

## 3COM V7122 Digital Gateway **Installation Guide**

System Release 5.0



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### **ABOUT THIS GUIDE**

This Installation Guide describes the installation of the V7122 Digital Gateway.

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#### How to Use This Guide

This book covers these topics:

- Chapter 1: Quick Start
- Chapter 2: Installing the V7122 Gateway
- Chapter 3: Configuring the V7122 Gateway
- Chapter 4: Changing the V7122 Gateway Username and Password
- Chapter 5: Restoring and Backing Up the V7122 Gateway Configuration
- Chapter 6: Monitoring the V7122 Gateway
- Chapter 7: Upgrading the V7122 Gateway
- Chapter 8: Regulatory Information

#### Conventions

<u>Table 1</u> lists conventions that are used throughout this guide.

Table 1 Notice Icons

Icon	Notice Type	Description
i	Information note	Information that describes important features or instructions.
<u></u>	Caution	Information that alerts you to potential loss of data or potential damage to an application, device, system, or network.
<b>A</b>	Warning	Information that alerts you to potential personal injury or death.

#### **Model Numbers for the V7122 Gateways**

This guide describes the installation procedures and configurations for the following 3Com<sup>®</sup> VCX™ V7122 Digital Gateways:

- The VCX V7122 Digital Gateway 16 Span (3CRVG71224-07)
- The VCX V7122 Digital Gateway 8 Span (3CRVG71223-07)
- The VCX V7122 Digital Gateway 4 Span (3CRVG71222-07)
- The VCX V7122 Digital Gateway 2 Span (3CRVG71221-07)
- The VCX V7122 Digital Gateway 1 Span (3CRVG71220-07)

#### **Documentation Comments**

Your suggestions are important to us because we want to make our documentation more useful to you.

Please send e-mail comments about this guide or any of the V7122 documentation and Help systems to:

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Please include the following information with your comments:

- Document title
- Document part number (usually found on the front page)
- Page number
- Your name and organization (optional)

#### Example:

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See <u>Appendix A: Obtaining Support for Your 3Com Product</u> for details about how to register your product and get support from 3Com.

#### **Notices**

#### **WEEE EU Directive**

Pursuant to the WEEE EU Directive, electronic, and electrical waste must not be disposed of with unsorted waste. Please contact your local recycling authority for disposal of this product.

#### **Abbreviations and Terminology**

Each abbreviation, unless widely used, is spelled out in full when first used, and only Industry standard terms are used throughout this guide. The symbol 0x indicates hexadecimal notation.



#### **WARNING:**

The V7122 gateway is supplied as a sealed unit and must only be serviced by qualified service personnel.



Where "network" appears in this guide, it means LAN, WAN, and the like accessed using the gateway's Ethernet interface.

### **CHAPTER 1: QUICK START**

This Installation Guide helps you to set up the V7122 gateway for the first time. Prior knowledge of IP networks is preferred. The following steps provide a quick setup flow. For detailed information about how to fully configure the gateway, see the V7122 Digital Gateway User Guide.

- 1. Unpack the V7122 gateway
- 2. Mount the V7122 gateway
- 3. Cable the V7122 gateway
- 4. Assign the V7122 gateway IP address
- 5. Configuring the V7122 gateway basic control protocol parameters
- 6. Configure the PSTN parameters

# CHAPTER 2: INSTALLING THE V7122 GATEWAY

<u>Figure 1</u> shows the front view of the V7122 media gateway. For information about the V7122 gateway LEDs, see <u>Monitoring the V7122 LEDs</u>.

Figure 1 VT122 Gateway Front View

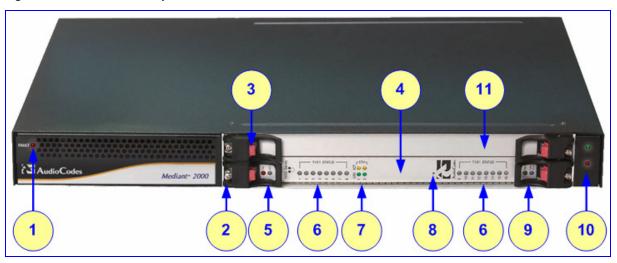


 Table 2
 V7122 Gateway Front View Component Descriptions

Item #	Label	Component Description
1	FAULT	Dual AC Power LED
2		cPCI board locking screws
3		cPCI latches
4		TP-1610 cPCl board, 16-trunk configuration
5		Status LED Indicators
6	T1/E1 STATUS	E1/T1 Trunk Status LED Indicators
7	ETH	Ethernet LED Indicators
8		Reset button
9		cPCI LED Indicators
10		Power and Fan LEDs
11		An available cPCI slot for an optional third-party CPU board



#### WARNING: Electrical Shock

The equipment must only be installed or serviced by qualified service personnel.

To install the V7122 gateway, follow these 4 steps:

- 1 Unpack the V7122 gateway (see Unpacking).
- 2 Check the package contents (see <u>Package Contents</u>).
- **3** Mount the V7122 gateway (see Mounting the V7122 Gateway).
- 4 Cable the V7122 gateway (see Cabling the V7122 Gateway).

After powering-up the V7122 gateway, the Ready and LAN LEDs on the front panel turn to green (after a self-testing period of about three minutes). Any malfunction changes the Ready LED to red (see Monitoring the LEDs for details on the V7122 LEDs).

When you have completed the above relevant sections you are then ready to start configuring the gateway (see <a href="Chapter 3">Chapter 3</a>: Configuring the V7122 Gateway).

#### Unpacking

To unpack the V7122 gateway, follow these 6 steps:

- **1** Open the carton and remove packing materials.
- **2** Remove the V7122 gateway from the carton.
- **3** Check that there is no equipment damage.
- 4 Check, retain and process any documents.
- 5 Notify 3Com or your local supplier of any damage or discrepancies.
- **6** Retain any diskettes or CDs.

#### **Package Contents**

Ensure that in addition to the V7122 gateway, the package contains these items:

- For the dual AC power supply version, two AC power cables are supplied; for the single AC power supply version, one AC power cable is supplied.
- For the DC power supply version, one connected DC power cable (crimp connection type) and one DC adaptor (screw connection type) connected to the rear panel of the V7122 gateway are supplied; use only one type.
- CD (software and documentation).
- Small plastic bag containing (see Figure 2):

- Two brackets and four bracket-to-device screws for 19-inch rack installation option.
- Four anti-slide bumpers for desktop installation.
- This Installation Guide.

Figure 2 19-inch Rack & Desktop Accessories



#### Mounting the V7122 Gateway

The V7122 gateway can be mounted on a desktop, or installed in a standard 19-inch rack. See <u>Cabling the V7122 Gateway</u> for cabling the V7122 gateway.

#### Mounting the V7122 Gateway on a Desktop

No brackets are required. Optionally, attach the four (supplied) anti-slide bumpers to the base of the V7122 gateway and place it on the desktop in the position you require.

#### Installing the V7122 Gateway in a 19-inch Rack

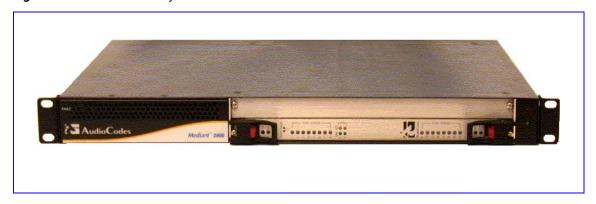
You can install the device in a standard 19-inch rack either by placing the device on a shelf preinstalled in the rack (preferred method), or by attaching the device directly to the racks frame using integral brackets.

Before rack mounting the chassis, attach the two brackets (supplied) to the front sides of the device (see Figure 3).

To attach the two front side brackets, follow these 3 steps:

- 1 Remove the two screws nearest the front panel on either side of the device.
- 2 Align a bracket over two holes on one side (so that the brackets larger holes face front) and with the two supplied *replacement* screws, screw in the bracket.
- 3 Perform the same procedure on the other side.

