



Mitel® 5000 Communications Platform (CP)

June 2010

TECHNOLOGY BRIEF

The information conveyed in this document is confidential and proprietary to Mitel and is intended solely for Mitel employees and members of Mitel's reseller channel who specifically have a need to know this information. If you are not a Mitel employee or a Mitel authorized PARTNER, you are not the intended recipient of this information. Please delete or return any related material. Mitel will enforce its right to protect its confidential and proprietary information and failure to comply with the foregoing may result in legal action against you or your company.



Table of Contents

Introducing the Mitel 5000 Communications Platform (CP)	1
Target Market / Opportunity / Positioning	1
Product Overview / Features and Benefits / Description	1
Architecture	1
Expansion Modules	2
Digital Expansion Interface (DEI)	3
Digital Telephones	3
IP Phones	4
Messaging	4
Basic Voice Mail Features	5
Mobility	5
System Features	7
Phone Features	8
Signaling Interfaces	9
Administration and Diagnostics	9
Licensing	10
Applications	11
Demo Kits	12
Configuration Information	12
Training	13
Supporting Material	13
Questions & Answers	14

Introducing the Mitel 5000 Communications Platform (CP)

Target Market / Opportunity / Positioning

The Mitel® 5000 Communications Platform (CP) is an ideal platform for a small-to-medium business interested in the latest technology and application capability, but is not necessarily ready to go with a pure IP solution. Since it provides both digital and IP capability natively, it can easily adapt to and grow with the customer's evolving needs.

In addition, the 5000 CP provides a powerful feature set with built-in feature-transparent IP networking capabilities.

And, the 5000 CP leverages the award winning shared desktop and application portfolio that is supported on the Mitel Communications Director (MCD).

Product Overview / Features and Benefits / Description

The 5000 CP provides customers with a flexible platform that is designed to meet the needs of the customer's current environment while allowing for change(s) that would not mean a complete system swap out.

Whether you need a platform that supports digital handsets in order to re-use existing wiring, or one that can provide the latest in productivity enhancing applications and connect to next generation SIP based network services – or if you want to provide a pure IP environment to support local IP phones and teleworkers over broadband services, the 5000 CP is the answer.

The 5000 CP can be the platform of choice for the single site SMB or can deliver the right solution for the multi-site organization, thanks to its feature rich networking capabilities.

The 5000 CP supports a wide breadth of advanced software applications including the Mitel Applications Suite which includes Mitel NuPoint Unified Messaging™ (UM), Mitel Speech Auto-Attendant, Mitel Customer Service Manager and Mitel Business Dashboard in an easy to deploy, administer and manage solution. It provides out of the box solutions for mobility with Dynamic Extension Express and Teleworking and supports sophisticated desktop applications such as Mitel Unified Communicator® (UC) Express and Mitel Unified Communicator® (UC) Advanced.

Architecture

At the core of the 5000 CP is the HX Controller. The HX Controller comprises a chassis and a processor module. The HX Controller chassis incorporates the module slots, an LCD display for viewing system status, alarms and performing some basic administrative actions and two USB ports – USB A for system backups and USB B for technicians to run diagnostics, and an HX Processor Module. The HX Processor Module runs the 5000 CP software which provides a wealth of features, delivers a Door Relay, Paging and a Music On Hold port, four analog trunks and four analog extensions (without the need for extra modules), a LAN port to connect onto the network, as well as the capability to connect additional expansion bays, if required, to scale the solution.

The HX Controller can support devices and network connections from a traditional telephony model (e.g. digital handsets, T1 network connections, BRI network connections) as well as pure IP (SIP trunks, IP handsets etc). The system provides the resources for managing the necessary translation from one environment to the other. Additionally, the 5000 CP HX Controller provides the necessary DSP resources to support services such as T.38 fax over IP and G.729 compression between IP and TDM devices.

To scale the system simply, connect one or more Digital Expansion Interface chassis, and you have additional module bays to continue system expansion.



