



RMX[®] 2000/4000 MPMx Migration Procedure

Prior to initiating this procedure make sure you are entitled to version 7.1 in your *Support Agreement*.



Version 7.1 requires that the Control Unit memory size be at least 1024MB.

To check the RMX Memory size, in the RMX Web Client/RMX Manager go to **Administration > System Information**.

If the control unit Memory size is 512MB, DO NOT perform the upgrade procedure and contact Polycom support.



- The MPMx requires software version 7.1 installed. **First complete the version 7.1 upgrade procedure based on this document, then install the MPMx card/cards.**
- RMX 4000 - when upgrading from MPM+ to MPMx cards, on the RTM-IP 4000 card, all connections require **Ferrite** cables.
- If the upgrade process fails, please contact Polycom support.



To maximize conferencing performance, especially in high bit rate call environments, a 1Gb connection is recommended.

Upgrading the RMX with MPM/MPM+ to MPMx cards involves the following processes:

- **Process 1:** Obtaining the License Key
- **Process 2:** Upgrading to Version 7.1

Process 1: Obtaining the License Key

Version 7.1 requires *Product Registration* and a new *Product Activation Key*. For more information, see *RMX 1500/2000/4000 Getting Started Guide, Chapter 2, "Procedure 1: First-time Power-up"* on page **2-21**.

Based on your order and chassis information you have provided, you may require a new RMX 2000 D-type chassis with the MPMx card(s). The new RMX 2000 chassis is issued with an identical Chassis Serial Number. Version 7.1 and MPMx card(s) require a new *Product Activation Key*.

Process 2: Upgrading to Version 7.1

You are required to first upgrade your MCU software to version 7.1. Start the software upgrade as specified in the following table:

Current Installed Version	Step(s) Required
2.x / 3.x	1,2,3,5,6*
4.x/4.x.x/5.x/5.x.x	2,3,5,6*
5.0.2	3,5,6*
6.x/6.0.x	4A&B,5,6*
7.x/7.0.x	5



* Step 6 is applicable only for customers with RMX 2000 A/B/C-type chassis.

Step 1- Upgrading MCU Software from Version 2.x/3.x to Version 4.1.1

The upgrade procedure requires that you download and install version 4.1.1.



To upgrade from Version 2.x to Version 7.1, you must first upgrade to version 4.1.1, then upgrade to version 5.0.x and then upgrade to version 7.1. If after the installation of version 4.1.1 the MCU reset fails, turn the system power off and on again.

The software upgrade procedure takes approximately 30 minutes to complete.



Do not interrupt the upgrade process in any way.

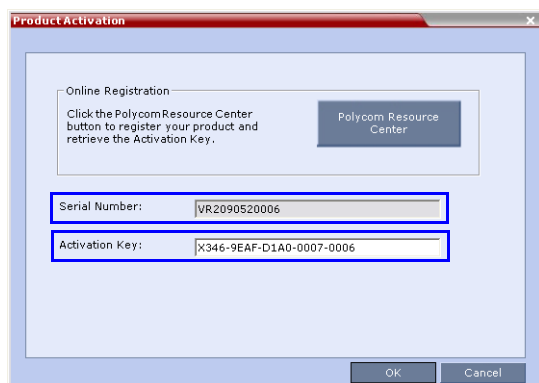
During the upgrade procedure, the MCU active alarms list indicates that the MCU is in the process of upgrading the software. You can start working with the RMX when the *Active Alarm* indication is removed from the list.

- 1 Download the *Version 4.1.1* software from the *Polycom Resource Center* web site.
- 2 Obtain the *Version 4.1.1 Product Activation Key* from the *Polycom Resource Center* web site. For more information, see the *RMX Getting Stated Guide, "Procedure 1: First-time Power-up"* procedure on page **2-21**.
- 3 Backup the configuration file. For more information, see the *RMX 1500/2000/4000 Administrator's Guide, "Software Management"* procedure on page **18-99**.
- 4 Install MCU Software *Version 4.1.1*
On the RMX® 2000 menu, click **Administration> Software Management > Software Download**.
- 5 Browse to the *Install Path*, selecting the **Version 4.1.1xx.bin** file in the folder where *Version 4.1.1* is saved and click **Install**.

At the end of the installation process the system displays an indication that the software was successfully downloaded and that a new activation key is required.

- 6 On the RMX menu, click **Setup > Product Activation**.

The *Product Activation* dialog box is displayed with the serial number field completed.



- 7 In the *Activation Key* field, enter or paste the *Product Activation Key* obtained earlier and click the **OK** button.

At the end of the *Product Activation* process the system displays an indication that the *Product Activation Key* was successfully installed.

- 8 Click the **OK** button.

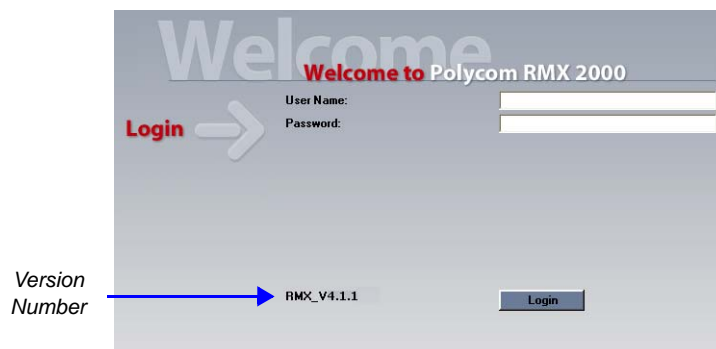
- 9 When prompted whether to reset the *MCU*, click **Yes** to reset the *MCU*.

The upgrade procedure may take up to 30 minutes during which time an *Active Alarm - System Upgrade* is displayed.

The RMX resets itself during the upgrade process and connection to the *RMX Web Client* may be lost. If the workstation is logged in to the *RMX Web Client* during the resets, the *MCU State* indicator at the bottom right corner of the *RMX Web Client* screen indicates *STARTUP*.

- 10 After 30 minutes, close and re-open the browser and connect to the RMX.

The version number in the *Welcome* screen has changed to 4.1.1



- 11 In the *RMX Web Client - Welcome* screen, enter your *User Name* and *Password* and click **Login**.

In the *Main Screen* an *MCU State* indicator displays a progress indicator **Starting up (15:25)** showing the time remaining until the system start-up is complete.



After software installation and MCU restart, the RMX 2000 powers-up in **MPM Card Configuration Mode**.

- 12 The upgrade to Version 4.1.1 is complete. Now proceed with the upgrade from Version 4.x to Version 5.0.x. For more information, see “*Step 2 - Upgrading from 4.x/5.x/5.0.x to Version 5.0.2*” on page 4.

