



Physical Memory Recommendations for Cisco CallManager Version 4.0 and later

Cisco® CallManager Version 4.0 provides many improvements to security, interoperability, functionality, and productivity that were not included in previous versions of Cisco CallManager. The new feature set of Cisco CallManager 4.0 requires additional server memory in order to run successfully.

In response to recent data from Cisco Systems® labs and customers, Cisco has increased the minimum recommended amount of physical memory required to successfully operate Cisco CallManager clusters that are running Version 4.0 and later.

This product bulletin summarizes the new memory recommendations.

PUBLISHER MEMORY

Memory required for a Cisco CallManager publisher server follows:

- Cisco recommends a minimum of 1 GB of physical memory on all servers running Cisco CallManager 4.0 and higher. This includes both publisher and subscriber servers.
- Additional memory beyond 1 GB is required if you are doing two or more of the following:
 - Using the Cisco AVVID (Architecture for Voice, Video and Integrated Data) XML Layer (AXL) interface or performing Structured Query Language (SQL) queries against the Cisco CallManager database
 - Running the Cisco IP Telephony Backup and Restore System (BARS) application
 - Using Cisco CallManager Serviceability Webpages and Real-Time Monitoring tool
 - Using Personal Address Book (PAB)
 - Using third-party billing applications
- If the Cisco CallManager publisher is also operating as a primary or backup call processing agent, additional memory is required to run Cisco CallManager 4.0 and later. This means that a server that is acting as the database publisher and has the ccm.exe or cti.exe service(s) running requires additional memory.

Table 1 outlines the minimum memory recommendations for Cisco CallManager publishers running Version 4.0 and later.

Table 1. Memory Requirements for Cisco CallManager Publishers Running Version 4.0 and Later

Condition or Server	Cisco 7815 Media Convergence Server (MCS)	Cisco 7825 MCS	Cisco 7835 MCS
Base publisher memory requirements	1 GB	1 GB	1 GB
Publisher that is running Cisco CallManager service	1.5 GB 2 GB recommended	2 GB	2 GB
Publisher running two or more of the services listed previously	1.5 GB 2 GB recommended	2 GB	2 GB

SUBSCRIBER MEMORY

Memory required for a Cisco CallManager subscriber server follows:

- Cisco recommends a minimum of 1 GB of physical memory on all servers running Cisco CallManager 4.0(2a) and higher. This includes both publisher and subscriber servers.
- If you have more than 500 devices on a single Cisco CallManager server, Cisco recommends more memory. This includes devices that would fail over to that Cisco CallManager server if a server or network experiences outage.
- Cisco CallManager running co-resident with the Cisco Carrier Routing System (CRS) or the Cisco IP Contact Center (IPCC) Express requires more than 1 GB of memory.

Table 2 outlines the minimum memory recommendations for Cisco CallManager publisher servers running Version 4.0 and later.

Table 2. Memory Requirements for Cisco CallManager Publisher Servers Running Version 4.0 and Later

Condition or Server	Cisco 7815 Media Convergence Server (MCS)	Cisco 7825 MCS	Cisco 7835 MCS
Base Subscriber Memory Requirements	1 GB	1 GB	1 GB
Subscriber with more than 500 devices	Not supported	2 GB	2 GB
Co-resident Cisco CallManager and Cisco CRS or IPCC Express	1.5 GB 2 GB recommended	2 GB	2 GB

Note: Earlier versions of the Cisco 7815 have a maximum memory capacity of 1.5 GB. These servers should continue to operate properly under the constraints within which they were designed to run.

MEMORY IN ORDERABLE CISCO MCSS

Table 3 outlines the current base memory in shipping Cisco MCSs.

Table 3. Base Memory for Cisco MCSs

Server Part Number	Base Memory
MCS-7815-I1-IPC1	1 GB
MCS-7815-I1-IPC1	2 GB
MCS-7815-I2-IPC1	2 GB
MCS-7825H-3.0-IPC1	1 GB
MCS-7825-H1-IPC1	2 GB
MCS-7825-H2-IPC1	2 GB
MCS-7825I-3.0-IPC1	1 GB
MCS-7825-I1-IPC1	2 GB
MCS-7825-I2-IPC1	2 GB
MCS-7835-H1-IPC1	2 GB
MCS-7835-I1-IPC1	2 GB
MCS-7845-H1-IPC1	4 GB
MCS-7845-I1-IPC1	4 GB

MEMORY UPGRADE

Refer to Tables 4 and 5 for part numbers for the new Cisco CallManager memory recommendations. The products should be ordered directly from HP or IBM, respectively.

