

Avaya Voice Portal

Overview

A new paradigm in customer service has emerged, defined by new generations of customers, social networking technologies, and historic economic challenges. Businesses face mounting pressure to do more with less, yet meet these rising customer expectations. Organizations need to deliver exceptional service to customers everywhere they appear. Every customer interaction must be handled appropriately across the enterprise, tracking and reporting to guide business decisions.



What if you were able to free your high value employees and agents from more routine customer communications to focus on key needs and business goals? What if your business had the ability to serve customers across multiple channels while lowering your cost of service and operating costs? What if your IT staff were able to manage and administer enterprise self service applications, both inbound and outbound, from one common set of tools and interfaces?

Avaya Voice Portal can do these things and more. What is Avaya Voice Portal? Avaya Voice Portal is open standards based web services platform for automated multi-channel experience management and integrated voice response (IVR).

Key Customer Benefits

From inbound to outbound automated customer care, Avaya Voice Portal can help your organization reach a new level of automated experience management and business competitive advantage.

Voice Portal can help you:

- **Improve Customer Satisfaction** – Employ the latest in automated customer care technologies to help customers serve themselves. Differentiate the user experience with unified self and assisted service through Avaya Aura™ Contact Center and Avaya Intelligent Customer Routing. Provide timely communications and alerts through Avaya Proactive Outreach Manager outbound self service.

- **Lower Service Costs** – Increase automation of services and support to lower service and operating costs. Lower service costs with convenient 24/7 automation of routine interactions. Reduce inbound traffic by anticipating caller inquiries and employ outbound self service applications that allow customers to take action.
- **Reduce OPEX and CAPEX Costs** – Optimize use of self and assisted service resources to better serve your customers. Lower application creation and integration costs and accelerate time to market of new services by leveraging the latest open standards - VoiceXML, CCXML, J2EE, Web Services, MRCP, Eclipse.

Feature Summary

Multi-channel – New devices and technologies have changed consumer communications and expectations leading many corporations to consider full scale adoption of automated email, SMS text, video, and outbound. Voice Portal supports deployment of multi-channel outbound services as well as video self service through video kiosks, video self help, and interactive voice and video applications

High Availability, Mission Critical

Architecture – Voice Portal has been architected to meet the most stringent performance and “high availability” requirements that today’s mission-critical speech-enabled communications applications demand, while helping businesses lower ownership costs.

Application Management – Single platform for both inbound and outbound self service applications simplifies management and administration. Supports Avaya Proactive Outreach Manager, Avaya Intelligent Customer Routing, as well as integrates with Avaya Aura™ Contact Center for context-based screen-pop and agent selection. Includes multi-tenancy and roles based access to increase economies and reduces operating costs and expenses.

Multi-tenancy and Roles Based Access

Multi-tenancy combined with roles based access to empower business leaders across your organization to create and manage their own self service applications. Voice Portal provides the ability to change self service data and behavior, such as allowing business managers to self manage key parameters such as hours of operation, call announcements, or holiday greetings.

Portable Application Deployment – Platforms share the same VoiceXML browser allowing Avaya Interactive Response VoiceXML applications written in Avaya Dialog Designer to run on Avaya Voice Portal. This approach reduces application deployment risks, increases self service application portability, and ensures a consistent user experience.

Transferable Platform Licensing – Preserve your existing Avaya self service application and software investments. Avaya Interactive Response licenses under current maintenance contracts can be converted to Voice Portal licenses at no additional license cost.

Application Reporting – Combines detailed application level reporting with true enterprise wide reporting and analytics through Avaya IQ to provide managers with a holistic understanding of systems, applications, and the user experience.

Architecture

Avaya Voice Portal was designed specifically for today’s networked IP and SIP based enterprise contact centers and is fundamentally divided into three components: The Media Processing Platform and the Voice Portal Management System and the Application Execution Environment.

