



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

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Event indicates an issue with system performance or health.
Fault signifies an issue with the system; an incident ticket is generated.
Performance refers to system functioning and responsiveness.
Report indicates a report is available that includes that data.

Monitoring Details for Cisco Unified Communications Manager (CUCM) versions 3.3x – 8.x

Cisco Unified Communications Remote Management Service is a comprehensive solution that provides monitoring, issue resolution, and around the clock management of the converged network infrastructure and Cisco voice applications.

Attribute	Description	Event		Report
		Fault	Performance	
VOICE GATEWAY DEVICE AVAILABILITY				
Monitors availability of voice gateway devices and interfaces				
Registered Hardware Phones	Number of registered hardware phones on Cisco CallManager	✓		✓
Phone Registration Problem	Alerts on threshold of phones not registered to primary CM	✓		
Registered Other Station Devices	Number of registered other station devices on Cisco CallManager	✓		
Registered Analog Access	Number of registered analog access devices on Cisco CallManager	✓		
Out of Service Analog Ports	Number of ports that are out of service	✓ (ver 5.x-8.x)		
Active MGCP PRIs per CallManager	Number of T1/E1 PRI [channels] that were active at timestamp	✓		
Active T1 PRI per MGCP Gateway	Number of T1 PRI [channels] that were active at timestamp	✓		
Active E1 PRI per MGCP Gateway	Number of E1 PRI [channels] that were active at timestamp	✓		
Active BRI per MGCP Gateway	Number of BRI [channels] that were active at timestamp	✓		
Total MGCP T1/E1 CAS per CallManager	Number of defined T1/E1CAS [channels] on Cisco CallManager	✓		
Active T1 CAS per MGCP Gateway	Number of T1 CAS [channels] that were active at timestamp	✓		
Active E1 CAS per MGCP Gateway	Number of E1 CAS [channels] that were active at timestamp	✓		
Registered MGCP Gateways	Number of registered MGCP gateways on Cisco CallManager	✓		
T1 Spans in Service	Availability of T1 spans	✓		
CISCO UNIFIED COMMUNICATIONS MANAGER CALL STATISTICS				
Monitors call statistics on Cisco Unified Communications Manager				
Calls Attempted	Number of calls attempted on this CallManager	✓ (ver 5.x-8.x)		
Calls Completed	Number of calls completed on this CallManager	✓ (ver 5.x-8.x)		
Calls in Progress	Number of calls in progress on this CallManager	✓ (ver 5.x-8.x)		



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Active Calls per CallManager	Number of calls that were active at timestamp	✓ (ver 5.x-8.x)		
Active Calls per MGCP Gateway	Number of calls that were active at timestamp	✓ (ver 5.x-8.x)		
H.323 Calls Active	Number of calls active through the H323 gateway added to the CallManager	✓ (ver 5.x-8.x)		
H.323 Calls Completed	Number of calls completed through the H323 gateway added to the CallManager	✓ (ver 5.x-8.x)		
H.323 Calls in Progress	Number of calls in progress through the H323 gateway added to the CallManager	✓ (ver 5.x-8.x)		
SIP Calls Active	Number of calls active	✓ (ver 5.x-8.x)		
SIP Calls Attempted	Number of calls attempted	✓ (ver 5.x-8.x)		
SIP Calls Completed	Number of calls completed	✓ (ver 5.x-8.x)		
SIP Calls in Progress	Number of calls in progress	✓ (ver 5.x-8.x)		
Cisco Locations: Calls in Progress	Number of calls in progress	✓ (ver 5.x-8.x)		
CISCO UNIFIED COMMUNICATIONS MANAGER APPLICATION AVAILABILITY				
Monitors availability of primary applications running on Cisco Unified Communications Manager				
Cisco TFTP Heartbeat	Cisco TFTP heartbeat	✓ (ver 3.x-4.x)		
Cisco Messaging Interface (CMI) Heartbeat	Cisco Messaging Interface (CMI) heartbeat	✓ (ver 3.x-4.x)		
Cisco CallManager Heartbeat	CallManager heartbeat.	✓ (ver 3.x-4.x)		
CallManager Attendant Console Heartbeat	CallManager Attendant Console Heartbeat	✓ (ver 3.x-4.x)		
CCM Line Link Down	Replaces CallManager Attendant Console State			
CCM.exe Virtual Bytes	Threshold = > 2Gb	✓ (ver 3.x-4.x)		
Code Red State Entered	Call throttling is entered for an extended period and cannot recover	✓		
Code Yellow State Entered	Call throttling is enabled	✓		
Connection to Distributor Failed	CCM 3 & 4 SQL Replication issue	✓		
DB Replication Failure	CCM database replication failure	✓		
Excessive TFTP Requests Aborted	A Cisco Unified Communications Manager has received a TFTP alarm indicating that TFTP requests were aborted	✓		
Repeated Restarts	System repeatedly restarts over a short period of time.	✓		
Web Interface Status	Alerts on reachability of ccmadmin and ccuser	✓		
Log partition	Log partition low WaterMark exceeded	✓ (ver 5.x-8.x)		
CISCO UNIFIED COMMUNICATIONS MANAGER DEVICE AND RESOURCE AVAILABILITY				
Monitors availability of resources provisioned on Cisco Unified Communications Manager				
Device Unavailable	Device does not respond to ICMP requests	✓		
SNMP Uptime	Alerts on SNMP uptime of less than 15 minutes	✓		



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Attribute	Description	Event		Report
		Fault	Performance	
Disk Utilization	Disk utilization on all hard disks		✓	✓
CPU Utilization	CPU utilization on all processors		✓	✓
Memory Utilization	Memory utilization		✓	✓
Interface Traffic	Traffic on all network interfaces			✓
Web Interface	Alerts on reachability of web interface (web/sa, ciscopca)	✓		
High route group utilization	Route list utilization in the cluster exceeds the configured threshold	✓ (ver 5.x-8.x)		
High route list utilization	Route list utilization in the cluster exceeds the configured threshold	✓ (ver 5.x-8.x)		
Route group exhausted	Route group utilization reached 100%. All route groups in the route list are fully utilized	✓ (ver 5.x-8.x)		
Route list exhausted	Route list utilization reached 100%. All route groups in the route list are fully utilized	✓ (ver 5.x-8.x)		
Location BW out of resources	A call through a Cisco Unified Communications Manager location failed due to lack of bandwidth	✓ (ver 5.x-8.x)		
Low priority queue full	The number of low priority signals in the Cisco Unified Communications Manager queue has exceeded the low priority queue size threshold	✓ (ver 5.x-8.x)		
Normal priority queue full	The number of normal priority signals in the Cisco Unified Communications Manager queue has reached the threshold size	✓ (ver 5.x-8.x)		
CTI link down	An active link between CTI Manager and Cisco Unified Communications Manager is down	✓ (ver 5.x-8.x)		
HW Conferences out of Resources	Number of times in an interval that a Unicast conference was requested when none was available	✓ (ver 5.x-8.x)		
Transcoder Out of Resources	Number of times during a specified period that a transcoder resource was requested when none was available	✓ (ver 5.x-8.x)		
MTP Out of Resources	When no MTP services available	✓ (ver 5.x-8.x)		
MOH Connections Lost	Number of MOH servers lost connections	✓ (ver 5.x-8.x)		
MOH Out of Resources	Number of times that an attempt was made to allocate a Music On Hold (MOH) resource	✓ (ver 5.x-8.x)		
FXO/FXS Outbound Busy Attempts	Number of times during an interval that a call through this analog access was attempted	✓ (ver 5.x-8.x)		
Cisco Transcoder Avail Resource Low	Available transcoder resources are below the threshold value	✓ (ver 5.x-8.x)		
Software Conference Out Of Resources	Software conference bridge registered with Cisco Unified CallManager is out of resources	✓ (ver 5.x-8.x)		
Active Port Threshold Exceeded	Number of active ports on the system exceeds threshold	✓ (ver 5.x-8.x)		
CDR Database Not Present	Alerts on CDR database not existing	✓		
CCM Database Not Present	Alerts on CCM database not existing	✓		
CDR Database Too Many Rows	Alerts on too many rows in the CDR database	✓		✓
CMR Database Too Many Rows	Alerts on too many rows in the CMR database	✓		✓
SERVICE AND PROCESS AVAILABILITY				
Monitors availability of primary services and processes				
CallManager Service	CallManager service	✓		
Cisco TFTP Service	Cisco TFTP service	✓		