Step 2 - Upgrading from 4.x/5.x/5.0.x to Version 5.0.2



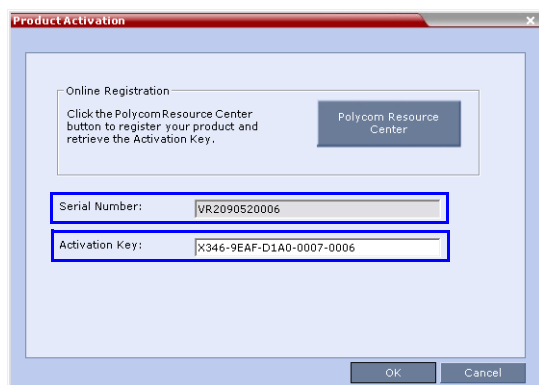
- When upgrading from version 4.x or 5.x/5.0.x to version 7.1, you must **first upgrade to version 5.0.2**. Do not perform any other intermediate upgrade.
- If *Windows 7™* is installed on the workstation, *Protected Mode* must be disabled before downloading the *Version 5.0.2* software to the workstation.

- 1 Download the required software Version 5.0.2 from the *Polycom Resource Center* web site.
- 2 Obtain the Version 5.0.2 *Product Activation Key* from the *Polycom Resource Center* web site. For more information, see the *RMX Getting Stated Guide, Chapter 2, "Procedure 1: First-time Power-up"* on page 2-21.
- 3 Backup the configuration file. For more information, see the *RMX Administrator's Guide, "Software Management"* procedure on page 18-99.
- 4 Install MCU Software Version 5.0.2.
On the RMX 2000 menu, click **Administration > Software Management > Software Download**.
- 5 Browse to the *Install Path*, selecting the **Version 5.0.2.bin** file in the folder where Version 5.0.2 is saved and click **Install**.

At the end of the installation process the system displays an indication that the software was successfully downloaded and that a new activation key is required.

- 6 On the RMX menu, click **Setup > Product Activation**.

The *Product Activation* dialog box is displayed with the serial number field completed.



- 7 In the *Activation Key* field, enter or paste the *Product Activation Key* obtained earlier and click the **OK** button.

At the end of the *Product Activation* process the system displays an indication that the *Product Activation Key* was successfully installed.

- 8 Click the **OK** button.
- 9 When prompted whether to reset the MCU, click **Yes** to reset the MCU.

At the end of the installation process the system displays an indication that the software was successfully downloaded.

The upgrade procedure takes about 30 minutes during which time an *Active Alarm - System Upgrade* is displayed.

The RMX resets itself during the upgrade process and connection to the *RMX Web Client* may be lost. If the workstation is logged in to the *RMX Web Client* during the resets, the *MCU State* indicator at the bottom right corner of the *RMX Web Client* screen indicates *STARTUP*.



- Sometimes when upgrading from version 4.x to version 5.0.x the reset process fails. In such a case, you can try to connect to the MCU via the Shelf Management and reset the MCU from the Hardware Monitor or you can "hard" reset the MCU by turning the Power off and on again.

- 10 After about 30 minutes, **close and reopen the browser** and connect to the RMX.
If the browser was not closed and reopened, the following error message is displayed: "Browser environment error. Please reopen the browser".
The version number in the *Welcome* screen has changed to 5.0.2.
- 11 In the *RMX Web Client – Welcome* screen, enter your *Username* and *Password* and click **Login**.



If upgrading from version 4.x, after software installation, the MCU is in the last *Card Configuration Mode* that was set for the system before the software upgrade. For more information on the Card Configuration Modes, see the RMX 2000 Hardware Guide, "RTM LAN" procedure on page 1-16.

In the *Main Screen* an MCU State indicator displays a progress indicator **Starting up (15:25)** showing the time remaining until the system start-up is complete.



If the default POLYCOM user is defined in the RMX Web Client, an Active Alarm is created and the MCU status changes to MAJOR until the POLYCOM User is renamed or a new Administrator User is created and the default User is deleted.

- 12 The upgrade to Version 5.0.2 is complete. Now proceed with the upgrade from Version 5.0.2 to Version 7.1. For more information, see "Step 3 - Upgrading from Version 5.0.x to Version 7.0.2" on page 5.

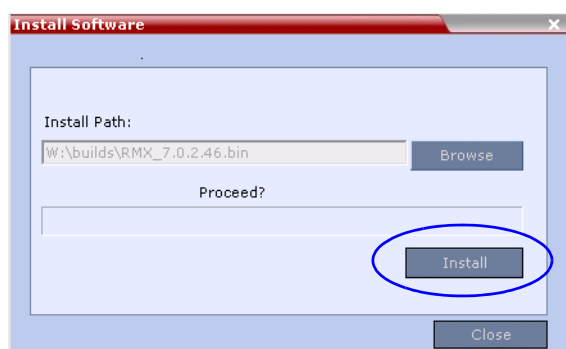
Step 3 - Upgrading from Version 5.0.x to Version 7.0.2

- 1 Download the required software Version 7.0.2 from the *Polycom Resource Center* web site.



If *Windows 7™* is installed on the workstation, *Protected Mode* must be disabled before downloading the *Version 7.0.2* software to the workstation.
For more information see, *Version 7.0.2 RMX Release Notes*, "Windows 7™ Security Settings" on page 9.

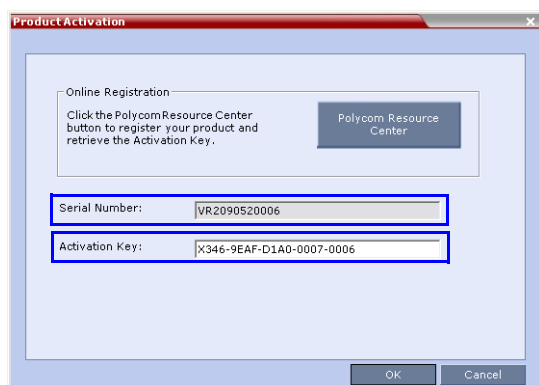
- 2 Obtain the *Version 7.0.2 Product Activation Key* from the *Polycom Resource Center* web site. For more information, refer to the RMX Software Licence document you received with your shipment.
- 3 Backup the configuration file. For more information, see the *RMX 1500/2000/4000 Administrator's Guide*, "Software Management" procedure on page 18-99.
- 4 Install MCU Software Version 7.0.2.
On the RMX 2000 menu, click **Administration > Software Management > Software Download**.
- 5 Browse to the *Install Path*, selecting the **Version 7.1bin** file in the folder where version 7.0.2 is saved and click **Install**.



