Cisco Aironet 340/350 Series Wireless Access Point

Supports Management Module SM-CIS1016
## Contents

### INTRODUCTION 4
- Purpose and Scope ........................................................4
- Required Reading ...........................................................4
- Supported Devices..........................................................5
- The SPECTRUM Model ..................................................5

### TASKS 7

### DEVICE VIEW 8
- Interface Icons ................................................................9
- Interface Icon Subviews Menu ......................................10
- Secondary Address Panel ............................................11

### DEVICE TOPOLOGY VIEW 12

### APPLICATION VIEWS 13
- Main Application View ...................................................13
- Supported Applications ..................................................14
  - Common Applications ..................................................14
  - Device-Specific MIBs ..................................................15
- Discovery Application ....................................................16
  - Discovery Cache Table View ......................................16
  - Interface Discovery Status Table .............................17

### PERFORMANCE VIEWS 18

### CONFIGURATION VIEWS 19
- Device Configuration View ...........................................19

### MODEL INFORMATION VIEW 21

### INDEX 22
Introduction

This section introduces the SPECTRUM Device Management documentation for the Cisco Aironet 340/350 Series Wireless Access Point.

This introduction contains the following topics:

- Purpose and Scope
- Required Reading
- Supported Devices (Page 5)
- The SPECTRUM Model (Page 5)

Purpose and Scope

Use this document as a guide for managing the Cisco Aironet 340/350 Series devices described on Page 5 with SPECTRUM management module SM-CIS1016. This document describes the icons, menus, and views that enable you to remotely monitor, configure, and troubleshoot Cisco Aironet 340/350 Series devices through software models in your SPECTRUM database.

Information specific to SM-CIS1016 is what is primarily included in this document. For general information about device management using SPECTRUM and explanations of SPECTRUM functionality and navigation techniques, refer to the topics listed under Required Reading.

Required Reading

To use this documentation effectively, you must be familiar with the information covered by the other SPECTRUM online documents listed below.

- Getting Started with SPECTRUM for Operators
- Getting Started with SPECTRUM for Administrators
- How to Manage Your Network with SPECTRUM
- SPECTRUM Views
- SPECTRUM Menus
- SPECTRUM Icons
- SPECTRUM Software Release Notice
Supported Devices

SPECTRUM management module SM-CIS1016 currently lets you model the CiscoCAP340 (Aironet Wireless LAN Access Point 340 series), and the CiscoCAP350 (Aironet Wireless LAN Access Point 350 series). Cisco Aironet products can be integrated into wired Ethernet networks, and they provide protection through full compliance with the IEEE 802.11b wireless standard.

The SPECTRUM Model

The model types for the Cisco Aironet 340/350 Series devices are Aironet, and AWCVX_MIB. Modeling results in the creation of Device icons that represent the devices and Application icons that represent their supported applications.

The Device icons contain double-click zones and provide access to Icon Subviews menus that let you perform device management activities such as those listed in Tasks on Page 7.

As Figure 1 shows, the appearance of the Device icons varies slightly depending on the kind of view it appears in.

Figure 1: Device Icons
The device-specific Icon Subviews menu options available from the Device icon are listed below.

<table>
<thead>
<tr>
<th>Option</th>
<th>Accesses the...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fault Management</td>
<td>Fault Management view, which is described in the <em>How to Manage Your Network with SPECTRUM</em> documentation.</td>
</tr>
<tr>
<td>Device</td>
<td>Device View (Page 8)</td>
</tr>
<tr>
<td>DevTop</td>
<td>Device Topology View (Page 12)</td>
</tr>
<tr>
<td>Application</td>
<td>Application Views (Page 13)</td>
</tr>
<tr>
<td>Configuration</td>
<td>Configuration Views (Page 19)</td>
</tr>
<tr>
<td>Model Information</td>
<td>Model Information View (Page 21)</td>
</tr>
<tr>
<td>Primary Application</td>
<td>Menu options that let you select the primary application; for example, Gen Bridge App, MIB-II, etc.</td>
</tr>
</tbody>
</table>

The rest of this document covering management module SM-CIS1016 is organized as follows:

- **Tasks** (Page 7)
- **Device View** (Page 8)
- **Device Topology View** (Page 12)
- **Application Views** (Page 13)
- **Performance Views** (Page 18)
- **Configuration Views** (Page 19)
- **Model Information View** (Page 21).
Tasks

This section contains an alphabetical list of device management tasks, with each task providing one or more links to views that let you perform the task.

