

Powerful and Affordable 802.11 Network Analysis Solution



Complete 802.11 Wireless Troubleshooting

By combining the 802.11 capture capabilities of AirPcap, the spectrum-level visibility of Wi-Spy, the visualization, drill-down and reporting features of CACE Pilot, and Wireshark's vast collection of protocol dissectors, CACE Technologies and MetaGeek have created the WiFi Pilot bundle, a complete wireless network analysis troubleshooting solution.

With the WiFi Pilot Bundle, you can:

- » Measure wireless channel utilization from the data and spectrum points of view simultaneously
- » Ensure safe, compliant, optimized operation of your wireless network
- » Easily identify rogue wireless networks and stations
- » Instantly detect 802.11 performance bottlenecks with sophisticated triggers and alerts
- » Move through long-duration View metrics using WiFi Pilots unique Time Control feature
- » Troubleshoot advanced issues like malfunctioning roaming with multiple AirPcap adapters
- » Provide professional, detailed reporting to clients and managers

WiFi Pilot Bundle Components

WiFi Pilot Analyzer: The Heart of the Solution

The WiFi Pilot analyzer is the core of the WiFi Pilot Bundle. A wireless-only subset of the popular CACE Pilot network analysis, visualization, and reporting tool, WiFi Pilot provides the same rich GUI with all of the display, drill-down, and reporting features, but with an 802.11, MAC-level-specific focus.



WiFi Pilot and Chanalyzer™

AirPcap: Unparalleled Wireless Traffic Capture

WiFi Pilot works exclusively with the AirPcap Family of WLAN packet capture adapters under Windows. The AirPcap Family, ranging from an 802.11b/g capture-only adapter to an 802.11a/b/g/n capture and injection adapter with two external MC-Card connectors for optional antennas, are USB-based and capture full 802.11 data, management, and control frames.



AirPcap adapters are USB-based and capture full 802.11 data, management, and control frames.

Thanks to the integration with AirPcap adapters, WiFi Pilot is the only product to offer full multi-channel packet capture from a laptop-based system.

Wi-Spy: Robust Spectrum Analysis

The Wi-Spy USB-based adapter and Chanalyzer software adds industry-leading spectrum analysis to the WiFi Pilot Solution. With Wi-Spy, you can easily find the open channel and minimize interference when installing, maintaining, or troubleshooting 802.11 networks. Depending on the Wi-Spy adapter chosen, you can track all radio activity from devices operating in the 2.4 GHz or 5 GHz band, including Radio Frequency Identification (RFID) tags, cordless phones, sensor networks and automation devices. MetaGeek's Chanalyzer 3.x software graphically displays which channels to use and which ones to avoid by obtaining real-time radio data and by identifying interfering devices.

The WiFi Pilot Bundle includes either Wi-Spy 2.4i (802.11b/g, Chanalyzer Lite), Wi-Spy 2.4x (802.11b/g, external antenna, Chanalyzer 3.x), or Wi-Spy DBx (802.11a/b/g/n, external antenna, Chanalyzer 3.x).

Wi-Spy 2.4i is the world's smallest 2.4 GHz spectrum analyzer.

Designed for the enterprise environment – where IT manages multiple 802.11a/b/g/n networks – Wi-Spy DBx has serious horsepower.



WiFi Pilot Features and Benefits

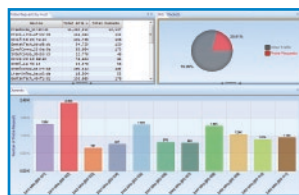
Wireshark Integration

WiFi Pilot and the AirPcap adapters are fully integrated with Wireshark, allowing you to leverage your team's existing expertise with the world's most widely-deployed network analyzer. Using WiFi Pilot's innovative Channel selection interface, you have complete control of your AirPcap adapters while capturing with Wireshark. Wireshark's prodigious dissector library for deep 802.11 packet analysis and the corresponding display filters are available for use within WiFi Pilot.



WiFi Pilot Views and Charts: Powerful Analysis and Visualization

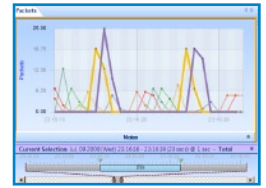
Views are the core analysis and visualization paradigm in WiFi Pilot. WiFi Pilot includes over 35 Views, providing a broad range of MAC-level protocol analysis support for wireless networks. An almost limitless variety of Views can be created when used in conjunction with Wireshark's capture and display filters.



WiFi Pilot features a complete collection of interactive Charts, including bar, pie, and strip charts, conversation rings, scatter diagrams, and grids. Visual selections can be performed on elements within a Chart, such as selecting individual bars within a bar chart or time intervals within a strip chart, giving rise to a powerful visual filtering mechanism.

