Getting Started with SOA on System i5
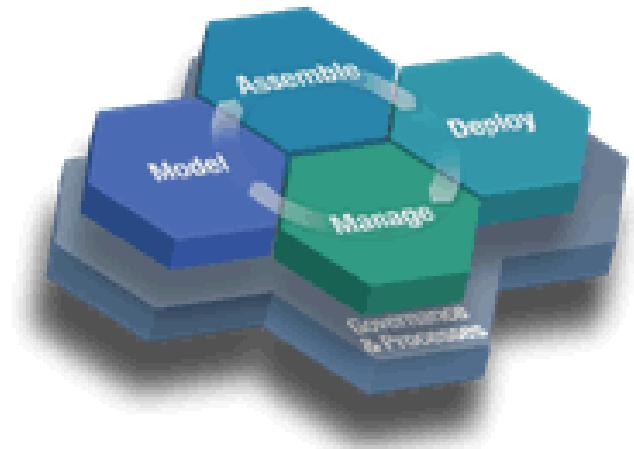
Advantages of System i5

Simplify your IT.

Agenda

- Collaboration overview
- IBM WebSphere Portal Server for System i5
- IBM Workplace products for System i5
  - Workplace Collaboration Services
  - Workplace Services Express
- System i5 unique capabilities & value add
- Summary & additional resources

Simplify your IT.

System i5 (iSeries) - The myths

✓ Old technology

✓ Proprietary

✓ Expensive

✓ Nothing but Green Screens

✓ Not strategic to IBM

✓ Slowly fading away

✓ All the iSeries people
are at least 50 years old

Simplify your IT.

System i5 (iSeries) - The Reality

- ✓ Industry Leading Technology
- ✓ The most open system on the planet
- ✓ Provides the lowest total cost of ownership of any server
- ✓ Runs everything from green screen applications to SOA
- ✓ In Feb 2005, IBM made a $1B commitment to driving the iSeries forward
- ✓ Adding new customers and ISVs every year
- ✓ Industry leading customer and Business Partner satisfaction
- ✓ Not all of us are over 50…..

Simplify your IT.
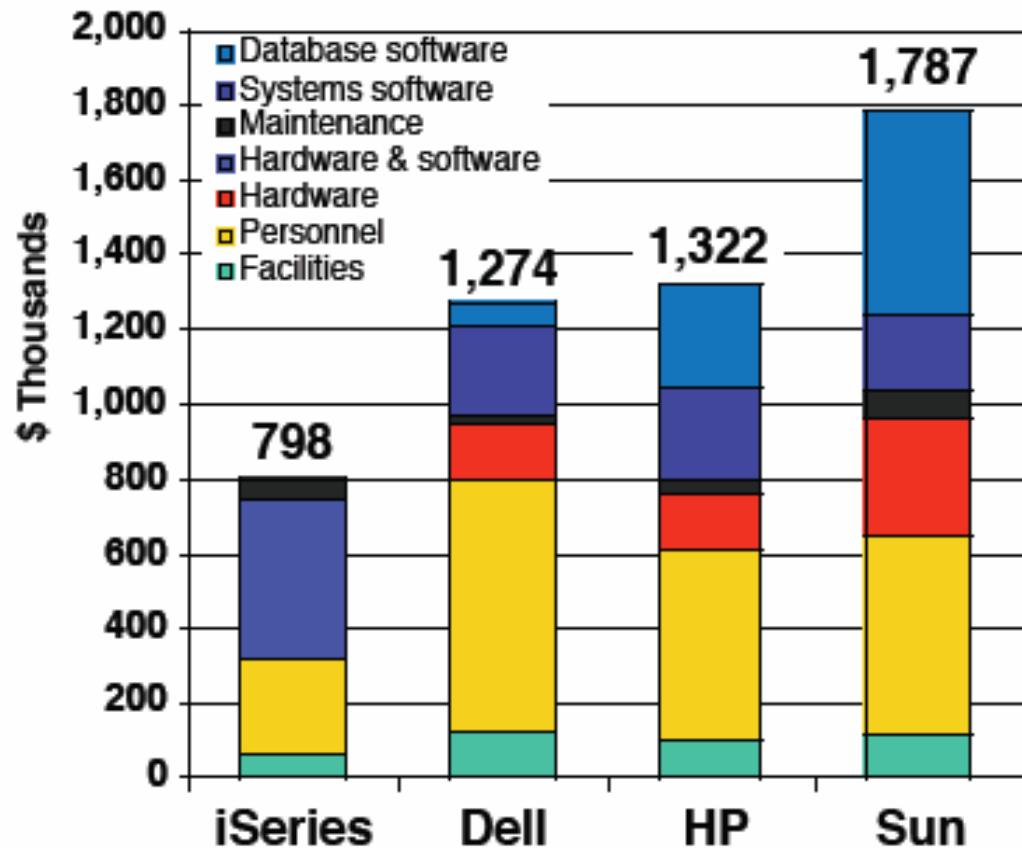
System i5 (iSeries) - The Reality

✓ Over 245,000 customers currently use more than 500,000 System i5, iSeries or AS/400 systems in over 100 countries world wide

✓ 99% of Fortune 100 companies utilize System i5, iSeries or AS/400 servers

✓ 94% of Fortune 500 companies use System i5, iSeries or AS/400 servers

✓ 7 out of 10 IBM customers have a System i5, iSeries or AS/400 server

✓ Over 13,000 System i5, iSeries or AS/400 systems in the healthcare industry

Simplify your IT.

