

ORACLE®

Arne Brüning

Systemberater

Server Technologies Competence Center
Oracle Deutschland GmbH

Arne.Bruening@oracle.com

ORACLE®



Oracle9i AS Release 2

ORACLE®

Die IT-Struktur

High Value To
The Business

**Specific
Business Applications**

**Standard
Business Applications**

Low Value To
The Business

Infrastructure

ORACLE®

The Information Technology Nightmare

High Value To
The Business

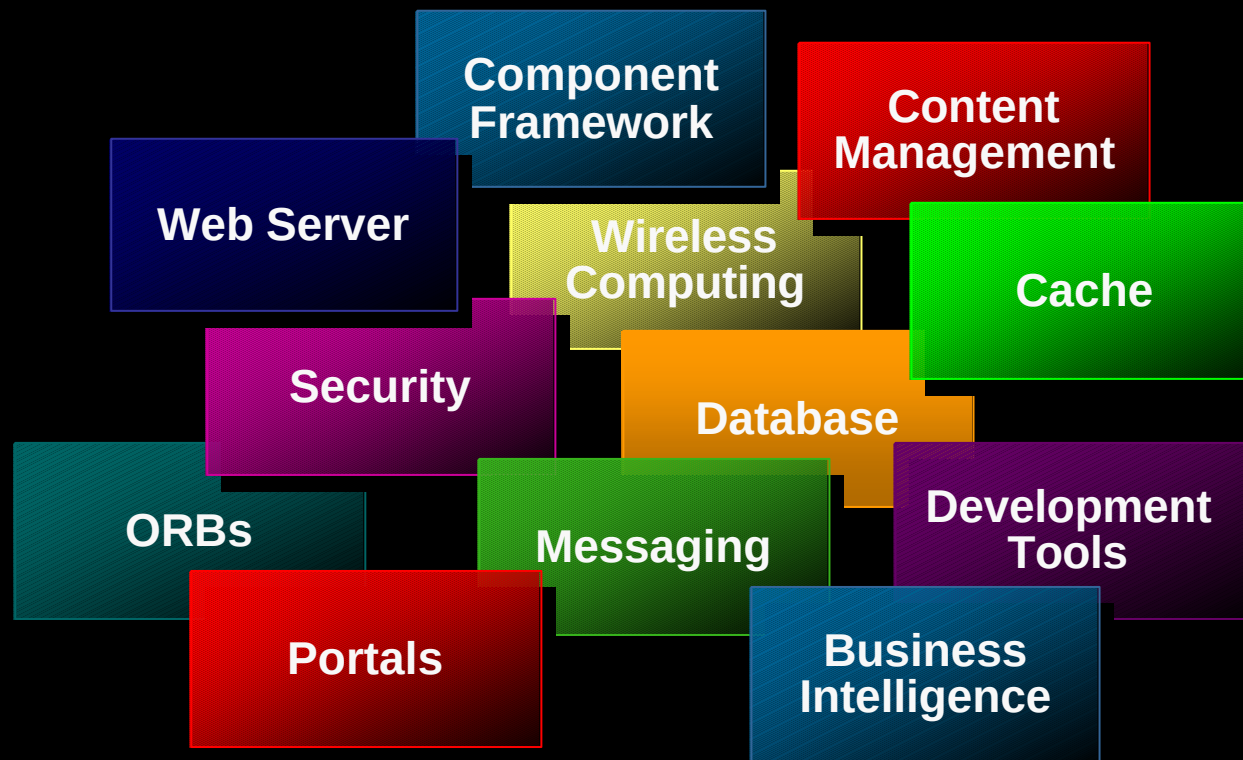
20% Of Budget

Low Value To
The Business

80% Of Budget

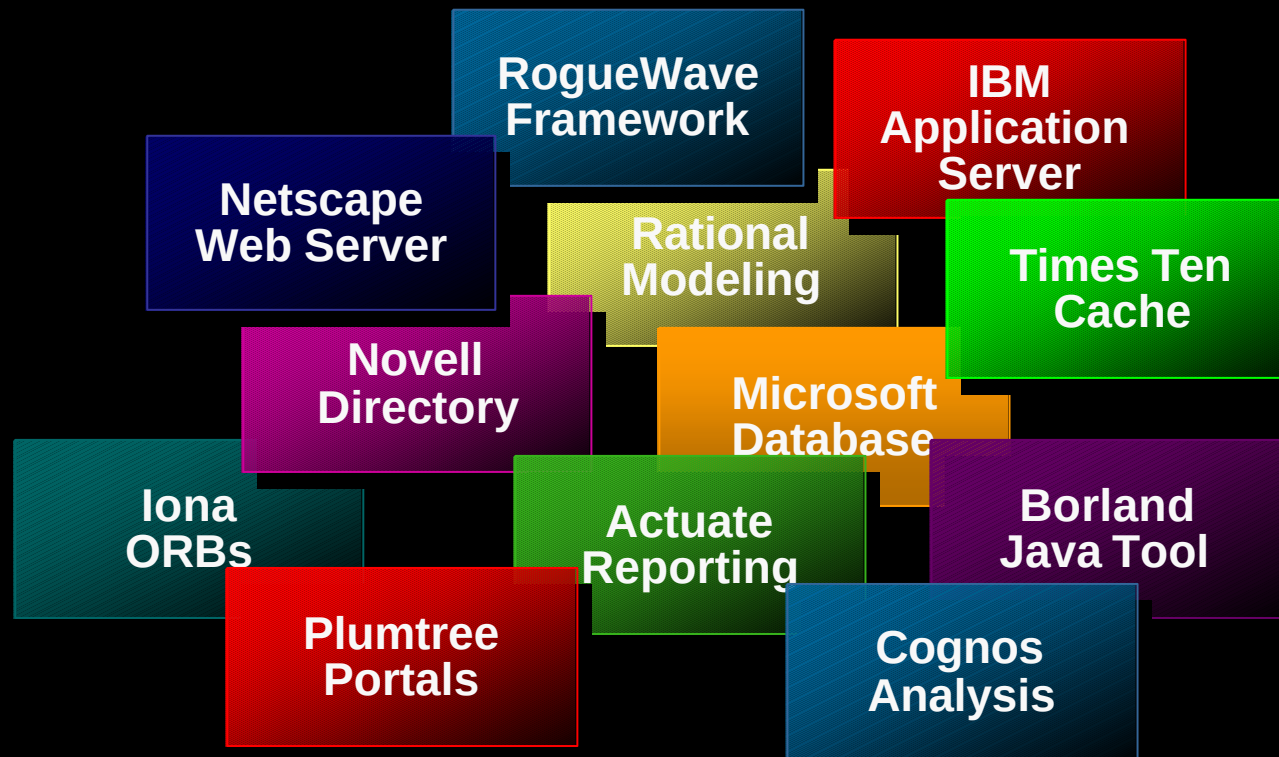
Warum ist IT-Infrastruktur so teuer???

- Zu viele zu integrierende Komponenten

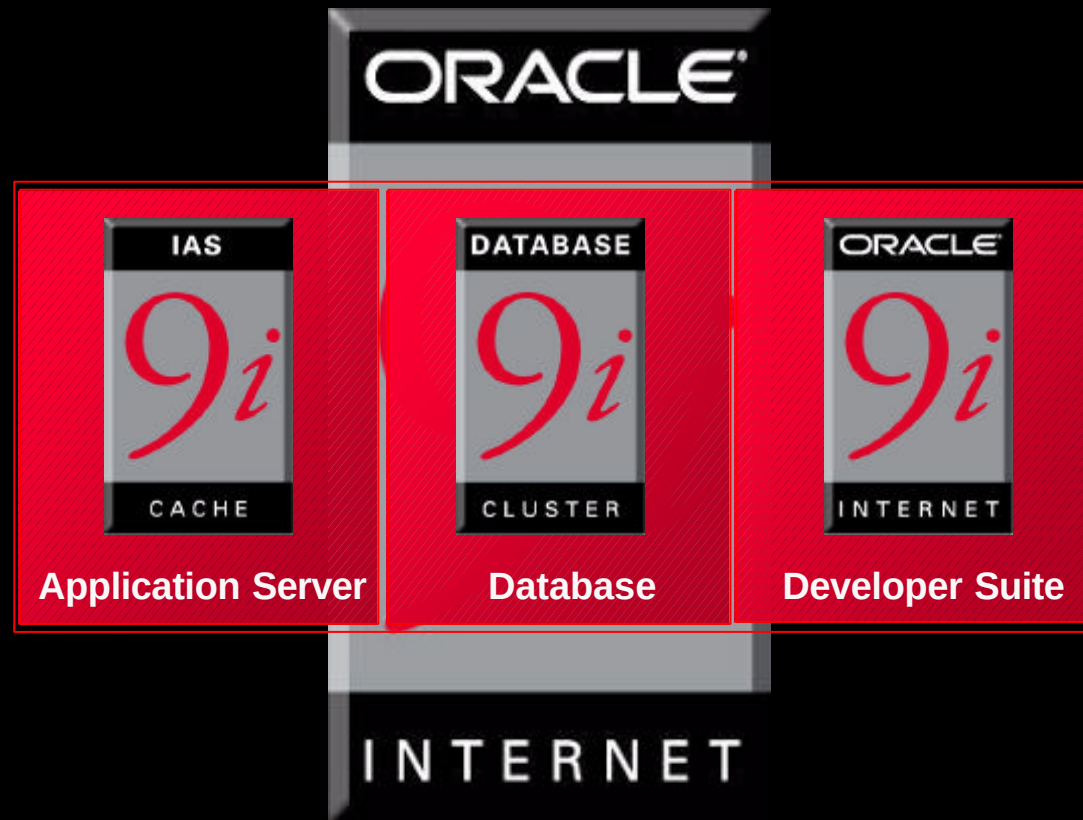


Warum ist IT-Infrastruktur so teuer???

- Zu viele Hersteller und Produkte



Oracle9i – komplett & integriert



Mit Oracle9i

High Value To
The Business

80% Of Budget

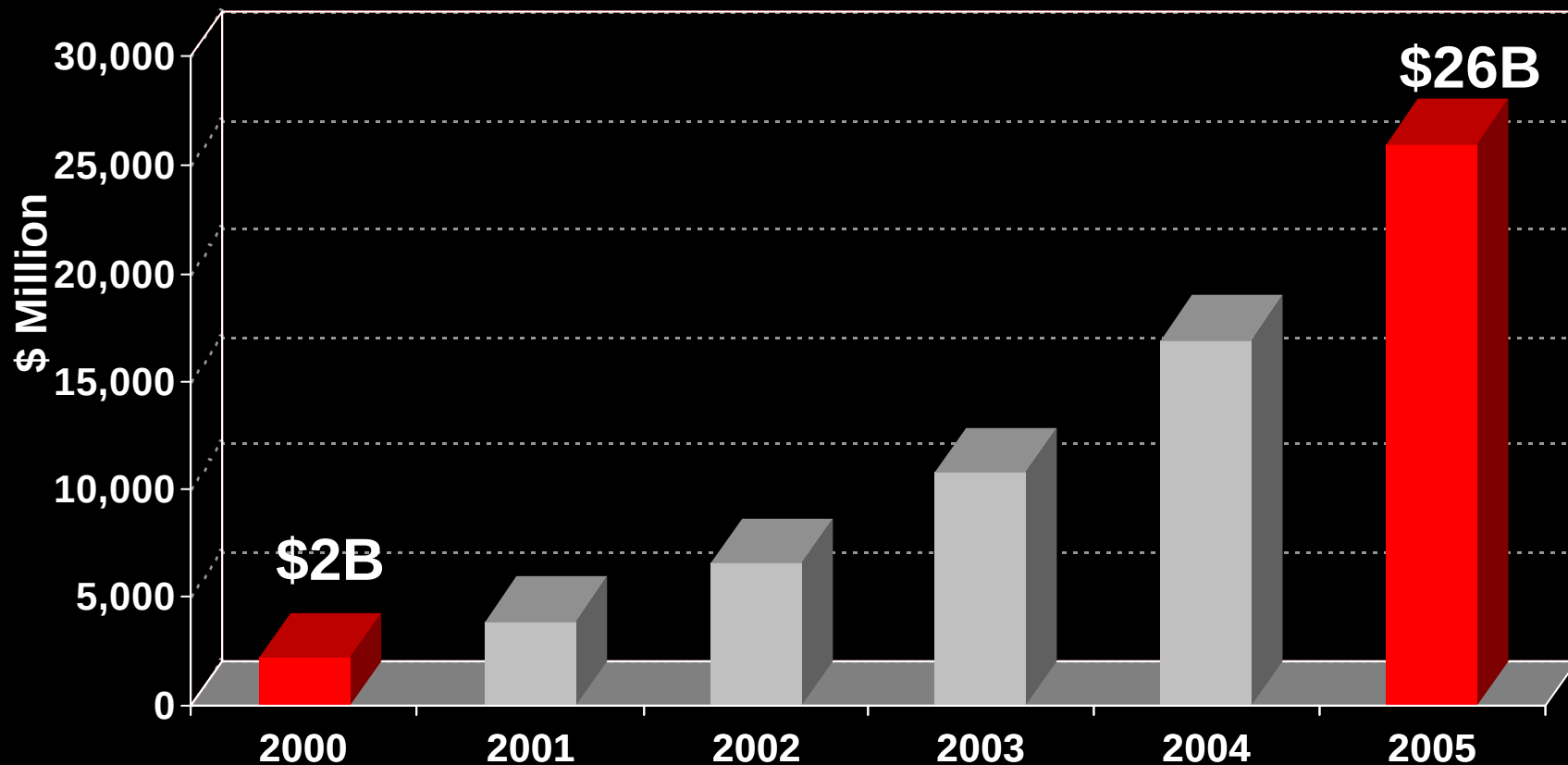
Low Value To
The Business

20% Of Budget

ORACLE®

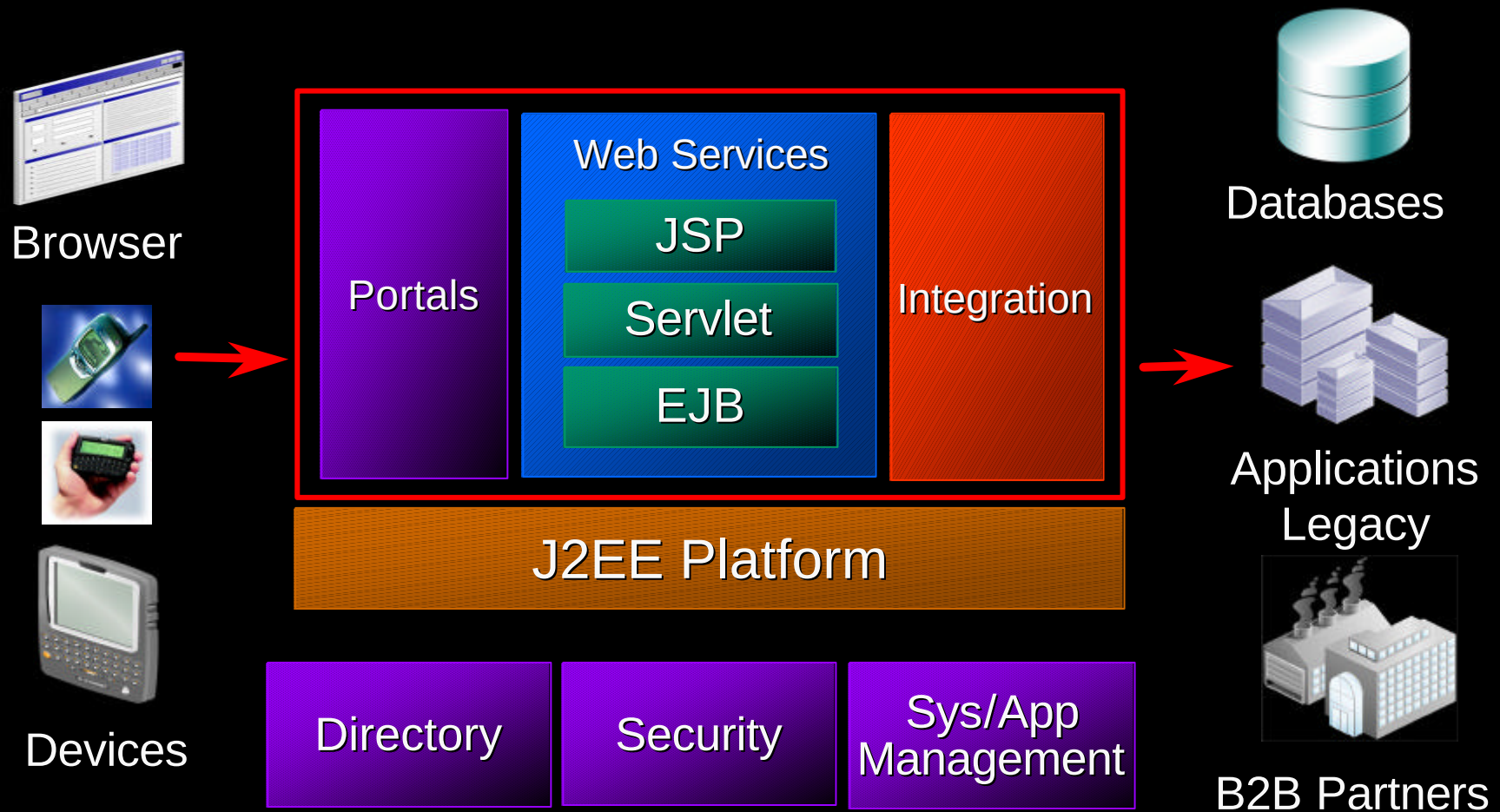
Application Server Market Forecast

*IDC predicts a 64% CAGR over the next 5 years
The App Server will be as large as the Database Market in
2005: \$26 Billion*

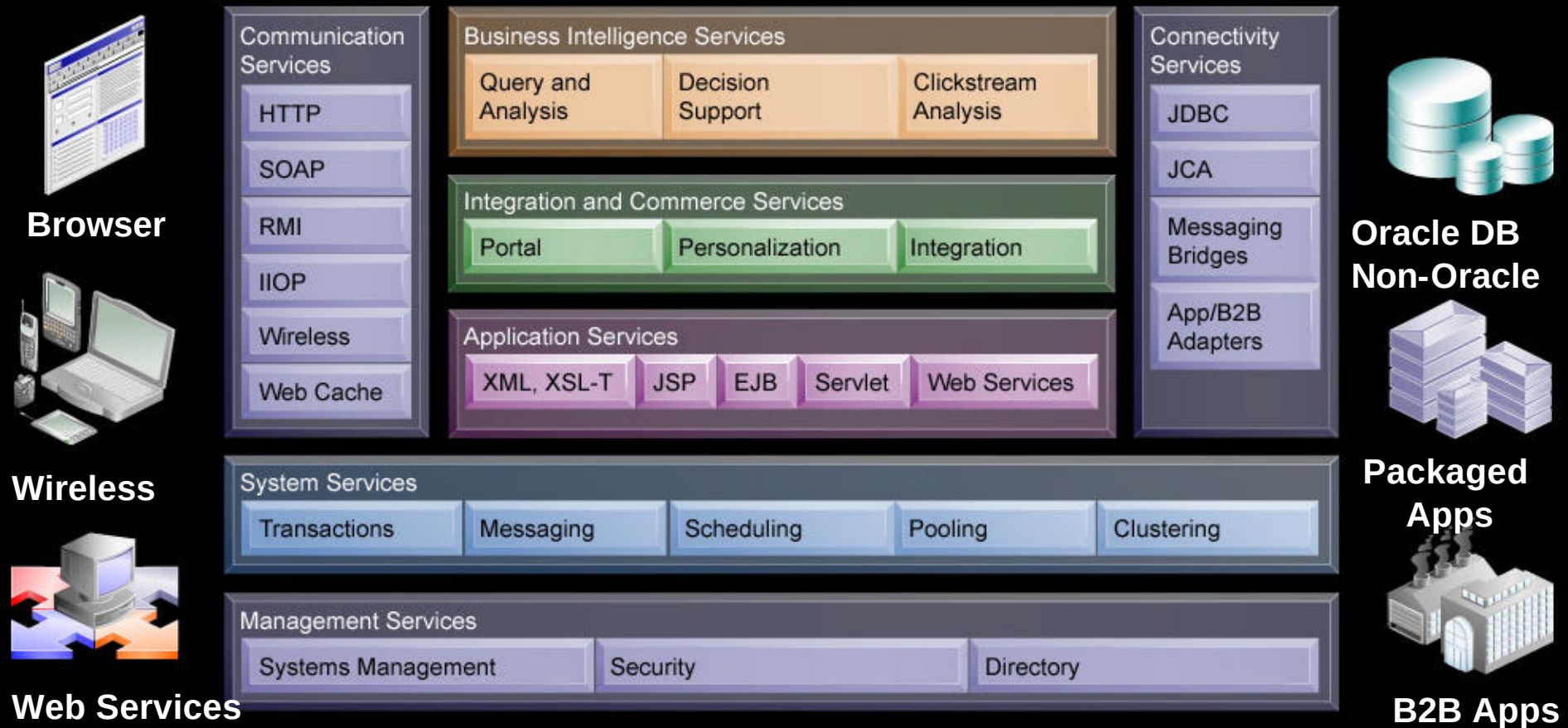


ORACLE®

Was ist ein Application Server?



Oracle9i Application Server Architecture



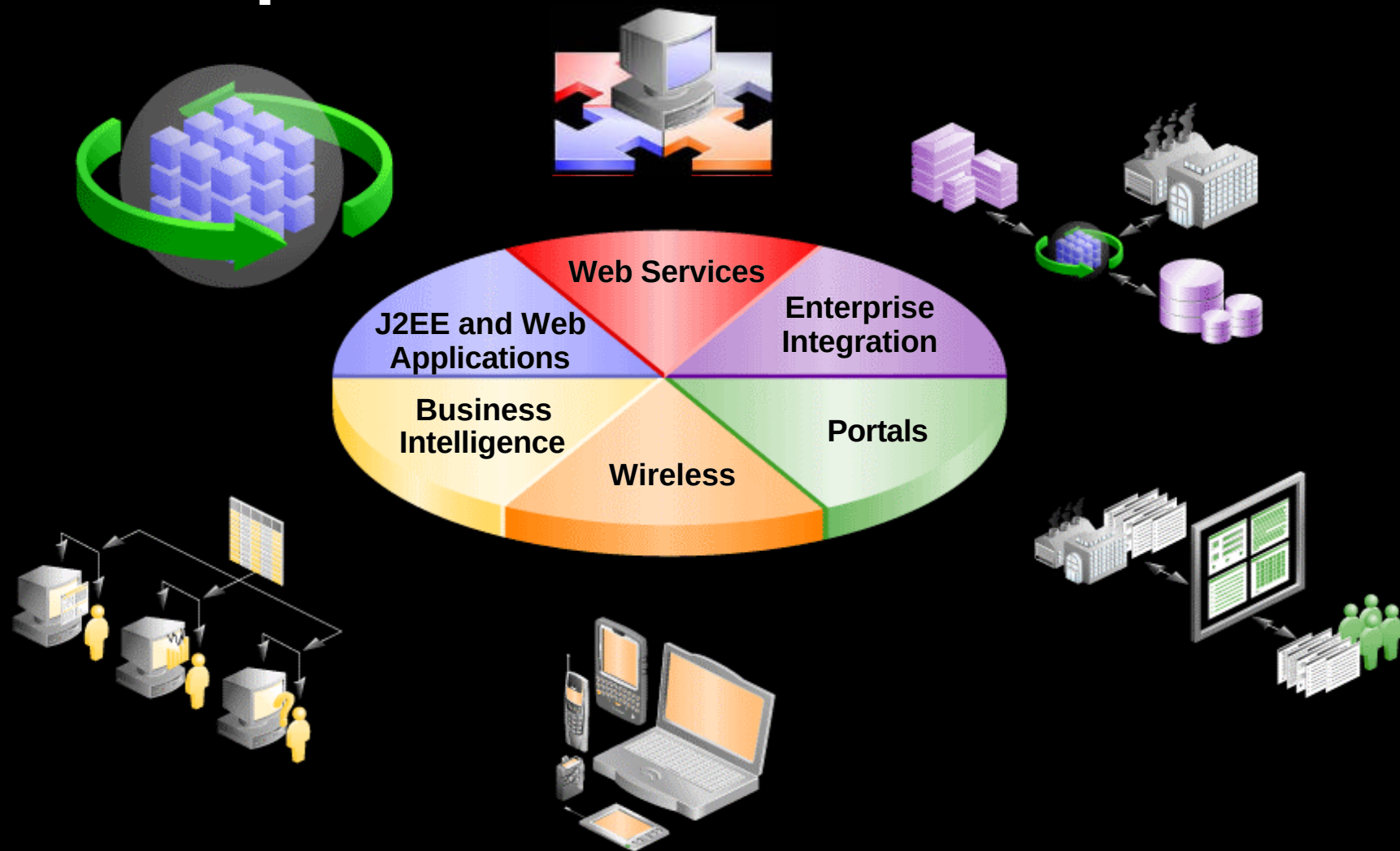
ORACLE®

Oracle9i Application Server



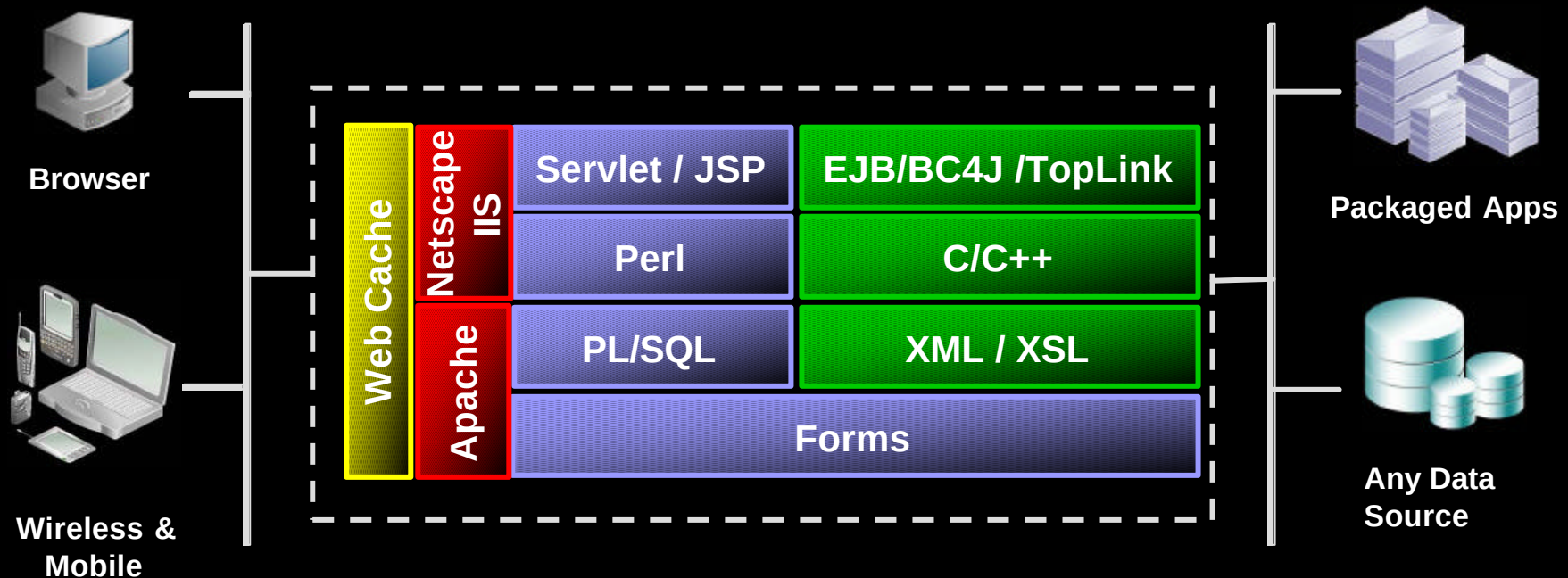
- Most Productive Development
 - Complete J2EE, Web Services
 - Portal, Wireless, Integration, Caching
 - New Personalization, Clickstream, BI, Personal Information Management
- Most Reliable Deployment
 - Performance,
 - Reliability, Availability, Scalability, Clustering
 - Manageability, Security
- 100% Standards Compliant
 - J2EE 1.3, Web Services, ebXML, RosettaNet, LDAP v3, SSL v3, XML ...
- Lowest Total Cost of Ownership

Oracle9i AS: Most Productive Development



ORACLE®

J2EE and Web Applications



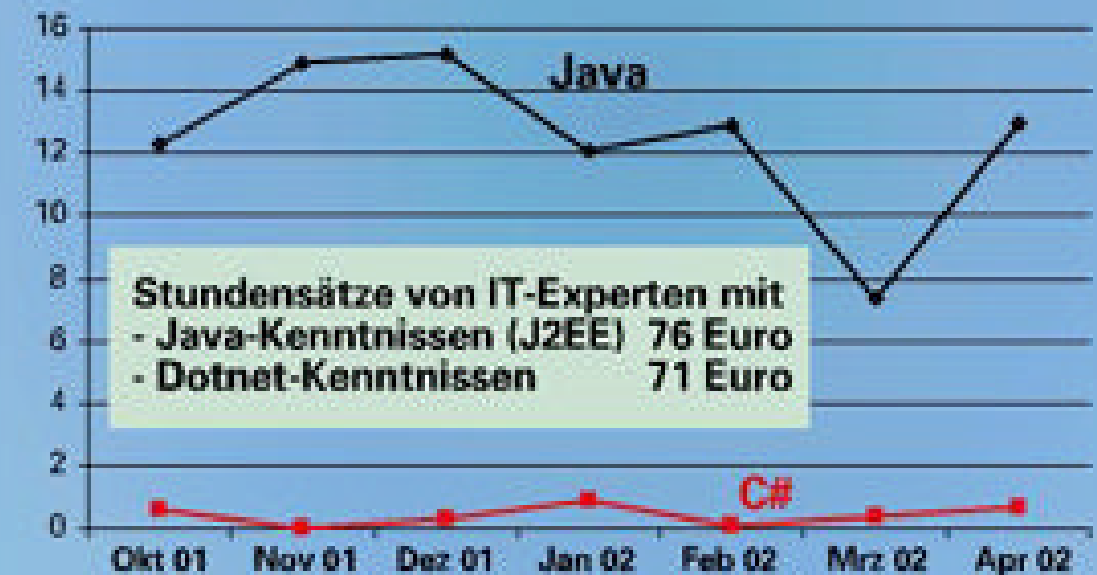
- Develop in Java, XML, Perl, PL/SQL, C/C++, Forms
- Build faster using integrated tools in iDS
- Reduce costs through a single, unified platform for Java, XML, & SQL

Warum Java?

- **Portabel**
 - Jedes Betriebssystem
 - Jede Plattform
- **Auswahl**
 - Ein Standard, viele Anbieter
- **Ausgereift**
 - Best practices
- **Proven**
 - Skalierbarkeit, Performance
- **Knowledge**
 - Common skills

C# kann Java nicht einholen

Geforderte Programmiersprachen bei neuen IT-Projekten (in Prozent)



Quelle: Gulp

COMPUTER ZEITUNG 28/2002/4a

IDC, 1998, 2001

ORACLE

Oracle9i AS Release 2

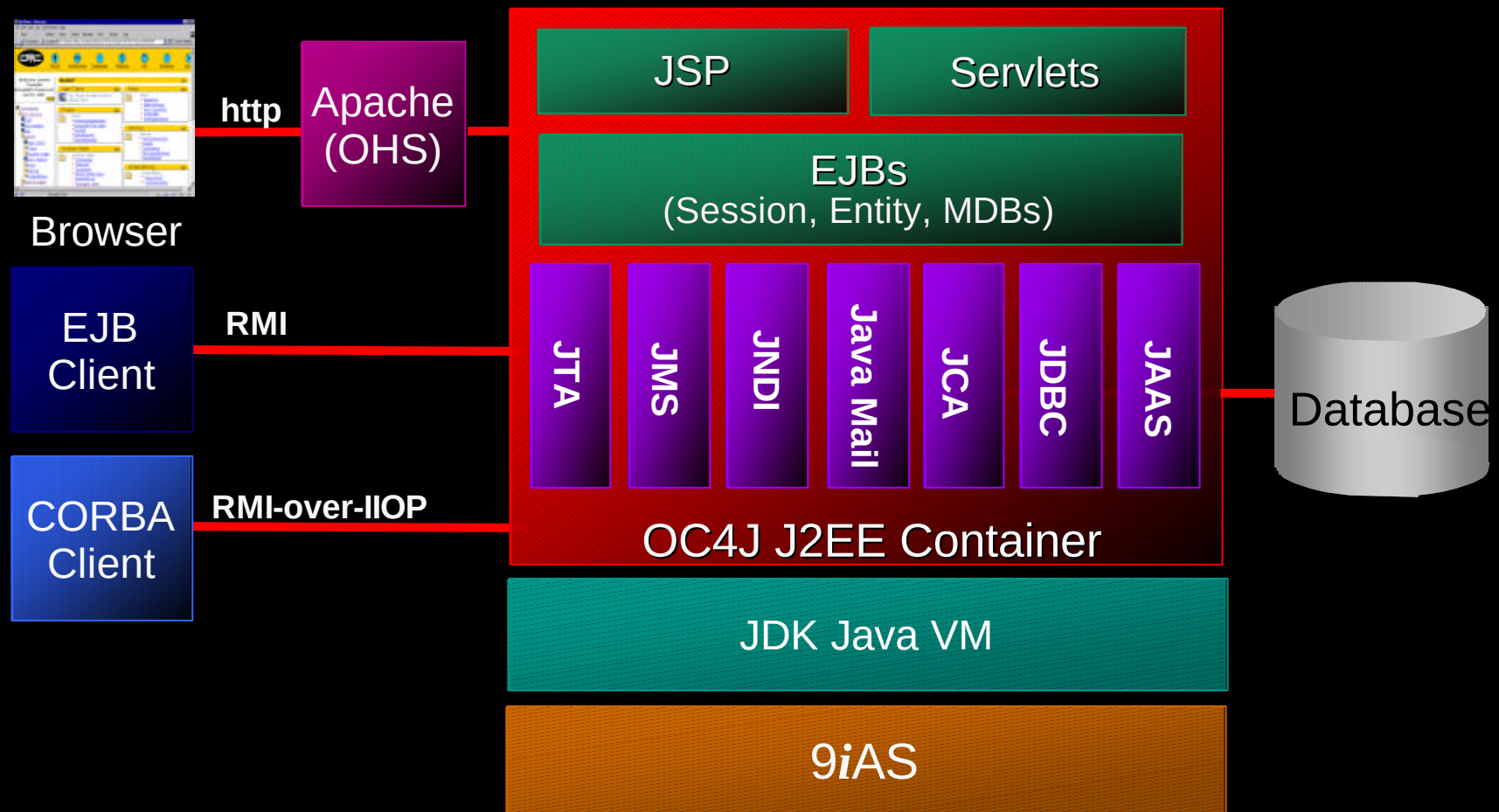
J2EE 1.3 Compliant

**100% J2EE
Compliant**



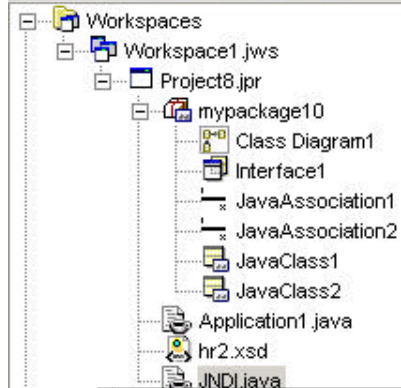
- JDBC 2.0
- EJB 2.0
- Servlets 2.3
- JSP 1.2
- JMS 1.0
- JTA 1.0
- JavaMail 1.2
- JAF 1.0
- JAXP 1.1
- Connector 1.0
- JAAS 1.0
- JNDI 1.2

Oracle9i AS J2EE Architektur



Oracle9iAS J2EE Facilities

- JDK 1.2, 1.3 Support ✓
- J2EE 1.3 Compliance ✓
- JSP 1.1/1.2 ✓
- Servlet 2.2/2.3 ✓
- EJB 1.1/2.0 ✓
- JDBC 2.0 ✓
- JNDI 1.2 ✓
- JMS 1.0.2 ✓
- JTA 1.0.1 ✓
- JavaMail 1.1.2 ✓
- JAAS 1.0 ✓
- Java Connector 1.0 ✓
- JSP Tag Libraries ✓
- Tomcat Compatible ✓
- Servlet Filters/Chains ✓
- Session Beans ✓
- Entity Beans ✓
- Message Driven EJBs ✓
- CMP/BMP ✓
- Queryability - EQL ✓
- Security - File & LDAP based ✓
- Transactions - 2PC ✓
- EAR File Deployment ✓
- WAR File Deployment ✓
- Servlet Clustering ✓
- EJB CLustering ✓
- HW/OS Independent Clustering ✓
- DB Independent ✓
- Web Server Independent ✓
- Auto Compilation ✓
- Auto Deployment ✓
- Hot Deployment ✓
- Configurable O-R Mapping ✓
- EJB Pooling ✓
- Thread Pooling ✓
- Connection Pooling ✓
- RAC/TAF Support ✓



**XML Structure
& Editor**

**Wizards for J2EE
& WebServices**

**PL/SQL Editor &
Remote Debugger**

100% Java

```

1 <?xml version="1.0"?>
2 <!-- edited with XML Spy v4.3 U (http://www.xmlspy.com) by Oracle XML (Oracle XML Dev) -->
3 <xsd:schema targetNamespace="http://www.oracle.com/xsd/hr2.xsd" xmlns:hr="http://www.oracle.com/xs
4 <xsd:annotation>
5   <xsd:documentation xml:lang="en">
6 /*****

```

```

9 public static String INITCTX = "co
10 public static String LDAP_HOST = "
11 public static String BASE = "cn=0r
12 public static String FILTER = "cn=

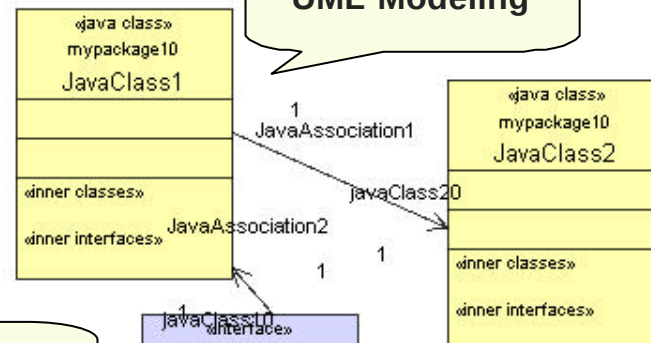
```

```

88 PROCEDURE logmnrR
89
90 IS
91   cur      NUMBER;
   rowcnt    INTEGER;

```

UML Modeling



Integrated OC4J

**Profiling, (Remote)-
Debugging & Code Coach**

Description	
java.lang.Throwable, Persistent	Exception
Deadlock detection, Persistent	Deadlock
mypackage10 JNDI.java 32	Source

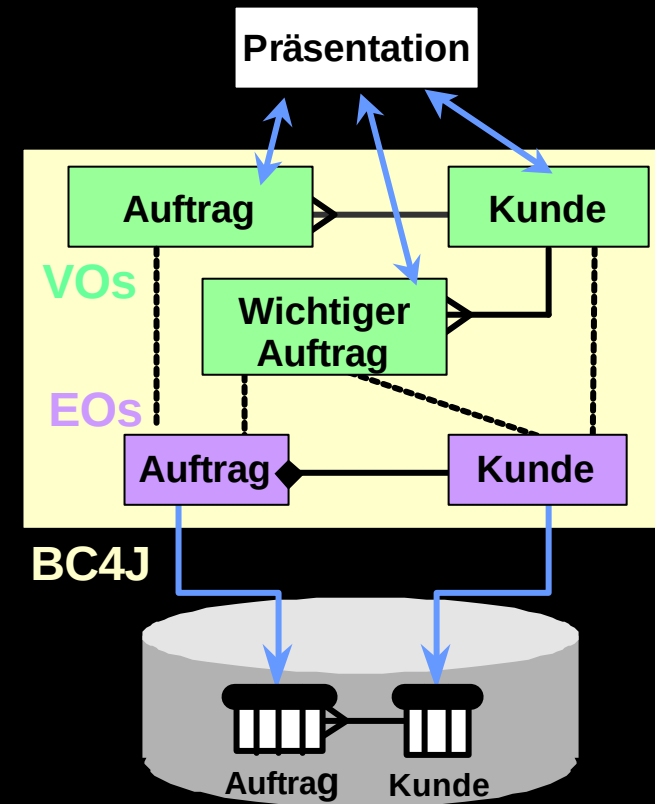
Log Breakpoints

Name	Type
ctx	(out of scope)
env	size 5 DirContext Hashtable

Smart Data Data Watches

Business Components for Java (BC4J)