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		Fault	Performance	
Cisco TFTP Service Out of Resources	TFTP requests failed due to lack of resources	✓		
Cisco Messaging Interface (CMI) Service	Cisco Messaging Interface (CMI) service	✓		
Cisco IP Voice Media Streaming	Cisco IP Voice Media Streaming App(IPVMSAPP) service	✓		
Cisco CTI Manager Service	Cisco CTI Manager service	✓		
Cisco Telephony Call Dispatcher (TCD) Service	Cisco Telephony Call Dispatcher (TCD) service	✓		
Cisco RIS Data Collector Service (RISDC)	Cisco RIS Data Collector service (RISDC)	✓		
Cisco Database Layer Monitor Service	Cisco Database Layer Monitor service	✓		
Cisco CallManager Backup (BARS) Service	Cisco CallManager Backup (BARS) service	✓		
DC Directory Server (dcx500.exe) Service	DC Directory Server (dcx500.exe) service	✓		
Cisco CDR Insert Service	Cisco CDR Insert service	✓		
Cisco Extended Functions Service	Cisco Extended Functions service	✓		
SQL Server Agent Service (sqlagent.exe)	SQL Server Agent Service (sqlagent.exe)	✓		
SQL Server Application (sqlserver.exe) Service	SQL Server Application (sqlserver.exe) service	✓		
CCM Http Service Inaccessible	Several successive attempts to contact a Cisco Unified CallManager cluster have been unsuccessful	✓		
CCM Http Service Down	HTTP service cannot be used to communicate to all Cisco Unified CallManagers in the cluster	✓		
CCM Windows Service Status	Alerts when Windows service is stopped	✓		
CISCO UNIFIED COMMUNICATIONS MANAGER RESOURCE PERFORMANCE				
Monitors performance of resources provisioned on Cisco Unified Communications Manager				
Voice Quality – Below Poor	Percentage of total calls in last interval with mean opinion score (MOS) less than 3.0		✓	✓
Voice Quality – Poor	Percentage of total calls in last interval with MOS between 3.0 and 3.6		✓	✓
Voice Quality – Fair	Percentage of total calls in last interval with MOS between 3.6 and 4.0		✓	✓
Software Conferences	Total Software conference resources configured on Cisco CallManager			
	Active Software conference resource on Cisco CallManager	✓		
	Available Software conference resource on Cisco CallManager	✓		
	Software conference resource utilization on Cisco CallManager	✓		✓
	Active software conferences at timestamp on Cisco CallManager	✓		
	Number of conferences active on this software conference bridge	✓		
	Total number of resources on this software conference bridge	✓		
	Available resources on this software conference bridge	✓		
	Active resources on this software conference bridge	✓		
Percentage active resources on this software conference bridge	✓			
Hardware Conferences	Total Hardware conference resources configured on Cisco CallManager			
	Active Hardware conference resource on Cisco CallManager	✓		
	Available Hardware conference resource on Cisco CallManager	✓		
	Hardware conference resource utilization on Cisco CallManager	✓		✓
	Active Hardware conferences at timestamp on Cisco CallManager	✓		



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Attribute	Description	Event		Report
		Fault	Performance	
	Number of conferences active on this hardware conference bridge	✓		
	Total number of resources on this hardware conference bridge	✓		
	Available resources on this hardware conference bridge	✓		
	Active resources on this hardware conference bridge	✓		
	Percentage active resources on this hardware conference bridge	✓		
Conferences	Total conferences on Cisco CallManager	✓		
	Active conferences on Cisco CallManager	✓		
	Percentage active conferences on Cisco CallManager	✓		
	Total conference streams on Cisco CallManager	✓		
	Available conference streams on Cisco CallManager	✓		
	Active conference streams on Cisco CallManager	✓		
	Percentage active conference streams on Cisco CallManager	✓		
Music on Hold (MOH)	Number of active MOH audio sources on Cisco CallManager	✓		
	Total number of MOH streams configured on Cisco CallManager	✓		
	Number of available MOH streams on Cisco CallManager	✓		
	Number of active MOH streams on Cisco CallManager	✓		
	Percentage active MOH streams on Cisco CallManager	✓		
	Total MOH multicast resources configured on Cisco CallManager	✓		✓
	Active MOH multicast resource on Cisco CallManager	✓		
	Available MOH multicast resource on Cisco CallManager	✓		
	MOH multicast resource utilization on Cisco CallManager	✓		
	Total MOH unicast resources configured on Cisco CallManager	✓		✓
	Active MOH unicast resource on Cisco CallManager	✓		
	Available MOH unicast resource on Cisco CallManager	✓		
	MOH unicast resource utilization on Cisco CallManager	✓		
Media Termination Point (MTP)	Total number of MTP connections on Cisco CallManager	✓		
	Number of active MTP instances on Cisco CallManager	✓		
	Total number of MTP streams on Cisco CallManager	✓		
	Number of available MTP streams on Cisco CallManager	✓		
	Number of active MTP streams on Cisco CallManager	✓		
	Percentage active MTP streams on Cisco CallManager	✓		
	Total MTP resources configured on Cisco CallManager	✓		
	Active MTP resource on Cisco CallManager	✓		
	Available MTP resource on Cisco CallManager	✓		
	MTP resource utilization on Cisco CallManager	✓		
	Total number of resources on the MTP device	✓		
	Available resources on the MTP device	✓		
	Active resources on the MTP device	✓		
	Percentage active resources on the MTP device	✓		
Transcoder	Total transcoder resources configured on Cisco CallManager	✓		
	Active transcoder resource on Cisco CallManager	✓		
	Available transcoder resource on Cisco CallManager	✓		
	Transcoder resource utilization on Cisco CallManager	✓		✓



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		Fault	Performance	
	Total number of resources on the transcoder device	✓		
	Available resources on the transcoder device	✓		
	Active resources on the transcoder device	✓		
	Percentage active resources on the transcoder device	✓		
Multicast Resources	Total number of multicast resources on the MOH device	✓		
	Available multicast resources on the MOH device	✓		
	Active multicast resources on the MOH device	✓		
	Percentage active multicast resources on the MOH device	✓		
	Total number of unicast resources on the MOH device	✓		
Unicast Resources	Available unicast resources on the MOH device	✓		
	Active unicast resources on the MOH device	✓		
	Percentage active unicast resources on the MOH device	✓		
	Total bandwidth configured for the location	✓		
Cisco Locations	Available bandwidth for the location	✓		
	Utilization of the bandwidth for the location	✓		✓
MGCP FXS/FXO	Number of defined FXS ports on Cisco CallManager platform	✓		
	Number of FXS ports that were active at timestamp	✓		
	Number of defined FXO ports on Cisco CallManager platform	✓		
	Number of FXO ports that were active at timestamp	✓		
	FXS port utilization at timestamp for the CallManager	✓		
	FXO port utilization at timestamp for the CallManager	✓		
	Number of defined FXS ports on CallManager Gateway	✓		
	Number of FXS ports that were active at timestamp	✓		
	Number of defined FXO ports on CallManager Gateway	✓		
	Number of FXO ports that were active at timestamp	✓		
	FXS port utilization at timestamp for the CallManager Gateway	✓		
MGCP PRI/BRI	Number of T1/E1 PRI [channels] that were defined on Cisco CallManager	✓		
	Number of T1 PRI [channels] that were defined on Cisco CallManager	✓		
	Number of T1 PRI [channels] that were active at timestamp	✓		
	Number of E1 PRI [channels] that were defined on Cisco CallManager	✓		
	Number of E1 PRI [channels] that were active at timestamp	✓		
	Number of BRI [channels] that were defined on Cisco CallManager	✓		
	Number of BRI [channels] that were active at timestamp	✓		
	T1 PRI utilization at timestamp for the CallManager	✓		
	E1 PRI utilization at timestamp for the CallManager	✓		
	BRI utilization at timestamp for the CallManager	✓		
	Number of T1/E1 PRI [channels] that were defined on CallManager Gateway	✓		
	Number of T1/E1 PRI [channels] that were active at timestamp	✓		
	Number of T1 PRI [channels] that were defined on CallManager Gateway	✓		
	Number of E1 PRI [channels] that were defined on CallManager Gateway	✓		
	Number of BRI [channels] that were defined on CallManager Gateway	✓		
	T1 PRI utilization at timestamp for the CallManager Gateway	✓		
E1 PRI utilization at timestamp for the CallManager Gateway	✓			



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
	BRI utilization at timestamp for the CallManager Gateway	✓		
	T1 PRI Utilization by DS0	✓		
	E1 PRI Utilization by DS0	✓		
	BRI Utilization by BRI	✓		
MGCP T1/E1 CAS	Number of T1/E1 CAS [channels] that were active at timestamp	✓		
	T1 CAS utilization at timestamp for the CallManager.	✓		
	Number of defined T1CAS [channels] on CallManager Gateway.	✓		
	Number of defined E1 CAS [channels] on CallManager Gateway.	✓		
	T1 CAS utilization at timestamp for the CallManager Gateway	✓		
	T1 CAS Utilization by DS0	✓		
CTI	Registered CTI ports	✓		
	CTI Link active	✓		
	CTI Connection active	✓		
	CTI Devices open	✓		
	CTI Lines open	✓		



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Monitoring Details for Cisco Unified Communications Manager (CUCM) Express versions 4.0, 7.x, 8.x

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Attribute	Description	Event		Report
		Fault	Performance	
CISCO UNIFIED COMMUNICATIONS MANAGER EXPRESS DEVICE AVAILABILITY				
Monitors availability of primary applications running on Cisco Unified Communications Manager				
Phone	Phone deceased	✓		
	Phone LoginFailed	✓		
	Phone Registration Failed	✓		
	Phone UnRegThresholdExceed	✓		
CISCO UNIFIED COMMUNICATIONS MANAGER EXPRESS CALL STATISTICS				
Monitors call statistics on Cisco Unified Communications Manager Express				
Resources	CCME Maximum Conferences Exceeded	✓		
	Key Phone Registered Change Notification	✓		
	Live feed MOH failed	✓		
CallManager Express Phone utilization	The percentage of IP Phones registered is calculated from the value received by polling	✓		
CallManager Express Maximum ephones	Number of ephones that can be configured on the CallManager Express		✓	
CallManager Express Registered ephones	Number of registered ephones on the CallManager Express			✓
CallManager Express Key IP phones Utilization	The percentage of Key IP Phones registered is calculated from the values received by polling		✓	
CallManager Express Key ephones configured	Number of key ephones configured on the CallManager Express			✓
SERVICE AND PROCESS AVAILABILITY				
Monitors availability of primary services and processes				
CallManager Express Key ephones registered	Number of registered key ephones on CallManager Express			
Number of ephone active call legs	Total number of ephone call legs at the time of polling			
Total number of ephones	Total number of IP phones seen by this device since the last reset			
CallManager Express Status	Cisco CallManager Express is enabled or disabled on the router	✓		✓
Services	Night Service Change			✓
Services	StatusChange			



