



Dialogic® Multimedia Platform (MMP) for AdvancedTCA and MMP Development Kit

Startup Guide

March 2008

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Publication Date: March 2008

Document Number: 05-2604-002

Contents

	Revision History	4
	About This Publication	5
	Purpose	5
	Intended Audience	5
	How to Use This Publication	5
	Related Information	6
1	Dialogic® MMP for AdvancedTCA and MMP Development Kit Overview	7
	1.1 Hardware and Software Requirements	7
	1.2 Dialogic® MMP for AdvancedTCA and MMP Development Kit Default Configuration.	8
2	Installation and Configuration	10
	2.1 Hardware Installation and Startup	10
	2.2 Connecting to the System	11
	2.3 Default Network Configuration	12
	2.3.1 Modifying Default IP Addresses in Single Subnet Configuration	13
	2.4 Configuring the Dialogic® MMP for AdvancedTCA Product	14
	2.4.1 Access the CLI	15
	2.4.2 Configure and Activate Runtime License Key	15
	2.4.3 Configure the Media DSP Ethernet Interfaces	16
	2.4.4 Configure Media Routing to Fabric	17
	2.4.5 Configure PSTN Interfaces	18
	2.4.6 Activate Configuration	19
	2.5 Verifying the System	19
3	Using the Schroff Shelf Manager	20
4	Troubleshooting	22

Revision History

This revision history summarizes the changes made in each published version of this document.

Document No.	Publication Date	Description of Revisions
05-2604-002	March 2008	Global change: Changed title to Dialogic® Multimedia Platform (MMP) for AdvancedTCA and MMP Development Kit. Copyright Page : Updated copyright information..
05-2604-001	November 2007	Initial version of document.

About This Publication

This preface provides the following information about this document:

- [Purpose](#)
- [Intended Audience](#)
- [How to Use This Publication](#)
- [Related Information](#)

Purpose

This document describes how to install and configure the Dialogic® Multimedia Platform for AdvancedTCA (also referred to herein as the Dialogic® MMP for AdvancedTCA product) with the operating system and Dialogic® Multimedia runtime software pre-installed. It also covers the Dialogic® Multimedia Platform (MMP) Development Kit (also referred to herein as the Dialogic® MMP for AdvancedTCA and MMP Development Kit), which includes the Dialogic® MMP for AdvancedTCA product, along with the chassis, shelf manager and other components.

Intended Audience

This document is intended for technical personnel involved in the “hands-on” use of the Dialogic® MMP for AdvancedTCA product. Familiarity with AdvancedTCA, the Dialogic® MMP for AdvancedTCA product, and a working knowledge of Linux, are expected from the users of this document. For more information about the Dialogic® MMP for AdvancedTCA product, refer to <http://www.dialogic.com/>.

How to Use This Publication

This document covers the following Dialogic part numbers:

- MMP250RE01AQ – lower-density Dialogic® MMP for AdvancedTCA product SKU with the Linux operating system and runtime Multimedia software pre-installed.
- MMP500RE01AQ – higher-density Dialogic® MMP for AdvancedTCA product SKU with the Linux operating system and runtime Multimedia software pre-installed.
- MMS250BDK01AW – This Dialogic® MMP for AdvancedTCA Development Kit includes the MMP250BA01AQ and MMBRTM496TE01AQ blades, a two-slot 3U Schroff chassis, and a breakout box.

About This Publication

- MMS500BDK02AW - This Dialogic® MMP for AdvancedTCA Development Kit includes the MMP500BA01AQ and MMBRTM496TE01AQ blades, a five-slot 5U Schroff chassis, and a breakout box.

Note: Most of this document applies to all part numbers referenced above. Some information in Chapters 1 and 2 only apply to the third and fourth bullet items (Dialogic® MMP for AdvancedTCA and MMP Development Kit part numbers). Such information is marked within the document.

The following list provides guidelines for using this document:

- To get an overall understanding of the install and configuration process, refer to [Chapter 1, “Dialogic® MMP for AdvancedTCA and MMP Development Kit Overview”](#).
- The complete installation procedure, including system requirements and system configuration, is provided in [Chapter 2, “Installation and Configuration”](#).
- Information about the using the Schroff Shelf Manager can be found in [Chapter 3, “Using the Schroff Shelf Manager”](#).
- If you encounter problems during or after the installation, refer to [Chapter 4, “Troubleshooting”](#) for suggested troubleshooting methods.

