# VocalPoint<sup>™</sup> VoiceBrowser



Web Voice browsing:

# Voice access to Internet content and interactivity

The convergence of Internet, wireless, and speech technologies is creating opportunities for businesses to extend Web-based information into the explosive **mobile Internet marketplace**.

Until now, adding such capabilities has been timeconsuming and expensive – and unsuccessful in transforming the richness of the visual Web into a **natural voice experience**.

VocalPoint Technologies – the pioneer and leader in voice Web browsing – provides the **software and infrastructure** to deliver compelling voice services using **live Web content.** With the VocalPoint VoiceBrowser, you can reach the ultimate interactive mass market: **any phone, anywhere.** 



# Access existing HTML and XML applications with any phone, simply by speaking

# Build revenue by offering your own voice portal, with broad Web access

These days, pursuit of a value-added services strategy is critical to communications companies, VARs and Application Service Providers (ASPs). VocalPoint's VoiceBrowser puts you ahead of the trends, allowing you to build customized, private-labeled voice portals and applications by integrating our proprietary technology into your network infrastructure. VoiceBrowser automatically interprets HTML or XML content into a structure easily navigable by speech, and manages the dialogue interaction with the end-user.

With this unique software, you can create new services that allow users to navigate, hear, and interact with Web content, quickly and intuitively. Adding telephone-access services can increase your customer-base, revenue and market share, and make your company a leader in a new class of voice services. Customer service, functionality and satisfaction are increased, without dependence on live operators or complex IVR systems — leading to positive bottom-line results.

#### The choice is yours

Give your users "any site" voice access today. VocalPoint VoiceBrowser eliminates the need for complex system integration or costly repurposing of content sites to enable voice access. You can voice-enable existing Web sites and applications immediately, without site involvement, as well as use Web-centered development efforts to quickly create and evolve new voice services. As a result, your value-added service offerings can be as flexible and broad as the Web. Popular portals, content and commerce sites, as well as Intranet or Internet applications can all be included.

#### Powerful, flexible voice services platform

We recognize that service providers need both power and flexibility. In operation, a voice browsing solution consists of highly scalable server platforms integrated into a fault tolerant architecture: the VocalPoint VoiceBrowser platform, automatic speech recognition (ASR) servers, text-to-speech (TTS) servers, as well as system management and reporting, load balancing, and computer telephony interface (CTI) platforms. Customers may choose to deploy one or many of these VocalPoint pre-integrated components. VocalPoint's architecture provides:

*High performance:* Not only is VocalPoint VoiceBrowser the only solution that completely leverages existing HTML and XML content, it has the power and performance to meet demanding network requirements. VocalPoint's multi-threaded design can scale seamlessly and efficiently to meet your needs.

**Scalablility:** Our VoiceBrowser has been designed from the ground up for system scalability and future innovation. It may be deployed in a variety of configurations for optimal redundancy, reliability and call-path efficiency. Through advanced automatic load balancing, multiple servers can be effectively deployed to support tens of thousands of users across an enterprise.

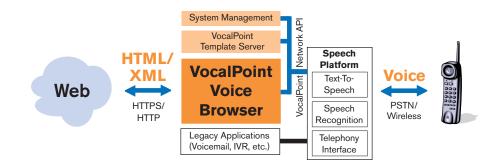
**Component flexibility:** Because VocalPoint VoiceBrowser is standards-based, you are free to adopt best-in-class technologies as they evolve. The Network API, and Java-based software allow VoiceBrowser to work with today's — and tomorrow's — leading speech recognition and synthesis engines, regardless of vendor or language.

*Extensiblility:* VoiceBrowser grows with your needs. By separating content authoring from rendering, VocalPoint's technology gives you the flexibility to continually improve the voice interface, as well as eventually implement hybrid multi-modal interactions.



**Cross-platform support:** VoiceBrowser is available on Windows NT, Solaris and Linux operating systems.

## **VocalPoint VoiceBrowser Solution**



#### Simple integration

Deployment of VoiceBrowser is fast and efficient. Thanks to its network-centric architecture, Java-based software, and compatibility with industry standards, VoiceBrowser may be deployed seamlessly alongside complimentary voice systems and legacy platforms. You are not forced to abandon current efforts to take advantage of exciting new voice browsing opportunities.

Browser services can run on enterprise-class, single or SMP servers using NT 4.0, Solaris or Linux.

#### Professional services support

To help speed deployment, and to support integration with legacy systems, we provide a world-class, internationally experienced professional services team. Leveraging our expertise in speech technologies and platforms, we can facilitate integration into your environment.

#### Enterprise-class manageability

Once up and running, your peace-of-mind is ensured by the flexible VoiceBrowser architecture. Because the browser easily integrates with existing system management and user profiling capabilities via its network API, you can simplify your administration requirements and take advantage of centralized support. Multiple packaging options allow you to choose between integrating VoiceBrowser into your existing system management architecture, or implementing a turnkey package including ASR, TTS, CTI and self-contained system management. Manageability features include:

- Load Balancing
- Fault Tolerance and Failover
- Logging
- Configuration Management
- Alert Management

VoiceBrowser also supports 56-bit or 128-bit SSL encryption for secure end-to-end transactions.

