

IntraSpection™ Personality Module

AsantéHub 1016-IQ

User's Manual

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About This Manual

This manual introduces the IntraSpecation Personality Module for the following device:

- ❑ The AsantéHub 1016-IQ intelligent Ethernet hub

Chapter Contents

This manual is divided into the following chapters:

- ❑ Chapter 1, “Introduction,” describes IntraSpecation Personality Modules and the system requirements needed to install and use one.
- ❑ Chapter 2, “Installation” explains how to install the AsantéHub 1016-IQ Personality Module.
- ❑ Chapter 3, “Accessing the Device,” explains how to access the AsantéHub 1016-IQ in IntraSpecation.
- ❑ Chapter 4, “Management,” describes how to perform some basic management functions with the AsantéHub 1016-IQ Personality Module.
- ❑ Chapter 5, “Menus,” describes each management menu and its contents.

Document Conventions

This manual uses the following conventions to convey instructions and information:

- Commands and key words are in **boldface** font.
- △ **Note:** Noteworthy information, which contains helpful suggestions or references to other sections in the manual, is in this format.
- ▲ **Important:** Significant information that contains very important information is in this format.

Audience

This manual uses terms and concepts associated with Ethernet networking and hubs. It is recommended that the user of this manual be familiar with local area networks and Ethernet hubs.

This manual also assumes familiarity with IntraSpection Web-based network management.

1

Introduction

IntraSpection Personality Modules

A Personality Module is a “plug-in” to the IntraSpection system that allows for expanded management of an SNMP (Simple Network Management Protocol) device by specifically addressing the device’s proprietary information (the “Private MIB”).

Management capabilities are accessed in IntraSpection via the Personality Module’s **Device Page** (see Figure 1-1).

AsantéHub 1016-IQ Personality Module

The AsantéHub 1016-IQ Personality Module allows for expanded management of an AsantéHub 1016-IQ Ethernet hub. See Figure 1-1.

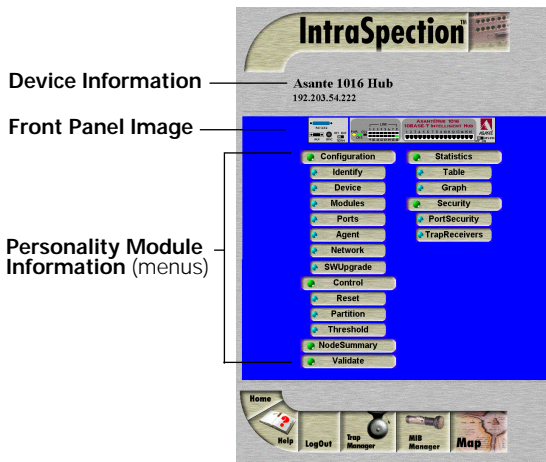


Figure 1-1 AsantéHub 1016-IQ Device Page

Management Options

The AsantéHub 1016-IQ Personality Module supports the following management options:

- Device identification
- General device information
- Module information
- Port configuration
- SNMP agent information
- Network access configuration
- Software upgrades
- Device resets
- Port partitioning
- Alarm thresholds
- Node summary information
- Table statistics at the device/group/port levels
- Graph statistics at the device/group/port levels
- Port security
- Trap receiver management

See Chapter 5 “Menus” for a complete description of each management option.

System Requirements

Server

- IntraSpecation version 1.01 or greater
- PC with 80486 or faster microprocessor
- 48MB RAM
- 100MB free disk space
- Windows NT™ 3.51 or higher or Windows NT 4.0 (recommended)
- Web server that supports Common Gateway Interface (CGI) 1.1 (such as Netscape FastTrack Server™, Microsoft IIS, NCSA HTTP, etc.)
- Any database management system that supports ODBC (such as Microsoft Access™, Oracle™, or Microsoft SQL Server)

Client

- Any Windows™, Windows NT, Macintosh™ or UNIX® workstation
- Any World Wide Web browser with Java™ and Java Script support such as Netscape Navigator® (version 3.0 required, 3.01 recommended) or Microsoft Internet Explorer™

2

Installation

Installing a Personality Module

This chapter explains how to install the AsantéHub 1016-IQ Personality Module.

- ▲ **Important:** The Personality Module is installed in the computer that contains the IntraSpecation Application Server.

Before installing the Personality Module, make sure that IntraSpecation (websuite.exe) is NOT running on the computer.

- 1 Insert the Personality Module CD into the computer.
- 2 Open the CD to display its contents.
- 3 Double-click the **1016.exe** file.
- 4 Click **Yes** at the “IntraSpecation Personality Module Installation Confirmation” dialog box.
The IntraSpecation Personality Module information window appears.
- 5 Click **Finish** to continue.
The Personality Module files are decompressed.
The “IntraSpecation Personality Module Welcome” dialog box appears.
- 6 Click **Next**.

Installation

The “Software License Agreement” window appears. Review the agreement carefully.

- 7 Click **Yes** to accept the agreement and continue with the installation.

To decline the agreement and exit the installation, click **No**.

The “IntraSpec Personality Module Read Me” window appears. Review the information carefully.

- 8 Click **Next** to continue.

The decompressed Personality Module files are installed into your computer.

The “Decompression of the Source is Now Complete” dialog box appears.

- 9 Click **OK** to continue with the installation.

The “Select Module to Install” window appears, displaying the 1016.ipm file. See Figure 2-1.

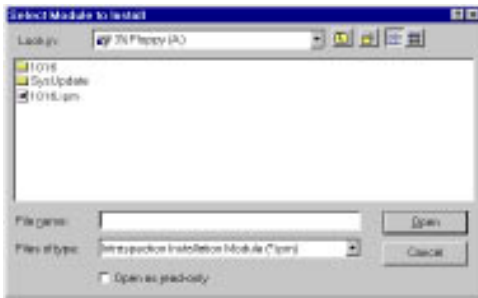


Figure 2-1 Select Module to Install window

- 10 Click once on the **1016.ipm** file.

- 11 Click **Open**.

The “Enter Product Serial Number” window appears.

- 12 Enter the serial number that came with your copy of the Personality Module.

The serial number is located on the inside cover of this User's Manual.

▲ **Important:** The serial number is case-sensitive; enter it exactly as shown.

13 Click **OK**.

The "IntraSpection Module Installation" window appears.

▲ **Important:** This window should be pointing to the directory that contains the IntraSpection (websuite.exe) program. If it is not, click **Browse** and locate that directory.

14 Click **OK**.

△ **Note:** A "Select Database" window may appear. If it does, select **vendor.mdb**, then click **OK**.

△ **Note:** An "Updating IntraSpection System Files" window may appear, if it does, click **OK**.

The installer program installs the Personality Module into the IntraSpection Application Server.

Installation is complete when the "Installation Completed Successfully" dialog box appears.

15 Start the IntraSpection Application Server, following the guidelines below:

- Windows NT 3.51 users: double-click the **IntraSpection** icon (located in the Programs group).
- Windows NT 4.0 users: open the **Start** menu, select **Programs**, then **IntraSpection**.

For information on accessing the AsantéHub 1016-IQ for management, see Chapter 3, "Accessing the Device."

3

Accessing the Device

This chapter explains how to access the AsantéHub 1016-IQ in IntraSpection via its Personality Module's **Device Page**. The Device Page provides access to the Personality Module's management options.

Accessing the Device Page

To access the Device Page for an AsantéHub 1016-IQ, you must first create a map of the network in IntraSpection.

- 1 Make sure the Personality Module is installed and the IntraSpection Application Server is running.
- 2 Access IntraSpection from any Java-enabled Web browser (requires logging into IntraSpection).
 - ▲ **Important:** For help on accessing and logging into IntraSpection, refer to the [IntraSpection User's Manual](#).
- 3 After you are logged into IntraSpection, click **Auto Discovery** on the IntraSpection Main Menu.

