IBM Software Group

IBM WebSphere Application Server V6.1

Main themes and product offerings

@business on demand.

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Converted to video May 15, 2015

This presentation covers the main themes and product offerings of WebSphere®
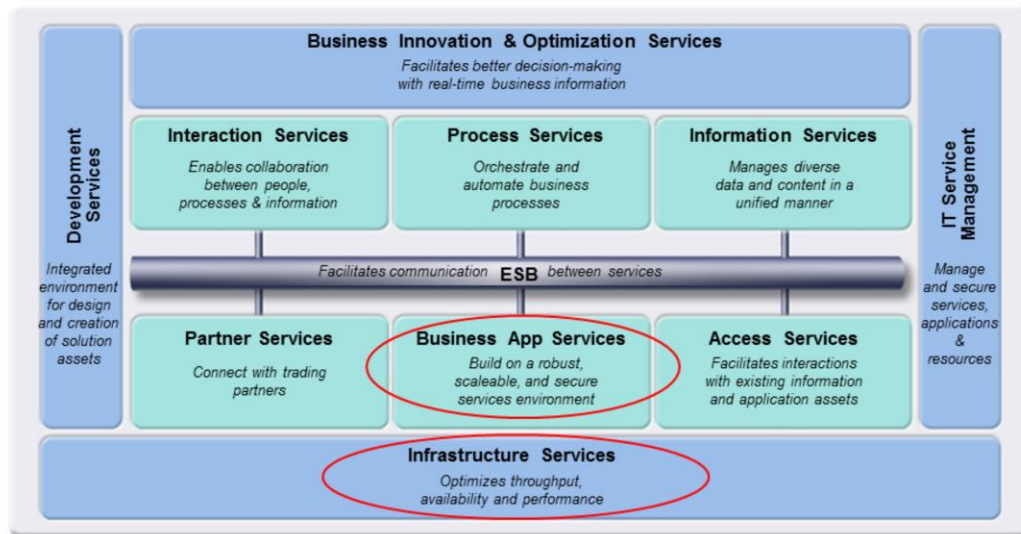Application Server V6.1.

This presentation will first discuss the main themes and focus areas of WebSphere Application Server V6.1, and will then discuss the various product offerings in the WebSphere Application Server family.

SOA reference architecture

The service oriented architecture reference architecture is a way of looking at the set of services that go into building an SOA. These capabilities can be implemented on a build-as-you-go basis allowing capabilities and project level solutions to be easily added as new requirements are addressed over time. You can see that these services represent the entire lifecycle, from building and assembly to deployment and management. An enterprise service bus is the backbone of the reference architecture, facilitating communication between services. The WebSphere Application Server family can be used to provide infrastructure services and business application services, and several other services run on top of the core infrastructure provided by WebSphere Application Server.

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Main themes

Simple, rapid development and deployment	*Ease-of-use features help accelerate time to value:* ▪ **J2SE 5 (IBM's Java™ SDK 5.0)** ▪ **Application Server Toolkit (AST) and other tools** ▪ **Installation Factory**
Secure, scalable, highly available SOA runtime	*Secure and available applications* ▪ **Security improvements** ▪ **Performance improvements**
Extensive communication services	*Makes assets accessible to new users, in new ways* ▪ **New and improved Web Services** ▪ **Session Initiation Protocol (SIP) support**
Effective application management	*Focus on innovation instead of maintenance* ▪ **Administrative and usability enhancements**

