CHAPTER 33

# Serial

This chapter describes the level of support that Cisco ANA provides for serial links, as follows:



## Technology Description

Please see Part 1: Cisco VNEs in this guide for information about which devices support the various technologies.

### Serial Links

Serial links take many forms, from 2400 b/s dial-up modems to dedicated T3 leased lines. All share two common traits: they interconnect two hosts, and they transmit a single bit at a time in each direction. The stream of bits is assembled into bytes and then packets. The speed of a serial line is rated in bits per second (b/s). They are either synchronous (in which some kind of clocking signal is transmitted with the data) or asynchronous.

**Note** Cisco ANA supports this technology only in conjunction with data link layer technologies, such as ATM or PoS.

# Information Model Objects (IMOs)

This section describes the following IMO:

- Serial Interface (IPhysicalLayer)

## Serial Interface

Physical layer Serial Interface objects are bound by their Containing Termination Points attribute to a Port Connector object. Each object is accessed primarily by the data link layer object, such as the PPP Encapsulation interface, bound by its Contained Connection Termination Points attribute.

*Table 33-1 Serial Interface (IPhysicalLayer)*

| Attribute Name | Attribute Description | Scheme | Polling Interval |
|---|---|---|---|
| All attributes are the same as Physical Layer (IPhysicalLayer) | | | |

# Vendor-Specific Inventory and IMOs

There are no vendor-specific inventory or IMOs for this technology.

# Network Topology

Cisco ANA does not support discovery of physical layer topology. This topology is manually (statically) configured by the system administrator. However, it is used in conjunction with the data link layer above it, such as ATM, for discovering its physical topology, while further verifying it by matching the traffic signature of these ports using Cisco's confidential scheme, which requires a substantial amount of traffic in order to function correctly.

# Service Alarms

The following alarms are supported for this technology:

- Discard Packets, page 41-26
- Dropped Packets, page 41-27
- Link Down, page 41-42
- Port Down, page 41-51
- Rx Utilization, page 41-53
- Tx Utilization, page 41-57