The AutoDiscovery Page appears.
- 4 Complete each field on the AutoDiscovery Page, following the guidelines below:
 - Type the IP subnet address of the AsantéHub 1016-IQ to be managed in the **Segment** field.
 - Type the AsantéHub 1016-IQ's community string in the **Community** field.
 - Make sure the **Enterprise ID** field has a value of **all**.

Accessing the Device

- Type the lowest (beginning) IP address on your network in the **Low IP Address** field.
- Type the highest (last) IP address on your network in the **Hi IP Address** field.
- Select **New** in the **Discovery Mode** field to create a new map.

5 Click **Apply**.

IntraSpection builds a map of your network. The map consists of icons which represent each “discovered” SNMP device on the network. Figure 3-1 is an example map.

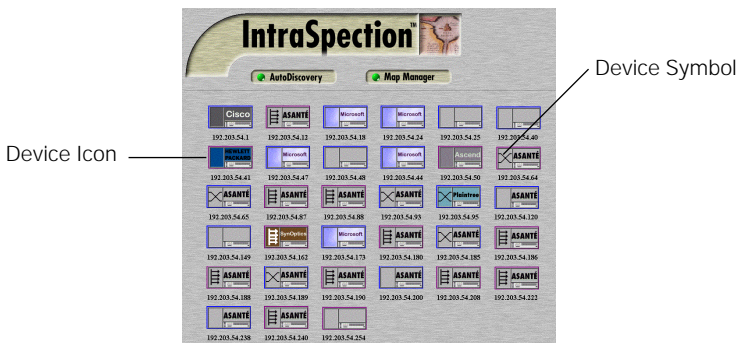


Figure 3-1 Discovered network map

6 After the map is complete, click once on the **map** icon (located at the bottom of the page on the navigation bar) to validate the devices on the map.

- △ **Note:** The devices on the map are validated when device symbols appear on certain icons (see Figure 3-1). Note that not all icons have a device symbol.

7 Click once on the AsantéHub 1016-IQ’s icon.

- △ **Note:** This icon is labeled “Asanté” and has a “repeater” device symbol. It also has the AsantéHub 1016-IQ’s IP address below it.

The Device Page for the AsantéHub 1016-IQ appears (see Figure 3-2 on page 3-3).

Device Page Components

A Personality Module's Device Page consists of several components, including device information, a front-panel image, and management menu items. See Figure 3-2.

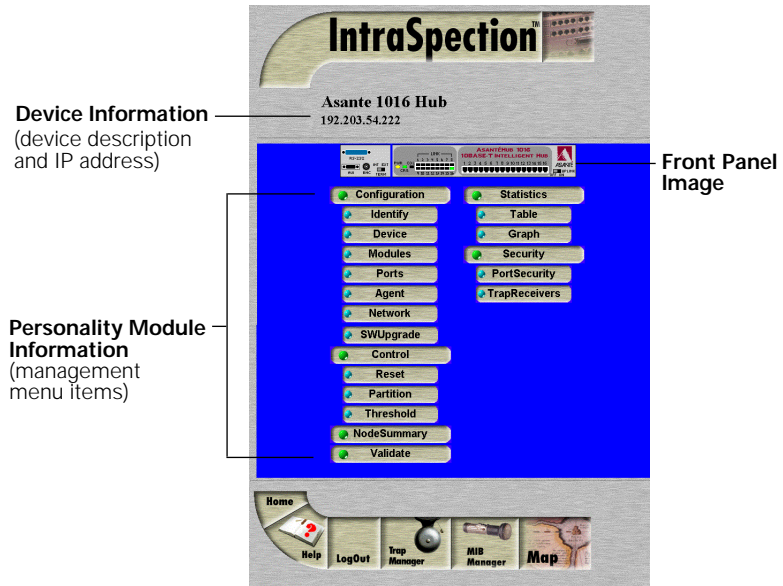


Figure 3-2 Device Page components

Front Panel Image

The interactive front panel image contains the following components (as illustrated in Figure 3-3):

- ❑ **Device** — the entire AsantéHub 1016-IQ.
- ❑ **Group** — one of two groups within the device (see Figure 3-3).
- ❑ **Port** — each port on the AsantéHub 1016-IQ; click once on a port to select it for management.
- ❑ **Status LEDs** — real-time LEDs that represent the LEDs on the AsantéHub 1016-IQ; they display hub and port activity.

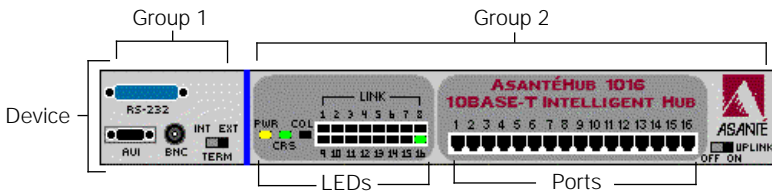


Figure 3-3 Front-panel image components

- ▲ **Important:** Throughout this manual, the term **device** refers to the entire AsantéHub 1016-IQ; the term **group** refers to one of the device's two groups; the term **port** refers to an individual port.

Selecting the Device for Management

The AsantéHub 1016-IQ can be managed at different levels; that is, at the device, group, or port level.

For example, if the device is selected and you select the **Graph** menu, statistics for the AsantéHub 1016-IQ are displayed. If a port is selected and you select **Graph**, statistics for the selected port are displayed.

Selecting an Item

Target Item	Action
Device (AsantéHub 1016-IQ)	Do not click anything on the front-panel image.
Group	Click once on the group.
Port	Click once on the port.

Deselecting an Item

Target Item	Action
Device	Click once on a group or a port.
Group	Click again on the selected group.
Port	Click again on the selected port.

Menu Components

The menus on the AsantéHub 1016-IQ Device Page provide access to the different management options supported by the Personality Module.

Tables

Some menus contain tables with information that is configurable directly on-screen from your Web browser while others contain information that is read-only. The following tables describe how to recognize configurable and read-only information.

Configurable Information

Table field	Action
Drop-down menu	Select from an available option.
White-colored fields	Type information.

Read-only Information

Table field	Action
Green- or gray-colored fields	None; field cannot be edited.

Table Columns

Some table columns can be resized to fit the width of your screen. To resize a table column, place the mouse pointer on a column title's left or right side (until a double arrow appears) and drag the column to the left or to the right, as desired.

Buttons

Some menus contain buttons which allow you to edit/and or update the page.

Button	Action
Apply	Applies any changes made to the device.
Refresh	Updates the table with the latest information.
Modify	Modifies a selected entry.
Add	Adds an entry into the table.

4

Management

This chapter explains how to perform some basic management functions with the AsantéHub 1016-IQ Personality Module.

Performing Basic Management Functions

- ▲ **Important:** The tasks outlined in this chapter require access to the AsantéHub 1016-IQ's Device Page. See Chapter 3, "Accessing the Device," for instructions.

This chapter covers the following configuration and management tasks:

Configuration Tasks

Configuration Task	Page #
Setting community strings	page 4-3
Configuring network access parameters	page 4-5
Configuring device identification information	page 4-6

Management Tasks

Management Task	Page #
Updating the Device Page	page 4-7
Viewing general device information	page 4-8
Performing a software upgrade	page 4-9
Enabling/disabling ports	page 4-10

Management

Management Task	Page #
Partitioning a port	page 4-12
Resetting the AsantéHub 1016-IQ	page 4-13
Enabling authentication traps	page 4-15
Managing trap receivers	page 4-16
Setting alarms	page 4-18
Viewing node summary information	page 4-21
Setting port security	page 4-23
Viewing statistics	page 4-25

Setting Community Strings

Community strings define access rights for reading and writing SNMP data objects for a device.

The community strings (read and write) for an AsantéHub 1016-IQ are manually set in the AsantéHub 1016-IQ via its console port.

In order to access the AsantéHub 1016-IQ with IntraSpection, the community strings must be set in IntraSpection to match those set in the AsantéHub 1016-IQ.

