Milwaukee Jan 18 Agenda

8:45 - 9:55: Registration Begins, Coffee and Snacks Served, Exhibit Area Open with Product Demonstrations, Time For Peer Networking/Interaction

9:55 – 10:00: Angelbeat CEO Ron Gerber Welcome and Introduction

10:00 – 10:20: Open Converged Infrastructure for Hybrid Clouds with Datrium
Gone are the days that IT staff want to configure, manage and troubleshoot their infrastructure. IT administrators demand simplicity; all that matters is that applications run simply, reliably and fast.

Hyperconverged Infrastructure (“HCI”) took a first step towards enabling this new computing paradigm, which according to Gartner will reach $10 Billion in sales by 2021.

The next step is Open Converged Infrastructure (“OCI”), which provides a powerful, cost-effective yet simple approach to increasing system/application performance under increased workloads. This new breed of convergence is:

- Simpler than Hyperconverged without vendor lock-ins
- Faster than All Flash Arrays
- No Backup Silos

Covering this highly relevant content is Shaun Hoover from Datrium, which delivers a new breed of tier 1 converged infrastructure with consumer-grade simplicity by combining compute, primary and secondary storage, and cloud backup into a single platform. Datrium DVX extends beyond HCI to address both mission critical, low latency workloads as well as backup and cloud data management for hybrid clouds.

10:20 – 10:40 Improving Network/Application Resilience and Performance, Given Recent Internet Outages with ThousandEyes
Recent Internet outages, caused by DDoS, Route Leaks and other cybersecurity attacks, plus natural/weather disasters and other factors have caused large-scale disruptions of mission-critical SaaS, IaaS and internally-hosted services.

During this technical, informative and highly informative session featuring Troy Whitney, Manager of Solutions Engineering at ThousandEyes, you will learn how to respond to these issues before they impact your customers, services and revenue, ensuring that your organization runs smoothly. You can quickly and precisely pinpoint the root cause of problems, then immediately share these insights with your vendors and customers.

ThousandEyes is a Network Intelligence platform that delivers visibility into every network an organization relies on, enabling them to optimize and improve application delivery, end-user experience and ongoing infrastructure investments. Leading companies such as ServiceNow and Twitter, as well as eBay and other members of the Fortune 500, use ThousandEyes to improve performance and availability of their business-critical applications.

10:40 - 11:00: Cloud Migration Strategies from Amazon Web Services (AWS)
Organizations of all sizes, across all industries, are fully aware of the financial and technical benefits of migrating legacy and onsite applications to the cloud. Brian Lewis, world renown Enterprise Solutions Architect at Amazon Web Services, will provide detailed recommendations and offer a framework/methodology, to help you plan out, then implement your strategic journey to the cloud. Among some of the specific topics covered during this technical and dynamic session are:

- Retire your “technical debt”, by eliminating time-consuming expensive tasks plus obsolete hardware and software requiring costly maintenance
- Focus on your core business mission, while simultaneously selecting from a broader range of architectures, applications and technical options available through AWS
- Create a blended/hybrid platform that combines both onsite computing resources and cloud-based services
- Innovate faster by understanding which cloud architecture is best-suited to your applications:
  - Serverless
  - Virtual Machine
  - Containers/Dockers

- Build for both scale and speed, simultaneously, without capital expenditures
- Reduce infrastructure risk while simultaneously enhancing overall network/data security
- Tap into the large ecosystem of AWS-certified app migration partners that seamlessly, securely and cost effectively move applications to the cloud

**11:00 - 11:20: Building a New class of Applications using Internet-of-Things, Analytics and Machine Learning by leveraging Cloud Computing Services from Amazon Web Services (AWS)**

The Internet of Things (IoT) is a system of ubiquitous sensors connecting the physical world to the Internet. Although Things, Intelligence, and Orchestration are the three core components of IoT, the value is in closing the gap between the physical and digital world in self-reinforcing and self-improving systems.

