

VoiceXML Forum Overview Webinar

With Bruce Pollock (Board Chair) and the
VoiceXML Committee Chairs

September 21, 2004

What is the VoiceXML Forum?

- An industry organization chartered with establishing and promoting VoiceXML by providing best practices, certification testing, resources and tools for developing speech-enabled applications
- A diverse community of IT, telecom and speech industry leaders
- More than 320 member companies worldwide
- A source of objective information and forum for industry discussions and debates
- The “Voice” of the industry
- **Mission: to promote and to accelerate the adoption of VoiceXML-based speech applications worldwide and nurture the VoiceXML ecosystem**

Why Use VoiceXML?

- VoiceXML is a W3C Recommendation
- Developers and customers have the assurance that applications written in VoiceXML can be ported to other platforms
- VoiceXML is broadly supported by the majority of vendors
- VoiceXML is XML-based and significantly increases the community of voice application developers
- VoiceXML separates the user interaction layer and the service logic allowing for a distributed application design
- VoiceXML leverages the Web paradigm for application development and deployment, and minimizes client/server interactions by specifying multiple interactions per document
- **VoiceXML is the industry standard for building speech-enabled applications**

VoiceXML in the Marketplace

- Thousands of commercial VoiceXML-based speech applications have been deployed worldwide
 - Across a diverse set of industries, such as:
 - Financial services, government, insurance, retail, telecommunications, transportation, travel and hospitality
 - VoiceXML powers a variety of mission-critical, and business-critical applications, such as:
 - Customer care, directory assistance, telematics and unified messaging
- **Hundreds of millions of VoiceXML calls are answered every day**

Forum Facts & Timeline

- AT&T, IBM, Lucent and Motorola create the VoiceXML Forum (March, 1999)
- VoiceXML Forum submits VoiceXML 1.0 draft specification to the W3C (May, 2000)
- W3C becomes official steward of VoiceXML; delivers VoiceXML 2.0 draft specification (October, 2001)
- HP, Nuance, Oracle, Verizon, VoiceGenie and West join board of directors (September, 2003)
- VoiceXML Forum launches platform certification program (October, 2003)
- VoiceXML 2.0 becomes a W3C Recommendation (March, 2004)
- VoiceXML Forum launches developer certification program (June, 2004)

The Forum and Industry Consortia

- Liaison relationship with the W3C
- W3C manages the technical evolution and development of the VoiceXML language
- VoiceXML Forum focuses on providing best practices, certification testing, resources and tools
- **Together the W3C and the VoiceXML Forum accelerate the adoption of VoiceXML-based speech applications**

Current Technical Work

- XHMTL+Voice (X+V) specification development
 - X+V is the VoiceXML Forum's choice for how to write multimodal applications
- Development and analysis tools
- Platform interfaces for tools, management and telephony
- Testing and certification to support application portability and vendor interoperability platform certification
- **VoiceXML Forum performs technical work beyond the W3C language specification charter**

Current Education Work

- Developer certification
- Events
 - User Group Meetings
 - Industry conferences (AVIOS, SpeechTEK, etc.)
- Tutorials
- Publishers of the *VoiceXML Review*
 - Bi-monthly e-zine
 - Technical and business features
- **VoiceXML Forum grows the speech development community by education and certification**

Contact the VoiceXML Forum

The VoiceXML Forum is open to any company interested in supporting the development and promotion of VoiceXML as an open, broadly supported markup language to enable speech-based applications and Internet information and content becoming voice and phone accessible.

For further information on the VoiceXML Forum, please contact:

VoiceXML Forum c/o IEEE-ISTO
445 Hoes Lane
Piscataway, NJ 08854 USA
voicexml-admin@voicexml.org
+ 1 732 465 6464
www.voicexml.org

Technical Council Update

Jim Ferrans

James.Ferrans@motorola.com

Role of the Technical Council

- Reports to Board of Directors.
- Comprised of representatives from each Sponsor Member.
- Responsible for coordinating and overseeing all technical activities:
 - Conformance Committee
 - Education Committee
 - Tools Committee
- Interface to international standards bodies.
- Misc.: Membership survey, conference activities, articles, interviews, voicexml.org content, ...

