



IP Telephony

Contact Centers

Mobility

Services

PRODUCT BRIEF

Avaya Dialog Designer

Overview

Avaya Dialog Designer is an open standards based Integrated Development Environment (IDE) for Avaya Voice Portal and Avaya Interactive Response. Dialog Designer accelerates time to market for businesses seeking higher automation and closure rates, turns a faster return on invest for Avaya Self Services solutions, and delivers superior customer satisfaction at a lower investment level. Based on the widely accepted Eclipse.org development framework for fit in Information Technology (IT) departments, Dialog Designer offers web application developers a reusable drag-and-drop environment for development and maintenance of speech and touch-tone IVR applications.

Highlights

For enterprises and integration partners seeking rapid and easy speech and touch-tone self service creation, Avaya Dialog Designer is a complete Integrated Development Environment offering support for both design and management of voice and speech self service applications. Dialog Designer was designed to conform to common IT application development practices by integrating into your existing Java, Web Services, and Eclipse-based development systems and allowing you to more easily leverage their investment in Avaya Self Service solutions.

Dialog Designer simplifies lifecycle activities associated with development of VoiceXML applications including design, simulation, and integration. VoiceXML applications are designed using a graphical “drag and drop” metaphor allowing for rapid application development. Dialog Designer includes several design wizards for recording phrases, building prompts, defining grammars, and synthesizing speech. In addition, the database wizard provides a simple interface to local or remote SQL databases via the Java Database Connector (JDBC) architecture. For faster integration of Web Services assets, DD also supports Web Services integrations with the simple to use Web Services interface through the Web Services Description Language (WSDL) wizard supporting SOAP/XML remote procedure calls.

Dialog Designer provides pre-built and validated integration points for Computer Telephony Integration (CTI) through support the JTAPI interface within Avaya Application Enablement Services as well as the VOX

interface within Avaya Interaction Center (IC). This approach simplifies integration by exposing CTI and IC functions and variables within the call flow, making it easier for developers to deploy more personalized and seamless handoffs between self and assisted service.

An embedded VoiceXML browser allows fast simulation and debug of speech or voice enabled applications. By leveraging your existing Web Server environments for deployment, Dialog Designer facilitates reuse of Web-based integrations, Web Server assets and skills, Web-based application development and consistent supply chains, all driving faster time to market and reduced cost of ownership.

Dialog Designer is an included and integral component provided with both Avaya Voice Portal and Interactive Response.

Dialog Designer, Voice Portal, and Interactive Response all share the same common VoiceXML browser to ensure consistent and reliable deployment of voice enabled services and applications. Dialog Designer includes pre-built Java classes for dynamic generation of VoiceXML and Speech and Touch-tone grammars that are validated with Avaya Self Service platforms. It also supports simple integration with existing Java Servlet classes for simple data integration and reuse of business logic already developed for Web Applications. It features a multi-lingual application model and simple pre-built templates for common IVR interfaces that integrate with Voice Portal and Interactive Response through the common VoiceXML 2.0 certified browser.

Solution in Action: Voice enabling existing web-based dealer locator improves lead generation

Problem: A regional automobile dealer offers car buyers the ability to quickly locate the closest dealership through a Web-based "Dealer Locator". The locator service has underperformed expectations by only being able to offload 20% of daily calls. It is discovered that most customers requesting dealer information are mobile.

Solution: The dealer elects to add voice access to their existing web application. By deploying voice access through the use of Dialog Designer, application development time originally budgeted at 60 hours is reduced to 20 hours through reuse of several existing web interfaces. In addition, lifecycle management is reduced by 50%.

Result: Voice access improves call automation from 20% to 80% as mobile telephone access is added to the original Web-based infrastructure. 50% more leads are generated resulting in significantly increased sales.

Dialog Designer is the first element of an open communications applications development framework for business communications applications, allowing businesses to more quickly design and develop self service applications that are better integrated with their overall web, telephony, and contact center architecture.

Dialog Designer supports the open source Eclipse.org application development tool framework. Eclipse is an open framework for tools vendors to develop and certify their tools to work together. Originally developed and contributed by IBM, Eclipse supports over 900 different tools for performing application design, development, testing and deployment functions from a wide range of vendors. The Eclipse framework offers significant advantages for editing and building of Java code. The open source community provides tools for source code control or file browsing, allowing vendors like Avaya to provide tools for building call flows, editing grammars, simulating and debugging Voice self service applications. These tools can communicate through this framework and the customer can realize best in breed solutions through combining these assets.

