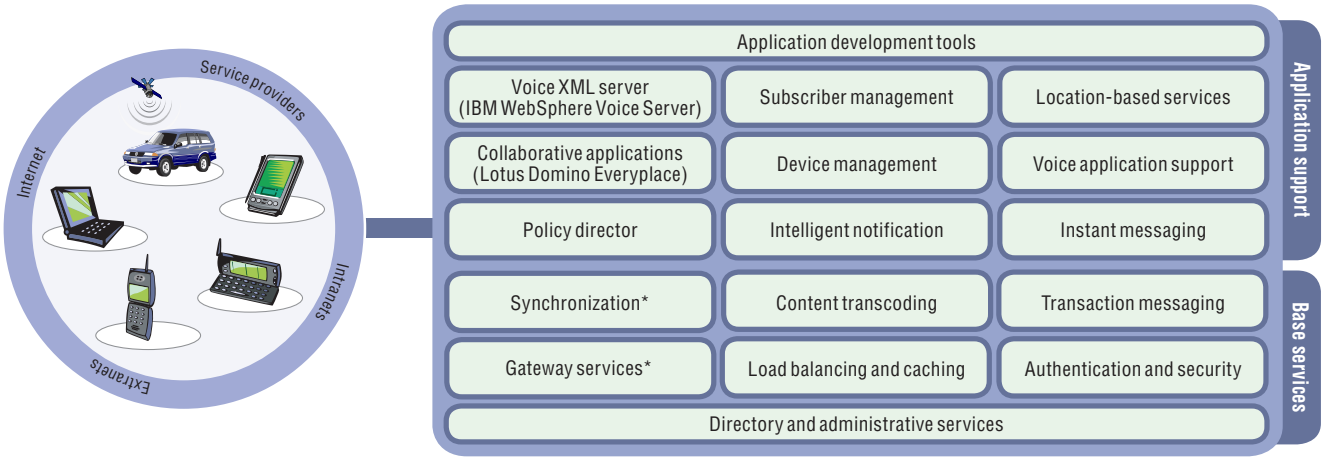
Deliver mobile solutions customers need anytime, anywhere

IBM

IBM WebSphere Everyplace Server, Service Provider Offering, Version 2.1



**Options for Version 2.1 can be included or excluded to meet individual needs.*

IBM WebSphere Everyplace Server, Service Provider Offering integrates with existing applications and network infrastructures to extend enterprise data to the wireless workforce.

Highlights

- ***Offers intelligent notification features to help manage information more easily***
- ***Uses device location to allow security-rich, privacy-protected, dynamic information exchange***
- ***Extends applications with integrated voice technologies to offer hands-free access***
- ***Scales to support service provider-sized deployment***
- ***Supports instant awareness and realtime communication capabilities with Lotus Sametime Everyplace***
- ***Provides access to collaborative applications through integration with Lotus Domino***
- ***Incorporates encryption, authentication and access control capabilities***

Leverage wireless technology to reach new markets

Gain a competitive advantage. Build customer loyalty. Drive revenue growth. Reach new markets. It's all a part of your strategic business plan. But to deliver your e-business to the wireless Web and develop cutting-edge applications—to provide information and services where and when customers need them—you have to keep in step with your customers. And they're on the go, now more than ever. At the same time, working in a mobile marketplace also means giving your employees access to the applications and resources they use.

e business

IBM can help you streamline your transition to mobile e-business with a comprehensive, end-to-end solution. IBM WebSphere® Everyplace™ Server, Service Provider Offering, Version 2.1 provides the infrastructure you need to connect, adapt, manage, transform and scale existing Web applications and business data into pervasive applications. With WebSphere Everyplace Server, Service Provider Offering, you can create and deliver new services through a variety of devices and get to market faster.

Adapt content dynamically

WebSphere Everyplace Server, Service Provider Offering supports a wide range of client devices, without requiring new client-side software. You can tailor content to match device display characteristics—such as screen size or graphics capabilities—to extend your market reach. Convert Hypertext Markup Language (HTML) or Extensible Markup Language (XML) to Wireless Markup Language (WML), i-mode and Handheld Device Markup Language (HDML) on the fly. New transcoders allow you to offer voice technologies—by converting HTML to VoiceXML—to help improve productivity and add hands-free convenience.

