



**APRIL 15<sup>TH</sup>**

**ENTERPRISE NETWORKS**

<b>Session ID: TS-EN-01-I Hands on Lab</b>	<b>Title: Cisco Cloud Networking Workshop</b> <i>Maximum attendees is 28</i>
<b>Speaker: Jay Bradford</b>	<b>Architecture: Enterprise Networks</b>
<b>Time Slot: 1:00 to 5:00</b> <b>Mckinnett Rooms 1 &amp; 2</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Enterprise and Mid-Market Network Managers/Network Engineers/Design Engineers/Systems Engineers &amp; Partners</b>	

**Abstract:**

The “Hands-on Experience will give you the opportunity to explore Cisco’s Meraki wireless access points, security appliances, switches and Systems Manager mobile device management. We will cover real-world scenarios showcasing how to deploy a branch network solution for a typical company. Attendees will leave with the experience and confidence to deploy Cisco’s Meraki networks in their environment. The labs will also provide the perfect setting to showcase the tight integration among the Cisco’s Meraki product lines and the benefits of cloud management via the Cisco’s Meraki Dashboard.

**Pre-Requisites:**

**As this is a hands-on lab, students should bring their laptop to take full advantage of the labs throughout the day sessions.**

<b>Session ID: TS-EN-02-I Technical Seminar</b>	<b>Title: Converged Access - Wired-Wireless System Architecture, Design and Operation</b>
<b>Speaker: David Zack</b>	<b>Architecture: Enterprise Networks</b>
<b>Time Slot: 1:00 to 5:00</b> <b>Mckinnett Rooms 3 &amp; 4</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Network Engineers/Design Engineers/Systems Engineers &amp; Partners</b>	

**Abstract:**

Cisco is bringing together the best of wired and wireless networking into “One Network” with Converged Access. Come to this session to get comprehensive knowledge of system architecture, product components, and deployment recommendations for your campus or remote branch access network. This session introduces Cisco’s new Converged Access solution, compares and contrasts it with existing Wireless deployment models, and provides an in-depth review of the new Converged Access solution including client association, roaming

modes, high availability, and Quality of Service capabilities. Don't miss the opportunity to get first-hand knowledge of upcoming innovations in the wired-wireless access layer.

## COLLABORATION

<b>Session ID: TS-CL-03-I Hands on Lab</b>	<b>Title: Cisco Customer Collaboration: BEef up your 6K with UCCX 10 - <i>Maximum attendees is 40</i></b>
<b>Speaker: Alok Takkar &amp; Jim Scotland</b>	<b>Architecture: Collaboration</b>
<b>Time Slot: 1:00 to 6:30 Mckinnett Rooms 5 &amp; 6</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Enterprise and Mid-Market Network Managers/Network Engineers/Design Engineers/Systems Engineers &amp; Partners</b>	

### Abstract:

Join us for this hands-on experience with the BE6K, Cisco's Collaboration Architecture in a box. This session will focus on best practices for design, implementation, configuration, and tweaking of your rich-media architecture to drive adoption and to compliment the day-to-day workflows of your users. Attendees should be prepared for a deep dive session with plenty of hands-on participation as the instructors lead you on an architectural journey. In the second half of the session we will walk attendees through the UCCX module of the BE6K further demonstrating how simple that it is for organizations to connect with their customers in a more meaningful way.

### Pre-Requisites:

**As this is a hands-on lab, students should bring their laptop to take full advantage of the labs throughout the day sessions.**

<b>Session ID: TS-CL-04-I Hands on Lab</b>	<b>Title: Cisco Customer Applications &amp; Conferencing: Show me some of that Cool Stuff!! <i>Maximum attendees is 40</i></b>
<b>Speaker: Sean Gonsalves</b>	<b>Architecture: Collaboration</b>
<b>Time Slot: 1:00 to 5:00 Mckinnett Rooms 7 &amp; 8</b>	<b>Tech Level: Advanced</b>
<b>Target Audience: Network Managers/Network Engineers/Design Engineers/Systems Engineers &amp; Partners</b>	

### Abstract:

At Cisco Live John Chambers and Rowan Trollope demonstrated the future of Cisco Collaboration - Simplicity, Mobility, and End User Centric (cloud). Cisco has the largest portfolio of Collaboration capabilities but rather than TALK about the improvements in Collaboration System Release 10.0 we plan to SHOW how you can turn up these features and functionality within your business. This hands-on lab session will focus office workflows and how to enable "the Art of the possible" for your people and across your organization with Cisco Collaboration's suite. As a teaser: Cisco Unified Communications Manager 10.0 introduces a wealth of new features to make upgrades, migrations, installations and provisioning much easier for administrators and end users. The CUCM

10.0 New Features lab will cover the most prominent of those features, as well as some of the video and dial plan enhancements.

