UAS Configuration Management

Configuration management activities for the UAS include provisioning audio for use by a gateway and changing system parameters in response to changes in UAS system configuration. Changing system parameters is performed either through the Local Customer Interface (LCI) GUI or through the Universal Audio Server Manager GUI of the CS 2000 Management Tools.

Note: Provisioning audio is performed through the Audio Provisioning Server (APS) Generic User Interface (GUI). Refer to the Media Server 2000 Series Configuration Management document for APS information.

UAS configuration management

All configuration data supporting the operation of the UAS is stored in configuration files. Configuration management entails manipulating the configuration file parameters either during system installation or when changes are warranted by system operation requirements. The configuration files include:

- uas.conf - containing configuration parameters that support the function of the UAS, including CG6000 card settings, Call Agent definition, APS hostname definition, network element settings, and conferencing service state definition

- snmpd.cnf - containing parameters that support the SNMP function, including management station address, SNMP user names, community names, and trap version

- hosts - containing parameters that support the function of the APS, including APS primary and secondary hostname and IP addresses

- atmhard.con - containing ATM bearer interface settings that link a local port ATM address to a particular ATM interface port

- atmconn.con - containing ATM bearer connections settings that provide the UAS with a remote gateway's name and ATM address

- mainsa.conf - containing Main Subagent program settings specifying the kinds of error and log messages to be sent to the management station

- atmSvcProfile.con - containing data on Switched Virtual Channel (SVC) traffic parameters associated with AAL2 SVCs

- atmhardloop.con - containing information associated with the loopback of SVCs

To assist you in identifying all of the editable parameters in the files listed above, each of the parameters is described in the following table, with information about the parameter provided under the following headings:

- Category - which indicates the type of parameter

- Parameter (Key or Record) - which shows the name of the parameter and its Key or Record name within the configuration file

- Description - which provides a high-level description of the function of the parameter

- When updated - which indicates whether changes made to configuration parameters are effected either at "init-time," that is, at the completion of the next program manager restart, or at "run-time," that is, immediately. In the table below, only Main Subagent parameters, and the "UAS SNMP Management Station Definition"

and "UAS SNMP Trap Destinations" parameters are <u>not</u> "init-time" configuration parameters.

- Tools used to manipulate the parameter data: Install (Installation program); EM (Universal Audio Server Manager Generic User Interface); Local Customer Interface (LCI) Generic User Interface; Other Tool (such as Notepad or VI editor)

> *Note:* Although parameter data can be manipulated through a screen editor such as Notepad or VI editor, it is recommended that changes to configuration data be made, instead, through either the Install program, Universal Audio Server Manager, or LCI GUI program. A screen editor does not contain the error checking capability available in Install, the Universal Audio Server EM, or LCI GUI and cannot, therefore, protect against possible service disruption caused by changing the parameter data.

Configuration parameters (Sheet 1 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
Network Element	Gateway type	Identifies the function of the UAS	-	x	-	-	-
Network Element	Bearer Type	Defines the bearer channel fabric type (IP or ATM)	-	x	-	-	-
Network Element	Legacy Announcements	Indicates whether the UAS is used in a CS2K network, in a multilingual environment	I	-	x	x	-
Network Element	Primary language	Defines the "primary" language to use for an announcement when the UAS is in a network where a primary and secondary language are required	I	-	x	x	-

Configuration parameters (Sheet 2 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
Network Element	Secondary language	Defines the "secondary" language to use for an announcement when the UAS is in a network where a primary and secondary language are required	I	-	x	x	-
Network Element	Backup storage IP	Defines the IP address of the database that will contain backup copies of the UAS configuration files	I	-	x	x	-
Network Element	Gateway control protocol	Determines the control protocol for the UAS, either H.248 or MGCP	I	-	x	x	-
Network Element	NTP Server IP	Defines the IP address of the Network Time Protocol server on the network. The NTP server is used for synchronizing logs and alarms on the UAS.	R	-	x	x	-
Audio Management	Primary DBServer Host	Defines the hostname associated with the APS that is hosting the database server used by the UAS node	I	-	x	x	-

Configuration parameters (Sheet 3 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
Audio Manage-ment	Audio Synch on Restart	For audio server applications of the UAS, determines whether audio distribution refresh upon node startup, in addition to the regularly-scheduled audio distribution, is enabled	I	-	x	x	-
Audio Manage-ment	Primary DBServer IP	Defines the IP address of the APS that is hosting the database server used by the UAS node	I	-	x	x	-
IVR Service	IVR support	Indicates whether IVR support is enabled in the system	I	-	x	x	-
Call Agent	Primary call agent name	Defines the computer name associated with the remote node that is hosting the Primary Call Agent application	I	-	x	x	-
Call Agent	Primary call agent IP address	Defines the IP address associated with the remote node that is hosting the Primary Call Agent application	I	-	x	x	-
Call Agent	Primary call agent port	Defines the port of the Call Agent application	I	-	x	x	-
Call Agent	UAS Call Control Port	Defines the port associated with receiving the call control message stream	I	-	x	x	-

Configuration parameters (Sheet 4 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
Conferenc-ing Service	Conference Spanning	Determines whether Conference Spanning is supported by the node. Conference Spanning allows conferences with up to 128 participants.	I	-	x	x	-
Conferenc-ing Service	Conferencing state	Determines whether Conferencing is enabled on the node	I	-	x	x	-

Configuration parameters (Sheet 5 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
Conferenc-ing Service	Conference Expansion Ports	This field indicates the number of reserved conference ports that can be used to grow existing conferences, but that cannot be used in reservations for new conferences. This prevents existing conferences from running out of resources. Once a port from this buffer is used, it is restored to the pool of resources after any member of the conference in the pool drops out of the conference. When you increase this number, fewer ports are available for general use. For example, if you reserve four ports, a 32-port pool will have only 28 ports available for new conferences. If you decrease this number, fewer ports are available to grow existing conferences when the pool is full.	I	x	x	x	-

Configuration parameters (Sheet 6 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
Bearer card	Annc Circuits per Card	This is the number of circuits available for announcements on each bearer card in the system. For IP fabric systems, this number is taken from the engineering data for the system. For ATM fabric systems, this number is set automatically by the system. If IVR is enabled, this number should be greater than zero. The allowable values are zero through the value of Max. Annc Circuits per Card.	I	x	x	x	-
Bearer card	Conference Circuits per Card	This is the number of circuits available for conferencing on each bearer card in the system. This number is taken from the engineering data for the system. If conferencing is enabled, this number should be greater than zero. The allowable values are zero through the value of Max. Conf. Circuits per Card.	I	x	x	x	-

Configuration parameters (Sheet 7 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
Bearer card	Transmit Gain	This is the strength of a signal going out from the vocoder of an rtp endpoint as compared with the strength of a signal going into the vocoder.	I	x	x	x	-
Bearer card	Receive Gain	This is the strength of a signal coming into an rtp endpoint from the decoder as compared with the strength of a signal coming into the decoder.	I	x	x	x	-
CG6000	IP address for card n	Defines the IP address associated with the specified card	I	-	x	x	-
CG6000	Network mask for card n	Defines the net mask associated with the card	I	-	x	x	-
CG6000	IP address of the router for card n	Defines the IP address of the router/gateway to which the card is connected	I	-	x	x	-
CG6000	BCT enabled on card n	Determines whether Bearer Channel Tandeming is enabled on the card	I	-	-	x	-
CG6000	RTP base port	Defines the first port used for real-time protocol streams on VoIP cards	I	-	x	x	-

Configuration parameters (Sheet 8 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
CG6000	Supported Codec	Indicates which of the following codecs are supported: G.711, G.723, G.726, G.729, T.38	I	-	x	x	-
CG6000	G729B	Indicates support for G.729B	I	-	x	x	-
CG6000	Default TOS	Determines the Type of Service (TOS) bit usage for the UAS, 0-255	I	-	x	x	-
CG6000	RFC 2833 DTMF	Indicates how the UAS will determine whether RFC2833 is enabled for each RTP connection. RFC2833 defines a method for passing DTMF digits "out-of-band" in special RTP packets, in order to provide more reliable DTMF recognition than is possible with low-bandwidth codecs.	I	-	x	x	-

Configuration parameters (Sheet 9 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
CG6000	RFC 2833 DTMF Squelch	Normally, when RFC2833 support is enabled for a call, any DTMF digits from the UAS will be sent only in RFC2833-defined packets, and they will be stripped from the voice path. If the value of RFC2833DTMF is AlwaysOn, the entry in this field determines whether the DTMF will be stripped (squelched) from the voice path.	R	-	x	x	-
Trunking Gateway or Audio Management	Tone set	Establishes the default tone set for the UAS, by country	R	-	x	x	-
ATM Bearer Interface	ATM companding mode	Determines the companding mode, either A-law or Mu-law	I	-	x	x	-
ATM Bearer Interface	Optical carrier mode	Determines the appropriate optical carrier standard for an ATM card, either SONET (a North American standard for optical carriers) or SDH (a European standard for optical carriers). The default for AAL1 systems is SONET.	I	-	x	x	-

Configuration parameters (Sheet 10 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
ATM Bearer Interface	ATM CTone support	When ATM BCT support is enabled, determines how the audio endpoints for the ATM card are defined	I	-	-	x	-
ATM Bearer Interface	ATM BCT support	Indicates whether Bearer Channel Tandeming is supported	I	-	-	x	-
ATM Bearer Interface	Bearer interface table fields: slot id; card port; card description; local atm address; alarm state; operational state; administrative state	Links a local port ATM address to a particular ATM interface port	R	-	x	-	-
ATM Bearer Connections	Remote gateway table fields: gateway name; gateway ATM address; local port ATM address table; slot id; card port; card description; local port address	Provides the UAS with a remote gateway's name and ATM address	R	-	x	-	-
SNMP	UAS SNMPV3 User Names	Defines SNMPv3 user names for read-only access and read/write access by the SNMP-based management system	I	-	-	x	-
SNMP	UAS SNMPV2c Community Names	Defines SNMPv2c community names (optional)	I	-	-	x	-

Configuration parameters (Sheet 11 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
SNMP	SNMP Trap Destinations	Defines IP address, port, and trap version for each SNMP trap destination. The IP address is the address to which SNMP traps are sent. The port is the UDP port associated with the remote SNMP management station. The version is the SNMP version of the SNMP traps sent by the UAS. (Note: One trap destination can be configured with the LCI GUI. Multiple trap destinations can be configured with the UAS Manager.)	R	-	x	x	-
Main Subagent	System Log Level	System logs are information, warning, or error events. Specifies that the Main Subagent is to send either all logs for that source, only warning and error logs for that source, only error logs for that source, or no logs for that source to the management station	R	-	x	-	-

Configuration parameters (Sheet 12 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
Main Subagent	Audio Server Log Level	Audio Server logs include information, warning, or error events. Specifies that the Main Subagent is to send either all logs for that source, only warning and error logs for that source, only error logs for that source, or no logs for that source to the management station	R	-	x	-	-
Main Subagent	Application Log Level	Application logs include information, warning, or error events. Specifies that the Main Subagent is to send either all logs for that source, only warning and error logs for that source, only error logs for that source, or no logs for that source to the management station	R	-	x	-	-
Main Subagent	Security Log Level	Logs are either audit-succeed or audit-fail. Specifies that the Main Subagent is to send either all security logs, only audit-fail logs, or no logs for that source to the management substation	R	-	x	-	-
Test Trunks	Test Trunk support	Denotes whether this card is to be used for test trunks	I	-	-	x	-

Configuration parameters (Sheet 13 of 13)

Category	Parameter	Description	When updated[a]	Install[b]	EM[c]	LCI GUI	Other Tool[d]
Test Trunks	Test Trunk config size	The size of the local office: small (50K trunks); medium (100K trunks); large (200K trunks). This determines the number of channels available for tests.	I	-	-	x	-
Test Trunks	Sage box IP 1 and 2	The IP address of the Sage test trunk box(es). For the small and medium test trunk configurations, one Sage box is used. For the large test trunk configuration, two Sage boxes are used.	I	-	-	x	-

a. Updated at **I**nit time (change takes effect at the time of the next application restart) or at **R**un time (change takes effect immediately).
b. Performed either during initial installation or during software upgrades.
c. Universal Audio Server Manager
d. Editor such as vi or Notepad.

Universal Audio Server Manager function

The Universal Audio Server Manager is used for viewing UAS and APS alarms and logs, for performing UAS fault management recovery procedures, and for manipulating UAS configuration parameters.

Note: The Universal Audio Server Manager cannot be used for maintenance or configuration of the Media Server 2000 Series.

When you log in to the Universal Audio Server Manager, the main screen displays. The screen contains a list of network elements displayed in the "Topology" pane, located in the top left-hand corner of the screen.

From the main screen, you can then choose a network element type displayed in the Topology pane. After making the selection, the network

element units of that type installed in the system display in the "Network Elements" pane, located in the lower left-hand corner of the screen, as shown in the following illustration.

