DSL Applications



Applications & Gateways

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Introduction

This section summarizes the contents of this document, which is one of a set of documents describing SPECTRUM applications. This section also provides references to the other applications documents.

This section covers the following topics:

- Purpose and Scope
- Other Applications Documents
- Summary of This Document (Page 5)

Purpose and Scope

This document defines the fields displayed in the views associated with a category of SPECTRUM applications called Digital Subscriber Line (DSL) applications, which at the present time includes the ADSL Line Application. The views and fields described in this document are accessed from the Icon Subviews menu of the application models displayed in the Main Applications view.

Other Applications Documents

Table 1 lists the documents that cover the other categories of SPECTRUM applications. In addition to the documents listed in the table, the document **MIBs and the Applications View** provides an introduction to the Application view and defines MIB functions in network management. All of these documents (and others) are available on the Aprisma Web site at:

www.aprisma.com/manuals

Table 1: Other Applications Documents

| Document Title | Typical Applications |
|----------------------------------|--------------------------------|
| Transmission Applications | Ethernet, Token Ring, FDDI |
| Technology Applications | APPN, ATM, DHCP |
| Bridging Applications | Spanning Tree, PPP Bridging |
| MIB-II Applications | SNMP, ICMP, TCP |
| Routing Applications | OSPF, VRRP, BGP4 |

Summary of This Document

The rest of this document describes the following application:

• ADSL Line Application (ADSLLineApp) (Page 6)

ADSL Line Application (ADSLLineApp)

This section describes the ADSL Line Application.

The following views are available for this application:

- Line Table (Page 6)
- ATUC Physical Table View (Page 7)
- ATUC Performance Table View (Page 7)
- ATUC Channel Performance Table View (Page 8)
- ATUR Physical Table View (Page 9)
- ATUR Performance Table View (Page 9)
- ATUR Channel Performance Table View (Page 10)
- Configuration View (Page 10)

Line Table

Access: From the Icon Subviews menu for the ADSLLineApp icon, select Line Table.

This table includes common attributes describing both ends of the line. It is required for all ADSL physical interfaces. ADSL physical interfaces are those entries where Type is equal to ads1.

This table provides the following information.

Instance

An entry in ADSL Line Table.

Coding

The ADSL coding type used on this line.

Туре

Defines the type of ADSL physical line entity that exists, by defining whether and how the line is channelized. If the line is channelized, the value will be other than noChannel. This field defines which channel type(s) are supported. In the case that the line is channelized, the manager can use the Stack Table to determine the Index for the associated channel(s).

Specific

OID instance in vendor-specific MIB. The Instance will be used to determine shelf/slot/port of the ATUC interface in a DSLAM.

ATUC Physical Table View

Access: From the Icon Subviews menu for the ADSLLineApp icon, select ATUC Physical Table.

This table provides one row for each ATUC. Each row contains the Physical Layer Parameters table for that ATUC. ADSL physical interfaces are those entries where Type is equal to ads1.

This view provides the following information.

Instance

An entry in the ATUC Physical Table.

Status

The current state of the ATUC line.

Attainable Rate

The maximum currently attainable data rate by the ATU. This value will be equal or greater than the current line rate.

Serial Number

The vendor specific string that identifies the vendor equipment.

Vendor ID

The vendor ID code is a copy of the binary vendor identification field defined by the PHY[10] and expressed as readable characters.

Version Number

The vendor specific version number sent by this ATU as part of the initialization messages. It is a copy of the binary version number field defined by the PHY[10] and expressed as readable characters.

ATUC Performance Table View

Access: From the Icon Subviews menu for the ADSLLineApp icon, select ATUC Performance Table.

This view provides two tables containing Performance information for total and daily performance statistics. The list below describe the total value, and for daily values simply substitute "in 24 hours" for "since last agent reset". This table provides one row for each ATUC. ADSL physical interfaces are those entries where Type is equal to ads1.

These tables provide the following information.

