SESSIONS
PRECONFERENCE WORKSHOPS - 26/02/2018

Registration

12:00pm - 8:00pm
Main agenda

Essential DevOps

1:00pm - 5:00pm
DevOps

Location: Mission City Ballroom, B5

Essential DevOps is a half day interactive workshop that provides a detailed overview of DevOps including cultural, automation and practical approaches that are delivering real business value in real organizations. The session will provide attendees with exposure to emerging DevOps practices, such as Continuous Delivery, the Three Ways and "Shift Left" testing and security. It will also look at how DevOps connects the dots between existing frameworks such as Agile, Lean and ITSM.

All Access or Pre-Conference Workshop pass required to attend this session.

Participants

Jayne Groll - CEO, DevOps Institute

Introduction to Containers and Kubernetes -- Please Register by Feb 22

1:00pm - 4:00pm
Orchestration

Please register by Feb. 22 to attend this workshop, so instructor can prepare materials.

Location: Mission City Ballroom, B4

In this workshop, you will learn the advantages of containers, Kubernetes, and cloud native design. A hands-on focused workshop will reinforce the creation of containers and deploying them in Kubernetes to see the immediate benefit that a cluster can bring to your organization.

All Access or Pre-Conference Workshop pass required to attend this session.

Participants

Ryan Schneider - Lead Education Engineer, Heptio

SCHEDULE
PRECONFERENCE WORKSHOPS - 26/02/2018

Container World

February 26-28, 2018
Santa Clara Convention Center
California

TIME	MAIN AGENDA	DEVOPS	ORCHESTRATION
12:00PM	**12:00pm** - Registration		
1:00PM		**1:00pm** - Essential DevOps	**1:00pm** - Introduction to Containers and Kubernetes -- Please Register by Feb 22

SESSIONS
DAY 1 - 27/02/2018

Container World

February 26-28, 2018
Santa Clara Convention Center
California

Registration

7:00am - 5:00pm
Main agenda

Breakfast & Networking

7:30am - 8:30am
Main agenda

Welcome Remarks

8:00am - 8:05am
Keynote Programming

Location: Mission City Ballroom

Open to all attendees and exhibitors.

Keynote: Are We Ready for Serverless?

8:10am - 8:30am
Keynote Programming

Location: Mission City Ballroom

In this talk, Expedia's Vice President of Technology Subbu Allamaraju will talk through the shifting paradigms on cloud, and explore the anchors and engines for serverless adoption.

Open to all attendees and exhibitors.

Participants

Subbu Allamaraju - Advisory Board | Vice President, Cloud, Expedia

Into the Cloud: Modernize Applications Without Tearing Them Apart

8:30am - 8:50am
Keynote Programming

Location: Mission City Ballroom

Sometimes it feels too daunting to take on the big challenges, the ones that reflect what it takes to evolve a business. Your business-your apps-feel frozen in time. Yet containers are the key that gives you tools to not only modernize onto the cloud, but also extend your customer value. In this keynote, Jason brings his know-how about enterprises, their legacy needs AND their future journey. That journey is one of security, simplified management, and interoperable environments. Jason's demo shows the modernization of the classic Pet Store Java app onto public cloud containers, and goes one step more: extends that app with Artificial Intelligence APIs. Stop by our booth afterwards, grab the demo code, and take the MTA challenge.

Listen to Jason discuss what it is like to build and manage a cloud, from operations to economics to engineering: https://softwareengineeringdaily.com/2017/11/29/how-ibm-runs-its-cloud-with-jason-mcgee/

Open to all attendees and exhibitors.

Participants

Jason McGee - VP and CTO, IBM Cloud Platform, IBM

Startup Lightning Talk: Cavirin

8:50am - 8:53am
Keynote Programming

Location: Mission City Ballroom

Open to all attendees and exhibitors.

Startup Lightning Talk: Replex

8:53am - 8:56am
Keynote Programming

Startup Lightning Talk: LogDNA

8:56am - 8:59am
Keynote Programming

Keynote Panel: Why Are Cloud Native Technologies so Critical to Giving Enterprises that Competitive Edge?

9:00am - 9:40am
Keynote Programming

Location: Mission City Ballroom

- Importance of community collaboration, co-opetition and open source support
- Insights into industry / community roadmap
- 'Solving the unsolvable problems': what are innovative solution providers doing to help legacy enterprises survive the threat of the cloud native start-up
- Why cultural change is critical for success

Open to all attendees and exhibitors.

Participants

Panelist: Mark Thiele - Advisory Board | Chief Strategy Officer, Apcera

Panelist: Swarna Podila - Senior Director, Community, Cloud Foundry Foundation

Panelist: Subbu Allamaraju - Advisory Board | Vice President, Cloud, Expedia

Moderator: Nitin Chopra - Partner, Shasta Ventures

SESSIONS
DAY 1 - 27/02/2018

Container World

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Keynote: Containers and Orchestrators: A way to navigate lock-in and get the most out of pure open source solutions

9:40am - 10:00am
Keynote Programming

Location: Mission City Ballroom

Cloud Native Computing is changing the way developers work. Some really tough problems have been solved for building and deploying applications, which has made developers radically more productive. There is another critical advantage associated with the portability and open source DNA of technologies like Kubernetes: they provide a buffer between the infrastructure and the developer. While this offers tremendous flexibility around where applications can run, it also – as with any open source technology - brings the risk of balkanization and fragmentation, either with software distributions, or in hosted cloud provider managed services.

During this session Craig McLuckie (one of the Kubernetes founders) will talk about how to maintain flexibility, stay close to the upstream open source communities and avoid vendor lock-in. He will explore the role that software conformance efforts and tools play, how to get closer to the communities that power open source technologies, and how to be pragmatic about dependencies when designing systems. McLuckie will cover not only what exists today, but also look at some of the key things that still need to be done to create an open and vendor neutral world for developers and IT professionals.

