Strata®

CIX™

Strata CIX
Media Application Server

Installation and Maintenance Manual
(MAS Release 3)

Publication Information

Toshiba America Information Systems, Inc.
Telecommunication Systems Division

Publication Information

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CIX-MAS-INSTALL-VA-E

Version 1, June, 2009

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This system is listed with Underwriters Laboratory (UL). Secondary protection is required, on any wiring from any telephone that exits the building or is subject to lightning or other electrical surges, and on DID, OPS, and Tie lines. (Additional information is provided in this manual.)

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CP01, Issue 8, Part I Section 14.1
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Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.
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CP01, Issue 8, Part I Section 14.2
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Area	**United States**	**Canada**
Safety	UL 60950-1 1st Edition	CSA-C22.2 No. 60950-1-03 1st Edition
Network	FCC CFR 47 Part 68 TIA/EIA/IS-968	IC CS-03
EMC	FCC CFR 47 Part 15	ICES003:2004

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Chapter 1 – Media Application Server Installation

Media Application Server Installation   1

The MAS is a multi-function server that connects through a Network Switch to the Strata CIX System IP LAN connection.

The MAS operating system is Windows® XP. The system is shipped with Service Pack 2 (SP2) installed.

The MAS is offered in two physical forms:

- Micro MAS - A desktop PC style cabinet
- 2U MAS - A 2U high, rackmount

Input Power

The MAS requires an input power source of 120 VAC, 50 or 60 Hz, 5.67 amps (max). The MAS is supplied with a standard 15 Amp power cord with a standard three-prong 120VAC that plugs into an AC power outlet. The MAS requires a dedicated, properly grounded circuit.

Power Failure Backup

Customer-supplied commercially available UPS systems should be used for power failure backup.

Grounding

The MAS does not need any additional grounding provided the AC outlet is properly grounded.

Connection

The MAS connects to the CIX using a single IP connection through a Network Switch or Router. All of the feature communications and Voice Mail speech paths are carried by this one connection.

The monitor, keyboard and mouse are customer supplied options. The MAS can be accessed via the network by using the Windows® XP Remote Desktop feature.
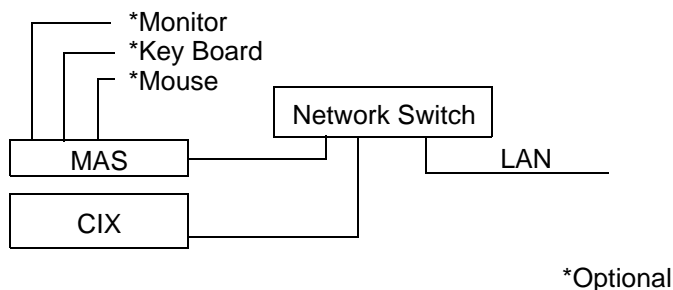
Figure 1 - 1   MAS Connection Block Diagram

2U MAS Physical Specifications

This 2U MAS platform includes the following features and options;

- Intel Pentium® 4, 2.3 gigahertz CPU
- 512 MB memory
- Internal PCI slots – Two full PCI slots for installation of fax modem boards
- Front cable connections
- RoHS Compliant (Restricted use of Hazardous Substances Directive) Supports Toshiba's mandate of environmental responsibility.

Basic 2U MAS Specifications

Dimensions of Cabinet	Height: 3.5 inches (86 mm)
	Width: 17 inches (430 mm) with bracket: 19 inches (483 mm)
	Depth: 18 inches (457.5 mm)
Cabinet Weight	Approximately 30 lbs. (13.6 kg)
Installation Type	Rack-mountable only. Cannot be floor or wall mounted.

2U MAS Physical Installation

The MAS can be mounted in a two post rack or it can be mounted on sliding rails in a four post rack.

Two Post Rack Mount

Use four screws to secure the MAS in a standard 19 inch rack. The rack and other equipment must not block the air-flow at the back and front of the MAS. The rail kit is not intended for use in a two post rack.

Four Post Rack Mount (Recommended)

The MAS can be mounted in a standard 19 inch four post rack or server cabinet. The rack and other equipment must not block the air-flow at the back and front of the MAS.

CD ROM Drive

0002-MAS

Two full length PCI card slots for FAX/Modem cards.

Figure 1 - 2   MAS Front View

USB Ports

Mouse Connector

Keyboard Connector

Monitor Output

Serial Port

1 Gb LAN Connector

10/100 Mb LAN
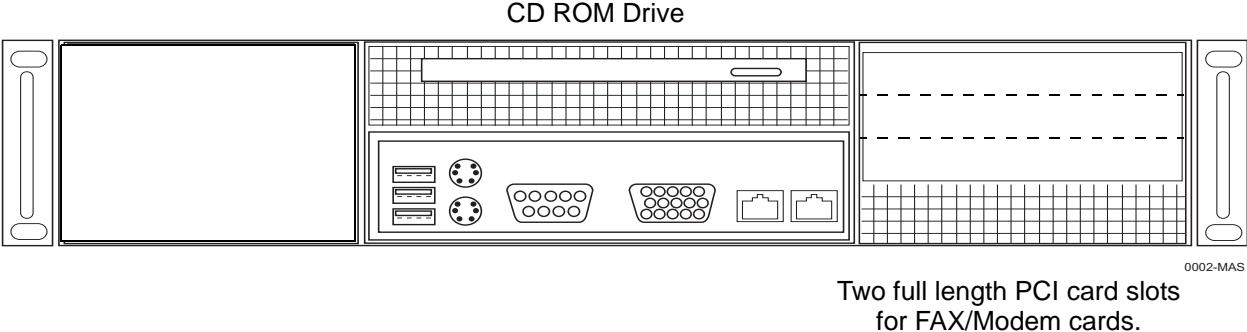
Figure 1 - 3   MAS Connector Detail

AC Input Power Switch

Power Switch

Reset Switch
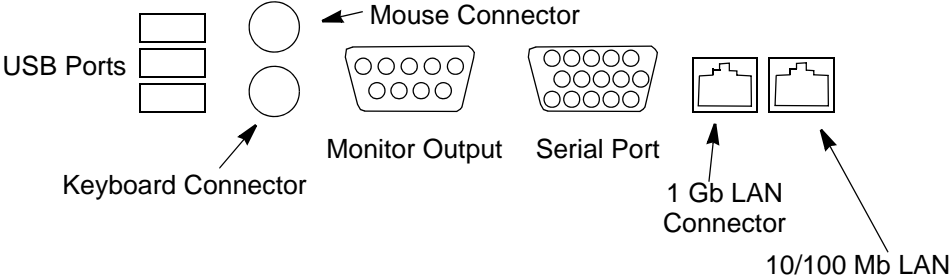
AC Power Connector
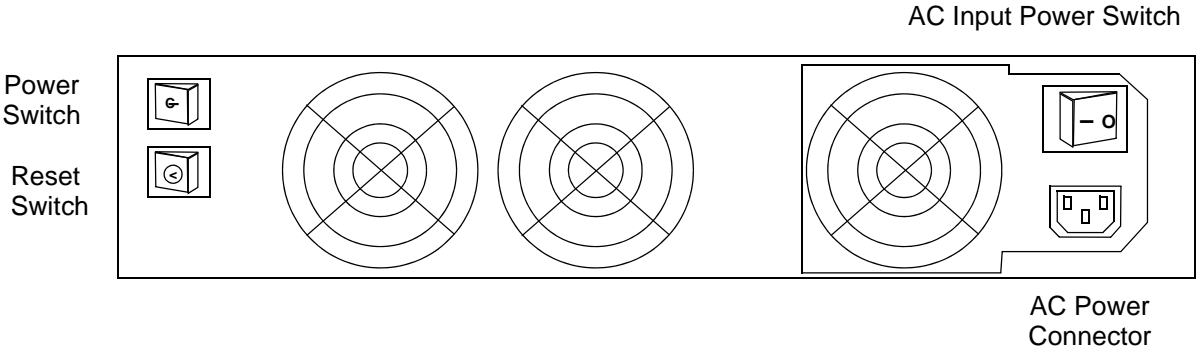
Figure 1 - 4   MAS Rear Panel

Assemble the MAS

Fax Modem Board Installation

The 2U MAS supports up to two fax modem boards per system for a maximum of 16 fax modem ports. If you are installing a fax modem board refer to "Fax Modem Board Installation" on page 6.

2U MAS Cabinet Mount

The 2U MAS can be fixed in a two pole rack or mounted on sliders in a four pole cabinet.

Two Post Rackmount

The MAS is attached to a two post rack using four screws through the brackets on the front of the cabinet.

Four Post Rackmount

1. Secure the inner rails to the MAS chassis as shown in Figure 1 - 5.

0006-MAS

Use the M4x4 (small) screws provided
to attach the inner rail to the MAS chassis

Notch in the rail
engages chassis tab.
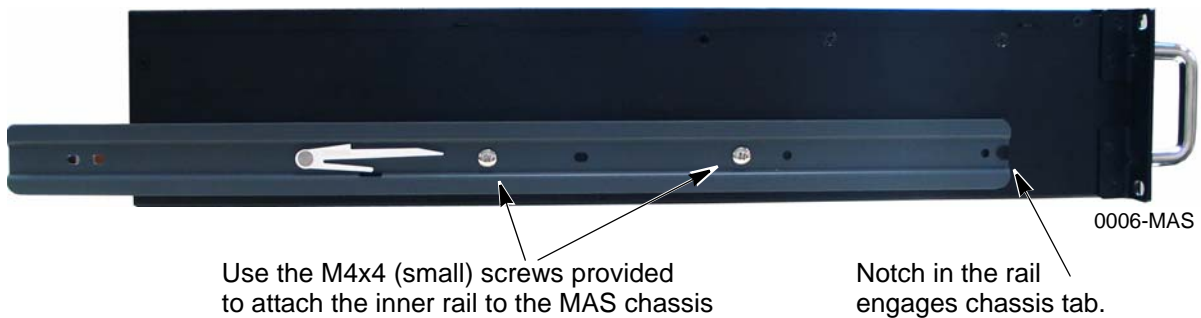
Figure 1 - 5   MAS with Rail Attached

2. Attach the outer rails to the front posts of the rack. Refer to Figure 1 - 6 and Figure 1 - 7.

    • If the post has non-threaded holes use the M5 screws and M5 nut plates. The nut plate must go behind the post. The rail flange goes between the nut plate and the post.

    • If the post has threaded M5 holes use the M4 screws and M4 nut plates. The screws will not engage the threads in the post. The nut plate must go behind the post. The rail flange goes between the nut plate and the post.

Nut Plate

Outer Rail

Front Post

Rack Post
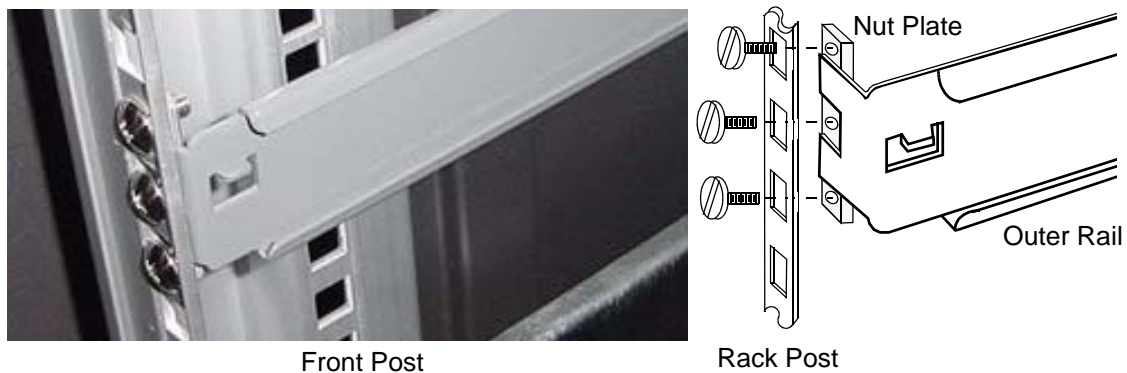
Figure 1 - 6   Outer Rail Attachments

Outer Rails

Inner Rails

Five inch Extension

15 inch Extension

L Brackets

M4 and M5 Nut Plates

Figure 1 - 7   Rail Kit

3. Attach the rails to the rear posts of the rack. Use the five or 15 inch extensions as needed. If needed use the L-brackets to attach the extension to the rear post. Refer to Figure 1 - 7 and Figure 1 - 8.

Rear Post using Extension and L-Bracket

Figure 1 - 8   L-Bracket to Attach Extension to Rear Post

4. Slide the MAS rails into the rails attached to the rack. Ensure that both side locks "click" into place.

Note   The cooling air flow through the MAS is front to back. Ensure that the front and rear grills are not obstructed.

