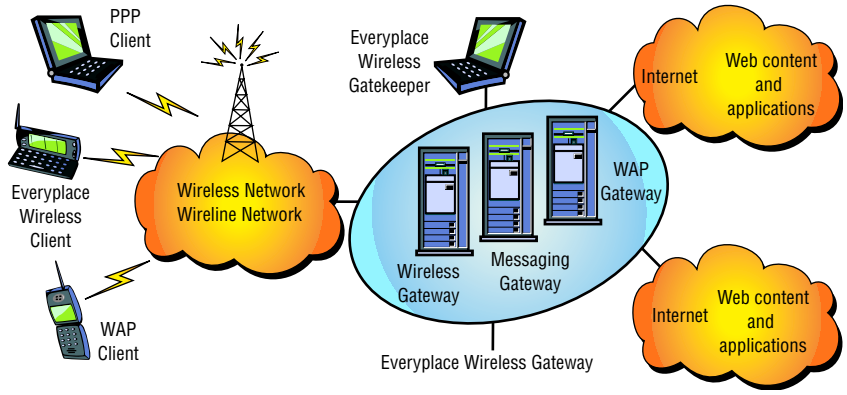
IBM Everyplace Wireless Gateway for Multiplatforms, Version 2.1



Everyplace Wireless Gateway enables mobile users to connect to multiple applications across wireless and wired networks within the enterprise.

Highlights

- ***Delivers e-business applications to mobile users over wireless and wired networks***
- ***Provides cost-effective network access to mobile users***
- ***Integrates diverse wireless networks using a single industry-standard interface***
- ***Features secure, two-way user authentication and data encryption***
- ***Improves network response times and reduces data overload with data compression and header reduction***
- ***Maintains or restores dial-up connections automatically to transmit data efficiently***
- ***Includes a Java technology user interface to setup and configure easily across multiple platforms***

Everyplace Wireless Gateway

IBM Everyplace™ Wireless Gateway for Multiplatforms, Version 2.1 is a distributed, highly scalable, multipurpose UNIX® communications platform. It supports optimized, security-rich data access by both Wireless Application Protocol (WAP) and non-WAP clients over a wide range of international wireless network technologies, local area networks (LANs) and wide area networks (WANs).

Everyplace Wireless Gateway integrates data access from wireless and wired networks so that applications and data can be made available to a mobile workforce. With a Transmission Control Protocol/Internet Protocol (TCP/IP) interface, existing applications may use either wireless or wired networks to integrate communications. The interface shields network-specific details from the user application and provides network-specific authentication and data enhancements—such as compression, encryption and optimization.

e® business

Everyplace Wireless Gateway components include:

- *Everyplace Wireless Gatekeeper*
- *Everyplace Wireless Client*

Everyplace Wireless Gatekeeper

IBM Everyplace Wireless Gatekeeper provides a Java™ technology-based administrator console to the Everyplace Wireless Gateway and to wireless resources.

With the easy-to-use administrative interface in Everyplace Wireless Gatekeeper, you can remotely define and configure wireless gateways, register users and mobile devices, specify logging and tracing controls and perform routine administrative tasks. The administration and configuration data is stored conveniently in a Lightweight Directory Access Protocol (LDAP) directory.

You also have the flexibility to define multiple Everyplace Wireless Gatekeeper administrators, enabling you to distribute administrative permissions and responsibilities among them. If you use Everyplace Wireless Gateway exclusively to support WAP clients, you can configure Everyplace Wireless Gatekeeper to display only WAP-related resources, simplifying the administration process.

Everyplace Wireless Client

IBM Everyplace Wireless Client software runs locally on mobile devices and provides a full function interface to communicate with Everyplace Wireless Gateway.

With an authenticated network connection to Everyplace Wireless Gateway, you can assign a client intranet or Internet IP address. IP applications can run on a wireless network using the standard TCP/IP provided by the operating system on the mobile device. Everyplace Wireless Client, in conjunction with Everyplace Wireless Gateway, offers enhanced functionality, improved performance and security-rich operations. The Everyplace Wireless Gateway supports standard IP routing—even over non-IP wireless bearer networks—to help ensure unbroken, end-to-end TCP sessions between mobile devices and application servers.

Network integration

An encrypted tunnel secures wireless connections between the Everyplace Wireless Gateway and the Everyplace Wireless Client. Everyplace Wireless Gateway supports applications using industry-standard sockets programming interfaces, so developers don't need to learn special programming interfaces or proprietary tools and protocols. TCP/IP applications can run unchanged with a wireless network.

Support for WAP clients

When you configure Everyplace Wireless Gateway as a WAP gateway, you can provide connectivity for multivendor WAP 1.1 and WAP 1.2 client devices. Everyplace Wireless Gateway fully supports the WAP Wireless Session Protocol (WSP) to link the microbrowser with cellular phones and personal digital assistants (PDAs).