Media Processing Platform (MPP) – The Media Processing Platforms run on Red Hat Linux Enterprise Certified Hardware Platforms performs the following functions:

- Includes the VoiceXML Voice Browser collects touch-tone, speech recognition, video events, plays pre-recorded phrases and interfaces to support generation of synthesized text-to-speech, processes events, and generates events for call records.

- Supports integrations to Avaya Aura™ Contact Center, Avaya Aura™, and Avaya Communication Manager 2.1 and later. Terminates SIP and H.323 integrations and supports SRTP/RTP/RTCP (bearer channel) via the G.711 and G.729 codec.
- Supports video channel through H.263 and H.264
- Supports any TDM or IP infrastructure including ISDN, T1, E1, R2 and SS7 through SIP/RTP standards and intelligent SIP gateway options.
- Passes data such as Queue Position, Expected Wait Time, Dialed (Entered) Digits, etc. from Call Center Vectors for more intelligent and personalized self service response.
- Supports dynamic provisioning of concurrent VoiceXML sessions, IP Endpoint Registrations, ASR and TTS resources, and application data.
- Supports Media Resource Control Protocol (MRCP) to external Automatic Speech Recognition (ASR) and Text-to-speech (TTS) Resources from leading speech technology partners.

Voice Portal Management System – Provides centralized operations, administration, management and provisioning interfaces for the voice portal system. An easy to use Web-based interface provides support for the following management functions:

- Management of all Media Processing Platforms which support all concurrent VoiceXML “IVR” sessions across an enterprise.
- Manages VoIP, application, and speech resource provisioning.

- Performs fail-over in case of loss of a Media Processing Platform by reclaiming VoiceXML licenses and registrations from the affected Media Processing Platform. Automatically redeploys licenses and registrations to spare capacity (on provisioned server) or to a spare server offering businesses the highest levels of availability of mission critical customer self service applications.

Voice Portal Management System includes a Simple Network Management Protocol (SNMP) Management Information Base (MIB) to external Network Management Systems such as IBM Tivoli or HP OpenView.

Application Execution Environment – The third element is a Web Server host, such as an Apache Tomcat Web Server, that serves the standards-based VoiceXML and CCXML script to the MPP. Typically Voice Portal leverages your organization’s existing web application servers.

These elements, in addition to Avaya Dialog Designer described below, form the core Voice Portal approach. These components can reside on separate servers or for smaller scale deployments the VPMS, MPP and Apache Tomcat Web Server for Dialog Designer applications can be loaded on a single server.

Self Service Design and Management

Voice Portal in conjunction with Avaya Dialog Designer offers application developers one of the most flexible, open, and cost effective application platforms today. Applications can be written in a number of ways based on the standard VoiceXML and CCXML specifications. Businesses and independent software developers can create applications by hand-coding VoiceXML/CCXML, by using a custom code environment to write static VoiceXML, or can use an Integrated Development Environment to generate dynamic VoiceXML.

Avaya Dialog Designer is a complete Integrated Development Environment (IDE) allowing faster and less costly application design, coding, debugging, testing, simulation and deployment. Applications are designed using a graphical “drag and drop” metaphor allowing for rapid application development. Dialog Designer includes an embedded VoiceXML/CCXML browser allowing simulation of applications; the same VoiceXML browser is integrated within Voice Portal and Interactive Response offering developers an additional level of assurance that applications deployed will operate as expected.

Voice Portal combined with Dialog Designer offer advanced functionality in the following areas:

- Web services
- Outbound Self Service
- Multi-party Conferencing
- Advanced call handling
- Application Reporting

Web Services – Voice Portal supports the ability to publish and consume Web Services allowing applications to be integrated to enterprise and contact center applications. Services can be designed to dynamically adjust customer experience based on any information passed during the Web Service invocation. For example, a business process can acquire people (like a technician, field services technician, or resident expert) to accomplish a supporting task. Additionally, a simple Web Page (ASP, JSP, or PHP) might trigger applications such as a customer alert or notification or trigger applications like dynamic conferencing. Web Services also provides a simpler integration point to other contact center applications including Avaya Proactive Contact and Avaya Interaction Center.

