UNI Signalling Test Application

E4214A

For the HP Broadband Series Test System
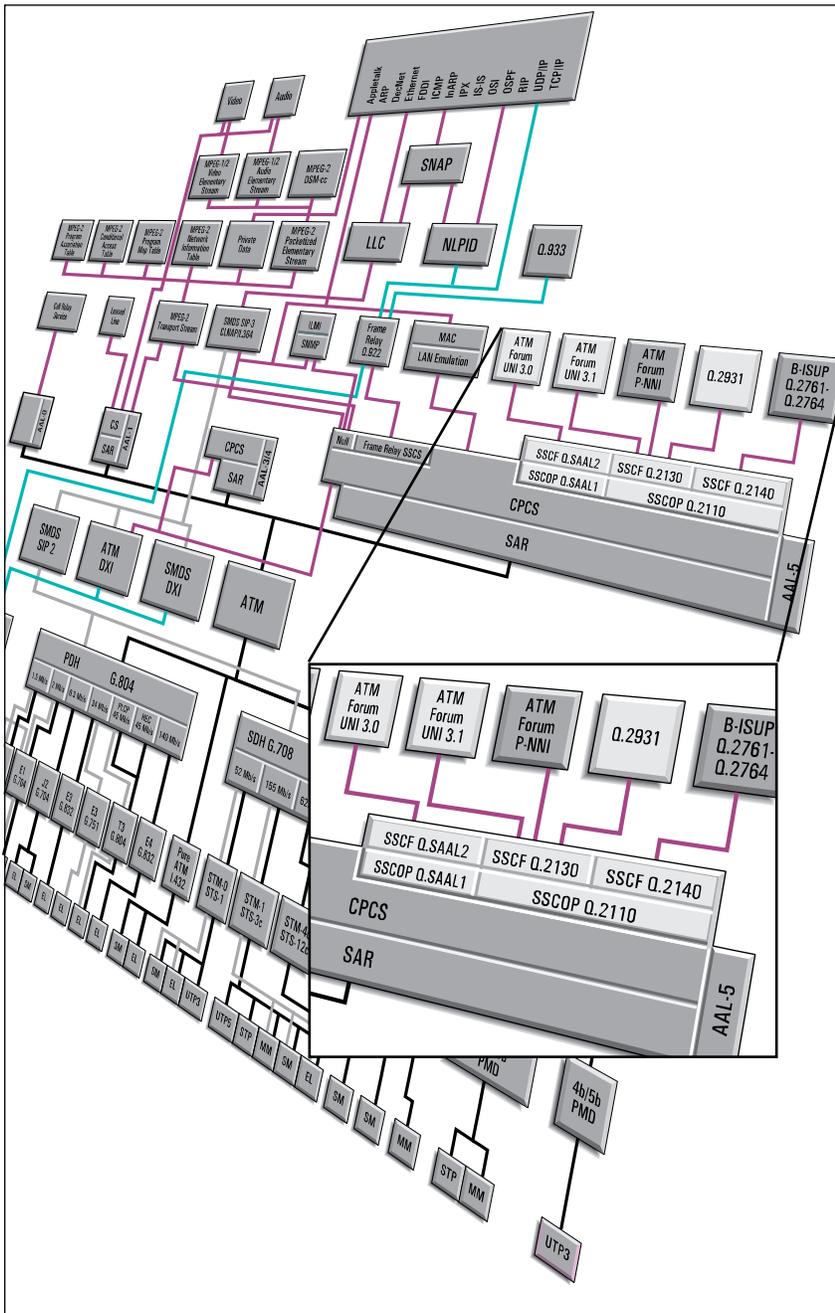
Implementing ATM Switched Virtual Circuits Means Signalling!

The ability to efficiently establish switched virtual circuits will be both a competitive necessity and an important determinant of performance as ATM networks grow in size. Signalling is not only complex, but also a key issue to network equipment manufacturers; HP's Broadband Series Test System is the most comprehensive tool available to help you develop switch and terminal equipment supporting new ATM Forum and ITU-T specifications.

Public network operators, service providers, and independent test laboratories can use the E4214A UNI Signalling Test Application software to verify conformance to international standards, conduct field trials of new prototypes, and commission new installations.