Universal Audio Server Manager main screen showing UAS units in the Network Elements pane
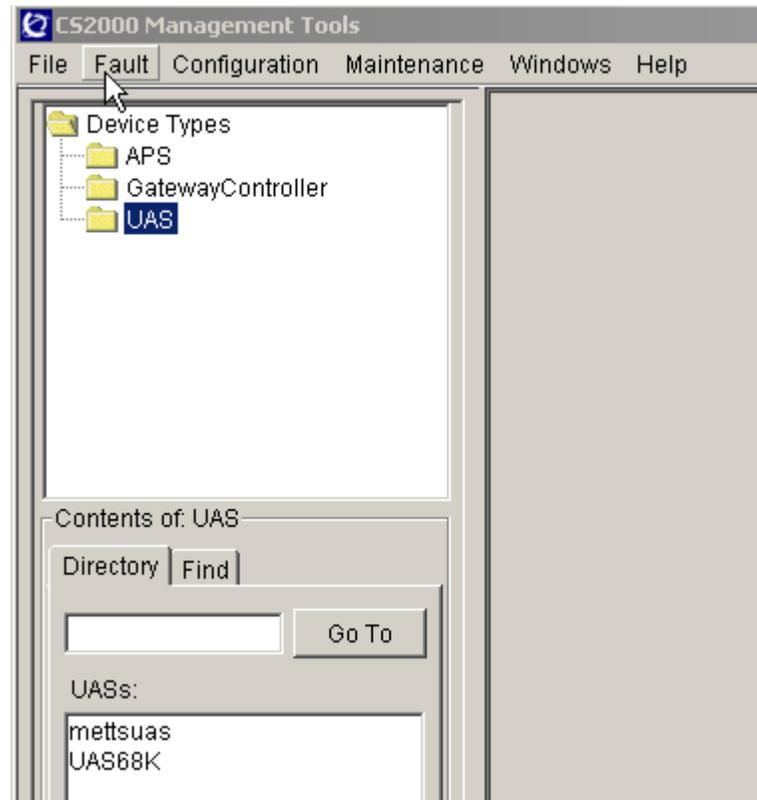
System Identification pane
When you select a network element unit in the Network Elements pane of the Universal Audio Server main screen, a System Identification pane (top right-hand panel) and a component-specific pane (located immediately below the System Identification pane), similar to the one shown in the following illustration, display.

Universal Audio Server Manager main screen showing a System Identification pane for a UAS.
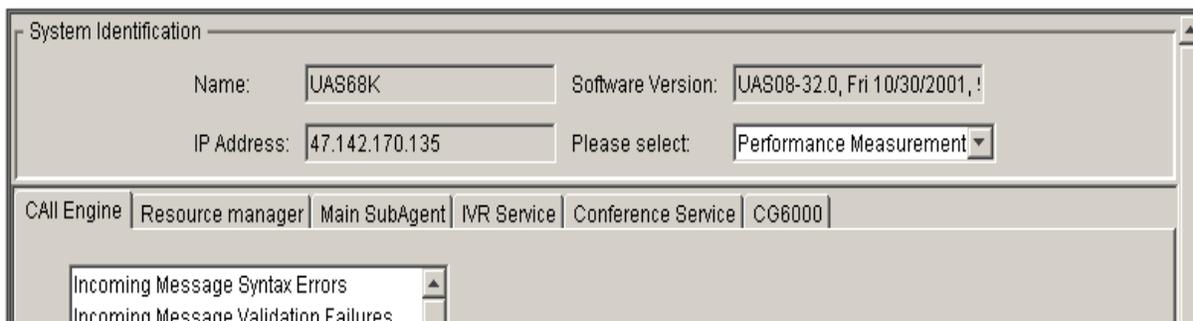
The system identification pane contains the following information pertaining to the network element unit you have selected:

• name

• IP address

• software version running on the unit and the software build time-stamp

• pull-down list of configuration information pertaining to the network element unit you have selected

Component-specific pane
The component-specific pane contains a listing of configuration information corresponding to the selection you make in the pull-down list in the box labeled, "Please select."

Performance Measurement   When you select "Performance Measurement" in the pull-down list, a screen like that shown in the following illustration displays. The component-specific pane contains tabs with which you can select different types of performance measurement information. For a description of each of the performance measurements that can be displayed, see the document, NN10139-711, entitled "UAS Performance Management," in your UAS document suite.

Universal Audio Server Manager main screen showing the Performance Measurement selection

Maintenance   When you select "Maintenance" in the pull-down list, a screen like that shown in the following illustration displays.

Universal Audio Server Manager main screen showing the Maintenance selection
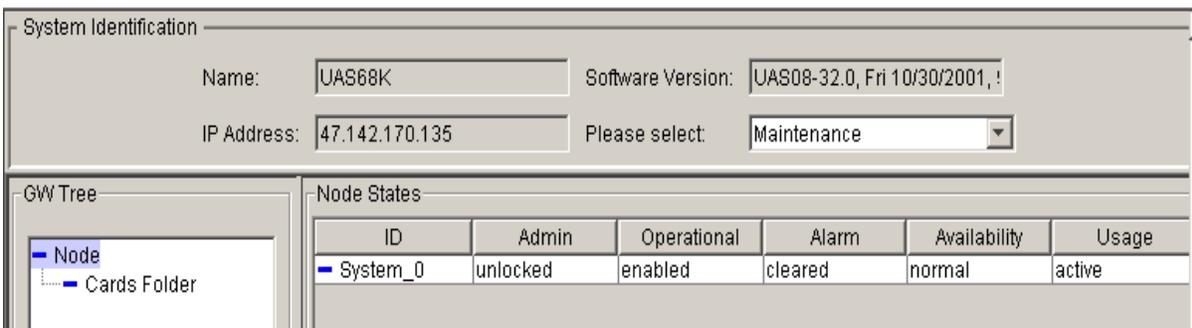
If you select the "Node" folder in the Network Element Tree pane, a "Node States" pane displays, providing state information about the node. The following table describes the state information provided for the node.

Node states

State type	Values	Description	Normal state
Admin	unlocked shutting down locked	indicates if the node is permitted to perform services (unlocked), or is not permitted to perform services (locked)	unlocked
Operational	enabled disabled	indicates whether the node is providing service (enabled) or cannot provide service (disabled)	enabled
Alarm	cleared warning minor major critical	indicates the status of the most severe alarm for the component. A "cleared" status indicates that no alarms are active.	cleared
Availability	normal	not applicable	normal
Usage	idle active busy	indicates if a node is not in use (idle), is in use (active), or is in use and is at maximum capacity (busy)	idle or active

When you select (click) the selected node, buttons located at the bottom of the screen become activated. Depending on the current operational state of the node, you may then lock, unlock, restart, or reboot the node, or you may view component states information for the node. These operations are described fully in dedicated procedures located in the document, NN10073-911, entitled "UAS Fault Management," in your UAS document suite.

If you select the "Cards Folder" in the Network Element Tree pane, operation information about the cards provisioned in the node displays in the "Content of Cards Folder" pane. When you select (click) a card in the list of cards, buttons located at the bottom of the screen become activated. Depending on the current operational state of the card, you may then lock or unlock the card, or you may view component states information for the card. These operations are described fully in dedicated procedures located in the document, NN10073-911, entitled "UAS Fault Management," in your UAS document suite.

Configuration   When you select "Configuration" in the pull-down list, a screen like that shown in the following illustration displays. The screen contains configuration file parameters, and tabs for additional screens containing configuration file parameters, that enable you to change configuration information applicable to the bearer fabric type of your node. The configuration file parameters are described in the table entitled, [Configuration parameters](#). Procedures that show how to change configuration information using the Universal Audio Server Manager can be found in the document, NN10095-511, entitled "UAS Configuration Management," in your UAS document suite.

Universal Audio Server Manager main screen showing the Configuration selection

SNMP Configuration   When you select "SNMP Configuration" in the pull-down list, a screen like that shown in the following illustration displays. The component-specific pane contains a "Trap Destinations" pane, which shows existing SNMP configuration. From this pane, you can add new information, or you can modify or delete existing information. Procedures that show how to change the SNMP configuration information using the Universal Audio Server Manager can be found in the document, NN10095-511, entitled "UAS Configuration Management," in your UAS document suite.

Universal Audio Server Manager main screen showing the SNMP Configuration selection

IP Address	Port	Security Name	Alarms	Logs	Ptm ColdStart	Std ColdStart	Version

ATM Bearer Interface   When you select "ATM Bearer Interface" in the pull-down list, a screen like that shown in the following illustration displays. The component-specific pane contains a "UAS ATM Bearer Interfaces" pane that enables you to link a local port ATM address to a particular ATM interface port. Through this pane, the current state of the ATM interface can be monitored and the administrative state of the card can be modified. A procedure that enables you change ATM bearer interface settings using the Universal Audio Server Manager can be found in document, NN10095-511, entitled "UAS Configuration Management," in your UAS document suite.

Universal Audio Server Manager main screen showing the ATM Bearer Interface selection

ATM SVCs   When you select "ATM SVCs" in the pull-down list, a screen like that shown in the following illustration displays. Three tabs in the component-specific pane enable you to choose whether to view information related to a selected port ATM address, to view information related to a selected destination ATM address, or to view and modify an ATM AAL2 SVC profile.

Universal Audio Server Manager main screen showing the ATM SVCs selection

ATM AAL2 PVCs   When you select "ATM AAL2 PVCs" in the pull-down list, a screen like that shown in the following illustration displays. The screens in the component-specific pane enable you to provide the UAS with a remote gateway's name and ATM address.

Universal Audio Server Manager main screen showing the ATM AAL2 PVCs selection

Status pane
The Status pane, located below the component-specific pane, records status messages pertaining to the communication of the node with the Universal Audio Server Manager server. The messages can be used in basic troubleshooting when communication between the node the Universal Audio Server Manager is disrupted.

When you place your cursor in the Status pane and right-click your mouse, three options display that enable you to clear existing messages from the status pane, to refresh the status pane content, or to collect the status pane content for insertion into a file on your PC desktop.

Local Configuration Interface (LCI) GUI
The Local Configuration Interface (LCI) GUI enables you to change the configuration file parameters. Although the Universal Audio Server Manager should normally be used for this purpose, the LCI GUI enables you to make configuration file updates in the event that the Universal Audio Server Manager is not operating. The LCI GUI is run on a single, local node.

When you launch the LCI GUI, the main screen displays. A "Node" folder displays in the Network Element Tree pane of the screen. When you select the Node folder, the configuration screen appropriate for the bearer fabric of your node displays. If the bearer fabric of your node is ATM, you may need to also select the appropriate ATM bearer fabric of your node, either ATM-AAL1 or ATM-AAL2. A sample IP bearer fabric configuration screen is shown in the following illustration.

LCI GUI configuration screen for an IP bearer fabric node
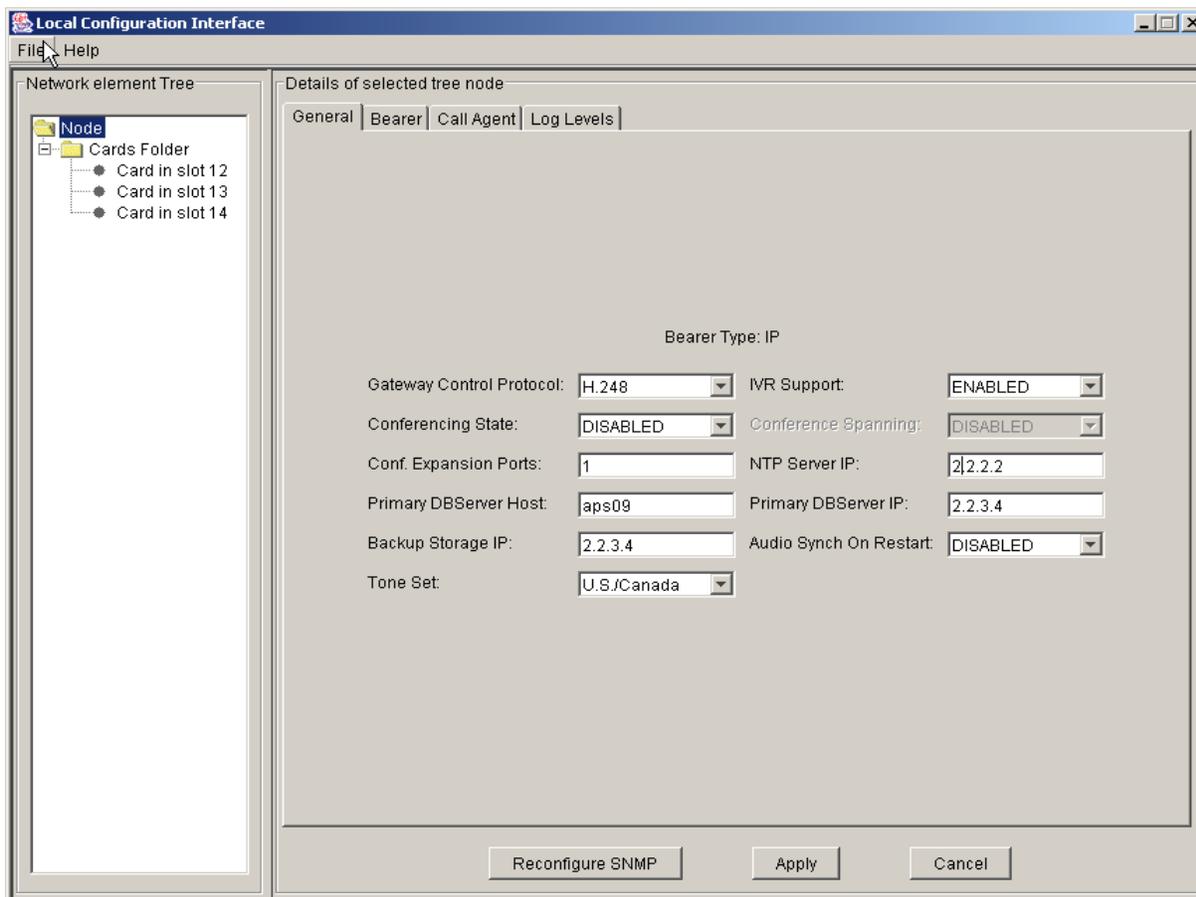
The screen contains configuration file parameters, and tabs for additional screens containing configuration file parameters, that enable you to change configuration information applicable to the bearer fabric type of your node. All of the configuration file parameters that you can modify through the LCI GUI are described in the table entitled, Configuration parameters.

