



EtherScope™ Series II

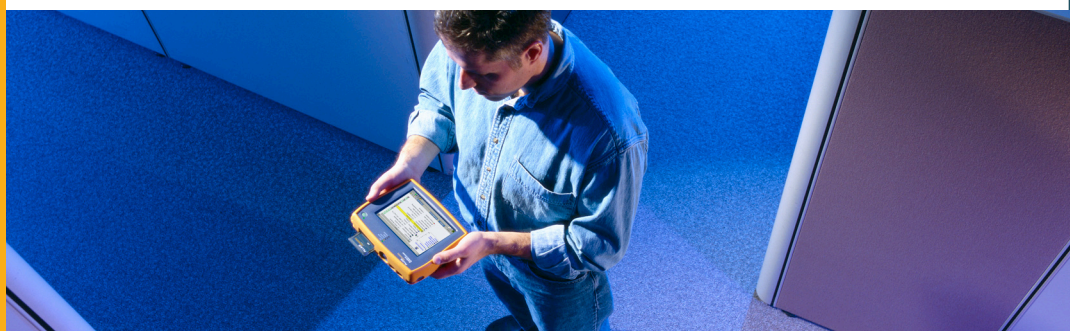
Wireless Network Assistant

With Wireless EtherScope, you can:

- **Solve WLAN problems fast** – EtherScope scans 2.4GHz and 5GHz frequencies to provide RF visibility across 802.11a, b, and g networks.
- **Find top-talkers** – Measure network utilization and find out which users are demanding more of the wireless LAN. Find out which wireless access points are overburdened by congregating clients.
- **Discover unauthorized devices** – Discover rogue access points, unauthorized bridges, and ad-hoc networks and quickly locate these devices inside or outside of the building by using signal strength measurements and directional tools.
- **Plan for wireless expansion** – Verify current wireless network coverage using site survey capabilities.
- **Troubleshoot EAP authentication** – Monitor the EAP authentication process of any wireless client to see if, when, and where the process breaks down.
- **View data instantly** – See all wireless infrastructure and client devices, monitor signal quality data, and measure network utilization. Wireless network measurement statistics help you troubleshoot difficult WLAN issues.
- **Easily use** – A bright, color, touch-screen display, intuitive user interface and context-sensitive help makes EtherScope Series II Network Assistant a snap to use.

You receive the call when users are unable to access your wireless LAN, when it's slow, or when it's down. Wasting no time, you grab your proven assistant and rush off to solve the problem.

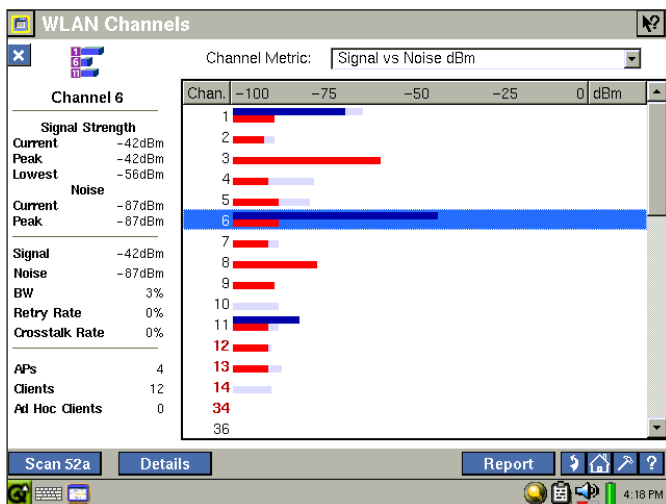
With a/b/g wireless and 10/100/Gig wired/fiber analysis built-in, EtherScope Series II provides vision into your network on both sides of the access point so you can investigate, isolate and solve problems fast.



