



**WebSphere** software

# IBM WebSphere XML Document Management Server

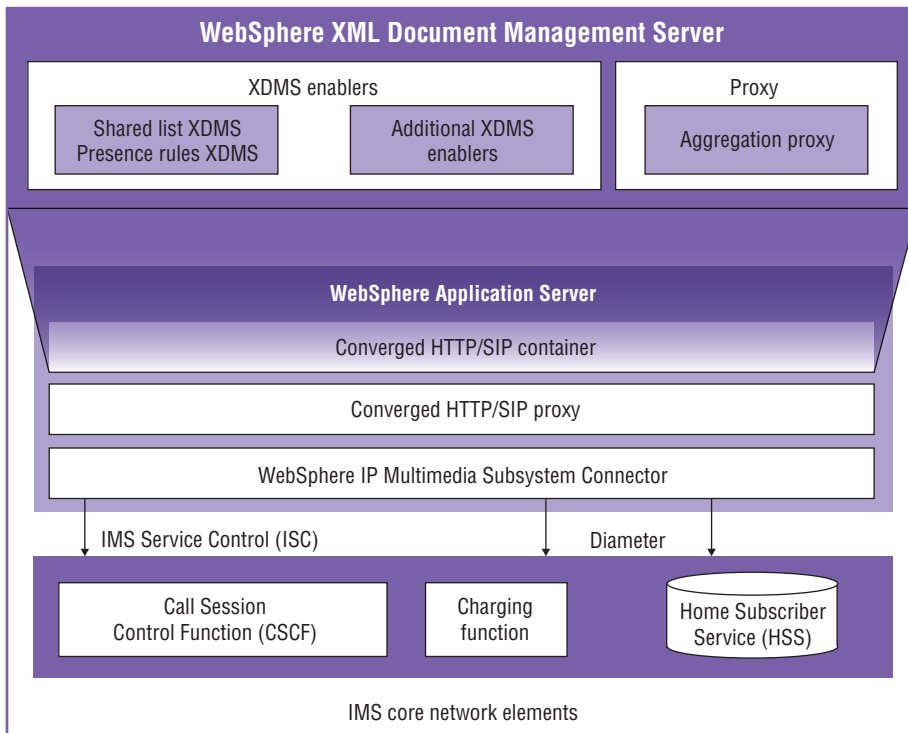
## Highlights

- Improve the user experience by enabling customers to reuse information, such as group lists, profiles and preferences, across applications
- Facilitate efforts to get to market quickly by using standardized data access mechanisms for XML-based information
- Simplify management by centrally managing information from multiple vendors' applications, using IETF, OMA, ETSI and 3GPP standards
- Support legacy and next-generation services, including SIP- and IMS-compliant service enablement

## Avoid a siloed approach that hampers customer usability

For telecommunications service providers that have multiple independent presence environments — landline, mobile and enterprise, for example — the burden of managing XML-based information is significant, for both IT staff and end users. If, for example, you had a group list built into an instant messaging (IM) application, then that list would not be available to other applications. Your IT staff would need to manage multiple group-list servers. And your end users would need to manage multiple lists for each group of contacts they have.

IBM WebSphere® XML Document Management Server (XDMS) helps you address these challenges, and not only for group-list capabilities. WebSphere XDMS offers an application- and service-independent way to manage XML documents of any type, including group lists, user profiles, contact information, authorization rules and policy data. It is built on the highly reliable, highly available WebSphere platform, and it complies with both intervendor



**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 find 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 XML Document Management 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 platform, IBM has developed IMS-compliant service enablers — IBM WebSphere IP Multimedia Subsystem Connector, IBM WebSphere Presence Server, IBM WebSphere Telecom Web Services Server and WebSphere XDMS — to help minimize the cost and time to deliver rich, composite services to market.

integration standards and next-generation frameworks. As a result, WebSphere XDMS supports your efforts to take advantage of convergence to enhance both service to your customers and operational efficiencies.

Because WebSphere XDMS enables XML document access from any application, service or device, it helps you improve the user experience for your customers. This creates customer stickiness by integrating the customer experience across applications. WebSphere XDMS also facilitates your efforts to bring new services to market quickly, since you can avoid the time and cost of building group-list, presence, privacy and other capabilities for each application or service. Furthermore, it helps you simplify management — as well as minimize the cost of managing — by giving you a centralized way to manage data across many different vendors.

**Deploy a standards-based solution that works across applications and services**

Unlike offerings that only integrate group-list or profile information for the vendor's own applications, WebSphere XDMS helps you integrate XML-based information across your full range of applications and services.