SNMP Configuration file parameters
If you click the "Reconfigure SNMP" button located at the bottom of the LCI GUI configuration screen, an SNMP configuration screen, like that shown in the following illustration, displays. From this screen you can change the SNMP management configuration file parameters.

LCI GUI SNMP configuration screen

Please change the following default values:

v2c read/write community:	admin
v2c read only community:	public
v3 read/write user:	v3admin
v3 read only user:	v3user
trap version:	v3 ▼
trap destination:	66.77.88.99
trap port:	162

OK   Cancel

CG6000C card Configuration file parameters
If the bearer fabric of your node is IP, the "Cards Folder", located in the Node folder, displays. If you select the Cards Folder, a cards screen like that shown in the following illustration displays in the "Details of selected tree node" window. From this screen you can view the various Configuration file parameters associated with the CG6000C cards provisioned in your node.

LCI GUI CG6000C cards screen
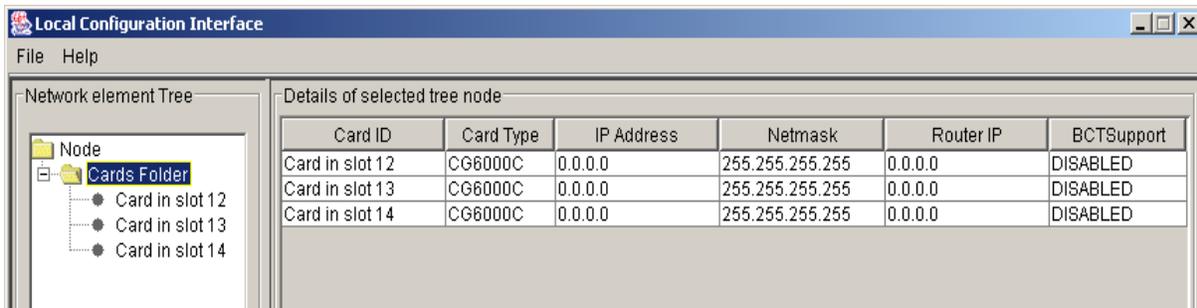
If you then double-click the Cards Folder, a bulleted list of the cards shown in the cards screen displays below the Node folder. When you select the bullet associated with a card in this list, a detail screen for the card you have chosen displays in the "Details of selected tree node" window, like that shown in the following illustration. Through this screen, you can change the configuration file parameters for the card.

LCI GUI CG6000C card detail screen
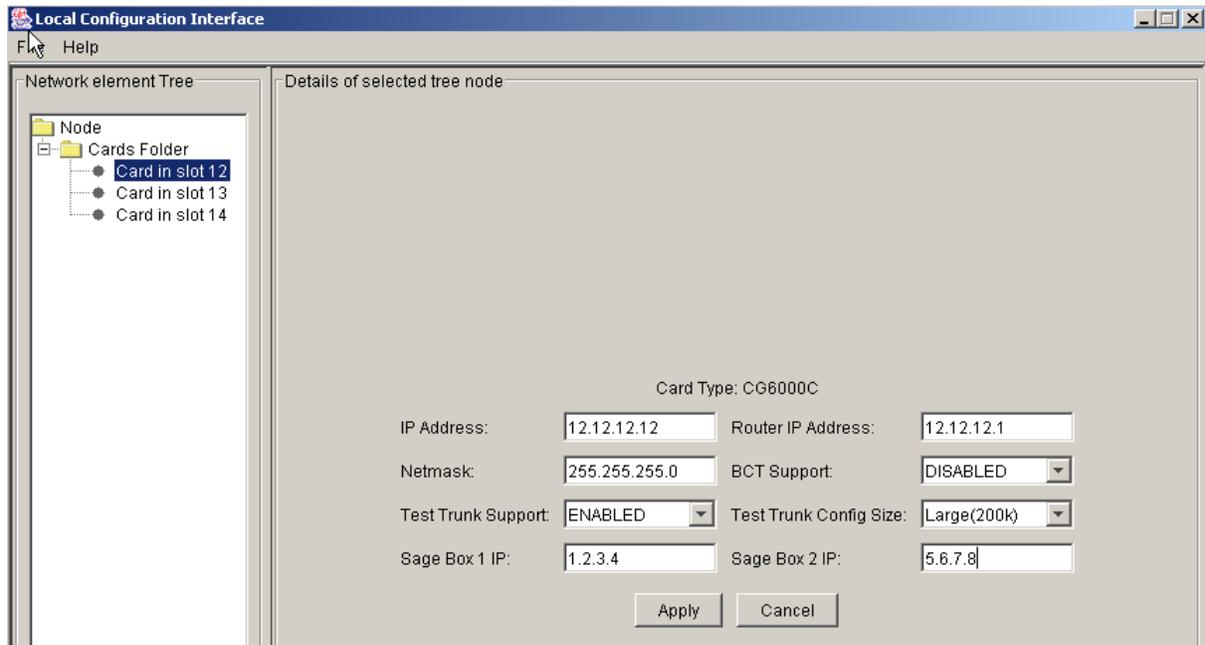
ATM-AAL1 card Configuration file parameters

When an AG4000 card is provisioned in the ATM-AAL1 node, used for ATM CTone Support, this capability is enabled through the "ATM CTone Support" field in the General tab window of the ATM-AAL1 configuration screen. There is no separate card configuration screen for the ATM-AAL1 AG4000 card.

ATM-AAL2 card Configuration file parameters

If the bearer fabric of your node is ATM-AAL2, a bulleted list of the AG4000 cards configured in the node for test trunk support displays below the Node folder. When you select the bullet associated with a card in this list, a detail screen for the card you have chosen displays in the "Details of selected tree node" window, like that shown in the following illustration. Through this screen, you can configure the card for trunk testing support.

LCI GUI ATM-AAL2 AG4000 card detail screen
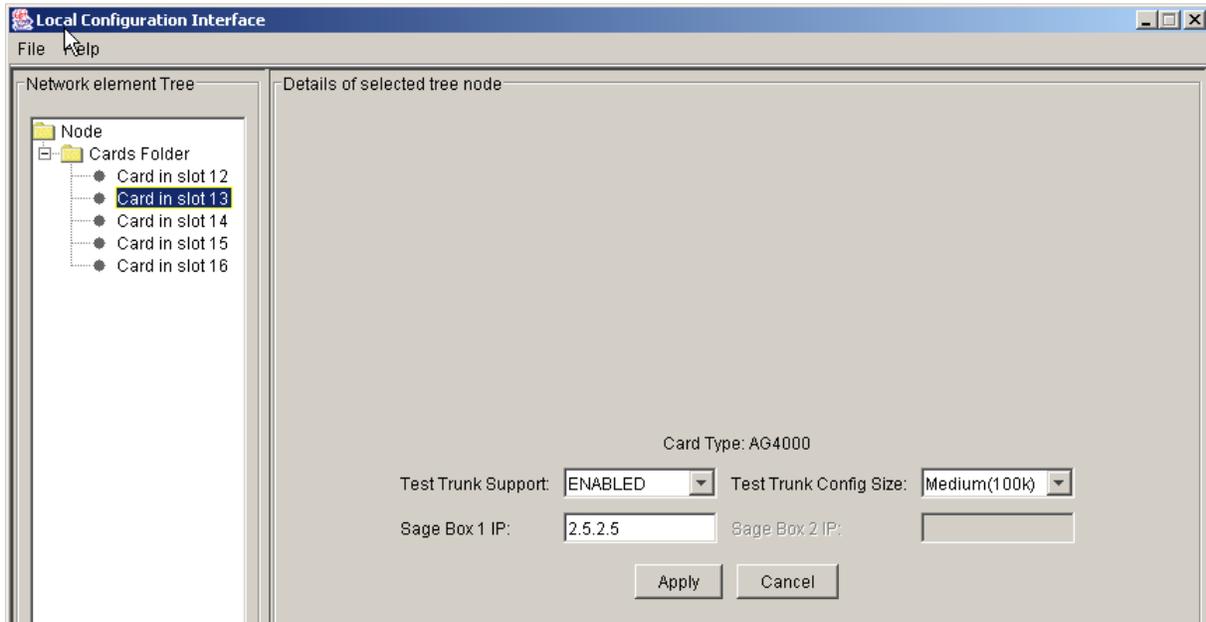
Procedures for changing Configuration file parameters
A procedure that shows how to change configuration information using the LCI GUI can be found in the document, NN10095-511, entitled "UAS Configuration Management," in your UAS document suite. Procedures for datafilling the CG6000 and AG4000 card configuration parameters, in response to card removal or addition, can be found in the document, NN10073-911, entitled "UAS Fault Management," in your UAS document suite.

UAS and APS Configuration management procedures

The following table lists configuration procedures used for identifying the UAS and APS in the network topology (Universal Audio Server Manager)

Configuration procedures used to identify a UAS or APS in the network topology

Procedure and page	Interface or Tool used
Adding a UAS or APS to the network topology	UAS Manager
Deleting a UAS or APS from the network topology	UAS Manager
Renaming a UAS or APS in the network topology	UAS Manager

The following table lists UAS-specific configuration procedures.

UAS configuration procedures

Procedure and page	Interface or Tool used
Changing the audio management DB server IP address	UAS Manager
Changing ATM bearer interface settings	UAS Manager
Changing ATM AAL2 PVC settings	UAS Manager
Viewing ATM SVC settings	UAS Manager
Configuring the SNMP trap destination	UAS Manager
Modifying configuration parameters through the Universal Audio Server Manager	UAS Manager
Modifying configuration parameters through the Universal Audio Server Manager	LCI GUI
Configuring tone sets	Toneset Configuration GUI

Adding a UAS or APS to the network topology

The following procedure enables you to add a new audio server (UAS) or audio provisioning server (APS) to the Universal Audio Server Manager interface.

Adding a UAS or APS to the network topology

At the Configuration Menu of the Universal Audio Server Manager

1   Select either the Add UAS or Add APS option.

2   In the Add Audio Server or Add Audio Provisioning Server window, enter the following information:

  • server name

    Note 1: It is recommended that the server (node) name assigned the UAS or APS not exceed 20 characters in length.

    Note 2: Ensure that this is the same server name entered during installation of the unit.

  • IP address

  • port number used by the SNMP master agent (this must be consistent with the port number established during the installation of the server)

  • security name

3   Click the Add button in the window.

The UAS or APS unit appears in the Network Elements pane of the Universal Audio Server Manager main screen.

4   You have completed this procedure.

Deleting a UAS or APS from the network topology

This procedure enables you to delete an audio server (UAS) or audio provisioning server (APS) from the Universal Audio Server Manager Interface.

Deleting a UAS or APS from the network topology

At the Network Elements pane of the Universal Audio Server Manager main screen

1   Select the UAS or APS for deletion.

2   In the Configuration menu, select either the Delete UAS or Delete APS option.

3   In the Delete Warning window that displays, click OK.

      The system performs the deletion and updates the Network Elements pane of the Universal Audio Server main screen.

4   You have completed this procedure.

Renaming a UAS or APS in the network topology

This procedure enables you to rename an audio server (UAS) or audio provisioning server (APS) that is currently viewable through the Universal Audio Server Manager interface.

Renaming a UAS or APS in the network topology

At the Network Elements pane of the Universal Audio Server Manager main screen

1   Select the UAS or APS unit to be renamed.

2   In the Configuration menu, select either the Delete UAS or Delete APS option.

3   In the Delete Warning window that displays, click OK.

The system performs the deletion and updates the Network Elements pane of the Universal Audio Server Manager main screen.