Key Benefits

- Design wizards for integrating Web Services, recording phrases, building prompts, defining grammars, and synthesizing speech significantly reduce the time and cost of application prototyping and design.
- An embedded VoiceXML browser allows fast simulation and debug of speech or voice enabled applications.
- Shares same VoiceXML browser with Voice Portal, and Interactive Response to ensure consistent and reliable deployment of voice enabled services and applications.
- Maximizes applications interoperability and lower ownership costs through support of open standards integration with 3rd party Eclipse-based tooling

Components

Avaya Dialog Designer includes three primary components:

- Development Environment

- Application Execution Environment
- Communications Applications Integration

Development Environment

Dialog Designer greatly simplifies and speeds services creation through features such as the Web Services Wizard that allow developers to quickly integrate public or enterprise Web Services elements within dialog call flows. The Eclipse-based graphical drag-and-drop environment allows development of applications, simulation using the included VoiceXML browser, and deployment on to customer provided Web Server environments. Developers select, configure, and link application templates, and build reusable components to design new automated voice services and call flows. Support for Web Services (SOAP/XML/WSDL), Databases (JDBC), CTI, and Java (Servlet, EJB, JMS, etc.) and legacy integrations (3270/5250/MQ) are all facilitated within the Dialog Designer environment.

Application Runtime Environment

Dialog Designer creates simple Java Servlet applications that generate industry standard VoiceXML 2.0 markup that is processed via Interactive Response and Voice Portal, while also supporting integrations of multiple data sources and applications. Dialog Designer creates an application runtime environment which is then deployed on customers Apache Tomcat or IBM WebSphere based Java Servlet environments.

Communications Applications Integration

Dialog Designer supports advanced integration with other platforms such as Avaya Applications Enablement Services and Avaya Interaction Center. Through the AES JTAPI interface, developers can design sophisticated communications applications that leverage AES Computer Telephony Integration (CTI) from a simple Dialog Designer Environment for advanced call control and data integration. Within the contact center, Dialog Designer simplified simplifies services creation and integration with Avaya Interaction Center for Agent Desktop Integration and Workflow integration.

Feature	Benefits
Java-based, Open Standards Architecture for Application Hosting and Integration	Java Servlet framework architecture simplifies development, integration, and reusability of speech and touch-tone applications. Reduces learning curve and increases component reusability, helping ensure best practices are used across all self service web and voice applications.
Complete Open Standards-based Speech and Touch-Tone Self Service Creation	Open Eclipse based framework supports integrated tools for call-flow design, phrase recording, prompt and grammar development. Application developers, system testers, and business managers can work more closely to rapidly prototype, develop and verify applications with minimal hardware footprint. Consistent VoiceXML browser across Dialog Designer, Voice Portal and Interactive Response results in a transparent user experience between simulation and deployment.
Market Leading Speech Technologies	Leverage best of breed speech self service solutions from market leaders while maximizing applications reusability and reducing risk. Supports market leading speech platforms, speech recognition engines, and text to speech engines from IBM, Scansoft and Nuance. Supports 3rd party application development components such as Scansoft OpenSpeech Dialog Modules grammars and applications

Systems Supported

Dialog Designer Development Environment Requirements
- Customer provided Windows developer workstation (laptop or desktop) with the following minimum requirements

- Windows XP or Windows 2000 Professional operating system
- Minimum 1 GHZ CPU
- Minimum 512K RAM (1 GB recommended)
- Minimum 40 GB Disk Space
- Connectivity to Application Web Server for Deployment (LAN connectivity)

Dialog Designer Deployment Environment Requirements- Customer provided Web Server Platform with the following minimum requirements

- Operating Systems:
Windows XP, Windows 2000, Sun Solaris 8.x, Red Hat Linux ES 3.0
- Web Server Software:
Apache Tomcat 5.0 (.28 or higher), IBM Websphere Express 5.1, IBM Websphere Application Server 5.1.1
- High Performance Web Server Architecture
—Recommended minimum 2 GHZ CPU
—Recommended minimum 2 GB RAM
—Recommended minimum 40 GB Disk Space