Related Information

See the following additional information:

- <http://www.dialogic.com/manuals/> (for Dialogic® product documentation)
- <http://www.dialogic.com/support/> (for Dialogic technical support)
- <http://www.dialogic.com/> (for Dialogic® product information)

Dialogic[®] MMP for AdvancedTCA and MMP Development Kit Overview 1

The Dialogic[®] Multimedia Platform (MMP) for AdvancedTCA and MMP Development Kit (herein referred to as the Dialogic[®] MMP for AdvancedTCA and MMP Development Kit) is a Dialogic-validated combination of hardware and software that can accelerate the development time on AdvancedTCA multimedia solutions.

Note: The configurations of the Dialogic[®] MMP for AdvancedTCA and MMP Development Kit referenced in this document ship with the Red Hat Linux operating system and Dialogic[®] Multimedia runtime software pre-installed by Dialogic. A one-year subscription for Red Hat Linux Enterprise 4 is also included.

The Dialogic[®] MMP for AdvancedTCA and MMP Development Kit includes either a two- or five-slot AC-powered Schroff AdvancedTCA chassis, with the operating system and Dialogic[®] Multimedia runtime software pre-installed. A Rear I/O Transition Module (RTM) and a breakout box for interfacing to the TDM (T1 or E1) networks are also included as parts of the development kit.

1.1 Hardware and Software Requirements

Note: Development Kit part numbers only: The Dialogic[®] MMP for AdvancedTCA and MMP Development Kit includes the chassis, the shelf-manager, Dialogic[®] Multimedia blade(s), a Rear Transition Module (RTM), a PSTN breakout box, and RJ21 cables. The chassis is a two- or five-slot AC chassis from Schroff. The shelf-manager is the Schroff ACB IV Bussed Shelf Manager with PPS ShMM 500.

The Dialogic[®] MMP for AdvancedTCA product part numbers require the following:

- Computer to be used as an external management console for configuring the product.
 - Note:** Having a serial port available on this computer is recommended. If a serial port is unavailable, Ethernet can be used as an alternative, with the following example Ethernet setting of management host: IP = 192.168.0.100, subnet mask = 255.255.255.0. See the default network settings of Dialogic[®] MMP for AdvancedTCA and MMP Development Kit in *section 2.2*.
- RJ45 to DB9 NULL modem cable to use the serial port for configuration.
- USB flash drive, to copy the runtime license key file to the Dialogic[®] MMP for AdvancedTCA product (optional).

Runtime License Key File

Contact your VAD to obtain a license file (also known as a Runtime License Key). You will need the blade serial number beginning with PJ followed by six digits (PJnnnnnn) which is shown on a label on the box as well as on the blade itself.

Note: A verification license is provided with the Dialogic® Multimedia runtime software, activated and ready to use, but this license is only intended to be used for verifying that the software installation was successful. For proper configuration and to verify the system by running a demo, a full runtime license file is required.

The runtime license key file is an XML file with a name such as *atca_mm_license.xml*.

Terminal program

If the connection is made over a serial cable, a terminal program operating via a serial port is required, such as the HyperTerminal program included with the operating system. Alternatively, you can use PuTTY <http://www.chiark.greenend.org.uk/~sgtatham/putty/>, which allows you to connect via both serial port and SSH over the Ethernet.

The following settings should be made before connecting to the Dialogic® MMP for AdvancedTCA product:

- Set the speed to 115200.
- Set Flow Control to “none”.

1.2 Dialogic® MMP for AdvancedTCA and MMP Development Kit Default Configuration

The Dialogic® MMP for AdvancedTCA and MMP Development Kit ships with the following configuration:

- Red Hat Linux operating system installed
- Dialogic® MMP Multimedia runtime software installed
- Ethernet interfaces: eth6 is enabled, all other ethernet interfaces are disabled
- Default IP addresses:
 - Eth6 = 192.168.0.11
 - DSP1 = 192.168.0.20
 - DSP2 = 192.168.0.21
 - DSP3 = 192.168.0.22
 - DSP4 = 192.168.0.23
 - Gateway = 192.168.0.250
- Rear Transition Module (RTM) included (part number MMB496RTMTE01AQ only)
- Schroff Shelf Manager with IP addresses set to 192.168.0.2 (Dialogic® MMP for AdvancedTCA and MMP Development Kits only)

Dialogic® MMP for AdvancedTCA and MMP Development Kit Overview

Use following commands to view the default IP address configuration:

- For Eth6, type `ifconfig eth6` at the Linux prompt.
- For DSPs, type `show interface media <0..3>` at CLI prompt.

