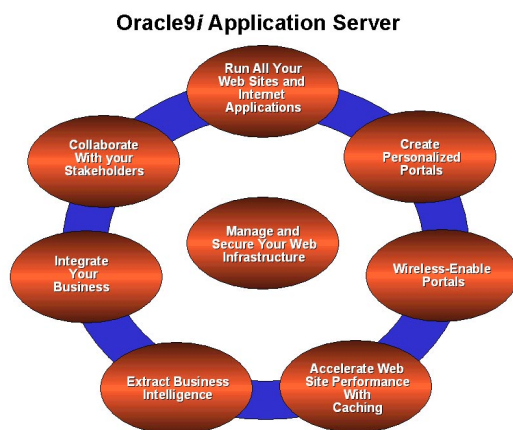




## Oracle9i Application Server

**Data Sheet**  
**March 2001**

*Oracle9i Application Server is the most comprehensive, integrated application server on the market. It will run any web site, portal or Internet application, and do so faster than any other application server on the market. Oracle9i Application Server allows you to access your sites and applications from both traditional browsers and from any mobile device. With Oracle9i Application Server you can satisfy demands for up-to-date business information through integrated business intelligence. Oracle9i Application Server also includes a comprehensive set of management, integration and collaboration technologies to enable you to streamline operations, increase efficiency, and more effectively interact with trading partners.*



### ORACLE9i APPLICATION SERVER

Oracle9i Application Server (Oracle9iAS) is a comprehensive, integrated application server that provides all of the infrastructure and functionality needed to run every successful e-Business. All development teams face a similar set of challenges - the need to rapidly deliver web sites and applications that run fast over any network and on every device; whilst providing business intelligence to support operational adjustments and strategic decisions. Oracle9i Application Server enables teams to address all of these e-business challenges.

With Oracle9iAS you can:

- run all your dynamic web sites and Internet applications;
- create personalized portals;
- make sites and applications accessible from both traditional browsers and any mobile device;
- run any web site at least 3 times faster than any other application server;
- understand business intelligence;
- manage all of your web infrastructure;
- integrate your business applications;
- collaborate with stakeholders.

## **RUN ALL YOUR DYNAMIC WEB SITES AND INTERNET APPLICATIONS**

Oracle9iAS can support all of your Internet application needs - whether it be a web site, portal or Internet application. It provides a deployment platform that supports many different development approaches and the latest industry standard technologies and programming languages including Java, Servlets, JSPs, EJBs, and XML.

Oracle9iAS is tightly integrated with the Oracle database and provides unique functionality that allows all database developers to quickly become productive web developers. Developers can quickly leverage their PL/SQL knowledge to build dynamic database applications with PL/SQL Server Pages (PSPs), Oracle JavaServer Pages, Business Components for Java, or Oracle9iAS Forms Services.

Oracle Internet Developer Suite (iDS) offers a variety of development tools optimized for developing applications that are deployed on

Oracle9iAS, including JDeveloper and Forms Developer.

### **Oracle HTTP Server *Powered by Apache***

The Apache-based HTTP Server is the HTTP entry-point. It serves both static and dynamic content. It serves static content from the file system, and it serves dynamic content by dispatching requests via extensions called “mods” to the different application services within the Application Server and the Database Server. In addition to the standard “mods” provided by Apache, Oracle HTTP Server includes Oracle-specific “mods” fully developed and supported by Oracle. The following are the key “mods” packaged with the Oracle HTTP Server.

**mod\_jserv:** dispatches HTTP requests for servlets to the Jserv servlet engine within the Application Server.

**mod\_perl:** dispatches HTTP requests for Perl programs to the Perl Interpreter embedded in the Apache Web Server.

**mod\_ssl:** provides public key security based on SSL certificates, and is used to encrypt traffic between a client and the Apache Server.

**mod\_plsql:** Oracle-specific “mod” that delegates the handling of stateless requests to PL/SQL and Java stored procedures running in the database.

**mod\_ose:** Oracle-specific “mod” that delegates the handling of stateful requests to servlets, JSPs, and Java Stored Procedures running in the Oracle JVM.

## Perl Interpreter

Oracle HTTP Server contains an embedded Perl Interpreter which supports the full power of Perl programming language. The Perl Interpreter runs in the Web Server and provides an efficient and high performance environment for executing Perl scripts.