**If you knew the state of everything in the world – or at least your organization’s technology infrastructure - and could then make informed decisions based on this realtime and accurate data, what problems would you solve?**

To help you answer that question and extract the value from your connected devices, AWS has built IoT specific services, such as AWS Greengrass and AWS IoT. They help you collect and send data to the cloud, make it easy to load and analyze that information, and provide the ability to manage your devices, so you can focus on developing applications that fit your needs.

**Amazon Machine Learning** is a service that makes it easy for IT professionals and developers at all skill levels to use machine learning technology. It provides visualization tools and wizards that guide you through the process of creating machine learning (ML) models without having to learn complex ML algorithms and technology. Once your models are ready, Amazon Machine Learning makes it easy to obtain predictions for your application using simple APIs, without having to implement custom prediction generation code, or manage any infrastructure.

Amazon Machine Learning is based on the same proven, highly scalable, ML technology used for years by Amazon’s internal data scientist community. The service uses powerful algorithms to create ML models by finding patterns in your existing data. Then, Amazon Machine Learning uses these models to process new data and generate predictions for your application.

These important topics will also be covered by Brian Lewis, world renown Enterprise Solutions Architect at Amazon Web Services.

**11:20 – 11:40: Securing Confidential Data and Mission Critical Applications in the Cloud with Amazon Web Services**

Security in the cloud is much like security in your on-premises data centers - only without the costs of maintaining facilities and hardware. In the cloud, you don’t have to manage physical servers or storage devices. Instead, you use software-based security tools to monitor and protect the flow of information into and out of your cloud resources. Here are some of the specific topics and solutions discussed by Brian Lewis of AWS.

**Infrastructure Security:** AWS provides several security capabilities and services to increase privacy and control network access including Network firewalls built into Amazon Virtual Private Cloud (VPC), plus AWS web application firewall (WAF) capabilities. These let you create private networks while securing/controlling access to instances and applications.

**DDoS Mitigation:** Availability is of paramount importance in the cloud. AWS customers benefit from AWS services and technologies built from the ground up to provide resilience in the face of DDoS attacks. A combination of AWS services may be used to implement a defense in depth strategy and thwart DDoS attacks. Services designed with an automatic response to DDoS help minimize time to mitigate and reduce impact.
Data Encryption: AWS offers you the ability to add an additional layer of security to your data at rest, in motion, or in the cloud, providing scalable and efficient encryption features. This includes data encryption capabilities available in AWS storage and database services, flexible key management options, and encrypted message queues for the transmission of sensitive data using server-side encryption (SSE) for Amazon SQS.

Inventory and Configuration: AWS offers tools to maintain performance while ensuring that your cloud resources comply with organizational standards and best practices. This includes Amazon Inspector that automatically assesses applications for vulnerabilities or deviations from best practices, including impacted networks, OS, and attached storage.

Monitoring and Logging: AWS provides tools to enable you to see exactly what’s happening in your environment. This includes deep visibility into API calls through AWS CloudTrail, including who, what, who, and from where calls were made, plus alert notifications through Amazon CloudWatch when specific events occur and/or thresholds are exceeded.

Identity and Access Control: AWS offers you capabilities to define, enforce, and manage user access policies. This includes AWS Identity and Access Management (IAM) which lets you define individual user accounts with permissions across AWS resources, plus AWS Multi-Factor Authentication for privileged accounts, including options for hardware-based authenticators. AWS also offers native identity and access management integration across many of its services plus API integration with any of your own applications or services.

11:40 - 12:00: Accelerate the Hybrid Cloud with VMware Cloud on Amazon Web Services (AWS)
VMware Cloud on AWS is an on-demand service that enables you to run applications across vSphere-based cloud environments with access to a broad range of AWS services. Powered by VMware Cloud Foundation, this service integrates vSphere, vSAN and NSX along with VMware vCenter management, and is optimized to run on dedicated, elastic, bare-metal AWS infrastructure. With this service, IT teams can manage their cloud-based resources with familiar VMware tools. VMware plans to offer VMware Cloud on AWS across AWS regions, providing a robust and hardened cloud infrastructure to enable compelling use cases over time. These use cases include new application development activities, application migration, disaster recovery and backup, geographical expansion, burst capacity and data center consolidation/migration. This release enables delivery of data center extension, new application development and testing, and application migration use cases. Extend on-premises data centers to the cloud with a consistent operational model, retaining your familiar VMware tools, policies, and management as well as investments in third-party tools. Leverage AWS services to extend the value of enterprise applications over their lifecycle.

