

Wireless – smartBridges airBridge (wireless Client)

Version 1.1

This probe monitors a smartBridges airBridge device. It retrieves and displays a variety of information, including traffic, the number of clients associated, and RF information. It places the device into alarm or warning based on user-defined thresholds for the number of clients. This probe uses SNMP v1 GET commands, as required by the device (mostly based on ATMEL AT76C510).

Thresholds:

Alarms:

% RSSI too low: User-defined (< 20)

Too many retry packets/sec: User-defined (>=100)

Too many failed packets/sec: User defined (>=100)

Warnings:

% RSSI low: User-defined (< 50)

Version/License:

Included with the wireless probe bundle 1.1. Requires InterMapper 4.3d4 or later.

Supported Equipment:

smartBridges airBridges (all versions: indoor, outdoor, total)

Caveats/Notes

- You may see stability issues with your smartBridges airBridge devices if you access them directly too frequently (device may not respond in time and InterMapper will think that they're down).
- The device resets its wireless and ethernet statistics periodically, the probe will display a slightly lower number of bytes/sec or packets/sec the first time the device is being reprobbed after a reset.
- To be able to run both InterMapper and smartBridges simpleMonitor on the same machine, disable SNMP trap processing in InterMapper. In InterMapper Console window, choose Edit/Server Settings, navigate to Server Preferences/SNMP, and uncheck the box labelled "Listen for SNMP traps on UDP port 162", then click OK.

Status page

Device Status

Name: myairpoint.mydomain.com
DNS Name: myairpoint.mydomain.com
Address: 172.16.0.1
Status: (UP|DOWN) (Reachable since Jan 20, 12:01:03)
Protocol: Wireless - smartBridges airPoint
Up Time: n/a¹
Availability: 99.8 % (of 1 day, 20 hours, 25 minutes)
Packet Loss: 0.85 % (of 10680 total attempts) [Reset]
Recent Loss: 1 pkts at Jan 28, 10:26:28
Round-trip time: 87 msec

airBridge Information ([manage](#))

Station name: Dartware airBridge
Firmware Version: 0.01.11
MAC Address/SSID: 00:30:1A:00:E4:5D
AP's BSSID/ESSID: My Access Point
Channel: 0
Link quality/RSSI: 0 % / 0 dBm (0 %)
Ethernet: 1192 total (111 Tx 1081 Rx) bytes/sec
Wireless: 2 total (0 Tx 2 Rx) packets/sec
0 Tx retry 0 Rx failed packets/sec
Total wireless traffic: 3% Unicast 0% Multicast 97% Broadcast
Last updated Feb 08, 16:01:49; interval: 30 seconds

Data source:

- Operational mode: 1.3.6.1.4.1.410.1.1.4.1 (operationalMode)
- Station name: 1.3.6.1.4.1.410.1.2.1.10.0 (operWirelessBridgeName)
- Firmware version: 1.3.6.1.4.1.410.1.1.1.1.0 (sysDescr)
- SSID: 1.3.6.1.4.1.410.1.1.2.3.0 (operEthernetAddress)
- ESSID: 1.3.6.1.4.1.410.1.2.8.1.0 (NetworkSettings)
- Channel ID: 1.3.6.1.4.1.410.1.2.1.1.0 (operChannelID)
- Traffic information (these statistics MIB objects will result in a C struct in little endian order that will need to be parsed/unpacked – for details see the Atmel MIB):
 - Ethernet Rx statistics: 1.3.6.1.4.1.410.1.1.7.2.0 (EthTxStatistics)
 - Ethernet Tx statistics: 1.3.6.1.4.1.410.1.1.7.1.0 (EthRxStatistics)
 - Wireless statistics: 1.3.6.1.4.1.410.1.2.3.1.0 (WirelessStatistics)

¹ This information is not available since the device doesn't support MIB-II.

Sample status page:

```
192.168.1.241
Device Status
  Name: 192.168.1.241
  DNS Name: (Unknown)
  Address: 192.168.1.241
  Status: UP
  Protocol: Wireless - smartBridges airBridge (port 161)
  Up Time: n/a
  Availability: 100 % (of 2 seconds)
  Packet Loss: 0.0 % (of 3 total attempts) [Reset]
  Recent Loss: None
  Round-trip time: 15 msec
airBridge Information
  Station name: Dartware airBridge
  Firmware Version: 0.01.11
  MAC Address/SSID: 00:30:1A:00:E4:5D
  AP's BSSID/ESSID: 12:34:56:78:90:01/MyESSID
  Channel: 7
  Link quality/RSSI: 88 % / 43 dBm (100 %)
  Ethernet: 0 total (0 Tx 0 Rx) bytes/sec
  Wireless: 0 total (0 Tx 0 Rx) packets/sec
             0 Tx retry 0 Rx failed packets/sec
  Total wireless traffic: 38% Unicast 4% Multicast 58% Broadcast
Last updated Mar 22, 15:43:15; interval: 30 seconds
```