At the Configuration Menu

4   Select either the Add UAS or Add APS option.

5   In the Add UAS or Add APS window, enter the following information for the renamed unit:

- new server name

    Note: It is recommended that the server (node) name assigned the UAS or APS not exceed 20 characters in length.

- IP address

- port number used by the SNMP master agent (this must be consistent with the port number established during the installation of the server)

- security name

6   Click the Add button in the window.

The UAS or APS unit appears in the Network Elements pane of the Universal Audio Server main screen.

7   You have completed this procedure.

Changing the audio management DB server IP address

This procedure enables you to change the IP address of the APS that is hosting the database server used by this UAS node.

Changing the audio management DB server IP address

At the Network Element Status panel of the Universal Audio Server Manager

1   Pull down the Component menu in the System Identification pane and from it select Configuration.

2   Click "Node" in the Network Element Tree panel.

The current configuration information for the node displays in the General tab window of the Component-specific panel.

3   Enter the new IP address in the Primary DBServer IP field.

4   Click Apply.

5   In the pull-down list in the box labeled, "Please select," select Maintenance.

6   In the Maintenance Tree pane, select "Node".

7   Click the node entry that displays in the table shown in the Node States pane.

8   Lock the node by clicking the "Lock Graceful" button located at the bottom of the Node States pane.

9   Restart the node by clicking the "Restart Application" button located at the bottom of the Node States pane.

10   Click OK in the Restart Application Warning window.

11   Click OK in the Warning window.

12   You have completed this procedure.

Changing ATM bearer interface settings

Use the change ATM bearer interface settings to link a local port ATM address to a particular ATM interface port. The current states of the ATM interface can be monitored and the administrative state of the card can be modified.

Changing ATM bearer interface settings

At the Network Element Status panel of the Universal Audio Server Manager

1   In the Network Elements pane, select the appropriate UAS node.

Information about the node displays in the System Identification pane.

2   In the pull-down list in the box labeled, "Please select," select ATM Bearer Interface

The UAS ATM Bearer Interfaces screen displays in the component-specific pane.

3   Determine the action to be performed for the Bearer Interface and then click the Bearer Interface to be changed in the UAS ATM Bearer Interfaces screen.

> **Note:** To Link or Unlink an ATM Address, the Admin state must be set to Locked (Out of Service). The Bearer Interface must be Linked to an ATM address in order to set the Admin state to Unlocked (In service).

If	Do
you want to link an ATM address	step 4
you want to unlink an ATM address	step 7
you want to change the Admin state	step 9
you want to modify properties associated with an ATM bearer interface	step 11

4   Click the Link button.

The Specify ATM Interface Port Link window displays.

5   In the Specify ATM Interface Port Link window, pull down the menu for the local port ATM address and make a selection.

6   Click Save.

   a   Go to step 13.

7   Click the Unlink button.

The Confirm Unlink window displays.

8   Click Yes.

   a   Go to step 13.

9   Click the Change State button.

The Confirm State Change window displays.

10   Click Yes.

   a   Go to step 13.

11   Click the Properties button.

The ATM Interface Property Window displays.

12   Make any desired modifications in the ATM Interface Property Window and click Apply.

13   You have completed this procedure.

Changing ATM AAL2 PVC settings

Use the change ATM AAL2 PVC settings procedure to provide the UAS with a remote gateway's name and ATM address. If a call is present on an associated virtual circuit (VC), you will not be permitted to delete or modify the virtual circuit or remote gateway.

Changing ATM AAL2 PVC settings

At the Network Element Status panel of the Universal Audio Server Manager

1   In the Network Elements pane, select the appropriate UAS node.

Information about the node displays in the System Identification pane.

2   In the pull-down list in the box labeled, "Please select," select ATM AAL2 PVCs.

The ATM AAL2 PVC configuration screens display in the component-specific pane.

3   Determine the action to be performed on the remote gateway.

If	Do
you want to add a remote gateway	step 4
you want to delete a remote gateway	step 7
modify a remote gateway	step 10
view or modify remote gateway properties	step 14

4   Click the Add button, located in the Remote Gateways panel.

The ATM Bearer Connection Gateway Settings window displays.

5   In the ATM Bearer Connection Gateway Settings window, enter a Gateway Name and Gateway ATM Address for the new Gateway.

6   Click Save.

    a   Go to step 27.

7   Select a Remote Gateway.

8   Click the Delete button.

The Delete Gateway window displays.

9   Click OK.

    a Go to step 27.

10   Select a Remote Gateway.

11   Click the Modify button.

The ATM Bearer Connection Gateway Settings window displays.

12   In the ATM Bearer Connection Gateway Settings window, modify the Gateway Name and/or Gateway ATM Address.

13   Click Save.

    a Go to step 27.

14   Select a Remote Gateway.

15   Click the Properties button.

The ATM Bearer Connection Properties window displays.

16   Determine the action to be performed on the Bearer Connection.

If	Do
you want to add a VC	step 17
you want to delete a VC	step 20
modify a VC	step 23

17   Click the Add button.

The Specify ATM Bearer Connection Properties window displays.

18   In the ATM Bearer Connection Properties window, enter a VCCI, VPI, and VCI. Either pull down the Local Port ATM Address and make a selection or enter a valid Local Port ATM address. The AAL Type cannot be changed.

19   Click Save.

    a Go to step 27.

20   Select a VC.

21   Click the Delete button.

22   Click the OK button in the Delete VC confirmation window.

    a Go to step 27.

23   Select a VC.

24   Click Modify.

The ATM Bearer Connection Properties window displays.

25 In the ATM Bearer Connection Properties window, modify the VCCI, VPI, VCI. Either pull down the Local Port ATM Address and make a selection or enter a valid Local Port ATM address. The AAL Type cannot be changed.

26 Click Save.

27 You have completed this procedure.

Viewing ATM SVC settings

Use this procedure to view ATM SVC (Switched Virtual Connections) settings.

Viewing ATM SVC settings

At the Network Element Status panel of the Universal Audio Server Manager

1 In the Network Elements pane, select the appropriate UAS node.

Information about the node displays in the System Identification pane.

2 In the pull-down list in the box labeled, "Please select," select ATM SVCs.

The ATM SVCs configuration screen displays in the component-specific pane, showing ATM SVC by Port configuration information.

3 Determine whether you want to view information related to a selected port ATM address.

If	Do
you want to view information related to a selected port ATM address	step 4
you don't want to view information related to a selected port ATM address	step 5

4 Click the slot line in the display and then click Properties.

The Switched Virtual Connections by port screen displays.

In addition to the destination ATM address, the fields displayed include:

- Vpi - virtual path identifier
- Vci - virtual channel identifier
- AAL Type - ATM adaptation layer type
- Eecid - end-to-end connection identifier
- Vcci - virtual channel connection identifier
- Conn ids in Use - connection IDs in use
- Max Conn ids - maximum connection IDs

Click Close when you have finished reviewing the information in the screen.

If	Do
you want to view ATM SVC by destination information	step 5
you don't want to view ATM SVC by destination information	step 8

5   Select the "ATM SVC by destination" tab.

The addresses of UAS ATM nodes, established at the ATM destination gateways, appear in the "ATM SVC by destination" tab display.

6   Determine whether you want to view information related to a selected destination ATM address.

If	Do
you want to view information related to a selected destination ATM address	step 7
you don't want to view information related to a selected destination ATM address	step 10

7   Click the destination address in the display and then click Properties.

The Switch Virtual Connections by destination screen displays.

In addition to the slot and port numbers, the fields displayed include:

- Vpi - virtual path identifier
- Vci - virtual channel identifier
- AAL Type - ATM adaptation layer type
- Eecid - end-to-end connection identifier
- Vcci - virtual channel connection identifier

Click Close when you have finished reviewing the information in the screen.

8   Determine whether you want to view an ATM AAL2 SVC profile.

If	Do
you want to view an ATM AAL2 SVC profile	step 9
you don't want to view an ATM AAL2 SVC profile	step 10

9   Select the "ATM AAL2 SVC Profile" tab.

The SVC profile appears in the "ATM AAL2 SVC Profile" tab display.

a   Determine whether you want to modify an ATM AAL2 SVC profile.

If	Do
you want to modify an ATM AAL2 SVC profile	step b
you don't want to modify an ATM AAL2 SVC profile	step 10

b   Click a profile line in the display and then click Modify.

The Change Atm SVC Profile window displays.

c   For detailed information about the fields in this display, see the latest version of the document entitled, "ATM Forum - Traffic Management Specification." The identification number for version 4 of this document is af-tm-0056.000. The following fields in the display can be changed:

- Number of CIDS - the number of calls supported on each new SVC (1-247; default is 4)
- Persistence Lifetime - the number of seconds an idle AAL2 SVC is kept prior to being released. An idle AAL2

SVC has no active calls on it. (0-600 seconds; default is 180 seconds)

Make the changes and, if you wish to save the changes, click Save.

10 You have completed this procedure.

Configuring the SNMP trap destination

Use this procedure to add, modify, or delete an SNMP trap destination for this UAS node.

Configuring the SNMP trap destination

At the Network Element Status panel of the Universal Audio Server Manager

1   In the Network Elements pane, select the appropriate UAS node.

Information about the node displays in the System Identification pane.

2   In the pull-down list in the box labeled, "Please select," select SNMP Configuration

The existing SNMP trap destinations display in the Trap Destinations pane.

3   Determine the action to be performed.

If	Do
you want to add an SNMP trap destination	step 4
you want to modify an SNMP trap destination	step 5
you want to delete an SNMP trap destination	step 6

4   Click Add.

The Trap Destination window displays.

a   Enter an IP address, port number, security name, and trap version, and select the types of supported traps to be sent to this destination.

If	Do
you want to save the new trap destination information	step b
you want to cancel the new trap destination information	step c

b   Click Save. Go to step 7.

c   Click Cancel. Go to step 7.

5   Select an SNMP destination to modify.

    a Click Modify.

    The Trap Destination window displays.

    b Enter, as desired, new information in the IP address, port number, security name, and trap version fields, and change any types of supported traps to be sent to this destination.

If	Do
you want to save the new trap destination information	step <u>c</u>
you want to cancel the new trap destination information	step <u>d</u>

    c Click Save. Go to step <u>7</u>.

    d Click Cancel. Go to step <u>7</u>.

6 Select an SNMP destination to delete.

    a Click Delete.

    The Confirm Delete window displays.

If	Do
you want to save the new trap destination information	step <u>b</u>
you want to cancel the new trap destination information	step <u>c</u>

    b Click Yes. Go to step <u>7</u>.

    c Click No.

7 You have completed this procedure.

Modifying configuration parameters through the Universal Audio Server Manager

This procedure enables you to modify configuration parameters stored in C:\uas\etc\uas.conf, through the Universal Audio Server Manager. This procedure enables you to change general configuration parameters, including those for SNMP management. It does not contain the steps for changing CG6000C or AG4000 card configuration parameters. Procedures for changing CG6000C or AG4000 card configuration parameters after adding or removing the cards from the UAS system chassis can be found in the document, NN10073-911, entitled "UAS Fault Management," in your UAS document suite.

Modifying configuration parameters through the Universal Audio Server Manager

At the Network Element Status panel of the Universal Audio Server Manager

1   In the Network Elements pane, select the appropriate UAS node.

Information about the node displays in the System Identification pane.

2   In the pull-down list in the box labeled, "Please select," select Maintenance.

3   In the Maintenance Tree pane, select "Node".

4   Click the node entry that displays in the table shown in the Node States pane.

5   Select the entry for the node in the Node States window and then lock the node by clicking the "Lock Graceful" button located at the bottom of the Node States pane.

6   In the pull-down list in the box labeled, "Please select," select Configuration.

7   In the Network Element Tree pane, select "Node".

8   Determine the bearer fabric type of your system, either IP or ATM.

If	Do
IP is the bearer fabric type of your system	step 18
ATM is the bearer fabric type of your system	step 9

9   Determine whether the fabric type of your system is ATM-AAL1 or ATM-AAL2.

If	Do
your UAS bearer fabric type is ATM-AAL1	step 10
your UAS bearer fabric type is ATM-AAL2	step 14

10   In the Bearer Type ATM-AAL1 configuration screen, three tabs display in the "Details of selected tree node" window. Each tab selects a separate screen used for data filling.

Note: In each of the screens that display when you manipulate the ATM fabric version of the LCI GUI in the following steps, fields containing default data that cannot be changed appear in the color grey. When data is entered in an incorrect format in certain of these fields, the field label changes to a red color. When the data is then corrected in the field, the field label changes back to black. None of the screen changes can be applied and saved until all fields in all of the screens associated with the bearer fabric contain correct information.

In the General tab screen, verify and/or enter information for the following fields:

- **Atm Companding Mode**

  This is the companding mode, either A-Law or Mu-Law.

- **Optical Carrier Mode**

  This field allows selection of the appropriate optical carrier standard for your ATM card, either SONET (a North American standard for optical carriers) or SDH (a European standard for optical carriers). The default for AAL1 systems is SONET.