At the end of the installation process the *Install Software* dialog box indicates that the installed software is being checked. The system then displays an indication that the software was successfully downloaded and that a new activation key is required.

- 6 On the RMX 2000 menu, click **Setup>Product Activation**.

The *Product Activation* dialog box is displayed with the serial number field completed.



- 7 In the *Activation Key* field, enter or paste the *Product Activation Key* obtained earlier and click the **OK** button.

At the end of the *Product Activation* process the system displays an indication that the *Product Activation Key* was successfully installed.

- 8 When prompted whether to reset the *RMX*, click **Yes** to reset the *RMX*.



Sometimes when upgrading from version 5.0.x to version 7.0.2 the reset process fails. In such a case, you can try to connect to the MCU via the Shelf Management and reset the MCU from the Hardware Monitor or you can “hard” reset the MCU by turning the Power off and on again.

- 9 When prompted to wait while the *RMX* resets, click **OK**.

The upgrade procedure takes approximately **30 minutes**.

Connection to the *RMX* is terminated and you are prompted to reopen the browser.

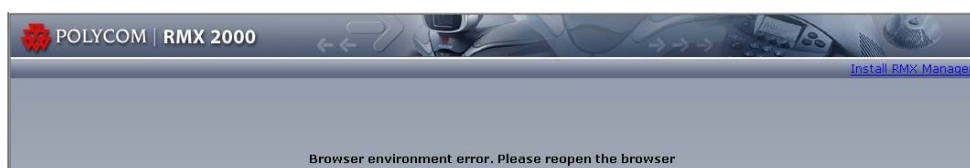


- 10 After approximately 30 minutes close and reopen the browser.
- 11 Enter the IP address of the *RMX Control Unit* in the browser's address line and press **Enter** to reconnect to *RMX*.

The browser displays a message indicating that it cannot display the requested page.

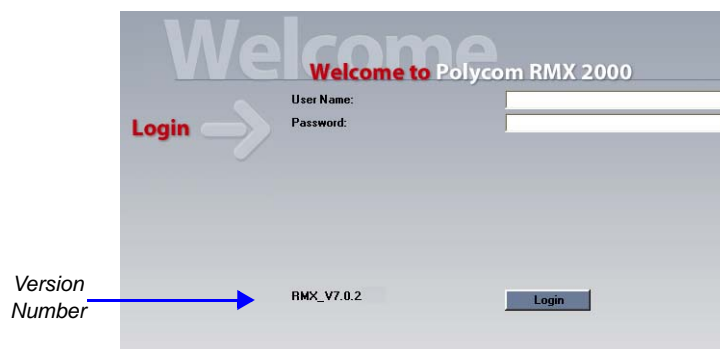
- 12 Refresh the browser periodically until connection to the *RMX* is established and the *Login* screen is displayed.

You may receive a message stating *Browser environment error. Please reopen the browser*.



- 13 Enter the IP address of the *RMX Control Unit* in the browser's address line and press **Enter** to reconnect to *RMX*.

The *Login* screen is displayed. The version number has changed to 7.0.2.



- 14** In the *RMX Web Client – Welcome* screen, enter your *Username* and *Password* and click **Login**.

In the *Main Screen* an *MCU State* indicator displays a progress indicator **Starting up (15:25)** showing the time remaining until the system start-up is complete



If the default POLYCOM user is defined in the RMX Web Client, an Active Alarm is created and the MCU status changes to MAJOR until a new Administrator user is created and the default user is deleted.



RMX 2000 with **A/B/C-type Chassis** users proceed with “*Step 5 - Upgrading from Version 7.0/7.0.x to Version 7.1*” on page **12**.

- 15** To use the new features such as *Operator Assistance* and *Gateway Sessions* the IVR Services must be updated. For more details, see Version 7.0.2 Release Notes.
- 16** Prior to removing an MPM/MPM+ card the captive screws must be unscrewed and the ejector levers must be opened to initiate a “power down” on the card.
- 17** Carefully slide the MPM/MPM+ card out through the front panel.
- 18** On the MPMx card to be installed, move the ejector levers to their fully open position. For more information, see “*Using the Modified PMC Compatible Ejector Lever*” on page **15**.
- 19** Slide in the MPMx card and tighten the captive screws.
- 20** A message appears indicating that the MCU is currently in MPM/MPM+ Card Configuration Mode and the MPMx card is disabled.
- 21** Reset the MCU to switch to the MPMx Configuration Mode.
- 22** The card startup procedure is complete when the MPMx card successfully completes startup and the green RDY (Ready) LED remains lit.

Step 4 - Upgrading from Version 6.0/6.0.1/6.0.x to Version 7.0.2

A.) Intermediate Upgrade from Version 6.0/6.0.1 to Version 6.0.2

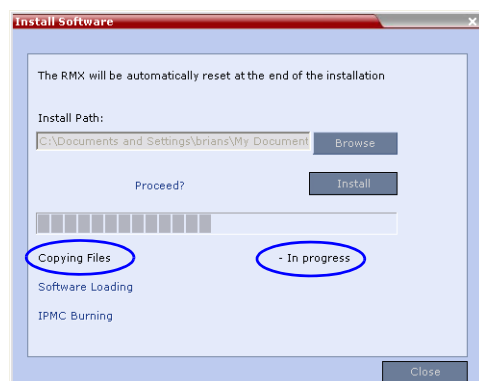
- 1 Download the *Version 6.0.x* software from the *Polycom Resource Center* web site.



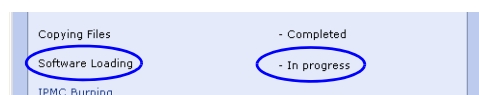
If *Windows 7™* is installed on the workstation, *Protected Mode* must be disabled before downloading the *Version 6.0.2* software to the workstation.
For more information see the Release Notes version 7.1, "*Windows 7™ Security Settings*" on page 11.

- 2 Backup the configuration file. For more information, see the *RMX 1500/2000/4000 Administrator's Guide*, "*Software Management*" procedure on page 18-99.
- 3 Install MCU Software *Version 6.0.2*.
On the RMX menu, click **Administration > Software Management > Software Download**.
- 4 Browse to the *Install Path*, selecting the **Version 6.0.xxx.bin** file in the folder where *Version 6.0.2* is saved and click **Install**.

The *Install Software* information box that the file copy is *In progress*.



