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KEYNOTES

KEYNOTE 1: The future of cloud-native application development

Cloud native describes a way of building applications on a cloud platform to iteratively discover and deliver business value. We now have access to the same technology that the large internet companies pioneered and used to their advantage to dominate their respective markets. What challenges arise when we start building applications to take advantage of this new technology?

In this keynote, we'll cover what it means to build applications with microservices and how concepts like service mesh have evolved to solve some of those problems. We'll also discuss how the next iteration of application development with Functions-as-a-Service (FaaS) and serverless computing fit into this landscape.

Attendees should come away from this event with an understanding of:

- What cloud-native application development means and how to deliver better software faster to create better business outcomes.
- How service mesh technology like Istio can solve the challenges introduced with cloud-native application architecture.
- How the next iteration of applications can use FaaS and how serverless computing fits in with a world of monoliths, microservices, and APIs.

Burr Sutter, director, developer experience, Red Hat
A lifelong developer advocate, community organizer, and technology evangelist, Burr Sutter is a featured speaker at technology events around the globe—from Bangalore to Brussels and Berlin to Beijing (and most parts in between). He is currently Red Hat's director of Developer Experience, a Java Champion since 2005, and former president of the Atlanta Java User Group. Burr founded the DevNexus conference—now the second largest Java™ event in the U.S.—with the aim of making access to the world's leading developers affordable to the developer community. When not speaking globally, Burr is the passionate creator and orchestrator of highly-interactive live demo keynotes at Red Hat Summit, the company's premier annual event.

KEYNOTE 2: Simplify microservices with service mesh technology

Numerous challenges are introduced with cloud-native applications. Migrating to a microservices architecture is no easy feat: There are exponentially more services to monitor, numerous API surfaces to secure, and a plethora of traffic to manage between services. You and your team need help, fast, to stay ahead of the game.

In this keynote, you will explore Istio, an open source tool to connect and manage microservices that is becoming an industry-leading service mesh for Kubernetes. You will dive into how Istio provides a method of integrating services like load balancing, mutual service-to-service

authentication, transport layer encryption, and application telemetry requiring minimal—if any—changes to the code of individual services.

Attendees should come away from the event with an understanding of:

- How Istio can simplify development and the pain points it will solve.
- The service-mesh layer of the Kubernetes stack.
- What's new in Istio 1.0.
- What the future looks like.

Brian "Redbeard" Harrington, product manager, Istio, Red Hat
Brian Harrington, also known as Redbeard, was chief architect at CoreOS and is now the product manager for Istio at Red Hat. He is developer, hacker, and technical writer in the areas of open source development and systems administration. His time spent in both defensive and offensive computing have combined with his readings of classical anarchism to present new ideas in organizational hierarchies for software development. He has been featured on Al Jazeera as an expert in the field of computer security, and has been seen and heard on Bloomberg Television and National Public Radio. He currently resides in Oakland, CA and was grudgingly elected president of the hackerspace HacDC.

TRACK 1: ACCELERATE APP DELIVERY WITH CONTAINERS

SESSION 1: IT transformation with containers and DevOps

The convergence of cloud, containers, artificial intelligence (AI), automation, and open source is rapidly transforming IT operations technologies, best practices, and skills. DevOps proves to be a game-changer for enterprise IT departments wanting flexibility and speed in supporting their product development teams.

In this session, we will discuss enterprise challenges and the impact of DevOps on the business, plus why leadership should be a key aspect of their strategy.

Brian Gracely, director of product strategy, Red Hat OpenShift, Red Hat
Brian Gracely is the director of product strategy at Red Hat, focused on OpenShift®. He is recognized as an industry thought leader in cloud computing and is co-host of the award-winning podcast, The Cloudcast and weekly Kubernetes podcast, PodCTL.