5. Connect IP cable from the 1 Gbit connector to the Network Switch. Refer to Figure 1 - 3. This is the only IP connection to the MAS. Do not use the 10/100 Mbit connector.

6. Connect AC power cord. Refer to Figure 1 - 4.

Fax Modem Board Installation

There are three fax modem boards available. Their Toshiba part numbers and capacities are:

- SYS-FAXMODEM-1 – 1 port modem board
- SYS-FAXMODEM-4 – 4 port modem board
- SYS-FAXMODEM-8 – 8 port modem board

The following is required to enable fax features on the MAS:

- Minimum of one MultiTech fax modem board
- Corroborating analog interface board (e.g. BSLU1A) in the host Strata CIX telephone system.
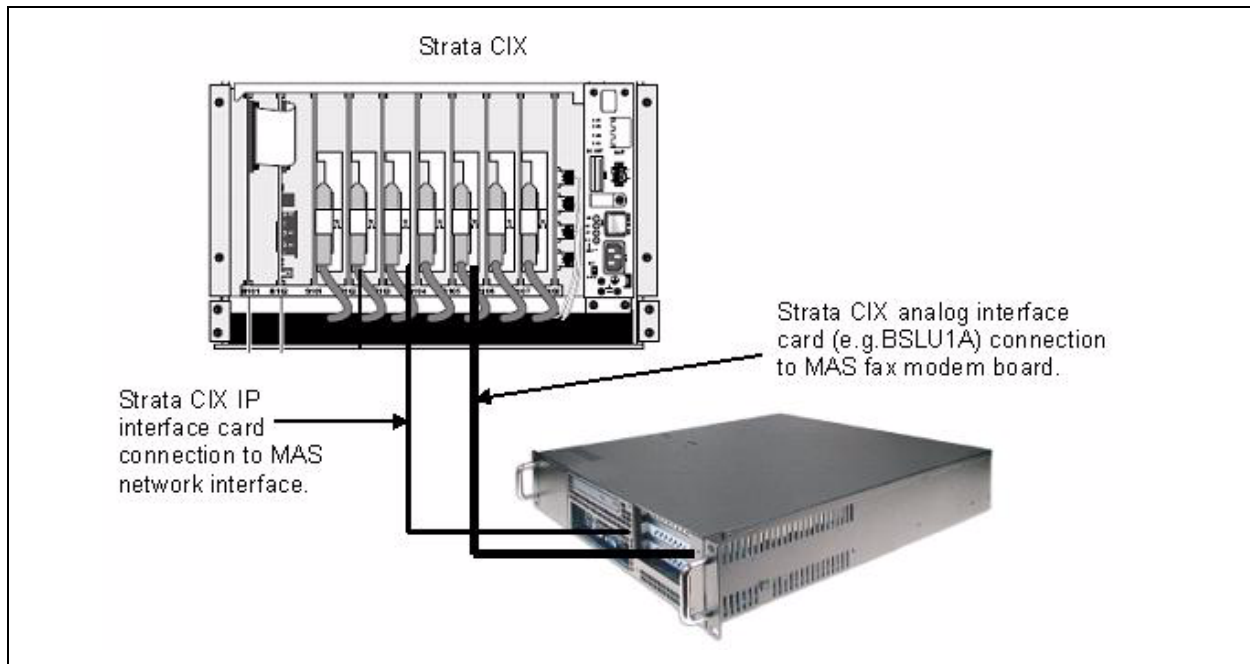
1. Power OFF the MAS.
2. Install the MultiTech Fax board(s).

   Notes

   - For the majority of the 2U MAS systems, the CD-ROM assembly will need to be removed in order to access the screws that secure the factory installed blank slot covers.
     For some units that had a secondary retaining bracket which secured the blank slot covers; simply remove the secondary retaining bracket to remove the blank slot covers.
   - For the 1U MAS the plastic slot guide on the end of the MultiTech board must be removed.

3. Refer to .

2U MAS Release 3

This is the third generation Media Application Server (MAS). This 2U rack mountable chassis incorporates Dual Core Central Processing Unit (CPU) technology from Intel®. Also available are an optional dual redundant power supply and RAID1 or RAID5 hard drive redundancy.

Description

This R3 MAS platform (Part number MAS-2U-XPPRO-R3) includes the following features and options;

- Intel Pentium® Dual Core 1.8 gigahertz CPU
- Dual core technology provides optimal performance with less power.
- Intel Server Motherboard (Snow Hill) – Intel 3210 chip set
- Windows® XP Professional (standard) – Windows 2003 Server (Optional)
- Front panel - Hard drive activity LED
- Front panel - Reset button – CPU reset
- Internal PCI slots – Two full PCI slots for installation of fax modem boards.
- Optional SATA RAID 1 or SAS RAID 5 hard drive redundancy.
- Optional Dual Redundant Power Supplies
- RoHS Compliant (Restricted use of Hazardous Substances Directive)
  Supports Toshiba's mandate of environmental responsibility.

Hardware Specifications

Hardware	Specification
CPU	Pentium Dual Core, 1.8 Gigahertz
Memory	1 GB (Maximum 4 GB)
Memory Slots	4 DIMM (DDR2 667/800 MHz)
Hard Drive	80 GB Serial ATA
SATA DVD Drive	Serial ATA Combo Drive CD, CD/RW, DVD-ROM
PCI Slots	2 Full length (Note: RAID 5 chassis support one PCI slot.)
USB	2 Ports – Front side connection
Serial I/O	1 Port – Front side connection
Chassis	2U rack mount chassis
Dimensions (HxWxD)	3.47" x 17.32" x 20" (8.814 cm x 44 cm x 50.8 cm)
Environment	Operating temperature: 32° ~ 122° F (0° ~ 50° C) Humidity: 5% ~ 95% non-condensing
Fans	2 fixed rear fans, 1 hard drive chamber fan
Power Supply	350 Watts

Part Numbers

For this new platform there are six new part numbers from which to choose.

Part Numbers	Description
MAS-2U-XPPRO-R3	2U MAS with Windows XP Professional, one 80GB SATA hard drive, Dialogic HMP 3.0, 1 gigabyte RAM
MAS-2U-R3-RAID1	2U MAS with Windows XP Professional, two 80GB SATA hard drives (RAID 1 redundancy), Dialogic HMP 3.0, 1 gigabyte RAM
MAS-2U-R3-RAID5	2U MAS with Windows XP Professional, three 73GB SAS hard drives (RAID 5 redundancy), Dialogic HMP 3.0, 1 gigabyte RAM
MAS-2USVR2K3-R3*	2U MAS with Windows 2003 Server, one 80GB SATA hard drive, Dialogic HMP 3.0, 1 gigabyte RAM
MAS-2USR3-RAID1*	2U MAS with Windows Server 2003, two 80GB SATA hard drives (RAID 1 redundancy), factory equipped with Dialogic HMP 3.0, 1 gigabyte RAM
MAS-2USR3-RAID5*	2U MAS with Windows Server 2003, three 73GB SAS hard drives (RAID 5 redundancy), Dialogic HMP 3.0, 1 gigabyte RAM
MAS-R3-REDUN-PS	Optional dual redundant power supply
*MAS units equipped with Windows Server 2003 are special order items. Please allow three to four business weeks for delivery.	

R3 MAS Installation Instructions

The R3 platform uses the same programming instructions as the previous 2U MAS system. It also shares the same side rail mounting instructions to install the system in a 19-inch rack. Refer to "2U MAS Cabinet Mount" on page 1-4.

There are some minor differences with the front panel connections as well as the instructions for installing optional PCI cards in the system.

PCI Board Installation Instructions

To install PCI boards into the 2 MAS system please follow these instructions;

1. Remove the top cover of the 2U MAS. Retaining screws can be found on the top front of the cover and on the side of the chassis.
2. Locate and remove the seven retaining screws, as indicated below.

Blank panel screws (4)

Card cage screws (7)
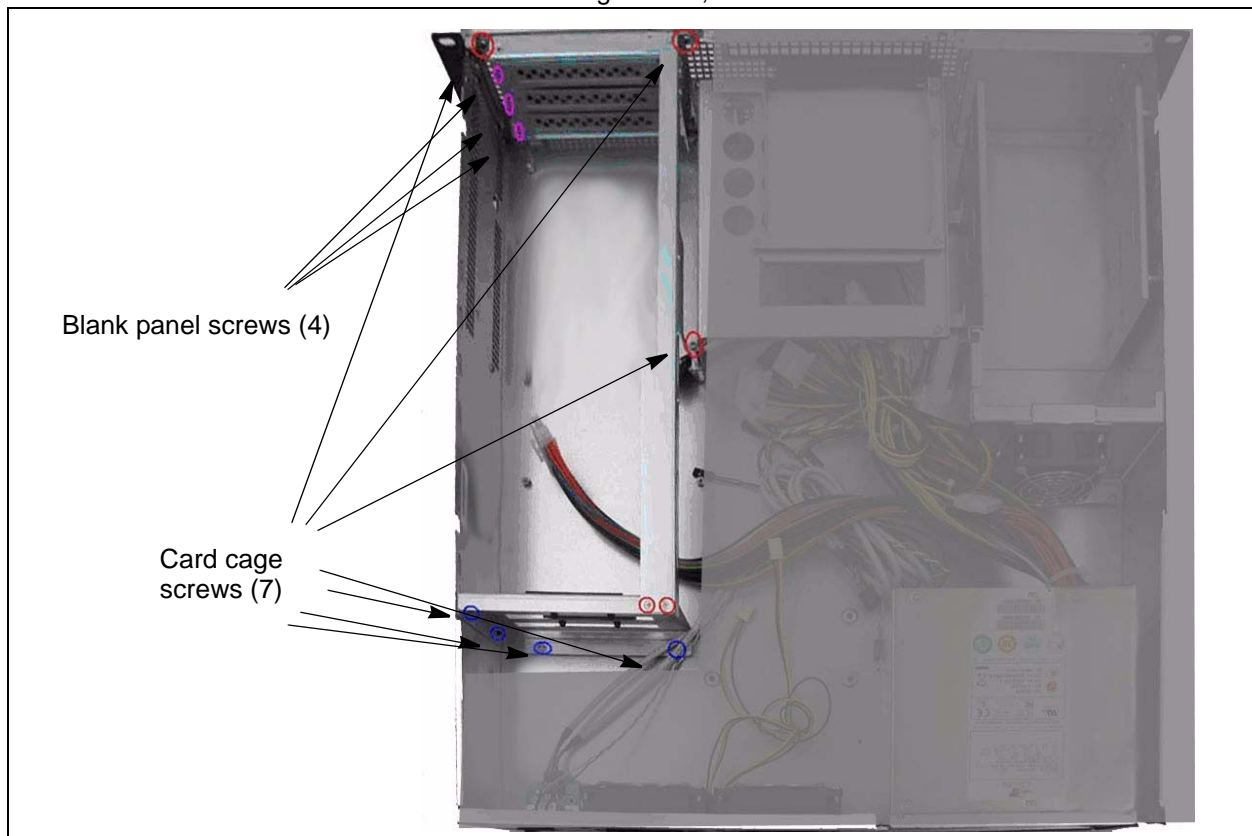
3. Carefully remove the card cage from the system.
4. Remove the blank panels for the card slot(s) that will be populated with PCI boards.
5. Install the PCI boards as required. Make sure that they are properly seated in their respective board connectors.

6. Reassemble card cage by reversing steps 1 through 3. Ensure that the locating tabs on the card cage slide into place at the bottom, front of the chassis.

Ensure the metal latches are properly in place and secure the Riser cage. The latches should easily slide in place.

Front Panel Detail

The AC Power cord connects on the rear panel of the MAS. All other connections are on the front panel.

