Driving iSeries e-business Solutions With WebSphere

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Agenda

Stages of eBusiness adoption
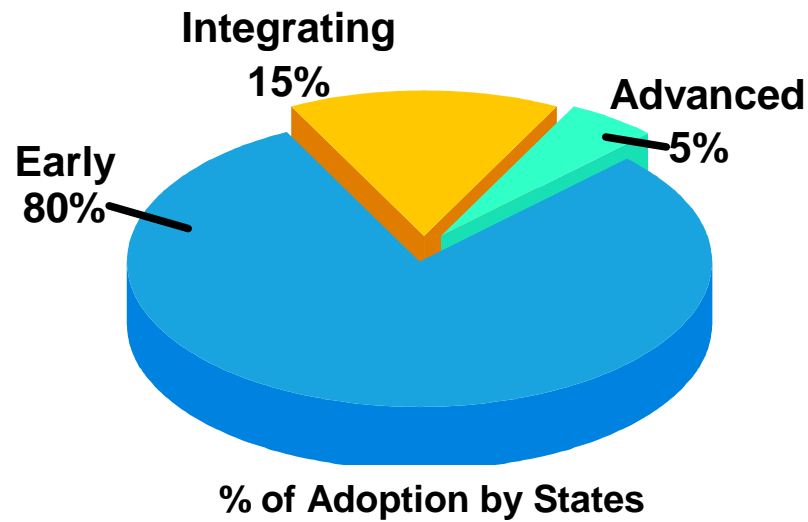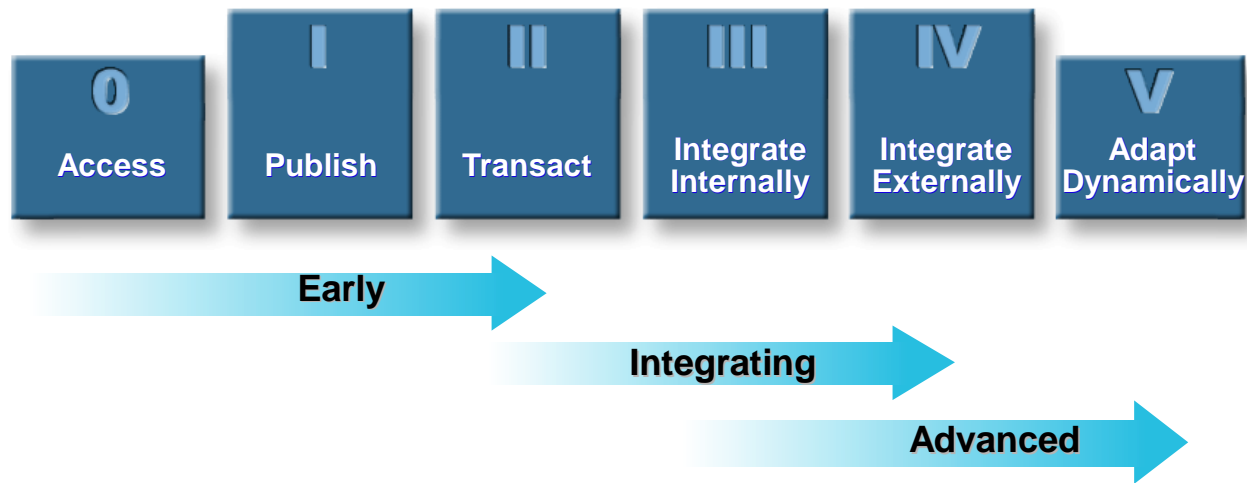
The WebSphere story

Introducing WAS V5 & WebSphere-Express V5 for iSeries

iSeries e-business strategies leveraging WebSphere
   * **Build new applications**
   * **Extend existing applications to web**
   * **Buy e-business applications**
   * **Consolidate workloads**

Summary/Q's & A's

States of eBusiness Adoption

0	I	II	III	IV	V
Access	Publish	Transact	Integrate Internally	Integrate Externally	Adapt Dynamically

Early →

Integrating →

Advanced →

Integrating 15%

Advanced 5%

Early 80%

% of Adoption by States

Small & Medium Business & The Web

VARBusiness - Aug. 07, 2002

A majority of Small/Medium businesses (51%) ranked connecting employees to the Web as their top technology priority this year, followed by automating customer interactions (39%) and adopting wireless capabilities (26%).

Legend:
- Employees on Web
- Automate Customer interactions
- Wireless
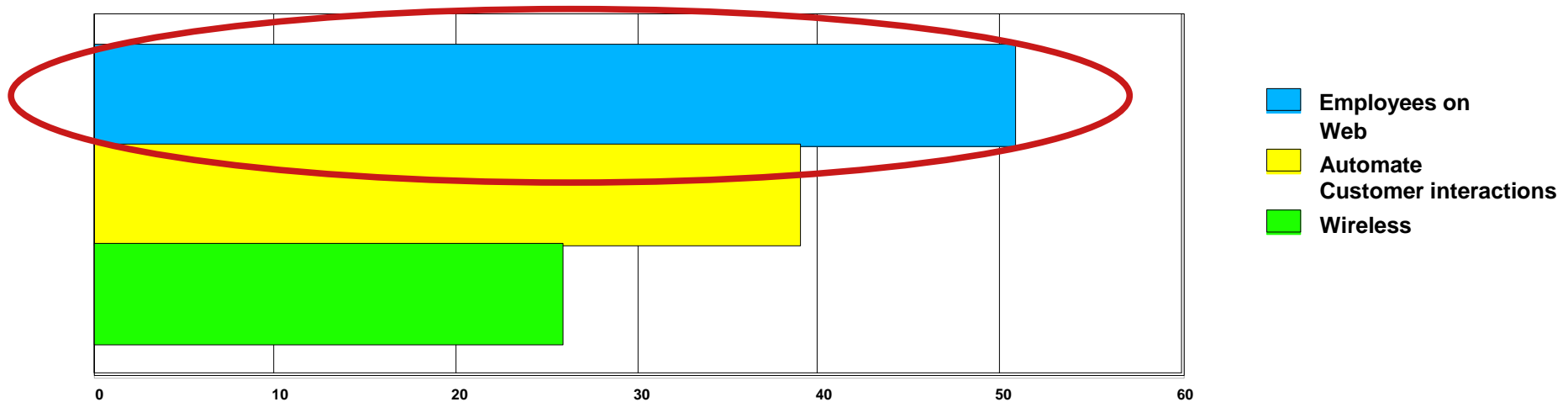
Top - technology priority = Connect employees to the web!

IBM

2002 Market Transforming Momentum

#1

Leading Indicators!

"... Companies Plan to Standardize on WebSphere, 5-to-1 over WebLogic ..."
Salomon Smith Barney, 2001

- **Consideration** +6
- **WebSphere Awareness** 58%

#1

Sustained Revenue Growth!

13 Consecutive Quarters of Double-digit WebSphere Revenue Growth

- **3Q 2001** +73% yty
- **4Q 2001** +43% yty
- **1Q 2002** +53% yty
- **2Q 2002** +17% yty

50%
2001 YTY

#1

Market Share Leadership!

Growing Nearly 5X faster than BEA

34%

On Target for Clear-Cut Market Leadership in 2002

Market **Leading** e-business Platform

EBAY IS PLAYING TO WIN.

WEBSPHERE ISN'T JUST A PLATFORM FOR WEB SERVICES. IT'S A LAUNCHING PAD.

WebSphere®

WebSphere: Foundation For e-business

Not Categorized as WebSphere
- IBM WebFacing Tool
  - Included in WDSc
  - 1 copy in WebSphere-Express

- iSeries Access for the Web
  - Part of iSeries Access Family

WebSphere Portal Server

Access widespread and diverse data sources from anywhere, anytime, by anyone you allow
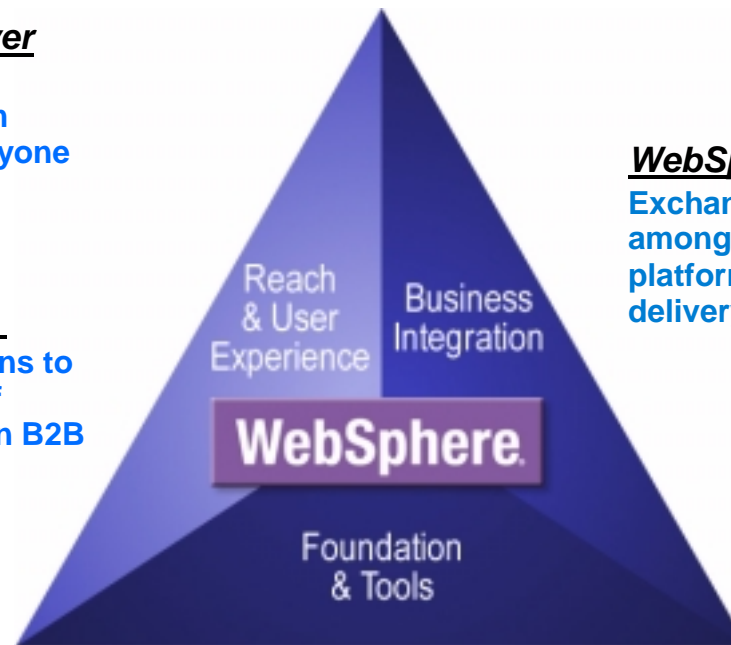
WebSphere Commerce

Powerful sell-side solutions to handle the broad range of challenges encountered in B2B and B2C environments

WebSphere MQ

Exchange information among more than 35 platforms with assured delivery

Reach & User Experience

Business Integration

WebSphere.