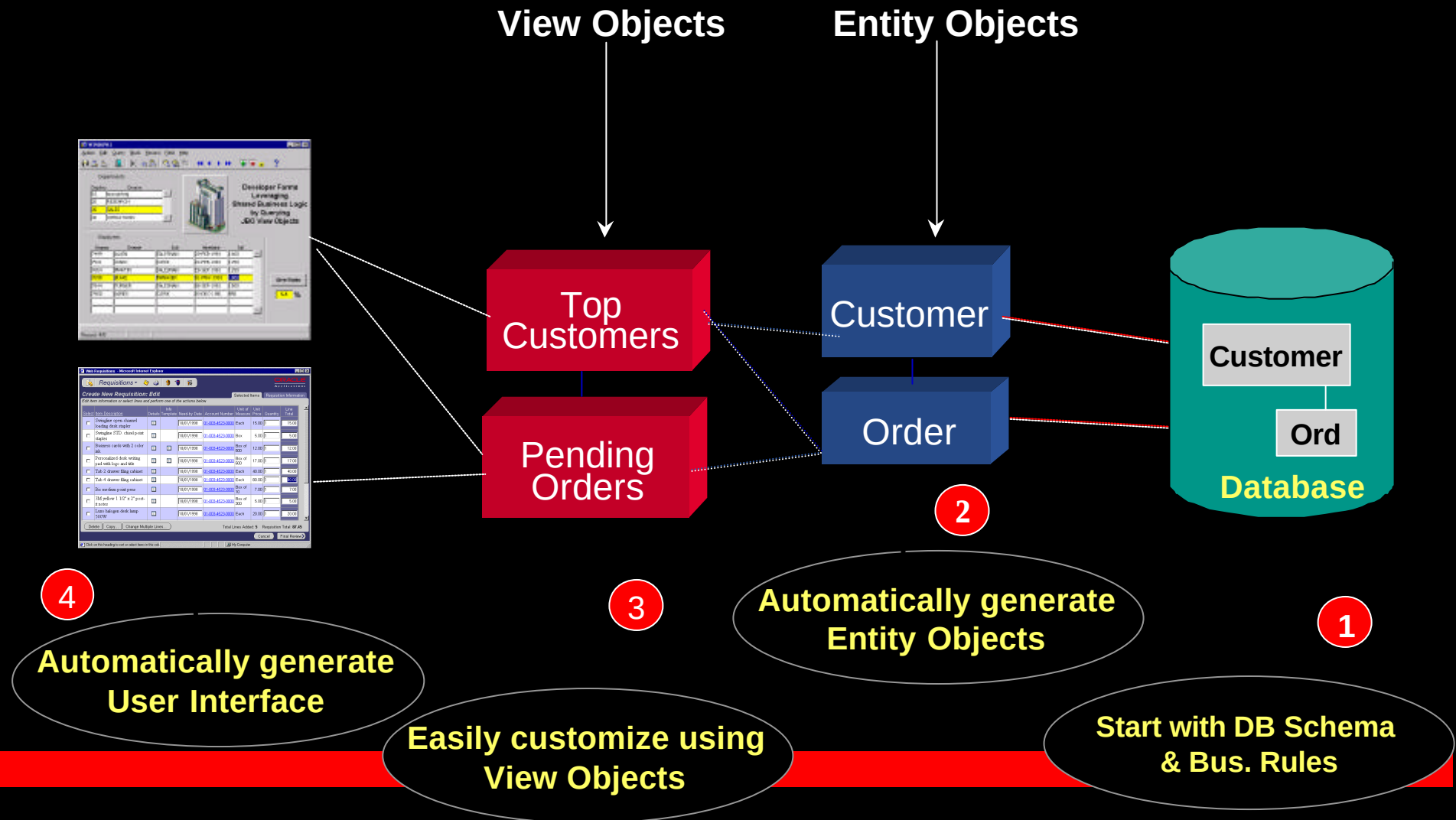
- 100% Java, XML Framework zur Erstellung von Geschäftskomponenten
- Persistenz Schicht
- Geschäftslogik kapseln
- Universeller Clientzugriff auf die gleiche Logik
- Write once, deploy anywhere



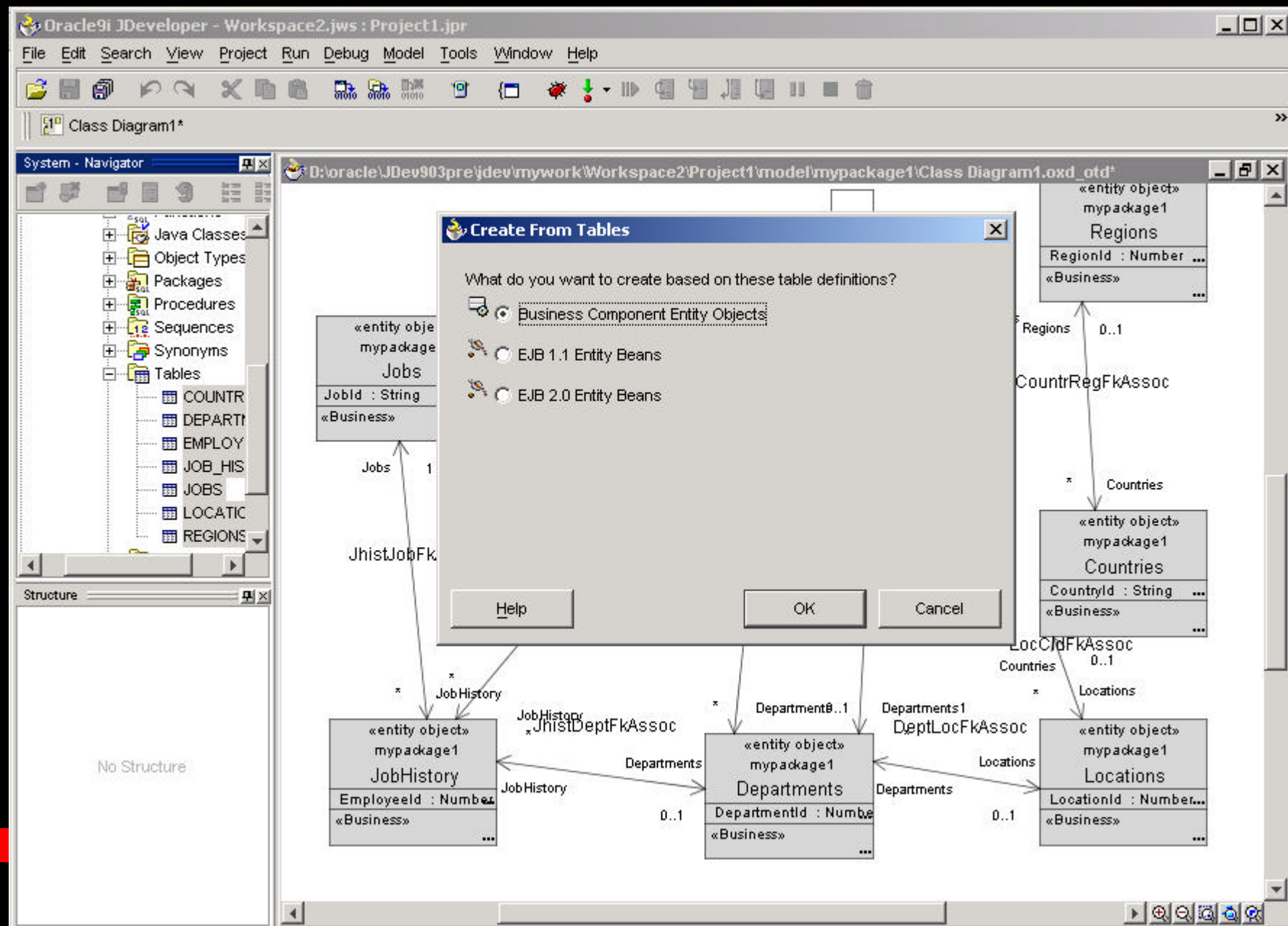
Bereitstellung der Infrastruktur
Entwickler konzentriert sich auf Geschäftslogik

Simplified Application Development

Oracle Business Components for Java (BC4J)



BC4J: UML-Design im JDeveloper



JDeveloper: Analysten

Enterprise Java IDEs

 = One of the Leaders,
  = Credible Offering,
  = Partnerships,
  = Weak,
 Blank = No Offering

Enterprise Java IDE	License Cost	Rich Client Support	UML Class Modeling	Pattern Support	Multi-Language Capability	Automated Web Services Support	Automated Struts Support
CA Advantage Joe	\$3,500						
IntelliJ IDEA	\$599						
Borland JBuilder	\$2,999						
Oracle JDeveloper	\$995						
Compuware OptimalJ	\$4,995						
Pramati Studio	\$995						
Sun ONE Studio	\$1,995						
IBM WebSphere Studio	\$7,500						

Source: Giga Information Group

ORACLE

ORACLE®

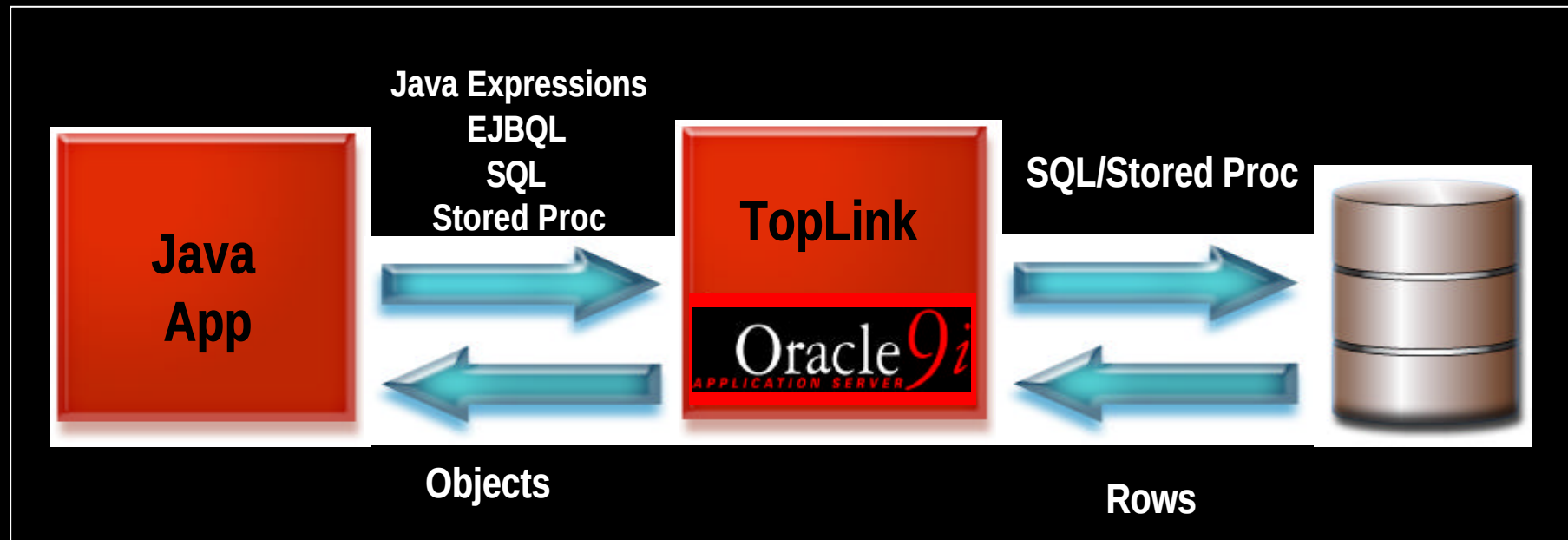
D E M O N S T R A T I O N

9i JDeveloper

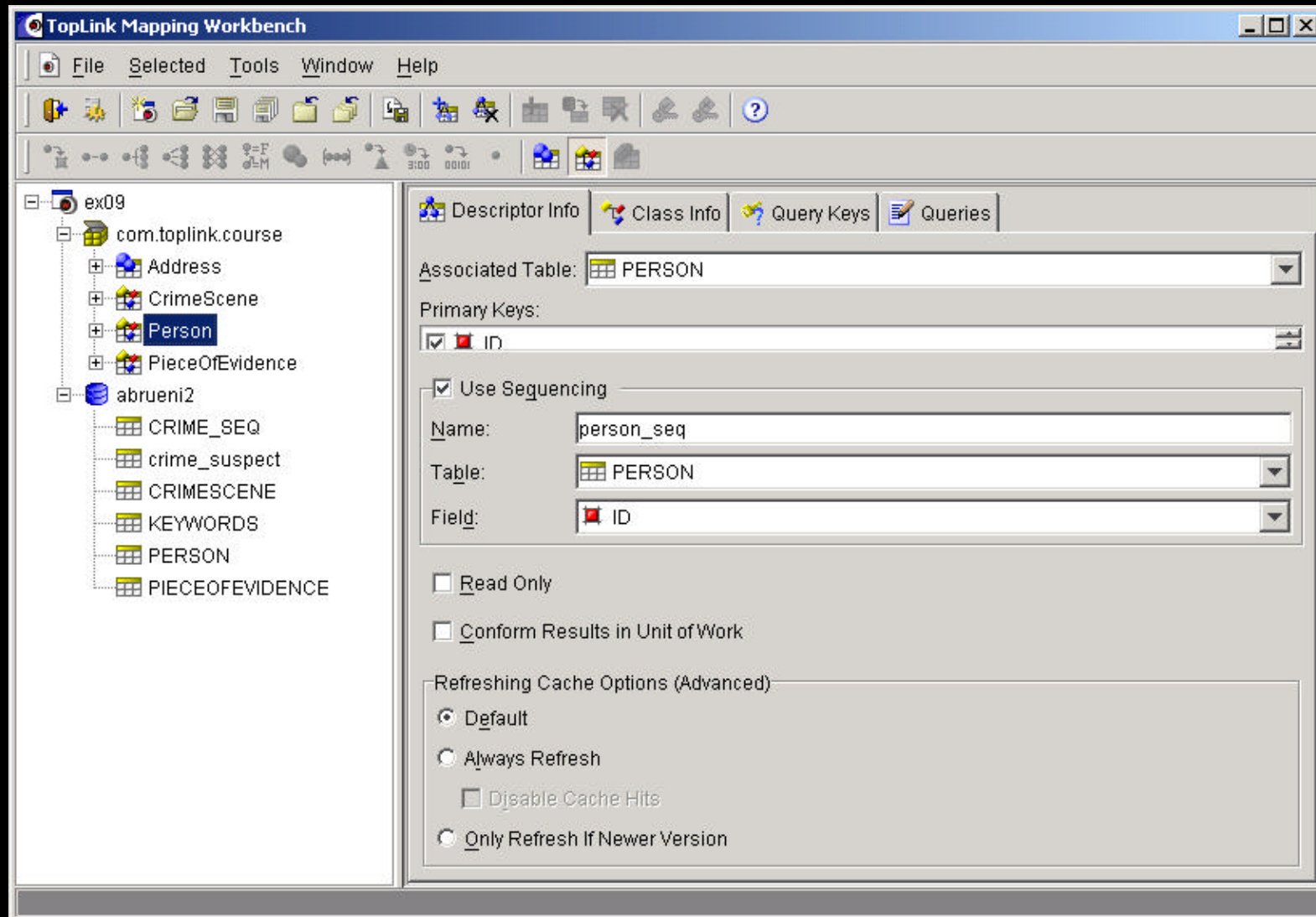
ORACLE®

Oracle9i AS TopLink

- TopLink facilitates *rapid* development, deployment and execution of all persistence related aspects of any Java Application
- Declarative Development
- Market Leader



TopLink: Deklaratives O/R Mapping



BC4J vs. TopLink?

> V 9.0.4

GUI

BC4J

Business
Objects

BC4J

O/R Mapping

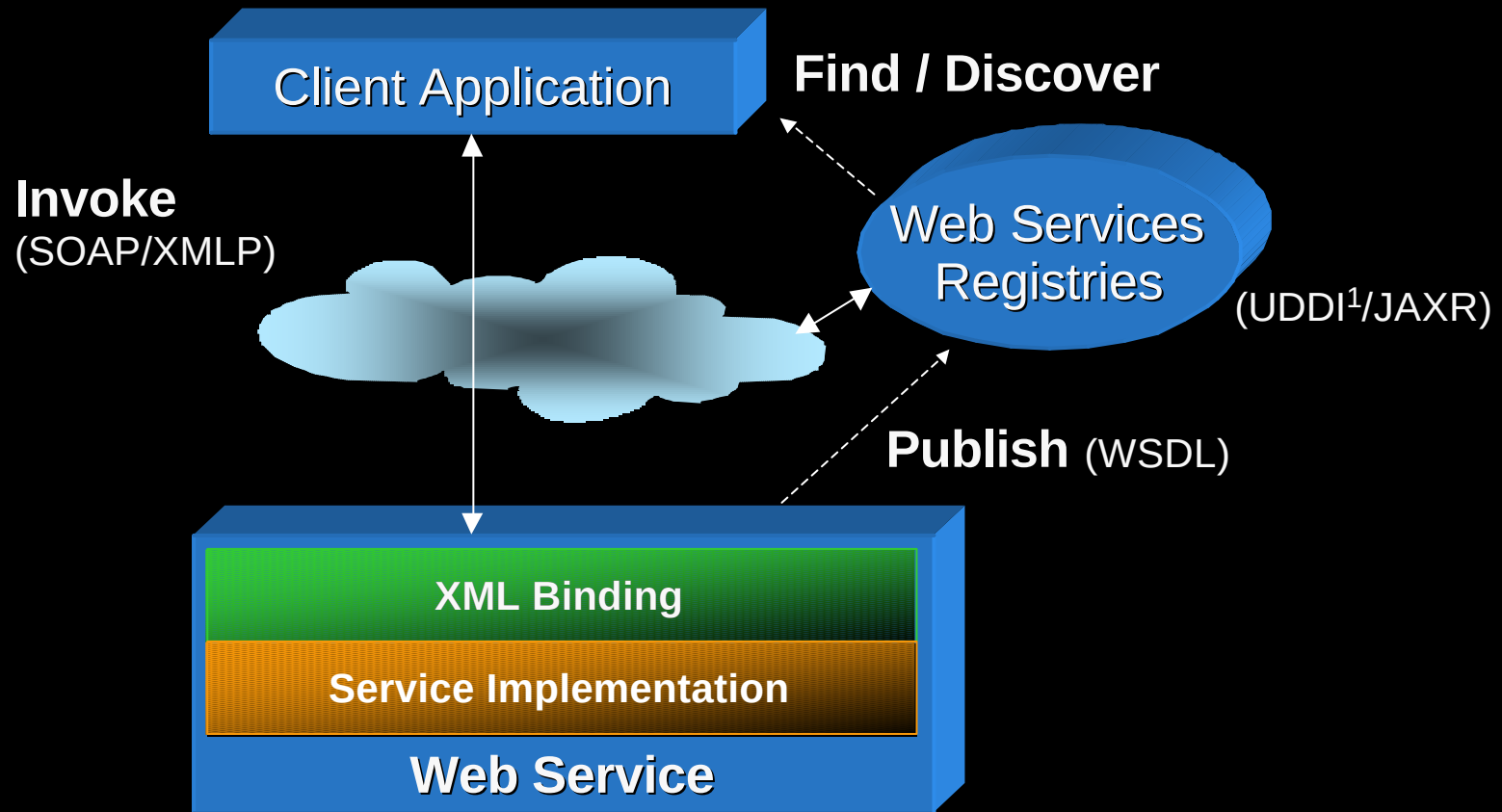
TopLink

TopLink

ORACLE

Web Services

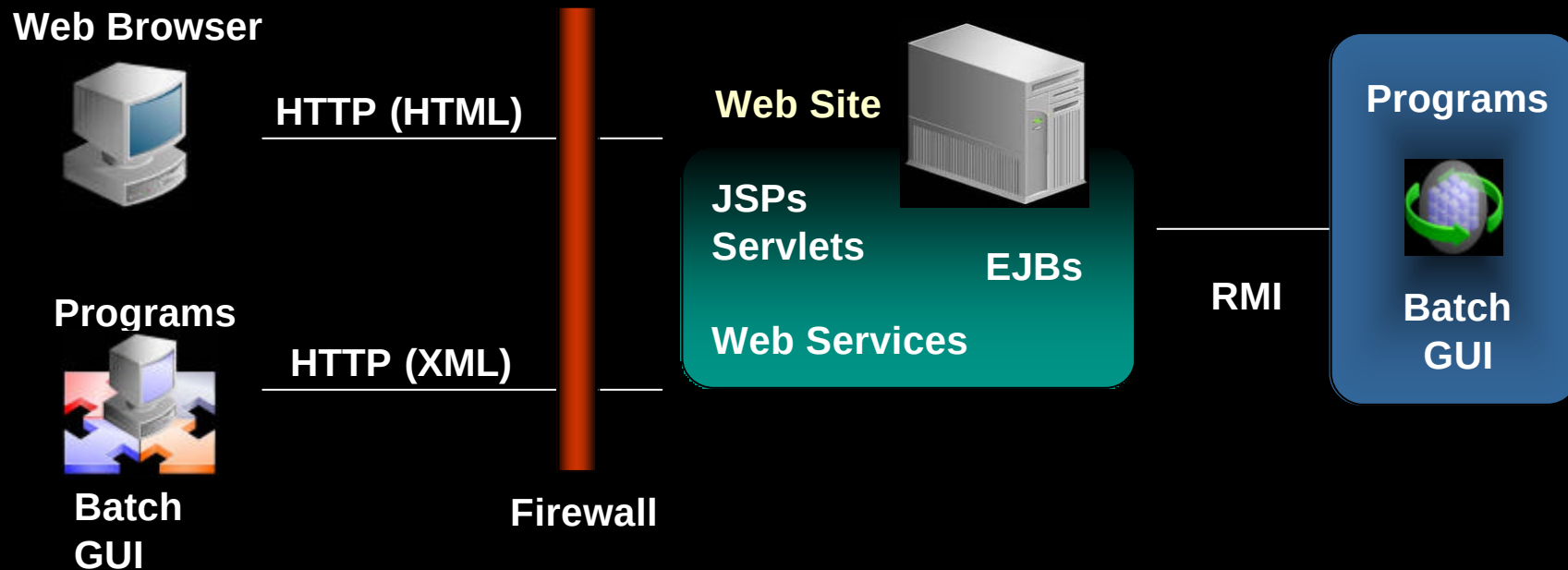
A technology evolution that accelerates an ongoing revolution...



ORACLE®

¹Universal Discovery, Description and Integration

Web Services



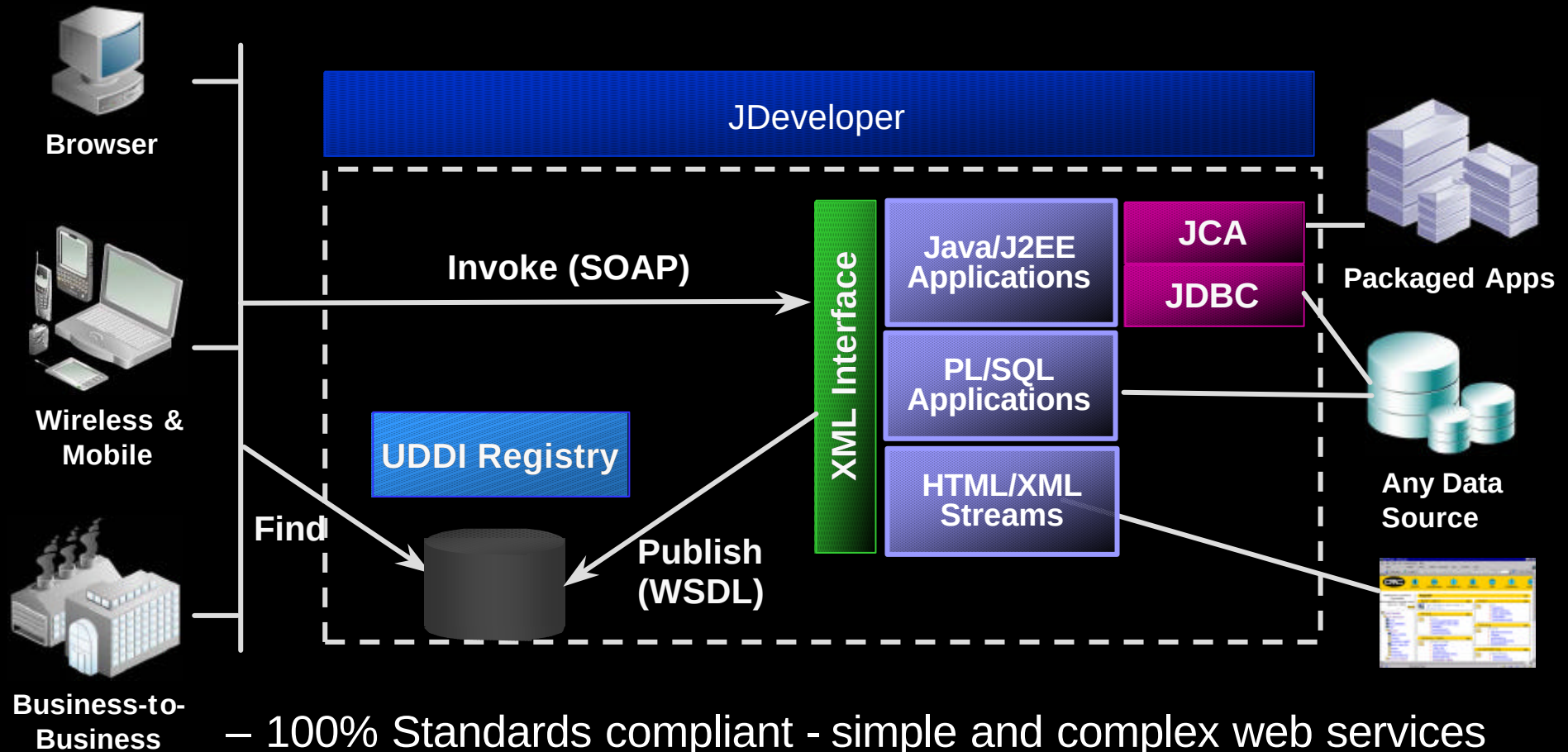
- Make your Web site programmatically accessible from the Web

Web Services Build on J2EE

- J2EE for Web services infrastructure
 - Transactions, security, lifecycle
- J2EE is proven
 - Mature, scalable, portable, widely adopted
- J2EE has standards for Web services
 - Java XML Pack: SOAP, WSDL, UDDI
- Compatible to .NET

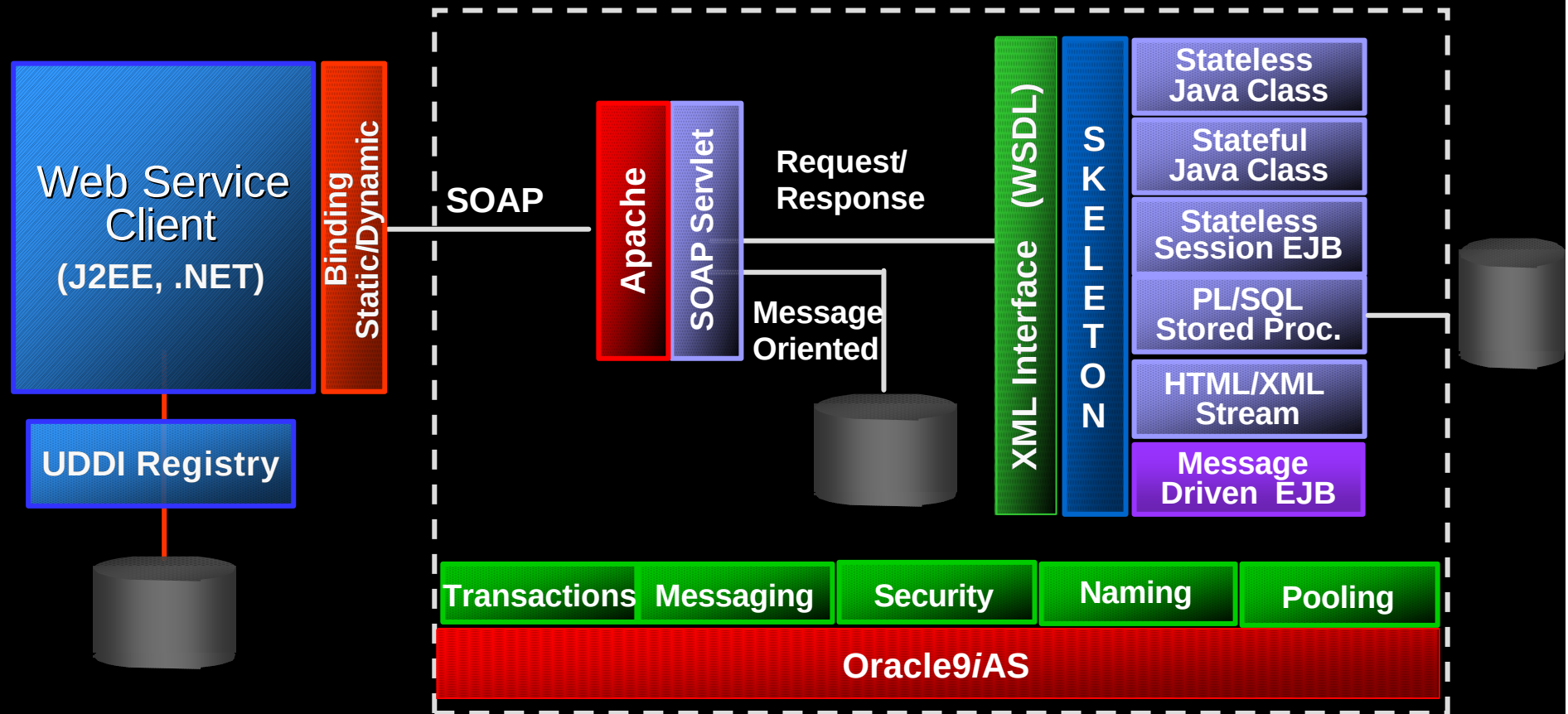


Develop, Deploy, & Manage Web Services



- 100% Standards compliant - simple and complex web services
- Expose J2EE, PL/SQL and legacy applications as web services
- JDeveloper automatically generates and deploys web services

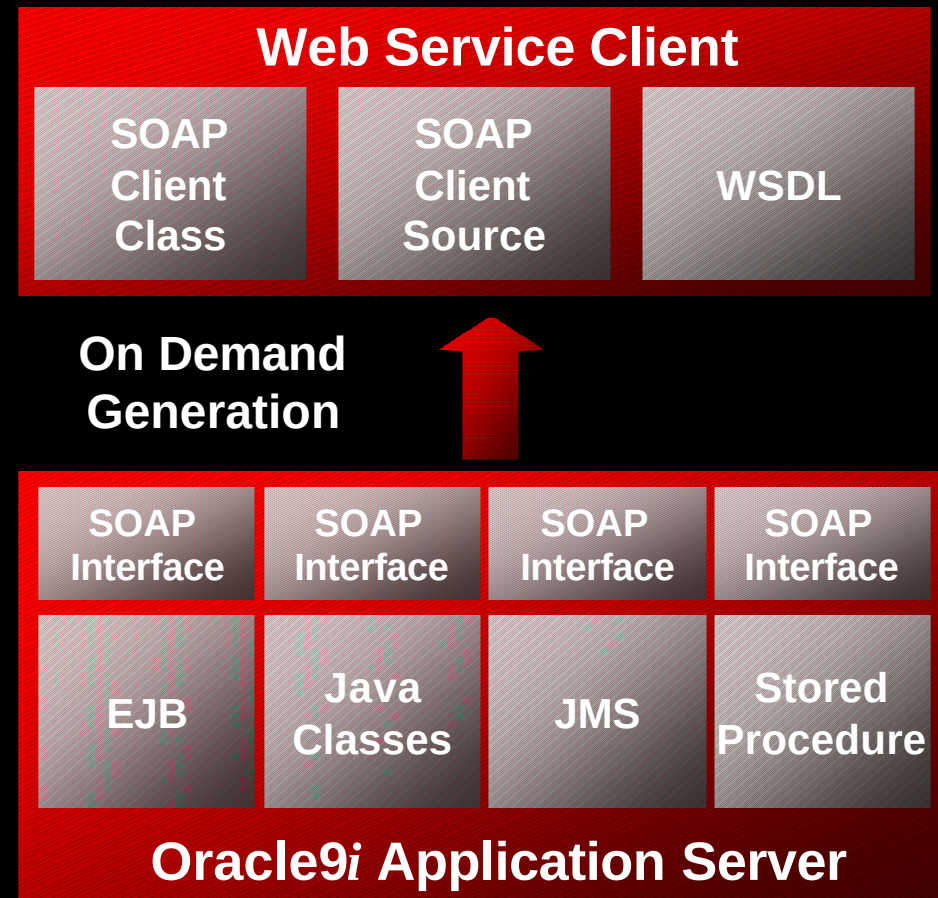
Develop, Deploy, & Manage Web Services



- Aligned with JSR 109
- Interoperable with .NET
- Leverage Performance and Reliability of Oracle9iAS J2EE Containers

Oracle9iAS: Easy Web Service Development

- Automated client stub generation
- Automated SOAP interface generation
- Automated WSDL generation
- Based on JAXM, JAX-RPC, JAXR, JAXP, JAXB



Oracle Contributes and Leads Standards Bodies



- Web Services WG (SOAP, WSDL, UDDI)
- XMLP WG
- XML Schema WG
- XML Query WG



- J2EE Web Services JSR
- JAXM JSR
- JAX-RPC JSR



- XMI Metadata WG
- Component Model WG



- TPAML
- BOPC WG
- WSRP



- Protocol/JAXP
- Repository/JAXR
- Messaging/JAXM



- RNIF WG



**Oracle is a Founding Member of the
Web Services-Interoperability Organization**

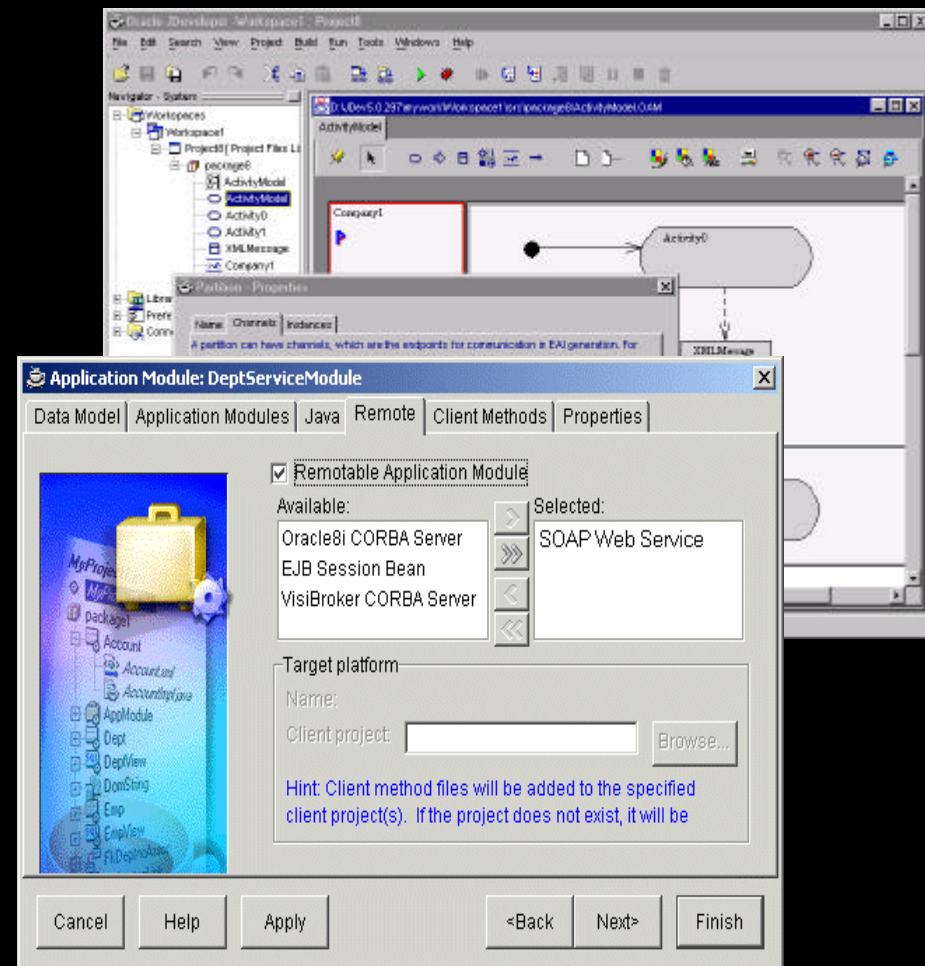


ORACLE®

Web Service Development

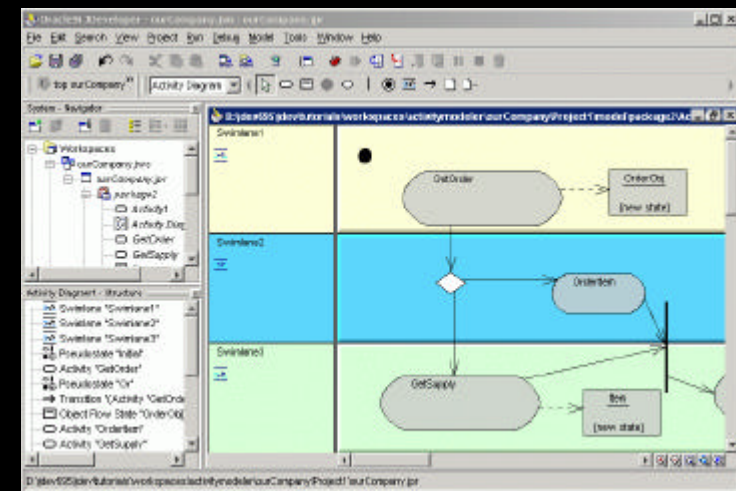
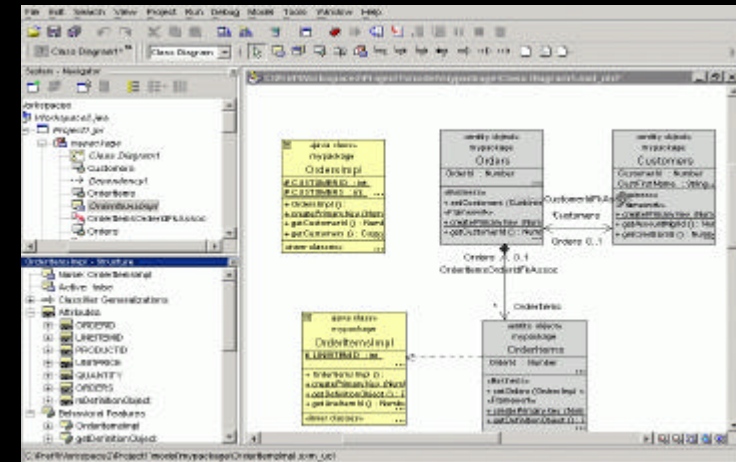
Oracle9i JDeveloper Web Services Tools Speed Design & Development

- Any Technology
 - Java, J2EE, BC4J
 - PL/SQL
 - XML
 - SOAP, WSDL
- Service creation
 - Discover web services
 - Bind to web services
 - Publish web services
- Complex services
 - Aggregate services
 - Compound services
 - Conditional services
- UML Activity Modeler



