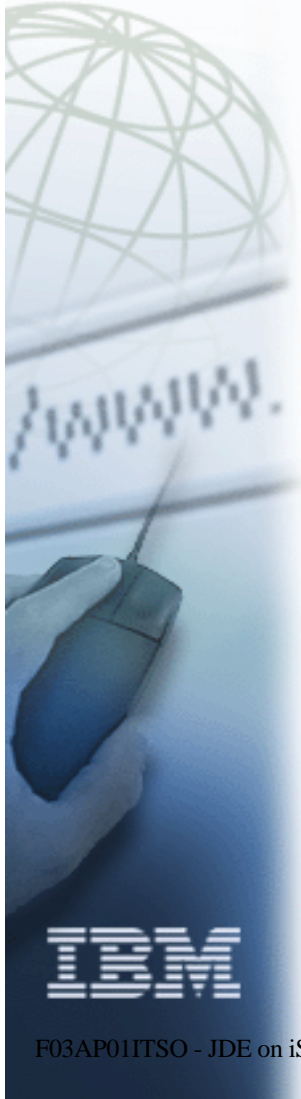


ibm.com



e-business



What's New With J.D. Edwards on iSeries

AP01

ITSO iSeries Technical Forum

Julie Ransom



Redbooks

International Technical Support Organization

© 2003 IBM Corporation

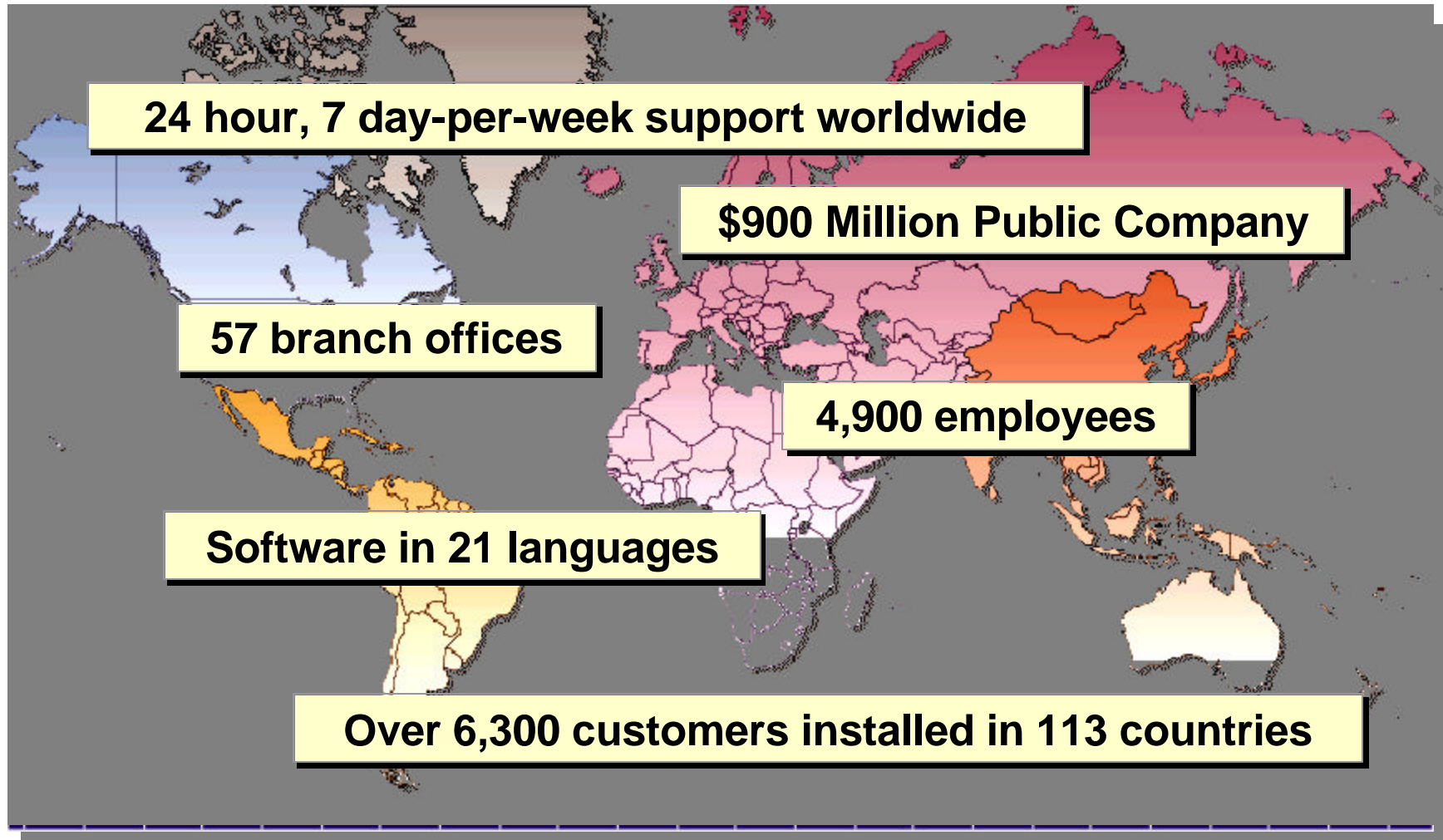
Agenda






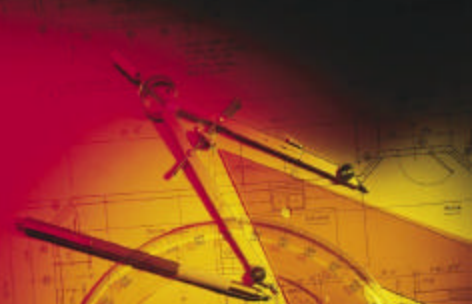
- IBM **@server** iSeries and J.D. Edwards Background
- Solutions from J.D. Edwards
- Collaborative Efforts
- Why iSeries for J.D. Edwards Implementations
- Resources and Contacts



J.D. Edwards Background



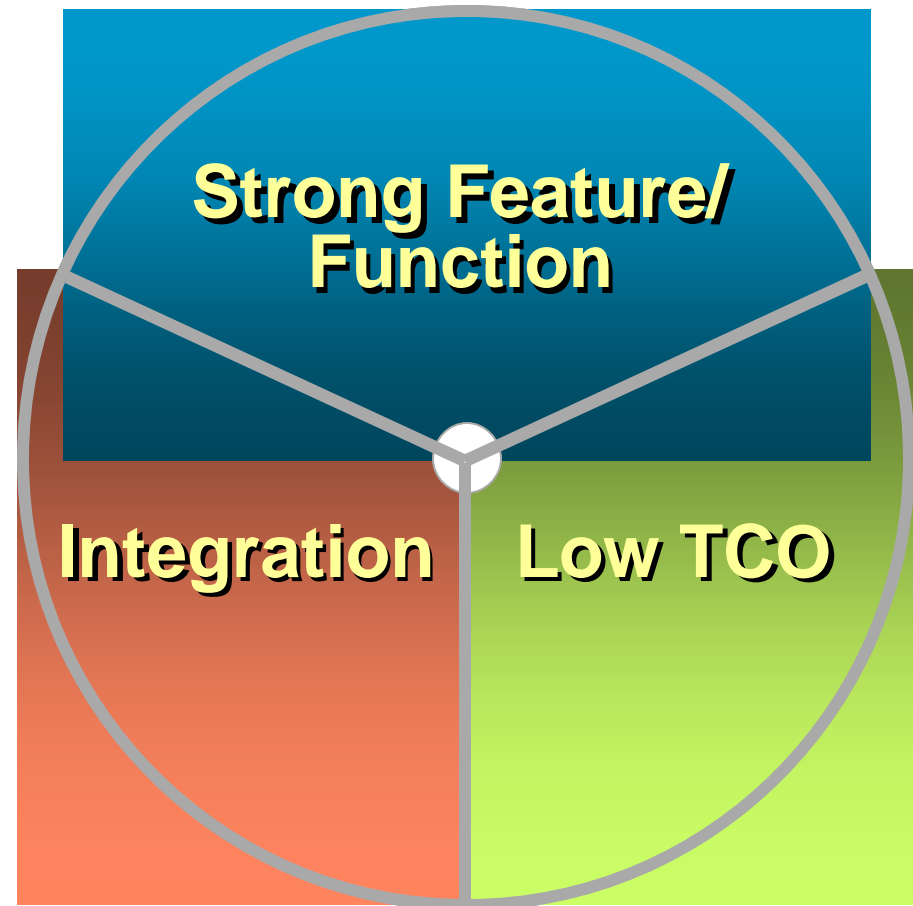
Industry Coverage

Manufacturing	Distribution	Asset-intensive	Project-oriented
			
<ul style="list-style-type: none">• Pharma/biotech• CPG• IFA• Chemicals• Auto & allied industries• Electronics	<ul style="list-style-type: none">• Third-party logistics• Wholesale distribution• Electronics• CPG• Medical devices	<ul style="list-style-type: none">• Mining• Energy• Construction• Field service• Real estate• Communications• Pulp and paper• Utilities	<ul style="list-style-type: none">• Construction• Public service• Professional services

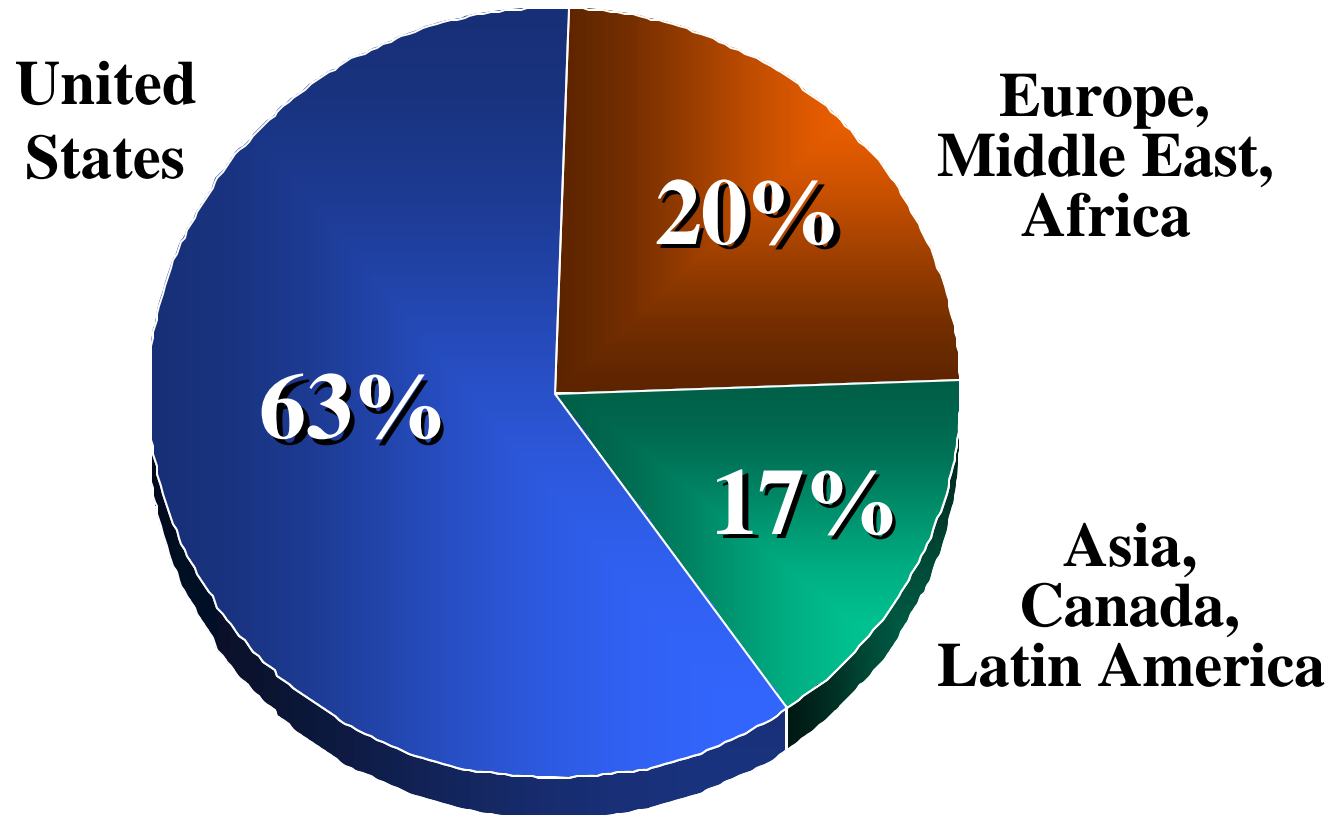
***JDE Refocused on Midmarket (\$250M - \$3B)
Customers Below \$250M covered by JDE Distributors***

Why Customers Choose J.D. Edwards Solutions

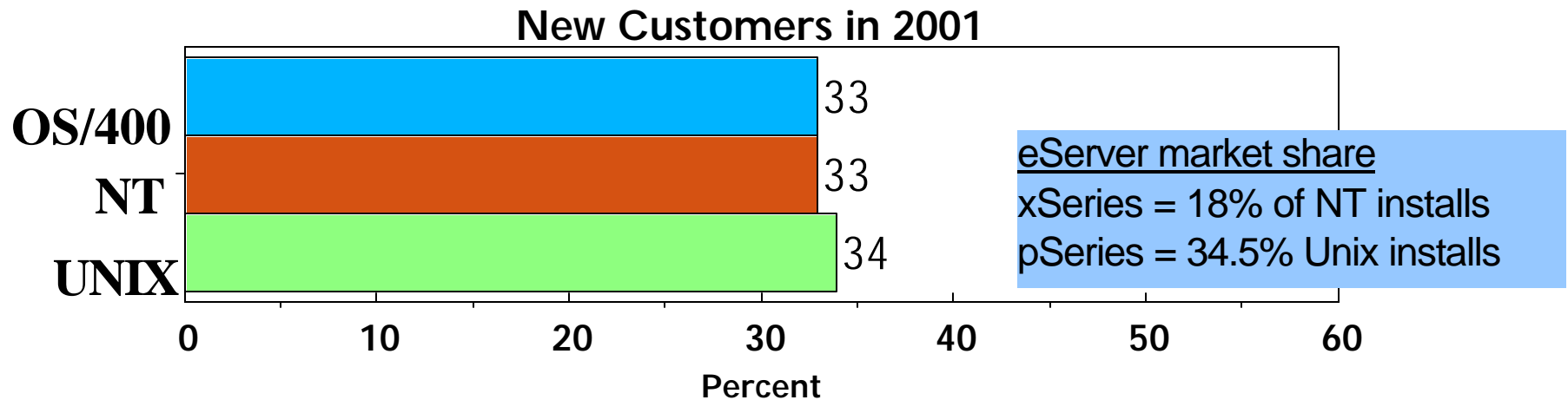
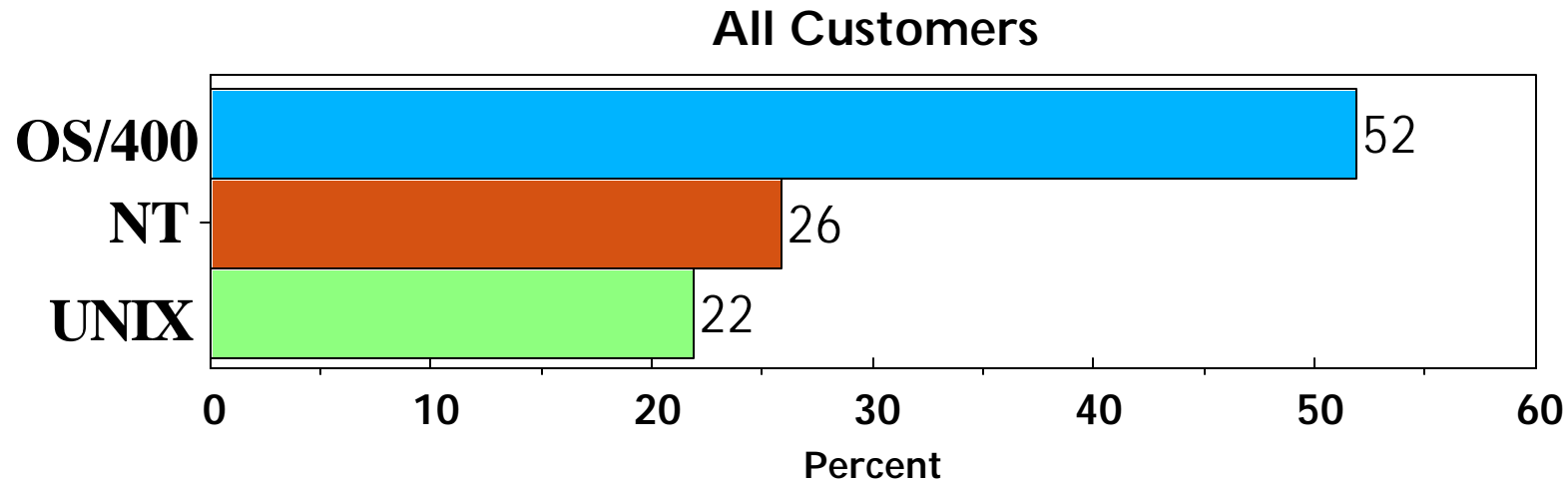
- **Feature/Function match to their top priority business needs**
- **An integrated solution from an accountable partner they feel comfortable will be here for the long haul**
- **Low total cost of ownership**
 - ▶ Software
 - ▶ Delivery
 - ▶ Support
 - ▶ Upgrades