Foundation & Tools

WebSphere Studio

Professional development tools based on a common workbench technology

WebSphere Application Server

High performance and extremely scalable transaction engine for dynamic e-business applications
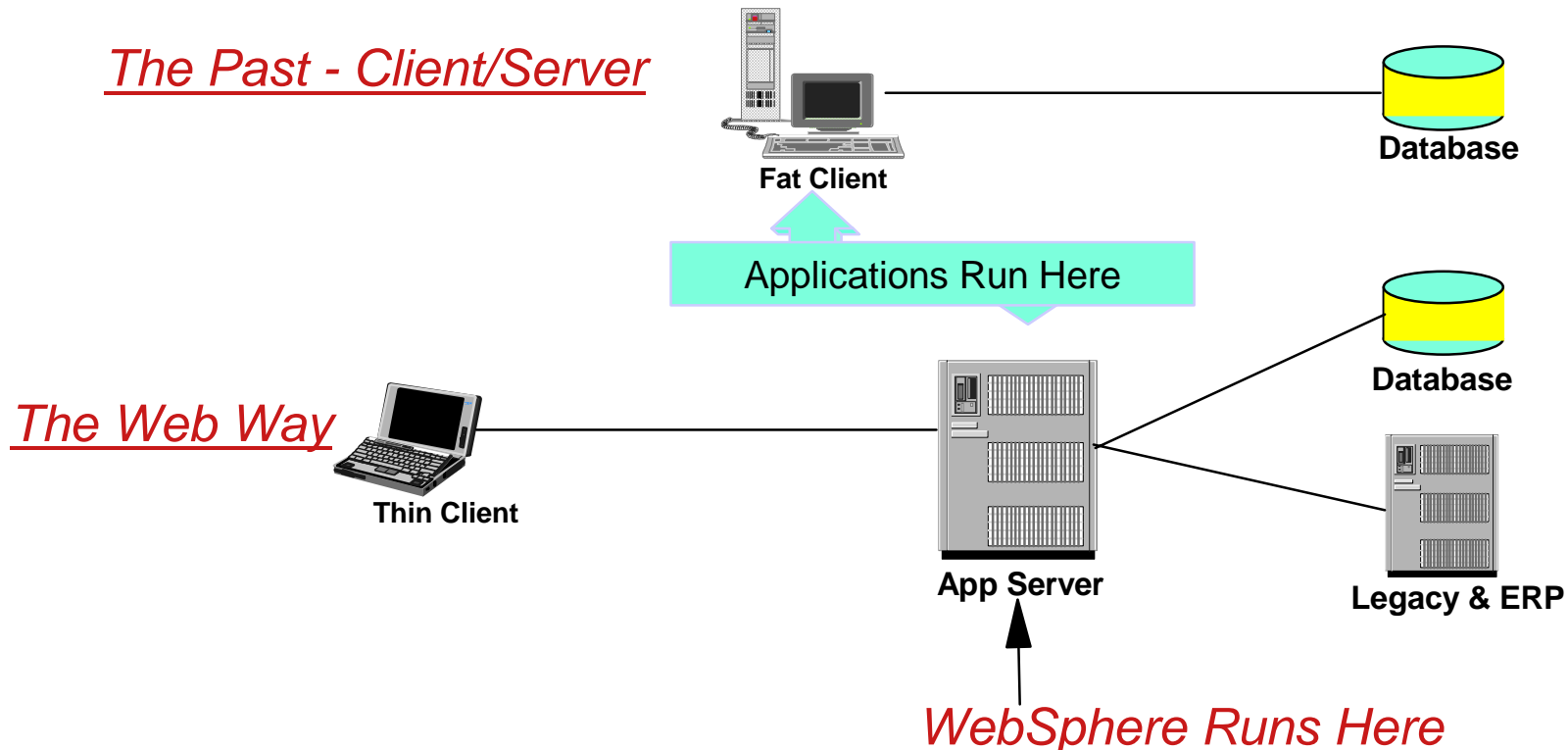
The dynamic e-business infrastructure for IBM, partner and customer solutions

Introduction To Web Application Servers

The way portable applications are deployed to the Web

Java™ server-side components rely on web application servers

- WebSphere-Express V5 - Servlets & Java Server Pages (JSP's)
- WebSphere Application Server V5 (Base) - adds Enterprise Java Bean (EJB's)

The Past - Client/Server

Fat Client

Database

Applications Run Here

The Web Way

Thin Client

App Server

Database

Legacy & ERP

WebSphere Runs Here

iSeries, Web Serving & Web Application Serving

Use for web transactions

iSeries Web Servers

- IBM HTTP Server
- Domino HTTP server
- IBM HTTP Server for iSeries

Web Application Servers (WAS) for iSeries

1. *IBM WebSphere Application Server V5* *(NEW)*
2. **IBM WebSphere Application Server V4.0 (WebSphere Advanced - single & multi-server)**
3. **IBM WebSphere Application Server V3.5 (Older - technical support ending 11/30/2003)**
4. **Apache Software Foundation's Jakarta Tomcat (Open Source & Not Strategic)**

Use for static web pages

	iSeries	iSeries	iSeries
Clients	*Web Server*	*Web Application Server*	*Core Business Applications*
	Static Web Page Serving	**Web Transaction Serving**	**Transaction and Data Serving**

IBM WebSphere Application Server V5
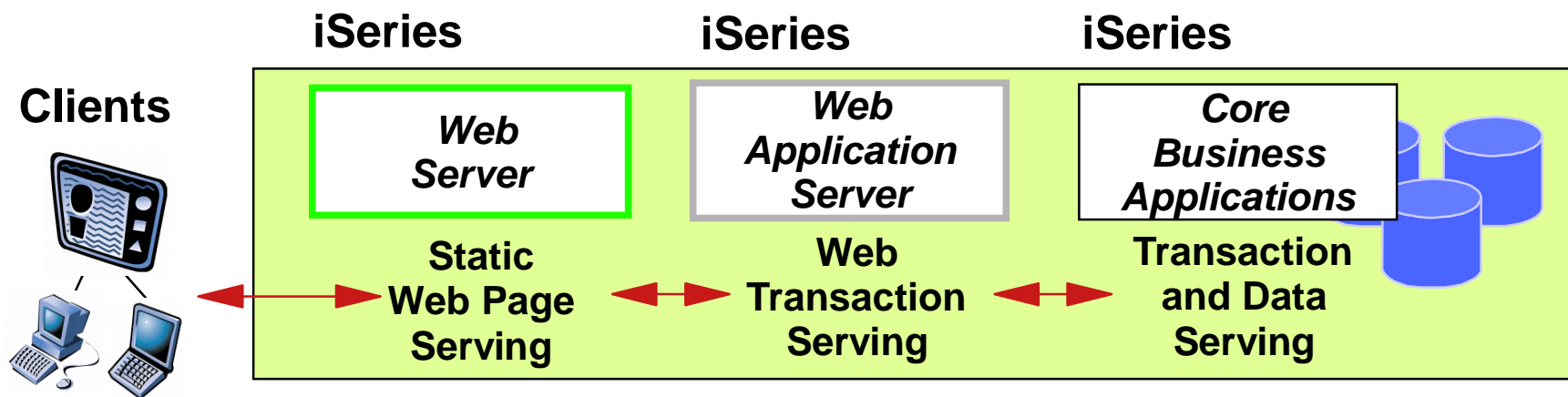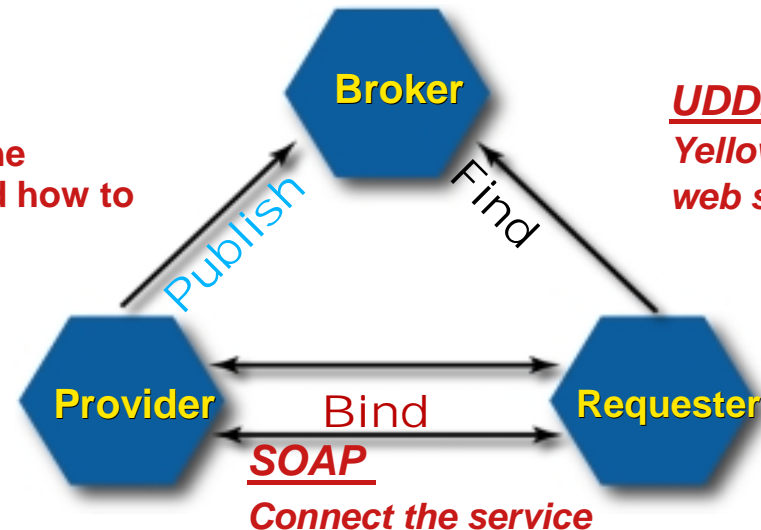
WebSphere Application Server V5
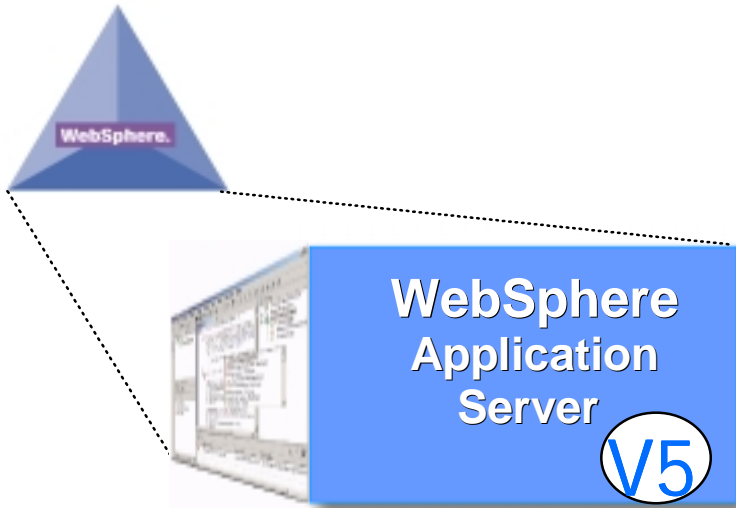
- **A highly flexible application server platform based on industry leading J2EE & Web services architecture**