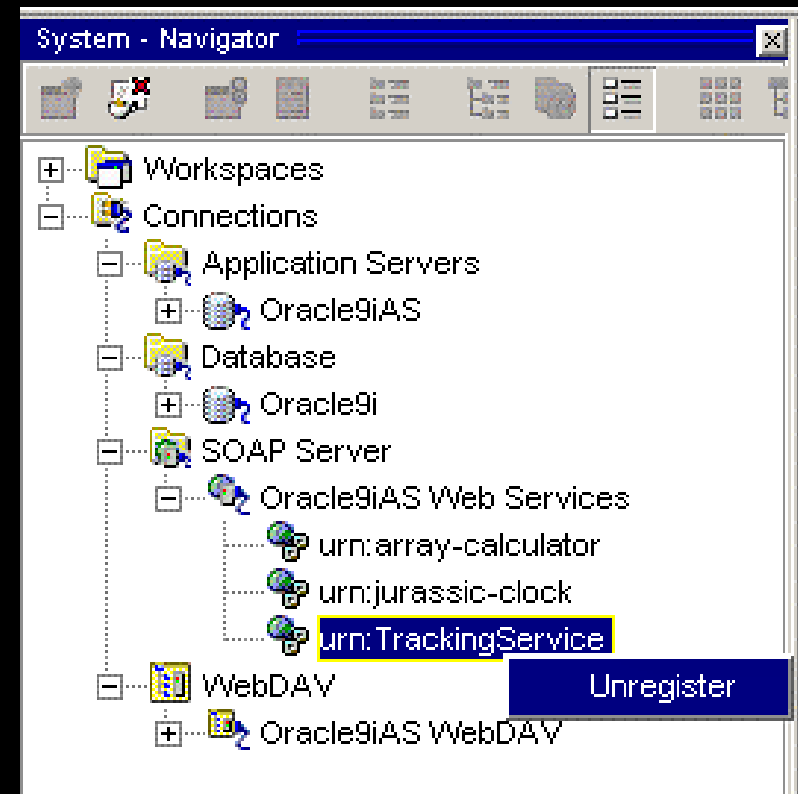
Web Services and UML Modeling

- UML Class Modeler
 - Model classes, EJBs and Web services
 - Synchronization of code, model, editors
- UML Activity Modeler
 - Web services orchestration
 - Application integration
 - Model business processes
 - Model object states



SOAP Service Browser

- Browse available SOAP services
- Register and unregister services
- Create WSDL from registered services
- Provides basis for UDDI equivalent

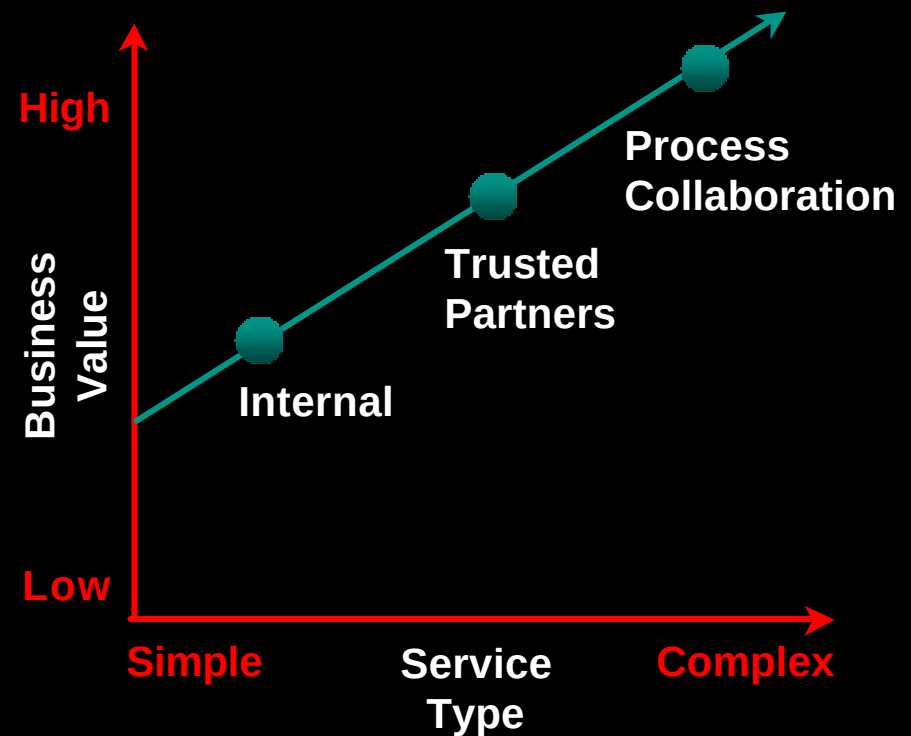


Oracle9i AS Web Services

- 100% Standards Compliant
 - Simple: SOAP 1.2, UDDI 2.0, WSDL 1.1, HTTP, SMTP, FTP
 - J2EE1.4, JAX-B, JAX-RPC, JAX-M, JAX-P, JAX-R, JSR 1.0.9
 - .NET Interoperable
 - Complex - ebXML, UNCEFACT, RosettaNet
 - MIME Attachment - W3C Literal Encoding
- Differentiators
 - Most Productive - Easiest to Develop, Migrate
 - Fastest, Most Scalable, Most Reliable
 - Ease-of-Use - Auto-Generate WSDL, Skeletons, Stubs
 - Performance - 5-10X vs Apache, 2-3X BEA, IBM
 - Availability - Hot-Deploy, Clusters, Security
 - Security - Firewalls, Single Sign-On
 - WSDL 1.1 Tools: Import, Edit, Generate, Compile

Web Services Scenarios

- Simple Web Services
 - SOAP, WSDL, UDDI
 - Synchronous
 - Point-to-point
 - Primarily data exchanges
- Complex Web Services
 - ebXML and RosettaNet
 - Asynchronous, multi-party
 - Require security and transactions
 - Primarily business processes



Open Source Support

- Integrated design time for Jakarta Struts, Apache Ant, JUnit and CVS
 - Struts: Web application framework
 - Ant: Build/Make tool
 - JUnit: Testing tool
 - CVS: SCM tool
- First production integration of Struts into a Java IDE
- Oracle will help ensuring Eclipse developers can take advantage of the Oracle platform in the same way as developers using Oracle's own Oracle9i JDeveloper



Oracle9i AS Toolunterstützung



Borland

Compuware Corporation



bmcsoftware



VM GEAR



serena



TogetherSoft



FatWire
Transforming e-business strategies
into business realities



Rational
the e-development company



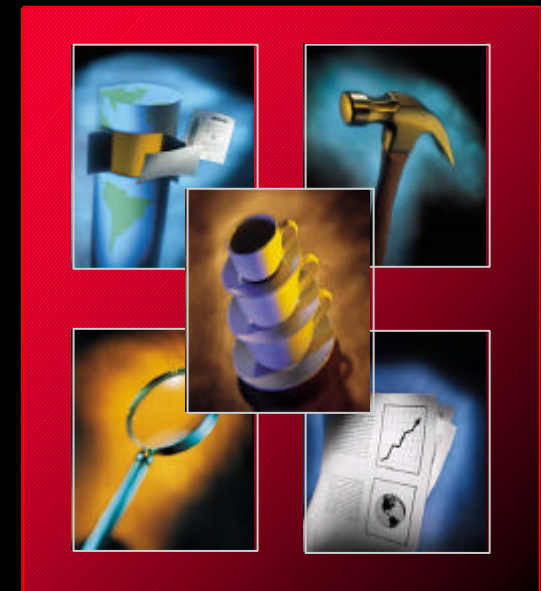
APPLIANT

ORACLE

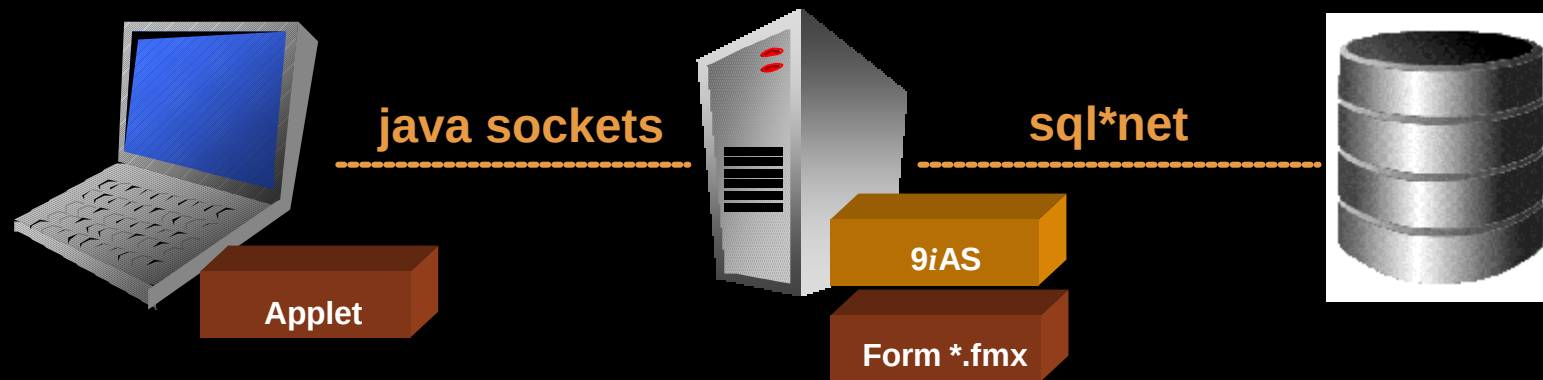
Anwendungsentwicklung

- Viele Sprachen
 - Java
 - J2EE: Servlets, JSPs, EJBs
 - Java Stored Procedures
 - PL/SQL, PSPs (mod_plsql)
 - C, C++, Java (mod_fastcgi)
 - Perl (mod_perl)
- 4GL: Modellbasierte Entwicklung
 - Oracle Designer, Oracle Developer
- Komponentenbasierte Entwicklung
 - JDeveloper, BC4J, UIX, UML

9i Developer Suite

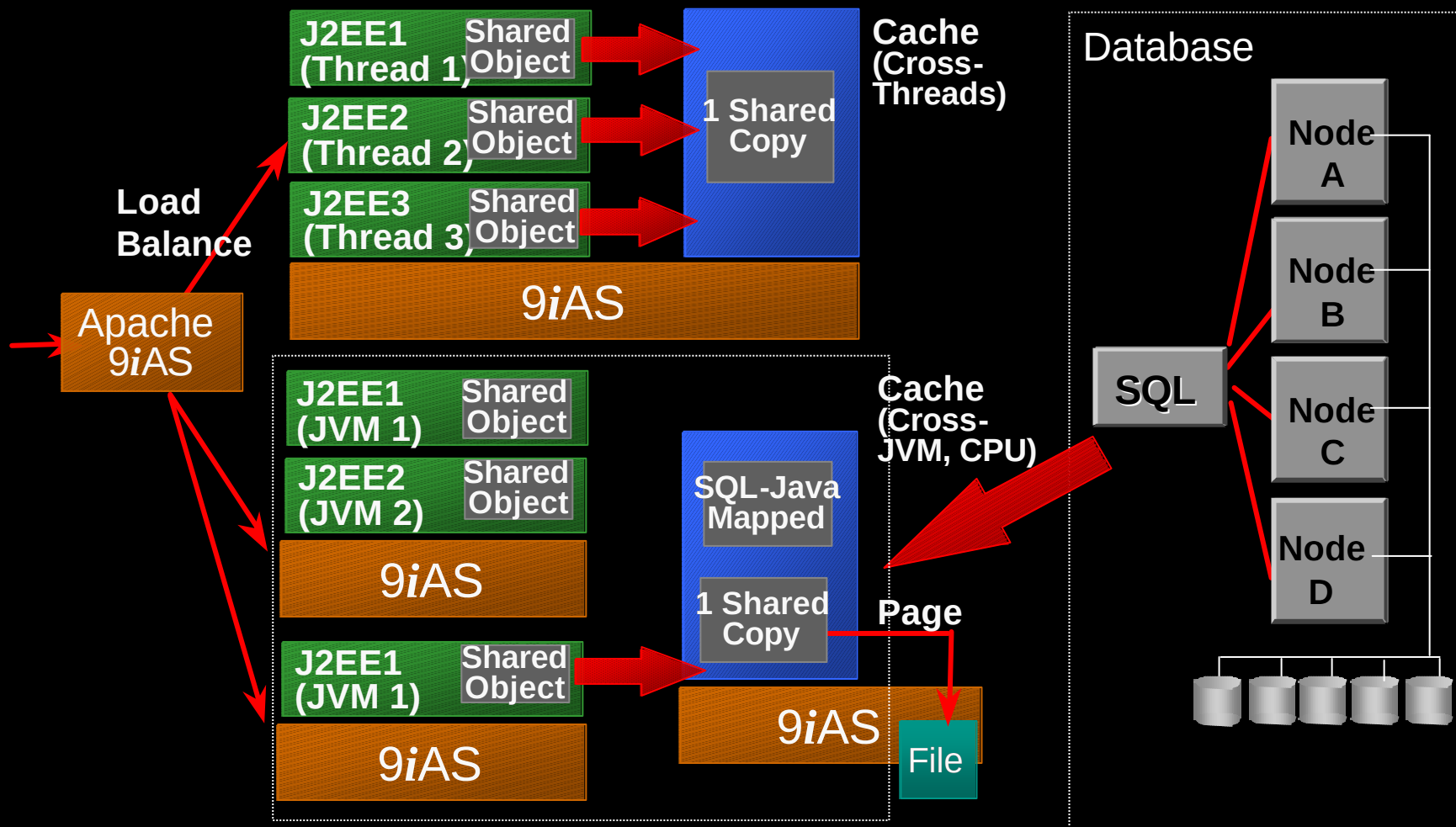


Oracle Forms Service

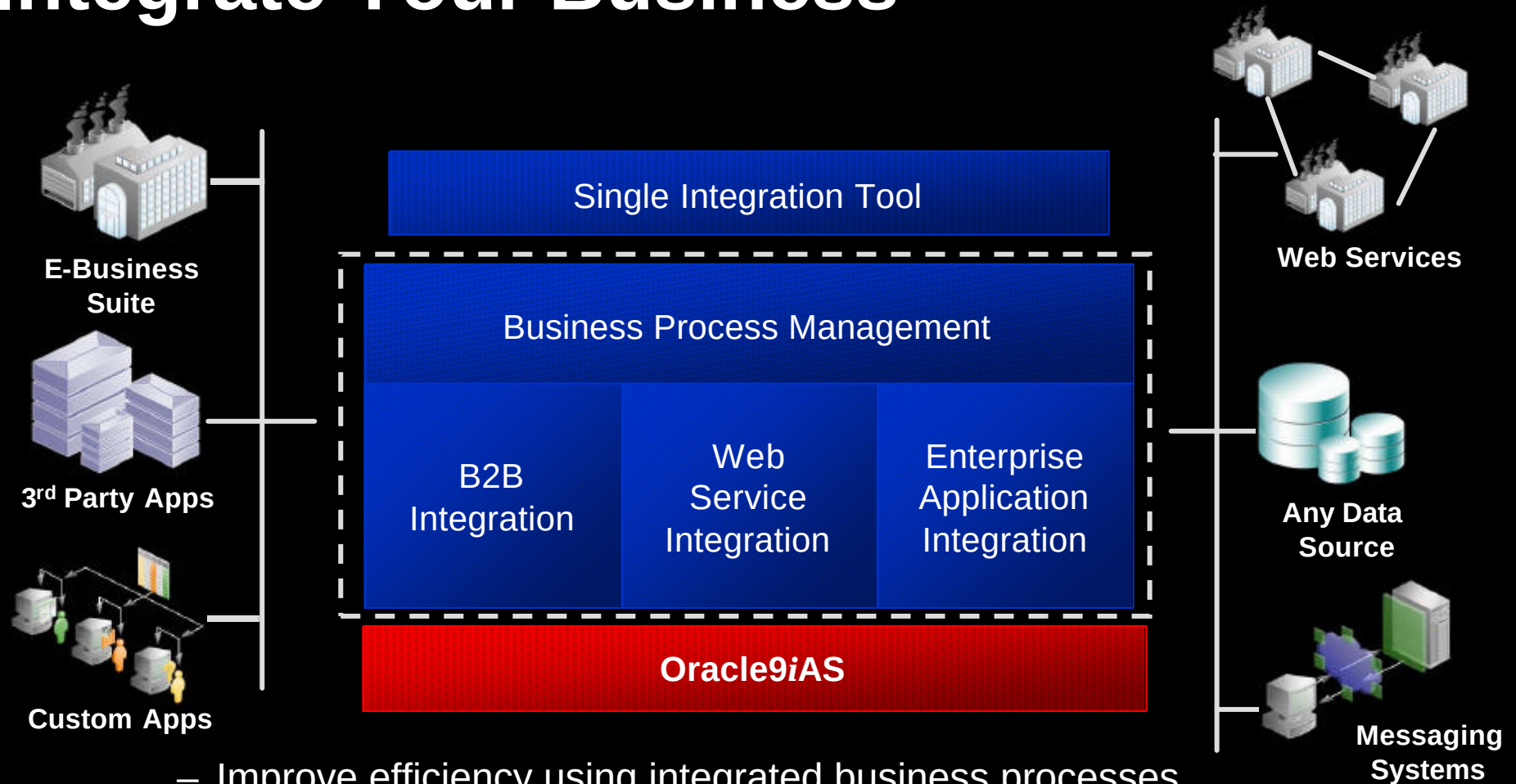


- Keine Runtime-Installation auf dem Client
- Einsatz bestehender C/S-Forms-Anwendungen im Web
- Loadbalancing mit dem Metrics-Server

Java Object Caching



Integrate Your Business



- Improve efficiency using integrated business processes
- Open, standards-based architecture
- Single solution for A2A, B2B, and web services integration
- Best solution pre-integrated with Oracle E-Business Suite

ORACLE®

Oracle9iAS Integration



- Improve efficiency using integrated business processes
- Common view approach minimizes impact of adding applications
- Pre-certified JCA based adapters
- Business process intelligence

Integration Connectors

Databases

- Oracle7.3, 8.0, 8i, 9i
- MS SQL-Server
- IBM DB/2 UDB
- Sybase
- Informix
- JCA Datasources
- OLE-DB Datasources

Messaging Facilities

- Oracle AQ
- MQ-Series
- SWIFT
- SONIC
- MSMQ

Mainframe/Legacy

- CICS
- ISAM, MVS (Soon)

Applications

- SAP R/3, R/4
- Oracle 10.7, 11.5.X
- Peoplesoft 7, 8
- Ariba
- Commerce One
- JD Edwards
- Siebel
- Siebel 2000
- i2
- Any JCA Application

Future

- Vantive
- Clarify
- Lawson
- Baan

Transports

- http, http-S
- SMTP
- ftp, ftp-S
- CORBA/IIOP
- COM/COM+
- Flat File

B2B Connectivity

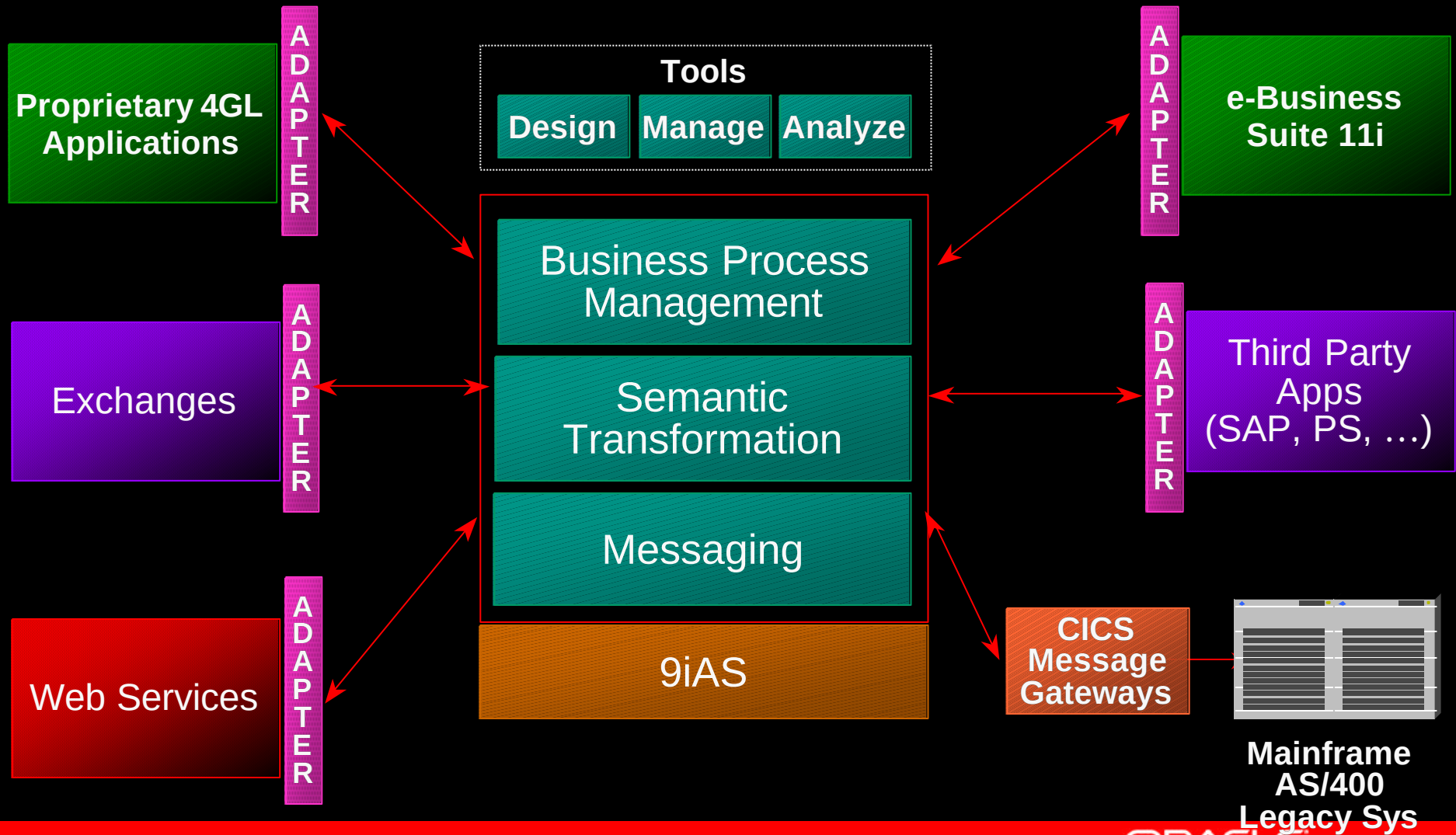
- RosettaNet 1.1, 2.0
- ebXML

DataTypes

- DB, XML
- EDI X.12, EDIFACT
- OAG BODs
- RNIF 1.1, 2.0
- SAP Idocs
- PS MADs

Oracle9iAS InterConnect

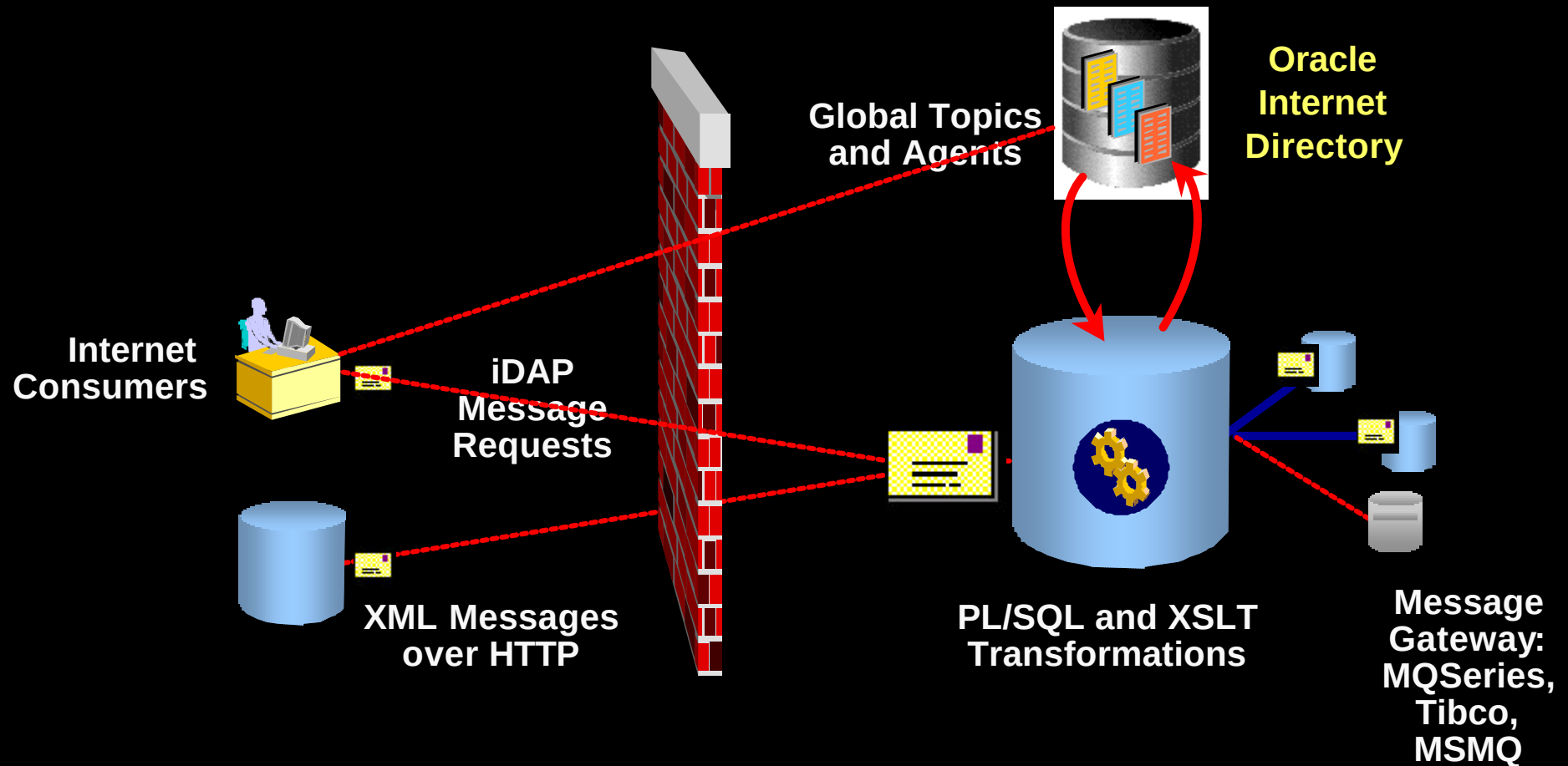
Connect Applications, Trading Partners, Web Services



ORACLE

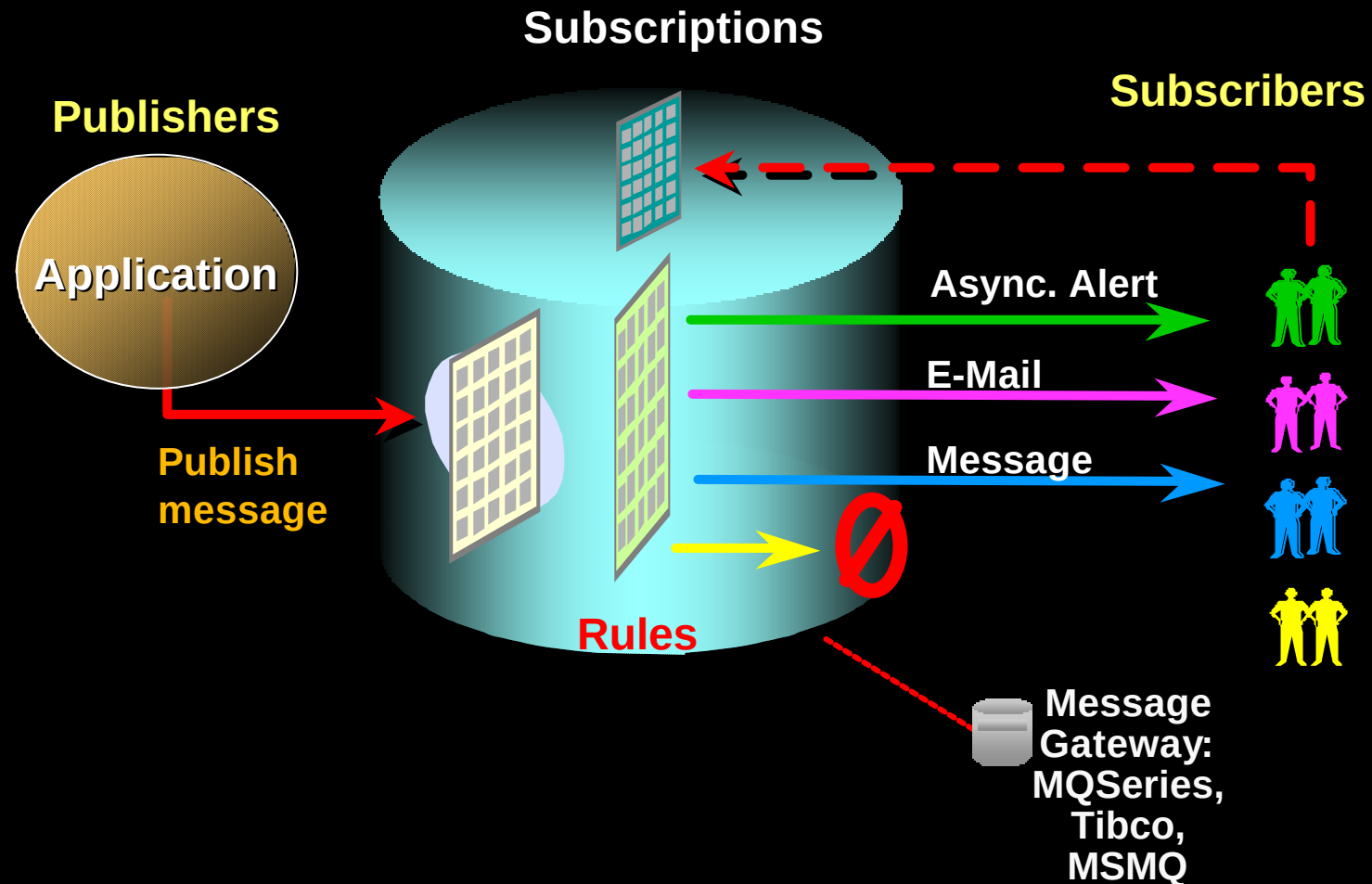
Oracle9i Advanced Queuing

Millions of messages/hour in industry standard formats



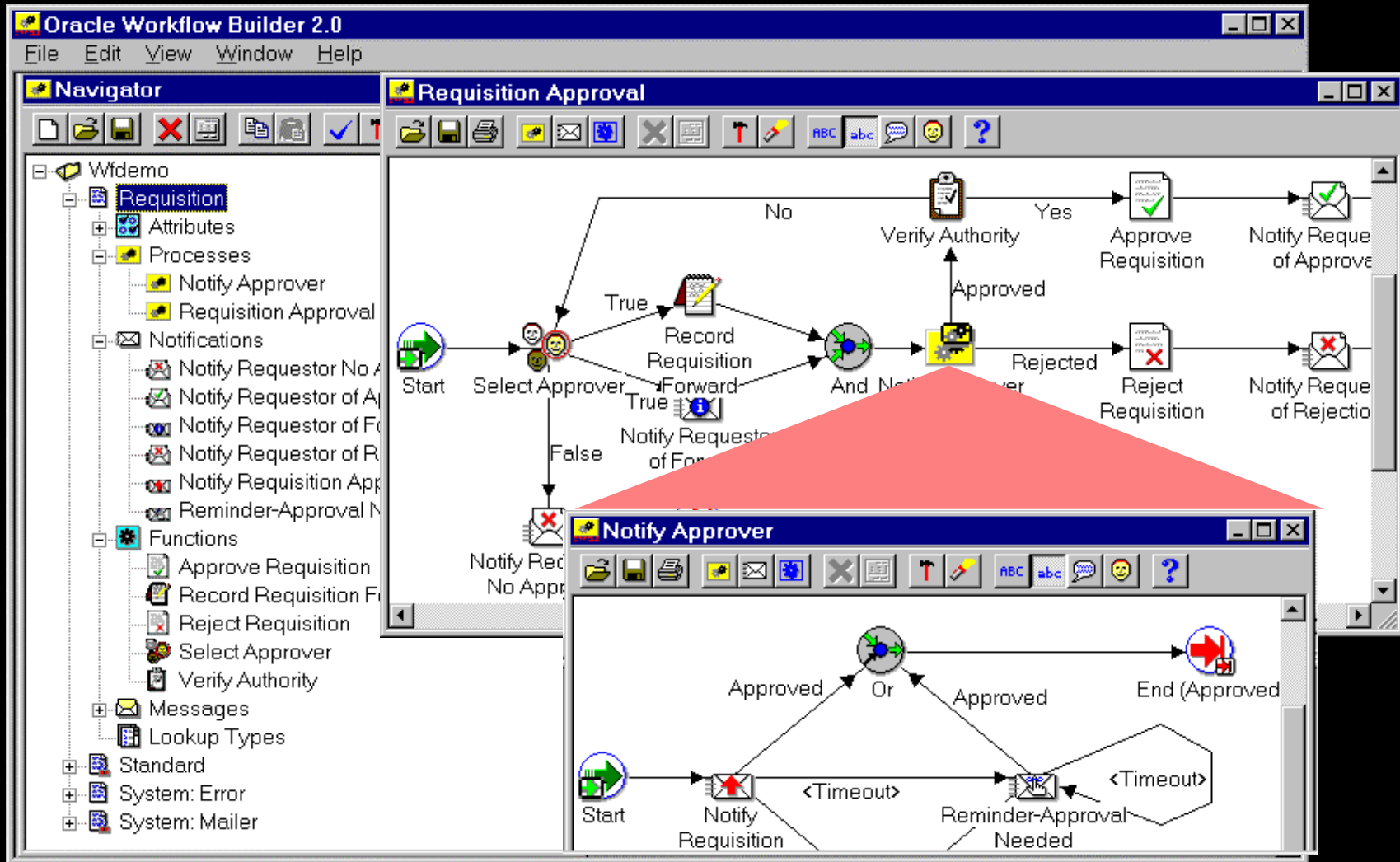
ORACLE®

Oracle9i Advanced Queuing



ORACLE®

Oracle9i Workflow Builder

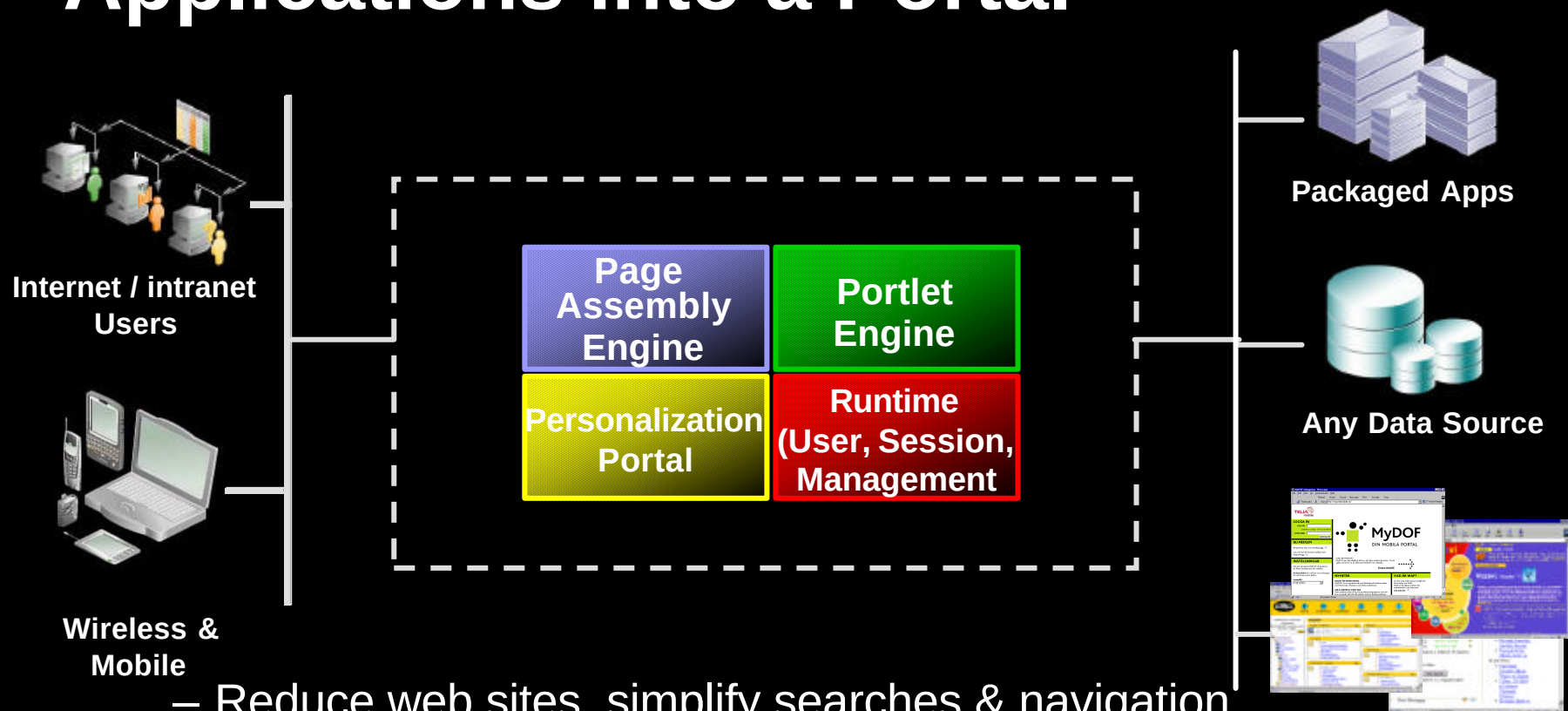


ORACLE®

Integration Differentiators

- Adapters
 - JCA+ - Metadata, Two-Way
 - Pre-Packaged - Many Certified
 - Services - Restart, Recovery, Txn Integrity
 - Adapter SDK - Get, Put, Metadata, Notification
- Benefits
 - Standards-Based - J2EE, JCA, Web Services, B2B
 - Common View - Events, Process
 - Maintainable - Metadata, Versions, Common View
 - RAS - Scalable, Reliable, Transactional
 - Process Monitoring - Consistent State
 - Process Intelligence - Non-Rep., Audit, Track

Aggregate Web Sites and Applications into a Portal



- Reduce web sites, simplify searches & navigation
- Single sign-on security framework, enterprise search
- Assemble personalized portal from pre-built “portlets”
- Productive wizard driven page design and development

Oracle9i AS Portal

Webbasierte, Wizardgestützte Entwicklung und Verwaltung

Zentrale Suche

Einfache Navigation

Personalisierte Portale

Eine Site, viele Anwendungen

Single Sign-On

Viele fertige Portlets

J2EE & Web Services Portlets

The screenshot displays the Oracle9i AS Portal interface within a Netscape browser window. The interface is titled 'Oracle Field Sales' and features a navigation bar with tabs for Customers, Opportunities, Quotes, Forecasts, Money, Contacts, and Profile. Below the navigation bar, there are several portlets. The 'Customers' portlet shows a list of top customers with their values. The 'Opportunities' portlet shows a list of opportunities with their names, values, and statuses. The 'Forecasts' portlet shows a pipeline chart. The 'Pipeline Chart' portlet shows a funnel chart. The 'Stocks' portlet shows a list of stocks. The interface also includes a search bar, a 'Find' button, and a 'Go' button. The bottom of the browser window shows the status bar with 'Document: Done'.

