IBM System z Technology Summit

Why WebSphere Application Server on System z?

z doctor is in!
Visit the z Solution Suite for 1-1 consultations; see the zEnterprise in action

Save the Date

Impact2011

Changing the Way Business and IT Leaders Work

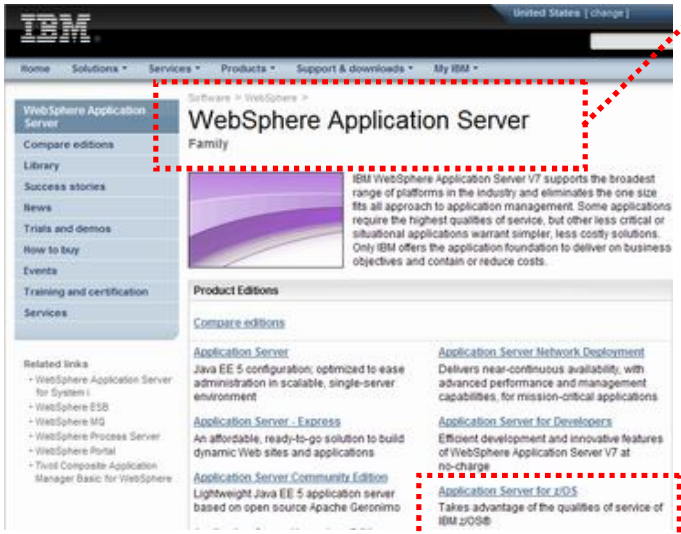
Optimize for Growth.
Deliver Results.

April 10–15
Las Vegas, NV

ibm.com/impact

Two Questions We'll Answer Today …

ibm.com WebSphere page …



WebSphere Application Server
Family

WebSphere. software

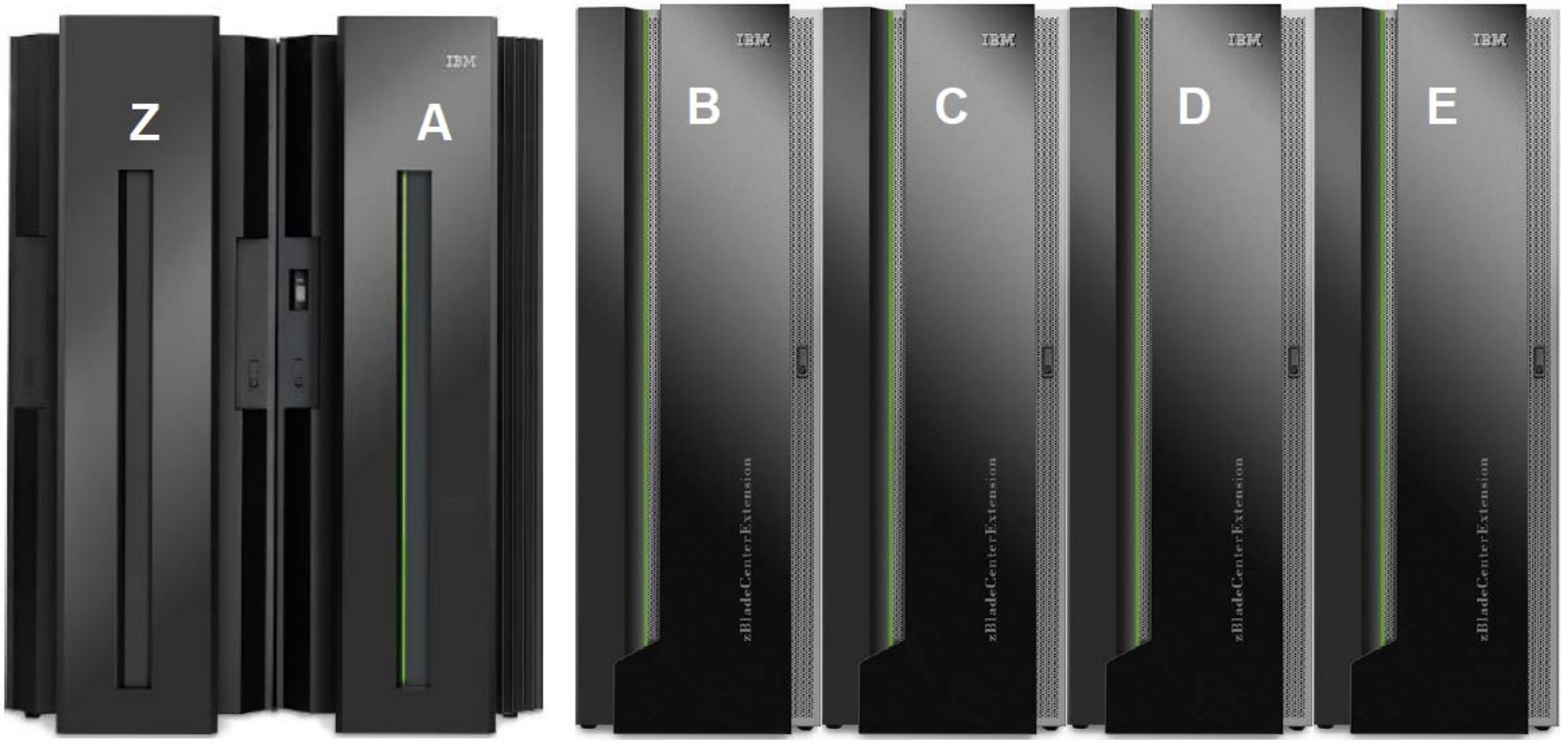
How does WebSphere Application Server address your business imperatives?

Application Server for z/OS

Takes advantage of the qualities of service of IBM z/OS®

What is meant by "Takes advantage of the qualities of service of IBM z/OS?"

IBM zEnterprise System

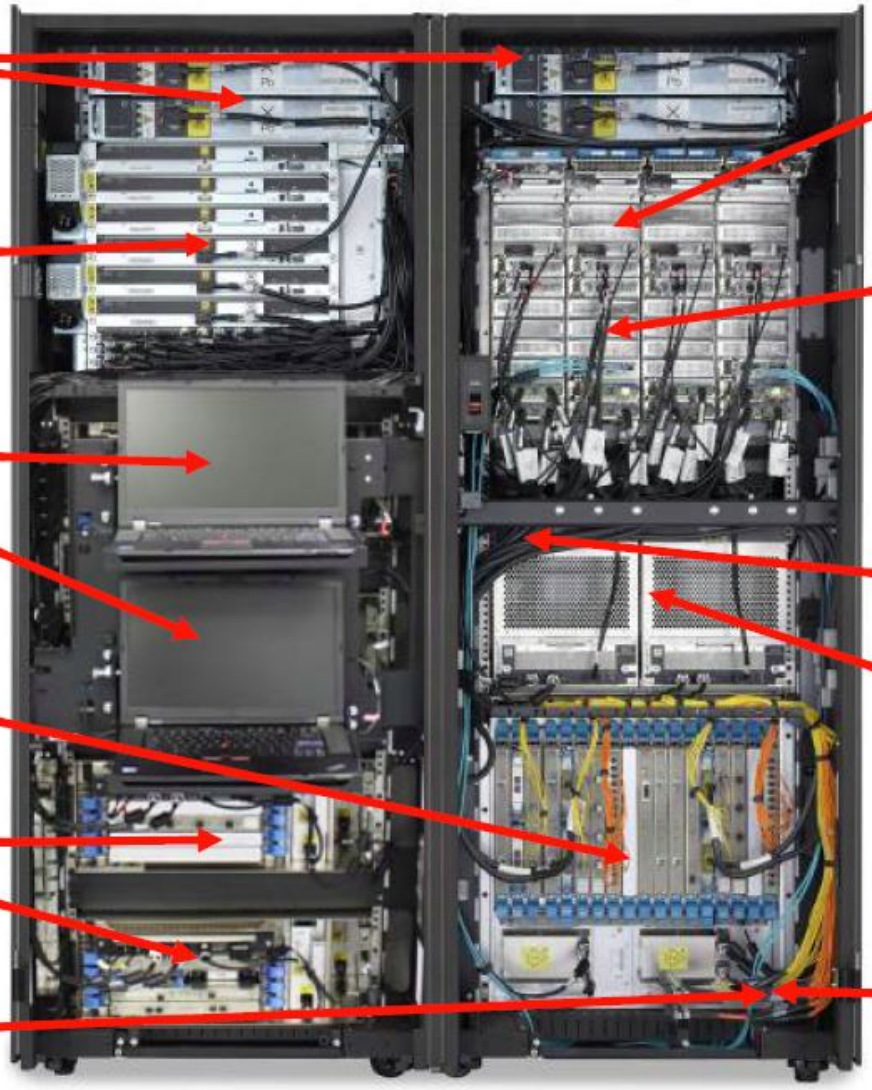


IBM zEnterprise 196 (z196)

IBM zEnterprise BladeCenter Extension (zBX)

IBM zEnterprise Unified Resource Manager (zManager)

z196 – Under the covers (Model M66 or M80)



Internal Batteries (optional)

Power Supplies

2 x Support Elements

I/O cage

I/O drawers

Fiber Quick Connect (FQC) Feature (optional)