- **Configurations available to meet the changing needs of different usage scenarios**

- **Built to be cross-platform and fully open & standards-based**

- **Web Services are supported with WebSphere Application Server V4 & V5 (including WebSphere - Express)**

- **Build, connect and integrate applications, servers, and devices**

- **Accelerate the pace of integration**
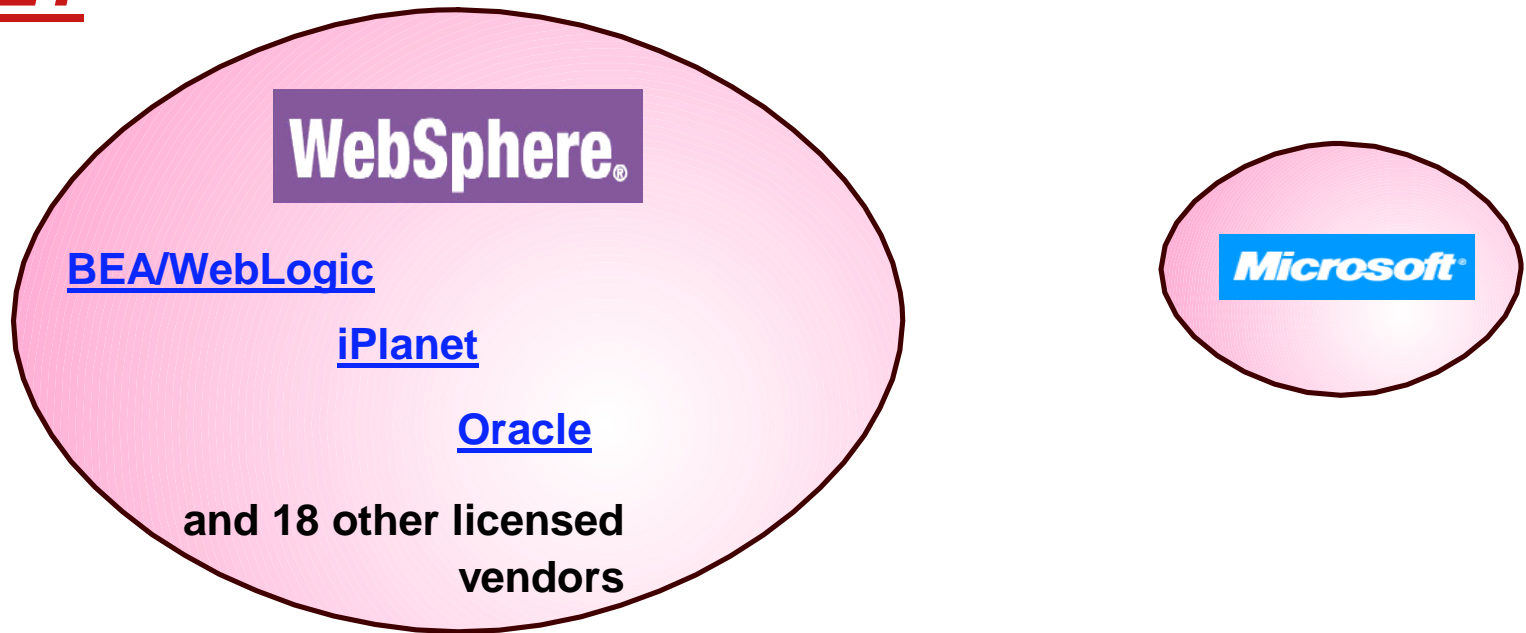
- **Access to partner and supplier services**

Web Services

Broker

WSDL
Describe the service and how to use it

UDDI
Yellow pages for web services

Publish

Find

Provider

Bind

Requester

SOAP
Connect the service

J2EE vs .NET

WebSphere.

BEA/WebLogic

iPlanet

Oracle

and 18 other licensed vendors

Microsoft

Category	J2EE	.Net
Deployment Platform	OS/400, zOS, AIX, Intel, HP-UX, Solaris, Linux, etc.	Windows (locked into single vendor)
Open Standards	Standards based on J2EE	Proprietary
Track Record	Mature & Proven	Beta Release
What customers get	Server consolidation & standards-based	Server proliferation & single vendor

IBM WebSphere Application Server V5

An extended J2EE & Web services *'build-to-integrate'* platform for creating, composing & choreographing adaptable networked application flows and behaviors

iSeries Support

The *mainstream* Web services J2EE 1.3 certified application server enabling industry leading QoS and flexible deployment options
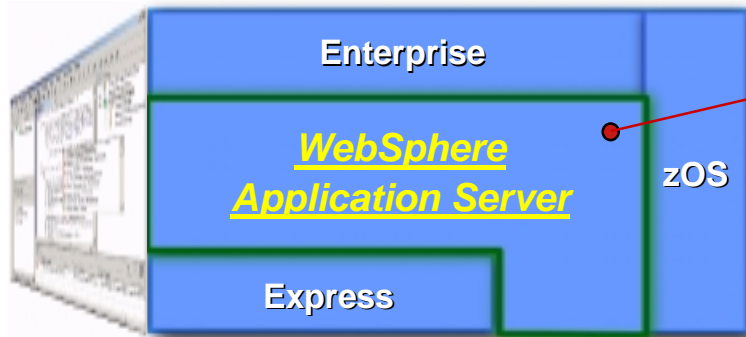
A J2EE web services application server specifically optimized to the unique *QoS of z/OS*

An easily approachable *"on-ramp"* to e-business, providing fast and productive development, deployment of dynamic web applications

Enterprise

WebSphere Application Server

z/OS

Express
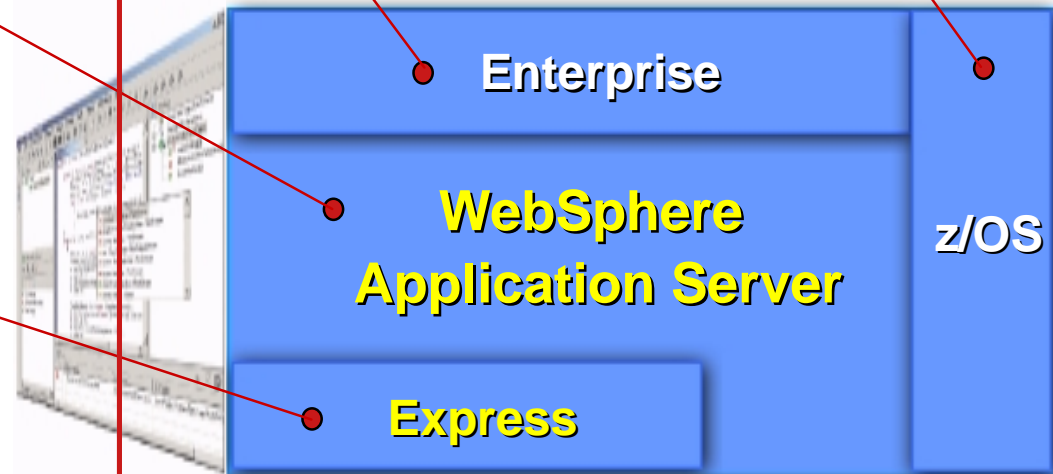
WebSphere Application Server (Base & Network Deployment?) V5