Troubleshoot RF coverage and performance issues

RF measurements

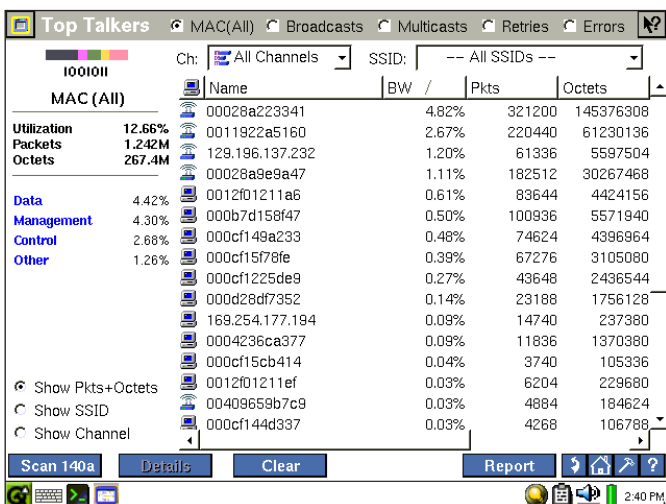
Is co-channel interference causing a problem? Is signal strength too low to support all users? EtherScope continuously scans 2.4GHz and 5GHz frequencies, providing visibility into wireless LAN coverage and performance. Choose the measurement you wish to view using drop down menus that include signal strength, signal to noise ratio, utilization, and several other useful measurements. Quickly determine if your access points are configured for the appropriate channels and that the RF transmit power is appropriate for your environment.



Channel scan

Identify top talkers

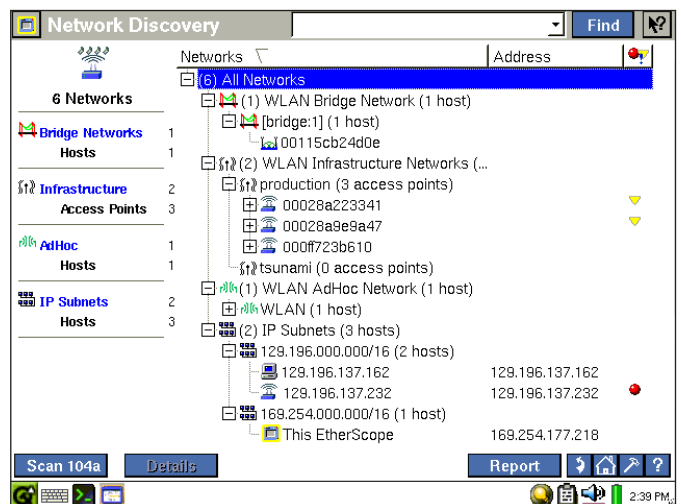
See who the top bandwidth users are at a glance. Use Wireless EtherScope to identify the busiest access points and the most demanding wireless clients.



Top talkers

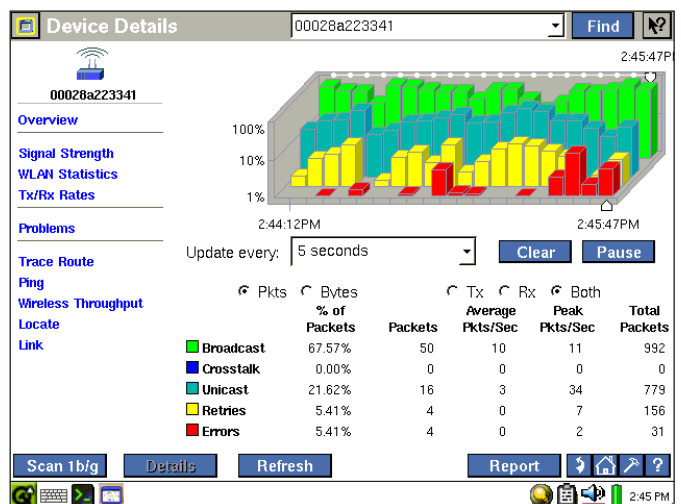
Network Discovery

Who is using the network, and where are they? Are wireless clients congregating in one area of the building, dragging down wireless network performance? Wireless EtherScope quickly identifies all wireless network access points and discovers all associated clients. Visibility into wireless network utilization helps you make better decisions about access point placement and expansion to support actual usage patterns.



