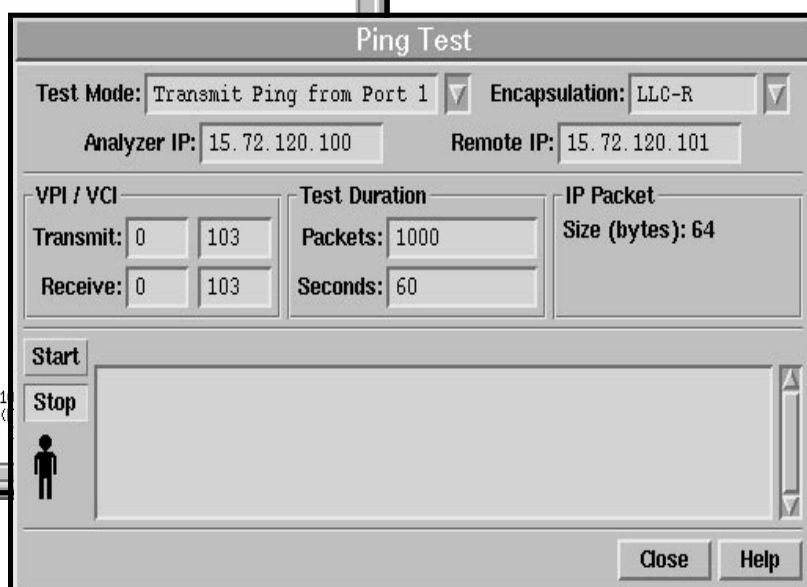
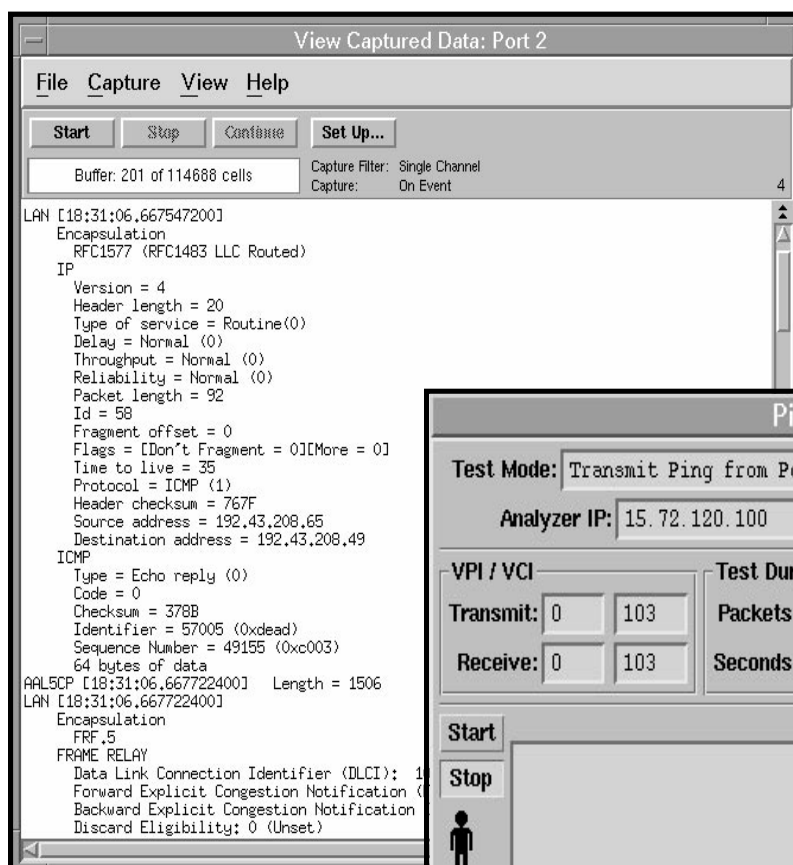


Data Services Analysis

HP E5200A Broadband Service Analyzer

**New
SMARTests**



Key features:

- Decodes for
 - Classical IP over ATM networks
 - ATM Forum LAN Emulation networks
 - Frame Relay interworking
- Ping SMARTest



HP E5200A Broadband Service Analyzer

Data Services Analysis

The HP E5200A Broadband Service Analyzer's Data Services Analysis allows you to quickly troubleshoot and verify the performance of your network.

The protocol decode capabilities allow you to view and analyze an extensive range of data protocols on your network. Analysis capabilities have been further extended to include a Ping SMARTtest that allows you to verify network connections.

