

## Interview with Mark Randolph, VoiceXML Forum

### *Technical committees for speaker biometrics, CCXML, MRCP, VoIP*

*Dr. Mark A. Randolph, Chairman of the VoiceXML Forum and Director of Engineering and Technology at Motorola, was interviewed by Bill Meisel in late April. Mark is a Fellow of the Technical Staff at Motorola and is responsible for technology strategy in the area of mobile applications, content, and services. Prior to joining Motorola, he was Member of Technical Staff at AT&T Bell Laboratories. Mark received his Bachelors degree from Georgia Tech, and S.M. and Ph.D. degrees in Electrical Engineering from MIT, and an M.B.A. from the University of Chicago.*

### **Please outline briefly the current structure and objectives of the VoiceXML Forum.**

The VoiceXML Forum is a global industry organization whose mission is to promote and to accelerate the worldwide adoption of VoiceXML-based applications. The Forum acts as an educational and technical resource, a certification authority and a contributor and liaison to standards organizations such as the W3C and the IETF.

The Board of Directors sets the strategic agenda for the organization and is comprised of Sponsor Member representatives. Our current Sponsor Members are AT&T, Cisco, Genesys, Hewlett-Packard, Holly Connects, IBM, Loquendo, Lucent, Motorola, Nuance, Oracle, Tellme Networks, Verizon, Vocalocity, and West. The Finance Committee, Marketing Committee, and Technical Council report to the Board of Directors. Our Technical Committees report to the Technical Council. We currently have six Technical Committees: Accessibility, Conformance, Education, MRCP Liaison, Speaker Biometrics, and Tools.

### **The Forum has certainly been successful in gaining acceptance of VoiceXML and associated standards. With the W3C doing the actual standards work, what is the Forum's current focus?**

You're right. I think there is little debate that VoiceXML is *the* industry standard for developing voice-driven applications. Today, there is unanimous vendor support for VoiceXML and most customers require VoiceXML support. In fact, most analysts are predicting that, for the first time, VoiceXML port shipments will overtake traditional IVR port shipments. This is a significant milestone.

Since the Forum submitted VoiceXML 1.0 to the W3C's Voice Browser Working Group and adopted it as the basis for development of a W3C dialog markup language, the W3C has led the technical development and evolution of VoiceXML, while the Forum has served as a technical resource, evangelist, certification authority, and contributor and liaison to the W3C. More recently, the decision to include speaker identification and verification (SIV) in VoiceXML 3.0 was the result of cooperation between the Forum's Speaker Biometrics Committee and the W3C. I think the success of VoiceXML speaks volumes about the importance of this symbiotic relationship we have with the W3C.

### **What are some of the current sub-group activities?**

There's a lot of great work happening at all levels in the organization. For example, over the past several months, the Conformance Committee has certified platforms from Cisco, Microsoft, Plum Voice Portals, and SandCherry, as well as second platforms from Avaya and Voxeo. The Technical Council recently published a whitepaper on the impact of VoIP telephony on the voice industry and the use of MRCP for speech engines. The MRCP Liaison Committee is developing a best practices document that describes how VoiceXML 2.1 can be implemented using MRCP v2. The Speaker

Biometrics Committee has published a requirements document, a glossary of speaker biometrics terms, and a data exchange file format. The Tools Committee is currently developing a specification for capturing runtime data from application servers, VoiceXML browsers, speech recognizers, databases, etc. This captured data is used to analyze and tune applications for better performance. The Tools Committee is also working on a specification for a metalanguage, a standard language for writing speech applications that run on an application server. Our education and evangelism activities continue as well.

Earlier this year, the Forum created the VoiceXML Solutions Directory ([www.vxmldirectory.com](http://www.vxmldirectory.com)), a comprehensive directory of VoiceXML-related products and services. The directory is designed to help companies interested in deploying VoiceXML-based business solutions to find the products and services they need quickly and efficiently. It currently includes nearly 200 products and services offered by the Forum's member companies. Every vendor working with VoiceXML should actively participate in the VoiceXML Forum and ensure that its products and services are listed in the directory.

### **Do you see the Forum's focus evolving?**

I definitely see the role of the Forum evolving. VoiceXML will always be an important part of our charter and is part of our organization's DNA, but the opportunities to help shape the future of phone-based applications and services go beyond VoiceXML into adjacent technologies. Accordingly, the Forum's work is broadening. Today, we have technical committees dedicated to speaker biometrics, CCXML, MRCP, and VoIP.

I would like to see us develop and cultivate strategic relationships with companies and organizations in complementary industries, like VoIP, and have them actively participate in the Forum at some level. Along these lines, multimodal will enable us to move into the embedded space (e.g., mobile devices). We are looking to broaden our base of membership to include customers in addition to vendors.

### **Any final comments?**

Sure. I would encourage every company that uses VoiceXML or related technologies, whether as a vendor or a customer, to join our organization. It is a very exciting time for our industry—Web and voice applications are truly converging and most enterprises are adopting standards-based solutions. Opportunities are available to participate in the Forum at every level, and it is a great way to provide leadership and influence the direction of the phone application marketplace.

Lastly, the VoiceXML Forum's website ([www.voicexml.org](http://www.voicexml.org)) is a terrific resource for information on VoiceXML and related technologies.

Thanks again for the opportunity to share this information with you and your readers!

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