE = UP
    - IP = 135.5.78.100
    - SUBMASK = 255.255.255.0
    - REMIP = 0.0.0.0
  - Select the EXECUTE button.
  - Select YES when ask to confirm command.
  - Observe on the TL1SI VIEW window that the IP address entered is displayed.
- The *AnyMedia* System is now configured for LOCAL LAN
- Exit GSI.

## c. Configuring the PC (running Windows 95) for LOCAL LAN connection:

- Record existing information before making these changes. You may need to re-enter this information to return PC to its original configuration.
- Click on the Windows 95 Network Neighborhood icon with the RIGHT mouse button.
- From the list that pops up, select Properties.
- In the Network window select TCP/IP->{Ethernet adapter} then select Properties button.
- In the TCP/IP Properties window select IP Address tab.
  - In the TCP/IP Properties with IP Address tab window:
    - select Specify an IP address.
    - Set IP address to: 135.5.78.1
    - Set Subnet Mask to: 255.255.255.0

- In the TCP/IP Properties window select WINS Configuration tab.
    - In the TCP/IP Properties with WINS Configuration tab window:
      - select Disable WINS Resolution.
  - In the TCP/IP Properties window select DNS Configuration tab.
    - In the TCP/IP Properties with DNS Configuration tab window:
      - select Disable DNS
  - In the TCP/IP Properties window select OK. This returns you to Network window.
  - In the Network window select OK.
  - Windows 95 will now ask you wish to reboot to enable setting. Select Yes.
  - After the PC has finished rebooting the PC is now configured for LOCAL LAN.
- d. Establish connected between GSI and System via LOCAL LAN connection
- Locate the system LAN port (marked as LAN on top of the *FAST* shelf)
  - If a cable is connected to that LAN port, disconnect cable. (Notify any network manager before disconnecting cable.)
  - Connect the GSI PC LAN port to the system LAN port with the cross-over LAN cable.
  - Start-up GSI software. This will take about 30 seconds.
  - Log into system via LAN:
    - From menu bar select NE OPERATIONS ==> CONNECT/DISCONNECT
    - In the COMMUNICATIONS window select the COMDAC tab and verify the following parameter settings; if settings are not correct, change settings:
      - SELECT LINK = LAN
      - HOST = 135.5.78.100

**⇒ NOTE:**

*This address is for local LAN access only*

- In the USER ID box enter the following user id: LUCENT01
- In the PASSWORD box enter the following password: UI-PSWD-01
- After parameters have been verified to be correct, select CONNECT.
- You are now logged into the system via the LAN and ready for command input.

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**⇒ NOTE:**

LAN connections are on a 15 minutes inactivity timer that will log the user off if no command is entered for 15 minutes. This only applies to Privileged and General users, not to Report-Only users.

**⇒ NOTE:**

After disconnecting from the LOCAL LAN and if the *AnyMedia* Access System was originally setup for REMOTE LAN use: restore the systems to its original IP/ROUTE and reconnect the original cable connected to the LAN port.

**⇒ NOTE:**

After disconnecting from the LOCAL LAN and if the PC is to be used for network use, restore the PC to its original settings.

## 9. Glossary

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AID	Access Identifier
AOS	AnyMedia Operating System
AP	Application Pack
CIT	Craft Interface Terminal
COMDAC	Common Data And Control Pack
COT	Central Office Terminal
CRV	Call Reference Value
CTU	Craft / Test Unit or Channel Test Unit
CU	Channel Unit
DS0	Digital Signal Level Zero
DS1	Digital Signal Level One
EOC	Embedded Operations Channel
ESF	Extended Super Frame
FSA	First Service Activation
FTP	File Transfer Protocol
GA	General Availability
GSI	Graphical System Interface
GUI	Graphical User Interface
IP	Internet Protocol
ISDN	Integrated Services Digital Network
MDS2	Metallic Distribution Shelf 2
MDSU	Metallic Distribution Server Unit
MSC	Metallic Server Controller
NB	Narrowband
NT	Network Termination
NVDS	Non-Volatile Data Storage
PC	Personal Computer
POTS	Publicly Offered Telephone Service (Plain Old Telephone Service)
PGTC	Pair Gain Test Controller
ROC	Remote Operations Channel
RT	Remote Terminal
S/W	Software
SF	Super Frame
TCA	Threshold Crossing Alert
TCP	Transmission Control Protocol
TCP/IP	Transmission Control Protocol/Internet Protocol
TL1	Transaction Language/1

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TL1SI	TL1 System Interface
TMC	Time-Slot Management Channel
UCC	Universal Communication Channel
VRT	Virtual Remote Terminal

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