



Enabling Live Communications at the Edge of IP Networks

Configuration Notes 299

Mediatrix 4100 Series Units in a Nortel CS2100/CS2K MGCP Environment

June 22, 2011

Proprietary

© 2011 Media5 Corporation

Table of Contents

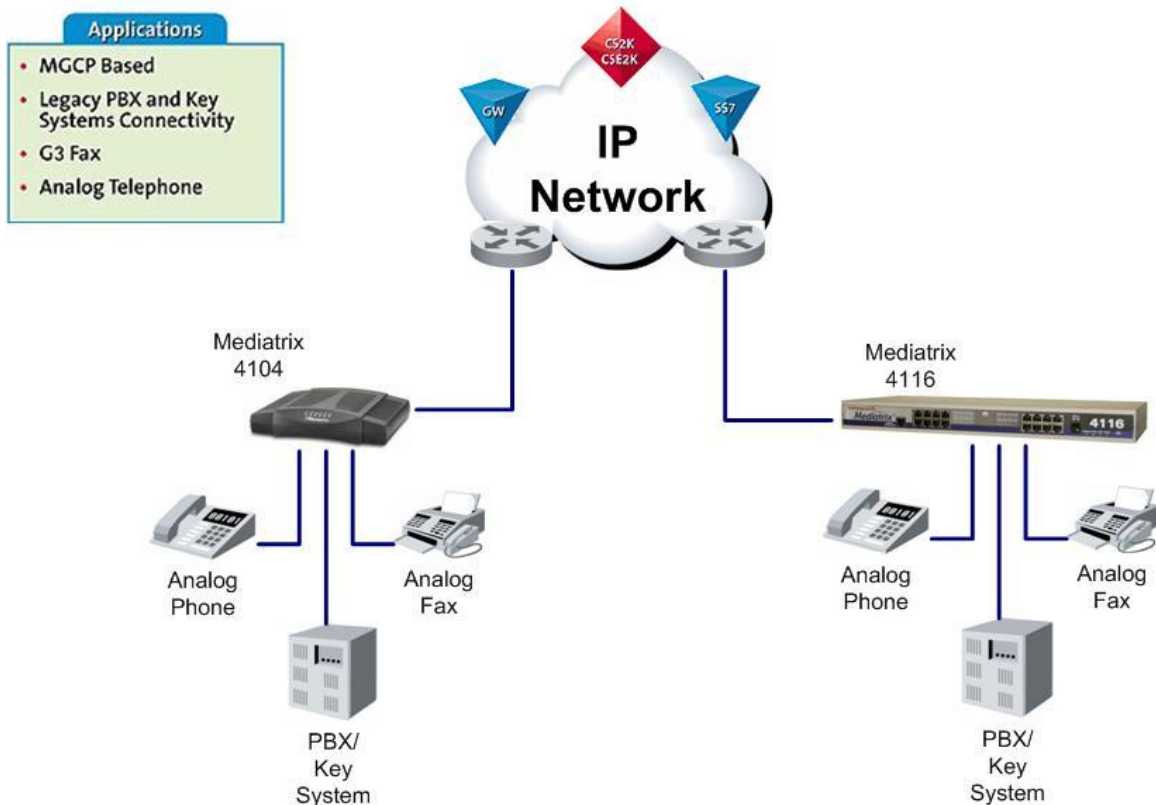
Introduction	3
Application Scenario	3
Running the Unit Manager Network Software	4
Configuring the Mediatrix FXS Unit.....	6

Introduction

This document outlines the configuration steps for deploying Mediatrix 4100 series FXS units, i.e., 4124 (24-ports), 4116 (16-ports), 4108 (8-ports) and 4104 (4-ports) in an MGCP environment with the Nortel CS2100/CS2K.