Open to all attendees and exhibitors.

Participants

Speaker: Craig McLuckie - Advisory Board | CEO, Heptio

Expo Hall Open

10:00am - 7:00pm
Main agenda

Networking Break

10:10am - 11:00am
Main agenda

Track Sponsor Keynote - VMWare

11:00am - 11:15am
Orchestration

Location: Mission City Ballroom, B5

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Art Fewell - Senior Technical Product Manager, VMWare, Cloud Native Applications

Track Sponsor Keynote -- Sonm

11:00am - 11:15am
Architecture

Location: Mission City Ballroom, B4

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Igor Lebedev - CTO, Sonm

Track Sponsor Keynote: Signal vs. Noise in DevOps: What's Here to Stay

11:00am - 11:15am
DevOps

The DevOps field is far from static, but with that motion comes a lot of noise. It's hard to know which trends and technologies will stick around, and which will fall by the wayside. Join Scalyr for a sneak peek into the data that reveal the real signal - where DevOps engineers spend their time and resources, and what that means for the future of this dynamic field.

Location: Mission City Ballroom, M1

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Chris Robertson - DevOps Evangelist, Scalyr

Panel: Understanding Which Container Orchestration Solution Is for You

11:20am - 12:00pm
Orchestration

Location: Mission City Ballroom, B5

Kubernetes may have the edge in the orchestration wars, but is it the right choice for you? In this talk, we'll examine the leading orchestration platforms, benchmarking their capabilities across:

- Purpose/origin
- Support/updates
- Host /Service discovery
- Scheduling
- Networking/load balancing
- Availability/Scale

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Moderator: Tim Clark - Partner, The FactPoint Group

Panelist: Lee Calcote - Head of Technology Strategy, SolarWinds

Panelist: Ritesh Patel - Founder, Nirmata

Panelist: Boskey Savla - Product Marketing Manager, VMware

So You Think You Can Scale...Containers? Why a Service Mesh is the answer to the question

11:20am - 12:00pm
Architecture

Location: Mission City Ballroom, B4

Attendees will leave with an understanding of:

- The core components of scaling containers: Circuit breakers, Retry, Discovery and Distribution
- Proxy models used for scaling containers: Reverse, Forward, Sidecar
- Basic service mesh architecture: Control plane and Data plane
- Where service mesh is going: programmable service platforms

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Lori MacVittie - Principal Technical Evangelist, F5 Networks

SESSIONS
DAY 1 - 27/02/2018

Container World

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Santa Clara Convention Center
California

Containers: Polyglot Ninjas for Build and Delivery Toolchains

11:20am - 12:00pm
DevOps

Location: Mission City Ballroom, M1

Moving away from monolithic applications towards distributed applications and micro- services gives development teams the freedom to select the best platform, languages, and tools for each task. But although a modern approach allows developers to quickly get resilient, scalable code out the door, CI/CD pipelines also get complicated. Have no fear, containers are here to help. By containerizing your build platform and agents, as well as your team's toolsets, you can keep developers happy and moving fast while delivering the quality your business demands.

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Mandy Hubbard - Software Engineer/QA Architect, CS Disco

Lunch & Networking

12:00pm - 1:00pm
Main agenda

Panel: Why DevOps Works Better in the Cloud

1:00pm - 1:40pm
DevOps

Location: Mission City Ballroom, M1

Today's businesses need to be able to quickly respond to market changes and customer demands, putting new emphasis on a DevOps approach to speed application delivery. However, this trend demands an automated infrastructure capable of matching the pace of these iterative updates. This discussion will explore how DevOps is driving a new migration to the cloud, and why rapid provisioning coupled with elastic capacity is now essential. Cloud and SDDCs are also helping break down barriers between developers and IT ops staff, reshaping job requirements and emphasizing new skill sets.

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Moderator: Jayne Groll - CEO, DevOps Institute

Panelist: Leslie Carr - Infrastructure Engineering Manager, Clover Health

Panelist: Chris Riley - DevOps Analyst, Fixate IO

Panelist: Jason McGee - VP and CTO, IBM Cloud Platform, IBM

Panelist: Steve Newman - CEO and Founder, Scalyr

Creating a Docker Secure Build Pipeline for Microservices

1:00pm - 1:40pm
Architecture

Location: Mission City Ballroom, B4

When we began shifting to a microservices architecture, we had to answer the question of how to build Docker images with an emphasis on security: how do we know what's being built and deployed, and whether it's safe? We created a centralized build pipeline providing developer flexibility while allowing security and compliance to manage the process. In this presentation I'll describe the pipeline, our requirements, and how we solved the challenge.

Participants

Mason Jones - Staff Software Engineer, Infrastructure Services, Credit Karma

From the Beginning: Hypervisors, VMs, and Containers

1:00pm - 1:40pm
Orchestration

Location: Mission City Ballroom, B5

Containers are nothing new to the industry, but it's surge in popularity have many engineers questioning the best use cases for virtual machines and containers. It's hard to figure out what is best for your application without understanding what the strengths of these technologies are. It's time to break down the barriers and understand containers, the difference between rkt and Docker, and all the acronyms buzzing through the community right now. Let's learn about the why's and whens to use virtual machines, containers, or both!"

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Sarah Christoff - Technical Support Analyst, WP Engine

Unify DevOps and SecOps: Security without Friction

1:50pm - 2:30pm
DevOps

Location: Mission City Ballroom, M1

Business Innovation and Digital Transformation are changing the pace and scale at which business applications are being developed. To stay agile, how do you balance the speed and agility of DevOps with the security and compliance of SecOps? It's time to unify DevOps and SecOps with complete visibility and control of containerized applications.

