
Overview

The OpenScape Voice Server CSTA-SDK provides a set of APIs to help simplify the development of Java based desktop applications which want to control the OpenScape Voice Server Call Control capabilities through the use of CSTA.

It provides simpler APIs to connect and manage the CSTA Features, hiding some of the complexity of the CSTA Object model.

The OSV Server CSTA-SDK connects directly to the OpenScape Voice server via raw TCP connection. HTTP/SOAP connection support is added since V1.2.0. TLS connection support is added since V1.3.0.

Release Notes

v1.6.1

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What's New?  
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TOOLS-4347: Fix XML structure for StartApplicationSession

v1.6.0

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What's New?

TOOLS-2685: Support <message> mediaClass tag.

v1.5.9

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What's New?  
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TOOLS-1413: FRN10724 code delivery

Interface Changes  
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The following interface is updated to reflect the changes introduced with FRN10724:

SnapshotDevice  
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The SnapshotDevice private data can now contain the "aliRebidRequest" element.

v1.5.8

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What's New?

TOOLS-1398: Parsing of StartApplicationSessionPosResponse is updated with actualHBT parameter

v1.5.7

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What's New?  
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TOOLS-1049: FRN10395: CSTA SDK - Multiline keyset support for CSTA.

#### v1.5.6

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What's New?

TOOLS-562: FRN9813 - Support OSMO OND for CSTA Consultation and compound services.

Bug Fixes

TOOLS-558: Exception in SnapshotCall.

Interface Changes

The following interface is updated to reflect the changes introduced with FRN9813:

GetConfigurationDataResponse

The supportedOSMOFeatureList can now contain the "consultationCall" element.

v1.5.5

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##### Bug Fixes

TOOLS-503: CSTA-SDK backwards compatibility issue with "privateData".

#### v1.5.4

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What's New?

TOOLS-394: Support DeviceCapsChangedEvent in CSTA-SDK.

Bug Fixes

TOOLS-392: MonitorStop Event is not received properly.

v1.5.3

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##### Bug Fixes

TOOLS-287: Added missing getter for "newDestination" from DivertedEvent.

#### v1.5.2

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What's New?

TOOLS-266: FRN9965 - CSTA SDK Support for FRN9962 CSTA monitoring and Release or Deflect of Network Interfaces (SIP TRUNKS).

Interface Changes

The following new interfaces are introduced to the CstaConnection class to support the above new functionality.

AssociateData

AssociateData(String altDestination)
AssociateData(CstaDeviceIdentifier deviceInfo, String altDestination)

The new AssociateData interfaces are only used in the FRN9965 scenarios, where the application sends an alternate destination for the call.

v1.5.1

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### What's New?

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CQ00332579: FRN9896 - CSTA SDK Support for FRN9855 Busy on busy for ONS incoming call.

### Bug Fixes

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CQ00332748: Fixed exception in thread "EventsDispatcher".

### Interface Changes

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The following new interface is introduced to the CstaConnection class to support the above new functionality.

### ClearConnection

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ClearConnection(CstaReason reason)

This is a new ClearConnection interface that is used to when a call is made to a device that already participates in another call.

In this case, the new calling device must be cleared using this interface.

## v1.5.0

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What's New?

CQ00332244: FRN8616 - CSTA SDK enhanced to support FRN8556 Do Not Disturb with Snooze Option.

CQ00332245: FRN8613 - CSTA SDK enhanced to support FRN8181 Call Log Services and Events.

Interface Changes

The following new interfaces are introduced to the CstaProvider class to support the above new functionality.

CstaGetConfigurationData

CstaGetConfigurationDataResponse CstaGetConfigurationData(String ons, String cellDeviceGNF, String cellCarrier, String deviceModel, String deviceOS)

Support for the GetConfigurationData in order to get the appropriate data, providing the device with ONS service

and OSMO device. Also, the new "snoozeDND" is supported as part of the supportedOSMOFeatureList parameters received in the GetConfigurationData Response.

The following new interfaces are introduced to the CstaLogicalDevice class to support the above new functionality.

