

WebSphere software

IBM WebSphere Presence Server

Highlights

- Utilize an independent, crossapplication presence server built for service provider networks
- Help create services that make customer communications more productive by utilizing presence information from multiple sources
- Harness the flexibility and reusability of a centralized enabler to decrease costs and increase revenue
- Implement a carrier-grade presence platform for legacy and IP Multimedia Subsystem (IMS) deployments
- Leverage IBM's extensive presence and service provider experience
- Interface with applications and network elements based on industry-standard interfaces for flexible service oriented architecture (SOA) deployments

WebSphere Presence Server Presence Information Additional presence Rich Presence Data Format (PIDF) Information Data (RPID) document types WebSphere Application Server Converged HTTP/SIP container Converged HTTP/SIP proxy WebSphere IP Multimedia Subsystem Connector IMS Service Control (ISC) Diameter Call Session Charging Home Subscriber Control Function (CSCF) function Service (HSS)

WebSphere Presence Server, built on the converged WebSphere Application Server platform, provides a flexible, reusable service enabler supporting the delivery of rich, next-generation services.

Service providers must move service enablers beyond application-specific silos

Telecommunications service providers already know that individuals use more communications devices today than ever before, in both their personal and professional lives. But to take advantage of this array of devices and drive new levels of customer service and revenue in the years ahead, service providers must master presence. This concept refers to an individual's availability, capability and willingness to be contacted. For instance, on what devices and applications can the individual be contacted right now? What are the capabilities of those devices and applications? Does the individual wish to be contacted on them? And by whom? The answers to questions such as these constitute that person's presence.

Today, applications and services use independent, application-specific silos of presence information. Since this information is isolated, it cannot be shared across applications to make services more valuable. A centralized

Establish a flexible, high-performance execution platform for next-generation services

The proliferation of Internet Protocol (IP) technologies such as Session Initiation Protocol (SIP) — and the development of open standards like the IP Multimedia Subsystem (IMS) framework and Parlay X Web services — create the opportunity for telecommunications service providers to deliver enhanced services to their customers more rapidly. Further, they can help cut the costs of developing and managing these services, while overcoming the challenges of inflexible legacy infrastructure. By leveraging these technologies, service providers can use a single platform to support rich, converged applications and communications traffic — voice, video or data — over fixed and mobile networks, independent of the underlying network infrastructure.

WebSphere Presence Server is part of the IBM next-generation services platform for telecommunications. Based on SOA principles — reusing individual service components and separating the creation and execution of new service applications from the underlying network — the IBM next-generation services platform provides a flexible execution environment for rich IP-based services. As part of this telecom service platform, IBM has developed IMScompliant service enablers — IBM WebSphere IP Multimedia Subsystem Connector and WebSphere Presence Server. IBM WebSphere Telecom Web Services Server and IBM WebSphere XML Document Management Server (XDMS) help minimize the cost and time to deliver rich, composite services to market.

enabler would provide flexibility for new and existing services to plug in to a common infrastructure, allowing services to be deployed more easily in less time. The isolated nature of these discrete environments also increases the management cost of developing, deploying and maintaining presence capabilities.

Utilize an independent, cross-application presence server built for service provider networks

IBM WebSphere® Presence Server, part of the IBM next-generation services platform for telecommunications, leverages an SOA approach that provides the ability to integrate presence functionality across disparate applications. It gives service providers the flexibility to keep presence information specific to an application, share it across a subset of services or make it available to all services. For example, a service provider might choose to enhance a phone book application to display both phone and instant message status. Whether introducing new services or enhancing existing ones, a new enabler does not have to be deployed for each service — instead, a common enabler may be used for all. By facilitating the creation of enhanced services and making them easy and cost-efficient to manage, WebSphere Presence Server provides significant benefits to both service providers and their customers.

Aggregate presence information to make subscribers' communications more productive

WebSphere Presence Server enhances end-user value by providing common intelligence about presence that can flow across applications. When subscribers can take advantage of an aggregating entity that brings together presence and other collaboration information, they can make their communications more efficient and productive.

For example, today many phone book applications on mobile phones only store contacts. But with presence information integrated into it, a phone book can show subscribers whether their friends are available before calling them. A presence-enabled phone book can also aggregate different modes of communication and show the optimal contact method.