### Pre-Requisites:

**As this is a hands-on lab, students should bring their laptop to take full advantage of the labs throughout the day sessions.**

## DATA CENTRE

<b>Session ID: TS-DC-05-I Technical Seminar</b>	<b>Title: Cisco Unified Computing System Technical Day - - <i>Maximum attendees is 40</i></b>
<b>Speaker: TBD</b>	<b>Architecture: Data Centre</b>
<b>Time Slot: 1:00 to 5:00 Mckinnett Rooms 9 &amp; 10</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Network Engineers/Design Engineers/Systems Engineers &amp; Partners</b>	

### Abstract:

This all day session will focus on the products and technologies of the Unified Computing System along with connectivity to LAN and SAN networks. The attendees will not be required to be experts on UCS but should be highly interested in learning the core technologies leveraged within the Cisco Unified Computing System and how it supports a highly dynamic and programmatic control of the Compute, LAN, and SAN infrastructure. This session will begin with an introduction of the UCS components and features to bring the Network engineer, Storage admin, and Server admin up to the latest knowledge of hardware and technologies available with UCS. We will continue with configuration deployment best practices and protocol operations of connected compute, LAN and storage. We will also discuss design best practices for deployment and application uses, including a review of pertinent security topics inherent to a converged system. This session then wraps up with Management and troubleshooting methods for the new and advanced uses of the UCS, from XML to CLI navigation. This session will include live demonstrations on UCS throughout the day to enhance the learning experience.

### Pre-Requisites:

**Students should bring their laptop and are encouraged to install UCS simulator on their laptop from <https://developer.cisco.com/web/unifiedcomputing/ucsemulator/download> before this session so that they can run some or all the task along with the speakers and ask relevant questions.**

<b>Session ID: TS-DC-06-I Hands On Lab</b>	<b>Title: Application Policy Enforcement using APIC <i>Maximum attendees is 40</i></b>
<b>Speaker: Azeem Suleman</b>	<b>Architecture: Data Centre</b>
<b>Time Slot: 1:00 to 5:00 Munro Rooms 9 &amp; 10</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Network Engineers/Design Engineers/Systems Engineers &amp; Partners</b>	

### Abstract:

Problems in current Data Center are mostly surrounding policy around applications. This hands-on lab provides students with an opportunity to configure basic features in a sandbox environment using Application Policy Infrastructure Controller (APIC). The lab exercises are designed to help students get a jump start on configuring and troubleshooting basic policy model as well as providing valuable hands-on experience with how the APIC integrates into existing network environments. Students will get a chance to experience interaction with APIC interface, configuring tenants, policies, connecting back and forth to VMs through the simulated fabric. This lab focuses on the deployment and operation of the APIC from the perspective of the network engineer, including visibility into statistics, debugging, various software components, and the impact on synthetic and live traffic streams.

### Pre-Requisites:

**As this is a hands-on lab, students should bring their laptop to take full advantage of the labs throughout the day sessions.**

## ENTERPRISE NETWORKS

<b>Session ID: TS-EN-07-I Hands On Lab</b>	<b>Title: Hands on Experience with IPv6 Routing and Services</b> <i>Maximum attendee is 40</i>
<b>Speaker: Harold Ritter &amp; Faraz Shamim</b>	<b>Architecture: Service Provider / Enterprise Networks</b>
<b>Time Slot: 1:00 to 5:00 Munro Rooms 7 and 8</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Network Engineers/Design Engineers/Systems Engineers &amp; Partners</b>	

### Abstract:

The “Hands on Experience with IPv6 Routing and Services” will provide attendees an opportunity to configure, troubleshoot, design and implement an IPv6 network using Ipv6 technologies and features such as: IPv6 addressing, IPv6 neighbour discovery, HSRPv6, static routing, OSPFv3, EIGRPv6 and BGPv6. You will be provided with a scenario made up of an IPv4 network where you will get the opportunity to configure and implement IPv6 based on the requirements on the network, i.e., where would you deploy dual stack, where it make sense to do tunneling and how to deploy IPv6 routing protocols without impacting your existing Network infrastructure.

### Pre-Requisites:

**This is a hands-on class with multiple labs during the 3 hour session. Students must have a basic understanding of IPv4 or IPv6 Addressing and Routing Protocols; as well as familiarity with Cisco IOS is preferred. Students should also bring their laptop to take full advantage of the labs throughout the day sessions.**

APRIL 16<sup>TH</sup>

## ENTERPRISE NETWORKS

<b>Session ID: B-EN-01-B Business</b>	<b>Title: Securing the Next Generation Network and Data Centre – Now and into the Future – Vision, Roadmap, and Execution</b>
<b>Speaker: Bret Hartman</b>	<b>Architecture: Enterprise Networks</b>
<b>Time Slot: 3:30 to 5:00 Mckinnett Rooms 1 to 3</b>	<b>Tech Level: Business Basic</b>
<b>Target Audience: CXOs/SVPs/VPs/Network Managers</b>	

### Abstract:

Rapid changes in the world around us, driven by cloud, mobility and the Internet of Everything, are creating significant opportunities for global organizations. With these environmental changes, the sophistication with which cyber threats and attacks are carried out continues to grow rapidly, and attackers are increasingly able to circumvent traditional security systems. Countering these intelligent adversaries to protect our networks and our data centers will require more advanced security technologies. Bret Hartman will describe how Cisco is leading the way with an integrated security architecture that supports the growth and evolution of our customers' businesses.