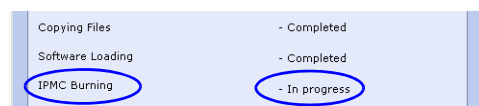
The *Install Software* information box indicates that *Software Loading* is in progress.



A series of *Active Alarms* are displayed indicating the progress of the upgrade process.

Active Alarms (3)							
ID	Time	Category	Level	Code	Process	N	Description
4	Mon	General	System	Softwar	Cards		RTM IP software upgrade 0% board Id:5
3	Mon	General	System	Softwar	Cards		Media card software upgrade 25% board Id:2
2	Mon	General	System	Softwar	Cards		Media card software upgrade 25% board Id:1

The *Install Software* information box indicates that *IPMC Burning* is in progress.



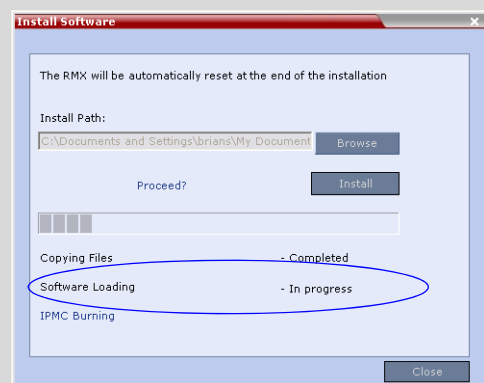
A further series of *Active Alarms* are displayed indicating the progress of the upgrade process.

Active Alarms (3)							
ID	Time	Category	Level	Code	Process	N	Description
7	Mon	General	System	IPMC sof	Cards		RTM IP IPMC upgrade 0% board id:5
6	Mon	General	System	IPMC sof	Cards		Media card IP IPMC software upgrade 0% board id:2
5	Mon	General	System	IPMC sof	Cards		Media card IP IPMC software upgrade 0% board id:1

The upgrade procedure takes approximately **20 minutes**.



When upgrading from version 6.0.1, if after 20 minutes the system remains in the *Loading Software* stage:



and sometimes the following Active Alarm is displayed:

ID	Time	Category	Level	Code	Process	Description
1627	26-10-2010 17:37:49	Assert	Major	Software Installer	File: InstallerManager.cpp, Line: 996, Code: 1	ASSERT: Timeout_reached_during_installation_flow
1626	26-10-2010 17:14:56	Assert	Major	Software Moulting	File: MoultingManager.cpp, Line: 947, Code: 1	ASSERT: CMoultingManager::OnAuthenticationEnd_
1625	26-10-2010 17:14:56	General	Major	Socket r Mplapi	Socket reconnect (board id: 5)	

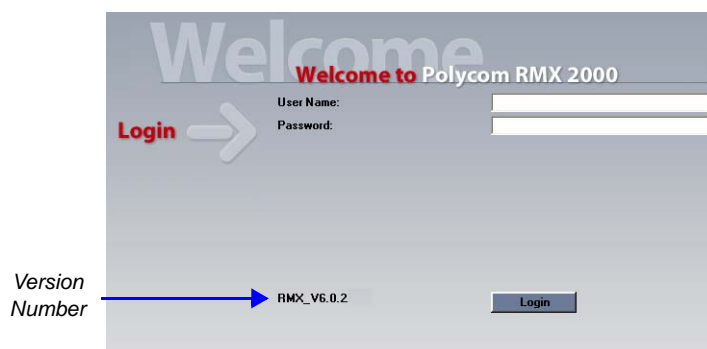
Close the Install Software window, access the **Hardware Monitor** and **Reset** the RMX. After reset, the upgrade process continues as described below.

Connection to the RMX is terminated and you are prompted to reopen the browser.



- 5 After approximately 5 minutes close and reopen the browser.
- 6 Enter the IP address of the RMX Control Unit in the browser's address line and press **Enter** to reconnect to RMX.

The *Login* screen is displayed. The version number has changed to 6.0.2.

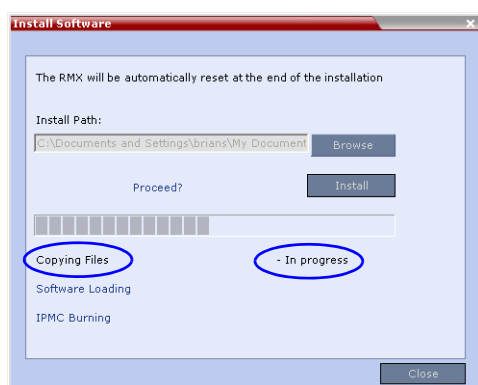


- 7 In the RMX Web Client – *Welcome* screen, enter your User Name and Password and click **Login**. In the *Main Screen* an MCU State indicator displays a progress indicator **Starting up (15:25)** showing the time remaining until the system start-up is complete.

B.) Upgrading from Version 6.0.x to Version 7.0.2

- 1 Download the required software Version 7.0.2 from the *Polycom Resource Center* web site.
- 2 Obtain the Version 7.0.2 *Product Activation Key* from the *Polycom Resource Center* web site. For more information, refer to the RMX Software License document you received with your shipment.
- 3 Backup the configuration file. For more information, see the *RMX Administrator's Guide*, "Software Management" procedure on page 18-99.
- 4 Install MCU Software Version 7.0.2.
On the RMX 2000 menu, click **Administration> Software Management > Software Download**.
- 5 Browse to the *Install Path*, selecting the **Version 7.0.2.bin** file in the folder where Version 7.0.2 is saved and click **Install**.

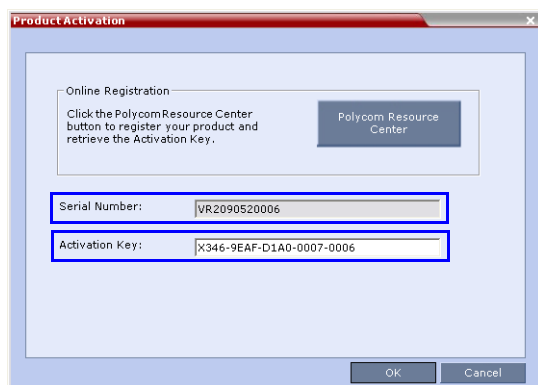
The *Install Software* information box that the file copy is *In progress*.



At the end of the installation process the system displays an indication that the software copying procedure is *Completed* and that a new *Activation Key* is required.

- 6 Click the **OK** button.
- 7 On the RMX 2000 menu, click **Setup>Product Activation**.

The *Product Activation* dialog box is displayed with the serial number field completed.