Server Cost of Ownership - Over 3-Years

JD Edwards EnterpriseOne

iSeries is

- 37.8% less than Dell
- 39.7% less than HP
- 55.3% less than Sun

Why?

- Availability
- System performance
- Reduction in complexity
- Increase focus of IT resources on business demands
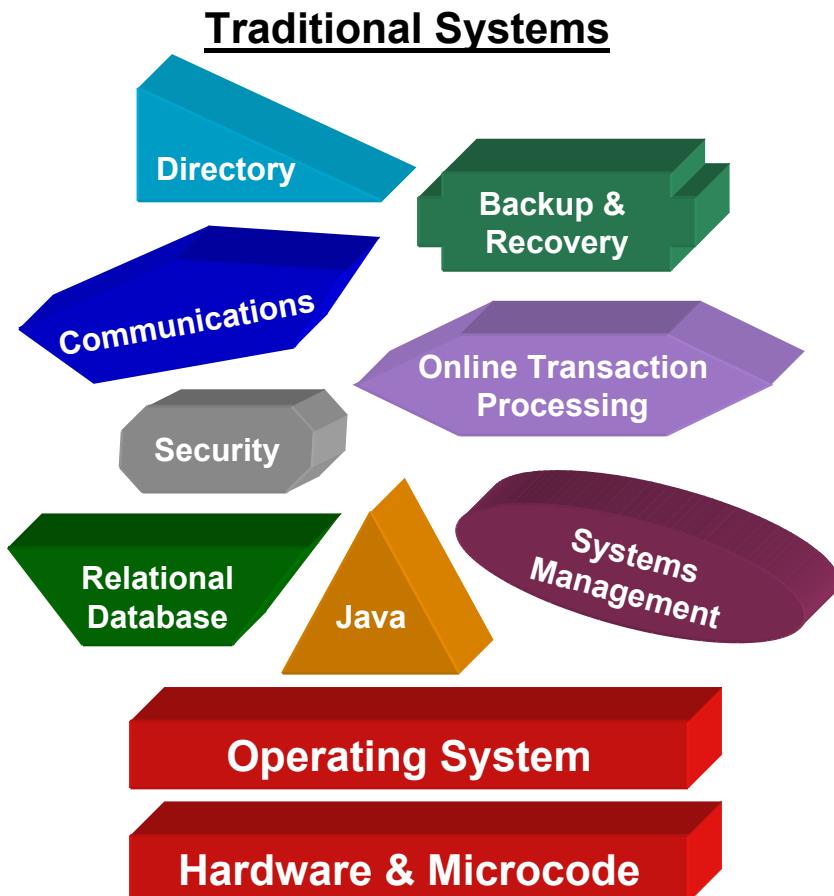
Source: ITG Status Report, June 2005

Cost/Benefit Case for IBM eServer i5 Servers: JD Edwards EnterpriseOne Solutions

Simplify your IT.
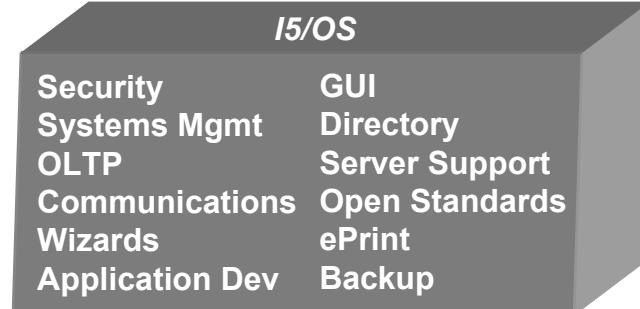
Why do clients buy i?

