



CHAPTER 5

Token Ring “TR” (IEEE 802™.5)

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

- [Technology Description, page 5-1](#)
- [Inventory and Information Model Objects \(IMOs\), page 5-1](#)
- [Network Topology, page 5-2](#)
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Technology Description

Token Ring

Token Ring refers to a Local Area Network (LAN) products covered by the IEEE 802.5 standard that unlike Ethernet, uses a ring topology whereby the data is sent from one station to the next and so on around the ring until it ends up back where it started, with a control token circulating around the ring controlling access.

The IEEE 802.5 standard provide both Media Access Control (MAC) (Layer 2), with Addressing, Access and Flow Control attributes, and various Physicals (Layer 1) definitions, with Media, Clocking and Speed attributes.

Inventory and Information Model Objects (IMOs)

This section includes the following tables:

- [Token Ring Interface \(ITokenRingLayer2\)](#)
- [Token Ring Physical \(ITokenRingLayer1\)](#)

Token Ring Interface

The following Data Link layer [Token Ring Interface](#) object, is bound by its Containing Termination Points attribute to a Physical Layer [Token Ring Physical](#) object, and is primarily being accessed by Network layer such [IP Interface](#), bound by its Contained Connection Termination Points attribute. It is also being accessed by [Bridging Entity](#).

Table 5-1 **Token Ring Interface (ITokenRingLayer2)**

Attribute Name	Attribute Description
MAC Address	Media Access Control (MAC) address
IANA Type	IANA type of the sub/layer
Containing Termination Points	Underlying termination points (connection or physical)
Contained Connection Termination Points	Bound Connection Termination Points

Token Ring Physical

The following Physical layer [Token Ring Physical](#) object, is bound by its Containing Termination Points attribute to a [Port Connector](#) object, and is accessed solely by the Data Link layer [Token Ring Interface](#) bound by its Contained Connection Termination Points attribute.

Table 5-2 **Token Ring Physical (ITokenRingLayer1)**

Attribute Name	Attribute Description
Same as Physical Layer (<i>IPhysicalLayer</i>)	

Network Topology

The discovery of Token Ring (TR) Data Link layer topology is unsupported and is manually (statically) configured by the system administrator.

Service Alarms

The following alarms are supported for this technology:

- Cloud Problem
- Discard Input Packets/Normal Discard Input Packets
- Dropped Output Packets/Normal Dropped Output Packets
- Link Down/Link Up
- Port Down/Port Up
- Receive Utilization/Receive Utilization Normal
- Transmit Utilization/Transmit Utilization Normal

**Note**

Note that these alarms, apart from the Cloud Problem, are related to the underlying Physical Interface (Common section).

**Note**

For a detailed description of these alarms and for information about correlation see the *Cisco Active Network Abstraction Fault Management User Guide*, 3.6.