Table 4. Memory for HP Servers*

Product ID	Compaq Model	Shipped Processor Speed	Total Memory Slots	Maximum Memory	Current Dual In-Line Memory Modules (DIMMs)	Desired Memory	Quantity	Memory Kit Part Number to Achieve Target
MCS-7825-800	DL320	800 MHz	4	2 GB	2 x 256 MB	2 GB	4	512 MB DIMMs Contact HP
MCS-7825-1133	DL320	1.133 GHz	4	2 GB	2 x 512 MB	2 GB	4	512 MB DIMMs Contact HP
MCS-7825H-2266	DL320-G2	2.266 GHz	4	4 GB	2 x 512 MB	2 GB	2	512 MB DIMMs Contact HP
MCS-7825H-3000	DL320-G2	3.06 GHz	4	4 GB	2 x 512 MB	2 GB	2	512 MB DIMMs Contact HP
MCS-7825-H1	DL320-G3	3.4 GHz	4	4 GB	2 x 1 GB	2 GB	-	-
MCS-7825-H2	DL320-G4	2.8 GHz	4	8 GB	2 x 1 GB	2 GB	-	-
MCS-7835	DL380	733 MHz	4	4 GB	2 x 256 MB	2 GB	4	512 MB DIMMs Contact HP
MCS-7835-1000	DL380	1 GHz	4	4 GB	2 x 512 MB	2 GB	2	512 MB DIMMs Contact HP
MCS-7835-1266	DL380 G2	1.266 GHz	6	6 GB	2 x 512 MB	2 GB	2	512 MB DIMMs Contact HP
MCS-7835H-2400	DL380-G3	2.4 GHz	6	6 GB	2 x 512 MB	2 GB	2	512 MB DIMMs Contact HP
MCS-7835H-3000	DL380-G3	3.06 GHz	6	6 GB	2 x 512 MB	2 GB	2	512 MB DIMMs Contact HP
MCS-7835-H1	DL380-G4	3.4 GHz	6	6 GB	2 x 1 GB	2 GB	-	-
MCS-7845H-2400	DL380-G3	2.4 GHz	6	6 GB	4 x 1 GB	4 GB	-	-
MCS-7845H-3000	DL380-G3	3.06 GHz	6	6 GB	4 x 1 GB	4 GB	-	-
MCS-7845-H1	DL380-G4	3.4 GHz	6	6 GB	4 x 1 GB	4 GB	-	-

Order from: http://welcome.hp.com/country/us/en/prodserv/options_supplies.html

Table 5. Memory for IBM Servers

Product ID	IBM Model	Shipped Processor Speed	Total Memory Slots	Maximum Memory	Current DIMMs	Desired Memory	Quantity	Memory Kit Part Number to Achieve Target
MCS-7815-1000	IBM x200	1 GHz	3	1.5 GB	2 x 256 MB	1.5 GB	3	512 MB DIMMs * Contact IBM Requires removal of existing DIMMs
MCS-7815I-2000	IBM x205	2 GHz	2	2 GB	1 x 512 MB	2.0 GB	2	1 GB DIMMs* Contact IBM Requires removal of existing DIMM
MCS-7815I-3000	IBM x206	3.06 GHz	4	4 GB	2 x 512 MB	1.5 GB	1	512 MB DIMM Contact IBM
MCS-7815-I1-IPC1	IBM x206	3.06 GHz	4	4 GB	2 x 512 MB	2 GB	2	512 MB DIMMs Contact IBM
MCS-7815-I1-IPC3	IBM x206	3.06 GHz	4	4 GB	2 x 1 GB	2 GB	-	-
MCS-7815-I2	IBM x206m	2.8 GHz	4	8 GB	2 x 1 GB	2 GB	-	-

MCS-7825I-3000	IBM x306	3.06 GHz	4	4 GB	2 x 512 MB	2 GB	2	512 MB DIMMs Contact IBM
MCS-7825-I1	IBM x306	3.4 GHz	4	4 GB	2 x 1 GB	2	-	-
MCS-7825-I2	IBM x306m	2.8 GHz	4	8 GB	2 x 1 GB	2	-	-
MCS-7835I-2400	IBM x345	2.4 GHz	4	8 GB	2 x 512 MB	2 GB	2	512 MB DIMMs Contact IBM
MCS-7835I-3000	IBM x345	3.06 GHz	4	8 GB	2 x 512 MB	2 GB	2	512 MB DIMMs Contact IBM
MCS-7835-I1	IBM x346	3.4 GHz	8	8 GB	2 x 1 GB	2 GB	-	-
MCS-7845-I1	IBM x346	3.4 GHz	8	8 GB	4 x 1GB	4 GB	-	-

*Order these parts from: <http://www.ibm.com/shop/us/maintenanceparts>



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