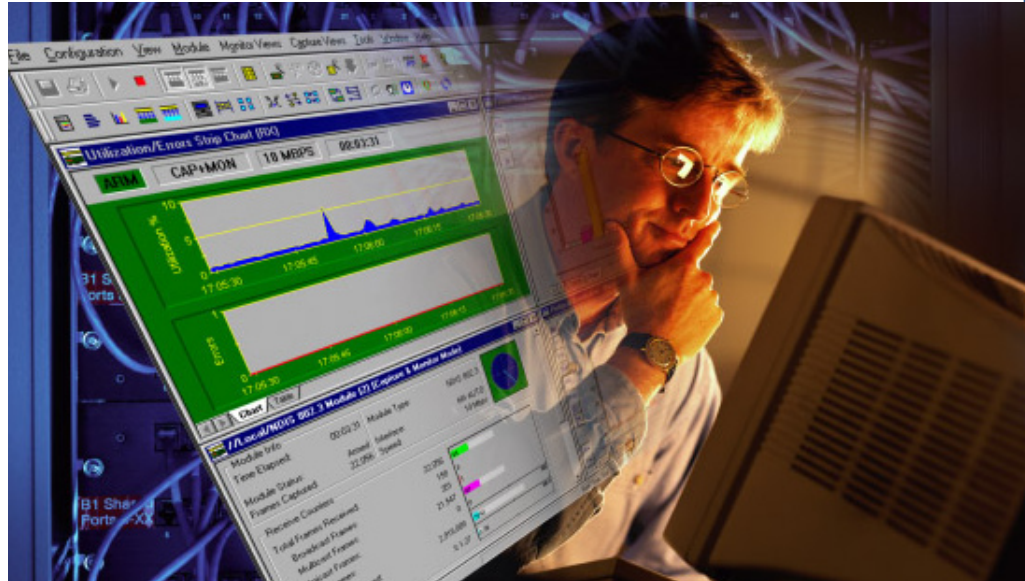# OptiView™ Link Analyzer

Modern IT datacenters and core networks are delivering applications and services that increasingly drive business productivity and profitability. Therefore, IT departments are progressively more responsible for supporting business goals by maintaining the performance of the applications that traverse these networks. The OptiView Link Analyzer is a flexible, network and application troubleshooting solution that provides packet-level visibility and application analysis using high-speed monitoring and packet examination.

OptiView™ Link Analyzer and an 8 port in-line fiber tap.

Powerful line-rate capture and application monitoring

When analyzing applications such as VoIP, missing one frame during a call set-up could mean losing visibility of the entire VoIP session. The OptiView Link Analyzer uses silicon-accelerated hardware to capture every frame on Ethernet segments up to Gigabit speeds. Link Analyzers synchronize system clocks to an external NTP server for accurate latency measurements across global enterprises or suspicious network segments. Combined with nanosecond packet time resolution and line rate filtering, multiple link analyzers accurately track packets as they traverse the network – helping identify segments causing degradation. If the application is the problem, comprehensive decodes and packet analysis will pinpoint server/host communication issues. The link analyzer provides the accuracy and reliability required to recognize and troubleshoot the toughest application response time prob-

lems. Integration with OptiView Protocol Expert provides a visual means of analyzing captured packets fast and accurately.

Dependability by design

OptiView Link Analyzer has two analysis interface cards with custom ASICs and 256 MB of onboard capture buffer space. Unlike other Gigabit network analysis solutions, each analysis card on the link analyzer supports 10/100BASE-T and three different versions of Gigabit Ethernet (1000BASE-SX, 1000BASE-LX and 1000BASE-T) using hot-swappable GBICs. This flexibility ensures the link analyzer will operate at any location on your Ethernet network and preserve the lifetime investment.