Customer	Value	Status
Actel	\$1,000,000	Active
IBM Corp	\$1,000,000	Active
Oracle	\$1,000,000	Active
ABC Inc	\$1,000,000	Active
Frank Oz	\$1,000,000	Active
Courtney Gant	\$1,000,000	Active
Kristin Bauersfeld	\$1,000,000	Active
Courtney Gant	\$1,000,000	Active
Kristin Bauersfeld	\$1,000,000	Active
Pamela Thompson	\$1,000,000	Active

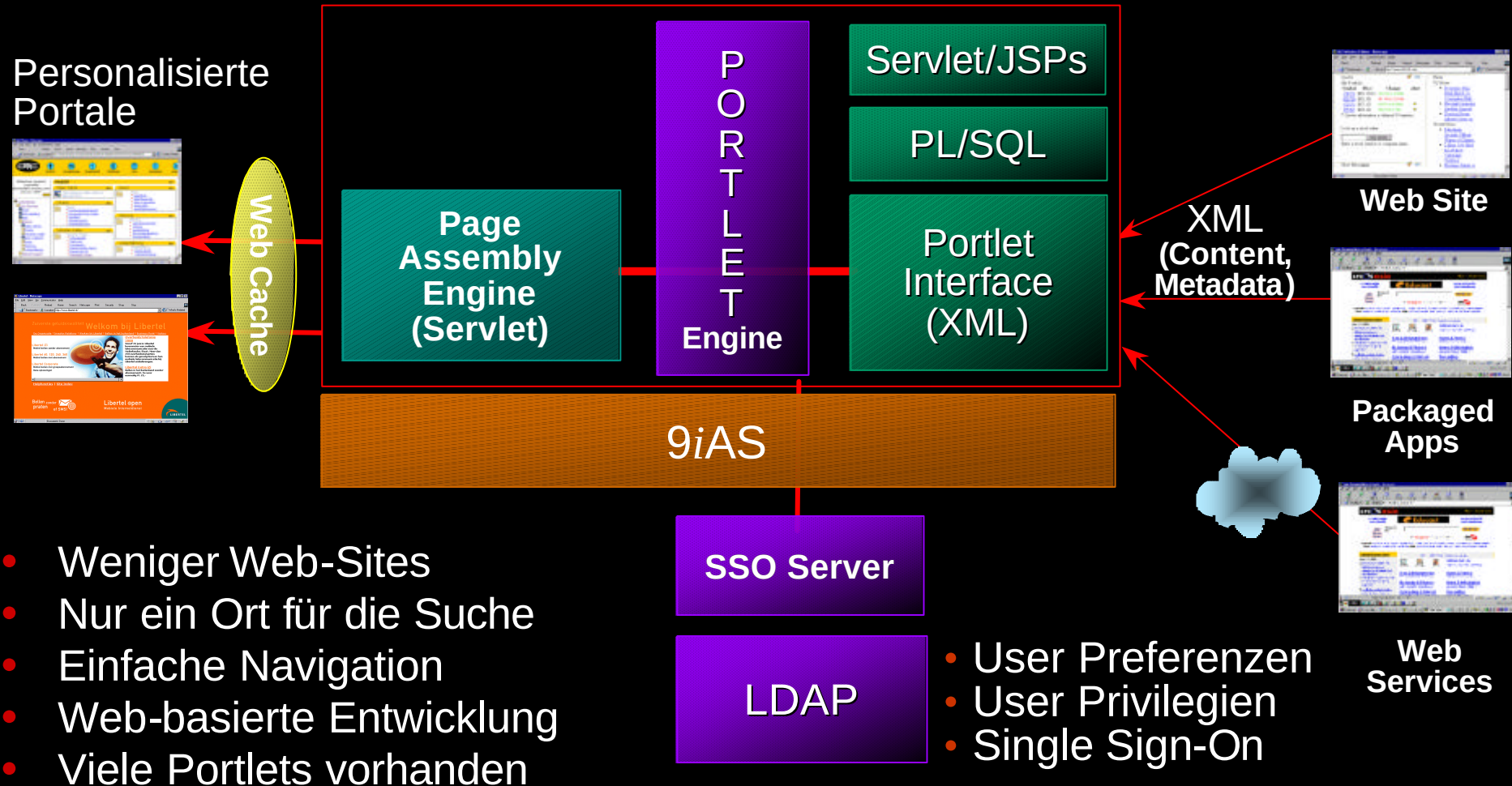
Opportunity	Name	Value
WAN Buildout	Qwest Comm	4,000
Router Upgrade	Ameritech	2,000
LAN Switches	Ameritech	1,500
Hubs&BridgesUp	ARCOR GmbH	1,000
Network Consol.	IBM	1,000
ATM Switches	Alcatel	900
New Hubs	Tkt.Mr.Online	750
New Routers	Yahoo!	225

Start Date	Customer	Opportunity	Value	Status
15-MAR-99	Airtouch Corp	LAN switches	\$200,000	Forecasted
15-MAR-99	IBM Global Netwks	WAN buildout	\$300,000	Preliminary
13-MAR-99	Pac Bell Mobile	New Hubs	\$1,000,000	Active
11-MAR-99	TCI Cable	Router Upgrade	\$350,900	Forecasted
09-MAR-99	GenX Inc	Router Upgrade	\$350,900	Forecasted
08-MAR-99	Mer Software	Switches	\$200,000	Upside
07-MAR-99	Docs Corp	Network Consol.	\$200,000	Preliminary
06-MAR-99	Donalds	ATM dugout	\$200,000	Preliminary
05-MAR-99	AT	Router Upgrade	\$200,000	Preliminary
04-MAR-99	on Carbide	Switches	\$200,000	Preliminary
03-MAR-99	Pepsi Co	Network Consol.	\$200,000	Preliminary
02-MAR-99	Coca Cola	Router Upgrade	\$200,000	Preliminary

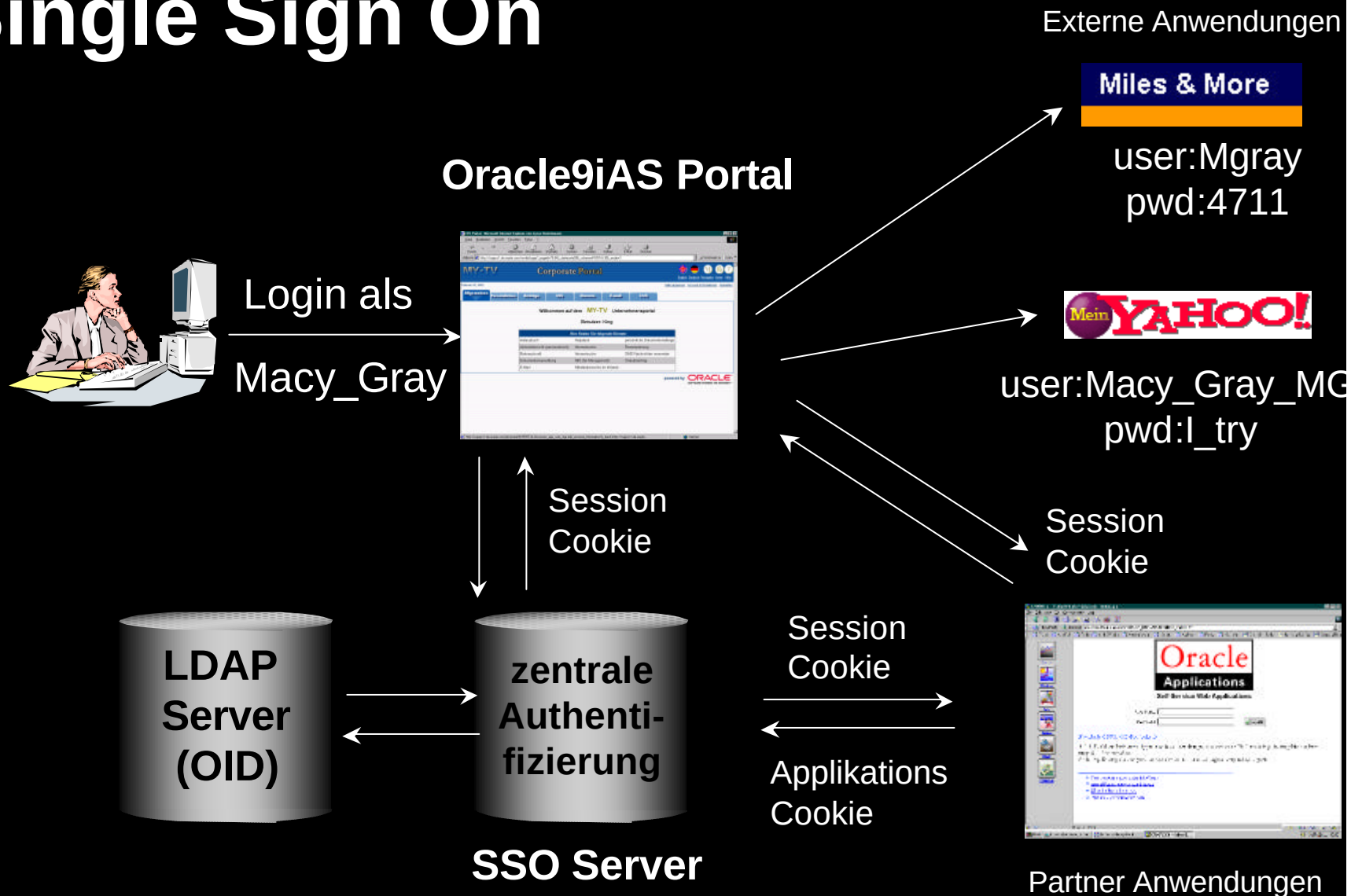
Legend for Pipeline Chart:

- Met or Exceeded Quota
- Within 30% of Quota
- More than 30% below Quota

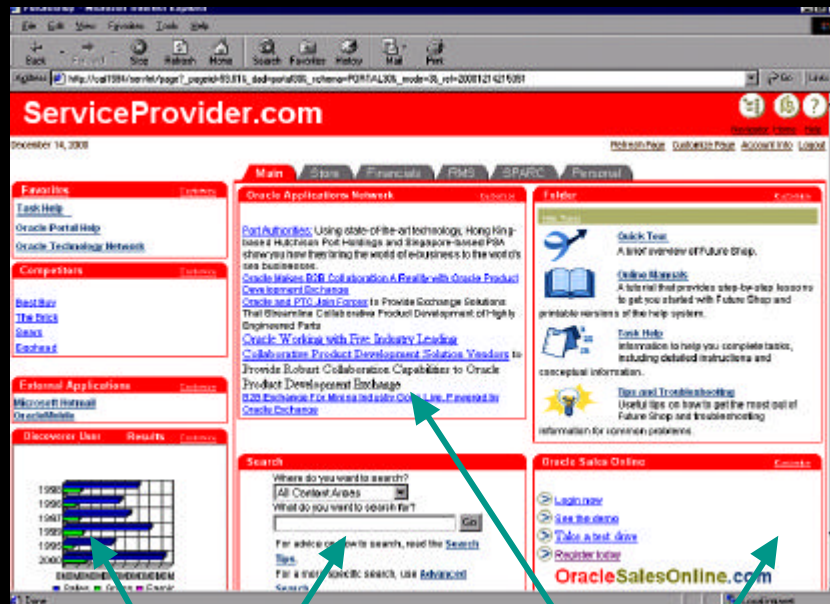
Oracle9i AS Portal



Single Sign On



J2EE Web Service Delivery and Oracle9iAS Portal



Web Service
Portlets

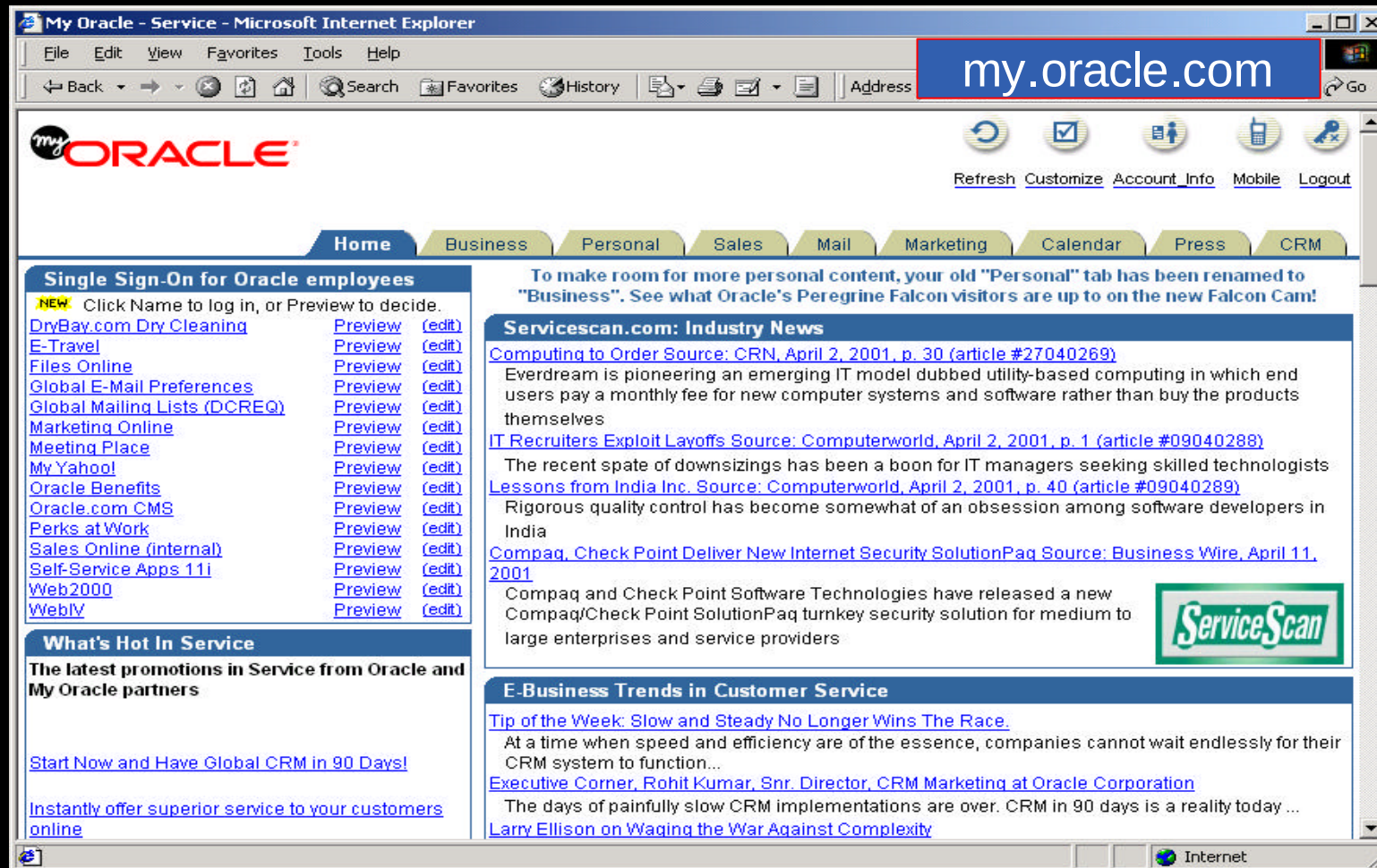
J2EE
Portlets

- Oracle9iAS Portal
 - Web service aggregation and delivery
 - J2EE infrastructure
- Standards based Portlets
 - JSR 168 – J2EE Portlets
 - OASIS Web Services for Remote Portals (WSRP)
- Portal Development Kit
 - Declarative Web service portlets
 - Programmatic Web service portlets with Oracle9i JDeveloper

Portals

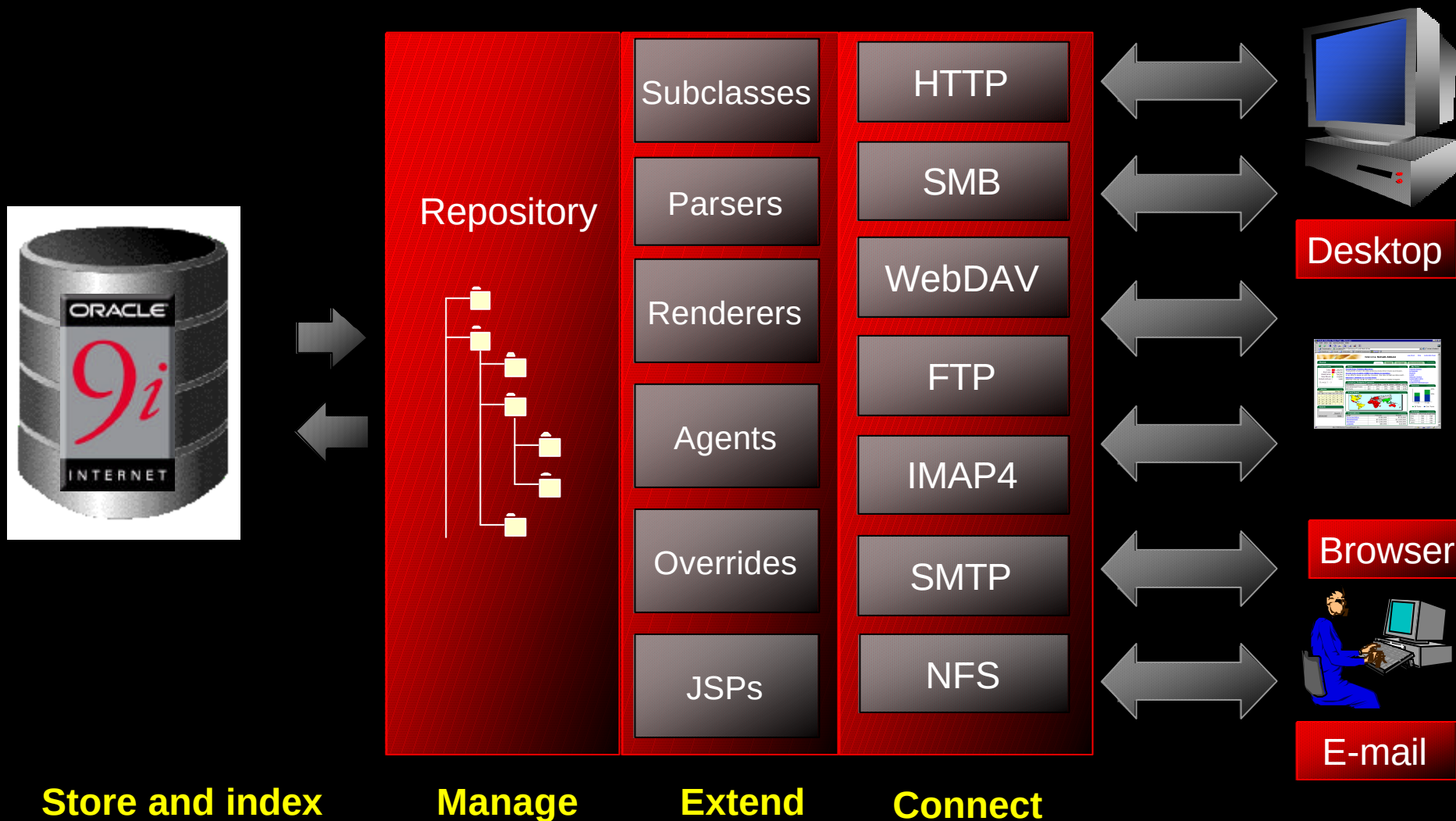
- Single Portal to Access Information
 - Aggregate, Personalize, Search
 - Enterprise-Wide Single-Sign On
- Oracle9iAS Release 2 Enhancements
 - Standards - J2EE, Web Services
 - Enhanced Intranet, Internet Search
 - Faster, More Scalable - Web Cache, Servlets
 - Seamless Fixed and Mobile Access
 - Pre-built Portlets
- Differentiators
 - Only Portal Product Vs. App Server Frameworks
 - Most Mature, Best Features, #1 Forrester
 - 200+ Portlet Providers including 11i

Wir haben für jeden von Ihnen eine Demo vorbereitet...

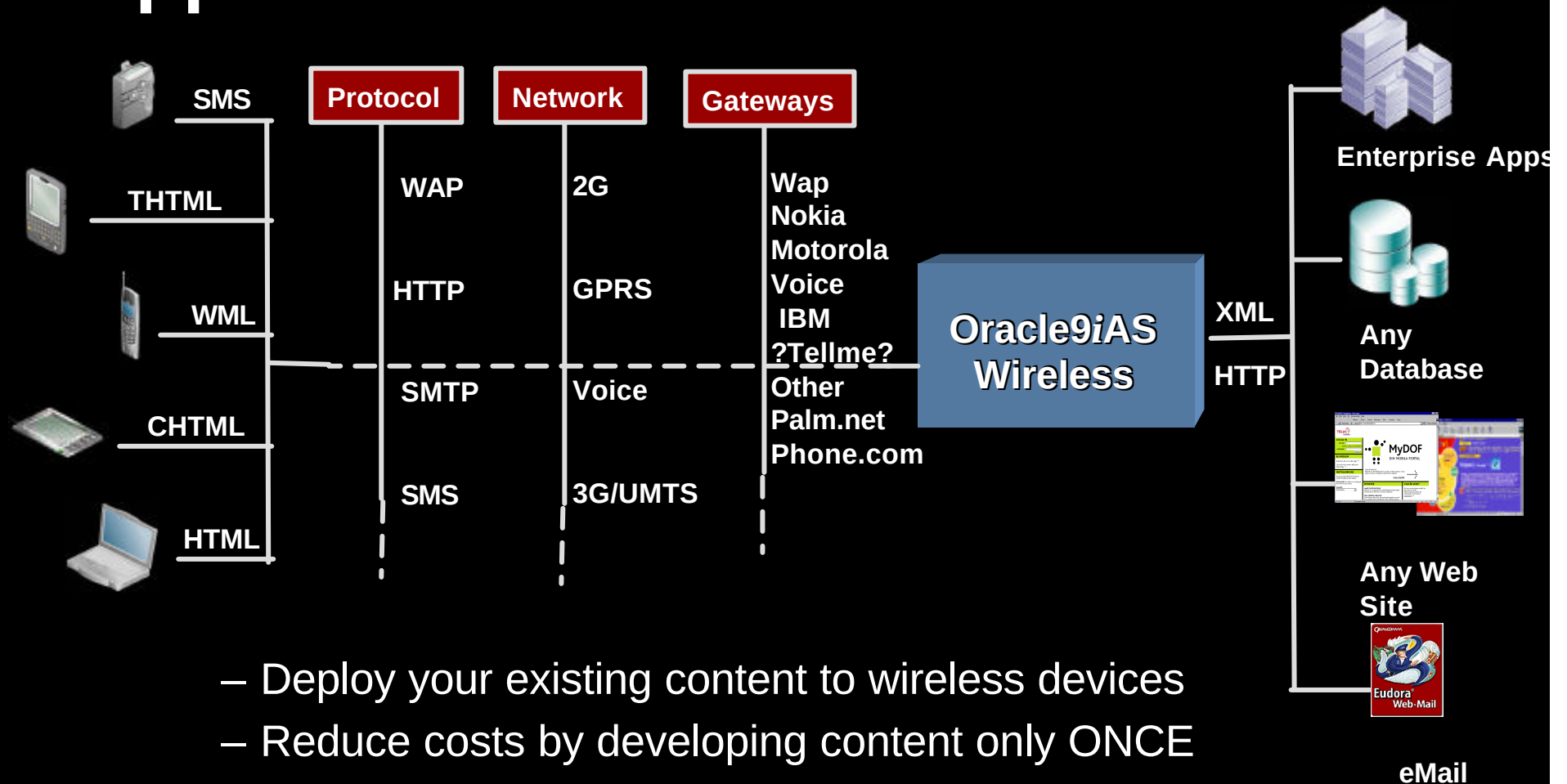


ORACLE®

Oracle9i FS



Wireless Enable Web Sites, Applications



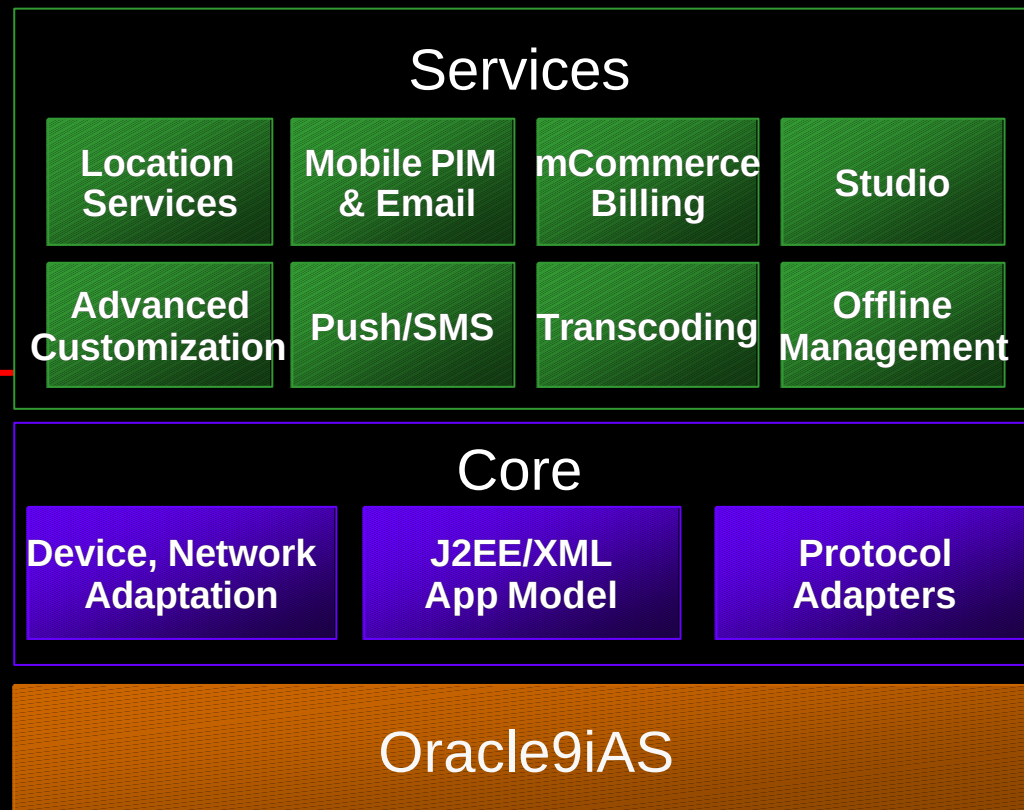
- Deploy your existing content to wireless devices
- Reduce costs by developing content only ONCE
- Provide personalized and localized access for all users

Wireless Enable Web Sites, Applications

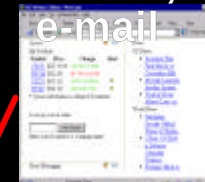
Any Device



Wireless Gateway



Any Content, Web Service, e-mail



WSDL



ORACLE®

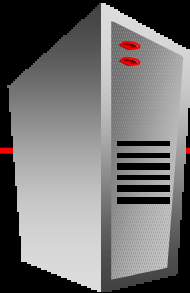
Oracle9i AS Wireless Edition



Any Device

- Nokia
- Motorola
- Ericsson
- Palm
- RIM Pagers
- Blackberry
- Any Network
-

Any Browser



Any Gateway

- Nokia
- Motorola
- Ericsson
- Phone.com
- CMG
- Tantau
- Infinity
- ...



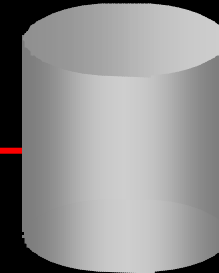
Any Markup

- HTML
- XML
- HDML
- WML
- TinyHTML
- TTML
- CHTML
- STKML
- VoXML
- VoiceXML
-

Oracle9i AS Wireless Edition

Personalized

- By User
- By Group
- By Device
- By Location
- By Language
- ...



Any Content

- Any Web Site
- Any HTML Page
- Any XML Page
- Any Database
- Any servlet
- Any JSP
- Any XSP
- Any e-mail
- ...

Oracle9iAS: Marktführer Wireless

Figure 3 Forrester Wave™: Mobile Middleware For Groupware, Q4 '02

View the data supporting this graphic by clicking the online "Get Data" button above the figure.

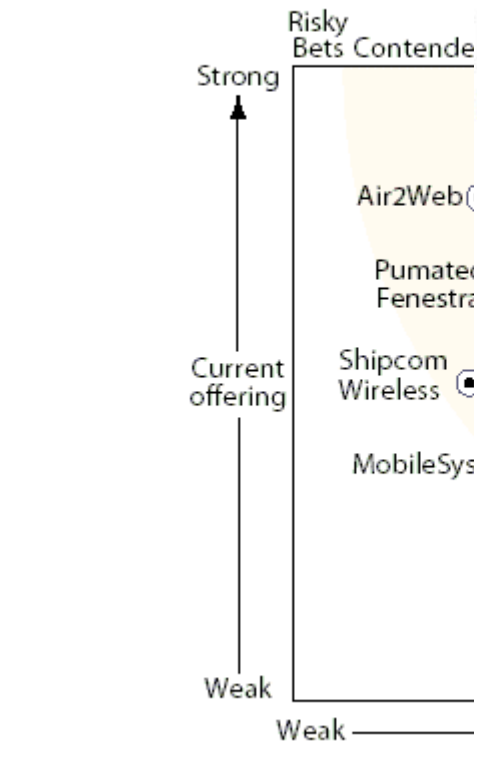


Figure 4 Forrester Wave™: Mobile Middleware For Enterprise Apps, Q4 '02.

View the data supporting this graphic by clicking the online "Get Data" button above the figure.



Source: Forrester Research, Inc.

ORACLE

Wireless

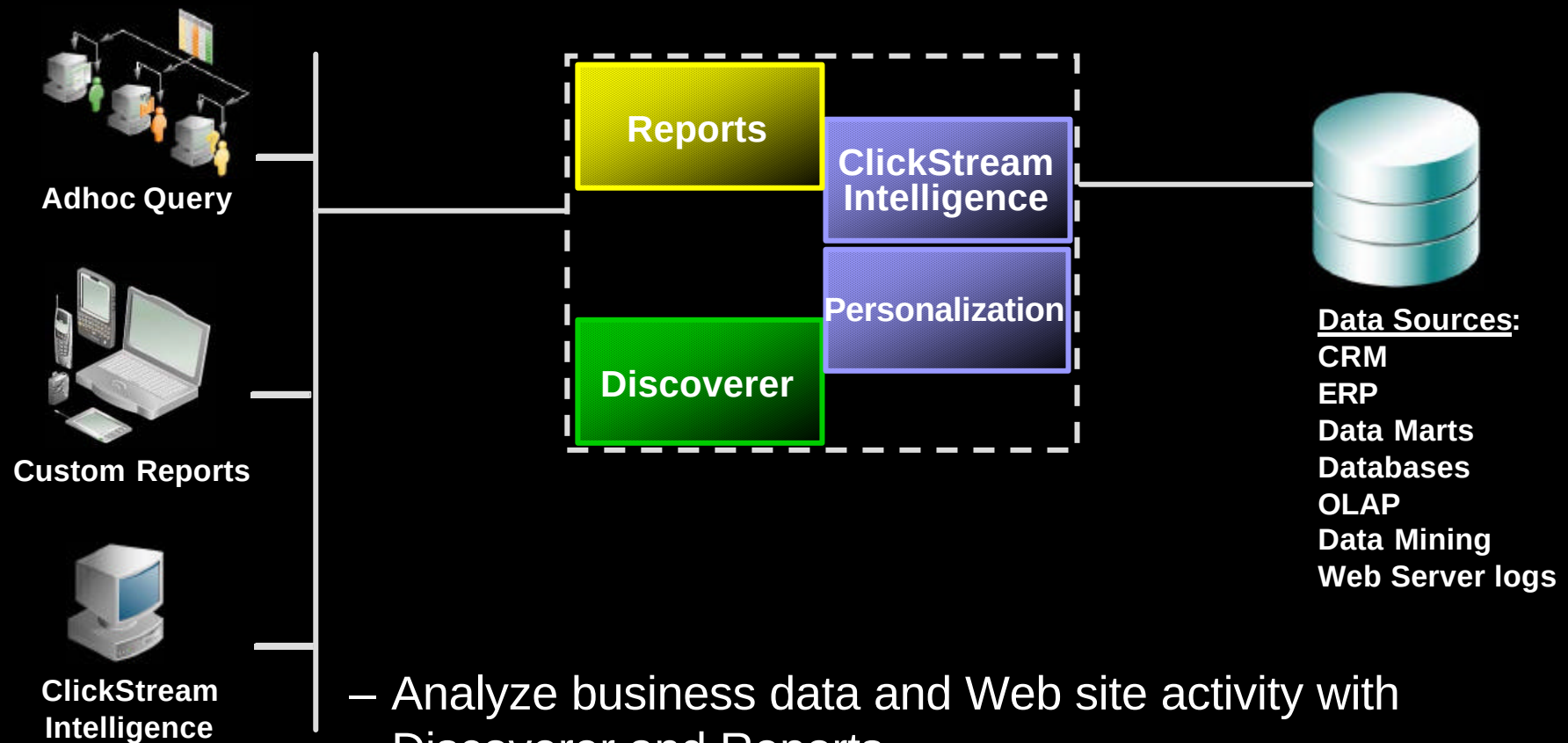
- Any Application, Any Device, Any Network
 - Devices - 70+ Certified, All Microbrowsers
 - Networks - GSM, CDMA, iMode, 2/2.5/3G
 - Transcoding, Location Services, PIM
- Oracle9iAS Release 2 Enhancements
 - Push - SMS, WAP, Text, Mail, SIM
 - Voice - VoiceXML, Authentication, Personalization
 - Security - WTLS, HTTP-S, Mobile Wallet
 - 2.5, 3G - Sessions, Multi-Channel
- Differentiators
 - Only App Server with All Devices, Networks
 - Best Wireless - Not Transcoding

Wireless

- Network Independent
 - Any Content, Device, Network, Gateway
- Device Independent
 - Phone, Palm, iPAQ, Laptops, RIM, iMode, ..
- With True Wireless Support
 - Location, Voice, SMS, Alerts, Broadband
- Productive Wireless Solutions
 - Mobile PIM, m-Commerce, Telematics
- Deployed Flexibly
 - Customer Premise, Hosted, ASP

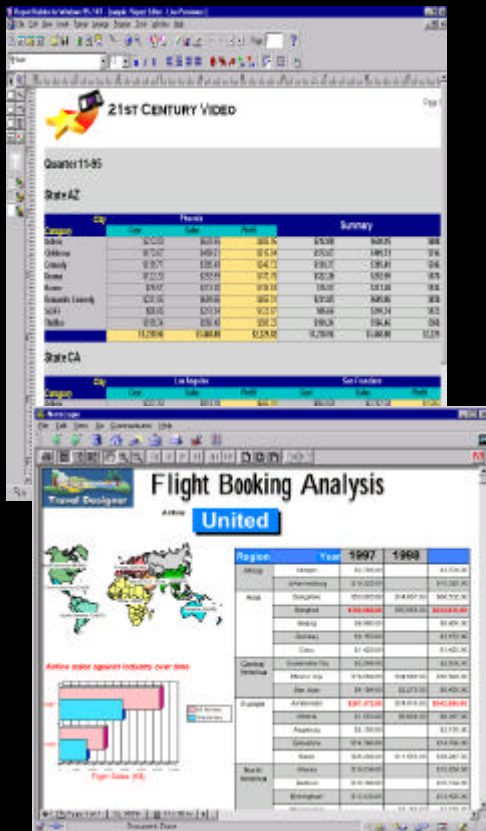


Extract Business Intelligence



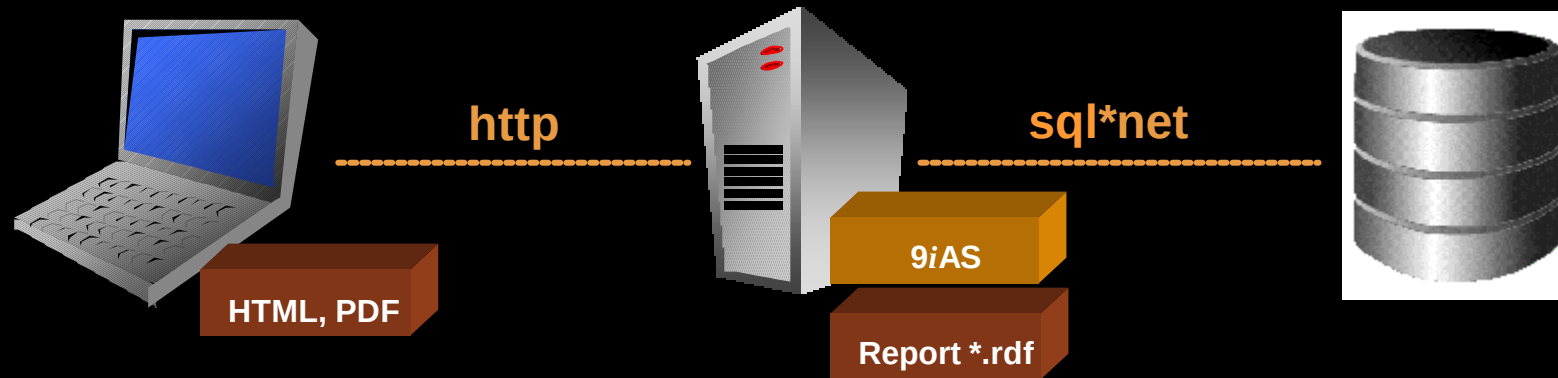
- Analyze business data and Web site activity with Discoverer and Reports
- Share business intelligence with your stakeholders

Build and Deploy Web Reports



- **Oracle9iAS Reports Developer**
 - Sophisticated, high quality web reports
 - HTML, HTML/CSS, PDF, XML, XLS
 - Unlimited data formatting
 - High quality report visualization
 - Integration with Database
- **Oracle9iAS Reports Services**
 - Application server based reporting
 - Data and application security on the web
 - Pluggable Datasources, Security
 - Integration with Oracle9iAS Portal
 - Personalization via XML

Oracle9i AS Reports



- Keine Runtime-Installation auf dem Client
- Web-Features: Hyperlinks, Email, Umwandlung von Charts in Images
- Vermeidung von Redundanzen, Load Balancing
- Reports Queue Manager, Scheduling

Discoverer Viewer

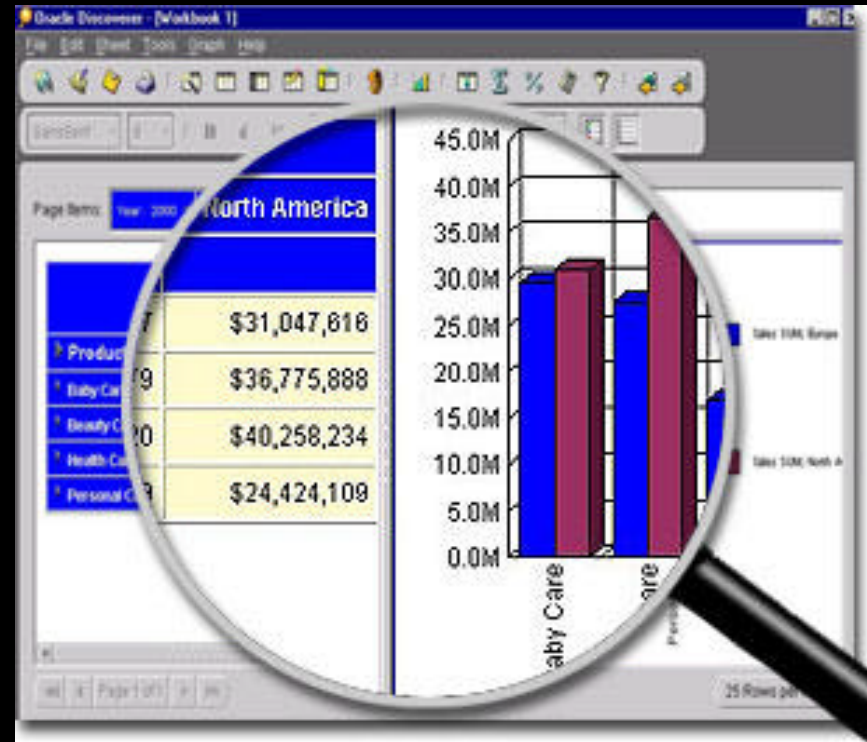
The screenshot displays the Oracle Discoverer Viewer web interface. At the top, the Oracle logo and 'Discoverer™ 4i Viewer' are visible. Navigation links include 'Neue Verbindung' and 'Arbeitsmappe öffnen'. A left sidebar titled 'Arbeitsblätter' lists several report templates: 'Rank of Sales', 'Top N / Bottom N', 'Sales as % of product category', 'Sales This Yr/Last Yr', 'Sales This Qtr / Last Qtr', and '3 Month Mvg Avg Sales'. The main content area is titled 'Cybersem4 - Rank of Sales' and includes links for 'Abfrage erneut ausführen', 'Tabellen-Layout', 'Darstellungsoptionen', and 'Druckerfreundliche Version'. Below this, a section titled 'Ranking Analysis by Year, Region and City' features a 'Calendar Year' dropdown set to '1998'. The primary data is presented in a table with four columns: 'Region', 'City', 'Sales SUM', and 'Rank Sales'. The table shows six rows of data for the 'Central' region, listing cities and their corresponding sales and ranks.

	Region	City	Sales SUM	Rank Sales
1	Central	Cincinnati	69.637	1
2		Louisville	61.236	2
3		St. Louis	35.819	3
4		Minneapolis	17.386	4
5		Chicago	16.433	5
6		Dallas	15.331	6

- Ad-hoc Datenanalyse im Web
- HTML-basiert
- Runtime
- Drill Down
- Integration mit Portal & Reports
- Sprachraum des Endanwenders

Easy, Self-Service Information Access With Oracle9i AS Discoverer

- Easy to Use
 - One Click
 - Wizard Driven
 - Drag and Drop Layout
- Increase Productivity
 - Drill Everywhere
 - Integration with Reports, Portal
 - DB Integration
- Fast, Accurate Information



Discoverer Viewer

The screenshot displays the Oracle Discoverer 4i Viewer web interface. At the top, the Oracle logo and 'Discoverer™ 4i Viewer' are visible, along with navigation links like 'Neue Verbindung' and 'Arbeitsmappe öffnen'. A left sidebar titled 'Arbeitsblätter' (Worksheets) lists several reports, including 'Rank of Sales', 'Top N / Bottom N', and 'Sales as % of product category'. The main content area shows a report titled 'Cybersem4 - Rank of Sales'. Below this, there are links for 'Abfrage erneut ausführen', 'Tabellen-Layout', 'Darstellungsoptionen', and 'Druckerfreundliche Version'. A section titled 'Ranking Analysis by Year, Region and City' includes a 'Calendar Year' dropdown set to '1998'. The primary data is presented in a table with four columns: 'Region', 'City', 'Sales SUM', and 'Rank Sales'. The table lists six cities under the 'Central' region, ranked by their sales for 1998.