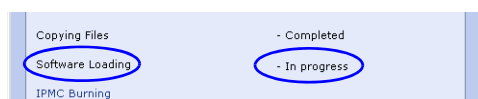


- 8 In the *Activation Key* field, enter or paste the *Product Activation Key* obtained earlier and click the **OK** button.

At the end of the *Product Activation* process the system displays an indication that the *Product Activation Key* was successfully installed.

- 9 Click the **OK** button.

The *Install Software* information box indicates that *Software Loading* is in progress.



A series of *Active Alarms* are displayed indicating the progress of the upgrade process.

Active Alarms (3)							
ID	Time	Category	Level	Code	Process N	Description	
4	Mon	General	System	Softwar	Cards	RTM IP software upgrade	0% board Id:5
3	Mon	General	System	Softwar	Cards	Media card software upgrade	25% board Id:2
2	Mon	General	System	Softwar	Cards	Media card software upgrade	25% board Id:1

The *Install Software* information box indicates that *IPMC Burning* is in progress.

Copying Files	- Completed
Software Loading	- Completed
IPMC Burning	- In progress

A further series of *Active Alarms* are displayed indicating the progress of the upgrade process.

Active Alarms (3)							
ID	Time	Category	Level	Code	Process N	Description	
7	Mon	General	System	IPMC sof	Cards	RTM IP IPMC upgrade	0% board id:5
6	Mon	General	System	IPMC sof	Cards	Media card IP IPMC software upgrade	0% board id:2
5	Mon	General	System	IPMC sof	Cards	Media card IP IPMC software upgrade	0% board id:1



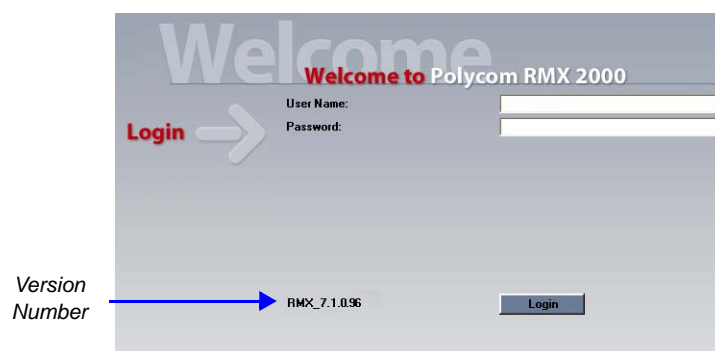
Sometimes, when updating the *Version 7.0.2* license key, the system displays the following active alarm:

Active Alarms (1)							
MCU	ID	Time	Category	Level	Code	Process Name	Description
172.22.185.145	2	11:57:15 2010	General	Major	Insufficient resources	Resource	Insufficient resources

Ignore this Active Alarm and complete this installation procedure.

- After about 30 minutes, **close and reopen the browser** and connect to the RMX. If the browser was not closed and reopened, the following error message is displayed: “*Browser environment error. Please reopen the browser*”.

The version number in the *Welcome* screen has changed to 7.0.2.



- In the *RMX Web Client – Welcome* screen, enter your *User Name* and *Password* and click **Login**.

In the *Main Screen* an *MCU State* indicator displays a progress indicator **Starting up (15:25)** showing the time remaining until the system start-up is complete.



- If the default POLYCOM user is defined in the RMX Web Client, an Active Alarm is created and the MCU status changes to MAJOR until a new Administrator user is created and the default user is deleted.
- If the upgrade process fails, please contact Polycom support.



RMX 2000 with A/B/C-type Chassis users proceed with “*Step 5 - Upgrading from Version 7.0/7.0.x to Version 7.1*” on page 12.

- 12 To use the new features such as *Operator Assistance* and *Gateway Sessions* the IVR Services must be updated. For more details, see Version 7.1 Release Notes, "Additional/Optional System Updates After Upgrading" on page 15.
- 13 Prior to removing an MPM/MPM+ card the captive screws must be unscrewed and the ejector levers must be opened to initiate a "power down" on the card.
- 14 Carefully slide the MPM/MPM+ card out through the front panel.
- 15 On the MPMx card to be installed, move the ejector levers to their fully open position. For more information, see "Using the Modified PMC Compatible Ejector Lever" on page 15.
- 16 Slide in the MPMx card and tighten the captive screws.
- 17 A message appears indicating that the MCU is currently in MPM/MPM+ Card Configuration Mode and the MPMx card is disabled.
- 18 Reset the MCU to switch to the MPMx Configuration Mode.
The card startup procedure is complete when the MPMx card successfully completes startup and the green RDY (Ready) LED remains lit.

Step 5 - Upgrading from Version 7.0/7.0.x to Version 7.1

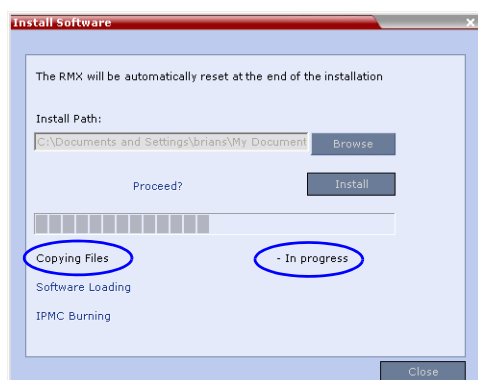
- 1 Download the required software Version 7.1 from the *Polycom Resource Center* web site.



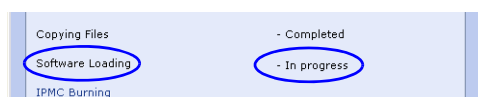
If *Windows 7™* is installed on the workstation, *Protected Mode* must be disabled before downloading the *Version 7.1* software to the workstation.

- 2 Backup the configuration file. For more information, see the *RMX Administrator's Guide*, "Software Management" procedure on page 18-99.
- 3 Install MCU Software Version 7.1.
On the RMX 2000 menu, click **Administration > Software Management > Software Download**.
- 4 Browse to the *Install Path*, selecting the **Version 7.1.bin** file in the folder where *Version 7.1* is saved and click **Install**.

The *Install Software* information box indicates that the file *Copying files* is *In progress*.



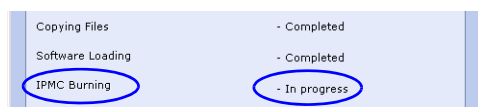
The *Install Software* information box indicates that *Software Loading* is in progress.



A series of *Active Alarms* are displayed indicating the progress of the upgrade process.

Active Alarms (3)							
ID	Time	Category	Level	Code	Process N	Description	
4	Mon	General	System	Softwar	Cards	RTM IP software upgrade 0% board Id:5	
3	Mon	General	System	Softwar	Cards	Media card software upgrade 25% board Id:2	
2	Mon	General	System	Softwar	Cards	Media card software upgrade 25% board Id:1	

The *Install Software* information box indicates that *IPMC Burning* is in progress.