Getting the VoiceXML Message Out

- Spring AVIOS/SpeechTek panel session (Igor Jablokov chaired).
- FAQs on SALT and VoiceXML at www.voicexml.org/faqs.html.
- Assisted in [voicexml.org](http://www.voicexml.org) facelift.
- Rebuttal of 1/2004 CACM article by Microsoft's Deng and Huang:
<http://www.voicexml.org/cacm-voicexml-response032004.html>
- Interview by Jay Lyman.
- Clarifications and corrections sent to journalists.
- Upcoming article in Dr. Dobbs by Gerry McCobb.

Survey

- **Membership survey:**
 - What features should be in W3C's "V3" version of VoiceXML?
 - How compatible should VoiceXML 2.0 and "V3" be?
 - Levels of interest in multimodality, X+V, SALT, etc.
- Over 30 companies responded.
- Conveying V3 inputs to W3C.
- Results published in the current VoiceXML Review.

http://www.voicexmlreview.org/Sep2004/features/sep2004_survey.html

Accessibility Committee

- Organizing a new Accessibility Committee.
- Primary goal is to investigate and champion accessibility issues in the VoiceXML Community. Other goals:
 - Cast a wide net in the community for inputs (e.g., some members will be from non-profit organizations).
 - Propose extensions to W3C Voice Browser and Multimodal Interaction Working Groups.
 - Promote best practices.
- Looking for committee chair, members.
- Please consider serving on this important committee.

Ongoing and Future Plans

- **Considering “standards-seeding” activities:**
 - Draft multimodal distributed synchronization protocol for submission to IETF.
 - Progressing X+V (e.g., Mobile Profile).
 - This work to be done in new technical committee(s).
- **Possible external publications:**
 - IEEE Spectrum
 - CACM Technical Opinion
 - Dr. Dobbs

Technical Council Participants

- Dan Burnett, Nuance
- Chris Cross, IBM
- Jim Ferrans, Motorola (Chair)
- Gary Jesenick, Lucent
- Rob Marchand, VoiceGenie
- Gerry McCobb, IBM
- Ken Rehor, Vocalocity
- Cindy Tiritilli, ISTO-IEEE
- Les Wilson, IBM
- Looking for participants from all Sponsor-level companies.

VoiceXML Forum Conformance Committee

Rob Marchand

VoiceGenie Technologies
Member, VoiceXML Forum Conformance Committee

Goals of VoiceXML

- **“Promotes service portability across implementation platforms. VoiceXML is a common language for content providers, tool providers, and platform providers.”**
- **“Shields application authors from low-level, and platform-specific details.”**

Conformance Committee Mission

- **Develop a VoiceXML Platform Certification Program.**
 - **Develop and evolve a VoiceXML Conformance Test Suite**
 - **Engage third party conformance testers**
 - **Manage ongoing conformance testing process**

Who is involved?

- **W3C Voice Browser Working Group**
 - Defines VoiceXML specification
 - Defines test assertions, test scripts
- **VoiceXML Forum Conformance Committee**
 - With support from NCC Group
 - Defines conformance requirements
 - Works with W3C Voice Browser Working Group Dialog Subgroup on VoiceXML clarifications, enhancements, and extensions
 - Develops branding program along with Marketing Committee
- **CT Labs**
 - Independent 3rd party Conformance Testing laboratory
 - Runs conformance testing on behalf of VoiceXML Forum
 - Approved and monitored by Conformance Test organization



Pilot Program

- **Program goals:**
 - Jointly validate the test suite
 - Verify the certification policies, logistics, and procedures
 - Demonstrate multi-vendor acceptance of the testing program
- **Timeline**
 - Completed Sept 2004
 - All vendors can begin self-testing with current test suite



Call to Action

- **Platform Developers**
 - Report results to your customers
 - Provide public feedback to the mailing list
 - Provide modified / corrected test scripts to committee
 - Submit new assertions for areas not currently covered
 - Design and submit new test scripts to committee
- **Application Developers**
 - Ask to see vendors' detailed test results
 - Require your vendors to be certified !
 - Develop new tests that highlight platform incompatibilities

How do I get my platform certified?

- Run the Conformance test suite
- Resolve any testing conflicts with the Conformance Committee
conformance@voicexml.org
- Submit an Implementation Conformance Statement (ICS)
- Register with the Forum and pay the testing fee
- The Forum will coordinate testing with the testing laboratory
- Test lab runs tests, reports results

VoiceXML Forum Platform Certification Program

- Program documentation published
- Test suite available to anyone
- Test harness available to members
- Pilot program completed!
- Production testing soon – contact Forum now
- More information:

<http://www.voicexml.org/certification/platform.html>

EDU Committee Overview

Jonathan Engelsma
Motorola, Inc.