✓ Because there's real value in *integration*

✓ Because *reliability* is a feature, not an option

✓ Because it supports *mixed workloads* on a single server, *with stability*, at high levels of system utilization

✓ Because it practically *manages itself*

✓ Because it's more *secure by design*, providing natural defenses against viruses and the vulnerabilities which they attempt to exploit

✓ Investment protection of IT assets

Simplify your IT.
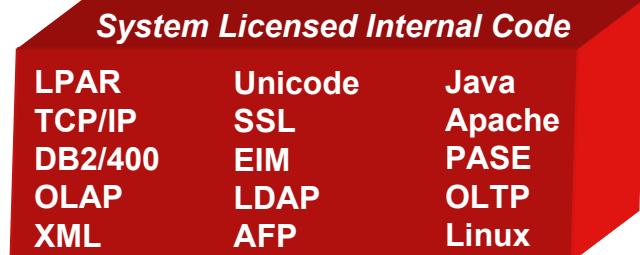
System i5 & iSeries – integrated by design

Traditional Systems

Directory

Backup & Recovery

Communications

Online Transaction Processing

Security

Relational Database

Java

Systems Management

Operating System

Hardware & Microcode

iSeries

I5/OS

Security	GUI
Systems Mgmt	Directory
OLTP	Server Support
Communications	Open Standards
Wizards	ePrint
Application Dev	Backup
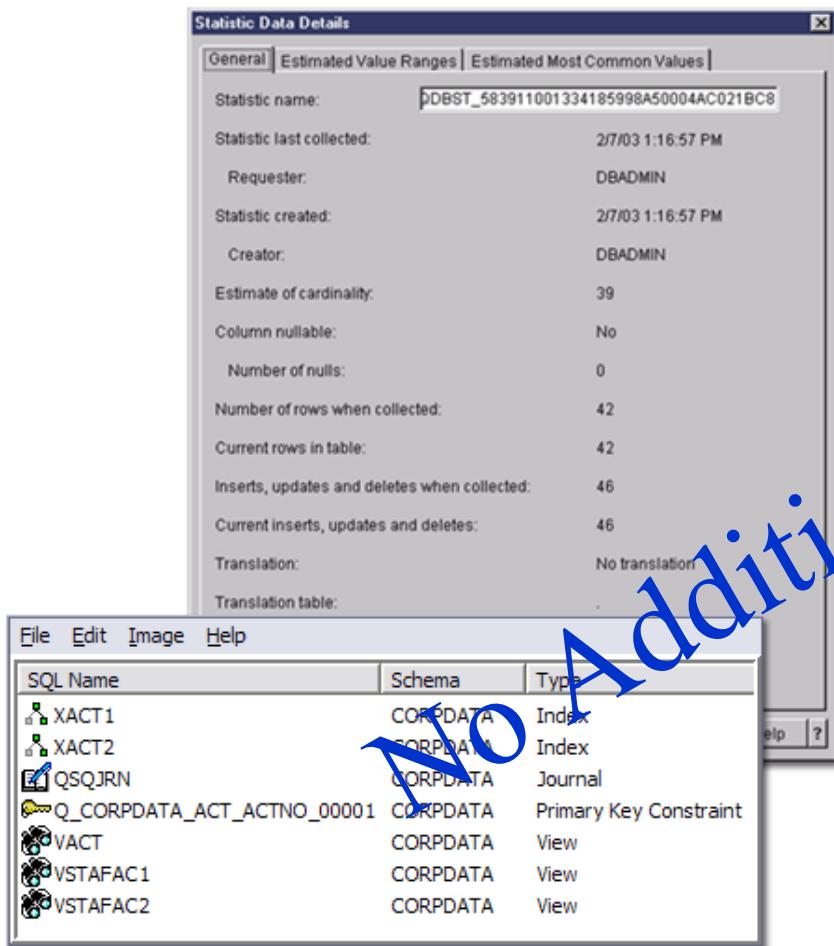
Technology Independent Machine Interface

System Licensed Internal Code

|		
LPAR	Unicode	Java
TCP/IP	SSL	Apache
DB2/400	EIM	PASE
OLAP	LDAP	OLTP
XML	AFP	Linux

iSeries 64-bit Power5 HW

Simplify your IT.

DB2® UDB for iSeries
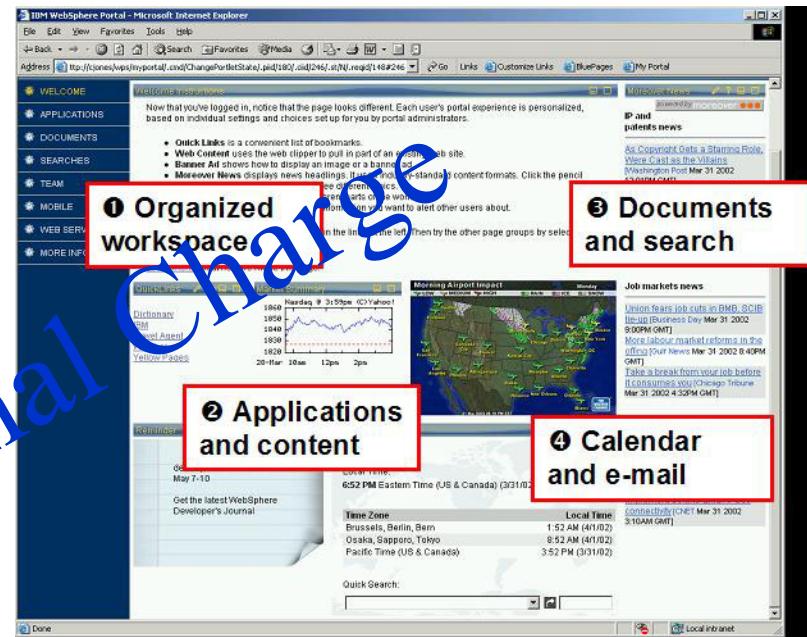
- Deliver enhanced functionality with improved performance and ease of use for data warehouse and queries
  - Star Join Recognition
  - Result set caching for re-run of same queries
  - Preview Materialized Query Table

