SNMP MIBs and Traps Support

This section describes the MIBs available on your system. When you access your MIB data you will expose additional MIBs not listed in this section. The additional MIBs you expose through the process are primarily used internally for things like inter-virtual machine management. Cisco does not support customer-side SNMP monitoring that uses these MIBs, nor is there any guarantee that these MIBs will be used in future releases of Cisco Webex Meetings Server.

Supported SNMP MIBs

The SNMP MIB ftp://ftp.cisco.com/pub/mibs/v2/CISCO-WBX-MEETING-MIB.my is supported by Cisco Webex Meetings Server. Not all MIB variables are applicable to Cisco Webex Meetings Server or to all Cisco Webex Meetings Server deployment types. For example, data center related MIBs do not apply to Cisco Webex Meetings Server systems.

CWMS System Information MIBS

Object[1]	OID	Description
cwCommSystemVersion Type: String	.1.3.6.1.4.1.9.9.809.1.1.1	Cisco Webex system version.
cwCommSystemObjectID Type: Autonomous	.1.3.6.1.4.1.9.9.809.1.1.2	The sysObjectID as defined in SNMPv2-MIB.

[1] All objects in this table are read only (RO).

CPU-Related MIBs

Object	Read/Write Privilege	OID	Description
cwCommCPUTotalUsage Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.1	Percentage of CPU usage by a host component. The total CPU usage contains CPU user usage, CPU system usage, and CPU nice usage. The CPU user time: CPU time spent in user space. The CPU system time: CPU time spent in kernel space. The CPU nice time: CPU time spent on low priority processes.
cwCommCPUUsageWindow Type: Gauge32	RW	.1.3.6.1.4.1.9.9.809.1.2.1.2	Duration (in seconds) before a notification (trap) is sent indicating a CPU usage has crossed a normal/minor/major threshold and remains at the new threshold.
cwCommCPUTotalNumber Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.3	Number of CPUs on the system.
cwCommCPUUsageTable Type: n/a	Not-accessible	.1.3.6.1.4.1.9.9.809.1.2.1.4	A list of CPU usage registers on the device.
cwCommCPUIndex Type: Unsigned	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.1	Unique CPU identifier. Each CPU has its own usage and breakdown values.
cwCommCPUName Type: String	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.2	CPU name. For example, Intel® Xeon™ CPU 3.00GHz.

Object	Read/Write Privilege	OID	Description
cwCommCPUUsage Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.3	Percentage of total CPU resources used. Usually GHz is used for measuring CPU power. Since GHz is too large for measuring some CPU usage categories, KHz is used as the measuring unit. The system speed multiplies by the fraction of each CPU section (for example, idle, nice, user) to get the CPU KHz for each category. KHz is used as the unit of measure for all the CPU categories in this table.
cwCommCPUUsageUser Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.4	CPU power executed in user mode.
cwCommCPUUsageNice Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.5	CPU power executed on low priority processes. Nice is a program found on UNIX and Linux. It directly maps to a kernel call of the same name. Nice is used to invoke a utility or shell script with a particular priority, thus giving a process more or less CPU time than other processes.
cwCommCPUUsageSystem Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.6	CPU power executed in kernel mode.
cwCommCPUUsageIdle Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.7	CPU power in idle status.
cwCommCPUUsageIOWait Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.8	CPU power used when waiting for disk I/O to complete.
cwCommCPUUsageIRQ Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.9	CPU power used when handling an interrupt request.

Object	Read/Write Privilege	OID	Description
cwCommCPUUsageSoftIRQ Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.10	CPU power used when handling a software interrupt request.
cwCommCPUUsageSteal Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.11	CPU power used on other tasks when running in a virtualized environment.
cwCommCPUUsageCapacitySubTotal Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.12	Current total CPU power.
cwCommCPUMonitoringStatus Type: String	RO	.1.3.6.1.4.1.9.9.809.1.2.1.5	Monitoring status of CPU resources: • closed (0)—Resource not available. • open(1)—Resource is available.
cwCommCPUCapacityTotal Type: Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.6	Overall CPU capacity.

CWMS Memory Information

Object[2]	OID	Description
cwCommMEMUsage Type: Gauge32	.1.3.6.1.4.1.9.9.809.1.2.2.1	Physical memory usage of the virtual machine.
cwCommMEMMonitoringStatus Type: String	.1.3.6.1.4.1.9.9.809.1.2.2.2	Monitoring status of the memory resource: closed (0)—Resource not available. open(1)—Resource is available.
cwCommMEMTotal Type: Gauge32	.1.3.6.1.4.1.9.9.809.1.2.2.3	Total physical memory size (in KB) of the host.
cwCommMEMSwapUsage Type: Gauge32	.1.3.6.1.4.1.9.9.809.1.2.3.1	Physical memory usage (in percentage) and swap memory usage of the host.

Object[2]	OID	Description
cwCommMEMSwapMonitoringStatus Type: String	.1.3.6.1.4.1.9.9.809.1.2.3.2	This object provides the monitoring status of memory and swap memory. closed (0)—The memory and swap memory status is available. open(1)—The memory and swap memory status is not available.

[2] All objects in this table are read only (RO).