Administrative Information (check)
- Model Information View (Page 21)

Alarm Thresholds (set)
- Interface Icon Subviews Menu (Page 10)

Configuration Information (check)
- Configuration Views (Page 19)

IP Address (find/change)
- Device View (Page 8)
- Secondary Address Panel (Page 11)

Network Type (check)
- Network Type Label (Page 10)

Performance (check)
- Device View (Page 8)
- Interface Icons (Page 9)
- Performance Views (Page 18)

Topology (check)
- Device Topology View (Page 12)
Device View

This section describes the Device view and subviews available for models of Cisco Aironet 340/350 Series devices in SPECTRUM.

**Access:** From the **Icon Subviews** menu for the Device icon, select **Device**.

This view (Figure 2) uses icons and labels to represent the device and its components, such as modules, ports, and applications. The view provides dynamic configuration and performance information for each of the device’s serial and network I/O ports, which are represented by Interface icons in the bottom panel of the view. The middle panel of the view displays a Device icon, which lets you monitor the device operation and access other device-specific views.
Interface Icons

Figure 3 shows a close-up of an Interface icon from the Device view. Most of the informational labels on the icon also provide double-click access to other views, as explained in the following label descriptions.

**Figure 3: Interface Icon**

- a Interface Number Label
- b IF Status Label
- c Interface Type Label
- d Network Type Label
- e Physical Address Label
- f IP Address Label

**Interface Number Label**
This label displays the interface (port) number.

**IF Status Label**
This label displays the current status of the interface for the primary application selected, e.g., Gen Rtr App or MIB-II App. Table 1 lists the possible label color representations. Note that the color of the label also depends on the interface’s current Administrative Status, which you set in the Interface Configuration View. This view can be accessed by double-clicking the Interface Type label.

**Table 1: Interface Status Label Colors**

<table>
<thead>
<tr>
<th>Color</th>
<th>Operational Status</th>
<th>Administrative Status</th>
<th>Label Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>up</td>
<td>up</td>
<td>ON</td>
</tr>
<tr>
<td>Blue</td>
<td>down</td>
<td>down</td>
<td>OFF</td>
</tr>
<tr>
<td>Yellow</td>
<td>down</td>
<td>up</td>
<td>OFF</td>
</tr>
<tr>
<td>Red</td>
<td>testing</td>
<td>testing</td>
<td>TEST</td>
</tr>
</tbody>
</table>

**Interface Type Label**
This label identifies the interface type (Ethernet, ATM, etc.). Double-click this label to access the Interface Configuration view. See the *SPECTRUM Views* documentation.
Network Type Label
This label identifies the type of network to which the interface is connected. Double-click the label to open the Model Information view for the interface.

Physical Address Label
This label displays the physical (MAC) address of the interface. Double-click this label to open the Address Translation Table (AT).

IP Address Label
This label displays the IP address for the interface. Double-click this label to open the Secondary Address Panel (Page 11), which lets you change the address and mask for the interface.

Interface Icon Subviews Menu

Table 2 lists the device-specific interface Icon Subviews menu options and the views to which they provide access.

<table>
<thead>
<tr>
<th>Option</th>
<th>Accesses the...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detail</td>
<td>Interface Detail view, which displays packet, error, and discard breakdown statistics for the interface.</td>
</tr>
<tr>
<td>IF Configuration</td>
<td>Interface Configuration view (see SPECTRUM Views).</td>
</tr>
<tr>
<td>Address Translation Table</td>
<td>Address Translation Table (AT) (see SPECTRUM Views).</td>
</tr>
<tr>
<td>Secondary Address Panel</td>
<td>Secondary Address Panel (Page 11).</td>
</tr>
<tr>
<td>Thresholds</td>
<td>Interface Threshold view, which lets you set the on/off alarm thresholds for load, packet rate, error rate, and % discarded for the interface.</td>
</tr>
<tr>
<td>Model Information</td>
<td>Model Information View (Page 21).</td>
</tr>
<tr>
<td>Trap Configuration</td>
<td>Interface Trap Configuration view (see How to Manage Your Network with SPECTRUM).</td>
</tr>
</tbody>
</table>
Secondary Address Panel

**Access:** From the Icon Subviews menu for the Interface icon in the Device view, select **Secondary Address Panel**.

This panel provides a table of IP addresses and masks obtained from the Address Translation table within the device’s firmware. You can change the current address displayed in the **IP Address** field by selecting an entry from the table in this panel and clicking the **Update** button.
Device Topology View

This section describes the Device Topology view available for models of the Cisco Aironet 340/350 Series devices.

