



Cisco JTAPI Classes and Interfaces

Introduction

This appendix contains a concise listing of all the classes and interfaces available in the Cisco JTAPI implementation for Cisco CallManager:

- [Cisco JTAPI Version 1.2 Classes and Interfaces, page A-2](#), which lists all the JTAPI v 1.2 classes and methods. The supported classes and methods have a check mark in the Cisco JTAPI Support column.
- [Cisco JTAPI Extension Classes and Interfaces, page A-17](#), which lists the Cisco extension classes and methods.
- [Cisco Trace Logging Classes and Interfaces, page A-20](#), which lists the error tracing classes and methods.

Cisco JTAPI Version 1.2 Classes and Interfaces

Core Package

Table A-1 lists each JTAPI interface in the JTAPI Core Package followed by the associated method(s) and whether the classes are supported by the Cisco JTAPI implementation.

Table A-1 Support for *javax.telephony*

Class Names	Method Names	Cisco JTAPI Support	Comments
Address	addCallObserver	Yes	
	addressObserver	Yes	
	getAddressCapabilities	Yes	
	getCallObservers	Yes	
	getCapabilities	Yes	
	getConnections	Yes	
	getName	Yes	
	getObservers	Yes	
	getProvider	Yes	
	getTerminals	Yes	
	removeCallObserver	Yes	
	removeObserver	Yes	
AddressObserver	addressChangedEvent	Yes	
Call	addObserver	Yes	
	connect	Yes	A CallObserver must exist for the Terminal or Address originating the call.
	getCallCapabilities	Yes	
	getCapabilities	Yes	
	getConnections	Yes	
	getObservers	Yes	
	getProvider	Yes	
	getState	Yes	
removeObserver	Yes		
CallObserver	callChangedEvent	Yes	
Connection	disconnect	Yes	
	getAddress	Yes	
	getCall	Yes	
	getConnectionCapabilities	Yes	

Table A-1 Support for *javax.telephony* (continued)

Class Names	Method Names	Cisco JTAPI Support	Comments
	getState	Yes	
	getTerminalConnections	Yes	
JtapiPeer	getName	Yes	
	getProvider	Yes	
	getServices	Yes	
JtapiPeerFactory	getJtapiPeer	Yes	
Provider	addObserver	Yes	
	createCall	Yes	
	getAddress	Yes	
	getAddressCapabilities()	Yes	
	getAddressCapabilities(Terminal)	Yes	
	getAddresses	Yes	
	getCallCapabilities()	Yes	
	getCallCapabilities(Terminal, Address)	Yes	
	getCalls	Yes	This method returns calls only when there are CallObservers attached to Addresses or Terminals, when a RouteAddress is registered for routing, or when a CiscoMediaTerminal is registered.
	getCapabilities	Yes	
	getConnectionCapabilities()	Yes	
	getConnectionCapabilities(Terminal, Address)	Yes	
	getName	Yes	
	getObservers	Yes	
	getProviderCapabilities()	Yes	
	getProviderCapabilities(Terminal)	Yes	
	getState	Yes	
	getTerminal	Yes	
	getTerminalCapabilities()	Yes	
	getTerminalCapabilities(Terminal)	Yes	
	getTerminalConnectionCapabilities()	Yes	
	getTerminalConnectionCapabilities(Terminal)	Yes	

Table A-1 Support for *javax.telephony* (continued)

Class Names	Method Names	Cisco JTAPI Support	Comments
	getTerminals	Yes	
	removeObserver	Yes	
	shutdown	Yes	
ProviderObserver	providerChangedEvent	Yes	
Terminal	addCallObserver	Yes	
	addObserver	Yes	
	getAddresses	Yes	
	getCallObservers	Yes	
	getCapabilities	Yes	
	getName	Yes	
	getObservers	Yes	
	getProvider	Yes	
	getTerminalCapabilities	Yes	
	getTerminalConnections	Yes	
	removeCallObserver	Yes	
	removeObserver	Yes	
TerminalConnection	answer	Yes	
	getCapabilities	Yes	
	getConnection	Yes	
	getState	Yes	
	getTerminal	Yes	
	getTerminalConnectionCapabilities	Yes	
TerminalObserver	terminalChangedEvent	Yes	

Call Center Package

Table A-2 lists each JTAPI interface in the JTAPI Call Center Package followed by the associated method(s) and whether the classes are supported by the Cisco JTAPI implementation.

