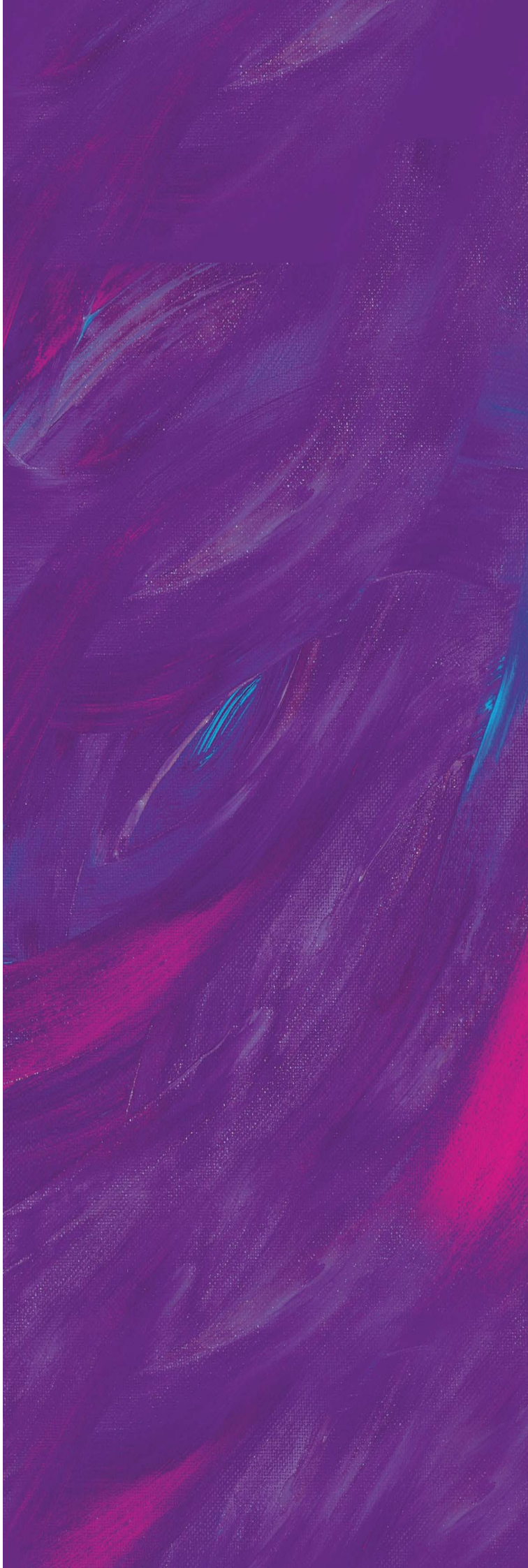
JEUS™

Web Application Server



TmaxSoft

Web Application Server JEUS

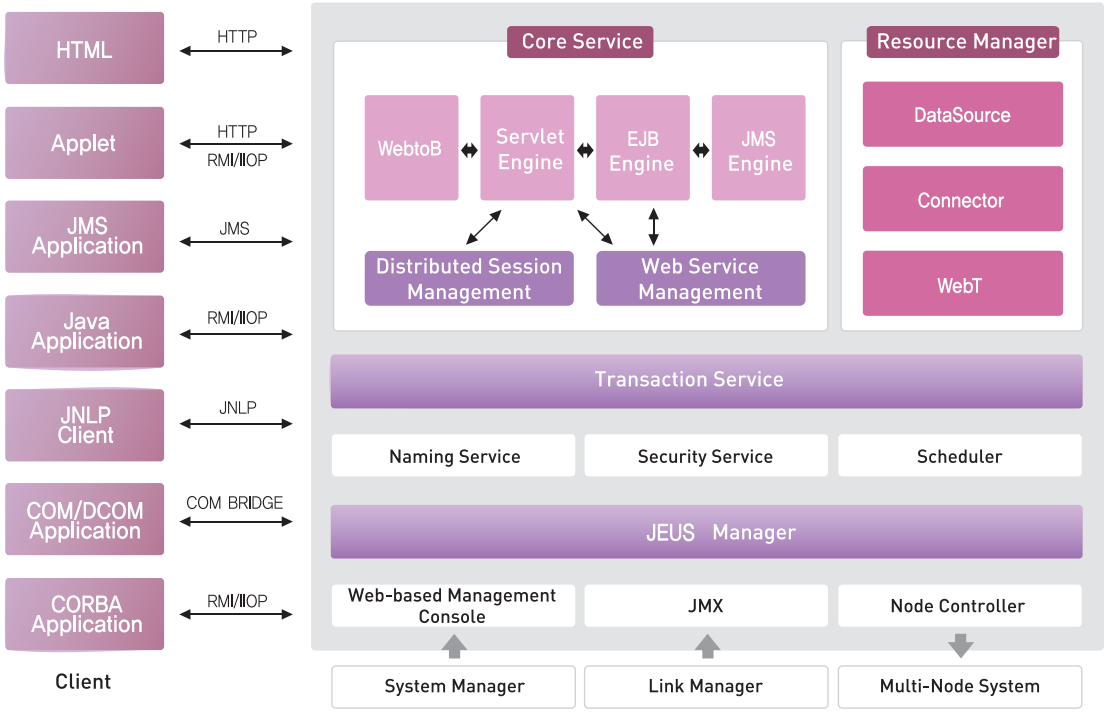
Overview

JEUS, an advanced, market-verified web application server, can give your Business a Competitive Market Edge

JEUS (Java Enterprise User Solution) is world's first Java EE 5 (JEUS 6) and Java EE 6 (JEUS 7) certified Web Application Server providing easy and rapid implementation of web and Java programs.

The JEUS solution enables the efficient development, operation, and execution of a wide variety of web applications and provides various system features such as transaction management, session maintenance and distributed session clustering. This facilitates system flexibility and ensures that the system can quickly respond to changes in the business environment.

JEUS facilitates the development of modular, reusable components and thereby the implementation of true Service Oriented Architecture.



▲ JEUS architecture

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Key Features

Leads Java EE 6 technology

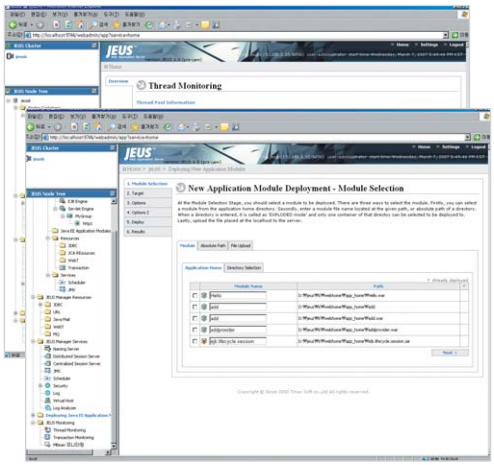
- World's first (except Sun Microsystems) to receive J2EE 1.4(JEUS 5) certification, Java EE 5(JEUS 6) certification, and Java EE 6 (JEUS 7) certification.
- By supporting Meta Annotation and Dependency Injection completely, JEUS improves the development productivity of web applications.
- Enhanced management and monitoring functions
- Reliability and efficiency on a distributed cluster environment
- Improved scalability and QoS (Quality of Service) of applications

Enables the development and implementation of highly stable web services

- JEUS components comply with extended Web Service Standards, such as Atomic Transactions and WS-Reliable Messaging. This ensures that service quality is maintained in terms of message security, data integrity, and message accuracy.
- Web services developed with JEUS comply with SOAP 1.1/1.2, WSDL 1.2, and UDDI 2.0/3.0 Basic Web Service Standards. Compliance to the various standards ensures that developed Web services will be fully interoperable with the Web services of other vendors and platforms that meet WS-I Basic Profile 1.0 specifications.