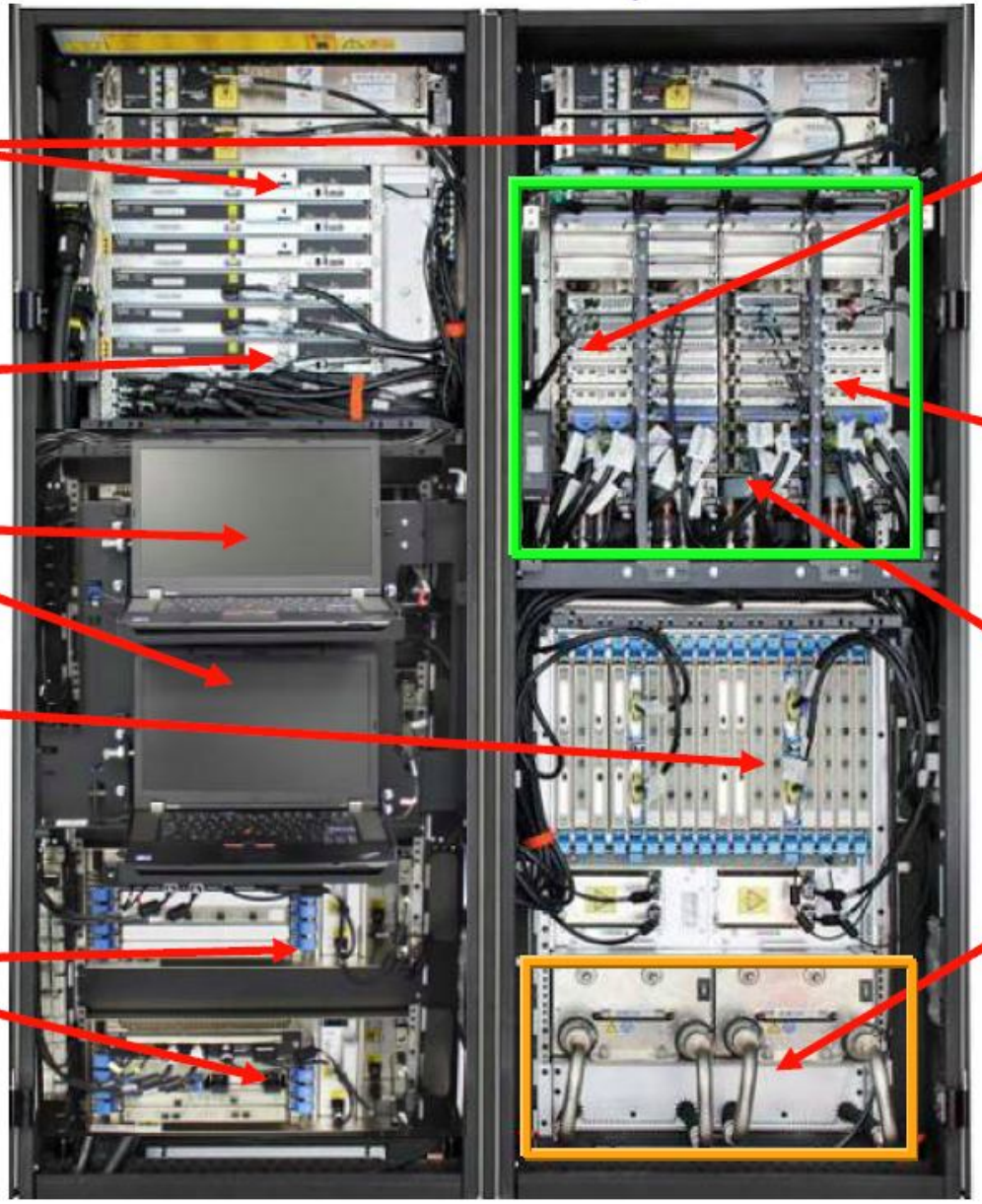
Processor Books, Memory, MBA and HCA cards

Ethernet cables for internal System LAN connecting Flexible Service Processor (FSP) cage controller cards

InfiniBand I/O Interconnects

2 x Cooling Units

z196 Water cooled – Under the covers (Model M66 or M80) front view



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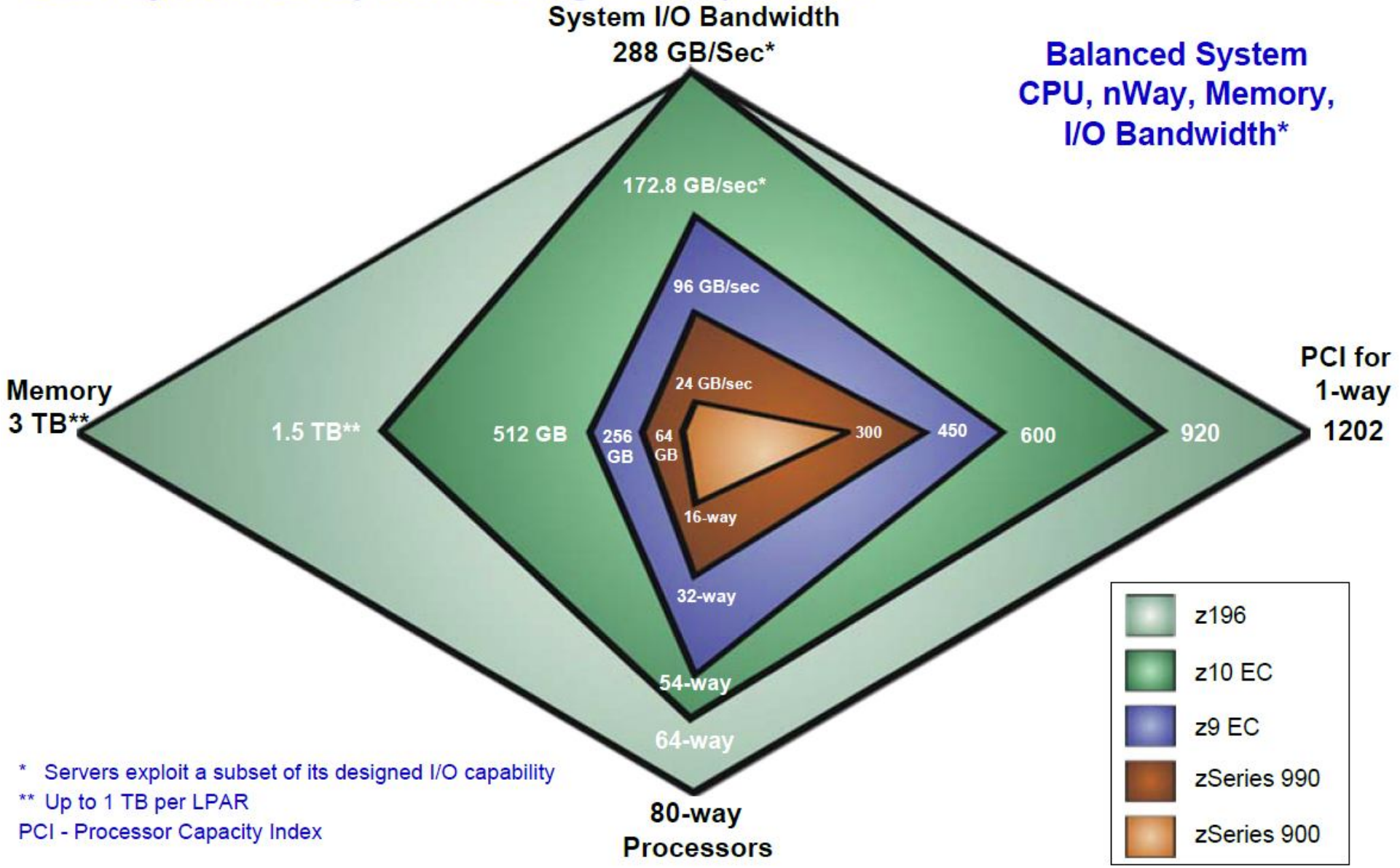
InfiniBand I/O Interconnects