Education Committee Objective/Overview

“The objective of the VoiceXML Education Committee is to proliferate VoiceXML knowledge and expertise within the industry”

- **Reports to the VoiceXML Technical Council**
- **Meets every other week via conference call.**
- **Participation open to all VoiceXML Forum Sponsor and Promoter member companies. (Supporter participation at Chair’s discretion.)**

EDU Accomplishments YTD

- Involvement in VoiceXML Forum's participation at Spring AVIOS/SpeechTEK event.
- Played an active role in the recent voicexml.org facelift.
- Developer Certification Program rolled out world wide.
- VoiceXML accessibility investigation.
- Educational Exchange Program Announced to Membership (ongoing)

Future Activities

- **VoiceXML Review**
- **Launching a Series of VoiceXML Forum Webinars beginning in September 2004.**
- **Authoring VoiceXML Training RFI.**
- **Proposed Activities**
 - **VoiceXML Application “Hall of Fame”**
 - **University Capstone Projects**

How to get involved?

- Please send email to Jonathan.Engelsma@motorola.com to get on the EDU mailing list and/or participate in EDU activities.
- Committee meets every other week via conference call at 1pm Eastern on Thursdays.

MARCOMM Committee Overview

Cheryl Alden
calden@voicegenie.com

Agenda

- MARCOMM Mission Statement
- MARCOMM Committee Strategy/Goals
- MARCOMM Activity Update
 - Member Logos
 - Developer Certification
 - SpeechTEK Fall
 - University Programming Contest
- Issues/Recommendations

MARCOMM Mission Statement

To promote, educate and communicate the value of VoiceXML to relevant markets and communities and create a strong international presence for the VoiceXML Forum as the leading resource for education, information and insight on VoiceXML technology.

MARCOMM Strategy/Goals

- Focus on what we CAN do and deliver!
- Develop short-term, manageable plans that can be executed against – increasing motivation for future activities and participation
- Create an environment whereby sponsor members are delivering Forum messages as an integrated component of their own marketing initiatives.

Member Logos

- Development of Member level logos complete (4C, Navy, Black versions of each)
- Logos to be available on forum website for download by appropriate members
- Email notification to members scheduled for early September



Developer Certification

- **Development of “Certified Developer” logo complete**
- **Promotion of Developer Certification to Vendors**
 - Selling blocks of “vouchers” to sponsor vendors to utilize for internal staff or as promotional giveaways at industry events
 - Cost of vouchers would be full price of certification testing
 - Accompanying “pitch” to vendors to communicate value of certification
- **Promotion of Developer Certification to Individuals**
 - Providing “banners” to present to forum sponsors

Communication Vehicles

- Plan to create quarterly “newsletter” piece to distribute to sponsor members to include in their corporate communications
- Solicit a 5 bullet-point list from each committee on current/upcoming activities
- Marketing to compile and distribute to sponsor members

Other Proposed Activities

- Continued goal toward “make it easier for members to help us communicate our value”
- Internal communications between committees and board to be better streamlined through marketing
- Development of quarterly “plans” to distribute to committees and board to set expectations, deliver manageable results
- Student Programming Contest

Participate!

- **VoiceXML MARCOMM meets every-other-Monday at 1:00 pm Eastern Time**
- **Some uptake seen in marketing committee participation – hope to see this improve in future**

