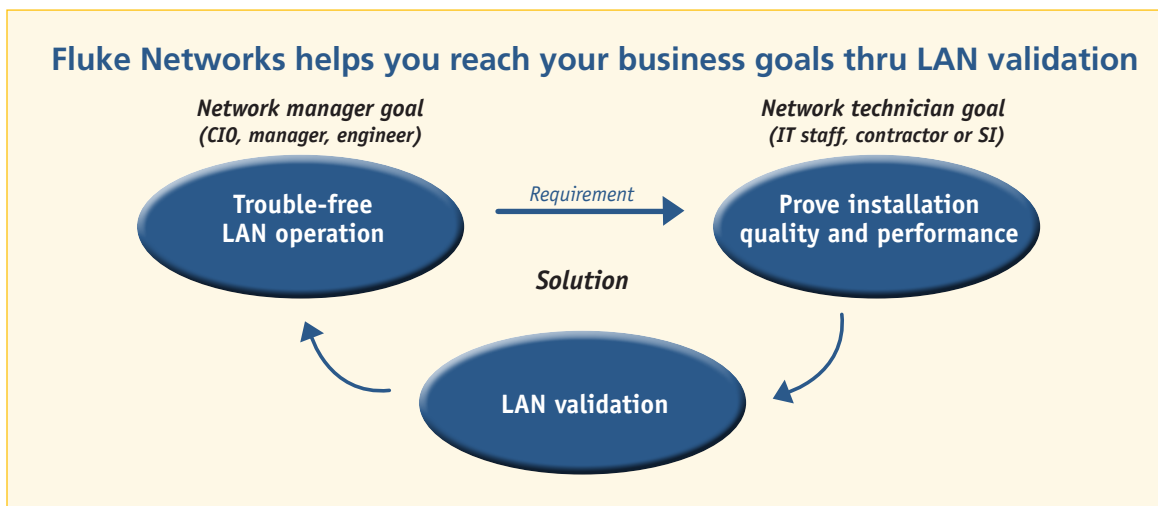


Network Technician Toolkits

Install, validate, and troubleshoot LANs fast

For many companies today, the local area network (LAN) is business-critical. If the network is down, the business is down. Therefore, network managers demand trouble-free network operation – or else their reputations or jobs could be at risk.

A business is a dynamic environment – employees are added or moved, client devices are upgraded or replaced, and new technologies are rolled out. The LAN supporting the business needs to adapt accordingly. When planning a network infrastructure expansion or upgrade project, the network manager expects new or upgraded LAN segments to exhibit the same trouble-free performance as the rest of his network. A smart manager requires that the network technician tasked with completing these projects prove that the new infrastructure was installed and configured correctly, and will perform as expected. LAN validation is that proof.



LAN validation maximizes network performance and minimizes network downtime by identifying and correcting problems at the conclusion of a LAN infrastructure installation project. The alternative is to skip validation and let employees find the installation-related problems in the course of normal business operations. When problems are found this way, costs are high as effected employees are unproductive and IT resources are needed to troubleshoot problems. It is more cost effective to proactively identify and fix problems via LAN validation – and since a validated LAN exhibits significantly fewer problems, employees are happier too.

Best practice: Step 1: Install LAN ➡ Step 2: Validate LAN ➡ Step 3: LAN goes live. Result few LAN problems, happy users

Alternative: Step 1: Install LAN ➡ Step 2: LAN goes live ➡ Step 3: Users find problems. Result: user complaints, high costs

LAN validation is a two-step practice that occurs just after the infrastructure installation and prior to the network going live with employees. It consists of (1) datacom cable certification and (2) LAN performance assessment.

- Cable certification guarantees that the installed and terminated twisted pair copper and fiber optic cabling complies with TIA/ISO standards. Standards-based certification is important to ensure that the cabling infrastructure will reliability support higher-layer network functionality.
- Performance assessment guarantees that the installed and configured LAN infrastructure devices, including network interface cards, switches, access points and routers (OSI layers 1 -3), are working together correctly to deliver network traffic with the desired speed (throughput) and quality (latency, jitter). Performance assessment also guarantees the availability and responsiveness of critical network services (OSI layers 4 -7). These services include successfully connecting clients to the LAN (DHCP), transferring files (FTP), browsing the web (HTTP), and URL-to-IP address translation (DNS).

Cable certification
+
Performance
assessment
=
LAN validation



Fluke Networks offers best in class solutions for cable certification and performance assessment. The DTX CableAnalyzer™ significantly reduces the total time to certify network cabling by improving every aspect of the testing process. The EtherScope™ Network Assistant significantly reduces the time to measure Ethernet performance and validate LAN services through proprietary algorithms that automate testing processes.



New DTX CableAnalyzer and EtherScope kits maximize value and cut expenses

The PRO Technician Kit includes everything needed for copper and fiber cable certification, Ethernet performance assessment, and wired and wireless LAN troubleshooting.

PRO Technician Kit

ES2-DTX-PRO-KIT = DTX-1800-M and ES2-PRO-SX/I-KIT

- 10 Mbps to 10 Gig copper cable certification
- Multimode fiber certification (Tier I)
- 10/100/Gig Ethernet troubleshooting
- 802.11 wireless LAN troubleshooting
- Gigabit Ethernet performance measurement with LinkRunner Pro Reflector (included)
- Service performance assessment

*Save 25%
off list
price when
purchasing a
DTX and ES2
together
in a kit!*

The LAN Technician Kit includes the basics for copper cable certification and wired LAN troubleshooting.

LAN Technician Kit

ES2-DTX-LAN-KIT = DTX-1800 and ES2-LAN-SX

- 10 Mbps to 10 Gig copper cable certification
- 10/100/Gig Ethernet troubleshooting

Contact your local Fluke Networks sales representative to learn more about Fluke Networks network test solutions or to schedule an on-site product evaluation.

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LAN Validation ROI Example			
Cost of not validating new LAN installations and upgrades	LAN infrastructure installation and upgrade projects	20	projects/year
	Project size	200	cable drops/project
		4000	cable drops/year
	Network problems identified by employees	24	problems/project
		480	problems/year
	Employee downtime cost	1	hours/problem
		480	hours/year
		\$16,800	/year @ \$35/hr
	IT staff troubleshooting cost	1	hours/problem
		480	hours/year
	\$12,000	/year @ \$25/hr	
	Cost of not validating and letting employees find problems	\$28,800	/year
LAN validation cost	Labor hours to validate project quality using Fluke Networks PRO Toolkit	5	min/drop
		333	hrs/year
	Cost of LAN validation	\$ 8,333	\$/year at \$25/hr
Savings	LAN validation	\$20,467	/year
	ROI	\$17,995	cost of PRO Toolkit
		11	months

Example based on U.S. dollars.

NETWORK SUPERVISION

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