Figure 3 V7122 Gateway Front View with 19-inch Rack Mount Brackets





**CAUTION:** Rack Mount Safety Instructions (UL)

When installing the chassis in a rack, be sure to implement the following safety instructions recommended by Underwriters Laboratories:

- Elevated Operating Ambient If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.
- Reduced Air Flow Installation of the equipment in a rack should be such that the amount of air flow required for safe operation on the equipment is not compromised.
- **Mechanical Loading** Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- Circuit Overloading Consideration should be given to the connection of the
  equipment to the supply circuit and the effect that overloading of the circuits
  might have on overcurrent protection and supply wiring. Appropriate
  consideration of equipment nameplate ratings should be used when
  addressing this concern.
- **Reliable Earthing** Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (for example, use of power strips).

To attach the device to a 19-inch rack, follow these 2 steps:

- 1 Position the device in your 19-inch rack and align the left-hand and right-hand bracket holes to the required holes in the vertical tracks of the 19-inch rack.
- 2 Use standard 19-inch rack bolts (not provided) to fasten the device to the frame of the rack.

3Com recommends using two additional rear mounting brackets (not supplied) to provide added support.



Users assembling the rear brackets by themselves should note the following:

- The distance between the screws on each bracket is 26.5 mm.
- To attach the brackets, use 4-40 screws with a maximal box penetration length of 3.5 mm.

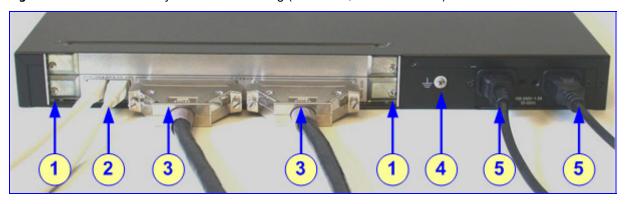
To place the device on a 19-inch racks shelf, follow these 2 steps:

- 1 Place the device on the preinstalled shelf.
- 2 You are now recommended to take the optional steps of fastening the device to the frame of the rack (as described above) while it is placed on the shelf, preventing it from sliding when inserting cables into connectors on the rear panel.

#### Cabling the V7122 Gateway

The V7122 gateway is available in many configurations, that is, AC or DC, and 16-trunk, 8-trunk, 4-trunk, 2-trunk, or 1-trunk device. The 16-trunk dual AC (Figure 4) and the 8-trunk DC (Figure 5) configurations are illustrated here as representative products.

Figure 4 V7122 Gateway Rear Panel Cabling (16 Trunks, Dual AC Power)



**Table 3** V7122 Gateway Rear Panel Cabling (16 Trunks, Dual AC Power) Component Descriptions

Item #	Label	Component Description	
1		RTM locking screws.	
2	ETHERNET	Two Category 5 network cables, connected to the two Ethernet RJ-45 ports.	
3	TRUNKS	Two 50-pin Telco connector cables, each supporting eight trunks.	
4	<u></u>	Protective earthing screw.	
5	100-240~1.5A	Dual AC power cables.	

Figure 5 V7122 Gateway Rear Panel Cabling (8 Trunks, DC Power)

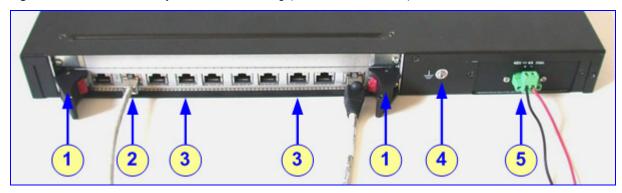


Table 4 V7122 Gateway Rear Panel Cabling (8 Trunks, DC Power) Component Descriptions

Item #	Label	Component Description	
1		RTM latches.	
2	ETH	A Category 5 network cable, connected to the Ethernet 1 RJ-45 port.	
3	PSTN	Eight RJ-48c ports, each supporting a trunk.	
4	<u></u>	Protective earthing screw.	
5	48V 4A max	2-pin connector for DC.	



#### Electrical Earthing

The unit must be permanently connected to earth using the screw provided at the back of the unit. Use 14-16 AWG wire and a proper ring terminal for the earthing.

To cable the V7122 gateway, follow these 4 steps:

1 Permanently connect the device to a suitable earth with the protective earthing screw on the rear connector panel, using 14-16 AWG wire.

- 2 Connect the E1/T1 trunk interfaces (see Connecting the E1/T1 Trunk Interfaces).
- 3 Install the Ethernet connection (see <u>Installing the Ethernet Connection</u>).
- 4 Connect the power supply (see Connecting the Power Supply).

#### **Connecting the E1/T1 Trunk Interfaces**

Connect the V7122 gateway E1/T1 Trunk interfaces using either Telco or RJ-48 connectors:

To connect E1/T1 trunk interface using 50-pin Telco connectors (16-trunk device), follow these 3 steps:

- 1 Attach the Trunk cable with a 50-pin male Telco connector to the 50-pin female Telco connector labeled *Trunks 1 →8* on the Rear Transition Module (RTM).
- 2 Connect the other end of the Trunk cable to the PBX/PSTN switch.
- 3 Repeat steps 1 and 2 for the other Trunk cable but this time connect it to the connector labeled *Trunks* 9 →16.

The 50-pin male Telco cable connector must be wired according to the pinouts described in Table 5, and to mate with the female connector illustrated in Figure 6.

Figure 6 50-pin Female Telco Board-Mounted Connector

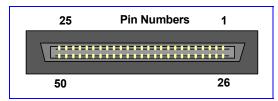


 Table 5
 E1/T1 Connections on each 50-pin Telco Connector

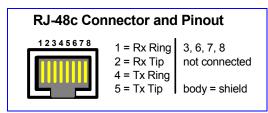
E1/T1 Number		——— Tx Pins (Tip/Ring)	Rx Pins (Tip/Ring)
1 to 8	9 to 16	——— TX Filis (Tip/Kilig)	KX Filis (Tip/Kilig)
1	9	27/2	26/1
2	10	29/4	28/3
3	11	31/6	30/5
4	12	33/8	32/7
5	13	35/10	34/9
6	14	37/12	36/11
7	15	39/14	38/13
8	16	41/16	40/15

To connect E1/T1 trunk using RJ-48c connectors, follow these 2 steps:

- 1 Connect the E1/T1 trunk cables to the ports labeled **Trunks 1 to 8** (in the case of the 8-trunk device) on the V7122 RTM.
- 2 Connect the other ends of the Trunk cables to the PBX/PSTN switch.

RJ-48c trunk connectors are wired according to Figure 7.

Figure 7 Pinout of RJ-48c Trunk Connectors

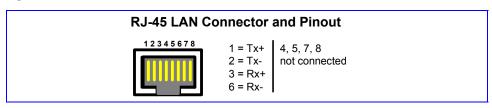


#### **Installing the Ethernet Connection**

Connect a standard Category 5 network cable to the Ethernet RJ-45 port (and the other as optional redundancy/backup). Connect the other end of the Category 5 network cables to your IP network. The Ethernet connectors (labeled *Ethernet 1* and *Ethernet 2*) are wired according to Figure 8.

When you assign an IP address to the V7122 gateway using HTTP (under <u>Step 1</u> in Section <u>Assigning an IP Address Using HTTP</u>), you may be required to disconnect this cable and recable it differently.

Figure 8 Pinout of RJ-45 Connectors





For redundant operation it is recommended to connect each of the Ethernet connectors to a different switch.

#### **Connecting the Power Supply**

Connect the V7122 gateway to the power supply using one of the following methods:

#### Connecting the AC Power Supply

To connect power when using a single AC power cable:

 Attach one end of the supplied 100/240 VAC power cable to the rear AC socket and connect the other end to the correct earthed AC power supply.



#### **WARNING:**

Units providing power sockets with three pins must be connected by service personnel to a socket-outlet with a protective earthing connection.

To connect power when using a dual AC power cable:

- **1** Before connecting the dual AC power cable, see the note below.
- 2 Attach one end of the supplied 100/240 VAC power cables to the rear AC sockets and connect the other end to a separate earthed mains circuits (for power source redundancy).