Lunch, Product Demonstration and Exhibit Area Open, Peer Networking

12:30 – 12:50: AWS Actions and Recommendations to Protect Applications and Data from Spectre and Meltdown
Spectre and Meltdown are two recently announced security vulnerabilities tied to Intel chip design. Here is relevant information from AWS, that will be covered by Brian.

Amazon EC2
All instances across the Amazon EC2 fleet are protected from all known instance-to-instance concerns of the CVEs previously listed. Instance-to-instance concerns assume an untrusted neighbor instance could read the memory of another instance or the AWS hypervisor. This issue has been addressed for AWS hypervisors, and no instance can read the memory of another instance, nor can any instance read AWS hypervisor memory. AWS has not observed meaningful performance impact for the overwhelming majority of EC2 workloads.

Recommended Customer Actions for AWS Batch, Amazon EC2, Amazon Elastic Beanstalk, Amazon Elastic Container Service, Amazon Elastic MapReduce, and Amazon Lightsail
While all customer instances are protected as described above, AWS recommends that customers patch their instance operating systems to isolate software running within the same instance and mitigate process-to-process concerns of CVE-2017-5754. For more details, refer to specific vendor guidance on patch availability and deployment.

12:50 - 1:20: Private/Public/Hybrid Cloud Strategies, Microsoft Support for Both Linux & Windows
Dockers/Containers, Devops Benefits, Integration with Microsoft Azure Cloud Services

Mike Shelton, Technical Director Azure Cloud Services at Microsoft, is the featured keynote speaker. His session begins with an overview of Microsoft's Azure public cloud platform, including some newly released features plus strategies for integrating Azure with onsite hardware and software computing resources as Windows Server 2016. He will present a framework to help you design an optimal private, public and/or hybrid cloud strategy for your organization.

His presentation then transitions to Dockers and Containers, which are widely deployed for cloud applications. He starts with a technical assessment of the similarities and differences between a container and a virtual machine, followed by a walk through/demonstration of enabling, creating, deploying and managing Linux and/or Windows containers/dockers/resources. There will be an evaluation of when to use which containers, why and how. FYI, a container is an isolated and portable operating environment, often viewed as the next evolution of virtualization that works at the Operating System (not Hardware) level. It provides a mechanism for IT to deploy services in a portable, repeatable and predictable manner.

For those who are new to containers, this content serves as a jumpstart to accelerate your learning of containers. If you already have experience on Linux containers, the session familiarizes you with the specifics of Windows containers, plus helps bridge and extend your skills for bringing business value to both Linux and Windows communities. Finally, these insights will greatly enhance your organization’s Devops initiatives.


Omkar Naik, world-renowned Cloud Architect/Technology Evangelist at Microsoft, takes you on an easy-to-understand journey of Blockchain technology. Blockchain is the basis of Cryptocurrencies such as Bitcoin. However, you want to get beyond the hype of Bitcoin and understand how Blockchain’s future influence/impact extends way beyond cryptocurrencies, as an open-source framework for Smart Contracts.

Blockchain is an emerging way for businesses, industries, and public organizations to almost instantaneously make and verify transactions—streamlining business processes, saving money, and reducing the potential for fraud. At its core, a blockchain is a data structure that’s used to create a digital-based, distributed transaction ledger that, instead of resting with a single provider, is cryptographically secured and shared among a distributed network of computers.

The result is a more open, transparent, and publicly verifiable system that will fundamentally change the way we think about exchanging value and assets, enforcing contracts, and sharing data across industries. The applications using blockchain are almost limitless, ranging from loans, bonds, and payments to more efficient supply chains to even identity management and verification.

End of Presentations/Event, Raffle Prize Drawings, Product Demonstration and Exhibit Area Remain Open