Communicate in realtime

Stay on the cutting edge and attract new customers with features that help you leverage device location information to deliver relevant, realtime content. With intelligent notification features you can build customer loyalty and improve user experience by delivering contextual content—like the home team scoring a last-minute touchdown or a jump in stock trades just before the closing bell—tailored to individual interests. And, WebSphere Everyplace Server, Service Provider Offering includes instant online awareness and messaging capabilities for realtime communication using a variety of devices.

Connect wired and wireless markets seamlessly

WebSphere Everyplace Server, Service Provider Offering integrates with your existing gateway, or offers an optional wireless gateway which includes a new messaging gateway with Short Messaging Support (SMS) *push* proxy. You can connect users to information and services across a wide range of wired or wireless networks by extending your e-business to Wireless Access Protocol (WAP) phones, intermittently connected devices, residential gateways, Internet access devices and Digital Set Top Boxes. Using the wireless gateway provides network protocol conversions, authentication, encryption and performance enhancements to give you dependable, security-rich connections—regardless of device type or location.

Ensure security-rich connectivity

With WebSphere Everyplace Server, Service Provider software, you can encrypt end-to-end connections across a variety of wireless and landline networks. Your customers' personal data can be transmitted securely and privately to give them peace of mind and help you build loyalty. With authentication functions built in, you can provide single sign-on capability to improve efficiency and eliminate the need to login repeatedly during multiple, simultaneous access of applications. Authorization and access-control features help prevent unwanted and damaging access to critical business applications and sensitive information.

Speed up data delivery

WebSphere Everyplace Server, Service Provider software helps you optimize data transmission and scale Web sites for more efficient delivery of content. Load-balancing functions help distribute workload across network servers to quickly adapt to changes in Web site traffic. You can prevent downtime and reduce denial of service errors during routine maintenance and unexpected, high-volume traffic. A robust caching proxy helps improve availability and response times so you can keep your customers' attention, deliver services or make a sale.

Simplify management of systems, customer relationships and devices

You can control installation, configuration, diagnostics and maintenance from a single graphical interface console to achieve comprehensive systems management. A centralized Lightweight Directory Access Protocol (LDAP) server permits WebSphere Everyplace Server, Service Provider software and third-party components to access user, device, network and configuration information to streamline management processes and save time. And with a selectable installation capability you can install only the functions that meet your immediate business objectives. You can quickly add new functions to extend your investments as needed.

With a built-in customer management facility, you can enroll and authenticate customers to streamline your process. Support multiple personalized devices for each user to reach and engage a more diverse customer base with a wider range of services. Manage key subscriber information—such as tracking usage and billing history—to up-sell, cross-sell, provide better customer service and improve the customer experience.

For more information

To learn more about IBM WebSphere Everyplace Server, Service Provider Offering, Version 2.1, or to learn how you can begin developing a pervasive computing solution for your mobile e-business, contact your IBM sales representative, or visit: **ibm.com**/pvc

IBM WebSphere Everyplace Server, Service Provider Offering, Version 2.1

Requirements[1]

Hardware[2]

IBM @server pSeries (IBM RS/6000®) with IBM AIX®, Version 4.3.3 or Sun with Sun Solaris™ Version 7 or Sun Solaris Version 8

Software

Netscape Navigator 4.08 or Netscape Communicator 4.7 or higher

Operating system compatibility

Client[3]

Includes support for Palm OS, Symbian EPOC OS, Microsoft® Windows NT®, Windows® Millennium Edition (Windows Me), Windows CE, Windows 2000, Windows 98, Windows 95, i-mode and QNX Neutrino

Networks

Supports WAP 1.2, general packet radio service (GPRS), personal digital cellular (PDC), cellular digital packet data (CDPD), Mobitex, DataTAC, Dataradio, global system for mobile (GSM), personal handy phone system (PHS), short message service (SMS), advanced mobile phone service (AMPS), Norcom Satellite Networks and landline TCP/IP networks

Server platforms

Supports IBM AIX, Sun Solaris

[1] *Connections to certain packet radio networks require an X.25 interface coprocessor card and software. Certain components may use IBM DB2 Universal Database™ or Oracle relational database. A limited version of DB2® is included with WebSphere Everyplace Server, Service Provider Offering. Oracle requires an Oracle Java™ Database Connectivity (JDBC™) connector.*

[2] *The exact system and available disk space requirements vary depending on the components you select for installation, and the number of subscribers, applications and resources to be supported in each customer environment.*