WebSphere Application Server

| Enterprise |
| WebSphere Application Server | zOS |
| Express |

The *mainstream* Web services application server enabling industry leading QoS and flexible deployment options

General Availability
V5R1 & V5R2 - 1/24

- **WAS Advanced V4 (single-server) - is now WebSphere Application Server V5 - $8,951 per cpu**

- **WAS Advanced V4 (multi-server) - is now WAS Network Deployment V5 - $13,441 per cpu**
    - **Adds clustering, workload mgmt., distributed security, systems management & directory**

- **J2EE 1.3 certified (EJB's) including a native, high performance JMS messaging server**

- **Provides a comprehensive XML Web services environment based on the latest open standards**

- **Improved, easy-to-use automated administration and management services**

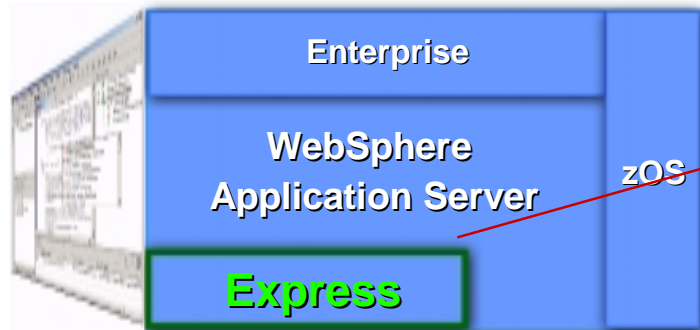# *WebSphere Application Server - Express* V5
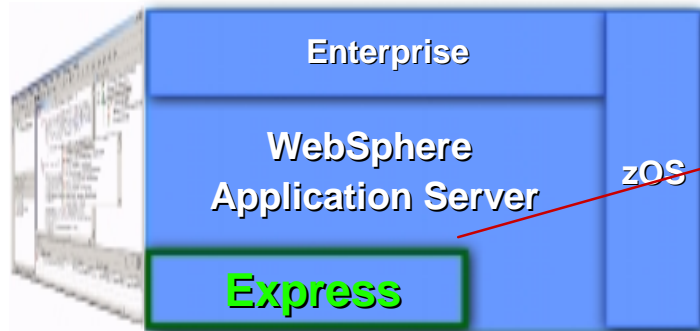
WebSphere Application Server - Express for iSeries

A cost effective, easily approachable "on-ramp" to e-business, providing fast and productive development, deployment & management of dynamic web sites

Enterprise

WebSphere
Application Server

zOS

Express

- **WAS-Express V5 for iSeries includes:**
  - **Web application server - WAS-Express V5**
  - **Application development tool - WebSphere Development Studio Client (WDSc)**
  - **Includes IBM Telephone Directory**

- **WebSphere Application Server - Express V5**
  - **OS/400 Support**
    - **V5R2 (GA - 2/21/2003)**
    - **V5R1 (GA - 3/14/2003)**
  - **Intel support**
    - **Windows 2000 & Linux**

Minimum iSeries = 300 cpw & 500 MB memory!

Price - WebSphere Application Server - Express V5

WebSphere Application Server - Express for iSeries

Enterprise

WebSphere
Application Server

zOS

Express

A cost effective, easily approachable "on-ramp" to e-business, providing fast and productive development, deployment & management of dynamic web sites

- **WAS-Express V5 is priced right for MidMarket!**
  - **$2,000 per cpu (unlimited number of web users - Intranet/Internet/Extranet) *OR***
  - **$25 per user (Intranet only registered users - buy in increments of 20 users)**
    - **Price includes 1 year of Software Maintenance**
      - **Register via Passport Advantage**

- **Current customers who have WAS Standard Edition (V3.02 or V3.5) & OS/400 SW subscription**
  - **Entitled to 1 copy of WAS-Express for iSeries**
  - **Must have ordered WAS V3.X by 1/24/2003**

IBM Telephone Directory

- WebSphere Application Server is web plumbing
  - **IBM Telephone Directory provides "out-of-the-box" functionality**
  - **iSeries-only offering for WAS V5 and WebSphere-Express V5 for iSeries**

- Provide ISV's and customers with an application which can be used immediately
  - **"Started simple" with WebSphere**
  - **Provide a valuable application all customers can use**
  - **Powerful search capabilities**
    - **Name - photo - phone - role - division - department - management chain, etc.**

- IBM Telephone Directory is no-cost for first 1,000 entries
  - **Small media charge in PPA (approx $25)**
  - **IGS special bid for 1,000+ entries**

URL: http://elcrtp25.raleigh.ibm.com:3633/bizApps

15

Customer Quote - WebSphere Express for iSeries

"I just installed WebSphere - Express for iSeries. It was incredibly easy. The install wizard built a WebSphere wizard which came up fully integrated with the Apache - based HTTP server on the first try! This thing is an administrators dream come true. It's ease of use from a systems management and administration standpoint can't be beat."

Bob Cancilla - Republic Indemnity Company of America

"New News" - WAS Content in iSeries Editions

System \ Bundle	Value Edition	Standard Edition	Advanced Edition	Enterprise Edition
800	Purchased Separately	WAS-Express 5.0	WAS-Express 5.0	
810		Purchased Separately		WAS-Express 5.0
825 / 870 / 890		Purchased Separately		Choice of WAS - Express, 4.0 Single Server or 5.0 Base

All new iSeries models support Web Moderinization (what does this mean?)
* All new models support WAS-Express (300 cpw)
* All new iSeries models implementing WebFaced applications do not require interactive workloads

iSeries e-business Strategies

iSeries e-business Strategies

#1 - Build new e-business applications

#2 - Extend existing applications to the Web

#3 - Buy new e-business solutions

#4 - Consolidate e-business workloads

Internet

Extranets

Intranet

Existing
COBOL/RPG
"Green
Screen"
Applications

Core LOB Solutions
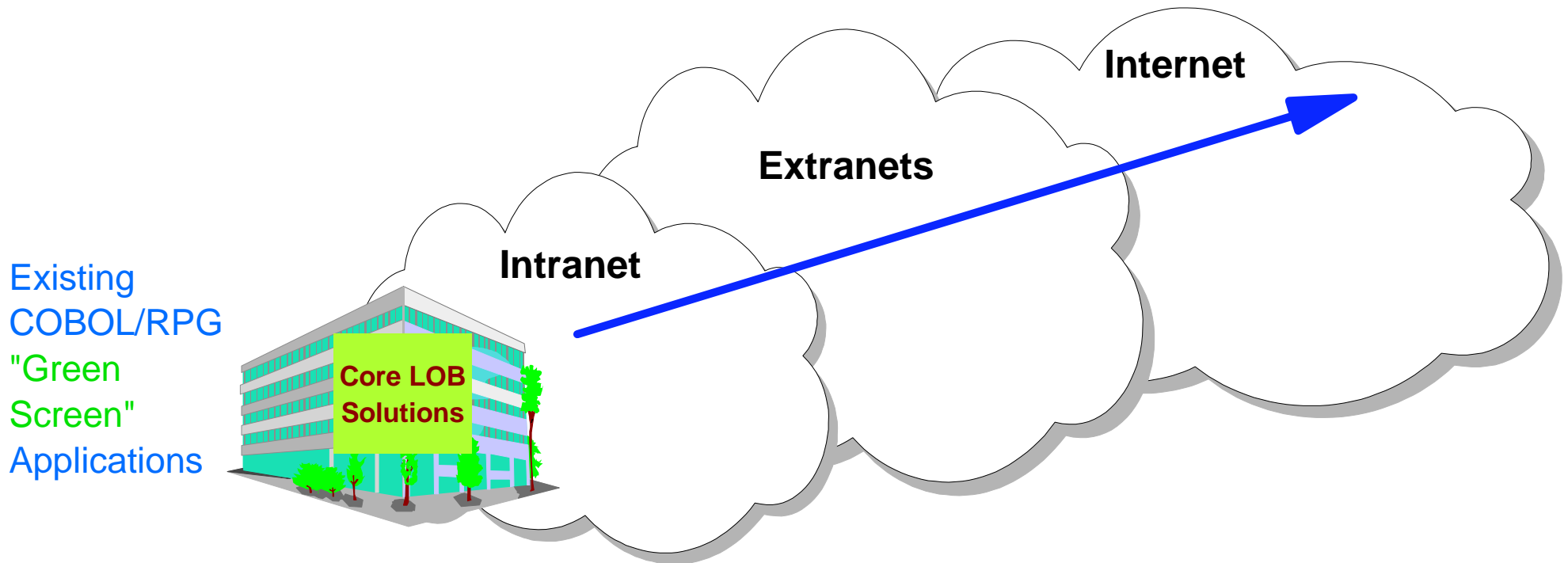
Build New Applications -
WebSphere Development Studio for iSeries

