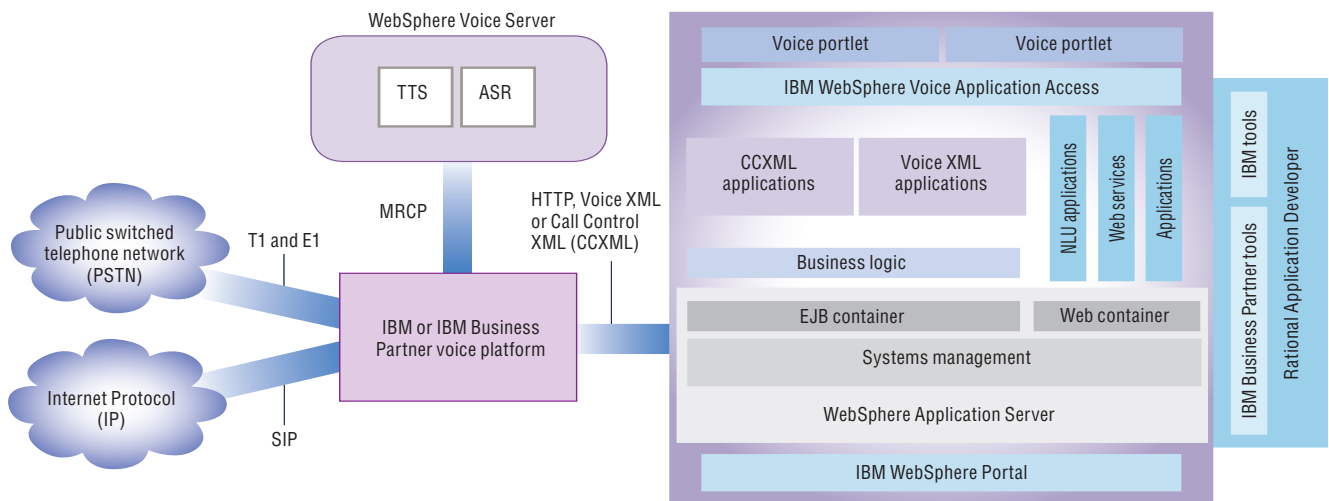


IBM WebSphere Voice Server for Multiplatforms, Version 5.1.3

Highlights

- Enables quick access to applications through natural-voice input and output
- Supports industry programming standards such as J2EE, achieved through WebSphere Application Server, to enable integrated scalability, availability, reliability, and systems-management and integration capabilities with your existing IT infrastructure
- Uses J2EE technology-based WebSphere Application Server as its run-time platform
- Supports MRCP, Version 1 Draft 4, an industry-standard speech interface, giving you more flexibility in your choice of IVR and gateway vendors
- Supports barge-in capabilities, enabling a user to interrupt the system dialog
- Extends Web information to virtually anyone with a telephone by enabling voice access to enterprise and Web applications, and includes powerful IBM ASR and TTS engines to enable this voice access
- Uses industry standards so you can easily create new speech-enabled applications or add voice interfaces to existing applications



The IBM voice solution architecture enables a flexible and scalable speech middleware platform.

Middleware for On Demand Business

As a leading provider of voice-enabling solutions, IBM delivers speech middleware, tools, and development and consulting services that can help your business deliver information to your customers quickly and easily. As a fundamental component of the IBM On Demand Business strategy, IBM WebSphere® Voice Server software can help you connect with your customers by providing robust self-service solutions that help increase customer service, cut costs, optimize your contact center and differentiate your organization from your competition.

Add voice-enabling capabilities to your enterprise applications

Based on open standards, WebSphere Voice Server software provides:

- *Speech middleware with broad integration points—based on open standards such as Java™ 2 Platform, Enterprise Edition (J2EE) and Eclipse technology—to use the existing skills and code assets of enterprise developers*
- *The ability to reuse and more easily deploy assets through a service oriented architecture (SOA) to respond quickly to market changes*
- *The benefits of critical reliability, scalability and systems management that enterprise IT has enjoyed for years*

Voice-enabled applications give your customers, employees and suppliers greater access to your information and services. WebSphere Voice Server supports industry standards such as VoiceXML, Media Resource Control Protocol (MRCP), Speech Recognition Grammar Specification (SRGS), Speech Synthesis Markup Language (SSML) and Semantic Interpretation for Speech Recognition (SISR), which frees your organization from being tied to proprietary technology and vendor lock-in.

