service installation
and maintenance

The next generation starts here

with Telecom Network SuperVision solutions
to build, manage and maintain a *leading edge*.

preventive maintenance

service assurance

trouble handling and fault management

The Opportunity – and the Challenge

Today it's more critical than ever to drive revenue growth by delivering new services. Communication service providers are using new technologies such as VDSL, PON, IPTV, VoIP and MPLS to roll out next-generation services that help them aggressively grow revenue, secure their customer base and deter competition.

But the transition to new services brings challenges. High-end services bring high customer expectations. Reducing operating costs in your core business while you fund new network deployment and deal with competitors is not easy. Will you be able to manage legacy-network spending, deliver next-gen services and keep your customers happy?

Your response will determine how readily customers adopt these high-revenue services. How long they stay with you.

And, how successfully you compete.

Your Challenges – Our Core Competency

Only Fluke Networks brings together the Operational Support Systems, Centralized Monitoring and Field Test solutions that deliver the business-transforming results you need to address the challenges ahead. We work closely with companies like yours to reduce their costs of existing operations and help them address the challenges of deploying new technologies.

Network SuperVision Solutions™ performance built on experience

Fluke Networks' solutions for the access network solve problems and create value for service providers worldwide.

- Major carriers use the Fluke Networks Predictor® solution every day to monitor more than 150 million lines, identify emerging problems and resolve them before they impact service.

- Our Trouble Handling OSS Suite is helping one local service provider cut its trouble rate well below the industry average and clear 97 percent of problems within 24 hours. Recovery after a major storm used to take days. Now it takes just hours.

- Our mission critical COMPAS Service Provisioning systems have allowed a major carrier to dramatically reduce service provisioning costs and increase service order flow-through rate to 95%.

- The Fluke Networks EXP™ Technician Productivity Solution resolves POTs and DSL troubles prior to service activation and ensures all service turn-ups are completed correctly the first time, every time, reducing repeat dispatches by up to 36 percent.

- ADSL2/2+ and VDSL network deployments go dramatically faster with our NetDSL® System. You can qualify an entire neighborhood for service in a single day.

Managing Today and Making the Transition

Part of transitioning your business is improving legacy processes. Targeted initiatives for process improvement can uncover important opportunities to reallocate staff and reduce the cost of provisioning, administration, support and maintenance for legacy networks. You can free up the resources you need to drive your next-gen transition forward.

Fluke Networks' test tools and solutions for provisioning, preventive maintenance, trouble handling and fault management of your access network can deliver both immediate cost reductions and sustainable process improvement. These systems enable your new business to grow and profit without the burden of outdated legacy processes. We deliver comprehensive solutions to help you build, manage and maintain your next generation network, streamlining process flows and driving cost out of your business.

We help you achieve your business objectives.

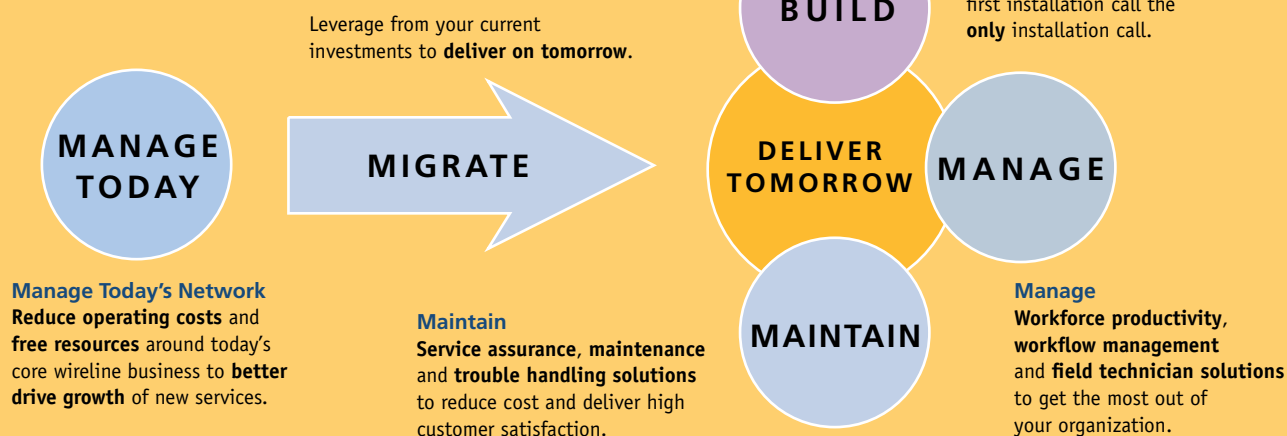## Deliver Tomorrow – Build, Manage, Maintain

