CHAPTER 7

Understanding Service Parameters

The Service Parameters configuration pages for Cisco CallManager Release 3.0 allow you to configure several different services on selected servers. With the Service Parameters application, you can insert, modify, and delete service parameters for those services.

Caution You will never need to add or delete service parameters unless directed by the Cisco Technical Assistance Center (TAC). Some changes to service parameters may cause system failure.

Additional Information

Refer to the following tables for the different service parameters, and a description of each, that can be configured for each service:

Cisco CallManager Service Parameters

Caution You will never need to add or delete service parameters unless directed by the Cisco Technical Assistance Center (TAC). Some changes to service parameters may cause system failure.

Note We strongly recommend modifying trace parameters from the Trace Configuration page. Refer to the "Trace" section on page 32-1 for more information.

Table 7-1 contains service parameters configured for Cisco CallManager.

Table 7-1 Cisco CallManager Service Parameters

ParamName	Values	Description
AbleToEstablishMF	Default: T	Used for certification testing. We recommend you do not change the default value. Valid values are T or F. Send the SABME at startup instead of waiting for the distance end to do it.
AnalogAccessUse729	Default: F	Not supported for Cisco CallManager Release 3.0.
AutoSelectHeldCallFlag	Default: F	Determines whether to automatically select the call on hold when the phone goes off hook if that call was the last signal sent to the phone.
CallDiagnosticsEnabled	Default: F	Determines whether call diagnostic records are generated. Valid values are: F = not generated T = generated
CallParkReversionTimeout	Default: 60	The number of seconds to wait before reverting a parked party to the call parker. Valid value is any numeric value.
CallWaitingEnable	Default: T	Enables or disables call waiting for the entire system.

Table 7-1 Cisco CallManager Service Parameters (continued)

ParamName	Values	Description
CdrEnabled	Default: F	Determines whether Call Detail Records (CDRs) are generated. Valid values are: T = Cdrs are generated F = Cdrs are not generated
CdrLogCallsWithZeroDuration Flag	Default: F	Enables logging of CDR records for calls which were never connected, or which lasted less than one second.
ClearCallsWhenDatalinkGoes Down	Default: T	If the D-channel (datalink) terminates, this setting determines if calls to the phones will be terminated. Valid values are 0 = Do not clear calls when datalink goes down; 1 = Clear calls when datalink goes down.
ConnectDisconnectTimer	Default: 7	Used for debugging purposes only. We strongly recommend you do not change the default value. The maximum time allowed for a response from a connect or disconnect request. Valid value is any numeric value.
DbNoActivityTimeout	Default: 30	The amount of time to wait before closing the file after no database requests have been received. Valid value is any numeric value.
DigitAnalysisTimer	Default: 6	Used for debugging purposes only. We strongly recommend you do not change the default value. The maximum time allowed for a response from a digit analysis requests. Valid value is any numeric value.
DisplayIEDeliveryFlag	Default: F	This flag (when set to T) enables the delivery of the display IE in SETUP and CONNECT messages for the calling and called party name delivery service.
ForwardMaximumHopCount	Default: 12	Maximum number of attempts to extend a forwarded call. Valid values are: (Value >=1)

Table 7-1 Cisco CallManager Service Parameters (continued)