Standards Supported

- IETF RFC1483
- IETF RFC1577
- ATM Forum LAN Emulation over ATM V1.0
- Frame Relay Forum FRF.5 - Network Interworking Implementation Agreement

Protocols can be displayed in brief, partial, or full decode format.

View Capture Display Options

Brief	1 line description
Partial	1 line summary for each LAN protocol layer
Full	Full details

Protocols

MAC	Ethernet Token Ring FDDI Frame Relay
TCP/IP	ICMP, ARP/RARP, TCP, UDP, RIP, RPC, finger, telnet, FTP, SNMP, DNS, NTP, TIMED, LRP/rlogin, who, SMTP, TFTP, bootp, GGP, EGP, OSPF, BGP, IGRP

Appletalk	AARP, AEP, ATP, DDP, DDPL, ELAP, NBP, RTMP
Novell	ECGHP, ERROR, IPX, IPXDIAG, RIP, SAP, SPX
XNS	PEP, SPP
DecNet	NSP
SNA	BPDU, SNATH, SNAXID, SNARH
Vines	ARP, ECHO, IPC, Vines IP
Others	CLNP, COTP

SMARTtests

SMARTtests are predefined tests that facilitate rapid network installation and problem identification. You can start a SMARTtest quickly and easily without the need to develop complex test routines.

For Data Services Analysis the HP E5200A Broadband Service Analyzer now offers a Ping SMARTtest.

Ping SMARTtest

Use the Ping SMARTtest to check connectivity of devices on Classical

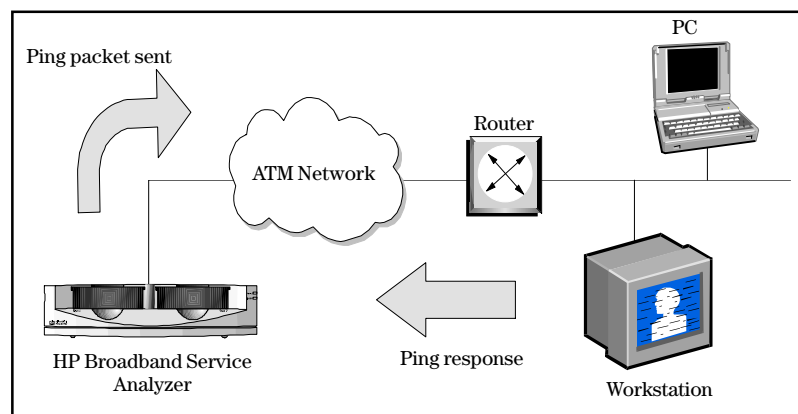
IP over ATM networks using the LLC-R encapsulation method that operates in a PVC environment.

Classical IP over ATM allows existing applications running over IP networks to run, without modification, directly over ATM networks. Each ATM network is treated like an IP subnet and is connected to other IP subnets using conventional router devices.

Classical IP over ATM provides an efficient method of mapping the different network layers together so that the ATM network is seen as just another type of physical media (ie Ethernet, Token Ring, or FDDI). Its enhanced IP ARP mechanism supports mapping IP addresses directly into ATM addresses.

RFC1577 specifies that the default encapsulation for Classical IP packets is LLC/SNAP, as documented in RFC1483.

The Ping SMARTtest transmits a series of ICMP ping request packets to a remote host as defined by its IP address. After receiving each request, the remote host should transmit a ping response back to the service analyzer. The responses indicate how many of the ping request packets were received at the remote host, and how long (in microseconds) it took for the



Ping SMARTtest

Data Services Analysis

packets to arrive back at the service analyzer.

The Ping SMARTtest is often used to perform manual fault isolation by calculating the following results

- number of packets sent
- number of packets received
- percentage of packets lost
- minimum, maximum, and mean delay

HP E5200A Broadband Service Analyzer

The HP E5200A Broadband Service Analyzer gives you complete network access control—much more than ordinary test technology. It allows you to manage the end-to-end quality of your service. The service analyzer shows the important interactions between the elements of the service, instantly notifying you of abnormal network conditions. The HP Broadband Service Analyzer is designed to meet your many test needs. It leads the way in a new class of portable test instruments specifically designed for dispatched, remote, and distributed applications.

System Requirements

The Data Services Analysis features are available as **standard** on the HP E5200A Broadband Service Analyzer. Simply make sure you have the following system configuration:

- HP E5200A Broadband Service Analyzer
- E5200A opt 002 (Release 1.3 or later)
- X-server display or Unix workstation



HP Sales and Support Offices

For more information, call your local HP sales office listed in your telephone directory or an HP regional office listed below for the location of your nearest sales office.

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