SESSION 2: DevOps and hybrid applications: What you need to know

Although continuous delivery (CD) and DevOps are growing in popularity, there is not much practical information available about how to get started and build automated pipelines across containers and traditional infrastructure. Most applications today follow the hybrid model, combining components deployed on containers with services that run on virtual machines (VMs) or public cloud services provided by Amazon Web Services, Google Cloud Platform, and Microsoft Azure.

In this presentation, we'll provide an overview on how to automate software delivery for hybrid applications that stretch over containers, VMs, and public clouds—from source code commit to deployment in production using Jenkins, Red Hat OpenShift, and Red Hat Ansible Automation. We'll cover the basics of CD and DevOps concepts. No previous experience with these practices is required.

Siamak Sadeghianfar, principal technical product marketing manager, Red Hat OpenShift, Red Hat
Siamak Sadeghianfar is responsible for technical aspects of OpenShift® in an enterprise environment and helping customers take advantage of Red Hat® OpenShift to achieve their goals. Siamak is a former solutions architect and architect. He has expertise related to the life

cycle of application development and processes such as Java™ EE, middleware, mobile, containers, microservices, and DevOp.

SESSION 3: Automating security and compliance for hybrid cloud environments

In a hybrid infrastructure consisting of physical, virtual, cloud, and container environments, maintaining visibility, control, security, governance, and compliance remains paramount—but it becomes more difficult and time consuming.

In this session, you'll learn how to solve these challenges in your hybrid infrastructure by automating security and compliance with a combination of Red Hat CloudForms, Red Hat Satellite, Red Hat Insights, Red Hat Ansible Tower, and OpenSCAP. Specifically, in your hybrid infrastructure, you'll learn how to:

- Easily provision a security-compliant host.
- Quickly detect and remediate security and compliance issues.
- Ensure governance and control in an automated way.
- Proactively monitor security and automate risk management.
- Perform audit scans and remediations on your systems.
- Automate security to ensure compliance against regulatory or custom profiles.

Lucy Kerner, global security technical evangelist and strategist, Red Hat
Lucy Kerner is the global security technical evangelist and strategist at Red Hat. She helps promote thought leadership and the global go-to-market strategy for security across the entire Red Hat® portfolio. Lucy creates and delivers security related technical content to the industry, customers, and partners and has spoken at numerous events and is a 2018, 2017, and 2016 Red Hat Summit Top Presenter. Lucy has more than 15 years of professional experience as both a software and hardware development engineer and a pre-sales solutions architect. Prior to Red Hat, she worked at IBM as both a Mainframe microprocessor design engineer and a pre-sales solutions architect for IBM x86 servers. She has also interned at Apple, Cadence, Lockheed Martin, and MITRE, where she worked on both software and hardware development.

TRACK 2: OPTIMIZE EXISTING APPS FOR MODERN DEMANDS

SESSION 1: Optimizing your existing applications

IT organizations that rely on legacy platforms and traditional development processes struggle to innovate and keep up with competitive pressures and the high rate of change demanded by customers. Application and infrastructure optimization is needed. While many organizations are interested in making this change, they often find themselves asking, “Where and how do we begin?”

In this presentation, we will share best practices from successful IT optimization and migration projects to help you get started on your digital transformation journey.

Tobias Hartwig, product marketing manager, Red Hat
Tobias Hartwig is a product marketing manager at Red Hat. He leads the Red Hat Application Modernization and Migration program, an initiative dedicated to helping customers modernize their application infrastructures and migrate their applications from proprietary middleware to Red Hat® JBoss® Middleware through an easy and cost-effective process with predictable returns.

SESSION 2: Eclipse Micropofile: The state of community-driven enterprise Java microservices

For almost two decades, organizations have been using enterprise Java applications to successfully run their businesses. With the advent of cloud computing, microservices in a cloud-native environment are becoming the norm.

Eclipse MicroProfile was created as a means to collaborate with vendors, individuals, and organizations like Java user groups in an open forum to rapidly bring microservices to enterprise Java developers. More recently, Jakarta EE was created as the new home for cloud-native

Java. In this presentation, we will catch you up on the current state of cloud-native application development with enterprise Java.