Dual Redundant Power Supplies Installation

Use the following procedure to remove the standard power supply and install the optional dual, redundant power supply assembly.
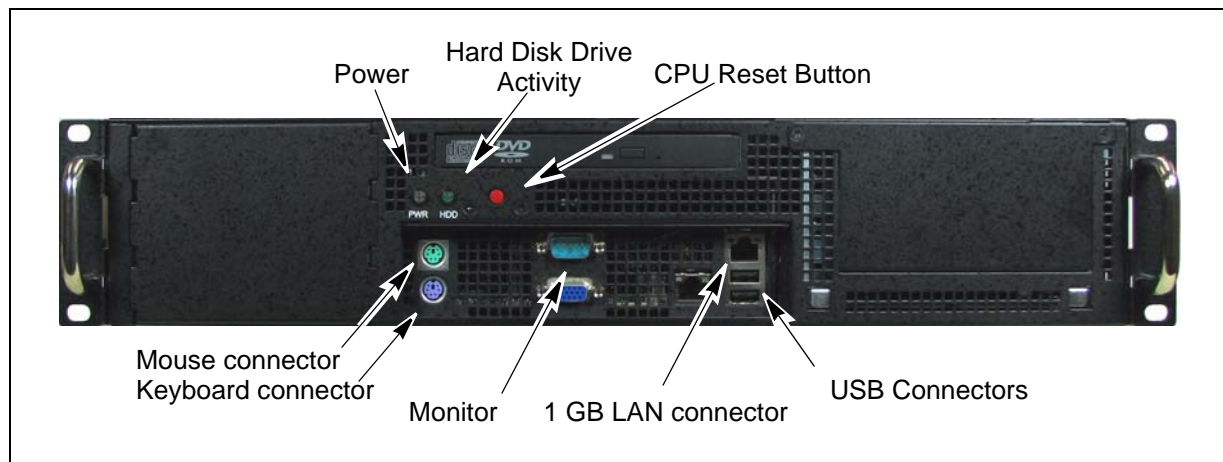
1. Shut down the system. When the system has completely shut down, the fans have stopped, remove the AC power cord from the back of the MAS chassis.

2. Remove the top cover of the 2U MAS. Retaining screws can be found on the top front of the cover and on the side of the chassis.

3. Access the bottom of the cabinet. Remove two power supply bracket screws. The screws are approximately six inches (15.5 cm) from the rear edge of the cabinet and about 5.75 inches (12.25 cm) apart.

4. Carefully cut the cable ties securing the power supply cables to the bottom of the cabinet.

5. Remove the PCI card cage from the chassis.

6. Remove the DVD drive assembly. The cables are long enough to set the DVD drive out of the way. It is necessary to remove the drive to access the power connection to the motherboard.

7. Remove the four screws securing the power supply to the back of the cabinet.

8. Disconnect the power supply cables.

9. Disconnect the power cable from the DVD cable.

10. Remove the power supply from the cabinet. The power supply and AC power cord are no longer needed.

Prepare the Dual Redundant Power Supplies (DRPS) chassis

The 2U chassis brackets must be attached to the DRPS chassis before it is installed.

1. Remove the retaining screw from both power supply units.

2. Use the folding handle to remove both power supply units.

3. Attach the cabinet mounting brackets to the DRPS chassis.

   The left (as viewed from the rear) bracket attached with two of the included flat head screws through counter-sunk holes into threaded holes in the power supply chassis.

   The right bracket uses two screws through holes in the power supply chassis into threaded holes in the bracket, The two power supply units must be out of the chassis to access these holes.

4. Set the DRPS chassis in the MAS cabinet. The four threaded holes, two on each bracket, must align with the holes in the cabinet. Notice the DRPS chassis extends approximately 0.375 inch out of the back edge of the cabinet. Do not install the screws at this time.

5. Plug the power supply cables into the motherboard connectors.

6. Replace the PCI card cage then, replace the DVD drive assembly.

DRPS Chassis Brackets

7. Plug the power supply cables into the hard disk drive(s). Then, plug in the DVD power cable.

8. Use the four screws from the standard power supply the secure the DRPS chassis in the cabinet. Dress the power cables, as much as possible, away from the RAID hard drive cage fan.

9. Some of the unused cables can be placed between the DRPS chassis and the side of the MAS cabinet. The LED attached to one of the DRPS cables is a power supply status indicator. When both power supply units are functioning the indicator is green. When one of the power supply units fails the indicator in red. This can be left inside the cabinet. Optionally, it can be secured with a cable tie such that it is visible through the front panel of the MAS.

10. Bundle the power cables and use new cable ties through the anchor points on the bottom of the cabinet.

CAUTION! **Ensure that all of the power supply cables are routed and secured so that none will rub against any sharp edges. Be sure that none of the cables are trapped or pinched under any of the brackets.**

---

11. Install the four screws to secure the DRPS chassis to the MAS back panel.

12. Replace the MAS cabinet top.

13. Plug both AC power cords into the dual power supply units Then, plug the power cords into a dedicated outlet.

14. Set the switches to the "ON" or "1" position.

15. Press and release the power switch on the rear of the MAS cabinet. Verify that the cabinet and power supply fan are running while the system reboots.

Power Supply Hot Swap

The two power supply units in the DRPS chassis share the MAS power load. In the event that one of the power supply units fail the other power supply unit will supply all of the power. The failing unit can be replaced with the system power on, without interrupting service.

When one of the DRPS units fails an audible alarm is generated and the status indicator led (Refer to Step 9 in the installation procedure) will turn red. The green power indicator next to the power switch on the back of the power supply unit will go dark on the failing unit. Use the following procedure to replace a failing power supply unit.

1. Set the power switch on the malfunctioning power supply unit to off. Unplug the AC power cord from the failed unit.

2. Remove the retaining screw next to the AC power connector.

WARNING! **The power supply unit cover may be as hot as 120° to 140° F (40° ~ 50° C). It may be necessary to wear gloves while replacing the power supply.**

3. Use the handle to pull the power supply out of the chassis.

4. Set the power switch on the replacement power supply to off.

5. Plug the replacement power supply into the chassis and replace the retaining screw.

6. Plug the AC power cord into the replacement power supply unit.

7. Set the replacement power supply switch to on. The power indicator next to the switch will light and the audible alarm will quite.

Micro MAS

This section gives the initial steps to set up Toshiba's entry level Media Application Server (MAS) called MicroMAS. Please read the entire contents of this section before beginning installation.

Introduction

MicroMAS platform includes:

- Motherboard with a 2.93 Ghz Intel® Celeron D processor
- 2 half-length Peripheral Component Interconnect (PCI) slots
- 80GB Serial ATA hard disk drive
- CD-R\RW drive
- 512MB Random Access Memory (RAM)
- 10/100BaseT Ethernet Connection
- PS/2 keyboard
- PS/2 mouse
- Windows XP Professional
- 2 Serial ports
- 2 Universal Serial Bus (USB) 2.0 connectors (front and rear)
- Footstand

System Status LED Indicators

These LEDs display the current status of critical elements and parameters within the unit

LED	Description	No Light	Light
Power	System Power	No Power	Blue Light — System is operational.
HDD	Hard Drive Activity	No Activity	Amber Light — Hard drive is active.

Micro MAS

The Strata MicroMAS is an entry-level server that offers all of the features of the 2U MAS platform but with a much smaller footprint.

The new Strata MicroMAS (shown right) is a very cost-effective Media Application Server that targets the small to medium CIX customers. The MicroMAS uses the same platform as the Strata ACD CT2 and the Stratagy ES8 but with greater processing power to handle the multiple applications of the MAS.

Hardware Specifications

The MicroMAS platform includes the following:

• Intel™ Celeron™ D processor and motherboard using the Intel 950 chipset
• 2 half-length Peripheral Component Interconnect (PCI) slots
• 80GB Serial ATA hard disk drive
• CD-R\RW drive
• 512MB Random Access Memory (RAM)
• 10/100 Base-T Ethernet Connection
• PS/2 keyboard
• PS/2 mouse
• Windows® XP Professional
• 2 Serial ports
• 2 Universal Serial Bus (USB) 2.0 connectors (front and rear)
• Footstand

MicroMAS Installation

Step 1: Before You Start

CAUTION!	**Always handle this system with care. Avoid dropping or jarring the unit by keeping the system in a secure position on a flat surface.**
	Electrostatic discharge can damage or destroy the components in the server. During this entire procedure, use an anti-static wrist strap to discharge any static electricity you may be carrying.

1. Check the packing list on the side of the carton to make sure that you have received all the items.
2. Make sure that you have a Phillips screwdriver.

Step 2. Network Connection

The MicroMAS requires a static IP Address. The MicroMAS and the Strata CIX (xCTU processor card) should be the same network segment.

Since MicroMAS-H has a VoIP connection to the MIPU/LIPU, then the supporting MIPU/LIPU must have an IP address that can be successfully pinged by the MicroMAS.

A MIPU/LIPU card's IP Address must be accessible by all IP devices (IP Telephones (IPT), MicroMAS). If IPT stations are going to be placed on the public internet or Strata Net IP will be run on the public network without a Virtual Private Network (VPN), the MIPU/LIPU should have a public IP address. The MicroMAS and CIX must be physically installed first. Connect up the MicroMAS. Insert the IP circuit cards into the CIX cabinets. Connect the IP cables. When all of the cables are connected proceed to the next step of setup.

Step 3. Verify PC Operation

Notes

- Steps 2~5 are required only if you have purchased a Voice board. They are not required for ACD, etc.

- This step verifies the unit is operational before installing voice boards.

1. Set the Voltage Selector Switch, located on the back panel, to an input power source of either 115VAC default or 220VAC (50-60 Hz), depending upon the available input power.
2. Plug-in the power cable to the rear of the unit and to the UPS.
3. Connect the monitor, keyboard and mouse. See Figure 1 - 11 on Page 17 for the monitor, keyboard and mouse connections on the MicroMAS.
4. Power up the unit. If the Windows® XP logon screen does not display, check the connections.

   At this point the installation is partitioned.

   - If you are installing a MicroMAS-D, that uses Dialogic analog port voice boards for connectivity to the CIX or installing a Fax modem card, proceed to the next step.

   - If you are installing a MicroMAS-H, that uses HMP for IP connectivity to a CIX MIPU/LIPU card, proceed to step 13.

Step 4. Remove Cover

1. Once the unit is operational, shut down Windows, turn the power off and remove the power cable.
2. Remove the two screws from the upper left and right corners of the back of the server. Pull the cover off using the build-in handle.

Step 5. Unpack Voice / Fax-modem Boards

➤ Remove the Dialogic voice (Dialogic part number D4PCIUF/S) and/or MultiTech System Fax-modem (MultiTech part number MT5634ZPX-PCI) board(s) to be installed in this system from the shipping boxes.

Note   MicroMAS only supports half-length PCI boards.

Step 6. Install Voice/Fax Board(s)

The 1U MAS system supports one fax modem board per system for a maximum of 8 fax modem ports.

1. Loosen the riser retaining bar by pulling on the release tab and lifting the Bar to unlock it (shown right).

2. Remove the PCI riser screw, then remove the PCI riser by pulling the riser upwards with the green strap.

3. Insert the edge connector of the first board into the PCI 1 slot (see Figure 1 - 10). Apply pressure only to the top edge of the board, and gently rock the board back and forth to seat the edge connector into the slot.

4. Insert the second board into the PCI 2 slot.

Retaining Bar   Release Tab   Riser   001-MM
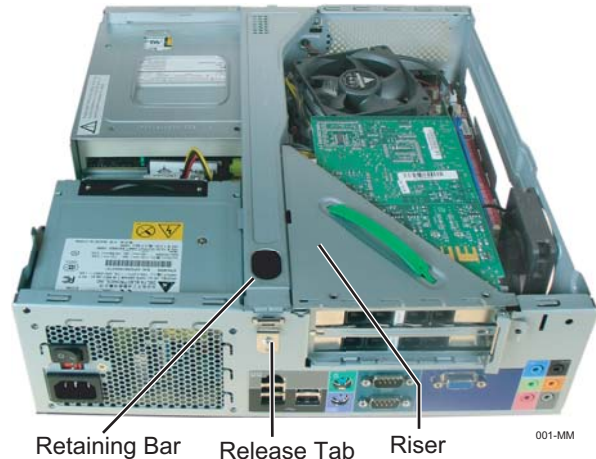
Figure 1 - 9   MicroMAS Internal View 1

Note   A Dialogic Voice board can be installed in the PCI 1 (top) slot with no modification. To install a fax-Modem card into the PCI 1 card slot the green strap must first be removed from the riser. The fax-modem card can be installed in the PCI 2 slot without modification.