	Region	City	Sales SUM	Rank Sales
1	Central	Cincinnati	69.637	1
2		Louisville	61.236	2
3		St. Louis	35.819	3
4		Minneapolis	17.386	4
5		Chicago	16.433	5
6		Dallas	15.331	6

- Ad-hoc Datenanalyse im Web
- HTML-basiert
- Runtime
- Drill Down
- Integration mit Portal & Reports
- Sprachraum des Endanwenders

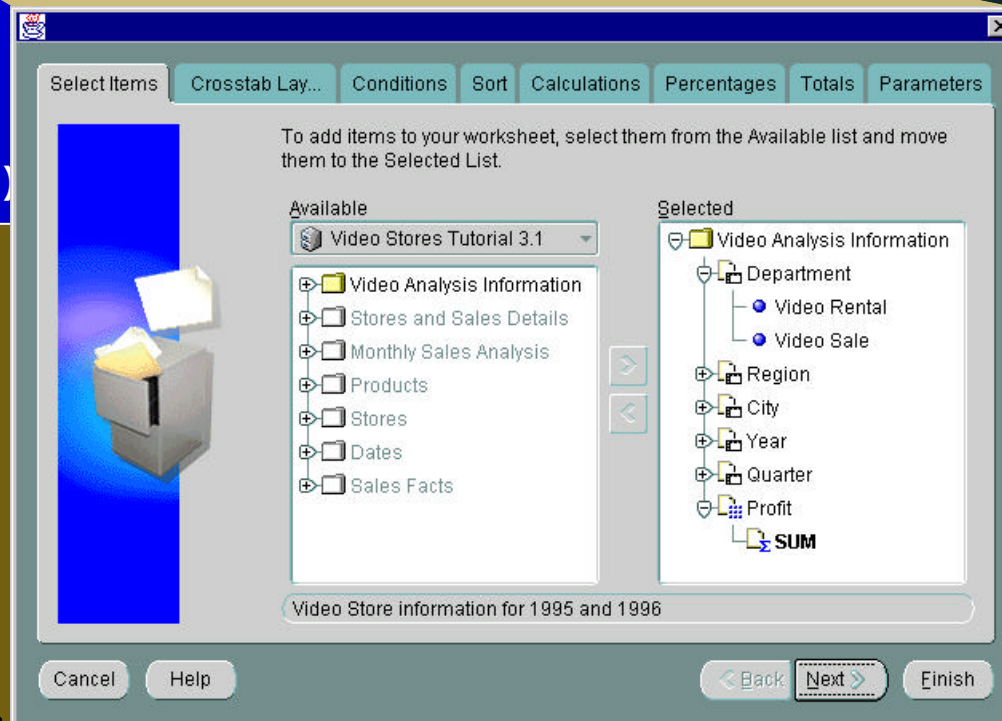
Endanwender Sicht auf die Information in der Datenbank

Complexität auflösen

RDBMS

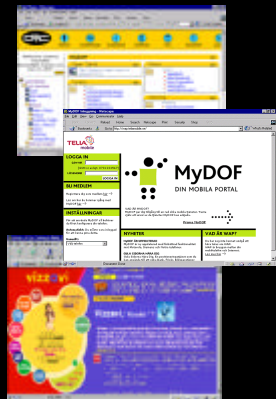
```
cl_addr3||',  
cl_twn||',  
cl_zipcode  
  
sum(nvl(qty*  
unit_price,0))
```

User's View

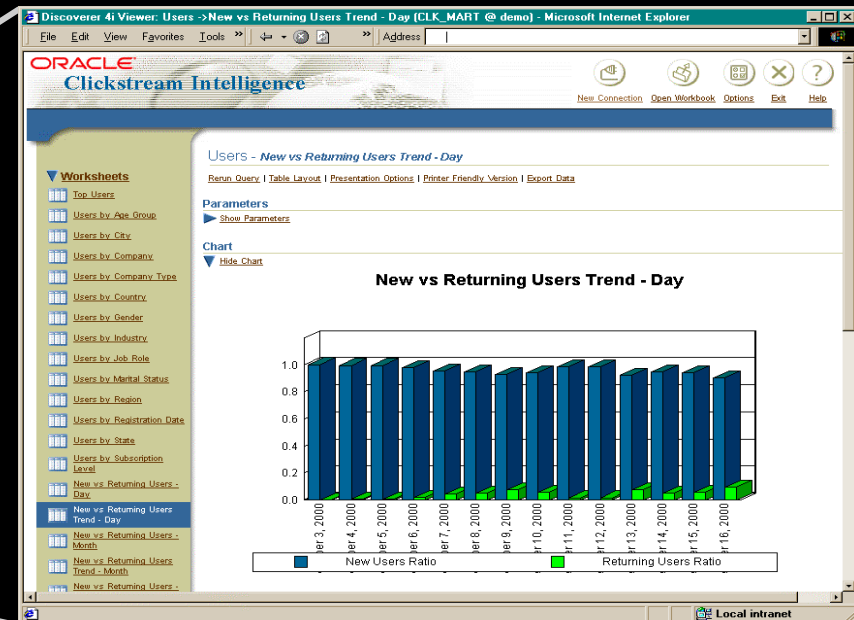


ORACLE

Extract Business Intelligence from Web Site Activity



ClickStream
Intelligence

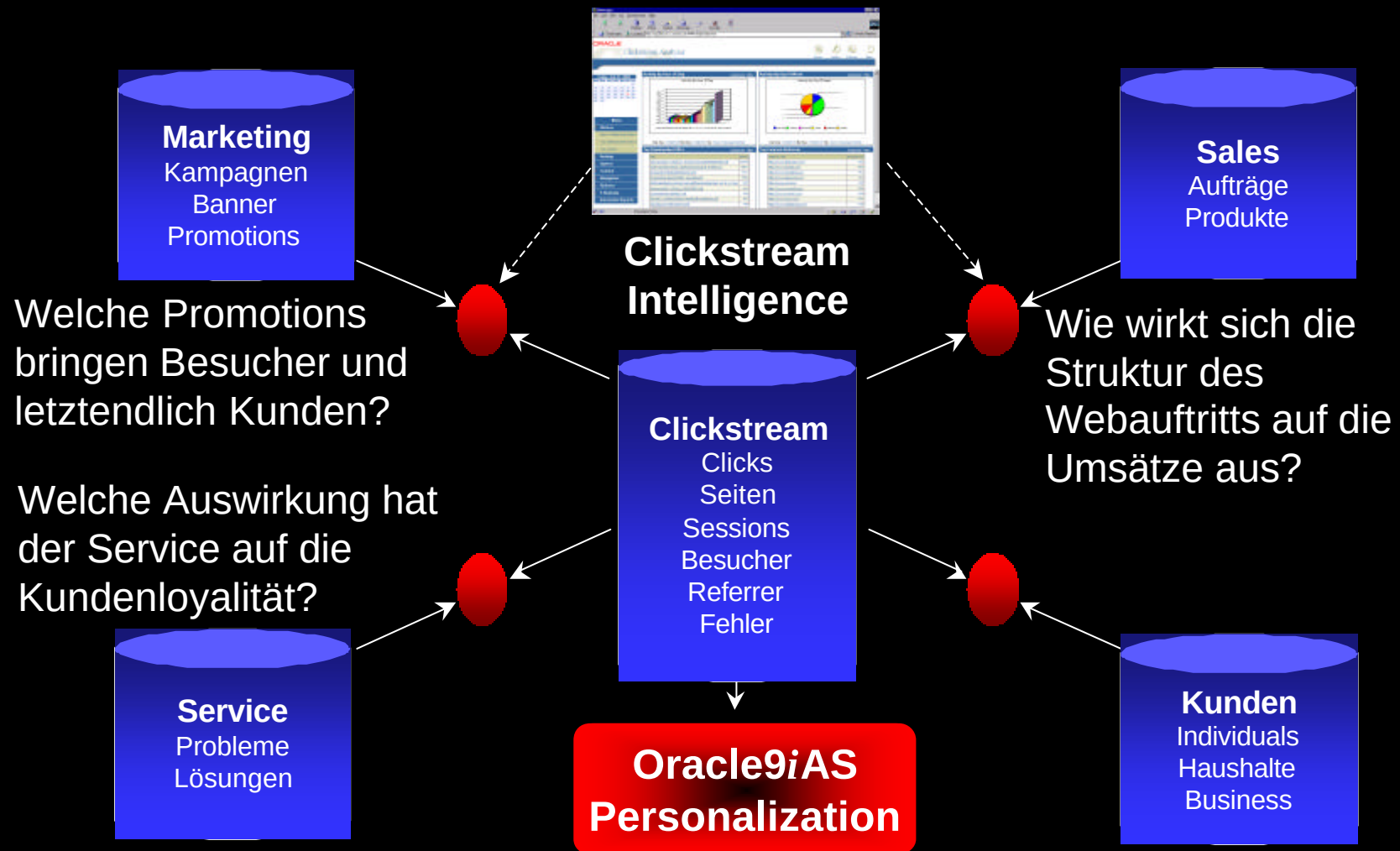


Web Site(s)

- Understand who is visiting your Web site
- Learn how long they stay and how often they come back
- Know what content are they viewing and looking for
- Use Data for Personalization

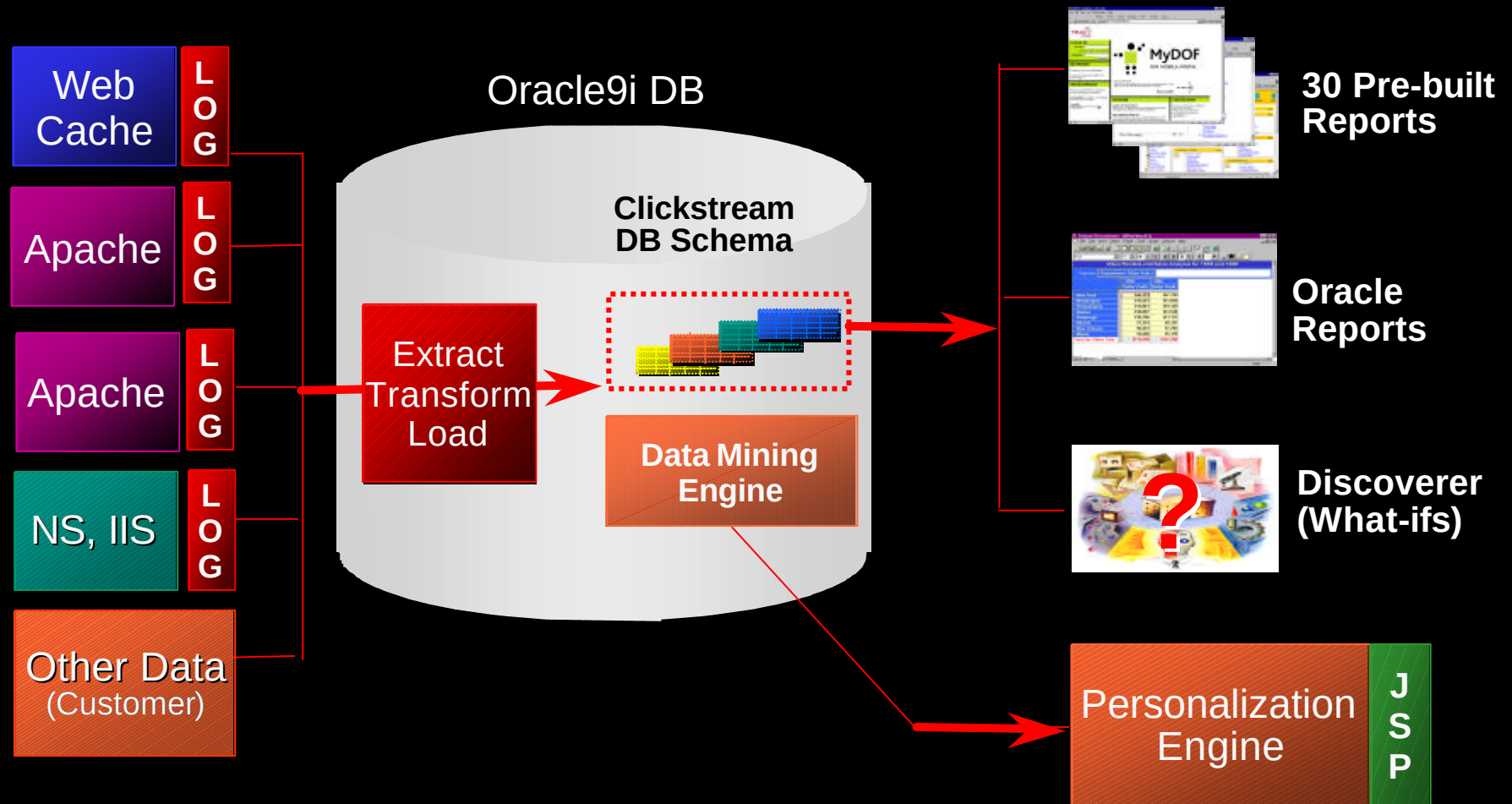
Clickstream

Fokus auf das Geschäft

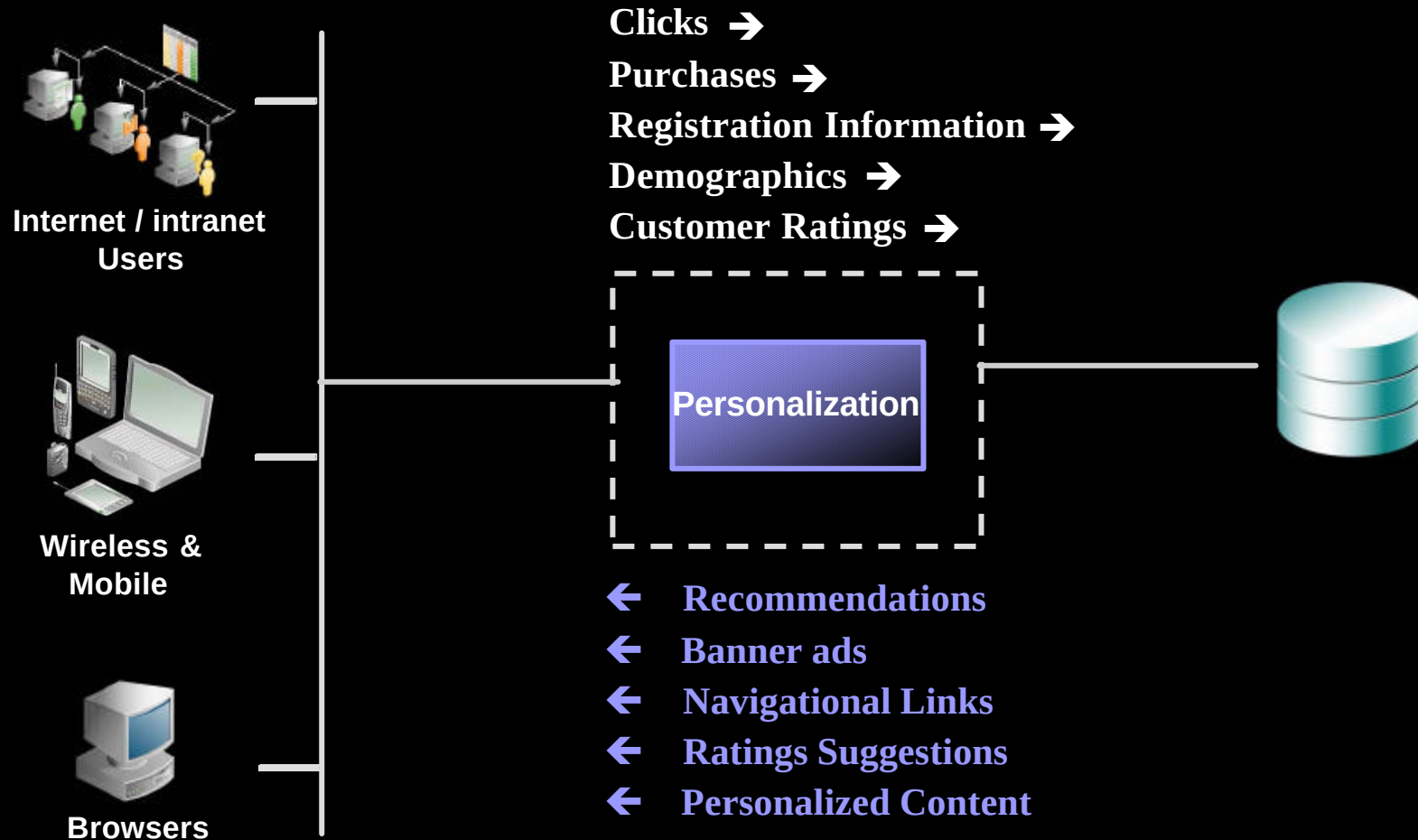


Understand Web Site Activity

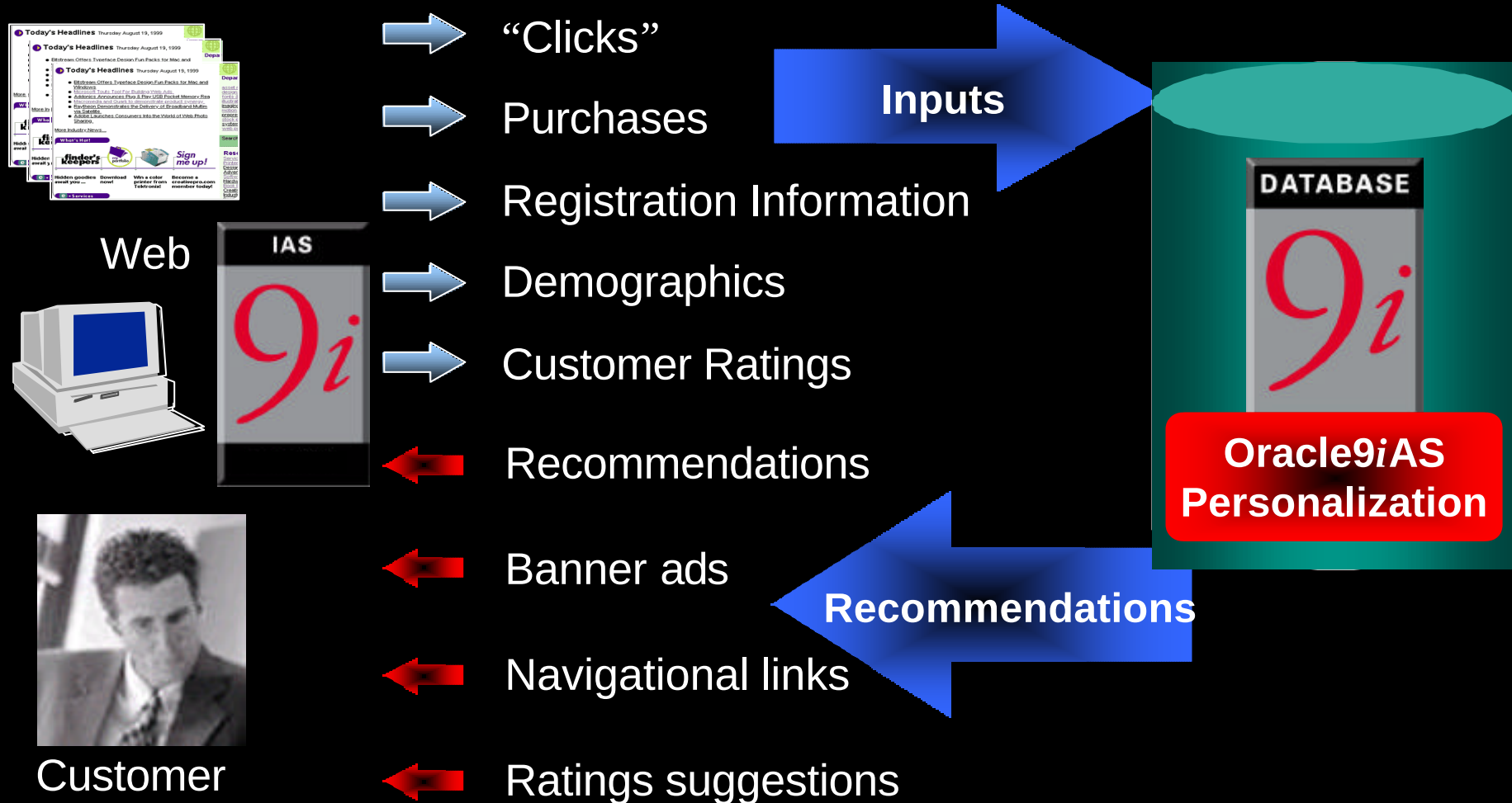
Capture and Analyze Clickstream Activity



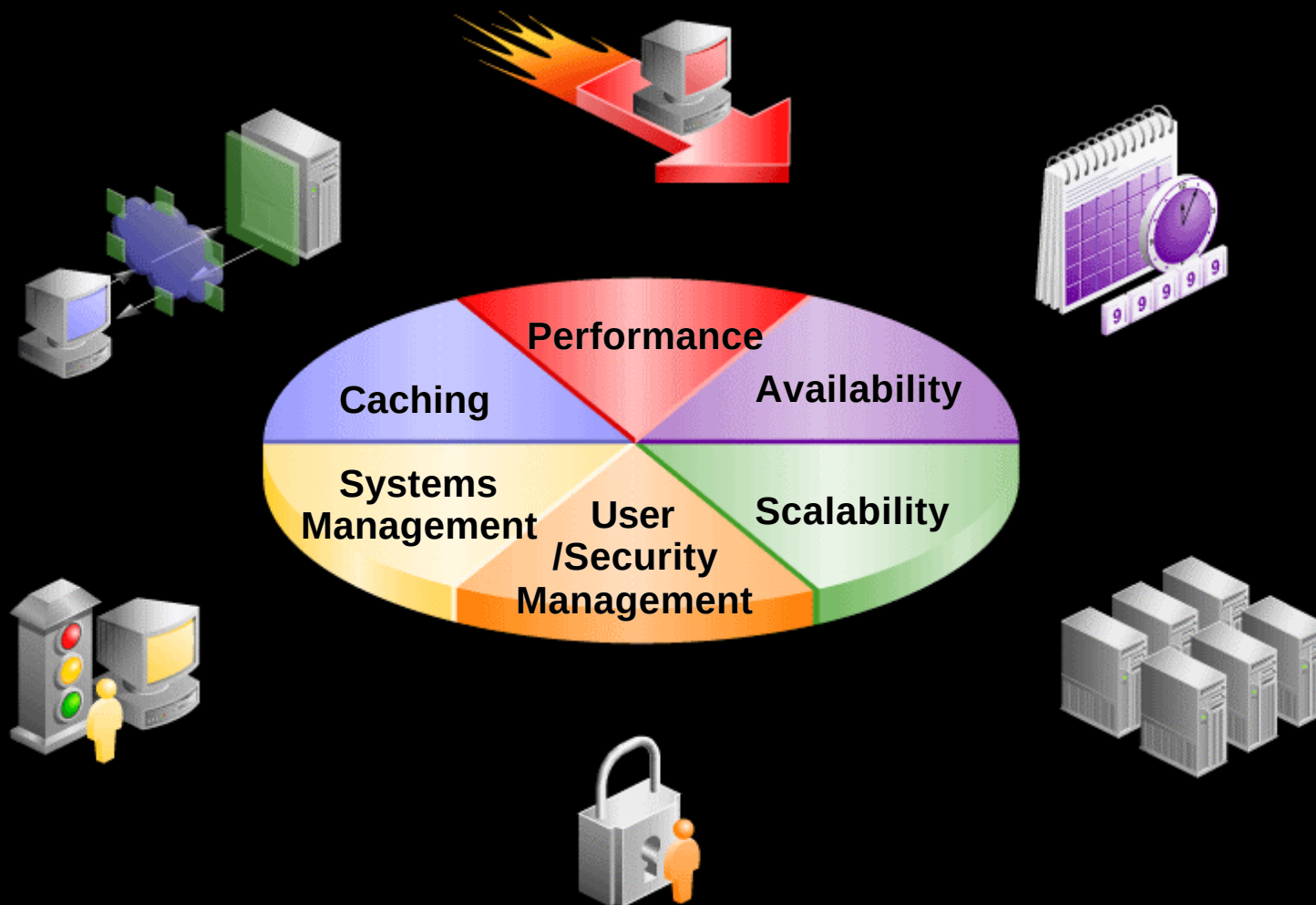
Personalize Web Content



Oracle9iAS Personalization



Oracle9iAS: Most Reliable Deployment



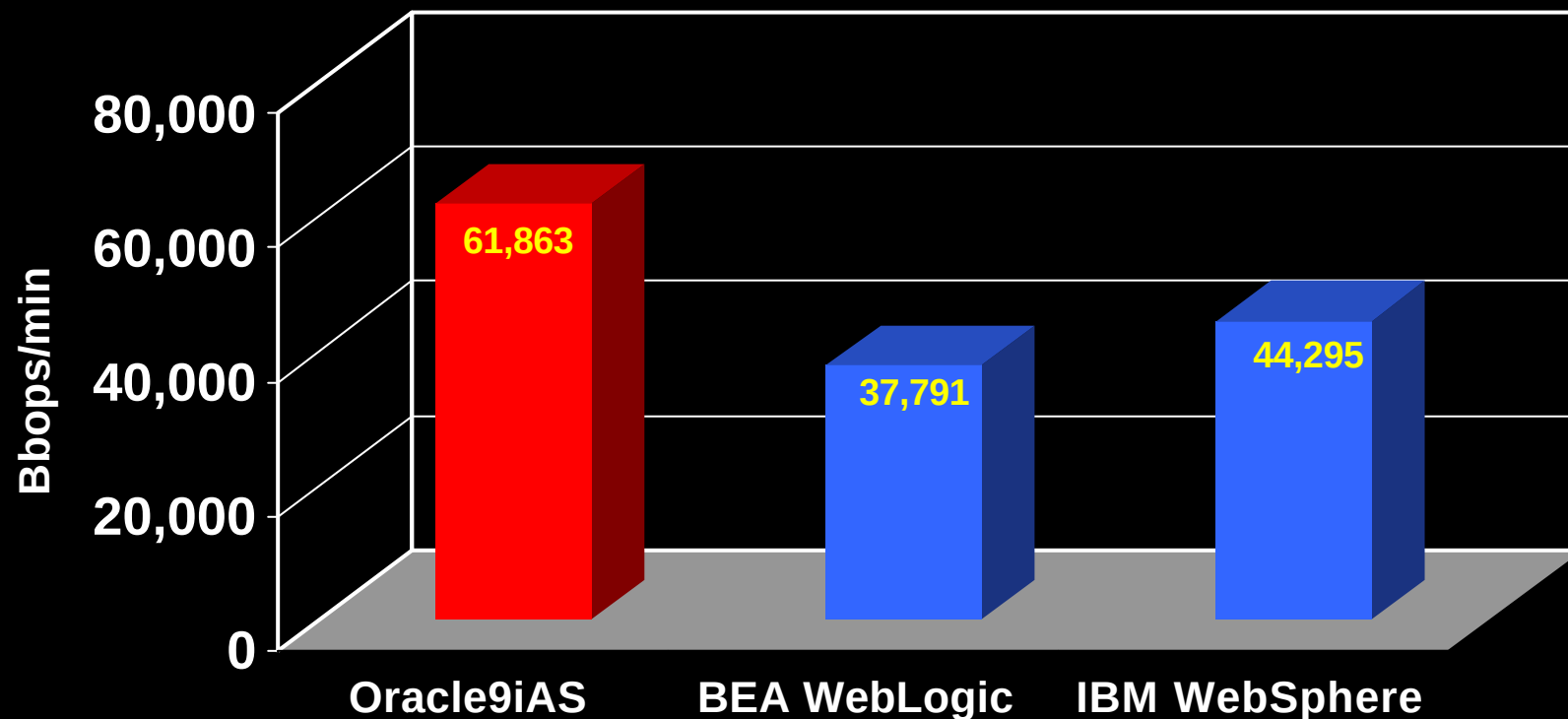
ORACLE®

Oracle HTTP Server (OHS)

- Apache Web Listener 1.3.22
 - Mod Architecture
 - Mod_OC4J, Mod_OSSO, Others
 - Sophisticated Netscape, IIS Proxy
- *New Oracle Enhancements*
 - Session Routing, IP Load Balancing
 - Clustered Apache Servers
 - Fast Restart High Availability
- Firewall, Load Balancer Certification
 - Firewalls - Cisco, Checkpoint, Raptor
 - Load Balancers - Cisco, F5 BigIP, Alteon

Oracle9iAS

ECperf Overall Performance Leader



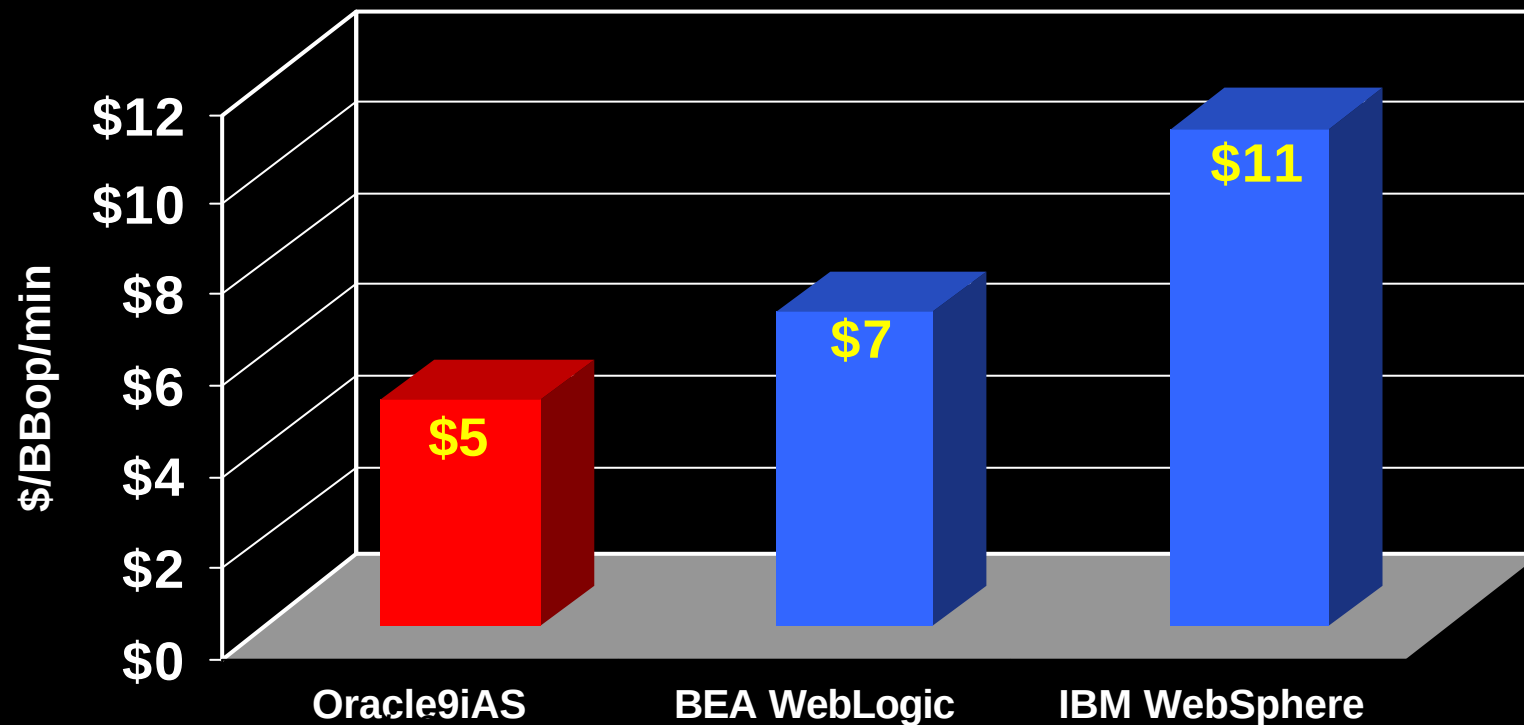
Oracle on Sun Computers

ORACLE®

Source: ECperf Benchmark: <http://ECperf.theserverside.com>

Oracle9iAS

ECperf Price Performance Leader



Oracle on HP Computers

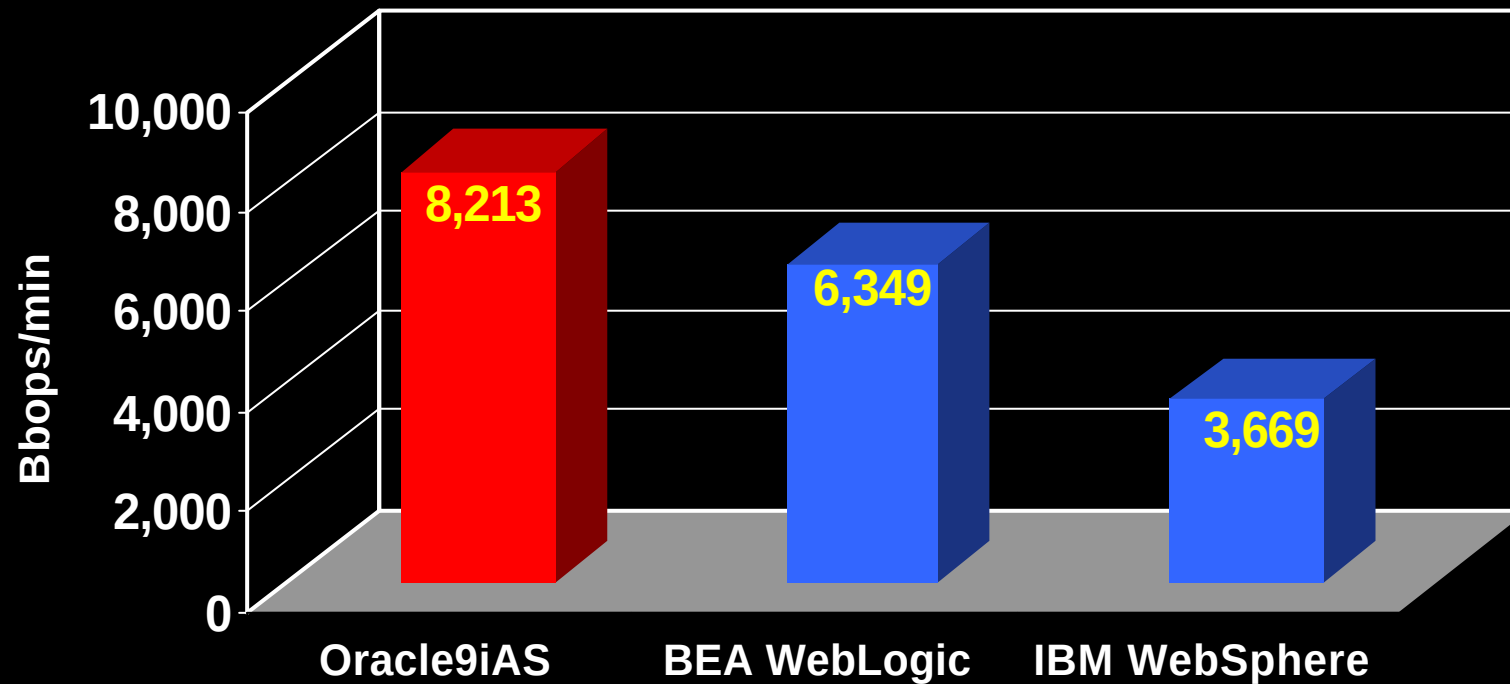
ORACLE®

Source: ECperf Benchmark: <http://ECperf.theserverside.com>

Oracle9iAS

Linux Performance Leader

Per-Node Performance on Intel/Linux (2 CPUs per Node)



ORACLE®

As of July 9, 2002: Oracle, 24,639.37 BBops/min @ Std, \$5/BBops/min @ Std. BEA on HP (sponsor), 25,394.60 BBops/min @ Std, \$9/BBops/min @ Std. IBM, 25,658.13 BBops/min @ Std, \$12/BBops/min @ Std. Source: <http://ecperf.theserverside.com>. ECperf is a trademark of Sun Microsystems Inc.

All SPEC jAppServer2001 Results Published by SPEC

These results have been submitted to SPEC; see [the disclaimer](#) before studying any results.