Geographic Distribution of J.D. Edwards Sales



J.D. Edwards License Revenue by Platform





J.D. Edwards Solutions

Two ERP Products

WORLD SOFTWARE™

- AS/400 and iSeries only solution
- Host centric - uses 5250 OLTP
- Functionally rich
- High Quality ==> "defect free"
- Until 2000, product had been stabilized; no new development and no marketing of this solution
- In 2000, JDE announced dedicated WorldSoftware Organization to provide
 - Indefinite support for World
 - Coexistence through Feb 2005
 - SW Enhancements
 - New e-business extensions
 - Easier migration to OneWorld
- Over 4000 accounts still on maintenance

ONE WORLD™

- Cross platform product
 - Available on NT, Unix and OS/400
- Client/Server application; object based
- One set of tools generates the app for all supported platforms
- Runs natively in C on iSeries
- OneWorld Xe provided
 - Web serving using WAS
 - HTML and Java clients
- ClusterProven on all platforms
- Joint resources (IBM/JDE) to ensure continued support/quality on iSeries
- Over 2000 live accounts on OW

Introducing J.D. Edwards 5



- **The fifth generation of JDE's complete family of software products and services**
- **The industry's most comprehensive, integrated, modular collaborative enterprise solution**
- **Makes customers stronger by making it easier for them to buy what they need when they need it**
- **Branded to take advantage of the J.D. Edwards name**
- **Announced June 2002**

What's in a Name?

Elegant
Software

OneWorld

1977

1984

1996

2002



Picasso

WorldSoftware

J.D. Edwards 5

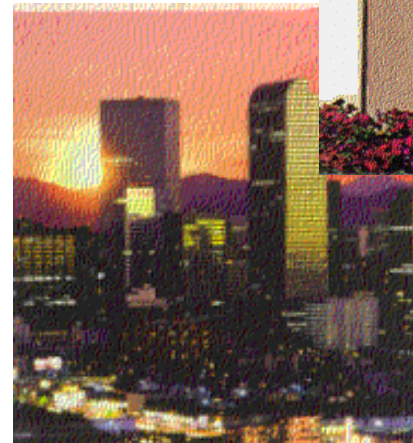


*Xe or not Xe.
That is the question.*



J.D. Edwards History

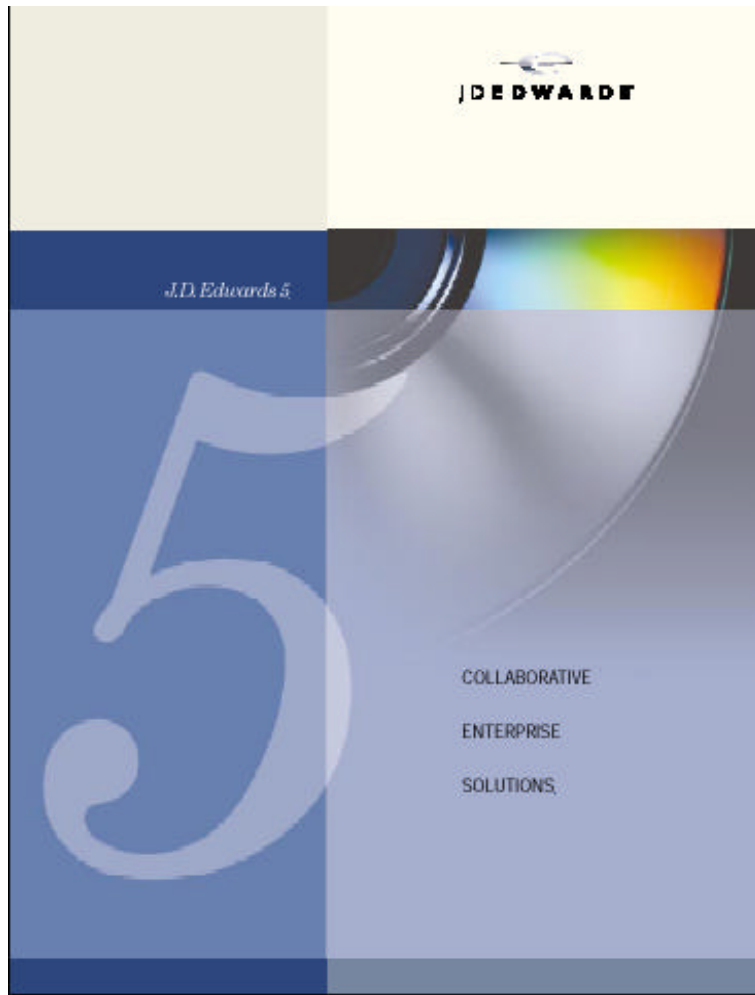
- **1977** – company founded in Denver, CO
- **1980** – began development on IBM System/38
- **1985** – World Software ships on S/38
- **1988** – World Software ships on AS/400
- **1990** – first international office (Brussels)
- **1995** – Genesis (SMB) product released
- **1996** – OneWorld product line released
- **1999** – JDE acquires Numetrix
- **2001** – JDE acquires Youcentric
- **2002** – Bob Dutkowsky named Chairman & CEO
- **2002** – announcement of J.D. Edwards 5



Solution Clarification

- **Like J.D. Edwards 5, OneWorld® and WorldSoftware™ remain important solution families**
- **OneWorld® and WorldSoftware™ support remains unchanged**
- **Most J.D. Edwards products integrate with both OneWorld® and WorldSoftware™**
- **J.D. Edwards 5 does not support WorldSoftware™ coexistence**

ERP Functional Coverage for World and JDE 5



- Financial Management
- Inventory Management
- Enterprise Asset Management
- Real Estate Management
- Workforce Management
- Project Management
- Homebuilder Management
- Field Service Management
- Procurement & Subcontract Management
- Order Management
- Manufacturing Management

WORLD SOFTWARE™

JDE 5 Uses a Tiered Architecture

- **Configurable Network Computing (CNC) architecture of JDE allows distribution of function**
- **Types of servers**
 - Database server
 - Application server (Logic server)
 - Batch server (Universal Batch Engine UBE's)
 - JAS (Java Application Server)
 - Citrix or Windows Terminal server
 - Web Generator
 - Deployment server
- **Client Choices:**
 - Thick (“fat”): Client runs application logic, may also run batch
 - Thin or “mapped”: All or a portion of the application logic is mapped to a separate server
 - Thin clients commonly connect to Citrix or WTS server: Used to reduce WAN traffic and provide acceptable performance to remote clients
 - Web (HTML): Need only a browser
- **With this flexibility comes and choices, comes complexity, especially for implementation**



Configuration Options

Two tier
Database Server
Fat Client
iSeries



DB



MBF (Master Business Functions)

OneWorld Fat
Client

Virtual Three Tier
with WAN

iSeries



DB & MBF(including batch)



xSeries
TSE/Citrix

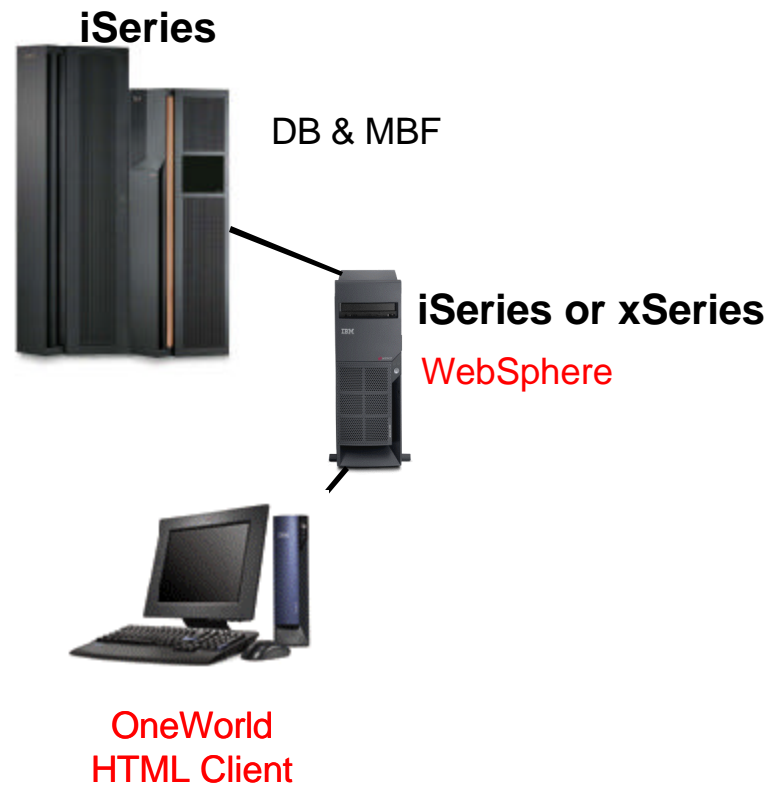


OneWorld
Windows Client

Returning to Host Based Using the Web

Virtual Three Tier Web

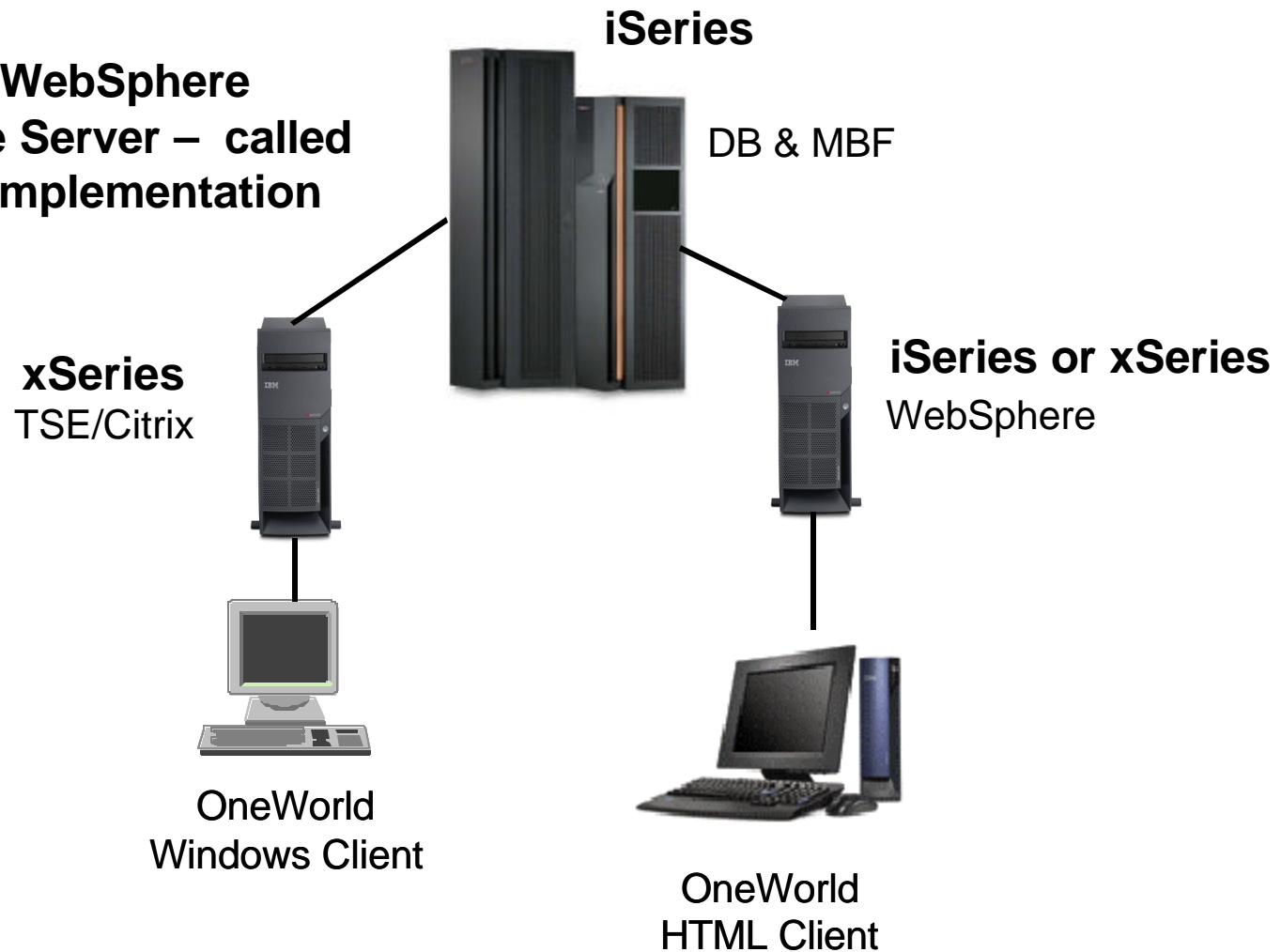
Can also run WebSphere
on Enterprise Server – called
“All in One” Implementation



For Remote Clients You Might Need Windows & Web

Virtual Three Tier WAN / Web

Can also run WebSphere
on Enterprise Server – called
“All in One” Implementation



Additional Servers

■ Deployment server

- Used to “build” and distribute JDE code
- Intel based
- IXS card or separate xSeries