WebSphere Development Studio for iSeries V4**

- Combines Legacy and web development in one offering
  - **iSeries host & PC-based client tools**
    - **Legacy client - CODE/400 & VisualAge RPG**
    - **Web client - Java, HTML, XML, & Web Services**
    - **IBM WebFacing Tool**
- WebSphere Development Studio Client (WDSc) is PC-based client application development tool
  - **1 copy of WDSc is shipped with WAS-Express for iSeries**

Customer Benefits

- Support existing application development as well as new web-development
- Integrate the key tools of e-business, Java, and web development
- Ability to "wrapper" RPG applications as web service!
- Modernize 5250 applications via IBM WebFacing Tool

WDSc & WSAD V5 for iSeries will GA on 4/25/03

IBM Server & Middleware Tools	Partner Tools & Middleware
WebSphere Studio	
WebSphere Studio Workbench	

70,000 copies shipped since May 23, 2001!

WebSphere
Development Studio
for iSeries

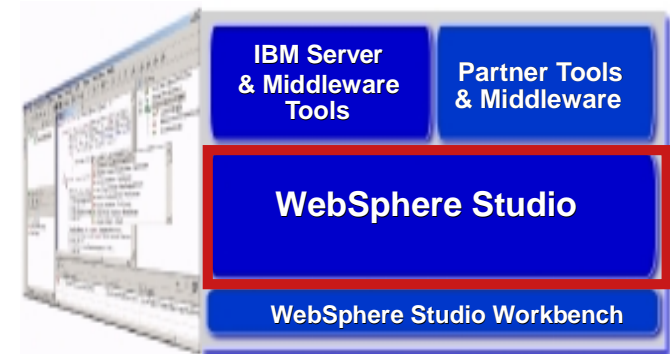# iSeries e-business Strategies

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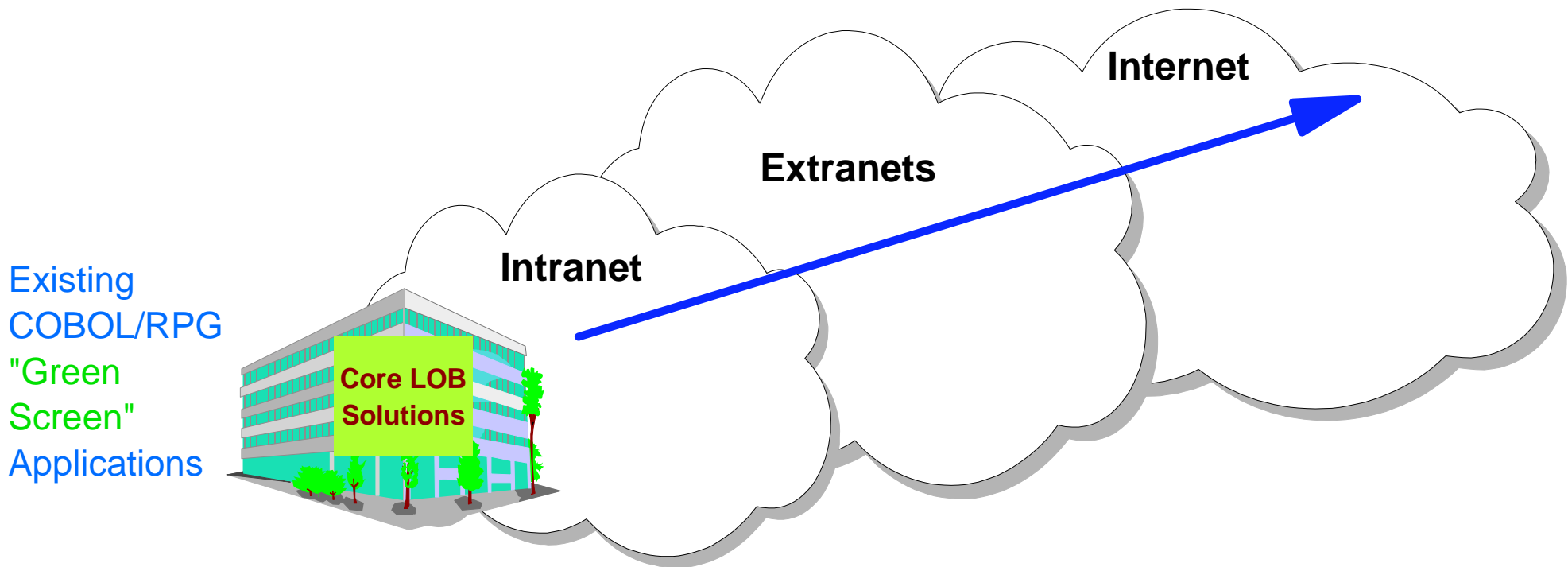
Modernize & Extend Existing iSeries Applications

Top executive focus topic: Get rid of those green screens!

Many iSeries customers are just <u>getting started</u> with e-business

Only need to ask customers 2 questions to qualify a WebSphere opportunity:

#1 - Do you want your employees to access iSeries via browser?

#2 - Do you want graphical applications?

WebFacing Modernizes iSeries 5250 Applications

IBM WebFacing Tool

- Part of WebSphere Development Studio for iSeries (shipped with WDSc)
- Supports 5250 and web interfaces
- Quickly convert RPG/5250 applications to Graphical User Interface (GUI)
- End-users access applications via browser
- New 2003 iSeries models (only) do NOT require 5250 CPW workload!

Before & After WebFacing
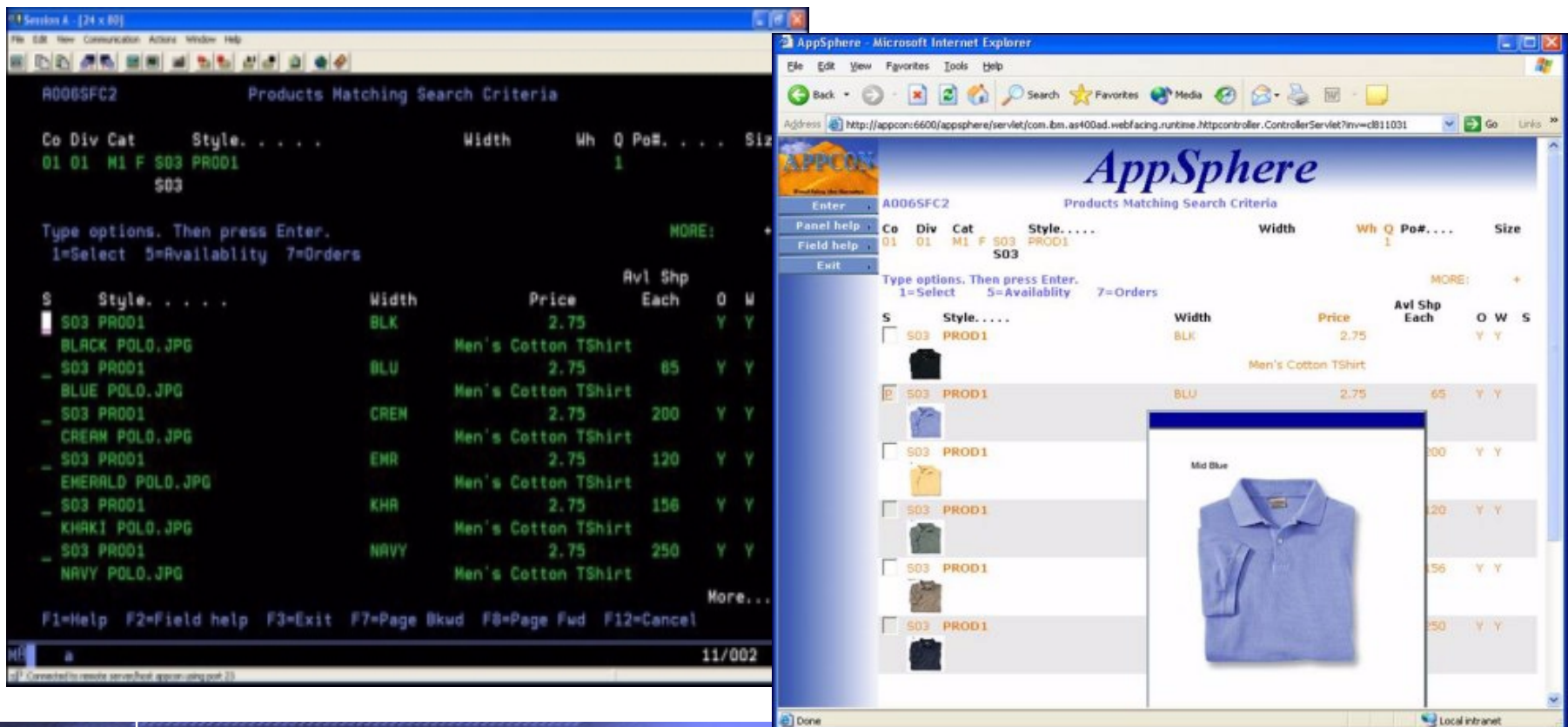
Customer Quote - WebFacing

"We knew the value proposition of WebFacing was extremely attractive, but we were absolutely blown away by how easy and quick it was to create web interfaces for our 5250 applications. IBM has a winner!"

