

2019 **CALIX**

CONNEXIONS

INNOVATION AND
USER CONFERENCE



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2019 **CALIX** CONNEXIONS

INNOVATION AND
USER CONFERENCE
WYNN LAS VEGAS | OCTOBER 26-29

SATURDAY

OCTOBER 26

Golf Tournament & Spa

SUNDAY

OCTOBER 27

8:30 AM – 3:45 PM

Training

6:30 PM – 9:00 PM

Welcome Reception

MONDAY

OCTOBER 28

8:00 AM – 11:00 AM

General Session

1:30 PM – 5:00 PM

Breakout Sessions

7:00 PM – 10:00 PM

Evening Entertainment

TUESDAY

OCTOBER 29

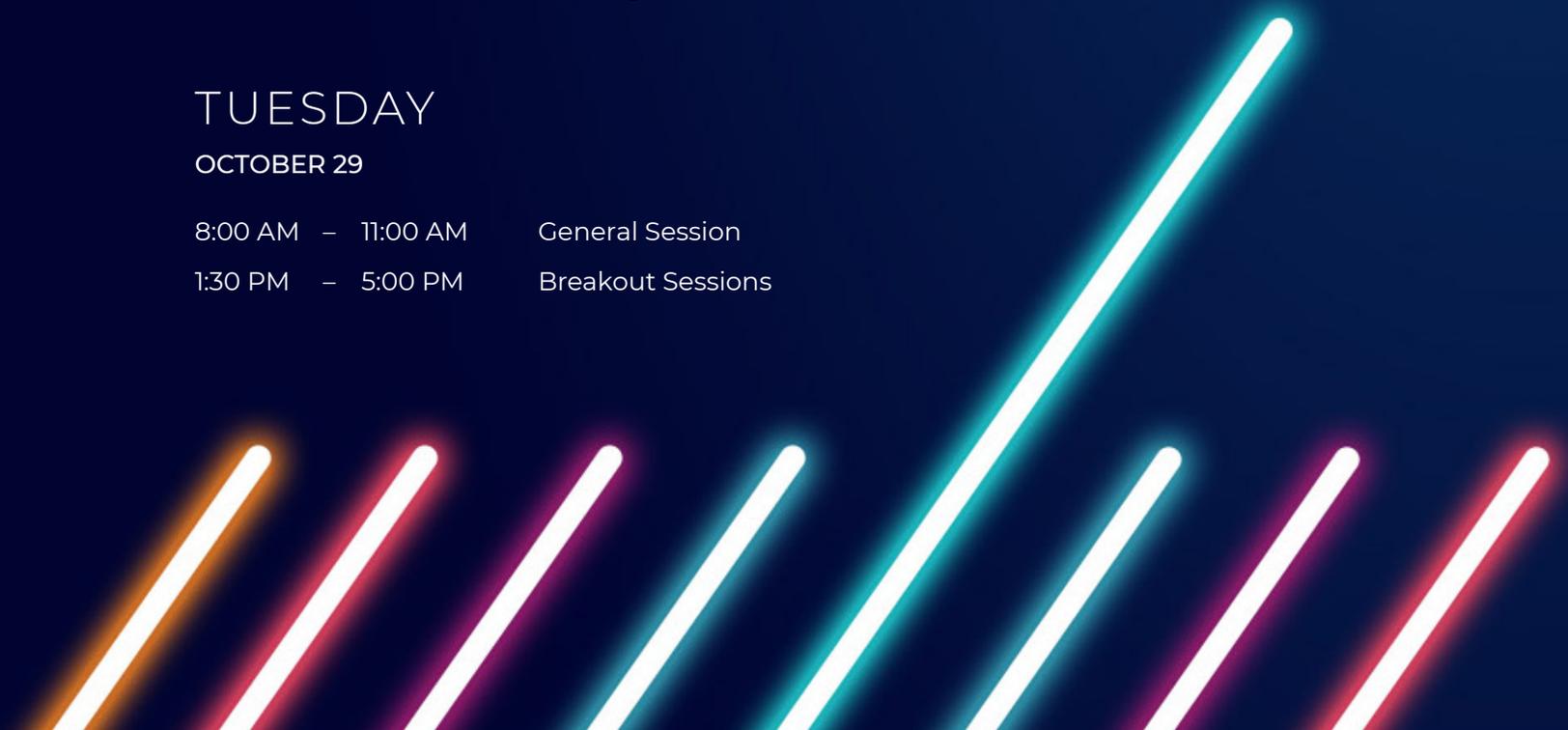
8:00 AM – 11:00 AM

General Session

1:30 PM – 5:00 PM

Breakout Sessions

IT'S
YOUR
TIME TO
LEAD.



CONFERENCE STREAMS	PAGE
BUILD YOUR SKILLS AND TEST YOUR KNOWLEDGE: Training, Education, and Certification	4
WHO SHOULD ATTEND: Network Operations, Technicians, Customer Service Reps	
WHAT YOU'LL LEARN: Join Calix-trained engineers and technicians for complimentary on-site "Test Your Knowledge" assessments to earn Calix Academy learning badges, and participate in hands-on labs.	
ELEVATE	6
WHAT YOU'LL LEARN: Learn how to more effectively market to subscribers, support them, and deliver solutions to enhance their network experience. Become the leader in the journey to the smart home by tailoring your offerings for every subscriber.	
SIMPLIFY	8
WHAT YOU'LL LEARN: Understand the latest enhancements to the AXOS platform and supporting solutions to help you intelligently plan or expand your network, as well as automate system installation and subscriber service provisioning.	
ACCELERATE	10
WHAT YOU'LL LEARN: Engage the portfolio of Calix Services with deep experience from helping thousands of customers plan, implement, and optimize their networks and services. Get more proactive, resolve issues faster, and automate processes to provide exceptional subscriber experiences.	



TRAINING

Titles and Abstracts

NGPON Basics

In this session, you will gain the basic knowledge required to design passive optical networks (GPON and NG-PON2). Starting with PON concepts and the advantages and disadvantages of various PON architectures, the evolution towards NG-PON2 including the benefits of wavelength mobility is also discussed.

Introduction to Layer 3 in the Access Network