## Multiple Listener Support

In addition to supporting the Apache-based HTTP Server for handling HTTP requests, Oracle9i Application Server also supports other listeners. Currently, the product provides Microsoft IIS plug-ins for two types of applications.

**Stored Procedures.** Similar to `mod_PLSQL` for Apache, this IIS plug-in delegates the handling of PL/SQL and Java Stored Procedures running in the database.

**Java Servlets and JSPs.** Similar to `mod_OSE` for Apache, this IIS plug-in delegates the handling of requests for servlets and JSPs running in the Oracle JVM.

The following Oracle9iAS components also provide support for multiple listeners: Oracle9iAS Forms Services, Oracle9iAS Reports Services, Oracle9iAS Discoverer and Oracle Business Components for Java (BC4J).

## Support for Java

Oracle9i Application Server supports all of the latest industry standard enterprise technologies and programming languages including J2EE APIs with Java Servlets, JSP, EJB and CORBA.

### Apache JServ

Apache JServ is a Java servlet engine fully compliant with Sun Microsystems' Java Servlet

2.0 API specification. Java Servlets provide a simple and powerful mechanism to build web-based applications.

### Oracle EJE (Enterprise Java Engine)

The Oracle EJE is a server-side Java engine that supports J2EE APIs (including Servlets 2.2, JSPs 1.1, and Enterprise JavaBeans 1.1), CORBA, and database stored procedures. Oracle9i Application Server leverages the scaleable, highly available and secure EJE infrastructure.

### Oracle Servlet Engine (OSE)

OSE implements the JavaSoft Servlet 2.2 API specification. It provides a highly scaleable and secure environment for executing servlets in the Oracle JVM contained within Oracle9iAS. OSE offers a highly scaleable environment for running stateful applications since it leverages the session-based architecture of the Oracle JVM.

### Oracle Java Server Pages (JSP)

Oracle JSP is Oracle's translator and runtime engine compliant with version 1.1 of Sun's JavaServer Pages specification. JavaServer Pages allows you to embed Java in HTML and offers a powerful scripting environment allowing separation of page format from application logic. JavaServer Pages are translated into servlets that run in Oracle9i Application Server.

### Business Components for Java (BC4J)

Oracle9i Application Server includes an application component framework for development and deployment of Java Applications based on SQL tables. Java components built using the BC4J framework can be executed as servlets or

JSPs, or can also be deployed as Enterprise Java Beans or CORBA objects.

### **Support for PL/SQL**

Oracle9iAS delivers extensive PL/SQL support allowing Oracle developers to quickly leverage their existing skills to become web developers.

### **Oracle PL/SQL Server Pages (PSP)**

Oracle PSP is the compiler for PL/SQL Server Pages. PL/SQL Server Pages allow you to embed PL/SQL in HTML and offers a powerful scripting environment allowing separation of presentation format from application logic. Oracle PSP includes the PSP compiler that compiles PL/SQL Server Pages into PL/SQL stored procedures. Oracle PSP uses the PL/SQL Web Toolkit to generate the web pages.

### **Oracle PL/SQL**

The Oracle PL/SQL is a scalable environment for executing PL/SQL stored procedures, web applications and PSPs in the middle tier. It shares the infrastructure with the Oracle Enterprise Java Engine and Oracle9iAS Database Cache.

### **Oracle9iAS Forms Services**

Oracle9iAS Forms Services enable high performance and scaleable deployment of sophisticated transactional Java forms, built using the declarative, wizard-driven Forms Developer, to a 3-tier browser based architecture.

### **Oracle9iAS Developer Kits**

Oracle9i Application Server also includes the following developer kits.

### **Oracle Database Developer Kit**

This kit contains client libraries for the Oracle database and Java2 Enterprise Edition support (JMS, JDBC, and JNDI).

### **Oracle XML Developer Kit (XDK)**

XML Developer's Kit contains the basic building blocks for reading, manipulating, transforming and viewing XML documents. The XDK bundled with Oracle9i Application Server provides support for Java, C, C++ and PL/SQL. It includes the XML Parser, XSLT Processor, XML Class Generator, XML Transviewer Beans, and XSQL Servlet.