Table A-2 Support for *javax.telephony.callcenter*

Class Names	Method Names	Cisco JTAPI Support
ACDAddress	getACDManagerAddress	
	getLoggedOnAgents	
	getNumberQueued	
	getOldestCallQueued	
	getQueueWaitTime	
	getRelativeQueueLoad	
ACDAddressObserver		
ACDConnection	getACDManagerConnection	
ACDManagerAddress	getACDAddresses	
ACDManagerConnection	getACDConnections	
Agent	getACDAddress	
	getAgentAddress	
	getAgentID	
	getAgentTerminal	
	getState	
	setState	
AgentTerminal	addAgent	
	getAgents	
	removeAgents	
	setAgents	
AgentTerminalObserver		
CallCenterAddress	addCallObserver	
CallCenterCall	connectPredictive	
	getApplicationData	
	getTrunks	
	setApplicationData	
CallCenterCallObserver		
CallCenterProvider	getACDAddresses	
	getACDManagerAddresses	
	getRouteableAddresses	
CallCenterTrunk	getCall	
	getName	

Table A-2 Support for *javax.telephony.callcenter* (continued)

Class Names	Method Names	Cisco JTAPI Support
	getState	
	getType	
RouteAddress	cancelRouteCallback	Yes
	getActiveRouteSessions	Yes
	getRouteCallback	Yes
	registerRouteCallback	Yes
RouteCallback	reRouteEvent	Yes
	routeCallbackEndedEvent	Yes
	routeEndEvent	Yes
	routeEvent	Yes
	routeUsedEvent	Yes
RouteSession	endRoute	Yes
	getCause	Yes
	getRouteAddress	Yes
	getState	Yes
	selectRoute	Yes

Call Center Capabilities Package

Table A-3 lists each JTAPI interface in the JTAPI Call Center Capabilities Package followed by the associated method(s), and whether the classes are supported by the Cisco JTAPI implementation.

Table A-3 Support for *javax.telephony.callcenter.capabilities*

Class Names	Method Names	Cisco JTAPI Support
ACDAddressCapabilities	canGetACDManagerAddress	
	canGetLoggedOnAgents	
	canGetNumberQueued	
	canGetOldestCallQueued	
	canGetQueueWaitTime	
	canGetRelativeQueueLoad	
ACDConnectionCapabilities	canGetACDManagerConnection	
ACDManagerAddressCapabilities	canGetACDAddresses	
ACDManagerConnectionCapabilities	canGetACDConnections	
AgentTerminalCapabilities	canHandleAgents	
CallCenterAddressCapabilities	canAddCallObserver	
CallCenterCallCapabilities	canConnectPredictive	
	canGetTrunks	

Table A-3 Support for *javax.telephony.callcenter.capabilities*

Class Names	Method Names	Cisco JTAPI Support
	canHandleApplicationData	
CallCenterProviderCapabilities	canGetACDAddresses	Yes
	canGetACDManagerAddresses	Yes
	canGetRouteableAddresses	Yes
RouteAddressCapabilities	canRouteCalls	Yes

Call Center Events Package

Table A-4 lists each JTAPI interface in the JTAPI Call Center Events Package followed by the associated method(s), and whether the classes are supported by the Cisco JTAPI implementation.

Table A-4 Support for *javax.telephony.callcenter.events*

Class Names	Method Names	Cisco JTAPI Support
ACDAddrBusyEv		
ACDAddrEv	getAgent	
	getAgentAddress	
	getAgentTerminal	
	getState	
	getTrunks	
ACDAddrLoggedOffEv		
ACDAddrLoggedOnEv		
ACDAddrNotReadyEv		
ACDAddrReadyEv		
ACDAddrUnknownEv		
ACDAddrWorkNotReadyEv		
ACDAddrWorkReadyEv		
AgentTermBusyEv		
AgentTermEv	getACDAddress	
	getAgent	
	getAgentAddress	
	getAgentID	
	getState	
AgentTermLoggedOffEv		
AgentTermLoggedOnEv		
AgentTermNotReadyEv		
AgentTermReadyEv		
AgentTermUnknownEv		

Table A-4 Support for *javax.telephony.callcenter.events* (continued)

