SNMP MIBs and Traps Supported

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 following sections describe the SNMP MIBs supported by Cisco WebEx Meetings Server.

Cisco WebEx Meetings Server System Information

Object	Type	Read/Write Privileges	OID	Description
cwCommSystemVersion	String	RO	.1.3.6.1.4.1.9.9.809.1.1.1	This object provides the version of the WebEx system.
cwCommSystemObjectID	AutonomousType	RO	.1.3.6.1.4.1.9.9.809.1.1.2	This object provides the sysObjectID defined in SNMPv2-MIB.

CPU-Related MIBs

Object	Type	Read/Write Privileges	OID	Description
cwCommCPUTotalUsage	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.1	This object provides the total percentage of CPU usage of 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	Gauge32	RW	.1.3.6.1.4.1.9.9.809.1.2.1.2	This object controls the duration (in seconds) to wait before sending notification (trap) after a CPU usage threshold is crossed. The notification is sent only if CPU usage crosses a threshold level (normal/minor/major) and remains in the new threshold level over the duration defined in this window.
cwCommCPUTotalNumber	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.3	This object provides the total number of CPUs on the system.
cwCommCPUUsageTable	n/a	Not accessible	.1.3.6.1.4.1.9.9.809.1.2.1.4	A list of CPU usage registering on the device.
cwCommCPUIndex	Unsigned32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.1	This object uniquely identifies a CPU in the table. Each CPU has its own usage and breakdown values.
cwCommCPUName	String	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.2	This object provides the CPU name. For example, Intel(R) Xeon(TM) CPU 3.00GHz.
cwCommCPUUsage	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.3	This object provides the 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 (in KHz) multiplies by the fraction of each CPU section (for example, idle, nice, user) to get the CPU KHz of each category. Khz is used as the unit for all the CPU categories below.

Object	Type	Read/Write Privileges	OID	Description
cwCommCPUUsageUser	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.4	This object provides the CPU power executed in user mode.
cwCommCPUUsageNice	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.5	This object provides the 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 the process more or less CPU time than other processes.
cwCommCPUUsageSystem	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.6	This object provides the CPU power executed in kernel mode.
cwCommCPUUsageIdle	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.7	This object provides the CPU power in idle status.
cwCommCPUUsageIOWait	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.8	This object provides the CPU power used when waiting for disk I/O to complete.
cwCommCPUUsageIRQ	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.9	This object provides the CPU power used when handling an interrupt request.
cwCommCPUUsageSoftIRQ	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.10	This object provides the CPU power used when handling a software interrupt request.
cwCommCPUUsageSteal	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.11	This object provides the CPU power used on other tasks when running in a virtualized environment.
cwCommCPUUsageCapacitySubTotal	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.4.1.12	This object provides the current total CPU power.
cwCommCPUMonitoringStatus	String	RO	.1.3.6.1.4.1.9.9.809.1.2.1.5	This object provides the monitoring status of CPU resources: • closed (0)—Resource not available. • open(1)—Resource is available.
cwCommCPUCapacityTotal	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.1.6	This object provides the overall CPU capacity.

Cisco WebEx Meetings Server Memory Information

Object	Type	Read/Write Privileges	OID	Description
cwCommMEMUsage	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.2.1	This object indicates the physical memory usage of the virtual machine.
cwCommMEMMonitoringStatus	String	RO	.1.3.6.1.4.1.9.9.809.1.2.2.2	This object provides the monitoring status of the memory resource: • closed (0)—Resource not available. • open(1)—Resource is available.
cwCommMEMTotal	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.2.3	This object provides the total physical memory size (in KB) of the host.
cwCommMEMSwapUsage	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.3.1	This object provides the host's physical memory usage (in percentage) and swap memory usage.
cwCommMEMSwapMonitoringStatus	String	RO	.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.

Disk Usage

Object	Type	Read/Write Privileges	OID	Description
cwCommDiskUsageCount	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.5.1	This object provides the count of how many disks (for example, local disk, remote disk, meeting recording disk) available in the system.