ParamName	Values	Description
ForwardNoAnswerTimeout	Default: 12	The number of seconds to wait before forwarding on No Answer Condition. Valid values are: (Value >=1)
GatekeeperControlRegistration Type	Default: F	H.323 Gatekeeper Control Registration Type. We strongly recommend not changing this parameter unless you have a complete understanding of RAS registration.
GatewayKeepAliveTimeout	Default: 25	The number of seconds between Gateway Status messages.
GatewayPollTimeout	Default: 10	The number of seconds to wait for a response from a GatewayOpenReq. Valid value is any numeric value.
H225ConnectTime	Default: 0	H.225ConnectTime determines, on an outgoing H.323/H.225 call, whether we process the open logical channel (when audio is transmitted) on the call proceeding, call alerting, or call connecting.
HoldType	Default: F	Original Hold Type requires the user to press the hold button to retrieve a call from hold. The new hold allows the user to press the line button on which the held call is stored to retrieve it.
InterfaceIdentifierPresentFlag	Default: F	This flag only applies to the DMS100 protocol for the digital access gateway in the Channel Identification IE of the SETUP, CALL PROCEEDING, ALERTING, and CONNECT messages. The purpose of this parameter is to interoperate with Nortel PBX when the PBX is configured to use the DMS100 protocol.
IpPrecedence	Default: 0x000000B0	Used by anyone who configures streaming, phones, media applications, etc. We strongly recommend that this parameter never be changed.
L2RetriesN200	Default: 3	The number of retries before declaring the datalink down. Valid value is any numeric value.

Table 7-1 Cisco CallManager Service Parameters (continued)

ParamName	Values	Description
LineStateUpdateEnabled	Default: T	Determines whether Line State Server (used by Cisco WebAttendant) can track the active/inactive states of each line/directory number.
LowPriorityQueueThrottling Flag	Default: F	When low priority TCP queue gets too large, start throwing away new call attempts.
LowPriorityQueueThrottling MaxCount	Default: 1000	The maximum number of outstanding low priority stimulus messages in the queue before new call attempts are discarded. Use this value to adjust call response time. Valid value is any numeric value.
MatchingCgpnWithAttendant Flag	Default: F	On an outbound analog access gateway call, compare if the calling party number matches one of the associated analog access ports. If so, then select that port, otherwise make it so all ports with an attendant number assigned to them are not usable for the life of the current call. This forces selection of another analog access device if another analog access gateway has been configured in RoutePoint/RouteGroup. If another analog access gateway has not been configured, the user hears a fast busy signal.
MaxAdHocConference	Default: 4 Min: 3 Max: maximum size of largest conference bridge in system	Specifies the maximum number of parties that can be added to an Ad-Hoc Conference.
MaxErrorsToReport	Default: 1	The number of errors to report per datalink establishment. Valid value is any numeric value.

Table 7-1 Cisco CallManager Service Parameters (continued)

ParamName	Values	Description
MaxMeetMeConferenceUnicast	Default: 10 Min: 3 Max: maximum size of largest conference bridge in system	Specifies the maximum number of participants that can join a Meet-Me conference.
MaxNumberOfReceivedIFrames BeforeAcking	Default: 0	Receive 5 I-Frames before responding with a receiver ready (RR) for an acknowledgement (ACK). Valid value is any numeric value.
MaxNumberOfStationsIniting	Default: 50	The maximum number of stations trying to initialize without completing all database requests. Under a heavy load, it is possible to overwhelm the system to the point where no calls can be completed. Set these values to get back usability if the system becomes overwhelmed. Decreasing the LowPriorityQueueThrottlingMaxCount provides faster dial tone, but also increases the chances for calls being rejected. Valid value is any numeric value.
MediaExchangeInterfaceCaps Timeout	Default: 8	The number of seconds for a device to send capabilities for a media connection. Valid value is any numeric value.
MediaExchangeTimeout	Default: 5	The number of seconds for a media connection to be made. Valid value is any numeric value.
OutOfBandwidthText	Default: Not Enough Bandwidth	The text to be displayed when the call cannot be placed because there is not enough bandwidth.
OutStandingIFramesK	Default: 7	The maximum number of outstanding I-Frames which are not acknowledged. Valid value is any numeric value.

