

# **Alerts**

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# **Alert Central Displays**

Unified RTMT displays both preconfigured alerts and custom alerts in Alert Central. Unified RTMT organizes the alerts under the applicable tabs: System, Voice/Video, IM and Presence Service, Cisco Unity Connection, and Custom.

You can enable or disable preconfigured and custom alerts in Alert Central; however, you cannot delete preconfigured alerts.

## **System Alerts**

The following list comprises the preconfigured system alerts:

- · AuthenticationFailed
- CiscoDRFFailure
- CoreDumpFileFound
- CpuPegging
- CriticalServiceDown
- DBChangeNotifyFailure
- DBReplicationFailure
- DBReplicationTableOutofSync
- HardwareFailure
- · LogFileSearchStringFound
- LogPartitionHighWaterMarkExceeded
- $\bullet \ LogPartitionLowWaterMarkExceeded$

- LowActivePartitionAvailableDiskSpace
- LowAvailableVirtualMemory
- LowInactivePartitionAvailableDiskSpace
- LowSwapPartitionAvailableDiskSpace
- ServerDown (Applies to Unified Communications Manager clusters)
- SparePartitionHighWaterMarkExceeded
- SparePartitionLowWaterMarkExceeded
- SyslogSeverityMatchFound
- SyslogStringMatchFound
- · SystemVersionMismatched
- $\hbox{-} Total Processes And Threads Exceeded Threshold$

### **Related Topics**

System Alerts

### **Automatic Trace Download Activation**

Some preconfigured alerts allow you to initiate a trace download based on the occurrence of an event. You can automatically capture traces when a particular event occurs by checking the **Enable Trace Download** check box in Set Alert/Properties for the following alerts:

CriticalServiceDown: CriticalServiceDown alert is generated when any service is down.
 CriticalServiceDown alert monitors only those services that are listed in RTMT Critical Services.



Note

The Unified RTMT backend service checks status (by default) every 30 seconds. If service goes down and comes back up within that period, CriticalServiceDown alert may not be generated.

- CodeYellow: This alarm indicates that Unified Communications Manager initiated call throttling due to unacceptably high delay in handling calls.
- CoreDumpFileFound: CoreDumpFileFound alert is generated when the Unified RTMT backend service detects a new Core Dump file.



Note

You can configure both CriticalServiceDown and CoreDumpFileFound alerts to download corresponding trace files for troubleshooting purposes. This setup helps preserve trace files at the time of crash.



Caution

Trace Download may affect services on the node. A high number of downloads adversely impacts the quality of services on the node.

### **Voice and Video Alerts**

The following list comprises the preconfigured Voice and Video alerts:

- BeginThrottlingCallListBLFSubscriptions
- CallAttemptBlockedByPolicy
- CallProcessingNodeCpuPegging
- CARIDSEngineCritical
- CARIDSEngineFailure
- CARSchedulerJobFailed
- CDRAgentSendFileFailed
- CDRFileDeliveryFailed
- CDRHighWaterMarkExceeded
- CDRMaximumDiskSpaceExceeded
- CodeYellow
- DDRBlockPrevention
- DDRDown
- EMCCFailedInLocalCluster
- EMCCFailedInRemoteCluster
- ExcessiveVoiceQualityReports
- ILSHubClusterUnreachable
- ILSPwdAuthenticationFailed
- ILSTLSAuthenticationFailed
- IMEDistributedCacheInactive
- IMEOverQuota
- IMEQualityAlert
- IMEServiceStatus
- InsufficientFallbackIdentifiers
- InvalidCredentials
- LocationOutOfResource
- MaliciousCallTrace
- MediaListExhausted
- MgcpDChannelOutOfService
- NumberOfRegisteredDevicesExceeded

- NumberOfRegisteredGatewaysDecreased
- NumberOfRegisteredGatewaysIncreased
- NumberOfRegisteredMediaDevicesDecreased
- NumberOfRegisteredMediaDevicesIncreased
- NumberOfRegisteredPhonesDropped
- RecordingCallSetupFail
- RecordingGatewayRegistrationRejected
- RecordingGatewayRegistrationTimeout
- RecordingGatewaySessionFailed
- RecordingResourcesNotAvailable
- · RecordingSessionTerminatedUnexpectedly
- · RouteListExhausted
- RTMTSessionExceedsThreshold
- SDLLinkOutOfService
- TCPSetupToIMEFailed
- TLSConnectionToIMEFailed
- UserInputFailure
- · ProductInEval
- · ProductEvalExpired
- ProductOutOfCompliance
- ProductRegistrationExpiringSoon
- ProductAuthorizationExpiringSoon
- ProductRegistrationExpired
- ProductAuthorizationExpired
- ProductCommunicationError