Published Results (5):

Result Categories: | [SingleNode](#) | [DualNode](#) | [MultipleNode](#) | [Distributed](#) |

SingleNode (1):

Submitted By	System Title	BOPS	\$/BOPS	Category	Disclosures
IBM Corporation	IBM WebSphere Application Server on IBM eServer iSeries i890	804.09	4847.59	SingleNode	Text HTML

DualNode (2):

Submitted By	System Title	BOPS	\$/BOPS	Category	Disclosures
Oracle Corporation	Oracle9iAS Release 2 Standard Edition on Dell PowerEdge 6650	189.63	506.61	DualNode	Text HTML
Pramati Technologies Ltd	Pramati Application Server 3.0 (Standard Edition) submission on DELL 2 CPU Xeon	57.38	1101.60	DualNode	Text HTML

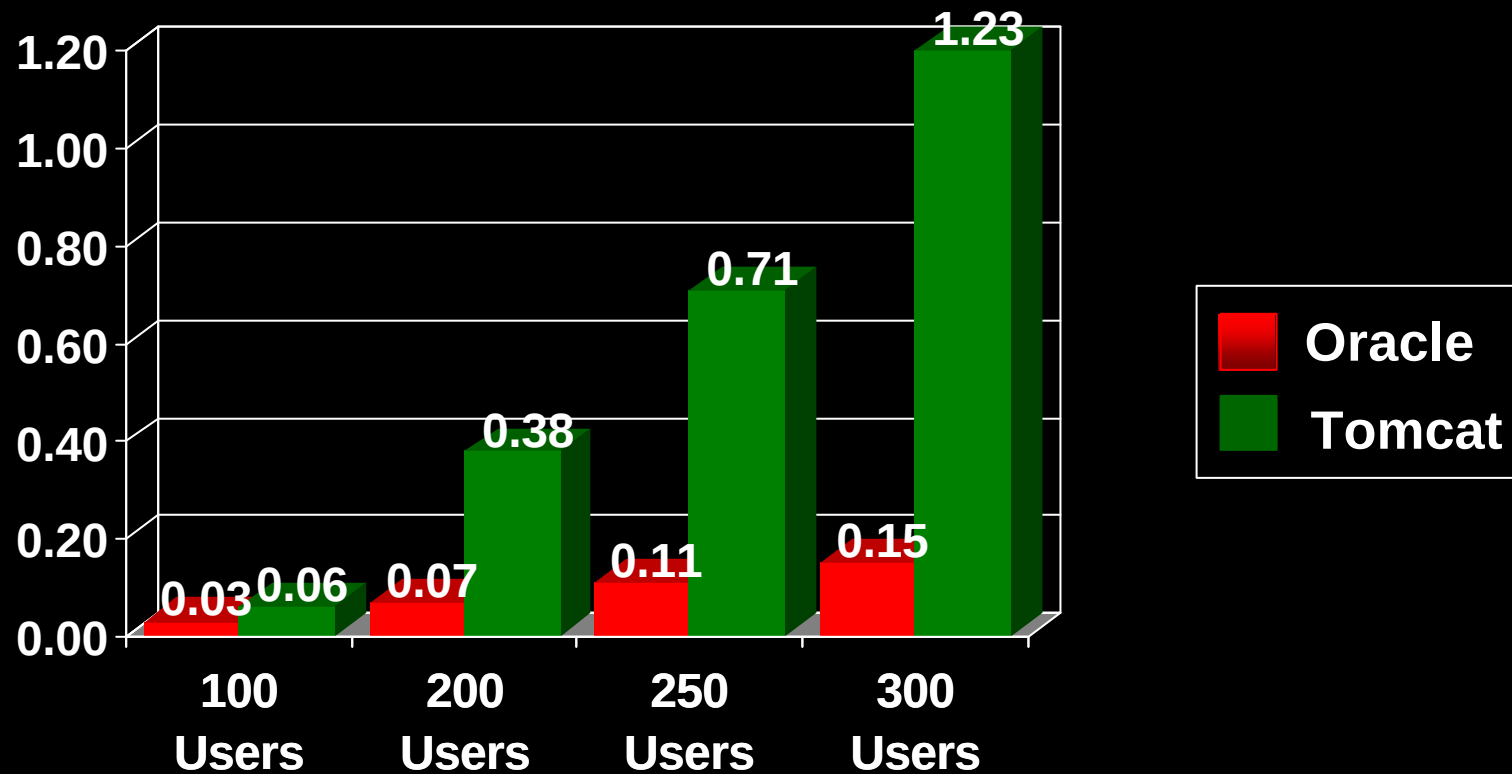
MultipleNode (2):

Submitted By	System Title	BOPS	\$/BOPS	Category	Disclosures
Oracle Corporation	Oracle9iAS Release 2 on HP ProLiant ML530G2 Cluster	558.85	389.54	MultipleNode	Text HTML
Oracle Corporation	Sun Microsystems SunFire V880 / Oracle9iAS Release 2, Standard Edition v9.0.2.1.0	1476.81	1540.03	MultipleNode	Text HTML

Go To: [Home](#) | [OSG](#) | [SPECjAppServer2001](#) | [\[SPECjAppServer2001 Results\]](#)

Oracle9iAS J2EE, Fastest

Average Response Time (Seconds)

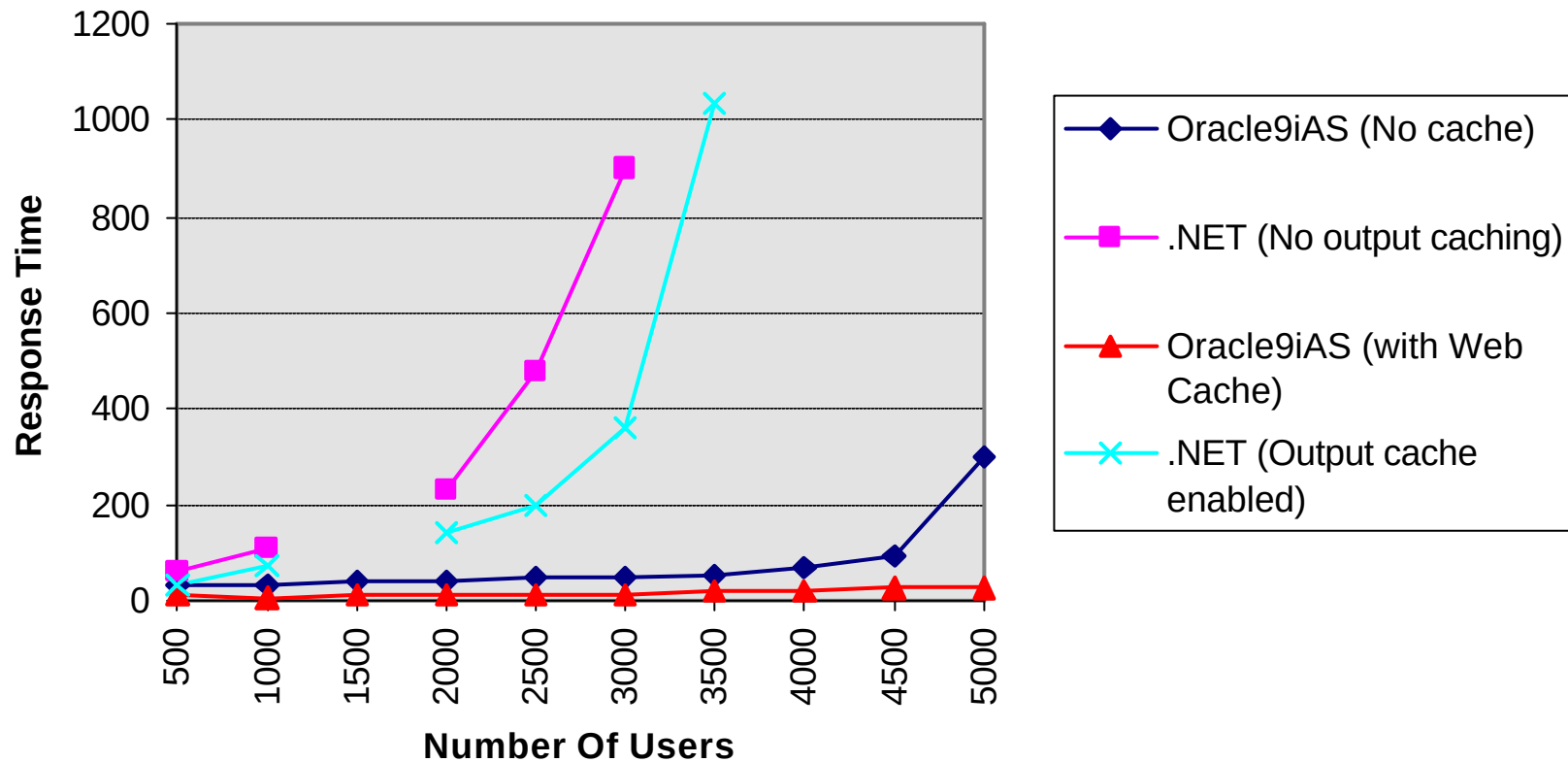


Pure JSP Test

ORACLE

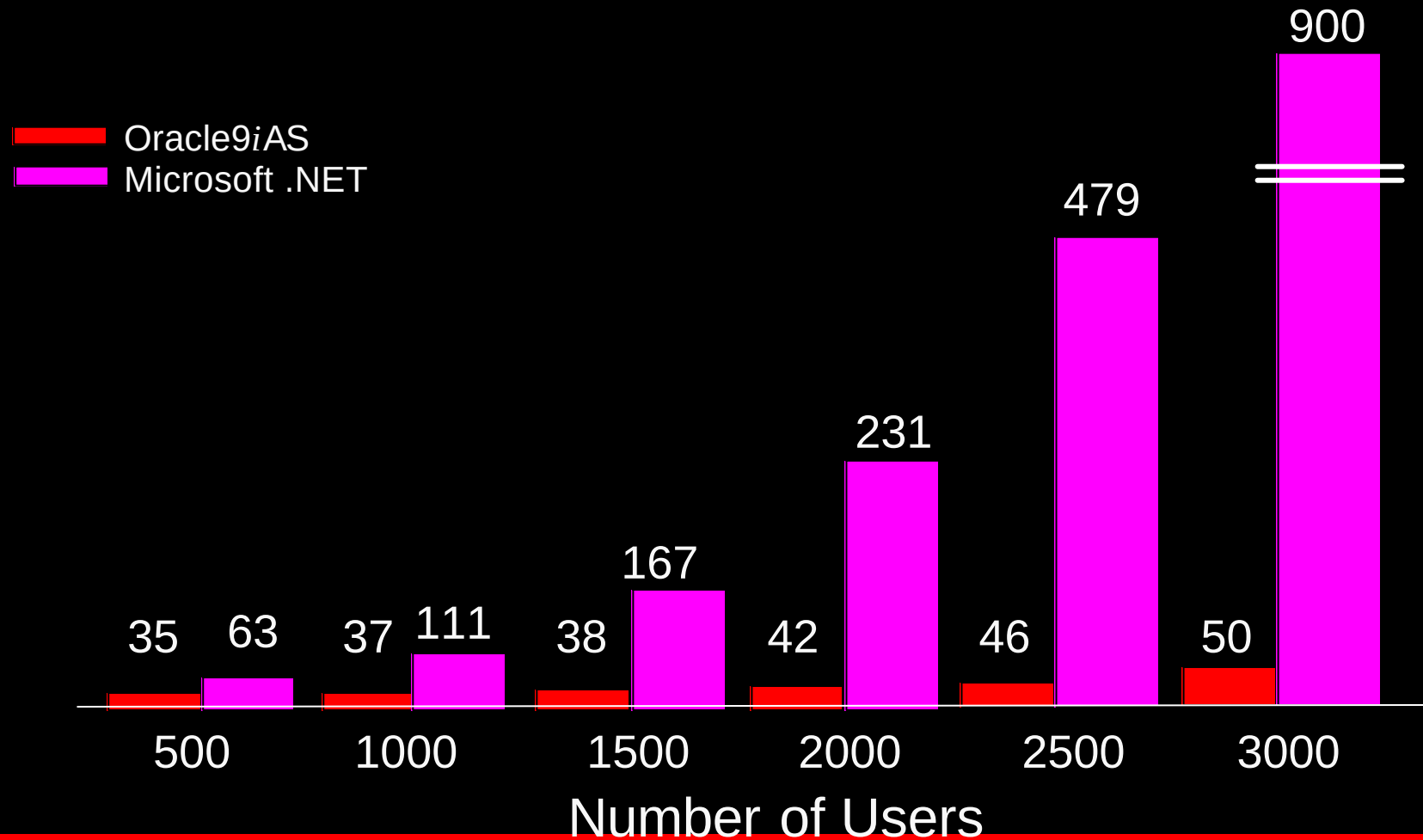
Faster Than .NET

Average Response Time (MilliSeconds)



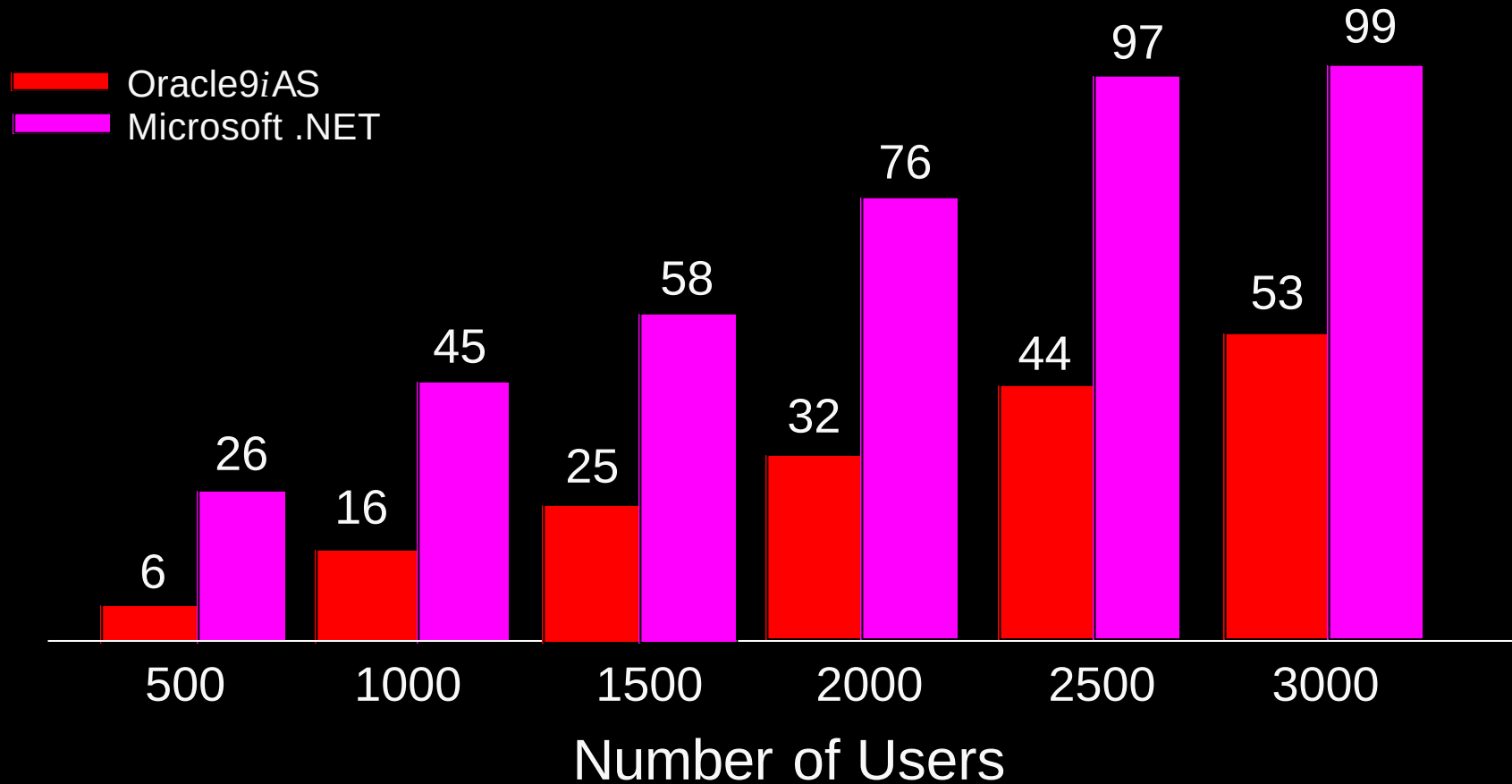
9iAS Faster Than MS .NET

Average Response Time Milliseconds



9iAS More Scalable than MS .NET

Percent CPU Usage



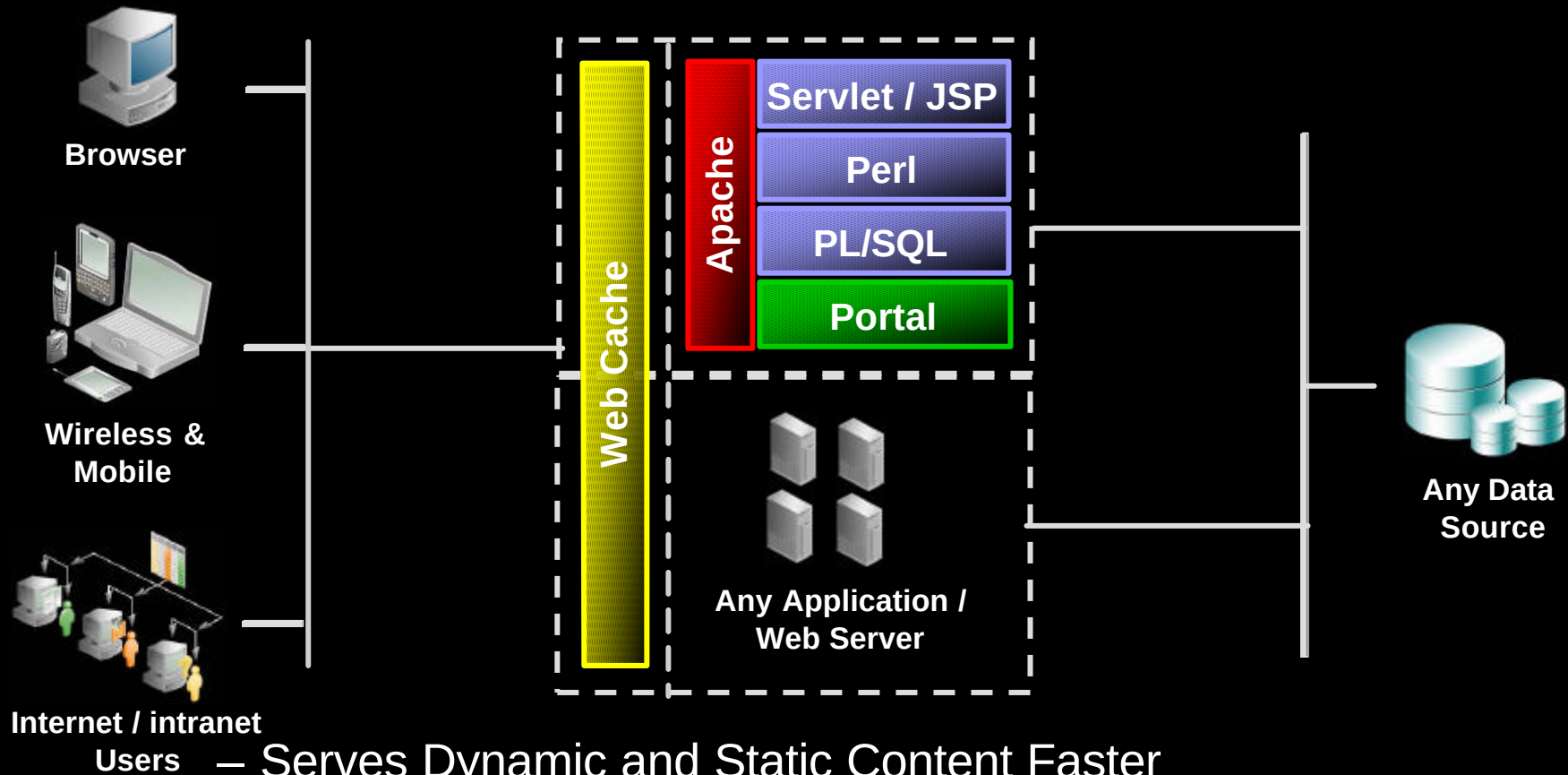
Why is Oracle9iAS Faster?

- Container Activity
 - Less overhead for container-generated code
 - Container optimizes SQL traffic
- Transaction Management
 - Minimal overhead for creating, maintaining, managing a transaction
- Concurrency Control
 - Container optimizes pessimistic locking
 - Database optimizes optimistic locking
- JDBC Drivers
 - Less traffic between app server and database
- JNDI
 - Efficient namespace management and bean lookups

Why is Oracle9iAS Faster?

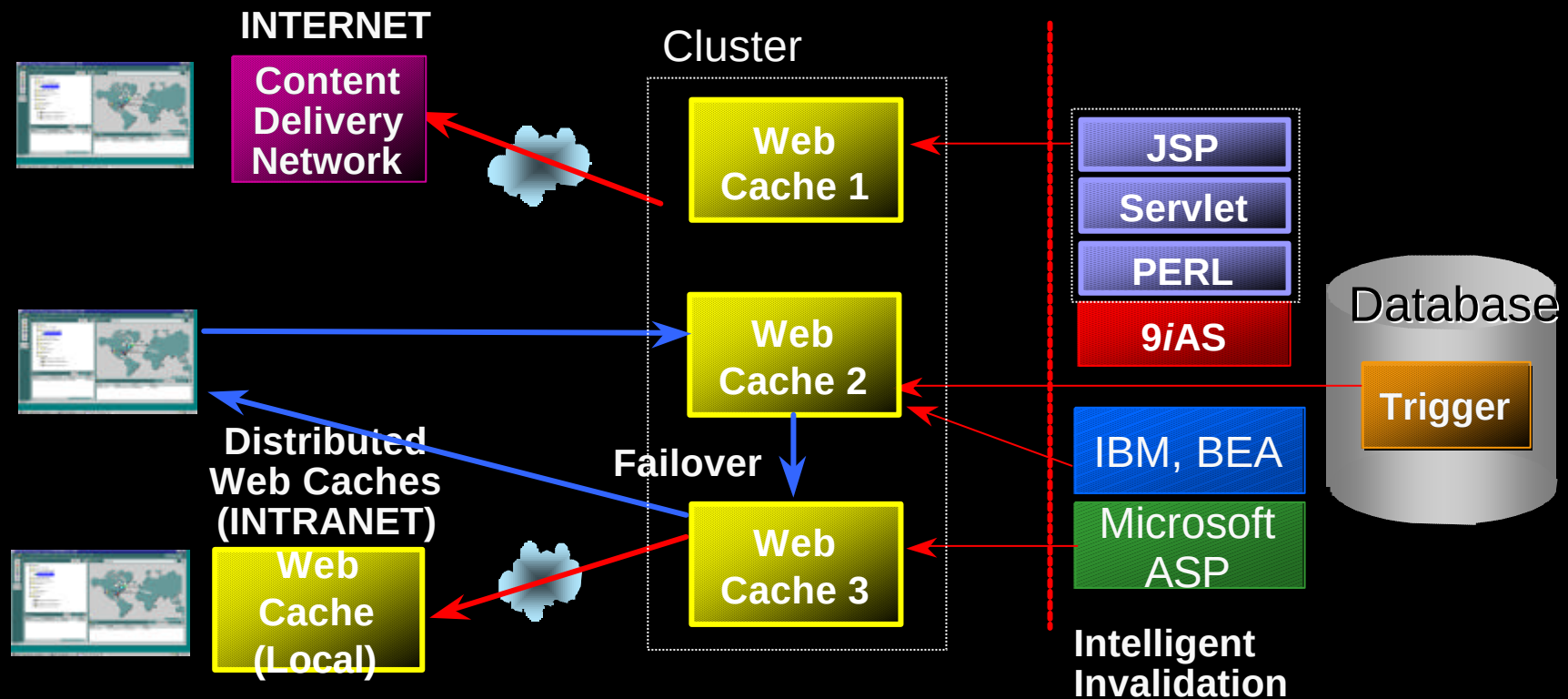
- App Server Optimizations
 - Fastest J2EE, Web Services
 - All Aspects - Code Path, Network, Data, Marshaling
- J2EE Optimizations
 - Transactions - Optimized Scheduling
 - New Txn Modes - Read-Only, Serializable
 - Caching - SQL Statement, EJB Caching
 - DB Mappings - Optimized CMP, EJB QL
 - Network - RMI, RMI-over-IIOP
 - Data Manipulation - Java String, Byte Arrays
- Distributed J2EE Object Caching
 - Reduces SQL-Java Overhead, Sharing

Improve Reliability Using Caching



- Serves Dynamic and Static Content Faster
- Supports more users with fewer web servers / less hardware
- Higher reliability with surge protection and loadbalancing

Web Caching

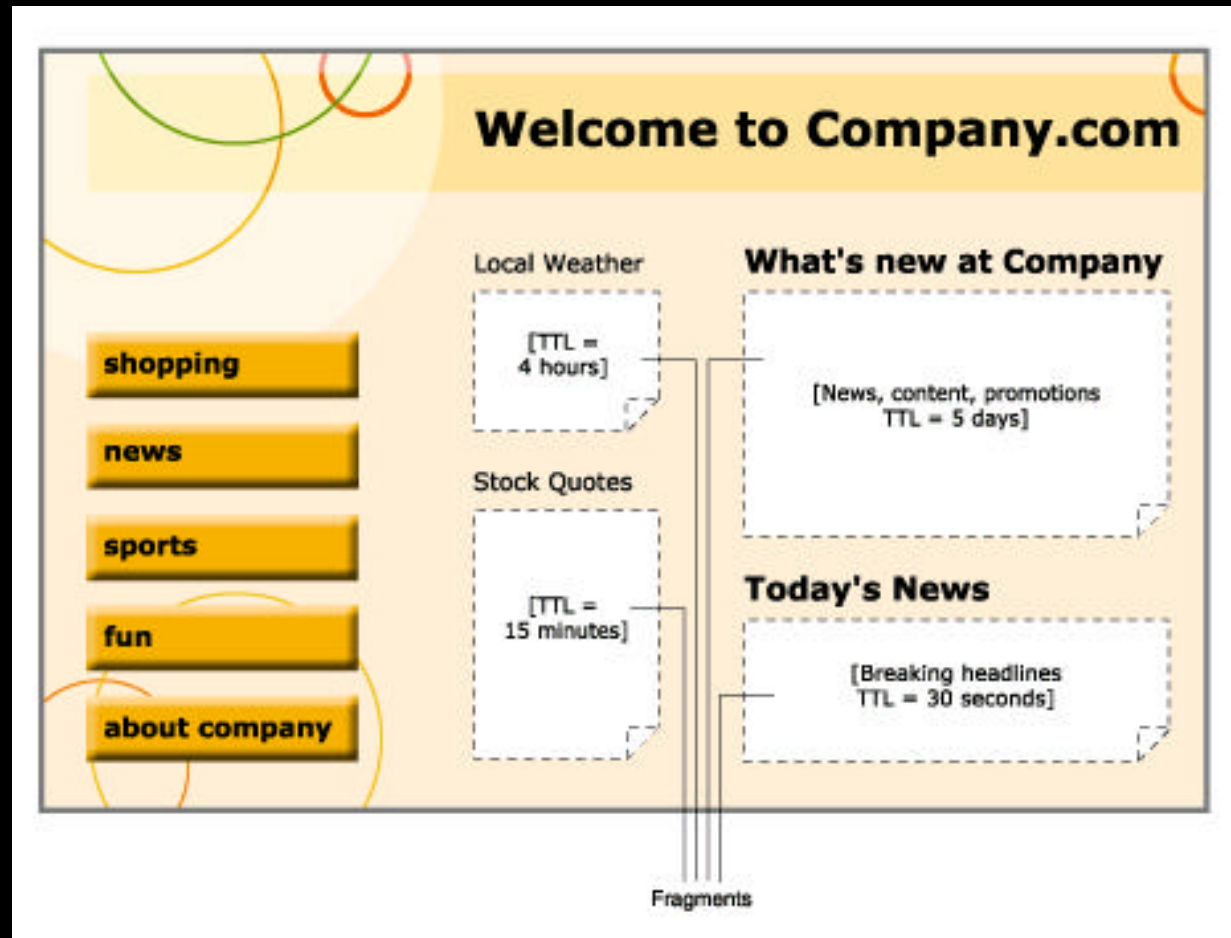


- Improve latency by integrating content delivery networks
- Higher reliability by distributing caches geographically

Das Unmögliche Cachen - ESI

Hochpersonalisierte Seiten

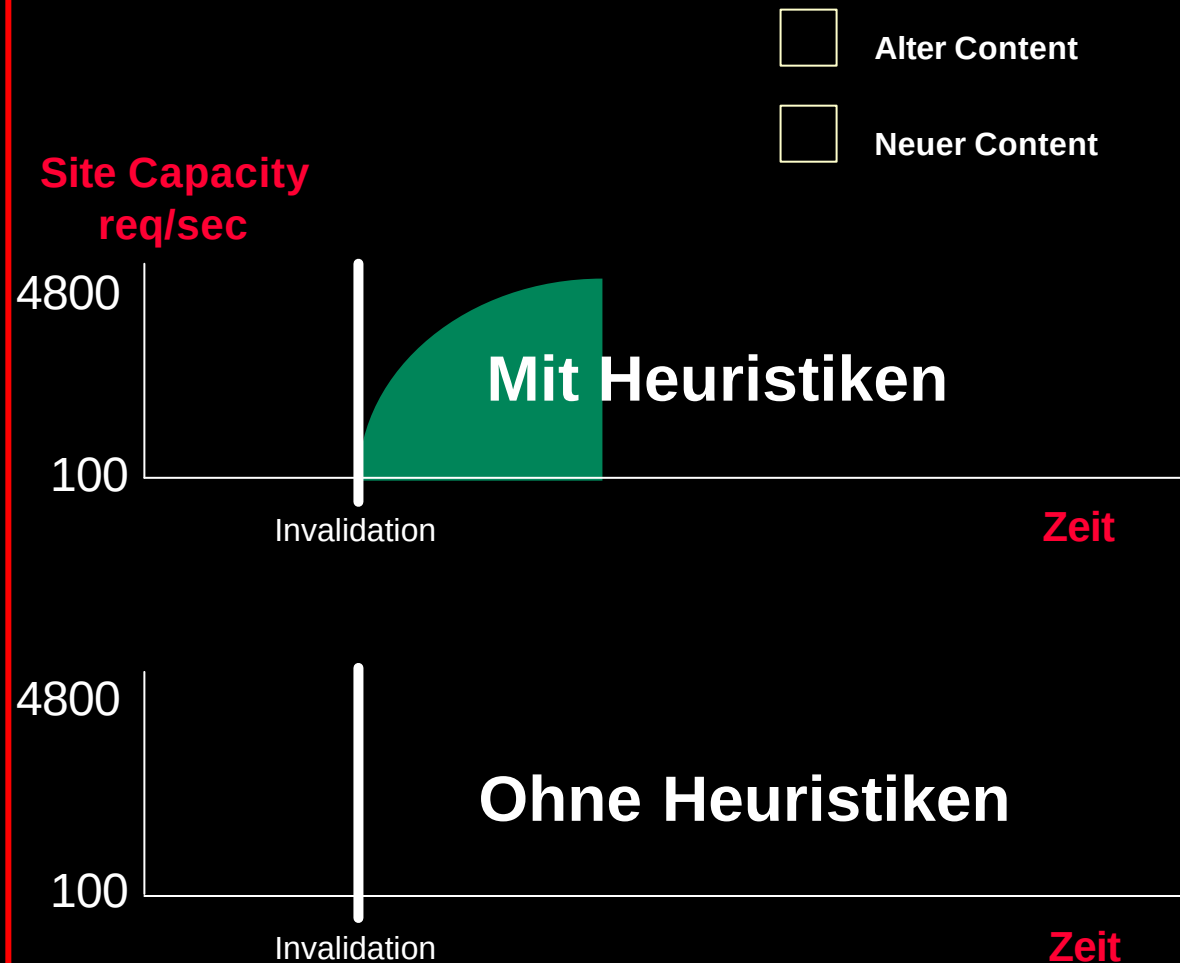
- Template
- Fragmente
- ESI = Markup Language
- Oracle + Akamai
- Open Spec.: www.esi.org
- JESI = JSP Tag Library



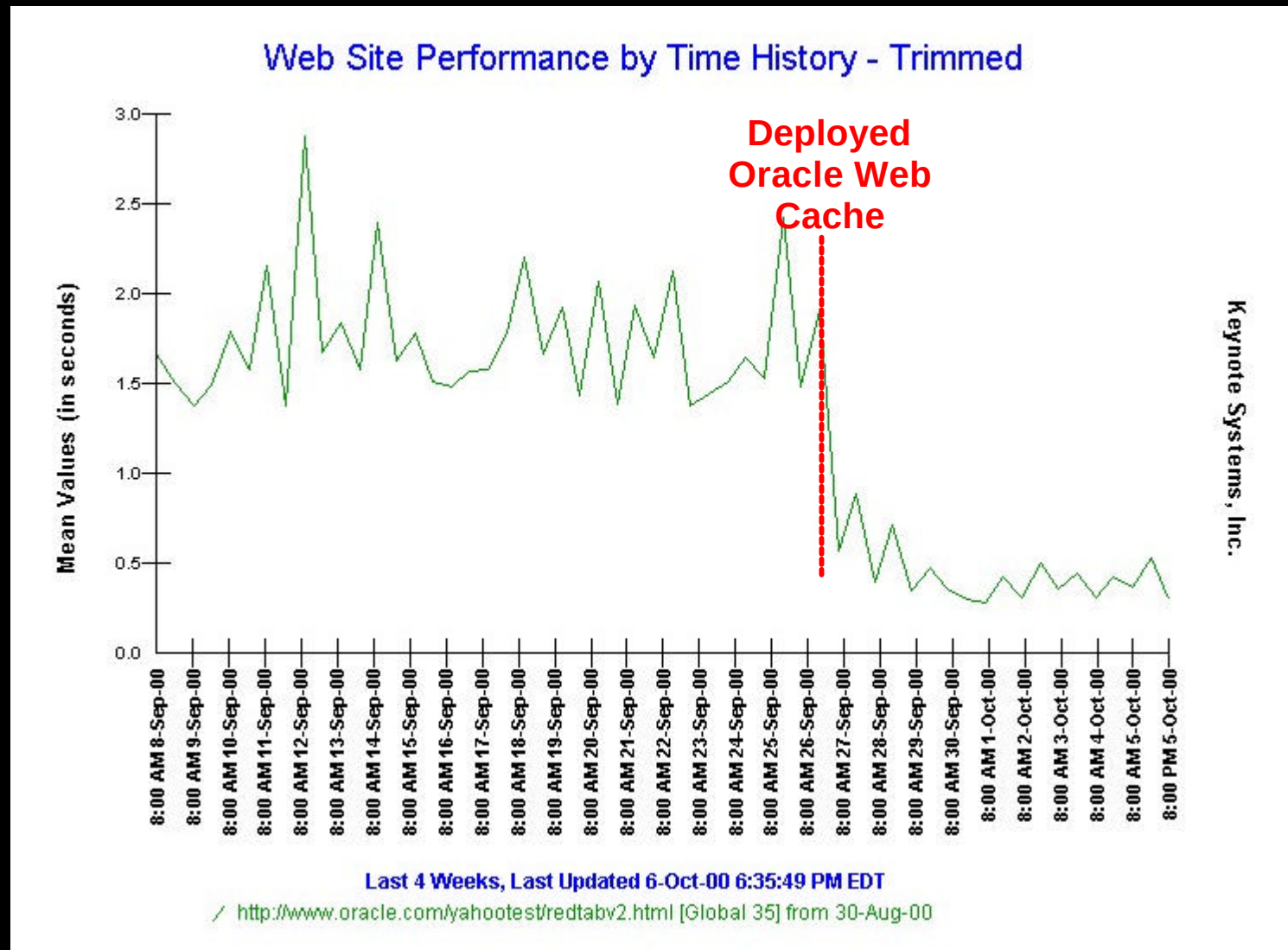
Performance Versicherung

Konstante Perf. nach Masseninvalidierung

- Capacity Heuristics
- Dämpfen der AppServer Last
 - Schutz gegen traffic spikes, denial-of-service attacks
- Sortieren der AppServer Request Queue
- Basiert auf
 - Request Queue Length
 - Document Popularity
 - Document Validity
 - Invalidation Age

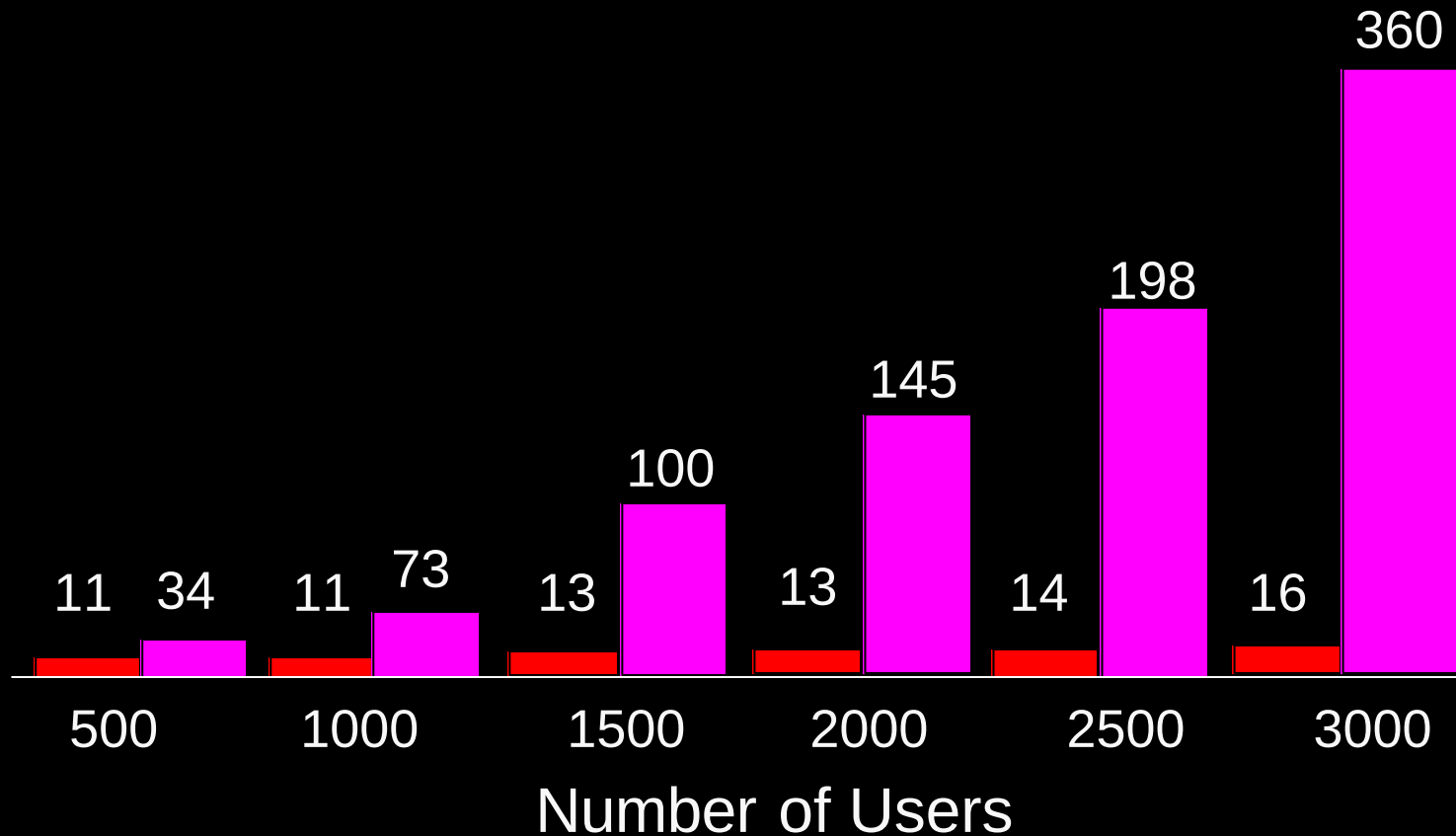


Oracle.com - Fastest Site on the Internet



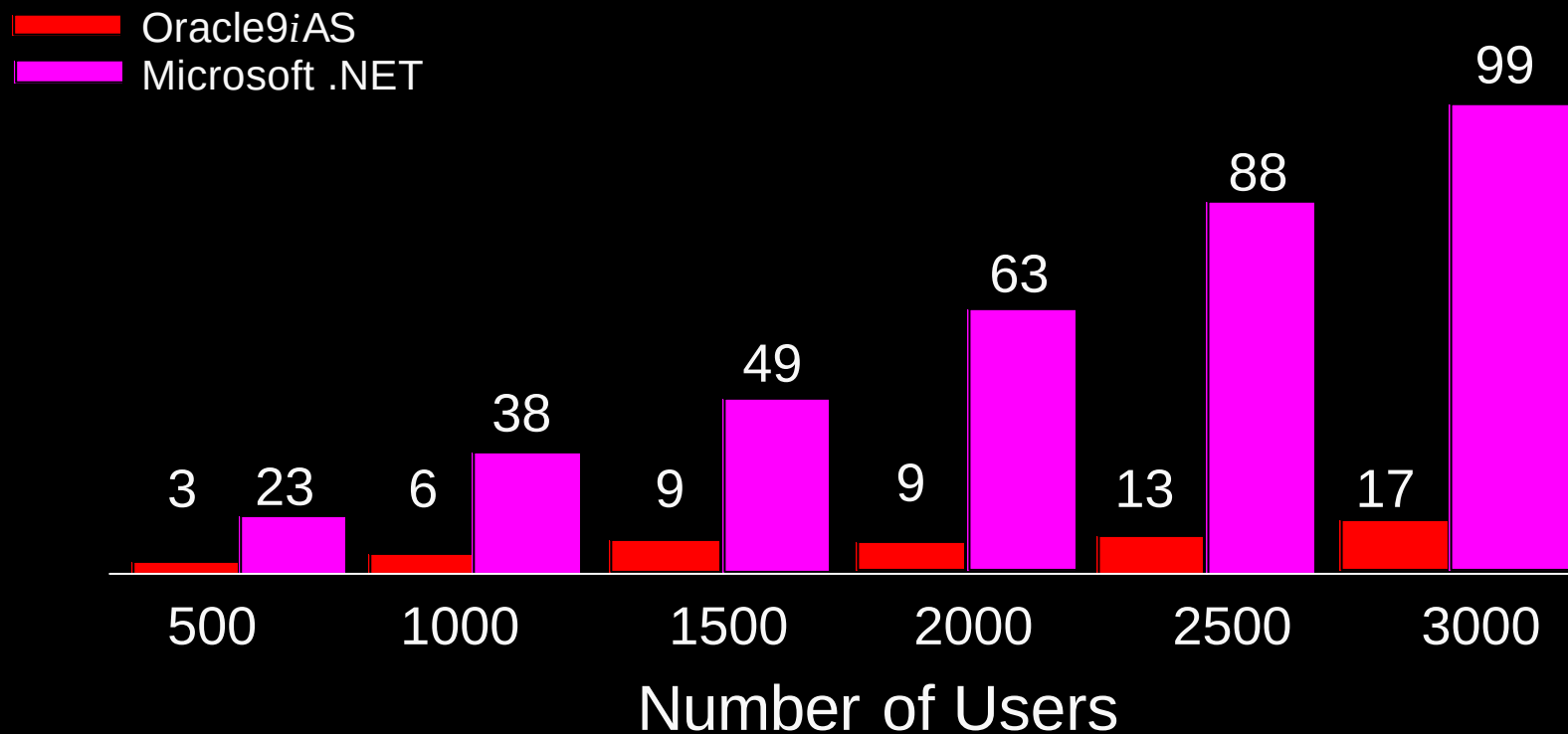
Oracle9iAS Web Cache Faster Than .NET Cache