Figure 1 Mitel 5000 HX Controller (Front)



Figure 2 Mitel 5000 HX Controller (Back)

Expansion Modules

Besides the built-in devices, the HX Controller has four expansion bays that support the following modules:

- Digital Device Module (DDM-16) – provides 16 digital set ports (limited to three)
- Dual T1/E1 module (T1M-2) – provides connectivity for up to two T1/E1 spans (including PRI services)
- Basic Rate Module (BRM-S) – provides two Basic Rate (2B+D) network interfaces which equates to four voice channels
- Single Line Module (SLM-4) – This module provides connectivity for up to four analog devices.
- Loop Start Module (LSM-4) – This module provides connectivity for up to four analog trunk connections and includes support for calling line ID and faxing

Digital Expansion Interface (DEI)

The DEI is a 1u expansion shelf that provides three module bay slots, and with the ability to connect up to four DEI's, the 5000 CP can grow to 250 phones. Each bay slot can support the following modules:

- Digital Endpoint Module (DEM-16) – provides 16 digital set ports (note this is different to the DDM described above).
- Single Line Module (SLM-8) – This module provides connectivity for up to 8 analog devices.



Figure 3 Mitel 5000 Digital Expansion Interface (DEI)

Digital Telephones

The 5000 CP controller supports the Mitel 8528 and 8568 Telephones – the specific capabilities of each are noted in the table below, but both feature:

- a built-in speaker and microphone, allowing you to answer station and outside calls hands free, as well as take advantage of on-hook dialing
- a large message waiting lamp in the upper right hand corner that is visible from all angles
- 10 fixed function keys that allow one-touch operation for the most commonly used telephony functions or settings
- a built-in jack that allows headsets to be attached to the phone without interfering with handset operation
- optional Mitel Programmable Key Module (PKM) 12 and Mitel Programmable Key Module (PKM) 48 modules.

Each Telephone requires a Category E license (840.0417).
Refer to Product Bulletin PA20090501 for details.

IP Phones

The 5000 CP supports a variety of IP Phones including those pictured below. Each IP Phone requires a Category D license (840.0416).



Mitel 5320 IP Phone



Mitel 5340 IP Phone



Mitel 5330 IP Phone



Mitel 5360 IP Phone



Mitel 5304 IP Phone

Messaging

The 5000 CP supports two options for voice messaging:

- Mitel Basic Voice Mail 5000: Basic Voice Mail 5000 (BVM) provides up to 16 ports for voice mail, automated attendant (AA), Call Routing Announcements (CRA), Record-a-Call, etc. BVM provides basic Unified Messaging (forward-to-email) and it supports the VPIM protocol for voice mail networking. Most 5000 CP base kits include four ports, and additional ports can be licensed in increments of four ports.
- Mitel NuPoint Unified Messaging™ (UM): NuPoint UM, provided as part of MAS, provides up to 32 ports for voice mail, speech automated attendant, Call Director, etc. NuPoint UM's advanced Unified Messaging includes Fax capabilities, along with full bidirectional synchronization of deletions and message waiting indication. For addition information about NuPoint UM, please refer to the Mitel OnLine Product pages.

Basic Voice Mail Features

- Automated attendant application with recall destination
- Basic unified messaging
- Call diversion
- Call screening
- Cancel unheard messages
- Cascading remote message notification
- Centralized voice mail support
- Configurable 7 and 9 key for saving Custom call routing announcements with digit translation
- Directory services
- Information storage
- Message notification / retrieval
- Optional G.726-32 compression
- "Play only" mailbox
- Record-a-call
- Return call via caller ID or to an extension
- Schedule Time-based Application Router (STAR)
- Supervised transfer
- System group lists
- Un-delete message
- Unified messaging basic (forward-to-email)
- Voice mail
- Voice mail networking (VPIM, Digital and / or AMIS) Automatic Number Identification (ANI)
- Caller ID
- Dialed Number Identification Service (DNIS)
- Direct Inward Dialing (DID)
- E&M
- MGCP
- PRI national ISDN-2 support
- SIP (via SIP server software)
- T1 / OPX / Disconnect
- Trunk group PRI call-by-call
- Two-stage caller identification

Mobility

The 5000 CP includes a set of mobility features collectively known as Dynamic Extension Express. These features are designed around the understanding that most PBX users also have multiple phones, including a mobile phone, that they want to be contactable wherever they are, and that they don't always want to provide a list of numbers where they can be reached. Dynamic Extension Express is designed to allow users to be reachable at their mobile phone for business calls – so they can issue a single business number.

