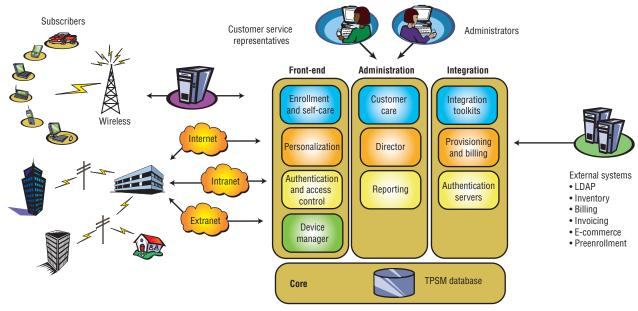


# **Tivoli Personalized Services Manager, Version 1.2**



Delivering personalized services to pervasive devices with Tivoli Personalized Services Manager, Version 1.2

#### Highlights

- Offers a cost-effective, scalable, highly functional platform
- Helps you rapidly build, publish and activate revenue-generating services
- Helps you offer value-added services to increase average per-user revenue
- Supports multiple lines of business

- Includes industry-standard authentication to ensure security-rich access
- Provides single sign-on to multiple services capabilities and supports value-added services
- Decreases the need for customer service representative intervention
- Provides flexible subscriber enrollment capabilities
- Integrates with leading third-party billing products

## Be ready to attract new customers with cutting-edge services

As existing technologies improve and new ways emerge for customers to connect to networks and services
—from dial-up to broadband, wireless and satellite—service providers (SPs) have to manage increasing numbers of subscribers and accommodate a wider range of technologies to maintain a competitive edge. They have to be ready to deliver services to new and existing customers using almost any device—including personal digital assistants (PDAs), handheld computers, smart phones, microcomputers and Internet appliances.



With Tivoli® Personalized Services Manager (TPSM), you can offer new device access to subscribers and build in value-added and premium services to generate incremental revenue from your customer base. TPSM helps you get started with subscription management, service administration, device management and service selection and activation. With an Internet services manager component and a device management services component, TPSM offers an entry-level services-to-device solution that helps you fully manage your subscribers' online experiences.

Internet services manager
The Internet services manager
component provides a concise,
integrated software infrastructure
with key business features, such
as enrollment, service provisioning,
subscriber authentication and access
control, customer care and selfservice support. You can support
separately branded offerings simultaneously, giving each brand a unique

identity and a full range of business offerings. The Internet services manager helps ensure uninterrupted operation, provides the flexibility to make new services readily available to existing subscribers, and is highly scalable to meet growing needs. Built on industry-standard components, the Internet services manager enables you to offer an almost unlimited array of services — without having to alter the core base of the TPSM infrastructure. You can start with a system size that meets the needs of your initial subscriber base and grow quickly as you attract new subscribers - while maintaining database design consistency and uninterrupted service.

Device management services

TPSM provides device management
services to support a variety of handheld devices. Device management
services extend the capability of the
Internet services manager, so you
can offer services to a wider audience
using Palm OS, Microsoft® Windows®
CE platform-based devices and
Internet appliances like IBM NetVista™.
Using TPSM, you can create and

manage a personalized service environment for individual subscribers, offering simplified self-service and enhancing overall customer experiences. Subscribers can also customize their service environments - select and add services, for instance—through a personal portal page. The personal portal page allows subscribers to gain access from any device, anywhere, anytime. You can create and publish targeted services that match the unique preferences of each subscriber. As your needs grow, TPSM lets you migrate seamlessly to IBM WebSphere® Everyplace™ Server, Service Provider Offering to add greater mobile wireless capabilities and enhanced subscriber options. In addition to mobile wireless functionality, TPSM provides a migration path to IBM Rapid IP Services for e-Business Solutions — an IBM solution for broadband service access.

# Manage multiple lines of business more effectively

TPSM is designed to support a growing number of lines of business (LOBs), including consumer and wholesale services, enterprise outsourcing, service bureaus and virtual SPs.

You can preserve distinct brand names and unique identities while multiple LOBs operate simultaneously on a single system and use the same database. Each LOB relies on a centrally managed enrollment engine, but maintains separate presentation and payment plan offers.