Since malicious viruses and worms are a major complication on today's networks, link analyzer runs the hardened and stable VxWorks operating system. This OS delivers carefree maintenance, stability and resistance to security threats. If your network is attacked by a virus, link analyzer will be up

Real-time analysis and line rate packet capture for full duplex Gigabit Ethernet
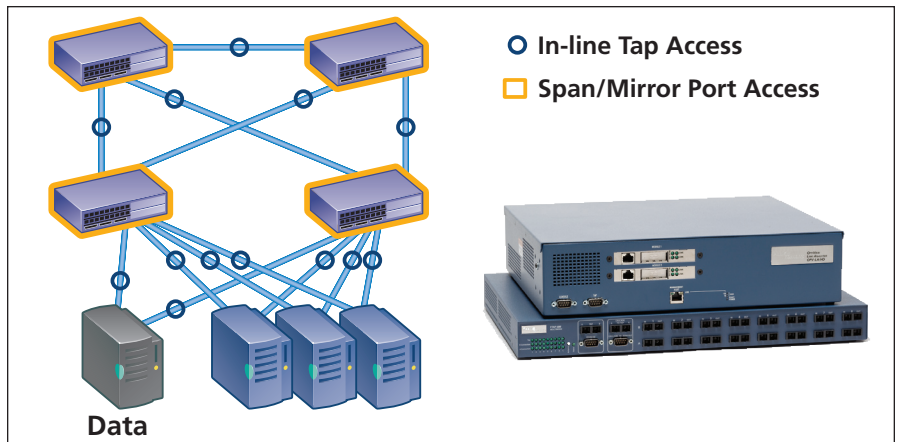
and running to notify you of the event and to isolate infected systems.
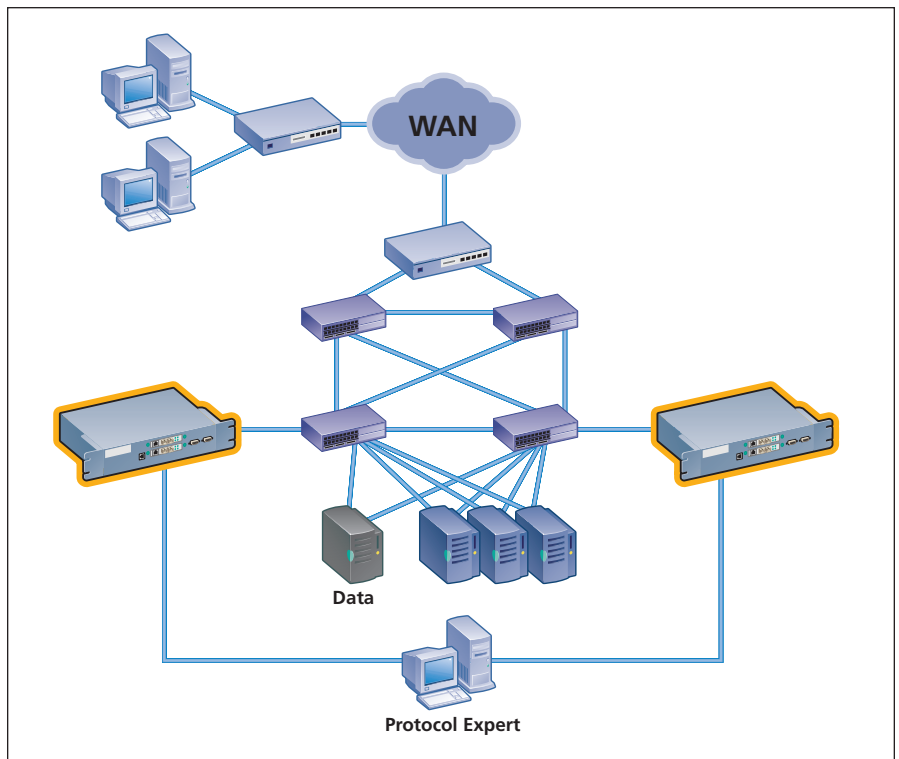
Deployment and control

Because effective network and application analysis often depends on data collected from different locations, the OptiView Link Analyzer works with a full line of single and multi-port in-line taps, aggregation taps or span/mirror ports switches. Fluke Networks representatives will be happy to help you with the design. Management of the OptiView Link Analyzer is straightforward and efficient utilizing the centralized controls of Protocol Expert. Single click firmware updates, user account administration (with available TACAC support) and group filter deployment make the link analyzer an effective network management solution without draining time and resources.

