

IBM WebSphere Everyplace Subscription Manager, Version 5.0

Highlights

- **Scalable solution with a high performance subscriber database that can support tens of millions of subscribers**
- **Delivers a mature, industry-proven infrastructure targeted at public wireless LAN (PWLAN), broadband and dial-up service providers for creating and managing services**
- **Customer Care, Self Enrollment and Self Care Web-based applications are easily customized and branded for integration into existing business environments**
- **Supports subscriber and service management functions for PWLANs**
- **Enables the rapid deployment of service delivery portals by extending the capabilities of WebSphere® Portal**
- **Integrated with leading Internet billing products, lightweight directory access protocol (LDAP) directories and Tivoli® Access Manager**

Extended to support public wireless LAN

Many handheld devices and laptop computers now support 802.11 wireless standards and allow providers to offer network access in places such as convention centers, airports, coffee shops, book stores and hotels. Today, travelers can have easy Internet access from any of these remote locations, using these Wi-Fi 'hotspots' as virtual offices, stopping in to check e-mail, download documents or communicate with co-workers.

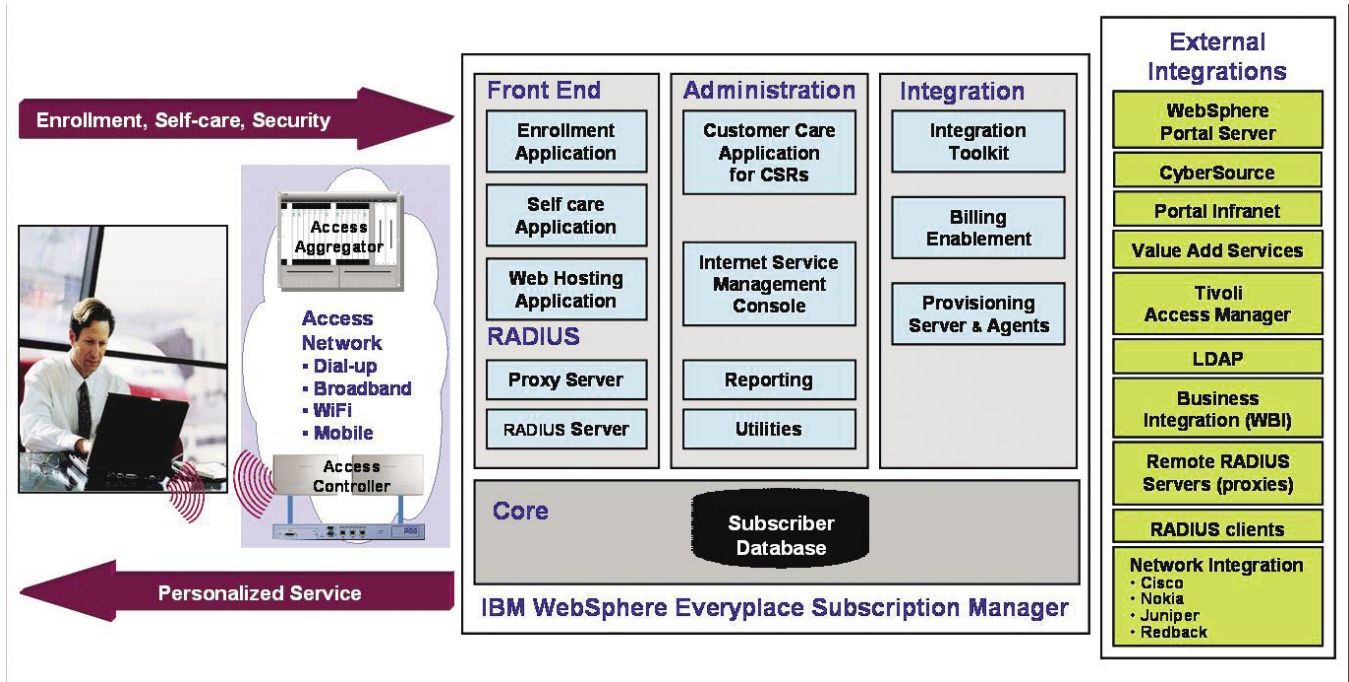
A member of the IBM® WebSphere® Everyplace® Service Delivery (WESD) family of offerings, WebSphere Everyplace Subscription Manager, Version 5, now supports subscriber and service management functions for public wireless local-area networks. In today's on demand world, where more people expect instant access to information and applications at any time, any place—WebSphere Everyplace Subscription Manager extends the reach for service providers and carriers who want to ensure greater access to information—and, in turn, generate new revenue streams.