Bret Hartman is the Vice President and Chief Technology Officer for Cisco's Security Business Group

<b>Session ID: T-EN-04-I Technical</b>	<b>Title: Enabling Enterprise Networks with SDN</b>
<b>Speaker: David Jirku</b>	<b>Architecture: Enterprise Networks</b>
<b>Time Slot: 11:00 to 12:30 Mckinnett Rooms 8 &amp; 9</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

### Abstract:

Software Defined Networks (SDN) has its roots in academia, with research around wiping the networking slate clean. Its purpose is "to explore what kind of Internet we would design if we were to start with a clean slate and 20-30 years of hindsight". The lessons learned there are valuable, not only for academia but for organizations of all sizes. Unfortunately, for the vast majority of network architects, we're not able to simply flick a switch and start a new wholesale networking paradigm. The good news is that the various technologies and approaches to redefining how networking is done allow us to maintain what works with those areas where there can be a "better way". In this session we will explore the real-world implementations and solutions being delivered under the catch-all SDN umbrella as they apply to enterprise networks including:

- Device & network programmability thru API's such as Cisco OnePK
- Centralization of network control using SDN Controllers such as Cisco XNC
- Orchestration of the complete lifecycle of network services
- The role OpenFlow and other emerging protocols
- Overlay technologies and the virtualization of networking functions

We will also discuss the business and technology benefits of each solution when deployed into the existing networks

<b>Session ID: T-EN-05-I Technical</b>	<b>Title: Next Generation Campus Switching: Are You Ready</b>
<b>Speaker: Lila Rousseaux</b>	<b>Architecture: Enterprise Networks</b>
<b>Time Slot: 3:30 to 5:00 Mckinnett Rooms 6 &amp; 7</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Enterprise and Mid-Market Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

In this session we will review the latest evolution within the Cisco Catalyst switching product portfolio including the latest Cisco Catalyst 6800 switches and Cisco Instant Access. We will discuss information on rich network services, performance and scale and how you can best utilize these opportunities to simplify your IT operations and improve your business efficiencies.

<b>Session ID: T-EN-06-I Technical</b>	<b>Title: Cisco Enterprise Silicon - Delivering Innovation with UADP and QFP</b>
<b>Speaker: David Zack</b>	<b>Architecture: Enterprise Networks</b>
<b>Time Slot: 1:30 to 3:00 Mckinnett Rooms 6 &amp; 7</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

Come to this session to learn about the latest advances in Cisco Enterprise silicon development ASIC (Application Specific Integrated Circuit) hardware which provides a key foundational element of the Cisco ONE Architecture for Enterprise Networks, and which support key industry trends such as SDN. Attendees at this session will gain a greater insight into how ASICs are created showcasing the advanced capabilities and functionality delivered by two of Cisco's latest switching and routing silicon innovations UADP (Unified Access Data Plane) and QFP (QuantumFlow Processor). By developing custom silicon, and leveraging this advanced hardware within our Enterprise portfolio, Cisco has always provided differentiating capabilities and compelling customer value across many platforms. In this session, we will explore the capabilities and advantages provided by custom Cisco silicon, provide greater insight into the functionality delivered by existing Cisco Enterprise ASICs, and explore the new capabilities and solutions enabled by Cisco's latest generation of Enterprise-focused programmable switching and routing chipsets UADP and QFP.

<b>Session ID: T-EN-07-I Technical</b>	<b>Title: Spectrum management best practices in a Gigabit wireless world</b>
<b>Speaker: Jim Florwick</b>	<b>Architecture: Enterprise Networks</b>
<b>Time Slot: 11:00 to 12:30 McKinnett Rooms 6 &amp; 7</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

With the introduction of 802.11ac the news is full of the potential for Gigabit networking. Very few of us will have the luxury of running a network that strictly supports 802.11ac and that means a mixed environment for most of us. Get the facts on what 802.11ac means to you, how to evaluate using 20, 40, 80 or 160 Mhz OBSS/Channels. How does RRM's DCA handle a mixed environment and what performance considerations do you need to consider to make decisions that make the best of the spectrum you have today and in the future. What is in the future for our spectrum? This in depth session will focus on the state of the market, what cisco expects, and how best to configure your existing network to take advantage of advancements while maintaining your current user base. If you have or are considering deploying 802.11ac – then this session should provide the answers you need to start asking the right questions.

