

PRODUCT PREVIEW



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Service Verify Helps You Manage High Value Ethernet Services

Ask five different people what Ethernet service management means and you will likely get five different answers. In fact, you might even get a debate on what defines a high value Ethernet service. Any Ethernet service that includes a Service Level Agreement (SLA), service availability requirement, QoS metrics or financial considerations for failing to meet any of these attributes can be considered a high value service. Examples include mobile backhaul, metro Ethernet and high bandwidth TLS circuits that provide mission critical services to mobile carriers, enterprises, government entities and community institutions.



Most service providers would agree that network management and service management are two inherently different things. Service providers generally have established tools that configure and manage the network elements that deliver Ethernet services. However, the ability to define, establish and manage contractual service commitments has been somewhat challenging.

Fortunately, Calix has introduced a new software application that brings more clarity on what Ethernet service management means while giving communications service providers the confidence to showcase the quality and availability of their access network.

This is the motivation behind Service Verify, the latest addition to the Compass suite of software applications. Bifurcating network management from service management assures providers can establish Ethernet services that traverse equipment from multiple suppliers while maintaining confidence in their ability to meet contractual commitments.

Service Verify is a comprehensive software tool that gives providers the confidence to offer differentiated Ethernet services with the contractual commitments they need to stand out in the highly competitive Carrier Ethernet market. This new application enables service providers to do the following:

- Define key performance indicators (KPIs) and performance thresholds that serve as the foundation for business Ethernet and mobile backhaul service contracts.
- Ethernet Service Availability Testing (SAT) reporting and repository.
- Predictive SLA compliance analysis using real-time and historical data.
- Display the performance of the network to end-users through a subscriber portal.
- Generate ad-hoc or scheduled reports based on KPIs for internal or end-user needs.

Relying on industry standards such as ITU Y.1731 performance monitoring, ITU Y.1564 and RFC 2544 Ethernet service activation tests, Service Verify is compatible with a variety of Ethernet access devices including those from Calix. This means it can be used in existing networks enabling providers to grow revenue streams without additional capital investments.

Service Verify adds to the growing suite of Software-as-a-Service (SaaS) applications that enable service providers to manage the broadband service lifecycle. Collectively, Compass applications provide a level of visibility and control to various service provider business functions that include customer service, network operations and marketing.

Learn more about Service Verify in the Calix EXPO Booth #301.



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Finley Engineering IP Services: Because One Size Doesn't Fit All



Some solution providers use a one-size-fits-all network design methodology. They use the same manufacturers the same way in every network they deploy. Finley Engineering understands that every customer they serve has different requirements, and finding the right solution requires analysis and monitoring to ensure the network is designed not with the manufacturers' products in mind but with the customer's requirements as the driving force of the solution.

IP Service Designed For Your Needs

Finley IP services include a secure, scalable network design tailored to your specific requirements and goals. Finley offers multisystem integration capabilities, resolving issues between multiple vendors when interoperability is a must and different manufacturers aren't cooperating. When interoperability becomes an issue, you can't be left standing in the middle with multiple vendors each giving you their requirements to work with them.

Finley keeps the customer as the number-one priority and ensures the network meets the customer's needs. To maintain network visibility and ensure minimal downtime, Finley can deploy network management that allows proactive problem detection and monitoring. For networks spread out geographically, remote monitoring will capture any issues that occur so they can be addressed immediately, minimizing any impact to production network traffic. If troubleshooting is required, problems can be isolated utilizing diagnostic tools like protocol analyzers. Traffic is captured where issues occur, even in remote locations where capturing traffic for protocol analysis can be a challenge.



Staying Secure as You Grow

As networks grow, the challenge of maintaining a secure environment becomes greater. It seems the larger the network the bigger the target placed on it by hackers. At Finley we can help you define a security policy that makes sense for your network, updating your security infrastructure and helping you define your network security posture so it meets your security policy. As the sophistication of attacks increases, it's clear old tactics incorporating a firewall and antivirus aren't adequate protection. Compliance requirements like PCI, HIPAA and CIPA are driving companies to change how they protect their assets. Finley understands these challenges and has over 60 years of experience ensuring compliance to mandated industry standards.

Stop by Booth 318 at RTIME in San Antonio. Meet Laren Metcalf, Finley's IP services director, and learn more about Finley IP Services.

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The Key to the Bottom Line Is the Top Line (Revenue Growth)

The telecommunications landscape has changed—forever! Technology is racing forward at breakneck speeds, regulated financial reserves are evaporating and competition is attacking from every side. Succeeding in such a highly fluid environment requires laser focus, attention to detail and knowledge, and that's where the skilled and experienced professionals at GVNW can help you succeed. We offer a wide range of services and have highlighted three of those below.

SPECTRUM AUCTION SERVICE



Over the next 18 months, the FCC will auction off 65 MHz of spectrum. If you're considering participating in the auctions and thinking of going it alone, think again. The process is complicated, time consuming and fraught with potential pitfalls. GVNW has assembled a team of experienced and skilled people to help guide prospective bidders through the auction process. Participating in a spectrum auction is like playing hardball in the big leagues. The players are highly competitive, have deep pockets, know what they want and expect to win. The team at GVNW has played the game and devised a strategy that results in success.