2 x Water Cooling Units

IBM System z: System Design Comparison

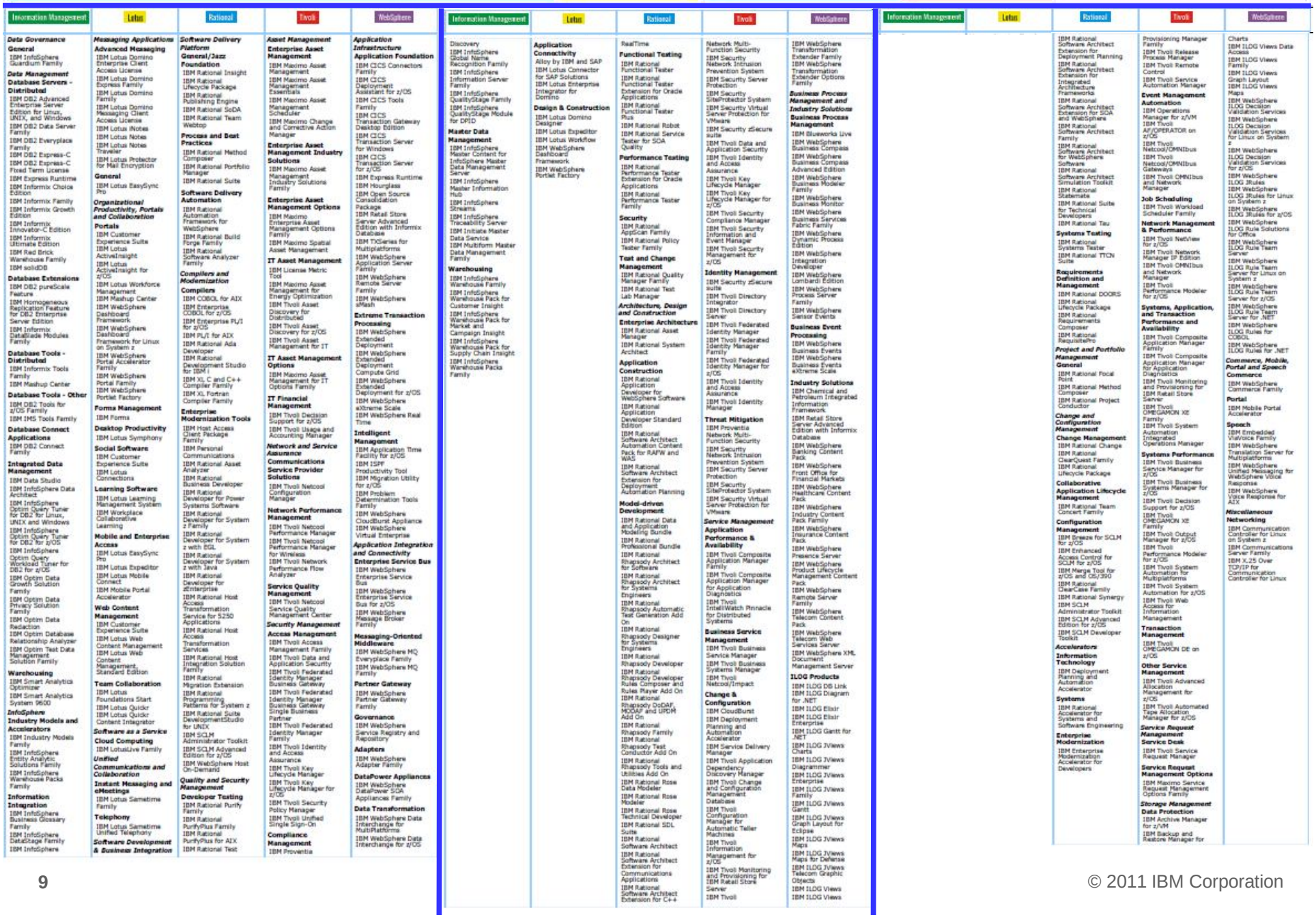


* Servers exploit a subset of its designed I/O capability

** Up to 1 TB per LPAR

PCI - Processor Capacity Index

Information Management | Lotus | Rational | Tivoli | WebSphere



Information Management

Data Governance

General

IBM InfoSphere Guardium Family

Data Management

Database Servers - Distributed

IBM DB2 Advanced Enterprise Server Edition for Linux, UNIX, and Windows

IBM DB2 Data Server Family

IBM DB2 Everyplace Family

IBM DB2 Express-C

IBM DB2 Express-C Fixed Term License

IBM Express Runtime

IBM Informix Choice Edition

IBM Informix Family

IBM Informix Growth Edition

IBM Informix Innovator-C Edition

IBM Informix Ultimate Edition

IBM Red Brick Warehouse Family

IBM solidDB

Database Extensions

IBM DB2 pureScale Feature

IBM Homogeneous Replication Feature for DB2 Enterprise Server Edition

IBM Informix DataBlade Modules Family

Database Tools - Distributed

IBM Informix Tools Family

IBM Mashup Center

Database Tools - Other

IBM DB2 Tools for z/OS Family

IBM IMS Tools Family

Database Connect Applications

IBM DB2 Connect Family

Integrated Data Management

IBM Data Studio

IBM InfoSphere Data Architect

IBM InfoSphere Optim Query Tuner for DB2 for Linux, UNIX and Windows

IBM InfoSphere Optim Query Tuner for DB2 for z/OS

IBM InfoSphere Optim Query Workload Tuner for DB2 for z/OS

IBM Optim Data Growth Solution Family

IBM Optim Data Privacy Solution Family

IBM Optim Data Redaction

IBM Optim Database Relationship Analyzer

IBM Optim Test Data Management Solution Family

Warehousing

IBM Smart Analytics Optimizer

IBM Smart Analytics System 9600

InfoSphere

Industry Models and Accelerators

IBM Industry Models Family

IBM InfoSphere Entity Analytic Solutions Family

IBM InfoSphere Warehouse Packs Family

Information Integration

IBM InfoSphere Business Glossary Family

IBM InfoSphere DataStage Family

IBM InfoSphere

Lotus

Messaging Applications

Advanced Messaging

IBM Lotus Domino Enterprise Client Access License

IBM Lotus Domino Express Family

IBM Lotus Domino Family

IBM Lotus Domino Messaging Client Access License

IBM Lotus iNotes

IBM Lotus Notes

IBM Lotus Notes Traveler

IBM Lotus Protector for Mail Encryption

General

IBM Lotus EasySync Pro

Organizational Productivity, Portals and Collaboration

Portals

IBM Customer Experience Suite

IBM Lotus ActiveInsight

IBM Lotus ActiveInsight for z/OS

IBM Lotus Workforce Management

IBM Mashup Center

IBM WebSphere Dashboard Framework

IBM WebSphere Dashboard Framework for Linux on System z

IBM WebSphere Portal Accelerator Family

IBM WebSphere Portal Family

IBM WebSphere Portlet Factory

Forms Management

IBM Forms

Desktop Productivity

IBM Lotus Symphony

Social Software

IBM Customer Experience Suite

IBM Lotus Connections

Learning Software

IBM Lotus Learning Management System

IBM Workplace Collaborative Learning

Mobile and Enterprise Access

IBM Lotus EasySync Pro

IBM Lotus Expeditor

IBM Lotus Mobile Connect

IBM Mobile Portal Accelerator

Web Content Management

IBM Customer Experience Suite

IBM Lotus Web Content Management

IBM Lotus Web Content Management, Standard Edition

Team Collaboration

IBM Lotus Foundations Start

IBM Lotus Quickr

IBM Lotus Quickr Content Integrator

Software as a Service

Cloud Computing

IBM LotusLive Family

Unified Communications and Collaboration

Instant Messaging and eMeetings

IBM Lotus Sametime Family

Telephony

IBM Lotus Sametime Unified Telephony

Software Development & Business Integration

Rational

Software Delivery Platform

General/Jazz Foundation

IBM Rational Insight

IBM Rational Lifecycle Package

IBM Rational Publishing Engine

IBM Rational SoDA

IBM Rational Team Webtop

Process and Best Practices

IBM Rational Method Composer

IBM Rational Portfolio Manager

IBM Rational Suite

Software Delivery Automation

IBM Rational Automation Framework for WebSphere

IBM Rational Build Forge Family

IBM Rational Software Analyzer Family

Compilers and Modernization

Compilers

IBM COBOL for AIX

IBM Enterprise COBOL for z/OS

IBM Enterprise PL/I for z/OS

IBM PL/I for AIX

IBM Rational Ada Developer

IBM Rational Development Studio for IBM i

IBM XL C and C++ Compiler Family

IBM XL Fortran Compiler Family

Enterprise Modernization Tools

IBM Host Access Client Package Family

IBM Personal Communications

IBM Rational Asset Analyzer

IBM Rational Business Developer

IBM Rational Developer for Power Systems Software

IBM Rational Developer for System z Family

IBM Rational Developer for System z with EGL

IBM Rational Developer for System z with Java

IBM Rational Developer for zEnterprise

IBM Rational Host Access Transformation Service for 5250 Applications

IBM Rational Host Access Transformation Services

IBM Rational Host Integration Solution Family

IBM Rational Migration Extension

IBM Rational Programming Patterns for System z

IBM Rational Suite DevelopmentStudio for UNIX

IBM SCLM Administrator Toolkit

IBM SCLM Advanced Edition for z/OS

IBM WebSphere Host On-Demand

Quality and Security Management

Developer Testing

IBM Rational Purify Family

IBM Rational PurifyPlus Family

IBM Rational PurifyPlus for AIX

IBM Rational Test

Tivoli

Asset Management

Enterprise Asset Management

IBM Maximo Asset Management

IBM Maximo Asset Management Essentials

IBM Maximo Asset Management Scheduler

IBM Maximo Change and Corrective Action Manager

Enterprise Asset Management Industry Solutions

IBM Maximo Asset Management Industry Solutions Family

Enterprise Asset Management Options

IBM Maximo Enterprise Asset Management Options Family

IBM Maximo Spatial Asset Management

IT Asset Management

IBM License Metric Tool

IBM Maximo Asset Management for Energy Optimization

IBM Tivoli Asset Discovery for Distributed

IBM Tivoli Asset Discovery for z/OS

IBM Tivoli Asset Management for IT

IT Asset Management Options

IBM Maximo Asset Management for IT Options Family

IT Financial Management

IBM Tivoli Decision Support for z/OS

IBM Tivoli Usage and Accounting Manager

Network and Service Assurance

Communications Service Provider Solutions

IBM Tivoli Netcool Configuration Manager

Network Performance Management

IBM Tivoli Netcool Performance Manager

IBM Tivoli Netcool Performance Manager for Wireless

IBM Tivoli Network Performance Flow Analyzer

Service Quality Management

IBM Tivoli Netcool Service Quality Management Center

Security Management

Access Management

IBM Tivoli Access Management Family

IBM Tivoli Data and Application Security

IBM Tivoli Federated Identity Manager Business Gateway