## SECURITY

<b>Session ID: T-SEC-02-I Technical</b>	<b>Title: Cisco Trustsec &amp; Security Group Tagging</b>
<b>Speaker: Rob Bleeker</b>	<b>Architecture: Security</b>
<b>Time Slot: 11:00 to 12:30 Mckinnett Rooms 4 &amp; 5</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

### Abstract:

Come to this session to understand how the combination of IEEE 802.1AE (data link encryption) with the power of Session Group Tags achieves trusted security in a network. Security Group Tags (SGT) extend context aware role-based access control from the edge into the entire network. Role based access control can be used in support of business requirements like regulatory compliance and BYOD. This session covers the protocols and functions that create a trusted network. We will discuss the best practices when deploying this tagging ability using campus switches including migration techniques from non-SGT capable to devices to a fully SGT capable network deployment.

<b>Session ID: T-SEC-03-I Technical</b>	<b>Title: Mobile Devices &amp; BYOD Security - Deployment &amp; Best Practices</b>
<b>Speaker: Sylvain Levesque</b>	<b>Architecture: Security</b>
<b>Time Slot: 1:30 to 3:00 Mckinnett Rooms 4 &amp; 5</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

### Abstract:

Come to this session to understand security aspects surrounding the deployment of mobile devices such as smartphones and tablets in a corporate network and their inter-working with Cisco security solutions. Subjects covered will include mobile devices OS security, state of malware on mobile devices, data loss prevention, VPN and remote access, 802.1x and certificate deployment, profiling, posture, web security, MDMs and others.

<b>Session ID: T-SEC-10-I Technical</b>	<b>Title: NetFlow Monitoring for Cyber Threat Defense</b>
<b>Speaker: Matt Robertson</b>	<b>Architecture: Security</b>
<b>Time Slot: 3:30 to 5:00 Mckinnett Rooms 4 &amp; 5</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

### Abstract:

Recent trends have led to the erosion of the security perimeter and increasingly attackers are gaining operational footprints on the network interior. This session takes an in depth look at NetFlow with the goal of leveraging the technology to provide heightened visibility and context into network traffic in order to identify attackers and accelerate incident response. Design, deployment and operational best practices in establishing a NetFlow security monitoring program using the Lancope StealthWatch System as a collection and analysis technology will be presented. Use cases in how to best organize and query NetFlow and the Cisco ISE as an additional telemetry source using StealthWatch will be discussed. Further use cases of how to drive an investigation in order to identify an attacker's presence on the network based on the statistical analysis of NetFlow telemetry will be covered.

<b>Session ID: T-SEC-18-B Technical</b>	<b>Title: Security Vulnerabilities in Modern Operating Systems</b>
<b>Speaker: Yves Younan</b>	<b>Architecture: Security</b>
<b>Time Slot: 3:30 to 5:00 Munro Rooms 1 &amp; 2</b>	<b>Tech Level: Basic</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

The Common Exposures and Vulnerabilities database has over 25 years of data on vulnerabilities in it. In this session we dig through that database and use it to map out trends and general information on vulnerabilities in software in the last quarter century.

This data allows us to see which types of vulnerabilities have been the most occurring since CVE started collecting data, which had the highest impact, etc. We will look at how changes in security and new discoveries of vulnerabilities affect the total amount of vulnerabilities found in those years. We will also examine how the popularity of these types of vulnerabilities have changed over the years, in some years web vulnerabilities were the most reported, while in other years memory errors were most popular, recently yet another type has become very prevalent. The data also allows us to take a look at vendors and products: allowing us to see which vendors had to deal with the most security issues and which products had the most vulnerabilities reported for them. We also use it to look at specific subsets of products, allowing us, for example, to look at the amount of critical vulnerabilities in at the various popular browsers. Correlating this data with Microsoft bulletins also allows us to get an idea of how many of the vulnerabilities that were reported for Microsoft products, were 0-day vulnerabilities. This is an especially interesting metric given how highly impactful the exploitation of a 0-day vulnerability can be. Finally, we take a look at what can be done to protect against exploitation of these vulnerabilities.

**COLLABORATION**

<b>Session ID: T-CL-08-B Business</b>	<b>Title: Make Collaboration Simple</b>
<b>Speaker: Rowan Trollope</b>	<b>Architecture: Collaboration</b>
<b>Time Slot: 11:00 to 12:30 Mckinnett Rooms 1 to 3</b>	<b>Tech Level: Business Basic</b>
<b>Target Audience: CXOs/SVPs/VPs/Network Managers</b>	

**Abstract:**

Be relevant to your business again. Change the way people work together. Make collaboration simple! In this session, Rowan Trollope, SVP / GM of Cisco Collaboration, will discuss the path his organization is on to solve this difficult problem. He will provide insight into how current market trends — mobility and cloud — are changing the collaboration experience, while highlighting today's solutions and the roadmap ahead. Learn how Cisco is taking advantage of these opportunities to develop the next generation of solutions that change the way we work — making you the hero once again.