As you plan your company's strategy to make next-generation carrier services pay off, there are important decisions you need to make and questions you need to ask.

- Will customers accept the same service activation and repair cycles for triple play services that they do today for traditional voice service? Or will they want more?

- How can you improve processes for supporting next-generation services by building on — not abandoning — your legacy system investments?

- Can your existing trouble handing and fault management processes support your planned bundled voice, video, data service offering?

- Are your I&M people, processes and test solutions ready to support new services?

We can answer these questions and help you **build** your network to deliver new advanced services, **manage** your processes and people and **maintain** the high level of service quality your customers expect.

Fluke Networks SuperVision Solutions

Helping you build, manage and maintain your next-gen network advantage.

Leverage from your current investments to **deliver on tomorrow.**

MANAGE TODAY

MIGRATE

DELIVER TOMORROW

BUILD

MANAGE

MAINTAIN

Build
Plant qualification, **records management** and **service installation** to make the first installation call the **only** installation call.

Manage Today's Network
Reduce operating costs and **free resources** around today's core wireline business to **better drive growth** of new services.

Maintain
Service assurance, **maintenance** and **trouble handling solutions** to reduce cost and deliver high customer satisfaction.

Manage
Workforce productivity, **workflow management** and **field technician solutions** to get the most out of your organization.

Access Network Solutions

End-to-end solutions that help you deliver on the promise of next-generation technology.