■ Web Generator

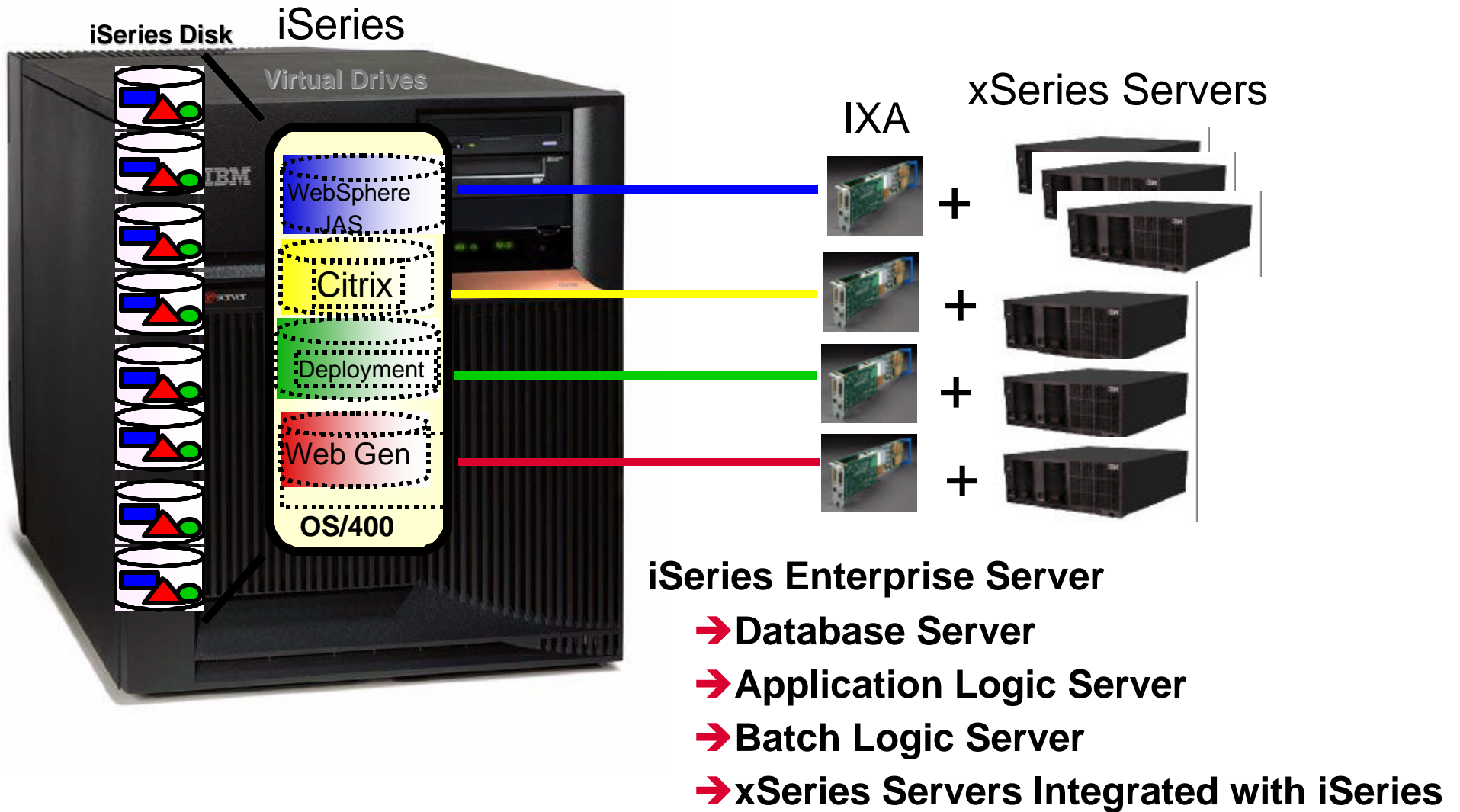
- Required for HTML clients
- Generates serialized objects for HTML clients

■ JAS server (Java Application Server)

- Also called WebSphere Server
- Required for HTML clients
- Used to run WebSphere to support HTML clients
- Can be on any platform supported by WebSphere
- Can be separate server or “all in one”
- For iSeries can implement in LPAR and receive sub-capacity pricing



Example Config for JDE 5 on iSeries



JDE's View of iSeries and Latest Offering

“The newest capabilities and packaging options in the iSeries servers provides outstanding flexibility and price performance for J.D. Edwards customers. The Temporary Capacity Upgrade on Demand feature is unique to the industry and allows J.D. Edwards to continue delivering on demand solutions that respond to customers’ changing business environments.

Les Wyatt, Senior Vice President and Chief Marketing Officer, J.D. Edwards



- **J.D. Edwards 5 - Solutions on Demand**
- **Tailored business solutions supporting Financials, Distribution and Manufacturing business requirements**
- **A unique iSeries offering**
- **A 25% discount off J.D. Edwards 5 applications for new customers**
- **Worldwide availability with initial deployment in the U.S.**
- **Simplified architecture consolidating the Application server, Web server and Database server on a single machine**
- **Proven implementation template that speeds time to benefit**
 - ▶ **Saves up to 50% during implementation**
- **Planned GA Date – March 15, 2003**
- **PR:** <http://www.jdedwards.com/public/0,1413,0%257E2216%257E9729,00.html>

More Details on JDE's Solutions on Demand Offering

- **Rapid implementation of an ERP system for new customers**
- **Saves up to 50% on normal implementations by:**
 - Pre-integrated, pre-tested applications
 - Application has technical setup completed
 - Collaborative computing on a single server environment
- **Pairs the simplicity and expandability of J.D. Edwards 5 ERP solutions with business process templates to help companies maximize business performance while minimizing IT, operations and implementation costs**
 - Start with the base modules, add others as your business dictates -- On Demand!
- **Initial applications being offered at 25% discount for iSeries customers**
 - Financials Bundle (Procurement, Application Foundation, and Technology Foundation)
 - Distribution Bundle (Procurement, Sales Order Management, Application Foundation, and Technology Foundation)
 - Manufacturing Bundle (Procurement, Sales Order Management, Manufacturing Management, Application Foundation, and Technology Foundation).
- **It's for customers who must:**
 - Achieve rapid time to value
 - Focus on core business competencies
 - Implement a Tier 1 solution to support a growing business
 - Enhance their solution to fit growing business demands
 - Realize their business gains in predictable way
 - Improve their efficiency and business practices with a low cost of entry

Sizing for JDE's Solutions on Demand on new iSeries

- **Putting all J.D. Edwards 5 tiers on a single server**
- **Providing a mix of concurrent users running:**
 - Financial
 - Manufacturing
 - Distribution

Model	CPW	# Users	Memory	Disk
i800 1-way	300	20	3.0GB	205GB
i800 1-way	950	65	4.0GB	230GB
i810 1-way	1020	75	4.3GB	235GB
i810 1-way	1470	105	5.0GB	250GB
i810 2-way	2700	195	7.5GB	290GB
i825 3-way	3600	260	9.0GB	320GB
i825 6-way	6600	480	15.0GB	425GB

SCM and CRM Extension Products

Integrates with World, OneWorld and JDE 5

Supply Chain Mgmt

- Advanced Planning Solution (formerly Numetrix)
- Runs on NT, Unix & iSeries (on PASE or IXS)
- APS running on IXS in October 2000
- Demand Planning GAs on PASE January 2003
 - Other modules rolling out natively on iSeries through out 2003
- J.D. Edwards base ERP packages cover Supply Chain Execution
- IBM, J.D. Edwards and partners provide implementation services to complement this software offering

Customer Relationship

- Collaborative Commerce CRM (formerly YOUCentric)
- Java-based app so it runs on all platforms
 - It runs especially well on iSeries because of the excellent Java performance
- Release 1.2 native on iSeries in June 2002
- Release 2.0 announced in January 2003
 - Includes 175 enhancements
 - See PR on JDE home page
- Statement of Direction for Linux
- IBM, J.D. Edwards and partners provide implementation services to complement this software offering

Advance Planning Solution Natively on iSeries

Announced October 28, 2003

J. D. Edwards Announces Native Support for J.D. Edwards 5 Supply Chain Management Applications on the IBM eServer iSeries Platform

J.D. Edwards & Company (Nasdaq: JDEC - News) today announced native support for its entire J.D. Edwards 5 Supply Chain Management solution on the IBM eServer iSeries platform.

As part of this initiative, J.D. Edwards plans to make its Advanced Planning modules available native on the iSeries in phases, beginning in early 2003. This move also demonstrates J.D. Edwards' continued commitment to lowering total cost of ownership for its customers by offering open, standards based solutions on platforms specifically tailored for mid-market to mid-cap companies.

The over 4,500 joint IBM and J.D. Edwards customers can now incrementally add modular supply chain management functionality to their J.D. Edwards 5, OneWorld® or WorldSoftware(TM) systems, utilizing existing hardware and allowing them to experience the benefits of robust, integrated supply chain solutions without undue implementation costs. J.D. Edwards Advanced Planning includes modules for strategic, tactical and operational planning as well as collaborative planning across the extended trading network to include customers and suppliers, allowing enterprises to more tightly manage inventories, reduce costs and increase revenues.

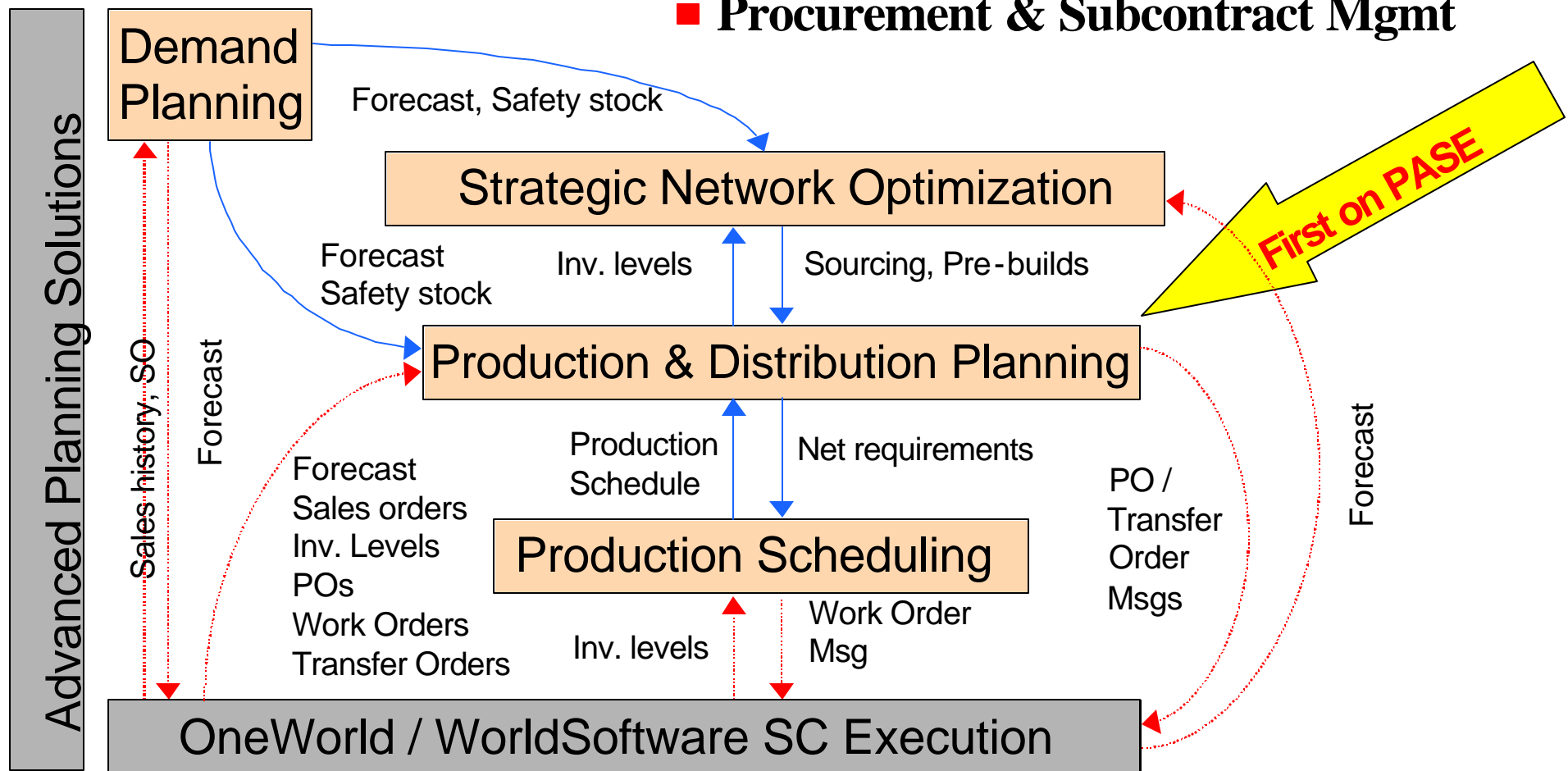
"This offering allows us to leverage our existing J.D. Edwards investment on the iSeries for our emerging supply chain needs." George Suda, CIO at Apria Healthcare.

"The availability of our Advanced Planning software native on the iSeries, along with its modularity and flexibility to integrate with existing and future technologies, all contribute to a solution that meets customers' needs now and in the long term."

