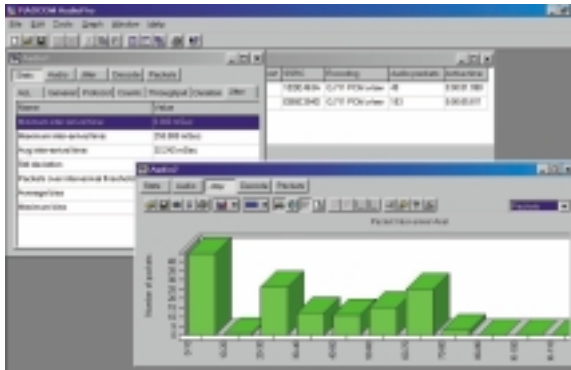# PrismLite

WAN/LAN/ATM Protocol Analyzer

The whole spectrum
of internetwork testing for
convergence networks

RAD COM

TEST-OF-THE-ART

Managing multi-service networks

Using on-line protocol filtering packet analysis, the PrismLite is truly a multi-service test tool.

Voice
PBX
ATM Network
PrismLite
Service Mux
Video Switch
Data Switch
Data
Image
Image
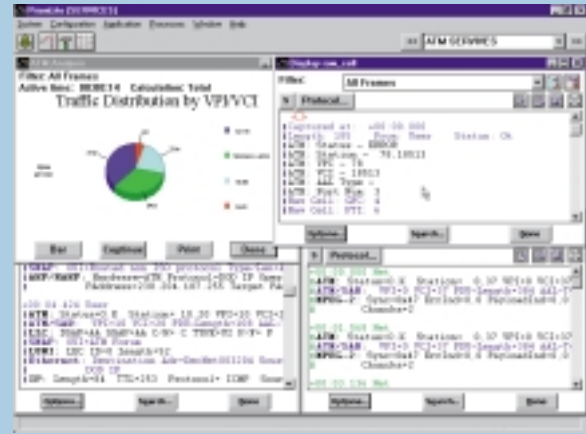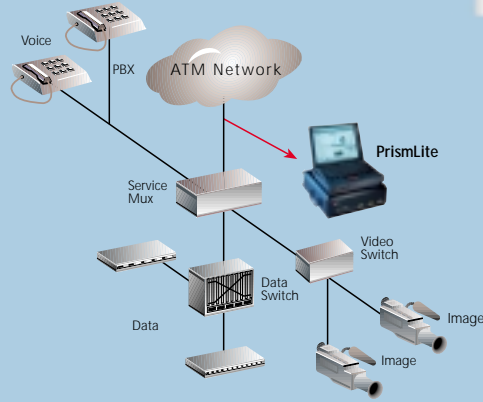
Telecom VoIP testing

Supporting a range of telecom technologies such as SS7, V5 and cellular protocols in addition to H.323, MGC and SIP over traditional WAN/LAN data protocols makes the PrismLite an ideal and natural tester for packet telephony.
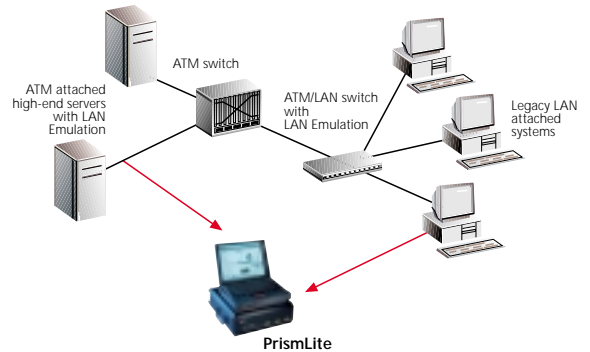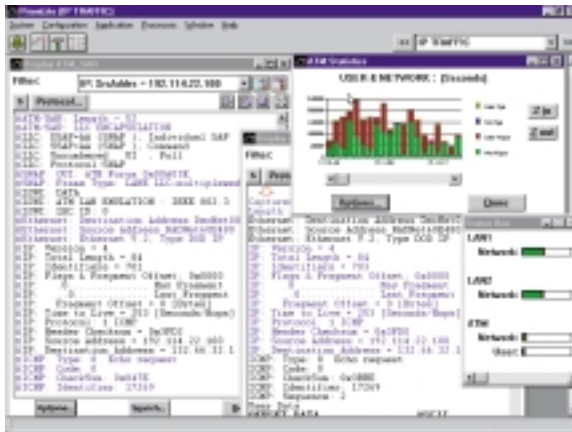
IP Network
Gateway
PrismLite
PSTN
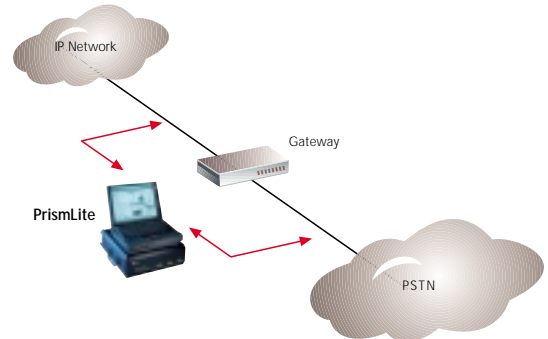
Cellular testing