Class Names	Method Names	Cisco JTAPI Support
AgentTermWorkNotReadyEv		
AgentTermWorkReadyEv		
CallCentCallAppDataEv	getApplicationData	
CallCentCallEv	getCalledAddress	
	getCallingAddress	
	getCallingTerminal	
	getLastRedirectedAddress	
	getTrunks	
CallCentConnEv		
CallCentConnInProgressEv		
CallCentEv	getCallCenterCause	
CallCentTrunkEv	getTrunk	
CallCentTrunkInvalidEv		
CallCentTrunkValidEv		
ReRouteEvent		Yes
RouteCallbackEndedEvent	getRouteAddress	Yes
RouteEndEvent		Yes
RouteEvent	getCallingAddress	Yes
	getCallingTerminal	Yes
	getCurrentRouteAddress	Yes
	getRouteSelectAlgorithm	Yes
	getSetupInformation	Yes
RouteSessionEvent	getRouteSession	Yes
RouteUsedEvent	getCallingAddress	Yes
	getCallingTerminal	Yes
	getDomain	Yes
	getRouteUsed	Yes

Call Control Package

Table A-5 lists each JTAPI interface in the JTAPI Call Control Package followed by the associated method(s) and whether the classes are supported by the Cisco JTAPI Implementation.

Table A-5 Support for *javax.telephony.callcontrol*

Class Names	Method Names	Cisco JTAPI Support	Comments
CallControlAddress	cancelForwarding	Yes	Only for Call Forward All
	getDoNotDisturb		
	getForwarding	Yes	Only for Call Forward All
	getMessageWaiting		
	setDoNotDisturb		
	setForwarding	Yes	Only for Call Forward All
	setMessageWaiting		
CallControlCall	addParty		
	conference	Yes	In a consult conference scenario, only OriginalCall.conference (ConsultCall) is supported. ConsultCall.conference (OriginalCall) is not supported.
	consult(TerminalConnection)	Yes	
	consult(TerminalConnection, String)	Yes	
	drop	Yes	
	getCalledAddress	Yes	
	getCallingAddress	Yes	
	getCallingTerminal	Yes	
	getConferenceController	Yes	
	getConferenceEnable	Yes	
	getLastRedirectedAddress	Yes	
	getTransferController	Yes	
	getTransferEnable	Yes	
	offHook	Yes	
	setConferenceController	Yes	
	setConferenceEnable	Yes	
	setTransferController	Yes	
	setTransferEnable	Yes	
	transfer(Call)	Yes	In a consult transfer scenario, only OriginalCall.transfer (ConsultCall) is supported. ConsultCall.transfer (OriginalCall) is not supported.

Table A-5 Support for *javax.telephony.callcontrol* (continued)

Class Names	Method Names	Cisco JTAPI Support	Comments
	transfer(String)	Yes	
CallControlCallObserver		Yes	
CallControlConnection	accept	Yes	
	addToAddress	Yes	
	getCallControlState	Yes	
	park	Yes	
	redirect	Yes	Redirect allows a connection in the CallControlConnection.ESTABLISHED state to be redirected.
	reject	Yes	
CallControlForwarding	getDestinationAddress		
	getFilter		
	getSpecificCaller		
	getType		
CallControlTerminal	getDoNotDisturb		
	pickup (Address, Address)		
	pickup (Connection, Address)		
	pickup (TerminalConnection, Address)		
	pickupFromGroup(Address)		
	pickupFromGroup(String, Address)		
	setDoNotDisturb		
CallControlTerminalConnection	getCallControlState	Yes	
	hold	Yes	
	join		
	leave		
	unhold	Yes	
CallControlTerminalObserver			

Call Control Capabilities Package

Table A-6 lists each JTAPI interface in the JTAPI Call Control Capabilities Package followed by the associated method(s) and whether the classes are supported by the Cisco JTAPI implementation.