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Attribute	Description	Event		Report
		Fault	Performance	
CISCO UNIFIED COMMUNICATIONS MANAGER EXPRESS RESOURCE AVAILABILITY				
Monitors availability of primary services and processes				
Device Unavailable	Device does not respond to ICMP requests	✓		✓
SNMP Uptime	Alerts on SNMP uptime of less than 15 minutes	✓		
Web Interface	Alerts on reachability of CME web interface	✓		



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Monitoring Details for Microsoft Exchange Server

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Attribute	Description	Event		Report
		Fault	Performance	
MICROSOFT EXCHANGE SERVER PERFORMANCE STATISTICS				
Monitors availability of services, processes, and memory utilization on MS Exchange Servers				
Performance Counters	Exchange Message Store Performance Counter - Log Record Stalls	✓		
	Exchange Message Store Performance Counter - Table Opens/sec	✓		
	Exchange Message Store Performance Counter - Physical Disk % Disk Time	✓		
	Exchange Message Store Performance Counter - Avg. Disk sec/ Read	✓		
	Exchange Message Store Performance Counter - Avg. Disk sec/ Write	✓		
	Exchange Message Store Performance Counter - Current Disk Queue Length	✓		
Memory	Windows - Total memory		✓	
	Windows - Used memory		✓	
	Windows - Free memory		✓	
	Windows - Memory Utilization	✓		
MS Windows	Window cached bytes		✓	
	Window commit limit		✓	
	Window committed bytes		✓	
	Total CPU usage	✓		
Exchange	Exchange MTA – emsmta.exe	✓		
	Exmgmt.exe	✓		
	Exchange Mail Store – store.exe	✓		
	Any exchange service	✓		



Monitoring Details for Cisco Media Convergence Server (MCS) (HP Series)

Attribute	Description	Event		Report
		Fault	Performance	
CISCO MEDIA CONVERGENCE SERVER RESOURCE AVAILABILITY				
Monitors availability of resources on Cisco Media Convergence Server				
Memory Utilization	Memory usage system processes. Raises an event if any threshold is exceeded.	✓		
Total Memory	Total memory	✓		
Used Memory	Used memory	✓		
Free Memory	Free memory	✓		
CPU Utilization (Non CCM)	CPU usage system processes; raises an event if any threshold is exceeded	✓		✓
Disk Utilization	Disk utilization	✓		✓
Window Cached Bytes	Window cached bytes		✓	
Window Commit Limit	Window commit limit		✓	
Window Committed Bytes	Window committed bytes			
Physical Memory Utilization	Physical memory utilization	✓		✓
Virtual Memory Utilization	Virtual memory utilization	✓		✓
Operating System Kbytes Buffered	Operating system Kbytes buffered		✓	
Operating System Kbytes Cached	Operating system Kbytes cached		✓	
Operating System Kbytes Shared	Operating system Kbytes shared		✓	
Operating System Kbytes Total Swap	Operating system Kbytes total swap		✓	
Operating System Kbytes Used Swap	Operating system Kbytes used swap		✓	
Operating System Kbytes Free Swap	Operating system Kbytes free swap		✓	
Data Physical Disk Status	HDD status	✓		
SCSI Drive Status	HDD status	✓		
IDE ATA Disk Status	HDD status	✓		
Server Fan Status	Server fan status	✓		
Power Supply Status	Power supply status	✓		
Temperature Status	Compaq Temperature Status	✓		
Interface ICMP Status	Availability of the ICMP interface on the server	✓		
High Broadcast Rate	Input packet broadcast percentage exceeds the Broadcast threshold. The input packet		✓	
High Backplane Utilization	Utilization of the backplane's bandwidth exceeds the backplane utilization threshold		✓	
High Buffer Miss Rate	Rate of buffer misses exceeds the Memory Buffer Miss Threshold		✓	
High Collision Rate	Rate of collisions exceeds the collision threshold.		✓	
High Discard Rate	The minimum packet rate, and the input packet discard percentage is greater than the threshold		✓	
High Error Rate	Thresholds are exceeded: Error Threshold—Percentage of packets in error		✓	
High Queue Drop Rate	Queue Drop Threshold. The input (or output) queue overflow exceeded threshold		✓	
High Utilization	Current utilization exceeds the utilization threshold configured for this network adapter		✓	
Excessive Fragmentation	System memory is highly fragmented.		✓	
Interface SNMP Status	Availability of the SNMP interface on Cisco MCS	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
Duplicate	Duplicate IP on the network.	✓		
Excessive DA Faults	The number of drive array faults has exceeded a threshold on a Compaq system	✓		
Out Of Range	Device temperature or voltage is outside the normal operating range	✓		
SCSI Controller Down	SCSI controller is down	✓		

Monitoring Details for IBM Servers

Attribute	Description	Event		Report
		Fault	Performance	
IBM SERVER RESOURCE AVAILABILITY				
Monitors availability of resources on IBM server				
State Not Normal	A fan, power supply, temperature sensor, or voltage sensor is not acting normally	✓		
Network Errors	Network errors experienced by the server		✓	
Operation System Version	Identifies OS release version running on the server		✓	
CPU Utilization	CPU utilization	✓		✓
Disk Utilization	Disk utilization	✓		✓
Virtual Memory Utilization	Virtual memory utilization	✓		✓
Physical Memory Utilization	Physical memory utilization	✓		✓
Physical Drive	Availability of the physical drive	✓		
Fan	Server fan status	✓		



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Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

The Cisco® Unified Communications Remote Management Services (RMS) (Standard Service) provide comprehensive availability and performance monitoring and remote, proactive management of the Cisco Unified Communications solution. Cisco Unified Communications RMS features a single point of contact to facilitate all questions, collaborate with clients to address their productivity goals, and coordinate responses to complex technical issues by our expert in-house engineers.

Our remote, high-visibility co-management approach gives you simple ownership and control of your converged network and peace of mind knowing that Cisco expertise, proven management processes, and advanced management tools are working with you to maximize the value of your Cisco Unified Communications experience.

Services, resources, and applications that are monitored are subject to change without notice.

Event indicates an issue with system performance or health.
Fault signifies an issue with the system; an incident ticket is generated.
Performance refers to system functioning and responsiveness.
Report indicates a report is available that includes that data.

Monitoring Details for Cisco Unified Contact Center Enterprise versions 7.0, 7.1, 7.2, 7.5

Cisco Unified Communications Remote Management Service is a comprehensive solution that provides monitoring, issue resolution, and around the clock management of the converged network infrastructure and Cisco voice applications.