John Clingan, senior principal product manager for middleware, Red Hat
John Clingan is the senior principal product manager for middleware at Red Hat. As a Java™ developer with 20 years of experience, he now manages modern platforms like Thorntail, Vert.x, and the overall Red Hat microservices strategy.

SESSION 3: ASX adopts new technology and adapts faster

Discover how the Australian Securities Exchange (ASX) improved reliability and costs for its digital platform. The organization needed to operate with high stability, security, and performance, but its legacy application server platform was becoming increasingly inconsistent, unstable, and expensive.

With its new platform, ASX gained greater stability—and faster, more effective recovery for its web applications, allowing them to deliver an improved digital experience to their customers.

Theresa Payne, senior technology manager for digital, Australian Securities Exchange (ASX)
Theresa Payne is the senior technology manager for digital at the Australian Securities Exchange (ASX). She pioneered the transformation of the ASX Digital Platform, which are critical business-to-business and public facing web applications for the Australian Securities Exchange.

TRACK 3: DEVELOP NET-NEW CLOUD-NATIVE APPS

SESSION 1: Evolution of integration and microservices patterns with Istio service mesh

As we build distributed systems on cloud platforms (like Kubernetes, or public clouds), we must understand where the responsibility of the developer teams lies with respect to the platform. The platform provides some useful abstractions to make us more productive, but the correctness and safety of our applications and business requirements is still the responsibility of the developer and development teams. Tools like Istio, and service mesh in general, solve for some difficult problems like observability, security, and resilience and are highly encouraged for cloud-native application deployments. In this talk we'll take a look at how Istio can help build resilient distributed-systems applications, but also be very explicit about Istio's boundaries and where application frameworks built for integrating systems like Apache Camel fit into the picture. One does not obviate the need for the other.

Christian Posta, senior principal application platform specialist, Red Hat
Christian Posta is a senior principal application platform specialist at Red Hat. He has more than 15 years of experience building and designing highly scalable, resilient, distributed systems. Christian is the author of blog.christinaposta.com, a popular software blog with 35K+ views per month, and writes on top developer communities like techbeacon.com, DZone.com, InfoQ and others. He also mentors, trains, and leads teams with distributed-systems concepts, DevOps, and cloud-native application design. Christian is a frequent speaker at top technology conferences like Devoxx, JavaOne, KubeCon, or Red Hat Summit. He recently authored the book “Introducing Istio Service Mesh” for O’Reilly and Red Hat.

SESSION 2: A Java developer's journey to Kubernetes and OpenShift

In this session, we'll demonstrate tips, techniques, and best practices to build and deploy better software faster to increase the speed at which you deliver value for your business.

We'll cover:

- Microservices architecture patterns.
- Istio service mesh techniques.
- Advanced deployment and release patterns like dark and smart canaries.
- Pipelines.

Rafael Benevides, director, Developer Experience, Red Hat
Rafael Benevides is the director of Developer Experience at Red Hat.He helps developers and companies all over the world with efficiency in software development. He is a member of Apache DeltaSpike PMC, a Duke’s Choice Award winner project, and a speaker at conferences like JavaOne, Devoxx, TDC, and DevNexus.

SESSION 3: Delivering business value with microservices

Elsevier, one of the world's major providers of scientific, technical, and medical information, sought to accelerate access to enterprise data by shortening their development cycle, making more cost-effective decisions, and delivering business value faster, while moving away from technology vendor lock-in. Come hear Elsevier's phased approach to moving from monolithic services to microservices with Red Hat OpenShift, and the business benefits they have seen so far.

Tom Perry, senior director, Data, Insights, and Integration, Elsevier
Tom Perry is a senior director of Data, Insights, and Integration at Elsevier. He has 22 years of experience in the technology industry in mainframe development and leadership roles across data-driven initiatives. He has worked on industries including a pan European policing system and a transactional payment processing.