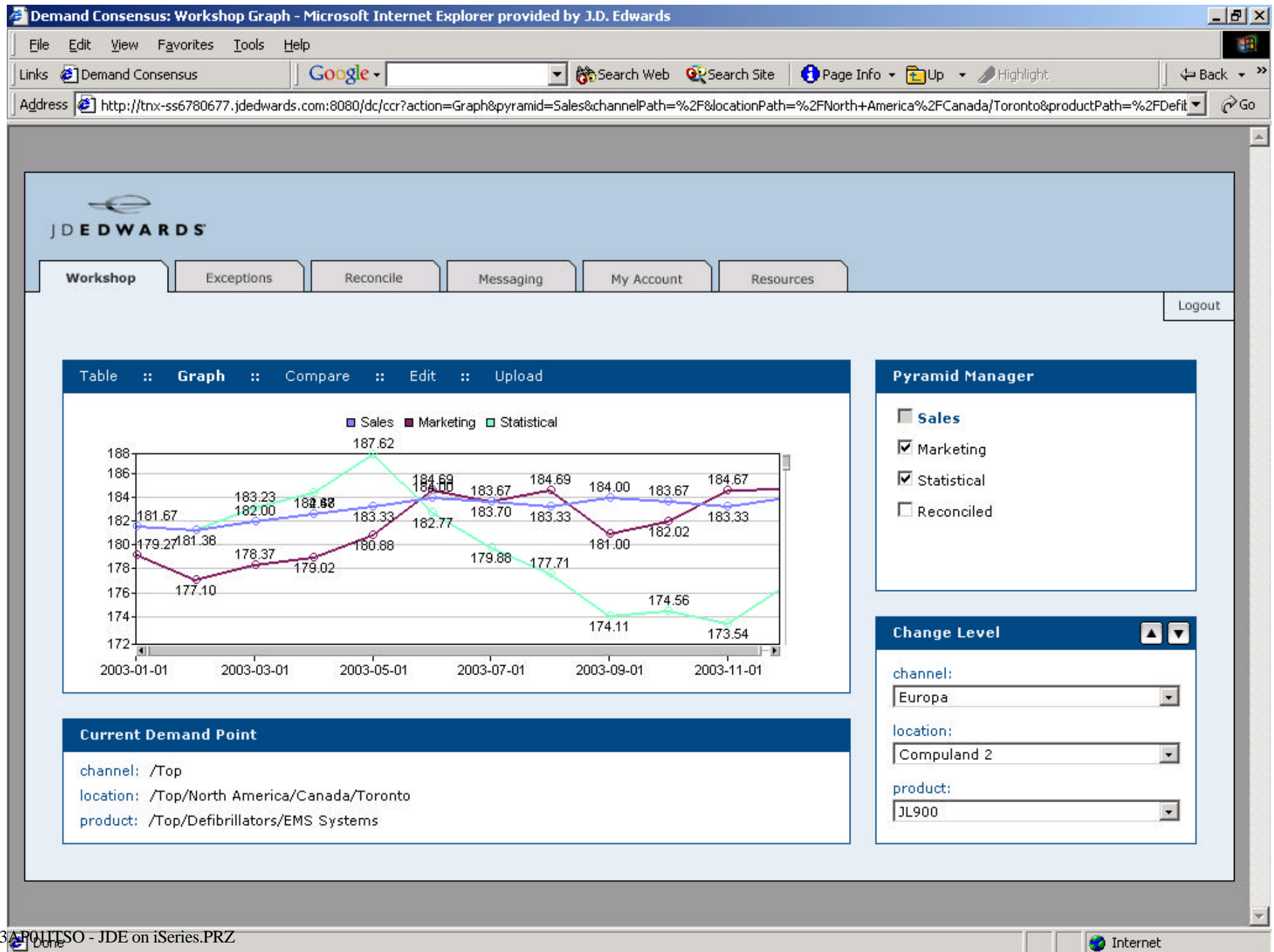
Andrew Carlson, Director of Supply Chain Product Marketing, J.D. Edwards

Advance Planning Solution

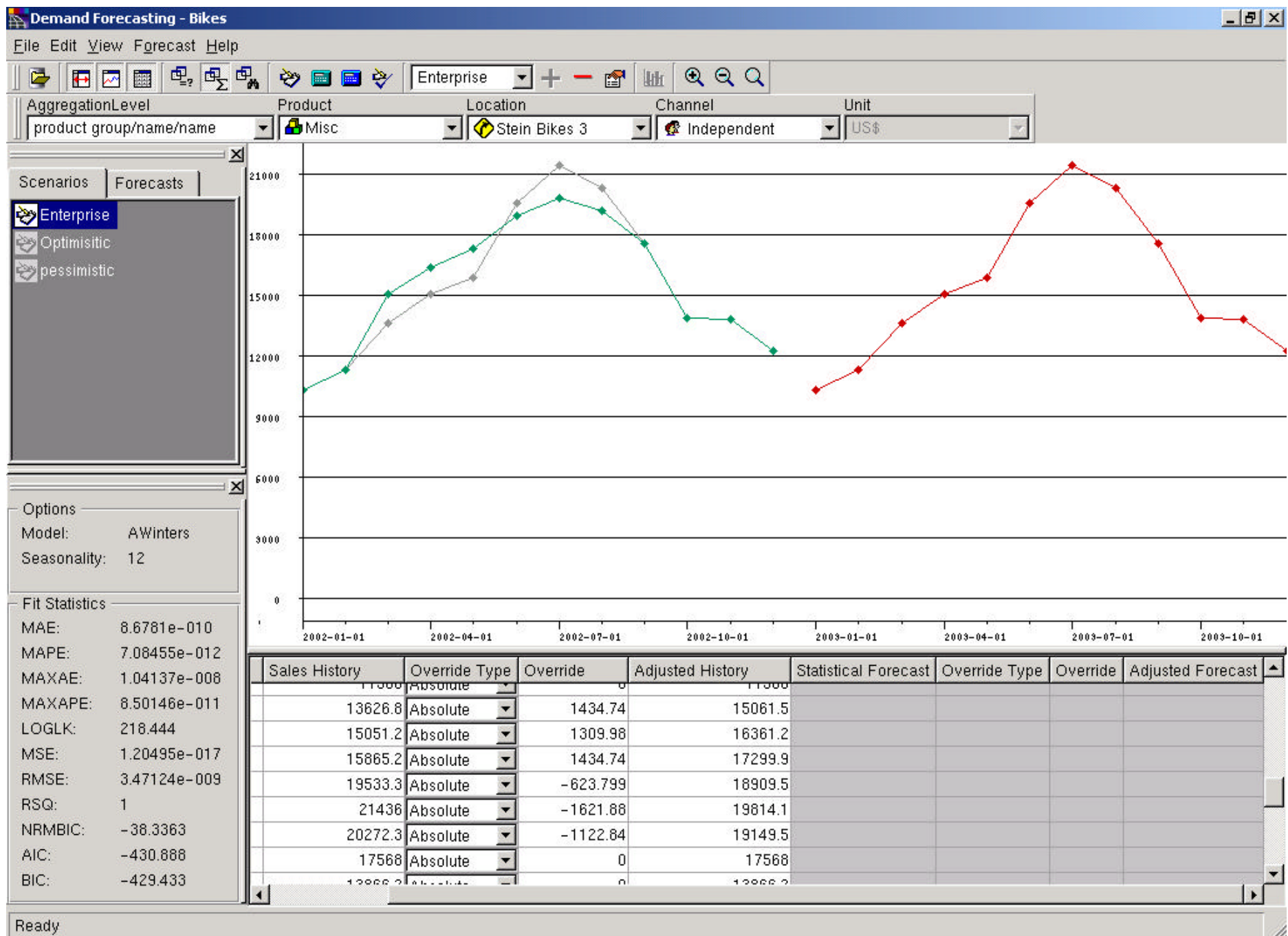
- **Logistics Management**
- **Order Management**
- **Manufacturing Management**
- **Inventory Management**
- **Procurement & Subcontract Mgmt**



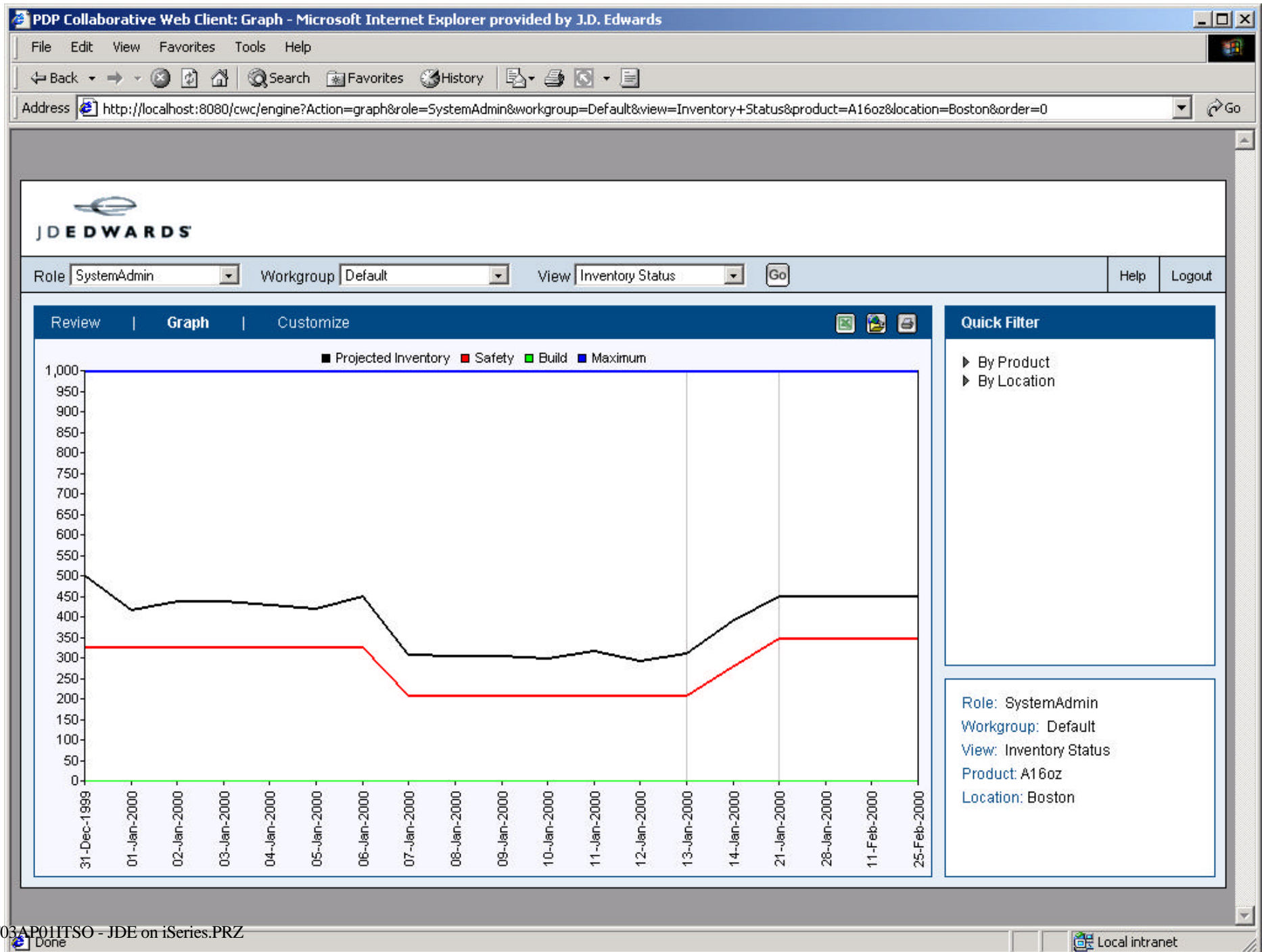
Demand Consensus Example



Demand Forecasting Example



Example of PDP Event Mgmt for Inventory Levels



Inventory Status Example

PDP Collaborative Web Client: Review - Microsoft Internet Explorer provided by J.D. Edwards

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History

Address <http://localhost:8080/cwc/engine?Action=table&role=SystemAdmin&workgroup=Default&view=Inventory+Status&product=Apples&location=Niagara&order=0> Go

JDE EDWARDS

Role: SystemAdmin Workgroup: Default View: Inventory Status Go Help Logout

Review | Graph | Customize

	31-Dec-1999	01-Jan-2000	02-Jan-2000	03-Jan-2000	04-Jan-2000	05-Jan-2000
Beginning Inventory	300.0000	254.3300	184.3300	0.0000	0.0000	0.0000
Production						
Net Requirements	14.3300		85.6700	70.0000	50.0000	70.0000
In Transit						
Planned Transfers		-50.0000	-200.0000			
Deployment Orders	-60.0000	-20.0000	-70.0000	-70.0000	-50.0000	-70.0000
Customer Orders						
Forecast						
Dependent Demanc						
Substituted Demanc						
Effective Demand	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Effective Demand D	60.0000	70.0000	270.0000	70.0000	50.0000	70.0000
Effective Demand B	100%	100%	100%	100%	100%	100%
Effective Demand S	100%	100%	100%	100%	100%	100%
Projected Inventory	254.3300	184.3300	0.0000	0.0000	0.0000	0.0000
Safety	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Safety Reduction	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Safety Stock Balanc	100%	100%	100%	100%	100%	100%
Safety Stock Satisfi	100%	100%	100%	100%	100%	100%
Build	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	1,500.0000	1,500.0000	1,500.0000	1,500.0000	1,500.0000	1,500.0000
Safety Coverage	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum Coverage	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ship Status	1	1	1	1	1	1
Receive Status	1	1	1	1	1	1
Production Status	1	1	1	1	1	1
Projected Days Cov	1.6827	0.6827	0.0000	0.0000	0.0000	0.0000

Last Exported: Fri May 17 13:02:01 MDT 2002

Quick Filter

- By Product
 - 16ozKDF
 - 24ozKDF
 - 32ozKDF
 - A16oz
 - Boston
 - Chicago
 - Cleveland
 - Hammond
 - Montreal
 - Shopmart
 - A32oz
 - Apples
 - B16oz
 - B32oz
 - Blueberries
 - M24oz

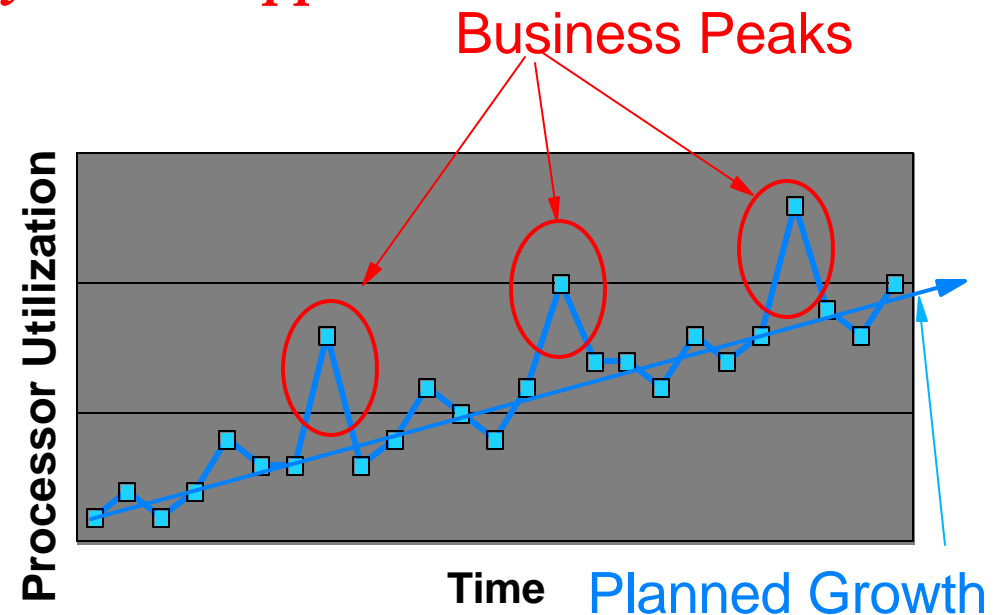
Role: SystemAdmin
 Workgroup: Default
 View: Inventory Status
 Product: Apples
 Location: Niagara

Local intranet

iSeries On/Off Capacity Upgrade on Demand

A great fit for J.D. Edwards Supply Chain Apps

- APS applications are very processor intensive workloads, but they only need to run periodically
 - Usually once a week or a month
- With this type of workload, most customers would have to purchase a larger server than they normally would need to account for these peaks in workload



- On iSeries, a customer can utilize the Capacity Upgrade on Demand (CUoD)
 - On/Off CUoD for special purposes (like APS) or business peaks (for seasonal workloads)
 - Pay after use based on processor DAYS used; break even at ~45 days
 - Bonus and complementary days are available
 - Permanent CUoD for planned growth
 - Pay when purchased; no premium charges
- Flexibility for your demanding workload!

How Does On/Off CUoD Work?