Attribute	Description	Event		Report
		Fault	Performance	
CISCO UNIFIED CONTACT CENTER ENTERPRISE DEVICE AND RESOURCE AVAILABILITY				
Monitors availability of device and resources on Cisco Unified Contact Center Enterprise				
Device Unavailable	Device does not respond to ICMP requests	✓		
SNMP Uptime	Alerts on SNMP uptime of less than 15 minutes	✓		
Web Interface (WebView)	Alerts on reachability of WebView login page	✓		
Web Interface (Web Re-skilling)	Alerts on reachability of Web Re-skilling login page	✓		
CPU Utilization	Monitor CPU utilization on all processors	✓		✓
Disk Utilization	Monitor disk utilization on all hard disks	✓		✓
Memory Utilization	Monitor memory utilization	✓		✓
Interface Traffic	Monitor interface traffic on all network interfaces	✓		✓
Application Gateway Status - ICM	All retry and failover attempts to the ICM/AW have failed	✓		
AAS Status	AAS is unable to log into the ICM/AW because the login authentication failed	✓		
AAS Link Status -ICM/AW	AAS lost its connection to the ICM/AW due to an unknown cause	✓		
MasterSelection	MasterSelection cannot start because the AAS PG hosts and ports were not configured in the registry	✓		
Application Gateway Status	The Application Gateway is now connected to the host process	✓		
Application Gateway Status - External Database	An external database used in some scripts has disconnected from the specified Application Gateway. Error recovery mechanisms will attempt to reconnect. Routing may be impacted.	✓		
Central Controller	The specified process at the Central Controller site is down. The Central Controller side is indicated. Attempts will be made to automatically restart the process	✓		
Router State Threshold	The router state size has been exceeded	✓		
Router Initialization Status - Logger	The router has not completed the initialization step of loading a configuration from the logger	✓		
Router Synchronized Status - Duplex	The router has detected that it is no longer synchronized with its partner	✓		
World Wide Web Publishing Service	World Wide Web Publishing Service may be down. ICM cannot communicate with Web server	✓		
Device Status - Central Controller	The indicated device failed to realign its message stream to this side of the Central Controller	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
Device Status - DMP protocol messages from Central Controller	The indicated device has failed to acknowledge multiple DMP protocol messages from this side of the Central Controller. The connection to the device will be forcibly reset.	✓		
Routing Client Engine Resources	Routing Client Engine is refusing new calls due to a larger than normal backlog of calls. The Routing Client Engine is now returning overload responses to new call requests and continuing to process existing calls.	✓		
ScriptTable Process	No database lookup requests can be processed as ScriptTable is unavailable on either side of the central controller	✓		
Hostname	Invalid hostname has been configured for the customer	✓		
Primary Distributor	Invalid primary distributor has been configured, or the system is unable to resolve the hostname for the named primary distributor	✓		
Central Controller	The indicated device has been disconnected from this side of the Central Controller. The indicated device has failed to acknowledge messages from the side of the Central Controller. The connection to the device will be forcibly reset.	✓		
CICR Link Status	All links to the CICR have terminated or were never established	✓		
Network ICM and CICR link status	The configuration for the connection between the Network ICM and the CICR's side is not valid	✓		
CICR	The link to the CICR has terminated or was never established. If configured to do so the CICR will continue to attempt to open the link.	✓		
Peripheral Gateway Link to Enterprise CTI Server	The Enterprise CTI server associated with this Peripheral Gateway is off-line. Enterprise CTI client applications are not able to connect to the server and exchange call and agent data.	✓		
Enterprise CTI Session with ClientID	The Enterprise CTI session has been terminated by the Enterprise CTI Server	✓		
Enterprise CTI Client Application Software	The Enterprise CTI client application software has reported an error	✓		
Dialer Port	A telephony error has occurred on a specific Dialer Port	✓		
MR PIM	MR PIM disconnected from the specified Dialer	✓		
MR PIM	MR PIM connected to Dialer	✓		
MR Routing	MR Routing disabled on Dialer	✓		
MR Routing	MR Routing enabled on Dialer	✓		
Dialer Port Extension	Dialer, Port, Extension, disconnected from Unified Communications Manager	✓		
Dialer	Dialer, Port, Extension, connected to Unified Communications Manager	✓		
Dialer	Dialer, Port, Extension, failed to register with Unified Communications Manager	✓		
Dialer	Dialer, Port, Extension registered with Unified Communications Manager	✓		
Import Rule ID	Failed to rename or delete the import file for Import Rule ID. This Import Rule has been temporarily disabled.	✓		
Blended Agent Campaign Manager - Schema Definition	An import has completed successfully	✓		
Blended Agent Campaign Manager	Either the Campaign Manager is not running or a network connection can't be established due to connectivity issues	✓		
Blended Agent Campaign Manager	An import started running but part of its configuration was deleted before it was able to do anything	✓		
Blended Agent CTI Server Connection is Active	Blended Agent CTI Server connection is active	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
MDS Message Synchronizer	The MDS Message Synchronizer has lost connectivity to its duplexed partner. This indicates either a failure of the private network, or a failure of the duplexed partner.	✓		
ICRP NIC Status - Network ICM	The ICRP NIC no longer has any communication sessions established with the indicated Network ICM. This points to a problem with the indicated NICR, or a problem with network connectivity.	✓		
SS7 Link Status -Supported Vendor's Network	The specified SS7 linkset to the supported vendor's network is in a non-working state	✓		
NIC ICP Gateway Status	The NIC ICP Gateway has stopped operation. Calls will be default routed.	✓		
NIC- Routing Client Status	The specified Routing Client has stopped operation. Calls will be default routed.	✓		
NIC - Remote Data Gateway Status	The NIC D66 no longer has any communication sessions established with the indicated Remote Data Gateway	✓		
NIC Status	The NIC is offline and cannot accept route requests from the network	✓		
SPRGate Service	SPRGate is halting execution	✓		
Service Control Point (SCP) Status - ICM	The Service Control Point is either out of service or communications between ICM and the SCP has broken. All connections associated with this link will be closed.	✓		
SS7 Link Status	The specified SS7 link is now unavailable	✓		
SS7 Linkset Status	The specified SS7 linkset is now available. No links in that linkset are operational. Consequently, communication has failed between the NIC and the adjacent signaling point to which the linkset connects.	✓		
NIC Gateway Status	The NIC has stopped operation. All virtual circuits are blocked.	✓		
NIC - Service Control Point (SCP) Status	The NIC has disconnected the communication sessions established with the indicated SCP	✓		
INAP NIC Link - INAP Gateway Status	The INAP NIC was unable to connect to the gateway on the INAP network	✓		
INAP NIC Status	The INAP NIC has disconnected the communication sessions established with the indicated gateway	✓		
INAP NIC Status	Although connected, the INAP NIC cannot establish a session with the indicated gateway	✓		
INAP NIC Status	The INAP NIC is offline and cannot accept route requests from the INAP network	✓		
SS7 linkset - INAP Gateway Status	The specified SS7 linkset is unavailable. No links in that linkset are operational. Communicated has failed between the INAP Gateway and the adjacent signaling point to which the linkset connects.	✓		
INAP Gateway Status	The INAP Gateway has stopped operation. The INAP subsystem is prohibited.	✓		
INCRP NIC - Network ICM Status	The INCRP NIC no longer has communication sessions established with the indicated network ICM	✓		
NIC Status	The NIC has an existing SVC open to the SCP and is waiting for a dialogue open message. The NIC has waited for a configured amount of time and has not received a dialogue open message.	✓		
NIC Status	NIC was unable to connect to the gateway	✓		
SS7 Link Status	The specified SS7 link is now out of service. Connectivity between the INAP Gateway and the adjacent signaling point is not lost unless all other links in the linkset have failed. If this occurs, a 'linkset unavailable' alarm is generated.	✓		
INAP Gateway Availability	The INAP Gateway has stopped operation due to the specified error code. The INAP subsystem is prohibited.	✓		



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Attribute	Description	Event		Report
		Fault	Performance	
SS7 Link - AIN Gateway Status	The specified SS7 link is now out of service. This is most likely due to a circuit problem between the AIN Gateway and the adjacent signaling point to which this link connects. Equipment problems are also a possible cause. Because each link typically belongs to a linkset containing two or more links, connectivity between the AIN Gateway and the adjacent signaling point is not lost unless all other links in the linkset have failed. If this occurs, a 'linkset unavailable' alarm is generated.	✓		
SS7 Link Status	The specified SS7 link is now out of service	✓		
INAP Gateway	The INAP Gateway has stopped operation. The INAP subsystem is prohibited.	✓		
SS7 IN NIC Link Status - SS7 gateway	SS7 IN NIC was unable to connect to the SS7 Gateway	✓		
Link Status	All links to the network from the NIC originating this event are in a non-working state	✓		
NTL NIC	The NTL NIC received an invalid label from the router. Check the label format and size.	✓		
NIC Status	A communication channel of the NIC is halting operation	✓		
A communication channel of the NIC is closed by the SCP	A communication channel of the NIC is closed by the SCP	✓		
Node Link Status - ICM	The specified node is not visible to ICM. Distribution of real time data may be impacted.	✓		
Node Status - ICM	The specified node is not visible to the ICM. Distribution of real time data may be impacted.	✓		
PIM Status	The specified PIM failed to connect to the Peripheral	✓		
ACD/IVR Link Status - Peripheral Gateway	The specified ACD/IVR is not visible to the Peripheral Gateway. No call or agent state information is being received by the CallRouter from this site.	✓		
Central Controller Link Status - Peripheral Gateway	The specified Peripheral Gateway is not connected to the Central Controller	✓		
Peripheral Gateway Link Status - Peripheral	Peripheral is off-line or the physical interface between the Peripheral and the Peripheral Gateway is not functioning	✓		
PIM Status	The PIM connection to the Peripheral failed	✓		
SDDSN Server Status	A system connected to the SDDSN Server has failed to unregister as a valid endpoint. This indicates that the system abruptly disconnected from the SDDSN Server.	✓		
SDDSN Server Status	An event has been received that the SDDSN Server cannot decipher using the resource files (message DLLs) because they are missing or out of date. The SDDSN Server has forwarded the ciphered event, and then disconnected the system that generated that event.	✓		
SDDSN Protocol Compatibility Status	An event has been received by a client system using an incompatible version of the SDDSN Protocol	✓		
Message Integration Service	Message Integration Service was unable to connect to the indicated component and address	✓		
Port Status	A previously malfunctioning telephony port has received a message from the telephony driver indicating the ports is back in service	✓		
Process Not Running	Process is not running on the specified computer	✓		
Process Not Running	Process is running on the specified computer	✓		
Process Down	Process is down on the specified computer	✓		
Process Up	Process is up on the specified computer	✓		
The configuration IP address for the Side A MasterSelection is badly formed or cannot be found	The configuration IP address for the Side A MasterSelection is badly formed or cannot be found	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
The configuration IP address for the Side B MasterSelection is badly formed or cannot be found	The configuration IP address for the Side B MasterSelection is badly formed or cannot be found	✓		
SCP Session Status	No session is currently opened with the SCP. The SCP index indicates the relative position of that SCP's configuration in the NT Registry.	✓		
Session Status	A problem has occurred with the capabilities or notification masks for this session. Either the mask sent in the open message had undefined bits set or the router requested an action which was not configured in the open session message.	✓		
Message Integration Service	A call within MIS could not be tracked successfully	✓		
Message Integration Service	A message pertaining to the indicated trunk group and trunk has not been configured with MIS	✓		
Message Integration Service	MIS was unable to open a session to the indicated component	✓		
Central Controller	The configuration IP address for the Side A MasterSelection is blank	✓		
Central Controller	The configuration IP address for the Side B MasterSelection is blank	✓		
CISCO UNIFIED CONTACT CENTER ENTERPRISE SERVICE AND PROCESS AVAILABILITY				
Monitors availability of services and processes running on Cisco Unified Contact Center Enterprise				
ICM/UCCE AWS Status	ICM/UCCE AWS status	✓		
AWS/HDS Process Status	AWS/HDS Process status	✓		
ICM/UCCE Router Status	ICM/UCCE Router status	✓		
ICM/UCCE Logger Status	ICM/UCCE Logger status	✓		
ICM/UCCE CTIOS Server Status	CTIOS Instance status	✓		
Blended Agent Campaign Manager	The Blended Agent Campaign Manager is not running	✓		
Blended Agent Campaign Manager	Blended Agent Campaign Manager is ready to distribute customer	✓		
Blended Agent Campaign Manager - DB Import	The schema for a specified table has been changed but the overwrite option has not been enabled. An existing database table does not match the configured import.	✓		
Blended Agent Campaign Manager - Schema Definition	Could not create the specified table due to invalid import schema definition	✓		
Blended Agent Campaign Manager - Table Definition	The import file did not match the table definition	✓		
Blended Agent Campaign Manager - Dialing List	A Dialing List could not be populated from the specified table	✓		
Blended Agent Campaign Manager - Dialogic Drivers	Dialogic Drivers have not been started and or configured	✓		
Blended Agent Private Database	The Blended Agent Private Database has not been initialized or SQL Server is not running	✓		
Blended Agent CTI Server Status	The Blended Agent CTI Server connection has been terminated	✓		
ICM Network Interface Controller Status	ICM Network Interface Controller status	✓		
Node Manager - Application Availability	A critical process needed to run ICM software on this node has died.	✓		
Node Manager - Application Availability	The Node Manager has started. The Node Manager cannot determine	✓		
Node Manager - Application Availability	The Node Manager is terminating a process	✓		
Node Manager - Application Availability	A process terminated for an unknown reason	✓		
Node Manager - Application Availability	A process terminated for unknown reason. It will be automatically restarted.	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
Node Manager - Application Availability	A process terminated itself successfully.	✓		
Node Manager - Application Availability	The Node Manager has crashed. The machine will be rebooted after specified period of time.	✓		
Node Manager - Application Availability	The Node Manager has crashed. The machine cannot be rebooted.	✓		
Node Manager - Application Availability	The Node Manager has requested the machine be rebooted. The machine will be rebooted after specified period of time.	✓		
Node Manager - Application Availability	A critical process has requested a reboot after the service has been up for a specified period. The machine cannot be rebooted since auto-reboot on process request is disabled. The Node Manager will attempt to restart the service.	✓		
Node Manager - Application Availability	A critical process has requested the machine be rebooted. The machine will be rebooted after specified period of time.	✓		
UCCE Component Status	PG process status	✓		
Router – Windows Service Status	Alerts on Windows service being stopped	✓		
Router – Process Status	Alerts on process not running, utilizing high CPU	✓		
Router – Lost PG Communication	Alerts on router losing communication to a peripheral gateway	✓		
Router – Translation Route Timeout	Alerts on router translation route timeouts	✓		
CTIOS – Windows Service Status	Alerts on Windows service being stopped	✓		
CTIOS – Process Status	Alerts on process not running, utilizing high CPU	✓		
CISCO UNIFIED CONTACT CENTER ENTERPRISE CALL STATISTICS				
Monitors call statistics on Cisco Unified Contact Center Enterprise				
Number of contact center agents currently logged into ICM/UCCE	Number of contact center agents currently logged into ICM/UCCE			✓
Number of calls in progress in ICM/UCCE	Number of calls in progress in ICM/UCCE			✓
Number of calls per second	Number of calls per second			✓