The E4214A tests switched virtual circuit signalling protocols at the ATM User-Network Interface (UNI). A powerful open reference emulation state machine allows interactive or programmatic control for switched-virtual circuit creation and analysis. Includes a program for ILMI address registration. The E4214A can also be used with other BSTS software applications to obtain additional traffic generation, capture filtering and real-time statistics capabilities.

Powerful Reference Emulation State Machine

- Emulates UNI signalling protocols so that SVCs can be created from the BSTS through the system under test

- Interactive signalling functions include call initiation, call table listing, active channel release, add/drop channels to a point-to-multipoint connection, and establish/release SSCOP link

- Superb signalling performance handles 700 to 900 PDUs per second at the SSCOP/SSCF layer, and typically 180 calls per second at the UNI signalling layer (with V743 UNIX controller)

- Automatic layer 3 response can be disabled for direct control of the SSCF or SSCOP state machines

- Protocol behavior, timers, delays and call acceptance are all configurable

Layer 3 UNI Signalling	Q.2931	UNI 3.1	UNI 3.0

Layer 2 SAAL			
SSCF	Q.2130	Q.2130	Q.SAAL2
SSCOP	Q.2110	Q.2110	Q.SAAL1
AAL	AAL-5	AAL-5	AAL-5

Powerful reference emulation state machine supports three protocol stack combinations!

Protocol Simulation

- Create normal or abnormal protocol behavior on demand to quickly isolate signalling protocol implementation problems

- Traffic can easily be captured, created, edited and stored in files for later analysis or transmission

- Automatic encoding and segmentation

- Supports two signalling state machines on separate virtual channels simultaneously

Multiport Monitoring

- Examine signalling messages sent between two devices across the UNI

- Dual-port full-duplex operation featuring merged statistics, synchronized capture and merged playback

- Decodes communications traffic into an English language display using terminology from standards documents