This chapter provides installation and configuration procedures for the Dialogic® Multimedia Platform for AdvancedTCA and MMP Development Kit (herein referred to as the Dialogic® MMP for AdvancedTCA and MMP Development Kit).

2.1 Hardware Installation and Startup

The following steps are necessary to get the unit ready for operation:

1. Remove the Dialogic® Multimedia blade from the box and install it into the chassis using the guidelines provided in the Read Me First document shipped with the product.
2. Remove the Rear Transition Module (RTM) from the box and install it into the chassis using the guidelines provided in the Read Me First document shipped with the product
3. Plug in the NULL modem cable to the Dialogic® Multimedia blade's front panel and at the computer used as the console (see [Figure 1, "Sample Setup"](#), on page 11).
4. Plug in the power supply and power up the chassis. Wait until the blue LED on the front panel of the Dialogic® Multimedia blade is lit.
5. If using AC chassis from Schroff (included in the development kit):
 - 5a. Plug in appropriate fuses into the power supply module located in rear of chassis. One set of fuses are provided for 110V line power and another set of fuses are provided for use with 240V line power.
 - 5b. Connect the AC power supply cable to chassis

Note: The five-slot AC chassis uses a 20 Amps power cord.



Figure 1. Sample Setup

2.2 Connecting to the System

Follow these steps to connecting to the system:

1. Get access to the Linux command line by running a terminal program on the computer used as a management console (PuTTY can be used for serial port access or as the SSH client if Ethernet is used).
2. Login using the User ID `root` and the password `rootpass`.

A message similar to the following appears on the screen:

Installation and Configuration

```
Mounting other filesystems: [ OK ]
Starting lm_sensors: [ OK ]
Starting automount: No Mountpoint Defined [ OK ]
Starting smartd: [ OK ]
Starting acpi daemon: [ OK ]
Starting sshd: [ OK ]
Starting xinetd: [ OK ]
Starting CORBA Event Server: [ OK ]
Starting CORBA Name Server: [ OK ]
Starting xfs: [ OK ]
Starting system message bus : [ OK ]
Starting HAL daemon : [ OK ]

Red Hat Enterprise Linux AS release 4 (Nahant Update 3)
Kernel 2.6.9-34.ELsmp in an i686

localhost.localdomain login: root
Password:
```

Before proceeding, make sure that the system date is set correctly in Linux, by using the `date` command to display the system date/time. If the date/time is incorrect, use the `date` command in the format `date <MM><DD><HH:MM><YYYY>`, where time should be in the 24-hour format. For example, `date 072015202007` sets the date/time to 3:20 PM on July 20, 2007.

2.3 Default Network Configuration

The Dialogic[®] MMP for AdvancedTCA product design is flexible and allows for network configuration in practically any AdvancedTCA network environment. The default network configuration is a single subnet configuration for the Dialogic[®] Multimedia blade.