In this session, Matt will ignore the traditional technologies associated with containers, as they are constantly changing. Instead, Matt will focus on the challenges facing both DevOps and SecOps when it comes to security. Only by understanding each team's objections, can a frictionless approach to security be achieved. Lastly, Matt explains how to integrate security within the DevOps process without impacting development, but also providing security the visibility and control needed to secure containers. This frictionless approach unifies both DevOps and SecOps by providing zero-touch, seamless integration with the existing CI/CD process, portability across any container platform or programming language, and complete system, network, storage, and application security without root privileges.

After completing this session, attendees will...

* Understand the challenges related to both DevOps and SecOps and why security creates friction
* Understand how to integrate container security into their existing DevOps process and tools, helping to unify DevOps and SecOps teams
* Understand the benefits of frictionless security

Participants

Matt Alderman - Chief Strategy & Marketing Officer, Layered Insight

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DAY 1 - 27/02/2018

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Panel: Cloud Native/Cloud Immigrant: Modernizing the Enterprise

1:50pm - 2:30pm
Architecture

Location: Mission City Ballroom, B4

This panel will bring together leaders from "born in the cloud" companies, along with enterprises modernizing their legacy application and infrastructures to discuss what it means to be "cloud native", the different challenges they have faced, best practices and a forward view on what's coming on the Cloud Native horizon.

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Moderator: Jo Peterson - VP, Cloud Services, Clarify360

Panelist: Lori MacVittie - Principal Technical Evangelist, F5 Networks

Panelist: Ryan Holland - Senior Director, Technology Services Group, AlertLogic

Panelist: Brad Linder - Cloud Native and Big Data Evangelist, Sling TV

Managing Kubernetes Workloads On-premise and in AWS Cloud

1:50pm - 2:30pm
Orchestration

Location: Mission City Ballroom, B5

Managing Kubernetes clusters on-premise requires ongoing resource allocation, knowledge, and expertise in your infrastructure team. Cluster lifecycle concerns include: upgrades, security, node maintenance, resizing and many more. These areas are additionally difficult to manage as cluster sizes grow.

In this talk, we will explore some of the common problems that our customers face with scaling and managing on premise Kubernetes implementations and evaluate the operational ease and resulting benefits of outsourcing these problems to Amazon Web Services Cloud. We will also discuss the specific integrations Amazon is working on, to make these benefits translate easily to customers and the community in general.

Participants

Nishi Davidson - Developer Advocate, AWS

Dan Wilson - Principal Architect, Concur

Coffee Break

2:30pm - 3:00pm
Main agenda

Behavior Intelligence at the Edge Cloud

3:00pm - 3:40pm
Orchestration

Behavioral intelligence, the method and application of cloud native computing and artificial intelligence, provides unprecedented insight into customer behavior based on how the software they use behaves and interacts along the hybrid edge cloud. However, to gain this insight, we need to evolve traditional infrastructure towards a modern edge cloud, meaning:

- Any software architecture, language or vintage
- Any content or capability implemented in software
- Any hybrid infrastructure and technology

In this session, Doug will discuss the modern edge cloud, which requires new software architectures and deployment models. These new approaches unleash the use of microservices, containers, and functions at scale. However, how does one gain insight into how software functions interact with each other in this new architecture and their environment during runtime? Doug will also discuss the visibility and control requirements needed to build behavioral intelligence in this new modern edge cloud.

Location: Mission City Ballroom, B5

Participants

Doug Nassaur - General Manager, Lead Principal Technical Architect, Technology Design & Architect, AT&T

How to Reduce the Attack Surface of your Container Workloads

3:00pm - 3:40pm
Architecture

Location: Mission City Ballroom, B4

Cilium is an open source project focused on Layer 7-aware networking & security with BPF for microservices.

Modern microservice architectures factor out application functions into individual services and expose them via APIs using protocols such as HTTP/REST, gRPC, or Kafka. The rise of container-based orchestration platforms (such as Kubernetes) is creating demand for routing, load-balancing & security infrastructure that is highly scalable, application-aware, and resilient. At the same time, BPF (Berkeley Packet Filter) is becoming the fastest growing technology in the Linux kernel and is revolutionizing networking, security and tracing.

This talk introduces the open source project Cilium - a modern networking and security platform for microservices. Cilium is built on top of BPF and provides Linux native networking and security services with application-protocol awareness. Cilium works hand-in-hand with application proxies such as Envoy and the services management orchestration layer Istio in order to provide infrastructure services in a transparent manner with minimal overhead. This talk will discuss the challenges of exposing services via APIs and the solution that Cilium provides to enforce least privilege security.

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Cynthia Thomas - Technology Evangelist, Covalent

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Distributed Microservices Metrics and Tracing with Istio and OpenCensus

3:00pm - 3:40pm
DevOps

Location: Mission City Ballroom, M1

With the adoption of microservices, what was once a single application running on a single server has become hundreds of services running on dozens of servers. Microservices give you more freedom, scalability and agility, but makes understanding what's going on a lot harder. Things like understanding the lifecycle of a request, finding hotspots in your system, and even getting an alert when something is wrong is now much harder!

In this talk, I'll demo two open source projects, Istio and OpenCensus, that are based on years of production experience at Google and can significantly help you monitor and trace your distributed microservices. Istio can automatically trace RPC calls between services, and OpenCensus makes it easy to add white-box metrics and tracing to your services so you know what's going on.

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Sandeep Dinesh - Cloud Developer, Google

Panel: Kubernetes and Your Open Infrastructure

3:50pm - 4:30pm
Orchestration

Location: Mission City Ballroom, B5

Join our panel of Kubernetes and open cloud experts, where we'll offer practical ideas to address questions like:

*   How Enterprise-grade is Kubernetes today? What will it take to get there? What support & services are in place to help with Enterprise adoption?
*   Should you run containers as the overlay or underlay, and when would it make sense to do which?
*   Are containers the end of VMs as we know them?
*   How does the shift to container-based application deployment models play into IoT & Microservices deployment architectures?
*   What do these applications, as well as enterprise-driven deployment models need that containers bring to the table?
*   Is there a very wrong way to do this and what should users and operators watch out for?