WebSphere Everyplace Subscription Manager offers two scenarios:

- *Pre-paid scenario includes scratch cards, vouchers and credit cards*
- *Post-paid scenario includes monthly subscriptions and telephone bill surcharges.*

Pre-paid PWLAN services are defined by quotas to control how much time (usage or total duration) and/or traffic each user is allowed. For example, hotel or conference guests may select among several available prepaid PWLAN access services, receiving a voucher with a user ID and password. Service providers can create thousands of prepaid accounts with specific usage and traffic quotas in the form of scratch cards containing user IDs and passwords, which can be sold or issued as part of a wireless LAN service promotion.

IBM WiFi Rapid IP Solution Architecture



Customer service representatives can enroll users to public wireless LAN services, or customers can self-enroll for PWLAN service directly from a browser. Customer support representatives can also look up a wireless LAN user, view the account information, including PWLAN quotas and usage, and make changes if appropriate.

WebSphere Everyplace Subscription Manager software offers provisioning interfaces to enable operation support system/business support system (OSS/BSS) integration. It is integrated with leading Internet billing products, Lightweight Directory Access Protocol (LDAP) directories and IBM Tivoli Access management product providing authorization capabilities.

Scales to support millions of subscribers

WebSphere Everyplace Subscription Manager's scalable infrastructure uses a high performance database that can support tens of millions of subscribers. With its ability to implement value-added fee-based services, WebSphere Everyplace Subscription Manager provides the

infrastructure for service providers to increase efficiency, improve customer service and increase revenue streams while lowering support costs. IBM is enabling this competitive edge by delivering a scalable and customizable infrastructure that allows for integration into the WebSphere Portal, as well as integration into external and legacy applications.

Flexible and scalable subscriber management

WebSphere Everyplace Subscription Manager is designed to collect and store fully customizable subscriber data, associate subscribers with their chosen services, and initiate the provisioning process to enable service delivery. For example, to support usage billing, WebSphere Everyplace Subscription Manager can record session usage based on time used and data delivered via the port or network access server. And its flexible service provisioning features easily support customer-defined new or existing service delivery models.

Key features

WebSphere Everyplace Subscription Manager delivers fundamental subscriber and service management features, independent of their business model or delivery architecture, including:

Self-service and support

To retain and respond to customer needs, WebSphere Everyplace Subscription Manager offers Subscriber Self Care—a complete Web-based guided self-service environment application. From online enrollment to order status and service history, subscribers are enabled to manage their own accounts. Empowered to try out new services in real-time, subscribers can add or remove a variety of services seamlessly. Subscribers can change their network access, subscribe to monthly services, or they can order on demand services such as streaming video or online gaming.

WebSphere Everyplace Subscription Manager helps you streamline the production and rollout of applications that generate new revenue streams. It enables service providers to bundle their service offerings and differentiate products with innovative service packages.

Integration with the WebSphere Portal

The Web applications provided by WebSphere Everyplace Subscription Manager can be integrated with the WebSphere Portal platform to provide a robust Internet Protocol (IP) Store. WebSphere Portal manages the presentation of portal content, including dynamic adjustment based on the user's device, the personalization of the 'portlets' that make up the portal content, and access control to the pages and portlets included in the portal.

In a deployment that includes WebSphere Everyplace Subscription Manager and WebSphere Portal, WebSphere Everyplace Subscription Manager can be used to manage the LDAP group membership of subscribers to provide selective access to the appropriate portal content. In addition, application programming interfaces (API) are provided to enable portlets running on WebSphere Portal to easily access service, user and subscription information maintained by WebSphere Everyplace Subscription Manager, including placing orders for new on demand services.