Table 7-1 Cisco CallManager Service Parameters (continued)

ParamName	Values	Description
OverlapReceivingForPriFlag	Default: F	We strongly recommend using the default setting for this parameter.
PreferredG711Millisecond PacketSize	Default: 20	This is the preferred amount of time set for delivering packets. Value for this parameter should never be set below 20, as this will add latency.
PreferredG723Millisecond PacketSize	Default: 30	This is the preferred amount of time set for delivering packets. This parameter should never be set below 20, as this will add latency.
PreferredG729Millisecond PacketSize	Default: 20	This is the preferred amount of time set for delivering packets. This parameter should never be set below 20, as this will add latency.
RASMulticastFlag	Default: F	Allows for multicast registration of RAS. **Caution:** Do not set this parameter unless you want all RAS devices to register to Cisco CallManager.
RedirectingNumIEDeliveryFlag	Default: F	This flag applies to the SETUP message only on all protocols for the digital access gateway. When the flag is set to True, the RedirectingNumberIE is included in the SETUP message to indicate the first redirecting number and the redirecting reason of the call when Call Forward happens.
SdlMaxUnHandledExceptions	Default: 5	The maximum number of Cisco CallManager exceptions before Cisco CallManager stops running.
SdlTraceMaxLines	Default: 10000	The maximum number of lines in each file before starting the next file. Valid value is any numeric value.
SdlTraceTotalNumFiles	Default: 100	The maximum number of files before restarting file count and overwriting old files.
SilenceSuppressionSystemWide	Default: T	Determines whether silence suppression is disabled for all devices on a system-wide basis.

Table 7-1 Cisco CallManager Service Parameters (continued)

ParamName	Values	Description
SilenceSuppressionWith Gateways	Default: T	Determines whether silence suppression is disabled for all devices on gateways.
StableIn4Flag	Default: F	Used for certification testing. We recommend you do not change the default value.
Station2ndKeepaliveInterval	Default: 60	The Keepalive Interval for backup server.
StationKeepaliveInterval	Default: 30	The number of seconds between keepalive messages sent to Cisco IP Phones (stations). Use any numeric value starting at 30. We recommend you do not use the 0 value.
StatisticsEnabled	Default: T	Determines whether system statistics are generated. Valid values are: F = not generated T = generated
StatusEnqPollFlag	Default: F	Sends status enquiries to H.323 devices to check for out of range status. If the device is determined to be out of range, the call is terminated. If the device is within range, sending these status enquiries does not disrupt call connection.
StripPoundCalledPartyFlag	Default: T	This flag (when set to T) enables the stripping of # sign digits from the called party IE, of the inbound and outbound Q.931 and H.225 SETUP message.
SuppressOutOfChansEvents	Default: T	Used for debugging purposes only. We strongly recommend you do not change the default value. Determines whether out of channels responses will be sent to event processing.
TimerSendProgress_msec	Default: 3000	Sometimes the other end does not get back fast enough with the Alert, Progress or Connect while in Call_initiated state.
TimerT1Frame_msec	Default: 2000	Valid value is any numeric value in 1/8 second ticks.

Table 7-1 Cisco CallManager Service Parameters (continued)

ParamName	Values	Description
TimerT200_msec	Default: 1000	Layer 2 Retransmission time. This is the only timer value which is in 1/40 second ticks, all other values are in 1/8 second ticks. The increased granularity was needed because of certification testing and requirements which were +/-5% on timers. Valid value is any numeric value in 1/40 second ticks.
TimerT203_msec	Default: 10000	Layer 2 Keepalive. Valid value is any numeric value in 1/8 second ticks.
TimerT301_msec	Default: 180000	User-(Call Delivered) ALERTING Received, Network-(Call Received) ALERTING Received. Valid value is any numeric value in 1/8 second ticks.
TimerT302_msec	Default: 10000	Interdigit Timeout. User-(Overlap Receiving) SETUP ACK sent, Network-(Overlap Sending) SETUP ACK sent. Valid value is any numeric value in 1/8 second ticks.
TimerT303_msec	Default: 4000	User-(Call Initiated) SETUP sent, Network-(Call Present) SETUP sent. Valid value is any numeric value in 1/8 second ticks.
TimerT304_msec	Default: 20000	User-(Overlap Sending) SETUP ACK received, Network-(Overlap Receiving) SETUP ACK received. Valid value is any numeric value in 1/8 second ticks.
TimerT305_msec	Default: 30000	User-(Disconnect Request) DISCONNECT sent, Network-(Disconnect Indication) DISCONNECT without progress ind sent. Valid value is any numeric value in 1/8 second ticks.
TimerT306_msec	Default: 30000	Network-(Disconnect Indication) DISCONNECT with progress ind sent. Valid value is any numeric value in 1/8 second ticks.
TimerT307_msec	Default: 180000	Network-(Null) SUSPEND ACK sent. Valid value is any numeric value in 1/8 second ticks.