### **Related Topics**

Voice and Video Alerts

### **IM and Presence Service Alerts**

The following list comprises the preconfigured IM and Presence Service alerts:

- CTIGWModuleNotEnabled
- CTIGWProviderDown

- CTIGWUserNotLicenced
- CTIGWUserNotAuthorized
- CTIGWProviderFailedToOpen
- CTIGWQBEFailedRequest
- CTIGWSystemError
- $\bullet \ EspConfigAgentMemAllocError\\$
- $\bullet \ EspConfigAgentFileWriteError$
- $\bullet \ EspConfigAgentNetworkOutage\\$
- EspConfigAgentNetworkRestored
- EspConfigAgentHighMemoryUtilization
- $\bullet \ EspConfigAgentHighCPUU tilization\\$
- EspConfigAgentLocalDBAccessError
- $\bullet \ EspConfigAgentProxyDomainNotConfigured\\$
- EspConfigAgentRemoteDBAccessError
- $\bullet \ EspConfigAgentSharedMemoryStaticRouteError$
- ESPConfigError
- ESPConfigNotFound
- · ESPCreateLockFailed
- ESPLoginError
- ESPMallocFailure
- ESPNAPTRInvalidRecord
- ESPPassedParamInvalid
- ESPRegistryError
- ESPRoutingError
- ESPSharedMemCreateFailed
- ESPSharedMemSetPermFailed
- ESPSharedMemAllocFailed
- ESPSocketError
- ESPStopped
- ESPStatsLogFileOpenFailed
- ESPVirtualProxyError
- ESPWrongIPAddress

- ESPWrongHostName
- ICSACertificateCASignedTrustCertFound
- ICSACertificateFingerPrintMisMatch
- ICSACertificateValidationFailure
- InterclusterSyncAgentPeerDuplicate
- LegacyCUPCLogin
- NotInCucmServerListError
- PEAutoRecoveryFailed
- PEDatabaseError
- PEIDSQueryError
- PEIDSSubscribeError
- PEIDStoIMDBDatabaseSyncError
- PELoadHighWaterMark
- PEMemoryHighCondition
- PEPeerNodeFailure
- PESipSocketBindFailure
- PEStateDisabled
- PEStateLocked
- PEWebDAVInitializationFailure
- PWSSCBFindFailed
- PWSSCBInitFailed
- PWSAboveCPULimit
- PWSAboveSipSubscriptionLimit
- PWSRequestLimitReached
- SRMFailed
- SRMFailover
- SyncAgentAXLConnectionFailed
- UASCBFindFailed
- UASCBGetFailed
- XcpCmComponentConnectError
- XcpCmPauseSockets
- XcpCmStartupError

- XcpCmXmppdError
- XcpConfigMgrConfigurationFailure
- XcpConfigMgrHostNameResolutionFailed
- XcpConfigMgrJabberRestartRequired
- XcpConfigMgrR2RPasswordEncryptionFailed
- $\bullet \ XcpConfigMgrR2RRequestTimedOut$
- XcpDBConnectError
- XcpMdnsStartError
- XcpSIPFedCmComponentConnectError
- $\bullet \ XcpSIPFedCmStartupError$
- XcpSIPGWStackResourceError
- XcpThirdPartyComplianceConnectError
- XcpTxtConfComponentConfigError
- XcpTxtConfDBConnectError
- XcpTxtConfDBQueueSizeLimitError
- XcpTxtConfGearError
- XcpWebCmComponentConnectError
- XcpWebCmHttpdError
- XcpWebCmStartupError
- XcpXMPPFedCmComponentConnectError
- XcpXMPPFedCmStartupError

#### **Related Topics**

IM and Presence Service Alerts

## **Cisco Unity Connection Alerts**

The following list comprises the preconfigured Cisco Unity Connection alerts.

- NoConnectionToPeer
- · AutoFailoverSucceeded
- AutoFailoverFailed
- · AutoFailbackSucceeded
- · AutoFailbackFailed
- SbrFailed (Split Brain Resolution Failed)

- DiskConsumptionCloseToCapacityThreshold
- DiskConsumptionExceedsCapacityThreshold
- · LicenseExpirationWarning
- · LicenseExpired



Note

The first six alerts apply only to Cisco Unity Connection cluster configurations.

### **Related Topics**

Cisco Unity Connection Alerts

# **Alert Action Setup**

In RTMT, you can configure alert actions for every alert that is generated and have the alert action sent to e-mail recipients that you specify in the alert action list.

The following table provides a list of fields that you will use to configure alert actions. Users can configure all fields, unless otherwise marked.