IBM Tivoli Federated Identity Manager Business Gateway Single Business Partner

IBM Tivoli Federated Identity Manager Family

IBM Tivoli Identity and Access Assurance

IBM Tivoli Key Lifecycle Manager

IBM Tivoli Key Lifecycle Manager for z/OS

IBM Tivoli Security Policy Manager

IBM Tivoli Unified Single Sign-On

Compliance Management

IBM Proventia

WebSphere

Application Infrastructure Application Foundation

IBM CICS Connectors Family

IBM CICS Deployment Assistant for z/OS

IBM CICS Tools Family

IBM CICS Transaction Gateway Desktop Edition

IBM CICS Transaction Server for Windows

IBM CICS Transaction Server for z/OS

IBM Express Runtime

IBM Hourglass

IBM Open Source Consolidation Package

IBM Retail Store Server Advanced Edition with Informix Database

IBM TXSeries for Multiplatforms

IBM WebSphere Application Server Family

IBM WebSphere Remote Server Family

IBM WebSphere sMash

Extreme Transaction Processing

IBM WebSphere Extended Deployment

IBM WebSphere Extended Deployment Compute Grid

IBM WebSphere Extended Deployment for z/OS

IBM WebSphere eXtreme Scale

IBM WebSphere Real Time

Intelligent Management

IBM Application Time Facility for z/OS

IBM ISPF

Productivity Tool

IBM Migration Utility for z/OS

IBM Problem Determination Tools Family

IBM WebSphere CloudBurst Appliance

IBM WebSphere Virtual Enterprise

Application Integration and Connectivity

Enterprise Service Bus

IBM WebSphere Enterprise Service Bus

IBM WebSphere Enterprise Service Bus for z/OS

IBM WebSphere Message Broker Family

Messaging-Oriented Middleware

IBM WebSphere MQ Everyplace Family

IBM WebSphere MQ Family

Partner Gateway

IBM WebSphere Partner Gateway Family

Governance

IBM WebSphere Service Registry and Repository

Adapters

IBM WebSphere Adapter Family

DataPower Appliances

IBM WebSphere DataPower SOA Appliances Family

Data Transformation

IBM WebSphere Data Interchange for Multiplatforms

IBM WebSphere Data Interchange for z/OS

Information Management

Discovery

IBM InfoSphere Global Name Recognition Family

IBM InfoSphere Information Server Family

IBM InfoSphere QualityStage Family

IBM InfoSphere QualityStage Module for DPID

Master Data Management

IBM InfoSphere Master Content for InfoSphere Master Data Management Server

IBM InfoSphere Master Information Hub

IBM InfoSphere Streams

IBM InfoSphere Traceability Server

IBM Initiate Master Data Service

IBM Multiform Master Data Management Family

Warehousing

IBM InfoSphere Warehouse Family

IBM InfoSphere Warehouse Pack for Customer Insight

IBM InfoSphere Warehouse Pack for Market and Campaign Insight

IBM InfoSphere Warehouse Pack for Supply Chain Insight

IBM InfoSphere Warehouse Packs Family

Lotus

Application Connectivity

Alloy by IBM and SAP

IBM Lotus Connector for SAP Solutions

IBM Lotus Enterprise Integrator for Domino

Design & Construction

IBM Lotus Domino Designer

IBM Lotus Expeditor

IBM Lotus Workflow

IBM WebSphere Dashboard Framework

IBM WebSphere Portlet Factory

Rational

RealTime

Functional Testing

IBM Rational Functional Tester

IBM Rational Functional Tester Extension for Oracle Applications

IBM Rational Functional Tester Plus

IBM Rational Robot

IBM Rational Service Tester for SOA Quality

Performance Testing

IBM Rational Performance Tester Extension for Oracle Applications

IBM Rational Performance Tester Family

Security

IBM Rational AppScan Family

IBM Rational Policy Tester Family

Test and Change Management

IBM Rational Quality Manager Family

IBM Rational Test Lab Manager

Architecture, Design and Construction

Enterprise Architecture

IBM Rational Asset Manager

IBM Rational System Architect

Application Construction

IBM Rational Application Developer for WebSphere Software

IBM Rational Application Developer Standard Edition

IBM Rational Software Architect Automation Content Pack for RAFW and WAS

IBM Rational Software Architect Extension for Deployment Automation Planning

Model-driven Development

IBM Rational Data and Application Modeling Bundle

IBM Rational Professional Bundle

IBM Rational Rhapsody Architect for Software

IBM Rational Rhapsody Architect for Systems Engineers

IBM Rational Rhapsody Automatic Test Generation Add On

IBM Rational Rhapsody Designer for Systems Engineers

IBM Rational Rhapsody Developer

IBM Rational Rhapsody Developer Rules Composer and Rules Player Add On

IBM Rational Rhapsody DoDAF, MODAF and UPDM Add On

IBM Rational Rhapsody Family

IBM Rational Rhapsody Test Conductor Add On

IBM Rational Rhapsody Tools and Utilities Add On

IBM Rational Rose Data Modeler

IBM Rational Rose Modeler

IBM Rational Rose Technical Developer

IBM Rational SDL Suite

IBM Rational Software Architect

IBM Rational Software Architect Extension for Communications Applications

IBM Rational Software Architect Extension for C++

Tivoli

Network Multi-Function Security

IBM Security Network Intrusion Prevention System

IBM Security Server Protection

IBM Security SiteProtector System

IBM Security Virtual Server Protection for VMware

IBM Security zSecure suite

IBM Tivoli Data and Application Security

IBM Tivoli Identity and Access Assurance

IBM Tivoli Key Lifecycle Manager

IBM Tivoli Key Lifecycle Manager for z/OS

IBM Tivoli Security Compliance Manager

IBM Tivoli Security Information and Event Manager

IBM Tivoli Security Management for z/OS

Identity Management

IBM Security zSecure suite

IBM Tivoli Directory Integrator

IBM Tivoli Directory Server

IBM Tivoli Federated Identity Manager

IBM Tivoli Federated Identity Manager Family

IBM Tivoli Federated Identity Manager for z/OS

IBM Tivoli Identity and Access Assurance

IBM Tivoli Identity Manager

Threat Mitigation

IBM Proventia Network Multi-Function Security

IBM Security Network Intrusion Prevention System

IBM Security Server Protection

IBM Security SiteProtector System

IBM Security Virtual Server Protection for VMware

Service Management

Application Performance & Availability

IBM Tivoli Composite Application Manager Family

IBM Tivoli Composite Application Manager for Application Diagnostics

IBM Tivoli IntelliWatch Pinnacle for Distributed Systems

Business Service Management

IBM Tivoli Business Service Manager

IBM Tivoli Business Systems Manager

IBM Tivoli Netcool/Impact

Change & Configuration

IBM CloudBurst

IBM Deployment Planning and Automation Accelerator

IBM Service Delivery Manager

IBM Tivoli Application Dependency Discovery Manager

IBM Tivoli Change and Configuration Management Database

IBM Tivoli Configuration Manager for Automatic Teller Machines

IBM Tivoli Information Management for z/OS