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Moderator: Lisa-Marie Namphy - Advisory Board | Developer Advocate & Community Architect, OpenStack Community

Panelist: Robert Starmer - Cloud Advisor, Founding Partner, Kumulus Technologies

Panelist: Tony Campbell - Director of Field Engineering, CoreOS

Best Practices to Secure Application Containers and Microservices

3:50pm - 4:30pm
Architecture

Containers such as Docker and CoreOS Rkt deliver incredible capabilities to developers and operators and are powering the DevOps revolution in application development and deployment. Docker in particular has taken industry by storm, resulting in over 8 billion downloads and 500,000+ containerized applications in this open source platform. With all this new-found power comes significant challenges and concerns. Come learn how application containers and micro-services work via the definition published in the NIST publication SP 800-180, understand the security challenges leveraging this new approach, and best practices to address the same as documented in future NIST publications.

Location: Mission City Ballroom, B4

Participants

Anil Karmel - Co-Chair | CEO & Co-Founder, NIST Cloud Security Working Group, Cloud Security Alliance | C2 Labs

A DevOps State of Mind: Continuous Security for DevOps with Kubernetes

3:50pm - 4:30pm
DevOps

Location: Mission City Ballroom, M1

With the rise of DevOps, containers are at the brink of becoming a pervasive technology in Enterprise IT to accelerate application delivery for the business. When it comes to adopting containers in the enterprise, Security is the highest adoption barrier. Is your organization ready to address the security risks with containers for your DevOps environment?

In this presentation, you'll learn about:

*   The underlying technologies for Containers based DevOps including Kubernetes
*   The top security risks with containers and how to manage these risks at scale for Container Images, Builds, Registry, Deployment, Hosts, Network, Storage, API, Monitoring/Logging, Federation.
*   How to make your Container workflow more secure without slowing down DevOps
*   Automating security vulnerability management and compliance checking for container images

Participants

Chris Van Tuin - Chief Technologist, NA West, Red Hat

QoS And Burstability: Dynamic Kubernetes at Domo

4:40pm - 5:20pm
Orchestration

Location: Mission City Ballroom, B5

Domo manages 40+ Kubernetes clusters for a range of workloads, clouds, and compute resources. We also replace, delete, scale, and add new clusters on a regular basis and therefore need to be able to able to keep a stable client endpoint even as the underlying infrastructure is evolving. Come see how we have designed our cluster infrastructure to provide:

*   Dynamic QOS for millions of pods per day across 40+ clusters without any client code change required
*   Dynamic handling of diverse node pools for fun and profit (literally)

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Carson Anderson - Cloud Ops Engineer, Domo

SESSIONS
DAY 1 - 27/02/2018

Container World

February 26-28, 2018
Santa Clara Convention Center
California

Case Study: Running Containers at Scale at Netflix

4:40pm - 5:20pm
DevOps

Location: Mission City Ballroom, M1

This session will outline what the leading web-scale giant has learned from running production workloads within containers running on the AWS Cloud, on a platform called Titus.

Titus is Netflix's infrastructural foundation for container based applications. Titus provides cluster and resource management as well as container execution with deep Amazon EC2 integration and common Netflix infrastructure enablement.

In the session we'll cover the architecture of Titus, what applications are leveraging containers at Netflix and why, lessons learned running containers and scheduling in production at scale, and a peek at the future of Titus at Netflix.

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Andrew Spyker - Manager, Netflix Container Cloud, Netflix

Corin Dwyer - Senior Software Engineer, Netflix

Enabling Cloud Native Web Scale @ Sling TV

4:40pm - 5:20pm
Architecture

Location: Mission City Ballroom, B4

A look back at how Sling TV launched our first Cloud Native, web scale application. Attendees will leave with an understanding of:

- How we got started and the technical, people and process challenges we overcame
- How we are combining Cloud Native & Big Data to provide a higher quality service to our customers
- Our high-level architecture to achieve the levels of abstraction, reliability and flexibility we are after
- Some things we wish we knew before we started.
- What is on the horizon for us in the coming year

We will review our journey from the developer, platform engineering and end user perspectives.

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Brad Linder - Cloud Native and Big Data Evangelist, Sling TV

Happy Hour on the Expo Floor

5:30pm - 7:00pm
Main agenda

SCHEDULE
DAY 1 - 27/02/2018

TIME	MAIN AGENDA	ARCHITECTURE	DEVOPS	KEYNOTE PROGRAMMING	ORCHESTRATION
7:00AM	**7:00am** - Registration **7:30am** - Breakfast & Networking				
8:00AM				**8:00am** - Welcome Remarks **8:10am** - Keynote: Are We Ready for Serverless? **8:30am** - Into the Cloud: Modernize Applications Without Tearing Them Apart **8:50am** - Startup Lightning Talk: Cavirin **8:53am** - Startup Lightning Talk: Re-plex **8:56am** - Startup Lightning Talk: LogDNA	
9:00AM				**9:00am** - Keynote Panel: Why Are Cloud Native Technologies so Critical to Giving Enterprises that Competitive Edge? **9:40am** - Keynote: Containers and Orchestrators: A way to navigate lock-in and get the most out of pure open source solutions	
10:00AM	**10:00am** - Expo Hall Open **10:10am** - Networking Break				