- ▲ **Important:** It is recommended that you set the community strings for an AsantéHub 1016-IQ in IntraSpection **before** you attempt to perform any network management functions.

This section describes how to set the community strings in IntraSpection to match those set in the AsantéHub 1016-IQ.

To set the community strings for an AsantéHub 1016-IQ in IntraSpection:

- 1 On the AsantéHub 1016-IQ's Device Page, click the **map** icon on the IntraSpection navigation bar (located at the bottom of the screen), as shown in Figure 4-1.



Figure 4-1 IntraSpection navigation bar

The most recently discovered map appears.

- 2 Click the **Map Manager** button.
The Map Manager Page appears, similar to Figure 4-2.



Figure 4-2 IntraSpecation Map Manager Page

- 3 Click the **Edit Device** button.
The Map Configuration Table appears, similar to Figure 4-3.



Figure 4-3 Map Configuration Table

- 4 Enter the AsantéHub 1016-IQ's IP address in the **IP Address** field.
- 5 Enter the AsantéHub 1016-IQ's read community string in the **Read** field.
- 6 Enter the AsantéHub 1016-IQ's write community string in the **Write** field.
- 7 Click **Apply**.
The read and write community strings for the AsantéHub 1016-IQ are set in IntraSpecation.

Configuring Network Access Parameters

To configure and/or manage an AsantéHub 1016-IQ, the AsantéHub 1016-IQ needs to be properly configured with network access parameters.

These parameters are initially configured in the AsantéHub 1016-IQ via the its console port; however, some can be modified using IntraSpec-tion.

To configure network access parameters:

1 Click **Network**.

The Network Information Table appears, similar to Figure 4-4.

Network Information	
192.203.54.222: AH1016	
Network Access Parameters	
Agent's IP Address	192.203.54.222
Subnet Mask	255.255.255.0
Default Gateway	192.203.54.1
DnsServer	8.8.8.8
VpnServer	
Dial String	
OutDialRate	3000
<input type="button" value="Apply"/> <input type="button" value="Refresh"/>	

Figure 4-4 Network Information Table

2 Click once in the field to be edited.

For a description of each field, see “Network “ on page 5-9.

▲ **Important:** If you change the **IP address**, **subnet mask**, and/or **default gateway**, you must reset the AsantéHub 1016-IQ. See “Resetting the AsantéHub 1016-IQ” on page 4-13.

3 Type the new information.

4 Click **Apply**.

The network access information is edited. Click **Refresh** to view updated information.

Configuring Device Identification Information

To help with hub identification, you can add certain details to the AsantéHub 1016-IQ; such as, the AsantéHub 1016-IQ's name, location, and contact information.

To configure device identification information:

- 1 Click **Identify**.

The Device Identification Table appears, similar to Figure 4-5.

Device Identification	
192.203.54.222: AH1016	
Identification	
IP Address	192.203.54.222
Device ID	1.5.8.1.1.208.1.2.8
Description	Asante 1016-IQ Intelligent Hub
Name	AS1016
Location	Click Here
Contact	Click Here
Life Time	30.228.7m.0s
Configuration	
Interface	0

APPLY REFRESH

Figure 4-5 Device Identification Table

- 2 Click once in the field to be edited.

For a description of each field, see “Identify” on page 5-3.

▲ **Important:** Only those fields that are colored white can be edited.

- 3 Type the new information.

▲ **Important:** A maximum of 254 characters (including spaces) is allowed.

- 4 Click **Apply**.

The identification information is edited. Click **Refresh** to view updated information.

Updating the Device Page

The files for the AsantéHub 1016-IQ Personality Module are stored within the IntraSpection Application Server's database.

Occasionally, these files should be updated from the Device Page to ensure that you are viewing the AsantéHub 1016-IQ's latest information.

To update the Personality Module's Device Page:

1 Click **Validate**.

The Device Page is updated with the latest information for the AsantéHub 1016-IQ Personality Module.

After the Device Page is updated, the IntraSpection Map Manager Page appears.

2 Click **AutoDiscovery** to rediscover the network map containing the devices.

▲ **Important:** See "Accessing the Device Page" on page 3-1 for instructions on discovering devices with AutoDiscovery.

Viewing General Device Information

General device information includes items such as the AsantéHub 1016-IQ's version and revision numbers, chassis type, backplane type, and backplane revision number.

To view general device information:

- 1 Click **Device**.

The Device Information Table appears, similar to Figure 4-6.

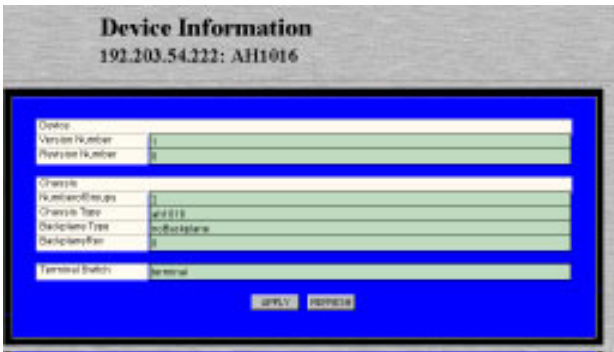


Figure 4-6 Device Information Table

Δ **Note:** The information displayed on this page is read-only.

For a description of each field, see "Device" on page 5-4.

- 2 Click **Refresh** to view updated information.

Performing a Software Upgrade

If you have a TFTP server on your network, you can upgrade an AsantéHub 1016-IQ's software via IntraSpection.

To upgrade an AsantéHub 1016-IQ's software via a TFTP server:

- 1 Click **SWUpgrade**.

The Software Upgrade Table appears, similar to Figure 4-7.

Figure 4-7 Software Upgrade Table

- 2 Type the software's file name and network path in the **Boot File Name** field.
- 3 Type the TFTP server's IP address where the software file resides in the **Server Address** field.
- 4 Open the **Image Load Mode** drop-down menu and select **netBoot**.
- 5 Click **Apply**.
- 6 Reset the AsantéHub 1016-IQ to initiate the downloading of the software. See "Resetting the AsantéHub 1016-IQ" on page 4-13 for instructions.

Click **Refresh** to view updated information.

Enabling/Disabling Ports

The enabling or disabling of a port is a manual operation that can be used to isolate devices possibly causing problems on the network or to prevent unauthorized use of a port or station.

To enable or disable a port:

- 1 Click **Ports**.

You do not need to select any particular port on the front-panel image.

The Port Table appears, similar to Figure 4-8.

Port Table
192.203.54.222: AH1016

Group	Port	Port Type	Link Status	AutoPart Status	Jabber Status	Jabber State	Polarity Status	Polarity State	Admin State
1	1	au	Null	notAutoPartitioned	off	enabled	Null	Null	enabled
1	2	other	Null	autoPartitioned	off	enabled	Null	Null	enabled
2	1	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	2	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	3	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	4	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	5	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	6	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	7	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	8	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	9	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	10	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	11	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	12	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	13	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	14	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	15	r45	linkoff	notAutoPartitioned	off	enabled	normal	disabled	enabled
2	16	r45	linkon	notAutoPartitioned	off	enabled	normal	disabled	enabled

Refresh Modify

Complete

Figure 4-8 Port Table

The Port Table displays the current status of each port on the device. The table contains a scroll bar that is independent of the browser, which allows you to view information on all ports on the device.

△ **Note:** For a description of each field, see “Ports” on page 5-6.

- 2 Select the port to be enabled or disabled by clicking once on the port’s row.

△ **Note:** The ports are identified by their group and port number. For example, the AsantéHub 1016-IQ’s 16 10Base-T ports are on group 2.

- 3 Click **Modify**.
The Modify Dialog box appears.
- 4 Open the **Admin State** drop-down menu and select **enable** (to enable the port) or **disable** (to disable the port).
- 5 Click **Apply**.
The port's state is modified.
Click **Refresh** to view updated information.