PCI Riser

Power Supply

Retaining Bar

PCI 1 Card
PCI 2 Card
CPU Fan

RAM Slot

Chassis Fan

002-MM
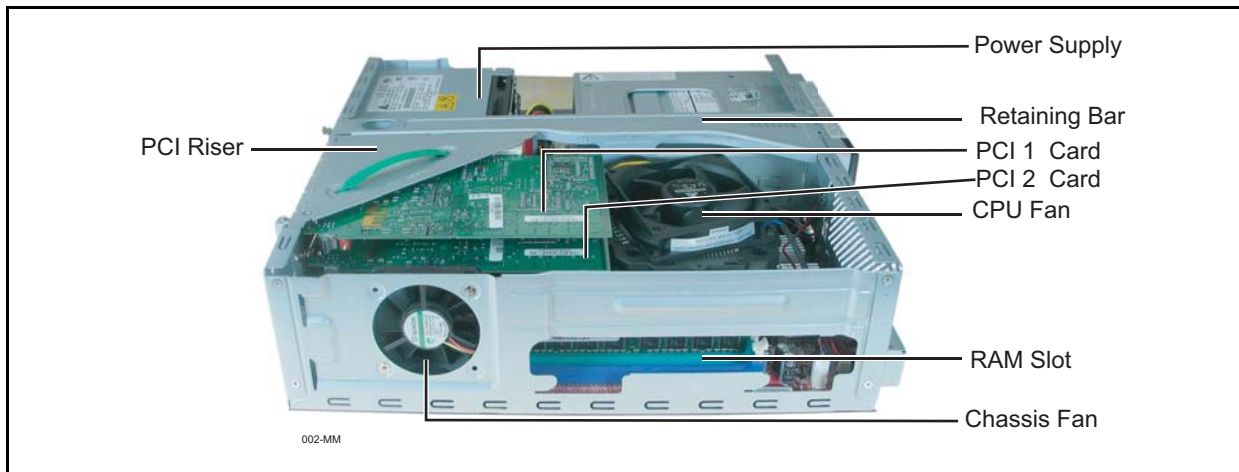
Figure 1 - 10   MicroMAS Internal View 2

Step 7. Reinstall Riser

1. Reinstall the PCI riser in the chassis. Align the PCI slot and press down to secure the PCI riser assembly.

2. Insert the riser retaining bar and press gently to lock into place.

3. Secure the riser to the chassis by screwing in the screw taken out in Step 6.Install Voice/Fax Board(s).

Step 8. Check Hardware Connections

➤ Check to insure that all other boards and cables are properly seated.

Step 9. Complete MicroMAS Hardware Setup

1. Replace the cover and tighten the two thumbscrews.

2. Connect the following items (see for connections):
   • Keyboard
   • Monitor
   • Mouse

The hardware portion of this installation is now complete.

Step 10. (Optional) Install Footstand

➤ Set the unit on the footstand (shown at right).

Front Panel

PCI Card Slots

003-MM

AC Power Cord Connectore

Mic-in (Pink)

Line-out (Green)   Rear Panel

Com 1

USB

Com 2

Main Power Switch

RJ45 LAN Connection

Keyboard

Line-in (Blue)

220V and 110V Switch   Mouse

VGA Connector
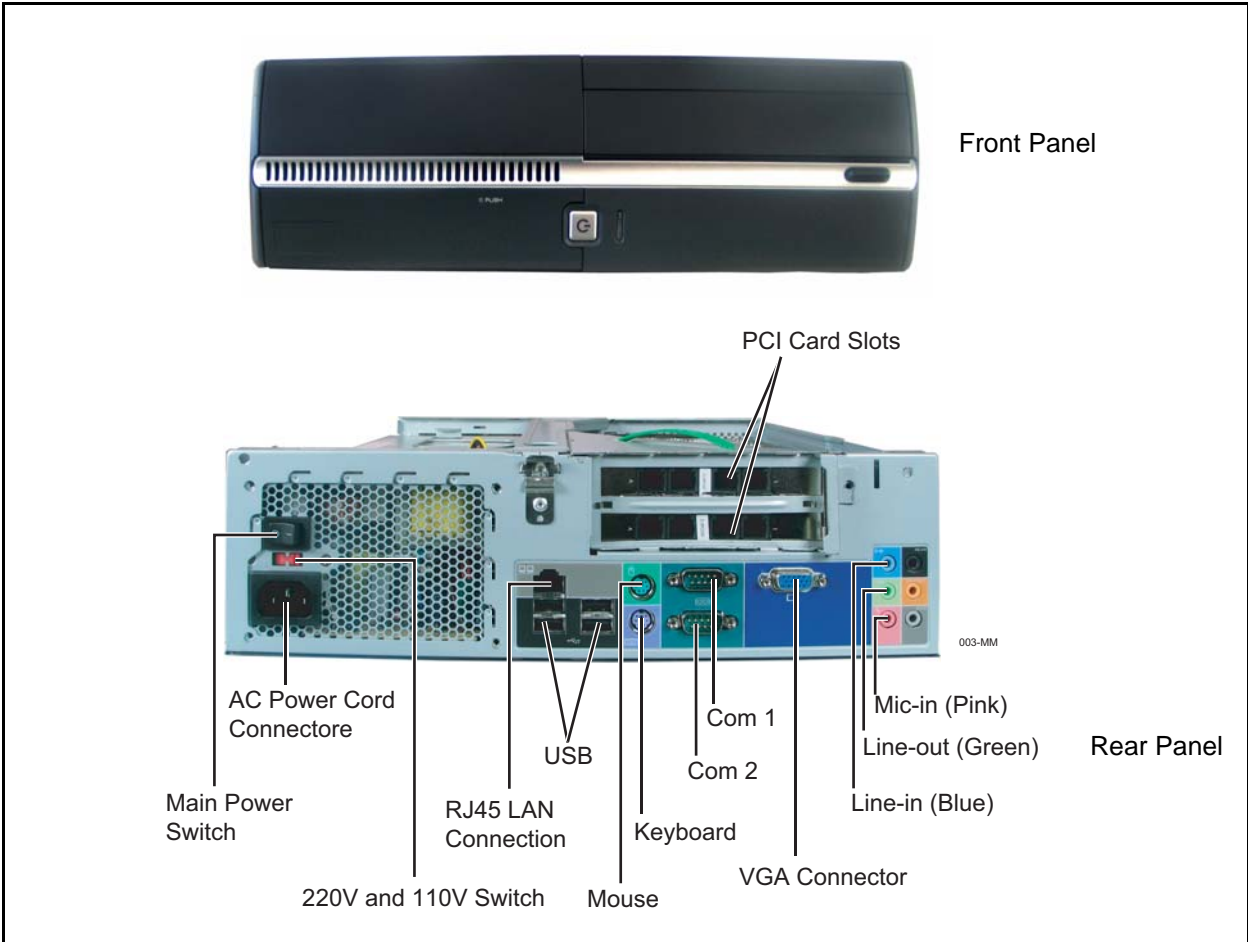
Figure 1 - 11   MicroMAS Front and Back Panels

Step 11. Power Up the PC

1. Plug-in the power cable to the rear of the unit and to the UPS.

2. Power up the unit using the Power Switch on the front control panel. If the Windows XP logon screen does not display, check the connections detailed in Steps 3 and Steps 3.

   If the Windows **Found New Hardware Wizard** starts follow **"Install Fax-modem Board Software - All MAS Systems" on page 1-19** or **"Configure Voice Board Software" on page 1-28** as appropriate. If no PCI cards are installed skip forward to **"Configure Software" on page 1-29**.

Install Fax-modem Board Software - All MAS Systems

When the MAS is powered-up after the installation of a MultiTech modem board the Windows Found New Hardware Wizard should start. Follow this procedure to complete the installation wizard.

1. The first dialog box will ask if it can connect to Windows update to search for software. Select "**No, not at this time**" then, click on **Next**.

2. Insert the MultiTech Driver CD now. **Note:** If the "Auto Run" installation menu appears click "EXIT" to close it.

   In the Found New Hardware Wizard window select **Install from a list or specific location [Advanced]**.

   Click on **Next**.
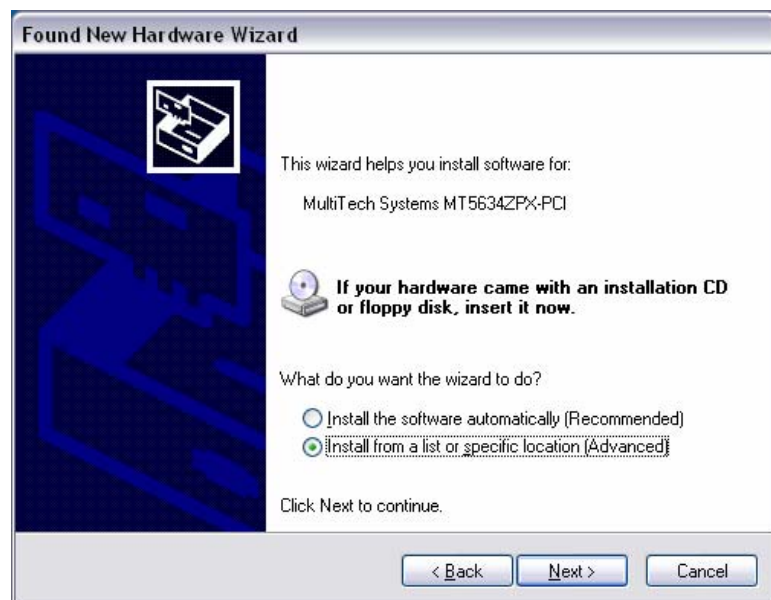
3. Selectt **Search for the best driver in these locations**.

    Uncheck the **Search removable media [floppy, CD-ROM…]** button.

    Check the **Include this location in the search** box. For a one port fax modem board enter **D:**

    For a multi-port fax modem board, use the **Browse** button to select; **D:\Drivers\Win2K-XP-2003**.
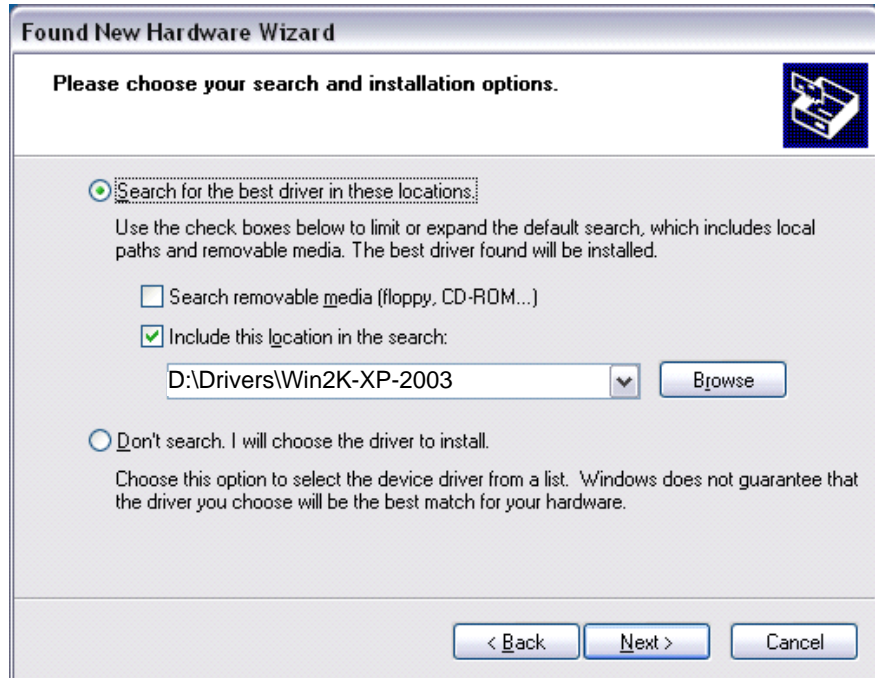
    Ensure that the **Don't search** radio button is not selected. Click on **Next**.
    A dialog box will appear asking you to wait while the installation wizard finds the files.

4. When the Hardware Installation warning appears, click on **Continue Anyway**.

5. Click **Finish** to complete installation of one fax-modem card.

   If another modem is detected a Hardward Installation dialog box will open. Select **Continue Anayway**.

   Each modem port must be installed. The system treats each port as a separate device.

   Repeat the above steps for each modem port.

