



IBM Software Group

IBM® WebSphere® Everyplace® Deployment for Windows and Linux Version 6

Access Services



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This presentation introduces the Access Services provided by the IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client.

Goals

- Understand the Access Services provided by the IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client

The goal of this presentation is to understand the Access Services provided by the IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client.

Agenda

- Access Services
 - ▶ Web Container
 - ▶ Transaction Container
 - ▶ JNDI
 - ▶ Messaging
 - ▶ Database
 - ▶ Web Services
 - ▶ Data Sync Framework

The agenda of this presentation is to provide an overview of the Access Services provided by the IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client.

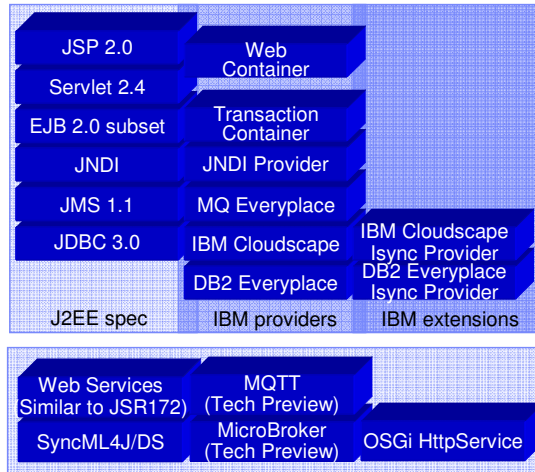
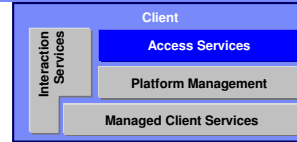
Section

Access Services

Here is the overview of the Access Services provided by the IBM WebSphere Everyplace Deployment for Windows and Linux Version 6 client.

Access Services

- Value
 - ▶ Extend backend programming model “out” to devices
- Services
 - ▶ Web Container
 - ▶ Transaction Container
 - ▶ JNDI
 - ▶ Messaging
 - ▶ Database
 - ▶ Web Services
 - ▶ Data Sync Framework
- Standards
 - ▶ J2EE subset, J2SE, J2ME
 - ▶ W3C
 - ▶ Web Services
 - ▶ OMA



Access Services provide a familiar programming model for J2EE developers so they can reuse their skills and components to develop applications that run on clients. Additionally, Access Services enable client applications to support offline operations. Access Services also enable you to move key components of your application to the client platform through the use of standard APIs.

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J2EE Affinity Components

- Web Container
 - ▶ Servlet 2.4 / JSP 2.0
 - ▶ Servlet 2.3 / JSP 1.2
- Embedded Transaction Container
 - ▶ EJB 2.0 subset
- Database
 - ▶ JDBC 3.0
 - ▶ DB2e or Cloudscape
 - ▶ Supports offline operation via sync with Enterprise databases
- Point-to-Point Messaging
 - ▶ JMS 1.1
 - ▶ WebSphere MQe
 - ▶ Supports offline operation through local queuing of messages
- JNDI

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Here are the specific Access Services that support affinity with the J2EE / WebSphere programming model.

The client platform provides an embedded **Web container** to run Web applications that consist of JSP's and servlets. The Web container enables you to move your Web applications from the server to clients to preserve the existing browser user interface, leverage your existing Web components, and provide a richer user experience through support of local and offline operations.

The client platform also provides an **embedded Transaction Container** to run Embedded Transaction Applications that conform to a subset of the EJB 2.0 specification. This container enables you to move your business logic from the server to clients so you can leverage your existing beans to make business logic available to client applications, and support local and offline operations. These business logic components are referred to as *Embedded Transaction applications*.

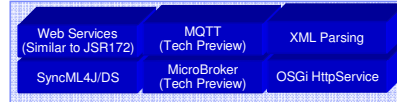
There are two key services that support local and offline operations.

First, you can use the **JDBC 3.0** API with DB2 Everyplace or IBM® Cloudscape™ as a local SQL database when more advanced data manipulations are required than can be supported by placing data in a local file store. These databases can periodically synchronize with Enterprise databases to capture data on the client for use by the client application when the user is offline. These databases can also protect local data through data encryption.

Second, you can also use the Java Message Service (**JMS**) 1.1 API with WebSphere MQ Everyplace (MQe) to send and receive messages. MQe provides once-only, assured messaging and supports offline operations with local message queues that hold messages when the device is offline and then sends these queued messages to Enterprise applications when the device is back online. Similarly, messages destined for client applications are held in server-side message queues and then sent to the client applications when the device is back online. MQe encrypts messages to protect content over the network. As a result, the client platform enables your users to conduct secure e-business transactions.

JNDI provides a name space so applications can utilize named objects.

Additional Components



- Mobile Web Services
 - ▶ Similar to JSR 172
- Publish and Subscribe Messaging
 - ▶ MQ Telemetry Transport (MQTT) (Tech Preview)
 - ▶ Microbroker (Tech Preview)
- SyncML4J Framework
 - ▶ Open Mobile Alliance SyncML specification

For online operations, the client platform supports **Mobile Web Services** so client applications can consume and provide Web Services in a secure manner. As a result, your users have access to a broad range of business data and consumer information.

The client platform also supports a technical preview of the **MQ Telemetry Transport** and the **MicroBroker**, which is suitable for applications that require messaging, notification and event services. The MicroBroker supports publish and subscribe messaging.

The **SyncML4J** (SyncML for Java) toolkit enables you to develop data synchronization client applications.

For more information...

- To get more information on specific Access Services, please select from the following sub-topics:
 - ▶ Web container and applications
 - ▶ Embedded transaction container and JNDI
 - ▶ Messaging
 - ▶ Database
 - ▶ Web Services

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