IBM

WebSphere® software

Extending voice access to the portal environment

Highlights

■ *Enables efficient and effective use of mobile resources by providing voice access to portal solutions*

■ *Leverages the WebSphere® infrastructure to enable the management and administration of multiple channels of access on a single platform*

■ *Provides a consistent programming model to build portals and voice portlets for Independent Software Vendors (ISVs) and enterprise application developers*

■ *Provides the next generation voice application platform*

Pervasive computing

The evolving challenge of mobilizing e-business requires robust, next generation technology solutions coupled with accessibility to those solutions. IBM answers this challenge by delivering a family of pervasive milddleware products that deliver multimodal, multi-device access to WebSphere-based and connected information. The foundation is formed with WebSphere Portal, which provides a next generation infrastructure for secure intranet/extranet access with portal capabilities, collaborative extensions and enterprise support for content applications. The Portal infrastructure is extended to mobile devices such as PDAs and smartphones with WebSphere middleware products such as WebSphere Everyplace Access. And the most recent offering, IBM WebSphere Voice Application Access 4.1, extends the platform even further to become a conversational application server. Users can then access WebSphere-based applications in a natural, user-friendly way.

IBM delivers a voice portal solution

WebSphere Voice Application Access is a software middleware product that extends the WebSphere Portal framework to voice — improving the way mobile workers conduct their business with customers, business partners and other employees. Solutions built on WebSphere Voice Application Access enable users to access a wide range of business information by using a standard telephone or cell phone and their voice.

WebSphere Voice Application Access allows businesses to design, develop and deploy voice solutions and integrate them into a portal infrastructure. WebSphere Voice

Application Access leverages the scalability, personalization and authentication features built into WebSphere Portal along with the Voice Extensible Markup Language (VoiceXML) Browser and the Automated Speech Recognition (ASR) and Text-To-Speech (TTS) engines provided with the IBM WebSphere Voice Server.

Improved accessibility

This end-to-end enterprise solution enhances productivity while providing access to realtime data through the most natural of forms—voice. WebSphere Voice Application Access supports the administration of groups and users as well as secure access to portal-based information across multiple channels and modalities. Mobile users benefit from a more natural end-user experience. They can access a Web site, select the applications they want to use and define individual portlet preferences, such as reading urgent e-mails over the phone. Users can personalize their voice portals in the very same way that they personalize their Web portals.

Consistent programming model

WebSphere Voice Application Access extends the familiar Eclipse-based Web portal programming model and tools for voice application development. Web developers already understand the concepts of portals and portlets, so extending this model to voice is another natural evolution. In addition, the WebSphere Voice Application Access Toolkit is a plug-in to WebSphere Studio, and it allows developers to quickly and easily build, test, deploy and maintain voice portlet applications within the same, consistent Integrated Development Environment (IDE) framework as their Web applications.

Open standards

IBM voice solutions provide the robust, open standards and next generation technologies to leverage the possibilities of today with the

WebSphere Voice Application Access 4.1 Enterprise Benefits:	
For mobile employees	• Extends access to enterprise information and applications from the PC or PDA to the telephone • Provides a single point of entry to voice applications residing in a portal environment • Enables voice interaction to a wide range of personalized information, portal-based messaging and enterprise applications, data sources and Web content in a single voice session • Reduces reliance on using the PC to manage urgent or multiple sources of information

For Enterprise Line Of Business (LOB) executives	• Improves user productivity and user experience by enabling voice interaction to a Web-based portal environment
	• Extends the reach of enterprise applications to your mobile workforce to:
	  – Improve scheduling
	  – Provide access to contact information and messaging
	  – Improve Customer Relationship Management (CRM)

For Information Technology (IT) managers	• Extends existing infrastructure investments in portal and telephony systems • Extends the value of existing application investment from desktop to voice interface • Extends mobile interfaces from PDA and Wireless Application Protocol (WAP) phones using Compact Hypertext Markup Language (cHTML) and Wireless Markup Language (WML) to VoiceXML
For ISVs and application developers	• Developers can use the same business logic and connectivity to backend data that was used for graphical portlet development and apply this logic to voice portlet development • Voice portlet development environment uses the same, consistent IDE framework (Eclipse-based) as Web applications • Allows for integrated administration of groups and users across channels and modalities • Provides for integrated secure access • Extends existing investment in application development, Web portal infrastructure and VoiceXML application development

voice requirements of tomorrow. IBM is committed to supporting open standards to foster and preserve business partner relationships while allowing for ISV customizations. With that in mind, WebSphere Voice Application Access 4.1 is VoiceXML 1.0 compliant now, and will be VoiceXML 2.0 compliant when that standard is finalized.