<b>Session ID: T-CL-09-I Technical</b>	<b>Title: Collaboration Architecture Design: Unified Call Control and Dial plans for Voice and Video Centric Networks (Part 1 of 2)</b>
<b>Speaker: Johnny Jagroo</b>	<b>Architecture: Collaboration</b>
<b>Time Slot: 1:30 to 3:00 Mckinnett Rooms 8 &amp; 9</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	



**Abstract:**

This session is intended for Cisco partners and customers who want to learn the latest enhancements on architecture and dialplan for rich media environments which include voice and video and desktop. The products and solutions discussed are relevant for any deployment of SIP, H.323, audio and video endpoints (either hard endpoints or soft clients). Some of the newer features/capabilities we'll discuss include: Global Dial Plan Replication (GDPR), VCS working as a gateway for cross platform B2B. I will discuss call control integrations with Cisco Unified Communications Manager 10.x and Cisco Video Communications Server 8.x and will give guidance on architectural deployments with Cisco Unified Communications Manager on most common scenarios (single site, multiple site, SME topology) for both point-to-point and multipoint calls.

<b>Session ID: T-CL-11-I Technical</b>	<b>Title: Collaboration Architecture Design: Designing End-to-End Pervasive Conferencing Solutions (Part 2 of 2)</b>
<b>Speaker: Robert Bouchard</b>	<b>Architecture: Collaboration</b>
<b>Time Slot: 3:30 to 5:00 Mckinnett Rooms 8 &amp; 9</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

As pervasive Collaboration Solutions explode out of the boardroom and disrupt our workspace, we are challenged to provide cost effective and scalable conferencing solutions to accommodate these unprecedented levels of continuous growth. More so, the Enterprise is equally torn between how to efficiently deliver both ad hoc and scheduled Conferencing Solutions without oversubscribing their resource base. Cloud vs On-Prem solutions are equally an important factor to consider as part of the overall design. This session provides an overview and series of demonstrations on how Cisco Pervasive Conferencing technologies and solutions can be effectively deployed to address these challenges. The technologies and solutions covered as part of this session include: the Cisco TelePresence Server, Conductor, TelePresence Management Suite (TMS), TMS Provisioning Extensions, WebEx Enabled TelePresence, and Collaboration Meeting Rooms (CMR).

<b>Session ID: T-CL-12-I Technical</b>	<b>Title: Collaboration Architecture Design: Cisco Collaboration Administration: Easy as 1-2-3</b>
<b>Speaker: Shawn Cardinal</b>	<b>Architecture: Collaboration</b>
<b>Time Slot: 11:00 to 12:30 Munro Rooms 9 &amp; 10</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

Do you have Cisco Communications Manager or Cisco Video Communications Server as part of your collaboration solution? Have you ever wondered if there is a better way to manage this environment? If so you need to attend this session on Cisco Prime Collaboration. This session will cover the value of using Cisco Prime Collaboration to manage your collaboration environment. Discover new ways of provisioning, reporting and troubleshooting through the single-pane-of-glass that is Cisco Prime Collaboration. This session will contain all you need to know to about making your collaboration administration as easy as 1-2-3.

<b>Session ID: T-CL-13-I Technical</b>	<b>Title: Collaboration Architecture Design: Workspace or Workplace - It's all about the USER Experience</b>
<b>Speaker: Nicky Kearns</b>	<b>Architecture: Collaboration</b>
<b>Time Slot: 1:30 to 3:00 Munro Rooms 9 &amp; 10</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

The key to a successful collaboration deployment is an amazing user experience where the user does not even notice the technology. The key to this user experience can be summed up as Simplicity, Consistency and Reliability. In this session we will explore Cisco's strategies to address these key design tenants and why it drives the best user experience in the industry. We look at how the experience can take place in different work environments. After all work is what you do, not where you are.

<b>Session ID: T-CL-14-I Technical</b>	<b>Title: Collaboration Architecture Design: Connected Consumers and the Omni Channel Experience</b>
<b>Speaker: Joseph Bassaly</b>	<b>Architecture: Collaboration</b>
<b>Time Slot: 3:30 to 5:00 Munro Rooms 9 &amp; 10</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

New consumer buying behaviors and regulations are putting pressure on companies for growth through innovation. This session will address evolving customer segments' demands while creating more efficient and secure multi-channel delivery. This session will provide the attendee ideas on successful implementation of Collaboration infrastructure delivered with key ecosystem elements to enable the Omnichannel journey at your pace and choice maximizing investments. This session will have design elements on Mobile, Video and back end process routing that will help IT to design a platform ready to accommodate the Omni Channel business requirements.