A further series of *Active Alarms* are displayed indicating the progress of the upgrade process.

Active Alarms (3)						
ID	Time	Category	Level	Code	Process Name	Description
7	Mon	General	System	IPMC sof	Cards	RTM IP IPMC upgrade 0% board id:5
6	Mon	General	System	IPMC sof	Cards	Media card IP IPMC software upgrade 0% board id:2
5	Mon	General	System	IPMC sof	Cards	Media card IP IPMC software upgrade 0% board id:1



Sometimes, when updating the *Version 7.1* license key, the system displays the following active alarm:

Active Alarms (1)							
MCU	ID	Time	Category	Level	Code	Process Name	Description
172.22.185.145	2	11:57:15 2010	General	Major	Insufficient resources	Resource	Insufficient resources

Ignore this Active Alarm and complete this installation procedure.

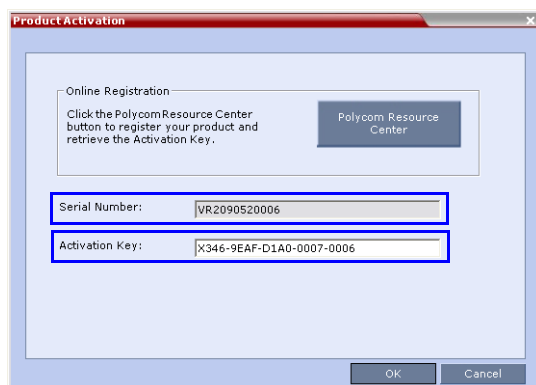
The upgrade procedure takes approximately **20** minutes.

Connection to the *RMX* is terminated and you are prompted to reopen the browser.



- 5 Approximately 5 minutes after receiving this message, close and reopen the browser.
- 6 On the RMX 2000 menu, click **Setup>Product Activation**.

The *Product Activation* dialog box is displayed with the serial number field completed.



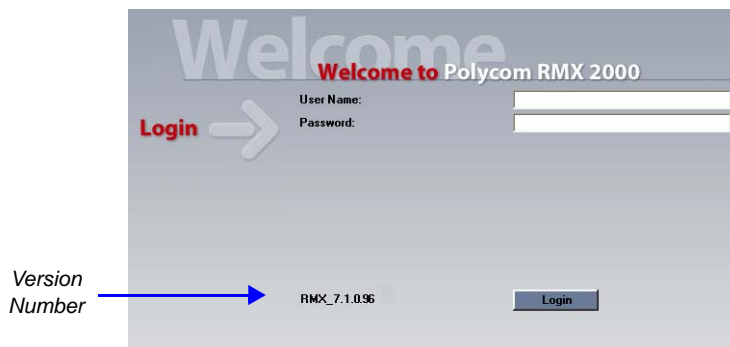
- 7 In the *Activation Key* field, enter or paste the *Product Activation Key* obtained earlier and click the **OK** button.

At the end of the *Product Activation* process the system displays an indication that the *Product Activation Key* was successfully installed.

- 8 Click the **OK** button.
- 9 Enter the IP address of the *RMX Control Unit* in the browser's address line and press **Enter** to reconnect to RMX.

The browser displays a message indicating that it cannot display the requested page.

The version number in the *Welcome* screen has changed to 7.1.



- 10** In the *RMX Web Client – Welcome* screen, enter your *User Name* and *Password* and click **Login**.

In the *Main Screen* an *MCU State* indicator displays a progress indicator **Starting up (15:25)** showing the time remaining until the system start-up is complete.



- If the default POLYCOM user is defined in the RMX Web Client, an Active Alarm is created and the MCU status changes to MAJOR until a new Administrator user is created and the default user is deleted.
- If the upgrade process fails, please contact Polycom support.

- 11** To use the new features such as *Operator Assistance* and *Gateway Sessions* the *IVR Services* must be updated. For more details, see “*Additional/Optional System Updates After Upgrading*” on page 15 in the RMX Release Notes.

Step 6 - Upgrading RMX 2000 A/B/C-type Chassis Users

Step 6a. Removing MCU Components from the Existing Chassis and Removing the Chassis from the Rack

- 1** Power down the MCU.
- 2** Disconnect the following cables from the back panel:
 - Power cable
 - LAN cable from LAN 2 port
 - Optional - if installed. E1/T1 Cables from PRI ports
- 3** Remove the following components:



On each component captive screws must be loosened and ejector lever or levers must be opened. Care must be taken opening or closing the *All Metal Ejector Lever* or *Modified PMC Compatible Ejector Lever* as described in “*Using the Ejector Lever*” below. Ensure that power to the RMX is turned OFF (O) before performing the procedures described below.

- Remove the CNTL unit from the front of the RMX (see page 16).
 - Remove the Power Supply drawer from the front of the RMX (see page 16).
 - Remove RTM IP card from the rear of the RMX (see page 16).
 - Optional - if installed. Remove the RTM ISDN card from the rear of the RMX (see page 17).
 - Optional. Remove the MPM card from the front of the RMX.
- 4** Remove the RMX unit from the rack (see page 17).

Using the Ejector Lever

Using the All Metal Ejector Lever

This ejector lever can be moved to 3 positions:

- **Closed** - The ejector levers are fully retracted and pushed up against the card's panel.
- **Partially Open** - For card powering down mode. Partially open the ejector lever(s) until the blue HS LEDs on the card and the *Control Unit* start flashing. When the HS LED remains lit the card is in a powered down mode and you can remove the card.



Warning!

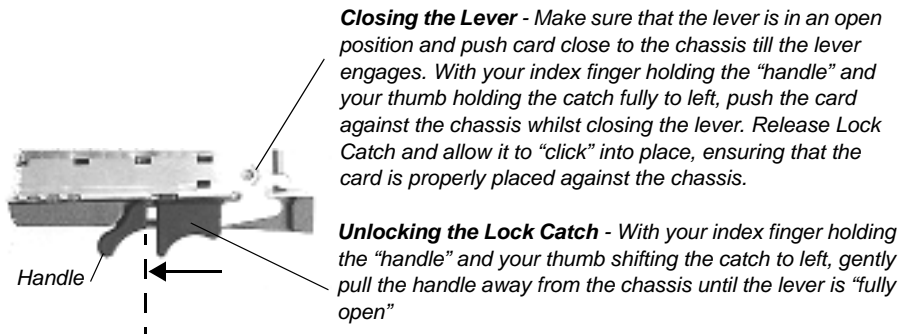
Once the removal sequence is initiated and the HS LED flashes, the process cannot be terminated.