Features	Platforms, Protocols, Interfaces
Application Development Environment	Data integration support (built in)
Eclipse.org based Integrated Development Environment	JDBC database support for customer supplied databases/ drivers (Oracle, MS SQL, etc)
Embedded VoiceXML 2.0 Certified Browser (same browser as Avaya IR and Voice Portal)	SOAP/XML/WSDL for Web Services integration
Telephony Simulation Environment	Java Servlet Integration
Support for integrated SAPI ASR/TTS resources	3270/5250 through Partner
Drag-and-drop environment for call flow design	Data integration support (through Java integration in Application Servers) (requires Application Server Components)
Integrated Call Flow Builder	JMS (MQ Series)
Integrated Grammar Editor	EJB (transactional support through supported Application Servers)
Integrated Prompt and Phrase Editor	Enterprise Applications (Siebel, SAP, etc) through Web Services and Java Integration
Common Speech and IVR Templates	Java Native Interface (JNI) for legacy support
Live Application Highlighting	
Advanced Capabilities	CTI and Platform Support
Pre-built Computer Telephony Integration support	Avaya CT 1.3 with JTAPI
Pre-built Contact Center (Interaction Center) support	Avaya Interaction Center (IC) 6.1 with Vox Interface
Multi-lingual call flow support with dynamic language binding	Application Enablement Services 3.0 (AES) with JTAPI
Enhanced Basic Speech (embedded dynamic prompts)	Application Enablement Services 3.0 (AES) with XCSTA through Web Services Integration
Application and Integration Simulation Scripting	Third party CTI Available through Web Services Integration
Modules	
Support for VoiceXML Object Tag and Sub-dialog (OSDM support)	
Management, Reporting Support	Application Programmer Interfaces
Application Logging Tag with Arbitrary Data Support	Java API
Integration with Web Deployment Environments through Eclipse Plugins (Tomcat and Websphere Managers)	VoiceXML

Features	Platforms, Protocols, Interfaces
Retargeted platform and grammar support	Dynamic Grammar API
Speech Capabilities	Speech Engine and Grammar Specification Support
Static and Dynamic Grammar Editors	Scansoft OSR 3.0.3
ASR Simulation (through SAPI resources)	Nuance 8.5
Grammar Simulation (through GUI)	IBM WVS 5.1.3
Grammar Simulation (through scripting)	SRGS
	OSDM core 2.0.02, address 2.0.2, name 2.0.0
Text-to-Speech Capabilities	Text-to-Speech Engine and Specification Support
Prompt Support for TTS	Speechify 3.5/RealSpeak 3.5/4.0
SSML Editor for TTS	Vocalizer 3.0/4.0
TTS Simulation (through SAPI resources)	IBM WVS 5.1.4
TTS Simulation (through GUI)	
TTS Simulation (through scripting)	

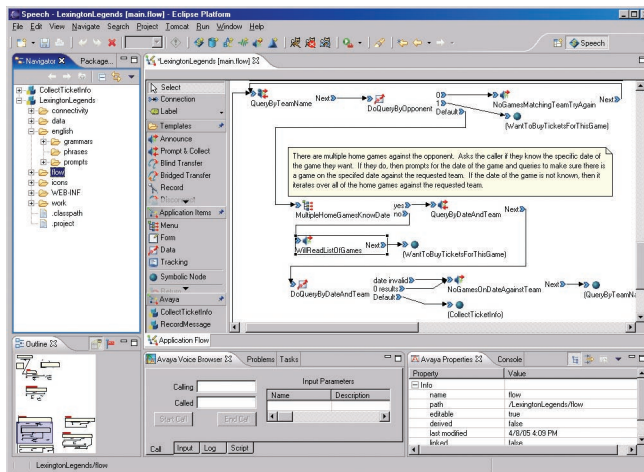


Figure: Avaya Dialog Designer allows developers to have access to dialog component libraries, design wizards, workflows, and component properties all from one interface.

About Avaya

Avaya enables businesses to achieve superior results by designing, building and managing their communications infrastructure and solutions. For over one million businesses worldwide, including more than 90 percent of the FORTUNE 500®, Avaya's embedded solutions help businesses enhance value, improve productivity and create competitive advantage by allowing people to be more productive and create more intelligent processes that satisfy customers.

For businesses large and small, Avaya is a world leader in secure, reliable IP telephony systems, communications applications and full life-cycle services. Driving the convergence of embedded voice and data communications with business applications, Avaya is distinguished by its combination of comprehensive, world-class products and services. Avaya helps customers across the globe leverage existing and new networks to achieve superior business results.

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