Main themes and product offerings
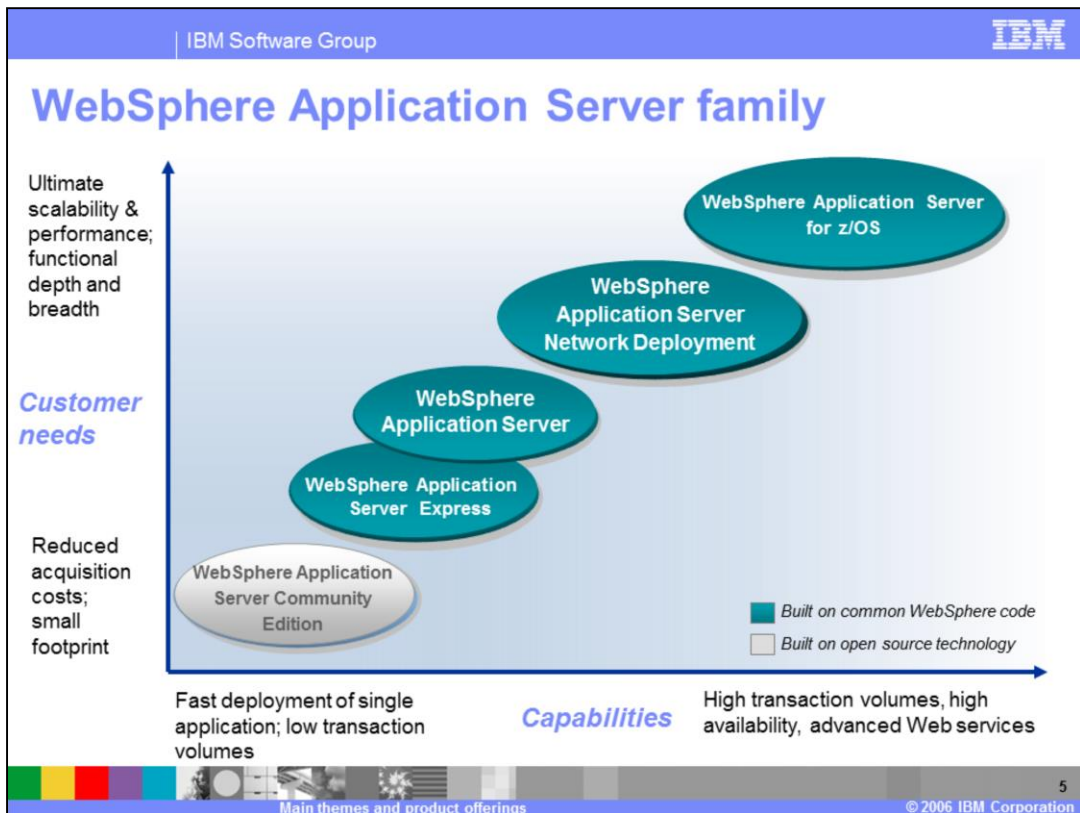
4

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WebSphere Application Server V6.1 builds on and extends the proven runtime and systems management model of WebSphere Application Server version 6.0, and is focused on improvements in several key areas. The first is a focus on simplifying the development and deployment experience, providing several ease-of-use features to help accelerate time to value. Support for the Java™ 5 SDK gives developers access to new interfaces and data types that simplify application development. The increasingly robust Application Server Toolkit builds on its application assembly and deployment features by adding new application development tools, including wizard-driven development of J2EE and Web services components. The Installation Factory tool enables you to build reusable customized installation packages that include product maintenance, enterprise applications, and customized configurations, greatly simplifying repetitive installations.

This release is also focused on improving the security, scalability, and availability of your environment. Several new features make it easier to secure your WebSphere Application Server environment, including the option to automatically secure administrative access during installation and new user repository options. Performance is also improved, both due to the new IBM Virtual Machine and to performance enhancements in several application server components.

Version 6.1 also improves on version 6.0 by extending the WebSphere Application Server programming model, enabling you to develop new and innovative types of applications. These new types include support for Portlet applications and new types of Web services applications. It also includes support for Session Initiation Protocol, which is increasingly used in rich media applications, such as instant messaging, voice over IP, and video conferencing.