Key product capabilities

With WebSphere Voice Server, Version 5.1.3, IBM delivers a range of product features to help you increase customer satisfaction while lowering your total cost of ownership (TCO). These features include:

- *The ability to use the J2EE architecture and Enterprise JavaBeans (EJB) components to provide core functionality. WebSphere Voice Server runs as an enterprise application on IBM WebSphere Application Server to extend its reliability, scalability and availability.*
- *Support for MRCP, Version 1 Draft 4; SRGS, Version 1.0; SSML, Version 1.0; and SISR, Version 1.0.*

- *Grammar-based speech recognition, including support for dynamic grammars.*
- *WebSphere Voice Server extensions to the WebSphere Application Server administrative console to enable configuration, monitoring and troubleshooting.*
- *The ability to access WebSphere Voice Server using the standard MRCP for speech servers. Any qualified MRCP technology-enabled interactive voice response (IVR) vendor partner can use WebSphere Voice Server. For a list of compatible IVR and IP telephony vendors, visit ibm.com/software/pervasive/voice_server/*
- *The ability to support more than one language installed on a single machine.*
- *Support for Red Hat Enterprise Linux® (RHEL) WS/ES/AS for Intel, Version 3.0 and SUSE LINUX Enterprise Server (SLES), Version 8.0.*
- *Support for Microsoft® Windows® 2003 Enterprise and Standard editions.*
- *Support for the IBM AIX 5L™ operating system.*

Another feature of WebSphere Voice Server is the ability to take advantage of a WebSphere Application Server technology-based architecture. WebSphere Voice Server delivers advanced deployment services such as clustering, centralized administration and configuration, and high availability for distributed configurations. These capabilities enable you to:

- *Dynamically reconfigure WebSphere Voice Server by adding or removing servers from the WebSphere Voice Server environment with no change requirements on the IVR platform integrated with WebSphere Voice Server.*
- *Choose from multiple deployment options from single-server to clustered highly available high-volume configurations.*
- *Provide simplified system management and administration using browser-based remote administration across firewalls through WebSphere Application Server management (based on Java Management Extensions [JMX]), a browser-based user interface and a single administration console to manage multiple WebSphere Voice Server machines.*

- *Deliver tight integration with IBM Rational® Software Development Platform, a highly productive development environment powered by Eclipse technology.*
- *Support advanced failover including failure bypass and clustering capabilities.*
- *Help increase your return on investment (ROI) and lower your TCO by reusing existing IT assets and standards. This translates into the potential to reduce costs, reduce time to value and increase business flexibility.*
- *Take advantage of the features of the WebSphere Application Server J2EE, Version 1.3 run time, which enables you to focus on adding value through speech—and not on developing your infrastructure environment.*

Voice application-development tools

IBM WebSphere Voice Toolkit is powered by Eclipse technology and makes it easy to develop VoiceXML applications without having to know the internals of voice technology. This toolkit enables you to build, debug and deploy voice applications across the IBM WebSphere Voice family of products.

Complementary products

WebSphere Voice Server, Version 5.1.3 works with a number of complementary products, including:

- *WebSphere Voice Toolkit, Version 6.0.1 (available for download at ibm.com/software/voice).*
- *IBM WebSphere Application Server Edge Load Balancer (formerly IBM WebSphere Application Server Network Dispatcher) to provide scalability and the ability to remove a server from the network without interruption. This product features high availability, load balancing and ease of integration.*
- *WebSphere Application Server deployment manager to provide at-a-glance system administration of a WebSphere Voice Server network.*

Global access

WebSphere Voice Server, Version 4.2, Version 5.1, Version 5.1.1, Version 5.1.2 and Version 5.1.3 are available in multiple languages, including Hong Kong Cantonese, Simplified Chinese, Australian English, U.K. English, U.S. English, French, Canadian French, German, Italian, Japanese, Korean, Dutch, Spanish and Latin American Spanish. For up-to-date language and platform support, visit ibm.com/pervasive/voice_server.

Providing NLU capabilities

Natural Language Understanding (NLU) describes an application's ability to understand and intelligently react or respond to a query or command from a human in standard language, as opposed to a specially formatted sentence or menu command. NLU offers significant benefits to both your enterprise and your users by providing self-service capabilities through familiar, natural spoken commands that provide a pleasant customer experience.