Every GSM, CDMA and GPRS interface can be monitored and tested. Consequently, the PrismLite is an ideal tool for developers of cellular networks, test and verification labs and installation crews. And the GPRS Consultant aids in understanding network activity.

BSS
SS7
Cellular network
GPRS network
IP network (Internet)
PrismLite
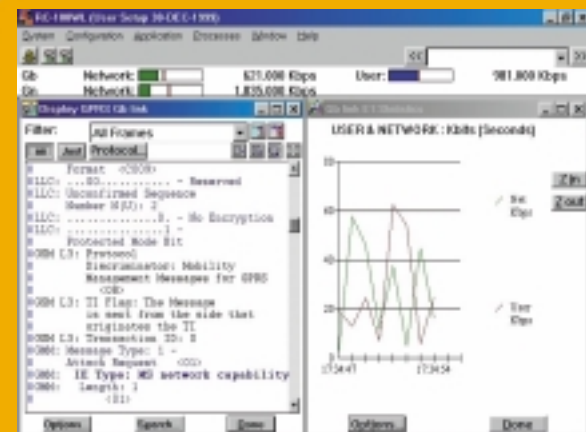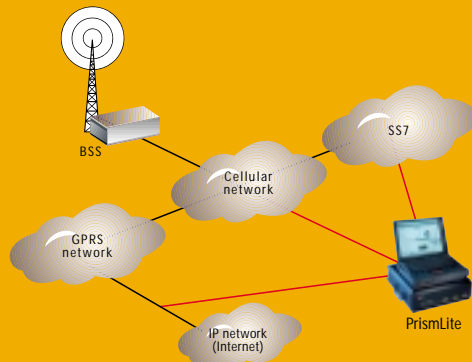
Tracking TCP/IP over any technology, in real time

The PrismLite connects to several technologies at the same time. With its live protocol filtering and real-time ATM packet reassembly, the PrismLite is the ideal analyzer for testing TCP/IP and more than 350 other protocols over any link.

ATM attached high-end servers with LAN Emulation

ATM switch

ATM/LAN switch with LAN Emulation

Legacy LAN attached systems

PrismLite

Verifying ATM QoS and tracking down non-conforming ATM traffic

Carriers and service providers can use the PrismLite to monitor thousands of VCs and track down non-conforming traffic. In addition, ATM users can proactively measure and verify that the contracted QoS is actually delivered.

ATM

Edge switch

Users
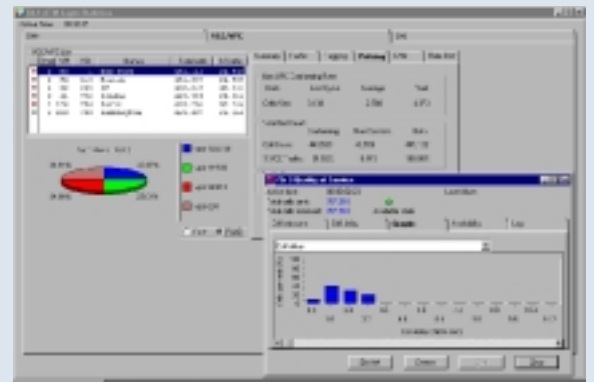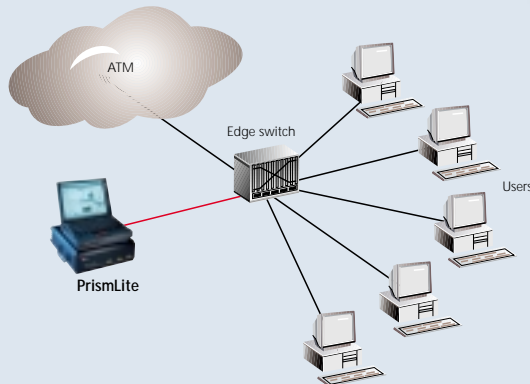
PrismLite