Enable, use and bill for temporary capacity

- **Enable -- server is enabled for temporary capacity**
 - Customer signs a contract with IBM
 - Sales Channel (IBM or Business Partner) places a customer order for a On/Off CUoD Enablement Feature
 - Customer enters the resulting CUoD Enablement Code on the server

- **Use -- temporary capacity is requested and used**
 - Request temporary capacity via server screen (specify units)
 - Electronically report temporary capacity activity (minimum of once per month)

- **Bill -- temporary capacity is monitored, billed, and paid for**
 - IBM consolidates reported information
 - IBM notifies the Sales Channel about customer activity related to temporary capacity
 - Sales Channel places an "after-the-fact" configurator order for CUoD Billing Features
 - Sales Channel bills their customer



Model	Processor Feature	Startup Processors	Standby Processors	TCOD Enablement Feature	TCOD Billing Feature	US Prices
825	2473	3	3	1773	1782	\$1,100
870	2486	8	8	1776	1785	\$1,200
890	2497	16	8	1777	1788	\$1,300
890	2498	24	8	1778	1791	\$1,300

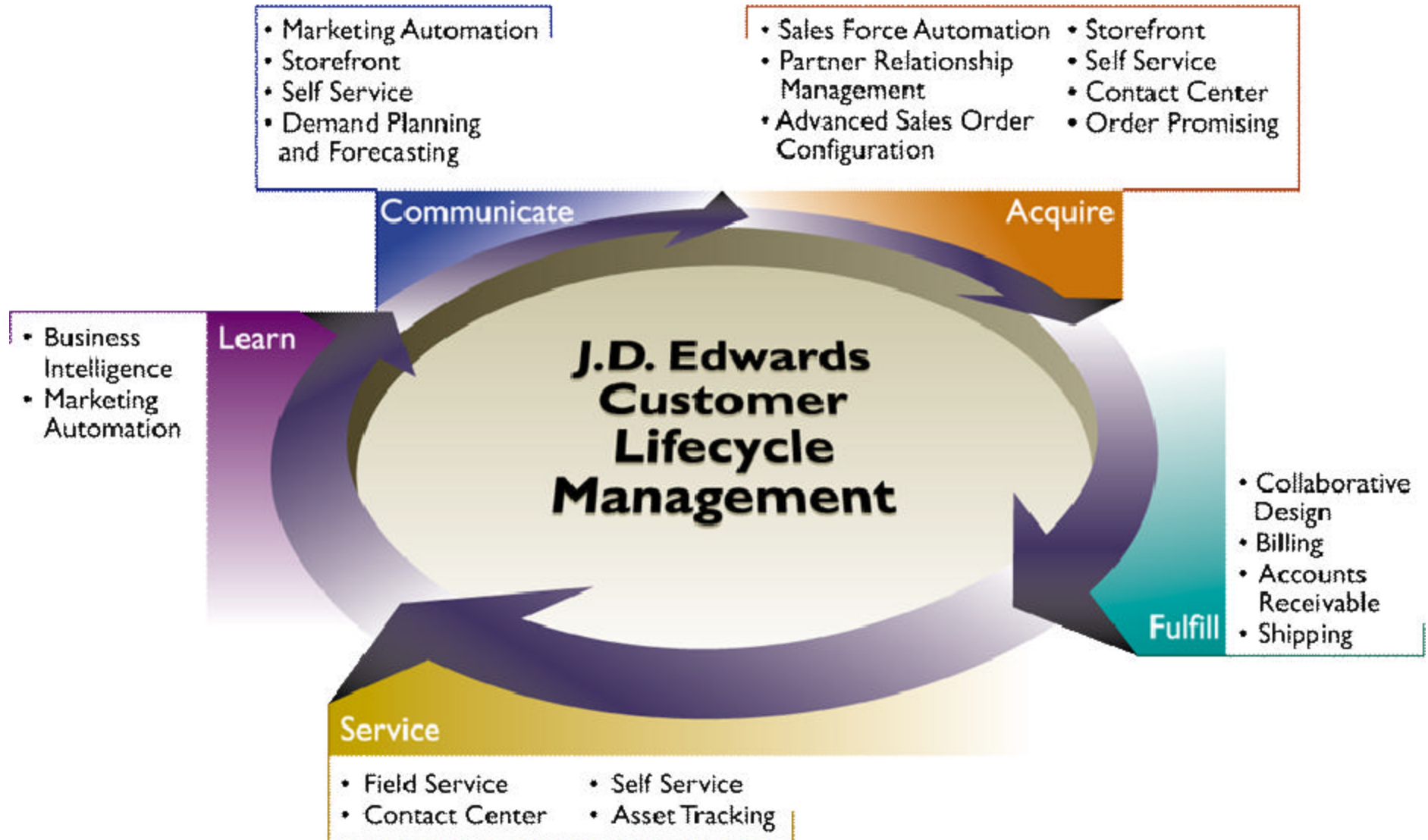
* TCOD Enablement Features are no charge MES features

* US Prices represent IBM's list price for a TCOD Billing Feature (one Processor Day of temporary capacity)

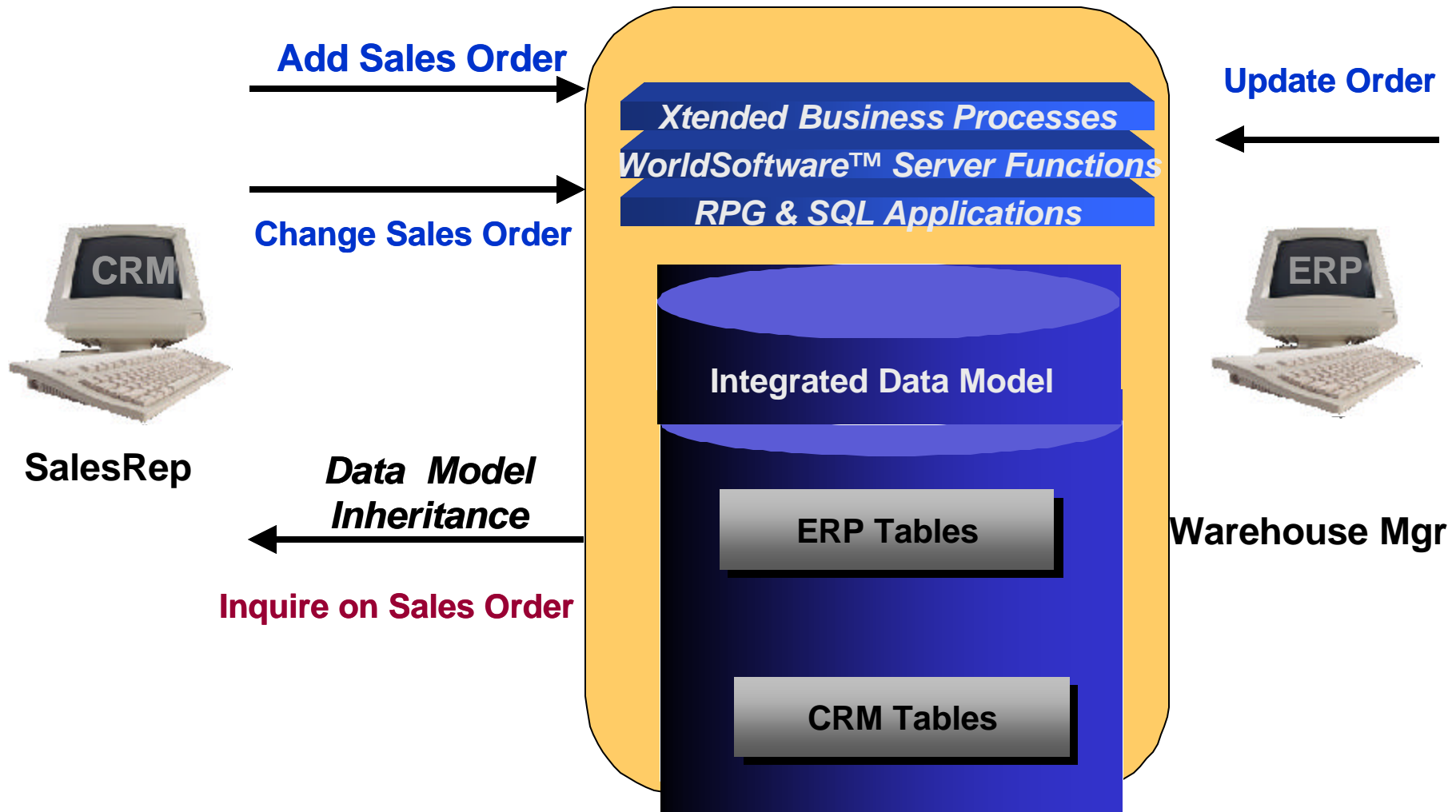
* Additional operating system licensing may be required if using an OS that is licensed by processor (NOT required for OS/400)

* Additional software licensing may be required if using SW that is licensed by processor

Customer Relationship Management



CRM is Integrated With JDE's ERP



- CRM and ERP share the same database so the order processing person sees the data entered by the Sales Rep immediately

CRM Benefits for JDE Customers on iSeries

■ Companies that successfully implemented CRM programs reported:

- Sales increases of 51% per rep
- Customer satisfaction rating improvements of 20%
- Cost of sales and service decreases of 21%

Jim Dickie, Insight Technology Group



- FW Murphy manufactures instrumentation and controls for natural gas compressors and industrial engines
- Based in Tulsa, OK with WW locations
- \$55 Million in annual sales

■ For companies like FW Murphy, the value from CRM included:

- Using the shared data, it provided them with updated information in front of sales and service personnel
- Dramatic efficiencies in customer discount structures
- Improved customer satisfaction which means return business
- Reduced order processing time by 20%

Customer & Supplier Relationship Mgmt Coverage

For Customers

- Advanced Order Configuration
- Contact Center
- Customer Self Service
- Field Service
- Business Intelligence for CRM
- Partner Relationship Management
- Sales Force & Marketing Automation
- Storefronts
- CRM for Financial Services

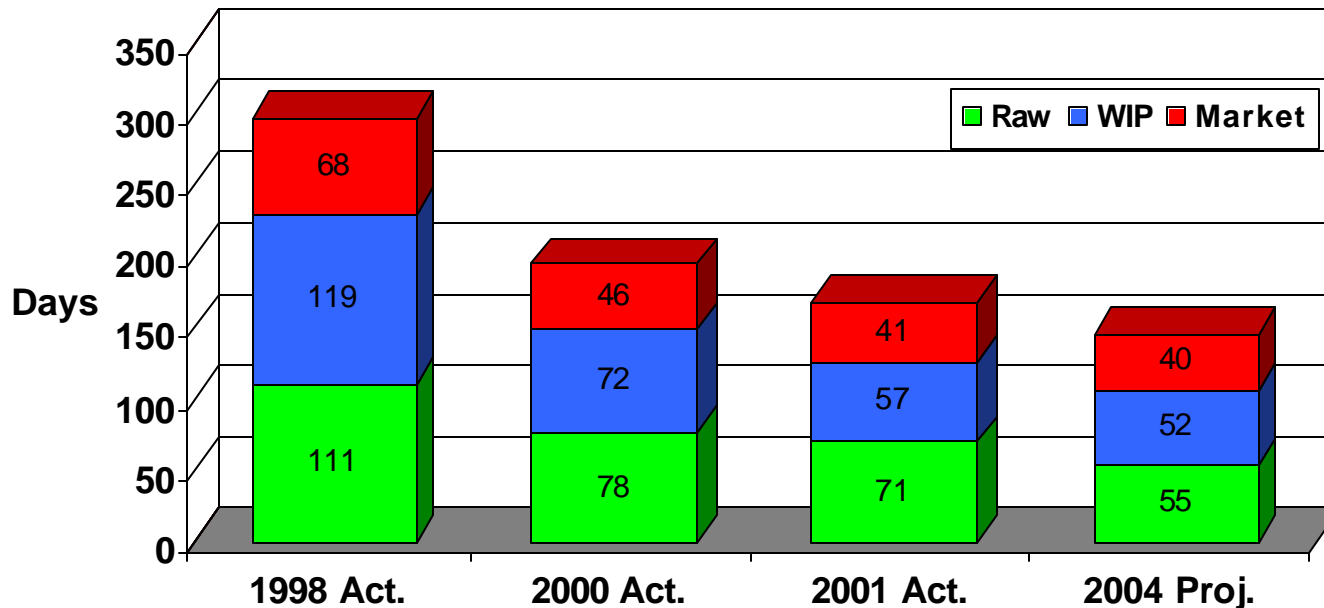
For Suppliers

- E-Procurement
- Procurement Management
- Supplier Self Service
- Demand Consensus
- Demand Planning
- Product & Distribution Planning
- Product Scheduling (Discrete)
- Warehouse Management
- Accounts Payable
- Product Scheduling (Process)
- Strategic Network Optimization
- Content Management
- Agreement Management
- Inventory Management
- Product Data Management
- Requirements Planning
- Transportation Management

Customers Reaping the Benefits

Graphic Electrodes Sees Benefits the First Year!

- Worldwide manufacturer of carbon and graphite products
- Demanding graphite electrode business climate; 6 plants in 6 countries over 4 continents
- The project: manage the business globally to improve profitability
- Reduced inventories by 40% and lead times by 20%
- Globally focused business decisions; internal collaboration
- The solution: J.D. Edwards Strategic Network Optimization, Demand Planning and WorldSoftware



World Specific Extensions - Self-Service Apps

- Serving Internal and External Customers via the Internet
- Areas Covered
 - Customer
 - Supplier
 - Employee
 - Financial Management
 - Asset Management
 - Project Management
- No required changes in World
- Best for a limited number of named clients
 - They sign on to your production system directly
- Does require iSeries 5250 OLTP

WORLD SOFTWARE™

Customer Self-Service with WorldSoftware

JDEdwards
Enterprise Software

CRM Self-Service Application

Cust Relationship Mgmt

- [Order Entry](#)
- [Order Status](#)
- [Product Availability](#)
- [Account Information](#)
- [Address Book](#)
- [Account Status](#)
- [Delivery Notes](#)
- [Product Catalog](#)
- [Quote Orders](#)
- [Blanket Orders](#)
- [Direct Ship Orders](#)

Ordering

- [Product Catalog](#)
- [Search](#)
- [Product Availability](#)
- [Place Order](#)

Customer Service

- [Order Status](#)
- [Account Information](#)
- [Address Book](#)
- [Account Status](#)
- [Delivery Notes](#)

Contact Us

- [E-mail](#)
- [Telephone](#)

Item Search

Search

[Log Off](#)

Sales Force Mgmt Fulfillment

- **Ability to manage all customer information**
- **Order status**
- **Account information**
- **Order entry**
- **Address Book information**
- **Obtain quotes**

Supplier Self-Service With WorldSoftware

The screenshot displays the JD Edwards Vendor Self-Service - Stock interface. The page is structured as follows:

- Header:** JD Edwards logo on the left and right, with "Vendor Self-Service - Stock" centered below.
- Sidebar (Left):** A teal vertical bar containing the following links:
 - Procurement Self-Service
 - Vendor Self-Service - Stock (highlighted)
 - Vendor Self-Service Non-Stock
 - Vendor Self-Service Encumbrance
- Main Content Area:**
 - Purchase Order Processing:**
 - [Enter Purchase Orders](#)
 - [Enter Blanket Orders](#)
 - [Enter Quote Orders](#)
 - [Receipts by Purchase Order](#)
 - [Open Order Inquiry](#)
 - [Open Quotes Inquiry](#)
 - [Blanket Order Inquiry](#)
 - [Address Book](#)
 - [Buyers Information](#)
 - [Approval Review - PO](#)
 - [Orders Awaiting Approval](#)
 - Requisition Management:**
 - [Enter Requisitions](#)
 - [Open Requisitions Inquiry](#)
 - [Requisitions Awaiting Approval](#)
 - [Approval Review - Reqs](#)
 - Supplier Inquiry:**
 - [Supplier Ledger Inquiry](#)
 - [Supplier Payment Inquiry](#)
 - [Supplier Item Summary](#)
 - Item Information:**
 - [Item Search](#)
 - [Item Ledger - CARDEX](#)
 - [Summary Availability](#)
 - [Detail Availability](#)
 - Contact Us:**
 - [E-mail](#)
 - [Telephone](#)

Vendor Self-Service Procurement Self-Service

- **Manage Internal Purchasing**
- **Enter Quotes**
- **View Invoices**
- **Manage Supplying Material**

Employee Self-Service With WorldSoftware

Human Resource
Self-Service
Employee Resource
Self-Service

- **HR becomes a partner-based dept**
- **Update Personal information**
- **Perform Benefit Open Enrollment**
- **View accrue vacation / sick time**
- **Time Entry**

The screenshot shows the JDE Edwards Employee Self-Service web application. At the top left, there is a 'Help' link. Below it is the JDE EDWARDS logo. The main header area features a cityscape image and the text 'Employee Self-Service'. On the left side, there is a blue sidebar menu with the following items: 'Employee Self-Service' (highlighted in yellow), 'Change of Address', 'Benefit Selection', 'Change of Marital Status', and 'EE Vacation & Sick Balan'. The main content area is titled 'Employee' and contains several blue underlined links: 'Change of Address', 'Benefit Selection', 'Change of Marital Status', 'EE Vacation & Sick Balances', 'Time Entry by Employee', and 'Dependent/Beneficiary Changes'. Below this, there is a 'Contact Us' section with blue underlined links for 'E-mail' and 'Telephone'.