A standard set of enrollment screens can be customized to deliver uniquely branded messages and graphics, as well as SP-specific billing plans and payment options. Behind the scenes, an array of data elements is captured from each new subscriber, so TPSM function is delivered consistently to every subscriber, regardless of branding. TPSM creates a partition in the database that distinguishes and preserves individual LOB branding with unique realm-name distinctions and Internet address, or URL, namespaces.

Realm-name distinctions allow you to group subscribers and identities by common characteristics. Systems managers, network administrators, product service developers, and system administrators can create specific services offerings to meet individual realm needs. And, you can limit customer service representative (CSR) access control and security provisions to specific realms. The result: each LOB and its subscribers are kept distinct from others hosted by TPSM and across the Internet, giving you greater control and easier management.

### Improve customer care and call-center efficiency

TPSM uses a customer-care interface that allows a CSR to view or change subscriber data in realtime. With TPSM, important customer data is kept up to date and immediately available to billing and other integrated systems. And access control features can be used to improve systems management and protect sensitive data.

### Offer customers self-care options and improved service selection

TPSM provides personalization functions to help you offer your customers services that are easy to understand, select, purchase, activate and use. Subscribers can modify their personal service portal pages to display services — and request different types of services—tailored to their interests or needs. For example, video on-demand can be developed as a value-added service with an IBM Global Services contract allowing the personalized portal page to display titles by subscriber interest, such as comedy or action. You can reach potential customers with targeted advertisements and service offerings like banner ads, special interest notices and sales promotions. The subscription database keeps individual profiles with demographic information - address and age, special preference fields, personalization choices and interests and account data. TPSM helps you mine and manage databases to build services that meet the needs of

individuals or groups of subscribers. And subscribers can modify select areas of their profile data—to update an address or telephone number, review their billing plans or methods of payment, change passwords or add premium services. Later, as you upgrade your infrastructure to accommodate a larger, more diverse customer base, you can use IBM WebSphere Portal Server to extend value-added services and improve self-care options.

### Subscriber authentication and access control

With centralized authentication, TPSM subscribers are checked against the TPSM subscriber database when they log in based on their subscription profile parameters. Subscribers are granted single sign-on status throughout a session. Relevant dynamic information is preserved throughout a subscriber's session—simplifying

the user experience and eliminating the need to reenter ID information.

TPSM integrates tightly with Tivoli

SecureWay® Policy Director to boost the level of security you can extend to customers.

### Leverage industry-standard technologies

To integrate with third-party components and tools, Tivoli Subscription Manager, Version 1.2 incorporates industry-standard technology including:

- A published set of Java<sup>™</sup> technologybased application programming interfaces (APIs)
- Java Database Connectivity (JDBC) connector protocol to hide the specific details of the database
- TCP/IP- based communication between components and systems
- Web user interfaces and publishing based on Java technology, JavaScript, HTML, JavaServer Pages (JSP) and similar Web content languages

- Secure Sockets Layer (SSL) support
- An interface to export data to the Lightweight Directory Protocol (LDAP) directory
- Support for relational databases, including IBM DB2® Universal Database™ and Oracle Relational Database Management System (RDBMS)
- Support for Web server software, including IBM WebSphere Application Server, Advanced Edition, Version 3.5
- UNIX® technology-compliant operating systems, including IBM AIX® and Sun Solaris™ operating environments
- Structured Query Language standard (SQL-92 standard) interface for relational database access
- Internet Engineering Task Force (IETF) specifications-compliant RADIUS authentication server

Management service	Function	Value
Personalization	Enables service providers to customize the assigned portal page which can then be further customized by the subscriber to reflect personal interests and account information	<ul> <li>Ability to conduct customized marketing through banner ads and special interest notices</li> <li>Improvement of user experience and opportunity to build customer loyalty</li> </ul>
Enrollment	Allows enrollment through CSRs, subscriber self-care, branded CD-ROMs or banner-ad response and can be tailored to LOB and virtual SP needs	<ul> <li>Flexibility to attract customers from a variety of efforts</li> <li>Savings of cost and time to initiate revenue-generating personalized services</li> </ul>
Self-care	Enables customer-initiated enrollment and selection of new services and allows subscribers to update account and personal information	Reduction of service-providing costs and increase of customer satisfaction
Multiple LOB support	Hosts and manages several LOBs at once, preserving unique brand identities	More productive use of machines and operators
Authentication and access control	Verifies subscribers against database at login for privileges and capabilities	Ability to recognize and govern usage based on set subscription parameters
Customer care and support	Changes subscriber-related data dynamically throughout the system	Improved CSR efficiency and productivity     Improved customer experience and subscriber satisfaction     CSRs delegated to LOBs and brands     Realtime updates to billing and other systems
Web hosting	Helps residential customers create personal Web sites	Increased customer base, new revenue and greater retention
Personal devices	Supports a variety of pervasive devices concurrently from the same device manager	Greater diversity of service offerings and support