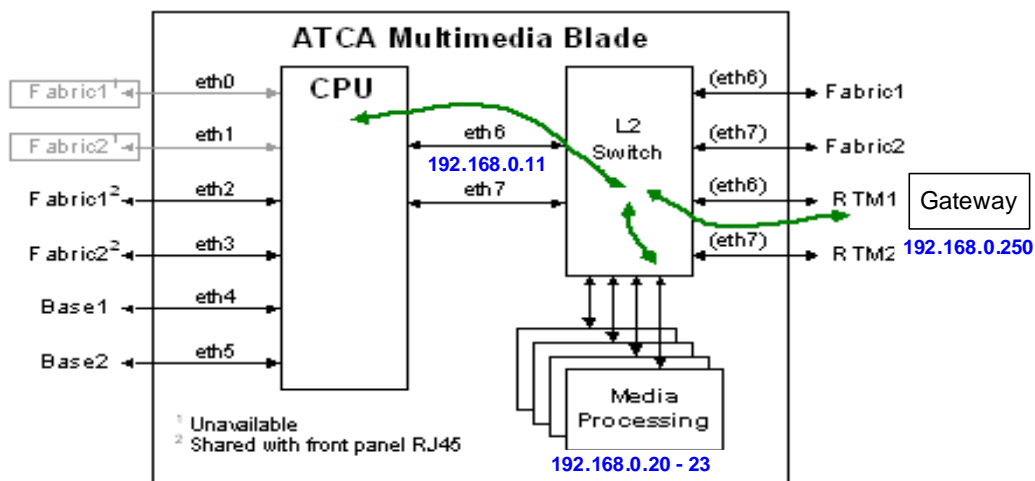


Figure 2. Single Subnet, Single Network Interface Configuration

The Dialogic® Multimedia blade is pre-configured with five IP addresses: eth6 for Media Routing to the host processor, and four Media DSPs to provide echo cancellation and media transcoding off load.

The default IP addresses assigned to the eth6 and the four Media DSPs are:

```
eth6: "192.168.0.11"
Media DSP 0 (med 0): "192.168.0.20"
Media DSP 1 (med 1): "192.168.0.21"
Media DSP 2 (med 2): "192.168.0.22"
Media DSP 3 (med 3): "192.168.0.23"
```

Proceed to the following section below if you need to modify the IP address. Otherwise, continue with [Section 2.4, "Configuring the Dialogic® MMP for AdvancedTCA Product"](#), on page 14

2.3.1 Modifying Default IP Addresses in Single Subnet Configuration

This section describes how to change the default setting of the IP addresses. Do not change the default settings unless absolutely necessary. Follow these steps to modify the IP Addresses from the factory default settings.

Note: The Media DSPs and the eth6 interfaces must be on the same network subnet. Media data flow in the system is designed to travel over the eth6 interface to provide direct media connectivity for echo cancellation and media off load.

1. Set up and enable eth6 IP address in Linux. Modify `/etc/sysconfig/network-scripts/ifcfg-eth6` to include the following information:

```
DEVICE=eth6
ONBOOT=yes
BOOTPROTO=static
IPADDR=192.168.1.11
NETMASK=255.255.255.0
GATEWAY=192.168.1.250
```

The example sets the eth6 to static IP address 192.168.1.11 and the Gateway to 192.168.1.250.

2. Restart the network service using the command `service network restart`.
3. Proceed to [Section 2.4, "Configuring the Dialogic® MMP for AdvancedTCA Product"](#), on page 14.

2.4 Configuring the Dialogic® MMP for AdvancedTCA Product

In this section, the Command Line Interface (CLI) method for configuration is used.

Start the Dialogic® Services on the Dialogic® Multimedia blade by typing `dlstart` at the command line prompt. Upon successful completion of the operation, the screen output similar to the following appears:

```
STARTING DIALOGIC SERVICES...
ipmi_msghandler already loaded
ipmi_sir already loaded
ipmi_devintf already loaded
Starting tvl2_sysctl [ OK ]
Starting csme [ OK ]
Starting tvl2drv_load [ OK ]
Starting RTF Logging Server: [ OK ]
Starting Error Logger: [ OK ]
Starting Device Mapper : [ OK ]
Starting Timeslot Doler : [ OK ]
Starting Board Manager Service : [ OK ]
Starting SNMP Agent Service : [ OK ]
Starting CLI Agent: [ OK ]

Starting Dialogic Media Service

.....
.....
.....
.....
.....
Dialogic Media is ACTIVE

STARTING DIALOGIC SERVICES COMPLETE
```

Note: In order for Dialogic® Services to successfully start, a valid runtime license key file must be present on the system. By default, the Dialogic® Multimedia runtime software ships with a runtime license key file for one port of voice functionality. The filename is `1r1v0e0c0s0f1m_ver.xml`, and the file is located in the `/usr/dialogic/data/` directory.

Instructions on selecting a different license file are provided in this section. The CLI service may start even if the runtime license key is invalid or corrupted. If the line “Starting CLI Agent Service” shows “Failed”, you can manually start the CLI service by typing `dlservices cli start` at the command prompt.