For the dual AC power supply note the following:

- The LED on the left side of the chassis is only connected when the dual AC is used. It is not relevant to the single AC power connection.
- If only a single socket is connected to the AC power, (while the other plug is left unconnected) the chassis LED (on the left side) is lit red, indicating that one of the dual power inlets is disconnected.
- When both the AC power cables are connected, one of the plugs can be disconnected under power without affecting operation, in which case the chassis left LED is lit red.
- UPS can be connected to either (or both) of the AC connections.
- The dual AC connections operate in a 1+ 1 configuration and provide loadsharing redundancy.
- Each of the dual power cables can be connected to different power phases.

#### Connecting the DC Power Supply

To connect the V7122 gateway to a DC power supply use one of these two options:

- DC Terminal block with a screw connection type.
- DC Terminal block with a crimp connection type.

To connect DC power using a DC terminal block screw connector, follow these 3 steps:

- 1 Create a DC cable by inserting two 14-16 AWG insulated wires into the supplied adaptor (see Figure 9) and fasten the two screws, each one located directly above each wire.
- 2 Connect the two insulated wires to the correct DC power supply. Ensure that the connections to the DC power supply maintain the correct polarity.
- 3 Insert the terminal block into the DC inlet located on the V7122 gateway.

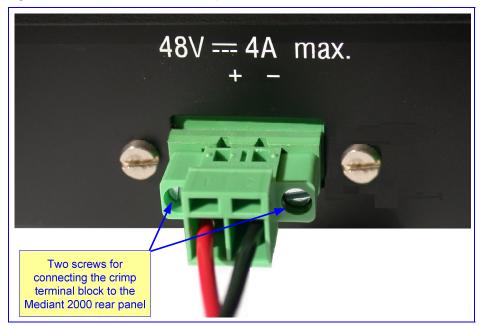
Figure 9 DC Terminal Block Screw Connector



To connect DC power using a DC terminal block crimp connector, follow these 3 steps:

- 1 Remove the DC adaptor (screw connection type) that is attached to the V7122 gateway rear panel.
- 2 Connect the two insulated wires to the correct DC power supply. Ensure that the connections to the DC power supply maintain the correct polarity (see Figure 10).
- 3 Insert the terminal block to the DC inlet located on the V7122 gateway.

Figure 10 DC Terminal Block Crimp Connector



## CHAPTER 3: CONFIGURING THE V7122 GATEWAY

The V7122 gateway is supplied with application software already resident in its flash memory (with factory default parameters).

Section <u>Assigning the V7122 Gateway IP Address</u> describes how to assign IP addresses to the V7122. Section <u>Configuring the V7122 Basic Control Protocol Parameters</u> describes how to set up the V7122 gateway with basic parameters using a standard Web browser (such as Microsoft <sup>TM</sup> Internet Explorer).



Section <u>Assigning the V7122 Gateway IP Address</u> applies equally to H.323 and SIP.

#### Assigning the V7122 Gateway IP Address

The V7122 gateway is composed of one or two identical media gateway modules. These media gateways are fully independent, each gateway having its own MAC and IP addresses (<u>Table 6</u> shows the default IP addresses of the V7122 gateway). To assign an IP address to each of the V7122 gateway modules use one of the following methods:

- HTTP using a Web browser (see <u>Assigning an IP Address Using HTTP</u>).
- BootP (see <u>Assigning an IP Address Using BootP</u>).
- The embedded Command Line Interface (CLI) accessed using Telnet (see <u>Assigning an</u> IP Address Using the CLI).
- DHCP (see the V7122 Digital Gateway User Guide).

<u>Table 6</u> lists the default IP addresses of the V7122 gateway. You can use the Reset button at any time to restore the V7122 gateway networking parameters to their factory default values (see Restoring Networking Parameters to their Initial State).

 Table 6
 V7122 Gateway Default Networking Parameters

V7122 Gateway Version	Default Value	
Single module (up to 8 trunks)	10.1.10.10	
Double module (up to 16 trunks)	10.1.10.10 (Trunks 1-8) and 10.1.10.11 (Trunks 9-16)	
Default subnet mask is 255.255.0.0, default gateway IP address is 0.0.0.0		

#### **Assigning an IP Address Using HTTP**

To assign an IP address using HTTP, follow these 9 steps:

- 1 Disconnect the V7122 gateway from the network and reconnect it to your PC using one of the following two methods:
  - Use a standard Ethernet cable to connect the network interface on your PC to a port on a network hub / switch. Use a second standard Ethernet cable to connect the V7122 gateway to another port on the same network hub / switch.
  - Use an Ethernet cross-over cable to directly connect the network interface on your PC to the V7122 gateway.
- 2 Change your PCs IP address and subnet mask to correspond with the V7122 gateway factory default IP address and subnet mask (shown in Table 6). For details on changing the IP address and subnet mask of your PC, see the Windows™ Online Help (Start>Help).
- **3** Access the V7122 gateway first modules Embedded Web Server (see <u>Accessing the Embedded Web Server</u>).
- 4 In the Quick Setup screen, set the V7122 gateway *IP Address*, *Subnet Mask* and *Default Gateway IP Address* fields under *IP Configuration* to correspond with your network IP settings. If your network does not feature a default gateway, enter a dummy value in the *Default Gateway IP Address* field.
- 5 Click the Reset button, and then at the prompt click *OK*; the V7122 gateway applies the changes and restarts. This takes approximately three minutes to complete. When the V7122 gateway completes the reset, the *Ready* and *LAN* LEDs on the front panel are lit green.



Record and retain the IP address and subnet mask you assign the V7122 gateway. Do the same when defining new username or password. If the Embedded Web Server is unavailable (for example, if you have lost your username and password), use the BootP/TFTP configuration utility to access the device, "reflash" the load and reset the password (see the V7122 Digital Gateway User Guide for detailed information on using a BootP/TFTP configuration utility to access the device).

- **6** Repeat Steps 3 to 5 for the V7122 gateway's second module (if used).
- 7 Disconnect your PC from the V7122 gateway or from the hub / switch (depending on the connection method you used in Step 1).
- **8** Reconnect the V7122 gateway and your PC (if necessary) to the network.
- 9 Restore your PCs IP address and subnet mask to what they originally were. If necessary, restart your PC and re-access the V7122 gateway using the Embedded Web Server with its new assigned IP address.

#### Assigning an IP Address Using BootP



BootP procedure can also be performed using any standard compatible BootP server.

You can also use BootP to load the auxiliary files to the V7122 gateway (see the V7122 Digital Gateway User Guide).

To assign an IP address using BootP, follow these 13 steps:

- 1 Open the BootP application (supplied with the V7122 gateway software package).
- 2 Click on the Edit Clients icon :; the Client Configuration screen is displayed.
- 3 Click on the Add New Client icon ; a client with blank parameters is displayed (Figure 11).
- 4 In the *Client MAC* field, enter the MAC address of the gateway. The MAC address is printed on a label located on the base of the V7122 gateway.
- Verify that the check to the right of the *Client MAC* field is selected. This enables the particular client in the BootP tool (if the client is disabled, no replies are sent to BootP requests).
- 6 In the *Client Name* field, enter a descriptive name for this client so that it is easier to remember which gateway the record refers to. For example, this name could refer to the location of the gateway.
- 7 In the *IP* field, enter the IP address you want to assign the gateway. Use the normal dotted decimal format.
- 8 In the *Subnet* field, enter the subnet mask you want to assign the gateway. Use the normal dotted decimal format. Ensure that the subnet mask is correct. If the address is incorrect, the gateway may not function until the entry is corrected and a BootP reset is applied.
- In the *Gateway* field, enter the IP address for the default gateway. If you do not know the IP address for the default gateway, contact your network administrator.
- **10** Click *Apply* to save this entry to the list of clients.
- **11** Click *OK*; the Client Configuration screen is closed.
- 12 Use the reset button (located on the V7122 gateway front panel) to physically reset the gateway causing it to use BootP; the V7122 gateway changes its network parameters to the values provided by the BootP.
- 13 Repeat Steps 2 through 11 for the V7122 gateway's second module (if used).