SetDoNotDisturb -----

boolean SetDoNotDisturb(boolean doNotDisturbOn, int DNDResume)

This is a new SetDoNotDisturb interface in order to enable the DND Snooze functionality for the device. DND service will remain active for the period in minutes specified (DNDResume).

GetDoNotDisturbData -----

CstaDoNotDisturbData GetDoNotDisturbData()

Get the current status of the Do Not Disturb feature for the device (true if DND is on and active, false if DND is off) and the time in minutes remaining till the DND is deactivated when the DND snooze functionality has been enabled.

The following new interfaces are introduced to the CstaDevice class to support the above new functionality.

CallLogSnapshot -----

CstaCallLogResponseWithErrorCode CallLogSnapshot()

Given a specified CSTA monitored device, a Call Log Snapshot is requested. The request success is validated with the arrival of a Call Log Snapshot Response. Every modification of the device's Call Log will result in receiving a Call Log Event message with the updated Call Log.

In case of an error during the processing of Call Log Snapshot, a CSTA Internal Service Error Code is returned.

CallLogDelete -----

CstaCallLogResponseWithErrorCode CallLogDelete(CstaCallLogDeleteList recordList)

Given a specified CSTA monitored device and a list of call records, a deletion of these records is requested. The request success is validated with the arrival of a Call Log Delete Response. A Call Log Event with the updated Call Log is received as a result.

In case of an error during the processing of Call Log Delete, a CSTA Internal Service Error Code is returned.

v1.4.0

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### What's New? -----

CQ00288521: Support for GetSwitchingFunctionDevices and GetLogicalDeviceInformation.

CQ00283448: Support Application Session.

CQ00285193: Support for event filtering in Monitor Start Requests.

CQ00286729: Support for event filtering in Monitor Start Responses.

CQ00283593: Allow multiple CSTA links through the CstaSystem class.

CQ00285201: Faster method to detect link failure/closed sockets through the event listener interface.

## Bug Fixes

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CQ00283347: Fix invokeID overflow when invokeID reaches 9998 (max value set at 9999).

CQ00285928: Changes to stabilize the read and send message functions in high volume traffic situations.

CQ00286047: Prevent out of memory and overload conditions in volume traffic situations by limiting the CstaEventsQueue size.

## Interface Changes

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The following new interfaces are introduced to the CstaProvider class to support the above new functionality.

### CstaGetSwitchingFunctionDevices

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boolean CstaGetSwitchingFunctionDevices(CstaDeviceCategory category)

boolean CstaGetSwitchingFunctionDevices(CstaDeviceID deviceId, CstaDeviceCategory category)

If only the category is specified, then a list of all devices of that category are returned in

a (potentially multiple) CstaSwitchingFuctionDevices event(s).

If a deviceId is specified, and that deviceId is an MLHG Pilot, a list of agents of that

pilot are returned in a (potentially multiple) CstaSwitchingFuctionDevices event(s).

If a deviceId is specified, and that deviceId is an MLHG agent, a list of pilots that

agent belongs to are returned in a (potentially multiple) CstaSwitchingFuctionDevices event(s).

### CstaGetLogicalDeviceInformation

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CstaGetLogicalDeviceInformationResponse

CstaGetLogicalDeviceInformation(CstaDeviceID deviceId)

CstaGetLogicalDeviceInformationResponse

CstaGetLogicalDeviceInformationNID(CstaDeviceID networkInterfaceDeviceId)

Note: The information returned is defined in the CSTA interface spec; note that if the deviceId is a keyset,

then the appearanceList data contains appearances for each related keyset line. If the deviceId is an MLHG pilot,

then the associatedGroupList contains deviceIds for each member agent.

## Monitor Event Filtering

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CstaMonitor MonitorStart(CstaDevice device, boolean silmTag, boolean NID, CstaFilterEventList filter)

The full interface for MonitorStart is extended to allow a CstaFilterEventList filter to be applied. A CstaFilterEventList

can be created and populated with the events that you do NOT wish to see. These events will not sent for the subscriber

monitored under this monitor point.