REVENUE ASSURANCE



Recent studies show that revenue leakage and retroactive adjustment accounts for up to a 10% loss on carrier access billing (CAB) transactions. Those losses can have a substantial impact on your company's financial position. GVNW's revenue assurance experts are experienced in dealing with the inherent complexities of network, tariff and industry changes that frequently cause companies to leave valuable revenue on the table. Whether you create your CABs internally or use a vendor, it is one of your company's largest revenue sources and should be reviewed periodically for accuracy. GVNW has the experience, knowledge and skill to thoroughly evaluate whatever process you use to ensure all payments are complete, accurate and timely.

MERGERS AND ACQUISITIONS



Merger and acquisition strategy can be a powerful and critical component in achieving organizational goals. GVNW's broad and varied merger and acquisition experience coupled with deep functional and industry expertise can effectively identify, execute and integrate deals that will strengthen your competitive advantage and add considerable value to your business. GVNW's team has assisted in a wide array of transactions, from the very small single exchange companies to large consortiums acquiring multiregion and multistate exchanges. Our team of experienced accountants and engineers has the depth of expertise and knowledge to ensure that your transaction is carefully evaluated, meticulously detailed and doggedly pursued to completion. When the success of your company is at stake, it's critical that you have the GVNW team at your side.

Contact us today and learn about all the services we offer to help your company succeed.

Distance Yourself From the Competition and Increase Customer Satisfaction With NISC®

Today's telecom customers want convenient account access, detailed usage information at their fingertips and the ability to add and change services 24/7. Put the power of true account management in your customers' hands with the newest innovations from National Information Solutions Cooperative (NISC)!

SMARTHUB™ WEB AND MOBILE APP :: THE CENTER OF CUSTOMER ENGAGEMENT

Provide your customers with the tools they need to manage their accounts with mobile and Web apps fully integrated with iVUE®, NISC's fully-integrated enterprise system. SmartHub, a customer self-serve solution, securely delivers account information, mobile payment options, usage graphs, service interruption reporting and more to your customers on the go.

Now with the newly launched SmartHub Order Management solution, your customers have the power to manage existing services as well as add and upgrade packages 24/7. This new offering uses your existing website to market services based on location, demographics and history—with fully customizable business rules to accommodate hundreds of bundling configurations. The shopping cart functionality will allow your customer to see their prices change in real time as they add and upgrade services, thus reducing the confusion accounting adjustments can cause. Avoid costly truck rolls and let your website do the work so you can redirect your customer service representatives' time to more critical tasks.

SmartHub is available for Android, iOS and the Web, so you have the potential to reach your entire subscriber base with one solution. These tools empower and engage your customers, not only helping with retention but also attracting new customers, while differentiating you from your competition.

BROADBAND MEASURED SERVICE :: NOT ONLY A BILLING TOOL, AN EDUCATION TOOL

With NISC's newest offering, Broadband Measured Service, your telco will have the power to not only track and bill overages, but you will also have the tools to educate your customers on the true value of your service. Provide customers with graphs that show their Internet consumption hourly, daily or monthly. Educating your customers on their usage patterns and helping them control their costs is imperative for customer satisfaction, and Broadband Measured Service is a powerful ally. Broadband Measured Service seamlessly integrates into iVUE Customer Care and Billing, leading to billing ease, and with NISC's SmartHub, your customers have the tools they need to monitor their usage and pay their bills on their smart device 24/7.

Looking for ways to increase efficiencies and customer satisfaction? Learn more about SmartHub, SmartHub Order Management and Broadband Measured Services today! Please visit us at booth 317 at the 2014 EXPO to take these innovative solutions for a test drive.

For more information about NISC and the iVUE enterprise system, please visit www.nisc.coop.



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NRTC Seeks to Be Rural Telcos' Reliable Partner

These days, there's plenty of advice floating around the Internet and industry meetings for small companies. Finding the right partner is a common refrain.

The National Rural Telecommunications Cooperative (NRTC) absolutely agrees. NRTC's goal has long been to become the best, most reliable partner for small- and medium-sized telcos. NRTC in past years has been the rural telco's partner for satellite television, Internet services, broadband access, access to video programming and many others.

That effort continues. The modern telco continues to need affordable access to the latest advancements.



Take the cloud, for example. NRTC recently acquired NeoNova Communications in Raleigh, N.C. NeoNova has transferred its ISP operations to the cloud and is well prepared to transfer enterprise operations and small businesses to cloud computing as well. It has a steady track record of serving rural clients. Where NRTC has been the partner for residential Internet subscribers, NeoNova and NRTC are now prepared to provide up-to-date service to all segments of the business community as well.

A rural telco today needs a mobile voice and data product to be a full-service provider to its community. But how can it afford to build a wireless business to compete with the large national carriers without spectrum, infrastructure and a huge staff?