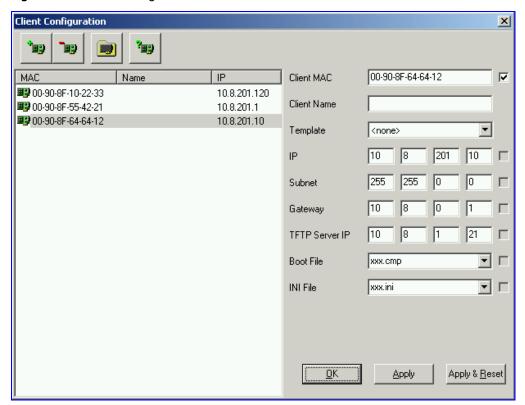


Figure 11 Client Configuration Screen with Blank Parameters

#### Assigning an IP Address Using the CLI

To assign an IP address using the CLI, follow these 7 steps:

- 1 Enable the Embedded Telnet Server:
  - a) Access the V7122 gateway Embedded Web Server (see <u>Accessing the Embedded Web Server</u>).
  - b) Set the Embedded Telnet Server parameter (under Advanced Configuration > Network Settings > Application Settings) to Enable (Unsecured).
  - c) Reset the gateway. On the main menu bar; click the Maintenance button; the Maintenance Actions screen is displayed. From the Burn to FLASH drop-down list, select Yes and then click the Reset button; the V7122 gateway is shut down and re-activated. A message about the waiting period is displayed. The screen is refreshed.
- **2** Use a standard Telnet application to connect to the V7122 gateway Embedded Telnet Server.
- 3 Login using the username (Admin) and password (Admin).
- 4 At the prompt type conf, and then press *Enter*, the configuration folder is accessed.
- 5 To check the current network parameters, at the prompt, type gcp ip and then press *Enter*; the current network settings are displayed.

6 Change the network settings by typing: scp IP [ip\_address] [subnet\_mask] [default\_gateway] (for example, SCP IP 10.13.77.7 255.255.0.0 10.13.0.1); the new settings take effect on-the-fly. Connectivity is active at the new IP address.



This command requires you to enter all three network parameters (each separated by a space).

7 To save the configuration, at the prompt, type sax and then press *Enter*, the V7122 gateway restarts with the new network settings.

#### **Restoring Networking Parameters to their Initial State**

You can use the *Reset* button on the V7122 gateway chassis to restore networking parameters to their factory default values (described in <u>Table 6</u>) and to reset the username and password.

Note that the V7122 gateway returns to the software version burned in flash. This process also restores the V7122 gateway parameters to their factory settings. Therefore, you must load your previously backed-up *ini* file, or the default *ini* file (received with the software kit) to set them to their correct values.

This option is currently supported on one media gateway module (trunks 1-8) only.

To restore networking parameters to their initial state, follow these 6 steps:

- 1 Disconnect the V7122 gateway from the power and network cables.
- 2 Reconnect the power cable; the gateway is powered up. After approximately 45 seconds the ACT LED blinks for about four seconds.
- While the ACT LED is blinking, press shortly on the reset button (located on the front panel); the gateway resets a second time and is restored with factory default parameters (username: Admin, password: Admin).
- 4 Reconnect the network cable.
- 5 Assign the V7122 gateway an IP address (see <u>Assigning the V7122 Gateway IP</u> Address).
- Load your previously backed-up ini file, or the default ini file (received with the software kit). To load the ini file via the Embedded Web Server, <a href="Chapter 5">Chapter 5</a>: Restoring and Backing Up the V7122 Gateway Configuration.

#### **Accessing the Embedded Web Server**

To access the Embedded Web Server, follow these 4 steps:

- 1 Open a standard Web-browsing application such as Microsoft™ Internet Explorer™ (Version 6.0 and higher) or Netscape™ Navigator™ (Version 7.2 and higher).
- 2 In the URL field, specify the IP address of the gateway (for example, http://10.1.10.10 for the first module of the V7122 gateway); the Embedded Web Servers Enter Network Password screen appears, shown in Figure 12.

Figure 12 Embedded Web Server Login Screen



- 3 Enter the username (default: Admin), and password (default: Admin). Note that the User Name and Password fields are case-sensitive.
- 4 Click **OK**; the Quick Setup screen is accessed, shown in <u>Figure 13</u> (H.323), and <u>Figure 14</u> (SIP).

#### Configuring the V7122 Gateway Basic Control Protocol Parameters

To configure the V7122 gateway *basic* control protocol parameters use the Embedded Web Servers Quick Setup screen.

- For H.323, see <u>Configuring Basic H.323 Parameters</u>.
- For SIP, see Configuring Basic SIP Parameters.

When you have completed the above relevant section you are then ready to start using the V7122 gateway. For information on how to fully configure the VoIP gateway, see the V7122 Digital Gateway User Guide.



The following configuring Sections from here up to and including <u>Configuring Basic SIP Parameters</u> apply individually to H.323 or SIP.

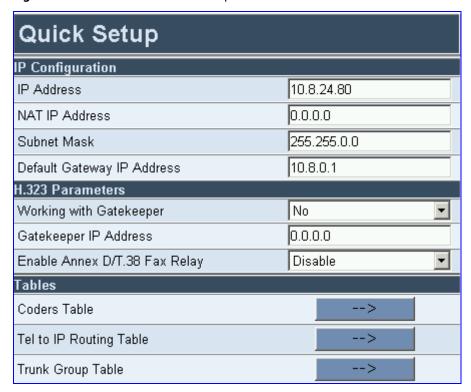
H.323 configuring continues with <u>Configuring Basic H.323 Parameters</u>. SIP configuring continues with <u>Configuring Basic SIP Parameters</u>.

Once the gateway is configured correctly back up your settings by making a copy of the VoIP gateway configuration (ini file) and store it in a directory on your PC. This saved file can be used to restore configuration settings at a future time. For information on backing up and restoring the gateways configuration, see <a href="Chapter 5"><u>Chapter 5</u></a>: Restoring and Backing Up the V7122 Configuration

#### Configuring Basic H.323 Parameters

After accessing the Embedded Web Server (see <u>Accessing the Embedded Web Server</u>) the H.323 Quick Setup screen is displayed.

Figure 13 V7122/H.323 Quick Setup



To configure basic H.323 parameters, follow these 8 steps:

- 1 If the V7122 gateway is connected to a router with NAT enabled, perform the following procedure. If it is not, leave the *NAT IP Address* field undefined.
  - Determine the "public" IP address assigned to the router (by using, for instance, router Web management). Enter this public IP address in the NAT IP Address field.

- Enable the DMZ configuration on the residential router for the LAN port where the V7122 gateway is connected. This enables unknown packets to be routed to the DMZ port.
- When working with a Gatekeeper, under H.323 Parameters, set the *Working with Gatekeeper* field to *Yes*, and then enter the IP address of the primary Gatekeeper in the *Gatekeeper IP Address* field. When no Gatekeeper is used, the internal routing table is used to route the calls.
- 3 Leave *Enable Annex D/T.38 FAX Relay* parameter at its default unless your technical requirements differ.
- 4 Select the coder (that is, vocoder) that best suits your VoIP system requirements. The default coder is: G.723.1 30 msec. To configure the entire list of coders you want the V7122 gateway to use, see the V7122 Digital Gateway User Guide.
- 5 Map outgoing calls to IP addresses (when Gatekeeper is not used) by completing these steps:
  - a) Click the arrow button next to the *Tel to IP Routing Table* label; the Tel to IP Routing screen opens.

Any telephone number whose destination number matches the prefix defined in the *Destination Phone Prefix* field and whose source number matches the prefix defined in the adjacent *Source Phone Prefix* field, is sent to the IP address entered in the *IP Address* field.

- b) Click Submit; the Tel to IP Routing table is automatically updated.
- c) Click *Quick Setup*; you are returned to the Quick Setup screen.

For more information about the Tel to IP Routing table, see the 7122 Digital Gateway User Guide.