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Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

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Event indicates an issue with system performance or health.
Fault signifies an issue with the system; an incident ticket is generated.
Performance refers to system functioning and responsiveness.
Report indicates a report is available that includes that data.

Monitoring Details for Cisco Unified Contact Center Express versions 3.5, 4.0, 4.5(1), 5.x, 6.x, 7.x, and 8.x

Cisco Unified Communications Remote Management Service is a comprehensive solution that provides monitoring, issue resolution, and around the clock management of the converged network infrastructure and Cisco voice applications.

Attribute	Description	Event		Report
		Fault	Performance	
CISCO UNITY EXPRESS DEVICE, SERVICE, AND PROCESS AVAILABILITY				
Monitors availability of device and resources on Cisco Unity Express				
Disk Utilization	Disk utilization on all hard disks			✓
CPU Utilization	CPU utilization on all processors			✓
Memory Utilization	Memory utilization			✓
Interface Traffic	Interface traffic on all interfaces			✓
Device Unavailable	Device does not respond to ICMP requests	✓		
SNMP Uptime	Alerts on SNMP uptime of less than 15 minutes	✓		
Web Interface	Web interface working	✓		
Cisco Application Server	Cisco Application Server status	✓		
Cisco CRA Chat Server	Cisco CRA Chat Server status	✓		
Cisco Application Server	Cisco Application Server status	✓		
Cisco Application Server	Cisco Application Server status	✓		
CRS Agent Datastore-CRS SQL Server Agent	CRS Agent Datastore-CRS SQL Server - Agent	✓		
CRS Agent Datastore-Microsoft SQL Agent	CRS Agent Datastore-Microsoft SQL - Agent status	✓		
CRS Config Datastore-CRS SQL Server - Config	CRS Config Datastore-CRS SQL Server - Config	✓		
CRS Config Datastore-Microsoft DTC	CRS Config Datastore-Microsoft Distributed Transaction Coordinator status	✓		
CRS Config Datastore-Microsoft SQL Agent	CRS Config Datastore-Microsoft SQL Agent status	✓		
Cisco CRS Database	Cisco CRS Database status	✓		
CRS Engine-Cisco Desktop Call/Chat Service	CRS Engine-Cisco Desktop Call/Chat service status	✓		
CRS Engine-Cisco Desktop Enterprise Service	CRS Engine-Cisco Desktop Enterprise service status	✓		
CRS Engine-Cisco Desktop IP Phone Agent Service	CRS Engine-Cisco Desktop IP Phone Agent service status	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
CRS Engine-Cisco Desktop LDAP Monitor Service	CRS Engine-Cisco Desktop LDAP Monitor service status	✓		
CRS Engine-Cisco Desktop License and RMS	CRS Engine-Cisco Desktop License and Resource Manager service status	✓		
CRS Engine-Cisco Desktop Recording & Statistics Service	CRS Engine-Cisco Desktop Recording & Statistics service status	✓		
CRS Engine-Cisco Desktop Sync Service	CRS Engine-Cisco Desktop Sync service status	✓		
CRS Engine-CRS Engine	CRS Engine-CRS Engine status	✓		
CRS Engine-Manager	CRS Engine-Manager status	✓		
CRS Engine-Manager-Application Manager	CRS Engine-Manager-Application Manager status	✓		
CRS Engine-Manager-Archive Manager	CRS Engine-Manager-Archive Manager status	✓		
CRS Engine-Manager-Channel Manager	CRS Engine-Manager-Channel Manager status	✓		
CRS Engine-Manager-Cluster Manager	CRS Engine-Manager-Cluster Manager status	✓		
CRS Engine-Manager-Config Manager	CRS Engine-Manager-Config Manager status	✓		
CRS Engine-Manager-Contact Manager	CRS Engine-Manager-Contact Manager status	✓		
CRS Engine-Manager-Database Manager	CRS Engine-Manager-Database Manager status	✓		
CRS Engine-Manager-Document Manager	CRS Engine-Manager-Document Manager status	✓		
CRS Engine-Manager-Executor Manager	CRS Engine-Manager-Executor Manager status	✓		
CRS Engine-Manager-Expression Manager	CRS Engine-Manager-Expression Manager status	✓		
CRS Engine-Manager-File Manager	CRS Engine-Manager-File Manager status	✓		
CRS Engine-Manager-Grammar Manager	CRS Engine-Manager-Grammar Manager status	✓		
CRS Engine-Manager-Log Manager	CRS Engine-Manager-Log Manager status	✓		
CRS Engine-Manager-Node Manager	CRS Engine-Manager-Node Manager status	✓		
CRS Engine-Manager-Prompt Manager	CRS Engine-Manager-Prompt Manager status	✓		
CRS Engine-Manager-RTP Port Manager	CRS Engine-Manager-RTP Port Manager status	✓		
CRS Engine-Manager-Script Manager	CRS Engine-Manager-Script Manager status	✓		
CRS Engine-Manager-Session Manager	CRS Engine-Manager-Session Manager status	✓		
CRS Engine-Manager-Socket Manager	CRS Engine-Manager-Socket Manager status	✓		
CRS Engine-Manager-User Manager	CRS Engine-Manager-User Manager status	✓		
CRS Engine-Manager	CRS Engine-Manager status	✓		
CRS Engine-Manager-CMT Subsystem	CRS Engine-Manager-CMT Subsystem status	✓		
CRS Engine-Manager-Core RTR Subsystem	CRS Engine-Manager-Core RTR Subsystem status	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
CRS Engine-Manager-Enterprise Server Data Subsystem	CRS Engine-Manager-Enterprise Server Data Subsystem Status	✓		
CRS Engine-Manager-JTAPI Subsystem	CRS Engine-Manager-JTAPI Subsystem status	✓		
CRS Engine-Manager-RmCm Subsystem	CRS Engine-Manager-RmCm Subsystem status	✓		
CRS Engine-Manager-VOIP Monitor Subsystem	CRS Engine-Manager-VOIP Monitor Subsystem status	✓		
CRS Historical Datastore-CRS SQL Server - Historical	CRS Historical Datastore-CRS SQL Server - Historical status	✓		
CRS Historical Datastore-Microsoft DTC	CRS Historical Datastore-Microsoft DTC status	✓		
CRS Historical Datastore-Microsoft SQL Agent	CRS Historical Datastore-Microsoft SQL Agent status	✓		
CRS Node Manager-CRS Administration	CRS Node Manager-CRS Administration status	✓		
CRS Node Manager-CRS Administration-Manager	CRS Node Manager-CRS Administration-Manager	✓		
CRS Node Manager-CRS Administration-Mgr Arch. Mgr	CRS Node Manager-CRS Administration-Manager-Archive Manager status	✓		
CRS Node Manager-CRS Administration-MCM	CRS Node Manager-CRS Administration-Manager-Cluster Manager status	✓		
CRS Node Manager-CRS Administration-MCM	CRS Node Manager-CRS Administration-Manager- Config Manager status	✓		
CRS Node Manager-CRS Administration-Manager-Database Mgr	CRS Node Manager-CRS Administration-Manager-Database Manager status	✓		
CRS Node Manager-CRS Administration-Manager- Doc Mgr	CRS Node Manager-CRS Administration-Manager- Document Manager status	✓		
CRS Node Manager-CRS Administration-Manager- EM	CRS Node Manager-CRS Administration-Manager-Executor Manager status	✓		
CRS Node Manager-CRS Administration-Manager- EM	CRS Node Manager-CRS Administration-Manager-Expression Manager status	✓		
CRS Node Manager-CRS Administration-Manager-File Manager	CRS Node Manager-CRS Administration-Manager- File Manager status	✓		
CRS Node Manager-CRS Administration-Manager-Grammar Manager	CRS Node Manager-CRS Administration-Manager- Grammar Manager status	✓		
CRS Node Manager-CRS Administration-Manager-Log Mgr	CRS Node Manager-CRS Administration-Manager- Log Manager status	✓		
CRS Node Manager-CRS Administration-Manager- Node Mgr	CRS Node Manager-CRS Administration-Manager- Node Manager status	✓		
CRS Node Manager-CRS Administration-Manager- Prompt Mgr	CRS Node Manager-CRS Administration-Manager- Prompt Mgr status	✓		
CRS Node Manager-CRS Administration-Manager-RTP Port Manager	CRS Node Manager-CRS Administration-Manager- RTP Port Manager status	✓		
CRS Node Manager-CRS Administration-Manager- Script Manager	CRS Node Manager-CRS Administration-Manager- Script Manager status	✓		
CRS Node Manager-CRS Administration-Manager- Socket Mgr	CRS Node Manager-CRS Administration-Manager- Socket Manager status	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
CRS Node Manager-CRS Administration-Manager-User Manager	CRS Node Manager-CRS Administration-Manager- user Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon	CRS Node Manager-CRS Cluster View Daemon status	✓		
CRS Node Manager-CRS Cluster View Daemon- Mgr	CRS Node Manager-CRS Cluster View Daemon- Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Mgr Archive Mgr	CRS Node Manager-CRS Cluster View Daemon- Manager-Archive Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Cluster Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Cluster Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Config Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Config Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Database Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Database Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Database Purge Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Database Purge Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Document Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Document Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Executor Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Executor Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-File Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-File Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Grammar Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Grammar Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Log Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Log Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Node Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Node Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Prompt Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Prompt Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Script Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Script Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-Socket Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-Socket Manager status	✓		
CRS Node Manager-CRS Cluster View Daemon- Manager-User Manager	CRS Node Manager-CRS Cluster View Daemon- Manager-User Manager status	✓		
CRS Repository Datastore-CRS SQL Server - Repository	CRS Repository Datastore-CRS SQL Server - Repository Status	✓		
CRS Repository Datastore-Microsoft SQL Agent	CRS Repository Datastore-Microsoft SQL Agent status	✓		
Cisco CRA Enterprise Server	Cisco CRA Enterprise Server status	✓		
Cisco Application Server	Cisco Application Server status	✓		
Cisco CRA Sync Server	Cisco CRA Sync Server status	✓		
Cisco CRA TAI Server	Cisco CRA TAI Server status	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
Cisco Application Engine	Cisco Application Engine status	✓		
CRA Database	CRA database not present	✓		
	CRA database number of rows (SQL70DB)			✓
Repository Database	Repository database not present	✓		
	CRA Repository database number of rows (SQL70DB)			✓
Windows Service Status	Alerts on Windows service being stopped	✓		