Dynamic Extension Express provides mobile twinning capability that causes the user's mobile phone to ring at that same time as their desk phone (Example 1). If the user is unable to answer the call, it goes to the user's office voice mail box.

Example 1:

	Desk Phone	Mobile Phone	Voice Mail	How long to ring at each step before advancing	Comments
Step 1	•	•		16	Immediately twins with mobile phone. Then goes to voice mail (after 16 seconds)
Step 2			•		

In addition, Dynamic Extension Express also offers a cascading capability sometimes referred to as step-wise routing (Example 2). With step-wise routing, the desk phone rings first before twinning the call to the mobile phone. This avoids the call to the mobile phone when the user is at their desk. Besides eliminating unnecessary missed calls on the user's mobile phone, step-wise routing does not needlessly consume costly trunks.

Example 2:

	Desk Phone	Mobile Phone	Voice Mail	How long to ring at each step before advancing	Comments
Step 1	•			8	Immediately twins with mobile phone. Then twins with mobile phone after 8 seconds of ringing my desk phone. Then goes to voice mail (after 16 seconds).
Step 2	•	•		8	
Step 3			•		

Since mobile phones typically have their own voice mail, Dynamic Extension Express needs to be able to distinguish between the user answering the call on the mobile phone versus the mobile phone's voice mail answering. Therefore, twinned calls to the mobile phone will play a greeting that says: "Press the '#' key to accept the call, or a '*' key to send the call to voice mail". This is a configuration option.

If the user should answer the twinned call on their mobile phone and subsequently return to the office, the Hand-off feature allows the user to easily move the call back to the desk phone by pressing the Hand-off feature key or feature code on the desk phone. Likewise, a user on a call on their desk phone can use the Hand-off feature to move the call to their mobile phone. This allows the user to leave their desk while remaining on the call.

Dynamic Extension Express offers a total of five destinations for each user that can be programmed to ring simultaneously:

- Desk phone
- Mobile phone
- Home IP Phone
- Home Phone
- UC Advanced Softphone (available only with UC Advanced 3.0 or later)

The Dynamic Extension Express features are configured by the system administrator. End users can turn Dynamic Extension Express on or off via a feature key code or using the voice guided Configuration Assistant.

The 5000 CP also supports Mitel's newest desktop peripheral, the Mitel 5610 DECT Handset and Mitel IP DECT Stand for the Mitel 5300 Series IP Phones. This unique accessory offers unprecedented convenience and limited mobility for IP Phone users. The cordless 5610 DECT Handset, with full dial pad and vibrant illuminated color screen, gives users the freedom and mobility to move away from their desk within their office or adjacent offices. Refer to Product Bulletin PA20090503 for more information.

