

*Extend applications seamlessly to wireless, mobile workers*



# eNetwork Emulator Express Version 4

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## **Highlights**

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**Provides optimization for main-frame and AS/400 applications**

**Improves performance by transmitting only modified data through data caching**

**Reduces data transmission through data compression**

**Delivers multiprotocol support for wireless and dial-up networks when used with the IBM eNetwork Wireless Gateway and Clients**

**Supports standard Telnet 3270 and Telnet 5250 emulators (user option)**

## **Gain a competitive edge with increased productivity**

In today's marketplace, having the competitive edge in your industry is vital. Workers need enterprise connections from a home office, hotel room, or even a car to access critical information or forms. Workers are turning to wireless solutions to provide their connectivity, giving them the edge they need to conduct business while on the move.

IBM® offers you a solution that lets you seamlessly extend your existing applications to mobile employees over wireless networks. eNetwork™ Emulator Express, Version 4, formerly ARTour™ Emulator Express, has the ability to increase work force responsiveness and give your users a competitive edge in the marketplace. eNetwork Emulator Express lets organizations take their mobile solutions one step farther to provide better customer service and increased productivity.

## **Using eNetwork Emulator Express**

eNetwork Emulator Express is specifically designed to extend the reach of host-based 3270 or AS/400® 5250 protocol applications to your mobile work force.

The eNetwork Emulator Express Client and Server work together to reduce significantly the amount of data sent over the network. The eNetwork Emulator Express Client resides on the mobile device with a Telnet emulator, such as

IBM eNetwork Personal Communications, where it communicates over a local TCP/IP connection. The eNetwork Emulator Express Client communicates with a remote eNetwork Emulator Express Server, using a TCP protocol, which in turn communicates with a Telnet server, such as IBM eNetwork Communications Servers.

eNetwork Emulator Express Software is designed to run with IBM eNetwork Wireless Gateway and Clients, which support the leading international data packet radio, analog and digital cellular, and wireline networks under a single interface. The ever-increasing list of supported protocols includes 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.

## **Product characteristics**

Most 3270 and AS/400 5250 application screens contain many fields with static data. These fields typically define the variable data that is either displayed from the host or entered by the user. Examples are fields containing the words Name, Address, Account Number, Account Balance. When these applications are run over a high-bandwidth, high-speed, wired connection within the enterprise, there is negligible impact from transmitting these fields back and forth between the host and the user; however, with low-band-

width, low-speed, expensive wireless or dial-up connections, data reduction becomes significant from both a financial and a response-time perspective.

Through the implementation of differencing and caching, eNetwork Emulator Express eliminates the retransmission of static data, thus providing significant reduction of data transfer to and from the mobile device. By storing field images at both the eNetwork Emulator Express Client and Server, only new or modified data needs to be transmitted. The contents of the cache are maintained across emulator sessions, so it's not necessary to recreate cached data every day. As a further step to reduce transmission costs, the cache can be initially loaded by connecting the mobile worker's portfolio of applications through a dial-up or Local Area Network (LAN) connection to the enterprise network. In this way, the cache is prewarmed before use in a mobile environment.

### Data compression

When the data to be transmitted is identified by the caching routines, it is further reduced by applying arithmetic compression algorithms. The net result of these operations is that only a fraction of the original data stream (in bytes) is transmitted over the mobile connection.

### Protocol reduction

Because of the unique relationship between the eNetwork Emulator Express Client and Server, the standard Telnet connection protocols can be reduced by 50 percent and more.

### Utilities

eNetwork Emulator Express Client sessions can be monitored and managed from the eNetwork Emulator Express Server. In addition, trace facilities are provided for both the eNetwork Emulator Express Server and Client.

### Operating environment

eNetwork Emulator Express Server runs on AIX® and Windows NT® platforms, while eNetwork Emulator Express Clients run on OS/2® and Windows® 95.

### International language support

In addition to English, eNetwork Emulator Express 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 date 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 date data with it.

### The eNetwork Wireless family

In addition to eNetwork Emulator Express, the eNetwork Wireless 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 Wireless Gateway and Client

— IBM's wireless communication middleware enables and simplifies management and support of applications in the mobile environment. The eNetwork Wireless Client resides on a user's mobile computer and communicates with the eNetwork Wireless Gateway. The gateway uses a common interface to integrate communication from various mobile networks and provides the link to the enterprise network.

### eNetwork Web Express

— 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 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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