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Monitoring Details for Cisco Unity versions 4.0, 5.0, and 7.0

Cisco Unified Communications Remote Management Service is a comprehensive solution that provides monitoring, issue resolution, and around the clock management of the converged network infrastructure and Cisco voice applications.

Attribute	Description	Event		Report
		Fault	Performance	
CISCO UNITY DEVICE AND RESOURCE AVAILABILITY				
Monitors availability of resources provisioned on Cisco Unity				
Device Unavailable	Device does not respond to ICMP requests	✓		
SNMP Uptime	Alerts on SNMP uptime of less than 15 minutes	✓		
Total CPU Usage	Measured CPU utilization at timestamp for all CPUs		✓	✓
Total Disk Space Usage	Measured disk utilization at timestamp		✓	✓
Total Memory Usage	Measured memory utilization at timestamp		✓	✓
TAPI Lines Active	Alerts if number of active lines are less than total number of lines	✓		✓
TAPI Lines Full	Alerts if TAPI lines are full	✓		✓
TAPI Incoming Calls	Alerts on [custom] threshold of incoming calls	✓		✓
TAPI Outgoing Calls	Alerts on [custom] threshold of outgoing calls	✓		✓
CISCO UNITY SERVICE AND PROCESS AVAILABILITY				
Monitors availability of primary services and processes				
AV Gateway Service	AV Gateway (avcsgateway.exe) Service	✓		
AV Manager Service	AV Manager (avcsmgr.exe) Service	✓		
AV Directory Datastore Service	AV Directory Datastore (avdsad.exe) Service	✓		
AV Global Catalog Datastore Service	AV Global Catalog Datastore (avdsglobalcatal.exe) Service	✓		
AV Directory Change Writer Service	AV Directory Change Writer (avdirchangewrit.exe) Service	✓		
AV Licensing Service	AV Licensing Service (avlic.exe) Service	✓		
AV Media Master Proxy Service	AV Media Master Proxy (Avmmproxysvr.exe) Service	✓		
AV Reports Service	AV Reports Service (avrepdirsvrvc.exe) Service	✓		
AV SQL Change Writer Service	AV SQL Change Writer (avsqlchangewrit.exe) Service	✓		
AV Text-To-Speech Service	AV Text-To-Speech Service (avttsvr.exe) Service	✓		
AV Unity Messaging Repository Service	AV Unity Messaging Repository (avumrsyncsvr.exe) Service	✓		
Cisco Unity TDS Proxy Service	Cisco Unity TDS Proxy Service	✓		
CsEmsSvr Service	CsEmsSvr Service	✓		
Cisco Unity Bridge Services	CsBridgeConnector	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
Cisco Unity Database	Cisco Unity Database Service	✓		
Cisco Unity Web Services	Cisco Unity Web Services Service	✓		
Cisco Unity Media Services	Cisco Unity Media Services Service	✓		
Cisco Unity Active Directory Datastore Service	Cisco Unity Active Directory Datastore Service	✓		
Messaging Service	Messaging Service	✓		
Microsoft Exchange Management Service	Microsoft Exchange Management Service	✓		
Trap Handling	Cisco Unified Operations Manager generated event, while handling traps from Cisco Unity			
SMTP Service	SMTP Service	✓		
Memory - Free System Page Table Entries	Memory - Free System Page Table Entries	✓		
Unity Failover or Restart	Indicates a failover between the primary and secondary Cisco Unity	✓		
Unity Port Hung	Indicates a problem with a voice mail port that is configured to answer calls	✓		
CPU Usage: Cisco AvCsGateway Service	CPU usage for the Unity Manager process and for system processes	✓		
Memory Usage: Cisco AvCsGateway Service	Memory usage for the Unity Manager process and for system processes	✓		
CPU Usage: Cisco AvCsMgr Service	CPU usage for the Unity Manager process and for system processes	✓		
Memory Usage: Cisco AvCsMgr Service	Memory usage for the Unity Manager process and for system processes	✓		
Memory Virtual Bytes: Cisco AvCsMgr Service	Virtual Bytes	✓		
CPU Usage: Cisco AvCsTrayStatus Service	CPU usage for the Unity Manager process and for system processes	✓		
Memory Usage: Cisco AvCsTrayStatus Service	Memory usage for the Unity Manager process and for system processes	✓		
CPU Usage: Cisco AvDSAD Service	CPU usage for the Unity Manager process and for system processes	✓		
Memory Usage: Cisco AvDSAD Service	Memory usage for the Unity Manager process and for system processes	✓		
CPU Usage: Cisco AvDSGlobalCatalog	CPU usage for the Unity Manager process and for system processes	✓		
Memory Usage: Cisco AvDSGlobalCatalog	Memory usage for the Unity Manager process and for system processes	✓		
CPU Usage: Cisco AvLic Service	CPU usage for the Unity Manager process and for system processes	✓		
Memory Usage: Cisco AvLic Service	Memory usage for the Unity Manager process and for system processes	✓		
CPU Usage: Cisco CsBridgeConnector	CPU usage for the Unity Manager process and for system processes	✓		
Memory Usage: Cisco CsBridgeConnector	Memory usage for the Unity Manager process and for system processes	✓		
CPU Usage: Cisco AvUMRSyncSvr Service	CPU usage for the Unity Manager process and for system processes	✓		
Memory Usage: Cisco AvUMRSyncSvr Service	Memory usage for the Unity Manager process and for system processes	✓		
CPU Usage: inetinfo.exe Process	CPU usage for the Unity Manager process and for system processes	✓		
Memory Usage: inetinfo.exe Process	Memory usage for the Unity Manager process and for system processes	✓		
CPU Usage Cisco SQLSERVER process	CPU usage for the Unity Manager process and for system processes	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
Memory Usage: SQLSERVER Process	Memory usage for the Unity Manager process and for system processes	✓		
Backup service down	Alerts on unity backup service being down	✓		
Prompt Silence Delay	Alerts on extended silence delay with prompts	✓		
Unity Web Interface Working	Alerts on reachability of web interface	✓		
Unity Database Exists		✓		
Unity Service Status	Alerts when Unity Windows service is not running	✓		
CISCO UNITY PORT UTILIZATION				
Monitors port utilization on Cisco Unity				
Total Ports	Total number of ports on Cisco Unity	✓		
Active Ports	Active number of ports on Cisco Unity	✓		
Total Inbound Ports	Total number of inbound ports on Cisco Unity	✓		
Active Inbound Ports	Active number of inbound ports on Cisco Unity	✓		
Total Outbound Ports	Total number of outbound ports on Cisco Unity	✓		
Active Outbound Ports	Active number of outbound ports on Cisco Unity	✓		



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Monitoring Details for Cisco Unity Connection versions 1.2, 2.0, 7.0, and 8.0

Cisco Unified Communications Remote Management Service is a comprehensive solution that provides monitoring, issue resolution, and around the clock management of the converged network infrastructure and Cisco voice applications.