Table A-6 Support for *javax.telephony.callcontrol.capabilities*

Class Names	Method Names	Cisco JTAPI Support
CallControlAddressCapabilities	canCancelForwarding	Yes
	canGetDoNotDisturb	Yes
	canGetForwarding	Yes
	canGetMessageWaiting	Yes
	canSetDoNotDisturb	Yes
	canSetForwarding	Yes
	canSetMessageWaiting	Yes
CallControlCallCapabilities	canAddParty	Yes
	canConference	Yes
	canConsult	Yes
	canConsult(TerminalConnection)	Yes
	canConsult(TerminalConnection, String)	Yes
	canDrop	Yes
	canOffHook	Yes
	canSetConferenceController	Yes
	canSetConferenceEnable	Yes
	canSetTransferController	Yes
	canSetTransferEnable	Yes
	canTransfer	Yes
	canTransfer(Call)	Yes
	canTransfer(String)	Yes
CallControlConnectionCapabilities	canAccept	Yes
	canAddToAddress	Yes
	canPark	Yes
	canRedirect	Yes
	canReject	Yes
CallControlTerminalCapabilities	canGetDoNotDisturb	Yes
	canPickup	Yes
	canPickup(Address, Address)	Yes
	canPickup(Connection, Address)	Yes
	canPickup(TerminalConnection, Address)	Yes

Table A-6 Support for *javax.telephony.callcontrol.capabilities* (continued)

Class Names	Method Names	Cisco JTAPI Support
	canPickupFromGroup	Yes
	canPickupFromGroup(Address)	Yes
	canPickupFromGroup(String, Address)	Yes
	canSetDoNotDisturb	Yes
CallControlTerminalConnectionCapabilities	canHold	Yes
	canJoin	Yes
	canLeave	Yes
	canUnhold	Yes

Call Control Events Package

Table A-7 lists each JTAPI interface in the JTAPI Call Control Events Package followed by the associated method(s) and whether the classes are supported by the Cisco JTAPI implementation.

Table A-7 Support for *javax.telephony.callcontrol.events*

Class Names	Method Names	Cisco JTAPI Support
CallCtlAddrDoNotDisturbEv	getDoNotDisturbState	
CallCtlAddrEv		
CallCtlAddrForwardEv	getForwarding	Yes
CallCtlAddrMessageWaitingEv	getMessageWaitingState	
CallCtlCallEv	getCalledState	Yes
	getCallingAddress	Yes
	getCallingTerminal	Yes
	getLastRedirectedAddress	Yes
CallCtlConnAlertingEv		Yes
CallCtlConnDialingEv	getDigits	Yes
CallCtlConnDisconnectedEv		Yes
CallCtlConnEstablishedEv		Yes
CallCtlConnEv		Yes
CallCtlConnFailedEv		Yes
CallCtlConnInitiatedEv		Yes
CallCtlConnNetworkAlertingEv		Yes
CallCtlConnNetworkReachedEv		Yes
CallCtlConnOfferedEv		Yes
CallCtlConnQueuedEv	getNumberInQueue	Yes
CallCtlConnUnknownEv		Yes
CallCtlEv	getCallControlCause	Yes

Table A-7 Support for *javax.telephony.callcontrol.events* (continued)

Class Names	Method Names	Cisco JTAPI Support
CallCtlTermConnBridgedEv		
CallCtlTermConnDroppedEv		Yes
CallCtlTermConnEv		Yes
CallCtlTermConnHeldEv		Yes
CallCtlTermConnInUseEv		
CallCtlTermConnRingingEv		Yes
CallCtlTermConnTalkingEv		Yes
CallCtlTermConnUnknownEv		Yes
CallCtlTermDoNotDisturbEv		
CallCtlTermEv		

Capabilities Package

Table A-8 lists each JTAPI interface in the JTAPI Capabilities Package followed by the associated method(s) and whether the classes are supported by the Cisco JTAPI implementation.

Table A-8 Support for *javax.telephony.capabilities*

Class Names	Method Names	Cisco JTAPI Support
AddressCapabilities	isObservable	Yes
CallCapabilities	canConnect	Yes
	isObservable	Yes
ConnectionCapabilities	canDisconnect	Yes
ProviderCapabilities	isObservable	Yes
TerminalCapabilities	isObservable	Yes
TerminalConnectionCapabilities	canAnswer	Yes

Events Package

Table A-9 lists each JTAPI interface in the JTAPI Events Package followed by the associated method(s) and whether the classes are supported by the Cisco JTAPI Implementation.