New Management Functions

- JEUS enables easy resource allocation and Web-based monitoring configuration through Web Manager.
- A variety of console management tools such as JEUS Admin, DB Pool Admin, JMS Admin, and Web Admin.
- Through the Web-based Log Analyzer, logs can be searched and analyzed by containers or engines with a variety of conditions.
- By supporting Open Framework (JMX), JEUS flexibly integrates with various 3rd party systems.



Web-based management environment

JEUS's Web based management environment makes it easy to allocate resources and to manage the Network.

Flexible integration with existing systems.

- J2EE CA (Connector Architecture) provides a standards-based application integration environment, ensuring integration with other systems, such as CICS, IMS, SAP, TANDEM, Ingres, MQ, etc.
- JMX (Java Management eXtension) Framework facilitates integration with external administration tools such as HP Openview.
- Ensures integration with TP-Monitor through WebT and integration with CORBA through RMI-IIOP.
- Ensures integration with COM/DCOM through the COM Bridge
- Ensures integration with LDAP through the JNDI Bridge
- Ensures integration with DB through the JDBC Driver.

High Quality Technical Support

- Supports a variety of technical resources such as white papers, KMS, Q&A, and online-accessed manuals.

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Key Functions

Increases developer convenience

- Streamlines development and improves developer's experience by meeting a broader range of specifications than any similar product, including EJB 3.1 and Servlet 3.0.

Supports Web 2.0

- Incorporates both JSP (Java Server Page) 2.1 and JSF (Java Server Faces) engines to provide an optimal environment for developing user interfaces for Web 2.0.

Enhances support for web services

- Provides cutting-edge, efficient web service using JREST JAX-WS 2.1 JAXB 2.0 Java Web Service Metadata(JSR 181) and improves web service processing rate by adapting StAX(Streaming API for XML).