WorldSoftware Customers Seeing the Value!

Self-Service Apps Pay Off For Transpro!



- ✓ **Transpro has 11 manufacturing plants and 60 distribution centers for their OEM auto products**
- ✓ **Using a PC-based order entry that didn't operate real-time with WorldSoftware so they couldn't check parts availability**
- ✓ **Implemented Customer Self-Service using the web so now all locations use the same integrated, real-time system**

■ **Before Self-Service Apps**

- No real-time access to product availability
- Disparate order entry and processing systems
- Manual order reconciliation

■ **After Self-Service Apps**

- Consistent pricing across all locations
- One common set of application software
- Increased order accuracy and order fill rates
- Improved customer service

Resulting in better business efficiency and happier customers!



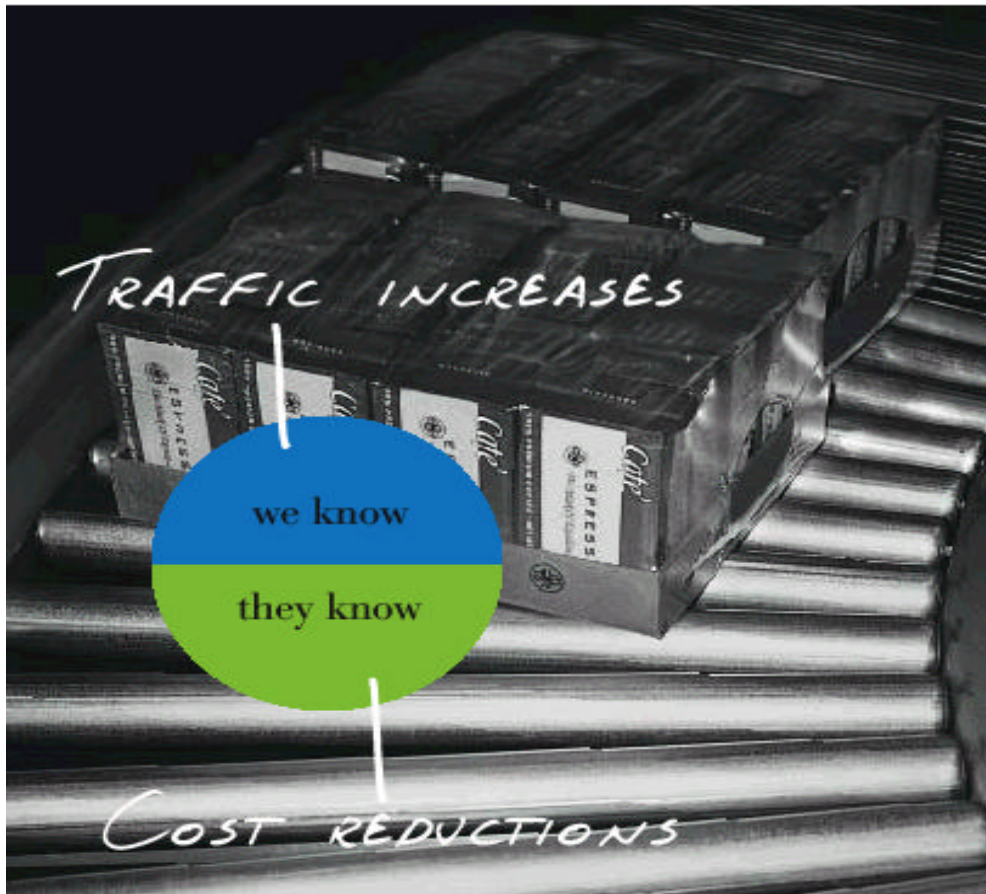
Collaborative Efforts

IBM & JDE: Spanning More Than 25 Years!

- IBM does business with JDE on Servers, Storage, SW & services
 - iSeries is the largest of all these aspects
- Over 85% of J.D. Edwards installed base runs on IBM hardware
 - iSeries
 - pSeries
 - xSeries
- J.D. Edwards is one of 6 "aligned partners" with IBM
 - IBM has dedicated sales & marketing resources assigned to JDE
- J.D. Edwards is one of only three premier global services practices within IBM with over 900 skilled resources WW
- In March 2001, IBM and JDE signed a Strategic Alliance Agreement
 - this means IBM invests in JDE and JDE leads with IBM products
- In October 2002, JDE signed an OEM agreement to imbed DB2, WAS, DB2 and WS Portal with all new apps



Check Out Our Joint Marketing on the Web



Please refer to our
IBM/JD Edwards
Alliance co-branded
web site for additional
information:

<http://www.ibm-jdedwards.com>

Many Joint Customers

Architecture, Engineering, Construction

- Benderson Development
- CBI Industries
- David Weekley Homes
- Foster Wheeler
- Hensel Phelps Construction
- Hoffman Corporation
- Hubbard Construction
- Koll Construction
- Sundtt
- Walt Disney Imagineering

Automotive

- Saab Automobile
- Harley Davidson Europe
- BF Goodrich Europe
Coordination Center NV
- ASC, Inc.
- Champion Laboratories, Inc.
- Dana Corporation
- Lectron Products, Inc.
- Simpson Industries, Inc.

Electronics

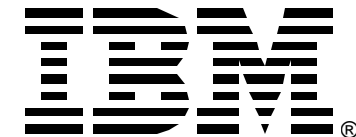
- IBM
- Oki Electronics (Hong Kong), Ltd.
- Oki Electronics Europe GmbH
- Emerson Electric Company
- General Instrument Corporation
- Lexmark International, Inc.
- Medtronic, Inc.
- Paradyne Corporation
- Phillips Electronics Ireland

Energy/Chemical

- Unocal Chemicals
- Burmah Castrol Plc
- Shell International, Ltd.
- Mobil Corporation
- LaRoche Industries, Inc.
- Praxair, Inc.
- Sandoz Technology
- Elf Oil UK

Fabricated Metals

- Electrolux AB
- Ford New Holland
- Huffy Corporation
- Krones, Inc.
- Coachman Industries
- Parker Hannifin Corp.
- Zexel USA Corporation



More Joint Customers

Public Sector

- City of Calgary -
Land and Housing Department
- The Metropolitan Government of
Nashville & Davidson County
- Government of the British Virgin
Islands
- Colorado Housing & Finance
Authority
- Louisiana Employees' Retirement
System
- Manchester Airport (UK) Plc
- McCarran Airport, Las Vegas
- Missouri Department of Corrections
- New Jersey Natural Gas
- Texas Department of Criminal
Justice
- Government of Bermuda

Pharmaceuticals

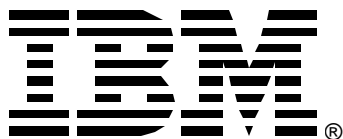
- Lilly Industries Limited
- Amgen, Inc.
- Mallinckrodt Group, Inc.
- Sanofi
- SmithKline Beecham, Plc
- Sterling Winthrop, Inc.
- Warner Lambert
- Baxter Healthcare

General Business

- Waste Management
- Holiday Inns
- British Sky Broadcasting Group
Limited
- Blockbuster Entertainment
- Royal Caribbean
- The Museum of Modern Art
- Tiffany & Co.
- Alltel Corporation
- Cementos Mexicanos

Consumer Products

- Bic SA
- Samsonite Corporation
- United Merchandising
- Beringer Wine Estates
- E&J Gallo Winery
- VANS, Inc.
- American Home Products
Corporation
- Seiko Corp. of America
- Rollerblade, Inc.
- Parker Pen USA, Ltd.
- The Limited
- Boise Cascade
- Bacardi Imports, Inc.
- Estee Lauder International, Inc.
- Prestone Products Corporation
- Robert Mondavi Winery
- Tambrands, Inc.
- Rawlings Sporting Goods



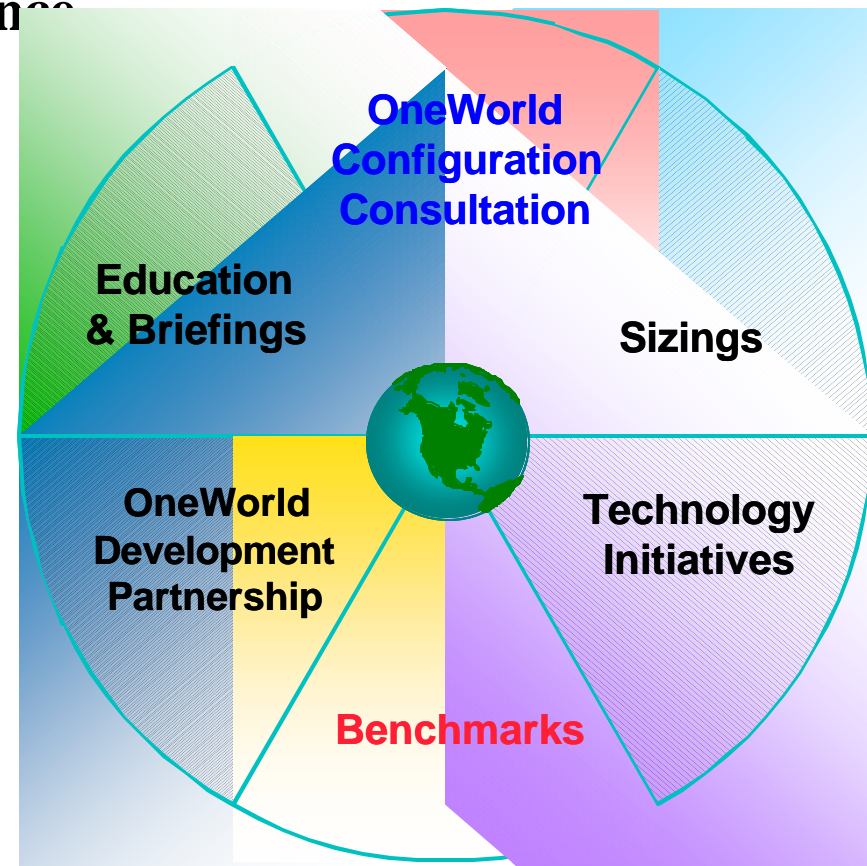
Technology Collaboration

- Server Proven, Cluster Proven, Storage Proven
- Performance characterizations and high-water Benchmarks
- V5R2 verification
- IBM International Competency Center
- Joint development projects with iSeries lab resources on site in Denver
 - Changes get made in OS/400 and in JDE apps
- IBM and J.D. Edwards channel partner training
- WebSphere Application Server validation
- JDE's production systems are iSeries



International Competency Center

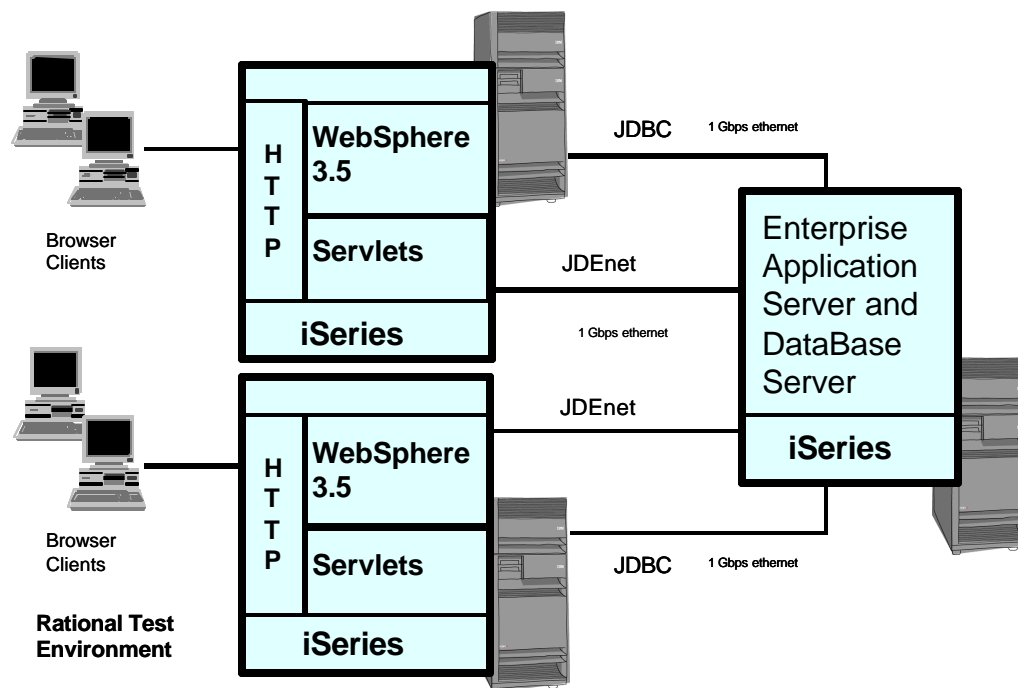
- IBM has the largest on site presence at JDE HQ of any other partner
- Benchmark Guidance
- System Sizing
- Solution Assurance Checklists
- Technology Initiatives
- Customer Briefings
- Worldwide Sales Support
- Technical Feedback
- Denver, CO (303) 334-2022
- Questionnaire:
 - US: 800-426-4329,
 - International: 408-256-5422
 - Option 2, Doc. ID #8651