If the Dialogic® Services fails during the process starting the, please see [Chapter 4, “Troubleshooting”](#) for troubleshooting instructions.

Once the Dialogic® Services have been successfully started, perform the following configuration steps:

1. [Access the CLI](#)
2. [Configure and Activate Runtime License Key](#)
3. [Configure the Media DSP Ethernet Interfaces](#) (optional)

Installation and Configuration

/usr/dialogic/data/1r1v0e0c0s0f1m_ver.xml directory. A high density license must be activated to fully utilize the Dialogic® Multimedia runtime software.

Note: At any time during license setup, you can check the status by typing “show license” at the CLI prompt.

After obtaining a license file from your VAD or Dialogic distributor, perform the following tasks:

1. Copy the license file using either SFTP or USB flash drive. The default directory for the runtime license key file is /usr/dialogic/data. If you wish to change the license file directory from the default setting, provide the license directory path. by entering the following command at the CLI prompt:

```
CLI> conf license directory /license
updated
CLI>
```

2. To activate the license file, enter the `conf license activate` command and specify the license file name. The license file will be activated on the next ipmedia start or on reboot.

```
CLI> conf license activate atca_mm_license.xml
updated - Activates on next ipmedia restart
CLI>
```

3. Show the license file for verification. At the CLI prompt, enter the `show license` command to verify that the proper license has been selected, noting that the selected license will not be activated until the system has been rebooted.

```
CLI> show license
Active License: /usr/dialogic/data/1r1v0e0c0s0f1m_ver.xml
Selected License: /license/atca_mm_license.xml
License Seed:
OEM License:
Function:
Library:
License directory: /license/
Name: atca_mm_license.xml, Type: Node Locked, Specific Value
Options: 320 Conferencing, 0 Enhanced RTP, 250 Multimedia, 500 RTP G.711, 0 Speech
Integration, 48 T.38 Fax Termination, 500 Voice
CLI>
```

If you are done configuring the system, refer to [Section 2.4.6, “Activate Configuration”](#), on page 19 to logout and activate the system.

2.4.3 Configure the Media DSP Ethernet Interfaces

Note: This step is only required if modifying from the default IP Addresses

Media data flow in the system is designed to travel over the eth6 Advanced Mezzanine Card (AMC) ethernet interface(s) to the Media DSPs for echo cancellation and transcoding off load. Up to four(4) Media DSPs are located on the AMC, which is pre-installed on the baseboard.

Note: It is the end user’s responsibility to make sure that each Media DSP gets a unique IP address on the same subnet as the eth6 interface for proper media data flow. The IP addresses should be modified to fit the end user’s network layout.

The following steps can be used in CLI to change the default Media DSP IP addresses:

1. At the CLI prompt, enter the `conf interface media <id> ip address <current ip address> addr <new ip address>` command, specifying the current IP address and the new IP address. The following example changes the current default IP address of Media DSP 0 to “192.168.1.20” for the ‘Single Subnet’ Configuration.

```
CLI> conf interface media 0 ip address 192.168.0.20 addr 192.168.1.20
Updated
CLI>
```

2. Repeat Step 1 configuration for each of the Media DSPs. By using the up arrow in CLI, you can repeat the previous command. Using the left/right arrows allows you to edit the command line and easily complete the CLI entry for the next Media DSP interface. The following example changes the current default IP addresses of Media DSPs 1-3 for the ‘Single Subnet’ Configuration:

```
CLI> conf interface media 1 ip address 192.168.0.21 addr 192.168.1.21
Updated
CLI> conf interface media 2 ip address 192.168.0.22 addr 192.168.1.22
Updated
CLI> conf interface media 3 ip address 192.168.0.23 addr 192.168.1.23
Updated
CLI>
```

If you are not using an RTM, continue with [Section 2.4.4, “Configure Media Routing to Fabric”](#), on page 17). If you have a PSTN RTM and are using the PSTN interfaces, continue with [Section 2.4.5, “Configure PSTN Interfaces”](#), on page 18. If you are not configuring the PSTN interfaces at this time, proceed to [Section 2.4.6, “Activate Configuration”](#), on page 19.