- **NTP Server IP**

  This is the IP address of the Network Time Protocol server on your network. The NTP server is used for synchronizing logs and alarms on the UAS.

  Note: The Windows time service queries the NTP server for time synchronization once every 24 hours. Therefore, a

        system time correction will occur only after the next time synchronization.

- **Backup Storage IP**

  This is the IP address of the database that will contain backup copies of the UAS configuration files. Datafilling this field is optional.

- **End Points**

  This field shows the current number of end points configured. If a system configuration change causes the number of end points to change, the number of end points displayed in this field does not reflect the change until after a system restart. This is a read-only field.

11   Select the "Call Agent" tab.

       The Call Agent tab screen displays in the "Details of selected tree node" window.

12   In the Call Agent tab screen, verify and/or enter information for the following fields:

- **Primary Call Agent Name**

  This is the computer name associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent IP Address**

  This is the IP address associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent Port**

  This is the port of the Call Agent application (default is 2944).

- **UAS Call Control Port**

  This is the port associated with receiving the call control message stream (default is 2944).

13   Go to step 23.

14   In the Bearer Type ATM-AAL2 configuration screen, three tabs display in the "Details of selected tree node" window. Each tab selects a separate screen used for data filling.

Note: In each of the screens that display when you manipulate the ATM fabric version of the LCI GUI in the following steps, fields containing default data that cannot be changed appear in the color grey. When data is entered in an incorrect format in certain of these fields, the field label changes to a red color. When the data is then corrected in the field, the field label changes back to black. None of the screen changes can be applied and saved until all fields in all of the screens associated with the bearer fabric contain correct information.

In the General tab screen, verify and/or enter information for the following fields:

- **Atm Companding Mode**

  This is the companding mode, either A-Law or Mu-Law.

- **Optical Carrier Mode**

  This field allows selection of the appropriate optical carrier standard for your ATM card, either SONET (a North American standard for optical carriers) or SDH (a European standard for optical carriers). The default for AAL2 systems (including wireless systems) is SDH; if a North American AAL2 system is being configured, this field must be changed to SONET.

- **Gateway Control Protocol**

  This is the control protocol for the UAS, either H.248 or MGCP.

- **IVR Support**

  This indicates whether IVR support is enabled on this system.

- **NTP Server IP**

  This is the IP address of the Network Time Protocol server on your network. The NTP server is used for synchronizing logs and alarms on the UAS.

  Note: The Windows time service queries the NTP server for time synchronization once every 24 hours. Therefore, a

system time correction will occur only after the next time synchronization.

- **Primary DBServer Host**

  This is the hostname associated with the APS that is hosting the database server used by this UAS node. If the system does not support its own APS, accept the default settings.

- **Primary DBServer IP**

  This is the IP address of the APS that is hosting the database server used by this UAS node.

- **Backup Storage IP**

  This is the IP address of the database that will contain backup copies of the UAS configuration files. Datafilling this field is optional.

- **Audio Synch on Restart**

  For audio server applications of the UAS, this entry determines whether you want audio distribution refresh upon node startup, in addition to the regularly-scheduled, hourly audio distribution. The pull-down menu allows you to select either Enabled or Disabled.

- **End Points**

  This field shows the current number of end points configured. If a system configuration change causes the number of end points to change, the number of end points displayed in this field does not reflect the change until after a system restart. This is a read-only field.

15   Select the "Call Agent" tab.

The Call Agent tab screen displays in the "Details of selected tree node" window.

16   In the Call Agent tab screen, verify and/or enter information for the following fields:

- **Primary Call Agent Name**

    This is the computer name associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent IP Address**

    This is the IP address associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent Port**

    This is the port of the Call Agent application (default is 2944).

- **UAS Call Control Port**

    This is the port associated with receiving the call control message stream.

- **Legacy Announcements**

    This indicates that the UAS is used in a CS2K network, in a multilingual environment. The pull-down menu allows you to select either Enabled or Disabled.

    Note: If Legacy Announcements is Enabled, then both a Primary Language and Secondary Language must also be entered. If the Legacy Announcements is Disabled, then both the Primary Language and the Secondary Language fields are Disabled.

- **Primary Languag**e

    This is the primary language associated with the node.

    Note: A Primary Language is required only if the Legacy Announcements field is Enabled. If Legacy Announcements is Disabled, then the Primary Language field will also be Disabled.

- **Secondary Language**

    This is the secondary language associated with the node.

    Note: A Secondary Language is required only if the Legacy Announcements field is Enabled. If Legacy Announcements is Disabled, then the Secondary Language field will also be Disabled.

17   Go to step 23.

18   In the Bearer Type IP configuration screen that displays, four tabs display in the "Details of selected tree node" window. Each tab selects a separate screen used for data filling.

>   ***Note 1:*** Fields containing default data that cannot be changed appear in the color grey.

>   ***Note 2:*** When data is entered in an incorrect format in certain of these fields, the field label changes to a red color. When the data is then corrected in the field, the field label changes back to black. None of the screen changes can be applied and saved until all entry errors in the screen are corrected.

In the General tab screen, verify and/or enter information for the following fields:

- **Gateway Control Protocol**

    This is the control protocol for the UAS, either H.248 or MGCP.

    >   ***Note:*** Ensure that the Gateway Control Protocol is set to H.248.

- **IVR Support**

    This field determines whether IVR support is enabled in this system.

- **Conferencing State:**

    This field determines whether Conferencing is enabled in this node.

    >   ***Note:*** If Conferencing State is Disabled, then the Conference Spanning field is also Disabled.

- **Conference Spanning**

  This field determines whether Conference Spanning is supported by the node. Conference Spanning allows conferences with up to 128 participants.

  > ***Note:*** If "Conferencing State" is Disabled, then the Conference Spanning field is also Disabled.

- **Conference Expansion Ports**

  This field indicates the number of reserved conference ports that can be used to grow existing conferences, but that cannot be used in reservations for new conferences. This prevents existing conferences from running out of resources. Once a port from this buffer is used, it is restored to the pool of resources after any member of the conference in the pool drops out of the conference.

  When you increase this number, fewer ports are available for general use. For example, if you reserve four ports, a 32-port pool will have only 28 ports available for new conferences. If you decrease this number, fewer ports are available to grow existing conferences when the pool is full.

- **NTP Server IP**

  This is the IP address of the Network Time Protocol server on your network. The NTP server is used for synchronizing logs and alarms on the UAS.

  > ***Note:*** The Windows time service queries the NTP server for time synchronization once every 24 hours. Therefore, a

system time correction will occur only after the next time synchronization.

- **Primary DBServer Host**

  This is the hostname associated with the APS that is hosting the database server used by this UAS node. If the system does not support its own APS, accept the default settings.

- **Primary DBServer IP**

  This is the IP address of the APS that is hosting the database server used by this UAS node.

- **Backup Storage IP**

  This is the IP address of the database that will contain backup copies of the UAS configuration files. Datafilling this field is optional.

- **Audio Synch on Restart**

  For audio server applications of the UAS, this entry determines whether you want audio distribution refresh upon node startup, in addition to the regularly-scheduled, hourly audio distribution. The pull-down menu allows you to select either Enabled or Disabled.

- **Tone set**

  This is the default tone set provided for the country that you select from the pull-down menu associated with this field.

- **End Points**

  This field shows the current number of end points configured. If a system configuration change causes the number of end points to change, the number of end points displayed in this field does not reflect the change until after a system restart. This is a read-only field.

19   Select the "Bearer" tab.

The Bearer tab screen displays in the "Details of selected tree node" window.

20　In the Bearer tab screen, verify and/or enter information for the following fields:

- **Rtp Base Port**

  This is the first port number used for real-time protocol streams on VoIP cards.

  > ***Note:***　*This must be an even number. In addition, commas must not be entered in the number.*

- **Annc Circuits per Card**

  This is the number of circuits available for announcements on each bearer card in the system. This number is taken from the engineering data for the system. If IVR is enabled, this number should be greater than zero. The allowable values are one through the value of Max. Annc Circuits per Card.

- **Conference Circuits per Card**

  This is the number of circuits available for conferencing on each bearer card in the system. This number is taken from the engineering data for the system. If conferencing is enabled, this number should be greater than zero. The allowable values are one through the value of Max. Conf. Circuits per Card.

- **Max. Annc Circuits per Card**

  This is the maximum value for Annc Circuits per Card, for the network element. This number can vary depending on the software release of the network element and also depending on whether the network element is configured for IP or for ATM. The element manager uses this value to perform error checking on the user's input for Annc Circuits per Card.

- **Max. Conf. Circuits per Card**

  This is the maximum value for Conference Circuits per Card for the network element. This number can vary depending on the software release of the network element. The element manager uses this value to perform error checking on the user's input for Conference Circuits per Card.

- **Transmit Gain**

  This is the strength of a signal going out from the vocoder of an rtp endpoint as compared with the strength of a signal

going into the vocoder. Transmit Gain does not apply to conferencing service.

- **Receive Gain**

  This is the strength of a signal coming into an rtp endpoint from the decoder as compared with the strength of a signal coming into the decoder.

- **Default TOS**

  This field determines the Type of Service bit usage for this UAS, 0-255. The default is 0, which indicates "normal" delay, throughput, and reliability, with "routine" precedence.

- **RFC2833 DTMF**

  This field indicates how the UAS will determine whether RFC2833 is enabled for each RTP connection. RFC2833 defines a method for passing DTMF digits "out-of-band" in special RTP packets, in order to provide more reliable DTMF

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recognition than is possible with low-bandwidth codecs. The possible selections include:

— *AlwaysOff (RFC2833 support is always disabled, regardless of call control)*

— *Negotiated (RFC2833 support is enabled per call control messaging, that is, SDP and/or LCO negotiation)*

Note: The setting should be AlwaysOff when announcements or conferencing are supported.

- **RFC2833 DTMF Squelch**

  Not applicable

- **G729B**

  This field indicates G.729B audio codec support.

- **Clock Sync Mode**

  Not applicable

- **Primary Clock Source**

  Not applicable

- **Secondary Clock Source**

  Not applicable

- **Clock Source Carrier Type**

  Not applicable

- **Current Clock Source Type**

  Not applicable

- **Current Clock Source**

  Not applicable

- **Supported Codec**

  These check boxes determine which codecs, G711, G723, G726, G729, and T.38 are supported. The following

guidelines should be followed when you are selecting the codecs:

— *T.38 is selectable <u>only</u> when at least one CG6000 card with BCT capability is installed in the system.*

— *In an <u>all-BCT</u> system, all voice codecs should be disabled.*

— *In a <u>non-BCT</u> system, up to a maximum of four voice codecs can be selected; the T.38 codec cannot be selected.*

— *In a mixed system (BCT + IVR, BCT + Conf, BCT + IVR + Conf), up to a maximum of four of the codecs can be selected; one of the four codecs selected must be a voice codec.*

— *In a non-BCT system supporting only conferencing service, G.729 must <u>not</u> be selected.*

— *It is recommended that you select G.711 for systems supporting conferencing service, to avoid any possible deterioration of voice quality.*

21   Select the "Call Agent" tab.

The Call Agent tab screen displays in the "Details of selected tree node" window.

22 In the Call Agent tab screen, verify and/or enter information for the following fields:

- **Primary Call Agent Name**

  This is the computer name associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent IP Address**

  This is the IP address associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent Port**

  This is the port of the Call Agent application (default is 2944).

- **UAS Call Control Port**

  This is the port associated with receiving the call control message stream (default is 2944).

- **Legacy Announcements**

  This indicates that the UAS is used in a CS2K network, in a multilingual environment. The pull-down menu allows you to select either Enabled or Disabled.

  Note: If Legacy Announcements is Enabled, then both a Primary Language and Secondary Language must also be entered. If the Legacy Announcements is Disabled, then both the Primary Language and the Secondary Language fields are Disabled.

- **Primary Languag**e

  This is the primary language associated with the node.

  Note: A Primary Language is required only if the Legacy Announcements field is Enabled. If Legacy Announcements is Disabled, then the Primary Language field will also be Disabled.

- **Secondary Language**

  This is the secondary language associated with the node.

  Note: A Secondary Language is required only if the Legacy Announcements field is Enabled. If Legacy Announcements is Disabled, then the Secondary Language field will also be Disabled.

23 Select the "Log Levels" tab.

The Log Levels tab screen displays in the "Details of selected tree node" window.

24 In the Log Levels tab screen, verify and/or enter information for the following fields:

- **System Log Level**

  System logs are information, warning, or error events. This field specifies that the Main Subagent is to send either all logs for that source, only warning and error logs for that source, only error logs for that source, or no logs for that source to the element management station.

- **UAS Log Level**

  Audio Server logs include information, warning, or error events. This field specifies that the Main Subagent is to send either all logs for that source, only warning and error logs for that source, only error logs for that source, or no logs for that source to the element management station.