Supports asynchronous service

- Supports web services for mass-transaction processing by using Async Servlet and Async Web service so as to optimize system operational efficiency and performance improvement.

Improves JMS(Java Message Service) performance

- Enhances JMS server functions which offer loosely coupled communication through messages that are delivered by various applications, and ensures stability in transmitting asynchronous messages. JMS Server greatly simplifies the development of distributed applications, and the message delivery function provides greater reliability in processing critical business logic.

Supports session clustering

- Clustering can be either Center Concentrated or Center Dispersion. System performance is optimized through the use of many different overload dispersion methods.

Ensures high reliability for clustering environment

- Provides fail-over features including EJB Fail-Over, JDBC Connection Fail-Over to be engaged for JEUS servers. Additionally, administrators can dynamically add or delete servers and server processes without having to shut down the system. In the event of system error, back-up servers and server processes facilitate the continual availability of services.

Implements distributed architecture

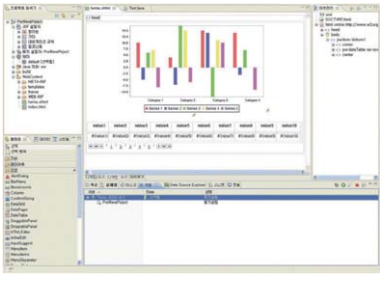
- Provides dynamic load balancing and fail-over features through mutual monitoring and backup services carried out between multiple JEUS servers.

Supports automated error handling

- All interactions between client machines and the servers are mutually monitored, so that reliable and stable services are guaranteed. In the event of transaction or system failure, requests are passed to backup servers and automated restart functions are engaged. All server processes are monitored and in the event of failure, they are automatically restarted.
- JEUS' Active Management setup enables quick recovery from thread hang-ups. When the thread hang-up rate exceeds an administrator-defined value, an alert e-mail is sent and the container is restarted. JEUS detects connection failures that result from program error. JEUS then forces the connections to return.

Provides a flexible security architecture

- JEUS is based upon an open architecture and flexible framework concept, which enables JEUS security functions to be highly customized. Additionally, JEUS' security domain functions enable various security standards to be configured, such as limiting authorization by client IP or domain. JEUS' security features enable user authorities to be assigned individually for each J2EE Application and support dynamic authority mapping (principal-to-role, and role-to-resource mapping). Additionally, JEUS incorporates security audit mechanisms that operate through a flexible event handling model.
- Provides a security realm including File Realm/DB Realm for large-scale data systems and allows customers to use security SPI to implement their own security features. SSL can be used for internal technical communication in clustering environments.



Web Application Development Environment

Provides a robust Web UI development environment by using AJAX (Asynchronous JavaScript and XML) function and JSF(Java Server Faces) function.

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Benefits

High development productivity

- Provides a wide variety of templates and components for developing web applications (Servlet, JSP, JSF, EJB, etc).
- Accommodates various programming techniques.

High performance of Web system

- Multi-threading architecture solves the performance problems experienced by traditional CGI-based architectures.
- Database connection pool reduces load on DB.
- Flexible session clustering and Java Non-blocking I/O technology enables the optimal performance on a large system.
- Load balancing features ensure that the system maintains an optimal level of performance.

Increases the manageability of large systems

- Provides a centralized administration environment to facilitate efficient system management.
- Provides a centralized, eclipse-based environment for developing and managing application programs.

Highly stable and reliable

- Automatic fault tolerance: in the event of hardware failure, service requests are routed to and continuously processed within backup hardware.
- Automatic restart: in the event of process failure, service programs are automatically restarted.

Resources are used efficiently

- By adopting Java Enterprise Application server, server resources are used efficiently, dramatically reducing the cost to sizing hardware servers initially or to add them.
- High efficiency and productivity of development provided by JEUS minimizes the human resources required to develop applications.

Supported Environments

Supported operating systems

Oracle(SUN) Solaris 8,9,10

- SPARC-Based Server Series
- Intel x86 Series

HP-UX 11x, 11i, 11iv2

- HP PA-RISC Series
- Intel Itaminum2 Series

IBM AIX, 5.1.x, 5.3.x

- RS6000
- IBM pSeries

REDHAT AS 2.0 or later, SuSe8 or later, Asianux 1.0 or later

- Intel x86 Series
- Intel Itanium Series
- IBM iSeries
- IBM pSeries

MS Windows 2000, 2003, XP, Vista

- Intel x86 Series

Installation requirements

Windows 2000, 2003, XP, Vista

- 500MB or more of hard disk space
- 128MB memory

Solaris, HP-UX, AIX, Linux

- 500MB or more of hard disk space

JEUS™
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