Your success with next-gen services requires a great network — and a great deal more. The people and processes you employ to build, manage and maintain your network must be as fast, cost-effective and customer-friendly as the services you provide. Your support systems need to maximize the value of your legacy network investments, even as you transition to the next generation. For end-to-end solutions that deliver superior performance you and your customers can count on, look to Fluke Networks.
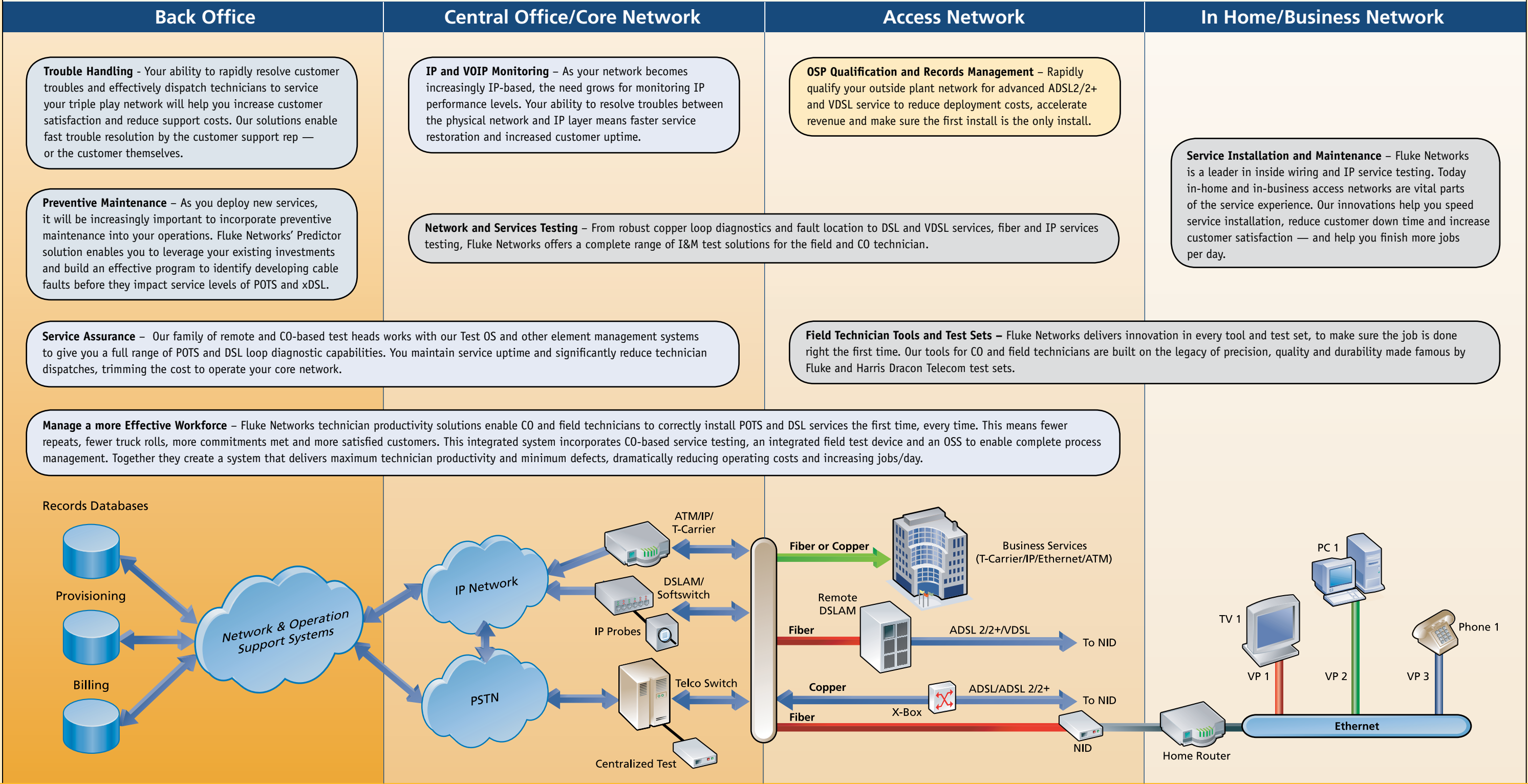
Key

- OSS Solutions
- Field Test Solutions
- Service Assurance Solutions
- OSP Solutions

Back Office	Central Office/Core Network	Access Network	In Home/Business Network

Trouble Handling - Your ability to rapidly resolve customer troubles and effectively dispatch technicians to service your triple play network will help you increase customer satisfaction and reduce support costs. Our solutions enable fast trouble resolution by the customer support rep — or the customer themselves.

IP and VOIP Monitoring – As your network becomes increasingly IP-based, the need grows for monitoring IP performance levels. Your ability to resolve troubles between the physical network and IP layer means faster service restoration and increased customer uptime.

OSP Qualification and Records Management – Rapidly qualify your outside plant network for advanced ADSL2/2+ and VDSL service to reduce deployment costs, accelerate revenue and make sure the first install is the only install.

Service Installation and Maintenance – Fluke Networks is a leader in inside wiring and IP service testing. Today in-home and in-business access networks are vital parts of the service experience. Our innovations help you speed service installation, reduce customer down time and increase customer satisfaction — and help you finish more jobs per day.

Preventive Maintenance – As you deploy new services, it will be increasingly important to incorporate preventive maintenance into your operations. Fluke Networks' Predictor solution enables you to leverage your existing investments and build an effective program to identify developing cable faults before they impact service levels of POTS and xDSL.

Network and Services Testing – From robust copper loop diagnostics and fault location to DSL and VDSL services, fiber and IP services testing, Fluke Networks offers a complete range of I&M test solutions for the field and CO technician.

