Awarepoint Bridge B2 Installation Manual

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Document History

Date	Author	Changes
02/14/2008	Derek Smith	Initial Draft



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FCC Compliance

Awarepoint Bridge model B2 FCC ID: UAG-B2

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this Device may not cause harmful interference and (2) this Device must accept any interference received, including Interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAUTION: This manual describes installation procedures for electrical equipment. Proper precautions are required. Particular attention should be given to text highlighted with the following symbol:



Antenna Used:

This device has been designed to operate with the antenna listed below, and having a maximum gain of 2 dBi. Antennas not included in this list or having a gain greater than 2 dBi are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

Pulse W1030

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference at his own expense.

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1 Introduction

Customer support: 1-888-TAGIT-NOW

1.1 **Overview**

This system installation manual is for an Awarepoint employee or Awarepoint trained service provider who intends to install the Awarepoint Bridge model B2.

1.2 Preparing for Installation - Read this First!

1.2.1 System Hardware

Prior to installation, you will need the following system hardware.

Awarepoint Bridge(s), including:

- Power Supply
- Ethernet Cable (Cat 3 or better, length to be determined by site requirements)

1.2.2 Information

Prior to installation, you will need the following information:

③ IP Addressing: DHCP or Static. If using Static addressing then: IP Address, Default

Gateway, and Subnet Mask.

- 3 IP Address of Awarepoint Appliance
- ③ Location, with an Ethernet port that has been tested and configured to work

with 10 Base- T, full duplex Ethernet. (A 10/100 autosense setting should be

adequate)

1.3 System Components

The Awarepoint Real-time Awareness Solution consists of several components as shown in the diagram below. The parts of the system that require installation include Awarepoint Tags, Awarepoint Sensors, Awarepoint Bridges, and the Awarepoint Appliance. The Awarepoint Appliance contains all software necessary for system operation.



The System is configured using the System Manager, a Java application that runs on a PC connected to the facility LAN. The System Manager may be downloaded from the Awarepoint Appliance.

1.3.1 Awarepoint Bridge

The Bridge model B2 is shown.



Figure 1.1- 2: Awarepoint Bridge model B2

The connectors on the bottom of the bridge are (Left to Right) Network Interface, Power Connector, and Serial Port. The Network Interface connects the Bridge to the Ethernet network, according to IEEE standard 802.3. The power connector connects to the Awarepoint power adapter. The Serial Port is used for configuring the Bridge. The serial interface operates on 38,400 baud with 8 data bytes, 1 stop bit, and no parity.

2 Awarepoint Bridge Installation

2.1 **Physical Installation**

Find a suitable location for the Bridge. Mounting in switch closets is preferred, as the Bridge is less likely to be disturbed. You will need one power outlet and one Ethernet port. Prior to installing the Bridge, read its MAC address from the bottom. Indicate on a paper copy of the map where this Bridge is located along with its MAC address.

Attach double-sided tape to each corner on the bottom of the Bridge and press the Bridge against the surface to affix it.

2.2 Connect to the Serial Interface

Connect a serial cable between the Bridge and the computer you will use to configure the Appliance (normally your laptop computer).

Open a terminal program (e.g. TeraTerm) and set the serial port on your computer to:

- Baud: 38,400 baud
- Data Bits: 8
- Parity: None
- Stop Bits: 1
- Flow control: None

To do this in Tera Term, click on Setup: Serial Port and adjust the settings appropriately for the port on your computer. Note - the Port setting in the image below may be different, depending upon your computer.

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Deta:	8 bit	•	Cancel
Parity:	none		
Stop:	1 bit		Help
Flow control:	none	•	
- Transmit del	iý		

Figure 2-1: Tera Term Serial Port Setup

2.3 Configure Network Interface

Plug the Bridge into the power outlet.

Open the terminal and press the 'Enter' button three times. This will initiate the configuration script. You should now see boot information. When prompted, press 'c' to configure the IP Address settings. At the prompt, enter return to accept the existing MAC address.

At the next prompt, if using DHCP to set the IP address of the Bridge then press Y. Otherwise (if you setting the IP address with a static IP address) press N, and enter the IP Address, subnet mask, and default gateway for this Bridge.

Finally, enter the IP Address of the Appliance.

The Bridge will proceed to ping the Appliance, test communications with the Appliance, and perform an internal test. If the communications tests fail, change the IP address setting and retry. If the internal test ("Serial Board test") fails, replace the Bridge.

2.4 Place Bridge on Map

Open the System Manager and click on the Positioning: Configuration tab. Expand the Sensors/Bridges tree and select the floor where the Bridge is located.

Expand the unassigned section of the Sensors/Bridges tree.

The Bridge you just installed should show up in the Unassigned section of the device tree. If it is functioning correctly, the icon for the Bridge should be blue.



Figure 2-2: Positioning: Configuration Tab

Drag the Bridge icon onto the map and place it where it is located.

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Figure 2- 3: Positioning: Configuration Tab - Placing Awarepoint Bridge

Click the Apply button to save the changes.

3 Troubleshooting

Customer Support: 1-888-TAGIT-NOW

3.1 Awarepoint Bridge

If the Bridge appears Red in the Positioning: Configuration tab or on the Awarepoint Network Operations Center, the Bridge has a problem. Try the following steps:

1. From a computer on the same network as the Bridge, ping the Bridge's IP address. If this test passes, proceed to step 3. If this test fails, it is likely the Bridge is disconnected from the network. Check that the Bridge is connected to the Ethernet network.

2. From the same computer, open a web browser and go to the Bridge's IP address. Press the 'Restart Bridge' button and enter the password.

3. Check the status of the Bridge using the system manger. If it remains down , contact Awarepoint Technical Support.