



open

Sybase® EAServer

The Application Server for Every Enterprise.





## Enterprise Class

# Distributed Applications

With their ubiquity, lower cost, simplicity, and ample power, new distributed application architectures that separate data, business logic, and user interface can open up your enterprise to unprecedented IT opportunities.

These n-tier approaches can help you rapidly and feasibly extend the power of your IT applications to the furthest reaches of the enterprise—indeed, the world—to create customer-service portals, supply-chain extranets, e-commerce sites, and much more. Authorized users from virtually any Internet-connected client can securely access your systems to perform queries and transactions.

For enterprise IT teams, the issue quickly shifts to making the proper infrastructure decisions. If you're moving to deploy distributed multi-tier applications, the right application server foundation is a non-negotiable requirement. How can you create and implement the durable, enduring, secure functionality of enterprise-class applications on distributed architectures?

It all starts with the right foundation: Sybase EAServer.

### **EAServer: Open for e-business**

Leveraging leading-edge Java™ 2 Platform–Enterprise Edition (J2EE)™ 1.3 technology, Sybase EAServer is the high-performance, scalable, secure, open application server for e-portal and Internet business solutions that use multi-tier architectures. Sybase EAServer is the industry's preferred platform for distributed application development for many key reasons.

#### *Market-Leading Openness*

No application server is more open than EAServer. It supports an exceptionally broad range of simultaneously interacting component models, including CORBA®, ActiveX®/COM, Enterprise JavaBeans™ Java™ Servlets, and, of course, Sybase's own PowerBuilder® non-visual objects (NVOs). It supports most major programming languages, including Java™ C/C++, Visual Basic®, and PowerBuilder. It supports leading OS platforms, including Microsoft® Windows NT®, Solaris™ HP-UX, IBM® AIX®, and Linux. As a result, you can create sophisticated applications using your existing staff, skills, and resources at a far lower cost to build, deploy, and maintain reliable distributed applications.

#### *Faster Time to Market*

Development cycles continue to shrink. That's why EAServer provides the right environment for rapid development and deployment of applications through minimal coding, reuse of existing code, and a short, low learning curve.

# secure

## *Increased Reliability*

Just like your traditional legacy systems, distributed applications require the same levels of unstopable reliability. With EAServer, you can reuse and blend in proven, tested components. What's more, EAServer also provides the enterprise-class services you expect and require: higher-performance clustering, load balancing, failover, caching, and more.

## *Comprehensive Security*

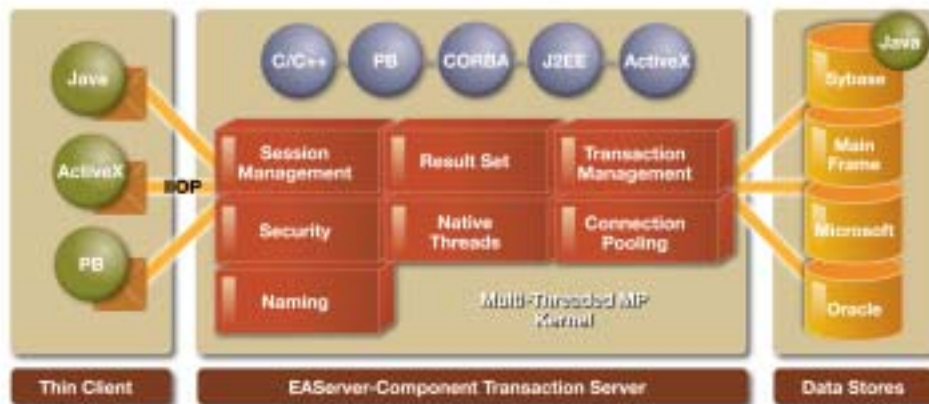
EAServer supports HTTPS, SSL 4.0 40- and 128-bit encryption, and X.509 digital certificates to ensure the privacy of your enterprise application data.

