



# Software Product Description

**PRODUCT NAME:** DIGITAL RoamAbout Access Point Software, Version 2.4

**SPD 51.38.04**

## DESCRIPTION

The DIGITAL RoamAbout Access Point Software runs on the DIGITAL RoamAbout Access Point bridge. The DIGITAL RoamAbout Access Point is a transparent bridge that allows users to connect an IEEE 802.3/Ethernet local area network (LAN) to a wireless LAN. It can be used standalone or as a module in the MultiStack system or the DIGITAL MultiSwitch 900. The Access Point allows portable and desktop PC users to access the wired LAN, supporting dynamic work environments, temporary offices, and difficult wiring environments.

LAN bridges are the building blocks of the extended LAN. An extended LAN is a collection of LANs that are interconnected to logically appear as one large LAN. The DIGITAL RoamAbout Access Point bridge interconnects an IEEE 802.3/Ethernet LAN to a wireless LAN allowing only data destined for an adjacent LAN to pass through the bridge. By performing this traffic control and direction, network bandwidth is maximized because only traffic required on the extended LAN is allowed to traverse the bridge.

The DIGITAL RoamAbout product set consists of the Access Point bridge and adapter card; both ISA and PC Card (also called PCMCIA) adapter cards are available. The Access Point is the interface between the wired IEEE 802.3/Ethernet LAN and the wireless LAN. The Access Point has a 10Base2 (ThinWire) or 10BaseT connection to the wired LAN and uses a PC Card network adapter for connection to the wireless LAN. This same network adapter card is used by the portable PC to connect to the wireless LAN. The frequency and technology are determined by the type of PC Card (915 or 2400 MHz, Direct Sequence or Frequency Hop) used.

- A RoamAbout Access Point bridge with a RoamAbout

915 DS/PC Card has a data rate of up to 2 megabits per second.

- A RoamAbout Access Point bridge with a RoamAbout 2400 DS/PC Card has a data rate of up to 2 megabits per second. This is also available with DES encryption.
- A RoamAbout Access Point bridge with a RoamAbout 2400 FH/PC Card has a data rate of up to 1.6 megabits per second.

The Access Point using the DIGITAL RoamAbout 915 DS/PC Card network adapter also interoperates with the RoamAbout 915 DS/ISA Network Adapter which is used in stationary ISA bus PCs.

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The RoamAbout Access Point bridge is shipped with the software preloaded in flash memory. Software upgrades are downline loaded over the wired network using the BOOTP/TFTP protocols.

## Features

The DIGITAL RoamAbout Access Point Software has the following features and functions:

*Multi-Technology:* Supports both Frequency Hop and Direct Sequence radio technologies operating in two frequency bands: 915 MHz and 2400 MHz.

*Roaming:* Allows portable PC users to move from the coverage area of one RoamAbout Access Point to the coverage area of another. The Access Points provide transparent handoff between coverage cells so that users do not lose their network connection.

*SNMP Management:* A set of SNMP Management Information Bases (MIBs) allows users on any SNMP Network Management Station (NMS) to manage the Access Point. The DIGITAL clearVISN management station can be used and has a graphical interface. The Access Point supports MIB II (RFC-1213), IETF Bridge MIB (RFC 1398), Ethernet MIB (RFC-1493), DEC ELAN Vendor MIB, HUB PCOM MIB, AT&T's® WaveLAN MIB (when a RoamAbout 915 DS/PC Card or a RoamAbout 2400 DS/PC Card is installed in the Access Point), Proxim's Enterprise MIB (when a RoamAbout 2400 FH/PC Card is installed in the Access Point), and RoamAbout MIB with any RoamAbout PC Card installed.

*Local Console Management:* Provides management through the local console serial port on the Access Point. With console management, the user can configure the Access Point, display parameter settings and counter values, and initiate downline loading of software upgrades.

*Protocol Filtering:* Filters and makes forwarding decisions on incoming data packets based on the packet protocol. Protocols not in use on one side of the LAN may be filtered by the bridge.

*Address Filtering:* Filters and makes forwarding decisions on incoming data packets based on the specific source or destination address present in the packet.

*Traffic Filtering:* Filters and makes forwarding decisions on incoming data packets, allowing only packets destined for the wireless side to traverse the bridge, thus reducing traffic on the wireless LAN.

*Rate Limiting:* Provides wired IEEE 802.3/Ethernet to wireless broadcast traffic rate limiting functionality to abate broadcast and multicast traffic.

*8000 Node Address Database:* The Access Point learns up to 8000 node addresses in its forwarding database. Allows the Access Point to work more efficiently in very large LANs by remembering every node address in the LAN (up to 8000 nodes).

*Spanning Tree:* Performs Spanning Tree loop detection using either the IEEE 802.1d or the DIGITAL LANbridge algorithms. The Access Point automatically configures to the appropriate algorithm for compatibility with the other bridges in the network.

*DEChub Support:* The Access Point can be used in the DEChub 90 and DIGITAL MultiSwitch 900, with configuration and management through the DEChub utilities.

The Access Point can also be used in the DIGITAL MultiStack system.

*Diagnostics:* Performs diagnostic self-test automatically at power-up and reports status through the LEDs.

*Software Upgrade:* A load host system supporting BOOTP/TFTP is required.

## ORDERING INFORMATION

The RoamAbout Access Point Software is loaded in the flash memory of the RoamAbout Access Point hardware. The software is not available separately. To order the RoamAbout Access Point, use one of the following part numbers:

- DEIAP-\*\*- RoamAbout Access Point, standalone version. Wireless-to-wired bridge for connectivity to a wired network for portable and desktop devices. Includes software license, country-specific power supply and cord, and documentation.