- Extend development interfaces
  - Enhance SQL standards leadership and DB2 family compatibility
  - Support Rational XDE Modeler
  - Deliver Unicode enhancements
  - Enable .NET Managed Provider

- Scalability and performance enhancements with i5/OS V5R4

Simplify your IT.

Integration yields automation

Typical DBA Tasks	DB2 UDB for iSeries
Manage DASD Space Allocation	Automated
Review Table Space Allocations & Extents	Automated
Review & Balance Indexes	Automated
Application Rebinding	Automated
Maintain Database Integrity	Automated
Update Database Statistics	Automated
Synchronized OS & DB User Security	Automated
Reload Data for Hardware & Software Upgrades	Automated
Load Data into Data Base	Parallel Data Import/Export
Build and Manage DB Backup & Recovery	iSeries Navigator
Create & Review Indexes for Tables	iSeries Navigator
Performance Analysis & Tuning (DB & System)	iSeries Navigator
Create and Maintain DB Schema	iSeries Navigator & 3rd Party Tools (ERwin, PowerDesigner)
Automated DB Performance Profiling	DBA Essentials
Advanced DB Performance Analysis & Tuning	iSeries Navigator DB Essentials
Data Replication & Consolidation	Multiple IBM & 3rd Party Products

Simplify your IT.

WebSphere Application Server

- **WebSphere Express ships with i5/OS at no charge**

- **WebSphere Express tightly integrated with i5/OS V5R3**
  - Includes new IBM Survey application, in addition to IBM Telephone Directory
  - Now available with every @server i5 and upgrade to i5/OS V5R3
 - IBM Web administration for iSeries simplifies configuration and management
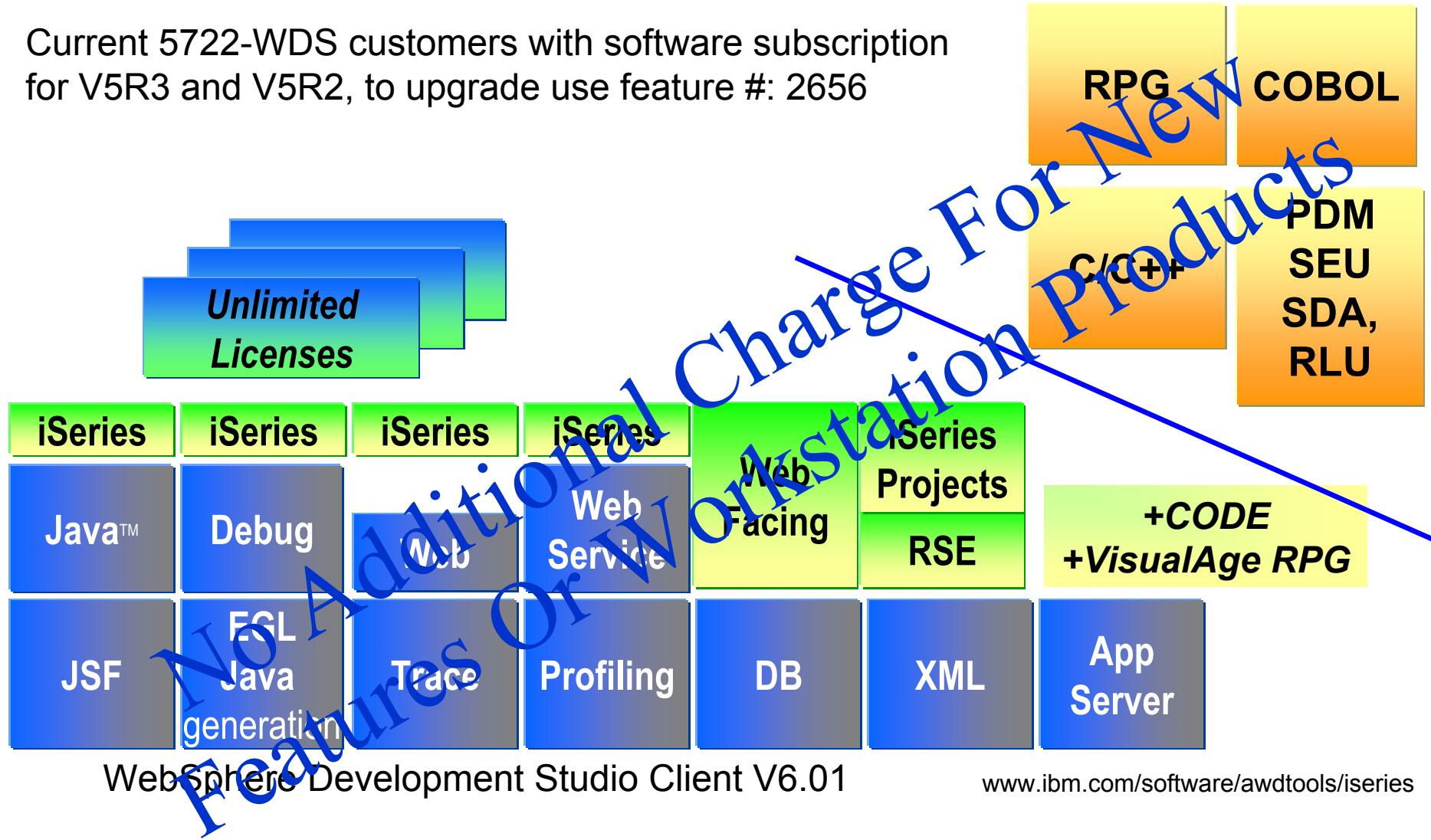
WebSphere software