Table 1: Alert Action Configuration

Field	Description	Comment
Alert Action ID	ID of alert action to take.	Specify descriptive name.
Mail Recipients	List of e-mail addresses. You can selectively enable or disable an individual e-mail in the list.	_

# **Access Alert Central and Set Up Alerts**

By using the following procedure, you can perform tasks, such as access Alert Central, sort alert information, enable, disable, or remove an alert, clear an alert, or view alert details.

### **Procedure**

### **Step 1** Perform one of the following tasks:

- a) On the Quick Launch Channel, do the following:
  - 1. Click System.
  - 2. In the tree hierarchy, double-click **Tools**.
  - **3.** Click the Alert Central icon.
- b) Choose **System** > **Tools** > **Alert** > **Alert Central**.

The **Alert Central monitoring** window displays and shows the alert status and alert history of the alerts that the system has generated.

### **Step 2** Perform one of the following tasks:

- a) Set alert properties.
- b) Suspend alerts.
- c) Configure e-mails for alert notification.
- d) Configure alert actions.
- e) Sort alert information in the Alert Status pane. Click the up/down arrow that displays in the column heading.

For example, click the up/down arrow that displays in the Enabled or In Safe Range column.

You can sort alert history information by clicking the up/down arrow in the columns in the Alert History pane. To see alert history that is out of view in the pane, use the scroll bar on the right side of the Alert History pane.

- f) To enable, disable, or remove an alert, perform one of the following tasks:
  - From the Alert Status window, right-click the alert and choose **Disable/Enable Alert** (option toggles) or **Remove Alert**, depending on what you want to accomplish.
  - Highlight the alert in the Alert Status window and choose System > Tools > Alert > Disable/Enable (or Remove) Alert.

### Tip

You can remove only user-defined alerts from RTMT. The Remove Alert option appears grayed out when you choose a preconfigured alert.

- g) To clear either individual or collective alerts after they get resolved, perform one of the following tasks:
  - After the Alert Status window displays, right-click the alert and choose Clear Alert (or Clear All Alerts).
  - Highlight the alert in the Alert Status window and choose **System** > **Tools** > **Alert** > **Clear Alert** (or **Clear All Alerts**).

After you clear an alert, it changes from red to black.

- h) To reset alerts to default configuration, perform one of the following tasks:
  - After the Alert Status window displays, right-click the alert and choose **Reset Alert to Default Config**, to reset that alert to the default configuration.
  - Choose **System** > **Tools** > **Alert** > **Reset all Alerts to Default Config**, to reset all the alerts to the default configuration.
- i) To view alert details, perform one of the following tasks:
  - After the **Alert Status** window displays, right-click the alert and choose **Alert Details**.
  - Highlight the alert in the **Alert Status** window and choose **System** > **Tools** > **Alert** > **Alert Details**.

Tip

After you have finished viewing the alert details, click **OK**.

## **Set Alert Properties**

Using the alert notification feature, the application notifies you of system problems. The following configuration setup is required to activate alert notifications for a system performance counter.

From the RTMT Perfmon Monitoring pane, you select the system perfmon counter and perform the following actions:

- Set up an e-mail or a message popup window for alert notification.
- Determine the threshold for the alert.
- Determine the frequency of the alert notification (for example, the alert occurs once or every hour).
- Determine the schedule for when the alert activates (for example, on a daily basis or at certain times of the day).



Tip

To remove the alert for the counter, right-click the counter and choose Remove Alert. The option appears dim after you remove the alert.

#### **Procedure**

### **Step 1** Perform one of the following actions:

If you want to:	Action
Set alert properties for a performance counter	<ul> <li>Display the performance counter.</li> <li>From the counter chart or table, right-select the counter for which you Alert/Properties.</li> <li>Check the Enable Alert check box.</li> </ul>
Set alert properties from Alert Central	<ul> <li>Access Alert Central.</li> <li>Select the alert for which you want to set alert properties.</li> <li>Perform one of the following actions:</li> </ul>
	<ul> <li>Right-select the alert and select Set Alert/Properties.</li> <li>Select System &gt; Tools &gt; Alert &gt; Set Alert/Properties.</li> <li>Check the Enable Alert check box.</li> </ul>

- **Step 2** Select the severity level at which you want to be notified in the Severity list check box.
- **Step 3** Enter a description of the alert in the Description pane.
- Step 4 Select Next.
- **Step 5** Configure the settings in the Threshold, Value Calculated As, Duration, Frequency, and Schedule panes.