The following country variants are available:

- DEIAP-AA—version for North America, Japan
- DEIAP-AD—version for Denmark
- DEIAP-AE—version for UK, Ireland, Pacific Rim countries
- DEIAP-AI—version for Italy
- DEIAP-AK—version for Switzerland
- DEIAP-AT—version for Israel
- DEIAP-AX—version for Central European countries
- DEIAP-AZ—version for Australia, New Zealand
- DEIAP-BJ—version for India, South Africa

**Note:** Certification is required for all wireless products before they can be sold in a particular country. The RoamAbout 2400 FH/PC Card and 2400 DS/PC Card are being tested in different countries right now. Please contact your local country Network Products Business sales representative for the latest availability information for a particular country.

- DEIAP-MA— DIGITAL RoamAbout Access Point, DEChub version. Wireless-to-wired bridge for connectivity to a wired network for portable devices and desktop devices. It includes software license, accessory kit, and documentation.

**HARDWARE**

*Components:* To connect to the wireless LAN, a DIGITAL RoamAbout Access Point and a RoamAbout PC Card network adapter are required.

*Compatibility:* The PC Card network adapter used in the DIGITAL RoamAbout Access Point must be compatible with the other wireless network adapters in the wireless LAN.

**REQUIRED HARDWARE AND SOFTWARE FOR THE DIGITAL ROAMABOUT ACCESS POINT AND PCMCIA PCs:**

- DEINA-AA—DIGITAL RoamAbout 915 DS/PC Card Network Adapter for wireless LANs for use in the United States, Canada, and Mexico. To be used in portable devices or in the RoamAbout Access Point. Includes omnidirectional antenna, software license, software media needed for portable devices only (two 3.5" RX23 diskettes), and documentation.
- DEIWB-\*\*—DIGITAL RoamAbout 2400 DS/PC Card Network Adapter, two versions available (DES and non-DES encryption), for wireless LANs for use in certified countries worldwide. To be used in portable devices or in the RoamAbout Access Point. Includes omnidirectional antenna, software license, software media needed for portable devices only (two 3.5" RX 23 diskettes), and documentation.
- DEIWC-\*\*—DIGITAL RoamAbout 2400 DS/PC Card Network Adapter, two versions available (DES and non-DES encryption), for wireless LANs for use in certified countries worldwide. To be used in portable devices or in the RoamAbout Access Point. Includes software license, software media needed for portable devices only (two 3.5" RX 23 diskettes), documentation, and optionally external antennas for building-to-building connection.
- DEIRB-\*\*—DIGITAL RoamAbout 2400 FH/PC Card Network Adapter for wireless LANs for use in certified countries worldwide. To be used in portable devices or in the RoamAbout Access Point. Includes omnidirectional antenna, software license, software media needed for portable devices only (two 3.5" RX23 diskettes), and documentation.

**REQUIRED HARDWARE AND SOFTWARE FOR STATIONARY ISA BUS PCs:**

- DEIWA-AA—RoamAbout 915 DS/ISA adapter card for use in the United States, Canada, and Mexico. Requires the ISA bus. Includes omnidirectional antenna with cable, software license, software media needed for PCs (two 3.5" RX23 diskettes), and documentation.

- DEIWA -\*\*—DIGITAL RoamAbout 2400 DS/ISA Network Adapter, two versions available (DES and non-DES encryption), for wireless LANs for use in certified countries worldwide. Requires the ISA bus. Includes omnidirectional antenna with cable, software license, software media needed for PCs (two 3.5" RX 23 diskettes), and documentation.
- DEIRA -\*\*—DIGITAL RoamAbout 2400 FH/ISA Network Adapter for wireless LANs for use in certified countries worldwide. Requires the ISA bus. Includes omnidirectional antenna with cable, software license, software media needed for PCs (two 3.5" RX23 diskettes), and documentation.

**SOFTWARE LICENSING**

A software license is required to run the RoamAbout Access Point Software and is included in the price of the hardware. The hardware license letter shipped with the unit along with the invoice constitutes proof of license.

**SOFTWARE PRODUCT SERVICES**

A variety of service options are available from DIGITAL. For more information, contact your local DIGITAL office.

**SOFTWARE WARRANTY**

Warranty for this software product is provided by DIGITAL with the purchase of a license for the product.

The above information is valid at time of release. Please contact your local DIGITAL office for the most up-to-date information.

**SOFTWARE UPDATES**

Software updates are available from our World Wide Web sites.

DIGITAL RoamAbout Web site:

Americas:	<a href="http://www.networks.digital.com/dr/wireless">http://www.networks.digital.com/dr/wireless</a>
Asia Pacific:	<a href="http://www.networks.digital.com.au/dr/wireless">http://www.networks.digital.com.au/dr/wireless</a>
Europe:	<a href="http://www.networks.europe.digital.com/dr/wireless">http://www.networks.europe.digital.com/dr/wireless</a>

DIGITAL Network Products Business Web site:

Americas:	<a href="http://www.networks.digital.com">http://www.networks.digital.com</a>
Asia Pacific:	<a href="http://www.networks.digital.com.au">http://www.networks.digital.com.au</a>
Europe:	<a href="http://www.networks.europe.digital.com">http://www.networks.europe.digital.com</a>

DIGITAL PC Web site: <http://www.pc.digital.com>

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