- **Application Log Level**

  Application logs include information, warning, or error events. This field specifies that the Main Subagent is to send either all logs for that source, only warning and error logs for that source, only error logs for that source, or no logs for that source to the element management station.

- **Security Log Level**

  Logs are either audit-succeed or audit-fail. This field specifies that the Main Subagent is to send either all security logs, only audit-fail logs, or no logs for that source to the element management station.

25 Determine whether you want to save the information that you have entered.

If	Do
you want to save the information	step 26
you do not want to save the information	step 29

26   Click Apply.

27   Pull down the menu under File (located at the top left-hand corner of the Local Configuration Interface GUI screen) and select "Save". Click OK when the confirmation screen displays.

28   Go to step 30.

29   Click Cancel.

The entries in the screen fields revert to the default values.

30   In the pull-down list in the box labeled, "Please select," select Maintenance.

31   In the Maintenance Tree pane, select "Node".

32   Click the node entry that displays in the table shown in the Node States pane.

33   Restart the node by clicking the "Restart Application" button located at the bottom of the Node States pane.

34   Click OK in the Restart Application Warning window.

35   Click OK in the Warning window.

36   You have completed this procedure.

Modifying configuration parameters through the LCI GUI

Although the recommended tool to be used for modifying configuration parameters after a system is commissioned is the Universal Audio Server Manager, the following conditions require that you use the Local Configuration Interface (LCI) GUI instead:

- The Universal Audio Server Manager is down due to a hardware or network problem.

- The UAS call processing application is not running. The SNMP subagent that cooperates with the Universal Audio Server Manager runs inside the call processing application. The call processing application must be running to change the configuration through the Universal Audio Server Manager.

The LCI GUI enables you to change configuration parameters stored in C:\uas\etc\uas.conf. This procedure enables you to change general configuration parameters, including those for SNMP management. It does not contain the steps for changing CG6000C or AG4000 card configuration parameters. Procedures for changing CG6000C or AG4000 card configuration parameters after adding or removing the cards can be found in the document, NN10073-911, entitled "UAS Fault Management," in your UAS document suite.

Modifying configuration parameters through the Local Configuration Interface GUI

> **CAUTION**
> **Do not run the Local Configuration Interface GUI if the UAS application is running. Ensure that the UAS unit is out of service and that all UAS applications have stopped.**

At the Windows desktop interface

1   Ensure that the UAS is out of service.

2   Stop any applications that may be running.

    a   Access the "Services" window as follows:

        select **Start -> Programs -> Administrative Tools -> Services**

    b Right-click PMGRdaemon service and select Stop. Wait for notification that the applications have stopped.

> *Note:* You may wish to leave the "Services" window open, for use later in this procedure.

3 Determine the bearer fabric type of your system, either IP or ATM.

If	Do
IP is the bearer fabric type of your system	step 15
ATM is the bearer fabric type of your system	step 4

4 Launch the Local Configuration Interface GUI by performing the following steps:

    a open a command window by selecting **Start -> Run**

    b type **lci** in the window that displays

> *Note:* The first letter in the lci command is an "l", as in "local."

    c click OK or press Enter

> *The main Local Configuration Interface GUI screen displays.*

    d select the "node" folder in the Network Element Tree pane.

5 If you are <u>changing</u> the Adaptation Layer type of your ATM bearer fabric type system, pull down the Adaptation Layer menu and select the appropriate bearer fabric type.

When you select ATM-AAL1, the system checks to ensure that IVR is disabled and BCT is enabled, as required, for the ATM-AAL1 system. If the system detects that IVR is enabled or BCT is disabled, it will react in the following manner:

- *A pop-up window explaining that the configuration is not consistent with ATM displays. The system will ask you whether you want to update; click OK in the message pop-up.*

- *Another pop-up message window that indicates the configuration has been updated will then display; click OK in the message pop-up.*

- *The bearer type ATM-AAL1 configuration screen displays.*

When you select ATM-AAL2, the bearer type ATM-AAL2 configuration screen displays.

6   Determine whether the fabric type of your system is ATM-AAL1 or ATM-AAL2.

If	Do
your UAS bearer fabric type is ATM-AAL1	step 7
your UAS bearer fabric type is ATM-AAL2	step 11

7   In the Bearer Type ATM-AAL1 configuration screen, three tabs display in the "Details of selected tree node" window. Each tab selects a separate screen used for data filling.

In the General tab screen, verify and/or enter information for the following fields:

> *Note:* In each of the screens that display when you manipulate the ATM fabric version of the LCI GUI in the following steps, fields containing default data that cannot be changed appear in the color grey. In addition, when data is entered in an incorrect format in certain of these fields, the field label changes to a red color. When the data is then corrected in the field, the field label changes back to black. None of the screen changes can be validated and saved until all fields in all of the screens associated with the bearer fabric contain correct information.

- **Atm Companding Mode**

  This is the companding mode, either A-Law or Mu-Law.

- **Optical Carrier Mode**

  This field allows selection of the appropriate optical carrier standard for your ATM card, either SONET (a North American standard for optical carriers) or SDH (a European standard for optical carriers). The default for AAL1 systems is SONET.

- **NTP Server IP**

  This is the IP address of the Network Time Protocol server on your network. The NTP server is used for synchronizing logs and alarms on the UAS.

  > *Note:* The Windows time service queries the NTP server for time synchronization once every 24 hours. Therefore, a

system time correction will occur only after the next time synchronization.

- **Backup Storage IP**

  This is the IP address of the database that will contain backup copies of the UAS configuration files. Datafilling this field is optional.

- **ATM CTone Support**

  This field, which must be datafilled when ATM BCT Support is ENABLED (ATM BCT Support is always ENABLED for an AAL1 system), determines how the audio endpoints for the ATM card are defined. The possible responses are: ENABLED or DISABLED.

8 Select the "Call Agent" tab.

The Call Agent tab screen displays in the "Details of selected tree node" window.

9 In the Call Agent tab screen, verify and/or enter information for the following fields:

- **Primary Call Agent Name**

  This is the computer name associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent IP Address**

  This is the IP address associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent Port**

  This is the port of the Call Agent application (default is 2944).

- **UAS Call Control Port**

  This is the port associated with receiving the call control message stream (default is 2944).

10 Go to step 21.

11 In the Bearer Type ATM-AAL2 configuration screen, three tabs display in the "Details of selected tree node" window. Each tab selects a separate screen used for data filling.

> *Note:* In each of the screens that display when you manipulate the ATM fabric version of the LCI GUI in the following steps, fields containing default data that cannot be changed appear in the color grey. In addition, when data is entered in an incorrect format in certain of these fields, the field label changes to a red color. When the data is then

corrected in the field, the field label changes back to black. None of the screen changes can be validated and saved until all fields in all of the screens associated with the bearer fabric contain correct information.

In the General tab screen, verify and/or enter information for the following fields:

- **Atm Companding Mode**

  This is the companding mode, either A-Law or Mu-Law.

- **Optical Carrier Mode**

  This field allows selection of the appropriate optical carrier standard for your ATM card, either SONET (a North American standard for optical carriers) or SDH (a European standard for optical carriers). The default for AAL2 systems (including wireless systems) is SDH; if a North American AAL2 system is being configured, this field must be changed to SONET.

- **Gateway Control Protocol**

  This is the control protocol for the UAS, either H.248 or MGCP.

- **IVR Support**

  This indicates whether IVR support is enabled on this system.

- **NTP Server IP**

  This is the IP address of the Network Time Protocol server on your network. The NTP server is used for synchronizing logs and alarms on the UAS.

  Note: The Windows time service queries the NTP server for time synchronization once every 24 hours. Therefore, a system time correction will occur only after the next time synchronization.

- **Primary DBServer Host**

  This is the hostname associated with the APS that is hosting the database server used by this UAS node. If the system

does not support its own APS, when IVR Support is enabled, an entry must still be made in this field.

- **Primary DBServer IP**

  This is the IP address of the APS that is hosting the database server used by this UAS node.

- **Backup Storage IP**

  This is the IP address of the database that will contain backup copies of the UAS configuration files. Datafilling this field is optional.

- **Audio Synch on Restart**

  For audio server applications of the UAS, this entry determines whether you want audio distribution refresh upon node startup, in addition to the regularly-scheduled, hourly audio distribution. The pull-down menu allows you to select either Enabled or Disabled.

- **ATM BCT Support**

  This indicates whether Bearer Channel Tandeming is supported on this system

- **ATM CTone Support**

  This field, which must be datafilled when ATM BCT Support is ENABLED, determines how the audio endpoints for the ATM card are defined. The possible responses are: ENABLED or DISABLED.

12   Select the "Call Agent" tab.

The Call Agent tab screen displays in the "Details of selected tree node" window.

13 In the Call Agent tab screen, verify and/or enter information for the following fields:

- **Primary Call Agent Name**

  This is the computer name associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent IP Address**

  This is the IP address associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent Port**

  This is the port of the Call Agent application (default is 2944).

- **UAS Call Control Port**

  This is the port associated with receiving the call control message stream.

- **Legacy Announcements**

  This indicates that the UAS is used in a CS2K network, in a multilingual environment. The pull-down menu allows you to select either Enabled or Disabled.

  Note: If Legacy Announcements is Enabled, then both a Primary Language and Secondary Language must also be entered. If the Legacy Announcements is Disabled, then both the Primary Language and the Secondary Language fields are Disabled.

- **Primary Language**

  This is the primary language associated with the node.

  Note: A Primary Language is required only if the Legacy Announcements field is Enabled. If Legacy Announcements is Disabled, then the Primary Language field will also be Disabled.

- **Secondary Language**

  This is the secondary language associated with the node.

  Note: A Secondary Language is required only if the Legacy Announcements field is Enabled. If Legacy Announcements is Disabled, then the Secondary Language field will also be Disabled.

14 Go to step .

15 Launch the Local Configuration Interface GUI by performing the following steps:

a open a command window by selecting **Start -> Run**

b type **lci** in the window that displays

   Note: The first letter in the lci command is an "l", as in "local."

c click OK or press Enter

   The main Local Configuration Interface GUI screen displays.

d select the "node" folder in the Network Element Tree pane.

   In the Bearer Type IP Local Configuration Interface GUI screen that displays, four tabs display in the "Details of selected tree node" window. Each tab selects a separate screen used for data filling.

   Note: In each of the screens that display when you manipulate the IP fabric version of the LCI GUI in the following steps, fields containing default data that cannot be changed appear in the color grey. In addition, when data is entered in an incorrect format in certain of these fields, the field label changes to a red color. When the data is then corrected in the field, the field label changes back to black. None of the screen changes can be validated and saved until all entries in all screens associated with the bearer fabric contain correct information.

16   In the General tab screen, verify and/or enter information for the following fields:

- **Gateway Control Protocol**

  This is the control protocol for the UAS, either H.248 or MGCP.

  Note: Ensure that the Gateway Control Protocol is set to H.248.

- **IVR Support**

  This field determines whether IVR support is enabled in this system.

- **Conferencing State:**

  This field determines whether Conferencing is enabled in this node.

  Note: If Conferencing State is Disabled, then the Conference Spanning field is also Disabled.

- **Conference Spanning**

  This field determines whether Conference Spanning is supported by the node. Conference Spanning allows conferences with up to 128 participants.

  Note: If "Conferencing State" is Disabled, then the Conference Spanning field is also Disabled.

- **Conference Expansion Ports**

  This field indicates the number of reserved conference ports that can be used to grow existing conferences, but that cannot be used in reservations for new conferences. This prevents existing conferences from running out of resources. Once a port from this buffer is used, it is restored to the pool of resources after any member of the conference in the pool drops out of the conference.

  When you increase this number, fewer ports are available for general use. For example, if you reserve four ports, a 32-port pool will have only 28 ports available for new conferences. If

you decrease this number, fewer ports are available to grow existing conferences when the pool is full.

- **NTP Server IP**

  This is the IP address of the Network Time Protocol server on your network. The NTP server is used for synchronizing logs and alarms on the UAS.

  Note: The Windows time service queries the NTP server for time synchronization once every 24 hours. Therefore, a system time correction will occur only after the next time synchronization.

- **Primary DBServer Host**

  This is the hostname associated with the APS that is hosting the database server used by this UAS node. If the system does not support its own APS, accept the default settings.

- **Primary DBServer IP**

  This is the IP address of the APS that is hosting the database server used by this UAS node.

- **Backup Storage IP**

  This is the IP address of the database that will contain backup copies of the UAS configuration files. Datafilling this field is optional.

- **Audio Synch on Restart**

  For audio server applications of the UAS, this entry determines whether you want audio distribution refresh upon node startup, in addition to the regularly-scheduled, hourly audio distribution. The pull-down menu allows you to select either Enabled or Disabled.

- **Tone set**

  This is the default tone set provided for the country that you select from the pull-down menu associated with this field.

17 Select the "Bearer" tab.

The Bearer tab screen displays in the "Details of selected tree node" window.