## Application Session

The following interfaces are provided for Application Session support:

```
CstaApplicationSession StartApplicationSession(int sessionDuration)
CstaApplicationSession StartApplicationSession(String applicationID, String
protocolVersion, int sessionDuration)
CstaApplicationSession StartApplicationSession(String applicationID, String
protocolVersion, int sessionDuration, int heartBeatTimer)
CstaApplicationSession getApplicationSession()
int ResetApplicationSessionTimer(int requestedSessionDuration)
int ResetApplicationSessionTimer(int requestedSessionDuration, int heartBeatTimer)
void StopApplicationSession(String definedEndReason, String appEndReason)
```

### v1.3.2

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What's New?

CQ00275056: Enhancement to support appCallbackID and appCallbackName
in the privateData for Make Call requests

v1.3.1

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#### What's New?

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CQ00242438: FRN4844 - SIP URI support

CQ00240730: Support AssociatedCallingDevice and AssociatedCalledDevice

### v1.3.0

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What's New?

CQ00233503: CSTA-SDK: Support TLS connection for FRN4181

Bug Fixes

CQ00221692: Null pointer when handling a basic Held/Retrieved event
CQ00222319: XML Parse error for element "restricted" and "acdCall"

v1.2.0

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#### What's New?

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CQ00214198: CSTA-SDK: Support HTTP/SOAP connection

CQ00157701: Support Message Waiting Indicator Physical Device service

CQ00170233: Add support for FRN4464 Support for Xpressions SAP phone with  
ASC active voice recording (Heidelberger Cement)

CQ00157718: Support Routing Service for Telefonica Step 2

CQ00157473: Support CompoundCallState in SnapshotDevice response

CQ00159062: CSTA-SDK: Support of services permitted

CQ00159066: CSTA-SDK: Provide local CstaConnection object in the CstaEventObject

CQ00200594: FRN4208 CSTA-SDK support for Continuous Silent Monitoring for  
Voice only without Verint, ASC, and OpenScape Contact Center

CQ00193909: FRN4242 CSTA-SDK support for CSTA Application external device name  
provider via CSTA Network Interface Device (NID) service

CQ00213840: FRN5670: Rebrand OSV - CSTA-SDK.

#### Bug Fixes

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CQ00158981: autoOriginate option in CSTA MakeCall and JoinCall request  
should be a enum type instead of String

#### v1.1.0

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What's New?

CQ00145625: Updated Javadoc to include a brief description for
CstaException including all the CSTA Requests.

CQ00146946: Improved DeviceID / DeviceIdentifier String parsing.

CQ00146986: Improved ForwardingEvent to support optional tags such as
"forwardTo", "ringCount", and "ringDuration".

CQ00147181: Allow multiple MonitorStarts after a failed attempt.

CQ00157462: Added Application interface access to object "cstaEventObject"
and "CstaEventType". Allowing easy access to the type of
the currentObject and the ability to caste the object.

Example:

```
if(cstaEventObject.evtType == CstaEventType.DELIVERED)
{
    CstaDeliveredEvent deliveredXml = (CstaDeliveredEvent)
```

```
cstaEventObject.currentXmlObject;
    CstaDeviceIdentifier deviceIdentifier = new
CstaDeviceIdentifier(deliveredXml.getCalledDevice());
}
```

CQ00157464: Allows Application to be notified if there is a network
failure to the heart beat. Next heart beat will fail
and a CstaEvent with type="CstaException" and
indicator="HeartbeatFailure" will be sent to the EventListener.

CQ00157469 Added ArrayList<CstaConnection> to the CstaCall object,
which returns a snapshot object.

Note:

Application can only use this snapshot CstaCall object
to check CallIDs, and is not able to send a request
such as connection.HoldCall().

CQ00157704: Added Custom XML support for CSTA SDK Browser

CQ00157741: Allows incoming MonitorStop requests to remove SDK monitor
objects, related connections, and to notify the application.

CQ00158008: Added Application interface enabling the application to
specify an external inbound name in the AcceptCall.

Example:

CstaConnection.AcceptCallWithNameProvider(string)

CQ00158976: Extra handling for "restricted" tag as one of the CstaDevice elements. Thereby setting the device's FQDN to "restricted" if it is "restricted" in message.

Bug Fixes

CQ00147199: Fixed NullPointerException issues when calling method CstaProvider.registerEventListener().

v1.0.0

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Implemented basic functionality to the CSTA-SDK.

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