### **Oracle Internet File System**

Oracle Internet File System consolidates all corporate data into a single, unified repository. Its role in the Oracle9i Application Server is to present documents that are stored in this repository as files and folders that users can access using familiar interfaces such as Windows, the Web, and FTP.

In addition to supporting HTTP clients, Oracle9i Application Server can support other clients using IIOP, Net8, FTP and WAP protocols.

### **CREATE PERSONALIZED PORTALS**

Oracle9iAS delivers an extensible, secure, easy to use portal infrastructure needed to run every successful e-Business - internet, extranet and Intranet.

## **Oracle9iAS Portal**

Oracle9iAS Portal offers a complete solution for configuring and deploying an Enterprise Information Portal. It provides a framework for integration and secure access to corporate information, a customizable environment for personalization, and a set of services to manage portal deployment and expansion.

## **WIRELESS ENABLE PORTALS**

Oracle9iAS provides unique wireless capabilities for delivering information and applications to mobile devices.

### **Oracle9iAS Wireless**

Oracle9iAS Wireless enables customers to create new value-added services by deploying existing web content to new mobile devices. It serves as the platform for deploying a new generation of XML enabled applications that adapt to any device, mark-up language and form-factor. Oracle9iAS Wireless enables easy deployment and management of existing portals to mobile devices thereby enabling mobile e-Business.

## **ACCELERATE WEB SITE PERFORMANCE WITH CACHING**

Oracle9iAS Cache improves the performance and scalability of any web site. No one has a web site that is too fast! Oracle9iAS Web Cache delivers pages 3-10 times faster than any other application server. Oracle9iAS Database Cache serves web page searches faster and scales back end databases.

## **Oracle9iAS Web Cache**

Oracle9iAS Web Cache provides an Oracle patented technology to dramatically improve the performance and throughput of web sites that use static as well as dynamic content. Oracle9iAS Web Cache, deployed before the HTTP Server, is a content-aware server accelerator and can also provide good load balancing between the nodes running the applications.

### **Oracle9iAS Database Cache**

Oracle9iAS Database Cache offers a read-only and transparent middle-tier caching solution that improves throughput and performance for Web sites and applications that access an Oracle database. Oracle9iAS Database Cache works with any Web or application server package that communicates with the database through OCI or any layer that uses OCI (e.g. JDBC, PRO\*C, ODBC).

## **EXTRACT BUSINESS INTELLIGENCE**

Oracle9iAS provides an integrated business intelligence solution to extract and analyze critical business intelligence data needed to support operational adjustments and strategic decision making.

### **Oracle9iAS Reports Services**

Oracle9iAS Reports Services enables scaleable and secure publishing of dynamically generated Web reports in HTML, HTML/CSS, PDF or XML. Reports are built using Reports Developer

a rapid, wizard driven development environment tightly integrated with the Oracle database.

### **Oracle9iAS Discoverer**

Oracle9iAS Discoverer enables users to perform dynamic, ad-hoc query, reporting and analysis from a standard web browser. Oracle9iAS Discoverer includes Discoverer Plus to create queries and Discoverer Viewer to look at queries from a standard Web browser.

### **Oracle9iAS Clickstream Intelligence**

Oracle9iAS Clickstream Intelligence is an integrated e-business intelligence application with Portal-based reports for measuring Web traffic and improving Web site effectiveness. (Available in an upcoming Oracle9iAS release.)

## **MANAGE AND SECURE YOUR WEB INFRASTRUCTURE**

Oracle9i Application Server provides key functionality to manage all of your web infrastructure - systems and users - in a secure manner.

### **Oracle Enterprise Manager**

Oracle Enterprise Manager is a system management tool that provides an integrated solution for centrally managing your Oracle platform. Combining a graphical console, Oracle Management Server and Oracle Intelligent Agents, Oracle Enterprise Manager provides a comprehensive systems management framework for managing the application server, including Oracle HTTP Server *powered by Apache*, and the database server.

### **Oracle Advanced Security**

Oracle Advanced Security provides a comprehensive suite of security services for the Database Cache, Oracle JVM, and Oracle PL/SQL. It provides network encryption and authentication solutions, and supports a number of security protocols including Secure Sockets Layer (SSL), RADIUS and Kerberos.