Service Assurance – Our family of remote and CO-based test heads works with our Test OS and other element management systems to give you a full range of POTS and DSL loop diagnostic capabilities. You maintain service uptime and significantly reduce technician dispatches, trimming the cost to operate your core network.

Field Technician Tools and Test Sets – Fluke Networks delivers innovation in every tool and test set, to make sure the job is done right the first time. Our tools for CO and field technicians are built on the legacy of precision, quality and durability made famous by Fluke and Harris Dracon Telecom test sets.

Manage a more Effective Workforce – Fluke Networks technician productivity solutions enable CO and field technicians to correctly install POTS and DSL services the first time, every time. This means fewer repeats, fewer truck rolls, more commitments met and more satisfied customers. This integrated system incorporates CO-based service testing, an integrated field test device and an OSS to enable complete process management. Together they create a system that delivers maximum technician productivity and minimum defects, dramatically reducing operating costs and increasing jobs/day.

Records Databases

Provisioning

Billing

Network & Operation Support Systems

IP Network

PSTN

ATM/IP/T-Carrier

DSLAM/Softswitch

IP Probes

Telco Switch

Centralized Test

Fiber or Copper

Business Services (T-Carrier/IP/Ethernet/ATM)

Remote DSLAM

Fiber

ADSL 2/2+/VDSL

To NID

Copper

ADSL/ADSL 2/2+

To NID

Fiber

X-Box

NID

Home Router

PC 1

TV 1

VP 1

VP 2

VP 3

Phone 1

Ethernet

Operational Support Systems

Fluke Networks offers a suite of OSS products and services that helps wire line service providers manage existing networks more effectively and transition their systems to better support triple play services. While most OSS providers suggest a complete overhaul of your systems, we help you leverage what you have today as you build your network for tomorrow — quickly and cost effectively, with the performance and quality you desire.
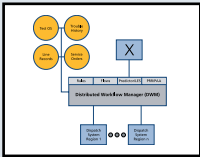
Preventive Maintenance Suite – Our preventive maintenance suite is built from Predictor®, a robust solution that warns of impending cable failure by correlating switch alarms to facility, cable and pair and creates proactive work packages to eliminate future trouble reports.
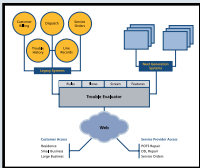
Loop Expert System (LES) – Rules based system that automatically identifies areas where proactive work is best applied to ensure failure-free plant operations.

Distributed Work Manager (DWM) – Correlates data from various aspects of the network to build prioritized work packages and improve dispatch center operations.

Trouble Handling Suite – is a series of OSS products focused on automating the trouble handling process and achieving improved flow-through. Ultimately, it can make it possible for service providers to offer customer-directed trouble resolution without the interaction of a customer service representative.

TroubleEvaluator – Rules based product that abstracts required data from operations systems and databases to provide information to the customer service rep while interacting with the customer on line. Flows are developed to automate the overall process and avoid swivel chair management across multiple systems.

Query Verify and Fix (QV&F) – Enables a single customer service representative to solve feature related troubles (i.e. Call Waiting, Long Distance Carrier) while on line with the customer.

Service Assurance Solutions

Customer uptime, rapid trouble resolution and the ability to effectively monitor network performance are critical for any world class network operation. Fluke Networks delivers, with Service Assurance solutions that address the legacy POTS network as well as DSL and IP networks.
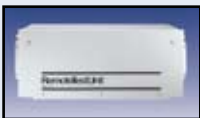
POTS/DSL Service Assurance – Our Remote Test Unit product line provides comprehensive loop test diagnostic capability. Service providers can effectively monitor all critical points of their physical network to ensure proper user performance.

IP Service Assurance – Monitoring IP network performance and VoIP will be a critical task in any next generation network. Fluke Networks has been a world leader in IP network performance monitoring for the last decade. We offer many options in IP level testing and monitoring.