IBM Server *Proven*

iSeries High-water Benchmark - 2001

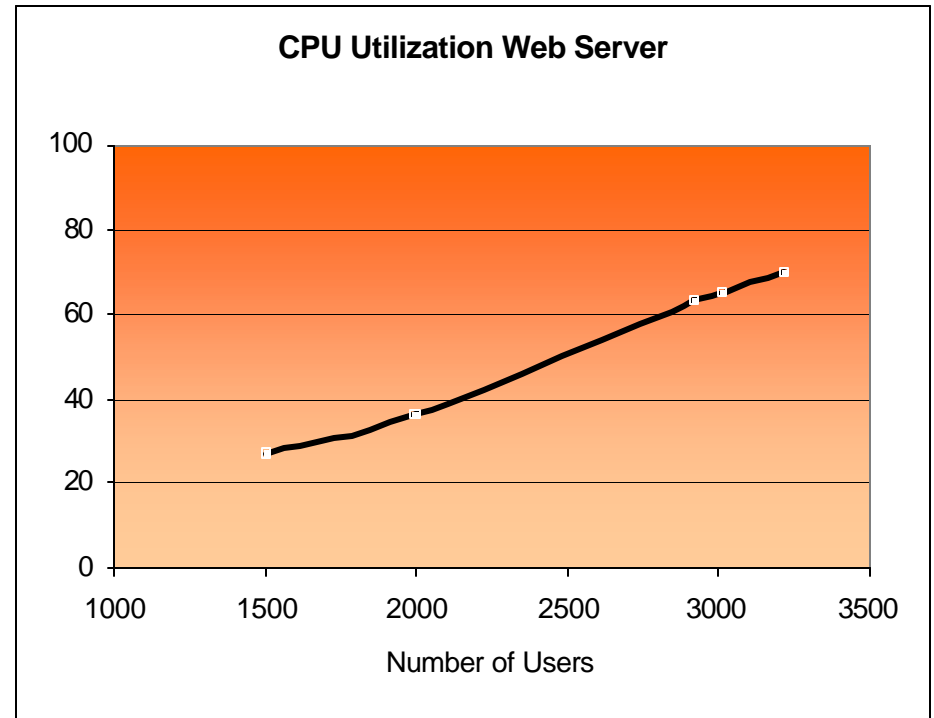
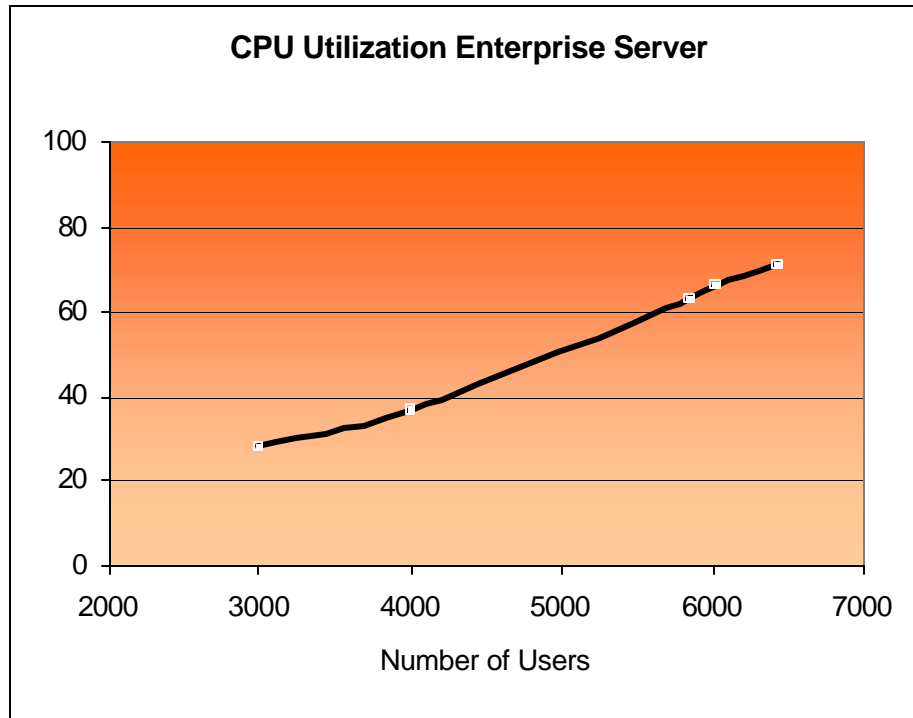
**More than
6000
concurrent
users!**



<http://www.developer.ibm.com/erp/jdedwards/downloads/oneworldbm.pdf>

- Three 840 24-way iSeries running V4R5
 - ▶ Two Web servers (HTTP, WebSphere, JDE Java Application Server)
 - ▶ One JDE OneWorld Xe Enterprise / DB server
- Benchmark transactions driven by Rational
 - ▶ 50% distribution, 25% finance, 25% manufacturing
- JDE Certifiable Results
 - ▶ 6020 concurrent web clients
 - ▶ Response time = 1.16 seconds
 - ▶ CPU 66% on Web Server, 65% on Enterprise Server

Benchmarking Results



Sun vs. iSeries Benchmark Comparison

- Sun / Oracle benchmark
 - 8,969 concurrent users
 - 1.46 second response time
 - 80% CPU utilization
 - 16 scripts

Active Users	Sun Benchmark	iSeries Benchmark	Delta
Number of users with 17 scripts	N/A	6020	
Number of users with 16 scripts	8969	N/A	
Number of users adjusted to 17 scripts	8250	6020	Sun 37% more users

Sun vs. iSeries Benchmark Comparison

Servers Used	Sun Benchmark	iSeries Benchmark	Delta
Database	(1) E6800 24-way (750 MHz) (79.9% busy)	N/A	
Enterprise (Database and Application)	N/A	(1) i840 24-way (500 MHz) (65% busy)	
Application / JAS Servers	(6) E6800 24-way (750 MHz) (67% busy)	N/A	
JAS Only Servers	N/A	(2) i840 24-way (500 MHz) (66% busy)	
Total Servers	(7) E6800 24-way (750 MHz)	(3) i840 24-way (500 MHz)	Sun 133% more processors Sun 250% more CPU MHz

***New iSeries i890 Servers run 1.3GHz with 32Processors

Sun vs. iSeries Benchmark Comparison

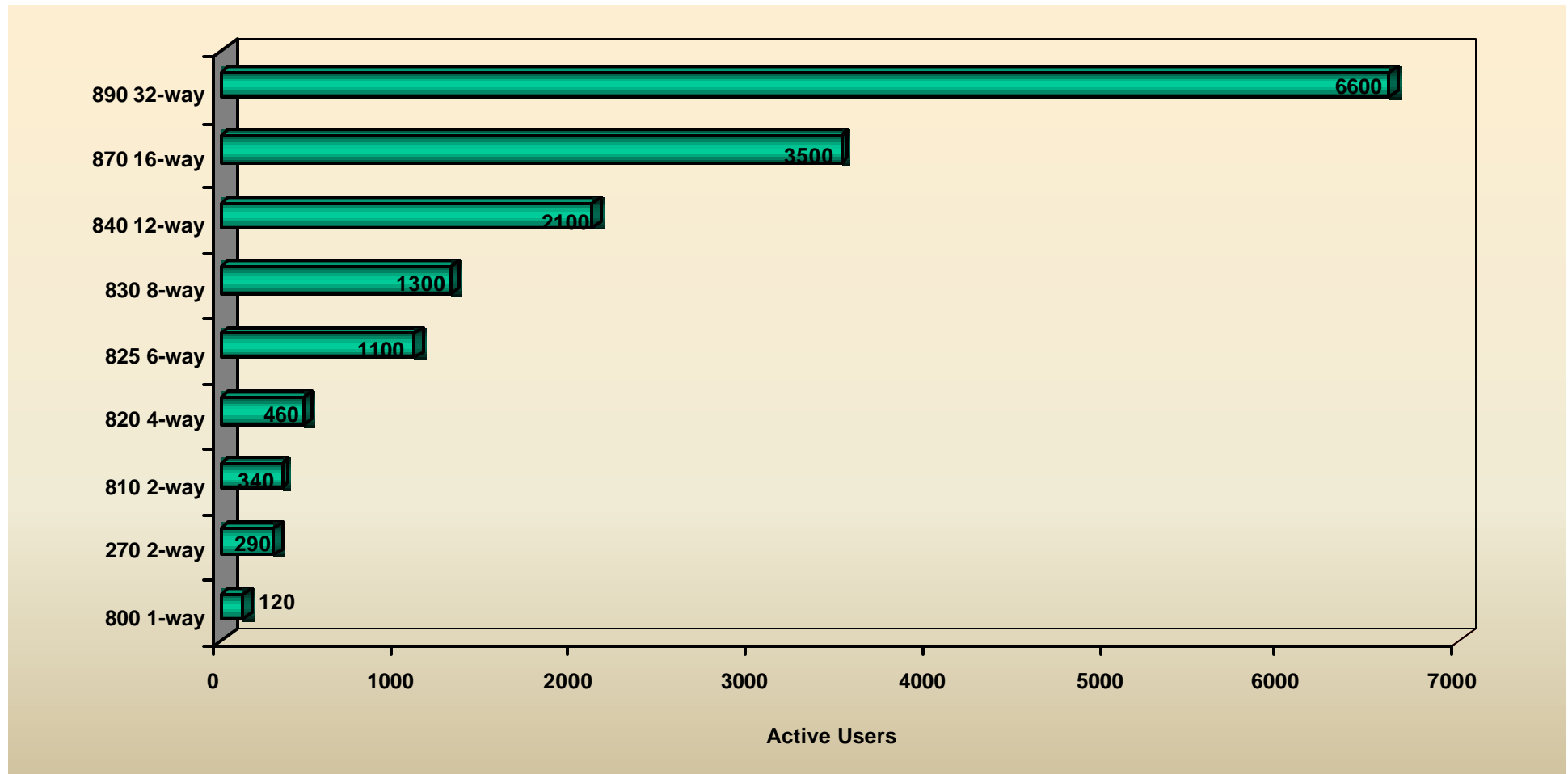
Response Time	Sun Benchmark	iSeries Benchmark	Delta
Average Response Time	1.46 seconds	1.16 seconds	Sun 26% slower

- Sun 37% more users
- Sun 133% more processors used
- Sun 250% more CPU MHz consumed
- Sun 26% slower response times
- **Who has the best high-water benchmark?**

Sizing Support

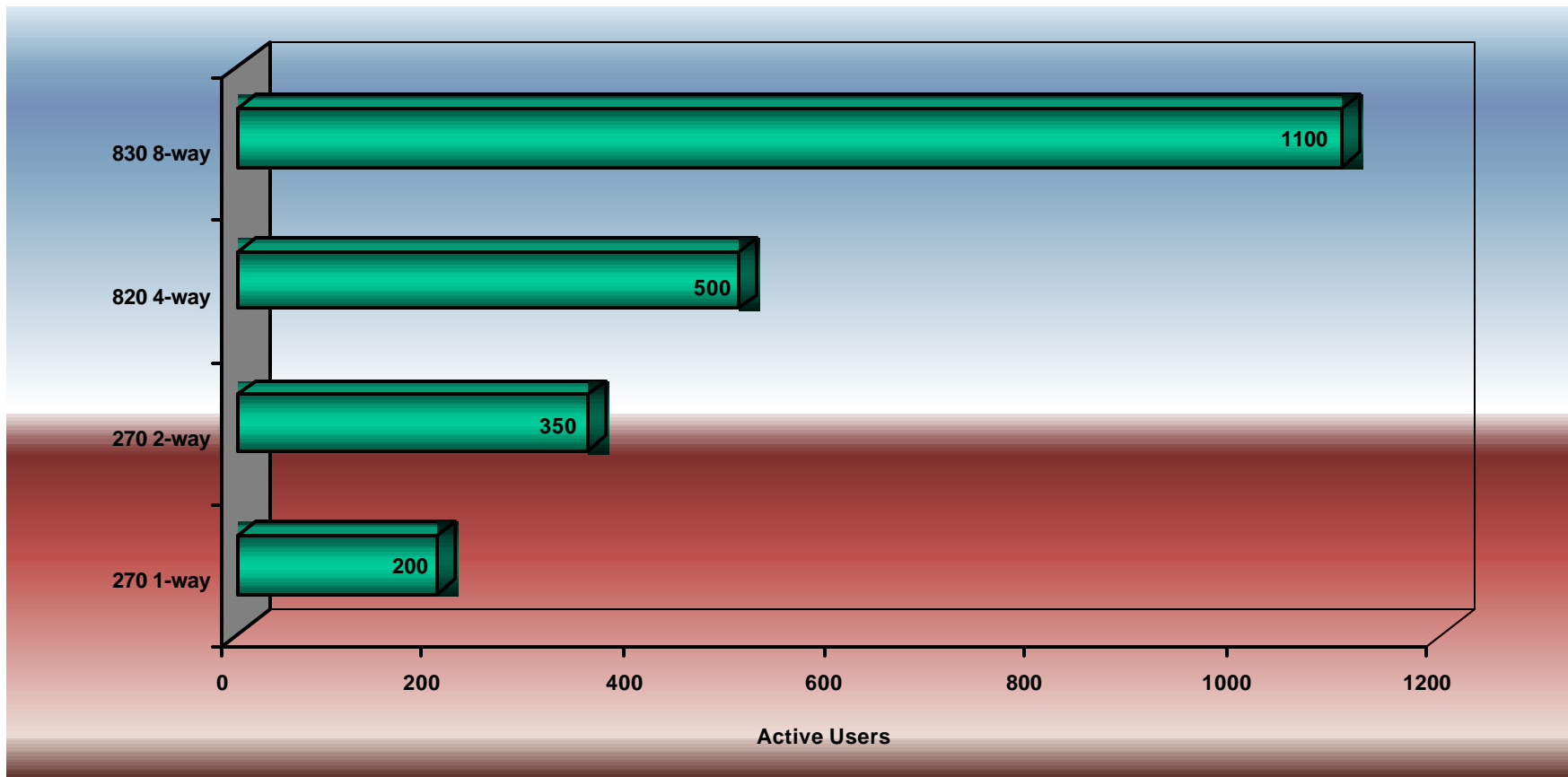
- **IBM has data to size all J.D.Edwards 5 components:**
 - ERP 8.0 / OneWorld Xe
 - WebSphere-based clients
 - Citrix clients
 - UBEs
 - CRM
 - APS
 - WorldSoftware
- **Access the IBM sizing questionnaire for J.D. Edwards software at:**
<http://www-1.ibm.com/support/techdocs/atmastr.nsf/WebIndex/PRS236>
- **Complete the questionnaire and submit to the IBM Techline Sizing Center in US, Italy and Japan**
 - Routing instructions on cover page
- **Sizing usually returned in about 3 business days**

Latest iSeries Sizings for Virtual 3-tier Implementation



- **Running DB and App Server on a single iSeries**
- **Web Serving done on a separate server for scalability**

Web Serving Scalability



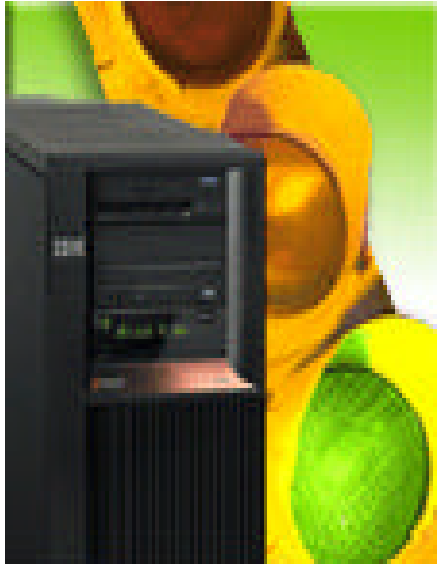
- **J.D.Edwards 5 ERP 8.0 client support requires IBM WebSphere Application Server 3.5.5 (Standard or Advanced) or WebSphere 4.0**
- **WebSphere Application Server 3.5.5 Standard is no charge on iSeries**
- **WAS 3.5 will be sold thru 09/02 and supported through June 2003**
- **OneWorld Xe SP 20 supports WebSphere 4.0**