OptiView™ Link Analyzer features

- Packet monitoring and capture at full line rate up to full duplex Gigabit Ethernet speeds
- RMON and RMONII support
- Real-time expert problem detection
- Optional 80 Gigabit hard drive (LA/HD only)
- Integrated web server for browser based access to real-time statistics and alarm configuration
- Real-time alarms and notifications can be sent via SNMP, email or log message
- Real-time application response time analysis for any TCP application
- Triggers to capture packets during user-defined application or network activity
- Time synchronization with multiple NTP servers
- Single click firmware updates pushed out to multiple link analyzers
- Group configurations pushed out with single click
- Group filters pushed out with single click
- VxWorks OS remains stable during malicious worm and virus attacks

○ **In-line Tap Access**
☐ **Span/Mirror Port Access**

Data

Utilizing a single link analyzer and a combination of span switches and in-line taps, packet captures can be remotely acquired from almost any link in the data center to view traffic patterns and application behavior from varying locations.

WAN

Data

Protocol Expert

Dual Link Analyzers can capture packets simultaneously on asynchronous data paths or links utilizing Cisco Etherchannel or 802.3ad aggregated link technology. This allows you to flexibly capture all packets along a link, no matter which data path they travel.

Statistics and reports

Statistic	Reports

MAC layer	- Frame count
	- Utilization
	- Broadcast frames
	- Multicast frames
	- Unicast frames
	- Error frames
	    • Undersize
	    • Oversize
	    • Jabbers
	    • Collisions

Frame size distribution	(in bytes) < 64 64 65 – 127 128 – 255 256 – 511 512 – 1023 1024 – 1518 >1518
Protocol distribution	- Network layer - IP layer - IPX layer - VoIP - All - By frames, absolute bytes, relative bytes
Top hosts by	- MAC layer - Network layer - Application layer
Top conversations by	- MAC layer - Network layer - Application layer
VLAN distribution	- Top hosts by VLAN - Top conversations by VLAN

VoIP specific analysis and reports

Analysis	Reports
Call log	Displays more than 2000 calls with associated metrics
VoIP metrics	Specific charts monitor important metrics associated with monitored calls - Jitter - Dropped packets - Delay - RTCP jitter - RTCP drop packets - Call set-up
VoIP quality of service	Real-time VoIP Quality of Service (QoS) analysis supports SIP, SCCP, H.323 and MGCP - User R factor - Network R factor - MOS – LQ - MOS – CQ - MOS – PQ (based on ITU-T P.862 standard)
Call analysis	QoS analysis shows timeline of metrics and quality
VoIP alarms	Notify degradation before users are impacted - Set-up time - Jitter - Dropped packets - RTCP jitter - RTCP dropped packets - User R factor - Network R factor - Set-up failures - Dropped calls

Specifications

Physical specifications	
Dimension	3.5 x 14.5 x 13.8 in (8.9 x 37 x 35 cm)
Weight	18 lbs (8.2 kg)
Power consumption	120 watts
Fuse protection	2.5A @ 250V
Input voltage range	90-264V
Input frequency	48-62 Hz

Ordering information

OptiView™ Link Analyzer and Protocol Expert Software	
Model	Description
OPV-LA2	OptiView™ Link Analyzer
OPV-LA2/HD	OptiView™ Link Analyzer with hard drive
OPV-T	1000 BASE-T GBIC, RJ-45
OPV-LX	1000 BASE-LX GBIC, SC connector
OPV-PE/PRO	OptiView™ Protocol Expert software
OPV-PE/PLUS	OptiView™ Protocol Expert Plus Software (adds remote control and traffic generation functions)
OPV-PE/VOIP	VoIP Option for OptiView™ Protocol Expert
OPV-PE/EP	Upgrade from OPV-PE/PRO to OPV-PE/PLUS

Note: OPV-LA2 and OPV-LA2/HD require OPV-PE/PLUS to operate

Our Gold Support plans give you exclusive services and 24/7 technical assistance

Sign up for our Gold Customer Support plan and you'll enjoy outstanding privileges to protect and add value to your investment in Fluke Networks equipment. They include:

- Unlimited technical assistance seven days a week, 24 hours a day via phone or at our web site support center.
- Repairs on covered items and overnight exchange/loaner units for uninterrupted service.
- Free software upgrades.
- Scheduled calibration and performance verification services.
- Web based training.
- Access to our extensive Knowledge Base library of operation and application related technical articles.
- Gold "Members Only" special prices and promotions.

Some benefits are not available in all countries. For more information see: **www.flukenetworks.com/goldsupport**

Warranty

The OptiView Link Analyzer comes with a standard, one-year warranty. Our Network SuperVision Gold Support is available for the OptiView Link Analyzer. For Gold Support please visit: **www.flukenetworks.com/goldsupport**

NETWORKSUPERVISION