Table 7-1 Cisco CallManager Service Parameters (continued)

ParamName	Values	Description
TimerT308_msec	Default: 4000	User-(Release Request) RELEASE sent, Network-(Release Request) RELEASE sent. Valid value is any numeric value in 1/8 second ticks.
TimerT309_msec	Default: 90000	User/Network-(Any stable State) Datalink lost. Valid value is any numeric value in 1/8 second ticks.
TimerT310_msec	Default: 10000	User-(Outgoing Call Proceed) CALL PROCEED received, Network-(Incoming Call Proceed) CALL PROCEED received. Valid value is any numeric value in 1/8 second ticks.
TimerT313_msec	Default: 4000	User-(Connect Request) CONNECT sent. Valid value is any numeric value in 1/8 second ticks.
TimerT316_msec	Default: 120000	(Restart Request) RESTART sent. Valid value is any numeric value in 1/8 second ticks.
TimerT317_msec	Default: 300000	Valid value is any numeric value in 1/8 second ticks.
TimerT321_msec	Default: 30000	(Any state) D-Channel failure. Valid value is any numeric value in 1/8 second ticks.
TimerT322_msec	Default: 4000	(Any state) STATUS ENQUIRY sent. Valid value is any numeric value in 1/8 second ticks.
TimerTStatusEnqPoll_msec	Default: 10000	(Any state) Timer initially used to send a StatusEnq. This was done to check to see if Symbol H.323 phone was still attached. Valid value is any numeric value in 1/8 second ticks.
TimeToDelayBeforeSendingAnAck_msec	Default: 0	The time to wait to send a receiver ready (RR) acknowledgement on a given Non poll I-Frame. Valid value is any numeric value in 25 millisecond ticks. 0 = send immediately.
ToneOnHoldTime	Default: 10 Min: 5 Max: 99999	The number of seconds to play some type of tone when a call is on hold (minimum of five seconds).

Table 7-1 Cisco CallManager Service Parameters (continued)

ParamName	Values	Description
Refer to the "Trace" section on page 32-1 for descriptive and configuration information on all trace parameters.		
UnknownCallerId		The directory number to be displayed. Valid value is any numeric value representing a general number for your system (if you wish to provide caller ID functionality to called parties). Valid value is any valid telephone number.
UnknownCallerIdFlag	Default: T	This parameter is related to the Unknown CallerId field. We strongly recommend using the default setting since this can now be configured using Cisco CallManager Administration.
UnknownCallerIdText	Default: Unknown	The text to be displayed to called parties having caller ID capability. The first line is 20 characters and the second line is 14 characters. Try to get a saying which looks OK in the display when broken into two lines having the specified number of characters per line.
UserUserIEStatus	Default: F	If the user to user information element (UUIE) is passed in the system, enabling UUIE status allows ISDN PRI messages to include them outbound PRI calls.

Additional Information

The following list contains additional information related to this section:

- Service Parameters, page 31-1
- Cisco CallManager, page 9-1
- Cisco CallManager Group, page 10-1

Related Procedures

- Adding a New Service on a Server, page 31-2
- Deleting a Service From a Server, page 31-3
- Adding a New Service Parameter, page 31-5

- Updating a Service Parameter, page 31-6
- Deleting a Service Parameter, page 31-9
- Adding a Cisco CallManager, page 9-1
- Updating a Cisco CallManager, page 9-5
- Deleting a Cisco CallManager, page 9-6

Cisco TFTP Service Parameters

Caution You will never need to add or delete service parameters unless directed by the Cisco Technical Assistance Center (TAC). Some changes to service parameters may cause system failure.