Application Scenario

MGCP (CS 2000 / CS 2100)



The following configuration notes are not a substitute for the Mediatrix Administration Documentation for Mediatrix analog products. Please have the following manuals available for reference:

- Mediatrix 4104, 4108, 4116 and 4124 MGCP Reference Manual
- Mediatrix 4104, 4108, 4116 and 4124 MGCP Quick Start
- Mediatrix Unit Manager Network Administration Manual
- All relevant Nortel CS2100/CS2K Manuals

Running the Unit Manager Network Software

The Unit Manager Network (UMN) software is a configuration and management tool for Mediatrix devices. The UMN can be downloaded from the Mediatrix Support Portal: <https://support.mediatrix.com/DownloadPlus/Download.asp>. It has a default 3-units limit upon installation. This will suffice for most configurations.

It is recommended that the administrator uses the UMN to configure the Mediatrix devices. Please refer to the UMN Quick Start guide for the installation of the software. Once the UMN software has been installed on your PC¹, proceed with the following steps.

Step 1: Start the UMN

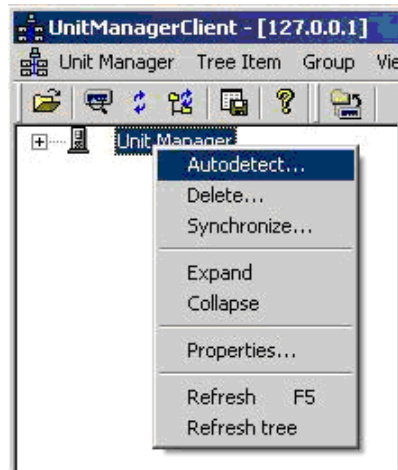
- Select from the *Start Menu > Programs > Unit Manager Network 3.2 > Unit Manager Network*.

Step 2: Login to the UMN

- In the *Administrator* login window (Connect to Unit Manager), a User Name and Password are not required. Click **OK** to proceed.

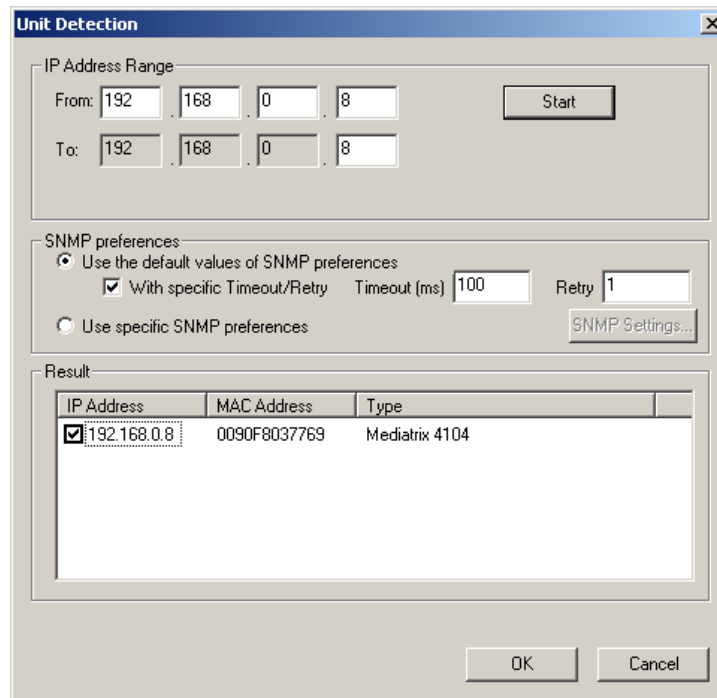
Step 3: Perform an Autodetect

- On the left pane, right-click the *Unit Manager* level, then select **Autodetect**.



