

*Information when you need it, where you need it!*



# eNetwork Wireless Gateway and Client

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## **Highlights**

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**Extends IP connectivity across leading wireless and dial networks**

**Integrates diverse networks under a single interface—TCP/IP**

**Shields applications from the underlying network complexities**

**Provides optimizations to minimize data traffic, reduce network costs, and enhance performance**

**Extends enterprise-level security with authentication and encryption**

**Features SNMP network management, integrated with TME 10 NetView**

**Broad support for radio, wireless, and dial-up networks worldwide**

## **Go wireless with ease**

In today's highly competitive business environment, every moment counts. Staying in business means staying in touch. The need for information is crucial whether you're in the office, on the road, or with a customer. That's why businesses are turning to mobile and wireless solutions.

Enabling applications for the mobile and wireless environment was complex, time consuming, and costly in the past. Now, there's no need to completely rewrite your existing applications to a specialized application programming interface (API). Existing TCP/IP-based applications can be easily and seamlessly integrated to run with eNetwork Wireless Software with few-to-no software modifications.

eNetwork™ Wireless Gateway, Version 4, is IBM® wireless communication middleware, which simplifies the management and implementation of applications in the mobile environment. The eNetwork Wireless Client supports the mobile environment. Formerly named ARTour™ Gateway and Mobile Client, eNetwork Wireless Software extends IP connectivity across a diverse set of wireless and dial networks to seamlessly enable TCP/IP applications to access the networks.

## **How eNetwork wireless works**

eNetwork Wireless Client resides on a user's mobile computer and communicates with the gateway over wireless or dial-up networks.

eNetwork Wireless Gateway integrates the mobile networks and provides the connection to the enterprise network. All your mobile users can use the same gateway and access the same enterprise applications, regardless of the networks they use. eNetwork Wireless also enables mobile users to connect to multiple applications, even if the applications are in different networks, such as local area networks (LANs), wide area networks (WANs), intranets, and the Internet.

## **Network integration**

eNetwork Wireless Software consolidates the leading international data packet radio, analog and digital cellular, and wireline networks under a single interface. The ever-increasing list of supported protocols include DataTAC, DataTAC Private Mobile Radio, Mobitex, DATARADIO, AMPS, CDPD, GSM, PCS 1900, PDC, PHS, and PSTN. A few of the many networks supported worldwide include ARDIS, RAM Mobile Data, DeTeMobil, Cantel, and Nippon City Media. All the network-specific details are hidden to make the network transparent to your application, so you can support multiple networks without additional effort. It also frees your technical staff from the need to understand complexities of each network. Best of all, your mobile users get the flexibility to use the network that meets their individual needs.

### TCP/IP sockets interface

eNetwork Wireless Software is based on IP transport, the widely adopted industry-standard communication protocol. It resides beneath the IP layer and is accessed through standard TCP/IP and User Datagram Protocol (UDP/IP) sockets so you don't need to worry about special interfaces or proprietary APIs.

eNetwork Wireless Software is transparent to TCP/IP applications, which means that your existing applications can be quickly and easily deployed in a wireless environment. New applications for wireless are simply written to standard interfaces, just as you would write them today. They can even be developed and tested in a wired environment, such as a LAN.

### New features for eNetwork Wireless Gateway and Client, Version 4

eNetwork Wireless Software increases its wide range of device and protocol support by adding DATARADIO, PDC, and PHS networks to our growing list of leading wireless providers. In addition, primary rate ISDN is another network connectivity option for the gateway. Two new features for ISDN-connected networks include call duration recording, which allows the customer to track usage by seeing the total time connected and

calling line identification, a security enhancement for users. To improve performance over all networks and cost-of-data transfer, a new TCP optimization function is also included.

### Data reduction

eNetwork Wireless Gateway data compression reduces the size of the IP packets, often by half, while header reduction decreases TCP/IP packet headers by 80 percent. Less data means faster response times, which is particularly important over wireless networks. In addition, network fees are often based on the amount of information transmitted — so data reduction is crucial to providing an effective and affordable mobile solution.

### Connection management

When using networks where fees are based on connection time, such as GSM, PCS 1900, and AMPS, eNetwork Wireless Software can provide significant cost savings. Once a connection has been established, eNetwork Wireless Software dynamically disconnects from the network during idle periods and reconnects when data transmission is required.