WebSphere infrastructure

WebSphere Voice Application Access extends existing infrastructure and application investment by building its platform on the WebSphere family of products, including WebSphere Application Server, WebSphere Portal and WebSphere Voice Response. Voice access to portals via telephone is available through WebSphere Voice Application Access, and mobile access to portals is available through WebSphere Everyplace Access now.

In the future, WebSphere Voice Application Access multimodal capabilities will allow you to bring these two functionalities together.

Partner support

Already, hundreds of IBM partners with hundreds of existing solutions take advantage of online portal features, Domino forms-based applications, embedded DB2 database applications, and other applications which leverage portal

WebSphere Voice Application Access 4.1 Functional Overview:	

Prerequisite products	• A telephony connection environment, such as one of the following WebSphere Voice Server telephony connection environments is required:
	  – WebSphere Voice Response for AIX®
	  – WebSphere Voice Response for Windows™
	  – Cisco Voice Over Internet Protocol (VoIP)
	  – Dialogic
	Note: The Notes portlet requires Domino™ Server 5.0.8 or higher, exchange portlet requires Microsoft Exchange 2000 or 5.5

Features	• Voice Aggregator—the runtime module that implements the voice menu needed to navigate to a specific voice portlet
	• Numeric Alias Support—an add-on to the WebSphere Portal administration facility that provides an equivalent numeric-only ID and password to the portal user's alphanumeric ID and password. This is required because telephone keypads provide only numeric entry of data
	• Prepackaged portlets—functional, ready-to-use voice applications that provide voice access to Personal Information Manager (PIM) and e-mail
	  – Voice Access for Lotus® Notes® R5 portlet
	  – Voice Access for Microsoft Exchange portlet
	• Sample applications—sample voice portlets are included in the system installation or available by download
	  – Travel sample with flight arrival and departure information
	  – Stock quote sample to query the current trading price
	  – Weather sample to get a local forecast from a nationwide forecasting service
	• Voice Application Access Toolkit—a plug-in to WebSphere Studio that allows developers to quickly and easily build, test, deploy and maintain voice portlet applications

WebSphere Voice Application Access 4.1 CD software includes	• WebSphere Voice Access V4.1
	  – Voice Aggregator
	  – Numeric Alias
	  – Ready to use PIM/e-mail portlets for Lotus Notes and Microsoft Exchange
	  – Sample portlets (travel, flight information, weather information)
	  – Voice Application Access Toolkit
	• WebSphere Portal 4.1.4
	• WebSphere Voice Server 3.1
	• WebSphere Studio Site Developer V5
	Note: The license agreement for WebSphere Portal allows usage ONLY for voice portal deployment. If you already have WebSphere Portal or WebSphere Voice Server installed, the WebSphere Voice Application Access 4.1 installation program will verify that you have the correct version installed and only install those software components that are not yet installed.

Operating systems supported	Windows 2000 (Advanced) Server, AIX 5.1
Languages supported	US English, UK English

functionality. Partners are developing voice portlets for WebSphere Voice Application Access and can be engaged in developing WebSphere Voice Application Access solutions. IBM is leveraging Business Partners for development of additional WebSphere Voice Application Access middleware products for ISVs, including messaging and syndicated content portlets.

IBM advances voice technology

Our worldwide resources and extensive partner network are enabling voice technology today, and down the road. IBM is enabling our customers to preserve and extend their current investment in Web technology and skills, enabling access to the very same enterprise information — through voice. With worldwide resources and an extensive Business Partner network, IBM offers a wide range of pervasive computing solutions to expand your portfolio of services to voice.

For more information

To learn more about IBM pervasive computing software solutions, visit **ibm.com**/pvc or call your local IBM representative.

e business software

G210-1582-00