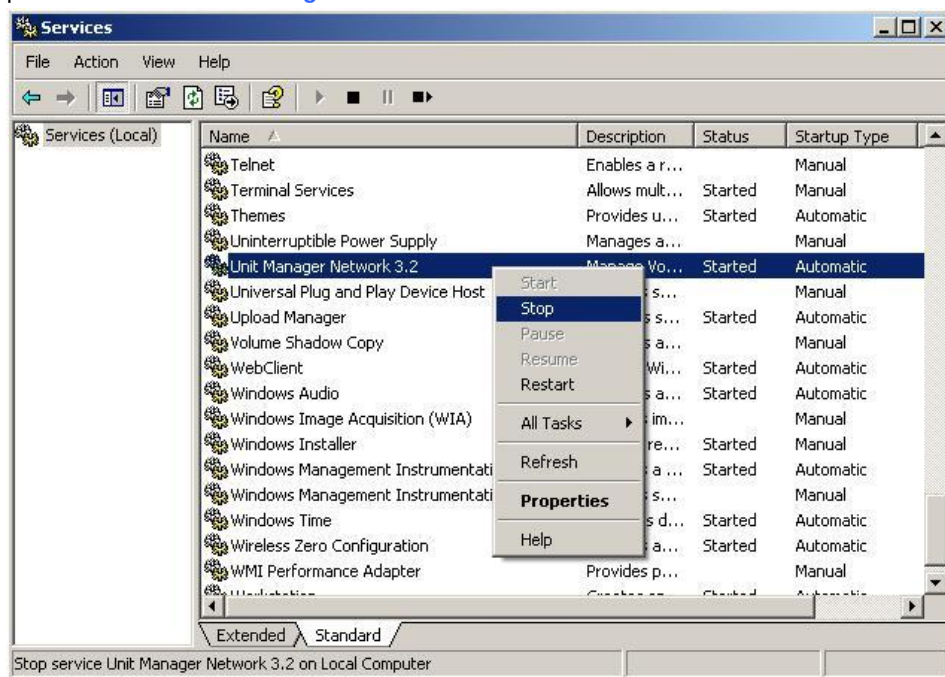
- Set the *IP Address Range* to minimize the time it takes to auto-detect the unit. Click **Start** to begin Mediatrix unit detection. When the unit is detected, the *Result* section lists the unit.
- Select the unit and click **OK**. If no DHCP server is used in your subnet, you must connect one unit at a time since they will start by using the default IP address 192.168.0.1 after a recovery reset. You will have to set a different static IP address for every unit. Please see the **Mediatrix 4104, 4108, 4116 and 4124 MGCP Quick Start Guide** for more details on initial setup.

¹ If you are having trouble opening the UMN application, verify that the status of the "Unit Manager Network 3.2" service is started. See Page 5 to access Windows Services.

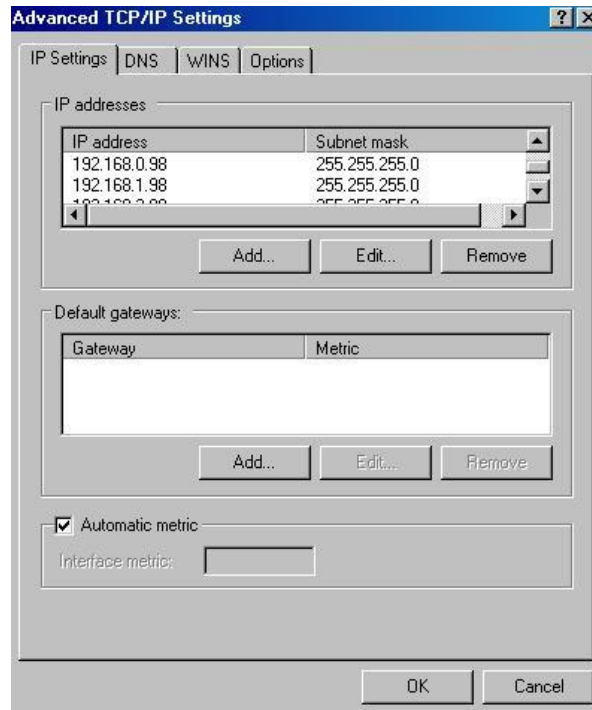


Note: The UMN runs in the Windows background. Mediatrix highly recommends that the administrator stops and restarts the UMN service whenever the IP address of the PC is changed. A restart may be needed depending on your Windows O/S.