**DATA CENTER**

<b>Session ID: B-DC-15-B Business</b>	<b>Title: The Evolution of the Data Center</b>
<b>Speaker: Dominick Delfino</b>	<b>Architecture: Data Centre</b>
<b>Time Slot: 1:30 to 3:00 Mckinnett Rooms 1 to 3</b>	<b>Tech Level: Business Basic</b>
<b>Target Audience: CXOs/SVPs/VPs/Network Managers</b>	

**Abstract:**

A day in the life of an enterprise CIO can be daunting—challenges such as managing complex environments, security and ongoing TCO pressures face us everyday. Addressing these challenges offer opportunities to significantly improve operations, productivity and have an impact on the bottom line if done successfully. This session will provide an insider's look at these challenges and offer strategies and technologies to maximize IT environments today and for the future.

<b>Session ID: T-DC-16-I Technical</b>	<b>Title: Data Centre Design for Canadian Small &amp; Medium Size Business</b>
<b>Speaker: Simon Vaillancourt &amp; Steven Boz</b>	<b>Architecture: Data Center</b>
<b>Time Slot: 3:30 to 5:00 Munro Rooms 7 &amp; 8</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Mid-Market Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

The economic and technology changes being felt in our Data Centres are impacting smaller environments just as much as the largest. The growth in storage traffic, virtual machines and the need to install and provision new applications at a faster pace is an issue across Data Centres of all sizes. The smaller environment however has some unique challenges. This session will focus on design best practices for the smaller Data Centre mixing both physical and virtual servers in both blade and rack mount servers. It will provide design guidance on supporting needed Data Centre network features and multiple storage protocols. A flexible network architecture will be discussed that is focused on simplified configuration and future scalability. The reference topology will begin from a small environment, and provide transition points according to server count requirements that protect the investment in existing equipment while providing increasing functionality. We will also cover how to manage such and infrastructure with UCS Director and how these designs prepare businesses of all size for Application Centric Infrastructure by leveraging the Nexus 9000 series switch.

<b>Session ID: T-DC-17-I Technical</b>	<b>Title: Customer Case Study: Data Center Disaster Recovery</b>
<b>Speaker: Nadir Lakhani</b>	<b>Architecture: Data Center</b>
<b>Time Slot: 1:30 to 3:00 Munro Rooms 5 &amp; 6</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

Data Center Disaster Recovery (DR) is an essential requirement for today's DC customers. Modern day DR model framework for Networks, Systems and Storage, utilizes the general and guiding principles that drive the design of data center. Disaster Recovery is an important and critical component for data and it includes recovery of Networking, systems and storage. Highly Available and resilient data centers with DCI and WAN connectivity provide many options of DR setup. DR for LAN, MainFrame, Storage, Systems (Windows, Intel, Solaris), data backup with replication using various technologies like Avamar, Data Domain, VNX etc. and providing a recovery time objective (RTO) of under 4-hours for Tier-1 data centers is a challenge. Data replication for normal state using MQC based QoS and optimal capacity sizing for the DCI and WAN links have to be considered in DR designs. Customer case study will be presented to elaborate on the disaster recovery methodologies.

<b>Session ID: T-DC-19-I Technical</b>	<b>Title: OpenStack Deployment in the Enterprise</b>
<b>Speaker: Joshua Kaya &amp; Mike Perron</b>	<b>Architecture: Data Center</b>
<b>Time Slot: 1:30 to 3:00 Munro Rooms 7 &amp; 8</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

OpenStack is an open source cloud operating system. More and more Service Provider and Enterprise customers are looking for a top-to-bottom cloud stack that is rapidly deployable, open source based and does not break the bank and this is where OpenStack shines. This session will address common questions such as: What is OpenStack? Why should I use OpenStack in the Enterprise? How do I deploy OpenStack? The bulk of the session will focus on deploying OpenStack using the Cisco OpenStack Installer starting from bare-metal provisioning all the way through the deployment of the controller and compute nodes as well as storage, and networking. A case study will be used to expand on topics such as multi-tenancy, quantum networking and application deployment. The use of open source and commercial tools such as Puppet will also be discussed. This session is very technical with a lot of configuration details

<b>Session ID: T-DC-20-I Technical</b>	<b>Title: Accelerating server performance in the 21st century</b>
<b>Speaker: Alan Bauld &amp; Christopher Nichols</b>	<b>Architecture: Data Center</b>
<b>Time Slot: 1:30 to 3:00 Munro Rooms 5 &amp; 6</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

This session will discuss what Cisco Solid State INVICTA Solutions are, why they are needed, how they can easily scale in performance, bandwidth and capacity, why they are different to other Solid State Solutions and how they can accelerate multiple applications within your Data Centre.