Average Response Time Milliseconds



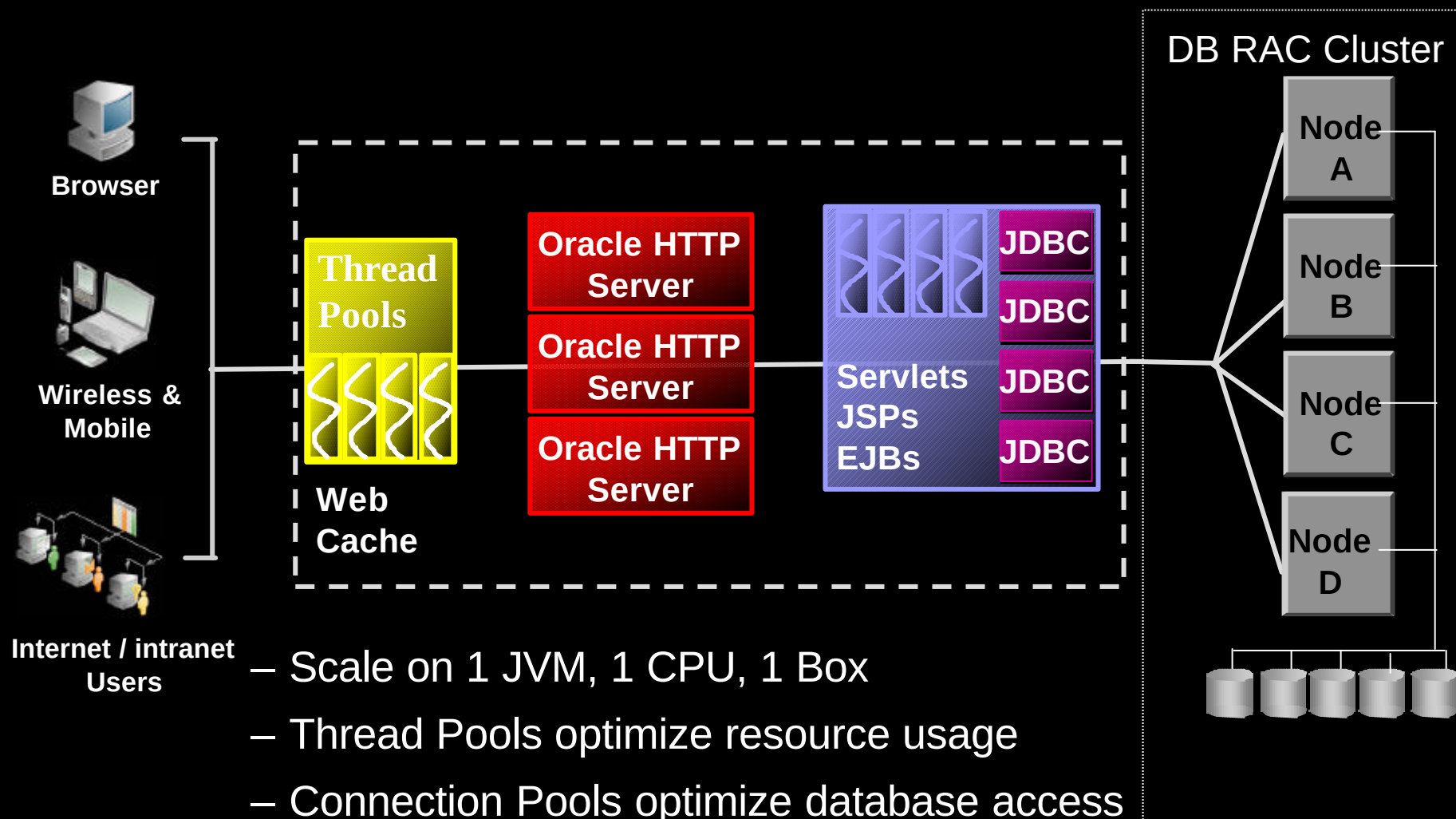
9iAS Cache More Scalable MS .NET Cache

Percent CPU Usage



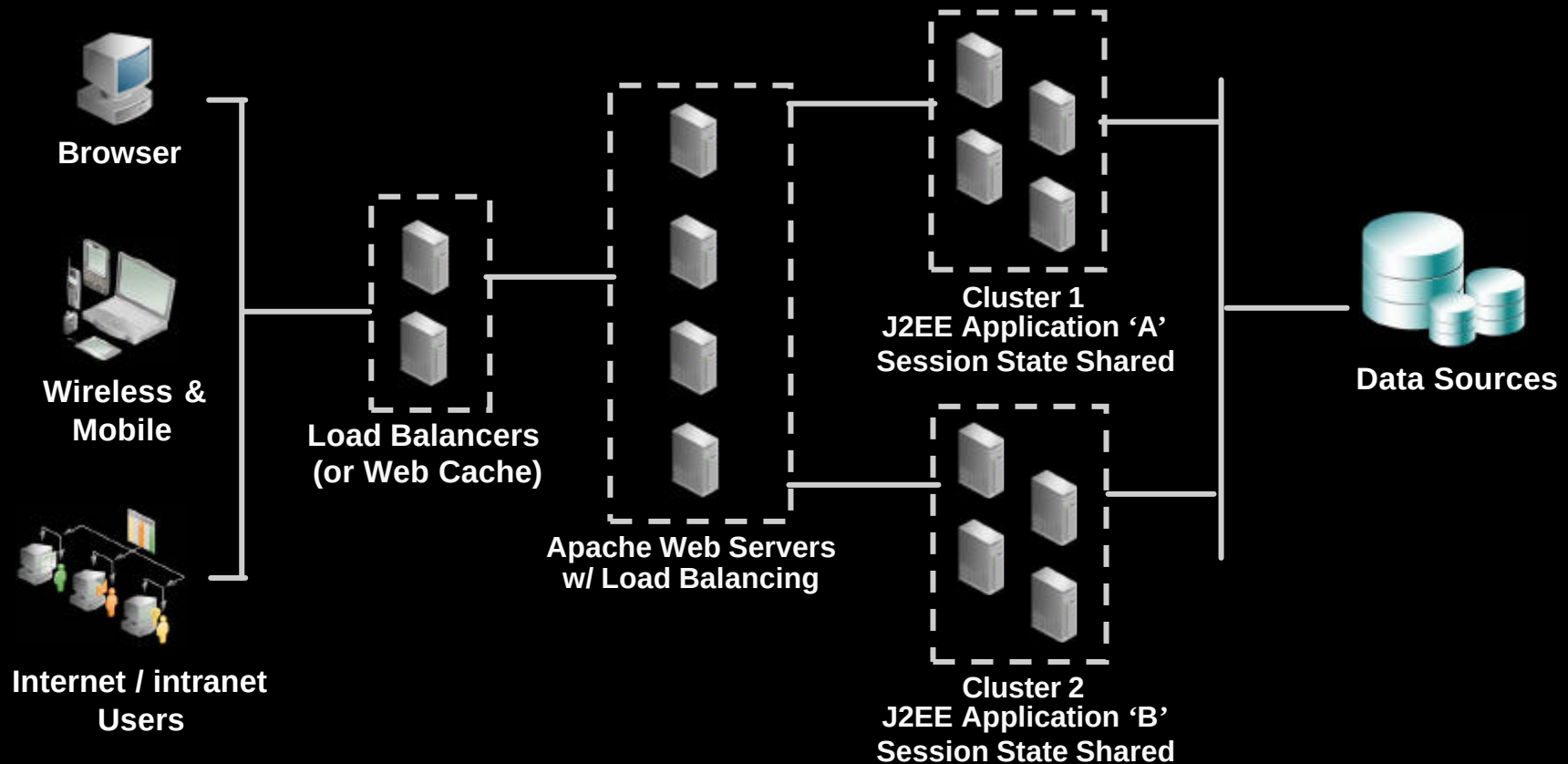
Improve Scalability

Pool Resources, Threads, and Connections



Improve Scalability

Application Cluster Instances with Load Balancing



- Web Caches share cache content. Load balancing via: round-robin, weighted %, or last use.

- Apache maps application/ requests to clusters.

- Clusters share application session state via IP multicast.

Scalability

- Variety of Scaling Techniques
 - Multiple Threads on 1 JVM (Pooling, Caching)
 - Multiple JVMs on 1 CPU (dto. + Cluster, Failover)
 - Multiple CPUs (dto. + Balancing)
 - SMP CPUs (Fast State Replication, J2EE Object Paging)
 - Clusters
 - Cluster - Cache, HTTP, JSP, Servlet, EJB
 - Load Balancing - Configurable
 - Failover - State Replication
 - Dynamic - Auto-Register, DCM
 - Management - DCM, OEM
- Scale With Zero Application Change

Scalability

- Variety of Scaling Techniques
 - 1 JVM, Multiple JVMs, Multiple CPUs, SMPs
- Multiple Threads on 1 JVM
 - Pools - Serially Reuse JSP, Servlet, EJBs
 - Memory - Cache J2EE Objects
 - DB Access - JDBC Pools
- Multiple JVMs on 1 CPU
 - CPU - Pool HTTP, RMI Listener Process
 - Connection - HTTP, AJP, RMI, IIOP, SOAP
 - Memory - Cache J2EE Objects
 - Cluster - Load Balancing
 - Failover - Servlet, EJB State

Scalability

- Multiple CPUs
 - Configurable - Processor, JVM, Threads
 - Cluster - Load Balancing, Failover
 - Management - DCM, OEM
- SMP CPUs
 - Fast State Replication, J2EE Object Paging
- Clusters
 - Cluster - Cache, HTTP, JSP, Servlet, EJB
 - Load Balancing - Configurable
 - Failover - State Replication
 - Fast - No App. Change, Delta State
 - Dynamic - Auto-Register, DCM
 - Management - DCM, OEM

Scalability

- Scale on 1 Java VM
 - Pool Resources to Handle More Users
- Scale with Multiple Java VMs on 1 CPU
 - Cluster App Server Efficiently
- Scale on Commodity HW
 - Cluster CPUs Efficiently
- Scale on Clustered HW
 - From Commodity CPUs to SMPs
- Scale With Zero Application Change

Scalability

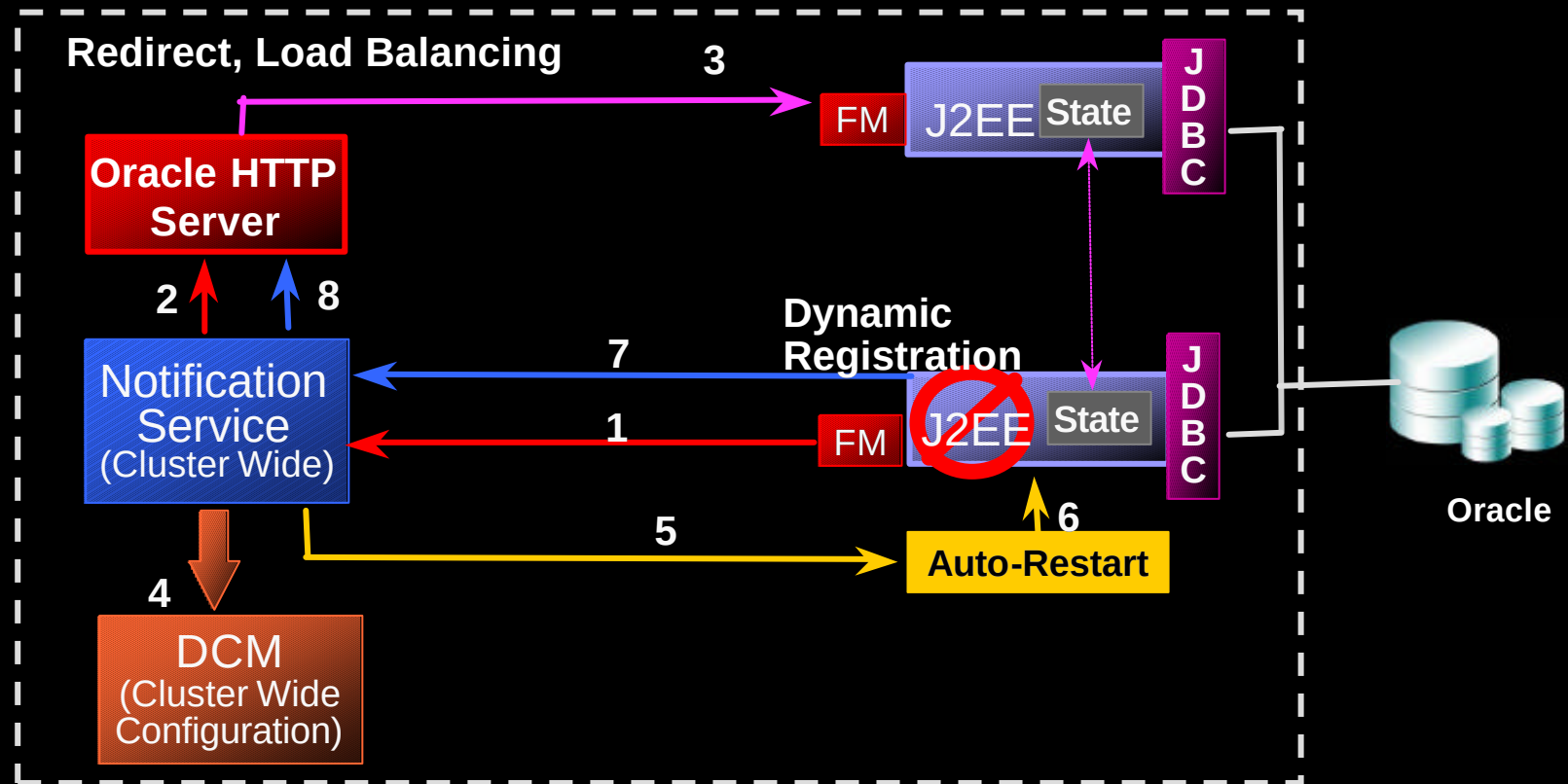
- Most Scalable Application Server
 - Scale on All Hardware - 1-2 CPU, SMP, Rack
 - 1 CPU - Use Memory, CPU Efficiently
 - Multiple CPUs - Cluster, Scale Linearly
 - Load Balancing - Distribute Load Efficiently
- Oracle9iAS Release 2 Enhancements
 - More Efficient Resource Pooling
 - Cluster - Cache, Apache, Servlets, EJBs, Web Services
 - Load Balancing - Enhancements, Configurable
- Differentiators
 - Most Scalable App Server - 1 CPU
 - Most Scalable App Server - Multiple CPUs

EJB Clustering

- Need to specify how/when state is replicated for stateful session beans and entity beans
 - N/A for stateless session beans
- Stateful session beans propagate state at one of:
 - JVM termination
 - End of call
 - StatefulSessionContext.setAttribute
- Entity Beans specify clustering-schema attribute
 - `<entity-deployment ... clustering-schema="asynchronous-cache" .../>`

High Availability

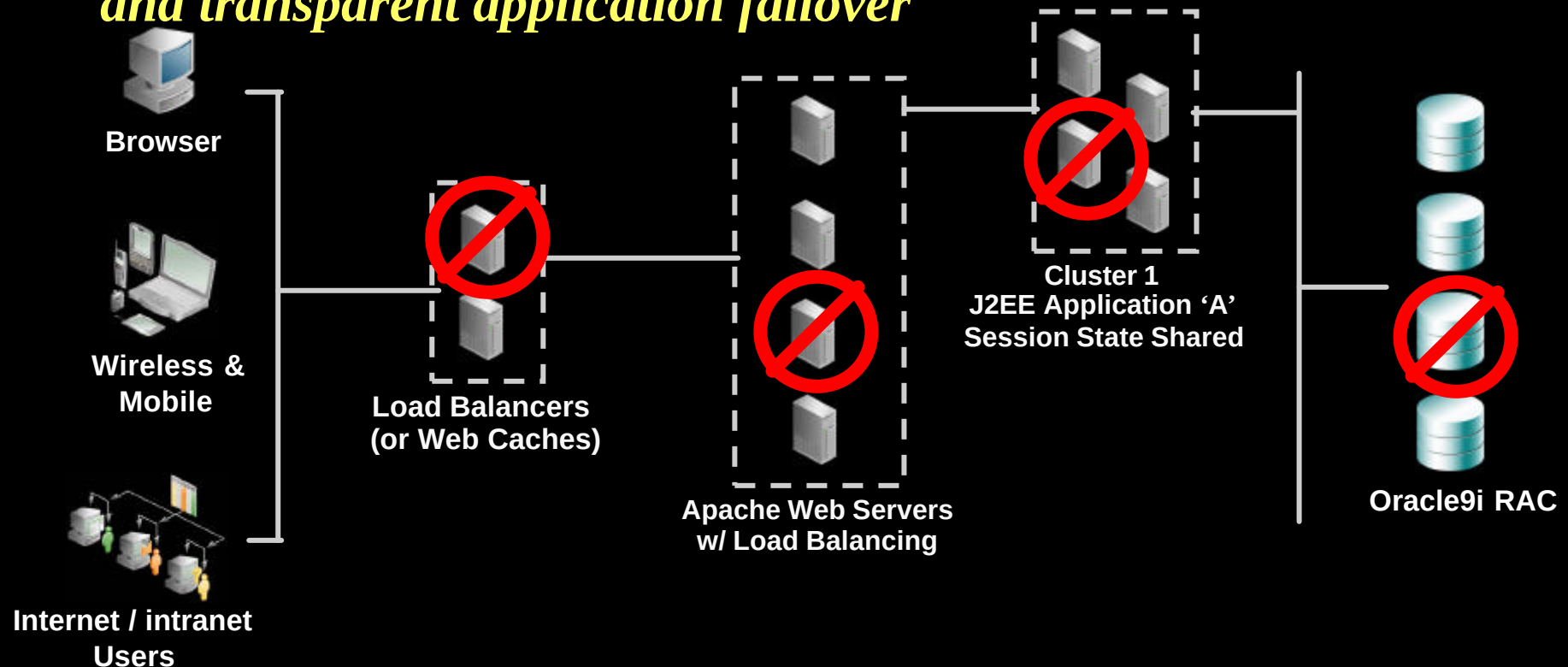
Automatic Failure Detection and Restart



- Automatic routing around failed processes
- Automatic rediscovery of new processes

High Availability

Clustered App and Data Servers with no single point of failure and transparent application failover



- Automatic addition of application servers to clusters
- Automatic application deployment to clusters
- Transparent re-routing around failed instances and session affinity

High Availability

- Zero Planned Downtime for Maintenance
 - Maintain, Upgrade & Hot Deploy Apps Online
- Zero Unplanned Downtime from Failures
 - New Fast Start Fault Recovery Architecture
 - App Server Clusters and Session Failover
 - RAC - Redundancy, Hot Failover
- Cluster Management Framework
 - Create, Start, Stop, Deploy Apps, Sync.
 - Fault Monitors - Up/Down, Thresholds
 - Notification Service - Clustered, Pub-Sub
 - DCM - Sync. Cluster Configuration
 - Restart - EM Jobs, Automatic
 - Administrator Intervention - OEM

High Availability

- Non-Stop Availability
 - Zero Downtime for Maintenance
 - Zero Downtime from Faults
- What's Better
 - Online Operations
 - Rolling Upgrade
 - Fast Restart Recovery
 - App Server Flashback
 - Database Clusters

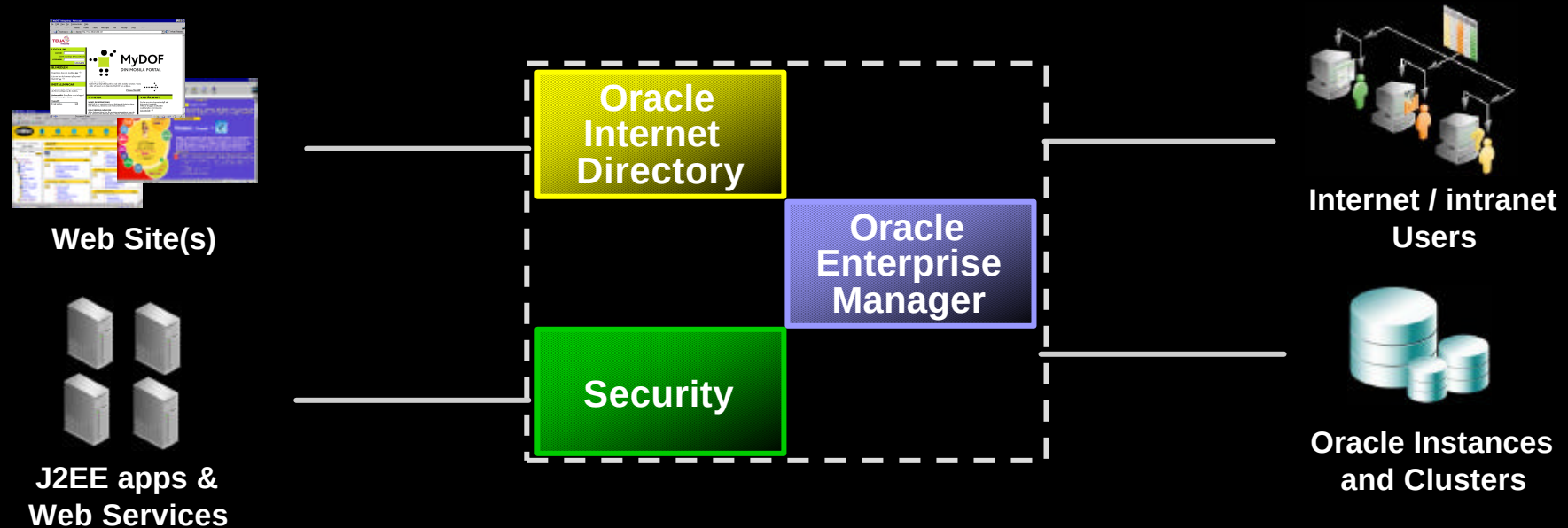
High Availability

- Zero Planned Downtime
 - Rolling Upgrade
 - Dynamic Reconfiguration - No Bouncing
 - Hot Deployment
 - Silent Install, Configure, Cloning
- Zero Unplanned Downtime
 - No Single Point of Failure
 - New Fast Start Fault Recovery Architecture
 - App Server Clusters and Session Failover
 - DB/RAC Clusters and Failover
- 100% State Recoverability

High Availability

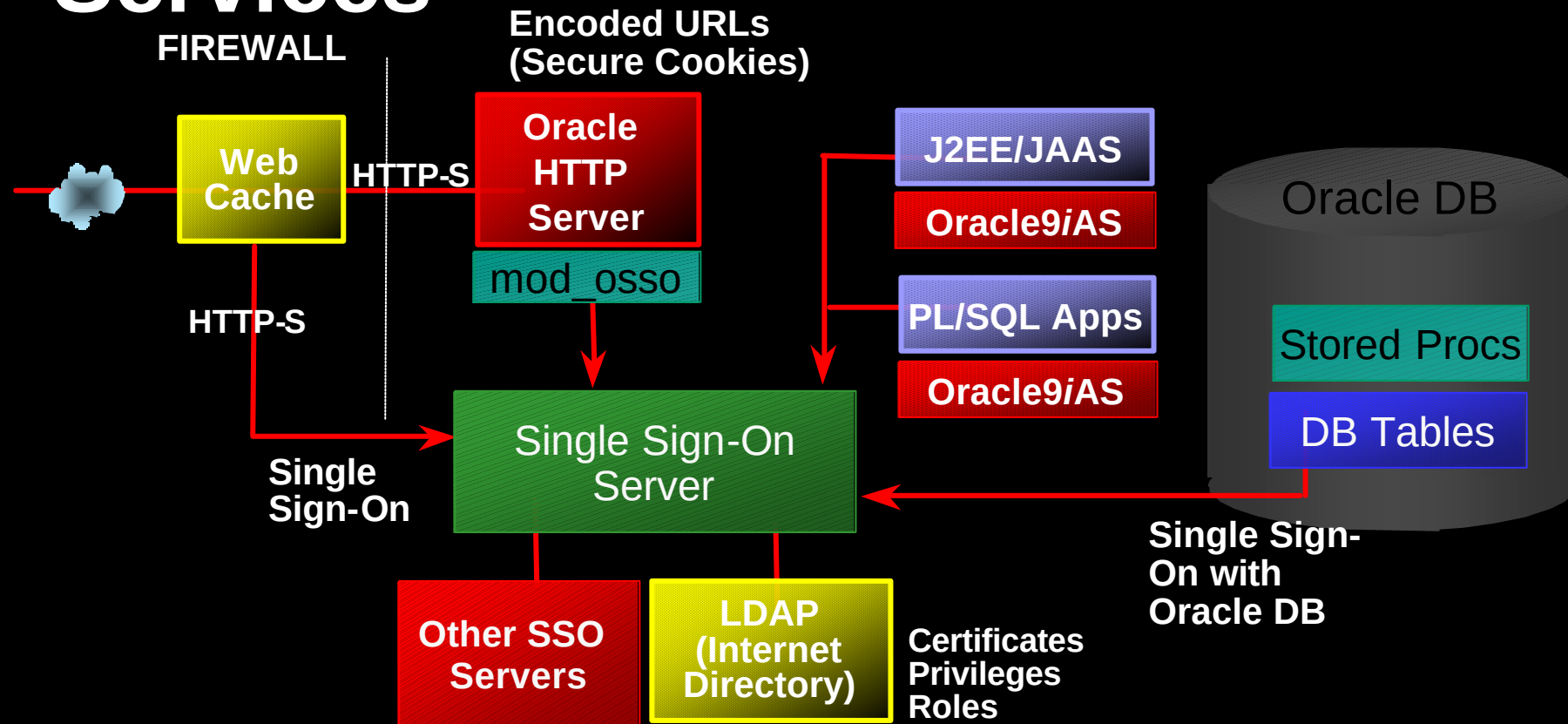
- Cluster Management Framework
 - Create, Start, Stop, Deploy Apps, Sync.
 - Fault Monitors - Up/Down, Thresholds
 - Notification Service - Clustered, Pub-Sub
 - DCM - Sync. Cluster Configuration
 - Restart - EM Jobs, Automatic
 - Administrator Intervention - OEM
- Transparent Application Failover
 - DB Node Failure - Persistent State
 - Notification - To App Server
 - Redirect JDBC - To Failover Node
 - Failover Levels - Cold, Warm, Hot
 - RAC - Redundancy, Hot Failover

Manage and Secure Web Infrastructure



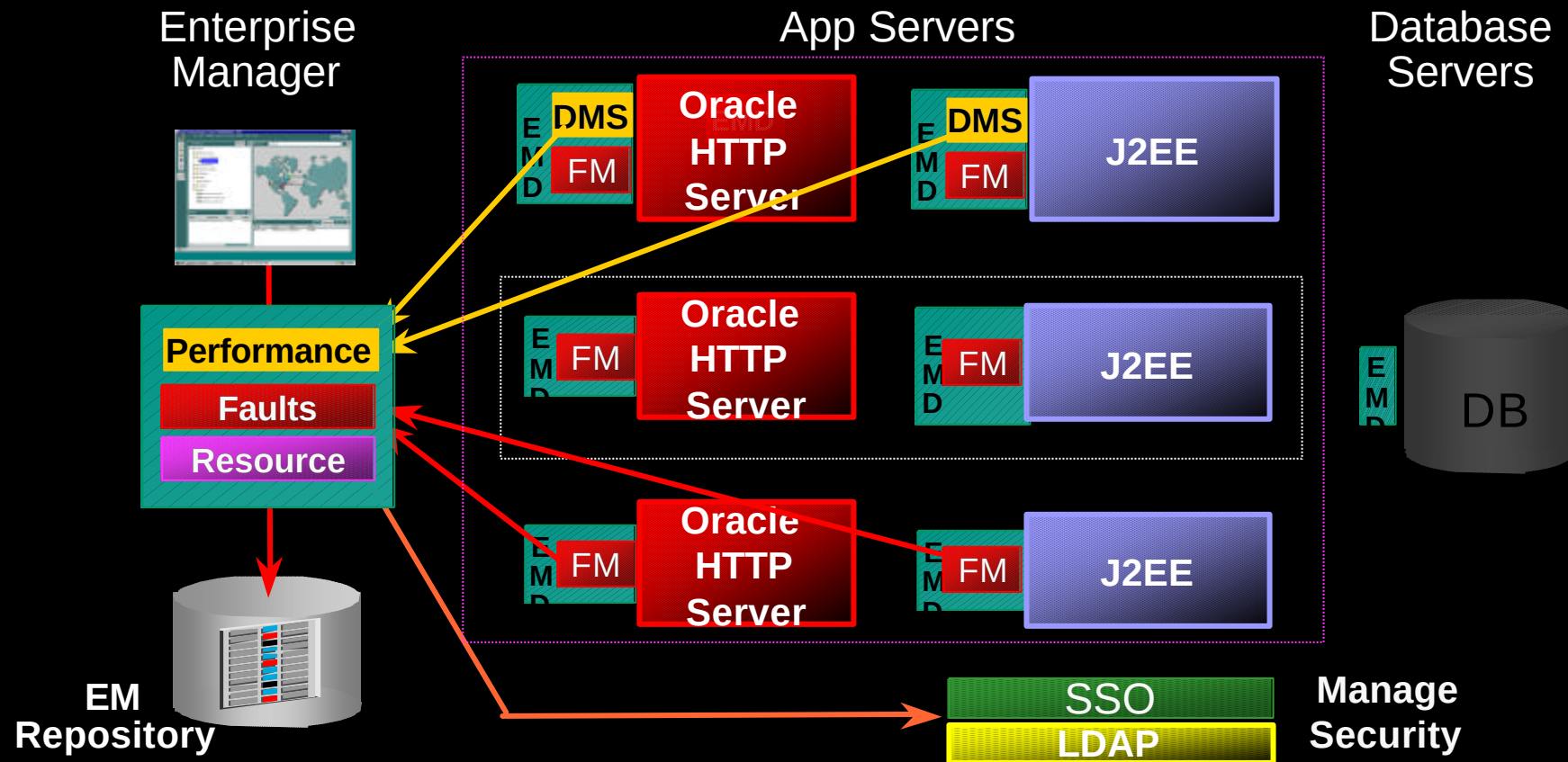
- Integrated Management and Security Framework
- One tool for application server and database administration
- One unified, end-to-end security model for App Servers & DB's
- One directory to manage all of your users and privileges

Directory and Security Services



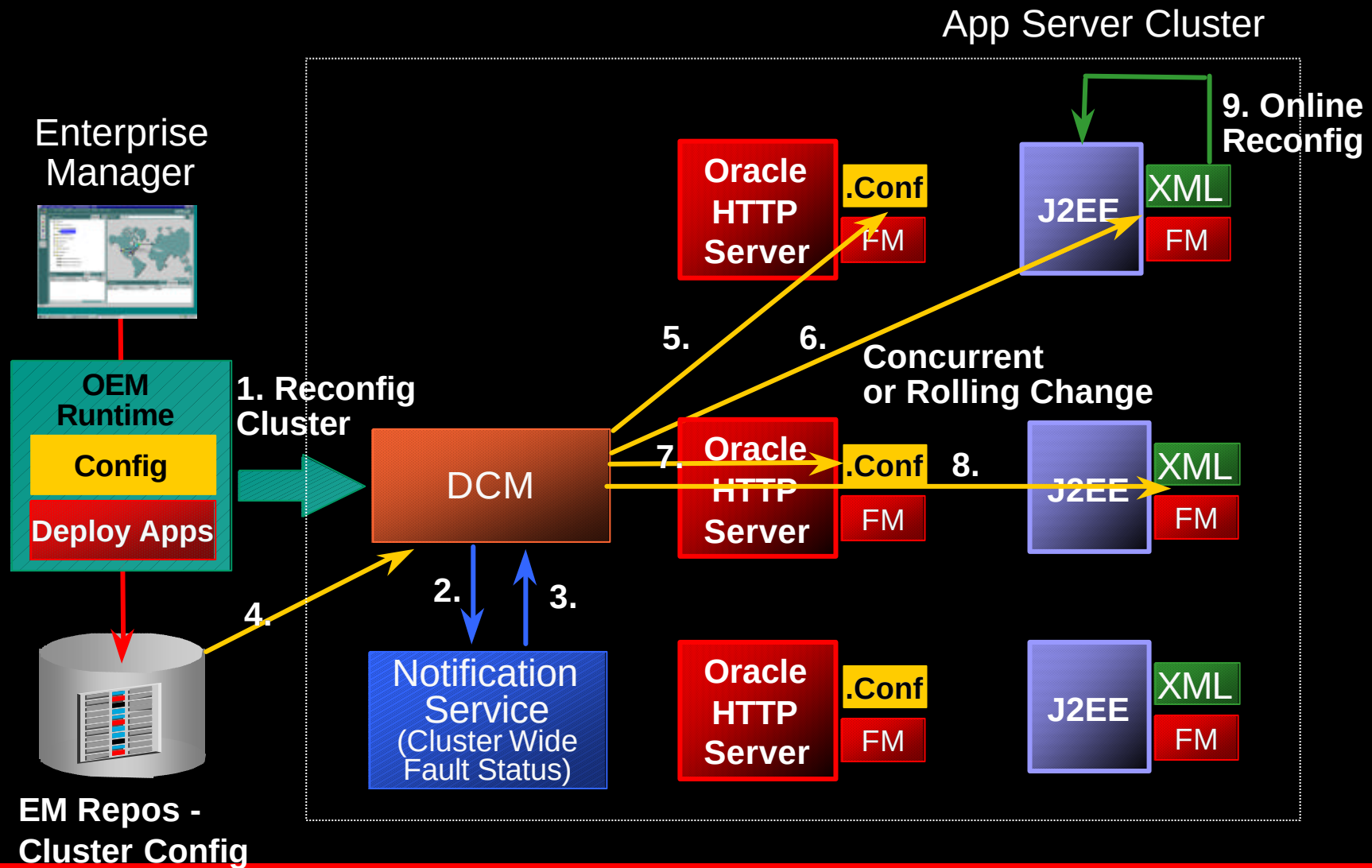
- Integrated Standards Based Security Framework
- One unified, end-to-end security model for App Servers & DB's
- One directory to manage all of your users and privileges

Systems Monitoring & Management



- Integrated Management Framework
- Single point of administration for all app. server components
- Comprehensive monitoring - status, faults, performance, resources

Systems Management



Oracle Enterprise Manager - Application Server:IAS-1 - Microsoft Internet Explorer

File Edit View Favorites Tools »
Address
oracle%5Fias.jsessionid=a5cfefc5fddf441ea250b89642f3dcc3?event=doLoad

ORACLE
Enterprise Manager

[Preferences](#) [Help](#)

Targets

Application Servers

Application Server: IAS-1

Application Server:IAS-1

Last Updated Time: Friday, October 12, 2001 9:41:30 AM PDT

General



Current Status **Up**
Host db02

Stop IAS-1 Restart IAS-1

CPU Usage

The underlying data for the CPU usage chart is unavailable.

Memory Usage

The underlying data for the memory usage chart is unavailable.

System Components

Select Component and...

Start Stop Restart

Select	Name	Type	Status	Uptime (days)	CPU Usage (%)	Memory Usage (MB)
☒	My Web Cache	Web Cache	✓			
☐	My DMS Apache	HTTP Server	✓			
☐	My LDAP	OID LDAP Server	✓			
☐	My Syndication Server	Syndication Server	?			
☐	My JServ	JServ	✓			
☐	My Integration	Directory Integration Platform	?			
☐	home	OC4J	✓			

Targets | Preferences | Help

Local intranet

Directory Services

- LDAP v3 Directory Server
 - Standards - LDAP v3, X.500
 - DB-Backed - Scalable, Reliable
 - Fast - Optimized Indexing, Access
 - 2-Way iPlanet Synchronization
- Central Security Administration
 - Manage - Users, Groups, Roles, ACLs
 - Comprehensive Security Operations
 - Advanced - Password Policies, Proxy ACL
 - Delegated Administration (DASN)
- Best-of-Breed Partners
 - Baltimore, Entrust, Netegrity, Verisign, RSA, SmartTrust

Systems Management

- Simplest to Manage
 - Fast Install and Initial Config
 - End-to-End Monitoring - WebCache, HTTP Server, Portal, J2EE container
 - Browser-Based, Remote Management
 - Firewall, Router Certified
 - Configure - Components, Ports, Log Files, Security
- Complete Monitoring & Management
 - Status, Resources, Faults, Performance
 - Create, Configure, Monitor, Deploy Apps, ...
- Complete Cluster Management
 - Create, Configure, Start, Monitor, Deploy Apps, ..
 - Cluster Wide Ops - Synchronization

Security & Management Differentiators

- Security Differentiators
 - JAAS for Authorization
 - In-the-Box SSO & LDAP
 - Delegated Administration Service
- Systems Management Differentiators
 - Monitoring - Deeper Metrics
 - Administration - More Efficient
 - Cluster Management - Comprehensive
 - Repository - Event Correlation
- Lowest TCM
 - Manage 9iAS As 1 Product
 - Manage 9iAS and Oracle DB

Security

- Most Secure Application Server
 - Standards - HTTP-S, SSL v3, JAAS, Java2, CSiv2
 - Central LDAPv3 Admin
 - Only Multi-tier, Centralized Security
 - Only JAAS/J2EE 1.3 App Server
- Integrated Single Sign-On Server
 - SSO Server - Fast, Scalable
 - Authenticate - Password, Certificate
 - Identity Store - LDAP, Encrypted XML
 - APIs - Partner Apps, JAAS, Other SSO
- Java/Web Services - JAAS
 - Multi-Tier - Web to JSP/Servlet to EJB
 - Fine Grained - Class, Method

Security

- Most Secure Application Server
 - Standards-based, Single Sign-On, Central Admin
- Oracle9iAS Release 2 Enhancements
 - Standards - HTTP-S, SSL v3, JAAS, Java2, CSv2
 - Integrated Single Sign-On Server
 - Multi-Tier, Fine Grained Privileges
 - Central LDAPv3 Admin - Self-Service Provisioning
- Differentiators
 - Only Multi-tier, Centralized Security
 - Only Integrated Single Sign-On, LDAP
 - Only JAAS/J2EE 1.3 App Server

Security

- Standard-based Security
 - HTTPS, PKI/SSLv3, JAAS, Java2, CSiv2, LDAPv3
- Single Sign-On
 - SSO Server - Fast, Scalable
 - Authenticate - Password, Certificate
 - Clients - Browsers, Web Services
 - Identity Store - LDAP, Encrypted XML
 - APIs - Partner Apps, JAAS, Other SSO
- Java/Web Services - JAAS
 - Multi-Tier - Web to JSP/Servlet to EJB
 - Fine Grained - Class, Method
 - Central Management

Security

- End-to-End Security
 - Browser to App Server to Database
- Simplify Security for Users
 - Single Sign-On
- Centralize Security for Administrators
 - Oracle Internet Directory
- Provide Fine Grained Security for Apps
 - Class/Method Level Access Control
- Using Standards
 - HTTP-S, PKI, SSLv3, LDAPv3, JAAS



Security

- Comprehensive Security
 - HTTP-S, PKI, SSL, JAAS, Java2, CSiv2, LDAP
 - Multiple Forms of Authentication
 - Role-Based Authorization
 - Fine Grained Access Control
- What's Better
 - Intrusion Detection
 - Single Sign-On
 - Centralized Administration

Administration, Create User, Information - Microsoft Internet Explorer

File Edit View Favorites Tools »

Address [oiddas/ui/oracle/ldap/das/admin/DASCreateUserInfoAdmin?clearcache=true](#)

**ORACLE**
**Internet Directory**


Help

HomeMy Profile**Directory**Configuration

UsersGroups

[Password Management](#)[Additional Information](#)[Work Address](#)[Home Address](#)[Contact Numbers](#)[Photo Management](#)[Resource Assignment](#)

CancelSubmit

Create User

Basic Information

Create

- * User ID
- * First Name
- * Last Name
- * Title
- * Employee Number (numbers only)

* indicates a Required Field.

Password Management

[Return to Top](#)

- * Password
- * Confirm Password

* indicates a Required Field.