SCHEDULE
DAY 1 - 27/02/2018

TIME	MAIN AGENDA	ARCHITECTURE	DEVOPS	KEYNOTE PROGRAMMING	ORCHESTRATION
11:00AM		**11:00am** - Track Sponsor Keynote -- Sonm **11:20am** - So You Think You Can Scale…Containers? Why a Service Mesh is the answer to the question	**11:00am** - Track Sponsor Keynote: Signal vs. Noise in DevOps: What's Here to Stay **11:20am** - Containers: Polyglot Ninjas for Build and Delivery Toolchains		**11:00am** - Track Sponsor Keynote - VMWare **11:20am** - Panel: Understanding Which Container Orchestration Solution Is for You
12:00PM	**12:00pm** - Lunch & Networking				
1:00PM		**1:00pm** - Creating a Docker Secure Build Pipeline for Microservices **1:50pm** - Panel: Cloud Native/Cloud Immigrant: Modernizing the Enterprise	**1:00pm** - Panel: Why DevOps Works Better in the Cloud **1:50pm** - Unify DevOps and SecOps: Security without Friction		**1:00pm** - From the Beginning: Hypervisors, VMs, and Containers **1:50pm** - Managing Kubernetes Workloads On-premise and in AWS Cloud
2:00PM	**2:30pm** - Coffee Break				
3:00PM		**3:00pm** - How to Reduce the Attack Surface of your Container Workloads **3:50pm** - Best Practices to Secure Application Containers and Microservices	**3:00pm** - Distributed Microservices Metrics and Tracing with Istio and OpenCensus **3:50pm** - A DevOps State of Mind: Continuous Security for DevOps with Kubernetes		**3:00pm** - Behavior Intelligence at the Edge Cloud **3:50pm** - Panel: Kubernetes and Your Open Infrastructure
4:00PM		**4:40pm** - Enabling Cloud Native Web Scale @ Sling TV	**4:40pm** - Case Study: Running Containers at Scale at Netflix		**4:40pm** - QoS And Burstability: Dynamic Kubernetes at Domo
5:00PM	**5:30pm** - Happy Hour on the Expo Floor				

SESSIONS
DAY 2 - 28/02/2018

Container World

February 26-28, 2018
Santa Clara Convention Center
California

Registration

7:59am - 4:00pm
Main agenda

Breakfast & Networking

7:59am - 9:00am
Main agenda

Welcome

8:00am - 8:10am
Keynote Programming

Location: Mission City Ballroom

Open to all attendees and exhibitors.

Keynote: Microservices and Containers at MetLife

8:10am - 8:30am
Keynote Programming

Location: Mission City Ballroom

Open to all attendees and exhibitors.

Participants

Tim Tyler - Principal Solutions Engineer, MetLife

Accelerating Your Transition to Modern Applications

8:30am - 8:50am
Keynote Programming

Location: Mission City Ballroom

The rapid growth of technology and tooling in the container ecosystem has enabled us to build modern applications that are more secure, scalable, and focused on our business. What are the key building primitives that allow us to accept, adopt, and accelerate our transition toward building and running modern applications?

In this session you will learn about:

- Key primitives required for building a modern system
- Steps you can take now to start building modern applications
- Secrets to fearlessly going faster and farther in the cloud

As part of this session we will highlight what we have learned from customers who are running applications using AWS Fargate, a new technology for building and running modern containerized applications in the cloud.

Open to all attendees and exhibitors.

Participants

Anthony Suarez - General Manager, AWS Fargate, Amazon Web Services

Startup Lightning Talk: Deepfence

8:50am - 8:53am
Keynote Programming

Location: Mission City Ballroom

Open to all attendees and exhibitors.

Participants

Sandeep Lahane - CEO and Founder, Deepfence

Startup Lightning Talk: Virtuozzo

8:53am - 8:56am
Keynote Programming

Participants

Sergey Maksimov - Product Management, Virtuozzo

Startup Lightning Talk: Codefresh

8:56am - 8:59am
Keynote Programming

Keynote Panel: Future View--What will the Container Landscape Look Like in 5 Years

9:00am - 9:40am
Keynote Programming

Location: Mission City Ballroom

- How will containers be used? For which applications? In which industries?
- What developments, key technologies will continue to dominate?
- What is the next wave of innovation, emerging technology we should be aware of?

Open to all attendees and exhibitors.

Participants

Panelist: Phil Estes - Technical Oversite Board, Open Container Initiative

Panelist: Sarah Novotny - Head of Open Source Strategy, Google Cloud Platform, Google

Panelist: Andrew Spyker - Manager, Netflix Container Cloud, Netflix

Panelist: Tim Mackey - Technology Evangelist, Black Duck

Moderator: Chris Riley - DevOps Analyst, Fixate IO

Keynote: Democratizing Development — How Do Containers, Orchestration, Services, Service Meshes, Marketplaces and Open Source Empower Your Business?

9:40am - 10:00am
Keynote Programming

Location: Mission City Ballroom

We've come a long way from a one datacenter/one server/one service model of operations with long lead times and extreme fragility. If the future is utility compute and a fully composable infrastructure, how do you prepare your developers and your business to benefit from this change? In this keynote, Google Cloud Platform's Head of Open Source Strategy Sarah Novotny will explore the process and culture changes — which much are harder than the technological changes — up and down the organization.

Open to all attendees and exhibitors.

Participants

Sarah Novotny - Head of Open Source Strategy, Google Cloud Platform, Google

Expo Hall Open

10:00am - 3:00pm
Main agenda

Networking Break

10:10am - 11:20am
Main agenda

SESSIONS
DAY 2 - 28/02/2018

Container World

February 26-28, 2018
Santa Clara Convention Center
California

Case Study: VMs to Kubernetes at WP Engine

11:20am - 12:00pm
Orchestration

Location: Mission City Ballroom, B5

Most organizations only need to run their applications in Kubernetes. In these situations, migrating onto Kubernetes clusters is relatively straightforward. What happens when you power over 500,000 sites and each one runs custom code provided by the customers.