WebSphere Voice Server provides support for the Statistical Language Models (SLMs) that are used by NLU. This enables you to leverage WebSphere Voice Server to build the SLM and use it during the speech-recognition process. IBM can provide services to help you realize the benefits of this state-of-the-art technology. Contact your IBM representative for details about NLU.

IBM lab services

IBM provides a range of services, based on deep technical and industry expertise, that can be customized to meet your specific business needs. These include:

IBM Speech Persona and Usability Assessment Service Offering

This offering provides an assessment of the persona and usability of your existing IVR and speech interfaces to determine ways to improve the user interface with speech technology. This services package is tailored to help you get started with speech technology quickly, using IBM human-factors expertise.

IBM Self-Service Opportunity Assessment Service Offering

This offering provides an assessment of the technical, business (financial) and user issues in an existing IVR environment to identify ways to improve these systems using speech technology. IBM evaluates how speech can streamline your service delivery, identifies the potential of your current architecture and creates a business case that can help you get the greatest return on your investment in the shortest time. IBM can also help you create a customer-experience vision that can help make your customers thrilled with the self-service features you provide.

For more information

WebSphere Voice Server is uniquely capable of handling your voice-recognition needs because it is built on robust WebSphere Application Server software. WebSphere Application Server provides an operating environment with advanced performance and availability capabilities that can support dynamic application environments. To learn more about IBM WebSphere Voice Server, Version 5.1.3, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/pervasive/voice_server/

IBM WebSphere Voice Server for Multiplatforms, Version 5.1.3 at a glance

Hardware requirements (Version 5.1.3)

Note: *The WebSphere Voice Server, Version 5.1.3 package includes IBM WebSphere Voice Server, Version 4.2 and Version 5.1.3 content.*

- Other vendor IVR products or VoiceXML, Version 2.0 or Version 2.1 gateways that interoperate with WebSphere Voice Server, Version 5.1, Version 5.1.1, Version 5.1.2 or Version 5.1.3 using MRCP, Version 1 Draft 4.
- Supported Linux or Windows systems that meet the following minimum hardware criteria:
 - Operating system: Linux or Windows 2003
 - Processor: Intel® or equivalent x86 at 1GHz minimum
 - RAM: 2GB (minimum)
 - Available disk space: 2GB
 - Network: TCP/IP
 - CD-ROM drive
- Supported IBM AIX® systems that meet the following minimum hardware criteria:
 - Operating system: AIX 5L, Version 5.3
 - Processor: IBM @server® pSeries® at 450MHz minimum
 - RAM: 2GB minimum
 - Available disk space: 2GB
 - Network: TCP/IP
 - CD-ROM drive

Hardware requirements (WebSphere Voice Toolkit, Version 6.0.1)

Note: *WebSphere Voice Toolkit, Version 6.0.1 is for use with WebSphere Voice Server, Version 5.1, Version 5.1.1, Version 5.1.2 or Version 5.1.3.*

- Operating system: Microsoft Windows XP
 - System suitable for running IBM Rational Web Developer, IBM Rational Application Developer or IBM Rational Software Architect
 - Processor: 800MHz minimum Pentium or equivalent; 1GHz recommended
 - RAM: 1GB
 - Available disk space: 800MB minimum (in addition to available disk space for Rational Web Developer, Rational Application Developer or Rational Software architect); additional disk space required to accommodate installation options selected by the user
 - Temporary disk space: additional 800MB for installation
 - Display: 256 colors; 1024x768 resolution or higher
 - Sound card and speakers for audio playback
-

IBM WebSphere Voice Server for Multiplatforms, Version 5.1.3 at a glance (continued)

Hardware requirements (Version 4.2 only)

When used with the WebSphere Voice Response for AIX, Version 3.1 or Version 4.2 telephony platform:

- Processor: IBM RS/6000® or pSeries 233MHz or higher
- RAM: 512MB minimum
- Available disk space : 500MB minimum per language installation
- Local network: 10/100Mbps Ethernet
- CD-ROM drive

Note: *WebSphere Voice Server, Version 4.2 requires separately orderable WebSphere Voice Response for AIX, Version 3.1 or Version 4.2. The general WebSphere Voice Response for AIX hardware requirements are listed in the IBM WebSphere Voice Response for AIX General Information and Planning Guide.*

Hardware requirements (Voice Toolkit for WebSphere Studio, Version 5.1)