Installing a hybrid Frame Relay and ATM network

The PrismLite can generate Frame Relay data over both Frame Relay and ATM links. By establishing an end-to-end connection through an internetworking function, it is possible to ensure that the network is configured correctly.

ATM Network

ATM

FR/ ATM interworking function

FR

FR Network
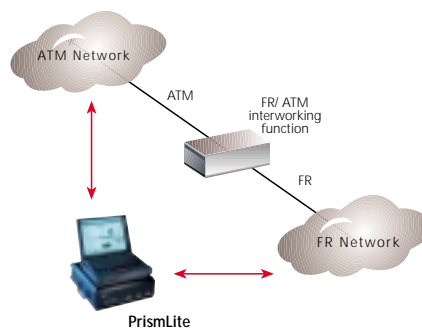
PrismLite

Solving remote access problems

The PrismLite supports multilink PPP and a host
of PPP control, authentication and compression protocols.
This can be used to debug a remote LAN access scenario.
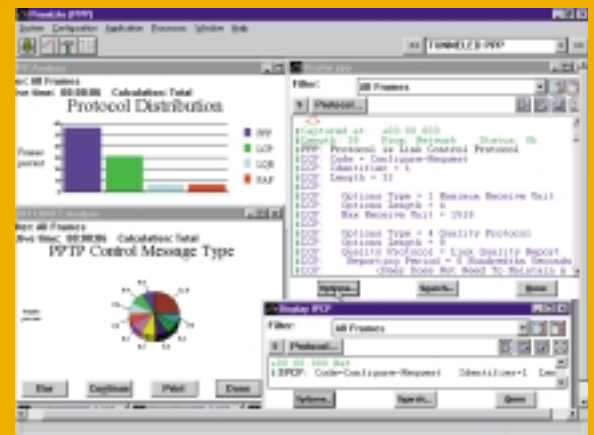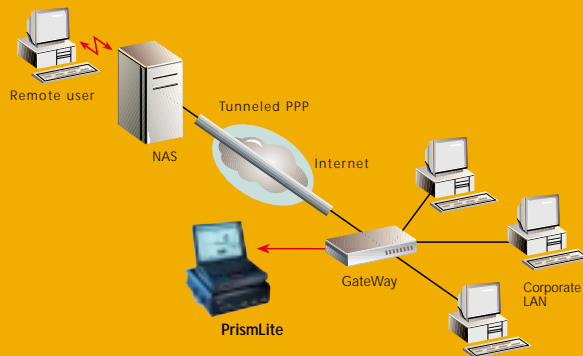

Remote user

NAS

Tunneled PPP

Internet

GateWay

Corporate LAN

PrismLite

Verifying network behavior under ATM signalling load

The PrismLite emulates real users to stress an ATM switch,
while monitoring the PNNI performance.

ATM switch

ATM PNNI

ATM PNNI

ATM switch

ATM PNNI

ATM switch

UNI Signalling Simulation

NNI Monitor
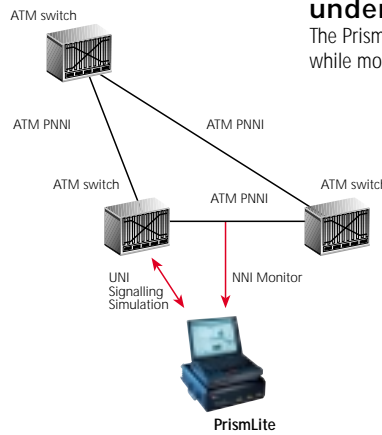
PrismLite

Measuring the performance of a router

The PrismLite automatically correlates data
on both sides of a network device and provides
critical information on latency and data loss.