Attribute	Description	Event		Report
		Fault	Performance	
CISCO UNITY CONNECTION DEVICE AND APPLICATION AVAILABILITY				
Monitors availability of device and primary applications running on Cisco Unity Connection				
Connection DB Event Publisher	Connection DB Event Publisher service is down	✓		
Cisco Serviceability Reporter	Cisco Serviceability Reporter service is down	✓		
Cisco Trace Collection Service	Cisco Trace Collection Service is down	✓		
Cisco RIS Data Collector	Cisco RIS Data Collector service is down	✓		
Cisco DRF Local	Cisco DRF Local service is down	✓		
Connection Reports Data Harvester	Connection Reports Data Harvester service is down	✓		
Connection Groupware Caching Service	Connection Groupware Caching Service is down	✓		
CISCO UNITY CONNECTION RESOURCE AVAILABILITY				
Monitors availability of resources provisioned on Cisco Unity Connection				
Device Unavailable	Device does not respond to ICMP requests	✓		
SNMP Uptime	Alerts on SNMP uptime of less than 15 minutes	✓		
Disk Utilization	Disk utilization on all hard disks	✓		✓
CPU Utilization	CPU usage for the entire system	✓		✓
Memory Utilization	Memory usage for the entire system	✓		✓
Too Many Unity Ports Active	Percentage of active ports exceeds threshold	✓		
Total Time Used Threshold Exceeded	Total time used (in minutes) for greetings and messages in all mailboxes exceeds total	✓		
Total Ports	Total number of ports on Cisco Unity Connection	✓		
Active Ports	Active number of ports on Cisco Unity Connection	✓		
Port Utilization	Port utilization on Cisco Unity Connection	✓		
Total Inbound Ports	Total number of inbound ports on Cisco Unity Connection	✓		
Active Inbound Ports	Active number of inbound ports on Cisco Unity Connection	✓		✓
Inbound Port Utilization	Inbound port utilization on Cisco Unity Connection	✓		
Total Outbound Ports	Total number of outbound ports on Cisco Unity Connection	✓		
Active Outbound Ports	Active number of outbound ports on Cisco Unity Connection	✓		✓
Outbound Port Utilization	Outbound port utilization on Cisco Unity Connection	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
Interface traffic	Interface traffic on all network interfaces			✓
Web Interface	Alerts on reachability of web interface	✓		
SERVICE AND PROCESS AVAILABILITY				
Monitors availability of primary services and processes				
Cisco DRF Master	Cisco DRF Master service is down	✓		
Cisco Database Layer Monitor	Cisco Database Layer Monitor service is down	✓		
Cisco AMC Service	Cisco AMC service is down	✓		
System Application Agent	System Application Agent service is down	✓		
A Cisco DB	A Cisco DB service is down	✓		
Connection System Agent	Connection System Agent service is down	✓		
Connection Voice Recognition Transport	Connection Voice Recognition Transport service is down	✓		
Connection Notifier	Connection Notifier service is down	✓		
Cisco CDP	Cisco CDP service is down	✓		
Cisco Certificate Expiry Monitor	Cisco Certificate Expiry Monitor service is down	✓		
Cisco Electronic Notification	Cisco Electronic Notification service is down	✓		
Cisco Log Partition Monitoring Tool	Cisco Log Partition Monitoring Tool service is down	✓		
Cisco CDP Agent	Cisco CDP Agent service is down	✓		
Native Agent Adapter	Native Agent Adapter service is down	✓		
Connection License Server	Connection License Server service is down	✓		
Connection DB	Connection DC service is down	✓		
Connection Message Transfer Agent	Connection Message Transfer Agent service is down	✓		
Connection IMAP Server	Connection IMAP Server service is down	✓		
Connection Mixer	Connection Mixer service is down	✓		
Connection SMTP Server	Connection SMTP Server service is down	✓		
Cisco Syslog Agent	Cisco Syslog Agent service is down	✓		
Host Resources Agent	Host Resources Agent service is down	✓		
Cisco Tomcat	Cisco Tomcat service is down	✓		
MIB2 Agent	MIB2 Agent service is down	✓		
SNMP Master Agent	SNMP Master Agent service is down	✓		
Connection Conversation Manager	Connection Conversation Manager service is down	✓		
Connection Voice Recognizer	Connection Voice Recognizer service is down	✓		
Process Status	Alerts when a process stops running	✓		



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Monitoring Details for Cisco Unity Express versions 2.1.1, 2.3, 3.x, 7.x, and 8.x

Cisco Unified Communications Remote Management Service is a comprehensive solution that provides monitoring, issue resolution, and around the clock management of the converged network infrastructure and Cisco voice applications.

Attribute	Description	Event		Report
		Fault	Performance	
CISCO UNITY EXPRESS DEVICE AND RESOURCE AVAILABILITY				
Monitors availability of device and resources on Cisco Unity Express				
Device Unavailable	Device does not respond to ICMP requests	✓		
SNMP Uptime	Alerts on SNMP uptime of less than 15 minutes	✓		
JTAPI Connection with CCM	JTAPI connection status between CUE and CallManager; not applicable when CUE talks to CME	✓		
Total memory	Reserved: The total RAM on the CUE	✓		
Available Memory	Reserved: The available RAM on the CUE	✓		
Memory Utilization	Reserved: The percentage RAM utilization on the CUE	✓		
Reachability	Interface Status	✓		
Percentage orphaned mailboxes	Total percentage of orphaned mailboxes is calculated using the values from the MIB attributes	✓		
Maximum sessions	Maximum number of sessions configured on the CUE			
Used sessions	Number of sessions used			
Percentage sessions used	Total percentage of sessions used is calculated using the values from the MIB attributes	✓		
Total number of busy mailboxes	Data calculated by adding all checking for the "TRUE" flag in the mib attribute "cueMboxBusy" in all "cueMboxEntry"			
Allocated Capacity of Voice Mail (minutes)	Allocated capacity of voicemail in minutes. This is the sum of each user's defined mailbox size, regardless of whether they are full or empty. The cueAllocatedCapacity cannot exceed the licensed cueCapacityOfVoicemail.			
Licensed mailboxes	Count of mailboxes for which the CUE is licensed			
Orphaned Mail Boxes	Current number of mailboxes not associated with an owner. This may occur if the user is deleted, but the mailbox is not. The mailbox will continue to take up its defined cueAllocatedCapacity on the storage media.			
Number of Full Mail Boxes	Number of mailboxes that are at least 90 percent full; this is an indication of general use			✓
Licensed capacity	Number of minutes of storage for which the CUE is licensed	✓		✓
Used capacity	Cumulative number of minutes of storage used by mailboxes	✓		
Capacity used for messages	Cumulative number of minutes of storage used for storing messages	✓		
Capacity utilization	Utilization of the storage on the CUE	✓		
Message Count	Total number of messages stored in all mailboxes			



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
Messages Deposited Since Last Poll	Number of messages left in all mailboxes since the last polling interval			
Messages Deleted Since Last Poll	Number of messages deleted in all mailboxes during the last polling interval			
Messages Retrieved Since Last Poll	Number of messages retrieved in all mailboxes during the last polling interval			
General Delivery Mailboxes				✓
Personal Mailboxes				✓
CISCO UNITY EXPRESS APPLICATION AVAILABILITY				
Monitors availability of applications on Cisco Unity Express				
Voice Mail Status	Status of the Voice Mail Application - Up or Down	✓		
NTP Trap	Notification of a Network Time Protocol (NTP) error			
CUE Application Trap	Notification related to applications running on Cisco Unity Express			
CUE Security Issue Trap	Notification when a possible security issue is detected			
CUE Storage Trap	Notification when storage device degradation is excessive			
CUE & CCM Connection Trap	Notification when the connection to the CallManager is lost			
CUE Backup Trap	Notification of a voicemail backup failure			
Voicemail Utilization Time Used	Percentage time used a ratio of total time used to the allocated capacity	✓		✓
Web Interface Working	Indicates availability of web interface			
CISCO UNITY EXPRESS CALL STATISTICS				
Monitors call statistics on Cisco Unity Express				
CUE Resource Utilization Trap	Notification indicates that the CUE has run out of a certain percentage of a specified type of resource	✓		
CUE Active Calls	CUE Active Calls above threshold	✓		✓



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Monitoring Details for Cisco Voice Gateways