When configured as a WAP gateway, Everyplace Wireless Gateway performs a protocol conversion to provide communication with WAP clients and HyperText Transport Protocol (HTTP) Web servers. The WAP gateway receives data and messages from WAP clients, translates the WSP

requests into HTTP requests and forwards them to an HTTP proxy. Then the gateway converts response headers from HTTP into WSP and forwards them to the WAP client.

Messaging gateway

You can use Everyplace Wireless Gatekeeper to configure Everyplace Wireless Gateway as a messaging gateway. The messaging functions support delivery and receipt of short messages to and from client devices.

When you configure the Everyplace Wireless Gateway to be a messaging gateway, you allow a Web application server to send messages to a client, such as a pager or a phone in a wireless network. The messaging gateway supports several types of messaging modes including SMS, e-mail and SNPP. Examples of message operations might be news, stock quotes, pager messages, broadcast messages and notification of events such as e-mail arrival.

Clustering Everyplace Wireless Gateway

You can configure Everyplace Wireless Gateway to be a principal or subordinate node in a cluster of wireless gateways. In this manner, Everyplace Wireless Gateway distributes and services communication requests and provides load-balancing efficiency. You can group subordinate nodes together and assign a principal node that dispatches traffic to specific nodes within the cluster group. And you can add subordinate nodes to a cluster group dynamically to increase the cluster's capacity.

For more information

To learn more about IBM Everyplace Wireless Gateway, visit:
ibm.com/pvc

IBM Everyplace Wireless Gateway for Multiplatforms, Version 2.1 at a glance

Wireless Gateway supports:

Cellular networks — Advanced Mobile Phone Service (AMPS) and N-AMPS; Code-division Multiple Access (CDMA); Time Division Multiple Access (TDMA); Global System for Mobile Communication (GSM); Integrated Digital Enhanced Network (iDEN); Personal Communications Services (PCS) 1900; PCD and PHS (Japan)

Public packet-radio networks — Cellular Digital Packet Data (CDPD) and CS-CDPD; DataTAC/IP, DataTAC 4000 (U.S.), DataTAC 5000 (Europe) and DataTAC 6000 (Asia); Modacom (Germany); General Packet Radio Services (GPRS); Mobitex (worldwide) and Mobitex/IP (U.S.); PDC-P (Japan)

Private packet networks — Dataradio; Motorola Private DataTAC

Internet connections — Cable modem; Digital subscriber line (DSL); Internet service provider (ISP)

Dial connections — DIAL/TCP; Integrated services digital network (ISDN); Point-to-Point Protocol (PPP); Public-switched telephone network (PSTN); Plain old telephone service (POTS)

Satellite networks — Norcom

LAN connections — Ethernet; Token ring; Wireless LAN

IBM Everyplace Wireless Gateway for Multiplatforms, Version 2.1 at a glance — minimum IBM @server configuration

Hardware requirements

IBM AIX operating environment	*Sun Solaris ™ operating environment*
• IBM RS/6000® 7043-150 tower	• Ultra 10
• 250MHz 32-bit 604e processor	• 1GB RAM
• 128MB memory	• CD-ROM
• 9.1GB internal disk storage	• Minimum 9GB hard disk drive

Software requirements for IBM AIX and Sun Solaris operating environments

- IBM AIX®, Version 4.3.3 or IBM AIX, Version 5.1 plus AIXLink 1.1.3.0 or higher to use an X.25 adapter
- Sun Solaris operating environment, Version 7 or higher
- Open database connectivity (ODBC)-compliant relational database
  - IBM DB2® Universal Database®, Version 7.1 or Oracle, Version 8.1.5 or Oracle, Version 8.1.6
    - Merant DataDirect Connect ODBC, Version 3.6.0
  - Oracle, Version 8.1.7
    - Merant DataDirect Connect ODBC, Version 3.7.0
- LDAP database, both server and client (IBM SecureWay® Directory Server, Version 3.2 or higher), Netscape, Version 4.1.X
- HTTP Proxy Server (if using WAP function)

IBM Everyplace Wireless Gatekeeper at a glance

Hardware requirements

- On Intel® platforms, 400MHz or greater Pentium® processor
- On RS/6000 platforms, 250MHz or greater processor
- Minimum of 128MB RAM
- Minimum of 30MB disk space

Software requirements

- TCP/IP protocol installed
- IBM AIX, Version 4.3.3; IBM AIX, Version 5.1
- Microsoft® Windows® 95, Windows 98, Windows NT®, Windows 2000, Windows Me
- Sun Solaris operating environment
- Linux®, Version 6.0 or later (with glibc2.1 or later)[1]

[1]*Requires Java Runtime Environment (JRE), Version 1.2.2_006 (or later 1.2) but not Version 1.3 or later*

IBM Everyplace Wireless Client at a glance

Minimum disk space requirements

- TCP/IP protocol installed
- 1 to 3MB available disk space on Windows 95, Windows 98,Windows NT, Windows Me or Windows 2000 platforms
- 1.5MB available disk space on Windows CE

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