



# RFID Networks & Middleware

## RFID Networks

Sept. 13, 2004, 2:45 PM – 3:30 PM.

**Location:** AIDC Theater on the Floor.

**Participants:** Blue Vector Systems, ConnecTerra, GlobeRanger, Oat Systems

## RFID Middleware and Web Services

Sept. 14, 2004, 2:45 PM – 3:30 PM.

**Location:** AIDC Theater on the Floor

**Participants:** BEA Systems, Sun Microsystems, TIBCO, webMethods

Both Panels are moderated by **Peter Winer, CEO Big Chief Partners.**

## Background

During the last two years, a large number of companies have staked claim to different segments of the RFID infrastructure space. These have included pure-play startups that have focused exclusively on RFID as well as opportunistic companies moving into RFID from adjacent areas.

The pure-play startups gaining the most traction have been focused on the distributed networks that drive RFID. These include original players such as OAT Systems, ConnecTerra and Globe Ranger. They also include relative newcomers Blue Vector Systems and RF Code.

These companies all have different approaches but the common thread is collecting information from distributed and potentially heterogeneous groups of RFID readers. The collected information is corrected, filtered, aggregated and delivered upstream to middleware, applications and business processes that capitalize on the information in a business context.

In addition, a cluster of established companies that focus on Middleware and Enterprise Application Integration (EAI) have seen the opportunity of moving into the RFID space. The most prominent of these are IBM, TIBCO, Sun Microsystems and webMethods. More recent entrants include BEA Systems and SeeBeyond.

These companies all view RFID as an emerging source of information for visibility and tracing. The products from these companies can enhance RFID information by connecting to outside data sources. They can also transform information into compatible formats and apply business rules that add value within a specific business context.

Among these companies, the EAI specialists include TIBCO, webMethods and BEA Systems. These companies provide message brokers that can integrate RFID information with other application information to create composite applications. Some players also provide development tools and portal solutions that can be used to build customized views of the integrated information.

*Prepared by:*

**Big Chief Partners, Inc.**

329 S San Antonio Road  
Los Altos, CA 94022 USA

**Voice:** (650) 917-3832

**Fax:** (650) 917-3831

info@bigchief.com

http://www.bigchief.com

## RFID Networks

During the past two years, numerous pure-play companies have been launched to provide solutions for collecting and leveraging information gathered from distributed RFID networks. Generally these companies take one of two approaches in providing solutions:

1. Server-based software that interfaces with readers, collecting information and processing it for upstream applications.
2. Network routers and appliances that provide similar functionality using dedicated hardware.

Increasingly, RFID reader manufacturers are moving into this space as well. Matrics (now Symbol Technologies) and

SAMSys have offered proprietary collectors for their readers for more than a year. Recently, Alien Technologies announced a similar add-on for their readers as well.

In this panel we will bring together representatives from four companies that are staking a claim to this emerging space:

**Bryan Tracey**, Director of Engineering, Globe Ranger

**Prasad Putta**, Chief Executive Officer, OAT Systems

**Ken Traub**, Chief Technology Officer, ConnecTerra.

**Anurag Mendhekar**, Chief Executive Officer, Blue Vector Systems

## RFID Middleware and Web Services

News from the RFID Networks space has been dominated by pure-play startups. In contrast, the biggest players in RFID Middleware and Web Services have been established Middleware and EAI specialists. These companies are working to leverage their existing platforms and applications in the RFID context.

As in other enterprise software spaces, this has created a debate about the need for dedicated middleware and application integration. Also, each vendor offers a different mix of product functions to solve the problem of delivering collected RFID information to enterprise applications.

In this panel we will bring together representatives from four companies that offer middleware and enterprise application integration for RFID:

**Jeff Flammer**, Director Manufacturing and Retail Solutions, BEA Systems

**Andrew Savitz**, Director RFID Solutions and Industry Alliances, webMethods

**Vijay Sarathy**, Group Marketing Manager RFID Infrastructure Solutions, Sun Microsystems

**Dushyant Pandya**, Director Strategic Alliances, TIBCO

## Panelist Biographies

### ***Andrew T. Savitz, Director, RFID Solutions and Industry Alliances, webMethods***

As director for RFID Solutions and Industry Alliances, Andrew Savitz is responsible for managing all aspects of webMethods' RFID offering. Andrew has more than 10 years of experience in the software industry. Before joining webMethods, Andrew previously worked as a software analyst at Robertson Stephens. Prior to that, Andrew worked for PeopleSoft, where he was a product lead with their Web-based solutions; and Andersen Consulting, where he contributed to its partnership with Siebel Systems, while Siebel grew from 12 to more than 400 employees.