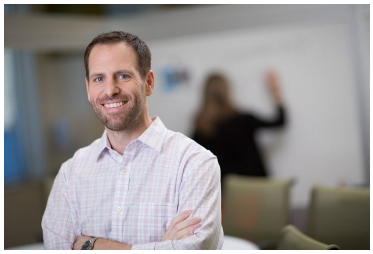
TRACK 4: DRIVE BUSINESS AND APP DEVELOPMENT INNOVATION

SESSION 1: A case study from Blue Cross NC on bringing the business and IT together to deliver new customer value

Blue Cross NC recognized a business need: to better engage users in their coverage and claims process through an application called BlueConnect. However, the Blue Cross NC team faced a few challenges: How to align different teams within IT and across IT to build a new application? What kinds of methods and practices should the team utilize to ensure shared understanding across the business? What kind of cultural changes are needed for this team to work together effectively? How can we scale new ways of working in the business?

In this session, Adam Hoover with Blue Cross NC will walk through his organization's journey with Red Hat Open Innovation Labs to deliver innovation to market. He will discuss:

- How to align disparate teams around a shared goal.
- The importance of practices and culture to introduce a new way of working.
- How to scale new ways of working in the business.



Adam Hoover, director, Digital Solutions, Blue Cross and Blue Shield of North Carolina
Adam Hoover is the director of Digital Solutions at Blue Cross and Blue Shield of North Carolina. He oversees the development and delivery of the digital tools for Blue Cross NC stakeholders across digital channels, which includes the self-service experiences for both web and mobile. Adam championed the adoption of agile and continuous delivery to provide faster time to market, helping the company anticipate and react to a rapidly changing, consumer-driven healthcare market.

SESSION 2: A framework to deliver business outcomes quickly: Shifting the conversation from "what" to "why"

As more customers—big and small, across verticals and geographies—look to different practices and various frameworks to implement agile, it can be easy to lose sight of the “why.” In this session, we will provide a pragmatic take on why business outcomes need to be the focus rather than one right framework. You’ll learn about a new approach to facilitate productive and effective conversations around business outcomes, and you’ll leave with practical tips, practices, and stories that demonstrate how to shift the conversation from “how” to “why.”

Matt Takane, consultant, Red Hat Consulting, Red Hat
Matt Takane is a consultant in Red Hat Consulting. An Agile coach for over 5 years, Matt is passionate about adapting working environments for customers to innovate, while ensuring individuals and interactions are never sacrificed. As a part of the Open Innovation Labs team, he leads customer delivery using the culture and open principles of Open Innovation Labs to cultivate a better way of working.

Tim Beattie, manager, Red Hat Consulting, Red Hat
Tim Beattie is a manager in Red Hat Consulting and engagement lead for Red Hat Open Innovation Labs. Tim's career in product delivery spans the last 17 years as an Lean-Agile coach, and a continuous delivery and design approach evangelist. He has helped transition large corporations to Agile with IBM, and now runs Open Innovation Labs residencies for Red Hat.

SESSION 3: Digital transformation from the eyes of industry leaders: New results from Harvard Business Review

Digital transformation may be a trite catch-all phrase for customers of varying sizes and challenges, but its implications are real. In a recent Harvard Business Review report (published Aug 2018), only 13% of respondents rated their ability to confront digital transformation as very effective. The vast majority of respondents understand its implications and relate to the importance of addressing technology, process, and culture in parallel, but struggle to implement strategies to address it, with culture as the leading inhibitor.

In this session, we'll discuss what industry leaders consider critical digital transformation capabilities, where organizations are struggling with adoption, what success looks like, and how many organizations are measuring the efficacy of efforts.

Marty Wesley, director of portfolio product marketing, Red Hat
Marty Wesley is a director of portfolio product marketing at Red Hat, focusing on Red Hat's complete portfolio of solutions. He has worked in software product marketing and product management roles for more than 18 years in large companies and startups. Marty helped define

and market infrastructure and business line applications based on open source software. His experience with commercial open source dates back to the very beginning of Red Hat® Enterprise Linux® at Red Hat.