Partitioning a Port

Port partitioning is an operation that is done **automatically** by the AsantéHub 1016-IQ in certain circumstances to stop transmission on a port, if the port is enabled for automatic partitioning.

To enable or disable automatic partitioning:

- 1 Select the port to be partitioned by clicking on it once on the front-panel image.
- 2 Click **Partition**.
The Port Partition Table appears, similar to Figure 4-9.

Port Partition
192.203.54.222: AH1016
Group: 2
Port: 5

Partition Port	
Group Number	2
Port Number	5
Action	enabled

APPLY REFRESH

Figure 4-9 Port Partition Table

- 3 Open the **Action** drop-down menu and select **enable** (to enable automatic partitioning) or **disable** (to disable automatic partitioning).
- 4 Click **Apply**.
The port's partitioning state is modified.
Click **Refresh** to view updated information.

Resetting the AsantéHub 1016-IQ

If you changed the IP address, subnet mask, and/or default gateway information, the AsantéHub 1016-IQ needs to be reset.

To perform a reset:

- 1 Click **Reset**.

The Device Reset Table appears, similar to Figure 4-9.

Device Reset
192.203.54.222: AH1016

Reset Device	
Reset Agent	noReset

APPLY REFRESH

Figure 4-10 Device Reset Table

- △ **Note:** If you selected a group, the Board Reset Table appears, similar to Figure 4-10

Board Reset
192.203.54.222: AH1016
Group: 2

Reset Board	
Group Number	2
Action	noReset

APPLY REFRESH

Figure 4-11 Board Reset Table

The Board Reset Table performs the same function as the Device Reset Table (they both reset the device).

Management

No matter which group is selected, the Board Reset Table will always display **Group: 2**, which refers to “repeater reset.”

Δ **Note:** Group 1 within the device cannot be reset. For more information on group numbering, see page 3-4.

2 Open the **Action** drop-down menu and select **reset**.

3 Click **Apply**.

The AsantéHub 1016-IQ or selected group is reset.

▲ **Important:** To abort the reset, click on the browser’s back arrow to go back one page.

Enabling Authentication Traps

The Trap Authentication feature enables an AsantéHub 1016-IQ to generate authentication traps. Authentication traps are generated when a network management station with an invalid community string attempts to access the AsantéHub 1016-IQ.

To enable Trap Authentication:

1 Click **Agent**.

The Agent Information Table appears, similar to Figure 4-12.

Agent Information	
192.203.54.222: AH1016	
Software	
SWVersion Major	1
SWVersion Minor	4
Firmware	
FWVersion Major	1
FWVersion Minor	3
Authentication	
Trap Authentication	disabled
UnAuthorized ComSt	
Unauthorized IP	0.0.0.0
<input type="button" value="APPLY"/> <input type="button" value="REFRESH"/>	

Figure 4-12 Agent Information Table

Δ **Note:** For a description of each field, see “Agent” on page 5-8.

2 Open the **Trap Authentication** drop-down menu and select **enabled**.

3 Click **Apply**.

The AsantéHub 1016-IQ is configured to generate authentication traps.

Managing Trap Receivers

The Trap Receivers menu allows you to determine which management stations on your network can receive traps from the AsantéHub 1016-IQ.

This section describes how to add and delete a trap receiver's entry.

To add a trap receiver entry:

- 1 Click **TrapReceivers**.

The Trap Receiver Table appears, similar to Figure 4-13.

Status	Trap Receiver Address	Community String
valid	192.203.54.155	private
valid	192.203.54.173	public

Refresh Modify Add

Complete

Figure 4-13 Trap Receiver Table

△ **Note:** For a description of each field, see “Trap Receivers” on page 5-24.

- 2 Click **Add**.
The Add Dialog box appears.
- 3 Open the **Status** drop-down menu and select **valid**.
- 4 Type the IP address of the management station that is to receive traps in the **Trap Receiver Address** field.
▲ **Important:** Do NOT type an IP address of 0.0.0.0.
- 5 Type the community string for the management station in the **Community String** field.

6 Click **Apply**.

The entry for the management station is added and appears in the table. If it does not appear, click **Refresh**.

Deleting a Trap Receiver Entry

To delete a trap receiver entry:

- 1** Click once on the row containing the entry to be deleted.
- 2** Click **Modify**.
The Modify Dialog box appears.
- 3** Open the **Status** drop-down menu and select **invalid**.
- 4** Click **Apply**.
The trap receiver is deleted.
- 5** Click **Refresh** in the Trap Receiver Table.

Modifying a Trap Receiver Entry

To change the IP address of a trap receiver entry:

- 1** Delete the trap receiver entry, following the directions above.
- 2** Add a new trap receiver entry, following the instructions on page 4-16.
The trap receiver entry's IP address is changed.
Click **Refresh** to view updated information.

Setting Alarms

Alarm thresholds can help you locate problems or faults on the network.

When you set a threshold for an activity on an AsantéHub 1016-IQ, you instruct the AsantéHub 1016-IQ to take a specific action when a value falls above or below the set threshold.

This section explains how to set, delete, and modify alarm thresholds.

To add an alarm:

1 Click **Threshold**.

The Alarm Threshold Table appears, similar to Figure 4-14.

Name	Alarm	Group	Interval	Priority	Type	Alarm Action	Action Type	Action Param	Description
------	-------	-------	----------	----------	------	--------------	-------------	--------------	-------------

Figure 4-14 Alarm Threshold Table

△ **Note:** If there are no alarm thresholds set, the table is empty.

For a description of each field, see “Threshold” on page 5-14.

2 Click **Add** to add an entry.

The Add Dialog box appears.

3 Complete each entry as outlined in Table 4-1 on page 4-19.

4 Click **Apply**.

The alarm threshold is added. If it does not appear in the Alarm Threshold Table, click **Refresh**.

Table 4-1 Alarm Threshold fields

Field	Description	Action
Index	Displays the number of the alarm entry.	This field is read-only; it cannot be edited.
Status	The status of the alarm entry.	Select valid to add an alarm or invalid to delete the alarm.
Target Domain	The portion of the device for which the alarm is to be set.	Select hub , port , or group from the drop-down menu.
TGroup	The number of the group for which the alarm is to be set.	Enter a group number if group was selected as the Target Domain .
TPort	The number of the port for which the alarm is to be set.	Enter a port number if port was selected as the Target Domain .
Target Subject	The counter to be polled for the alarm.	Select a counter from the drop-down menu. See "Target Subject" on page 5-15 for a description of each counter.
Sample Type	The unit of measure for the alarm.	This field cannot be edited; it is always set to event-persecond .
Startup Event	Determines when the alarm is to be triggered.	Select rising , falling , or risingANDfalling from the drop-down menu. See "Startup Event" on page 5-16 for a description of each event.
Threshold Value	The value that triggers the alarm.	Enter an integer.
Detected Value	Displays the last measurement made.	This field is read-only; it cannot be edited.
Rising Event	The response to occur for a triggered rising event.	Select a response from the drop-down menu. See "Rising Event" on page 5-16 for a description of each response.
Falling Event	The response to occur for a triggered falling event.	Select a response from the drop-down menu. See "Falling Event" on page 5-16 for a description of each response.

Management

Field	Description	Action
Sample Interval	The polling interval that determines how often to make the measurement.	Enter a number (in seconds). Note: The shorter the sampling interval, the more traffic on the network.
Owner String	The name of the person who defined the alarm entry.	Enter an eight-byte octet.

Deleting an Alarm

To delete an alarm:

- 1 Select the alarm entry to be deleted by clicking once on its row in the Alarm Threshold Table.
- 2 Click **Modify**.
The Modify Dialog box appears.
- 3 Open the **Status** drop-down menu and select **invalid**.
- 4 Click **Apply**.
The alarm entry is deleted. Click **Refresh** to view updated information.