* This presentation contains information about IBM's plans and directions. Such plans are subject to change without notice.

Simplify your IT.
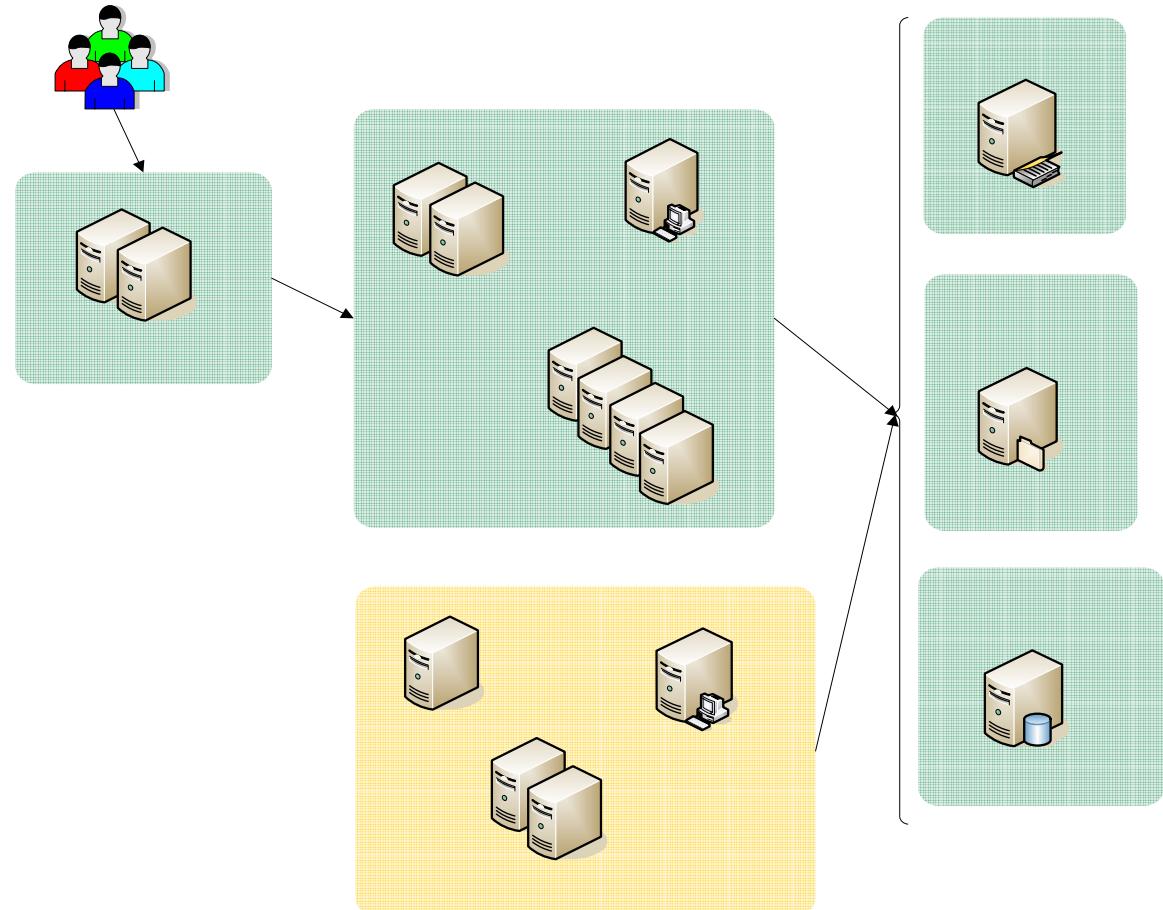
WebSphere Development Studio

Current 5722-WDS customers with software subscription for V5R3 and V5R2, to upgrade use feature #: 2656

**RPG** **COBOL**

C/C++ **PDM SEU SDA, RLU**

Unlimited Licenses

iSeries	iSeries	iSeries	iSeries		
Java™	**Debug**	Web	**Web Service**	**Web Facing**	**iSeries Projects**
					RSE

+CODE +VisualAge RPG

| **JSF** | **EGL Java** generation | **Trace** | **Profiling** | **DB** | **XML** | **App Server** |

WebSphere Development Studio Client V6.01

No Additional Charge For New Features Or Workstation Products

Simplify your IT.