[3] *Individual clients may not be supported by every component of IBM WebSphere Everyplace Server, Service Provider Offering.*

IBM WebSphere Everyplace Server, Service Provider Offering, Version 2.1 at a glance

Technology	Features
Content adaptation Extends applications to new classes of pervasive computing devices and tailors content to fit unique characteristics, such as screen size, graphics capabilities and storage capacity	• A standard set of transcoders from IBM WebSphere Transcoding Publisher to transform and reformat information to meet device, data or user needs; a developer toolkit to customize existing transcoders, create new transcoders and create new device profiles; new transcoders for HTML-to-VoiceXML and HTML-to-ClipperML for Palm and machine language translations • IBM Everyplace Synchronization Manager conduits for direct synchronization between Lotus Notes® and Microsoft Exchange servers and Palm OS or Microsoft Windows CE and Symbian EPOC devices, and synchronization to almost any Open Database Connectivity (ODBC)-compliant database • A reliable messaging infrastructure using IBM WebSphere MQ Everyplace server to connect mobile clients with servers and enable applications to queue data when network connections are not present • Lotus® Domino™ Everyplace integration, with adapters for Domino software-based business application content to help ensure that Domino application content is appropriately converted for the end device • IBM WebSphere Voice Server integration to voice-enable applications with mechanisms for text-to-speech and speech recognition capabilities to offer hands-free access to Web applications and content
Content delivery Expands the sources and methods for delivering content across a variety of devices	• Intelligent notification features to notify end users about realtime events such as sports scores and stock market updates delivered by WAP *push* messages, SMS messages, e-mail or instant messaging • Location services to provide privacy-based access to specific location information; locate mobile users by latitude-longitude coordinates, or city-state-country identification; supply information to applications to deliver personalized content depending on location, such as the nearest restaurant or gas station; and allow users to control which applications receive information about their location • Lotus Sametime™ Everyplace technology preview to access the instant messaging capabilities of Lotus Sametime; with online awareness and realtime communication on a variety of devices
Wireless connectivity Allows mobile users to access information and services across a variety of wireless or land-line networks	• New wireless client support for WinCE 3.0 Handheld Professional and PC 2000, PocketPC, Palm OS, Windows Me and embedded QNX Neutrino • Support for existing Windows NT, Windows 2000, Windows 98 and Windows 95 wireless clients • New messaging gateway support to help deliver SMS messages generated from an application over WAP and non-WAP networks, and a toolkit to exploit *push* application programmer interface (API) • Support for the latest WAP forum protocol specifications and G3 networks like GPRS • New distributed gateway design to help balance load, improve availability and increase scalability • Client API and toolkit to enable automatic switching between wireless connections • Support for WAP devices, SMS messaging, handheld devices, laptop computers and custom devices that use TCP/IP

IBM WebSphere Everyplace Server, Service Provider Offering, Version 2.1 at a glance (cont.)

Technology	Features
Security Enables secure connections between pervasive devices and applications across mobile and landline networks	• Authentication and single sign-on for users of all functions with the IBM WebSphere Everyplace domain, including Domino applications • Tivoli® SecureWay™ Policy Director integration to enable authorization and fine-grain access control; also limits application access by defined user privilege • Support for multiple authentication methods including basic Web authentication, forms-based, certificates and calling phone number • Encrypted data transmission across wireless and landline networks • Support of authentication by other vendor gateways, such as Nokia
Optimization and scalability Improves data transmission efficiency across networks and reduces usage-based network charges	• Everyplace Wireless Gateway and clients to perform data compression, header reduction, TCP protocol optimization, WAP architecture optimizations and connection management to address bandwidth, latency and cost issues for IP over the mobile network environment • A robust caching proxy to improve scalability and performance • Load balancing in the network dispatcher • Mutual high-availability backup
Systems management and provisioning Provides application, software and subscriber management capabilities	• Tivoli Personalized Services Manager (TPSM) infrastructure to enroll and service subscribers and subscriber functions, including self-management options • TPSM support for managing device services such as configuration and software distribution, depending on the capabilities of the device
Services Offers integrated installation *and* administration with features that help configure tailored services and meet key business objectives	• Central access point for administrative operations through IBM Everyplace Suite Manager • Automatic prerequisite check that only installs necessary components • Lightweight Directory Access Protocol, Version 3 (LDAPV3) server support for a variety of schema, referrals, authentication mechanisms and related specifications

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09-01
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