- 6 Enable E1/T1 B-channels by completing these steps:
  - a) Click the arrow button next to the *Trunk Group Table* label; the Trunk Group Table screen opens.
  - b) Select the number of the trunk you want to enable from the *Trunk ID* drop-down list.
  - c) Enter the number of B-channels you want to enable in the *Channels* field.
  - d) Enter the starting phone number in the adjacent *Phone Number* field (these are virtual numbers, used only to define enabled B-channels).
  - e) Click Submit; the Trunk Group Table is automatically updated.
  - f) Click *Quick Setup*; you are returned to the Quick Setup screen.
- 7 Click the *Reset* button, and then at the prompt click *OK*; the V7122 gateway applies the changes and restarts. This takes approximately three minutes to complete. When the V7122 gateway has finished restarting, the *Ready* and *LAN* LEDs on the front panel are lit green.
- **8** After the gateway is reset, configure the V7122 gateway trunk parameters. For information on configuring the trunk parameters, see Configuring the Trunk Settings.



H.323 users should continue with Section Configuring the Trunk Settings.

#### **Configuring Basic SIP Parameters**

After accessing the Embedded Web Server (see <u>Accessing the Embedded Web Server</u>) the SIP Quick Setup screen is displayed.

Figure 14 V7122/SIP Quick Setup



To configure basic SIP parameters, follow these 11 steps:

- 1 If the V7122 gateway is connected to a router with NAT enabled, perform the following procedure. If it is not, leave the *NAT IP Address* field undefined.
  - Determine the "public" IP address assigned to the router (by using, for instance, router Web management). Enter this public IP address in the NAT IP Address field.
  - Enable the DMZ configuration on the residential router for the LAN port where the V7122 gateway is connected. This enables unknown packets to be routed to the DMZ port.

- 2 Under SIP Parameters, enter the V7122 gateway domain name in the Gateway Name field. If the field is not specified, the V7122 gateway IP address is used instead (default).
- When working with a Proxy server, set the *Working with Proxy* field to *Yes*, and then enter the IP address of the primary Proxy server in the *Proxy IP Address* field. When no Proxy is used, the internal routing table is used to route the calls.
- 4 Enter the Proxy name in the *Proxy Name* field. If Proxy name is used, it replaces the Proxy IP address in all SIP messages. This means that messages are still sent to the physical Proxy IP address but the SIP URI contains the Proxy name instead.
- 5 Configure Enable Registration to Yes or No:
  No = the V7122 gateway does not register to a Proxy server/Registrar (default).
  Yes = the V7122 gateway registers to a Proxy server/Registrar at power up and every Registration Time seconds. For detailed information on the parameter Registration Time see the V7122 Digital Gateway User Guide.
- 6 Select the coder (that is, vocoder) that best suits your VoIP system requirements. The default coder is: G.723.1 30 msec. To program the entire list of coders you want the V7122 gateway to use, see the V7122 Digital Gateway User Guide.
- 7 Map outgoing calls to IP addresses (when Proxy is not used) by completing these steps:
  - a) Click the arrow button next to the *Tel to IP Routing Table* label; the Tel to IP Routing screen opens.

Any telephone number whose destination number matches the prefix defined in the Destination Phone Prefix field and whose source number matches the prefix defined in the adjacent Source Phone Prefix field, is sent to the IP address entered in the IP Address field.

- b) Click Submit; the Tel to IP Routing table is automatically updated.
- c) Click *Quick Setup*; you are returned to the Quick Setup screen.

For more information about the Tel to IP Routing table see the *V7122 Digital Gateway User Guide*.

- 8 Enable E1/T1 B-channels by completing these steps:
  - a) Click the arrow button next to the *Trunk Group Table* label; the Trunk Group Table screen opens.
  - b) Select the number of the trunk you want to enable from the *Trunk ID* drop-down list.
  - c) Enter the number of B-channels you want to enable in the *Channels* field.
  - d) Enter the starting phone number in the adjacent *Phone Number* field (these are virtual numbers, used only to define enabled B-channels).
  - e) Click Submit; the Trunk Group Table is automatically updated.
  - f) Click Quick Setup; you are returned to the Quick Setup screen.
- 9 Click the *Reset* button, and then at the prompt click *OK*; the V7122 gateway applies the changes and restarts. This takes approximately three minutes to complete. When the

V7122 gateway completes the restart, *Ready* and *LAN* LEDs on the front panel are lit green.

**10** After the gateway is reset, configure the V7122 gateway trunk parameters. For information about configuring the trunk parameters, see <a href="Configuring the Trunk Settings">Configuring the Trunk Settings</a>.



SIP users should continue with Section Configuring the Trunk Settings.

The following sections from here, up to the end of this Guide, apply equally to H.323, and SIP.

#### **Configuring the Trunk Settings**

To configure the trunk settings, follow these 14 steps:

- 1 Access the Embedded Web Server (see Accessing the Embedded Web Server).
- 2 Open the Trunk Settings screen (Advanced Configuration menu > Trunk Settings); the Trunk Settings screen is displayed. Initially, the screen appears with the parameters fields grayed (indicating read-only). The Stop Trunk button appears at the bottom of the screen. The Trunk Status indicators appear colored. Table 7 shows the possible indicators and their descriptions.

Figure 15 Trunk Settings Screen



Table 7 Trunks Status Color Indicator Keys

Indicator	Color	Description
	Gray	Disabled
w	Green	Active-OK
•	Yellow	RAI Alarm
	Red	LOS/LOF Alarm
♥	Blue	AIS Alarm
v	Orange	D-channel Alarm (ISDN only)

- 3 To configure the parameters of a specific trunk, from the trunks displayed on the top, select the trunk you want to configure by clicking the *Trunks Status* indicator. The first parameter named *Trunk ID* changes according to the trunk you click. The parameters displayed are for the selected trunk only.
- 4 To modify the selected trunks parameters, click *Stop Trunk*; the trunk is stopped and the Trunk Configuration State parameter changes to Inactive. The parameters are no longer grayed and can be modified. The *Apply Trunk Settings* button appears at the bottom of the screen. When all trunks are stopped, the *Apply to all Trunks* button also appears at the bottom of the screen.



If the trunk cant be stopped because it provides the gateways clock (assuming the V7122 gateway is synchronized with the E1/T1 clock), assign a different E1/T1 trunk to provide the gateways clock or enable TDM Bus PSTN Auto Clock on the TDM Bus Settings screen.

To assign a different E1/T1 trunk that provides the gateways clock, access the TDM Bus Setting screen and change the TDM Bus Local Reference number to any other trunk number (this operation can be performed on-the-fly).

**5** From the *Protocol Type* drop-down list, select the required protocol. Note that different trunks can be defined with different protocols (CAS or ISDN variants) on the same gateway (subject to the constraints in the V7122 gateway Release Notes).



When modifying the Protocol Type field, the menu is automatically updated according to the selected protocol (ISDN, CAS or Transparent). Additional parameters are appropriate to the selected protocol type.

**6** From the *Framing Method* drop-down list, select the required Framing Method (for E1 trunks, always set the Framing Method to *Extended Super Frame*).

- 7 From the *Clock Master* drop-down list, select the trunk clock source from the drop-down list. Choose either *Recovered* (the clock is recovered from the trunk -- default) or *Generated* (the trunks clock source is provided by the internal TDM bus clock source, according to the *TDM Bus Clock Source* parameter). For detailed information about the *TDM Bus Clock Source* parameter, see the *V7122 Digital Gateway User Guide*.
- **8** From the *Line Code* drop-down list, select the line code. Choose either *B8ZS* (bipolar 8-zero substitution) for T1 trunks only; *HDB3* (high-density bipolar 3) for E1 trunks only; or *AMI* (for both T1 and E1).
- 9 From the ISDN Termination Side drop-down list (applicable only to ISDN protocols), select User Side when the PSTN or PBX side is configured as Network side, and vice-versa. If you do not know the V7122 gateway ISDN termination side, choose User Side and then open the Channel Status screen (by clicking the Home button). If the D-channel alarm is indicated, choose Network Side.
- 10 To configure the different behavior bits: either enter the exact hexadecimal value of the bits in the field to the right of the relevant behavior parameter, or directly configure each bit field by completing the following steps:
  - a) Click the arrow button (-->) to the right of the relevant behavior parameter; the relevant behavior screen appears.
  - b) Modify each bit field according to your requirements.
  - c) Click Submit to save your changes.
- **11** After modifying the parameters:
  - To apply the changes to the selected trunk only, click Apply Trunk Settings.
  - To apply the changes to all the trunks, click Apply to all Trunks.

