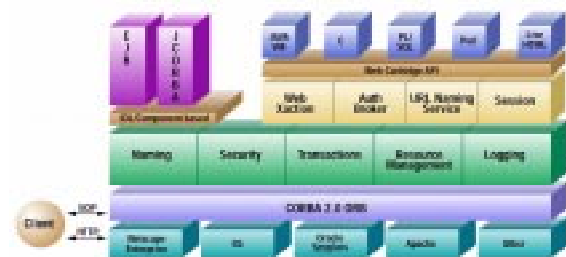


# Oracle™ Application Server 4.0

## *The Integrated Platform for Internet Computing*

### **THE ENTERPRISE PLATFORM FOR INTERNET APPLICATIONS**

Oracle Application Server represents the first enterprise application server designed to deliver Internet application deployment in one integrated platform. Oracle Application Server accelerates middleware convergence by allowing any client and any application to benefit from easy Web publishing and integrated Java support. It is Oracle's next-generation open, comprehensive platform for deploying business-critical applications to any network client while providing superior scalability, reliability, manageability and security. While thin-clients and browsers can provide universal access, standard HTTP web servers do not provide the capability to serve and manage new applications. Oracle Application Server provides the only true platform for deploying open and distributed network applications.



### **Enterprise Quality of Service**

Oracle Application Server 4.0, the application tier for Network Computing Architecture (NCA), delivers Enterprise Quality of Service as a scaleable, reliable, manageable and secure platform for hosting shared network applications. Oracle allows the platform to scale by offering a high-performance multi-threaded environment as well as dynamic load-balancing across multiple nodes. By offering automatic fault detection and recovery, Oracle Application Server guarantees the availability of service enterprises need.

Oracle delivers the industrial strength services necessary to support distributed transactional computing over the internet. Oracle anticipated the need for TP-monitor like services and built them into the Application Server 4.0 so developers can focus on the application instead of the infrastructure.

Built around a CORBA 2.0 compliant ORB, Oracle Application Server implements the application cartridges and all system services as distributed objects. This allows performance bottle-necks to be addressed effectively and cost-efficiently by distributing processes over multiple physical servers.

### **Easy Database Web Publishing**

Oracle Application Server 4.0 is the easiest way to integrate network applications with the Oracle database. Native PL/SQL capability provides a quick and simple approach to publishing data from an Oracle database. For organizations struggling to publish dynamic information to network clients, Oracle Application Server eliminates the tedious and difficult task of scripting required with traditional web servers that are optimized for static content.

### **Complete Legacy Integration for Network Applications**

Oracle Application Server excels at securely integrating all types of databases and legacy applications with network computing and thin-client environments. With the ODBC cartridge, Oracle Application Server provides industry standard support to all ODBC-compliant databases. For mainframe environments, Oracle Alliance Partners provide direct access to mainframe environments for thin-clients and Java™ capable clients. Coupled with Oracle Transparent Gateways, Oracle's database integration products, it's possible to integrate and extend almost every existing environment.

### **Open Application Platform for Business-Critical Internet Computing**

Enterprises are demanding open, scaleable, extensible and manageable application environments and Oracle Application Server delivers. With cross-platform support for all network clients, integrated support for all major development environments, and plugin-compatibility with popular HTTP servers, network application deployment is now easier, faster, and less expensive than client-server. Through an innovative cartridge architecture, Oracle Application Server combines high performance with a robust set of core application services that make thin-clients a reality for workgroups and enterprises alike. While much of the work in application development is typically spent in core networking, integration, reliability and scalability requirements, Oracle provides these services and capabilities out-of-the-box. With Oracle Application Server, more development time can be spent on building better applications.

### **Simplified Deployment for Leading Component Models**

With cross-platform support for all network clients -- HTML, Java, CORBA, -- Oracle Application Server offers easy deployment for all leading component models. As organizations move toward Java as an application environment, Oracle Application Server is positioned to be the premier development and deployment platform. Oracle Application Server will be the only server offering business-critical capabilities for Java applications. By deploying and managing Java as CORBA objects, Oracle Application server brings manageability, scalability and reliability to Java applications.

# Oracle Application Server 4.0

## Key Features

- Application based deployment platform
- Supports fully distributed applications
- HTTP listener independent
- Language independent development
- Automatic server redirection
- Full process isolation
- Safe, scaleable architecture
- Dynamic load-balancing
- HTML 3.2 support
- Automatic context management
- Open API for custom extensions
- Unifying API for Netscape, Microsoft, Apache, and Spyglass HTTP servers

## CORBA 2.0 Compliant ORB

- WRB services implemented as CORBA-compliant object services
- CORBA IIOP support
- Automatic IDL generation from Java
- Supports distributed listener and application architecture

## Java Environment

- Java CORBA object support
- Developer support for Enterprise JavaBeans
- Java IDE with Jdeveloper
- Server-side JIT compiler
- Native Java environment
- Auto-generated wrapper classes for PL/SQL
- Native access to Oracle7 and Oracle8
- National Language Support (NLS)

## PL/SQL Cartridge

- Data encapsulation through stored procedures
- Transparent dispatch to Oracle server
- Automatically translates HTML parameters to PL/SQL calls

## LiveHTML™ Cartridge

- Enhanced Server Side Include (SSI)
- HTML files can be target of an HTML form submission

## PERL Cartridge

- PERL Version 5 interpreter
- Oracle DBI/DBD Extensions
- OraPerl Emulation

## VRML Cartridge

- Platform for VRML 2.0 applications
- VRML Data Repository that manages VRML worlds
- Logic Repository ties together database triggers with the VRML event model
- Easy-to-use mechanism for embedding dynamic content, generated by custom scripts or SQL statements, within a VRML scene

## Inter-Cartridge Exchange

- Transport-independent, stateless protocol
- Mirrors the HTTP request model
- Set of APIs to allow a cartridge to address, send, request, and receive a response from another cartridge

## Security

- Directory and database based authentication
- LDAP support
- SSL 3.0
- X.509 certificate support

## Built-in Logging and Analysis Tools

- Support for CLF/XLF system message formats and client-defined statistics
- Support for logging into the database
- Graphical log analyzer tool
- Report generation on accesses, errors, clients, URLs, etc.

## Common Gateway Interface

- CGI 1.1 compliant
- Dedicated process per request
- Automatic cleanup

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## Oracle Application Server 4.0 – Enterprise Edition

The Enterprise Edition offers the following additional features:

## ODBC Cartridge

- Accepts ANSI SQL statements
- Returns HTML table with formatted results
- Connects to any ODBC compliant database
- Callable through ICX from any other cartridge

## Transaction support

- Supports CORBA OTS transactions
- Support for Java Transaction Service (JTS)
- Supports X/Open DTP model
- Supports open standards -- SQL, X/Open's XA and X/Open's TX
- Defines a set of APIs that is modeled on the XA interface
- APIs to start or join a transaction, retrieve transaction information, commit and rollback a transaction
- Transactional support across multiple cartridges

## Persistent Storage Services

- APIs for storing and retrieving content or managing content from a SQL database
- Schema attributes include content-type, author, creation date etc.
- Service supports Oracle DBMS, or filesystem storage

## Hardware and Software Requirements

Oracle Application Server is available on major UNIX platforms and Windows NT.

Oracle Corporation is the world's leading supplier of software for information management, and the world's second largest software company. With annual revenues of \$5.7 billion, the company offers its database, tools and application products, along with related consulting, education and support services, in more than 140 countries around the world.

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