- **Fully Open** - The card is released from the MCU housing.

Using the Modified PMC Compatible Ejector Lever

This ejector lever can be moved to 3 positions:

- **Closed/Locked** - Ejector lever(s) are gently pushed up against the card's panel and is locked. Ensure that the lock catch is in the standard closed position (shifted to the right as shown below)



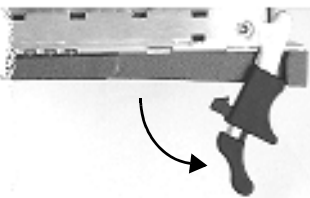
- **Partially Open** - For card powering down mode. Partially open the ejector lever(s) until the blue HS LEDs on the card and the *Control Unit* start flashing. When the HS LED remains lit the card is in a powered down mode and you can remove the card.



Warning!

Once the removal sequence is initiated and the HS led flashes, the process cannot be terminated.

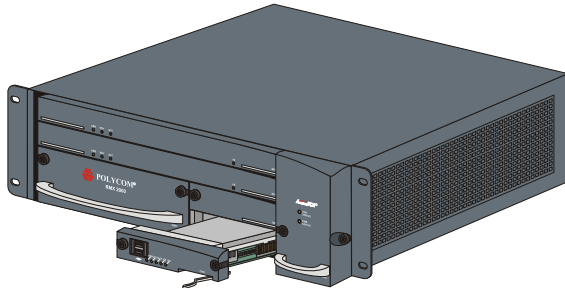
- **Fully Open** - In this position the card is released from the MCU housing and can be removed.



Lever Fully Open - Pull the lever handle(s) to a fully open position (approx. 70 degrees), as shown here

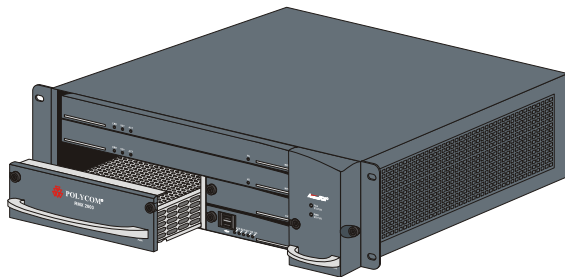
Removing the CPU (CNTL) Module

- 1 Unscrew the captive screws on the front panel of the RMX 2000 that secure the CNTL Module.
- 2 Use the ejector lever (see *"Using the Ejector Lever"* on page 15) to pull the CNTL Module out of its slot in the Backplane.
- 3 Carefully slide the CNTL Module out through the front panel.



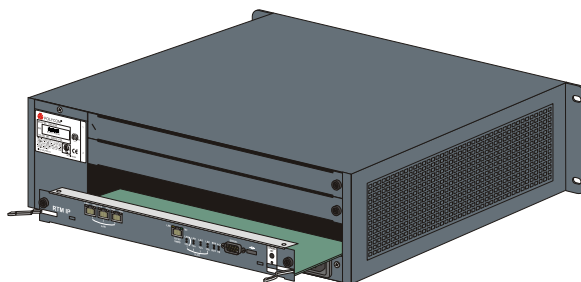
Removing the Power Supply Drawer

- 1 Unscrew the captive screws on the front panel of the RMX 2000 that secure the Power Supply.
- 2 Use the handle to pull the Power Supply Module out of its slot in the Backplane.
- 3 Carefully slide the Power Supply Module out through the front panel.



Removing the RTM IP Card

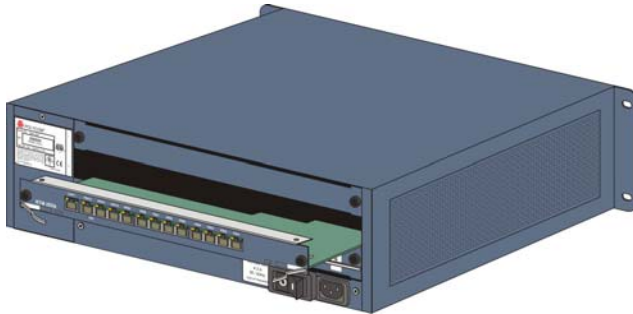
- 1 Unscrew the captive screws on the rear panel of the RMX 2000 that secure the RTM IP card.
- 2 Use the ejector levers (see *"Using the Ejector Lever"* on page 15) to pull the RTM IP card out of its slot in the Backplane.



- 3 Carefully slide the RTM IP card out through the rear panel.

Optional. Removing the RTM ISDN Card

- 1 Unscrew the captive screws on the rear panel of the RMX 2000 that secure the RTM ISDN card.
- 2 Use the ejector levers (see “Using the Ejector Lever” on page 15) to pull the RTM ISDN card out of its slot in the Backplane.

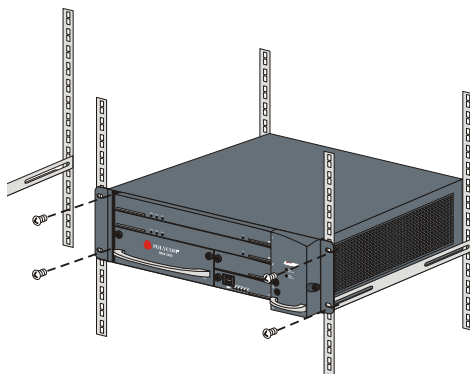


- 3 Carefully slide the RTM ISDN card out through the rear panel.

Removing the RMX from the Rack

The RMX® 2000 is installed in a rack using rack brackets or a shelf. Removing the MCU from the rack is done in the same way for both installation methods:

- Unscrew the four captive screws in the RMX's front mounting brackets that fasten the RMX to the rack. Remove the RMX from the rack.



Step 6b. - Installing MCU Components in the New RMX 2000 D-type Chassis and Mounting it in the Rack



The new chassis is delivered with the fan drawer and MPMx card installed.

- 1 Unpack the new chassis and place it on a flat, stable surface.
- 2 Install the following components in the new chassis:
 - Power Supply drawer (see “Installing the Power Supply Drawer” on page 18)
 - CNTL unit (see “Installing the CPU (CNTL) Module” on page 18)
 - RTM IP card (see “Installing the RTM IP Card” on page 19)
 - Optional. RTM ISDN card (see “Installing the RTM ISDN Card” on page 19)



On each component the card pins must be aligned and ejector lever or levers must be pushed back into their housing and lock(ed) as described in the “Using the Ejector Lever” on page 15. Ensure also that each captive screw is fastened properly.