The screen is refreshed and parameters become read-only (indicated by being grayed). The *Stop Trunk* button appears at the bottom of the screen.

- **12** Access the *TDM Bus Settings* screen (click *Advanced Configuration* >T*DM Bus Settings*). From the *PCM Law Select* drop-down list, select *Alaw* for E1 trunks and *MuLaw* for T1 trunks.
- 13 To save the changes so they are available after a power fail:
  - a) Click *Maintenance* on the main menu bar; the *Maintenance Actions* screen is displayed.
  - b) From the *Burn to FLASH* drop-down list, select *Yes* and the click the *Reset* button; a confirmation message appears when the save is complete.

For more detailed information about configuring the V7122 gateway trunk settings, see the V7122 Digital Gateway User Guide.

# CHAPTER 4: CHANGING THE V7122 GATEWAY USERNAME AND PASSWORD

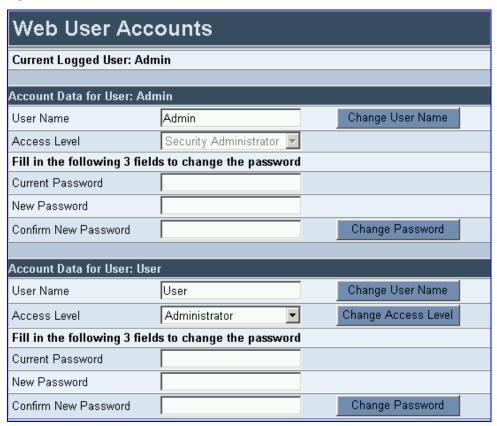
To prevent unauthorized access to the Embedded Web Server, two user accounts are available, a primary and secondary. For detailed information on the user account mechanism, see the *V7122 Digital Gateway User Guide*.

It is recommended that you change the default username and password of the account after first accessing the Embedded Web Server.

To change the username and password, follow these 3 steps:

Open the Web User Accounts screen (on the Advanced Configuration menu, click Security Settings > Web User Accounts option); the Web User Accounts screen is displayed.

Figure 16 Web User Accounts Screen



- 2 To change the username of an account, enter the new username in the User Name field, and then click *Change User Name*; the new username is applied immediately and the Enter Network Password screen appears (shown in Figure 12). Enter the updated username in the Enter Network Password screen. Note that the username can be a maximum of 19 case-sensitive characters.
- **3** To change the password of an account:
  - a) In the Current Password field, enter the current password.
  - b) In the New Password and Confirm New Password fields, enter the new password.
  - c) Click *Change Password*; the new password is applied immediately and the Enter Network Password screen appears (see <u>Figure 12</u>). Enter the updated password in the Enter Network Password screen. Note that the password can be a maximum of 19 case-sensitive characters.

# CHAPTER 5: RESTORING AND BACKING UP THE V7122 GATEWAY CONFIGURATION

The Configuration File screen enables you to restore (load a new *ini* file to the gateway) or to back up (save a copy of the VoIP gateway *ini* file and store it in a directory on your PC) the current gateway configuration. For information on the *ini* file see Table 13.

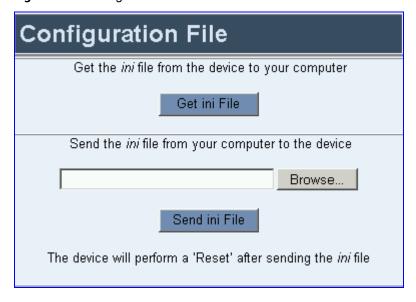
Back up your configuration if you want to protect your VoIP gateway configuration. The backup *ini* file includes only those parameters that were modified and contain other than default values.

Restore your configuration if the VoIP gateway has been replaced or has lost its configuration. You can restore the VoIP gateway configuration from a previous backup or from a newly created *ini* file. To restore the VoIP gateway configuration from a previous backup you must have a backup of the VoIP gateway configuration stored on your PC.

To restore or back up the ini file:

 Open the Configuration File screen (on the Advanced Configuration menu, click Configuration File); the Configuration File screen is displayed.

Figure 17 Configuration File Screen



To back up the *ini* file, follow these 4 steps:

- 1 Click Get ini File; the File Download window opens.
- 2 Click Save; the Save As window opens.
- 3 Navigate to the folder where you want to save the *ini* file.

4 Click Save; the VoIP gateway copies the *ini* file into the folder you selected.

To restore the *ini* file, follow these 4 steps:

- 1 Click Browse.
- 2 Navigate to the folder that contains the *ini* file you want to load.
- 3 Select the file and then click *Open*; the name and path of the file appear in the field beside the *Browse* button.
- **4** Click *Send ini File*, and then at the prompt click *OK*; the gateway is automatically reset (from the *cmp* version stored on the flash memory).

# CHAPTER 6: MONITORING THE V7122 GATEWAY

The V7122 gateway provides several ways for monitoring the status of the gateway:

- Monitoring the V7122 gateway LEDs (see Monitoring the V7122 LEDs).
- Monitoring the V7122 gateway trunks and B-channels using the Embedded Web Server (see Monitoring the V7122 Trunks and B-channels).

## **Monitoring the V7122 Gateway LEDs**

## **V7122 Gateway Chassis LED Indicators**

<u>Table 8</u> provides a detailed description of the V7122 gateway chassis LED indicators.

Table 8 Chassis LED Indicators

Location	Color	Function
Right side of front panel	Green	The power is on.
Right side of front panel	Red	Fan failure - indicates that any of the internal fans has significantly reduced its speed or has stopped.
Left side of front panel	Red	Power supply failure - indicates that one of the two AC redundant power supplies is faulty or disconnected from the AC/mains outlet. (This LED is only relevant for the dual AC power supply).

# **TP-1610 Front Panel LED Indicators**

The functionality of the front panel LEDs for the TP-1610 is described in the following four tables. Note that there is a choice of front panels according to the number of channels.

Table 9 Status LED Indicators

Label	LED Color LED Function		
FAIL	Red	Indicates gateway failure (fatal error)	
ACT	Green	Gateway initialization sequence terminated OK	Bi-color
ACI	Yellow	N/A	LED

Table 10 E1/T1 Trunk Status LED Indicators

Label	LED Color	Signal Description		
T1/E1 Status 1 to 8 and T1/E1 Status 9 to 16	Green	Trunk is synchronized (normal operation)		Bi-color - LED
	Red	Loss due to any of the following 4 signals:		
		LOS	Loss of Signal	•
		LFA	Loss of Frame Alignment	
		AIS	AIS Alarm Indication Signal (the Blue Alarm)	
		RAI	Remote Alarm Indication (the Yellow Alarm)	



On the front panel, 16 LEDs are provided for 16-span units and 8 LEDs are provided for 1-span, 2-span, 4-span, and 8-span units. In the case of 1-, 2-, and 4-span units, the extra LEDs are unused.

Table 11 Ethernet LED Indicators

Label	LED Color LED Function	
LINK	Green	Link all OK
ACT	Yellow	Transmit / receive activity

Table 12cPCI LED Indicators

Label	LED Color LED Function	
PWR	Green	Power is supplied to the board
SWAP READY	Blue	The cPCI board can now be removed.
SWAF NEADT		The cPCI board was inserted successfully.

During correct V7122 operation, the ACT LED is lit green and the FAIL LED is off.

# Monitoring the V7122 Gateway Trunks and B-channels

To monitor the status of the trunks and B-channels:

Open the Trunk & Channel Status screen by clicking the Home icon; the Trunk & Channel Status screen is displayed.



Figure 18 Trunk & Channel Status Screen



Note that the color coding of the Trunk Status is shown in Table 7.

To monitor the details of a B-channel, follow these 2 steps:

- In the Trunk & Channel Status screen, click the numbered icon of the specific B-channel whose detailed status you want to view; the B-channel-specific Channel Status screen appears.
- 2 Click the submenu links to view a specific B-channel's parameter settings.

# CHAPTER 7: UPGRADING THE V7122 GATEWAY

The Software Update menu enables users to upgrade the V7122 gateway software by loading a new *cmp* file along with the *ini* and a suite of auxiliary files, or to update the existing auxiliary files.