Harness maximum flexibility and reusability to decrease costs and increase revenue

WebSphere Presence Server helps you simplify the management — and minimize the cost — of aggregating presence information across disparate devices, applications and network elements. With a common platform, you do not have to learn and manage numerous siloed presence environments from multiple vendors and find ways to patch them together. And since

WebSphere Presence Server uses SOA principles, you can build, deploy and integrate these services independent of applications and the computing platforms on which they run.

Additionally, WebSphere Presence Server helps minimize the time to market for new integrated services. It is possible for new services to be launched more quickly, increasing the opportunity to begin receiving their associated revenue. Applications simply plug into the centralized presence enabler. Developers can add presence information to applications without developing a new presence or group list infrastructure. By reducing the bar to create rich applications, service providers can increase revenue opportunities by increasing the number of applications developed with presence functionality. At the same time, using a common enabler decreases cost by removing the need for developing, deploying and maintaining multiple presence platforms.

Gain the additional functional and technical capabilities you need for legacy and next-generation deployments

Service providers need the flexibility to deploy presence within their current telecommunications network and broader IMS plans. To accommodate this, WebSphere Presence Server

Enhance collaboration services with a telecommunications-focused presence platform

WebSphere Presence Server is a carrier-grade, stand-alone platform with key features that include:

- **Presence source flexibility** enables the inclusion of presence information from a broad range of sources, including devices, network elements and applications such as instant messaging and IPTV, as well as external presence providers such as enterprises.
- Application and service independence provides for the integration of presence information to any standards-based application, such as instant messaging and presence-enabled address books.
- Standard and custom presence information support enables the extension of presence beyond the standards to include application, service provider or use-case specific information.
- Underlying IBM WebSphere Application Server platform helps simplify the
 development of integrated applications that take advantage of the converged HTTP/SIP
 container and proxy server, while providing proven manageability, scalability and security.
- Legacy and next-generation network support supports service provider IMS networks through standards-based IMS service control (ISC) and Diameter interfaces to connect to IMS control plane elements and adapters for legacy network elements.
- Compliance with Internet Engineering Task Force (IETF), Open Mobile Alliance
 (OMA), European Telecommunications Standards Institute (ETSI) and 3rd Generation
 Partnership Project (3GPP) standards promotes widespread integration among
 multivendor applications, devices and network infrastructure.

bundles WebSphere IP Multimedia
Subsystem Connector. WebSphere
IP Multimedia Subsystem Connector
supports service provider IMS networks
through standards-based ISC and
Diameter interfaces. WebSphere
Presence Server uses WebSphere IP
Multimedia Subsystem Connector to
connect to IMS control plane elements.

WebSphere Presence Server can interoperate with WebSphere XDMS to provide group list and authorization rules support. When you use WebSphere XDMS, you can:

- Enable customers and administrators to create and manage network-based groups and authorization policies that work across all applications.
- Maintain access lists, permissions and other service-specific properties associated with those groups, group members and policies.
- Extend network capabilities through the centralized storage and standards-based management of XML-based information such as group lists, user profiles, contact information, authorization rules and policy data.



Although WebSphere Presence Server and WebSphere XDMS are designed to work in coordination with each other, they are standards compliant and can function independently. For example, WebSphere Presence Server can utilize group list management capabilities from a different vendor.

Take advantage of extensive IBM experience in developing "presence intelligence"

WebSphere Presence Server benefits from the extensive experience IBM has with presence functionality and working with telecom service providers, including:

- IBM Lotus® Sametime® instant messaging. which serves more than 16 million users.
- SIP-based collaboration gateway experience that enables presence sharing between service providers, enterprises and other environments.
- Joint research initiatives with major service providers to develop advanced presence services for mobile users.
- Experience with 14 of the world's 15 largest telecom service providers leveraging IBM middleware for their applications.

WebSphere Presence Server leverages this experience to enable you to provide the "presence intelligence" your customers desire. With the aggregated presence capabilities made possible by WebSphere Presence Server, and leveraging SOA principles, it is possible for telecommunications service providers can create new services — more intelligent services at lowered maintenance costs.

Hardware and software requirements

WebSphere Presence Server requires IBM WebSphere Application Server Network Deployment, Version 6.1. For details on all hardware and software requirements, visit ibm.com/software/ pervasive/presenceserver/sysregs

For more information

To learn more about WebSphere Presence Server, contact your IBM representative or IBM Business Partner, or visit ibm.com/software/pervasive/ presenceserver

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