Modifying an Alarm

To modify an alarm:

- 1 Select the alarm entry to be modified by clicking once on its row in the Alarm Threshold Table.
- 2 Click **Modify**.
The Modify Dialog box appears.
- 3 Modify the parameters, as desired, following the guidelines in Table 4-1 on page 4-19.
- 4 Click **Apply**.
The alarm is modified.

Viewing Node Summary Information

The Node Summary menu provides IP mapping information (a summary of node activity) for the device.

To view node summary information:

1 Click **Node Summary**.

The Node Summary Table appears, similar to Figure 4-15.

Node Summary Table -Device-
192.203.54.222: AH1016

NodeAging Timer

Group	Port	Last IP Address	Last Physical Address	Number of Addresses
1	1	0.0.0.0	FF FF FF FF FF FF	0
1	2	0.0.0.0	FF FF FF FF FF FF	0
2	1	0.0.0.0	FF FF FF FF FF FF	0
2	2	0.0.0.0	00 00 86 13 F3 5C	0
2	3	0.0.0.0	FF FF FF FF FF FF	0
2	4	0.0.0.0	00 00 86 13 F3 5C	0
2	5	0.0.0.0	FF FF FF FF FF FF	0
2	6	0.0.0.0	FF FF FF FF FF FF	0
2	7	0.0.0.0	FF FF FF FF FF FF	0
2	8	0.0.0.0	FF FF FF FF FF FF	0
2	9	0.0.0.0	FF FF FF FF 7F FF	0
2	10	0.0.0.0	FF FF FF FF FF FF	0
2	11	0.0.0.0	FF FF FF FF FF FF	0
2	12	0.0.0.0	FF FF FF FF FF FF	0
2	13	0.0.0.0	00 00 94 20 F5 3B	0
2	14	0.0.0.0	FF FF FF FF FF FF	0
2	15	0.0.0.0	FF FF FF FF FF FF	0
2	16	0.0.0.0	00 03 E3 C0 00 A3	42,838,687

Complete

Figure 4-15 Node Summary Table

Each node address remains in the table for the amount of seconds specified in the Node Aging Timer.

You can set the amount of time each entry remains in the table by typing the number of seconds in the **Node Aging Timer** field and clicking **Apply**.

Management

- ❑ The default setting is **-1** (this value prevents the table from updating; the value “4,294,967,295” appears in the field).
- ❑ A value of **0** never deletes the entries in the table.
- △ **Note:** The information displayed in the Node Summary Table is read-only.

For a description of each field, see “Node Summary” on page 5-18.

2 Click **Refresh** to view updated information.

Setting Port Security

The Port Security menu allows you to restrict access to ports by specifying the physical addresses that are authorized to connect to the ports.

If an unspecified physical address attempts to connect to a restricted port, an action (such as automatic partitioning of the port, sending of a trap, etc) can be specified to occur.

To set port security:

- 1 Click **Port Security**.

The Port Security Table appears, similar to Figure 4-16.

Group	Port	Status	Allowed Address	Violation Action
2	9	valid	00:00:00:00:00:01	sendTrap

Buttons: Refresh, Modify, Add, Delete

Status: Complete

Figure 4-16 Port Security Table

- 2 Click the **Add** button.

The Add Dialog box appears, similar to Figure 4-17.

GroupIndex: 0 Status: valid

PortIndex: 0 Allowed Address: 00:00:00:00:00:00

Violation Action: partitionport

Buttons: Apply, Cancel

Unsigned Java Applet Window

Figure 4-17 Add Port Security Dialog box

3 Enter the number of the group for which port security information is to be set in the **Group** field.

△ **Note:** If you are setting port security on one of the AsantéHub 1016-IQ's 16 ports, type **2** as the Group number.

4 Enter the number of the port for which port security information is to be set in the **Port** field.

5 Open the **Status** drop-down menu and select **valid**.

6 Enter the physical (MAC) address that is allowed to use the selected port number in the **Allowed Address** field.

▲ **Important:** Enter the physical address in hexadecimal notation separated by colons. For example, 00:00:94:C5:15:F1.

7 Open the **Violation Action** drop-down menu and select the violation action to occur if an unauthorized MAC address attempts to access the port.

For a description of each violation action, see “Violation Action” on page 5-23.

8 Click **Apply**.

The port security information is configured.

Click **Refresh** to view updated information.

Viewing Statistics

Statistics for an AsantéHub 1016-IQ can be viewed at the device, group, or port level in two different formats: table or graph. Statistics collected include runs, alignment errors, late collisions, short events, good frames, and bad frames.

Table Statistics

- 1 Select a port or group for which statistics are to be gathered by clicking on it once. To view statistics for the device, do not select any item on the front-panel image.
- 2 Click **Table**.
Table statistics appear for the selected port, group, or device, similar to Figure 4-18.

Device Statistics Table
192.203.54.222: AH1016

Sampling Interval (seconds): 2 RESET

Object	Curr	Peak	Avg	Total
Good Frames	28	28	1F	3,276,314
FramesToLongFilter	0	0	0	0
Runts	0	0	0	5,450
Alignment Errors	0	0	0	14
P/E Errors	0	0	0	30
OutRate Errors	0	0	0	0
Short Frames	0	0	0	1,281
Collisions	0	0	0	3,481
Late Collisions	0	0	0	0
Multiple Late Coll	0	0	0	0
Late Packets	0	0	0	0
Bad Frames	0	0	0	4,331
Available Output	2,008	2,398	1,871	387,236,881

Monitoring

Figure 4-18 Table Statistics

For a description of each object, see “Objects” on page 5-19.

- 3 Open the **Sampling Interval** drop-down menu and select the number of seconds to poll for statistics. Statistics are automatically gathered in the following columns:
 - Curr** — (current) the number of occurrences each second.
 - Peak** — the largest number of occurrences since opening or resetting the screen.

Management

- ❑ **Avg** — (average) the average number of occurrences since opening or resetting the screen.
- ❑ **Total** — the total number of occurrences since opening or resetting the screen.

4 Click **Reset** to reset the counters to zero.

Graph Statistics

- 1 Select a port or group for which statistics are to be gathered by clicking on it once. To view statistics for the device, do not select any item on the front-panel image.
- 2 Click **Graph**.
The Graph Statistics page appears for the selected port, group, or device, similar to Figure 4-19.

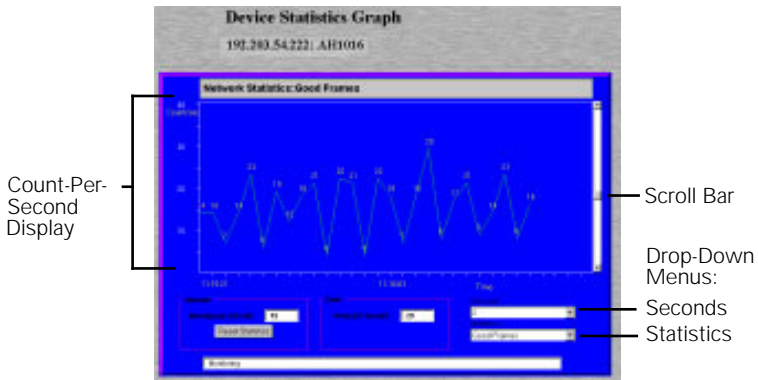


Figure 4-19 Graph Statistics

- 3 Open the **Statistics** drop-down menu and select the object to be monitored.
For a description of each object, see “Objects” on page 5-19.
- 4 Open the **Seconds** drop-down menu and select the number of seconds for which statistics are to be gathered.
- 5 Use the scroll button to change the graph’s count-per-second display (scroll up to increase the count-per-second, scroll down to decrease it).
 - ❑ **Average per Second** — the average number of occurrences since opening or resetting the screen.

Management

- ❑ **Peak per Second** — the largest number of occurrences since opening or resetting the screen.

6 Click **Reset** to reset the counters to zero.

5

Menus

This chapter describes each management menu on the AsantéHub 1016-IQ Personality Modules' Device Page.