Disk Usage

Object[3]	OID	Description
cwCommDiskUsageCount	.1.3.6.1.4.1.9.9.809.1.2.5.1	Count of how many disks (for example, local disk, remote disk, meeting recording disk) available in the system.
cwCommDiskUsageIndex	.1.3.6.1.4.1.9.9.809.1.2.5.2.1.1	Index of entries in the table that contain management information generic to the disk usage.
cwCommDiskPartitionName	.1.3.6.1.4.1.9.9.809.1.2.5.2.1.2	Disk partition name. For example, the partition /opt or /dev.
cwCommDiskUsage	.1.3.6.1.4.1.9.9.809.1.2.5.2.1.3	Current disk usage (in percentage) on the host.
cwCommDiskTotal	.1.3.6.1.4.1.9.9.809.1.2.5.2.1.4	Total disk space size (in MB) of this host.
cwCommDiskMonitoringStatus	1.3.6.1.4.1.9.9.809.1.2.5.3	Monitoring status of disk resources. close (0)—The disk usage status is not available. open (1)—The disk usage status is available.

[3] All objects in this table are read only (RO).

Supported SNMP Traps

Cisco Webex Meetings Server supports SNMP traps.

Notification Events

cwCommSystemResourceUsageNormalEvent (.1.3.6.1.4.1.9.9.809.0.1)

Notification when a system resource usage changes from the *normal* status. System can send out this notification in the event:

- The `cwCommCPUUsage` value of one CPU changes to be less than the value of pre-defined CPU Minor Threshold.
- The value of `cwCommMEMUsage` changes to be less than the value of a pre-defined MEM Minor Threshold.
- The value of `cwCommMEMSwapUsage` changes to be less than in the pre-defined MEM SwapMinor Threshold.
- The value of `cwCommFileUsage` changes to be less than the pre-defined File Minor Threshold.
- The value of `cwCommDiskUsage` on one disk changes to be less than the pre-defined Disk Minor Threshold.

cwCommSystemResourceUsageMinorEvent (.1.3.6.1.4.1.9.9.809.0.2)

Notification when a system resource usage changes from the *minor* status. The minor notification means the system has some issues and the system administrator must resolve them. System can send out this notification in the event:

- The `cwCommCPUUsage` value of one CPU changes to be larger than or equal to the value of pre-defined CPU Minor Threshold and be less than cwCommCPUMajorThreshold.
- The `cwCommMEMUsage` value changes to be larger than or equal to the value of the pre-defined MEM Minor Threshold and be less than the pre-defined MEM Major Threshold.
- The `cwCommMEMSwapUsage` value changes to be larger than or equal to the value of pre-defined MEM Swap Minor Threshold and be less than the pre-defined MEM Swap Major Threshold.
- The `cwCommFileUsage` value changes to be larger than or equal to the value of pre-defined File Minor Threshold and be less than the pre-defined File Major Threshold.
- The `cwCommDiskUsage` value of one disk changes to be larger than or equal to the value of pre-defined Disk Minor Threshold and be less than the pre-defined Disk Major Threshold.

cwCommSystemResourceUsageMajorEvent (.1.3.6.1.4.1.9.9.809.0.3)

This notification indicates system resource usage changes to the *major* status. The major notification means the system is in critical state and it required the system administrator to take action immediately. The system can send out this notification in the event:

- The `cwCommCPUUsage` value of one CPU changes to be larger than or equal to the value of pre-defined CPU Major Threshold.
- The `cwCommMEMUsage` value changes to be larger than or equal to the value of pre-defined MEM Major Threshold.
- The `cwCommMEMSwapUsage` value changes to be larger than or equal to the value of pre-defined MEM Swap Major Threshold.
- The `cwCommFileUsage` value changes to be larger than or equal to the value of pre-defined File Major Threshold.

- The `cwCommDiskUsage` value of one disk changes to be larger than or equal to the value of pre-defined Disk Major Threshold.

Trap Data

Supported trap data. We recommend that you set your MIB filter to receive only these traps.

Trap Data	Description
Name: cwCommNotificationHostAddressType **OID:** .1.3.6.1.4.1.9.9.809.1.2.4.1 **Textual Convention:** InetAddressType	Type of the network address made availab cwCommNotificationHostAddress.
Name: cwCommNotificationHostAddress **OID:** .1.3.6.1.4.1.9.9.809.1.2.4.2 **Textual Convention:** InetAddress	The host IP address sent with the notifica
Name: cwCommNotificationResName **OID:** .1.3.6.1.4.1.9.9.809.1.2.4.3 **Textual Convention:** CiscoWebexCommSysRes	The system resource name sent with the n named system resource has exceeded pre- 0. cwCommTtoalCPUUsage 1. cwCommMemUsage 2. cwCommMemSwapUsage 3. open file descriptor (no MIB data) 4. cwCommSocketUsage 5. one of the cwCommDiskTotal
Name: cwCommNotificationResValue **OID:** .1.3.6.1.4.1.9.9.809.1.2.4.4 **Textual Convention:** Unsigned32	System resource percentage usage value v
Name: cwCommNotificationSeqNum **OID:** .1.3.6.1.4.1.9.9.809.1.2.4.5 **Textual Convention:** Counter32	Sequence number that tracks the order of