Over the last two years, we have worked to move the sites that run on WP Engine's digital experience platform from virtual machines onto Kubernetes. I will share our experiences and the problems that we have faced from scaling, monitoring, logging and others.

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Nicole Hubbard - Architect, WP Engine

Panel: Do it like a Hyperscaler: Engineering Containers for security and hostile multitenancy

11:20am - 12:00pm
Security

Location: Mission City Ballroom, B4

Join us for a spirited discussion engineering containers for security, touching on such topics as:

- The security implications/value of containers on VM or Bare Metal, and is one model significantly more secure than another
- What are the implications for one vs. the other relative to application portability?
- Role of immutable infrastructure in managing services and software deployments in the context of security.
- Is there an automation strategy that makes the portability question moot, or is it still an issue?
- Security via policy and automation and how do we achieve that automation?
- How it impacts to portability? Is it better than, or an alternative to automation?

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Moderator: Jean Bozman - Vice President, Hurwitz & Associates

Panelist: Jason McGee - VP and CTO, IBM Cloud Platform, IBM

Panelist: Rob Hirschfeld - Founder and CEO, RackN

Panelist: Robert Starmer - Cloud Advisor, Founding Partner, Kumulus Technologies

Panelist: Sandeep Lahane - CEO and Founder, Deepfence

Containers and Persistent Memory

11:20am - 12:00pm
Storage / Persistent Storage

Location: Mission City Ballroom, M1

Containers can make it easier for developers to know that their software will run, no matter where it is deployed. What do customers, storage developers, and the industry want to see to fully unlock the potential of persistent memory in a container environment? This presentation will discuss how persistent memory is a revolutionary technology which will boost the performance of next-generation packaging of applications and libraries into containers.

You'll learn:
•What SNIA is doing to advance persistent memory
•What the ecosystem enablement efforts are around persistent memory solutions
•How NVDIMMs are paving the way for plug-n-play adoption into container environments

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Arthur Sainio - Co-Chair, SNIA Persistent Memory Special Interest Group | SMART Modular Technologies

Lunch & Networking

12:00pm - 1:00pm
Main agenda

Ubuntu 18.04 LTS Minimal Container Images: How Low Can We Go?

1:00pm - 1:40pm
Orchestration

Location: Mission City Ballroom, B5

In this session, we'll reveal the results of a project at Canonical to drastically reduce the size of the minimal Ubuntu image for the Ubuntu 18.04 LTS release. From Ubuntu-based Docker containers to embedded OS

applications, we've heard from many users the desire for the smallest possible Ubuntu starting point. Smaller images are subject to fewer security vulnerabilities, reduce network bandwidth consumption, and

require less storage. So far, we've trimmed the Ubuntu base image by 70%. Attend this session to learn how we've accomplished these savings, what's left in the image, and how we've defined the minimal Ubuntu image. Finally, we invite your testing and feedback on the results of this work!

Participants

Dustin Kirkland - Ubuntu Product & Strategy, Canonical

From Unsure to Secure: Basics for getting Kubernetes Running Securely in Production

1:00pm - 1:40pm
Vendor Tech Talk

Location: Mission City Ballroom, B4

As you scale your use of containers, Kubernetes provides a simple centralized way to manage and orchestrate your containerized applications. But it also brings with it a new set of security challenges specific to the orchestration layer. In this talk, we'll outline the key steps necessary to get Kubernetes up and running securely - so you can deploy applications at scale with confidence

Participants

Kevin Lewis - Solutions Architect, Twistlock

Panel: What are the Storage Challenges for Containerized Environments

1:00pm - 1:40pm
Storage / Persistent Storage

Location: Mission City Ballroom, M1

The benefits of deploying containers brings difficulties for IT infrastructure, along with the advantages of scale and agility, especially when it comes to storage.

In this session, we will examine:

- The storage challenges and different options for containers currently available
- The tradeoffs and functional differences between file, block and object storage approaches
- Architectural considerations

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Moderator: Kord Campbell - Consultant, Founder and CEO, Wisdom Inc.

Panelist: Brian Bulkowski - CTO and Co-Founder, Aerospike

Panelist: Igor Lebedev - CTO, Sonm

SESSIONS
DAY 2 - 28/02/2018

Container World

February 26-28, 2018
Santa Clara Convention Center
California

Avoiding Infrastructure At Rest - the Power of Immutable Containers

1:50pm - 2:30pm
Orchestration

Location: Mission City Ballroom, B5

Keeping up with patches has never been more critical. For hardware, that's... hard. What if servers were deployed 100% ready to run without any need for remote configuration or access? What if we were able to roll a complete rebuild of an entire application stack from the BIOS up in minutes? Those are key concepts behind a cloud and container deployment pattern called "immutable infrastructure." It's called immutable because the servers are deployed from container images produced by CI/CD process and destroyed after use instead of being reconfigured. It's a container and cloud pattern that has finally made it to physical.

In this talk, we'll cover the specific process and its advantages over traditional server configuration. Then we'll dive deeply into open tools and processes that make it possible to drive immutable containers into your own infrastructure. The talk will include live demos and will discuss process and field challenges that attendees will likely face when they start implementation at home. We'll also cover the significant security, time and cost benefits of this approach to make pitching the idea effective.

Participants

Rob Hirschfeld - Founder and CEO, RackN

Shane Gibson - Sr. Architect & Community Evangelism, RackN

Quantifying Container Risks at Scale

1:50pm - 2:30pm
Vendor Tech Talk

Quantifying risks present in container images is a critical aspect of production deployments of containerized applications. With Kubernetes clusters supporting thousands of nodes, any risk assessment solution must work at production scale without imposing significant performance penalties. During the natural application lifecycle, security risks will evolve independent of the security testing performed during development. Ultimately if trusted images become vulnerable, deployment risks increase, but identifying an impacted application can be challenging.