IBM Tivoli Monitoring and Provisioning for IBM Retail Store Server

IBM Tivoli

WebSphere

IBM WebSphere Transformation Extender Family

IBM WebSphere Transformation Extender Options Family

Business Process Management and Industry Solutions

Business Process Management

IBM Blueworks Live

IBM WebSphere Business Compass

IBM WebSphere Business Compass Advanced Edition

IBM WebSphere Business Modeler Family

IBM WebSphere Business Monitor

IBM WebSphere Business Services Fabric Family

IBM WebSphere Dynamic Process Edition

IBM WebSphere Integration Developer

IBM WebSphere Lombardi Edition

IBM WebSphere Process Server Family

IBM WebSphere Sensor Events

Business Event Processing

IBM WebSphere Business Events

IBM WebSphere Business Events eXtreme Scale

Industry Solutions

IBM Chemical and Petroleum Integrated Information Framework

IBM Retail Store Server Advanced Edition with Informix Database

IBM WebSphere Banking Content Pack

IBM WebSphere Front Office for Financial Markets

IBM WebSphere Healthcare Content Pack

IBM WebSphere Industry Content Pack Family

IBM WebSphere Insurance Content Pack

IBM WebSphere Presence Server

IBM WebSphere Product Lifecycle Management Content Pack

IBM WebSphere Remote Server Family

IBM WebSphere Telecom Content Pack

IBM WebSphere Telecom Web Services Server

IBM WebSphere XML Document Management Server

ILOG Products

IBM ILOG DB Link

IBM ILOG Diagram for .NET

IBM ILOG Elixir

IBM ILOG Elixir Enterprise

IBM ILOG Gantt for .NET

IBM ILOG JViews Charts

IBM ILOG JViews Diagrammer

IBM ILOG JViews Enterprise

IBM ILOG JViews Family

IBM ILOG JViews Gantt

IBM ILOG JViews Graph Layout for Eclipse

IBM ILOG JViews Maps

IBM ILOG JViews Maps for Defense

IBM ILOG JViews Telecom Graphic Objects

IBM ILOG Views

IBM ILOG Views

Information Management

Lotus

Rational

IBM Rational Software Architect Extension for Deployment Planning

IBM Rational Software Architect Extension for Integrated Architecture Frameworks

IBM Rational Software Architect Extension for SOA and WebSphere

IBM Rational Software Architect Family

IBM Rational Software Architect for WebSphere Software

IBM Rational Software Architect Simulation Toolkit

IBM Rational Statemate

IBM Rational Suite for Technical Developers

IBM Rational Tau

Systems Testing

IBM Rational Systems Tester

IBM Rational TTCN Suite

Requirements Definition and Management

IBM Rational DOORS

IBM Rational Lifecycle Package

IBM Rational Requirements Composer

IBM Rational RequisitePro

Project and Portfolio Management

General

IBM Rational Focal Point

IBM Rational Method Composer

IBM Rational Project Conductor

Change and Configuration Management

Change Management

IBM Rational Change

IBM Rational ClearQuest Family

IBM Rational Lifecycle Package

Collaborative Application Lifecycle Management

IBM Rational Team Concert Family

Configuration Management

IBM Breeze for SCLM for z/OS

IBM Enhanced Access Control for SCLM for z/OS

IBM Merge Tool for z/OS and OS/390

IBM Rational ClearCase Family

IBM Rational Synergy

IBM SCLM Administrator Toolkit

IBM SCLM Advanced Edition for z/OS

IBM SCLM Developer Toolkit

Accelerators

Information Technology

IBM Deployment Planning and Automation Accelerator

Systems

IBM Rational Accelerator for Systems and Software Engineering

Enterprise Modernization

IBM Enterprise Modernization Accelerator for Developers

Tivoli

Provisioning Manager Family

IBM Tivoli Release Process Manager

IBM Tivoli Remote Control

IBM Tivoli Service Automation Manager

Event Management Automation

IBM Operations Manager for z/VM

IBM Tivoli AF/OPERATOR on z/OS

IBM Tivoli Netcool/OMNIbus

IBM Tivoli Netcool/OMNIbus Gateways

IBM Tivoli OMNIbus and Network Manager

Job Scheduling

IBM Tivoli Workload Scheduler Family

Network Management & Performance

IBM Tivoli NetView for z/OS

IBM Tivoli Network Manager IP Edition

IBM Tivoli OMNIbus and Network Manager

IBM Tivoli Performance Modeler for z/OS

Systems, Application, and Transaction Performance and Availability

IBM Tivoli Composite Application Manager Family

IBM Tivoli Composite Application Manager for Application Diagnostics

IBM Tivoli Monitoring and Provisioning for IBM Retail Store Server

IBM Tivoli OMEGAMON XE Family

IBM Tivoli System Automation Integrated Operations Manager

Systems Performance

IBM Tivoli Business Service Manager for z/OS

IBM Tivoli Business Systems Manager for z/OS

IBM Tivoli Decision Support for z/OS

IBM Tivoli OMEGAMON XE Family

IBM Tivoli Output Manager for z/OS

IBM Tivoli Performance Modeler for z/OS

IBM Tivoli System Automation for Multiplatforms

IBM Tivoli System Automation for z/OS

IBM Tivoli Web Access for Information Management

Transaction Management

IBM Tivoli OMEGAMON DE on z/OS

Other Service Management

IBM Tivoli Advanced Allocation Management for z/OS

IBM Tivoli Automated Tape Allocation Manager for z/OS

Service Request Management

Service Desk

IBM Tivoli Service Request Manager

Service Request Management Options

IBM Maximo Service Request Management Options Family

Storage Management

Data Protection

IBM Archive Manager for z/VM

IBM Backup and Restore Manager for

WebSphere

Charts

IBM ILOG Views Data Access

IBM ILOG Views Family

IBM ILOG Views Graph Layout

IBM ILOG Views Maps

IBM WebSphere ILOG Decision Validation Services

IBM WebSphere ILOG Decision Validation Services for Linux on System z

IBM WebSphere ILOG JRules

IBM WebSphere ILOG JRules for Linux on System z

IBM WebSphere ILOG JRules for z/OS

IBM WebSphere ILOG Rule Solutions for Office

IBM WebSphere ILOG Rule Team Server

IBM WebSphere ILOG Rule Team Server for Linux on System z

IBM WebSphere ILOG Rule Team Server for z/OS

IBM WebSphere ILOG Rule Team Server for .NET

IBM WebSphere ILOG Rules for COBOL

IBM WebSphere ILOG Rules for .NET

Commerce, Mobile, Portal and Speech Commerce

IBM WebSphere Commerce Family

Portal

IBM Mobile Portal Accelerator

Speech

IBM Embedded Voice Family

IBM WebSphere Voice Family

IBM WebSphere Translation Server for Multiplatforms

IBM WebSphere Unified Messaging for WebSphere Voice Response

IBM WebSphere Voice Response for AIX

Miscellaneous Networking

IBM Communication Controller for Linux on System z

IBM Communications Server Family

IBM X.25 Over TCP/IP for Communication Controller for Linux

The WebSphere Application Server Family

An industry-leading open standard application server platform, with powerful business functionality

Manage Cost

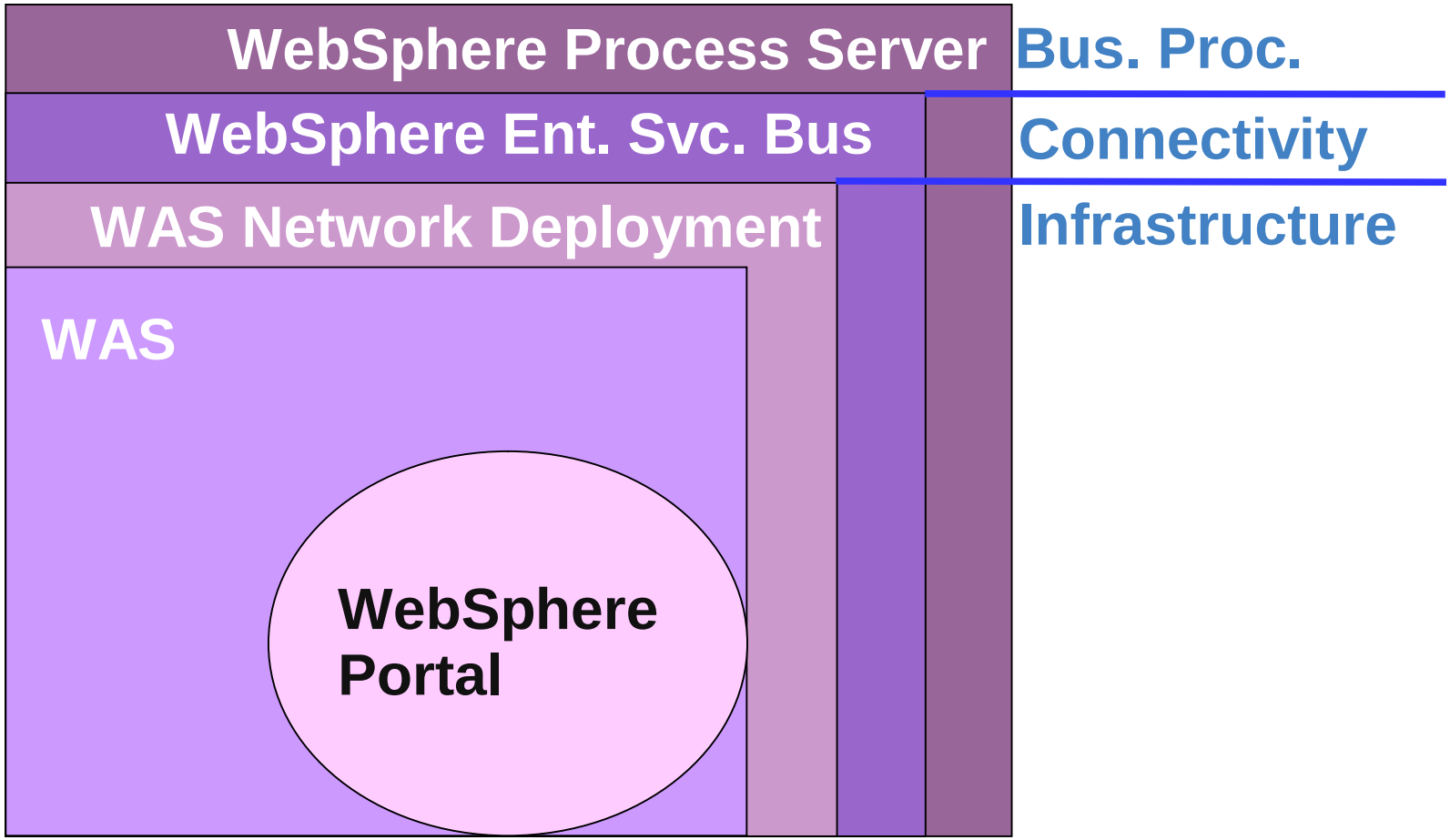
- **Common standards across all platforms**
- **Common tooling across all platforms**
- **Many of the same skills across all platforms**