Additional Information

[Return to Top](#)

Done Local intranet

ORACLE®

D E M O N S T R A T I O N

9iAS Verwaltung & Verfügbarkeit

ORACLE®

Oracle9iAS Feature Summary

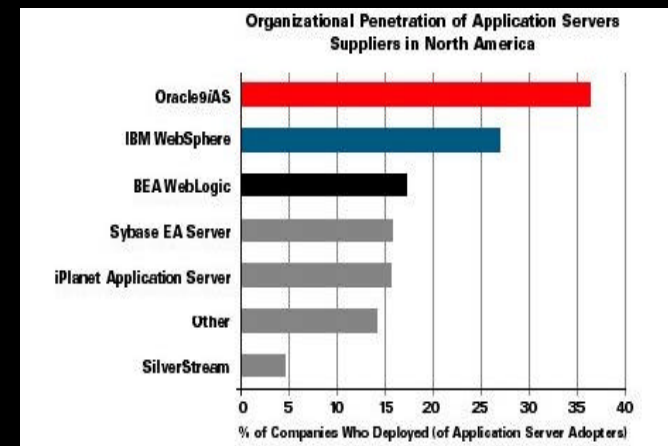
Services	Standard*	Enterprise	Options
HTTP (Apache + mods)	X	X	
J2EE/Web Services	X	X	
Portal	X	X	
Management (OEM)	X	X	
Content Management SDK	X	X	
TopLink, BC4J	X	X	
Forms		X	
Directory		X	
Integration & Workflow		X	
Caching		X	
Business Intelligence		X	
Wireless			X
Personalization			X
Clickstream			X

ORACLE®

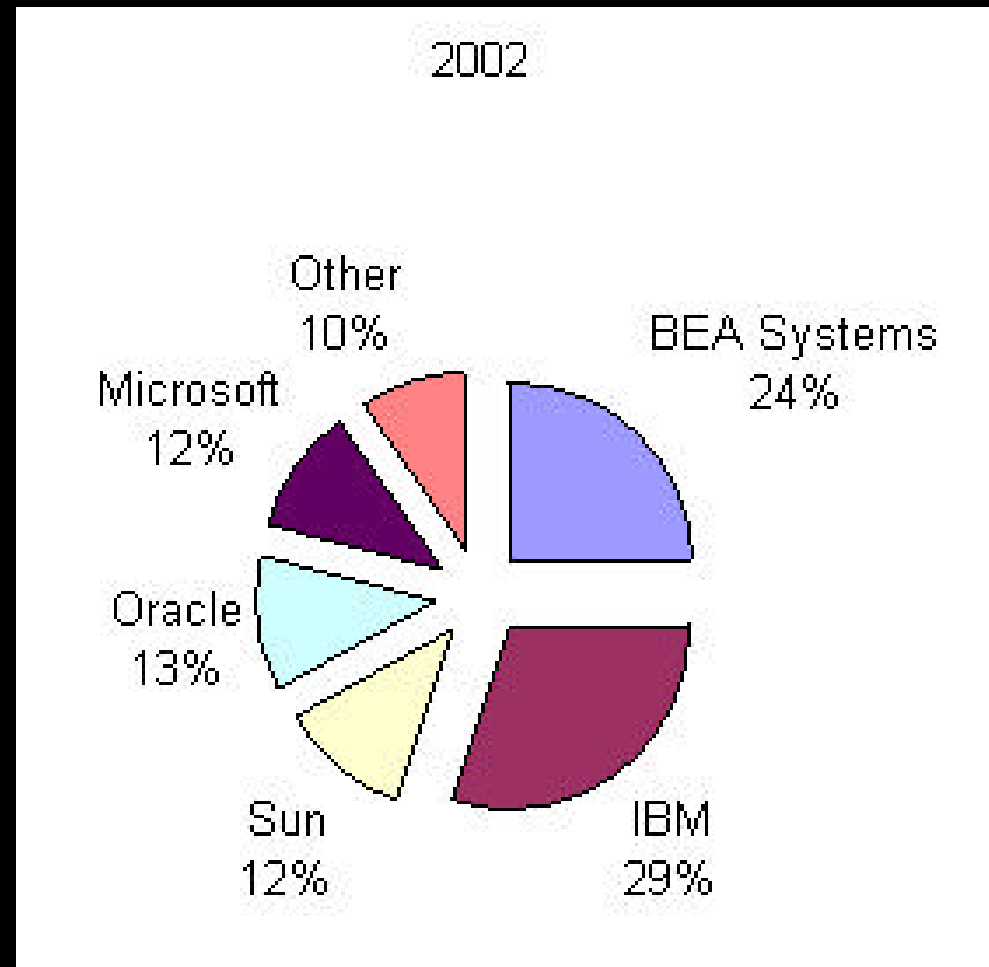
*Also includes: XML XDK, DB DK...

Oracle9iAS Momentum

- 11,000+ Live Customers
- 30,000+ Shipments
- 2.5 Million+ Downloads
- 800+ ISVs
- 3000+ System Integrators
- 3500 Resellers
- Oracle's Fastest Growing Business



Application Server Market Share

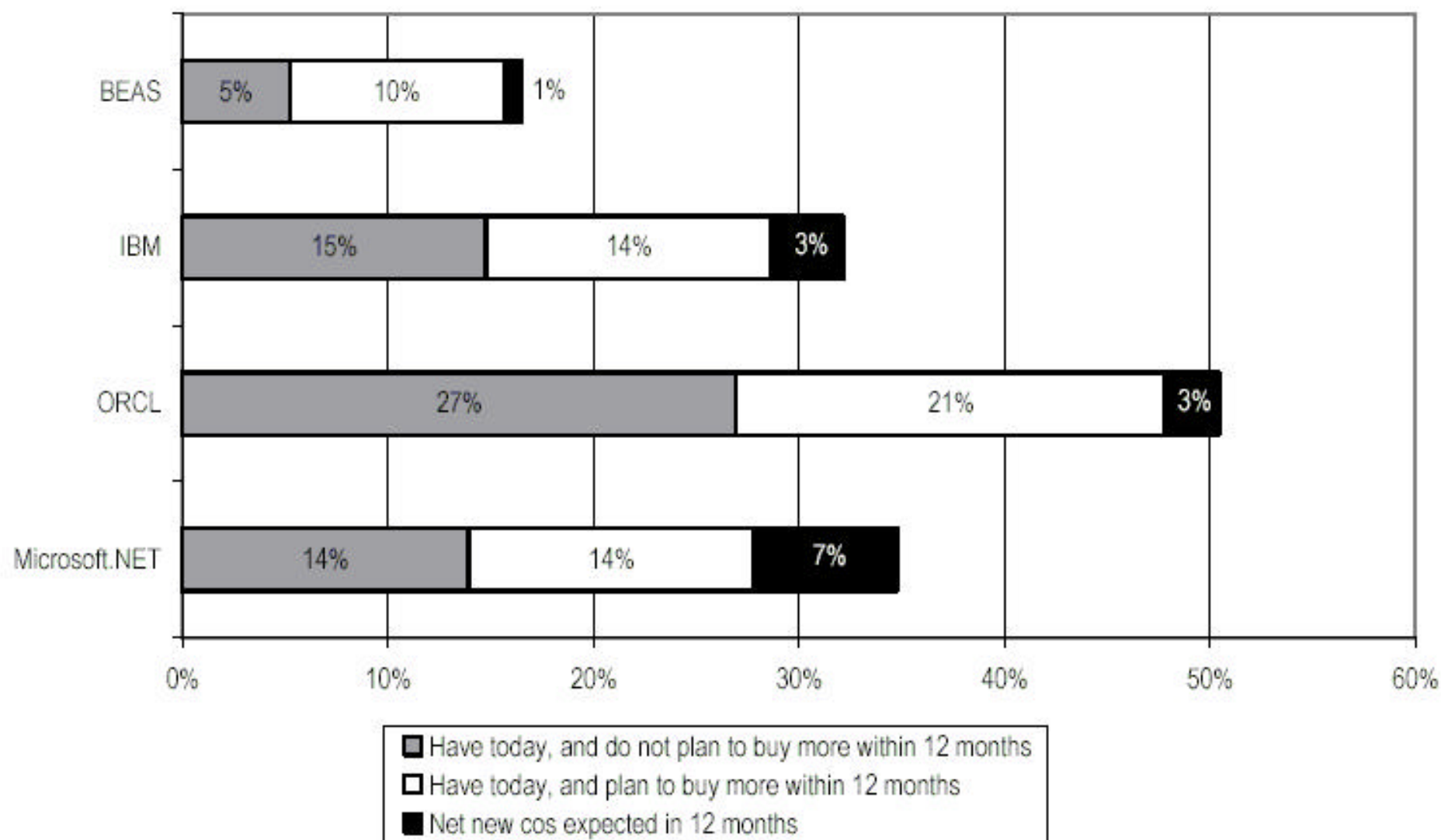


Source: AMR Research, April 2002

ORACLE®

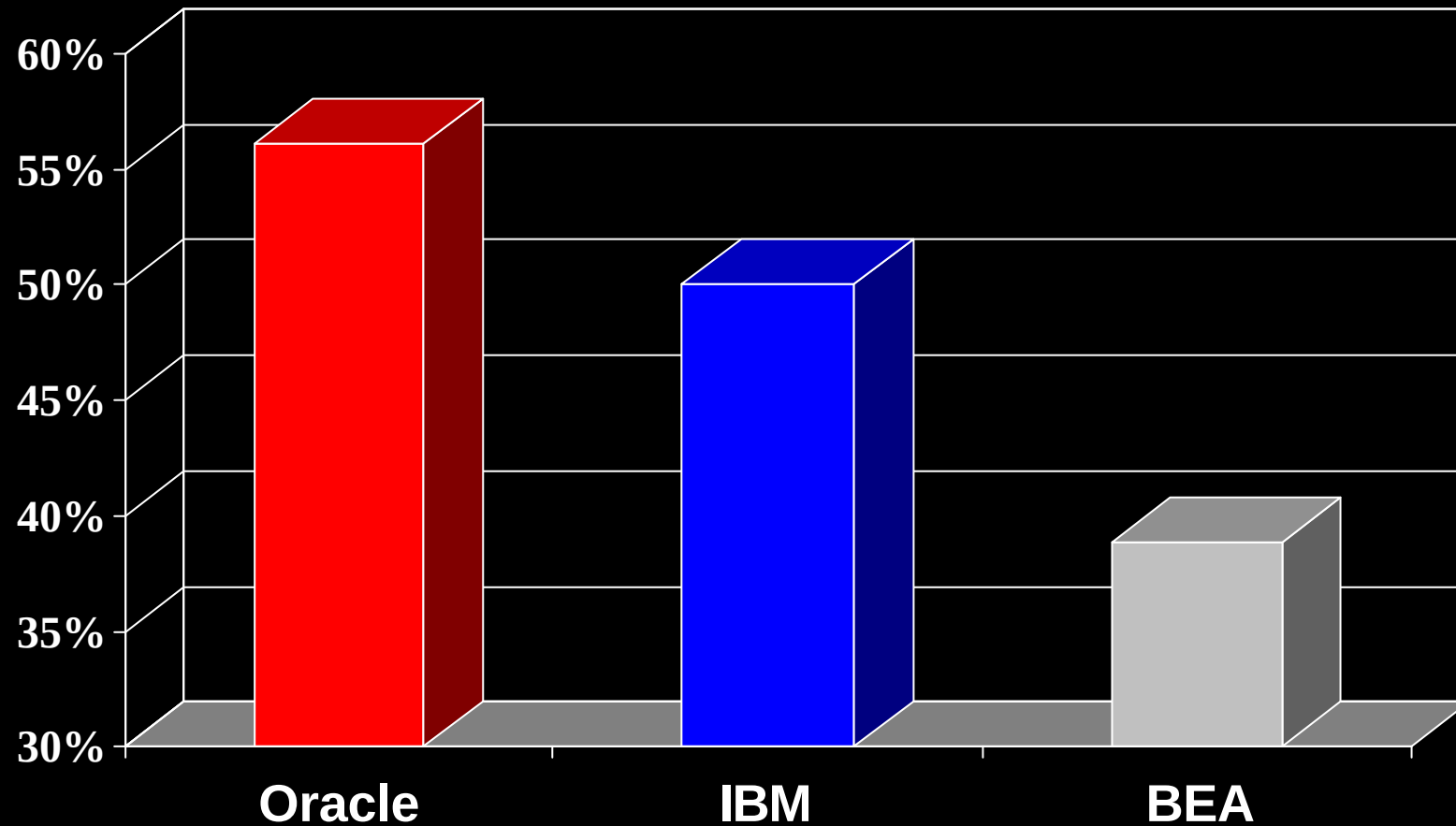
Exhibit 20. Oracle Sees Broadest Usage and Repeat Spending Rate

Question: Which application servers do you use? Which do you plan to buy over next 12 months?
[J2EE vs. Standard Edition not specified]



Source: 2002 Bear Stearns Application Development Survey.

Oracle9iAS: Fastest Growing



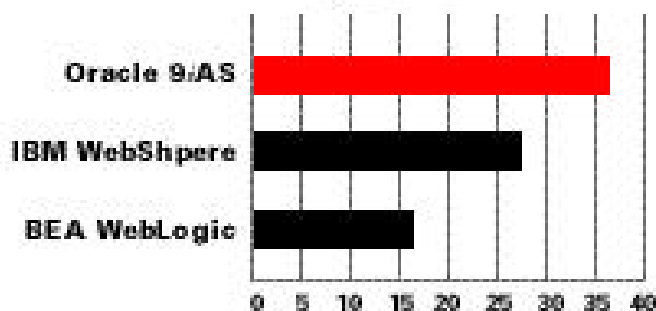
ORACLE®

Source: IDC, May 2002, "Application Server Software and eBusiness Platform Software"

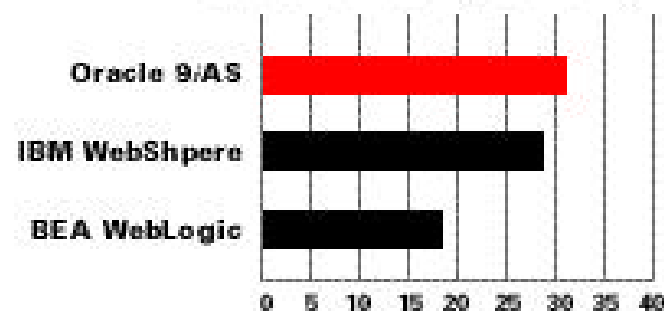
Customers Rate Oracle9iAS #1

What's the #1 Open Application Server?

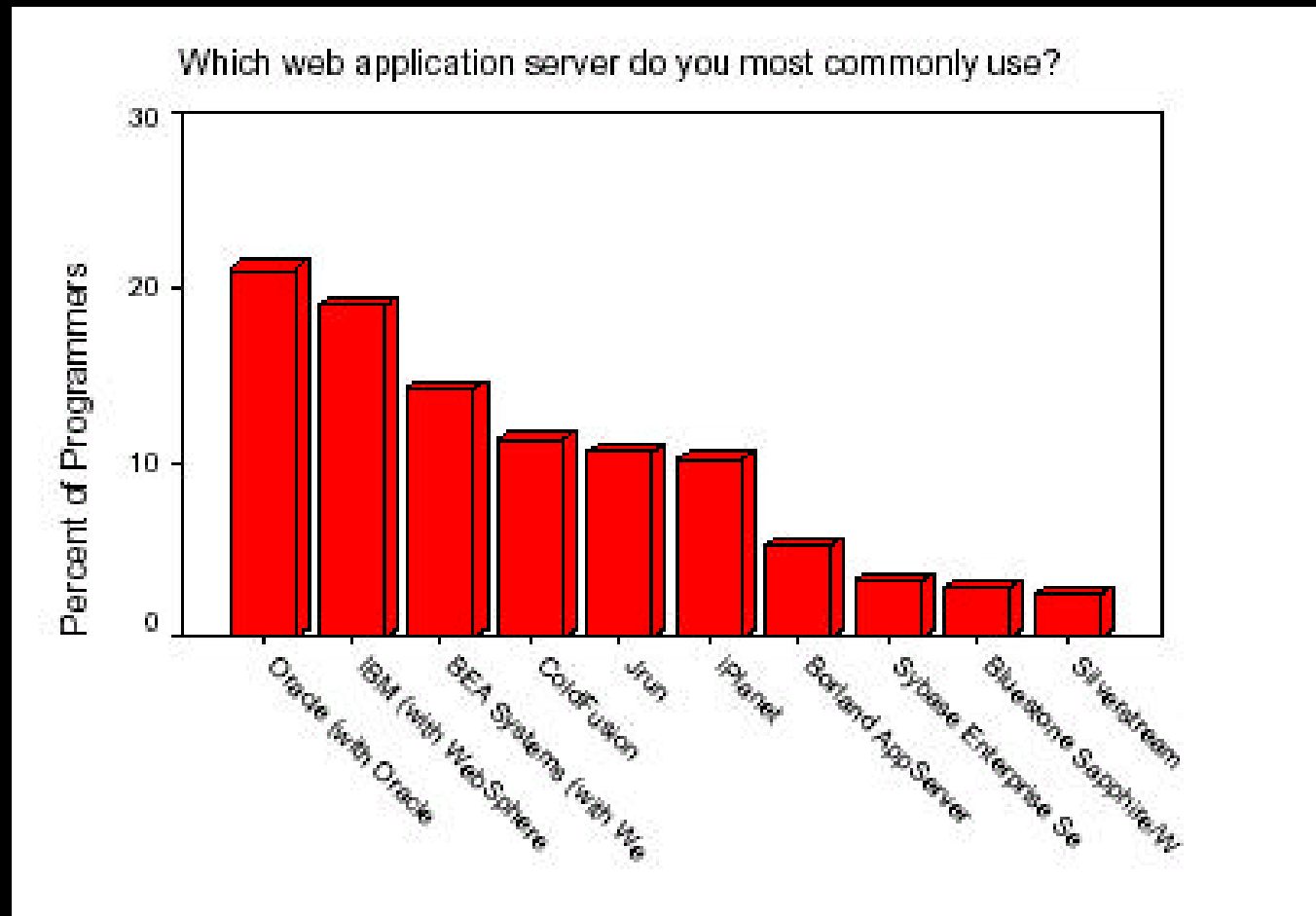
Hurwitz Group Customer Survey
August 2001



Morgan Stanley/Information Week
Customer Survey January 2002



Oracle9iAS: die #1 unter Linux



Quelle: Evans Data Corporation, Linux Developer Survey, Volume 1 2002

Oracle9iAS Awards

- #1 Java App Server
 - #1 Enterprise Portal
 - #1 Business Intelligence
 - #1 Wireless Server
 - 7 Category Wins
 - #1 App Server Platform
 - #1 Planned Deployments
 - #1 Current Deployments
 - #1 Market Share Growth
 - #1 Portal Server
 - Fastest Growing App Server
 - Complete Web Services Vision
 - Most Complete Platform
- Forrester Research
 - Forrester Research
 - DM Review
 - Java Dev Journal
 - Java Dev. Journal
 - Computer Reseller News
 - Hurwitz Research
 - Morgan Stanley
 - Giga Group
 - Forrester Research
 - TechTel Rankings
 - Giga
 - AMR Research

J2EE vs. .NET

	J2EE	.NET
Type of technology	Standard	Product
Middleware Vendors	30+	Microsoft
Interpreter	JRE	CLR
Dynamic Web Pages	JSP, Servlets	ASP.NET
Middle-Tier Components	EJB	Managed Comp.
Database access	JDBC SQL/J	ADO.NET
SOAP, WSDL, UDDI	Yes	Yes
Middleware (load-balancing ...)	Yes	Yes ¹
Languages	Java	C#, VB.Net, VBS.Net
Platforms	30+	Windows only

ORACLE®

¹No Products available now

.NET IS NOT READY

Windows .NET Server 2003

Flagship .NET product
delayed many times
from 2H01 to 1H03

Visual Studio .NET
.NET Framework

New-fangled, not mature

Content Mgmt Server
Exchange Appl Center
Commerce Server
SQL Server BizTalk
SharePoint ISA Server
Mobile Info Server
Host Integration Server

.NET Enterprise Servers
Old technology not yet
integrated into .NET

.NET IS PROPRIETARY



Windows Systems

YES



Solaris Systems

NO



HP-UX Systems

NO



Linux

NO

- .NET Runs Only on Windows
- Single-vendor lock-in with .NET

.NET IS NOT SECURE

- 200 + serious security flaws since 1999
- No progress in 2002 despite Trustworthy Computing initiative

Year	Security Advisories
1999	60
2000	100
2001	60
2002 (till Sep 25)	53

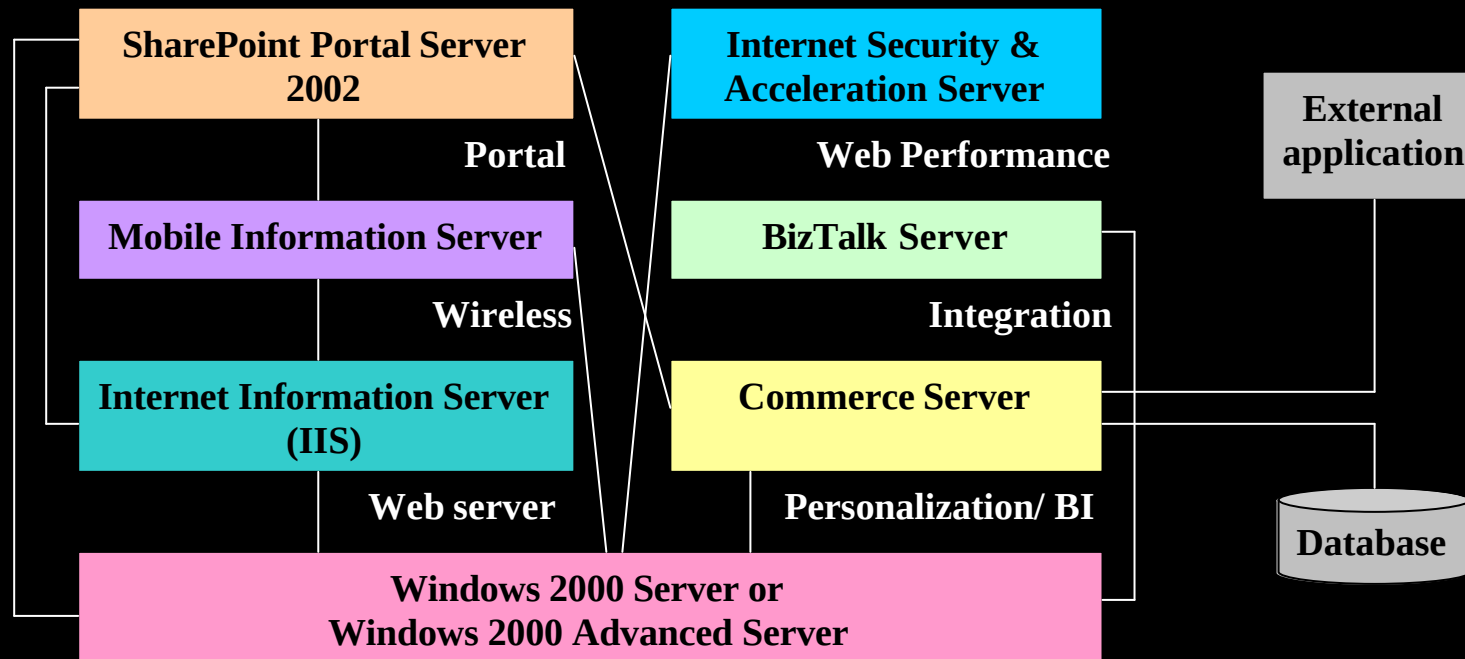
“Our products just aren't engineered for security.”

- Brian Valentine, SVP, Windows .NET Server (Sep 2002)



.NET IS NOT INTEGRATED

Example: What's needed to deploy a portal with .NET

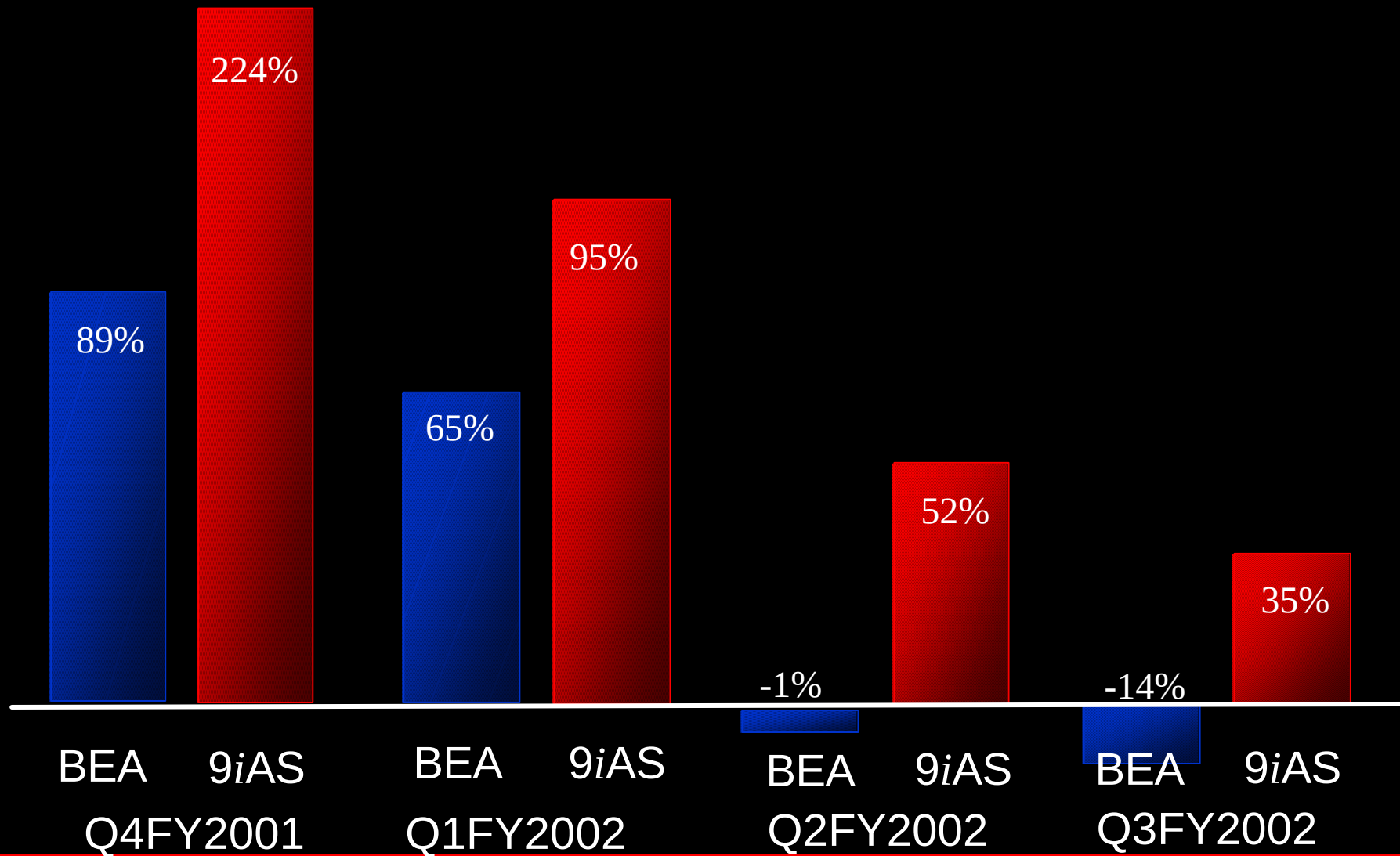


- What's needed with Oracle: Just Oracle9iAS

Oracle9iAS Complete

Area	Oracle9iAS	BEA
Multiple DBs	☒	☒
Multiple Web Servers	☒	☒
J2EE Server	☒	☒
Web Services	☒	☒
Enterprise Portal	☒	☒
Workflow	☒	☒
Integration	☒	☒
Management	☒	☒
Wireless	☒	☐
Clickstream	☒	☐
Web Cache	☒	☐
Java Cache	☒	☐
Security	☒	☐
Directory	☒	☐
Business Intelligence	☒	☐
Java Development	☒	☐

BEA vs. Oracle9iAS Revenue Growth



Source: Oracle Corporate Financials/BEA Systems Public Financials

struggle because it fundamentally changes the way they have traditionally worked with customers.

The analyst does not expect to start seeing growth in the software sector until 2008, and believes that Europe will lead the U.S. in its take-off.

With the fallout, customers may see several established names disappear. Gartner said there is a 0.7 (from one) possibility that Web services supplier [BEA](#) (Nasdaq: BEAS)  has no long-term future. It also believes that SunSoft is in danger.

"BEA is in a good position. The issue it has is that it must figure out how to expand beyond the application integration area," said Burton.

She added that Oracle (Nasdaq: ORCL)  has made it clear that "BEA is camping on its property and wants to kick it off." Under that pressure, the analyst does not believe the company can survive.

Borland is also in a difficult position. Having been forced to go on the acquisition trail to grow, it must now tie its new companies together.

"It's not impossible, [but] it's a challenge," said Gartner vice president Nick Jones. "Borland has to grow or shrink, because it can't stay at where it is today."

Burton explained that [Siebel](#) (Nasdaq: SEBL)  must move beyond customer relationship management   and has to overcome its restrictive cultural reputation if it is to attract talented employees.

Among the hardware vendors, Gartner suggested that any company outside the top three of IBM, [Dell](#) (Nasdaq: DELL)  and Hewlett Packard could be in danger. The possible casualties include Acer, Fujitsu and [Apple](#) (Nasdaq: AAPL) .

In telecoms across Europe, there are many players but no leaders and little vision, the analyst said. For 3G , said Gartner, read 3D: Debt, Delay and Doubt.

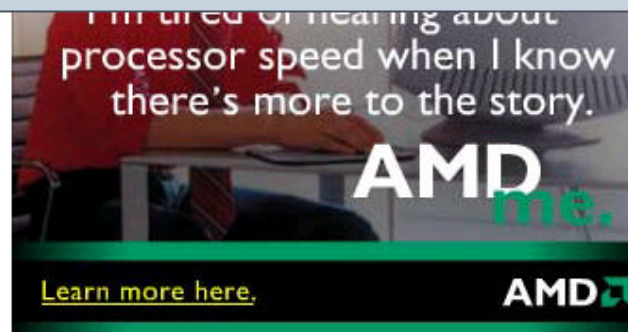
"There are far too many mobile operators in Europe," commented Jones. "There's room for three operators in most countries and for three big pan-European operators."

He also attacked the way mobile communications standards are developed, describing Bluetooth  as a disappointment and warning that Mobile Messaging Service will not reap the financial rewards many are hoping for. [END](#)

© 2002 VNUNet.com, VNU Business Online Limited (UK) i/a/w ScreamingMedia, Inc. All rights reserved.
© 2002 NewsFactor Network. All rights reserved.

 **Talkback:** [Click here to add your comment about this story...](#)

[See Related Stories](#)



NEW! Microsoft Adopts 'Smart' Strategy
▷ [Full Story](#)

NEW! HP Launches Ad Campaign To Reboot Brand
▷ [Full Story](#)

NEW! IBM, Sharp Build Linux Platform for PDAs
▷ [Full Story](#)

NEW! Dell PDA To Shake Up Market
▷ [Full Story](#)

NEW! Growing Wi-Fi Services Cast Wide Net
▷ [Full Story](#)

NEW! Nokia Messaging Phone Gets Down to Business
▷ [Full Story](#)

NEW! Palm for ARM
▷ [Full Story](#)

NEW! This Pacemaker Checks In Regularly with the Doctor
▷ [Full Story](#)

NEW! Palm's New Corporate Spin
▷ [Full Story](#)

Sony, T-Mobile Team for Wireless Entertainment
▷ [Full Story](#)

Salesforce.com Readies for Airforce Wireless Debut
▷ [Full Story](#)

Spy Satellite Pictures Are Unveiled
▷ [Full Story](#)

Gateway Web Access: One More for the Road
▷ [Full Story](#)

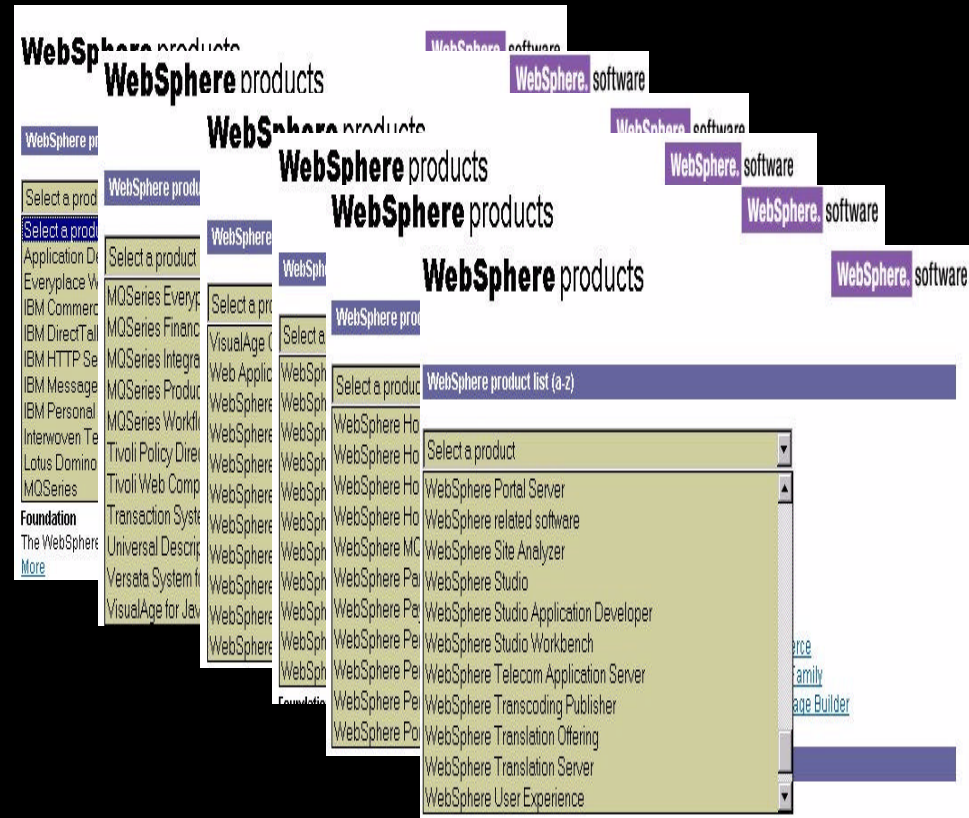
AMD Unveils 256-Megabit

Oracle9iAS Integrated



VS

- 1 SKU
- 1 Install
- 1 Update Model
- 1 Maintenance Model
- 1 Management Console
- 1 Security Environment
- 1 LDAP to Manage Users
- 1 Runtime Environment
- 1 Portal to Access
- 1 Toolset to Develop



ORACLE®

Oracle9i Application Server J2EE

Lightweight Developer Footprint

	Oracle9iAS OC4J	BEA WebLogic 6.1	IBM WebSphere 4.0
Download Size	23 MB	75 MB	103 MB
Disk Space	30 MB	80 MB	120 MB
Minimum Memory	20 MB	64 MB	80 MB

Interoperate with Existing Solutions

Dev Tools

Macromedia
Adobe
Rational
Borland
Forte
WebGain
TogetherSoft
NeuVis
Compuware
Sitraka
VMGear
Nuance
CA Jasmine
Silverstream
Groupserve
Where2Net
Empirix
Thought
Several Others

Sys Mgmt.

CA
BMC
Mercury Interactive
Compuware
Wily
Precise
Quest
VM Gear
Several Others
Security
Baltimore
Neterity
Verisign
Entrust
SmartTrust
RSA
POS
Windows

Content Mgmt.

Documentum
InterWoven
Stellent
Gauss
Fatwire
Serena
Bluewin
Complex Media

Pkg Apps

SAP R/3 & F/4
Oracle 10.7, 11.5
Peoplesoft
Ariba
Compuware
D Edwards
Siebel 2000

Databases

Oracle 7.3, 8.0, 8i, 9i
MS SQL-Server
IBM DB/2 UDB
Sybase
Informix

Messaging

Oracle AQ
MQ-Series
TIBCO
SWIFT MQ
SONIC MQ

Firewall/Switch

Checkpoint
Raptor
Cisco
Alteon
Nortel
BigIP

Product Certification

- OS/Hardware Platforms
 - Unix - Solaris, HP-UX, AIX, Tru64, Linux
 - Windows - NT, 2000, XP Underway
 - 64-Bit - HP-UX, AIX, Solaris, Linux
 - IA-64 - Planned for Second Half 2002
 - Browsers - NS 3, 4, 5, 6 and IE 3, 4, 5
- JDK Support: 1.1.8, 1.2.2, 1.3, 1.4 b
 - Platform JDK, JRE, Compatible with Java IDEs
- **11i** Suite Certification Complete
 - 11.5.* Certified with 9iAS v 1.0.2.2
 - 11.5.6 Currently Shipping
- Dell Infrastructure Accelerator
 - Certified Solutions Underway with Others

Most Affordable

- Lowest Software Cost
 - Pay Less, Get More
- Lowest Hardware Cost
 - Less HW, Scales Better
- Lowest Management Cost
 - One Management Console
- Lowest Integration Cost
 - One Product vs One Brand of Many Products
- Lowest Support Cost
 - One Support Contract

Lowest Software Cost - Pay Less

Area	Oracle	IBM	BEA
Java/J2EE Clustered	\$40,000	\$48,000	\$68,000
Web Services Clustered	\$40,000	\$48,000	\$68,000
Enterprise Portals	\$40,000	\$220,000	\$228,000
Wireless	\$120,000	\$140,000	\$240,000

Best App Server for Oracle DB

- Best Database Support
 - Out-of-the-Box - Oracle, SS, DB/2, Informix, Sybase
- Best App Server for Oracle DB
 - Certification - All Versions, Only 9i and 9i RAC certified App Server
 - Development - Consistency, Features
 - Tools - 1 Set of Development Tools
 - Performance - Fastest
 - Scalability - Transactions, Messaging Optimized
 - Availability - Failover, RAC, Standby
 - Globalization - 1 Globalization Model
 - Security - 1 Security Model

Release 2 New Features Summary

HTTP Server

- Integration: OC4J, OEM, SSO
- Proxy Plug-In
- High Availability
- Java Object Cache
- Diagnostic Logging

OC4J

- J2EE 1.3
- Stack Integration
- 3rd Party: JMS, JDBC, OR-Mapping
- Manageability

Web Services

- J2EE/PLSQL
- WSDL Generation
- UDDI, SOAP 2.0
- EAR file deployment
- Stream Processing

BC4J

- 9iDB Support
- Web Services Support

Forms

- Listener Servlet, SSO
- Remote Debugging
- Java Importer, Java API
- Internationalization

Portal

- Extended integration: Wireless, Web Cache, OEM, OID
- Empowered pages
- Enhanced content publishing
- Enhanced provider framework
- New Portlets: Disco, Reports, OEM, iFS

Wireless

- Push & SMS, PIM & Email
- SDK, Advanced Customization

Web Cache

- Clustering, Partitioning
- Multiple Virtual Hosts
- XSLT Support
- Validation-based caching
- ESI Language & Portal Extensions

Oracle9i File System

- Portlet
- Integration: Wireless, Web Cache, OEM

InterConnect

- Application & Technology Adapters

Unified Messaging

- SMTP Server & Authentication
- Voice Mail, SMS Notification
- Local Delivery Rules Engine
- Web Calendar, Resource Scheduler

Discoverer

- Portlets, Scheduling
- Aggregation enhancements
- Connection Management
- Integration: Web Cache, Reports

Reports

- Pluggable Notifications, Engines & Data Sources
- Event based publishing
- Enhanced Bursting
- Integration: Portal

Personalization

- Stack Integration

Clickstream Intelligence

- Brand New

Internet Directory

- User Authentication via SSO, OID
- Delegated and Self Admin
- Single, central user definition

OEM

- Lightweight HTML Admin UI
- User Administration
- End-to-end 9iAS Admin & Monitoring
- OC4J monitoring, deployment & configuration

Oracle9i Application Server Release 2

Key Messages



- Produktivste Entwicklungsumgebung
 - Gemeinsamer Infrastructure und Technology Stack
 - Vollständige J2EE & Web Services Implementierung
 - Geringster J2EE Ressourcenverbrauch
 - Portal, Wireless, Integration, Caching
 - Personalization, Clickstream, BI
- Zuverlässigstes Deployment
 - Performance und Caching
 - Hochverfügbarkeit und Clustering
 - Vollständige Management und Security Funktionalität
- 100% Standards Compliant
 - J2EE 1.3, Web Services, SOAP, WSDL, UDDI, ebXML, RosettaNet, LDAP v3, SSL v3, XML ..
- Niedrigste TCO

Weitere Informationen



otn.oracle.com

- Informationen zu allen Produkten
- Download von Software
- Sämtliche Dokumentation
- Anleitungen und Beispielcode
- Foren zum Erfahrungsaustausch

rtures

meal	AC865	Go to gate 23
it	ME202	Go to gate 5
to	AC857	Go to gate 23
rk	AA093	Go to gate 7
	AA067	Go to gate 18
	UA9392	Go to Lounge
ork	AIH11	Go to Lounge
	BI098	Gate open gate 9
er	AC897	Go to Lounge

ave baggage unattended

12:05

coloursmaster

A fatal exception 0E has occurred at 0028:00000313 in VXD VMH(01)
00000313. The current application will be terminated.

- Press any key to terminate the current application.
- Press CTRL+ALT+DEL again to restart your computer. You will lose any unsaved information in all applications.

Press any key to continue

coloursmaster

Haben Sie noch Fragen?

NOTHING
ON LINE

ORACLE®

ORACLE®