- Off-line validation with filtering for an unlimited number of virtual channels
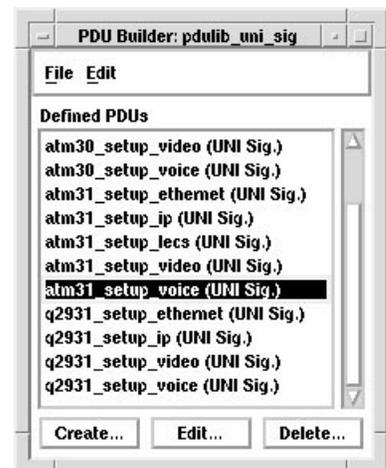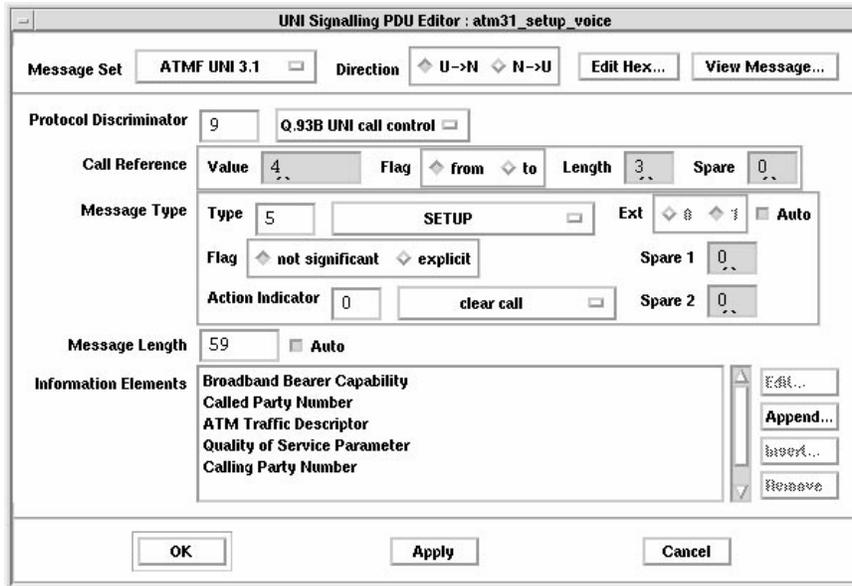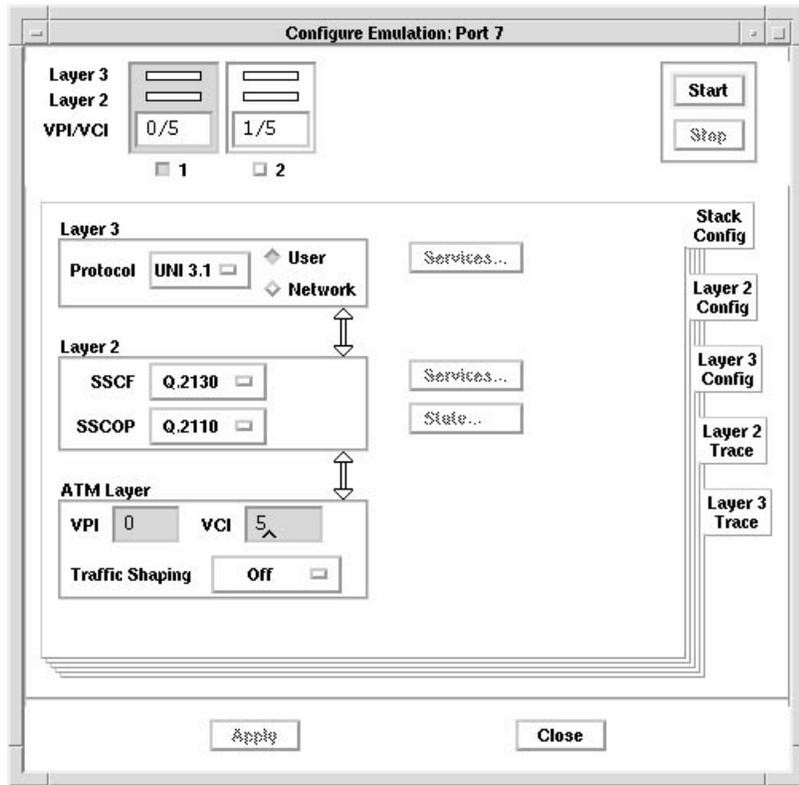
Unlike off-the-shelf closed implementations, HP's open reference emulation state machine lets you improve the robustness of your products by testing them under a wider range of possible signalling scenarios.

Related ATM Signalling Test Solutions for the BSTS

In addition to interactive protocol verification testing at the User-Network Interface (UNI), additional test software applications are available for the BSTS to perform automated conformance and interoperability testing for both ATM Forum 3.0 and 3.1 standards.

E7823A

UNI 3.0 Signalling Conformance Test Suite for the Network Side, Part 1

E7833A

UNI 3.1 Signalling Conformance Test Suite for the Network Side, Part 1

E7833B

UNI 3.1 Signalling Conformance Test Suite for the Network Side, Complete Test Suite

E7834A

UNI 3.1 Signalling Conformance Test Suite for the User Side

The BSTS: Get the Industry-Standard ATM Tester

The Hewlett-Packard Broadband Series Test System (BSTS) is widely acclaimed as the industry-standard ATM protocol and transmission tester. Chances are your partners, suppliers *and competitors* are using it! A flexible test platform for high speed LAN/WAN protocol and transmission testing, the BSTS can perform comprehensive testing of all layers, from physical through higher services, and at speeds up to 622 Mb/s. Due to its modular nature, multiple protocols can be simultaneously tested on multiple ports by configuring a test system to suit your specific test needs. The fully-programmable BSTS is ideal for R&D engineering, product development, quality assurance, performance, type approval, and conformance testing.

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For More Information

For more information about the Broadband Series Test System, contact your local HP sales office and request publication 5965-4721E, *The BSTS Product Catalog*. For more information on other Hewlett-Packard Test & Measurement products, publications or services, please call your local Hewlett-Packard sales office. A current listing is available via Web through AccessHP at http://www.hp.com. If you do not have access to the internet, please contact one of the HP centers listed and they will direct you to your nearest HP representative.

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