**Table 2: Counter Alert Configuration Parameters** 

Setting	Description
Threshold Pane	
Trigger alert when following conditions met (Over, Under)	Check and enter the value that applies:
	<ul> <li>Over: Check to configure a maximum threshold that must be met be value field, enter a value. For example, enter a value that equals the Under: Check to configure a minimum threshold that must be met be value field, enter a value. For example, enter a value that equals the</li> </ul>
	Tip Use these check boxes in conjunction with the Frequency and School
Value Calculated As Pane	
Absolute, Delta, Delta Percentage	Select the radio button that applies:
	<ul> <li>Absolute: Because some counter values are accumulative, select A</li> <li>Delta: Select Delta to display the difference between the current co</li> <li>Delta Percentage: Select Delta Percentage to display the counter per</li> </ul>
Duration Pane	
Trigger alert only when value constantly; Trigger alert immediately	Trigger alert only when value constantly: If you want the alert no or over threshold for a desired number of seconds, select this radio alert to be sent.
	Trigger alert immediately: If you want the alert notification to be seemed as a second control of the sec
Frequency Pane	
Trigger alert on every poll; trigger up to	Select the radio button that applies:
	Trigger alert on every poll: If you want the alert notification to acti this radio button.
	Trigger up to: If you want the alert notification to activate at certainumber of alerts that you want sent and the number of minutes with
Schedule Pane	
24-hours daily; start/stop	Select the radio button that applies:
	• 24-hours daily: If you want the alert to be triggered 24 hours a day,
	• Start/Stop: If you want the alert notification activated within a spectart time and a stop time. If checked, enter the start and stop times the counter to be checked every day from 9:00 a.m. to 5:00 p.m. or

## **Suspend Alerts**

You may want to temporarily suspend some or all alerts; you can suspend alerts on a particular node or on an entire cluster. For example, if you are upgrading your system to a newer release, suspend alerts until the upgrade completes, so that you do not receive e-mails and e-pages during the upgrade.

Follow this procedure to suspend alerts in Alert Central.

#### **Procedure**

#### **Step 1** Choose **System > Tools > Alert > Suspend cluster/node Alerts**.

#### Note

Per node suspend states do not apply to clusterwide alerts.

- **Step 2** Perform one of the following actions:
  - To suspend all alerts in the cluster, click the Cluster Wide radio button and check the Suspend all alerts check box.
  - To suspend alerts per server, click the **Per Server** radio button and check the **Suspend** check box of each server on which you want alerts to be suspended.

#### Step 3 Click OK.

#### Note

To resume alerts, choose **Alert** > **Suspend cluster/node Alerts** and uncheck the suspend check boxes.

# Set up alerts for core dump and collect relevant logs

Core dumps can be difficult to reproduce so it is particularly important to collect the log files associated with them when they occur and before they are over written.

Set up an e-mail alert for core dumps, so that you are immediately notified when one occurs to assist in troubleshooting its cause.

## **Enable Email Alert**



Important

Enable TLS mode, Enable Authentication mode, Username, and Password fields are introduced from Release 14SU2 onwards.

#### **Procedure**

- **Step 1** Select **System > Tools > Alert > Alert Central**.
- Step 2 Right-click CoreDumpFileFound alert and select Set Alert Properties.
- **Step 3** Follow the wizard prompts to set your preferred criteria:
  - a) In the **Alert Properties: Email Notification** popup, make sure that **Enable Email** is checked and click **Configure** to set the default alert action, which will be to email an administrator.
  - b) Follow the prompts and **Add** a Recipient email address. When this alert is triggered, the default action is to email this address.
  - c) Click Save.
- **Step 4** Set the default Email server:
  - a) Select System > Tools > Alert > Config Email Server.
  - b) Enter the e-mail server and port information to send email alerts.
  - c) Enter the **Send User Id**.
  - d) Click OK.

## **Collect logs**

Follow this procedure to collect logs after you receive an e-mail alert.

#### **Procedure**

- **Step 1** Note which services initiated the alert, which are indicated by "Core" in the e-mail message.
- **Step 2** Select **Tools** > **Trace & Log Central** > **Collect Files** and select the relevant logs for all impacted services.

For example, if the service is Cisco Presence Engine, collect the Cisco Presence Engine, Cisco XCP router and Cisco XCP Connection Manager logs. Or, if the service is Cisco XCP Router, collect the Cisco XCP Router, and Cisco XCP Connection Manager and Cisco Presence Engine logs.

**Step 3** Generate the stack trace by running the following commands from the CLI:

utils core active list

utils core active analyze core filename

- Step 4 Select Tools > Trace & Log Central > Collect Files and select the RIS Data Collector PerfMon Log.
- **Step 5** Select **Tools** > **SysLog Viewer** to collect the system logs.
  - a) Select a node.
  - b) Click **System Logs** > **messages** to view and save the messages.
  - c) Click **Application Logs** > **CiscoSyslog** to view and save the log file.
- **Step 6** Attach the collected files to your Cisco technical support case.

Collect logs