Note: *Voice Toolkit, Version 5.1 is for use with WebSphere Voice Server, Version 4.2.*

Operating system (one of the following)

- Operating system: Windows 2000 or Windows XP
 - Processor: Intel Pentium® III or equivalent at 500MHz minimum; 1.0GHz recommended
 - RAM: 768MB
 - Available disk space: 200MB minimum (along with the disk-space requirements for IBM WebSphere Studio products, and additional space to support the installation options selected by the user)
 - Temporary disk space: Additional 200MB on the drive specified in your user Terminal Monitor Program (TMP) environment variable (for installation)
 - Display: 256 colors and 800x600 resolution or higher; 1024x768 resolution recommended
 - Sound card and speakers for audio playback
-

Software requirements (Version 5.1.3)

Note: *The WebSphere Voice Server, Version 5.1.3 package includes WebSphere Voice Server for Multiplatforms, Version 4.2 and Version 5.1.3 content.*

Operating system (one of the following)

- AIX
 - AIX 5L, Version 5.3 with Maintenance Level (ML) 3
 - Linux
 - RHEL WS/ES/AS for Intel, Version 3.0 with Update 1, Update 3 or Update 4 (2.4 Kernel)
 - SLES, Version 8.0, powered by United Linux, Version 1.0 (Intel) with Service Pack (SP) 2a or SP3
 - Windows
 - Windows Server 2003 Enterprise
 - Windows Server 2003 Standard
-

IBM WebSphere Voice Server for Multiplatforms, Version 5.1.3 at a glance (continued)

Software requirements (Version 4.2 only)

When used with the IBM WebSphere Voice Response for AIX, Version 4.2 or Version 3.1 telephony platform:

- IBM AIX, Version 5.2 (with WebSphere Voice Response, Version 4.2)
- AIX, Version 5.1 (with WebSphere Voice Response, Version 3.1) Deployment environment for WebSphere Voice Response for AIX
- PSTN (T1/E1) SS7 or Voice over Internet Protocol (VoIP)-Serial Interface Protocol (SIP) connection to switch network
- Uncompressed G.711 voice when WebSphere Voice Response for AIX, Version 4.2 is using VoIP-SIP connection (for best speech-recognition accuracy)
- WebSphere Voice Server software and language software installed on separate pSeries machines to support speech-recognition and TTS capabilities
- Dedicated high-speed local area network (LAN) to support distributed WebSphere Voice Response and WebSphere Voice Server systems (100Mbps Ethernet LAN, depending on the size of the system)
- Recommended: Web application server, such as WebSphere Application Server, hosting VoiceXML applications

Notes:

1. *WebSphere Voice Server, Version 5.1.3 is not compatible with previous versions. Previous versions of WebSphere Voice Server must be uninstalled prior to installing WebSphere Voice Server, Version 5.1.3.*
2. *WebSphere Voice Server, Version 5.1.3 is a self-contained entity inside of a single machine. It does not coexist with prior versions of the WebSphere Voice Server, WebSphere Voice Server Speech Technologies or WebSphere Voice Response. It also does not coexist with customer applications on the same machine.*
3. *WebSphere Voice Server, Version 5.1.3 includes WebSphere Voice Server, Version 5.1.3 product CDs, as well as the WebSphere Voice Server, Version 4.2 product CDs that supported the AIX environment.*
4. *WebSphere Voice Response uses a VoiceXML browser application packaged with the product. VoiceXML uses applications stored on a Web server instead of applications stored on WebSphere Voice Response. Therefore, it does not use the IBM DirectTalk[®] server-side included (SSI) environment to manage applications.*
5. *WebSphere Voice Server for WebSphere Voice Response for AIX, Version 3.1 and Version 4.2 require program temporary fix (PTF) 1 (which includes PTF U496041 and PTF U497760) to run on AIX, Version 5.2. Previous versions of WebSphere Voice Server for WebSphere Voice Response for AIX must be uninstalled prior to installing WebSphere Voice Server, Version 4.2.*

Software requirements (WebSphere Voice Toolkit, Version 6.0.1)

- Windows XP with SP1 or later
- An existing installation of Rational Software Development Platform, Version 6.0 or 6.0.1, including Rational Web Developer, Rational Application Developer or Rational Software Architect

Note: *The installation program does not permit installation on any other platform.*

For the latest hardware and software requirements for WebSphere Voice Server, Version 5.1.3, visit ibm.com/pervasive/voice_server.



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