Integrated Support



- **Collaborative support team across SupportLine and ResponseLine**
- **iSeries exclusive!**
- **Shared information and documentation**
- **Cross training**
- **Problems are treated as one**
- **Contractual agreements are in place to share customer data**
- **No finger pointing**

Stress Testing

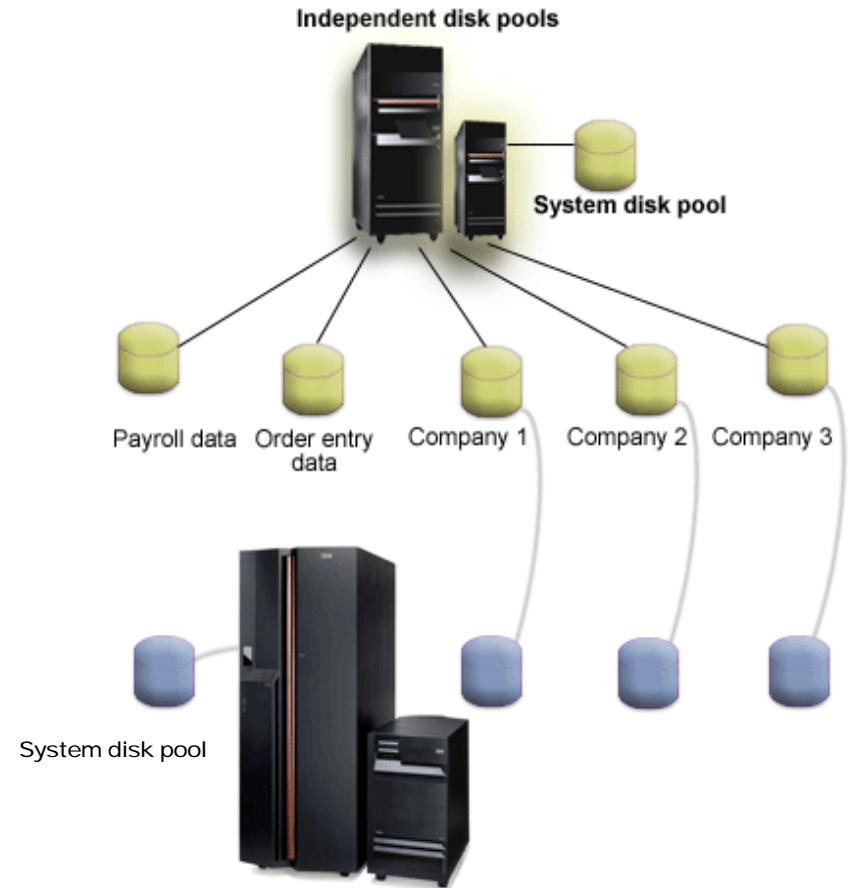


- **Joint initiative between J.D.Edwards and IBM iSeries**
- **Volume testing of OneWorld / ERP 8**
- **Project began first on iSeries in 1999**
- **Additional testing has been added on a regular basis**
- **JDE stress team sign-off required before product is released**

"Lowest Risk / Systems Assured"

High Availability with J.D. Edwards

- **J.D. Edwards is first EAS vendor to be ClusterProven on all supported IBM platforms**
- **All 3 HABPs have done testing with J.D. Edwards**
 - Datamirror
 - Lakeview Technologies
 - Vision Solution
- **All HABPs have JDE reference accounts**
 - World and OneWorld coverage
 - Contact the HABP that your customer is interested in
- **IBM & J.D. Edwards formed clustering lab for ongoing HA testing and customer demos**



- **Support for switching database and other objects between servers**
 - Switch disk for scheduled maintenance and upgrades
 - Improved availability for unscheduled outages



IBM Partner Program in Support of JDE Sales

- ✓ Limited Number with Authorized JD Edwards JM/VAE ensures skilled partners to help shorten sell cycle
- ✓ Ensure Coverage: Geography, Industry, Platforms, Markets
- ✓ Access to Executive Briefing Program, Marketing Funds/Leads
- ✓ Access to ICC Sizings, Internships & Tech/Sales Updates
- ✓ Priority Status for JD Edwards Opportunities
- ✓ IBM Field Sales Linkage
- ✓ Listed on Web Sites
- ✓ Joint Marketing & Business Plans

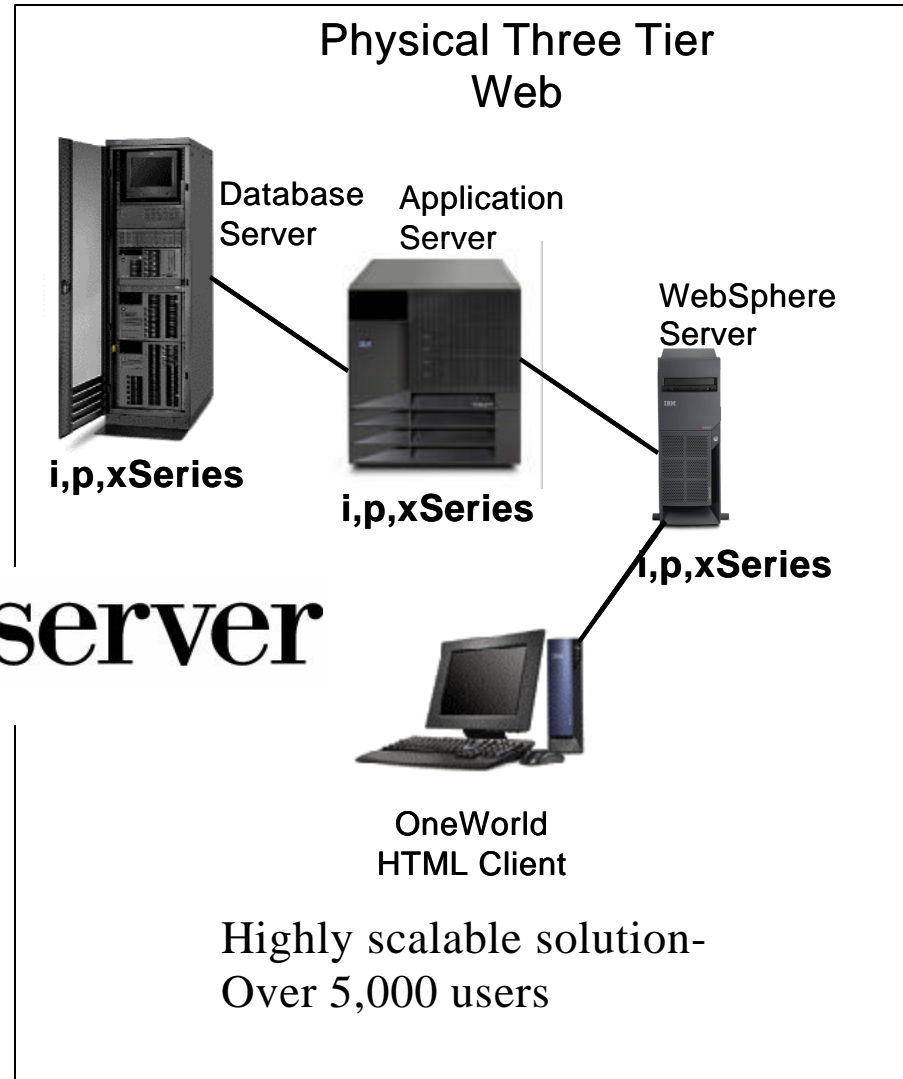


One Choice For Complete Offerings

from simple to scalable...



IBM @server



"Lowest Risk / Systems Assured"

What Do Others Say About JDE on iSeries

- **“The AS/400 platform is a very popular platform within the J.D.Edwards OneWorld community. Many clients migrating from World to OneWorld chose to stay with the AS/400 platform...”**
- **“..a common reason for the AS/400’s popularity is the stability of the platform. OneWorld users want to make sure that their ERP systems will be constantly available and, clearly, the AS/400 has proven itself strong on both points.”**



Source: J.D. Edwards

OneWorld: The Complete Reference, 2001

JDE on iSeries Customers Love Their Solution!

WESCO Aircraft Enjoys the Server Consolidation



"With iSeries as our single point of management, our total cost of server administration is down over 50%. Windows server storage is also much easier to manage now that it is consolidated on the iSeries and the testing of new applications is more flexible than ever."

Morris Benoun, Director of Information Technology, WESCO Aircraft

HPCL : Largest JDE Customer on iSeries

HPCL Needed the Scalability and Reliability of JDE on iSeries

- Second largest petroleum refinery and distribution company in India (\$4 Billion annual revenue)
- IOCL and BPCL, the other two customers run SAP on HP Servers
- 2400 active users for JDE OneWorld®. Plan to grow to 3600 users
- Chose iSeries Model 840 24-way for Production
- Won against stiff competition from HP and SUN
- Winning factors :
 - iSeries strengths with JDE
 - Implementation partner comfort with iSeries
 - Overall IBM value in terms of end-to-end services
- Order value for iSeries : \$500K for 2002
- Order value for IBM : \$4 Mill (includes Storage, xSeries, SW & ITS)





Shell Canada Limited Calgary, Canada

Shell Depends on World and OneWorld on iSeries

- ✓ **Enterprise Appl Solution**
- ✓ **iSeries Server Consolidation on 840**
- ✓ **J.D. Edwards One World and WorldSoftware**
- ✓ **Performance, reliability and LPAR to handle Shell's growth**
- ✓ **Flexible to run iSeries and other applications on a single system**

- One of largest petroleum companies in Canada. In 1999, earnings were over \$640M with more than 3,400 employees.
- IT infrastructure provides competitive advantage through innovation and TCO
- WorldSoftware/OneWorld suites are key mission critical requirements
- Model 840 12-way used to support all J.D. Edwards solutions and migrate other solutions to this lower cost infrastructure
- Scalability and performance to handle future grow and allow additional consolidation while providing significant reduction in overall support costs.

"e-business enablement of J.D. Edwards and other application environments are good examples of where higher performing, scalable systems such as the 840 are needed to enable us to react quickly to the growing needs of our business."

Kirk Chalk, Sr. Systems Analyst

In Closing....



- **J.D. Edwards and iSeries are a winning combination**
 - 25 years of working together
 - Number #1 selling solution for each
 - JDE has more iSeries implementations than all other platforms combined

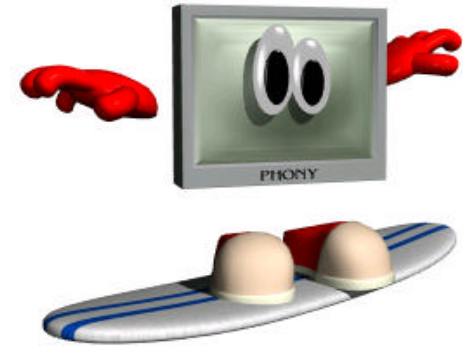
- **Continuing to develop solutions to meet the needs of our customers**
 - Integrated
 - Functionally rich
 - Providing the lowest total cost of ownership

- **Proven results a customer can count on!**

.... simplicity in an on demand world!

Helpful Web Sites

- **iSeries** ibm.com/eserver/series
- **IBM & JDE** ibm-jdedwards.com/us/
- **J.D. Edwards** jdedwards.com
- **Redbooks** redbooks.ibm.com
- **JDE on iSeries White Papers & Support** ibm.com/sesrvers/eserver/series/service/bms/jde-support.htm




Trademarks

© IBM Corporation 1994-2002. All rights reserved.

References in this document to IBM products or services do not imply that IBM intends to make them available in every country.

The following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

400	BRMS	Host Integration Series	JustMail	Payment Manager	Stylized 
ADSTAR	Client Series	Host on Demand	MQSeries	Payment Server	SystemView
Advanced Function Printing	ClusterProven	Host Publisher	MQSeries Integrator	PCOM	VisualAge for Java
AFP	CODE/400	HTTP Server for AS/400	Net.Commerce	PowerPC	VisualAge for RPG
AIX	DataGuide	IBM	Net.Data	PowerPC AS	WebSphere
AnyNet	DB2	IBM Logo	Netfinity	Print Service Facility	WebSphere Advanced Edition
Application Development	DB2 Extenders	IBM Network Station	NetView	pSeries	WebSphere Commerce Suite
APPN	DB2 UDB for AS/400	Information Warehouse	NUMA-Q	PSF	WebSphere Development Tools for AS/400
AS/400	DB2 Universal	Integrated Language Environment	OfficeVision	S/390	WebSphere Standard Edition
AS/400e	e-business logo	Intelligent Printer Data Stream	OS/2	San Francisco	Workpad
AT	e(logo) Server	IPDS	Operating System/400	Screen Publisher	xSeries
BrioQuery	Enterprise Storage Server	iSeries	OS/400	SmoothStart	

cc:Mail, Domino.Doc, Freelance, LearningSpace, Lotus, Lotus Domino, Lotus Notes, iNotes, QuickPlace, Sametime, and Word Pro are trademarks of Lotus Development Corporation in the United States, other countries, or both.

Tivoli and NetView are trademarks of Tivoli Systems Inc. in the United States, other countries, or both.

C-bus is a trademark of Corollary, Inc. in the United States, other countries, or both.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

PC Direct is a trademark of Ziff Communications Company in the United States, other countries, or both and is used by IBM Corporation under license.

ActionMedia, LANDesk, MMX, Pentium and ProShare are trademarks of Intel Corporation in the United States, other countries, or both.

IBM's VisualAge products and services are not associated with or sponsored by Visual Edge Software, Ltd.

Linux is a registered trademark of Linus Torvalds.

UNIX is a registered trademark of The Open Group in the United States and other countries.

SET and the SET Logo are trademarks owned by SET Secure Electronic Transaction LLC.

Other company, product and service names may be trademarks or service marks of others.

Information is provided "AS IS" without warranty of any kind.

All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics may vary by customer.

Information in this presentation concerning non-IBM products was obtained from a supplier of these products, published announcement material, or other publicly available sources and does not constitute an endorsement of such products by IBM. Sources for non-IBM list prices and performance numbers are taken from publicly available information, including vendor announcements and vendor worldwide homepages. IBM has not tested these products and cannot confirm the accuracy of performance, capability, or any other claims related to non-IBM products.

Questions on the capability of non-IBM products should be addressed to the supplier of those products.

All statements regarding IBM future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. Contact your local IBM office or IBM authorized reseller for the full text of the specific Statement of Direction.

Some information in this presentation addresses anticipated future capabilities. Such information is not intended as a definitive statement of a commitment to specific levels of performance, function or delivery schedules with respect to any future products. Such commitments are only made in IBM product announcements. The information is presented here to communicate IBM's current investment and development activities as a good faith effort to help with our customers' future planning.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput or performance improvements equivalent to the ratios stated here.

Photographs shown are of engineering prototypes. Changes may be incorporated in production models.