This session will cover the application and deployment of Layer 3 Routing and subscriber management in the new access network edge. The AXOS Subscriber Management Module (SMm), the Routing Protocol Module (RPM), and use cases related to their deployment will be discussed.

AXOS E7-2 Turn Up and Transport

This session provides an overview of the basic skills you need to deploy the E7 AXOS Ethernet services access platform including turn-up and provisioning a single-port uplink, LAG, g.8032v2, and ERPS rings. The use of SMx to add nodes and view system data will also be covered.

Intro to Calix Marketing Cloud

Want to know how to use Calix Marketing Cloud? Join our session with the product experts to learn how to navigate, execute targeted campaigns, create custom reporting, and get insight about your subscriber's broadband experience. You'll be able to execute targeted marketing based on user behavior, create effective persona based campaigns, and ensure your marketing dollars are being invested most effectively by becoming more familiar with Calix Marketing Cloud.

AXOS E9-2 Turn Up and Transport

In this session, you will learn the basics of the Calix E9 solution including hardware components and the types of services it delivers. You will also see how system activation as well as basic management and configuration tasks are performed using the CLI (Command Line Interface).

SMx Tips and Tricks

SMx or the Services Management Connector is the next generation service and network management platform for managing Calix AXOS-based systems. This session will provide a review of SMx fundamentals and discussion of features added to SMx over the past 12 months.

Calix Support Cloud: The Fundamentals

Want to know how to use CSC (EME)? Join our session with the product experts to learn how to navigate, execute use cases, create reporting, and utilize SmartChecks to provide your subscribers with excellent in-home Wi-Fi support experience. You'll be able to resolve more issues, reduce Truck Rolls, and reduce average talk time by becoming more familiar with Calix Support Cloud.

E3-2 AXOS Turn Up and Transport

Look inside the AXOS E3-2 Intelligent PON Node and learn how to leverage DOCSIS® provisioning to deliver symmetrical bandwidth and world-class services. See how you can leverage the AXOS OFx Connector to provide a full suite of next-generation services.