LAN Segments

Router

ATM Network

IP over ATM generation

PrismLite
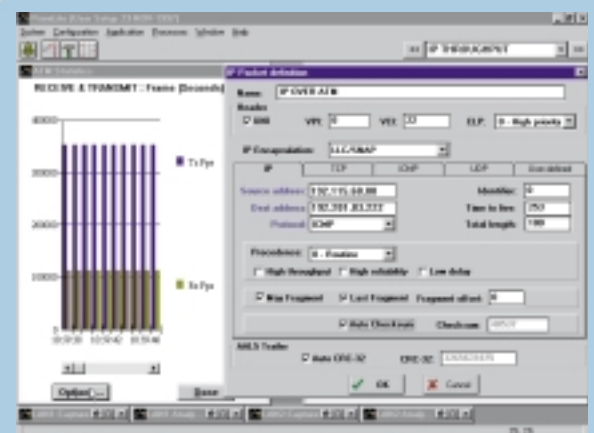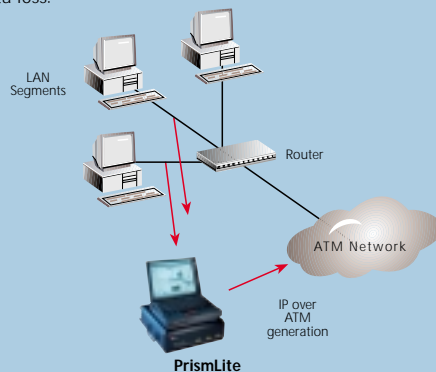
Down-time is a critical issue in the world of data and telecommunications. Problems must be solved quickly and effectively to ensure smooth network operation. However, today's converging networks are becoming increasingly intricate and complex.

The PrismLite is designed for WAN, LAN and ATM testing at the same time. Compact and portable, it helps network managers and field service engineers maintain uninterrupted network services and maximize network performance.

The PrismLite is available with a selection of 18 different line interfaces, providing connectivity to almost any known line. And as voice over data and data over cellular traffic increases, the PrismLite offers voice and cellular testing applications particularly suited for converged networks, as well as other powerful applications which provide an extensive range of test scenarios to fine tune and optimize network performance. Integrated with RADCOM's powerful protocol decoding and filtering engine, the PrismLite is the ideal tool to monitor, analyze and interpret end-to-end traffic.

This extensive range of monitoring and testing capabilities makes the PrismLite the ultimate tool for total internetwork testing.

SPECIFICATIONS

Basic System

CPU Boards: Two i960 RISC.
Memory Boards: 8-64 Mbyte.
Slots: 3.
Line-Interface Modules (LIMs): Up to 6; 2 for each slot, depending on technology.
Ethernet and parallel port connection to the PC.
Remote operation through TCP/IP.
Disk Buffer: Hard-disk limit.
Data Processing: On-line and off-line.
Filters & Analysis: Real time and off-line.
Statistics: Real-time and off-line.
Setups: User-defined and factory supplied.
Filters: All protocol layers - 7 layers live™.
User Interface: MS-Windows, mouse or keyboard control, complete context-sensitive help, remote control option available.
Front-end Processors (FEPs):
WAN: 2 ports.
LAN: 2 ports.
Fast LAN (10/100): 2 ports.
Gigabit: 2 ports.
ATM Combo – packet and cell level: 2 ports.
ATM Cell - cell level: 2 ports.

Line Interface Modules (LIMs)

WAN: V.35; RS-232/449/530; X.21; E1/FE1; T1/FT1; ISDN/BRI; ISDN/PRI, DDS.
LAN: Ethernet (10/100/1000); Token Ring.
ATM: OC-12c/STM-4, OC-3c/STM-1 multi-mode, single-mode, UTP-5; DS-3; DS-1; E3; E1; 25 Mbps; TAXI.

Timestamp

100 nanoSecond resolution; synchronized for all channels.

Modes of Operation

Simulation, full/half monitoring, signalling simulation, Quality of Service, BER Testing, Frame Relay simulation, X.25 simulation, ISDN simulation, 2-channel operation.