System Features

- Account codes
 - Forced
 - Forced on toll calls
 - Optional
 - Standard
- ACD agent ID
- ACD / UCD hunt members spanning nodes
- Administrator station programming
- Advanced CO interfaces
- Agent help
- Analog phone support
- Attendant console
- Automatic Call Distribution (ACD)
- Automatic Daylight Saving Time
- Automatic Route Selection (ARS)
- Call accounting system
- Call routing to public network
- Caller ID
- Calling Line Identity Presentation (CLIP) for UK single-line sets
- Database conversion utility for Inter-Tel Axxess®
- Database user export feature
- Database restore / save
- Desktop interface (through Ethernet)
- Diagnostics and audit trail (database change log)
- Digital networking (ISDN-based)
- Digital phone support
- Direct Inward System Access (DISA)
- Door relay
- Emergency outgoing access
- Extension lists
- Fax over IP (based on T.38 standard)
- File import tool
- House phones
- Hunt groups (75)
 - ACD and UCD
 - Announcement recording
 - Automatic camp-on
 - Overflow recording
 - Playback device capability
 - Programmable hunt group wrap-up
 - Recall recording
 - Remote ACD hunt group
 - Send camp-on notifications to members in DNDIP networking
- Keymaps (configurable)
- Loop loss measurement tool
- Multilingual voice prompts: Japanese (Katakana characters), Spanish, American and British English, Canadian French
- Music on hold
 - Persistent MOH
 - Ring back
 - Silence
 - Tick tone
 - File-based music sources
- Night answer
- Off-Premise Extension (OPX)
- Open Application Interfaces (OAI)
- System level (ASAI, MVIP, CSTA, TSAPI, ASCII)
- Paging (10 zones)
- Passwords
- Peer-to-peer audio for IP devices
- Phantom extension
- Privacy
- Scheduled database back-up
- Secondary extension appearance
- Single line sets (ONS)
- SIP trunking
- System alarm display and reporting
- System forwarding
- System hold
- System OAI events
- System OAI third-party call control
- System speed dialing
- Toll restriction
- Multiple classes, day and night trunks
- Uniform Call Distribution (UCD)
- UPS monitoring

Phone Features

- Automatic call access
- Automatic camp-on to busy stations, trunks and ARS
- Background music
- Busy trunk / station callback (queue)
- Call forwarding (on or off premises)
 - All calls
 - If busy
 - If no answer
 - If no answer or busy
- Call screening
- Call transfer (on or off premises)
 - To hold
 - To park
 - To ring
- Call waiting (camp-on)
 - Outside and intercom calls
 - Off-hook ringing
- Caller ID name / number toggle
- Conferencing
 - Four parties per conference
 - Maximum 20 parties in a conference total
- Configurable caller ID propagation
- Data calls
- Directed call pick-up (reverse transfer)
- Directory (IC, CO and feature)
- Do-not-disturb messages
- Dynamic Extension Express
- Emergency call
- Feature buttons
- Feature directory
- Group call pick-up
- Group listen
- Group remove / replace from UCD / hunt groups
- Hands-free answer
- Hook-flash capability
- Hot keys
- Individual hold and recall
- Microphone mute
- Off-hook voice announce
- On-hook dialing
- Power fail transfer (supports 2 loop start trunks and 2 single line stations)
- Programmable feature codes
- Redial
- Remote feature programming
- Self-test function
- Station password
- Station speed dialing
- Station-to-station intercom calls
- Station-to-station messaging
- User-programmable keys
- User-programmable ring tone

Signaling Interfaces

- Automatic Number Identification (ANI)
- Caller ID
- Dialed Number Identification Service (DNIS)
- Direct Inward Dialing (DID)
- E&M
- MGCP
- PRI national ISDN-2 support
- SIP (via SIP server software)
- T1 / OPX / Disconnect
- Trunk group PRI call-by-call
- Two-stage caller identification

Administration and Diagnostics

The 5000 CP is quick and easy to install in both single-node and multi-node environments. The system can be configured through an installable PC client program that provides a powerful “explorer” user interface including copy / paste, wizards for common tasks, and context-sensitive help. Configuration can be performed over an IP connection or using the 5000 CP’s built-in modem. The 5000 CP also offers the highly productive capability to configure a system’s database off-line without connecting to an actual 5000 CP. The resulting database can easily be applied to an actual 5000 CP system.

The 5000 CP includes a powerful tool called “System Administration and Diagnostics” for installing, maintaining, and troubleshooting a system. System Administration and Diagnostics provides an easy-to-use, task-oriented interface into the inner workings of the 5000 CP.