The table below provides a brief description of each menu; the sections that follow explain each menu in detail.

Table 5-1 Device Page Menu Descriptions

Menu	Description
Configuration	Title for the submenus listed below it; this menu cannot be selected. See "Configuration" on page 5-3.
Identify	Allows you to view and configure device identification information. See "Identify" on page 5-3.
Device	Allows you to view general device information. See "Device" on page 5-4.
Modules	Allows you to view information on the device's group types. See "Modules" on page 5-5.
Ports	Allows you to view information for each port and enable and disable ports. See "Ports" on page 5-6.
Agent	Allows you to view information on the device's SNMP agent (such as software and firmware information) and allows you to enable and disable trap authentication. See "Agent" on page 5-8.
Network	Allows you to view and configure network access information for the device. See "Network" on page 5-9.
SWUpgrade	Allows you to determine the file name and server address for upgrading the device's software. See "SWUpgrade" on page 5-10.

Menus

Menu	Description
Control	Title for the submenus listed below it; this menu cannot be selected. See "Control" on page 5-12.
Reset	Allows you to reset the AsantéHub 1016-IQ. See "Reset" on page 5-12.
Partition	Allows you to partition a port. See "Partition" on page 5-13.
Threshold	Allows you to set alarm thresholds for the device. See "Threshold" on page 5-14.
Node Summary	Allows you to view IP mapping information for the device. See "Node Summary" on page 5-18.
Validate	Updates the Device Page with the latest information from the IntraSpec Application Server database. See "Validate" on page 5-19.
Statistics	Title for the submenus listed below it; this menu cannot be selected. See "Statistics" on page 5-19.
Table	Allows you to view real-time statistical data, in a table format, on the device, a group, or a port. See "Table" on page 5-19.
Graph	Allows you to view real-time statistical data, in a graph format, on the device, a group, or a port. See "Graph" on page 5-21.
Security	Title for the submenus listed below it; this menu cannot be selected. See "Security" on page 5-22.
Port Security	Allows you to restrict access to a port by determining the IP address that is allowed to connect to the port. See "Port Security" on page 5-22.
Trap Receivers	Allows you to determine which management stations on the network can receive traps from the device. See "Trap Receivers" on page 5-24.

Configuration

This menu is not a management option; it is a title for the sub-menus listed below it. This menu cannot be selected.

Identify

This menu provides read-only and configurable identification information for the device.

Table 5-2 describes each field in the Identify menu.

- △ **Note:** For instructions on using this menu, see “Configuring Device Identification Information” on page 4-6.

Table 5-2 Identify Menu

Field	Description
Physical Address	Read-only field; displays the device's hardware address.
Object ID	Read-only field; displays the device's SNMP identifying number.
Description	Read-only field; displays a description of the device.
Name	Configurable field; assigns a name to the device. Note: A maximum of 254 characters (including spaces) is allowed.
Location	Configurable field; assigns a location to the device (where the device is physically located). Note: A maximum of 254 characters (including spaces) is allowed.
Contact	Configurable field; assigns a name of the person responsible for the device. Note: A maximum of 254 characters (including spaces) is allowed.
Up Time	Read-only field; displays the amount of time the device has been operational since the last time it was off-line.
Interfaces	Read-only field; displays the number of network interfaces present on this device.

Menus

Device

This menu provides read-only, general information on the device.

Table 5-3 describes each field in the Device menu.

- △ **Note:** For instructions on using this menu, see “Viewing General Device Information” on page 4-8.

Table 5-3 Device Menu

Field	Description
Version Number	Read-only field; displays the current version number of the device.
Revision Number	Read-only field; displays the current revision number of the device.
Number of Groups	Read-only field; displays the number of groups the device contains.
Chassis Type	Read-only field; displays the device's chassis type.
Backplane Type	Read-only field; displays the device's backplane type.
Backplane Rev	Read-only field; displays the device's backplane revision number.
Terminal Switch	<p>Read-only field; displays the current setting of the AsantéHub 1016-IQ's RS-232 port.</p> <p>The AsantéHub 1016-IQ's RS-232 port can be set — via the device's terminal switch — to function in one of two modes: as a dumb terminal port (for configuration of the hub) or for AMS 00B operation</p> <p>This terminal switch is manually set on the AsantéHub 1016-IQ.</p> <ul style="list-style-type: none"><input type="checkbox"/> terminal — the RS-232 port is set to dumb terminal mode.<input type="checkbox"/> amsport — the RS-232 port is set to AMS mode.

Modules

This menu provides read-only information on each group within the device.

The AsantéHub 1016-IQ consists of two groups. See “Front Panel Image” on page 3-4 for more information on the two groups.

Table 5-4 describes each field in the Modules menu.

Table 5-4 Modules Menu

Field	Description
Group	Read-only field; displays the number of the group.
Ports	Read-only field; displays the total number of ports in the group.
Chassis Module Type	Read-only field; displays the type of module of the selected group. <ul style="list-style-type: none"> <input type="checkbox"/> ah1016_UpLink <input type="checkbox"/> ah1016_16PortHost
Chassis Module Description	Read-only field; displays a description of the module.

Ports

This menu provides read-only and configurable information for each port on the device.

Table 5-5 describes each field in the Ports menu.

- △ **Note:** For instructions on using this menu, see “Enabling/Disabling Ports” on page 4-10 and “Partitioning a Port” on page 4-12.

Table 5-5 Ports Menu

Field	Description
Group	Read-only field; displays the number of the group to which the associated port belongs.
Port	Read-only field; displays the number of the port for which information is displayed.
Port Type	Read-only field; displays the type of connector on the port (for example, RJ-45).
Link Status	Read-only field; displays if a device is connected to the selected port. <input type="checkbox"/> linkon — a device is properly connected to the selected port and is powered on. <input type="checkbox"/> linkoff — a device is not connected to the port.
AutoPart Status	Configurable field; displays the automatic partitioning status of the selected port. <input type="checkbox"/> autopartitioned — the port is configured for automatic partitioning. <input type="checkbox"/> noautopartitioned — the port is not configured for automatic partitioning.

Field	Description
Jabber Status	<p>Read-only field; displays the status of the Jabber Detector.</p> <p>Note: A Jabber Detector is a device that helps prevent a node from transmitting constantly; for example, if the node is malfunctioning.</p> <ul style="list-style-type: none"> <input type="checkbox"/> on — jabber detector is on. <input type="checkbox"/> off — jabber detector is off.
Jabber State	<p>Configurable field; enables or disables the jabber detection test.</p>
Polarity Status	<p>Read-only field; displays the status of the auto polarity check.</p> <ul style="list-style-type: none"> <input type="checkbox"/> normal — the auto polarity checking is enabled and the polarity status is normal. <input type="checkbox"/> reversed — the auto polarity checking is enabled and the polarity status is reversed.
Polarity State	<p>Configurable field; determines the state of the device's auto polarity correction.</p> <p>Auto polarity correction allows a hub to make electrical corrections automatically if a cable does not reverse polarity within its pairs.</p>
Admin State	<p>Configurable field; determines the state of the port.</p> <ul style="list-style-type: none"> <input type="checkbox"/> enabled — the port is enabled and can receive packets. <input type="checkbox"/> disabled — the port is disabled and cannot receive packets.

Agent

This menu provides read-only and configurable information on the device's SNMP agent.

Table 5-6 describes each field in the Agent menu.