Enhance Agility

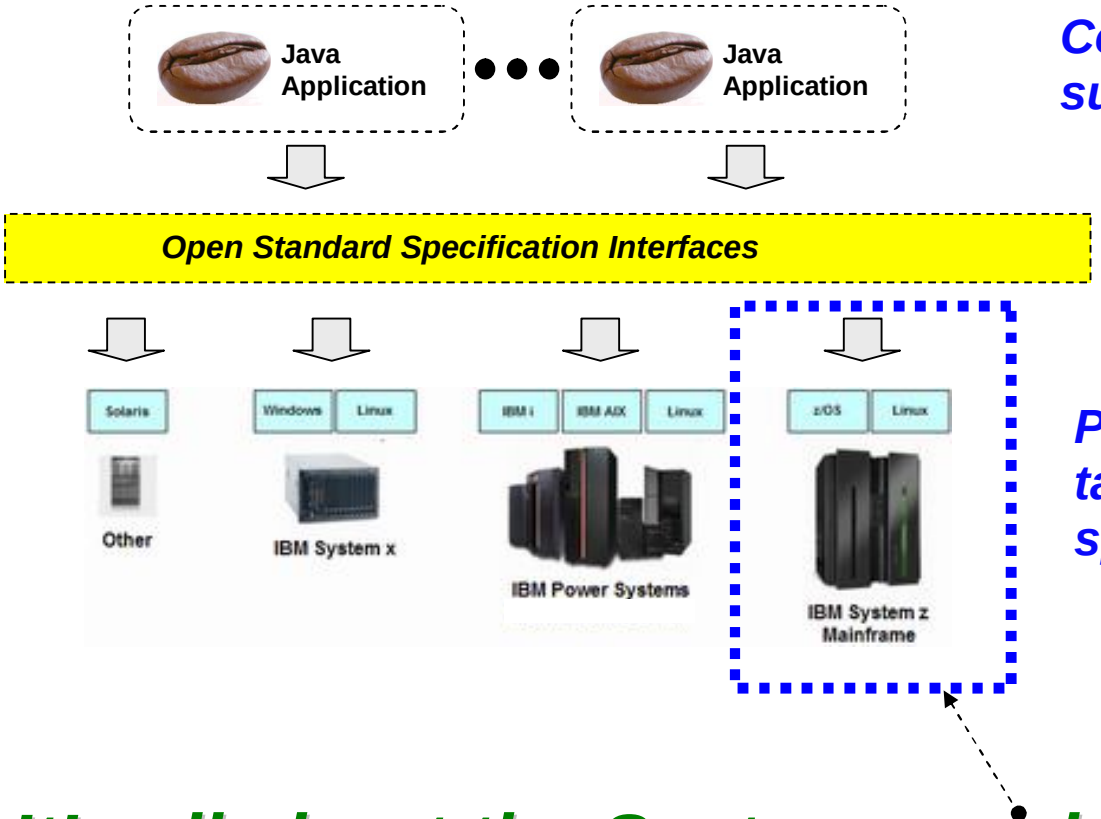
- **Rapid development and deployment model**
- **Many dynamic runtime elements**

Common business applications runtime across the enterprise … development, test, production

The WebSphere Application Server 'Stack'



Common Standards Across Family of Platforms

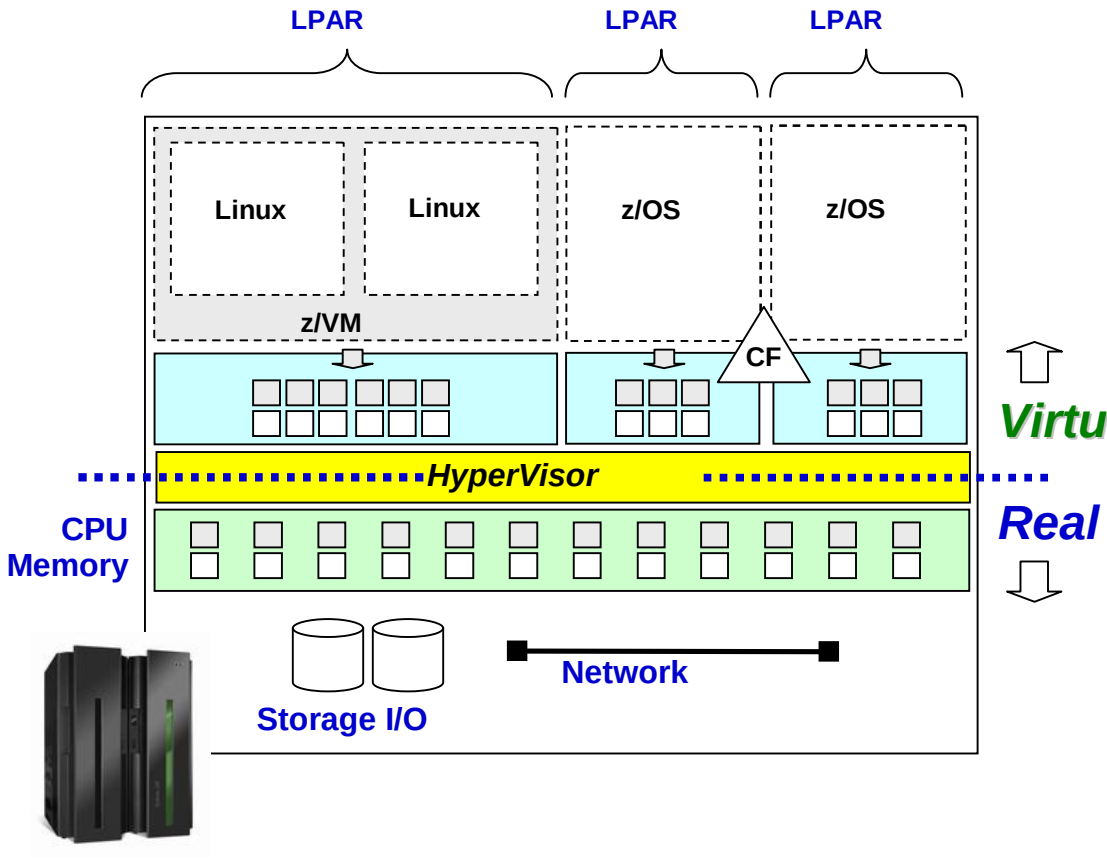


Common specification support above the line

Platform exploitation takes place below the specification line

It's all about the System z and z/OS platform and the way WAS z/OS exploits the platform

