

IDENTITY MANAGEMENT AND ACCESS CONTROL IN MULTI-CLOUD

Speaker Bio's

VARUN TALWAR

CO-FOUNDER AND CEO, *TETRATE*

Varun Talwar is the Founder and CEO of Tetrade. He was the founding product manager on gRPC and co-founder of the Open Source Istio project at Google. Prior to that he was responsible for Google Cloud Launcher, along with launching Hangouts on Air and Google Cloud Marketplace. Varun previously worked at YouTube where led the strategy and execution of products for creators and partners in sports, gaming, news and education departments. He helped launched YouTube in India, Singapore, Australia and Korea. With the extensive contributions that he has made to Istio as a project, with its focus on reducing complexity and secure management of microservices, Varun will be delivering the keynote address on trusting cloud native applications.



SCOTT ROSE

COMPUTER SCIENTIST, *NIST*

Scott Rose works as a computer scientist at the National Institute for Standards and Technology (NIST). Scott works on Internet infrastructure protection research and Internet protocol research. Scott is the editor of several IETF specifications and the author of several NIST Special Publications on secure Internet protocols. His current work is in bringing zero trust security understanding to the US Government. Scott received his BA in Computer Science from The College of Wooster and his MS from University of Maryland, Baltimore County.



JUANITA KOILPILLAI

FOUNDER AND CEO, WAVERLEY LABS

Juanita Koilpillai is Founder & CEO of Waverley Labs, a pioneer in software defined perimeters (SDP) and digital risk reduction solutions. She has 30 years' experience researching and developing systems in computer security, network management and real-time distributed software. She leads the open source software-defined perimeter (SDP) effort for 'black' apps in the cloud with the Cloud Security Alliance and is an active contributor to NIST leading the creation of a security risk index system for moving apps to the cloud (NIST 500-299). She was a key member of FEMA's Enterprise Security Management Team and served as Principle Investigator for several DoD initiatives. She co-founded CyberWolf - an advanced automated attack warning system deployed by government and later acquired by Symantec.



DAVID FERRAILOLO

MANAGER, SECURE SYSTEMS AND
APPLICATIONS GROUP, *NIST*

David F. Ferraiolo is the manager of the Secure Systems and Applications group of the Computer Security Division, at the National Institute of Standards and Technology. He has conducted extensive research in various areas of access control and authorization management, including formal model development, reference and prototype implementation, product demonstration development and evaluation. He is a coauthor of a book on Role-based Access Control and a book on Attribute Based Access Control, is the author or coauthor of more than 50 papers and journal articles on topics of access control, and the principle inventor on two patents. Due to his work, RBAC has advanced from a concept to the world's most widely used access control model, with features that show up at virtually all levels of computing. He received the 2019 ACSAC "Test of Time Paper" award, 2018 IEEE Innovation Award in Societal Infrastructure Award, a U.S. Department of Commerce gold medal, and an Excellence in Technology Transfer award from the Federal Laboratory Consortium and has served on the boards of numerous standardization efforts to include, the Common Criteria (ISO 15408), Role-Based Access Control (ANSI/INCITS 359), Next Generation Access Control (ANSI/INCITS 499 and 526).



RAMASWAMY CHANDRAMOULI

SENIOR SCIENTIST, *NIST*

Dr. Ramaswamy Chandramouli is a Senior Computer Scientist at the Computer Security Division at National Institute of Technology (NIST) USA for over 20 years. His publications span diverse areas such as RBAC, Model-based Security Testing, Smart Card Specifications, DNS & Email Security, ABAC and Security Guidance for Hypervisor & Container deployments. He is the co-author of 3 Technical books, 28 NIST publications and 37 peer-reviewed conference and journal publications.



ZACK BUTCHER

FOUNDING ENGINEER, *TETRATE*

Zack is core contributor @IstioMesh and the founding engineer and Tetrade. Prior to Tetrade, he worked at Google as one of the core contributors to Istio. Prior to Istio he worked on a variety of teams across Google Cloud Platform, focusing on authorization, policy, data retention, and the internal system Istio draws from.