Table 5-6 Agent Menu

Field	Description
SWVersion Major	Read-only field; displays the major software version number of the device.
SWVersion Minor	Read-only field; displays the minor software version number of the device.
FWVersion Major	Read-only field; displays the major firmware version number of the device.
FWVersion Minor	Read-only field; displays the minor firmware version number of the device.
Trap Authentication	<p>Configurable field; indicates if the device can send authentication traps to the trap receiving stations.</p> <p>Note: Authentication traps are generated when a network station with an invalid community string attempts to access the AsantéHub 1016-IQ.</p> <ul style="list-style-type: none"> <input type="checkbox"/> enable — the device can send authentication traps. <input type="checkbox"/> disable — the device cannot send authentication traps. <p>See “Enabling Traps” on page 4-15 for instructions.</p>
Unauthorized Com String	<p>Read-only field; displays the community string of the last network station that attempted to access the device with an invalid community string.</p> <p>This field is related to the Unauthorized IP field.</p>
Unauthorized IP	<p>Read-only field; displays the IP address of the last network station that attempted to access the device with an invalid community string. (The community string that was used is displayed in the Unauthorized Com String field.)</p>

Network

This menu provides configurable network access information for the device. This information is needed to access the device across the network (in-band management).

Table 5-7 describes each field in the Network menu.

- ▲ **Important:** If you change the **IP address, subnet mask, or default gateway**, the AsantéHub 1016-IQ needs to be reset in order for the changes to take effect. See “Resetting the AsantéHub 1016-IQ” on page 4-13 for instructions.
- △ **Note:** For instructions on using this menu, see “Configuring Network Access Parameters” on page 4-5.

Table 5-7 Network Menu

Field	Description
Agent's IP Address	Configurable field; determines the device's IP address.
Subnet Mask	Configurable field; determines the subnet address of the device. Note: A subnet mask, in the IP addressing scheme, is a group of selected bits whose values serve to identify a subnetwork. All members of the subnetwork share the mask value.
Default Gateway	Configurable field; determines the address of the default gateway (router) to which the device belongs.
Boot Server	Configurable field; determines the IP address of the boot server that was used for booting the IP agent.
Dial String	Configurable field; determines the initialization string used by the network management station to establish an out-of-band connection with the device.
Out of Band Rate	Configurable field; determines the baud rate for accessing the device via out-of-band management. The default is 9600 .

SWUpgrade

This menu provides read-only and configurable software upgrade and boot method information (the parameters used for downloading a new version of software) for the device.

Table 5-8 describes each field in the SWUpgrade menu.

- △ **Note:** For instructions on using this menu, see “Performing a Software Upgrade” on page 4-9.

Table 5-8 SWUpgrade Menu

Field	Description
SW Major Version	Read-only field; displays the major software version number of the device.
SW Minor Version	Read-only field; displays the minor software version number of the device.
Boot File Name	Configurable field; determines the file name and network path of the boot file for the device.
Server Address	Configurable field; determines the boot server’s IP address.
Image Load Mode	Configurable field; determines the method for loading the software. <ul style="list-style-type: none"> <input type="checkbox"/> localBoot — sets the device to boot from code stored in device (default setting). <input type="checkbox"/> netBoot — sets the device to boot from a TFTP server on the network.
Remote Boot Info	Read-only field; indicates that the boot configuration parameters are originating from EEPROM. Note: This field always displays eepromBootInfo .

Field	Description
Remote Boot Protocol	<p>Configurable field; determines the remote boot protocol used to load the device's software.</p> <ul style="list-style-type: none"><li data-bbox="426 318 944 399"><input type="checkbox"/> bootpTftp — sets the device to request an IP address from a BootP server and to load the software from a TFTP server.<li data-bbox="426 407 944 488"><input type="checkbox"/> tftpOnly — sets the device to only load the software across the network (the device must already be configured with an IP address).

Menus

Control

This menu is not a management option; it is a title for the sub-menus listed below it. This menu cannot be selected.

Reset

This menu allows you to reset the AsantéHub 1016-IQ.

Table 4-9 describes each field in the Reset menu.

- △ **Note:** For instructions on using this menu, see “Resetting the AsantéHub 1016-IQ” on page 4-13.

Table 4-9 Reset Menu

Field	Description
Reset Agent	Configurable field; resets the device. <input type="checkbox"/> reset — resets the device. <input type="checkbox"/> notReset — does not reset the device.

Partition

This menu allows you to configure a port for automatic partitioning. Table 5-10 describes each field in the Partition menu.

- △ **Note:** For instructions on using this menu, see “Partitioning a Port” on page 4-12.

Table 5-10 Partition Menu

Field	Description
Group Number	Read-only field; displays the number of the group to which the selected port belongs.
Port Number	Read-only field; displays the number of the selected port.
Action	Configurable field; enables or disables automatic partitioning on the port. <ul style="list-style-type: none"> <input type="checkbox"/> enabled — enables automatic partitioning on the selected port. <input type="checkbox"/> disable — disables automatic partitioning on the selected port.

Threshold

This menu displays the current alarms that are set and allows alarms to be added or modified.

Alarms can help you locate problems or faults on the network. When you set an alarm threshold for an activity on a hub, you instruct the hub to take a specific action when the value falls above or below the set threshold.

Table 5-11 describes each field in the Threshold menu.

- △ **Note:** For instructions on using this menu, see “Setting Alarms” on page 4-18.

Table 5-11 Threshold Menu

Field	Description
Index	Read-only field; displays the number of the alarm entry. This field cannot be modified.
Status	Configurable field; displays the status of the entry in the table. <ul style="list-style-type: none"> <input type="checkbox"/> valid — active entry. <input type="checkbox"/> invalid — inactive entry (deletes the entry when selected).
Target Domain	Configurable field; determines the portion of the device for which alarms are being set. <ul style="list-style-type: none"> <input type="checkbox"/> hub — sets the alarm for the entire device. <input type="checkbox"/> port — sets the alarm for a specific port; you must enter the port number in the TPort field and the port’s group number in the TGroup field. <input type="checkbox"/> group — sets the alarm for a specific group; you must enter the group number in the TGroup field.
TGroup (target group)	Configurable field; determines the group number for which the alarm is being set. <p>Important: This field only needs to be edited if the Target Domain is set to group.</p>

Field	Description
TPort (target port)	Configurable field; determines the port number for which the alarm is being set. Important: This field only needs to be edited if the Target Domain is set to port .
Target Subject	Configurable field; determines the counter to be polled. <ul style="list-style-type: none"> <input type="checkbox"/> readableframes — the total number of good or readable frames (frames without error). <input type="checkbox"/> frametoolong — the number of frames that were longer than 1,518 bytes. <input type="checkbox"/> runts — the number of frames that were shorter than 64 bytes. <input type="checkbox"/> alignmenterrors — the number of frames that were an integral number of octets in length and did not pass the FCS check. <input type="checkbox"/> fcerrors — the number of frames that failed Cyclic Redundancy Check (CRC). <input type="checkbox"/> datarateismatch — the number of errors where the incoming data rate is not within the tolerance level of 10Mhz (+ or - 0.01%). <input type="checkbox"/> shorthevents — the number of data bursts, where data is less than 10 bytes in length. <input type="checkbox"/> collisions — the total number of collisions. <input type="checkbox"/> latecollisions — the number of collisions that occurred after the 64-byte collision window. <input type="checkbox"/> autopartitions — the number of times the port was automatically partitioned in response to 31 or more continuous collisions. <input type="checkbox"/> badframes — the number of invalid frames (including toolong, runts, misaligned, or bad FCS).
Sample Type	Read-only field; sets a unit of measure for the alarm. Note: This field is always set to eventpersecond and cannot be modified.