Tools Committee Update

David Thomson

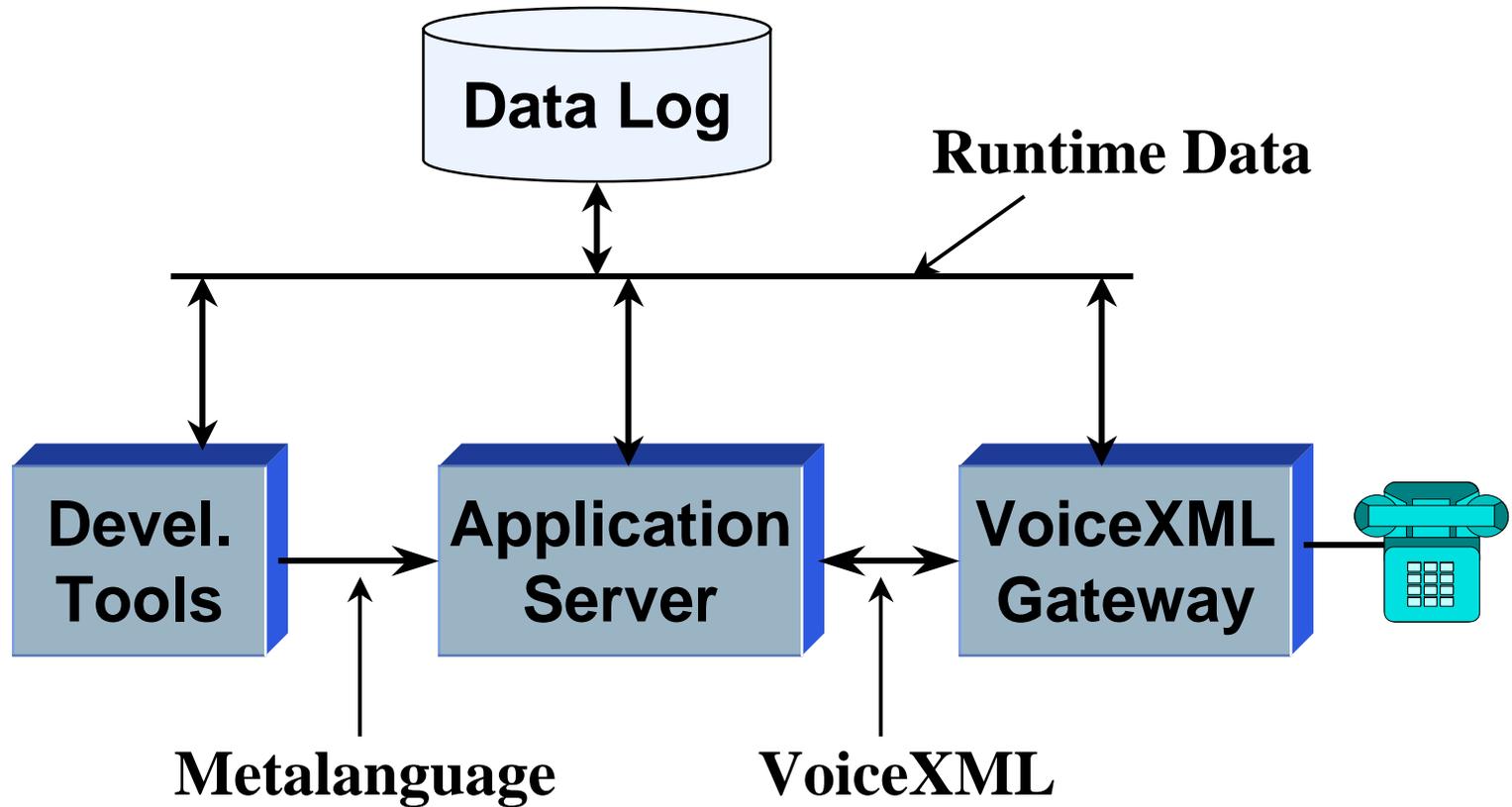
Tools Committee

- **Sponsored by the VoiceXML Forum**
- **Objective: Make VoiceXML easier to use through better development tools.**