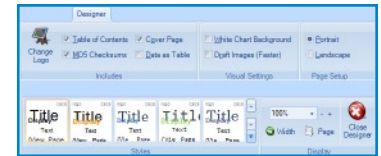
Drill-Down: Drag-and Drop Simplicity

Drill-down on both live and trace file sources is one of the most powerful and unique features in WiFi Pilot. Drill-down occurs when you apply a View to a selection made within a Chart. This powerful paradigm multiplies your analysis capabilities. WiFi Pilot's drill-down feature allows you to analyze very large trace files, quickly guiding you to anomalous network behavior.



Reporting: Fast and Professional

WiFi Pilot offers a rich set of reporting facilities fully integrated with WiFi Pilot Views, enabling you to easily and quickly create professional reports in a variety of formats including Word, Excel, and PDF from on-screen displays. You also can include your own annotations in your reports to tailor them to your customer's or manager's needs.



Time Control: Long-Term Metrics for Retrospective Analysis

Viewing network traffic metrics computed over days, weeks, and months can be challenging.



With WiFi Pilot's "back-in-time"

capability, you can easily move through View metrics over extended periods of time with just a few mouse clicks. Based on the selected time interval, sub-sampling and data aggregation techniques are used to optimize the granularity of the visual presentation of View metrics. The "back-in-time" capability can be applied to live and off-line traffic metrics.

Watches: Advanced Trigger and Alerting Mechanism

WiFi Pilot includes a sophisticated triggering and alerting technology called "Watches." Create a Watch (trigger plus action) on many MAC and Wireless View metrics and be alerted based on a trigger condition computed on the metric. For example, you can be alerted on high bandwidth, number of retransmissions, signal strength, and more. When a Watch detects that a trigger condition has been met, an action will be executed. Actions include event logging, sending email, and starting a packet capture.



WiFi Pilot Views List

WiFi Pilot includes over 35 Views, providing a broad range of MAC-level protocol support for wireless networks.

Top Level Views

- Discovery – APs and Stations
- MAC Overview

Generic Analysis

- Capture Summary
- Bandwidth Over Time
- MAC Conversations
- Top MAC Sources
- Top MAC Destinations
- Top MAC Unicast
- Multicast and Broadcast Stations
- Unicast vs. Multicast vs. Unicast Traffic
- Frame Size Distribution
- Frame Size Over Time

Traffic Analysis

- Top Traffic
- Frame Types
- Frame Type vs. Time
- Frame Transmission Rates
- Encryption Analysis
- Vendor Analysis
- Wireless A-B-G-N
- Associations, and Probe Requests

Bandwidth

- Channel Bandwidth vs. Time
- Host Bandwidth vs. Time
- SSID Bandwidth vs. Time
- Encryption Type Bandwidth vs. Time

Scatter Diagrams

- Source Analysis and Channel Analysis

Channel Usage

- Channel Usage vs. Time
- Channel Usage Scatter Diagram

Retransmissions

- Retransmission Overview
- Retransmission Conversations
- Retransmissions vs. Normal Traffic
- Host Retransmissions vs. Time

Signal and Noise

- RF Overview
- Channel RF vs. Time
- Average RF vs. Time

ARP Views

- ARP Overview
- ARP Traffic vs. Total Traffic
- ARP Details

Update Subscription

WiFi Pilot analyzer pricing includes a 12-month Update Subscription, providing automatic access to updates and upgrades to the analyzer as they occur. Update Subscriptions are renewable after the first year.

Licensing, Activation, and Installation

The WiFi Pilot Software License Agreement is a single-seat license. Activating and installing WiFi Pilot can be accomplished either through an online or call-in process.

System Requirements

Operating systems: Windows XP and Vista

Suggested Hardware Platform:

- Pentium-D (dual core) 2.0 GHz processor
- 2 GB RAM
- 300MB free disk space plus additional space for trace files and reports
- Support for graphics cards with a minimum resolution of 1024 x 768

About CACE Technologies, Inc.

Founded in 2005 with the vision of offering superior tools to the networking community, CACE Technologies, Inc. has since become a leader in the network analysis industry. Our innovative product portfolio includes the AirPcap family of wireless packet capture adapters for Windows, the TurboCap™ full-rate dual-port Gigabit Ethernet capture and injection solution, and CACE Pilot™, a powerful and intuitive network analysis, visualization and reporting tool. CACE also provides support, training, and development for two of the most popular and highly acclaimed open-source networking tools: WinPcap and Wireshark.

All CACE products are fully integrated with Wireshark and are designed to enhance the Wireshark user experience.