This release also has an increased focus on administrative and usability enhancements. You will notice that many tasks have been simplified in the administrative console and that the wsdamin command-line tool has introduced many new high-level commands that simplify the administrative scripting experience. These improvements, based on extensive research and customer feedback, will improve the efficiency of managing and maintaining a WebSphere Application Server environment, allowing you to focus your efforts on innovation.
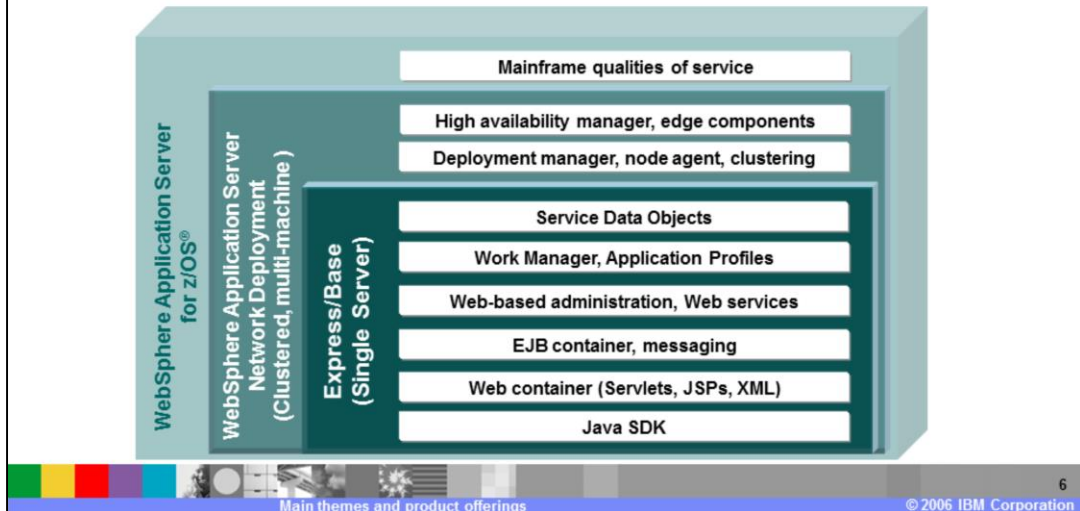
WebSphere Application Server family

There are several products in the WebSphere Application Server family that are currently available, offering a wide range of capabilities to meet differing customer needs.

WebSphere Application Server Community Edition is a low-cost and small-footprint offering that is based on open source technology. It is built on a different code base than the rest of the WebSphere Application Server family, and is not within the scope of this presentation. WebSphere Application Server Express is designed to get you quickly up and running in a single-server environment, and includes bundled tools, such as Rational® Web Developer, to help you quickly develop and deploy applications.

WebSphere Application Server is the base offering of the product, and is licensed to run on larger servers than the Express offering, supporting higher-volume applications. The WebSphere Application Server Network Deployment offering provides better scalability and availability by enabling you to build and manage environments with multiple application servers. WebSphere Application Server for z/OS enables you to leverage the reliability and qualities of service of a mainframe environment for your J2EE applications.

V6.1 product packaging

- Packaging similar to V6.0.x
- Distributed electronically and on CD or DVD

Mainframe qualities of service

High availability manager, edge components

Deployment manager, node agent, clustering

WebSphere Application Server for z/OS®

WebSphere Application Server Network Deployment (Clustered, multi-machine)

Express/Base (Single Server)

Service Data Objects

Work Manager, Application Profiles

Web-based administration, Web services

EJB container, messaging

Web container (Servlets, JSPs, XML)

Java SDK

Main themes and product offerings

6

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The packaging of the WebSphere Application Server version 6.1 product offerings is very similar to the packaging of version 6.0. The Express and Base product offerings are single-server environments that continue to offer the full J2EE™ programming model, Web services support, and also extensions to the programming model, such as application profiles and Service Data Objects. The Network Deployment offering provides all the capabilities of the Base offering in a clustered, multi-machine environment that increases the scalability and availability of your application serving environment. It also includes advanced Web services capabilities, such as the Web Services Gateway and UDDI registry. WebSphere Application Server for z/OS® extends the Network Deployment product by integrating with the z/OS environment, enabling you to take advantage of mainframe capabilities and qualities of service. The Express, Base, and Network Deployment offerings are distributed on CD, DVD, and using electronic mechanisms. WebSphere Application Server for z/OS is available electronically and on tape.

In summary, WebSphere Application Server V6.1 builds upon the proven WebSphere Application Server V6.0 platform. Product enhancements are focused around the core themes of simplifying development and deployment, improving security and performance, extending support for new application types, and improving usability. The product offerings are packaged in the same fashion as V6.0, including Express, Base, and Network Deployment offerings, with WebSphere Application Server for z/OS bringing the features of the Network Deployment offering to the mainframe platform.

References

- IBM Education Assistant

- WebSphere Application Server information center
  - http://www.ibm.com/software/webservers/appserv/infocenter.html

8

For more information about WebSphere Application Server V6.1, you will find many more presentations and demonstrations such as this one throughout the IBM Education Assistant Web site. You will also find lots of useful product information in the WebSphere Application Server information center.

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9

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