- Go to *Start Menu > Settings > Control Panel > Administrative Tools > Services*.
- Stop and restart the **Unit Manager Network 3.2** service.



- Alternatively, you can configure multiple IP addresses on the same PC network interface card (only in static IP mode – not DHCP) to avoid restarting the computer or stopping and restarting the UMN service whenever you change the IP address and subnet of the Mediatrix unit. This is recommended for advanced IP network users, the current configuration notes do not cover the step by step setting for this alternative.



Configuring the Mediatrix FXS Unit

Step 1: Setting Basic Network Parameters

- Once the Mediatrix FXS has been auto-detected, it should appear under the *Unit Manager* level. Right-click the *Administration* level of the Mediatrix unit and select the *Edit* menu.
- Configure the IP addresses to reflect your network. Uncheck **Use DHCP** if you are using static IP addresses. Restart the unit after the configuration of IP addresses for the unit to accept the new addresses.
- When using DHCP: you can also reserve the IP address for the Mediatrix unit by assigning the MAC address of the unit to a specific IP address in your DHCP server – it will be easier to auto-detect the unit for provisioning. An example of a unit IP address fetched by DHCP is shown in the figure below.

Step 2: Setting up Call Agent IP Addresses

On the Mediatrix FXS unit, the Call Agent IP addresses can be statically assigned or acquired by DHCP. In this example, the *Use DHCP* option is unchecked, i.e., only static addresses are used. The IP address of the Nortel CS2100/CS2K Signaling server, **172.168.10.10**, is manually assigned in the *Call Agent* section.

- Select the **MGCP** page and set the following:
 - Uncheck **Use DHCP**.
 - Set the *Call Agent* field to the Nortel CS2100/CS2K Signaling server IP address.

The MGCP Configuration dialog box is shown with the following settings:

- MgcP Call Agent:**
 - ☐ Use DHCP
 - Static
 - Call Agent: 172.168.10.10
- Local Configuration:**
 - MgcP listening port: 2427
 - RSIPs restart level: Group
- FQDN:**
 - Static FQDN: Mediatrix1234
 - FQDN mode: Static
 - Current FQDN: [192.168.0.1]
 - Current FQDN mode: Dhcp

#		IdTerm2	IdTerm1
1	aaln		1
2	aaln		2

Buttons: Set target units..., OK, Cancel

Step 3: Setting up the MGCP Local Configuration

In this example, the MGCP listening port is set to **2427**, this is the default value for Mediatrix and should NOT be changed when used with Nortel CS 2100/CS2K unless instructed otherwise.

The RSIP restart Level is set to **Group** by default and is the recommended value when used with Nortel CS 2100/CS2K.

Step 4: Define FQDN

The FQDN Mode specifies the method used to obtain the required information (hostname or IP address of the source unit) for Mediatrix unit to use in the MGCP signaling message.

There are four options:

- DHCP: The DHCP server will provide the host name
- DNS: The DNS server will provide the host name
- Static: Will use what is in the static FQDN Box
- None: The IP Address of the unit inserted within angle brackets is used.

In this example the **Static** option is used as a FQDN Mode and **Mediatrix1234** is the pre-defined name for this end-point that will be sending registration message to the Nortel CS 2100/CS2K call agent.

Note: The FQDN of all the gateways need to be provisioned in advance. Refer to your CS 2100/CS2K Documentation for more details.

Step 5: Define IdTerm

In this example, the MGCP IdTerm1 and IdTerm2 are configured to the Mediatrix default values. These values should match the values given in the Nortel CS2100/CS2K Signaling Server.

Step 6: Restart the unit

Once the FXS is in service, you are ready to make voice and fax calls across the VoIP network.