

ATN Transport Server

The Airtel ATN Transport Server provides an integrated ATN Router and End-System with support for an ATN Transport Layer service as described in the ATN Manual issued by ICAO.

The Airtel ATN Transport Server is compliant with ICAO CNS/ATM Package 1 SARPs and allows nodes to operate as ATN End Systems or Intermediate Systems.

Highlights

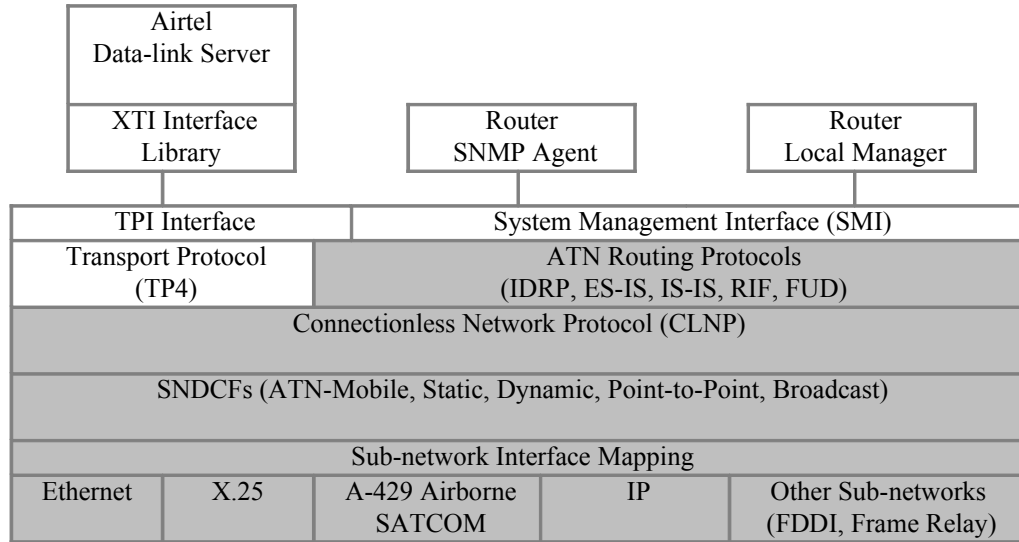
- Provides an XTI compliant interface with ATN enhancements for applications.
- Compliant with CNS/ATM Package 1 SARPS
- Compliant with EUROCAE ED-110A
- Permits a node to operate as an ATN End or Intermediate system.
- Connection Oriented and Connection-less Transport Service

Support

- Connection oriented transport protocol specification as defined in ISO/IEC 8073
- Connectionless transport protocol specification as defined in ISO/IEC 8602
- ATN Transport Congestion Avoidance Algorithm
- Inter-domain Routing Protocol (IDRP), as defined in ISO/IEC 10747
- ES-IS routing exchange protocol as defined in ISO/IEC 9542
- Levels 1 and 2 IS-IS intra-domain routing protocol, as defined in ISO/IEC 10589
- Mobile SND CF with event-driven sub-networks
- Packet Layer Protocol for Data Terminal equipment as defined in ISO/IEC 8208.
- Multiple X.25 cards
- Multiple LAN cards for both FDDI and Ethernet LANs
- Williamsburg File Transfer Protocol, version 1 over ARINC 429
- IP SND CF

Product Structure

The Transport Server product provides an ATN end system stack up to the Transport Layer. The following figure shows the architectural layout of the product:



ATN Transport Server Architecture (including ATN Router)

- **Router SNMP Agent:** Optional SNMP Agent is for remote management (under development).
- **Router Local Manager:** Local Management is provided by a CLI (Command Line Interface) based local manager
- **System Management Interface:** The system management interface (SMI) provides access to all management information maintained by the product. The user can configure the system, receive notifications and operation results via the SMI. In addition, it allows the user to create log files and set trace levels.
- **TPI:** The Transport Provider Interface is a standard UNIX STREAMS type interface to transport. The XTI interface uses this interface to access the transport stack.
- **XTI:** The X/Open Transport interface (XTI) provides a standard transport user interface. The interface has been extended to support ATN applications.
- **TP4:** The TP4 module provides an ATN-compliant Connection Oriented Transport Service (COTS) and Connectionless Transport Service (CLTS).
- **ATN Router:** The ATN Router Protocols, Connectionless Network Protocol and supporting sub-networking modules are provided by the ATN Router components (shaded area).

Product Information

The Airtel ATN Transport Server is available in both binary and C source code formats. Both airborne and ground versions are available. The router software is available ready-to-run on HP-9000, Sun SPARC and Intel PCs running Linux. Support on other platforms is quoted separately.

The Airtel ATN Transport Server incorporates software components licenced from EUROCONTROL.