<b>Session ID: T-DC-21-I Technical</b>	<b>Title: Introduction to Application Centric Infrastructure</b>
<b>Speaker: Mike Herbert</b>	<b>Architecture: Data Center</b>
<b>Time Slot: 11:00 to 12:30 Munro Rooms 5 &amp; 6</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

This session is an intermediate session that provides detailed information on Cisco's Application Centric infrastructure (ACI) and the requirement to build data center infrastructure based on application demands. The migration towards cloud based infrastructure (IaaS, SaaS, PaaS) along with a shift towards DevOps practices have placed new requirements on the capabilities and design of the Data Center infrastructure. The network capabilities, design and operational practices in particular have been stressed as the rate of application development, deployment and growth has accelerated. Cisco's new Application Centric Infrastructure (ACI) facilitates dynamic provisioning of the network connectivity and automates the configuration of the virtual and physical networking and L4-7 services based directly on applications requirements to radically simplify the operation and troubleshooting of the DC infrastructure. This session provides a technical introduction to ACI, the network fabric it utilizes, the controller and operational interfaces as well as its support for multi-vendor services (F5, Citrix, Cisco) and hypervisors (ESX/DVS, HyperV, KVM/OVS). The session will provide a solid foundation for network, security, dev-ops and platform engineers looking to leverage the capabilities of a Cloud based DC.

<b>Session ID: T-DC-27- I Technical</b>	<b>Title: Big Data Architecture and Deployment</b>
<b>Speaker: Sean McKeown</b>	<b>Architecture: Data Center</b>
<b>Time Slot: 11:00 to 12:30 Munro Rooms 7 &amp; 8</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

This session is an intermediate technical mix of application, compute, and networking topics concerning the deployment of Big Data clusters. This session will cover the application and infrastructure architecture components of Big Data clusters with a specific focus on Hadoop deployments. We will look at why organizations are deploying Big Data and Hadoop clusters. We will look at the application behavior in the context of building a network and compute infrastructure and its design considerations. The session goes into detail on network and compute architecture regarding Nexus 55xx, 3000, and UCS; specifically buffer usage and network bandwidth characterization, cluster design, best practices, cluster management, sizing, and scaling. The goal of the session is provide the attendee a better understanding of Big Data cluster architecture and application behavior, to be better equipped for Big Data infrastructure discussions in your data center environment.

<b>Session ID: B-DC-30-B Technical</b>	<b>Title: Data Center Portfolio Update</b>
<b>Speaker: Jacob Van Ewyk &amp; Michal Skiba</b>	<b>Architecture: Data Center</b>
<b>Time Slot: 3:30 to 5:00 Mckinnett Room 10</b>	<b>Tech Level: Basic</b>
<b>Target Audience: Network Managers/Architects/Systems Design Engineers</b>	

**Abstract:**

This session will offer an Overview of the UCS System Architecture, including all of the technical innovations that serve as the foundation. Among the topics covered will be overviews on UCS, Nexus family, Unified Fabric, Service Profiles, Hardware Abstraction, Fabric Extension, Memory Expansion and the UCS Manager.

**SERVICE PROVIDER**

<b>Session ID: T-SP-22-I Technical</b>	<b>Title: Service Provider Architectures</b>
<b>Speaker: Matt Gillies</b>	<b>Architecture: Service Provider</b>
<b>Time Slot: 11:00 to 12:30 Munro Rooms 3 &amp; 4</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Service Providers/Network Engineers/Design Engineers/Systems Engineers</b>	

**Abstract:**

With Cloud and Mobility, SDN and NfV and Open Source, the Service Provider world is changing as we move towards more automated, virtualized and open architectures. Join us for this keynote where senior executives will share specific market trends and the use cases that service provider customers are adopting to transform their architectures and businesses for the future. We will give an overview of new and upcoming solutions from Cisco and explain how they will help you to augment your current architectures to optimize and monetize your existing assets and create new revenue generating services in a more simple and agile way.

<b>Session ID: T-SP-23-I Technical</b>	<b>Title: IP Video Evolution with Cisco Videoscape</b>
<b>Speaker: Justin Caple</b>	<b>Architecture: Service Provider</b>
<b>Time Slot: 1:30 to 3:00 Munro Rooms 3 &amp; 4</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Service Providers/CXOs/SVPs/VPs Network Managers/Engineers/Design Engineers/Systems Engineers</b>	

**Abstract:**

This session describes the evolution of Cisco's Videoscape Architecture which provides a foundation for IP Video service delivery across managed and unmanaged networks to managed and unmanaged devices, core video services, cloud DVR, CPE innovations and Video service transitions to Cloud services. Core to this architecture is a focus on both user experience and interoperability.