18   In the Bearer tab screen, verify and/or enter information for the following fields:

- **Rtp Base Port**

   This is the first port number used for real-time protocol streams on VoIP cards.

      Note: *This must be an even number. In addition, commas must not be entered in the number.*

- **Annc Circuits per Card**

   This is the number of circuits available for announcements on each bearer card in the system. This number is taken from the engineering data for the system. If IVR is enabled, this number should be greater than zero. The allowable values are one through the value of Max. Annc Circuits per Card.

- **Conference Circuits per Card**

   This is the number of circuits available for conferencing on each bearer card in the system. This number is taken from the engineering data for the system. If conferencing is enabled, this number should be greater than zero. The allowable values are one through the value of Max. Conf. Circuits per Card.

- **Max. Annc Circuits per Card**

   This is the maximum value for Annc Circuits per Card, for the network element. This number can vary depending on the software release of the network element and also depending on whether the network element is configured for IP or for ATM. The element manager uses this value to perform error checking on the user's input for Annc Circuits per Card.

- **Max. Conf. Circuits per Card**

   This is the maximum value for Conference Circuits per Card for the network element. This number can vary depending on the software release of the network element. The element manager uses this value to perform error checking on the user's input for Conference Circuits per Card.

- **Transmit Gain**

   This is the strength of a signal going out from the vocoder of an rtp endpoint as compared with the strength of a signal

going into the vocoder. Transmit Gain does not apply to conferencing service.

- **Receive Gain**

  This is the strength of a signal coming into an rtp endpoint from the decoder as compared with the strength of a signal coming into the decoder.

- **Default TOS**

  This field determines the Type of Service bit usage for this UAS, 0-255. The default is 0, which indicates "normal" delay, throughput, and reliability, with "routine" precedence.

- **RFC2833 DTMF**

  This field indicates how the UAS will determine whether RFC2833 is enabled for each RTP connection. RFC2833 defines a method for passing DTMF digits "out-of-band" in special RTP packets, in order to provide more reliable DTMF

recognition than is possible with low-bandwidth codecs. The possible selections include:

— *AlwaysOff (RFC2833 support is always disabled, regardless of call control)*

— *Negotiated (RFC2833 support is enabled per call control messaging, that is, SDP and/or LCO negotiation)*

Note: The setting should be AlwaysOff when announcements or conferencing are supported.

- **RFC2833 DTMF Squelch**

    Not applicable

- **G729B**

    This field indicates G.729B audio codec support.

- **Clock Sync Mode**

    Not applicable

- **Primary Clock Source**

    Not applicable

- **Secondary Clock Source**

    Not applicable

- **Clock Source Carrier Type**

    Not applicable

- **Supported Codec**

    These check boxes determine which codecs, G711, G723, G726, G729, and T.38 are supported. The following guidelines should be followed when you are selecting the codecs:

    — *T.38 is selectable <u>only</u> when at least one CG6000 card with BCT capability is installed in the system.*

    — *In an <u>all-BCT</u> system, all voice codecs should be disabled.*

    — *In a <u>non-BCT</u> system, up to a maximum of four voice codecs can be selected; the T.38 codec cannot be selected.*

    — *In a mixed system (BCT + IVR, BCT + Conf, BCT + IVR + Conf), up to a maximum of four of the codecs can be*

selected; one of the four codecs selected must be a voice codec.

— *In a non-BCT system supporting only conferencing service, G.729 must <u>not</u> be selected.*

— *It is recommended that you select G.711 for systems supporting conferencing service, to avoid any possible deterioration of voice quality.*

19   Select the "Call Agent" tab.

The Call Agent tab screen displays in the "Details of selected tree node" window.

20   In the Call Agent tab screen, verify and/or enter information for the following fields:

- **Primary Call Agent Name**

  This is the computer name associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent IP Address**

  This is the IP address associated with the remote node that is hosting the Primary Call Agent application.

- **Primary Call Agent Port**

  This is the port of the Call Agent application (default is 2944).

- **UAS Call Control Port**

  This is the port associated with receiving the call control message stream (default is 2944).

- **Legacy Announcements**

  This indicates that the UAS is used in a CS2K network, in a multilingual environment. The pull-down menu allows you to select either Enabled or Disabled.

  Note: If Legacy Announcements is Enabled, then both a Primary Language and Secondary Language must also be entered. If the Legacy Announcements is Disabled, then both the Primary Language and the Secondary Language fields are Disabled.

- **Primary Languag**e

  This is the primary language associated with the node.

  Note: A Primary Language is required only if the Legacy Announcements field is Enabled. If Legacy

Announcements is Disabled, then the Primary Language field will also be Disabled.

- **Secondary Language**

  This is the secondary language associated with the node.

  Note: A Secondary Language is required only if the Legacy Announcements field is Enabled. If Legacy Announcements is Disabled, then the Secondary Language field will also be Disabled.

21   Select the "Log Levels" tab.

The Log Levels tab screen displays in the "Details of selected tree node" window.

22   In the Log Levels tab screen, verify and/or enter information for the following fields:

- **System Log Level**

  System logs are information, warning, or error events. This field specifies that the Main Subagent is to send either all logs for that source, only warning and error logs for that source, only error logs for that source, or no logs for that source to the element management station.

- **UAS Log Level**

  Audio Server logs include information, warning, or error events. This field specifies that the Main Subagent is to send either all logs for that source, only warning and error logs for that source, only error logs for that source, or no logs for that source to the element management station.

- **Application Log Level**

  Application logs include information, warning, or error events. This field specifies that the Main Subagent is to send either all logs for that source, only warning and error logs for that source, only error logs for that source, or no logs for that source to the element management station.

- **Security Log Level**

  Logs are either audit-succeed or audit-fail. This field specifies that the Main Subagent is to send either all security

logs, only audit-fail logs, or no logs for that source to the element management station.

23   Determine whether you want to save the information that you have entered.

If	Do
you want to save the information	step 24
you do not want to save the information	step 27

24   Click Validate.

25   Pull down the menu under File (located at the top left-hand corner of the Local Configuration Interface GUI screen) and select "Save". Click OK when the confirmation screen displays.

26   Go to step 28.

27   Click Cancel.

28   Determine whether SNMP management configuration parameters need to be changed.

If	Do
SNMP management configuration parameters need to be changed	step 29
SNMP management configuration parameters <u>do not</u> need to be changed	step 30

29   Click the "Reconfigure SNMP" button, located at the bottom of the Local Configuration Interface GUI screen.

The Local Configuration Interface GUI SNMP window displays, showing default values delivered with the UAS system.

a   Enter information for the following fields in the screen:

- **v2c read/write community**

   This is the SNMPv2c community name for read/write access through the SNMP-based management station.

- **v2c read only community**

   This is the SNMPv2c community name for read-only access through the SNMP-based management station.

- **v3 read/write use**r

   This is the SNMPv3 community name for read/write access through the SNMP-based management station.

- **v3 read only user**

    This is the SNMPv3 community name for read-only access through the SNMP-based management station.

- **trap version**

    This is the SNMP version of the SNMP traps sent by the UAS.

- **trap destination**

    This is the destination IP address associated with the remote SNMP management station. This is the address to which SNMP traps are sent.

- **trap port**

    This is the UDP port associated with the remote SNMP management station.

b Determine whether you want to save the information that you have entered.

If	Do
you want to save the information	step c
you do not want to save the information	step f

c Click OK.

d Pull down the menu under File (located at the top left-hand corner of the Local Configuration Interface GUI screen) and select "Save". Click OK when the confirmation screen displays.

e Go to step 30.

f Click Cancel.

The entries in the screen fields revert to the default values.

30   Close the Local Configuration Interface GUI screens by pulling down the menu under File and selecting "Exit", and then close the command window.

31   Start the SNMP master agent by performing the following steps:

a select **Start -> Run**

b type **cmd** in the window that displays

c press Enter

d type **net start snmpdm** on the command line

    e press Enter

32 Start the UAS applications.

    a If the "Services" window is not already open, access the "Services" window as follows:

        select **Start -> Programs -> Administrative Tools -> Services**

    b Right-click PMGRdaemon service and select Start.

33 You have completed this procedure.

Configuring tone sets

The Tone Set Support feature provides a standard, "universal" set of call processing tones for each of the following countries: Australia, Austria, Belgium, Brazil, China, France, Germany, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The feature supports the unique tone variants required for each country.

In the Tone Set Support feature, a "tone set" is the collection of standard call processing tones for a given country, arranged in three categories: "call progress," "conferencing tones," and "expanded call progress." Each of the call processing tones consists of two entities: a name, and a value. The "name" is the standard name assigned the tone, for all countries, such as "busy tone." The "value" is the set of characteristics that produce the sounds of the different tones: frequency, cadence, amplitude (dB level), and number of iterations. The standard tone set for a country is established during installation of the UAS through the Local Customer Interface (LCI) GUI. If changes in the values of the standard tones in a country's tone set are required, the Tone Set Support feature enables you to make these changes through the following procedure.
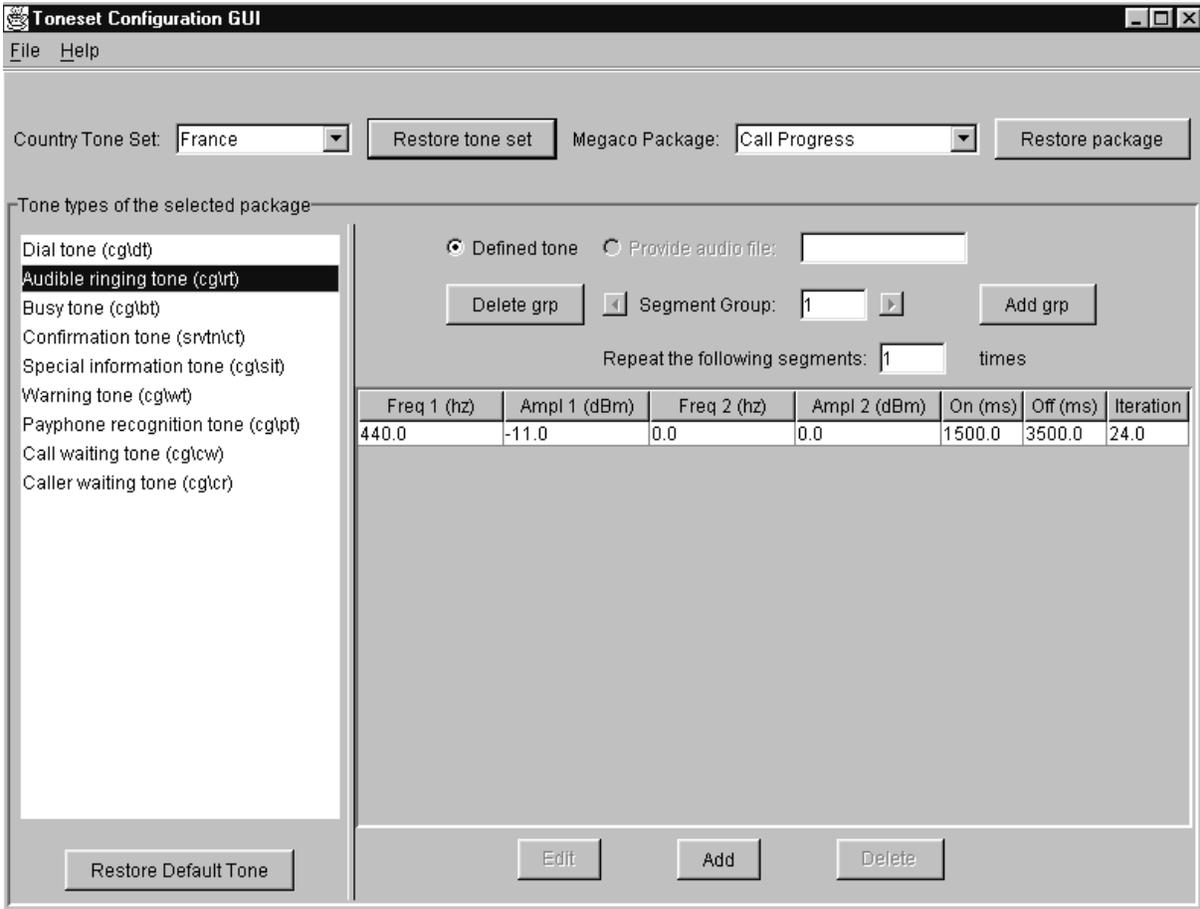
Configuring tone sets

At the Windows desktop interface

1   Launch the Toneset Configuration GUI by performing the following steps:

    a select **Start -> Run**

    b type **cmd** in the window that displays

    c press Enter

    d type **ToneConfig** on the command line

    e press Enter

        The Toneset Configuration GUI screen displays.

Toneset Configuration GUI screen

Note: This screen shows a sample of Toneset Configuration GUI information displayed in response to steps 2, 7, and 12, in this procedure.