Note We strongly recommend modifying trace parameters from the Trace Configuration page. Refer to the "Trace" section on page 32-1 for more information.

Table 7-2 contains service parameters configured for Cisco TFTP.

Table 7-2 Cisco TFTP Service Parameters

ParamName	Values	Description
AnalogTcpPort	Default: 2002	Not used under normal circumstances.
CallManagerIp	Default: 127.0.0.1	Not used under normal circumstances.
CallManagerIpTrack	Default: T	Not used under normal circumstances.
ChangeUDPPort	Default: 3000	Do not change this parameter.
DigitalTcpPort	Default: 2001	Not used under normal circumstances.
FileDelete	Default: T	Flag that enables configuration file deletion. This is necessary to ensure deleted devices do not still get configuration files.

Table 7-2 Cisco TFTP Service Parameters (continued)

ParamName	Values	Description
FileLocation	Default: c:\Program Files\Cisco\TFTPpath	String that represents the primary path for building and serving files.
PhoneTcpPort	Default: 2000	Not used under normal circumstances.
ServerIpTrack	Default: T	True means use default local IP address. Do not change this parameter.
TFTPIp	Default: 127.0.0.1	String that represents the IP address of the TFTP server if ServerIpTrack is false.
Refer to the "Trace" section on page 32-1 for descriptive and configuration information on all trace parameters.		
UseDb	Default: T	Do not change this parameter.

Additional Information

The following list contains additional information related to this section:

- Service Parameters, page 31-1
- Cisco TFTP, page 28-1
- Trace, page 32-1
- Understanding Trace Configuration, page 32-2
- Recommended Trace Settings, page 32-9

Related Procedures

The following list contains procedures related to this section:

- Inserting Cisco TFTP Service on a Server, page 28-2
- Deleting Cisco TFTP Service From a Server, page 28-3
- Configuring Cisco TFTP Command Line Parameters, page 28-5
- Deleting Cisco TFTP Command Line Parameters, page 28-7
- Configuring Cisco TFTP Trace Parameters, page 28-8
- Adding a New Service and Trace Configuration, page 32-9

- Updating a Trace Configuration, page 32-11
- Deleting a Trace Configuration, page 32-11

Cisco Messaging Interface Service Parameters

Caution You will never need to add or delete service parameters unless directed by the Cisco Technical Assistance Center (TAC). Some changes to service parameters may cause system failure.

Note We strongly recommend modifying trace parameters from the Trace Configuration page. Refer to the "Trace" section on page 32-1 for more information.

Table 7-3 contains service parameters configured for Cisco Messaging Interface.

Table 7-3 Cisco Messaging Interface Service Parameters

ParamName	Values	Description
MessageWaitingOffDN		Specifies the directory number to which calls from a voicemail system are directed to disable or turn off the Message Waiting light for the specified calling party.
MessageWaitingOnDN		Specifies the directory number to which calls from a voicemail system are directed to enable or turn on a Message Waiting light for the specified calling party.
MiniSearchSpace		The search space to use when determining the device to be affected by the MWI lamp.
SerialPort	Default: COM1	The port to which the cable is connected, and that is connected to the voice mail system.
Refer to the "Trace" section on page 32-1 for descriptive and configuration information on all trace parameters.		

Table 7-3 Cisco Messaging Interface Service Parameters (continued)

ParamName	Values	Description
VoiceMailDn		The voice mail access number.
VoiceMailPartition		The partition in which the voice mail DN resides.