Network discovery

Drill-in to view wireless LAN metrics such as FCS errors, crosstalk, and retries. Identify suspicious activity, then identify the source and solve the problem.



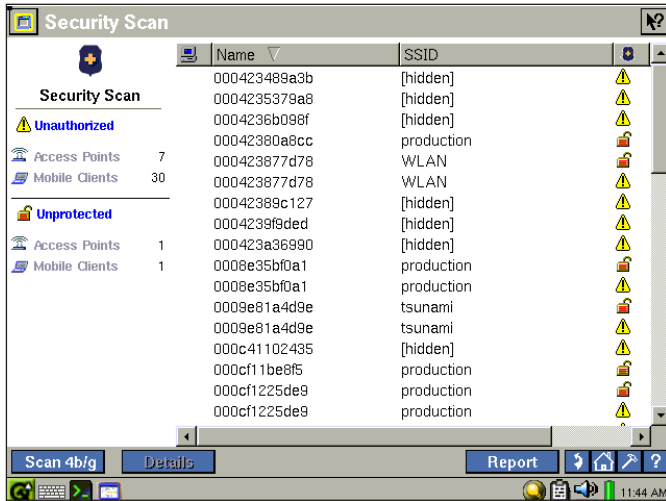
Device details



Wireless security and policy enforcement

Discover unauthorized devices

Wireless security is a top concern, and wireless security policies are difficult to enforce. Use Wireless EtherScope to perform periodic audits of the wireless environment. Wireless EtherScope automatically discovers rogue access points, unauthorized wireless bridges, mobile clients and ad-hoc networks, enabling quick response and resolution.



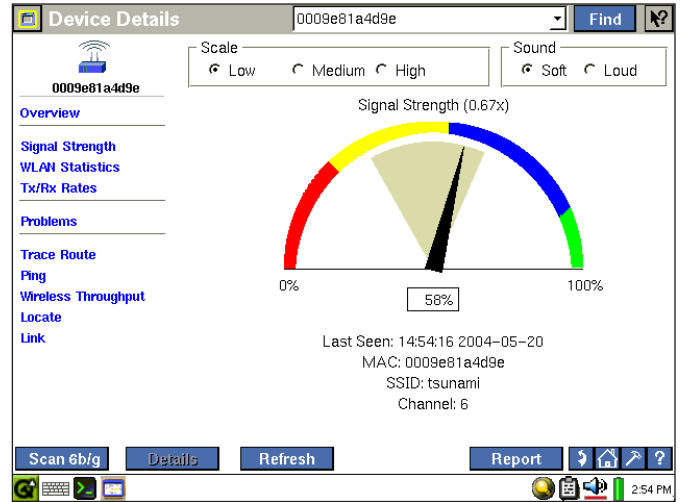
Discover unauthorized devices

Verify authentication and encryption

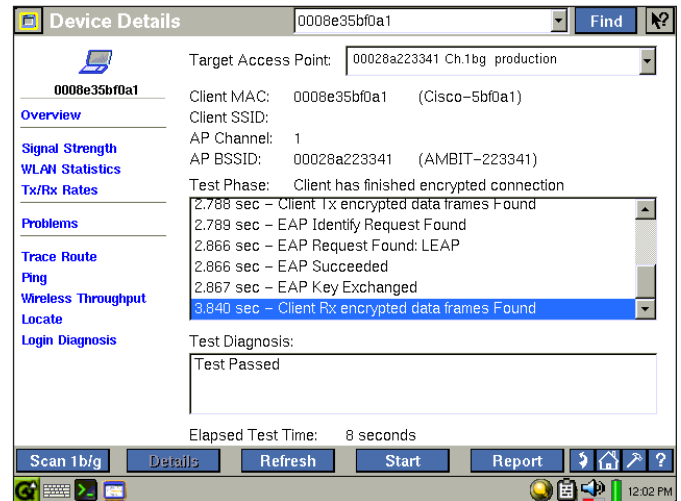
Wireless EtherScope discovers whether infrastructure and client devices are employing the appropriate authentication mechanism. EAP (Extensible Authentication Protocol) authentication is tested and monitored using EtherScope's login test tool. Using EtherScope, force a wireless client to disassociate from an access point, and monitor the client and access point EAP exchange as the client re-authenticates on the network. Discover if, where, and when the EAP authentication process breaks down.