Access: From the Icon Subviews menu for the Device icon, select DevTop.

The Device Topology view (Figure 4) shows the connections between a modeled device and other network entities. The lower panel of the view uses Interface icons to represent the device’s serial, network, and I/O ports. These icons provide the same information and menu options as those in the Device View (Page 8). If a device is connected to a particular interface, a Device icon appears on the vertical bar above the Interface icon along with an icon representing the network group that contains the device.

Refer to the SPECTRUM Views documentation for details on Device Topology view.
Application Views

This section describes the main Application view and the associated application-specific subviews available for models of Cisco Aironet 340/350 Series devices in SPECTRUM.

Access: From the Icon Subviews menu for the Device icon, select Application.

Main Application View

When a device model is created, SPECTRUM automatically creates models for each of the major and minor applications supported by the device. The main Application view identifies all of these application models, shows their current condition status, and provides access to application-specific subviews. Figure 5 shows this view in the Icon mode. If you prefer the List mode, which displays applications as text labels, select View > Mode > List.

For more information on this view, refer to the MIBs and the Application View document.

Figure 5: Main Application View
Supported Applications

SPECTRUM’s applications can be grouped within two general categories as follows:

- Applications associated with non proprietary MIBs. See Common Applications below.
- Applications associated with device-specific MIBs. See Device-Specific MIBs (Page 15).

Common Applications

For the most part, these applications represent the non proprietary MIBs supported by devices. Listed below (beneath the title of the SPECTRUM document that describes them) are some of the common applications currently supported by SPECTRUM. Refer to these documents when your devices support these applications.

Routing Applications
- Generic Routing
- Repeater
- AppleTalk
- DECnet
- OSPF
- OSPF2
- BGP4
- VRRP
- RFC 2932

Bridging Applications
- Ethernet Special Database
- Spanning Tree
- Static
- Transparent
- PPP Bridging
- Source Routing
- Translation
- QBridge

MIB II Applications
- SNMP
- IP
- ICMP
- TCP
- System2
- UDP

Transmission Applications
- FDDI
- Point to Point
- DS1
- DS3

Note: The documents listed below (in bold font) are available for viewing at:
www.aprisma.com/manuals/
Application Views

- RS-232
- WAN
- Frame Relay
- Token Ring
- Ethernet
- Fast Ethernet
- RFC 1317App
- RFC 1285App
- RFC 1315App
- 802.11App
- SONET

• Technology Applications
  - APPN
  - ATM Client
  - DHCP
  - DLSw
  - PNNI
  - RFC 1316App
  - RFC 1514
  - RFC 2287
  - RFC 2790
  - RFC 2925

• DOCSIS Applications
  - DOCSISCblDvApp
  - DOCSISQOSApp
  - DOCSISBPI2App
  - DOCSISBPIApp

Supported Applications

- DOCSISIFApp

• Digital Subscriber Line (DSL) Applications
  - ADSL

Device-Specific MIBs

SPECTRUM imports the following device-level proprietary MIB into its database:

- AWCVX-MIB.my

This MIB can be used in conjunction with SPECTRUM's optional customization products (referred to as the Level I Tool Kits) to create application models and views that display the condition of selected MIB objects.

Note:

Aprisma Management Technologies can provide training, technical assistance, and custom engineering support services for creating application models and their associated views.

The following device-specific application is described in the remainder of this section:

• Discovery Application (Page 16)
Discovery Application

This application (CiscoCDPApp) has three menu options that provide access to the following views.

- **Discovery Cache Table View** (Page 16)
- **Interface Discovery Status Table** (Page 17)
- **Model Information View** (Page 21)

**Discovery Cache Table View**

**Access:** From the **Icon Subviews** menu for the CiscoCDPApp Application icon, select **Cache**.

This table contains the cached information obtained by receiving Cisco Discovery Protocol (CDP) messages.