Additional Information

The following list contains additional information related to this section:

- Service Parameters, page 31-1
- Cisco Messaging Interface, page 27-1
- Most Commonly Changed Service Parameter Fields, page 27-2
- Trace, page 32-1
- Understanding Trace Configuration, page 32-2
- Recommended Trace Settings, page 32-9

Related Procedures

The following list contains procedures related to this section:

- Adding Cisco Messaging Interface Service on the Cisco CallManager, page 27-4
- Deleting Cisco Messaging Interface Service From a Server, page 27-5
- Configuring Cisco Messaging Interface Command Line Parameters, page 27-7
- Deleting Cisco Messaging Interface Command Line Parameters, page 27-10
- Configuring Cisco Messaging Interface Trace Parameters, page 27-11
- Deleting Cisco Messaging Interface Trace Parameters, page 27-14
- Adding a New Service and Trace Configuration, page 32-9
- Updating a Trace Configuration, page 32-11
- Deleting a Trace Configuration, page 32-11

Cisco IP Voice Media Streaming Service Parameters

Caution You will never need to add or delete service parameters unless directed by the Cisco Technical Assistance Center (TAC). Some changes to service parameters may cause system failure.

Table 7-4 contains service parameters configured for Cisco IP Voice Media Streaming.

Table 7-4 Cisco IP Voice Media Streaming Service Parameters

ParamName	Values	Description
CFB:OrphanStreamTimeout	Default: 300	Time set for orphaned CFB calls to stay up when a Cisco CallManager goes down.
ChangeUDPPort	Default: 3000	Do not change this parameter.
MTP:OrphanStreamTimeout	Default: 300	Time set for orphaned calls or conferences to stay up when a Cisco CallManager goes down.
MTP:RunFlag	Default: F	This flag (when set) enables MTP.
Refer to the “Trace” section on page 32-1 for descriptive and configuration information on all trace parameters.		

Additional Information

The following list contains additional information related to this section:

- Service Parameters, page 31-1
- Media Termination Point, page 30-1
- Important Information, page 30-3
- Call Failure/User Alert, page 30-4
- Trace, page 32-1
- Understanding Trace Configuration, page 32-2
- Recommended Trace Settings, page 32-9

Related Procedures

The following list contains procedures related to this section:

- Adding a Media Termination Point, page 30-6
- Updating a Media Termination Point, page 30-7
- Deleting a Media Termination Point, page 30-9
- Adding a New Service and Trace Configuration, page 32-9
- Updating a Trace Configuration, page 32-11
- Deleting a Trace Configuration, page 32-11

Database Layer Service Parameters

Caution You will never need to add or delete service parameters unless directed by the Cisco Technical Assistance Center (TAC). Some changes to service parameters may cause system failure.

Table 7-5 contains service parameters configured for the Database Layer.

Table 7-5 Database Layer Service Parameters

ParamName	Values	Description
MaxCdrRecords		A service wide parameter that is a number that specifies the maximum number of CDR records to keep around. If the CDR tables get too full (the number of records reaches this maximum number) then the oldest records are deleted and a message is sent to the Event log. This check occurs once a day.
Refer to the "Trace" section on page 32-1 for descriptive and configuration information on all trace parameters.		

Additional Information

The following list contains additional information related to this section:

- Service Parameters, page 31-1
- Most Commonly Changed Service Parameter Fields, page 27-2
- Trace, page 32-1
- Understanding Trace Configuration, page 32-2
- Recommended Trace Settings, page 32-9
- Cisco CallManager, page 9-1
- Cisco CallManager Group, page 10-1

Related Procedures

The following list contains procedures related to this section:

- Adding a New Service and Trace Configuration, page 32-9
- Updating a Trace Configuration, page 32-11
- Deleting a Trace Configuration, page 32-11
- Adding a Cisco CallManager, page 9-1
- Updating a Cisco CallManager, page 9-5
- Deleting a Cisco CallManager, page 9-6
- Adding a Cisco CallManager Group, page 10-2
- Updating a Cisco CallManager Group, page 10-3
- Deleting a Cisco CallManager Group, page 10-4