Table A-9 Support for *javax.telephony.events*

Class Names	Method Names	Cisco JTAPI Support
AddrEv	getAddress	Yes
AddrObservationEndedEv		Yes
CallActiveEv		Yes
CallEv	getCall	Yes
CallInvalidEv		Yes
CallObservationEndedEv	getEndedObject	Yes
ConnAlertingEv		Yes
ConnConnectedEv		Yes
ConnCreatedEv		Yes
ConnDisconnectedEv		Yes
ConnEv	getConnection	Yes
ConnFailedEv		Yes
ConnInProgressEv		Yes
ConnUnknownEv		Yes
Ev	getCause	Yes
	getID	Yes
	getMetaCode	Yes
	getObserved	Yes
	isNewMetaEvent	Yes
ProvEv	getProvider	Yes
ProvInServiceEv		Yes
ProvObservationEndedEv		Yes
ProvOutOfServiceEv		Yes
ProvShutdownEv		Yes
TermConnActiveEv		Yes
TermConnCreatedEv		Yes
TermConnDroppedEv		Yes
TermConnEvgetTerminalConnection		Yes
TermConnPassiveEv		
TermConnRingingEv		Yes
TermConnUnknownEv		Yes

Table A-9 Support for *javax.telephony.events* (continued)

Class Names	Method Names	Cisco JTAPI Support
TermEv	getTerminal	Yes
TermObservationEndedEv		Yes

Media Package

Table A-10 lists each JTAPI interface from the JTAPI Media Package followed by the associated method(s) and whether the classes are supported by the Cisco JTAPI implementation.

Table A-10 Support for *javax.telephony.media*

Class Names	Method Names	Cisco JTAPI Support
MediaCallObserver		Yes
MediaTerminalConnection	generateDtmf	Yes
	getMediaAvailability	
	getMediaState	
	setDtmfDetection	Yes
	startPlaying	
	startRecording	
	stopPlaying	
	stopRecording	
	useDefaultMicrophone	
	useDefaultSpeaker	
	usePlayURL	
	useRecordURL	

Media Capabilities Package

Table A-11 lists each JTAPI interface in the JTAPI Media Capabilities Package followed by the associated method(s) and whether the classes are supported by the Cisco JTAPI implementation.

Table A-11 Support for *javax.telephony.media.capabilities*

Class Names	Method Names	Cisco JTAPI Support
MediaTerminalConnectionCapabilities	canDetectDtmf	Yes
	canGenerateDtmf	Yes
	canStartPlaying	Yes
	canStartRecording	Yes
	canStopPlaying	Yes
	canStopRecording	Yes

Table A-11 Support for *javax.telephony.media.capabilities* (continued)

Class Names	Method Names	Cisco JTAPI Support
	canUseDefaultMicrophone	Yes
	canUseDefaultSpeaker	Yes
	canUsePlayURL	Yes
	canUseRecordURL	Yes

Media Events Package

Table A-12 lists each JTAPI interface in the JTAPI Media Events Package followed by the associated method(s) and whether the classes are supported by the Cisco JTAPI implementation.

Table A-12 Support for *javax.telephony.media.events*

Class Names	Method Names	Cisco JTAPI Support
MediaEv	getMediaCause	Yes
MediaTermConnAvailableEv		
MediaTermConnDtmfEv	getDtmfDigit	Yes
MediaTermConnEv		Yes
MediaTermConnStateEv	getMediaState	
MediaTermConnUnavailableEv		

Unsupported Packages

Table A-13 shows the JTAPI packages that are unsupported by the Cisco JTAPI implementation.

Table A-13 Unsupported JTAPI Packages

Unsupported JTAPI Packages
JTAPI Phone Package
JTAPI Phone Capabilities Package
JTAPI Phone Events Package
JTAPI Private Data Package
JTAPI Private Data Capabilities Package
JTAPI Private Data Events Package

Cisco JTAPI Extension Classes and Interfaces

Cisco JTAPI Extension Classes

Table A-14 Cisco JTAPI Extension Classes

Cisco Extension Classes	Method Names
CiscoMediaCapability	getMaxFramesPerPacket() getPayloadType() toString()
CiscoG711MediaCapability	
CiscoG723MediaCapability	getBitRate() toString()
CiscoGSMMediaCapability	
RegistrationException	
UnregistrationException	

