

## IEEE IRI 2015 Invited Industry Speaker (I)

### Data science enabled resiliency analytics and beyond

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#### *Abstract*

Aggressive and differentiated Recovery Point Objective (RPO), Recovery Time Objective (RTO) creates multiple data protection silos in an enterprise. Resiliency for an enterprise data center is often achieved through the use of redundant components, periodic backup, continuous replication and (or) highly available architectures. With the emergence of cloud delivery model, Backup as a Service, DR as a Service has gained wide acceptance. For a service provider, it presents a unique challenge to quickly analyze all the metadata gathered from these environments to enable problem determination, fault isolation, service level agreement violation and anomalous behaviors.

Our scalable big data analytics framework analyzes millions of resiliency metadata tuples in a near real-time fashion to generate several actionable insights. This talk presents an overview of the system including

- the architecture and internals of the system
- key features of the system including a novel collective intelligence framework to enable social context to resiliency management
- research challenges and lesson learnt during the development and deployment of the system
- enablement of resiliency as a service on Platform as a Service (PaaS) environment due to complexities of the custom applications and continuous DevOps model.

#### *Biography:*



**Ramani Routray** IBM Research - Almaden, San Jose, CA 95120 USA ([routrayr@us.ibm.com](mailto:routrayr@us.ibm.com)). Mr. Routray is IBM Master Inventor, Senior Technical Staff Member and manager of the Cloud Systems Analytics group at IBM Almaden Research Center. He joined IBM in 1998 and has architected and delivered several key products and service offerings in the area of storage Disaster Recovery, Storage Management and Virtualization, and Cloud Service Architectures. He has received multiple technical awards in IBM including Best of IBM and corporate award, authored over 40 scientific publications and technical standards, and is author or coauthor of 48 patents.

## IEEE IRI 2015 Invited Industry Speaker (II)

### Multi-Layered Access Control with Oracle Database Vault

**Ji-won Byun**

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#### *Abstract*

Regulations, industry directives and numerous breach disclosure laws require stronger security controls. In parallel, attacks on databases are becoming increasingly common as hackers and even insiders target large data repositories to steal data, disrupt business, or gain economic advantage through industrial espionage. Consequently, protecting the database has become paramount and requires a defense in depth, multi-layered approach that encompasses preventive, detective, and administrative controls. Oracle Database Vault provides the industry's most comprehensive access control capabilities to address these challenges, and the main features of Oracle Database Vault are presented in this talk.

#### *Biography:*



**Ji-won Byun** is a Principal Member of Technical Staff with the Database Security Group, Oracle, USA. He has worked over 8 years within the Oracle database security group and is one of the principal developers for Oracle Database Vault. He received the B.A. degree in computer science from U.C. Berkeley and the M.S. and Ph.D. degrees in computer science from Purdue University.

## IEEE IRI 2015 Invited Industry Speaker (III)

### Cloud solution brokering

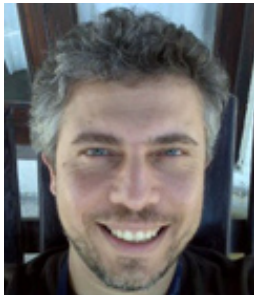
**Claudio Bartolini**

Cloud Chief Technologist - Hewlett-Packard Enterprise Cloud  
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#### *Abstract*

Current trends in cloud, API managements and microservices architectures enable a novel approach to bringing to market business solutions exposing a great degree of reuse, composability, continuity and autonomy. These trends also create opportunities for Cloud Solution Brokering: hiding infrastructure and platforms, so as to focus on software as a service, as well as simplifying and lowering the cost of creating new solutions composing them out of pre-existing services. In this document we describe our approach to building a Cloud Solution Broker, focusing in particular on the aspect of enabling an organization to become the trusted broker for business solutions. To effectively do that, and confidently take on the risk that this position implies, we need to solve the problem of managing business-level SLAs in a dynamic service composition environment.

#### *Biography:*



**Claudio Bartolini** is a Cloud Chief Technologist with Hewlett-Packard Enterprise Cloud. Claudio has 20 year experience in IT as a researcher, manager, consultant and strategist; he is a frequently invited keynote speaker at international academic and practitioner conferences, prolific and extensively cited author. Visiting and adjunct professor at prestigious Universities worldwide. Claudio holds a Ph.D. in Computer Science from the University of Ferrara, Italy and a M.Sc. in Electronic Engineering from the University of Bologna, Italy.