Dave Bauer - Architect, Xperia Solutions

IBM WebFacing Tool + New Models = No Interactive CPW!

"New News" in 2003 Models & Packaging - WebSphere & WebFacing

- **Model 800**
  - IBM WebFacing does NOT require 5250 CPW workload
  - iSeries Standard & Advanced Editions include WAS-Express V5 for iSeries

- **Model 810**
  - IBM WebFacing does NOT require 5250 CPW workload
  - iSeries Advanced Edition includes WAS-Express V5 for iSeries

- **Models 825, 870 & 890**
  - IBM WebFacing does NOT require 5250 CPW workload
  - iSeries Enterprise Edition includes choice of WAS Advanced V4, WAS V5 (Base) or WAS-Express for iSeries

> *ALL Older iSeries Models Using WebFacing Tool Requires 5250 CPW*

iSeries Access Family (fee-based) Includes WebSphere-based Products

iSeries Access for the Web

- Administrator & end-user tool

- Access iSeries resources via browser

- Use iSeries Access for the Web with WebFacing to modernize system screens

- Administrator can customize/limit access to resources

  The browser-based alternative...

WebSphere Host Publisher

- Programmer tool
- Modernize existing 5250 applications
- Combine multiple back-end applications
  - iSeries, zSeries, VAX, etc
- Customize applications
  - Take 1,000 screens down to 200
- Supports WAS V3.5 & V4
  - Not WAS V5 or WAS - Express yet

  Modernize green screen applications...

What is HATS?

Dynamic Rules Based Transformation

- **Host Access Transformation Server**
  - A host-to-web HTML emulator...
  - Includes a rules-based transformation engine...
  - Converts green screens to graphical user interfaces (GUIs)...
  - Works with iSeries system screens too (WebFacing does NOT)

Easier to Use vs. WebFacing

- **HATS Limited Edition (Should GA in 2Q 2003)**
  - Positioned as easier to use vs. WebSphere Host Publisher
  - Designer is plug-in to WebSphere Studio Development Tools

HATS Limited Edition Only Provides 5250 to HTML Transformation
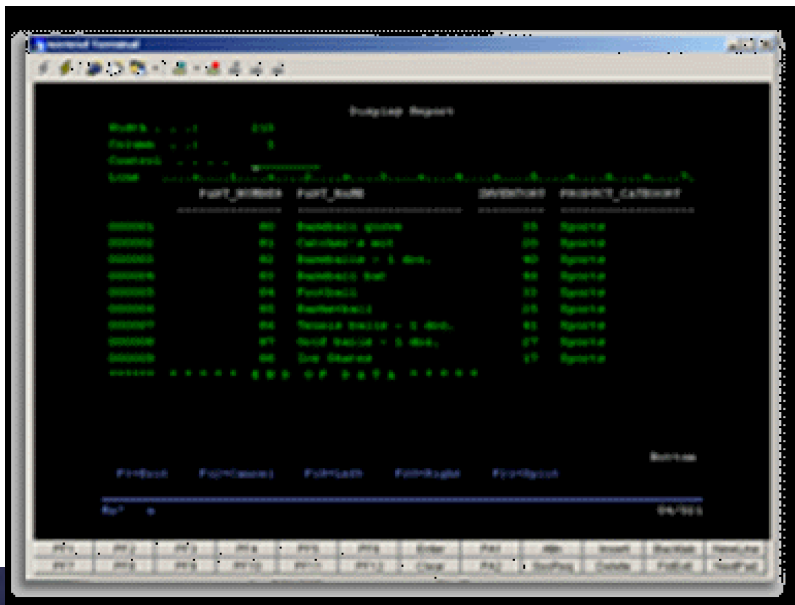
IBM Product Function Comparison

Administrator product **for working with host/server resources**

- **iSeries Access for Web**
- **Only product that formally supports ASF Tomcat**

Programmer product **to modernize host applications**

- **IBM WebFacing Tool**
- **WebSphere Host Publisher**
- **HATS Limited Edition**

All 4 products require a web application server

End-users benefit from all products
- * *GUI*
- * *Browser-based*

Packaging

- **iSeries Access Family**
  - **iSeries Access for Web**
  - **WebSphere Host Publisher**
  - **HATS Limited Edition**
- **WebSphere Development Studio for iSeries**
  - **WebFacing**

Demo iSeries Access for Web and WebSphere Host Publisher:
http://iseriesd.dfw.ibm.com/webaccess/iWAHome (case sensitive)
Use the following User ID and password to sign in:
User ID of **WUSER**
Password of **GUEST1**
Beaver Creek Web Solutions Demo site...
http://www.piner.com/

WebSphere MQ (formerly MQ Series)

