



ChannelProbe

Voice/Fax V.17 Protocol Analyzer

Features

- Powerful facsimile protocol analyzer
- Easy-to-use interface, full T.30 analysis
- Voice and tone testing
- Configurable fax/voice call generation
- Remote data acquisition via Internet
- Multi-node configurations for end-to-end testing

Benefits

- Save time isolating interoperability problems
- Get the whole picture - high level to bit level
- One product to buy and learn to test fax, voice and tone
- Configure fax vs. voice lines to suit your needs
- Remote use saves support travel costs

Applications

- Product development
- Quality assurance testing
- Field diagnostics
- End-to-end telephony service testing

ChannelProbe is a robust multi-node communication channel test tool for R&D, QA and field service personnel. You can isolate facsimile interoperability problems quickly with ChannelProbe's passive monitoring and protocol analysis capabilities.

ChannelProbe can generate traffic with well-known characteristics and varying loads to test fax and voice systems. The product's distributed hardware architecture simplifies the task of performing end-to-end testing of facsimile and voice communication systems, and quickly identifies problems caused by the network infrastructure.

Product Configuration

ChannelProbe is a software application that runs on any Windows XP or 2000 workstation. Traffic monitoring and generation is done by a self-contained hardware device called a ChannelTrap. ChannelProbe software can control one or more ChannelTraps over TCP/IP or a locally-attached serial cable*.

ChannelProbe identifies facsimile problems and also includes Voice/Tone testing capabilities.

Isolating Facsimile Problems

ChannelProbe monitors, originates, or sends facsimile transmissions through its ChannelTrap hardware. The ChannelTrap sits between a fax unit and the analog connection to the public telephone network and monitors and reports the traffic from the call's originating and answering points.

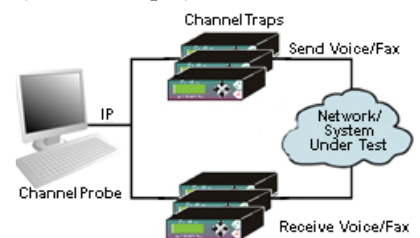
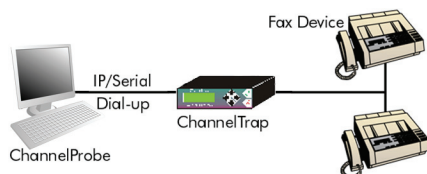
ChannelProbe has an elegant, easy-to-use interface that displays all captured facsimile protocol data and message content. From a high level view, you can quickly drill down to the bit level. Rich analytical software identifies protocol errors and provides guidance on their severity. The Dynamic CCITT/ITU-T T.30 Help window explains signals, data formats and byte descriptions, so understanding an error in relationship to fax standards is a snap.

Isolating a transmission problem may require a known-good facsimile device to originate or answer a call with specific predefined behavior (i.e., modulation, coding method, test chart). ChannelProbe's "golden" sender or receiver, with fully configurable transmission characteristics, plays specific test scenarios and reports protocol violations. You can define multiple test calls with differing behavior to create "mini-test suites" for isolating problems quickly.

Isolating End-to-End Transmission Errors

Facsimile calls can be corrupted, and voice/tone traffic can be degraded as they move through a complex digital or analog network. This can occur as the result of timing delays, dropped packets, or other network anomalies.

You can use multiple ChannelTraps to create an end-to-end test system that plays both the originator and the answering party in fax/voice sessions.



ChannelProbe

This system identifies protocol violations, fax message degradation, DTMF errors, and voice call degradation as a result of the network transport.

Isolating Fax/Voice Traffic Volume Problems

Communication servers, routers and other system software can fail when subjected to high volumes of fax and/or voice traffic. To isolate this type of failure, use multiple ChannelTraps to generate fax and/or voice traffic simulations, with all sessions controlled by a single ChannelProbe GUI interface. ChannelProbe can control up to 48 ChannelTrap devices simultaneously. You can define test cases to create varying types of mixed facsimile and voice traffic, and run tests continuously for days or even weeks. ChannelTrap units can be distributed in a variety of locations to realistically simulate traffic patterns.



Solving Remote Field Service Problems

You can easily ship a ChannelTrap unit to a site that is encountering a problem, then isolate the problem with ChannelProbe from the home office via TCP/IP or an Internet connection. ChannelTrap is easy to ship and setup at a remote site and can dramatically reduce your support travel costs. ChannelProbe is the most versatile and powerful test tool for isolating problems over your communication channels.

Ordering Information

T4003-KE: ChannelProbe Kit
ChannelProbe Kit contains the following:
T4003-SE: ChannelProbe Software
T4003-EKEY: ChannelProbe Key
F2008-T: ChannelTrap

Capabilities Overview

Facsimile Capabilities

- Support for all 1/1996 ITU-T recommendations
- Real time call monitoring, up to 14.4 KBS
- Detailed post-call analysis of T.4, T.6 and T.30 conformance
- Originate or answer fax calls
- Send or receive predefined and custom test fax pages
- HDLC data decoding
- Call Summary, with error summary
- Complete results database manager
- T.30 help system
- T.4 and T.6 data encoding/decoding
- Bitmap viewer for received messages
- Call Map for navigating from high level to bits
- Numerous reports covering all fax characteristics
- Extensive global configuration setting
- Large selection of predefined test charts

Voice/Tone Capabilities

- Test analog voice over multiple lines
- DTMF tone transmission/reception
- Voice waveform transmission/reception
- Complete results database
- Round trip delay measurement
- Compare received waveforms to reference waveform
- DTMF measurements (Signal Level, Duration, PostSilence Time, etc.)
- Extensive configuration options

ChannelTrap Hardware Capabilities

- Monitor facsimile calls
- Originate and answer facsimile/voice calls
- LCD readout with front panel controls
- Remote control via TCP/IP connection
- Software configuration/status (from ChannelProbe)
- Report unit availability to remote ChannelProbe host
- Report operational status to remote ChannelProbe host
- Perform Synchronize Calls and Continuous Operation on command



Putting Technology to the Test

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*Serial interface supported on Windows 2000 and earlier versions only.