AVAYA
The Power of We™

Avaya Aura® Application Enablement Services

Telephony Web Service SDK

The Telephony Web Service included with Avaya Aura® Application Enablement (AE) Services provides a high level interface to a subset of the third-party call control capabilities available on Avaya Aura Communication Manager acting as an access server. The Telephony Web Service Software Development Kit (SDK) provides the tools developers need to create client web applications that include basic call creation and administration functionality.

- **The Telephony Web Service is resident on** Avaya Application Enablement Services

- **The Telephony Web Service exposes basic call control capabilities of** the Avaya Communication Manager to clients using SOAP

- **The SDK includes the WSDL required to create** client-side stubs on web service applications

- **The SDK includes sample SOAP messages for** each call control operation

- **The SDK includes a documented sample application that demonstrates** the capabilities of the web service

About AE Services

AE Services is a software platform that provides connectivity between client applications and Communication Manager. AE Services includes an enhanced set of Application Programming Interfaces (APIs), client-side libraries, protocols, and web services that expose the capabilities of Communication Manager to application developers.

About the Telephony Web Service

The Telephony Web Service exposes a high level interface to the basic call control capabilities provided by Communication Manager. The web service provides an abstraction of some of the more complicated concepts associated with traditional Computer Supported Telecommunications Applications (CSTA) call control, such as connections, call identifiers and call states. Client web applications are not required to maintain any call state or information other than session IDs to sessions on the server.

The Telephony Web Service presents a session-based model to clients. Sessions are created explicitly when an attach request is sent, and implicitly when a new request is received by the service.

The Telephony Web Service does not generate events. For instance, the service allows users to originate outbound calls, but does not provide any subsequent call progression events. If monitoring is required, developers should consider using TSAPI or JTAPI for Communication Manager instead.

What's in the SDK?

The Telephony Web Service SDK comprises:

- **The WSDL file** which defines the Telephony Web Service and is used to generate client-side stubs on the web application.

- **Sample SOAP messages** for each operation supported by the Telephony Web Service.

- **Telephony Service Web Portal sample application:** demonstrates the use of each of the AE Services Telephony Web Service requests in the context of a web application. Using the application, users can lookup phone numbers from an LDAP database and then call, transfer, or conference any of the matching database entries from their phone set. The application also allows users to create their own contact list for quickly accessing frequently used phone numbers.

- **Application Notes** for the Telephony Service Web Portal sample application.

Supported call control requests and session management methods

Call control request:	Used to:
makeCall	Create a call between the origination and destination parties.
singleStepConferenceCall	Add the specified destination party to the active call on the originating party's terminal.
singleStepTransferCall	Transfer the active call on the originating party's terminal to the destination party.
answerAlertingCall	Answer an alerting call on the specified party's terminal.
disconnectActiveCall	Disconnect the specified party from the active call on their terminal. Other parties on the call remain connected.
Session management method:	**Used to:**
attach	Start a session. This is an optional step that allows the web application to authenticate the user and absorb the time required to initiate a session in a separate step from a telephony request.
release	End a session. When the web application has finished using the Telephony Web Service, it should send a release request to allow the server to end the session and free up resources.

Getting started

The Telephony Web Service SDK can be downloaded free of charge from the Avaya DevConnect web portal (registration required).

In addition, the *AE Service Web Services Programmer's Guide* is available for download from the DevConnect web portal.

What else do developers need?

To develop web applications that use the Telephony Web Service, and to run the sample applications, developers will also need:

- **Access to an AE Services server,** connected to Communication Manager. See *Additional resources for developers,* below.

- **AE Services license:** TSAPI basic user.

- **A language specific WSDL compiler and code generator** for compiling client application stub code. The sample applications use Apache Axis.

Additional AE Services resources for developers

The DevConnect program offers members a range of additional resources to aid in development and testing activities, including:

- **Free community-based support Forums and Frequently Asked Questions (FAQs)** are available to all registered DevConnect members.

- **A software-only developer configuration of Communication Manager and AE Services,** known as the Avaya Aura Basic Development Environment, suitable for installation on a single server or desktop machine.

- **Free remote lab access options** to Avaya Aura Communication Manager and Application Enablement Services hardware and software configurations.

- **Sample applications,** in addition to those included with the SDKs, that can be used to aid in the development of new applications

- **Discounted procurement options** for enhanced level members.