Figure 4 5000 CP System Administration & Diagnostics

Licensing

The 5000 CP is sold as a “base kit” including the hardware and licenses necessary to get started — just add phones. Most base kits include quantities of some of the phone licenses. Each phone requires a license, and there are several phone licenses to choose from:

Description	Part	Supports
Category D	840.0416	Mitel 5304, 5312, 5324, 5320, 5330, 5340, 5360 IP Phones
Category E	840.0417	8528 / 8568 Telephone
Category F	840.0418	5601 DECT Handset, UC Express Softphone

In addition, the 5000 CP has several other licensable capabilities:

Description	Part	Comments
IP Networking	840.0224	Increases the feature-transparent IP networking between 5000 CP nodes, beyond the built-in limit of 6 channels, up to the hardware capacity of the system.
Individual PRI	840.0227	Enables the ISDN PRI protocol for one T1/E1 span. Note that one PRI license is typically included in the base kit.
Agent Help	840.0228	Enables the Agent Help capability for ACD.
Analog Voice Mail Hunt Group	840.0229	Enables the Analog Voice Mail Hunt Group capability. Although not commonly used for voice mail per se, the voice mail hunt group functionality is often used to interface with external equipment like fax servers.
Automatic Call Distribution	840.0230	Enables the Automatic Call Distribution feature set for the system.
Voice Mail AMIS Networking	840.0231	Enables BVM to network with other voice mail systems using the AMIS protocol (not commonly used).
Voice Mail Networking	840.0232	Enables BVM to network with other voice mail systems using the VPIM protocol
Remote ACD	840.0233	Enables the ability for ACD hunt groups to span nodes.
IP Gateway Trunk	840.0234	Enables one trunk on an IP Trunk gateway.
System OAI Events	840.0320	Enables (all) OAI applications to receive system events.
System OAI 3rd Party Call Control	840.0321	Enables (all) OAI applications to perform 3rd party call control
BVM 4 Ports	840.0460	Enables four (additional) ports for Basic Voice Mail up to a maximum of 16 ports.
Dual T-1 Second Port	840.0759	Enables the second port on one dual T1 module (T1M-2).
File Based	840.0819	Enables the use of one file-based Music-on-Music Source Hold port up to a maximum of five.
SIP Peering Trunk	840.0833	Enables one SIP (carrier) trunk.

Applications

The 5000 CP supports a rich set of applications from both Mitel and the Mitel Solutions Alliance (MSA) developer community.

Some key applications to note are offered as part of the MAS. MAS is actually multiple applications packaged together running on single server. MAS includes NuPoint UM, Speech Auto-Attendant, Mitel Audio & Web Conferencing (AWC), and optionally, Customer Service Manager / Business Dashboard.

Demo Kits

52002643 Mitel 5000 Demo Kit NA (Full)

Each Demo Kit includes an assortment of licenses for different phones and features. The full version of the kit includes five phones:

- 8528 Telephone
- 8568 Telephone
- 5312 IP Phone
- 5320 IP Phone
- 5340 IP Phone

Configuration Information

The 5000 CP is a modular system that can be configured to meet a wide variety of customer needs. At a high level, the 5000 CP has a set of built-in devices as well as few other expansion options. Please refer to Sales Workbench on Mitel OnLine for detailed configuration information.

Built-in capabilities:

- Four loop start trunks
- Four analog phone ports (ONS)
- One music port
- One door relay

Modular Expansion Bays in HX Controller (four):

- Digital Desktop Module (DDM-16)
- Dual T1 Module (T1M-2)
- Quad Loop Start Module (LSM-4)
- Quad Analog Phone Module (SLM-4)

Digital Expansion Interface (DEI) (up to four) each providing three expansion bays:

- Digital Endpoint Module (DEM-16)
- Analog Phone Module (SLM-8)

Note that the expansion modules for the DEI and the expansion modules for the HX Controller are not the same form factor.