Locate rogue devices

Use the Locate feature to physically track down rogue devices and ad-hoc network. Follow audible and visual indicators that lead you to the location of the offending device!



Locate rogue devices



Verify authentication and encryption



Planning wireless network expansion

Site survey

Has the RF environment changed since the access points were installed? Is wireless network coverage sufficient to support all users? Does the wireless network provide ubiquitous coverage sufficient to support seamless roaming?

Use Wireless EtherScope to capture baseline RF coverage data immediately after the wireless infrastructure is installed, then compare historical data to periodic survey data over time. Use this information to make minor adjustments to wireless access point transmit power, relocate access points, or add new access points before RF environmental changes impact your user community.

The screenshot shows the 'Site Survey' application window. At the top, the location is set to 'pod2'. Below this, there are statistics for the current survey: 3 surveys, 6 total APs, 0 new APs, and 0 missing APs. The date is May 20, 2004, at 02:52 PM. A table lists detected networks with columns for SSID, BSSID, Channel, and Signal strength. The networks listed are: [bridge:1] (BSSID: 00115cb24d0e, Ch: 11, Signal: -74dBm), [hidden] (BSSID: 000f723b610, Ch: 1, Signal: -80dBm), production (BSSID: 0011922a5160, Ch: 6, Signal: -63dBm), production (BSSID: 00028a9e9a47, Ch: 6, Signal: -36dBm), production (BSSID: 00028a223341, Ch: 1, Signal: -68dBm), and tsunami (BSSID: 0009e81a4d9e, Ch: 6, Signal: -20dBm). Buttons for 'Scan 132a', 'Details', 'Clear', 'Save', and 'Report' are visible at the bottom.

Site survey

Reporting

Network reports

Document your wireless network with EtherScope generated XML reports. Record network metrics, site survey data, and network discovery lists for use in status reports and for historical reference.

FLUKE networks EtherScope™ Network Assistant
WLAN Site Survey - Current vs. Previous
May 19 15:05:33 2005
Location: pod2
Current Reading: May 19 15:05:19 2005
Previous Reading: 15:05:06 2005-05-19

SSID: 00028a223341	Current	Previous
SSID: production	production	lake
Channel: 1	1	1
Signal: -72dBm	-72dBm	-53dBm
% Errors: 0	0	0
% Retries: 0	0	0
% Utilization: 0	0	0

SSID: 00028a9e9a47	Current	Previous
SSID: production	production	lake
Channel: 6	6	6
Signal: -47dBm	-47dBm	-52dBm
% Errors: 0	0	0
% Retries: 20	20	0
% Utilization: 0.38	0.38	0

SSID: 0009e81a4d9e	Current	Previous
SSID: tsunami	tsunami	tsunami
Channel: 6	6	6
Signal: -18dBm	-18dBm	-9dBm
% Errors: 0	0	0
% Retries: 0	0	0

Wireless reports

Network SuperVision Gold Support

Sign up for our Network SuperVision Gold Support plan and you'll enjoy privileges to protect and add value to your equipment. These include unlimited 24x7 technical assistance and an exchange unit at no cost in the event something happens to your unit. Support also includes unlimited access to the knowledgebase and "members only" promotions.

See www.flukenetworks.com/goldsupport for details.