## *High-Volume Transaction Support*

EAServer accommodates high-volume applications through robust transaction-management and two-phase commit. Through a single integration broker for integration, control, and interoperability, EAServer supports industry-standard transaction monitoring through DTC, XA, OTS, JTS, and EJB™ Your proven back-end investments live on with EAServer.

## *Easier Manageability*

EAServer includes sophisticated tuning features to improve performance, enabling you to administer and monitor all aspects of the server, including instance pooling, transaction management, thread pooling, and easy-to-use property sheets.



- Zero Installation Cost
- Rich GUI

Developers focus on solving business problems instead of programming application structure.

- High Speed Connectivity
- Database Independence

The Comprehensive,

# Open Platform

For Today and Tomorrow

## A Complete Platform

Sybase EAServer is the complete platform for distributed e-business applications, offering an integrated Web server to support dynamic content using JavaScript™, JavaServer Pages™, and Java Servlets. EAServer also includes the methodology-neutral, multi-component Business Component Server that provides all of the services for transaction management, security, connection and session management, and more.

J2EE makes it possible to develop and deploy multi-tiered e-business applications more quickly and easily. EAServer 4.0 (Windows NT and Solaris) provides support for the latest version of J2EE.



## Unsurpassed Support for J2EE 1.3

Sybase EAServer fully supports the Java 2 Platform, Enterprise Edition (J2EE) 1.3 standard. By supporting J2EE, EAServer insulates application developers from the complexities inherent in writing large-scale applications—such as transaction management, lifecycle management, resource pooling—by supplying those services in the application server, rather than in the application. EAServer's extensive J2EE 1.3 support includes:

- **Enterprise JavaBeans 2.0** – Message-driven beans and enhancements to container-managed persistence
- **JSP™ 1.2/Servlet 2.3** – Write JSPs in XML with embedded scripts and Java processing for dynamic XML page creation, in addition to HTML page creation.
- **JAXP** – The Java API for XML Parsing
- **JAAS** – The Java-based security interface allowing for pluggable authentication components
- **JMS 1.0.2** – EAServer supports the standard Java messaging interface as a wrapper on top of existing service.
- **Connectors (JCA)** – This common access methodology lets you pool connections into legacy systems such as SAP and PeopleSoft®.
- **JTS** – The Java Transaction Service
- **JDMK API** – This provides access to Java applications through standard SNMP monitoring systems.

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## Security

EAServer's Security Manager handles the extensive security features. Use native operating system username/password, x.509 digital certificates, or if you have a security mechanism in place, you can use the user-defined hook to access it. EAServer also supports SSL from HTTP requests.

EAServer supports role-based security. You can assign logins to roles and roles to objects in the server. You can set roles at the package, component, or method within a component.

## Performance and Scalability

EAServer provides a wide range of features that deliver enterprise-caliber performance and scalability. Take advantage of a multi-threaded SMP execution engine, intelligent connection pooling, failover and load-balancing features, and much more.

## Legacy Integration

EAServer's message broker can receive, transform, process, and reformat messages among different legacy systems. That means your heterogeneous legacy systems can efficiently and transparently interoperate in a multi-tier application.

**"With these recent offerings, Sybase is no longer just a tools vendor. The company that brought us PowerBuilder, a legendarily successful thick-client solution, has clearly reinvented itself with products such as EAServer."**