Trust is first established through best practices including the use of trusted image registries, static code analysis, API fuzzing, strong perimeter defenses and deployment controls. Unfortunately, this trust model omits information flow and may lack an understanding of component sources. When devising security action plans, defenders must quickly assess both the impact and scope of a security disclosure – regardless of component source. Enhancing security information flow accelerates risk mitigation at production scale by focusing attention on vulnerable application components.

Attendees will leave with an understanding of how security driven development practices should be amended to incorporate realities of container security. Coverage will include patching and development strategies to meet regulatory requirements. Real world examples will be given for how container images can transition from secure to vulnerable without changing any code or configuration.

Location: Mission City Ballroom, B4

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Tim Mackey - Technology Evangelist, Black Duck

Singularity Containers for Enterprise Performance Computing (EPC)

1:50pm - 2:30pm
Storage / Persistent Storage

Location: Mission City Ballroom, M1

Singularity is the most widely used container solution in high-performance computing (HPC). Enterprise users interested in AI, Deep Learning, compute drive analytics, and IOT are increasingly demanding HPC-like resources. Singularity has many features that make it the preferred container solution for this new type of "Enterprise Performance Computing" (EPC) workload. Instead of a layered filesystem, a Singularity container is stored in a single file. This simplifies the container management lifecycle and facilitates features such as image signing and encryption to produce trusted containers. At runtime, Singularity blurs the lines between the container and the host system allowing users to read and write persistent data and leverage hardware like GPUs and Infiniband with ease. The Singularity security model is also unique among container solutions. Users build containers on resources they control or using a service like Singularity Hub. Then they move their containers to a production environment where they may or may not have administrative access and the Linux kernel enforces privileges as it does with any other application. These features make Singularity a simple, secure container solution perfect for HPC and EPC workloads.

Participants

David Godlove - Software Engineer, Sylabs

Coffee Break

2:30pm - 3:00pm
Main agenda

SESSIONS
DAY 2 - 28/02/2018

Container World

February 26-28, 2018
Santa Clara Convention Center
California

Istio: The Extensible Service Mesh

3:00pm - 3:40pm
Orchestration

Location: Mission City Ballroom, B5

With microservices and containers mainstreaming, container orchestrators provide much of what the cluster (nodes and containers) need. With container orchestrators' core focus on scheduling, discovery and health at an infrastructure level, microservices are left with unmet, service-level needs, such as:

- Traffic management, routing, resilient and secure communication between services
- Policy enforcement, rate-limiting, circuit breaking
- Visibility and monitoring with metrics, logs and traces
- Load-balancing and rollout / canary deployment support

Service meshes provide for these needs. In this session, we will dive into Istio -- its components, capabilities and extensibility. Istio envelopes and integrates with other open source projects to deliver a full-service mesh. We'll explore these integrations and its extensibility in terms of choice of proxies and adapters.

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Lee Calcote - Head of Technology Strategy, SolarWinds

Skip the Anxiety Attack When Building Secure Containerized Apps

3:00pm - 3:40pm
Vendor Tech Talk

Location: Mission City Ballroom, B4

As a developer security is something you know you have to handle, but that doesn't mean you have to figure it all out yourself. Application security complexity can be reduced if planned into development from the start. In this talk, experts from the IBM Container Service team will discuss what it means to build and run a secure application and show how Kubernetes-as-a-service is the ideal platform. Learn how to achieve a secure Kubernetes cluster, how to handle network security, and how to build security awareness into you CI/CD pipeline. We will address how the IBM Container service provides this secure platform automatically and cover advanced capabilities such as Vulnerability Advisor, which provides image vulnerability scanning, configuration scanning based on ISO 27k, live container scanning, and integration with IBM X-force Exchange, to provide insight to the severity of discovered vulnerabilities. Network security will also be covered, including how to leverage network access policies with Calico and how to protect ingress traffic.

Participants

Chris Rosen - Program Director, Offering Management, IBM Container Service & IBM Container Registry, IBM

Laying the Foundation for Stateful Containers in Production

3:00pm - 3:40pm
Storage / Persistent Storage

Location: Mission City Ballroom, B4

Today's businesses demand modern applications and workflows to deliver digital products faster than ever before. Containers accelerate product development, but enterprises are hindered by legacy VM infrastructure and an unproven container stack – especially as they transition to running stateful containers in production.

Are you facing these container challenges?

- IT that fails to match the speed and agility of containers
- Legacy infrastructure that fails to deliver predictable performance
- Prohibitive cloud computing costs

Attend this informative session and learn:

- How to integrate container infrastructure with modern developer workflows
- The pros and cons of DIY, virtualized, and hyperconverged container infrastructures
- How purpose-built container infrastructure can slash costs, simplify management, and accelerate time to market

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Jeff Chou - Co-founder and CEO, Diamanti

Stateful Applications: eBay's Streaming Platform on Kubernetes (Case study)

3:50pm - 4:30pm
Storage / Persistent Storage

Location: Mission City Ballroom, M1

Containerizing Big Data applications in a production environment is a big challenge since these applications require human operational knowledge to correctly operate while protecting against data loss. At ebay we are building a streaming platform to provide full lifecycle management for ZooKeeper, Kafka and Flink on Kubernertes. We are utilizing the CoreOS operator pattern, leveraging eBay's local disk volume solution on bare metal machine, and are benefiting from the workflow engine to build an orchestration layer. This platform makes it easier and more agile to manage the multi-component, GEO-distributed stateful applications.