LIAM WHITE

ENGINEER, *TETRATE*

Liam is a software engineer at Tetrate and maintainer on the Istio project. He leads the mesh troubleshooting workgroup at Tetrate, working on both internal products and the open-source projects that underpin them.



NICOLAS M. CHAILLAN

CHIEF SOFTWARE OFFICER, AIR FORCE
CO-LEAD, DOD ENTERPRISE DEVSECOPS INITIATIVE

Mr. Nicolas Chaillan, a highly qualified expert, is appointed as the first Air Force Chief Software Officer, under Dr. William Roper, the Assistant Secretary of the Air Force for Acquisition, Technology and Logistics, Arlington, Virginia. He is also the co-lead for the Department of Defense Enterprise DevSecOps Initiative with the Department of Defense Chief Information Officer. As the Air Force's senior software czar, Mr. Chaillan is responsible for enabling Air Force programs in the transition to Agile and DevSecOps to establish force-wide DevSecOps capabilities and best practices, including continuous Authority to Operate processes and faster streamlined technology adoption.



IGNASI BARRERA

FOUNDING ENGINEER, *TETRATE*

Ignasi has been building hybrid multi-cloud platforms and SDN solutions for more than 9 years. He is a long-term open source contributor and in 2015 he became a Member of the Apache Software Foundation, where he mentors new projects in the Incubator and helps with community development activities and the promotion of open source. In 2018 he joined Tetrade as a founding engineer where he works on service mesh and multi-cloud security.



JOSHUA ROBERTS

COMPUTER SCIENTIST, *NIST*

Joshua Roberts is a computer scientist at NIST. He started as an intern in 2013 and has been working on NGAC ever since. He is currently the lead engineer on NIST's reference implementations and other NGAC focused projects. Under a CRADA agreement with Tetrate, Josh has contributed to their NGAC implementation.



**JAYANTA KUMAR
DEBNATH**
INFOBEYOND TECHNOLOGY

Mr. Jayanta K. Debnath received his M.S degree (with thesis) in Computer Engineering from University of Toledo in 2016. He was a software engineer at Robi Axiata Ltd from 2009 to 2013 before his M.S study. In the past four years, at InfoBeyond he has been working on several projects in the areas of networking, access control, power grid, and network performance diagnosis. His programming experience includes C/C++, Java, SQL, Python, JSP/Servlet, Spring Framework, Oracle PL/SQL, bash shell scripting, Oracle I0g, MySQL, etc. He worked as the software engineer for Security Policy Tool product sponsored by NIST. Mr. Debnath has published several papers in IEEE conference and Journals.



ULRICH LANG

OBJECTSECURITY

Ulrich received his Ph.D. from the University of Cambridge Computer Laboratory (Security Group) on conceptual aspects of middleware security in 2003 (sponsored by the UK Defence and Evaluation Research Agency (DERA), after having completed a Master's Degree (M. Sc.) in Information Security with distinction from Royal Holloway College (University of London) in 1997. On the management side, Ulrich has recently completed a Business Marketing Strategy course at the Kellogg School of Management (Northwestern University). Ulrich is a renowned thought leader in access control and also involved other cybersecurity automation areas (incl. supply chain risk analysis and vulnerability assessment). He is on the Board of Directors of the Cloud Security Alliance (Silicon Valley Chapter) and is a technical expert witness. He co-invented and is responsible for the development of OpenPMF. He has been a Principal Investigator on several Phase I and Phase II SBIRs.



VINCENT HU

SENIOR SCIENTIST, *NIST*

Vincent Hu is a computer scientist in the computer security division of the National Institute of Standards and Technology (NIST). His interests include formal models, access control, distributed systems, intrusion detection, and quantum computing. He currently works on access control policy verification, attribute based access control, access control for distributed systems, attribute assurance, and quantum security algorithms. Vincent received his Ph.D. degree in Computer Science from the University of Idaho.