Industry-Leading Virtualization Technology

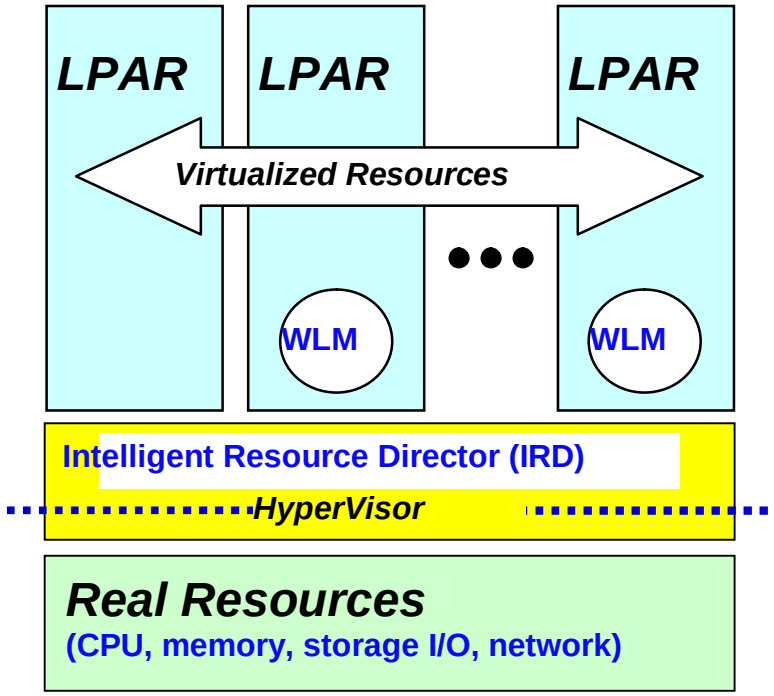


Not merely "like" the mainframe
It *is* the mainframe

Proven enterprise quality virtualization technology

Not all virtualization technologies are the same

Dynamic Resource Re-Allocation Between LPARs



Add CPU non-disruptively

Re-allocate CPU non-disruptively

IRD intelligently balances

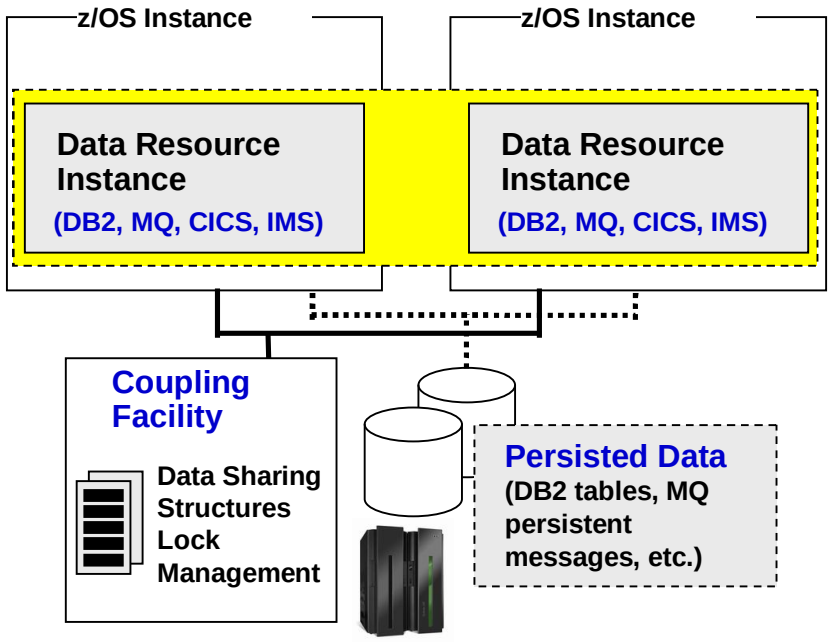
Vary I/O capacity dynamically

WLM advise IRD

Virtualization technology that evolved in the enterprise

Solid, stable and proven

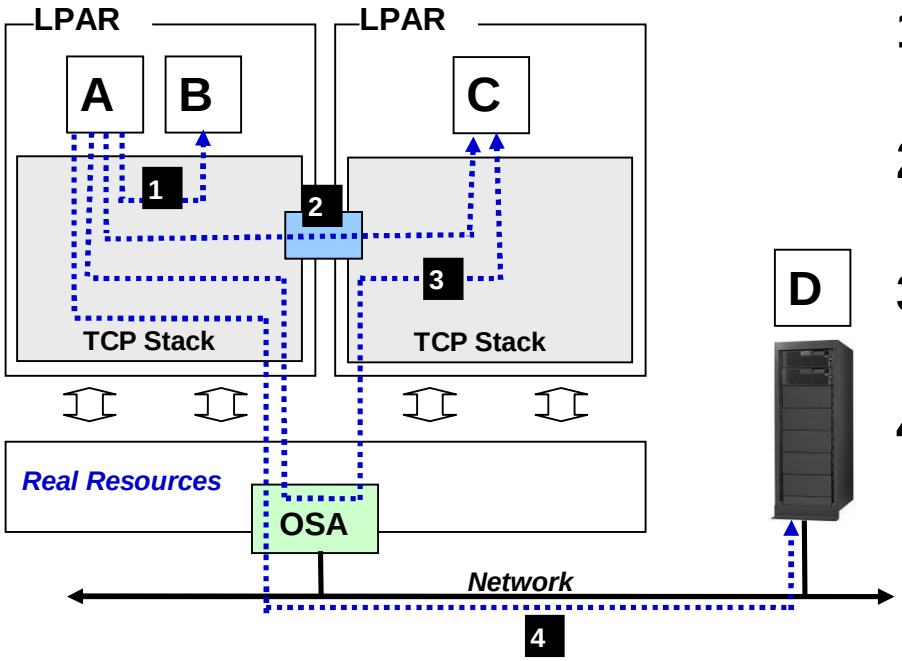
True Data Sharing From Multiple Resource Instances



- **Parallel Sysplex provides clustered z/OS instances**
- **Shared data, lock management, coordinated time management, high-speed data transfer**
- **Mature, stable, reliable**
- **Unbeatable availability**

Provides scalability and availability … to levels used throughout the world for critical activity

Intelligent TCP/IP

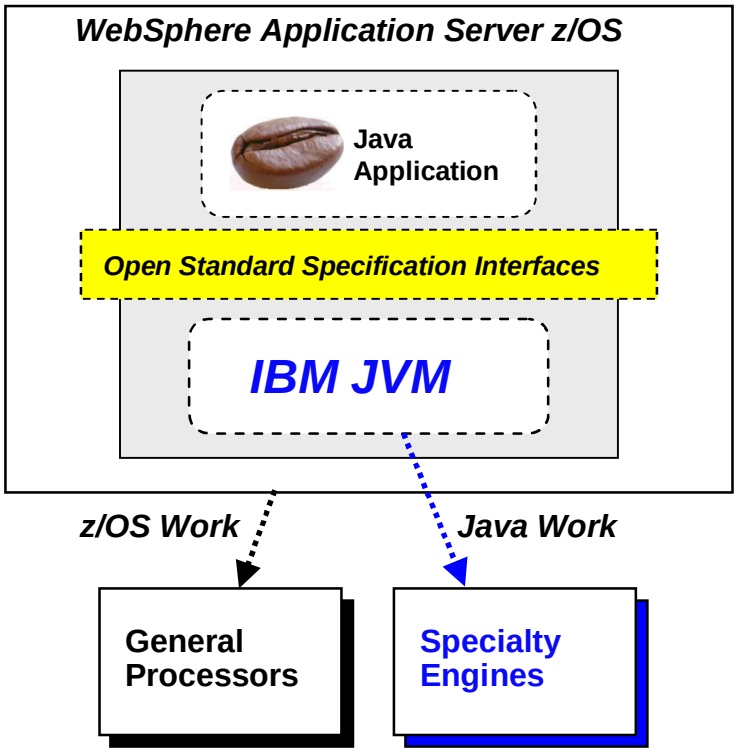


1. **Same LPAR**
   - No network … cross memory … *ultra* fast
2. **Different LPAR, HiperSockets**
   - No network … cross memory … very fast
3. **Different LPAR, *not* HiperSockets**
   - No wire … just adapter card … fast
4. **Off System z**
   - Traditional networking here

When throughput and scalability is important, network delays can add up

TCP/IP on z/OS is very aware and optimizes its path to reduce overhead and benefit your business

Specialty Engine Exploitation

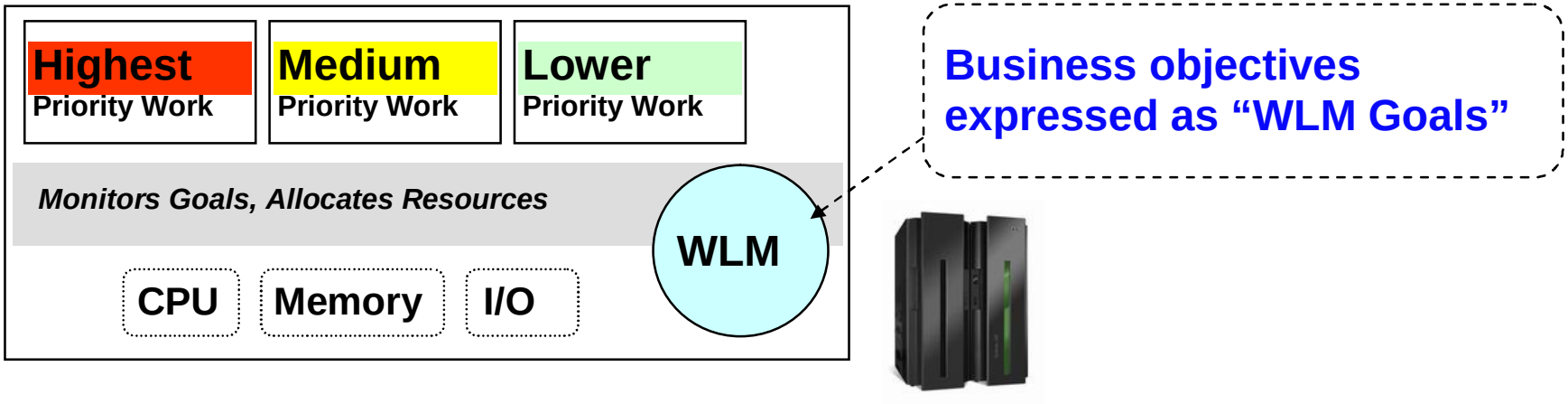


- **Offload Java work to financially attractive specialty engines**
- **Completely transparent process to applications**
- **Greater general processor capacity for non-Java work**
- **Lower software licensing costs, and/or the avoidance of additional costs**

Works for Java offload, Linux on System z offload and certain DB2 processing offload

A feature enthusiastically embraced by many System z and z/OS customers!