Managing Carrier Class Wi-Fi

In this session, you will learn about Wi-Fi standards including the upcoming 802.11ax. We will examine the key Wi-Fi Data Elements that are critical to troubleshooting and optimization of Wi-Fi networks. Finally and most importantly, with the advent of Calix mesh-enabled access points and EXOS Wi-Fi optimization we will see how EXOS reduces or eliminates the need for manual troubleshooting altogether.

Nerds of a Feather: Revenge of the Nerds

See how your fellow network API gurus have hacked, tinkered, and created valuable tools using Calix APIs. The session will feature real-world examples built by service providers to elucidate network health to internal teams.

TRAINING

Titles and Abstracts

AXOS E7-2 anyPON Triple Play

In this session, you will learn how to provision the policies, profiles, and templates that are needed to support E7 layer 2 triple-play services. You will also learn how to provision and verify functionality of E7 layer 2 triple-play services.

Ensuring Successful Home Wi-Fi Deployments

This session provides an overview of the different types of EXOS devices and how to use Calix Support Cloud to effectively deploy and maintain EXOS devices. This session focuses on leveraging the Gigaspire for automatic detection and walks you through the required service provisioning.

CSC 201: Mastering Calix Support Cloud Like a Pro

Want to know how to use CSC (Experience Management Edition) like a pro? Join our session with the product experts to learn how to create reporting that improves customer experience, finds and isolate Mystery Trouble Devices, and learn best practices for educating your subscribers on in-home Wi-Fi dos and don'ts. Learn ways to proactively resolve Wi-Fi issues before your subscribers even know they are occurring.

AXOS E9-2 anyPON Triple Play

In this session, you will learn how to provision the policies, profiles, and templates that are needed to support E9 Layer 3 triple-play services. You will also learn how to provision and verify functionality of E9 Layer 3 triple-play services.

Calix Marketing Cloud: A Guide to Winning Subscribers

Join our session with the product experts to learn how to take advantage of all that Calix Marketing Cloud has to offer. We will deep dive into many of the more advanced features in Calix Marketing Cloud including proactive churn mitigation strategies, new subscriber right sizing analysis, and Wi-Fi experience analytics. Learn how these insights can help you take your campaigns to the next level and ensure you are getting the most out of Calix Marketing Cloud.

E7-2 Active Ethernet with 19.3 Release

Equipment overview (E7 hardware, ONT types). Sample triple – play provisioning and troubleshooting steps using the AXOS CLI, and the SMx. Comparing and contrasting legacy and current provisioning models (the CMS method vs. the SMx method).

10G Business Ethernet Services Overview

In this session, we will compare three 10G PON access deployment technologies: XGS-PON, NG-PON2, or 10G EPON. Which one will you use to transport 5G and built your network of the future?

E9-2 Hands On Lab

In this hour, we will step through the process of service configuration in the E9-2 using the SMx. We will explore building templates and profiles, adding new subscribers, assigning services, and service validation.

E7-2 Hands On Lab

In this hour, we will explore the process of service configuration in the E7-2. Using the CLI and SMx, you will learn to perform service verification and troubleshooting.

ELEVATE

Titles and Abstracts

Insider Insights: The Evolution of Wi-Fi

Homes are becoming increasingly digital properties. Managing the bandwidth within a home - or small office - is becoming increasingly challenging for providers. In this session, we will explore some of the Wi-Fi challenges within the home and small business arena and how technological advances are making improvements (e.g., Wi-Fi 6, DFS, etc.). Learn about some of the latest industry trends so you are prepared for the future..

Peer Talk: High Bandwidth Apps Need High-Powered Wi-Fi

Don't be left behind as your competitors shift from broadcast video to streaming/OTT video and embrace applications like eGaming. Attend this session to learn how, and why, service providers are embracing new services to drive broadband subscriptions.