- **Connects to any commercial system in business today**
  - **35 different Platforms**
- **Integrate more tightly with suppliers**
- **Important data is always delivered**
- **Share and leverage information between applications**
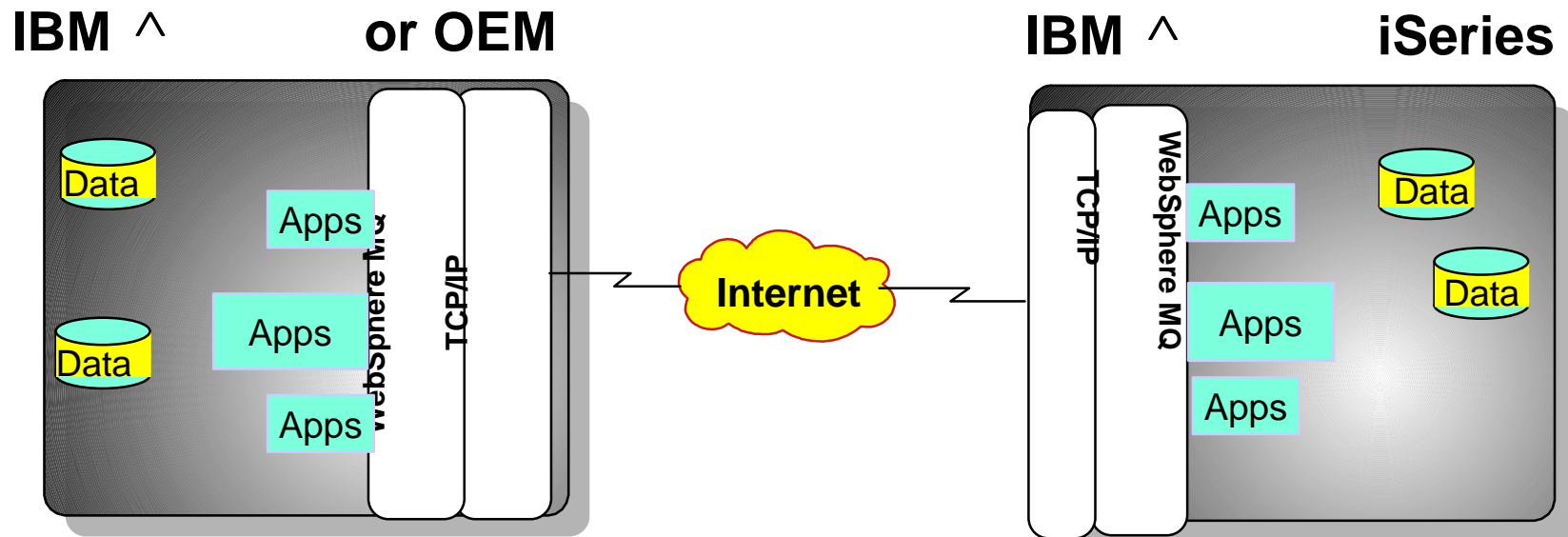
http://www.ibm.com/software/ts/mqseries/messaging/
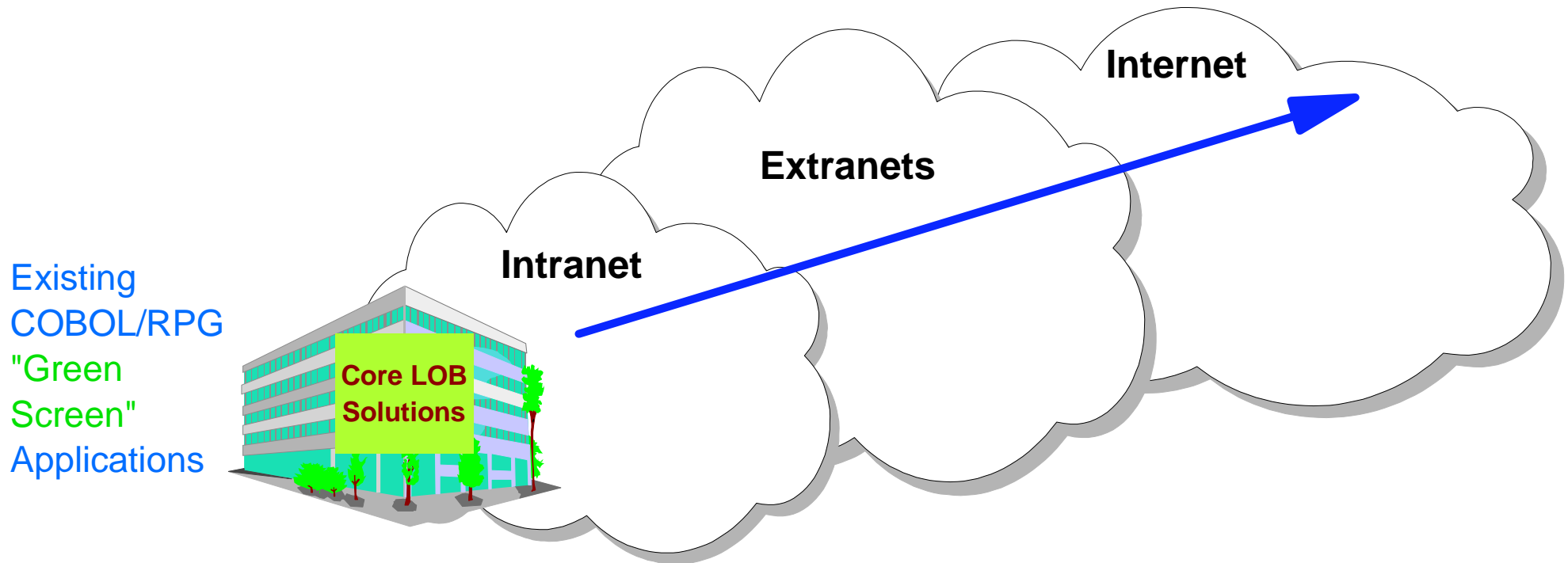
∧ *iSeries e-business Strategies*

iSeries e-business Strategies

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COBOL/RPG
"Green
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Applications

Core LOB
Solutions

Domino & WebSphere

iSeries = Recognized as a leading enterprise Domino server

- "Out of box" functionality (mail, calendar & collaborative solutions)
- Ideal for companies with low/medium e-biz skills/resources
- Excellent ISV applications available today
- Domino 6 now includes "limited use" WAS Advanced V4 (single server) license

domino

Optimized for collaboration and workflow

IBM WebSphere

Optimized for distributed transactions and components
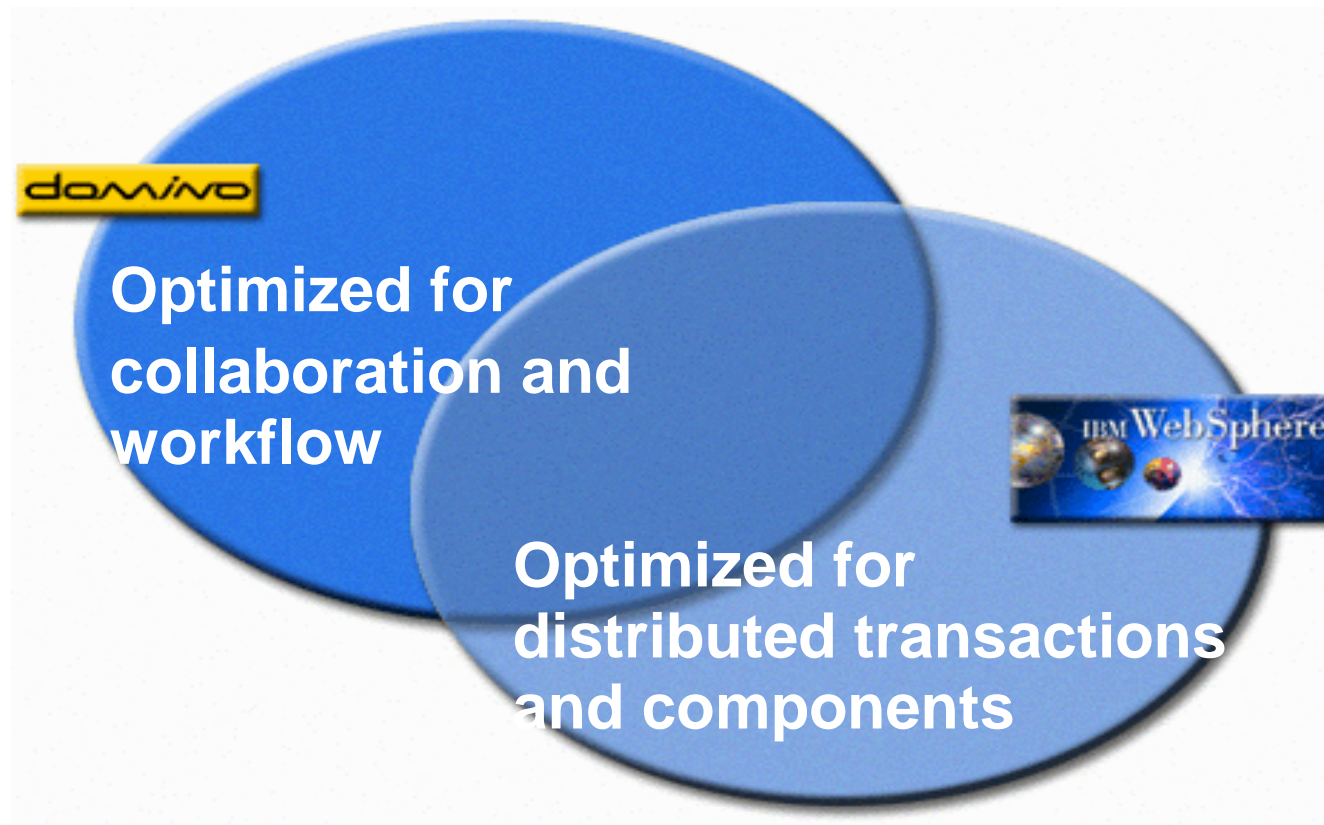
WebSphere Commerce

- **Customize B2C & B2B catalog web sites**
- **Serious sell-side solutions integrated into existing applications**
- **Maximize revenues, improve customer service & extend reach worldwide**
- **Shopping-cart analogy**

Business-2-Consumer

Business to Consumer

Catalogs   Orders   Payment

Business-2-Business

Business to Business

Workflow   Contracts Negotiations

WebSphere Commerce for web-based e-commerce Solutions

WebSphere Commerce V5.4 Overview

WebSphere Commerce Overview

- **Provides a framework for customers to establish effective, high-end B2B and B2C e-commerce web sites**

- **WebSphere Commerce Professional Edition (WCPE)**   *$89,600 per CPU (US)*

  - **Advanced order & inventory management, business campaign management, integrated business intelligence & reporting, live help (via SameTime) & supports auctions & payment management**

$140,000 per CPU (US)

- **WebSphere Commerce Business Edition (WCBE)**

  - **Includes all the function in WCPE function plus significantly more B2B functionality**

    - **Sell-side managed contracts, RFQ's, approvals workflow, requisition lists, buyer/seller collaboration, advanced user management and access control**

      Excellent WebSphere Commerce Demo

      http://cdsportal5.corningdata.com/demosite5/eportal1.nsf

      ID = wcs

      Password = password

Reactions from some customers & ISV's

I love the function available in WebSphere Commerce!

But it's too expensive for my company!!

