Digital ATM Starter Kit for LAN Emulation Developers

Product Overview

Revision:1.0Date:October 2, 1995Author:Theodore L. Ross

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Revision History

Revision	Date	Author	Comments
1.0	2-Oct-95	TLR	Initial Revision

1. Introduction

The *Digital ATM Starter Kit* is a collection of software components that provide ATM end-station functions. It was designed to be reusable in a wide range of applications and on a wide range of platforms. The starter kit is intended to be used in ATM-attached end-stations (supporting ATM NICs), ATM edge-devices, and ATM switches. It may be deployed on both big-endian and little-endian hardware platforms including those with 64-bit architectures.

2. Software Features

The following is a list of high-level features of the ATM Starter Kit. Refer to *the Digital ATM Starter Kit Programmer's Guide* for detailed descriptions of the components and their interfaces.

2.1 Connection Management

- Supports multiple physical ports
- SVC and PVC Support
- SVC aging configurable per-VC
- Supports QoS

2.2 LAN Emulation Client

- Supports multiple ELANs
- Configuration via Well-Known NSAP Address, PVC, or manually entered NSAP Address
- Optional direct-join (bypassing configuration and joining with manually entered NSAP Address for LES)
- Fully configurable operational parameters
- Supports flooding of unknown unicasts (configurable)
- Supports Flush protocol
- Supports LEC-MIB (MIB implementation is not provided)
- Hooks provided for interface to edge-device fast-path
- Performs echo-suppression using LEC-ID in packet header
- Provides configurable broadcast and multicast filters including promiscuous mode of operation
- Supports both UNI 3.0 and UNI 3.1

2.3 Signaling Interface

- Coded for use with Trillium signaling software
- Trillium dependencies isolated for easy conversion to a different signaling package

3. Architectural Overview

The following diagram illustrates the structure of the ATM Starter Kit software including its external interfaces. Refer to the *Digital ATM Starter Kit Programmers Reference* for detailed descriptions of the interfaces and subcomponents of the atchitecture.



4. Limitations and Features not Implemented

The following limitations exist in the *Digital ATM Starter Kit*. These may be corrected in an upcoming update to the software.

- The 802.5 (token ring) frame format is not currently supported,
- Not all LEC_MIB objects are accessible outside the LAN Emulation Client module,
- Location of the LECS via ILMI is not supported,
- LAN Emulation over PVCs is not supported,
- QoS is not supported for LAN Emulation.