Andrew received a BS in mathematics, applied actuarial science from UCLA, and he earned an MBA in finance and high tech strategy from the Anderson School at UCLA.

### ***About webMethods***

webMethods (Nasdaq: WEBM) is the industry's first Web services infrastructure company. webMethods' innovative integration, Web services, portal and analytic solutions enable more than 1,200 enterprise customers worldwide to run, measure and optimize their business. Recognized in 2003 as the fastest growing software company in North America by Deloitte, webMethods is headquartered in Fairfax, Va., with offices throughout the U.S., Europe, Asia Pacific and Japan.

***Jeff Flammer, Director Manufacturing and Retail Solutions, BEA Systems***

Jeff Flammer leads BEA's manufacturing and retail solutions at BEA. Prior to BEA, he was a director in communications and high-tech industry vertical at Manugistics, and prior to Manugistics, he was a manager in Accenture's Supply Chain Strategy practice. Mr. Flammer has a master's in manufacturing systems engineering from Stanford University and a B.S. in mechanical engineering.

***About BEA Systems***

BEA Systems, Inc. is the world's leading application infrastructure software company. BEA provides the enterprise software foundation for more than 15,000 customers around the world, including the majority of the Fortune Global 500. Companies turn to BEA to help them evolve their existing enterprise software applications from inflexible, redundant, legacy architectures to highly responsive, mature Web infrastructures.

***Dushyant Pandya, Director Strategic Alliances, TIBCO Software***

Dushyant Pandya is the director of strategic alliances for TIBCO Software. Before joining the company, he was director of product management and marketing for CrossWorlds Software. Pandya received an M.S. in engineering from the University of California at Berkeley and an M.B.A. from Stanford University.

***About TIBCO***

TIBCO provides software and services that help companies orchestrate assets across their enterprise in real-time. TIBCO is the largest independent provider of such software, with almost 20 years of experience and 2,000 customers.

***Vijay Sarathy, Group Marketing Manager RFID Infrastructure Solutions, Sun Microsystems***

Vijay Sarathy is the Group Marketing Manager for Sun's RFID Infrastructure Solutions. In this role he is helping define and drive Sun's RFID strategy as it pertains to solutions for EPC and non-EPC applications. Just prior to this current role, Vijay was a Product Manager in the Java Marketing organization where he was responsible for the J2EE integration technologies and helped drive overall J2EE adoption.

Vijay is a Mechanical/Industrial Engineer by training with 14+ years of experience with software technology. He has an MS from Texas A&M University and an MBA from Santa Clara University, CA.

***About Sun Microsystems***

Since its inception in 1982, a singular vision - The Network is The Computer - has propelled Sun Microsystems, Inc. (Nasdaq: SUNW) to its position as a leading provider of industrial-strength hardware, software, and services that make the Net work. Sun can be found in more than 100 countries and on the World Wide Web.

***Ken Traub, Chief Technology Officer, ConnecTerra***

Ken Traub is Chief Technical Officer and a co-founder of ConnecTerra, Inc, a leading provider of device computing solutions and RFID middleware. Ken was a founding member of the EPCglobal Software Action Group, which is responsible for developing all EPCglobal standards related to software, and also is one of three technology vendors serving on the EPCglobal Architecture Review Committee. Ken has contributed as an author to five EPCglobal software standards and currently chairs the middleware Working Group. Prior to founding ConnecTerra, Ken has been a founder and technical advisor to five high technology startups in the Boston area, combining deep expertise in a wide variety of technical areas with over a decade of senior management experience. Ken received his B.S., M.S. and PhD in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology.

***About ConnecTerra***

ConnecTerra, Inc. is a leading provider of enterprise infrastructure software for device computing. ConnecTerra's technologies provide the core communications, security, policy, device and data management services required to integrate devices into a wide range of applications. ConnecTerra's flagship infrastructure software, RFTagAware, targets the specific challenges of enterprise RFID deployments, including tag data processing and reader management. Using RFTagAware, companies are able to get their RFID deployments up and producing results quickly, while knowing that their infrastructure can scale as the number of tagged items, readers and remote sites grow.

***Bryan Tracey, Chief Architect, GlobeRanger***

Chief Architect for GlobeRanger, has been directly responsible for the architecture, design and implementation of GlobeRanger's core product, the iMotion Edgeware platform. As a representative of GlobeRanger, he has helped to design and establish global standards within both the Auto-ID Center and EPCglobal, where he currently serves as a co-chair of the filtering and collection working group. Bryan is a recognized expert and speaker on RFID and mobility solutions. Prior to GlobeRanger, Bryan led product engineering and development at companies such as AllStarFleet, MediaRealm Incorporated and Vujade. Bryan earned a bachelor's degree from St. John's College and a masters in mathematics from Rensselaer Polytechnic Institute.