Announcing WebSphere Commerce Pro Entry

- **New WebSphere Commerce offering for Small & Medium Businesses**
  - **Priced at $22,400 (US) - Sub-capacity pricing available**

- **Functionally similar to WebSphere Commerce Professional**
  - **SameTime function not included**

- **Restricted Terms & Conditions**
  - **Can only be run on 1 cpu**
  - **Limited to only 1 store**

- **Meets the needs of the MidMarket**
  - **Supports iSeries**
  - **Low price**
  - **Channel-ready**
  - **Upgrade path to other WebSphere Commerce Professional & Business Editions**

What is a Portal?

Portals are Web pages tailored for specific users providing:
- A single point of personalized interaction
- Integrated content, applications, people & processes
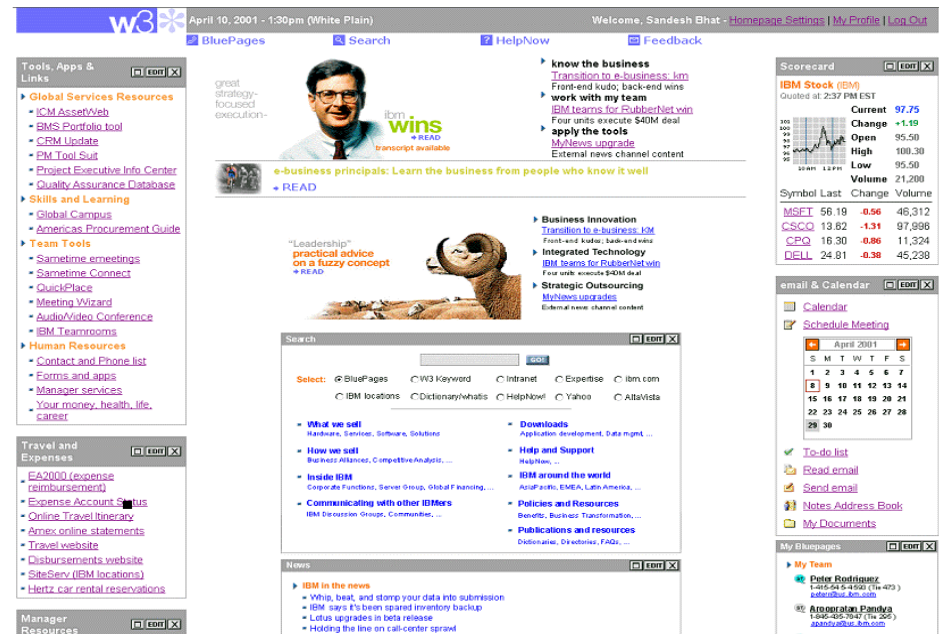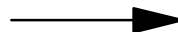
WebSphere Portal Server Enable V4.1 for iSeries
- Quickly build scalable portals to simplify and speed your access to personalized information and applications
- $72K (US) per cpu
- Sub-capacity pricing NOT supported

Portals

* B2B

* B2E

* B2C

Example of WebSphere Portal & Portlets

Collaboration data

Subscriber News

Monitor Usage

Inventory data from ERP Application

Business partner data

Business Intelligence Reports & Analysis

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iSeries e-business Strategies

∧

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iSeries & WebSphere Sub-Capacity Pricing Examples

Partition #1	Partition #2
WAS 0.5 cpu	Other Workload 1.5 cpu's

2-Way iSeries

2-Way iSeries
- WAS processor units = 0.5
- WAS licenses required = 1

Part #1	Part #2	Part #3	Part #4
WAS 1.5 cpu	WCS 0.4 cpu	WCS 0.5 cpu	Other Workload 5.6 cpu

8-Way iSeries

8-Way iSeries
- WAS processor units = 1.5
- WAS licenses required = 2

- WCS processor units = 0.9
- WCS licenses required = 1

- **LPAR required** - license a product for use on less than the full capacity (in processors) of the machine
- Use the Electronic Service Agent for iSeries to send the software inventory to IBM every 30 days
- This data is used by IBM to audit for compliance to the license terms and conditions
- http://www-1.ibm.com/servers/eserver/iseries/announce/subcapprc.html

iSeries Success = Multiple Applications & Environments

LOB/ISV Business Applications

Lotus Domino application server and solution framework

IBM WebSphere Java-based Web Application Server

UNIX Runtime plus ISV tools, middleware and application servers

Integrated xSeries Server NT/WIN2000

Linux

Interconnected for application integration

Security
- Built-in from the silicon up
- Built on an object oriented model
- Open Design

Database
- UDB
- JDBC interoperability
- ODBC interoperability

Systems Mgt.
- Single system, multi-workload
- Multi system
- Integrated
- Graphical

Java
- Java Virtual Machine
- Just In Time compilation
- Integrated memory management

Networking
- TCP/IP
- HTTP
- Apache
- Net Server
- XML
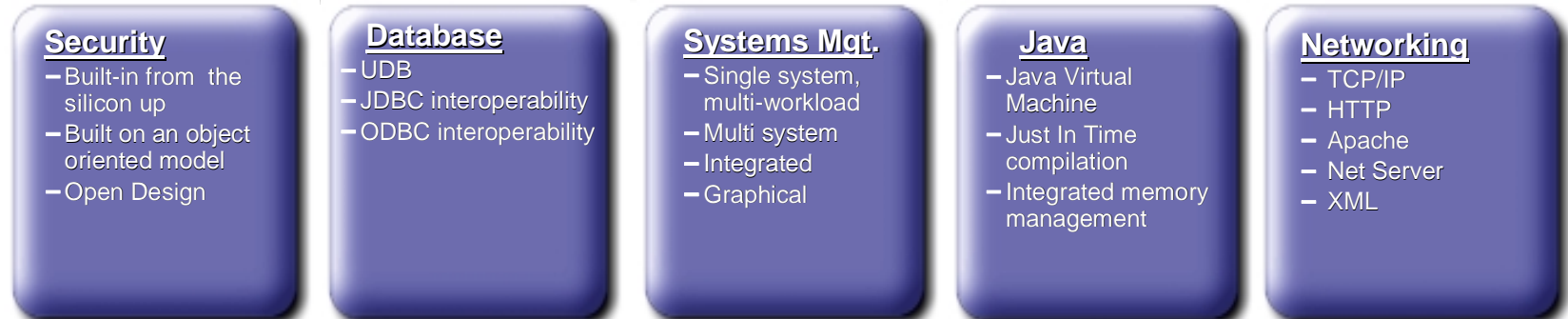
Across a scalable, secure, reliable platform

iSeries Value Proposition

Power to drive new, industry standard capabilities

WebFacing

WebSphere

Java & XML

Web Services

Domino

Windows NT

ERP/SCM/CRM

Deliver value customers expect

Ease of Use

Integration

Reliability

Security

Scalability

Service & Support

New Solutions Are Complimentary With Existing Applications

Solution Identifier - Look For These Characteristics

- **Customers who want low cost application server supporting Servlets & JSP's**
  - **WAS - Express V5 for iSeries**

- **Customers who want most robust, scalable application server supporting J2EE**
  - **WebSphere Application Server V5 & WAS V5 Network Deployment**

- **Customers who want their employees to access iSeries resources with a browser**
  - **iSeries Access for the Web**

- **Customers/ISV's who want to modernize 5250 applications by converting DDS**
  - **IBM WebFacing Tool**

- **Customers who want to modernize 5250 applications dynamically via data streams**
  - **WebSphere Host Publisher or HATS**

- **Customers who want to build/deploy a B2C or B2B eCommerce solution**
  - **WebSphere Commerce**

- **Customers/ISV's who want to offer a single integrated portal for B2B, B2C or B2E**
  - **WebSphere Portal Server**

Next generation iSeries...simplicity in an on demand world

- **WebSphere is critical to iSeries customers e-business success in future**
  - **WebSphere-Express V5 is most important WebSphere announcement ever for iSeries**
  - **WebFacing does NOT require 5250 CPW with NEW hardware (ONLY)**

- **iSeries customers & ISV's have many low-cost options to "Start Simple"**
  - **WebSphere-Express V5 for iSeries**
  - **IBM WebFacing Tool**
  - **iSeries Access for the Web**
  - **WebSphere Host Publisher**

- **Advanced WebSphere Brand products help iSeries customers and ISV's "Grow Fast"**
  - **WAS V5 (Base Server & Network Deployment)**
  - **WebSphere Commerce**
  - **WebSphere MQ**
  - **WebSphere Portal Server**

- **Major education & services opportunity exists for IBM & WebSphere Business Partners**

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Stylized	HTTP Server for AS/400	Net.Commerce	WebSphere Development Tools for AS/400
AIX	IBM	Net.Data	WebSphere Standard Edition
DB2 UDB for AS/400	IBM Logo	PowerPC	
Application Development	e-business logo	PowerPC AS	
APPN	Payment Manager	VisualAge for RPG	
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