You can use WebSphere XDMS to share XML documents with any standards-based application. For example, group information from one vendor's IM application can be displayed and manipulated in another vendor's contact book application. This degree of flexibility supports your efforts to simplify and improve the customer experience for your end users. And you can facilitate integration of new applications and services without recreating common information.

WebSphere XDMS complies with Internet Engineering Task Force (IETF), Open Mobile Alliance (OMA), European Telecommunications Standards Institute (ETSI) and 3rd Generation Partnership Project (3GPP) standards. As a result, it helps you achieve widespread integration between multivendor applications, devices and network infrastructure.

**Support any XML document type**

WebSphere XDMS can store and manage any XML document type. Examples of XML documents commonly used for services are:

- Group lists.
- User profiles.
- Contact information.
- Authorization rules.
- Policy data.

You can expand the capabilities by adding additional document types. For example, you could enable your organization's applications to utilize common network address book documents.

WebSphere XDMS also includes pre-built document schemas based on OMA standards, including Shared XDMS, RLS XDMS and Presence XDMS.

### **Extend value with document management and subscription capabilities**

WebSphere XDMS implements standards-based XCAP (HTTP) for document creation, management and retrieval. WebSphere XDMS utilizes SIP for subscriptions and notifications about document changes.

By leveraging these capabilities, users and applications can manage applications directly and elect to be notified whenever a particular XML document changes. For example, WebSphere XDMS can help you enrich social networking applications. If everyone who accepts an electronic invitation is added to a group and other applications subscribe to that group to be notified when it changes, then they can enable end users to make use of those changes, such as when sending out a message to the group.

WebSphere XDMS can also be extended to support Web service interfaces through an external enabler. WebSphere Telecom Web Services Server can interoperate with WebSphere XDMS to provide Parlay X 2.1 Web services for Address List Management. WebSphere Telecom Web Services Server enables you to provide third-party application developers with Web services access to network services through a single, common entry point.

### **Control information privacy with flexibility**

To facilitate efficient management and help protect the private data that can be part of the XML documents you manage, WebSphere XDMS provides detailed privacy controls. Permissions can be assigned to users or administrators at any level, whether specific to a single document or more broadly across sets of documents. WebSphere XDMS also allows for detailed customization on the type of access allowed for individual users or administrators. For example, a user may have the right to fully administer one document but only view another.

### **Provide a truly converged HTTP/SIP execution environment**

To help you take advantage of convergence while optimizing manageability,

scalability and security, WebSphere XDMS is built on the proven WebSphere platform. From this environment, you can more easily build integrated applications that take advantage of convergence.

The platform features a converged HTTP/SIP container and a converged HTTP/SIP proxy. It implements Java™ Specification Request (JSR) 116 standards-based SIP and supports SIP PUBLISH, SUBSCRIBE and NOTIFY methods. Additionally, it provides Java Platform, Enterprise Edition Connector Architecture (JCA) support for custom interfaces and protocols.

Consequently, you can use WebSphere XDMS to help simplify deployment and administration. You can take advantage of shared session management and security to minimize the burden on your IT organization.

The deployment, management and development benefits of the WebSphere platform are magnified when you use multiple WebSphere products, such as when you combine WebSphere XDMS with WebSphere Presence Server. However, because WebSphere XDMS and WebSphere Presence Server only use standards-based interfaces — XML Configuration



Access Protocol (XCAP)/HTTP and SIP — the products can also work independently from each other.

To help you maximize reliability, redundancy and availability, the WebSphere platform features capabilities such as the following:

- Clustering
- Seamless failover
- Edge device handling
- Load balancing with converged proxy

### Support legacy and next-generation networks

WebSphere XDMS has been designed for both legacy and next-generation networks. It integrates with IMS networks through interfaces that have been interoperability tested with leading network equipment providers.

WebSphere XDMS can interface with IMS networks through the WebSphere IMS Connector, which provides:

- IMS Service Control (ISC) interfaces that enable communication with the Call Session Control Function (CSCF) in the IMS control plane.
- Diameter interfaces: Rf, which can pass accounting information and use records to a Charging Data Function (CDF); Sh, which can connect to a Home Subscriber Service (HSS); and Ro, for online charging.

### Hardware and software requirements

WebSphere XDMS requires IBM WebSphere Application Server Network Deployment, Version 6.1. For details on all hardware and software requirements, visit [ibm.com/software/pervasive/presenceserver/sysreqs](http://ibm.com/software/pervasive/presenceserver/sysreqs)

### For more information

To learn more about WebSphere XDMS, contact your IBM representative or IBM Business Partner, or visit [ibm.com/software/pervasive/presenceserver](http://ibm.com/software/pervasive/presenceserver)

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