2.4.4 Configure Media Routing to Fabric

This step is only required if the Rear Transition Module (RTM) is not present. The default scenario will route media to the RTM RJ-45 interface.

If RTM is not present or if media is required to travel internal to the AdvancedTCA chassis, the media data can be routed to the AdvancedTCA Switch Fabric by correctly configuring the L2 switch on the Advanced Mezzanine Card (AMC). To configure the AMC to enable routing to the Advanced TCA SwitchFabric-1:

1. At the CLI prompt, enter the `conf interface eth 8 adminstatus up` command:

```
CLI> conf interface eth 8 adminstatus up
Updated
CLI>
```

2. Configure the AMC to disable routing to the RTM.

```
CLI> conf interface eth 10 adminstatus down
Updated
```

The resulting L2 switch settings for routing media to the AdvancedTCA fabric are as follows:

```
SwitchFabric-1 (eth8): adminstatus:up
SwitchFabric-2 (eth9): adminstatus:down
SwitchRTM-1 (eth10): adminstatus:down
SwitchRTM-2 (eth11): adminstatus:down
```

Installation and Configuration

If you have a PSTN RTM and are using the PSTN interfaces, see [Section 2.4.5, “Configure PSTN Interfaces”](#), on page 18. If you are not configuring the PSTN interfaces at this time, see [Section 2.4.6, “Activate Configuration”](#), on page 19.

2.4.5 Configure PSTN Interfaces

Note: Default one(1) port runtime license key does not support PSTN.

The Dialogic® Multimedia blade’s PSTN Rear Transition Module (RTM) provides up to 16 spans of E1/T1 trunks. The PSTN interfaces do not need to be configured if the RTM will be used in IP-only mode. For more information about configuring the PSTN trunks and clock fallback using the CLI and for more information about possible values for PSTN options including linetype and linecode, refer to the Dialogic® Multimedia Platform for AdvancedTCA Technical Product Specification found at <http://www.dialogic.com/manuals/multimedia11/default.htm>.

The following steps are shown to demonstrate how to configure a PSTN interface. These steps assume the following configuration: 8 E1 (hdb3) spans, trunk 1 as the default clock using the CLI.

1. To configure the system for the total number of trunks to enable (such as 4, 8, 12, or 16), enter the following command at the CLI prompt:

```
CLI> conf system pstn 8
```

2. For each trunk, set the trunk out of service.

```
CLI> conf interface ds1 1 adminstatus down
CLI> conf interface ds1 2 adminstatus down ...
```

3. For each trunk, set the linetype.

```
CLI> conf interface ds1 1 linetype e1
CLI> conf interface ds1 2 linetype e1
```

4. For each trunk, set the linecode.

```
CLI> conf interface ds1 1 linecode hdb3
CLI> conf interface ds1 2 linecode hdb3
CLI> conf interface ds1 8 linecode hdb3
```

5. For each trunk, set the trunk in service.

```
CLI> conf interface ds1 1 adminstatus up
CLI> conf interface ds1 2 adminstatus up ...
```

6. Set the clock fallback-list priority. As a default, the internal clock is specified as first priority. For example, trunk 1 as the default clock and the internal oscillator as backup:

```
CLI> conf interface ds1 clock fallback-list 1 1
CLI> conf interface ds1 clock fallback-list internal 2
```

Note: Use the `conf system pstn-trunks 0` command if you wish to disable the PSTN interfaces.

2.4.6 Activate Configuration

The configuration is activated when you log out of CLI and reboot the system. To activate the configuration and complete the installation process, the following steps are required:

1. At the CLI prompt, enter the logout command

```
CLI> logout
```

2. Reboot the system. A reboot is required after system configuration to activate the configuration.
3. After reboot, login to Linux and type `dlstart` at the command prompt.

2.5 Verifying the System

If you would like to verify that you have set up the system properly, it is recommended that you run the Dialogic[®] Multimedia demo, which has been customized to work in the Dialogic[®] MMP for AdvancedTCA and MMP Development Kit.

The Dialogic[®] Multimedia demo features video capabilities of the Dialogic[®] Multimedia runtime software.