Cisco JTAPI Extension Interfaces

Table A-15 Cisco JTAPI Extension Interfaces and Their Methods

Cisco Extension Interfaces	Method Names
CiscoAddrCreatedEv	getAddress()
CiscoAddress	getType()
CiscoAddressObserver	
CiscoAddrEv	
CiscoAddrInService	
CiscoAddrOutOfService	
CiscoCall	getCallID()
CiscoCallEv	
CiscoCallID	getCall() intValue()
CiscoConferenceEndEv	getConferenceCall() getFinalCall() getHeldConferenceController() getTalkingConferenceController()

Table A-15 Cisco JTAPI Extension Interfaces and Their Methods (continued)

Cisco Extension Interfaces	Method Names
CiscoConferenceStartEv	getConferenceCall() getFinalCall() getHeldConferenceController() getTalkingConferenceController()
CiscoConnection	getConnectionID() getReason()
CiscoConnectionID	getConnection() intValue()
CiscoConsultCall	getConsultingTerminalConnection()
CiscoConsultCallActiveEv	getHeldTerminalConnection()
CiscoEv	
CiscoJtapiPeer	
CiscoMediaTerminal	getRTPInputProperties() getRTPOutputProperties() register(InetAddress, int) unregister()
CiscoProvEv	
CiscoProvider	getCallbackGuardEnabled() getMediaTerminal() getMediaTerminals() setCallbackGuardEnabled()
CiscoProviderObserver	
CiscoRouteSession	getCall()
CiscoRTPInputProperties	getBitRate() getEchoCancellation() getLocalAddress() getLocalPort() getPacketSize() getPayloadType()
CiscoRTPInputStartedEv	getRTPInputProperties()
CiscoRTPInputStoppedEv	

Table A-15 Cisco JTAPI Extension Interfaces and Their Methods (continued)

Cisco Extension Interfaces	Method Names
CiscoRTPOutputProperties	getBitRate() getMaxFramesPerPacket() getPacketSize() getPayloadType() getPrecedenceValue() getRemoteAddress() getRemotePort()
CiscoRTPOutputStartedEv	getRTPOutputProperties()
CiscoRTPOutputStoppedEv	
CiscoSynronousObserver	
CiscoTermCreatedEv	getTerminal()
CiscoTermEv	
CiscoTerminal	getRegistrationState()
CiscoTerminalConnection	
CiscoTerminalObserver	
CiscoTermInServiceEv	
CiscoTermOutOfServiceEv	
CiscoTransferEndEv	getFinalCall() getTransferController() getTransferredCall()
CiscoTransferStartEv	getFinalCall() getTransferController() getTransferredCall()
ObjectContainer	getObject() setObject()
RTPBitRate	
RTPPayload	

Cisco Trace Logging Classes and Interfaces

Cisco Trace Logging Classes

Table A-16 Cisco Trace Logging Classes

Cisco Trace Logging Class	Method Names
LogFileOutputStream	close() flush() getCurrentFile() getFileExtension() getFileNameBase() getMaxFiles() getMaxFileSize() write(byte[], int, int) write(int)
NullTraceWriter	close() flush() getEnabled() print(String) println(String)
OutputStreamTraceWriter	close() flush() getEnabled() print(String) println(String) setOutputStream(OutputStream)
TraceManagerFactory	getModules() registerModule(String) registerModule(TraceModule) registerModule(TraceModule, OutputStream)

Cisco Trace Logging Interfaces

Table A-17 Cisco Trace Logging Interfaces

Cisco Trace Logging Interfaces	Method Names
ConditionalTrace	disable() enable()
Trace	append(Object) append(String) getName() isEnabled() print(Object) print(String) print(String, Object) print(String, String) println(Object) println(String) println(String, Object) println(String, String) setDefaultMnemonic(String)
TraceManager	disableAll() disableTimeStamp() enableAll() enableTimeStamp() getConditionalTrace(String) getConditionalTrace(String, String) getName() getOutputStream() getSubFacilities() getTraces() getTraceWriter() getUnconditionalTrace(String) getUnconditionalTrace(String, String) removeTrace(String) removeTrace(Trace) setOutputStream(OutputStream) setSubFacilities() setTraceWriter()

Table A-17 Cisco Trace Logging Interfaces (continued)

Cisco Trace Logging Interfaces	Method Names
TraceModule	getTraceManager() getTraceModuleName()
TRACETYPE	
TraceWriter	close() flush() getEnabled() print(String) println(String)
UnconditionalTrace	