– PC Magazine 5/7/01

# EAServer 4.0

- **J2EE 1.3 Support** – Following in Sybase tradition of support for the Java standard, EAServer 4.0 provides support for the latest version of the Java 2 Platform, Enterprise Edition standard.
- **JDMK API** – Access Java applications through standard SNMP monitoring systems. (Enterprise edition only)
- **WebServer Plug-Ins** – EAServer includes Web server plug-ins for Apache, Netscape, and Microsoft Internet Information Server. These plug-ins reside on the Web server and smoothly pass JSP requests through to another machine—without requiring a separate JSP engine installed on the Web server. These plug-ins also provide software-based load balancing of HTTP requests.
- **Embedded Installer** – Version 4.0 of EAServer introduces a “silent installer” designed for OEMs who want to bundle/embed EAServer with their unique products. Through this feature, EAServer automatically installs and configures the server to match an existing file and allows for the transparent deployment of components from the command line.
- **In-Memory Failover** – Sybase EAServer uses memory to store session and entity bean information for better performance for stateless and stateful components when failing over to a new server. (Enterprise edition only)
- **Repository Versioning** – This ensures all systems have the same software version. If necessary, you can roll back to a previous working version of a server configuration quickly and easily.
- **Cross-Platform Clustering** – Sybase EAServer fully supports clustering and synchronization on all supported operating systems anywhere on the network.
- **Performance Tuning** – EAServer enables administrators to tune their systems with object and page caching.
- **Hotspot VM Support** – JDK™ 1.3 includes Hotspot VM support to improve memory management through better garbage collection.

# The Trusted Supplier To Global Enterprises

For more than 6 years, Sybase has been a leader in global enterprise computing solutions. We're continuing to solidify that reputation by offering world-class e-business infrastructure solutions.

EAServer comes in the following editions:

	Small Business	Advanced	Developer	Enterprise
Integrated Dynamic Web Page Server	•	•	•	•
Number of Connections	10 IIOp Unlimited HTTP	Unlimited	5 IIOp 2 HTTP	Unlimited
JDMK			•	•
In-Memory Failover			•	•
AI Stored Procedures	•	•	•	•
Clustering		•	•	•
Failover of Stateless Components		•	•	•
Two Phase Commit (Unavailable on Linux)			•	•
AI CICS			•	•
Failover of Stateful Components			•	•

## MAJOR FEATURES AT A GLANCE

### Languages:

Java, PowerBuilder, C, C++, Microsoft Visual Basic, other languages supporting COM IDispatch

### Component Models:

C, CORBA C++, CORBA Java, Enterprise JavaBeans, COM/ActiveX, PowerBuilder VM

### Supported Clients:

CORBA C++, CORBA Java, Enterprise JavaBeans, ActiveX/COM, Native PowerBuilder, database clients using patented MASP technology (Methods As Stored Procedures)

### Web Servers

Built-in Web server supports static pages, J2EE Web applications, and PowerDynamo® pages.

### Other Web Servers:

Load balancing proxy plug-in provided for forwarding Web application requests into EAServer from Netscape 3.6, iPlanet™ 4.1, Apache 1.3, and Microsoft Internet Information Server. Also, Web servers can act as C++, COM, or Java clients to EAServer (e.g. NSAPI/ISAPI plug-ins or ASP/LiveWire scripts).

### Distributed Protocols:

*Objects:* IIOp, IIOp/SSL

*Web:* HTTP, HTTPS

*Database:* TDS, TDS

### Platforms/Processors:

Microsoft Windows NT and Windows 2000, Sun Solaris, HP-UX, IBM AIX, Linux. All platforms support symmetrical multiprocessor implementations.

### Data Access:

JDBC, ODBC, Native Sybase, Oracle® OCI 7, 8, EJB 1.1/2.0 Container Managed Persistence

### Security:

SSL 3.0, X.509 v3, RSA, Entrust, Automatic HTTP tunneling for IIOp clients enabling the use of IIOp over the Internet (even in the presence of proxies and firewalls), and integrated OS security. Authentication and authorization can be delegated to user-provided plug-in components for effective integration with enterprise security systems. Authentication and authorization caching for performance.

### Naming:

*CORBA:* CosNaming

*Java:* JNDI

*Storage:* LDAP

## For more information

about Sybase EAServer, point your browser to our Web site at [www.sybase.com/products/easerver](http://www.sybase.com/products/easerver). Or, call 1-800-8-SYBASE and ask to speak to a Sybase representative.

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