- Video mail – users can record an audio/video clip and play it back at a later time
- Video portal – users can select video clips from a menu

The demo requires a SIP IP video capable endpoint. To run the demo:

1. Change the directory to `/usr/dialogic/demos/MultiMedia/MultiMediaDemo/Release`.
2. Run `MultiMediaDemo`.
3. Dial `1000@<eth6 ip address>` from a SIP video phone.
4. Verify that audio and video is transmitted to the SIP video phone.

The Schroff Shelf Manager provided with the Dialogic® Multimedia Platform (MMP) for AdvancedTCA and MMP Development Kit (herein referred to as the Dialogic® MMP for AdvancedTCA and MMP Development Kit) is not shipped with an optional Shelf Alarm Panel (SAP). An SAP provides an RJ45 Serial Console connector, the Telco Alarm Interface, user-definable LEDs, and custom specific I/Os for the Shelf Manager. You may access SAP features over the IP network using the following the procedure:

The default IP Address of the Shelf-Manager is 192.168.0.2.

1. At the prompt, type `Telnet 192.168.0.2`
2. For Username, type `root`
3. Press the **Enter** key when a password is requested.

Once logged into the Shelf Manger, you can query the state the system, including the Dialogic® Multimedia blade in the chassis. Some Shelf Manager commands take the slot number as the command argument and other commands take the IPMB address as argument.

Two sample commands are provided below. The first command uses the slot number and second command uses the IPMB address. This example assumes the Dialogic® Multimedia blade is in slot three (3) of the chassis.

To retrieve information about the blade, type `# clia board 3` at the command prompt.

The following information appears on the screen:

```
IPM Sentry Shelf Manager Command Line Interpreter

Physical Slot # 3
86: Entity: (0xa0, 0x60) Maximum FRU device ID: 0x02
    PICMG Version 2.1
    Hot Swap State: M4 (Active), Previous: M3 (Activation In Process), Last State Change Cause:
    Normal State Change (0x0)

86: FRU # 0
    Entity: (0xa0, 0x60)
    Hot Swap State: M4 (Active), Previous: M3 (Activation In Process), Last State Change Cause:
    Normal State Change (0x0)
    Device ID String: "MPCBL0040 IPMC"

86: FRU # 1
    Entity: (0xc0, 0x60)
    Hot Swap State: M4 (Active), Previous: M3 (Activation In Process), Last State Change Cause:
    Normal State Change (0x0)
    Device ID String: "RTM Mgmt Ctlr"
```

```
86: FRU # 2
    Entity: (0xc1, 0x66)
    Hot Swap State: M4 (Active), Previous: M3 (Activation In Process), Last State Change Cause:
    Normal State Change (0x0)
    Device ID String: "AMC Mgmt Ctlr"
```

In the example, the “Hot Swap State” is M4 for FRUs 0, 1, and 2. Those FRUs are the base-board, RTM and the AMC. Their state is M4 indicating they are powered-up properly.

The IPMB address is also printed in the response. In the output above, 86 is the IPMB address. This is a hex value and is printed before the FRU ID.

To retrieve the system event log (SEL) using the IPMB address, type `clia sel <IPMB address>` at the command prompt.

For additional information, refer to the Schroff data sheets and product manuals at <http://www.schroff.us/home.asp>, and follow the links to Systems/AdvancedTCA/Support Information.

This chapter provides information about product troubleshooting.

If the Dialogic[®] Service fails to start using the `dlstart` command, follow these guidelines to troubleshoot the issue:

- Check that the system date/time is set correctly. If not, follow the instructions in *---section 3.2.1*
- Make sure you have a valid license file set up properly by using the `show license` command from the CLI script as described in *--- section 3.3*
 - Note:* The default 1 port runtime license key file does not support PSTN. Use the correct license file if using PSTN interfaces.
- Ensure that the Dialogic[®] MMP and RTM blades are firmly seated in the chassis, with latches properly engaged.

If the issue is not resolved, execute the script `trouble_report.sh` from the Linux command prompt. The script will generate a compressed file similar to the sample shown here:

```
[root@localhost ~]# trouble_report.sh
Gathering system information...
Hardware config...
Network config...
Process state
Message logs
Dialogic product config
Generating trouble reports in the file /root/trouble_reports5294.tgz
Cleaning up
Done
[root@localhost ~]#
```

Send this file to your Dialogic technical support representative.