Peer Talk: Drive More Revenue with Enhanced Managed Wi-Fi

Let Calix "Show you the Money." Learn how service providers are positioning the GigaSpire, powered by EXOS, to drive more revenue from Enhanced Managed Wi-Fi/Managed Wi-Fi+. And the best part is, it elevates the subscriber experience.

Peer Talk: How Self-Help Apps can Transform your Customer Experience

Apps are a win for you and a win for your subscriber. Find out how service providers are using the Calix Smart Home app to elevate the subscriber experience and experiencing fewer help desk calls, while giving subscribers control over their home and small business network.

Insider Insights: Let it be ... 10G

Hear how best to build/transition your current network today to the 10G network of the future, including the implications for the access and home networks.

Peer Talk: Best Practices for Marketing Managed Wi-Fi

Are you looking to improve cost savings or revenue per subscriber? Gain insights on best practices from your service provider peers who are currently exceeding their targets and expectations for Managed Wi-Fi services.

Insider Insights: What's Beyond Broadband?

We all know Managed Wi-Fi is an immediate opportunity. But what's next? The smart money is on....Smart. Smart Grid, Smart Cities, and Smart Homes promise to drive business in the future and we're excited to share what we've learned from these growing industries.

ELEVATE

Titles and Abstracts

Peer Talk: Subscriber Care Best Practices

In an on-demand world, subscribers expect service. A poor experience can result in subscriber churn and sometimes social media backlash. In this session, learn from your service provider peers who have taken a proactive approach to improving their subscriber experience while reducing operational cost. Discover proven tactics to empower frontline support and reduce truck rolls.

Peer Talk: Marketing Best Practices

Are you growing fast enough? Are you able to match your marketing programs to specific, individual subscriber needs? In this session, hear directly from fellow service providers who are rethinking their marketing strategies and transforming into money-making machines. Discover the secrets behind some of their most successful campaigns, so that you can take them home and test them yourself.

Insider Insights: Marketing Smarter, Not Harder

Successful marketing is equal parts art and science. Join this session for a practical look at converting what you (should) know about your subscribers into more revenue, loyalty, and growth. Spoiler alert. It's all about becoming a data-driven marketer.

Insider Insights: Empowering your Frontline Support to Reduce Escalations and Truck Rolls

Don't limit your tier one support to an answering service. Join this session for a practical look at how putting the right intelligence and visibility at their finger tips can have a positive domino effect on the entire customer care operation.

Peer Talk: CAF Performance Testing - Are you Ready? (Part 1 of 2. Part 2 is under Accelerate)

Are you up to date on CAF requirements? If you need more information or are not sure if you have the latest, this session is for you. Listen to our Washington experts share updates, discover what type of results service providers are seeing in their pre-testing, and learn about solutions and services that are available to help you succeed.

Industry View: Ready for 2020 and Beyond? A Look at Latest Service Provider Trends

Do you consider yourself an innovator? Are you building a forward-looking strategy for your company? If the answer is "yes," attend this session to get a glimpse of the latest technology, consumer, and business trends that will have a direct impact on how you deliver your services successfully, and most importantly, stay ahead of the competition.

SIMPLIFY

Titles and Abstracts

Peer Talk: Emerging Technologies Panel

Business Leaders know that the access network is more than a connection to the subscriber; it plays a vital role in many new services and network architectures. Attend this overview and panel discussion of Edge Computing, SD-WAN, network programmability, and more to learn how these new ideas can open new opportunities for service providers.

Insider Insights: 5G Mobile Networks and Transport Implications

5G mobile networks will be made up of both sub-6GHz spectrum and mmWave spectrum, together providing the “just right” mix of coverage, latency, and capacity for the emerging 5G mobile, fixed access, and industrial IoT applications. Spectrum choices will also drive transport solutions. In this session, we will discuss 5G and the implications to the transport networks that will connect the next generation of wireless radios. Emphasis on 5G mobile networks.

Peer Talk: mmWave Fixed Wireless Networks (FWA)

Technology advances in mmWave Fixed Wireless Access (FWA) provide opportunities to lower the connection cost to subscriber homes in some neighborhoods. Yet, there is more to delivering a broadband service than connecting the subscriber to the default gateway router. This session will discuss the latest advances in mmWave technology and the solution components necessary to deliver a secure broadband service.