Menus

Field	Description
Startup Event	Configurable field; determines when the alarm is to be triggered. <ul style="list-style-type: none"> <input type="checkbox"/> rising — alarm is triggered when the event rate rises above the threshold. <input type="checkbox"/> falling — alarm is triggered when the event rate falls below the threshold. <input type="checkbox"/> rising and falling — alarm is triggered when the event rate rises above or falls below the threshold.
Threshold Value	Configurable field; sets the value that triggers the alarm.
Detected Value	Read-only field; displays the last measurement made.
Rising Event	Configurable field; displays the response to a triggered rising event. <ul style="list-style-type: none"> <input type="checkbox"/> partitionport — partitions the target port. <input type="checkbox"/> sendtrap — sends a trap to the receiving trap station. <input type="checkbox"/> partitionportANDsendtrap — partitions the target port and sends a trap. <input type="checkbox"/> sendtrapANDrequestpage — sends a trap and sends a page to the network administrator (if the trap receiving station is an AsantéView Management Station). <input type="checkbox"/> partitionportANDsendtrapANDrequestpage — partitions the target port, sends a trap, and send a page to the network administrator (if the trap receiving station is an AsantéView Management Station).
Falling Event	Configurable field; displays the response to a triggered falling event. Options are the same as those for a rising event (see “Rising Event” above).
Sample Interval	Configurable field; sets (in seconds) the polling interval. <p>Note: The shorter this time period, the more traffic on the network.</p>

Field	Description
Owner String	Configurable field; displays the name of the person who defined the entry (eight-byte octect).

Node Summary

This menu provides IP mapping information (a summary of node activity) on the device.

Table 5-12 describes each field in the Node Summary menu.

- △ **Note:** For instructions on using this menu, see “Viewing Node Summary Information” on page 4-21.

Table 5-12 Node Summary Menu

Field	Description
NodeAgingTimer	Configurable field; specifies the amount of time (in seconds) to keep the node entry in the table. This value can be any number, including : <ul style="list-style-type: none"> <input type="checkbox"/> -1 — prevents the table from updating. When this value is entered in the Node Aging Timer field, the value “ 4,294,967,295” is displayed. <input type="checkbox"/> 0 — entries are not deleted from the table Note: The amount of time is rounded to the nearest minute.
Group	Read-only field; displays the number of the group.
Port	Read-only field; displays the number of the port on the group.
Last IP Address	Read-only field; displays the last known IP address that is associated with the port.
Last Physical Address	Read-only field; displays the last MAC address associated with the port.
Number of Addresses	Read-only field; displays the number of addresses received on the port.

Validate

This menu updates the Personality Module's Device Page with the latest information stored in the IntraSpection Application Server database.

For instructions on using this menu, see "Updating the Device Page" on page 4-7.

Statistics

This menu is not a management option; it is a title to the sub-menus listed below it. This menu cannot be selected.

Table

This menu provides real-time statistical information, in a table format, on the device, a selected group, or a selected port.

Table 5-13 describes each field in the Table menu.

- △ **Note:** For instructions on using this menu, see "Viewing Statistics" on page 4-25.

Table 5-13 Table Menu

Field	Description
Sampling Interval	Configurable field; allows you to set the amount of time (in seconds) that the device/group/port is polled for information.
Reset	Button; resets the counters to zero in the table.
Objects	<ul style="list-style-type: none"> <input type="checkbox"/> Good Frames — the total number of good or readable frames (frames without error). <input type="checkbox"/> FramesTooLongErrors — the number of frames that were longer than 1518 bytes. <input type="checkbox"/> Runts — the number of frames that were shorter than 64 bytes. <input type="checkbox"/> Alignment Errors — the number of frames that were an integral number of octets in length and did not pass the FCS check.

Menus

Field	Description
	<ul style="list-style-type: none"><li data-bbox="377 256 877 316">❑ FCS Errors — the number of frames that failed Cyclic Redundancy Check (CRC).<li data-bbox="377 326 867 407">❑ Datarate Mismatch — the number of errors where the incoming data rate is not within the tolerance level of 10Mhz (+ or - 0.01%).<li data-bbox="377 417 845 477">❑ Short Events — the number of data bursts, where data is less than 10 bytes in length.<li data-bbox="377 487 547 513">❑ Collisions —<li data-bbox="377 522 883 583">❑ Late Collisions — the number of collisions that occurred after the 64-byte collision window.<li data-bbox="377 592 891 652">❑ MauJabberLockups — the number of times the hub repeater chip goes into a lockup state.<li data-bbox="377 662 891 743">❑ Auto Partitions — the number of times the port was automatically partitioned in response to 31 or more continuous collisions.<li data-bbox="377 753 896 813">❑ Bad Frames — the number of invalid frames (including toolong, runts, misaligned, or bad FCS).<li data-bbox="377 823 877 883">❑ Readable Octets — the total number of octets received from valid frames.

Graph

This menu provides real-time statistical information, in a graph format, on the device, a selected group, or a selected port.

Table 5-14 describes each field in the Graph menu.

- △ **Note:** For instructions on using this menu, see “Viewing Statistics” on page 4-25.

Table 5-14 Graph Menu

Field	Description
Seconds	Drop-down menu; specifies the amount of time (in seconds) that the device/group/port is polled for information.
Statistics	Drop-down menu; determines the object for which statistics are gathered. Note: For a description of each object, see “Objects” on page 5-19.
Average per second	Displays the average number of occurrences since opening or resetting the screen.
Reset Statistics	Button; resets the counters to zero in the graph.
Peak per second	Displays the largest number of occurrences since opening or resetting the screen.
Count-per-second display	Displays the amount of counts per second displayed on the graph. Note: To control the count-per-second display, use the scroll bar on the right side of the graph (scroll up to increase the count-per-second; scroll down to decrease it).
Objects	For a description of each object, see “Objects” on page 5-19.

Security

This menu is not a management option; it is a title for the sub-menus listed below it. This menu cannot be selected.

Port Security

This menu allows you to control access to the device's ports by specifying the physical addresses that are allowed to connect to the ports.

If an unauthorized physical address attempts to connect to a restricted port, an action (such as partition the port, send a trap, etc) can occur.

Table 5-15 describes each field in the Port Security menu.

- △ **Note:** For instructions on using this menu, see “Setting Port Security” on page 4-23.

Table 5-15 Port Security Menu

Field	Description
Group	Read-only field; displays the number of the group.
Port	Read-only field; displays the number of the port on the group.
Status	Configurable field; determines the status of the entry. <input type="checkbox"/> valid — entry is active. <input type="checkbox"/> invalid — entry is inactive (deletes the entry).
Allowed Address	Configurable field; displays the physical address that is allowed to connect to the specified port.

Field	Description
<p>Violation Action</p>	<p>Configurable field; determines the action to occur if the physical address does not match the Allowed Address.</p> <ul style="list-style-type: none"> <input type="checkbox"/> partitionport — partitions the target port. <input type="checkbox"/> sendtrap — sends a trap to the receiving station. <input type="checkbox"/> partitionportANDsendtrap — partitions the target port and sends a trap. <input type="checkbox"/> sendtrapANDrequestpage — sends a trap and sends a page to the network administrator (if the trap receiving station is an AsantéView Management Station). <input type="checkbox"/> partitionportANDsendtrapANDrequestpage — partitions the target port, sends a trap, and send a page to the network administrator .

Trap Receivers

This menu allows you to determine the network management stations that will receive traps from the device.

Table 5-16 describes each field in the Trap Receivers menu.

- △ **Note:** For instructions on using this menu, see “Managing Trap Receivers” on page 4-16.

Table 5-16 Trap Receivers Menu

Field	Description
Status	Configurable field; displays the status of the trap receiving station's entry. <input type="checkbox"/> valid — trap receiver entry is active. <input type="checkbox"/> invalid — trap receiver entry is inactive (deletes the trap receiver's entry in the table when selected).
Trap Receiver Address	Configurable field; displays the IP address of the management station that can receive traps.
Community String	Configurable field; displays the write community string of the receiving management station.



Technical Support

Contacting Asanté Technical Support

To contact Asanté Technical Support:

Telephone	(800) 622-7464
Fax	(408) 432-6018
Fax-Back	(800) 741-8607 (408) 954-8607
Internet Mail	support@asante.com
World Wide Web	http://www.asante.com
Bulletin Board Service (BBS)	(408) 432-1416
ARA BBS (guest log in)	(408) 894-0765
AppleLink mail/BBS	ASANTE
FTP Archive	ftp.asante.com

Technical Support Hours

6:00 A.M. to 5:00 P.M. Pacific Standard Time USA, Monday – Friday.

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