The 5000 CP also supports two system-level options (see [Engineering Guidelines](#) for more details):

- Processor Expansion Card (PEC-1): the PEC-1 adds Digital Signal Processing (DSP) capability for supporting additional IP devices. The HX Controller usually provides enough DSP capability, but the PEC-1 is available for larger IP-centric installations.
- Processing Server (PS-1): The PS-1 is an additional server platform available for large and/or high traffic configurations.

The overall system capacities are listed in the table below. Note that because there are trade-offs, these capacities are not necessarily all possible at the same time.

System Capacities

	Digital	240	3 DDM-16s + 12 DEM-16s (4 DEIs)
	IP	250	PEC-1 recommended over 75
Phones	Analog	116	4 built-in + 4 SLM-4 + 12 SLM-8 (4 DEIs)
	Digital	8 T1/E1/PRI	4 dual T1/E1/PRI modules
	Analog	20	4 built-in + 4 LSM-4
Trunks	IP	100	PEC-1 recommended over 50
	Physical	1	Mini RCA jack
Music	File-based	5	Licensed individually
	Ports	16	Licensed in chunks of 4
Basic Voice Mail	Mailboxes	500+	Not licensed

Training

Refer to Mitel OnLine for information on Training requirements and options available for the 5000 CP.

Supporting Material

There are several useful supporting documents available on Mitel OnLine, including:

- Customer Presentations
- Technical Documentation
- Product Bulletins (e.g. phones, applications)
- Sales Workbench

Questions and Answers

Q: Why is Mitel introducing the 5000 CP into Canada? Why now?

A. The 5000 CP has been sold in the US and the UK for about five years, dating back to before Mitel acquired Inter-Tel in 2007. With the re-focus of the Mitel SX-200 IP Communications Platform (ICP) on the hospitality market and Avaya / Nortel® discontinuing the BCM products, the 5000 CP and the HX Controller provide a strong offering, particularly when digital phones are needed.

Q: Why are there separate base kits for Digital and IP?

A. The base kit approach is designed to simplify the ordering process, as well as providing appropriate pricing. The only differences between the two kits are the DDM-16 hardware in the digital kit and the included phone licenses. Either base kit can support adding the other kind of phones.

Q: How is the 5000 CP different from MCD or the Mitel 3000 Communications System (CS)?

A. Although there is some overlap in size and capability, the 5000 CP is targeted at digital and IP configurations in the 15 to 75 user size range typically involving applications that often involve a handful of locations. The 3000 CS is targeted at smaller single-site installations that have fewer application needs. MCD is targeted at IP enterprise customers that need both scaling and more-sophisticated enterprise back-office integration.

Q: Can I network a 5000 CP with other 5000 CP systems?

A. Yes, the 5000 CP provides very rich feature-transparent networking. IP networking of up to six channels is included with no additional licensing. The 5000 CP also networks with the Inter-Tel Axxess® product.

Q: Can I network / cluster a 5000 CP with MCD?

A. No, the feature transparent networking capabilities are only between like systems. However, it is possible to connect a 5000 CP with MCD, using PRI or SIP trunks to provide basic calling features like caller-ID. Refer to the Mitel OnLine Knowledge Base for additional information.

Q: Why doesn't the 5000 CP work with Mitel Border Gateway (MBG), including Teleworker?

A. The 5000 CP will eventually support MBG's Teleworker service, but there is still some development to be done. The 5000 CP offers a different method of supporting remote workers that requires configuration of the customer's firewall. The 5000 CP's method does not require any additional licensing.

Q: How is OAI different than MiTAI, and how do I get the documentation?

A. OAI (Open Application Interface) is similar to MiTAI in providing an interface for computer telephony. The two protocols are different with OAI having slightly more capability. Information about both protocols is available through the Mitel Solutions Alliance (MSA) program.

Q: I've seen a 5000 CP that was in a 1u box. How does that relate to the HX Controller?