Additional features include:

- *Clientless IP support for broadband access, in addition to Point-to-Point Protocol over Ethernet (PPPoE) support*
- *WebSphere Business Integrator (WBI) Server support*
- *Integration with Portal Intranet billing and CyberSource credit authorization*
- *Fully integrated Remote Authentication Dial-In User Service (RADIUS) and Extensible Authentication Protocol (EAP) proxy support*
- *Juniper SDX integration for Broadband*
- *Oracle Version 9i support*
- *Multilingual support – French, Korean, Chinese, Spanish, Brazilian, Portuguese, German, Japanese, Chinese/traditional, English U.S. and Italian*

WebSphere Everyplace Subscription Manager enhances the WebSphere Portal by fully integrating its services management infrastructure with the powerful personalization and aggregation functions of the portal. Orders for on demand services can be placed using custom designed portlets that communicate with the WebSphere Everyplace Subscription Manager provisioning subsystem to help ensure real-time service delivery, authorization and billing transactions.

Features	Benefits
Host multiple Internet Service Providers (SPs) simultaneously	<ul style="list-style-type: none"> • Provides the infrastructure for unique services, unique profiles, branding and marketing to enable virtual service provider business model
Subscriber self-enrollment and management	<ul style="list-style-type: none"> • Increases revenue, improves customer retention and lowers support costs through easy to use Web-based capabilities
Flexible service provisioning	<ul style="list-style-type: none"> • Java™-based provisioning engine easily supports customer-defined new or existing provided provisioning agents or customer written agents • Supports auto-(de)-provisioning for dynamic service delivery models for value add services
Integration with WebSphere Portal	<ul style="list-style-type: none"> • Subscribers can access WebSphere Everyplace Subscription Manager and WebSphere Portal using a single user ID • Personalized service portal provides ability to conduct customized marketing and improved user experience and loyalty
Built-in integration protocols	<ul style="list-style-type: none"> • LDAP protocol enables integration with external and legacy applications • Native RADIUS (two-way proxy, user definable authentication exists) enables integration with custom business procedures
Public wireless LAN support	<ul style="list-style-type: none"> • Service Providers can provide prepaid and postpaid access for wireless subscribers • Wireless LAN access can be granted to prepaid subscribers through vouchers or through credit card billing
Multi-vendor mediation	<ul style="list-style-type: none"> • Pre-integration with leading access servers and aggregation devices allows Service Providers to extend the life of their network investments, and offer value-add services over multi-vendor networks
Flexible programming toolkits	<ul style="list-style-type: none"> • All components are built using Java and documented APIs, compatible with WebSphere application development and tooling protocols, enabling Service Providers to provide value-added services such as network storage, Web hosting, streaming video and on-line games

Hardware requirements:

WebSphere Everyplace Subscription Manager V5.0 requires the following minimum hardware for servers and clients. Also listed are the supported network access controllers and servers.

Minimum server requirements

- Minimum 2GB RAM
- 80GB disk storage
- IBM @server® pSeries™ or Sun processor with performance characteristics equal to or higher than one of the following:
Total SPECint_rate_base2000 rating 7 or higher; Relative rPerf rating of 3 or higher

Minimum client requirements

- Client machines for subscribers require 300MHz processor or higher, and at least 128MB of RAM
- Client machines for customer service representatives and administrators require a 500MHz processor or higher; and at least 256MB of RAM; the Internet Services Manager Console administration tool also requires 100MB available disk space on the client machine

Minimum hardware for the Internet Services Manager Console

Use of the Internet Services Manager Console requires the following minimum hardware:

- A system with an Intel® Processor or equivalent with: a minimum of 256MB of RAM, a minimum of 100MB of available disk space, minimum processor speed of 500MHz

Supported broadband remote access servers

Implementation of WebSphere Everyplace Subscription Manager in a broadband service environment requires one of the following:

- Redback SMS 500 and AOS V5.03 or higher
- Redback SMS 1800 or 10000 and AOS V6.04 or higher
- Cisco routers that support the Service Selection Gateway (SSG) and IOS V12.2(4)B or higher
- Juniper E-series routers supported by Juniper SDX-300 Service Deployment System Release 4.0.1

Supported 802.11x access controllers

Implementation of a PWLAN solution requires one of the following:

- Nokia P022 Access Controller
- Cisco Aironet 1100, 1200 Access Points, Cisco IOS Release 12.2(8)JA or higher

Software requirements

WebSphere Everyplace Subscription Manager V5.0 requires the following prerequisite categories of server and client software:

Server Software Operating systems:

- IBM AIX® V5.1 (maintenance level 1,3) or V5.2 for installation on a IBM @server® pSeries processor
- Sun Solaris V8.0 or V9.0 with recommended patches for installation on a Sun processor

Database software

- Universal DB2® Enterprise Edition V8.1 with Fixpack 2, or V7.2 with Fixpack 8 and Java™ Database Connectivity (JDBC) V2.0
- Oracle Database Enterprise Edition V8.1.7.x from Oracle Systems Inc.

Additional Software required by WebSphere Everyplace Subscription Manager servers:

- IBM HTTP Web Server (included with WebSphere Application Server)
- For IBM AIX: IBM Developer Kit for AIX, Java Technology Edition, Java Software Development Kit (SDK) V1.3.1
- For Sun Solaris: Sun Java Development Kit 1.3.1_02
- One of the following:
 - DB2 V8.1 with Fixpack 2 Runtime Client, or DB2 V7.2 with Fixpack 8 Runtime Client
 - Oracle Client V8.1.7.x

Client software (Client machines are those used by subscribers, customer service representatives and WebSphere Everyplace Subscription Manager administrators)

- Microsoft® Windows® Operating Systems
 - Windows 2000 (Professional, Server, or Advanced Server)
 - Windows XP (Home, Media Center, Professional, Server, Enterprise Server, DataCenter and WebServer Windows 2003)

- Web browser
 - Netscape V6 or V7
 - Microsoft Internet Explorer V6 or, V5.5

Note: A Java Virtual Machine must be installed

- Database client for Internet Services Manager Console (one of the following):
 - DB2 V8.1 with Fixpack 2 or V7.2 with Fixpack 8 Runtime Client
 - Oracle Client V9i or V8.1.7.4

**IBM WebSphere Everyplace Service
Delivery family— Foundation for
flexibility**

The WebSphere Everyplace Subscription Manager offering is a member of the WebSphere Everyplace Service delivery family of offerings which provides expanded opportunities into the mobile e-business on demand world. All of the WebSphere Everyplace Service Delivery family of offerings are built on the WebSphere Application Server platform, share common components and are integrated to work together. This allows service providers to purchase only the functionality they require while delivering a consistent architecture to build on in the future. WebSphere Everyplace Service Delivery is designed to take the future in stride—to enable service providers to meet a broad spectrum of varying needs, and satisfy growing customer demands going forward.

This versatile set of offerings provides many key benefits, including:

Leverage wireless technology to reach new markets

Connect, adapt, manage, transform and scale cutting-edge Web applications for a wide range of pervasive devices.

Adapt content dynamically

Extend business content to an almost limitless range of wireless and wire connected devices, including wireless access protocol (WAP) phones, wireless personal computing devices, intermittently connected devices and digital set top boxes.

Implement innovative new services

Deliver new services quickly and cost effectively that leverage existing network assets while providing a smooth transition to Next Generation Networks.

Generate new revenue streams

Monetize network service enablers, leverage third party content and application developers to increase revenues.

IBM stands ready to help

At IBM, we have built lasting relationships with industry leaders in telecommunications, network services and Internet services. We understand your business and can provide custom solutions to expand your portfolio of services and speed your time to return on investment. With worldwide resources and an extensive Business Partner network, IBM stands ready to help.

For more information

To learn more about IBM WebSphere Everyplace Subscription Manager or IBM pervasive computing software solutions, contact your IBM representative or visit:

ibm.com/pervasive



© Copyright IBM Corporation 2004

IBM Corporation
8051 Congress Avenue
Boca Raton, Florida 33487

Printed in the United States of America
06-04
All Rights Reserved

IBM, the IBM Logo, AIX, DB2, eServer, Everyplace, pSeries, Tivoli and WebSphere are trademarks of International Business Machines Corporation in the United States, other countries or both.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Intel is a trademark of Intel Corporation in the United States, other countries, or both.

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.



G507-1665-00