**Type**

An indication of the type of address contained in the corresponding instance of `cdpCacheAddress`.

**Address**

The (first) network-layer address of the device’s SNMP-agent as reported in the most recent CDP message.

**Device ID**

The Device-ID string as reported in the most recent CDP message. The zero-length string indicates no Device-ID field was reported in the most recent CDP message.

**Device Port**

The Port-ID string as reported in the most recent CDP message. This will typically be the value of the `ifName` object (e.g., 'Ethernet0'). The zero-length string indicates no Port-ID field was reported in the most recent CDP message.

**Platform**

The device’s hardware platform as reported in the most recent CDP message. The zero-length string indicates that no Platform field was reported in the most recent CDP message.

**Capabilities**

The device’s functional capabilities as reported in the most recent CDP message. For the latest set of specific values, see the latest version of the CDP specification. The zero-length string indicates no Capabilities field was reported in the most recent CDP message.
Interface Discovery Status Table

**Access:** From the Icon Subviews menu for the CiscoCDPApp Application icon, select Interfaces.

This table contains the status of Cisco Discovery Protocol (CDP) on the device’s interfaces.

**IF**
The interface index value of the local interface.

**Discovery**
An indication of whether the Cisco Discovery Protocol is currently running on this interface.

**Group**
This object is only relevant to interfaces that are repeater ports on 802.3 repeaters; it indicates the RFC1516 group number of the repeater port that corresponds to this interface.

**Port**
This object is only relevant to interfaces that are repeater ports on 802.3 repeaters; it indicates the RFC1516 port number of the repeater port that corresponds to this interface.

**Interval**
The interval at which CDP (Cisco Discovery Protocol) messages are to be generated on this interface. The default value is 60 seconds.
Performance Views

This section introduces the Performance view. For details concerning this view, refer to the SPECTRUM Views documentation.

Performance views display performance statistics in terms of a set of transmission attributes, e.g., cell rates, frame rates, % error, etc. A typical view is shown in Figure 6. The instantaneous condition of each transmission attribute is recorded in a graph. The statistical information for each attribute is presented in the adjacent table.

Generally, you determine performance at the device level through Performance views accessed from the Device and Application icons. You determine performance at the port/interface level through Performance views accessed from Interface icons.

Figure 6: Performance View
Configuration Views

Configuration views let you see and modify current settings for the modeled device and its interfaces, ports, and applications. The following Configuration views are available for models of Cisco Aironet 340/350 Series devices:

- **Device Configuration View** (Page 19)

### Device Configuration View

**Access:** From the Icon Subviews menu for the Device icon, select **Configuration**.

A typical Device Configuration view is shown in Figure 7. Generally, this view includes a few fields that display device information as well as an Interface Configuration Table that lists interface parameters, some of which can be changed (see *SPECTRUM Views*). Some Device Configuration views include one or more buttons that provide access to device-specific configuration information. These are described below.
Configuration Views

Redundancy and Model Reconfiguration Options
Refer to the SPECTRUM Views documentation.

Interface Address Translation
Refer to the SPECTRUM Views documentation.
Model Information View

This section provides a brief overview of the Model Information view.

Model Information views display administrative information about devices and their applications and let you set thresholds and alarm severity for the devices.

Figure 8 shows a sample Model Information view. The layout of this view is the same for all model types in SPECTRUM but some information will vary depending on the model it defines. Refer to the SPECTRUM Views documentation for a complete description of this view.
Index

A
Address
  Interface IP 10
  Physical (MAC) 10
Translation 11
Admin Status 9
Applications 13

C
CiscoCDPApp 16
Common Applications 14
Configuration
  Device 19

D
Device Specific MIBs 15
DevTop Views 12
Discovery Application
  Cache Table View 16
  Interface Discovery Status Table 17
Documentation 4

H
Hardware 5

I
Icon
  Subview documentation 6
  Subviews 6
Icons
  Device 5
  Interface 9
IF Configuration 10
Interface
  Type, Device 9

N
Network I/O ports 12
Network Type 10

P
Performance Statistics 18
Port Number, Device 9

S
Serial ports 12
Supported Applications 14

T
Threshold Information 10
Troubleshooting 7
Index

V

Viewing other documents 14
  list 14
  online 14