2   In the Country Tone set pull-down menu, select a country for which you want to change a tone set.

If	Do
you want to restore the original tone set for the country	step 3
you want to change either a tone set package or a tone	step 7

3   Click Restore tone set, located at the top of the Toneset Configuration GUI screen.

4 Determine whether you want to save this change.

If	Do
you want to save this change	step 5
you do not want to save this change	step 6

5 Pull down the menu under File (located at the top left-hand corner of the Toneset Configuration GUI screen) and select "Save". Click OK when the confirmation screen displays.

6 If you want to perform another procedure, go to step 2. If you don't want to perform another procedure, go to step 71.

7 In the Megaco package pull-down menu, select a tone set package that you want to change.

The tone types available in the package display in left-side panel of the "Tone types of the selected package" panel.

> *Note:* Tone types in the list that have been modified before are preceded by an asterisk (*).

If	Do
you want to restore the original tone set package for the country	step 8
you want to change a tone	step 12

8 Click Restore package, located at the top of the Toneset Configuration GUI screen.

9 Determine whether you want to save this change.

If	Do
you want to save this change	step 10
you do not want to save this change	step 11

10 Pull down the menu under File (located at the top left-hand corner of the Toneset Configuration GUI screen) and select "Save". Click OK when the confirmation screen displays.

11 If you want to perform another procedure, go to step 2. If you don't want to perform another procedure, go to step 71.

12 In the list of tone types displayed, select the tone type that you want to change.

Information about the tone displays in the right-side panel of the "Tone types of the selected package" panel.

13   Determine the action that you want to perform on the tone.

If	Do
you want to add a tone segment to a tone group	step 14
you want to edit a tone segment	step 24
you want to delete a tone segment	step 35
you want to add a tone group	step 44
you want to delete a tone group	step 56
you want to restore the default tone	step 64

14   Look at the arrow buttons located on either side of the "Segment Group" label, located near the top of the "Tone types of the selected package" panel. If more than one tone group already exists for the selected tone type, the arrow button located on the right side of the "Segment Group" field will be enabled.

If	Do
more than one tone group exists for this tone type	step 15
only one tone group exists for this tone type	step 16

15   Click the arrow button located on the right side of the "Segment Group" field until the number of the tone group to which you want to add the tone segment displays in the field.

16   Click Add.

The "Add tonesegment to the tone" window displays.

Add tonesegment to the tone window

Note: This sample window shows the format of the fields found also in the "Edit tonesegment for tone" window, described in step 27.

17   Enter information, as you require, in the following fields in the window:

- **Frequency 1 (hz)**

  This is the frequency of the tone segment. The frequency must be between 200 and 3600 hz, inclusive.

- **Amplitude 1 (dBm)**

  This is the amplitude of the tone segment. The amplitude must be between .54 and 3.0 dBm, inclusive.

- **Frequency 2 (hz)**

  This is the frequency of a second segment that you can <u>superimpose</u> on the new tone segment. Up to two frequencies can be superimposed on the tone segment.

- **Amplitude 2 (dBm)**

  This is the amplitude of the second segment to be <u>superimposed</u> on the new tone segment.

a   Determine whether you want the tone to play continuously or at a specified interval.

If	Do
you want the tone to play continuously	step <u>b</u>
you want the tone to play at a specified interval	step <u>d</u>

b   Select the "continuously" radio button.

   Note: Only a tone that is the <u>last</u> member of the <u>last</u> tone group can be configured to play continuously.

c   Go to step <u>18</u>.

d   Select the "on timer (ms)" radio button.

e   Enter the "on timer (ms)" interval (that is, the interval of time, in milliseconds, that you want the new tone to play).

f   Enter the "off timer (ms)" interval (that is, the interval of time, in milliseconds, in which you want silence before any repetition of the tone)

g   Enter the "Iteration", or, the number of times that you want this "timed" tone to play.

18   Determine whether you want to save the information that you have entered.

If	Do
you want to save the information	step 19
you do not want to save the information	step 22

19   Click Apply.

20   Pull down the menu under File (located at the top left-hand corner of the Toneset Configuration GUI screen) and select "Save". Click OK when the confirmation screen displays.

21   Either return to step 14 and add another tone segment, or go to step 23.

22   Click Cancel.

23   If you want to perform another procedure, go to step 13. If you don't want to perform another procedure, go to step 70.

24   Look at the arrow buttons located on either side of the "Segment Group" label, located near the top of the "Tone types of the selected package" panel. If more than one tone group already exists for the selected tone type, the arrow button located on the right side of the "Segment Group" field will be enabled.

If	Do
more than one tone group exists for this tone type	step 25
only one tone group exists for this tone type	step 26

25   Click the arrow button located on the right side of the "Segment Group" field until the number of the tone group that contains the tone segment that you want to edit displays in the field.

26   In the list of segments that displays in the right-side panel of the "Tone types of the selected package" panel, select the tone segment that you want to edit.

27   Click Edit.

The "Edit tonesegment for tone" window displays.

28 Enter new information, as you require, in the following fields in the window:

- **Frequency 1 (hz)**

  This is the frequency of the tone segment. The frequency must be between 200 and 3600 hz, inclusive.

- **Amplitude 1 (dBm)**

  This is the amplitude of the tone segment. The amplitude must be between .54 and 3.0 dBm, inclusive.

- **Frequency 2 (hz)**

  This is the frequency of a second segment that you can <u>superimpose</u> on the new tone segment. Up to two frequencies can be superimposed on the tone segment.

- **Amplitude 2 (dBm)**

  This is the amplitude of the second segment <u>superimposed</u> on the tone segment.

a Determine whether you want the change the existing tone play interval.

If	Do
you want the tone to play continuously	step <u>b</u>
you want the tone to play at a specified interval	step <u>d</u>
you don't want to change the existing tone play interval	step <u>29</u>

b Select the "continuously" radio button.

> ***Note:*** Only a tone that is the <u>last</u> member of the <u>last</u> tone group can be configured to play continuously.

c Go to step <u>29</u>.

d Select the "on timer (ms)" radio button.

e Enter the "on timer (ms)" interval (that is, the interval of time, in milliseconds, that you want the new tone to play).

f Enter the "off timer (ms)" interval (that is, the interval of time, in milliseconds, in which you want silence before any repetition of the tone)

g Enter the "Iteration", or, the number of times that you want this "timed" tone to play.

29   Determine whether you want to save the information that you have entered.

If	Do
you want to save the information	step 30
you do not want to save the information	step 33

30   Click Apply.

31   Pull down the menu under File (located at the top left-hand corner of the Toneset Configuration GUI screen) and select "Save". Click OK when the confirmation screen displays.

32   Either return to step 24 and edit a different tone segment or go to step 34.

33   Click Cancel.

34   If you want to perform another procedure, go to step 13. If you don't want to perform another procedure, go to step 70.

35   Look at the arrow buttons located on either side of the "Segment Group" label, located near the top of the "Tone types of the selected package" panel. If more than one tone group already exists for the selected tone type, the arrow button located on the right side of the "Segment Group" field will be enabled.

If	Do
more than one tone group exists for this tone type	step 36
only one tone group exists for this tone type	step 37

36   Click the arrow button located on the right side of the "Segment Group" field until the number of the tone group containing the tone segment that you want to delete displays in the field.

37   In the list of segments that displays in the right-side panel of the "Tone types of the selected package" panel, select the tone segment that you want to delete.

38   Click Delete.

The "Delete Data Changes" confirmation window displays.

39   Make the appropriate selection in the confirmation window.

If	Do
you deleted a segment and want to save the change (deletion)	step 40
you deleted a segment but do not want to save the change (deletion)	step 42
you did not delete a segment	step 42

40   Pull down the menu under File (located at the top left-hand corner of the Toneset Configuration GUI screen) and select "Save". Click OK when the confirmation screen displays.

41   Either return to step 35 and delete another tone segment or go to step 43.

42   Click the Exit button located in the top right corner of the screen and click Yes in response to the query that then displays.

43   If you want to perform another procedure, go to step 13. If you don't want to perform another procedure, go to step 70.

44   Look at the arrow buttons located on either side of the "Segment Group" label, located near the top of the "Tone types of the selected package" panel. If more than one tone group already exists for the selected tone type, the arrow button located on the right side of the "Segment Group" field will be highlighted.

If	Do
more than one tone group exists for this tone type	step 45
only one tone group exists for this tone type	step 46

45   Click the arrow button located on the right side of the "Segment Group" field until the number of the last tone group associated with this tone type displays.

> *Note:* Tone groups are added sequentially. You can only add a tone group <u>following</u> the last tone group defined for the tone type.

46   Click Add grp

47   Click Add

The "Add tonesegment to the tone" window displays.

48   Enter information, as you require, in the following fields in the window:

- **Frequency 1 (hz)**

  This is the frequency of the tone segment. The frequency must be between 200 and 3600 hz, inclusive.

- **Amplitude 1 (dBm)**

  This is the amplitude of the tone segment. The amplitude must be between .54 and 3.0 dBm, inclusive.

- **Frequency 2 (hz)**

  This is the frequency of a second segment that you can <u>superimpose</u> on the new tone segment. Up to two frequencies can be superimposed on the tone segment.

- **Amplitude 2 (dBm)**

  This is the amplitude of the second segment to be <u>superimposed</u> on the new tone segment.

a   Determine whether you want the tone to play continuously or at a specified interval.

If	Do
you want the tone to play continuously	step <u>b</u>
you want the tone to play at a specified interval	step <u>d</u>

b   Select the "continuously" radio button.

> ***Note:*** Only a tone that is the <u>last</u> member of the <u>last</u> tone group can be configured to play continuously.

c   Go to step <u>49</u>.

d   Select the "on timer (ms)" radio button.

e   Enter the "on timer (ms)" interval (that is, the interval of time, in milliseconds, that you want the new tone to play).

f   Enter the "off timer (ms)" interval (that is, the interval of time, in milliseconds, in which you want silence before any repetition of the tone)

g   Enter the "Iteration", or, the number of times that you want this "timed" tone to play.

49 Determine whether you want to save the information that you have entered.

If	Do
you want to save the information	step 50
you do not want to save the information	step 54

50 Click Apply.

51 In the "Repeat the following segments" field, enter the number of times that you want the segments in the tone group to be repeated.

52 Pull down the menu under File (located at the top left-hand corner of the Toneset Configuration GUI screen) and select "Save". Click OK when the confirmation screen displays.

53 Either return to step 46 and add another tone group or go to step 55.

54 Click the Exit button located in the top right corner of the screen and click Yes in response to the query that then displays.

55 If you want to perform another procedure, go to step 13. If you don't want to perform another procedure, go to step 71.

56 Look at the arrow buttons located on either side of the "Segment Group" label, located near the top of the "Tone types of the selected package" panel. If more than one tone group already exists for the selected tone type, the arrow button located on the right side of the "Segment Group" field will be highlighted.

If	Do
more than one tone group exists for this tone type	step 57
only one tone group exists for this tone type	step 58

57 Click the arrow button located on the right side of the "Segment Group" field until the number of the tone group associated with this tone type, that you want to delete, displays.

58 Click Delete grp

The "Delete Data Changes" confirmation window displays.

59   Make the appropriate selection in the confirmation window.

If	Do
you deleted a tone group and want to save the change (deletion)	step 60
you deleted a tone group but do not want to save the change (deletion)	step 62
you did not delete a tone group	step 62

60   Pull down the menu under File (located at the top left-hand corner of the Toneset Configuration GUI screen) and select "Save". Click OK when the confirmation screen displays.

61   Either return to step 56 and delete a different tone segment or go to step 63.

62   Click the Exit button located in the top right corner of the screen and click Yes in response to the query that then displays.

63   If you want to perform another procedure, go to step 13. If you don't want to perform another procedure, go to step 70.

64   Click Restore the Default Tone, located at the bottom left side of the Tone types of the selected package panel.

65   Determine whether you want to save the change.

If	Do
you want to save the change	step 66
you do not want to save the change	step 68

66   Pull down the menu under File (located at the top left-hand corner of the Toneset Configuration GUI screen) and select "Save". Click OK when the confirmation screen displays.

67   Go to step 69.

68   Click the Exit button located in the top right corner of the screen and click Yes in response to the query that then displays.

69   If you want to perform another procedure, go to step 13. If you don't want to perform another procedure, go to step 70.

70   Close the Toneset Configuration GUI screen by selecting **File -> Exit**

71   Determine whether to restart the UAS.

If	Do
you made changes and saved them	step 72
you did not make any changes to save	step 80

At the Network Element Status panel of the Universal Audio Server Manager

72   In the Network Elements pane, select the appropriate UAS node.

Information about the node displays in the System Identification pane.

73   In the pull-down list in the box labeled, "Please select," select Maintenance.

74   In the Maintenance Tree pane, select "Node".

75   Click the node entry that displays in the table shown in the Node States pane.

76   Lock the node by clicking the "Lock Graceful" button located at the bottom of the Node States pane.

77   Restart the node by clicking the "Restart Application" button located at the bottom of the Node States pane.

78   Click OK in the Restart Application Warning window.

79   Click OK in the Warning window.

80   You have completed this procedure.