The Software Update menu comprises two submenus:

- Software Upgrade Wizard (see <u>Software Upgrade Wizard</u>).
- Load Auxiliary Files (see Updating the Auxiliary Files).



When upgrading the V7122 gateway software you must load the new cmp file with all other related configuration files.

# **Software Upgrade Wizard**

The Software Upgrade Wizard guides you through the process of software upgrade -- selecting files and then loading them to the gateway. The wizard also enables you to upgrade software (*cmp* file) while maintaining the existing configuration. Using the wizard obligates you to load a *cmp* file. You can also choose to use the wizard to load the *ini* and auxiliary files (for example, Call Progress Tones), but this option cannot be pursued without loading the *cmp* file. For the *ini* and each auxiliary file type, you can choose to reload an existing file, load a new file or not load a file at all.



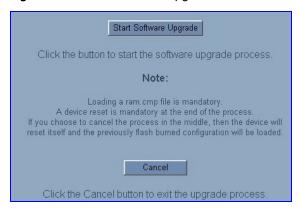
#### **WARNING:**

The Software Upgrade Wizard requires the V7122 gateway to be reset at the end of the process, disrupting any of its traffic. To avoid disruption, disable all traffic on the device before initiating the wizard, using the Graceful Option (see the V7122 Digital Gateway User Guide).

To use the Software Upgrade Wizard, follow these 9 steps:

- 1 Stop all traffic on the V7122 gateway (see the note above).
- 2 Open the Software Upgrade Wizard (click *Software Update* menu > *Software Upgrade* Wizard); the Start Software Upgrade screen appears.

Figure 19 Start Software Upgrade Screen





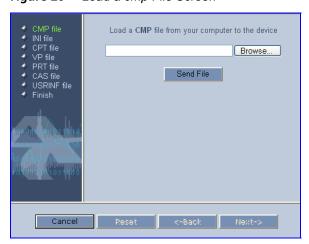
At this point, the process can be canceled with no consequence to the V7122 gateway (click the Cancel button). If you continue the process (by clicking the Start Software Upgrade button, the process must be followed through and completed with a V7122 gateway reset at the end. If you click the Cancel button in any of the subsequent screens, the V7122 gateway is automatically reset with the configuration that was previously burned in flash memory.

3 Click Start Software Upgrade; the Load a cmp file screen appears (Figure 20).



When in the wizard process, the rest of the Web application is unavailable and the background Web screen is disabled. After the process is completed, access to the full Web application is restored.

Figure 20 Load a cmp File Screen



4 Click *Browse*, navigate to the cmp file and click the button Send File; the cmp file is loaded to the V7122 gateway and you are notified as to a successful loading.

Figure 21 cmp File Successfully Loaded into the V7122 Gateway Notification



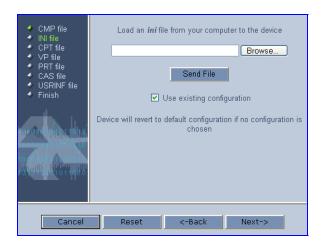
Note that the four action buttons (*Cancel*, *Reset*, *Back*, and *Next*) are now activated (following cmp file loading).

You can now choose to either:

- Click Reset; the V7122 gateway resets, utilizing the new cmp you loaded and utilizing the current configuration files.
- Click Cancel; the V7122 gateway resets utilizing the cmp, ini and all other
  configuration files that were previously stored in flash memory. Note that these are
  NOT the files you loaded in the previous wizard steps.
- Click Back; the Load a cmp File screen is reverted to; see Figure 20.
- Click Next; the Load an ini File screen opens; see <u>Figure 22</u>. Loading a new ini file or any other auxiliary file listed in the wizard is optional.

Note that as you progress, the file type list on the left indicates which file type loading is in process by illuminating green (until FINISH).

Figure 22 Load an ini File Screen

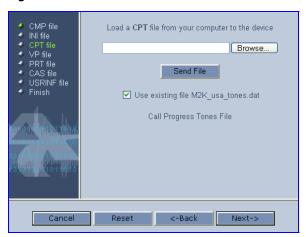


- 6 In the Load an ini File screen, you can now choose to either:
  - Click Browse and navigate to the ini file; the Use existing configuration check box, by default checked, becomes unchecked. Click Send File; the ini file is loaded to the V7122 gateway and you are notified as to a successful loading.
  - Ignore the Browse button (its field remains undefined and the check box Use existing configuration remains checked by default).
  - Ignore the Browse button and uncheck the Use existing configuration check box; no ini file is loaded, the V7122 gateway uses its factory-preconfigured values.

You can now choose to either:

- Click Cancel; the V7122 gateway resets utilizing the cmp, ini and all other configuration files that were previously stored in flash memory. Note that these are NOT the files you loaded in the previous Wizard steps.
- Click Reset; the V7122 gateway resets, utilizing the new cmp and ini file you loaded up to now as well as utilizing the other configuration files.
- Click Back; the Load a cmp file screen is reverted to; see Figure 20.
- Click Next; the Load a CPT File screen opens, see Figure 23; Loading a new CPT file or any other auxiliary file listed in the Wizard is optional.

Figure 23 Load a CPT File Screen

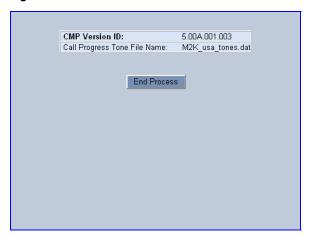


- 7 Follow the same procedure you followed when loading the ini file (see Step 6). The same procedure applies to the Load a VP file (not applicable to the V7122 gateway) screen and Load a coefficient file screen.
- In the FINISH screen (see Figure 24), the Next button is disabled. Click Reset or Cancel to complete the upgrade process.
  - Click Reset, the V7122 gateway burns the newly loaded files to flash memory. The
     Burning files to flash memory screen appears. Wait for the burn to finish. When it
     finishes, the End Process screen appears displaying the burned configuration files
     (see Figure 25).
  - Click Cancel, the V7122 gateway resets, utilizing the files previously stored in flash memory. (Note that these are NOT the files you loaded in the previous Wizard steps).

Figure 24 FINISH Screen



Figure 25 End Process Screen



**9** Click *End Process*; the *Quick Setup* screen appears and the full Web application is reactivated.

# **Updating the Auxiliary Files**

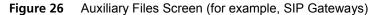
The auxiliary files are configuration *dat* files that are loaded to the gateway (in addition to the *ini* file) to enable enhanced gateway provisioning. <u>Table 13</u> presents a brief description of the *ini* file and the auxiliary files that are available: CAS, Voice Prompts, and Call Progress Tones (CPT). For information about additional auxiliary files, see the *V7122 Digital Gateway User Guide*.

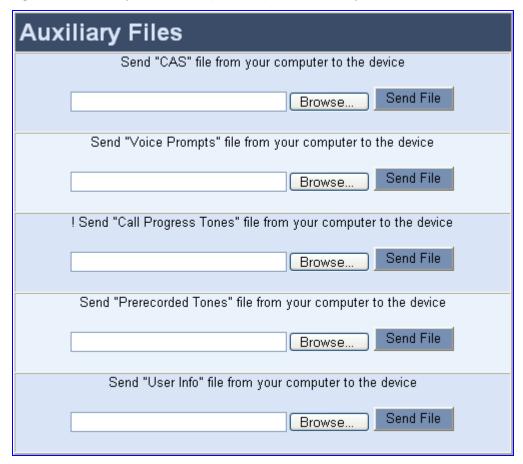
 Table 13
 ini and Auxiliary Files Descriptions

File Type	Description
ini	Load this file to provision the V7122 gateway parameters. The Embedded Web Server enables practically full device provisioning but customers may occasionally require new feature configuration parameters in which case this file is loaded. Note that loading the ini file only provisions parameters that are contained in the ini file. If a parameter is not specified in the ini file, values associated with that parameter are reset to a default value. These values may not be the same as the values that were configured for the VoIP gateway at the time of manufacture. Note: After the file has completed loading, the VoIP gateway automatically restarts (software is loaded from the flash).
CAS	Up to eight different CAS files containing specific CAS protocol definitions.  These files are provided by 3Com to support various types of CAS signaling.
Voice Prompts	The voice announcement file contains a set of Voice Prompts to be played by the V7122 gateway during operation on Call Agent request.
Call Progress Tones	This is a region-specific, telephone exchange-dependent file that contains the Call Progress Tones levels and frequencies that the VoIP gateway uses. The default CPT file is: U.S.A.
Prerecorded Tones	The dat PRT file enhances the gateways capabilities of playing a wide range of telephone exchange tones that cannot be defined in the Call Progress Tones file.
User Information	The User Information file maps PBX extensions to IP numbers. This file can be used to represent PBX extensions as IP phones in the global IP world.