Object	Type	Read/Write Privileges	OID	Description
cwCommDiskUsageIndex	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.5.2.1.1	This object is an index of entries in the table that contain management information generic to the disk usage.
cwCommDiskPartitionName	String	RO	.1.3.6.1.4.1.9.9.809.1.2.5.2.1.2	This object provides the disk partition name. For example, the partition /opt or /dev.
cwCommDiskUsage	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.5.2.1.3	This object provides the current disk usage (in percentage) on the host.
cwCommDiskTotal	Gauge32	RO	.1.3.6.1.4.1.9.9.809.1.2.5.2.1.4	This object provides the total disk space size (in MB) of this host.
cwCommDiskMonitoringStatus	String	RO	1.3.6.1.4.1.9.9.809.1.2.5.3	This object provides the monitoring status of disk resources. • close (0)—The disk usage status is not available. • open (1)—The disk usage status is available.

Supported SNMP Traps

The following sections describe the SNMP traps supported by Cisco WebEx Meetings Server.

Notification Events

The following are supported notification events.

Name	OID	Description
cwCommSystemResourceUsageNormalEvent	.1.3.6.1.4.1.9.9.809.0.1	This notification indicates that some system resource usage changes to the normal status. System could send out this notification once one of the following cases happens:
		1 The cwCommCPUUsage value of one CPU changes to be less than the value of pre-defined CPU Minor Threshold.
		2 The value of cwCommMEMUsage changes to be less than the value of pre-defined MEM Minor Threshold.
		3 The value of cwCommMEMSwapUsage changes to be less than in the value of pre-defined MEM SwapMinor Threshold.
		4 The value of cwCommFileUsage changes to be less than the value of pre-defined File Minor Threshold.
		5 The value of cwCommDiskUsage on one disk changes to be less than the value of pre-defined Disk Minor Threshold.

Name	OID	Description
cwCommSystemResourceUsageMinorEvent	.1.3.6.1.4.1.9.9.809.0.2	This notification indicates that some system resource usage changes to the minor status. System could send out this notification once one of the following cases happens: 1 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 the value of cwCommCPUMajorThreshold. 2 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 value of pre-defined MEM Major Threshold. 3 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 value of pre-defined MEM Swap Major Threshold. 4 The cwCommFileUsage value changes to be larger than or equal to the value of pre-defined File Minor Threshold and be less than the value of pre-defined File Major Threshold. 5 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 value of pre-defined Disk Major Threshold. The minor notification means the system has some issues and the system administrator must resolve them.

Name	OID	Description
cwCommSystemResourceUsageMinorEvent	.1.3.6.1.4.1.9.9.809.0.3	This notification indicates that some system resource usage changes to the major status. System could send out this notification once one of the following cases happens: 1 The cwCommCPUUsage value of one CPU changes to be larger than or equal to the value of pre-defined CPU Major Threshold. 2 The cwCommMEMUsage value changes to be larger than or equal to the value of pre-defined MEM Major Threshold. 3 The cwCommMEMSwapUsage value changes to be larger than or equal to the value of pre-defined MEM Swap Major Threshold. 4 The cwCommFileUsage value changes to be larger than or equal to the value of pre-defined File Major Threshold. 5 The cwCommDiskUsage value of one disk changes to be larger than or equal to the value of pre-defined Disk Major Threshold. The major notification means the system is in critical status, it needs the system administrator to take action immediately.

Trap Data

The following are supported trap data. Set your MIB filter to only receive the traps described below.

Name	OID	Textual Convention	Description
cwCommNotificationHostAddressType	.1.3.6.1.4.1.9.9.809.1.2.4.1	InetAddressType	This object represents the type of the network address made available through cwCommNotificationHostAddress.
cwCommNotificationHostAddress	.1.3.6.1.4.1.9.9.809.1.2.4.2	InetAddress	This object provides the host IP address sent with the notification.

Name	OID	Textual Convention	Description
cwCommNotificationResName	.1.3.6.1.4.1.9.9.809.1.2.4.3	CiscoWebExCommSysRes	This object provides the system resource name which is sent with notification. It indicates the named system resource has over pre-defined warning levels. 0. cwCommTtoalCPUUsage 1. cwCommMemUsage 2. cwCommMemSwapUsage 3. open file descriptor (no MIB data) 4. one of the cwCommDiskTotal
cwCommNotificationResValue	.1.3.6.1.4.1.9.9.809.1.2.4.4	Unsigned32	This object provides the system resource percentage usage value with notification.
cwCommNotificationSeqNum	.1.3.6.1.4.1.9.9.809.1.2.4.5	Counter32	This object provides sequence number. It is used for tracking the order of the notifications.