SANDI RODDY

CHIEF SCIENTIST, *CYBER WARFARE SYSTEMS,*
JHU/APL

Ms. Roddy started her career with the U.S. Navy Security Group as a Cryptologic Maintenance Engineer, designing, installing and operating high speed crypto for the Navy's classified communications infrastructure. She transitioned to TEMPEST engineering by learning and applying RF and Satellite propagation protection techniques. She worked for the National Security Agency in the early design and implementation of Public Key Infrastructure systems, which included developing PK-enabled applications and Directory Services. Her NSA career included a variety of technical leadership positions at the Pentagon, NATO, DISA and the Unified Cross Domain Management Office focusing on the technological underpinnings of security management. Ms. Roddy is the Chief Scientist for Cyber Warfare Systems for JHU Applied Physics Lab where she applies her continuously evolving curiosity to a variety of challenges.



RON TURNER

XPRESSRULES

After completing a year of Fulbright-funded graduate research (linguistics) in Europe, Dr. Turner completed a Ph.D. at Harvard. As a faculty member at Dartmouth College he focused his research on the application of computers to natural language. He later did post-doctoral published research in computer science, worked in industry as a software engineer, and then founded a multimedia production company serving the world's largest textbook publishers. After winning Small Business Innovation Research (SBIR) contracts for information portability (Department of Energy) and information security (Department of Defense), he co-founded XpressRules® LLC.



SARBARI GUPTA

PRESIDENT, *ELECTROSOFT*

Dr. Sarbari Gupta has been active in the information security industry for over twenty years. She has broad base of knowledge and experience in the areas of cybersecurity, identity and access management and cloud security. She holds a PhD degree in Electrical Engineering and the CISSP and CISA certifications. Dr. Gupta has authored over twenty technical papers/presentations in refereed conferences and journals and holds four patents in areas of cryptography. She has co-authored several NIST Special Publications in the areas of Electronic Authentication, Security Configuration Management, and Mobile Credentials.

Dr. Gupta is the Founder and President of Electrosoft, a provider of technology-based services and solutions with a special focus on cybersecurity. Serving Government and commercial customers since 2001, Electrosoft holds ISO 9001 and CMMI Level 3 certifications.



DEEPAK JEEVANKUMAR

DELL TECH CAPITAL

Deepak Jeevankumar is Managing Director at Dell Technologies Capital, where he leads investments in cybersecurity and cloud infrastructure. Deepak represents Dell Technologies Capital on the board of directors of the following companies: Cequence Security, Remediant, RiskLens and Tetrade.io. He previously served as the series A board director at JASK (acquired by SumoLogic), RedLock (acquired by Palo Alto Networks) and RiskRecon (acquired by MasterCard).



ANIL VATTI

CHIEF ARCHITECT, VISA

Anil Reddy Vatti is a Chief System Architect at Visa. Anil leads the microservices, containers, Kubernetes and ServiceMesh efforts in Visa. Anil and his team built a secure, resilient and a highly scalable container/ServiceMesh/ML&DL platform with several integrations into other tools such as monitoring, logging, and backend storage integrations. Anil also actively involved in developing Visa ML/DL (Machine learning and Deep learning) platform. Prior to Visa, Anil was a Principal Engineer at WalMart and helped build WalMart's container platform. You can find Anil spending time with family, playing with his kids, cooking, or building something new.



LIXUN QI

SENIOR TECH LEAD, *FREDDIE MAC*

Lixun Qi is a Sr Tech Lead at Freddie Mac, focused on building company-wide cloud native computing platforms. His responsibilities include Kubernetes, service mesh, software defined networking, information security and all related automation through GitOps. Much of time these days is spent on transformations of legacy platforms to Cloud and monolithic applications to microservice architectures. Lixun has over 20 years of experience in all technical layers from building global SDN network to programming distributed systems.