Ordering Information

Model	10/100/1000 twisted pair	1000 Mbps fiber optic	802.11a/b/g wireless	IT0/RFC 2544	Protocol Expert	InterpretAir	AnalyzeAir	Contents
ES2-LAN-SX/I	•	•		•				LAN analyzer, SX Fiber, IT0/RFC 2544 Mainframe, rechargeable Li-Ion battery pack (installed), protective boot, carrying strap, AC adapter/battery charger, remote wire map (WireView #1), 64MB CompactFlash® card, patch cable, RJ-45 coupler, CD containing user manuals and other useful files, carrying case plus SX Fiber Option and Internetwork Throughput Option (IT0)
ES2-PRO-SX/I	•	•	•	•				LAN and Wireless LAN analyzer, SX Fiber, IT0/RFC 2544 ES2-LAN-SX/I plus 802.11a/b/g Cardbus adapter and external directional antenna.
ES2-PRO-SXLX-I/S	•	•	•	•				LAN and Wireless LAN analyzer, SX and LX Fiber, IT0/RFC 2544, accessories kit ES2-PRO-SX/I plus, LX Fiber SFP, replacement battery, external battery charger, USB mini keyboard, WireView outlet IDs #2 - #6 and large carrying case.
ES2-PRO-SX/I-PE	•	•	•	•	•			Protocol Expert Suite ES2-PRO-SX/I plus Protocol Expert software package for laptop/tablet PC
ES2-PRO-SX/I-IA	•	•	•	•		•		InterpretAir WLAN Survey Software Suite ES2-PRO-SX/I plus InterpretAir WLAN Survey Software for laptop/tablet PC
ES2-PRO-SX/I-AA	•	•	•	•			•	AnalyzeAir Wi-Fi Spectrum Analyzer Suite ES2-PRO-SX/I plus AnalyzeAir Wi-Fi Spectrum Analyzer for laptop/tablet PC
ES2-PRO-SX/I-IA-AA	•	•	•	•		•	•	InterpretAir and AnalyzeAir Suite ES2-PRO-SX/I plus InterpretAir and AnalyzeAir solutions



Top interfaces - 10/100/Gigabit twisted pair copper port, Gigabit Fiber SFP transceiver, Compact Flash memory card, and 802.11a/b/g WLAN PCMCIA card.



802.11a/b/g cardbus wireless adapter.

Options & Accessories

Model	Option
ES-WLAN-OPT	802.11a/b/g wireless upgrade option for all LAN-only models
ES-LAN-OPT	10/100/1000 LAN upgrade option for all Wireless LAN-only models
ES2-SX-OPT	SX Gigabit Fiber Option for all LAN-enabled models
ES-IT0-OPT	Internetwork Throughput Option for all LAN-enabled models
Model	Accessory
ES2-SX	SX Gig Fiber SFP Transceiver (850nm VCSEL, replacement item)
ES2-LX	LX Gig Fiber SFP Transceiver (1310nm FP laser, SX Fiber Option required)
ES2-ZX	ZX Gig Fiber SFP Transceiver (1550nm DFB laser, SX Fiber Option required)
ES-ACCY-KIT	Kit containing an EtherScope battery, external battery charger, AC charger and line cord, USB mini keyboard, WireView identifiers #2 - #6, and a larger carrying case
DSP-FTK	Fiber optic test kit, 850nm and 1300nm LED source and 850/1300/1550 nm meter
ES-BATTERY	Replacement battery
ES-BATT-CHG	External battery charger
WIREVIEW 2-6	Remote identifiers 2 - 6
OPVS2-KB	Mini USB keyboard
ES-WCARD	Replacement WLAN card (hardware only)
DTX-ACUN	AC charger, universal
OPV-POE	Power Over Ethernet adapter
MT-8200-63A	IntelliTone 200 Probe
MT-8200-53A	IntelliTone 100 Probe
944806	Null modem cable (DB9)

NETWORK SUPERVISION

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Fluke Networks operates in more than 50 countries worldwide. To find your local office contact details, go to www.flukenetworks.com/contact.

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