Protocols

WAN: HDLC, SDLC, LAPB, LAPD, Frame Relay, X.25, SNA, ISDN, Cisco routers, RND routers, PPP suite, Wellfleet routers, Timeplex, SMDS/DXI, MLPPP, FUNI, ATM/DXI.
LAN/Encapsulated: Ethernet 10/100/1000, Token Ring, IGRP, EIGRP, TCP/IP suite, FDDI, ISO/OSI, DecNet, XNS, Novell/IPX, Banyan Vines, 3Com, Appletalk, Sun, LanManager, DLSw, Van Jacobson. NetBios, IPv6, NHRP, RSVP, DecNet; AppleTalk.
ATM: *Cell types:* AAL0, AAL1, AAL3/4, AAL5, OAM/RM, SMDS SIP-L2, SMDS SIP-L3. *Packet types:* AAL3/4, AAL5.
Signalling standards: UNI 3.0, UNI 3.1, UNI 4.0, SPANS, IISP, PNNI (signalling and routing), B-ICI.
Protocols and encapsulation methods: LAN Emulation, RFC 1483/1577, MPOA, ILMI, FRF.5, FRF.8, MPEG-1, MPEG-2, circuit emulation, IPSILON, MPLS.
VoIP: H.323 suite, MGCP, SGCP, SIP, SAP, T.38.
Cellular: GSM suite, COMA suite, GPRS suite, CDPD.
SS7: MTP2, MTP3, ISUP, SCCP, TCAP, MAP.
V5 protocol suite.
Customized protocols available on request.
User-programmable decode option.

Export/Import

Compatible with other Windows applications including export to Excel, Word, Sniffer file format, BMP and WMF.
Export/import to/from ASCII format.

PC Requirements

Pentium PC 166 MHz or higher; 32 Mbyte RAM or more; 120 Mbyte disk space.

Physical Characteristics

Dimensions: 35.0 x 32.5 x 10.7 cm (13.8 x 12.8 x 4.2 in) (d x w x h).
Weight: 7.0 kg (15.4 lb).
Power Input: 90-240 VAC (auto switching), 50/60 Hz.

Applications

ATM: ATM Policing, Signalling Simulation, BERT, Error Injection, Physical Line Status, ATM Consultant, Quality of Service (QoS), IP Traffic Generator.
LAN: Ethernet Simulation, Physical Layer Statistics, Top Talkers, Protocol Distribution, Error Injection, LAN Pro™ Expert analysis system.
WAN: Frame Relay Simulation, ISDN Simulation, X.25 Simulation, Frame Relay Troubleshooter, ISDN Consultant, BERT, V-series and E1/T1 Physical Layer Statistics.
General: User Programming Library, Report Generator, Capture, Statistics, Analysis, Traffic Generator, Latency and Loss Measurement, Jitter Analysis, VoIP Expert, Script language.

Operating Systems

Operates under Windows 95/98/NT.

Analysis (Partial List)

General: Frame status, frame length, frame direction, protocol distribution.
ATM: VPI, VCI, AAL type, erroneous by VPI/VCI, signalling message type, Q.SAAL message type, LANE LEC Id.
LAN-Ethernet: Source address, destination address, EtherType.
IP: IP Top Talkers, IP Top Listeners, protocol, type of service.
UDP: Destination port, SAP packet operation.
IPX: Packet type, socket number, source node, destination node.
WAN-Frame Relay: DLCI load, erroneous by DLCI, congestion by DLCI.
X.25: LGN, LCN, packet type.
BMP: Stream flag, stream type, total burst length.
NCP: Connection number, task number.

Safety Standards

CE Mark, UL, CUL.

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About RADCOM

RADCOM is a leading network test solutions and quality measurement equipment manufacturer focused on test solutions for LANs, WANs, ATM, cellular converged networks and convergence technologies. The Company's test and analysis equipment is used in the development and manufacturing of network equipment, the installation of networks, and the ongoing maintenance of operational networks to facilitate real-time identification, diagnosis, isolation and resolution of network problems. RADCOM's sales network includes over 55 distributors in 45 countries worldwide and over 14 manufacturer's representatives across North America.

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