Typical Workplace Deployment without iSeries
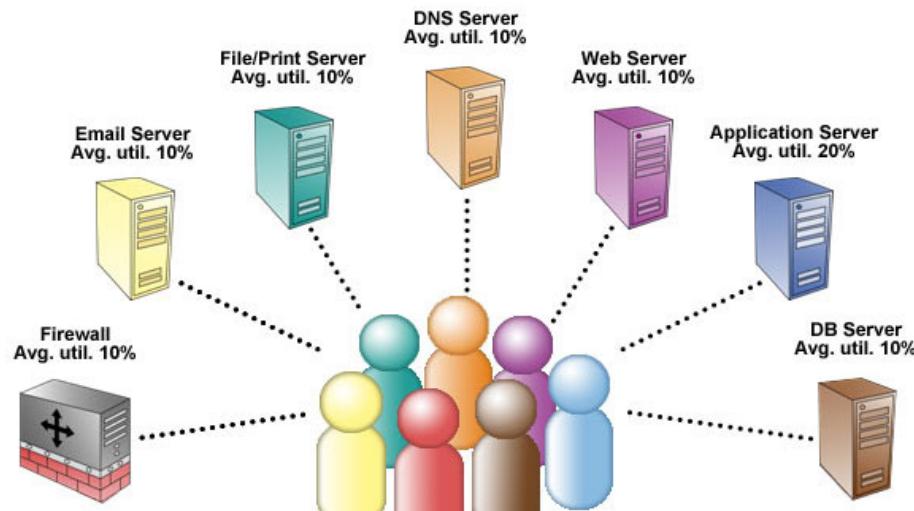
- Minimum 3 Servers or Logical Partitions

- 3 — 2-4 way servers

- Multiple Software Stacks to Maintain

- 1) Workplace Server
- 2) DB2 Server
- 3) Directory Server
- 4) HTTP Server
- 5) LDAP Server

Simplify your IT.

Integration yields simplicity
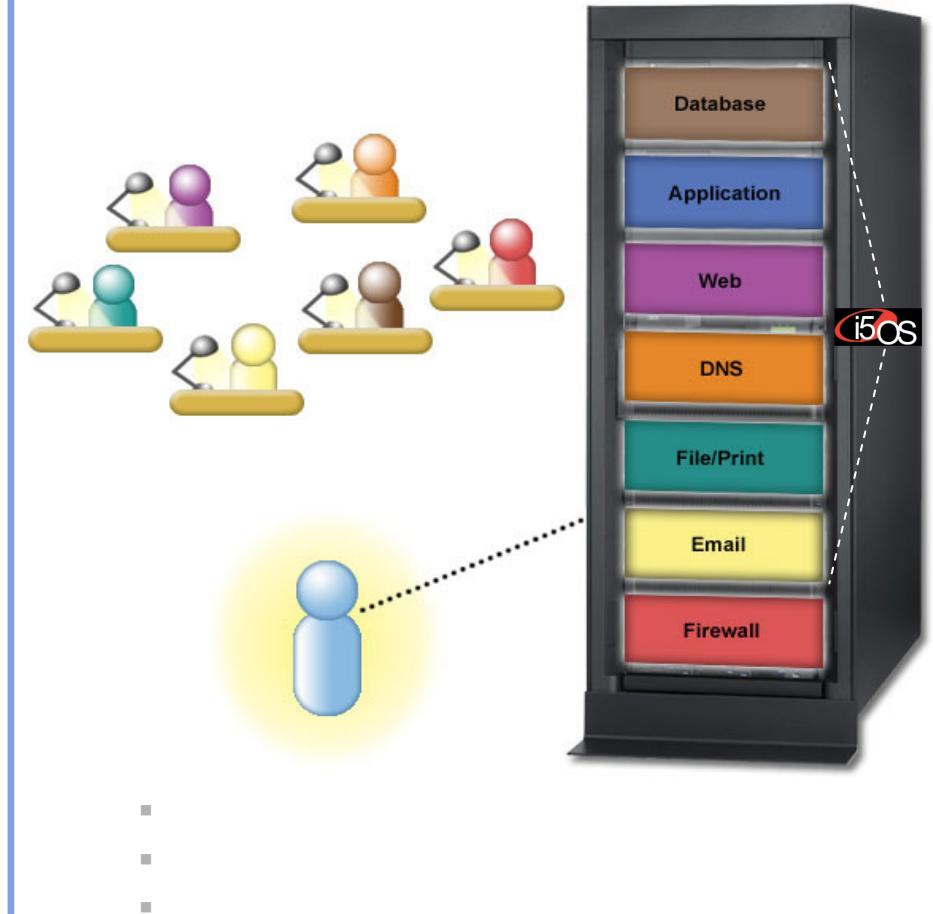
PC Servers:

Multiple workloads, multiple servers
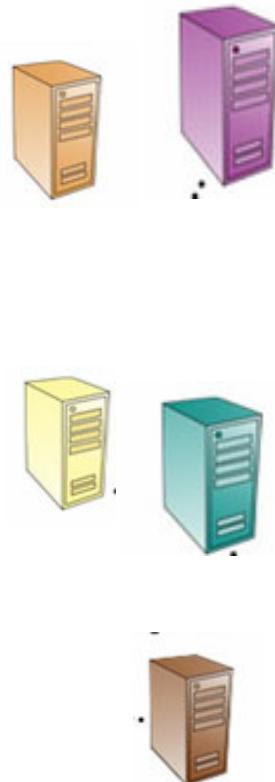
iSeries:

Multiple workloads, <u>one</u> server

DNS Server
Avg. util. 10%

File/Print Server
Avg. util. 10%

Web Server
Avg. util. 10%

Email Server
Avg. util. 10%

Application Server
Avg. util. 20%

Firewall
Avg. util. 10%

DB Server
Avg. util. 10%

Database

Application

Web

i5OS

DNS

File/Print

Email

Firewall

Simplify your IT.

Integration and Simplicity holds true for Workplace
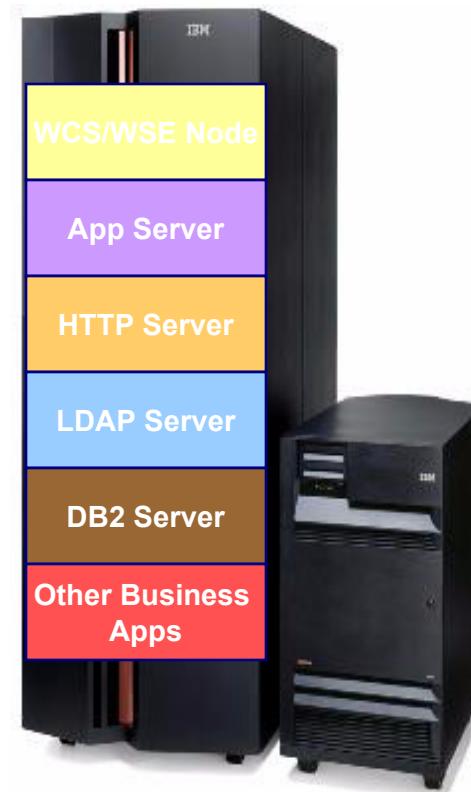
PC Servers:
Expanding workloads, multiple servers
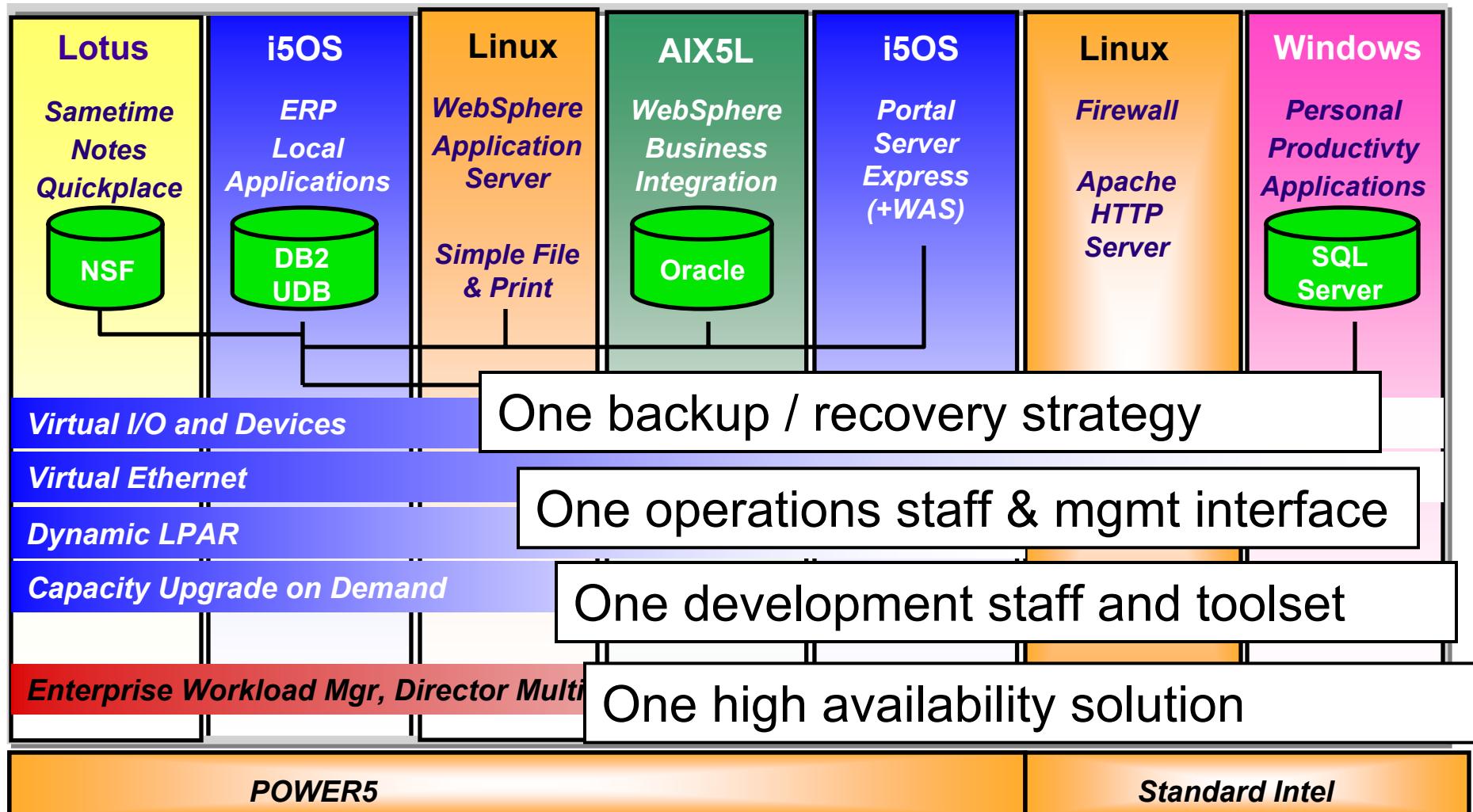
iSeries:
Expanding workloads, <u>one</u> server