### Packet filtering

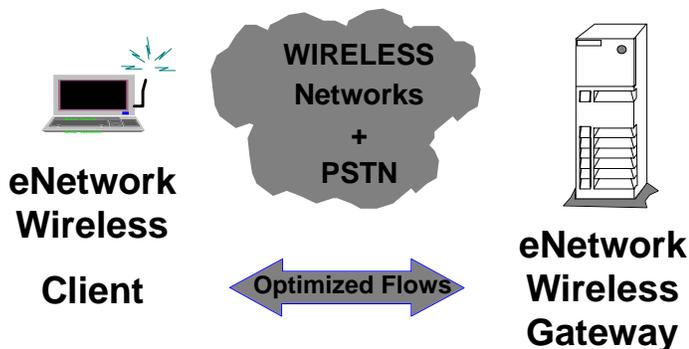
eNetwork Wireless Software can filter out certain packets to prevent their transmission to the mobile user. These packets include control messages and network management packets, both of which unnecessarily increase data traffic and network costs. Filters can be configured to tailor this feature to your specific environment.

### Address management made easy

Network addressing can be complex in the mobile environment because each network may have unique or proprietary (non-IP) network addressing schemes. With eNetwork Wireless Software, applications simply use IP addresses. Moreover, addresses are managed in the eNetwork Wireless Gateway. This means that a mobile user will always be known by the same IP address regardless of the network being used. It's that easy.

### Secure access and privacy

Wireless networks can raise concerns about security, and eNetwork Wireless Software provides a comprehensive solution. Authentication assures the identity of both the mobile user and the eNetwork Wireless Gateway to prevent unauthorized access. To provide for data privacy and protection from eavesdropping, eNetwork Wireless Software



encrypts your data using the commercial data masking facility (CDMF), an algorithm based on the Data Encryption Standard (DES) with a 40-bit encryption key. All data sent between the mobile user and the eNetwork Wireless Gateway can be encrypted for true end-to-end security.

### **Simplified configuration**

The client includes a user interface that enables easy setup and configuration. For an AIX® Gateway, the AIX System Management Interface Tool (SMIT) makes the configuration easy and helps you perform administrative functions, like adding mobile users to the gateway — even remotely.

### **Integrated network management**

eNetwork Wireless Software lets you manage mobile resources using the industry-standard simple network management protocol SNMP manager. eNetwork Wireless Gateways, networks, and mobile users are seamlessly integrated with your Tivoli® TME 10™ systems management environment with the status of mobile users and their connection state displayed in a familiar NetView® manner. The gateway acts as a proxy network management agent for the clients, eliminating all SNMP traffic between the clients and the gateway. And the status displays are sent to the appropriate upper levels to help you identify suspicious conditions immediately.

### **Operating environment**

The eNetwork Wireless Gateway runs on the AIX platform. The eNetwork Wireless Client runs on OS/2®, Windows® 3.1, Windows 95, and Windows NT®.

### **International language support**

In addition to English, eNetwork Wireless Software is being translated into other languages and Kanji characters, making it a global wireless solution. IBM plans to release these versions before the end of 1997.

### **Your wireless solution for today**

This product is Year 2000 Ready. When used in accordance with its associated documentation, it is capable of correctly processing, providing, and/or receiving data within and between the 20th and 21st centuries, provided all other products (for example, software, hardware, and firmware) used with the product properly exchange data with it.

### **The eNetwork Wireless family**

In addition to eNetwork Wireless Gateway and Client, the eNetwork Wireless Software family includes other software designed to enable and optimize application solutions for the mobile professional over a wide variety of wireless and dial networks without rewriting existing applications.

#### ***eNetwork Emulator Express*** —

Provides efficient and optimized access to 3270 and AS/400 5250 applications.

***eNetwork Web Express*** — Provides cost-effective and responsive access to intranet and Internet applications, using the browser of your choice, requiring no application changes.

### **For more information**

If you would like more information about eNetwork Wireless Software, contact your IBM representative, or visit us on the Internet at [www.software.ibm.com/mobile](http://www.software.ibm.com/mobile)

In the United States, call 1 800 735 7638, or send an e-mail to [mobile@us.ibm.com](mailto:mobile@us.ibm.com)

In other countries, send e-mail to [mobile@winvmd.vnet.ibm.com](mailto:mobile@winvmd.vnet.ibm.com)

### **eNetwork Wireless product identification numbers (PIDs)**

eNetwork Wireless Gateway for AIX, Version 4 Release 1  
PID 5765-D05

eNetwork Emulator Express Server for AIX, Version 4 Release 1  
PID 5765-D03

eNetwork Emulator Express Server for Windows NT, Version 4 Release 1  
PID 5639-D67

eNetwork Web Express Server for AIX, Version 2 Release 1  
PID 5765-D04

eNetwork Web Express Server for Windows NT, Version 2 Release 1  
PID 5639-D66



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