ARADHNA CHETAL

GLOBAL HEAD CLOUD SEC
ARCHITECTURE, *HSBC*

Aradhna Chetal is Global Head for Cloud Security Architecture at HSBC (Hong Kong Shanghai Banking Corporation). She has worked for a number of enterprises viz. JP Morgan & Chase, Merck, Boeing Company, T-Mobile and Microsoft where she was responsible for managing Cloud security architecture, digital transformation and migration of applications to cloud. She is a Cloud Security Alliance Research Fellow and has been a key contributor to CSA standards and NIST Cloud computing working Groups like cloud security reference architecture, Cloud Risk Management framework, Container and Microservices Security etc.. She has also been advisor to several startups that have been developing products for Network segmentation, zero trust, Identity & Access Management, Containers & Microservices Security.



ANDRÉ MENDES

CHIEF INFORMATION OFFICER (ACTING), DOC

André Mendes was appointed Chief Information Officer (Acting) for the Department of Commerce in August of 2019. There, he has overall responsibility and oversight of all technology systems at the United States Department of Commerce (DOC) and its associated Bureaus (FY2020 Budget \$3.8B).

Before, Mr. Mendes was responsible for all global technology platforms and systems for the International Trade Administration (ITA), the DOC bureau that manages global trade issues for the United States of America. There Mr. Mendes oversaw a rapid bureau-wide transformation effort making ITA the first Federal Agency/Bureau to be 100% cloud based, radically changing several workflows, enabling a massive scale-up of service provisioning quality, an unprecedented rise in employee morale and job satisfaction while also lowering overall operating costs to less than 11% of ITA's appropriation.

Prior to ITA, Mr. Mendes spent eight years at the U.S. Agency for Global Media (USAGM) in various executive roles; including CEO, COO, CIO, CTO and CFO. During his time at USAGM, Mr. Mendes managed overall Agency transformation generating over \$360 million in savings from 2010 through 2018 through aggressive global technology and facilities optimization with projected 10-year savings in excess of half a billion dollars (\$503M). In that timeframe, global weekly audiences grew 78% (165-278M), all while reducing technology and front office staff by over 22%.



ANIL KARMEL

**PRESIDENT, CLOUD SECURITY ALLIANCE - DC
METRO AREA CHAPTER
CEO, C2 LABS**

Anil Karmel is the co-founder and CEO of C2 Labs, a digital transformation partner that blends ART and SCIENCE to securely modernize IT to move at the speed of business, allowing heavily regulated customers to Take Back Control. Formerly, Anil served as the National Nuclear Security Administration's (NNSA) Deputy Chief Technology Officer. Karmel and his team have garnered industry and government accolades, including the SANS National Cyber Security Innovators Award for Cloud Security, InformationWeek 500 Top Government IT Innovators, ACT/IAC Excellence.gov Award and the DOE Secretary's Achievement Award. Anil serves as the co-chair of both the National Institute of Standards and Technology (NIST) Cloud Security Working Group and the Cloud Security Alliance (CSA) Application Containers and Microservices Working Group. Karmel also serves as the president of the CSA DC Metro Area Chapter.



STEPHEN NAUMANN

SENIOR ADVISOR – DATA CENTER
PRACTITIONER, GSA

Steve Naumann, now at GSA, has 30+ years of practical IT and Data Center experience in the Federal Sector. Starting off as a C Programmer at the Government Printing Office in 1987 he has since branched out to include experience gained at the Social Security Administration in application and hardware technical support, network administration, security, financial management, acquisition, data storage, mainframe, client server, energy optimization, agency level project/program management, strategic plans, data center design, data center migration and data center optimization management.

Steve has been a major contributor to the new DCCOI and Cloud Smart policies, wrote the base for the CIO Council's *Application Rationalization Playbook* and then directed its final development. In addition to writing Federal policy he advises Federal agencies on IT Modernization, strategic planning and Application Rationalization.