Peer Talk: Electric Cooperatives, Municipalities, and Broadband

As new entrants enter the marketplace, it becomes increasingly important to differentiate yourself and develop new and creative business models to maintain subscribers and build profitability. In this session, our panel will feature your peers and business leaders who will share their experiences in maintaining their competitive edge.

Peer Talk: OSS/BSS Transformation: Enabler or Inhibitor?

One of the biggest inhibitors to deploying new platforms, systems, and services is OSS/BSS integration. Learn from the experts on ways you can enable and accelerate your integration and automation processes simply and efficiently. Your peers will share examples of unique ways they have achieved impressive automation results.

Insider Insights: The Time is Now for Next Gen PON

There are a lot of PON options in the market, and even more being talked about. Let's demystify the technology options and learn from the experts about the benefits of tunable optics. We will share examples of use cases that are driving service providers to leverage Next Gen Pon for greenfield deployments and evolve existing networks.

Insider Insights: Build the Last Network You'll Ever Need

How many times have you built a new network? How many networks do you have? Whether you are new to delivering broadband or been doing it for years, learn how you can build the last network you will ever need, including some best practices for network design.

Insider Insights: Accelerate your Business and Achieve your ROI Targets

Accelerating your business is critical to your company's success. This session will show you how a software platform can help you accelerate your business. We'll walk through real business cases showing the benefits your peers have achieved.

Insider Insights: Access Network Operations Get a Cloud

Network operations are critical to your company's success. Learn how the latest access network capabilities in the cloud can help you reduce operational expenses and rapidly resolve network issues.

SIMPLIFY

Titles and Abstracts

Looking Ahead: AXOS Platform and E-Series Systems

For you to be successful, you need to know the future of the platform(s) you have invested in, or are considering investing in. So if you want to know what's next for AXOS, where the E-Series portfolio is going, and what unique capabilities can you look forward to in 2020 that will keep you competitive, join this must-attend session for the AXOS curious.

Insider Insights: Intelligent Access Edge: Solving the Distributed Access Network Challenge

Access networks are inherently distributed whether separated across central offices/headends, remote cabinets, or remote locations. Regardless of your species (MSO, Telco, Electric Co-Op, WISP, etc.), the distributed nature of the network creates a challenge. Learn how the latest Calix innovations will enable you to maintain a Distributed Access Architecture (DAA) and scale your network while reducing your operational expense.

Peer Talk: Aggregation and Access Networks: Breaking Through the Bottlenecks

As your subscribers use more bandwidth, it's not their PON that will be oversubscribed first, it's the aggregation point in the access network. This session will provide more detail on AXOS aggregation solutions, both on the E7-2 and E9-2. We will show how easy it is to simplify your operations by circumventing bottlenecks by adding bandwidth and capacity through the power of aggregation.

Peer Talk: Active Ethernet: Reimagined

Active Ethernet is now better than ever with a full end-to-end management solution, next generation hardware, and AXOS features and capabilities. All delivered in a "just like GPON" experience. Join this session to learn more about the next generation of Active Ethernet available today.

Peer Talk: Service Providers Share their AXOS Experience

Are you interested in learning how you can simplify your network and operations by taking advantage of unique AXOS capabilities such as the AXOS Diagnostics Toolbox? Join this session to hear from your peers on the benefits they have achieved.

Insider Insights: The Business Case for Hybrid PON

Many cable MSOs have historically considered an either/or approach to HFC evolution - a complete fiber-to-the-home build-out on the one hand, versus an upgrade of their existing HFC network on the other. But, a new "hybrid" approach converts existing optical nodes to Remote PHY devices while at the same time pushes fiber deeper into the nodes serving area for selective PON/FTTH connectivity. Join this session to learn more, including projected OPEX and licensing costs over a five-year period beginning with the deployment of the new hybrid network.

ACCELERATE

Titles and Abstracts

Industry View: Regulatory and Funding Updates You Can't Miss!