Participants

Xin Xu - MTS Engineer, eBay

Kubernetes Applications from Development to Production with Docker

3:50pm - 4:30pm
Orchestration

In the past few months Docker added support for Kubernetes as an orchestration option in Docker Desktop and Docker EE, including an integration that allows developers and operators to use the Docker Compose files they use today to deploy applications to Kubernetes.

In this talk we'll show how to take a cloud native application from development to a production Kubernetes cluster using Docker, covering many aspects of the Developer to Ops workflow: local development and debugging on your laptop, with Docker compose files or kubectl, securing the software supply chain with signing and scanning images, the workflow to promote images from staging to production, integrating with logging and monitoring systems, performing rolling updates.

Location: Mission City Ballroom, B5

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Alex Mavrogiannis - Senior Engineer, Docker

Making Container Security Accessible

3:50pm - 4:30pm
Security

Location: Mission City Ballroom, B4

Most of the security options available on container management platforms map the kernel and operating-system features like Seccomp or Linux capabilities which require expert understanding to take full advantage of. This results in often incorrect and over-permissive security configurations. Docker is aiming to change that and make container security more broadly accessible by developing a set of high-level permissions for containers and services, dealing with the implementation internally. This feature would enable exposed security settings to be abstracted from the underlying OS and defined based on what the application or service does at a high-level. Moreover image publishers would able to advertise the best security settings for their users to protect them from potential bad security decisions. Image publishers can even to bake these permissions inside the image itself, as part of a trusted bundle, hosted in a trusted registry.

All Access, Conference, Startup Conference or Enterprise Conference pass required to attend this session.

Participants

Nassim Eddequiouaq - Security Engineer, Docker

Hybrid Networking: Managing Containers and Virtual Machines

4:40pm - 5:20pm
Architecture

The session will cover the challenges relating to Hybrid networking involving containers and VMs and available opensource solutions that can be used to address these challenges It will provide a technical deep dive into some of the opensource networking stack like CALICO, Openstack Kuryr with Opendaylight and fd.io. The session will also provide basic overview about container networking models, application of software defined networking and service mesh.

Location: Mission City Ballroom, B5

Participants

Prem Sankar Gopannan - System Manager/Principal Architect, Ericsson

Paradox of choice - Building enterprise grade storage platform using open source components

4:40pm - 5:40pm
Orchestration

This talk showcases how a robust storage stack can be built using open source software components, if you choose wisely. To illustrate this, we will conduct a deep dive into vFile -- an open source, docker certified, managed plugin for Docker that provides shared file (persistent) storage for stateful cloud native applications. It uses ALL open source components such as ETCD, file server, Docker & Docker swarm. Via a live demo, this talk will show how vFile offers enterprise grade features such as file sharing, high availability & scalability, load balancing, resourced management & single click deployment.

Location: Mission City Ballroom, B5

Participants

Maio Luo , VMWare

SCHEDULE
DAY 2 - 28/02/2018

TIME	MAIN AGENDA	ARCHITECTURE	KEYNOTE PROGRAMMING	ORCHESTRATION	SECURITY	STORAGE / PERSISTENT STORAGE	VENDOR TECH TALK
7:00AM	**7:59am** - Registration **7:59am** - Breakfast & Networking						
8:00AM			**8:00am** - Welcome **8:10am** - Keynote: Microservices and Containers at MetLife **8:30am** - Accelerating Your Transition to Modern Applications **8:50am** - Startup Lightning Talk: Deepfence **8:53am** - Startup Lightning Talk: Virtuozzo **8:56am** - Startup Lightning Talk: Codefresh				
9:00AM			**9:00am** - Keynote Panel: Future View--What will the Container Landscape Look Like in 5 Years **9:40am** - Keynote: Democratizing Development — How Do Containers, Orchestration, Services, Service Meshes, Marketplaces and Open Source Empower Your Business?				

SCHEDULE
DAY 2 - 28/02/2018

TIME	MAIN AGENDA	ARCHITECTURE	KEYNOTE PROGRAMMING	ORCHESTRATION	SECURITY	STORAGE / PERSISTENT STORAGE	VENDOR TECH TALK
10:00AM	**10:00am** - Expo Hall Open **10:10am** - Networking Break						
11:00AM				**11:20am** - Case Study: VMs to Kubernetes at WP Engine	**11:20am** - Panel: Do it like a Hyperscaler: Engineering Containers for security and hostile multitenancy	**11:20am** - Containers and Persistent Memory	
12:00PM	**12:00pm** - Lunch & Networking						
1:00PM				**1:00pm** - Ubuntu 18.04 LTS Minimal Container Images: How Low Can We Go? **1:50pm** - Avoiding Infrastructure At Rest - the Power of Immutable Containers		**1:00pm** - Panel: What are the Storage Challenges for Containerized Environments **1:50pm** - Singularity Containers for Enterprise Performance Computing (EPC)	**1:00pm** - From Unsure to Secure: Basics for getting Kubernetes Running Securely in Production **1:50pm** - Quantifying Container Risks at Scale
2:00PM	**2:30pm** - Coffee Break						
3:00PM				**3:00pm** - Istio: The Extensible Service Mesh **3:50pm** - Kubernetes Applications from Development to Production with Docker	**3:50pm** - Making Container Security Accessible	**3:00pm** - Laying the Foundation for Stateful Containers in Production **3:50pm** - Stateful Applications: eBay's Streaming Platform on Kubernetes (Case study)	**3:00pm** - Skip the Anxiety Attack When Building Secure Containerized Apps

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DAY 2 - 28/02/2018

TIME	MAIN AGENDA	ARCHITECTURE	KEYNOTE PROGRAMMING	ORCHESTRATION	SECURITY	STORAGE / PERSISTENT STORAGE	VENDOR TECH TALK
4:00PM		**4:40pm** - Hybrid Networking: Managing Containers and Virtual Machines		**4:40pm** - Paradox of choice - Building enterprise grade storage platform using open source components			