Installing Fax Modem Boards using the Control Panel

1. Click Start > Control Panel.
2. Click on "Phone and Modem Options" icon (shown below).
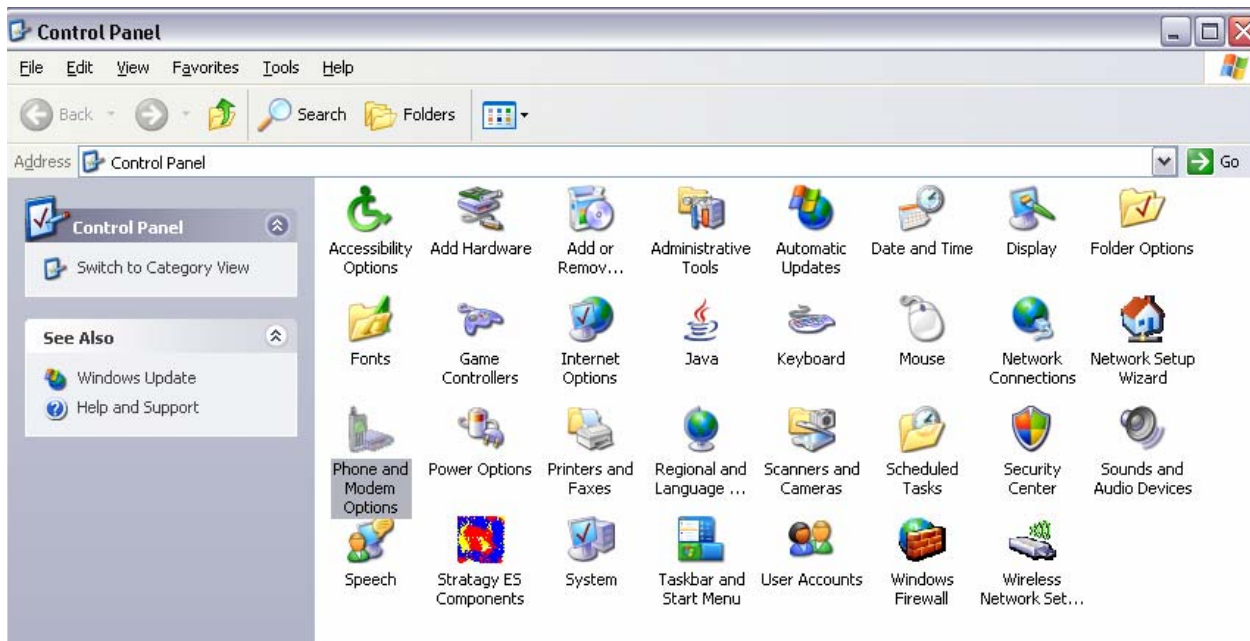
3. Enter the "Area code" for the installation (This is not used by SES. Windows requires this entry).
4. Leave the other fields blank and click "OK".

5. Click on the "Modems" tab.

6. Enter the "Area code" (this is not used by Stratagy but Windows requires this entry).

7. Leave the other fields blank, then click "OK"

8. In the Phone and Modems Options screen, click on the Modems tab. You should see the MultiTech modems installed and assigned to COM 3 and COM 4.
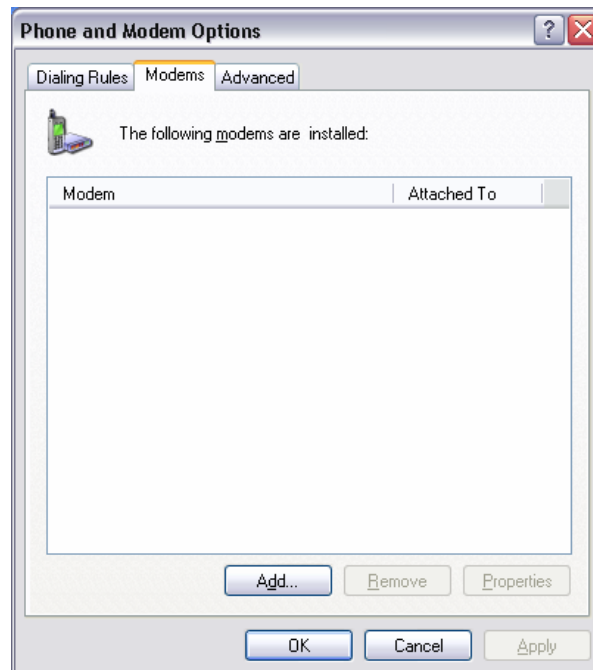
9. Highlight one of the modems and click on "Add"

10. The New "Hardware Wizard appears"

11. Select the check box "Don't detect my modem; I will select it from a list.

12. Select MuliTech Systems
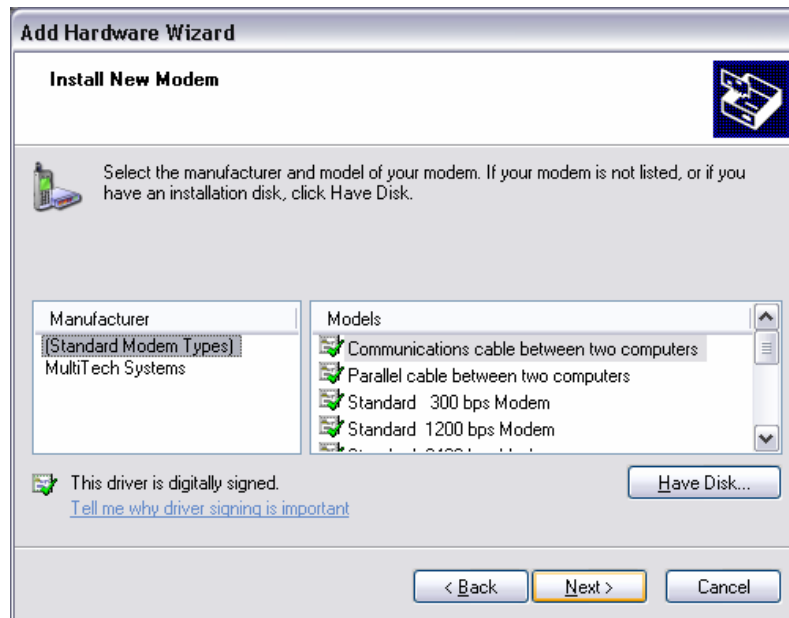
13. Click "Next"

14. Select:
   - For the 4 port fax modem board, select - MT5634SMI-V92
   - For the 8 port fax modem board, select - MT5634SMI-V92
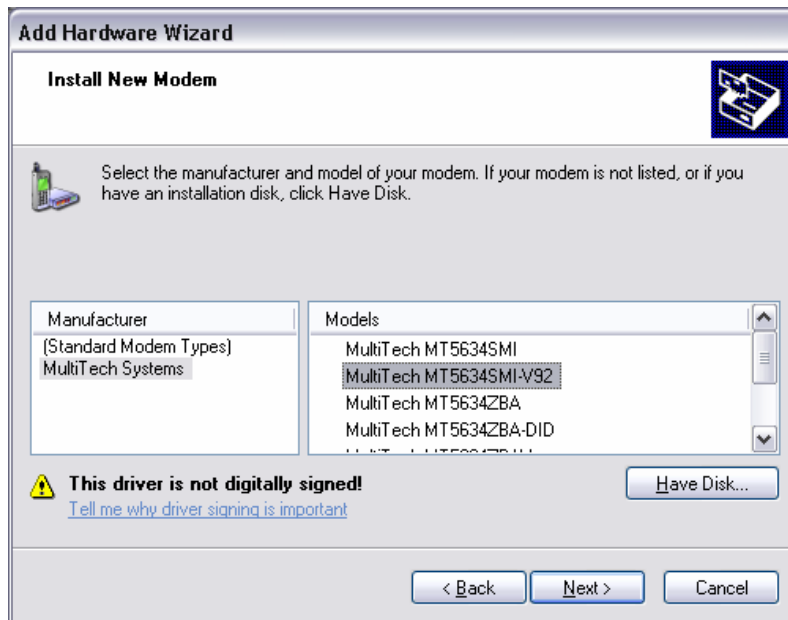
15. Click "Next"

Windows displays a list of available COM ports.

The MultiTech board (s) start at COM3

Note   System software will always interpret the existing COM ports on the MAS motherboard as COM1 and COM2. Therefore, the addition of the fax modem boards begin at COM3.

16. Click on COM3 continuing to the highest port number. For example 8 Modem ports will display as COM3 ~ COM10.

17. Click until all the MultiTech COM ports are highlighted.
18. Click "Next".

The Windows "compatibility" dialog warning appears.

Hardware Installation

⚠ The software you are installing for this hardware:

MultiTech MT5634SMI-V92

has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)

Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.

[Continue Anyway] [STOP Installation]

19. Click "Continue Anyway"

Repeat for each MultiTech COM port when prompted.

When completed the following dialog box appears:

Add Hardware Wizard

Install New Modem
Modem installation is finished!

Your modem has been set up successfully.

If you want to change these settings, double-click the Phone and Modem Options icon in Control Panel, click the Modems tab, select this modem, and then click Properties.

[< Back] [Finish] [Cancel]
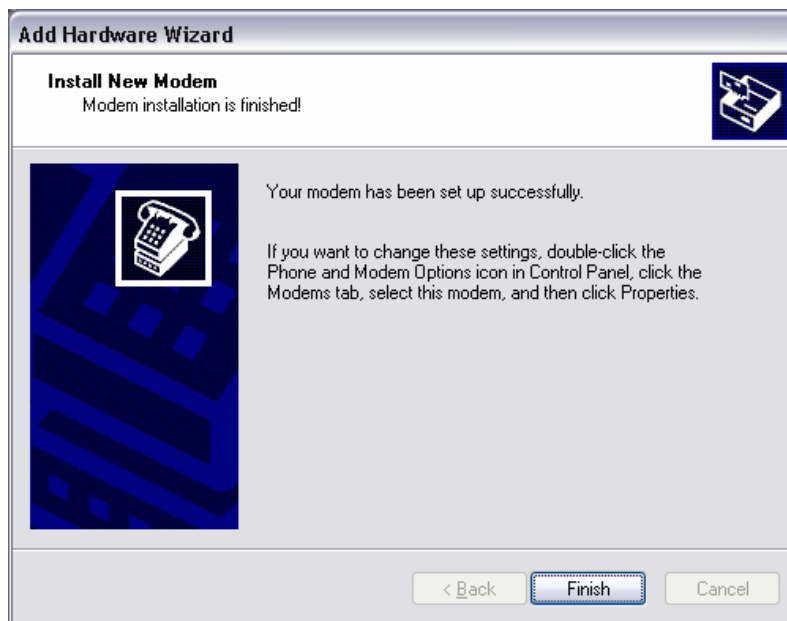
20. 39. Click "Finish" to close the "Add Hardware Wizard"

The installed COM port / MultTech Modems appear in the list.

21. 40. Click "OK" to close the "Phone and Modem Options"

When all of the modems have been installed the Found New Hardware box will display briefly in the lower right corner of the task bar.

22. When properly installed, the modems will appear in the system Device Manager. To view the Device Manager right click on the **My Computer** icon, then click on Manage. Click on **Device Manager** then expand the **Modems** tab.The MultiTech single port Modems will appear in the list as shown below.
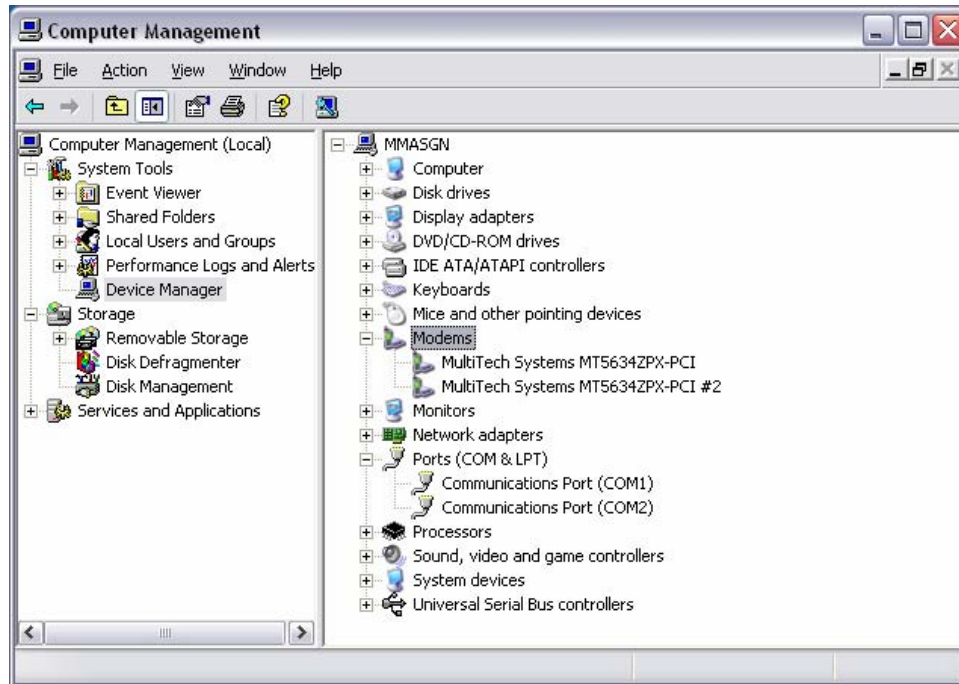
Step 12. Configure Stratagy using Network eManager

When the fax-modem card has been installed, the Stratagy software must be configured for the modem to function.

1. Login to eManager, connect to the system.

2. Select **Stratagy ES**> **VM System** > **VM Serial ports**.

3. For the COM port(s) the modem card(s) occupy, click on the drop arrow in the Assign As column and select **FAX**. The example below shows a system with two modems.

4. Enter the PDN of the single line port in the **Telephone System or Resource Name**: field for each modem installed. The modem and the PDN must match this entry.