ReConnect? CAF 3? National Security or Privacy? Don't miss updates on new government funding opportunities and regulatory requirements affecting your operational bottom line. Broadband providers of all kinds - wireline, cable, municipal, electric cooperative and wireless - can benefit from this informative session.

Peer Talk: Proactive Management of Network Incidents Drives New Ways to Improve Subscriber Experience

Proactively manage the subscriber experience like never before. Learn how service providers can mine the inherent intelligence of network alarms to gain more insight to solve service affecting issues faster, and prevent problems before they impact subscribers. Hear how customers are leveraging intelligent incident notifications and alarm analytics to radically change their operations and proactively address service outages and availability.

Peer Talk: Accelerate Network Deployment and Improve Quality in Three Easy Steps

Deploying networks and turning up subscribers requires a seamless orchestration of design, installation, and construction teams to meet demanding schedules and produce high quality. Often records are inaccurate, making provisioning an adventure and creating many costly re-trips to fix quality issues. Learn how service providers are delivering successful deployments through a focused approach leveraging automation tools and best practices to standardize, communicate, and validate.

Peer Talk: Roll Out Services Faster - The Best Method to Operationalize Managed Wi-Fi and Smart Home Services

Delivering high-value services like managed Wi-Fi efficiently and consistently requires upfront planning with an investment in operational processes, team training, and structured trials. Learn from trailblazing service providers who have worked with Calix Services to incorporate these best practices to enable streamlined, repeatable delivery of value-added services.

Insider Insights: Insights From the TAC to Innovate Your Operations

Service providers are seeking ways to become more proactive when it comes to ensuring network availability and service uptime. Hear from our panel of experts on the role the Calix Support organization can play, and top insights customers can leverage to realize those objectives. We'll also cover the various Support options, tools and resources customers have at their disposal to resolve problems more efficiently.

Peer Talk: Transforming and Building for the Future Ready Network

Whether you're transforming your existing network or building one from the ground up, it's important to design it with scalability and availability in mind to ensure your network is future-ready. Calix Professional Services experts and service provider innovators will team together to talk about best practices in designing, implementing, and seamlessly migrating subscribers to next generation Layer 2 and Layer 3 architectures.

Peer Talk: How to Accelerate Your Greenfield Deployment – Design, Implement, and Operate Your Network Faster

Your goal is to get into business fast using the latest best practices, and then manage it efficiently with an attention to operational KPIs that help ensure subscriber satisfaction. Attend this session to learn what you need to help your team get into business and ramp services fast so you can focus on your subscribers.

ACCELERATE

Titles and Abstracts

Peer Talk: Reinventing Operational Work Flows With Faster Response and Proactive Problem Solving

It's all about the user experience. Operations teams need to reinvent how they handle trouble reports with their subscribers and address incidents on their network. To do this they need to develop a more holistic, rapid response, and proactive approach to solving and preventing problems. The result—operational efficiency, less truck rolls, and happy subscribers. Attend this session on how to leverage complementary capabilities of the Remote Monitoring Service and Calix Support Cloud to enable proactive problem solving and rapid subscriber incident resolution.

Peer Talk: How to Create the Best Subscriber Experience and World-Class Tech Support Team

Your Tech Support team is your first line to subscriber satisfaction. Would you consider yours “World-Class?” Join this session to learn how to create and manage a world-class tech support team that delivers the best customer experience possible. We will discuss how to build a winning call engagement model and explore quality monitoring processes that enable your support teams to be Super Stars!

Peer Talk: Avoiding the Compliance Gap With Proactive Broadband Performance Testing (Part 2 of CAF Performance Testing, continued from Elevate Track)

The down side of not complying with FCC Broadband Performance Testing levels is that your CAF monthly support can be impacted by up to 25 percent. Is your testing framework set up correctly? Are you testing the right number of end points, at the right time, and right speed for proper results? What should you do if you have a compliance gap issue? In this session, you'll hear the latest FCC updates to help accelerate deployment of your performance testing framework and get first hand service provider insight to help you accelerate your compliance readiness.