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Attribute	Description	Event		Report
		Fault	Performance	
VOICE GATEWAY DEVICE AVAILABILITY				
Monitors availability of voice gateway devices and interfaces				
IOS Gateway Active Voice T1 PRI	Number of T1 PRI [channels] that were active with voice calls at timestamp		✓	
IOS Gateway Total T1 CAS	Number of defined T1CAS [channels] on Cisco Voice Gateway		✓	
IOS Gateway Active Voice T1 CAS	Number of T1 CAS [channels] that were active with voice calls at timestamp		✓	
IOS Gateway Total E1 CAS	Number of defined E1 CAS [channels] on Cisco Voice Gateway		✓	
IOS Gateway Active Voice E1 CAS	Number of E1 CAS [channels] that were active with voice calls at timestamp		✓	
IOS Gateway Total FXS	Number of defined FXS ports on Cisco Voice Gateway		✓	
IOS Gateway Active FXS	Number of FXS ports that were active at timestamp		✓	
IOS Gateway Total FXO	Number of defined FXO ports on Cisco Voice Gateway		✓	
IOS Gateway Active FXO	Number of FXO ports that were active at timestamp		✓	
IOS Gateway Total BRI	Number of defined BRI on GW		✓	
IOS Gateway Active Voice BRI	Number of BRI [channels] that were active with voice calls at timestamp		✓	
IOS Gateway Total EM	Number of defined E&M ports on Cisco Voice Gateway		✓	
IOS Gateway Active EM	Number of E&M ports that were active at timestamp		✓	
IOS Gateway Total E1 PRI	Number of E1 PRI [channels] that were defined on Cisco Voice Gateway		✓	
IOS Gateway Active Voice E1 PRI	Number of E1 PRI [channels] that were active with voice calls at timestamp.		✓	
IOS Gateway Active Non-Voice E1 PRI	Number of E1 PRI [channels] that were active with non-voice calls at timestamp		✓	
IOS Gateway Active Non-Voice T1 PRI	Number of T1 PRI [channels] that were active with non-voice calls at timestamp		✓	
IOS Gateway Active Non-Voice T1 CAS	Number of T1 CAS [channels] that were active with non-voice calls at timestamp		✓	
IOS Gateway Active Non-Voice E1 CAS	Number of E1 CAS [channels] that were active with non-voice calls at timestamp		✓	
IOS Gateway Active Non-Voice BRI	Number of BRI [channels] that were active with non-voice calls at timestamp		✓	
IOS Gateway Percentage Active Voice T1 PRI	T1 PRI voice utilization at timestamp for Cisco Voice Gateway	✓		
IOS Gateway Percentage Active	E1 PRI voice utilization at timestamp for Cisco Voice Gateway	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
Voice E1 PRI				
IOS Gateway Percentage Active Voice T1 CAS	T1 CAS voice utilization at timestamp for Cisco Voice Gateway	✓		
IOS Gateway Percentage Active Voice E1 CAS	E1 CAS voice utilization at timestamp for Cisco Voice Gateway	✓		
IOS Gateway Percentage Active FXS	FXS port utilization at timestamp for Cisco Voice Gateway	✓		
IOS Gateway Percentage Active FXO	FXO port utilization at timestamp for Cisco Voice Gateway	✓		
IOS Gateway Percentage Active Voice BRI	BRI voice utilization at timestamp for Cisco Voice Gateway	✓		
IOS Gateway Percentage Active E&M	E&M port utilization at timestamp for Cisco Voice Gateway	✓		
Interface SNMP Status	Availability of the SNMP interface on Cisco Voice Gateway	✓		
Interface ICMP Status	Availability of the ICMP interface on Cisco Voice Gateway	✓		
Monitors availability of voice gateway hardware				
DSP Card State	Alarms on any status other than normal	✓		
DS0 Busy Out	Alarms on DS0 if DS0 is in or about to be in a busy out state	✓		
ISDN D-Channel Status	Alarms when layer 2 is not active	✓		
ISDN Incoming Call Status	Alarms when incoming call request is rejected with cause 'requested circuit/channel not registered'			
SIP Phone Registration Threshold	Alarms when number of unregistered SIP phones has crossed the threshold.			
SIP Phone Registration Status	Alarm is generated when a SIP phone fails to register			
Three-Party Conference Threshold	Alarms when maximum number of conferences are exceeded			
VoIP Quality of Voice	Alarms when Calculated Planning Impairment Factor exceeds value of peer			
Fan Status - Degraded	Hardware fan status - degraded	✓		
Fan Status - Down	Hardware fan status - down	✓		
MGCP Gateway Connection	MGCP Gateway Connection status with Cisco CallManager Cluster	✓		
Processor or Adaptor Utilization	Current utilization exceeds the utilization threshold configured for this network adapter or processor	✓		
Physical Memory Utilization	System memory resource utilization	✓		
Interface Operational Status	Operational status of each interface	✓		
Voice Port Operational Status	Operational status of each voice port	✓		
MGCP Voice Interface Connection	MGCP connection status with Cisco CallManager Cluster of each Voice Interface	✓		
MGCP Port Connection	MGCP connection status with Cisco CallManager Cluster of each Voice Port	✓		
MGCP Voice Port Connection	MGCP connection status with Cisco CallManager Cluster of each Voice Port	✓		
SRST Router Failure	A catastrophic failure occurred on an SRST router	✓		
Environmental Monitor Shutdown	Environmental monitor detects a testpoint reaching a critical state and is about to initiate			
VOICE GATEWAY VITAL STATISTICS				
Monitors vital statistics on voice gateways				
Voltage Status	Voltage measured at a given testpoint is outside the normal range for the testpoint	✓		
Temperature	Temperature measured at a given testpoint is outside the normal range for the testpoint	✓		
XGCP Status	Alarms on any status other than Operational			
Redundant Power Supply Status	Alarms if the redundant power supply has failed	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
System Reload/Cold Start	Alarms when the system reloads	✓		
Link Status	Alarms when an interface has changed to a down state	✓		
SRST Status	Alarms when one or more phones are registered to the SRST router	✓		
SRST Router Status	A catastrophic failure occurred on an SRST router	✓		
IOS Gateway Active Call Legs	Number of call legs that were active at timestamp		✓	
IOS Gateway Total T1 PRI	Number of T1 PRI [channels] that were defined on Cisco Voice Gateway		✓	
FXS Calls Completed	Number of calls completed on this FXS port on the Gateway		✓	
FXS Outbound Busy Attempts	Number of outbound busy attempts on this FXS port on the Gateway		✓	
FXO Calls Completed	Number of calls completed on this FXO port on the Gateway		✓	
FXO Outbound Busy Attempts	Number of outbound busy attempts on this FXO port on the Gateway		✓	
Total DSP Channels	Total number of DSP channels on the device	✓		
Active DSP Channels	Number of DSP channels on device that were active at timestamp	✓		
In Use DSP Channels	Number of DSP channels on device that are reserved for serving calls	✓		
DSP Channel Utilization	DSP channel utilization on the device	✓		

Monitoring Details for Cisco Series Routers

Cisco Unified Communications Remote Management Service is a comprehensive solution that provides monitoring, issue resolution, and around the clock management of the converged network infrastructure and Cisco voice applications.

Attribute	Description	Event		Report
		Fault	Performance	
CISCO ROUTER DEVICE/INTERFACE AVAILABILITY				
Monitors availability of device and interfaces on Cisco routers				
Device Unavailable	Device does not respond to ICMP requests	✓		
SNMP Uptime	Alerts on SNMP uptime of less than 15 minutes	✓		
Power Status	Availability of the power supply	✓		
Temperature	Server temperature status	✓		
RAID Array	Indicates availability of RAID array drive(s)	✓		
Interface Operational Status	Operational status of each interface	✓		✓
Flapping Interface or Port	Alerts on flapping interfaces, 3 flaps in 5 minutes	✓		✓
Dial Back Up Uptime	Monitors the uptime of a back-up dial-on-demand port or interface	✓		
CISCO ROUTER ENVIRONMENTALS				
Monitors environmental statistics on Cisco routers				
Interface/Hardware Operational Status	Indicates a change in state for the Interface—Card or System Hardware—Disk	✓		
Interface ICMP Status	Availability of ICMP interface on the Cisco Series Router	✓		
Interface SNMP Status	Availability of SNMP interface on the Cisco Series Router	✓		
Temp/Voltage Range	Device temperature or voltage is outside the normal operating range	✓		
Power Supply Degraded	Power supply state is degraded	✓		
Power Supply Down	Power supply state is down	✓		
System Restarts	Monitoring the number of system cold and warm starts received within the threshold timeframe	✓		
Hardware Functioning	A fan, power supply, temperature sensor, or voltage sensor is not acting normally	✓		



Cisco Unified Communications Remote Management Services (Standard Service) Monitoring Details

Attribute	Description	Event		Report
		Fault	Performance	
Operating Temperature	Operating temperature exceeds the threshold	✓		
Temperature Sensor Degraded	Temperature sensor reports abnormal temperature measurements and reports	✓		
CPU utilization	Alerts when CPU utilization is greater than threshold	✓		✓
ROUTER VITAL STATISTICS				
Monitors vital statistics on Cisco routers				
Temperature Sensor Failed	Temperature sensor reports abnormal temperature measurements and reports	✓		
Fan Status - Degraded	Hardware Fan Status state has degraded	✓		
Fan Status - Down	Hardware Fan Status state is down	✓		
Processor or Adaptor Utilization	Current utilization exceeds the utilization threshold configured for this network adapter	✓		✓
Physical Memory Utilization	System memory resource utilization	✓		✓
Memory Fragmentation	Monitors system memory for excessive fragmentation		✓	
Backplane Utilization	Monitor utilization of backplane	✓		
Broadcast Rate	Broadcast percentage calculates the percentage of total capacity used to receive data			✓
Buffer Miss Rate	Rate of buffer misses exceeds the memory buffer miss threshold	✓		
Buffer Utilization	Number of buffers used exceeds the memory buffer utilization threshold	✓		✓
Collision Rate	Rate of collisions exceeds the collision threshold	✓		✓
Discard Rate	Percentage of discarded packets is greater than set threshold	✓		✓
Error Rate	Percentage of packets in error is greater than set threshold	✓		✓
High Queue Drop Rate	Number of packets discarded due to input or output queue overflow exceeding the threshold	✓		✓
Free Memory	Typically indicates the system is running out of memory resources	✓		✓



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