To load an auxiliary file via the Embedded Web Server, follow these 6 steps:

- 1 Open the Auxiliary Files screen (from the Software Update menu, click Load Auxiliary Files); the Auxiliary Files screen is displayed (shown in Figure 26).
- 2 Click Browse that is in the field for the type of file you want to load.
- 3 Navigate to the folder that contains the file you want to load.
- 4 Click the file and click *Open*; the name and path of the file appear in the field next to the *Browse* button.
- 5 Click the Send File button adjacent to the field that contains the name of the file you want to load. An asterisk in the screen section indicates that the file's loading takes effect onthe-fly (for example, Voice Prompts file).
- **6** Repeat Steps 2 through 5 for each file you want to load.





To save the loaded auxiliary files to flash memory and reset the gateway, follow these 3 steps:

- 1 On the main menu bar, click *Maintenance*; the *Maintenance Actions* screen is displayed.
- 2 Saving an auxiliary file to flash memory may disrupt traffic on the V7122 gateway. Therefore, disable all traffic on the device by performing a Graceful Lock:
  - a) Under the LOCK / UNLOCK group, select Yes from the Graceful Option drop-down list.
  - b) In the *Lock Timeout* field, enter the time (in seconds) after which the gateway locks.
  - c) Click *LOCK*; now new calls are accepted and the gateway locks and terminates all calls after the *Lock Timeout* value expires. Note that if no traffic exists and the time has not yet expired, the gateway locks.
- 3 Under the *RESET* group, select the *Yes* option from the *Burn to FLASH* drop-down list, and then click *Reset*; the auxiliary files are saved into flash and the V7122 gateway restarts. This takes approximately three minutes to complete. When the V7122 gateway has finished restarting, the *Ready* and *LAN* LEDs on the front panel are lit green.

# **CHAPTER 8: REGULATORY INFORMATION**

# Declaration of Conformity

**Application of Council Directives**: 73/23/EEC (including amendments),

89/336/EEC (including amendments), 1999/5/EC Annex-II of the Directive

Standards to which Conformity is Declared: EN55022: 1998, Class A

EN55024: 1998 EN61000-3-2: 1995

(including amendments A1: 1998, A2: 1998, A14: 2000)\*

EN61000-3-3: 1995\* EN60950-1: 2001

TBR-4: 1995 (including amendment A1: 1997)

TBR-13: 1996

TBR-12: 1993 (including amendment 1: 1996)

(\* Not valid for DC input)

Manufacturers Name: AudioCodes Ltd.

Manufacturers Address: 1 Hayarden Street, Airport City, Lod 70151, Israel.

**Type of Equipment**: Digital VoIP System.

Model Numbers: V7122, Stretto 2000, IPmedia 2000

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directives and Standards.

I. Zusmanovich, Compliance Engineering Manager

Czech	[3Com Ltd] tímto prohlašuje, že tento [2000 Series] je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES."
Danish	Undertegnede [3Com Ltd] erklærer herved, at følgende udstyr [2000 Series] overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF
Dutch	Hierbij verklaart [3Com Ltd] dat het toestel [2000 Series] in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG
English	Hereby, [3Com Ltd], declares that this [2000 Series] is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Estonian	Käesolevaga kinnitab [3Com Ltd] seadme [2000 Series] vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
Finnish	[3Com Ltd] vakuuttaa täten että [2000 Series] tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
French	Par la présente [3Com Ltd] déclare que l'appareil [2000 Series] est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE

German	Hiermit erklärt [3Com Ltd], dass sich dieser/diese/dieses [2000 Series] in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMWi)
Greek	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ [3Com Ltd] ΔΗΛΩΝΕΙ ΟΤΙ [2000 Series] ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ
Hungarian	Alulírott, [3Com Ltd] nyilatkozom, hogy a [2000 Series] megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak
Icelandic	æki þetta er í samræmi við tilskipun Evrópusambandsins 1999/5
Italian	Con la presente [3Com Ltd] dichiara che questo [2000 Series] è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latvian	Ar šo [3Com Ltd] deklarē, ka [2000 Series] atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lithuanian	[3Com Ltd] deklaruoja, kad irenginys [2000 Series] tenkina 1999/5/EB Direktyvos esminius reikalavimus ir kitas sios direktyvos nuostatas
Maltese	Hawnhekk, [3Com Ltd], jiddikjara li dan [2000 Series] jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC
Norwegian	Dette produktet er i samhørighet med det Europeiske Direktiv 1999/5
Polish	[3Com Ltd], deklarujemy z pelna odpowiedzialnoscia, ze wyrób [2000 Series] spelnia podstawowe wymagania i odpowiada warunkom zawartym w dyrektywie 1999/5/EC
Portuguese	[3Com Ltd] declara que este [2000 Series] está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovak	[3Com Ltd] týmto vyhlasuje, že [2000 Series] spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Slovene	Šiuo [3Com Ltd] deklaruoja, kad šis [2000 Series] atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Spanish	Por medio de la presente [3Com Ltd] declara que el [2000 Series] cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE
Swedish	Härmed intygar [3Com Ltd] att denna [2000 Series] står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

# **Safety Notices**

Installation and service of this gateway must only be performed by authorized, qualified service personnel.

The protective earth terminal on the back of the V7122 gateway must be permanently connected to protective earth.

## **Industry Canada Notice**

This equipment meets the applicable Industry Canada Terminal Equipment technical specifications. This is confirmed by the registration numbers. The abbreviation, IC, before the registration number signifies that registration was performed based on a declaration of conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

# **Digital Device Warnings**

This equipment complies with Part 68 of the FCC rules and the requirements adopted by ACTA. On the bottom of this equipment is a label that contains a product identifier in the format US:AC1ISNANMED2KDC. If requested this number must be provided to the telephone company.

The Telephone company may make changes in the facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service. Should you experience trouble with this telephone equipment, contact: AudioCodes Inc, San Jose, CA USA. Tel: 1 408 411 1175. Do not attempt to repair this equipment!

## Do not attempt to repair this equipment!

Facility Interface Code: 04DU9.BN, 04DU9.DN, 04DU9.1KN, 4DU9.ISN

Service Order Code: 6.0N

USOC Jack Type: RJ21X or RJ48C

It this gateway causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isnt practical, the telephone company will notify the customer as soon as possible. Also you will be advised of your right to file complaint with the FCC if you believe it is necessary.

#### **Network Information and Intent of Use**

The products are for access to ISDN at 2048 kb/s and for access to G.703 Leased lines at 2048 kb/s.

## **Network Compatibility**

The products support the Telecom networks in EU that comply with TBR4 and TBR13.

#### **Telecommunication Safety**

The safety status of each port is declared and detailed in the table below:

Ports	Safety Status
E1 or T1	TNV-1
Ethernet (100 Base-TX)	SELV
DC input port	SELV

**TNV-1**: Telecommunication network voltage circuits whose normal operating voltages do not exceed the limits for SELV under normal operating conditions and on which over voltages from telecommunication networks are possible.

**SELV**: Safety extra low voltage circuit.

#### **FCC Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# APPENDIX A: OBTAINING SUPPORT FOR YOUR 3COM PRODUCT

# **Customer Support**

Customer technical support and service are provided by 3Com Distributors, Partners, and Resellers from whom the product was purchased. For Customer support for products purchased directly from 3Com, contact <a href="mailto:support@3Com.com">support@3Com.com</a>.