### **Oracle Internet Directory**

Oracle Internet Directory is an LDAP V3 compliant service that leverages the strength of Oracle's database technology. It enables businesses to manage large numbers of users in a scaleable, reliable and secure way.

## **INTEGRATE YOUR BUSINESS**

Oracle9iAS provides a comprehensive infrastructure that enables you to integrate your business applications to other business applications within your business and to your partners and suppliers. Oracle9iAS enables you to integrate your business at the data level - using gateways, at the application level - using synchronous and asynchronous APIs, at the business process level - using workflow, within your business and with your partners and suppliers.

### **Oracle Gateways**

Oracle gateways enable you to access data in heterogeneous data sources from middle tier applications. Access to a variety of non-Oracle data sources like Sybase, Informix, DB2, etc. is available using an

Oracle Transparent Gateway. Alternatively, access to non-Oracle data sources that support ODBC or OLE-DB protocols is available using Oracle Generic Connectivity.

### **Synchronous and Asynchronous Application Integration**

Oracle9iAS provides robust support for integrating applications using synchronous or asynchronous techniques. Using Oracle9iAS, applications can communicate with each other using tightly coupled request/response calls based on industry standard techniques like CORBA and EJB or in a loosely coupled manner using asynchronous messaging based on Oracle Advanced Queuing.

### **Oracle Workflow**

Oracle Workflow delivers a complete workflow management system that supports business process based integration. Oracle Workflow automates and streamlines business processes both within and beyond your enterprise. Its technology enables modeling, automation, and continuous improvement of business processes.

### **Oracle Applications InterConnect**

Oracle Applications InterConnect is a comprehensive and flexible application integration platform that enables seamless integration of enterprise software. Oracle Applications InterConnect is specifically designed to integrate Oracle products with other Oracle products or third party legacy systems.

## **COLLABORATE WITH STAKEHOLDERS**

Oracle9iAS makes it easier for users to communicate and collaborate with others using an integrated approach for e-mail, voice mail, and fax messages.

### **Oracle9iAS Email**

Oracle9iAS Email is a highly scalable, standards-based solution for providing electronic messaging to support the current and future electronic messaging needs of growing companies, large enterprises, and service providers. As a messaging server that supports standard IMAP4, POP3, and SMTP clients, Oracle9iAS Email allows users to choose the email client that they are most comfortable with.

### **Oracle9iAS Unified Messaging**

Oracle9iAS Unified Messaging enables users to access and manage email, voice mail, and fax messages in a manner that best suits an individual's needs and work style. Based on the "Virtual" Inbox approach, Oracle Unified Messaging allows users to access their messages using a phone, web, wireless devices, or other clients.

## KEY BENEFITS

Oracle9i Application Server is a comprehensive, integrated application server that provides all of the functionality needed to run every successful e-Business. Oracle9i Application Server provides the infrastructure and lets you focus on the value-add - your business applications, operations and decisions.

With Oracle9iAS you can:

- build dynamic web sites and Internet applications;
- create personalized portals;
- make sites and applications accessible from both traditional browsers and any mobile device;
- run any web site 3-10 times faster than any other application server;
- understand business intelligence;
- manage all of your web infrastructure;
- integrate your business applications;
- collaborate with stakeholders.

## PACKAGING

Oracle9i Application Server is available in Standard, Enterprise and Wireless editions.

### STANDARD EDITION

The Standard Edition includes the following components:

Oracle HTTP Server *Powered by Apache*

Perl Interpreter

Oracle Enterprise Java Engine

Oracle9iAS Developer Kits

Oracle Internet File System

Oracle9iAS Portal

Oracle Advanced Security

Oracle9iAS Email

Oracle9iAS Unified Messaging

Oracle Enterprise Manager (Console only)

### ENTERPRISE EDITION

The Enterprise edition includes all the components in Standard Edition and the following additional components:

Oracle9iAS Cache

Oracle9iAS PL/SQL

Oracle9iAS Forms Services

Oracle9iAS Reports Services

Oracle9iAS Discoverer Viewer

Oracle Internet Directory

Oracle Workflow

Oracle Applications InterConnect

Oracle Enterprise Manager (Console and Management Server)

### WIRELESS EDITION

Oracle9iAS Wireless



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