**About GlobeRanger**

GlobeRanger is a leading provider of RFID, mobility and sensor-based software solutions. Its innovative iMotion™ Edgware™ platform provides the critical infrastructure layer for managing devices, networks, data, and processes at the edge of the enterprise, enabling real-time response. iMotion serves as the foundation for GlobeRanger and its partners to rapidly develop, deploy, and manage edge solutions.

**Anurag Mendhekar, CEO, Blue Vector Systems**

Anurag is a serial entrepreneur, and Blue Vector Systems is the second start-up that he has founded. The defining theme for Anurag's career has been building successful businesses around newly emerging technologies. The first startup he co-founded, Online Anywhere was the first company to create the whole new market category of content transformation tools for Mobile and non-PC devices. The success of the company was demonstrated through its acquisition by Yahoo.

Following that, as a key executive of Yahoo! Everywhere, Anurag developed a global business around Yahoo!'s Mobile Internet services, achieving distribution through almost 40 different wireless carriers to serve millions of people around the globe.

Anurag started his career at Xerox's prestigious Palo Alto Research center, where he was one of the inventors of Aspect Oriented Programming, a rapidly spreading paradigm of programming that forms the core of Blue Vector Systems' products.

**About Blue Vector Systems**

Blue Vector Systems is a sensor-based distributed computing systems company focused on reducing RFID implementation costs and operational complexities for its customers. Through solutions that provide reliable and cost-effective means to implement RFID solutions, Blue Vector Systems enables companies to realize new efficiencies in functionality and operation. Blue Vector Systems was founded in 2002 and is headquartered in Mountain View, CA

**Prasad Putta, CEO, Oat Systems**

Prior to co-founding OAT in 2001, Prasad started Auripay, a company that provided secure, flexible e-commerce payment solutions. He later sold the company to Cyota. Previously, he worked at i2 Technologies implementing supply chain solutions.

Prasad holds a masters degree in mechanical engineering from MIT, and an undergraduate degree from the Indian Institute of Technology in Madras.

**About Oat Systems**

OAT is the world's most widely deployed standards-based RFID software platform. Used by many of the world's largest companies, it integrates with existing enterprise applications and can be rolled out in a fraction of the time required by other systems. OAT helped MIT's Auto-ID Center develop the

standards and the core technologies that enable widespread commercial RFID. Today, no other RFID software platform can support OAT's broad range of RFID hardware that OAT does.

OAT personnel have been involved in the creation of the commercial RFID industry from day one. OAT has built the industry's most knowledgeable and respected team of RFID experts.

**Peter Winer, CEO, Big Chief Partners, Inc.**

Peter Winer is a partner at Big Chief Partners, based in Los Altos, CA. Mr. Winer is the architect and development manager for Big Chief's RFID software. He has 20 years of experience working on applications and Internet development projects on multiple platforms. He was previously in senior management at Symantec Corporation. He was also a founder of Living Videotext, Inc., where he was one of the earliest developers for the Macintosh computer. In the early 1980s, he was a lead programmer developing the CompuServe Information Service. He earned a B.S. in Computer Science from the University of Wisconsin.

**About Big Chief Partners**

Big Chief Partners is a strategic consulting and software development organization specializing in applications, Internet infrastructure, development tools, and RFID technology.

The company has a highly experienced team of individuals with substantial entrepreneurial experience in product development, engineering management, and operations in technology-based businesses. The company implements technology solutions and advises clients on adoption of technology and investments in technology.

Big Chief Partners has worked over the past several years to develop a commanding knowledge of automatic identification technologies and businesses. The company offers technology and strategy consulting to a variety of companies from early-stage startups to established businesses looking to add efficiency and gain competitive advantage through the use of automatic identification initiatives.

Big Chief Partners publishes a quarterly RFID report. To subscribe, email [info@bigchief.com](mailto:info@bigchief.com).

**Big Chief Partners, Inc.**

329 S San Antonio Road  
Suite 8  
Los Altos, CA 94022 USA

**Voice:** (650) 917-3832

**Fax:** (650) 917-3831

**Mail:** [info@bigchief.com](mailto:info@bigchief.com)

**Web:** <http://www.bigchief.com>

**Blog:** <http://www.bigchief.com/weblog>