5. You must restart the Stratagy VM system for the changes to take effect.

6. Assign the Voice Mail to a COS that has **DND** enabled.

Note   Changes will not take effect until after the SES service has been restarted. This can be accomplished by selecting Utilities > Operations > SES Restart menu option, or by

accessing the MAS system's desktop using Remote Desktop and using the StartStratagy control service utility.

Step 13. Configure Voice Board Software

Depending on the Stratagy ES's hardware configuration, you may need one or all of the following procedures to fully configure all of the voice boards that you have installed. To set up and configure the software for the voice boards, you must run the Dialogic Configuration Manager (DCM).

Procedures for the following voice boards are available in this section:

• D/4PCIUF (Fax), D/41PCIUS (Automatic Speech Recognition)

Configure Voice Boards

Windows XP and the Dialogic Software automatically detect Dialogic's PCI boards.

1. From Windows, click Start > Programs > Dialogic System Software > Dialogic Configuration Manager - DCM. The DCM Main screen displays (sample shown right). Click Connect.

2. Right-click on the installed board and select Configure Device. The Configure Device screen for the board displays.
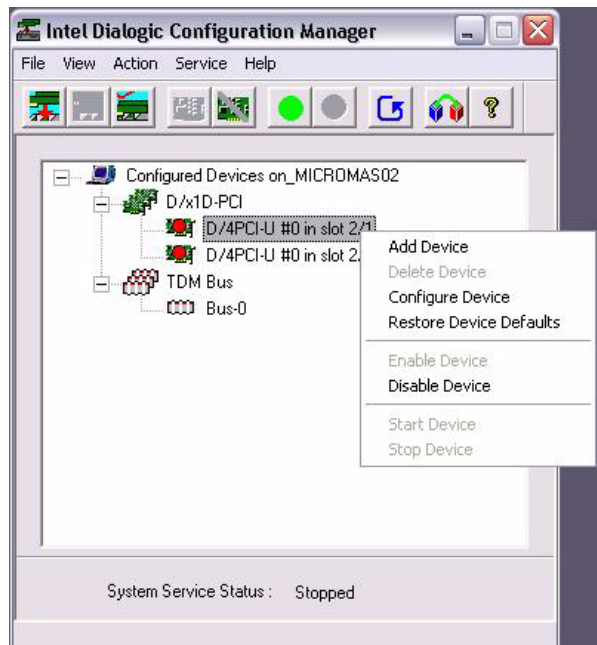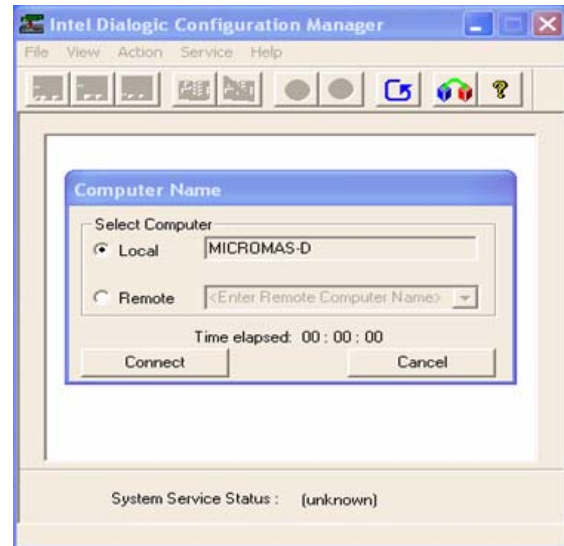
3. To change the firmware setting, select the Misc Tab and highlight FirmwareFile.

4. From the drop-down menu in the *Value* field, select d4u.fwl for the D/4PCIUF board or d4ucsp.fwl for the D/4PCIUS board (shown right).
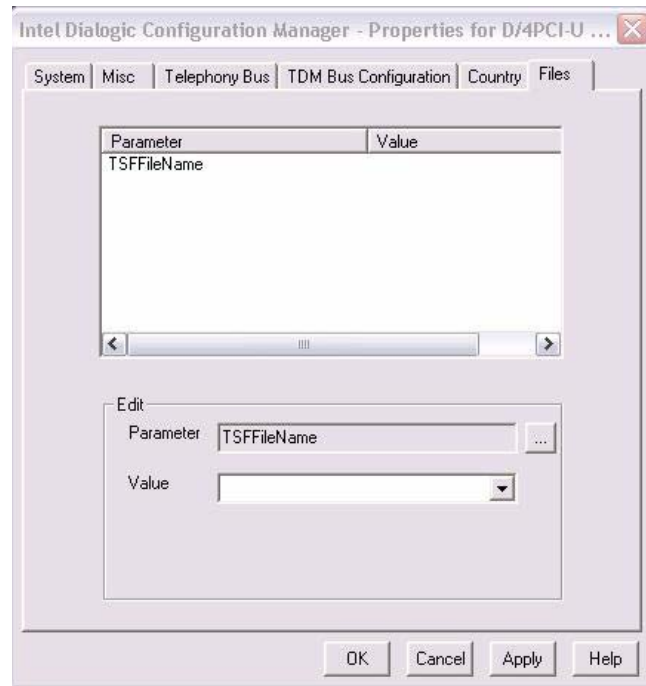
5. To set the Tone Set File, highlight TSFFileSupport and from the *Value* field, select Yes.

6. Select the Files tab, highlight TSFFileName and in the *Values* field type or browse to C:\StratagyES\Bin\DK.tsf.

7. Click Apply.

8. Click OK. The DCM screen displays.

9. Repeat steps 2~4 for the second board if applicable.

10. Exit out of the DCM and reboot the system.

Step 14. Configure Software

The MicroMAS is shipped with the application software loaded. Product and service licenses are downloaded from FYI. Refer to the Toshiba *Strata CIX Programming Manual (Vol. 2).*

The pre-loaded software should never need to be loaded. In the event this becomes necessary the MicroMAS recovery CD-ROM set, included with the server should be used.

Installation of any software not approved by Toshiba voids the warranty. Refer to "Approved Third Party Application Software" on page 1-31.

Windows XP Firewall Settings

The MicroMAS runs on the Windows XP Professional operating system. Windows XP includes an Internet Connection Firewall (ICF). When installing the MicroMAS, consider the configuration of the network and how the MicroMAS will be accessed. Changes to the ICF may be required. Considerations include:

• Will the MicroMAS be accessed using remote desktop or will a keyboard, monitor and mouse connected to the MicroMAS be the only direct access?

• Will the MicroMAS be addressable via the internet?

Network Connection - All MAS Systems

The MAS requires a static IP Address. The MAS and the CIX processor card (xCTU) should be in the same network segment. The MIPU/LIPU address must be assigned so that it can be pinged by the MAS.

The MIPU/LIPU card IP Address must be accessible by all IP devices (IPT, MAS). If IPT stations are going to be placed on the public internet, or Strata Net IP will be run on the public network without a VPN the MIPU/LIPU should have a public IP address.

The MAS and CIX must be physically installed first. Mount the MAS in the rack. Insert the circuit cards into the CIX cabinets. Connect the IP cables. When all of the cables are connected power up the system and proceed to the MAS Software Setup.

Software

The MAS is shipped with the application software loaded. Product and service licenses will be downloaded from FYI.

Refer to the Toshiba CIX Programming Manual Vol. 1.

The pre-loaded software should never need to be loaded. In the event this becomes necessary the MAS recovery CD-ROM set, included with the server will be used.

Important!   Installation of any software not approved by Toshiba will void the warranty. Refer to "Approved Third Party Application Software" on page 1-31.

Windows XP Firewall Settings

The MAS runs on the Windows XP Professional operating system. Windows XP includes an Internet Connection Firewall (ICF). When installing the MAS consider the configuration of the network and how the MAS will be accessed. Changes to the ICF may be required. Considerations include:

- Will the MAS be accessed using remote desktop or will and keyboard, monitor and mouse connected to the MAS be the only direct access?
- Will the MAS be addressable via the internet?

Media Application Server Configuration Requirements

The MAS is a platform for running real-time IP based multimedia applications. It must process each IP packet of a multimedia stream, each voice packet, within a fixed amount of time, generally 20 ms. It is imperative that the amount of processing required of the MAS in the worst case not exceed its capacity in terms of processor speed, cache size, or memory size.

To ensure that the capacity of the MAS is not exceeded, two steps must be taken.

- The number of real-time voice channels processed on the MAS must be limited. When licenses are generated FYI will check what is currently licensed on the MAS, what is being added, and check to see that the maximum is not being exceeded. This information is also programmed into CIX Quote.
- No other applications or windows components should be loaded onto the MAS. Many applications can, all by themselves, exceed the ability of the MAS to meet its 20 ms response time requirement, other applications working together can also exceed it.

This document contains information about specific applications and configurations. As the product and market evolve, we will update this document. Please check back on FYI occasionally for the latest version of this bulletin.

Approved Third Party Application Software

The Toshiba MAS is a purpose built system. Do not install any software not authorized by Toshiba. The table below shows the only third party application software that should be installed on the MAS.

Important! Installing any other applications will void the warranty, and tech support will not provide any support until the MAS has been brought back to a reliable configuration.

Table 1 - 1 Third Party Application Software

Application	Configuration Notes
PC-cillin™ Internal Security 2005	Should not be run in batch mode when running any other applications.
Symantec's Norton Anti-Virus™ 2005	Script blocking option must be un-checked.
McAfee® Virusscan® 2005 Ver. 9.0	Script blocking option must be un-checked.
Zoom Modem Driver	Zoom™/Modem V.92 USB Mini refer to "MAS Modem Installation (Optional)" on page 1-44.
Trend Micro and PC-cillin are registered trademarks of Trend Micro Inc. Norton Anti-Virus is a registered trademark of Symantec Corp. McAfee and Virusscan are registered trademarks of McAfee, Inc.	

Maximum MAS Configurations

The tables below show the available part numbers for the features that can be licensed to run on the MAS, and the maximum number of each that can be supported. However, we recommend checking all configurations through CIX Quote.

The tables below have three columns showing maximum configurations, the first shows the constraints on a MAS configured with both SES and ACD. The second column shows the constraints on a system that is configured with only VoiceMail. The third column shows the constraints of a system that is only configured with ACD.

Table 1 - 2 Toshiba SES and Feature Flex - Maximum Number of Licenses Shown

Feature	License	SES and ACD	Voice Mail Only	ACD Only
Alarm Clock Enable	LICMAS-FF-ACLK	1	1	0
Auto Speech Recognition Auto Attendant.	LICMASFGASRAA, LICMASUPASRAA-2	8	8	0
Call Monitor Enable	LICMAS-FF-CMON	1	1	0
Call Return Enable	LICMAS-FF-CRET	1	1	0
Call Screen Enable	LICMAS-FF-CSCR	1	1	0
Hot Desk	LICMAS-FF-HDSK	1	1	0
Four Port Upgrade for Stratagy ES on MAS **Note:** Four ports per license.	LICMAS4PORTUPG	4	5	0
One Seat Unified Messaging Upgrade.	LICMAS-FG-UM, LICMASUM10SEATS, LICMASUM25SEATS, LICMASUM50SEATS, LICMASUMUNLIMT	Unlimited	Unlimited	0
One Number Access Enable	LICMAS-FF-ONUM	1	1	0
Text-To-Speech Feature Group.	LICMASFGTTSETI	4	8	0

Table 1 - 3 ACD - Maximum Number of Licenses Shown

Feature	License	SES and ACD	Voice Mail Only	ACD Only
ACD Application License	LICMAS-APPLSW	1	0	1
Single Basic Agent License	LICMAS-BAADDL1	350	350	350
Single Agent Upgrade License	LICMAS-UPGREN1	360	360	360
Single Wnhanced Agent License	LICMAS-ENADDL1	350	350	350
Advanced Partner Program ACD Demo SW - B	LICMAS-ACDBR	1	0	0
Advanced Partner Program ACD Demo SW - H	LICMAS-ACDHQ	1	0	0
OAISYS Call Router License for Strata ACD	LICMAS-CALLRUTR	1	0	1