### For more information

To learn more about IBM Tivoli Personalized Services Manager, Version 1.2 or to learn how you can begin developing an entry-level pervasive computing solution for e-business growth, contact an IBM sales representative, or visit:

ibm.com/pvc/products/tivoli

#### Tivoli Personalized Services Manager, Version 1.2 at a glance

#### Hardware requirements

- IBM RS/6000® or Sun processor
- · A total SPECint95 rating of 22.7 or higher
- A two-processor system minimum
- · A relative OLTP rating of 14.5 or higher
- 2GB of RAM minimum
- Two hard drives with 9GB available storage space each minimum

#### Administrative console and device manager console

- Intel® technology-based (or equivalent) personal computer capable of running either of the following:
  - Windows NT® Server, Version 4.0 with Service Pack 6
  - Windows NT Workstation, Version 4.0 with Service Pack 6

#### Client platforms for enrollment, self-service, customer care and personalization

- Intel technology-based (or equivalent) personal computer capable of running any of the following:
  - Windows NT Server, Version 4.0 with Service Pack 6 or Windows NT Workstation, Version 4.0 with Service Pack, Windows 95, Windows 98, Windows 2000 Professional, Windows 2000 Server or Windows 2000 Advanced Server
- Keyboard and display, appropriate to the language installed

#### Software requirements

#### Operating systems

One of the following operating systems must be used as the operating environment on the server:

- AIX, Version 4.3.3 with PTF 2 or higher to install on an RS/6000 system
- Sun Solaris operating environment, Version 7.0 or Sun Solaris operating environment, Version 8.0 to install on a Sun system

#### Database management

One of the following database management systems:

- IBM DB2, Version 7.1 with FixPack 2A
- Oracle 8i, Version 8.1.7

#### Internet servers

- IBM WebSphere Application Server, Version 3.5
- IBM HTTP Server, Version 1.3.12.31

#### Tivoli Personalized Services Manager, Version 1.2 at a glance (continued)

#### Software requirements (continued)

#### Optional software

- IBM eNetwork Dispatcher optionally supported for scalability and load balancing
- NcFTP Software NcFTPd Server required for Web-hosting function
- Tivoli SecureWay Directory, Version 3.2 for LDAP support
- Tivoli SecureWay Policy Director, Version 3.7 for security services

#### Client software

One of the following must be installed on the client PCs:

Windows 95, Windows 98, Windows NT Server, Version 4.0 with Service Pack 6, Windows NT Workstation, Version 4.0 with Service Pack 6, Windows 2000 Professional, Windows 2000 Server or Windows 2000 Advanced Server

#### And either:

- · Netscape Communicator, Version 4.5 or higher
- · Microsoft Internet Explorer

#### Support for pervasive devices<sup>2</sup>

- Palm OS, Version 4.0 with cradle support for selected hardware<sup>3</sup>
- Windows CE running Windows with PocketPC Version 3, Compaq iPAQ 3650 and Cassiopeia E-125
- IBM PvC stack for NetVista

#### National language translation support

Tivoli Personalized Services Manager provides full language translation of one of the following languages at the time of the installation:

- Brazilian Portuguese, simplified and traditional (Mandarin) Chinese, English, French, German, Italian, Japanese, Korean and Spanish
- <sup>1</sup> Included with TPSM, Version 1.2
- <sup>2</sup> Also includes personalization enhancements for Wireless Application Protocol (WAP) devices
- <sup>3</sup> For more recent hardware platforms, such as Palm Connected Organizer Model V, while attached to the user's docking station



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