Instance

An entry in the Performance table.

Errored Seconds

Count of the number of Errored Seconds since agent reset. The errored second parameter is a count of one-second intervals containing one or more crc anomalies, or one or more los or sef defects.

Initializiations

Count of the line initialization attempts since agent reset. Includes both successful and failed attempts.

Loss of Frame

Count of the number of Loss of Framing failures since agent reset.

Loss of Link

Count of the number of Loss of Link failures since agent reset.

Loss of Signal

Count of the number of Loss of Signal failures since agent reset.

Loss of Power

Count of the number of Loss of Power failures since agent reset.

ATUC Channel Performance Table View

Access: From the Icon Subviews menu for the ADSLLineApp icon, select ATUC Channel Performance Table.

This view provides two tables containing Performance statistics for daily and total accumulations.

These tables provide the following information.

Instance

An entry in the ATUC Channel Performance table.

Transmitted Blocks

Count of all encoded blocks transmitted on this channel since agent reset.

Received Blocks

Count of all encoded blocks received on this channel since agent reset.

Corrected Blocks

Count of all blocks received with errors that were corrected since agent reset. These blocks are passed on as good data.

Uncorrect Blocks

Count of all blocks received with uncorrectable errors since agent reset.

ATUR Physical Table View

Access: From the Icon Subviews menu for the ADSLLineApp icon, select ATUR Physical Table.

This table provides one row for each ATUR. Each row contains the Physical Layer Parameters table for that ATUR. ADSL physical interfaces are those entries where Type is equal to adsl.

This view provides the following information.

Instance

An entry in the ATUR Physical Table.

Status

Indicates current state of the ATUR line.

Attainable Rate

Indicates the maximum currently attainable data rate by the ATU. This value will be equal or greater than the current line rate.

Serial Number

The vendor specific string that identifies the vendor equipment.

Vendor ID

The vendor ID code is a copy of the binary vendor identification field defined by the PHY[10] and expressed as readable characters.

Version Number

The vendor specific version number sent by this ATU as part of the initialization messages. It is a copy of the binary version number field defined by the PHY[10] and expressed as readable characters.

ATUR Performance Table View

Access: From the Icon Subviews menu for the ADSLLineApp icon, select ATUR Performance Table.

This view provides tow tables containing Performance information for total and daily performance statistics. This table provides one row for each ATUR. ADSL physical interfaces are those entries where Type is equal to ads1.

These tables provide the following information.

Instance

An entry in the Performance table.

Errored Seconds

Count of the number of Errored Seconds since agent reset. The errored second parameter is a count of one-second intervals containing one or more crc anomalies, or one or more los or sef defects.

Loss of Frame

Count of the number of Loss of Framing failures since agent reset.

Loss of Signal

Count of the number of Loss of Signal failures since agent reset.

Loss of Power

Count of the number of Loss of Power failures since agent reset.

ATUR Channel Performance Table View

Access: From the Icon Subviews menu for the ADSLLineApp icon, select ATUR Channel Performance Table.

This view provides two tables containing Performance statistics for daily and total accumulations.

These tables provide the following information.

Instance

This indicates that there is an entry in this table.

Transmitted Blocks

Count of all encoded blocks transmitted on this channel since agent reset.

ATUR Channel Performance Table View

Received Blocks

Count of all encoded blocks received on this channel since agent reset.

Corrected Blocks

Count of all blocks received with errors that were corrected since agent reset. These blocks are passed on as good data.

Uncorrect Blocks

Count of all blocks received with uncorrectable errors since agent reset.

Configuration View

Access: From the Icon Subviews menu for the ADSLLineApp icon, select Configuration View.

The Configuration view has one field called Alarm On Traps. It has a value of FALSE by default. If it is set to FALSE, and the device model passes a trap to the application model, the alert handler will only generate an event on the device model. If Alarm On Traps is TRUE, the alert handler will generate an event and an alarm on the device model.

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Device Management