Table 1 - 3 ACD - Maximum Number of Licenses Shown   *(continued)*

OAISYS Chat Text Messaging License	LICMAS-CHATSEAT	360	0	360
OAISYS Diamond out-of-plan upgrade for MAS	LICMAS-SUP-OUT	999	0	999
OAISYS Diamond support for MAS	LICMAS-SUP-OAI	999	0	999
OAISYS IVR Option with Database Assistan	LICMAS-ACDIVR	1	0	1
OAISYS NetPhone and chat license for MAS	LICMAS-NETSEAT	360	0	360
OAISYS NetPhone server and client	LICMAS-NETPH	1	0	1
Strata ACD Basic ACD 20 agent add-on	LICMAS-BASADD20	17	0	17
Strata ACD Enhanced ACD 20 agent add-on	LICMAS-ENADD20	17	0	17
Strata ACD MAS license (10 basic agent)	LICMAS-ACDBA10	2	0	2
Strata ACD MAS license (20 basic agent)	LICMAS-ACDBA20	1	0	1
Strata ACD MAS license (20 enhanced agent)	LICMAS-ACDEN20	1	0	1
Strata ACD upgrade to enhanced for MAS	LICMAS-UPGENHD	1	0	1
Strata ACD upgrade to enhanced for MAS	LICMAS-UPGADD20	17	0	17
VA port license with HMP license	LICMAS-ACDVA	15	0	31

Table 1 - 4 Insight - Maximum Number of Licenses Shown

Feature	License	SES and ACD	Voice Mail Only	ACD Only
Insight Plus Agent	LICMAS-INSPAG1	360	0	360
Insight App Pack	LICMAS-INSPA10	1	0	1
Insight Basic Agent	LICMAS-INSBAG1	350	0	350
Insight Agent Upgrade	LICMAS-INSPUP1	350	0	350
Additional Supervisor license for Insight	LICMAS-INSITSUB	99	0	99
Insight upgrade to Plus for Strata ACD	LICMAS-INSITUPG	1	0	1
Insight license for MAS	LICMAS-INSIGHT	1	0	1
inView client license for fifty users	LICMAS-INVIEW50	8	0	8
inView client license for five users	LICMAS-INVIEW5	72	0	72
inView client license for forty users	LICMAS-INVIEW40	9	0	9
inView client license for one user	LICMAS-INVIEW1	360	0	360
inView client license for ten users	LICMAS-INVIEW10	36	0	36
inView client license for thirty users	LICMAS-INVIEW30	12	0	12
inView client license for twenty users	LICMAS-INVIEW20	18	0	18

Table 1 - 5 Taske - Maximum Number of Licenses Shown

Feature	License	SES and ACD	Voice Mail Only	ACD Only
Contact - Base Renewal for MAS	LICMAS-TASCONB	999	0	999
Contact - Per Agent for MS	LICMAS-TASCONA	999	0	999
Contact - Per Month for MAS	LICMAS-TASCONM	999	0	999
Contact - Per Site for MAS	LICMAS-TASCONS	999	0	999
Contact - Re-enlist Site for MAS	LICMAS-TASCONR	999	0	999
TASKE Blue Pumpkin Integration for MAS	LICMAS-TASBPINT	1	0	1
TASKE COREMEDIA INTEG	LICMAS-TASCOREM	1	0	1
TASKE Contact Agent for MAS	LICMAS-TASAGENT	360	0	360
TASKE Contact Base System for MAS	LICMAS-TASBASE	1	0	1
TASKE Contact Blue Pumpkin Director	LICMAS-TASBPWF	1	0	1
TASKE Contact Conversion (Change PBX) for MAS	LICMAS-TASCONV	1	0	1
TASKE Contact Desktop Sign for MAS	LICMAS-TASSIGN	360	0	360
TASKE Conversion w/o Historical Data	LICMAS-TASTRAN	1	0	1
TASKE Demo System (10 agents, 1 supervisor)	LICMAS-TASKE-DEMO	1	0	1
TASKE Enterprise Client Software for MAS	LICMAS-TASENTER	1	0	1
TASKE IEX Integration	LICMAS-TASIEXWF	1	0	1
TASKE Left Bank WFM Integration	LICMAS-TASLBWF	1	0	1
TASKE Supervisor Client, 1 license for MAS	LICMAS-TASSUP1	99	0	99
TASKE Supervisor Client, 3 licenses for MAS	LICMAS-TASAUP3	33	0	33
TASKE Supervisor Client, 5 licenses for MAS	LICMAS-TASSUP5	20	0	20
TASKE Supervisor Client, 10 licenses for MAS	LICMAS-TASSUP10	10	0	10
myTaskeReporter Supervisor	LICMAS-TASMTSUP	100	0	100
myTaskeReporter Maintenance	LICMAS-TASSUPMT	999	0	999

Table 1 - 6 Toshiba VCS - Maximum Number of Licenses Shown

Feature	License	Max. Quanity	Max. Server	Max. User
VCS 90 Day Trial License	LIC-VCSTRIAL	1	1	512
VCS Starter	LIC-VCSBASIC5	1	1	5
VCS User License	LIC-VCSUSER1, LIC-VCSUSER10, LIC-VCSUSER20	Mix and Match	0	507

Maximum MAS Ports

One MAS can support up to 32 voice channels. One MAS can support up to 32 channels of Voice Mail OR up to 32 channels of ACD Voice Announcements.

When voice mail and voice announce are both on one MAS it can support up to 16 channels of Voice Mail, AND up to 16 Voice Announce ports.

If you want more than 16 ports of voice mail AND some ACD ports (or more than 16 voice announce AND some voice mail ports), you will then use one MAS for the voice mail ports and another for the voice announce ports. For example; 20 voice mail ports and 10 ACD ports will require two MASs.

MAS Licensing

For information about CIX Licensing see Chapter 10 in the Strata CIX Programming Manual Volume 1 for Licensing.

This option enables you to manage, issue and activate MAS licenses in the eManager™ server host. It is required that administrators should be able to manage licenses for all applications in the MAS.

Access Main MAS Licensing Screen

➤ Before connecting to the system login using the keyboard connected to the MAS. In the Manager Menu, click MAS Licensing. The screen below displays.

The upper part of the screen is a list of MAS License Container files stored in the eManager server in the <eManager>\Licenses folder. The example above shows a system with licensing already activated. The first time the license container directory is viewed it will be empty. The following columns are shown:

• Generation Time – date and time assigned by the FYI application when it creates the container file.

• File Name – specified by the administrator when the container file was created in eManager using the Upload button.

• MAS Serial Number – defined in the header of the container file.

• Local Status

  • Local MAS – The MAC address in this container file is the same as the local MAS host MAC address (where the eManager server is running).

  • Issued in Local MAS – Same as "Local MAS" but the licenses in this container have been issued already. eManager stores a log of the issued container files.

  • Remote MAS – The MAC address in this container file is different than the local MAS host MAC address (where the eManager server is running). This file could be viewed, uploaded to other MAS, but it cannot be issued in the local MAS host.

Upload Licenses

Note The Upload button is enabled if no file is selected, otherwise disabled.

The MAS License Container File is an XML file generated by the FYI application. The file can be downloaded from FYI or the file can be e-mailed from FYI.

1. From the MAS Licensing screen, click Upload. The Upload MAS License Container File screen displays (shown right).

2. If the file is stored in the local client PC, click Browse. Select the Container file. The file's contents and file name are copied into the fields of the Upload screen

   ...or go to FYI and open the MAS License Container File in a text file such as Notepad. Copy and paste the displayed file in the Content portion of the Upload MAS license screen shown here. The *File Name* field is blank.

Note If you chose to fill in the File Name before you copied/pasted the file, the file name remains in the field after pasting the file.

3. If the file name was filled in automatically, change the file name so that it is unique to the file. If you copy/pasted the file into this screen, you need to enter a unique file name.

Note File names must conform with the Windows filenames and conventions. If the file you uploaded does not have an .xml extension, you must add it before saving the file.

4. Click Save.

Issue Licenses

Note The file you selected must be "Local" to use this feature. Any file with a status of Remote MAS must be issued from the controlling server.

➤ From the MAS Licensing screen, select a file and click Issue Licenses. eManager separates the selected container file, extracts each license for the different applications and services and delivers the licenses. This process can take several minutes depending upon the number of applications installed.

A pop-up dialog box will show the status of the issue command as successful or failed.

Activate Licenses

➤ To activate the licenses, be sure the license file is not highlighted, click Activate Licenses. A warning box displays telling you that the MAS operating system will be shut down and rebooted. The MAS attempts to shut down and reboot immediately.

Important! During the activation process, the MAS cannot be processing calls. Any current connection being processed by the MAS is disconnected. In order not to disrupt daily activity in your customer's business, you can choose to do the activation process unattended during the evening/early morning hours by scheduling the procedure using the Windows scheduling process.

Delete Licenses

Note You can delete more than one file at a time by highlighting the files.

1. From the MAS Licensing screen, highlight a Container file(s).
2. Click Delete. A pop-up box displays and you are asked to confirm your deletion.
3. Click OK.

View Licenses

Note The View button is enabled when one file is highlighted, disabled when none or more than one is highlighted.

1. From the MAS Licensing screen, highlight a Container file.
2. Click View. The MAS Licensing Container File displays (sample shown below).

View Current Licenses

1. From the MAS Licensing screen, make sure that none of the listings in the License Container Directory is highlighted.

Note To remove a highlight, press **Ctrl** and click the highlighted item.

2. Click View Current Licenses. eManager checks the status of the license activation through each application's licensing interface and displays the results (sample shown right).

3. When finished, click OK.

Status Values Shown on Screen

• 0 – New license was issued, but not activated yet.

• 1 – The license activation during the startup procedure was successful.

• 2 – The license activation during the startup procedure failed.

Logout of eManager

➤ From the eManager Menu, click Logout to exit eManager.

Change MAS Static IP Address (Optional)

This procedure is used to change the MAS static IP Address from the default setting. The MAS must be mounted in the rack, the power cord plugged in and the IP cable installed between the MAS and the IP switch (LAN).

Note   This procedure requires a monitor, keyboard and mouse connected directly to the MAS. Refer to "MAS Rear Panel" on page 1-3.

1. At the MAS desktop select Start > Control Panel > Network and Internet connection. Click on Network Connection.

2. Right Click on Local Area Connection for Intel® PRO/1000 CT Network. Then select Properties.

3. Highlight Internet Protocol (TCP/IP) then click on the Properties button.

4. Select; Use the following IP address then enter the following:

    • IP Address: (default = 192.168.254.252)

    • Subnet Mask: (default = 192.255.255.0)

    • Default Gateway: <default is blank>

5. Click on the OK button.

SES Voice Mail and ACD Setup

When the MAS reboots login to eManager. Refer to the CIX Programming Manual Volume One for setting up user accounts. Then refer to the SES and ACD manuals to program the applications as appropriate.

MAS Recovery

In the event that MAS suffers a catastrophic failure the following procedures will restore the MAS to the configuration it was in when shipped. If possible backup the data, configuration and license files before starting. At the conclusion of these steps return to the MAS Software Setup section of this chapter.

Important!   The MAS Recovery procedure MUST be followed completely. Do not stop until the procedure is complete.

Step 1: Restore Using the Recovery CD Set

1. Ensure that the LAN cable from the 1Gbps connector on the MAS is NOT connected. Refer to "MAS Rear Panel" on page 1-3.

Important!   Ensure that the MAS does NOT have internet access at this time.

2. Connect power cable to your MAS server and power up the server.

3. Power up the MAS by depressing the power switch on the rear panel switch. Refer to "MAS Rear Panel" on page 1-3.

4. Insert the Recovery CD number one into the CD-ROM Drive.
    (Note: DO NOT remove this CD until instructed to insert another CD-ROM.)

5. Restart the MAS by pressing the Reset Button the rear panel. Refer to "MAS Rear Panel" on page 1-3. The computer will boot from the CD into the recovery environment.

Note   Until the recovery is complete the mouse will not function.

6. A dialog box will appear asking: Do you want to recover? Press the **Y** key on the keyboard to answer yes. A Caution dialog box stating that All data on the hard drive will be lost. Press the **Y** key on the keyboard.
    The Clearing Hard Disk Drive box will appear. Then the Toshiba - Symantec status screen will appear.

7. The screen prompt: Please insert the CD in order to continue the process. Remove CD one, insert CD two then press ENTER.

8. When the screen prompts: Please insert the CD in order to continue the process. Remove CD two, insert CD three then press ENTER.

9. At the end of the process the following will display. Recovery of Pre-installed Software is completed. Please remove the CD-ROM or floppy disk. Press any key and restart the system.

10. Remove the CD-ROM from the drive then, press any key on the keyboard. The MAS will restart.

Step 2.   Setup for Windows Mini-Setup Wizards

1. In the Welcome to the Windows XP Setup screen, click on Next**.**

2. In License Agreement screen, check the I accept the agreement box then click Next

3. In Regional and Language option, leave everything default, then click Next.

4. In the Personalize Your Software screen enter admin as the name and your company name then click Next

5. Enter the 25 characters Product Key which can be found on the label on the top cover of the MAS chassis.

6. For computer name enter: STRATAMAS01
   For password enter password
   (Note that the name and password are case-sensitive.)
   then click Next.