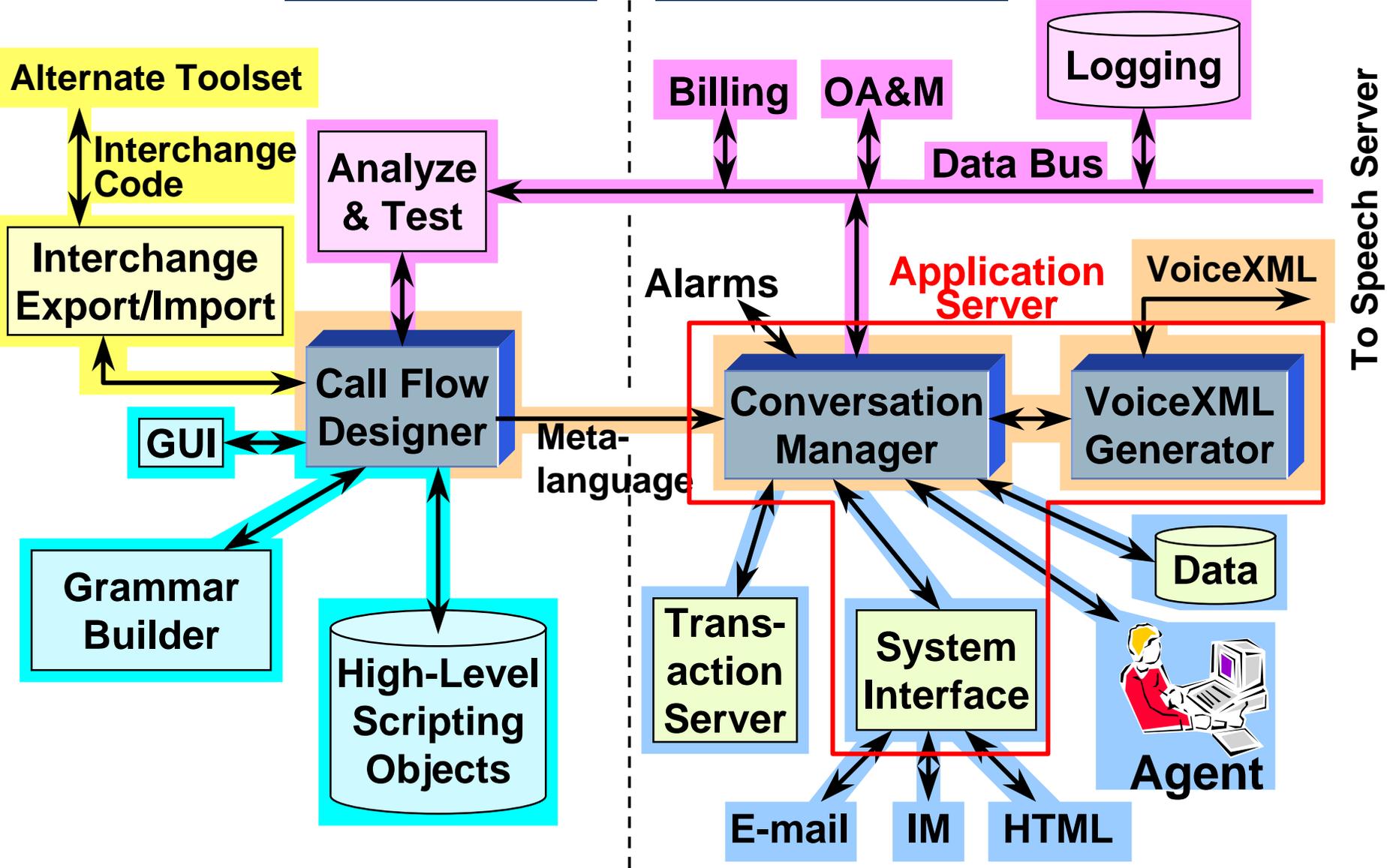
VoiceXML Tool Problems

- **Applications are not portable**
(Vendor-neutral applies only to speech server)
- **No standards for runtime data**
- **Vendor tools cannot be intermixed**
- **Better tools = more, better applications**

Typical VoiceXML System



Offline Tools **Runtime Tools**



Three Working Groups

Data Logging Working Group

- Standard format for OAM&P, billing, etc.
- Necessary for systems to stay in operation.

Metalanguage Working Group

- Standard format for application.
- Includes database, system interface, platform, ...

Open Source Working Group

- Create a repository of free software
- Support an open development community
- Several companies have shown interest

Data Logging Motivation

Problem

Runtime data format is proprietary, different for each platform. Communication needs go beyond VoiceXML.

Solution

Define a specification with elements, structure, and syntax.

Metalanguage Motivation

Problem

Applications written with Vendor X's tools will not run on Application Server from Vendor Y.

Solution

Define a uniform format for representing a complete application

Open Source Motivation

Problem

Wider availability of good tools would increase use of VoiceXML.

Solution

Create a repository with a basic tool set and open source to the community.

Status of Working Groups

Data Logging: Achieved cross-industry agreement on most architectural decisions (log levels, file structure, ...). Requirements and draft data element list are complete.

Metalanguage: Completed requirements document. Increased level of investment by new committee members.

Open Source: Possible seed software donation by IBM.

Meeting Structure

- **1-hour calls Wednesdays (11am EST)**
- **Rotating schedule for each subgroup:**
 - 1. Data Logging**
 - 2. Metalanguage**
 - 3. Open Source**
- **Meeting notes available.**