NRTC's Telispire is a Mobile Virtual Network Operator/Enabler/Aggregator (MVNO/E/A). It helps rural telcos increase revenues and profits by enabling voice, text and 3G/4G data services. A telco can implement Telispire's turnkey private-label solution quickly so that it can focus on growing revenue. Telispire provides the back-office services that enable smooth business entry.

After a telco begins partnering with Telispire, the company's dedicated teams of experts continue to serve by assisting with marketing campaigns, social media strategies, e-commerce consulting, charity tie-ins and whatever practices will help a small telco succeed.

Between its satellite and IPTV offerings, NRTC has always helped telcos provide competitive multichannel video service. Consumers watch TV on several screens now—laptops, tablets, smartphones. NRTC started up MyTimeTV, its own version of TV Everywhere, to fill the computer viewer expectations to view program

NRTC's experienced video services staff takes care of contract negotiations, and renewals and other details needed to build a service that competes with larger companies. NRTC's marketing programs offer ready-made marketing collateral and other helpful tools.

Telecommunications is volatile by its nature. As technologies change NRTC changes. We invest in the products and services that our members need. We then continue to work with rural telcos by providing the business support you'd expect from a good partner.

Please visit us at booth 617 at the 2014 RTIME EXPO to learn more about our strategic partnerships and how they can benefit your telco.



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Proven Agility, Availability & Efficiency for Your Data Center Project

"We asked several vendors to provide a turnkey solution, including engineering, furnishing and installation of our entire low-voltage infrastructure. TE and Power & Tel came together to provide the best solution," stated Brett Kirby, director of network management and data center operations for COMLINK.

TE Connectivity and Power & Tel help service providers construct state-of-the-art data centers that offer scalable, best-in-class colocation and hosting of equipment for their business and residential customers. TE's data center architecture is built around TIA-942 guidelines for cable management, equipment setup and maintenance to help ensure the data center will meet the challenges of future service requirements. Their solution and products encompass all critical areas within the data center: entrance facility, main distribution, horizontal distribution and equipment distribution. Power & Tel is utilized as a supply chain partner for their industry leading inventory management, logistics and distribution horse power.

TE's extensive data center product portfolio includes:

- Plug-and-Play Rapid Fiber Panel (more below on this product)
- Fiber Distribution Frames
- MPO Cable Assemblies
- Plenum-Rated Microcable
- Copper Cat 6 Panels and Cabling
- FiberGuide Optical Raceway System
- Fiber Patch Cords



TE's Rapid Fiber panel combines IFC cables with fiber panels using our innovative RapidReel fiber cable spool. With applications ranging from central offices and data centers, to cell sites and customer premises, Rapid Fiber panels offer extensive features and benefits. TE's Rapid Fiber panels provide a more cost-effective and efficient way to add fiber capacity by reducing engineering, ordering and installation time. By allowing new fiber to be installed faster than before, and by providing flexibility and scalability to deliver more bandwidth as needed, TE's Rapid Fiber panels lower the total cost of expanding fiber capacity, helping service providers attract and retain customers and ensure long-term profitability.

Rapid Fiber Panel Features:

- Reduces site survey costs by eliminating the need to precisely measure IFC cable lengths. In many cases, the cost of a site survey can be eliminated.
- Reduces fiber cable congestion—fiber is always the right length between intermediate fiber panel and Optical Distribution Frame.
- Facilitates worry-free installation of fiber with a robust microcable that is easier to handle.
- Provides simplified back office with fewer SKUs to order, track and process for invoices.
- Decreases lead-time from 4-6 weeks to 0-2 weeks (can potentially be deployed in one day).
- MPO connector and cabled module options enable more consistent use of fiber patch cord lengths between the equipment and intermediate fiber panel.
- Reduces splice cost by eliminating 12 individual patch cord connections at one time.
- Ensures better labor force utilization by using standardized industry connectors and cleaning methods.

Power & Tel provides you reliable distribution services for the full-line of solutions from TE Connectivity.

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Telcom Insurance Group Coverage Enhancements: Theft of Services, CAN SPAM COPPA, and More

Stop by our booth #218 and visit your Telcom Insurance Group family. We are the only company that is owned and directed by NTCA and 39 members to provide premier business insurance in risk management solutions as a member-benefit. Just like many of you, we are owned by those we serve, and we do not take that responsibility lightly.

THEFT OF SERVICES

Ever had your voice, data, or video services hacked into? Did you have a loss of income or did you have to pay a third-party carrier that you are a reseller for that stolen "time" and you had no customer to bill? We were the first and are still the only provider who recognized this exposure and offered a coverage solution.

CAN SPAM ACT OF 2003; THE CHILDREN'S ONLINE PRIVACY PROTECTION ACT 1998; FAIR AND ACCURATE CREDIT TRANSACTION ACT 2003 (RED FLAGS)

Are you concerned about fines and penalties that may be brought by or on behalf of the Federal Trade Commission, FCC or another regulatory agency because of an actual or alleged violation of a "privacy law"? We have a solution. We have an enhancement to our Network Security Data Liability policy designed to offer you a solution.

If you run a telecommunications company, you likely have these exposures. Come talk to us about coverage options for them.

Because it has always been a matter of trust.



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