A. You are referring to a hardware platform now being called the "CS Controller". The CS Controller was the predecessor to the new HX Controller being introduced with version 4.0 software. The main difference between the two controllers is that the HX Controller can support digital phones natively in the main chassis, while the CS Controller required an expansion chassis (DEI). The same 5000 CP software supports both controllers.

Q: Which countries is the 5000 CP sold into?

A. The 5000 CP is currently sold into the US, Canada, and the UK.

Q: Does the 5000 CP support SIP phones?

A. Yes, version 4.0 software introduces support for SIP phones on the 5000 CP, regardless of whether it's running on the HX Controller or CS Controller. Unfortunately, SIP is not a particularly tight standard, so all SIP phones will have to be separately certified against the 5000 CP by the SIP Centre of Excellence. Out of the chute, the only two supported SIP phone devices are the 5610 DECT Handset and the UC Express Softphone. Others will follow when certification can be completed.

Q: Does the 5000 CP support SIP trunks?

A. Yes. Refer to the Mitel OnLine Knowledge base for a current list of supported carriers.

Q: What if I have a SIP device that I want to connect to a 5000 CP?

A. First, check the Mitel OnLine Knowledge base for a current list of supported devices. If the device is not currently supported, contact the Mitel SIP Centre of Excellence to request certification.

Q: Are the expansion modules in the DEI compatible with the expansion modules in the HX Controller itself?

A. No. Although it may not be obvious to the casual eye, the modules are physically different sizes.

Q: Does the HX Controller fit in a standard rack?

A. Yes, the 5000 CP includes rack-mount "ears" that make it easily rack-mountable.

Q: Is there web-based programming for the 5000 CP?

A. No, the 5000 CP provides a powerful installable client that offers several advantages over web-based configuration including copy / paste, context-sensitive help, and most importantly, the ability to configure a system off-line. There are web pages for diagnostic purposes.

Q: Are there options for redundancy/resiliency?

A. No. Our market research has indicated that, for the SMB market, the R&D investment and cost overhead for redundancy isn't justified by the market opportunity.

Q: Does the 5000 CP communicate with the AMC like MCD does?

A. The 5000 CP uses the Mitel Applications Management Center (AMC), but it still is in "off-line" mode. This means that the AMC generates a license file that must be downloaded into the 5000 CP. "On-Line" AMC licensing is on the road map for a future release.

Q. Why does the DDM-16 have different cabling than the DEM-16, and can I make my own cables?

A. Although not obvious to the casual observer, the DDM-16 location in the HX Controller means that it is somewhat smaller than the DEM-16. There is not enough space on the faceplate to use the same RJ45 approach used on the DEM, nor is there enough space to use a standard "champ" connector. Instead, the DDM-16 uses a higher density connector. Although the connector is not proprietary to Mitel, it is unlikely that a technician would have access to the required tools. Therefore, Mitel has chosen to include the cable with the DDM-16. The cable can also be purchased separately as an Field Replaceable Unit (FRU).

Global Headquarters	U.S.	EMEA	CALA	Asia Pacific
Tel: +1(613) 592-2122 Fax: +1(613) 592-4784	Tel: +1(480) 961-9000 Fax: +1(480) 961-1370	Tel: +44(0)1291-430000 Fax: +44(0)1291-430400	Tel: +1(613) 592-2122 Fax: +1(613) 592-7825	Tel: +852 2508 9780 Fax: +852 2508 9232

www.mitel.com

For more information on our worldwide office locations, visit our website at www.mitel.com/offices

THIS DOCUMENT IS PROVIDED TO YOU FOR INFORMATIONAL PURPOSES ONLY. The information furnished in this document, believed by Mitel to be accurate as of the date of its publication, is subject to change without notice. Mitel assumes no responsibility for any errors or omissions in this document and shall have no obligation to you as a result of having made this document available to you or based upon the information it contains.

M MITEL (design) is a registered trademark of Mitel Networks Corporation. All other products and services are the registered trademarks of their respective holders.

© Copyright 2010, Mitel Networks Corporation. All Rights Reserved.

GD 1162_6454