<b>Session ID: T-SP-24-I Technical</b>	<b>Title: Better Network Management Through Network Programmability</b>
<b>Speaker: Dan Jerome</b>	<b>Architecture: Service Provider</b>
<b>Time Slot: 3:30 to 5:00 Munro Rooms 3 &amp; 4</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Service Providers/Network Engineers/Design Engineers/Systems Engineers</b>	

**Abstract:**

As we enter the age of network programmability the data models, protocols, and tools provided by a programmable network can greatly improve and simplify network management tasks. Configuration and operational data can be read and set regardless of the underlying device. Errors are properly reported to ensure reliable delivery of data. Connections are secure and robust. Data is more intelligently extracted. This session will explore how tools like NETCONF, YANG, as well as Cisco's Embedded Event Manager, onePK APIs, and embedded Python scripting can radically improve network management applications by offering visibility and provisioning power throughout the network stack.

<b>Session ID: T-SP-25-I Technical</b>	<b>Title: Service Provider Access Solutions</b>
<b>Speaker: Skip Abts &amp; Nicolas Breton</b>	<b>Architecture: Service Provider</b>
<b>Time Slot: 1:30 to 3:00 Munro Rooms 3 &amp; 4</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Service Providers/Network Engineers/Design Engineers/Systems Engineers</b>	

**Abstract:**

Cisco's Service Provider Access and Small Cell Technology Groups will discuss the industry trends shaping the Service Provider Access, Mobile Backhaul, and Small Cell Transport, as well as provide insight into Cisco's Product and Technology direction to leverage these industry trends. At the end of this session, the attendee should have an understanding of Cisco's Wireline Access and Mobility Transport Strategy, including areas of investment that Cisco is making in simplifying Service Provider Operations, as well as partnerships which compliment these solutions.

<b>Session ID: T-SP-28-I Technical</b>	<b>Title: Service Provider Wi-Fi</b>
<b>Speaker: Derick Linegar</b>	<b>Architecture: Service Provider</b>
<b>Time Slot: 11:00 to 12:30 Munro Rooms 1 &amp; 2</b>	<b>Tech Level: Intermediate</b>
<b>Target Audience: Service Providers/Network Engineers/Design Engineers/Systems Engineers</b>	

**Abstract:**

WIFI has become part of our everyday life. Service Providers are still struggling with providing each and everyone of us with good coverage and high speed Internet access everywhere. As users' behaviours are now better understood in terms of usage and location a wide range of deployment options are offered to Service Providers, ranging from the traditional macro cellular network, femto cells to WIFI cells. It is now common understanding that tomorrow's coverage will leverage different radio technologies.

WIFI can be deployed either as a ubiquitous solution covering a city center or any very high density location such as a stadium or commercial center or as standalone cells in people's home using their broadband home access as transport solution.

All these deployment options however need to converge towards a single and unique target which is to enhance the user's experience of mobility. Hence WIFI architectures need to deliver all the usual carrier requirements such as user authentication, user manageability, legal intercept, service differentiation and most and for all scale at the same time as providing the economics to complement tradition cellular technologies.

This session will cover in detail the architectures for deploying high density zones, residential community services and show how both of these converge for user authentication using Passpoint technologies, how the arrival of

ANDSF network selection servers and clients can be used to direct users to the best connection at any time and how SON solutions are needed to manage this ever growing mix of deployment options Service Providers are facing, making it more and more complex for users to know where to connect.

<b>Session ID: T-SP-29-B Technical</b>	<b>Title: HCS / Felixity</b>
<b>Speaker: Chris Johnson</b>	<b>Architecture: Service Provider</b>
<b>Time Slot: 1:30 to 3:00 Mckinnett Room 10</b>	<b>Tech Level: Basic</b>
<b>Target Audience: Service Providers/Network Engineers/Design Engineers/Systems Engineers</b>	

**Abstract:**

TBD

**CISCO BUSINESS SERVICES SESSION**

<b>Session ID: B-SER-26-B Business</b>	<b>Title: Cisco Analytics: Accelerate Network Optimization with Visualization</b>
<b>Speaker: Sanket Khemuka</b>	<b>Architecture: Cisco Services</b>
<b>Time Slot: 11:00 to 12:30 McKinnett Room 10</b>	<b>Tech Level: Business Basic</b>
<b>Target Audience: CXOs/SVPs/VPs/Network Managers</b>	

**Abstract:**

With the explosion of data from the proliferation of cloud services, mobile devices, and the Internet of Things, high-performance networks are essential for the rapid delivery of advanced business services and for accelerating insights from big data analytics. Is your network ready? Cisco provides a portfolio of network analytics to help customers realize maximum performance and value from their network investment. Through the session, you will learn to address some of the challenges using the distinct capabilities of Smart Analytics, which include:

1. Measuring & tracking overall network health, risk & compliance using Cisco Network Performance Index
2. Quickly identifying network exceptions
3. Better prioritizing resource utilization using an automated network improvement plan
4. Objectively tracking deployment consistency and feature utilization
- 5 Identifying sources of network disruption through detailed incident analysis
- 6 Prioritizing operational improvement tasks through interactive drill down on a large deployment data set”