

Bluetooth[®] Protocol Expert System

Key Features and Benefits

- · Data is displayed in a tabular format with protocol errors linked to the relevant sections of the Bluetooth specification
- Automatically identifies errors, protocol violations, and suggests best practices
- Shows connection statistics, including channel IDs, handles, modes, right at your fingertips
- Synchronization with other views, including the Frame Display makes drill down to details easy
- Graphical interface allows clear and concise views of protocol configurations, statistics and results
- Works on both live capture data and pre-captured CFA files
- Analyses data captured over the air and over the wire (HCI)
- All information displayed can be exported to CSV for archiving and offline review
- Highlights connections associations between different protocol layers

System Requirements

- OS Supported: Win 7 and Win 8
- Processor: Core i5 processor at 2.7 GHz
- RAM: 4 GB
- Free Hard Disk Space: 20 GB
- **Required Hardware:** ComProbe BPA 600 or ComProbe Sodera

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Bluetooth Expertise On Demand

The number of Bluetooth-enabled products and the companies that make them are rising rapidly - so rapidly, in fact, that highly experienced Bluetooth engineers have become a precious commodity in an industry where the demand for these professionals is skyrocketing, and where the key wireless technology adds profiles and protocols on an almost daily basis. Even when the demand for talent is met, development time and resources are still at a premium, requiring greater efficiency and precision in the lab during the development and QA cycles.

Frontline's Bluetooth Protocol Expert System complements the decoding power of the ComProbe Protocol Analysis Software by providing developers at all experience levels with concise in-depth analysis of *Bluetooth* profile issues and errors. But the Bluetooth Protocol Expert System doesn't just identify errors - it simplifies root cause analysis of what's causing those errors, making it an indispensable tool for developers that are new to Bluetooth, and for Bluetooth experts alike.

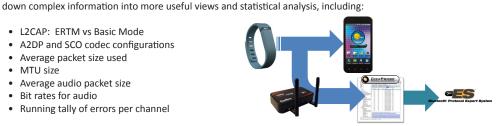
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How the Expert Can Help

Having the Bluetooth expert in your lab means that the decoded Bluetooth packets are not the end of the line in your debugging process. The Bluetooth Protocol Expert System automatically analyzes those packets to reveal when your implementation is violating protocol (currently A2DP and L2CAP with more profiles coming), and even identifies, with references to the relevant entries in the Bluetooth specification, violations of best practices and protocol ambiguities to be removed or avoided.

Using the concise and clear graphical interface provided by the Bluetooth Protocol Expert System, users with any level of Bluetooth experience can easily break

- L2CAP: ERTM vs Basic Mode
- A2DP and SCO codec configurations
- Average packet size used
- MTU size
- Average audio packet size
- Bit rates for audio
- Running tally of errors per channel •



The Bluetooth Protocol Expert System also indicates connections associations between different protocol layers, and is fully integrated with the familiar ComProbe Protocol Analysis System software views and the Bluetooth Audio Expert System software module. Follow any packet from the Bluetooth Protocol Expert System to that moment in the ComProbe Software's Bluetooth timeline, Frame Display, or other views. The Bluetooth Protocol Expert System leads you intuitively right to that needle in the haystack.

Learning from the Expert

Like many experts, the Bluetooth Protocol Expert System is a great teacher as well. By identifying problematic protocol interactions, protocol violations, and violations of best practices in clear and concise language, the Bluetooth Protocol Expert System helps developers optimize code and make the best use of the Bluetooth protocol.

Even after the debugging session is behind you, the Bluetooth Protocol Expert System, which works on both live captures and pre-captured traces, allows the inquisitive developer to review captures at any time, and even export data to CSV format for offline review.



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