7. Adjust appropriate date, time and time zone, then click Next. Set Auto adjust for Daylight Savings Time if appropriate for this area.

8. Click Typical settings, then click Next.

9. Select No and enter WORKGROUP if the MAS is not in any specific domain.

   Note   Note contact your network administrator for more information.

10. Click on Finish when done.

The MAS will restart as soon as the Windows Mini-setup is finished.

Step 3.   Activate Microsoft Windows license

1. Plug the LAN cable into the MAS 1 Gbit connector, refer to Figure 1 - 3 on Page 1-3. At this time internet access is required, or you may choose to license the MAS via a telephone conversation.

2. On the Windows Taskbar, double click on the Activation Key appearing in the System Tray window.

3. Select Yes activate over the internet now or Yes I want to telephone a Customer Service Representative.

4. Follow the prompts or instructions to activate the license.

5. When the registration completed, proceed to the next section.

   Note   At this point the MAS is in the "as shipped" condition. Data file, configuration files and license files must be restored.

Step 4.   Setup Network Connections

1. Log on to the MAS; click on Valued Customer and enter password as the password.

2. From the main menu select Start > Control Panel > Network and Internet Connection then click on Network Connection.

3. Right click on the Local Area Connection for the Intel® PRO/1000 CT Network, and select Properties**.**

4. Highlight Internet Protocol (TCP/IP) and click the Properties button.

5. Select Use the following IP address and enter the following:

   a. IP Address: 192.168.254.252 (static address)

   b. Subnet Mask: 255.255.255.0

   c. Default Gateway: Blank

6. Click on OK.

Step 5.   Set Up Firewall

7. Click the Advance tab at the top of the window, check mark; Protect my computer and network by limiting or …from the internet.

8. Click on the Settings… button.

9. Select following protocols:

   a. CIX SMDI. Click Edit to enter STRATAMAS01 in the Name or IP address field. Click on OK.

   b. CTX SMDI. Click Edit to enter STRATAMAS01 in the Name or IP address field. Click on OK.

   c. Ensure that ALL of the protocols in the list are set to STRATAMAS01.

10. Click on OK.

11. Click on Close to finish.

12. Close the control panel window.

Step 6.   Set Up Valued Customer Auto-Login

13. From the main Menu select Start > Run …> enter: control userpasswords2 and then press Enter.

14. In the Users for this computer list, scroll down to select Valued Customer.

15. Uncheck the Users must enter a user name and password to use this computer box.

16. Click Apply.

17. In the Automatically Log On window, type password as the Password and Confirmed Password text boxes, and then click the OK button.

18. Click OK to finish the user accounts settings.

Note   Note that when restarting the MAS again, the system will not prompt the user to logon the local machine any more.

Step 7.   Enabling Remote Desktop in Windows XP Professional

1. Click **Start**, right-click **My Computer**, and then click **Properties.**

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2. In the **System Properties** sheet, click the **Remote** tab.

3. Select the **Allow users to connect remotely to this computer** check box.

4. Select the **Select Remote Users…** check box.

5. Click **Add** button.

6. Click **Advanced** button.

7. Click **Find Now** button.

8. Highlight **Valued Customer** name, then click **OK**.

9. Click **OK** *three times* to save all the settings.

END OF RECOVERY PROCEDURE

Post Recovery Procedure

The MAS is now in its as shipped condition. Go to "MAS Licensing" on page 1-36.

To setup the SES and ACD refer to their manuals.

MAS Software Backup

The files shown in the following lists should be backed up on a regular basis. The backup files can be stored on a network disk drive or another network device.

Stratagy ES (Voice Mail Backup)

Refer to the Stratagy ES Installation and Maintenance manual for backup instructions.

ACD

The files listed in Table 1 - 7 should be backed-up. Refer to the ACD documentation for detailed information.

Table 1 - 7 ACD INI and Report Data

INI FILES	
NAME	**USE**
MISGEN.INI	configurator
MISREPTR.INI	report template
MISW.INI	real time display
REPORT DATA	
FILE NAME	
MASTER.PDB	
ELOGx \ ELOGyyyy.PDB	
MEMOx \ MEMOyyyy	

Files that get saved when doing an upgrade/maintenance

Here is the list and location of the files that should backed up when doing an upgrade.

In the CTS folder there will be a folder for each of the software pieces you have installed, (i.e. Net Server, V_Assist32, Call Router, etc.)

Search each of the folders and copy the following file extensions to the respective folders on the backup drive via the network:

- **.mdb**, **.aci, .dat** and **.acs** (example: netserver.mdb) (not every folder will have every one of these file extensions in it)

- If using Park n Page, backup the directory that has all the .txt files used to call users of the locate me application. cts\v_assist32

- The entire **prompts & scripts folders**

- The Voice Assistant port information and Database Assistant information is stored in the registry. Export the Computer Telephony Solutions registry key from: hkey_local_machine\software\computer telephony solutions. From the Registry menu, choose export registry file.

- If you have Voice Assistant version 3 or below: **va32.dat** located in cts\v_assist32 folder

- If you have TASKE: **toolbox.cde** located in taske8\sitedata\local folder all the **.pbx** files located in taske8\sitedata\local\smdr folder *OR* the entire **local folder**

- If the customer is printing reports from the server: templates **(.tpl)** files located in the document_settings/user/applic777ation_data/taske/prefs/local

- If using Wall Sign, backup the entire SignData folder

MAS Modem Installation (Optional)

The MAS can be accessed from a remote location via the network by using the Windows® XP Remote Desktop feature. The MAS can also be accessed via a dial-up connection after the installation of the Zoom 3090 USB V.92 Modem (Toshiba part number SYS-USB-MODEM).

The Zoom™/Modem V.92 USB Mini is a compact external modem for Windows computers.

Physical Size	2.75 in. x 5.0 in. x 0.87 in. (7.0 cm x 12.7 cm x 2.21 cm)
Power	USB port powered no batteries or AC adapters are required
Interface Cables	Modem to MAS: USB cable (included) Modem to phone circuit: RJ-11 (NOT included)
Regulatory Approvals	FCC Parts 15B and 68 UL, C-UL, CE

Zoom is a registered trademark of Zoom Telephonics, Inc.

Important!	Do not connect the modem to the USB until after the modem driver software has been installed on the MAS.

Step 1: Install Modem Driver Software on the MAS

Install the USB modem driver software before connecting the modem to the USB port on the MAS.

1. Insert the Zoom driver software CD-ROM into the MAS CD drive. The CD will auto-run.
2. Select Install Modem Drivers.
3. Select USB Drivers.

4. Say no to all of the other software components when prompted.
5. Reboot when prompted.

Step 2. Install Hardware and Configure Windows on the MAS

1. Plug in the USB cable between the modem and the MAS. When the Found New Hardware wizard appears, click Next. Windows will install the modem.
2. Add the Incoming Connection to Windows. Click Start>My Network Places. Click "View Network Connections" and then click "Create a new connection".

3. When the New Comnnection Welcome box opens click on Next.

4. In the Network Connection Type dialog box click to select Set up an advanced connection.
5. Click on Next.
6. In the Advanced Connection Options click to select Accept incoming connections, then click on Next.
7. In the Devices for Incoming Connections dialog box check-mark Zoom V92USB Faxmodem, then click on Next.
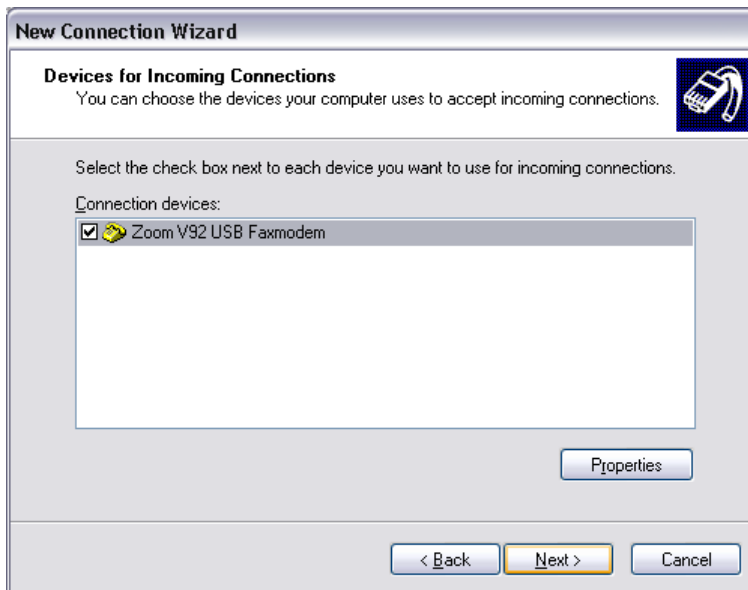
8. Select Do not allow virtual private connections, then click on Next.
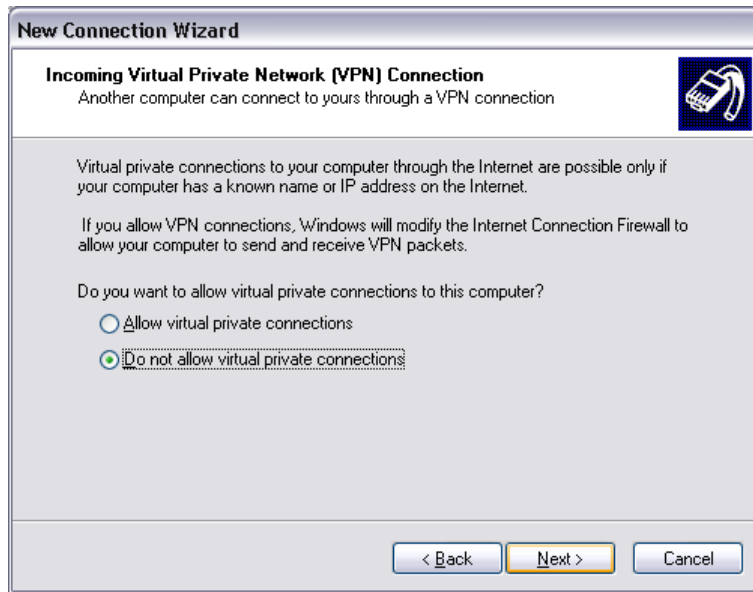
9. Select only Valued Customer in the User Permissions list.

10. In the Networking Software dialog box accept the default selections, click on Next.

11. In the Completing dialog box click on Finish.

12. The MAS setup is complete. The remaining steps are performed at the computer that will be used to dial into the MAS.

Step 3.   Client Configuration

Create the dialup connection on the computer that will be used to dial into the MAS

1. Get to the Network Connections / Add Network Connection dialog box. Typically this is through the Settings / Control Panel from the Start menu.
2. Select Connect to the network at my workplace, then click on Next.
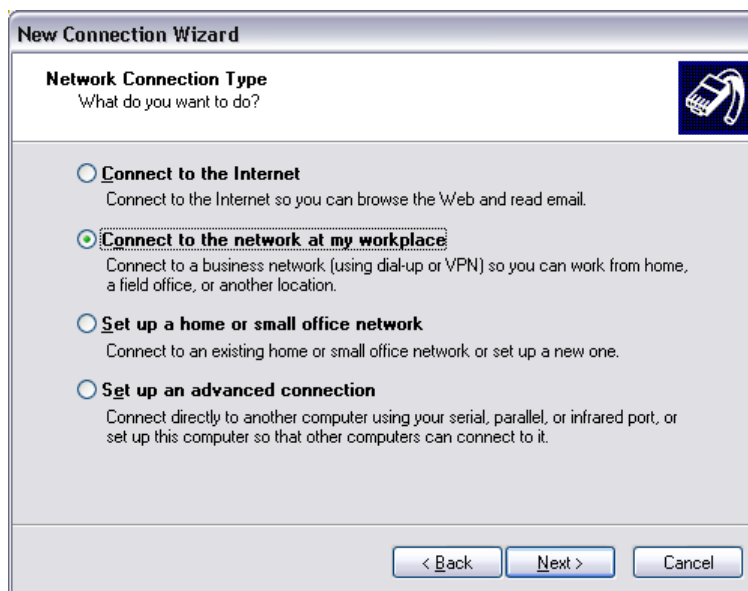
3. Select Dial-up connection as the Network Connection type.

4. Type a name in the Company Name field. Use a name that identifies the system or location. My MAS, shown below, is an example.

5. Enter the telephone number of the telephone line connected to the modem. Enter the modem number in the same format that a station user would dial the same number. Enter trunk access codes, toll prefix and/or area code as required.

6. Click on Finish.

Dial-up the MAS Modem

1. From the remote location computer open the Network Connection.
2. In the Connect dialog box enter Valued Customer as the User Name. Enter the password, then click on the Dial button.

This is the last page of the document.