#### Robust, site-independent customization

The platform's flexibility does not come at the price of quality. VoiceBrowser-based services are extremely easy to use, and are customizable to your requirements. Key features include:

**Customizable interface:** VoiceBrowser's intuitive user interface provides a convenient, friendly interaction. It frees users from the PC, and from visual limitations altogether. Not satisfied with the browser's default user experience? VocalPoint technology is flexible and customizable, so you can tune important elements of service dialogues to meet your needs. Producers or developers can use VocalPoint's Extended Cascading Style Sheet (xCSS) technology to emphasize or prune content, apply branding or prerecords, and make modifications to the voice experience — all without affecting the source Web site's visual appearance.

#### External management of voice interface:

VoiceBrowser's Template Server is an optional component that allows content developers or producers to apply xCSS and other voice enhancements to a remote site, without any production work or operational changes by the website itself. As a result, any sites of your own choosing can be included in your customized browsing experience.

#### Attractive economics

VocalPoint Technologies' VoiceBrowser allows you to quickly extend your value-added services strategy to Web browsing. Our per-port licensing fees, flexible component-based packaging, attractive support options, and flexible professional services let you build and scale your deployment to your specific needs.

### VocalPoint VoiceBrowser Advantages

- Build revenue from voice-browsing
- Use a flexible, web-based platform to quickly develop and deploy new voice services
- Easily integrate capabilities with existing investments

#### Features

#### System Architecture and Integration

- Networked client-server architecture distributes operations among key components:
  - · VoiceBrowser Platform
  - $\cdot$  Automatic Speech Recognition (ASR) server
  - Text To Speech (TTS) server
  - · Computer Telephony Integration (CTI) interface
  - · System management
    - · Resource Manager (RM)
    - · Log server
    - · System Administration and Monitoring Tool (SAT)
    - · Heartbeat Monitor Alerting (HMA)
  - · User registration database
- Architecture separates content from presentation
  - VocalPoint Extended Cascading Style Sheets (xCSS) allow designers to tailor Web pages for voice with no impact on visual browsers.
  - HTML and xCSS converted automatically into structure suitable for voice
  - Template Server applies xCSS enhancements to specific pages without any source site modifications
- Well-documented VocalPoint Network API facilitates:
  - · Flexibility in system hardware configuration.
  - · Easy substitution of components.
  - · Interoperability with legacy systems.
  - · Fault tolerance
- Java-based software allows cross-platform portability.

#### <u>User Interface</u>

- Directed dialogue, menu-driven interaction
- Voice or DTMF (Touch Tone®) input accepted
- User barge-in supported (can be disallowed)
- Automatic progressive help system
- Multi-language support
- Local user interface attributes may be specified
- · General interface customizable via configuration file
- Interprets and submits data entry forms
- Supports HTML elements including title, body, headings, ordered and unordered lists, links, image captions, tables.

#### Protocols and Standards

- Hypertext Markup Language (HTML)
- Extended Cascading Style Sheets (xCSS) (VocalPoint extensions to Internet-standard CSS2)
- Hypertext Transfer Protocol (HTTP)
- Secure Hypertext Transfer Protocol (HTTPS)
- HTTP Cookies (session and persistent)
- Java Speech Grammar Format (JSGF)
- Internet Audio (wav, uLaw, voc, au, aiff, iff, snd, 8svx, aLaw)

#### System Requirements

#### VoiceBrowser Platform

- VoiceBrowser: Windows NT Server 4.0/RedHat Linux 6.2/Solaris 2.7; 256MB RAM; 500 MHz CPU; 4GB HD; 100Mb/s Ethernet
- Template Server: Windows NT Server 4.0/RedHat Linux 6.2/Solaris 2.7; Apache 1.3.12; 256MB RAM; 500 MHz CPU; 4GB HD; 100Mb/s Ethernet

#### Complete VoiceBrowser System

- VoiceBrowser Platform (see above)
- ASR: Windows NT Server 4.0/Solaris 2.7; 512MB RAM; 500 MHz CPU; 9GB Hard drive; 100Mb/s Ethernet
- TTS: Windows NT Server 4.0; 256MB RAM; 500 MHz CPU; 4GB HD; 100Mb/s Ethernet
- CTI: Windows NT Server 4.0/RedHat Linux 6.2; 256MB RAM; 500 MHz CPU; 4GB HD; 100Mb/s Ethernet; NMS AG4000 PCI Telephony interface
- System Management: Windows NT Server 4.0/Solaris 2.7/RedHat Linux 6.2; 256MB RAM; 500 MHz CPU; 4GB HD; 100Mb/s Ethernet
- Database Server: Windows NT Server 4.0/Solaris 2.7; Oracle 8.1.6 or MySQL; 512MB RAM; 500 MHz CPU (NT)/400 M2 (SPARC); 2x9GB HD; 100Mb/s Ethernet

#### Call us today

A flexible, multi-site voice portal experience is only a phone call away. Our business development team can help you position your company as a leader in Web-based voice services. Please contact us at **partners@vocalpoint.com**, or call us directly at 415.615.0600 for more information.

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