- 3 Mount the RMX 2000 D-type chassis with all its components in the rack (see “Mounting the Assembled RMX 2000 D-type Chassis in the Rack” on page 19).
- 4 Connect all the required cables (see “Connecting Cables” on page 20).
- 5 Turn on the MCU and login.



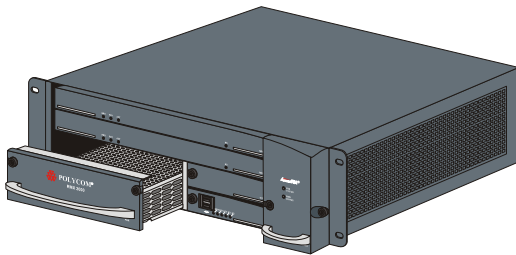
Note: On all cards, if during the startup phase the blue HS LED remains lit, please make sure that the card is properly seated in the slot. A lit HS LED indicates that the card is in a powered down mode. If this problem persists, contact your next level of support.

A message appears indicating that the MCU is currently in MPM Card Configuration Mode and the MPMx card is disabled.

- 6 Reset the MCU to switch the RMX 2000 to the MPMx Configuration Mode.
- 7 The card startup procedure is complete when the MPMx card successfully completes startup and the green RDY (Ready) LED remains lit.

Installing the Power Supply Drawer

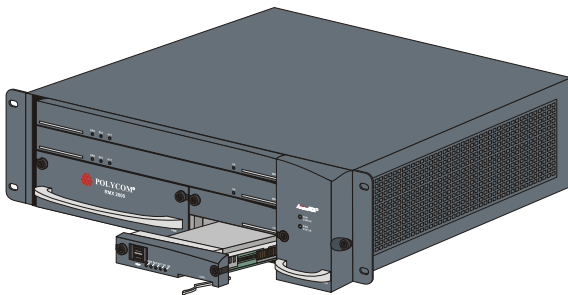
- 1 Slide in the Power Supply Module.
- 2 Using the handle, push the Power Supply Module firmly into the Backplane, making sure it is properly seated in its slot.



- 3 Tighten the captive screws on the front panel of the RMX that secure the Power Supply Module.

Installing the CPU (CNTL) Module

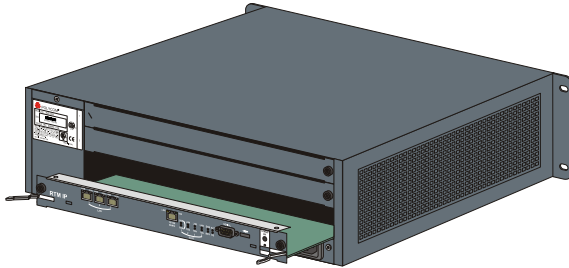
- 1 Slide in the CNTL Module. Push the CNTL Module firmly into the Backplane, making sure it is properly seated in its slot.



- 2 Ensure that the metal ejector lever is fully retracted into its housing.
- 3 Tighten the captive screws on the front panel of the RMX that secure the CNTL Module.

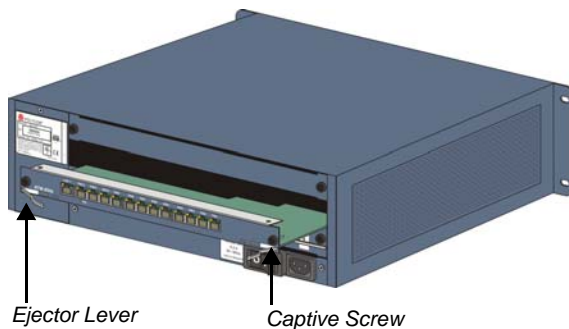
Installing the RTM IP Card

- 1 Slide in the replacement RTM IP card.
- 2 Push the RTM IP card firmly into the Backplane, making sure it is properly seated in its slot. Ensure that the ejector levers are fully retracted into their housings (see *"Using the Ejector Lever"* on page 15).
- 3 Tighten the captive screws on the rear panel of the RMX that secure the RTM IP card.



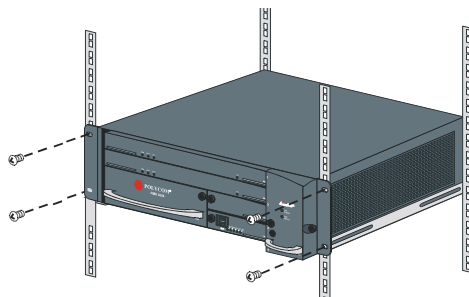
Installing the RTM ISDN Card

- 1 Slide in the replacement RTM ISDN card in the slot opposite to where an MPM+ card is seated.
- 2 Push the RTM ISDN card firmly into the Backplane, making sure it is properly seated in its slot.
- 3 Ensure that the ejector levers are fully retracted into their housings (see *"Using the Ejector Lever"* on page 15).
- 4 Tighten the captive screws on the rear panel of the RMX 2000 that secure the RTM ISDN card.



Mounting the Assembled RMX 2000 D-type Chassis in the Rack

- **Using rack brackets** – Mount the RMX on top of the rack brackets or on the shelf. Fasten the RMX to the rack with screws through the four holes in the RMX's front mounting brackets.



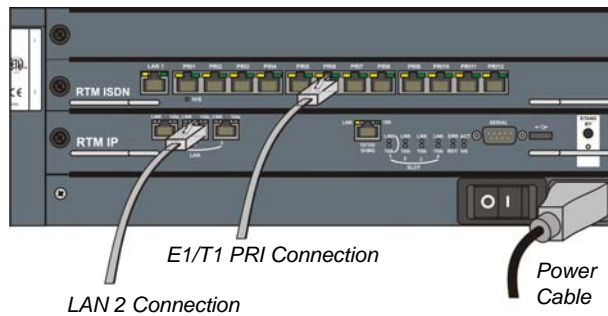
Connecting Cables



Do not remove the protective caps from LAN1, LAN3 and ShMG ports.

Connect the following cables to the back panel:

- Power cable
- LAN cable to **LAN 2** Port
- Optional. E1/T1 Cables to **PRI** Ports



Please be aware that the old RMX 2000 chassis and MPM/MPM+ board(s) cannot be disposed of with household waste. Instead, it is your responsibility to dispose of outdated equipment by handing it over to a designated collection point for the recycling of electronic equipment. The collection and recycling of obsolete equipment will help conserve natural resources and protect the environment. For more information about recycling and where you can drop off your equipment, please contact your local city office, your waste disposal service or your next level of support where you purchased the product.