Outbound Self Service – Voice Portal supports Avaya Proactive Outreach Manager as a managed application. The platform also includes outbound dialing capabilities like advanced call detection from Avaya’s market leading Avaya Proactive Contact platform. These capabilities are leveraged to support outbound and event Web Services using CCXML to create applications for outbound notifications, alerts and confirmations. Organizations can dynamically personalize call handling and messages based on whether a person or answering machine is detected. By providing “beep” detection, a personalized message can be left based on the initiation of message recording. Businesses can also design inbound and outbound self service applications so that faxes can be redirected to a designated fax server or outbound faxes or SMS messages can be delivered in support of the Self-Service experience.

Multi-party Conferencing – CCXML based multi-party conferencing capabilities provide the ability to develop applications that can dynamically establish ad hoc multi-party conferences based on self service events. Applications can be designed to gracefully bring in live assistance into a self service transaction when a caller may be having difficulty or even provide conferencing services on behalf of an assisted-service or business process event. (For example, providing a multi-party conference when a consultation is required)

Advanced Call Handling – Voice Portal supports multiple advanced contact center functions that accelerate service response, lower costs, and improve resource utilization. Avaya Voice Portal is the basis for the unified self and assisted service routing solution Avaya Intelligent Customer Routing. It can run alongside Avaya Aura™ and Avaya Communication Manager ACD functions as a peer for advanced routing and call treatment. Advanced call handling capabilities include:

- Termination of calls ahead of Avaya Communication Manager treatment with guaranteed Universal Call ID (UCID) generation consistent between Voice Portal and other Call Center elements
- Caller identification, determination of intent, and ability to select from multiple Contact Centers using real-time information for routing
- Treatment ahead of Communication Manager interaction with options for local treatment (music on hold, wait treatments) even when calls will be delivered overseas
- Predictive self-service based on expected waiting time in queue. By understanding expected wait times based on Avaya patented agent selection algorithms, Voice Portal can select a self-service application which accomplishes preparation work ahead of agent selection and handling allowing for faster resolution of customer issues at lower cost
- Detailed application, call, and session level reporting for end-to-end customer experience reporting
- Transport CTI information within SIP signaling paths, lowering complexity and costs while boosting reliability
- Reduce or eliminate costly pre-route and transfer-connect charges

Application Reporting – Voice Portal collects a rich set of call, session, and application record detail that can be presented within fully customizable web-based reports. Reporting includes detailed application reporting, automatic “breadcrumb” reports of a caller’s experience at every step of a self service interaction, plus transactional roll-ups. Application and caller information can be combined in unique ways with other external resources (“Web mashups”) such as overlaying caller detail report data with mapping data to see the geographical distribution of caller information for visual trends analysis.

Voice Portal also includes centralized reporting for multiple Voice Portal clusters to get an “Enterprise View” of all self-service capabilities whether across town or around the world. Multiple system management and reporting allow a single “cockpit” view into all live systems with operational indicators. Reports can extend across systems to create a holistic view of operational and business focused data.

Records are accessible through an open interface for integration into virtually any existing enterprise reporting system (e.g. Cognos, Crystal Reports, etc.) or information can be conveyed through Avaya IQ or Avaya Operational Analyst for cradle-to-grave reporting integration.

What’s in it for you

Take your customer experience to a new level. Employ the latest automated customer care best practices and technologies to lower costs while delivering a superior customer experience.

Learn More

For more information about how Avaya Voice Portal can support your business, please contact your Avaya Account Manager or Authorized Partner, or visit us on our Web site at avaya.com

About Avaya

Avaya is a global leader in enterprise communications systems. The company provides unified communications, contact centers, and related services directly and through its channel partners to leading businesses and organizations around the world. Enterprises of all sizes depend on Avaya for state-of-the-art communications that improve efficiency, collaboration, customer service and competitiveness. For more information please visit www.avaya.com.



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References to Avaya include the Nortel Enterprise business, which was acquired as of December 18, 2009.

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