Technician Productivity – Our DATU EXP™ is a field test system that verifies all CO wiring, service access and service turn-up for each installation. It takes the field technician through a series of tests which reduce repeats, overall testing costs and enables technicians to complete more jobs per day. By initiating the centralized test function, technicians can gain far-end, in-band access for centralized data collection and documentation back into existing company OSSs or custom databases. Combined with our OSS offering, the EXP™ System also becomes a powerful marketing tool that helps technicians sell new services to customers while on site.

Field Test Solutions

Effective Installation and Maintenance solutions are critical in rapid trouble resolution, and installation of services, as well as maintaining a high level of technician productivity. Award-winning field test products from Fluke Networks have earned their acclaim where it matters most: on the job.

Central Office and Field Test – Whether it's xDSL service installation, cable maintenance or IP service troubleshooting, Fluke Networks offers the solution. We specialize in solutions to rapidly install new services or troubleshoot network problems.

Technician Tools and Test Sets – With a growing line of butt-in telephone test sets, punchdown tools, TDRs and our newest line of JackRapid™ multi-pair Cat5 and Cat6 jack termination tools, we are delivering innovation that makes the field technician more productive. The addition of the Harris telecom test sets and tools to the Fluke Networks family firmly establishes our commitment to continued development in this category.

I&M in Homes and Businesses – The in-home/business premise network is new territory for many service providers, but it's been Fluke Networks territory since our inception. We offer many solutions to qualify or troubleshoot inside wiring and IP services, including data and VoIP.

OSP Solutions

When you are deploying next-generation services, you need a complete system to qualify your existing copper infrastructure and verify your plant records for ADSL2/2+ and VDSL services.

NetDSL™ System – This is the fastest and easiest way to qualify your network for wideband triple play services. High speed, bulk pair, single ended qualification enables you to target specific service areas and pre-qualify your network for its service level carrying capability. No second guessing, no false commitments to customers. With NetDSL, you can either confirm the network's ability to support new services or pinpoint plant conditioning activity that's needed. Either way, you significantly reduce deployment time and cost and start your new network deployment with satisfied customers — not disappointed ones.

NetServer™ – Whether you are managing a NetDSL system or traditional DaVaR® records management, NetServer enables automatic and comprehensive correction and updating of your outside plant loop records database. So if you are updating your wideband capacity or building a new database from scratch, the NetServer can help you manage loop records.

Fluke Networks Support and Maintenance Services

Fluke Networks provides a range of support services to our customers to assist in the deployment of any of our programs or solutions. A full portfolio of training programs, extended warranty, field support, 24-hour technical support or program management solutions are available.

As part of our OSS offering, we also offer Tier 1, Tier 2 and Tier 3 support for our own solutions or other OSS solutions you may have in place. Our expertise in Telecom service provisioning, outside plant, trouble handling, preventive maintenance and service assurance provide us with the unique ability to bring real value to our customer's operations.

Kaizen, or "change for the good," is a way of life at Fluke Networks. We constantly seek ways to improve our internal processes and employ a rich set of tools we call DBS or "Danaher Business Systems" to accomplish this continuous process improvement. We also apply these same practices in serving our customers and can bring a wealth of expertise and tools in helping our customers identify and generate sustainable process improvements in their own businesses.

We help you find a better way.

Network SuperVision Solutions™

Fluke Networks, a Danaher company, provides innovative solutions for the testing, monitoring and analysis of telecommunications and enterprise networks and for the installation and certification of the fiber and copper foundation of those networks. Our comprehensive line of Network SuperVision Solutions™ provides network installers, owners and maintenance professionals with superior vision into their network, combining speed, accuracy and ease of use to optimize network performance. Headquartered in Everett, Washington, Fluke Networks has more than 500 employees worldwide and distributes our products in more than 50 countries.

Worldwide Support

Like our products, our support is closely coupled to your evolving needs, with an eye on keeping you on top of the latest technology advances.

- Global support in 22 countries
- Award-winning product performance reliability
- Support programs tailored to your needs
- Solutions that continually anticipate and evolve with your network, your business and your market opportunities