WCS/WSE Node

App Server

HTTP Server

LDAP Server

DB2 Server

Other Business Apps

Simplify your IT.

Think Virtualization & IT Optimization

Lotus	i5OS	Linux	AIX5L	i5OS	Linux	Windows
Sametime Notes Quickplace	*ERP Local Applications*	*WebSphere Application Server*	*WebSphere Business Integration*	*Portal Server Express (+WAS)*	*Firewall*	*Personal Productivty Applications*
		Simple File & Print			*Apache HTTP Server*	
NSF	**DB2 UDB**		**Oracle**			**SQL Server**

Virtual I/O and Devices

Virtual Ethernet

Dynamic LPAR

Capacity Upgrade on Demand

Enterprise Workload Mgr, Director Multi

One backup / recovery strategy

One operations staff & mgmt interface

One development staff and toolset

One high availability solution

POWER5	*Standard Intel*

Simplify your IT.

Why System i5/iSeries for SOA?

- **You most likely have the tools you need to get started fast:**
  – WebSphere Development Studio client wizards build Web services from RPG/COBOL applications and DB2 UDB without programming
  – XML Toolkit for iSeries (5733-XT1) for consuming Web services within RPG/COBOL applications
  – WebSphere Application Server – Express Edition for hosting Web service based applications
- **On Demand: IBM System i5 Virtualization**
  – Dynamic resource allocation
  – Multiple Operating Support in LPAR or onboard/outboard Intel Servers supports any solution in the marketplace
- **Security**
  – Virus Resistant
  – i5/OS has the lowest number [single digits] of O/S vulnerabilities than any other commercial operating system
- **Scalability**
  – iSeries has highest growth path in the industry ranging from the smallest uni-processors scaling beyond mainframes

Simplify your IT.

Why choose iSeries for e-business applications?

Reduce IT labor cost and time	✓ An Integrated iSeries system is easier and faster to set up ✓ Dynamic storage management reduces system administration effort ✓ Many foundation components (e.g. DB2, WebSphere Application Server, Java Virtual Machine, HTTP server) are built into iSeries
Speed deployment	✓ iSeries wizard simplifies creating functional server configurations
Reduce operating costs	✓ With iSeries, you have only one physical system and system image to create and maintain ✓ iSeries requires fewer processors to support the same number of users ✓ iSeries hardware life-cycle is typically longer ✓ Upgrading to new OS release is relatively easy
Reduce risk	✓ iSeries is highly secure and virus-resistant ✓ iSeries Workload Estimator helps with correct sizing ✓ iSeries is committed to supporting IBM software products on the platform (WebSphere Application Server, MQ, Commerce, Portal, Workplace, WebSphere Business Integration, etc.)
Prevent productivity interruptions	✓ iSeries reliability is legendary ✓ iSeries architecture enables business continuity
Grow customer satisfaction	✓ iSeries has fanatically loyal customers… for many reasons
Business velocity: meet goals faster	✓ iSeries has a track record of fast time to value

Simplify your IT.

Questions?

Simplify your IT.

IBM

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DB2	iSeries	WebSphere
@server		Workplace

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