Workload Manager (WLM) Exploitation

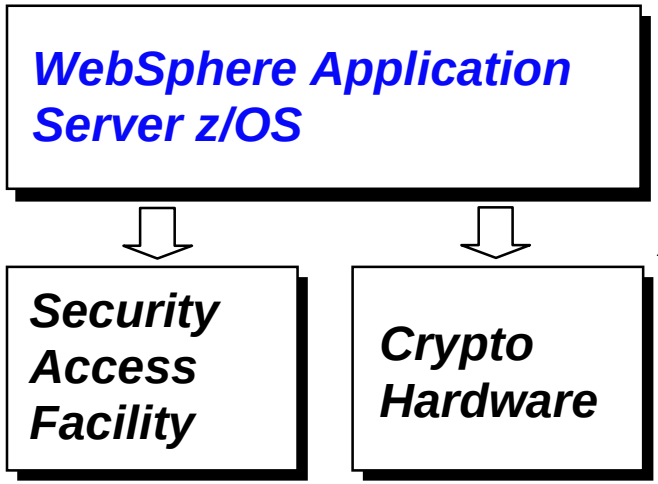


Benefits to you and your business:

- Intelligent control of resources towards meeting *your* goals
- Very efficient resource sharing can be accomplished
- Critical work gets the resources, less critical held off temporarily
- Intelligent routing of work based on WLM monitoring of system

Manage costs -- very efficient utilization of asset investment
Provide agility -- intelligent and dynamic allocation to meet goals

SAF and Crypto Hardware

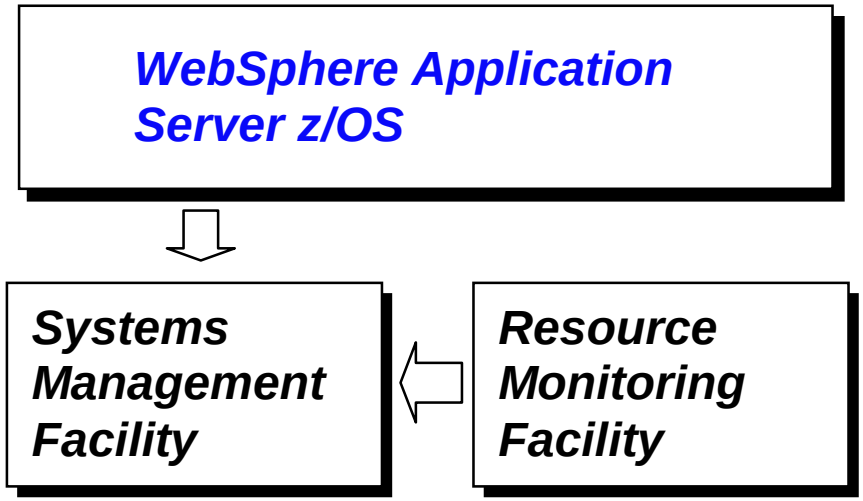


- Highest level of security for storage of private keys
- Very fast encryption and decryption
- Enhances security

- System interface for security products (IBM = RACF)
- Single, integrated security facility for tighter process control
- Define many classes of security profiles, including digital certificates

Security breaches are very disruptive and very expensive
Protecting secure data is a business imperative
SAF has proven itself to be secure and trusted

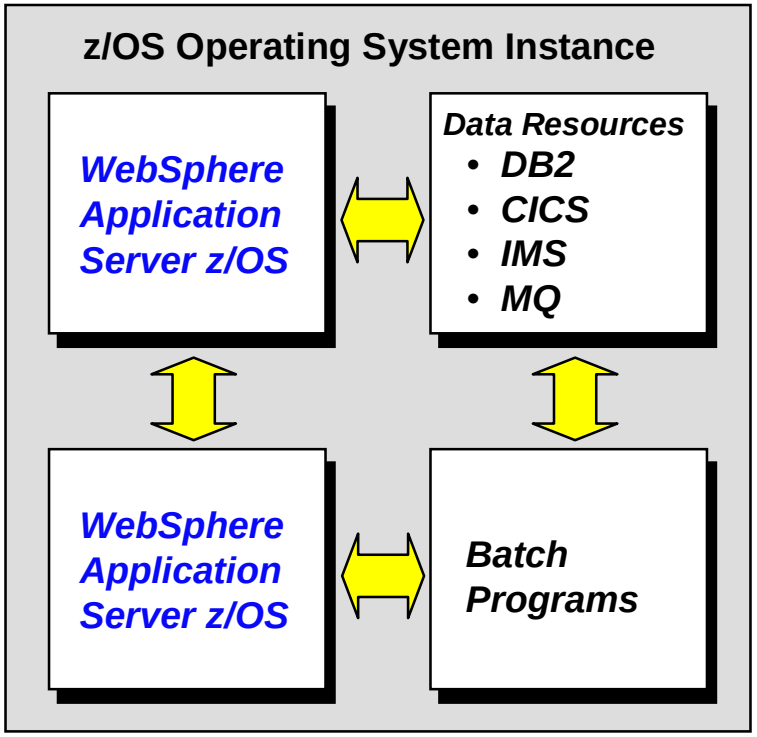
SMF and RMF -- Measuring and Reporting on Activity



- Achieve very accurate and customized reporting of system activity
- Perform very precise capacity measurement and planning
- Capture who is using what resources and when
- Allows finer-grained accounting and chargeback
- Many tools on the shelf to do analysis and reporting

Have a clear view of your resource investment and utilize is as fully as you can with the information you can gather

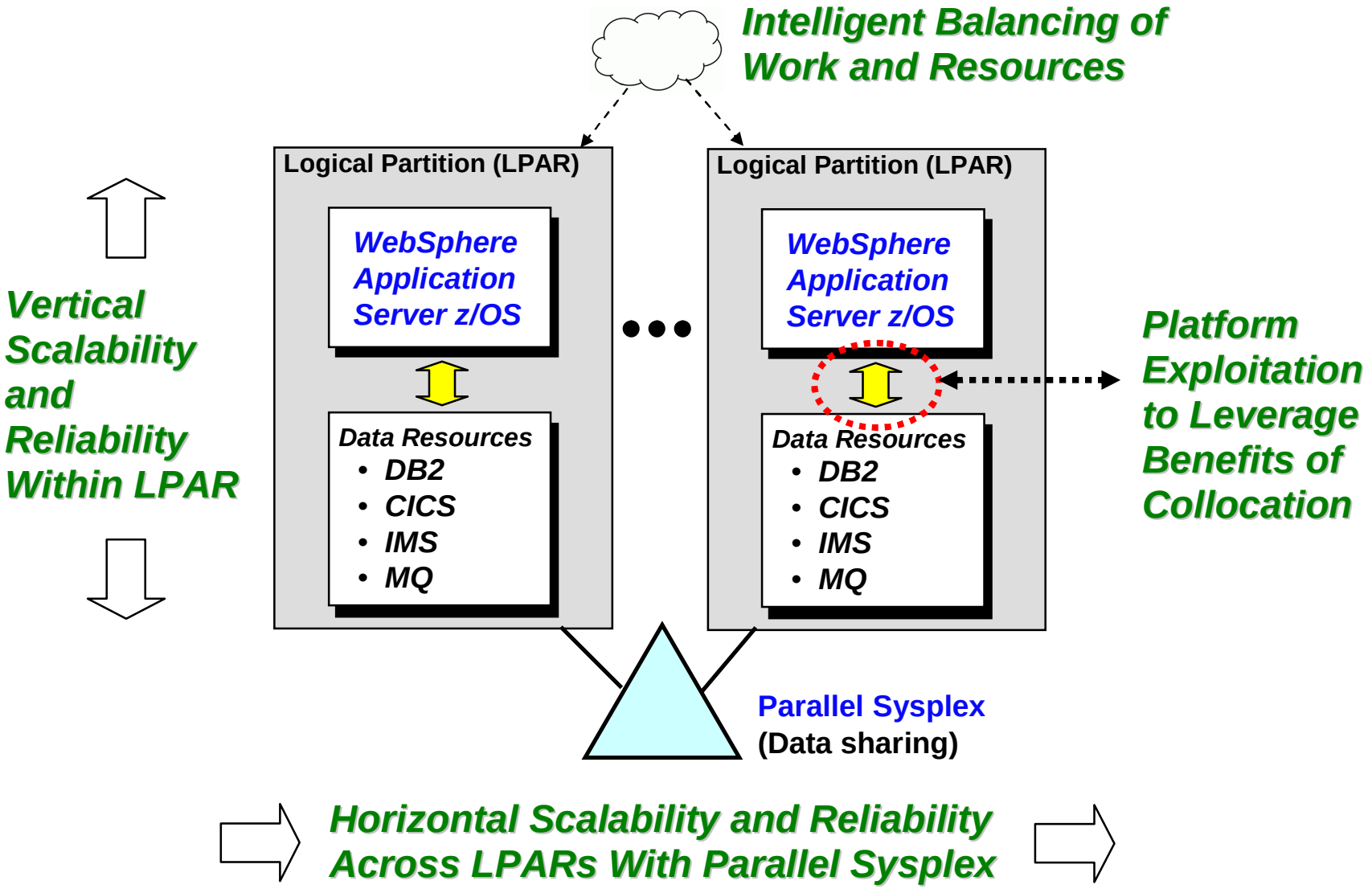
Collocation Benefits



- ***Extremely*** **fast data transfer**
- **Tightly controlled by z/OS authorization processes**
- **Eliminate need to serialize and deserialize data and objects**
- **Eliminate need for encryption overhead**
- **Propagate several forms of user identity**

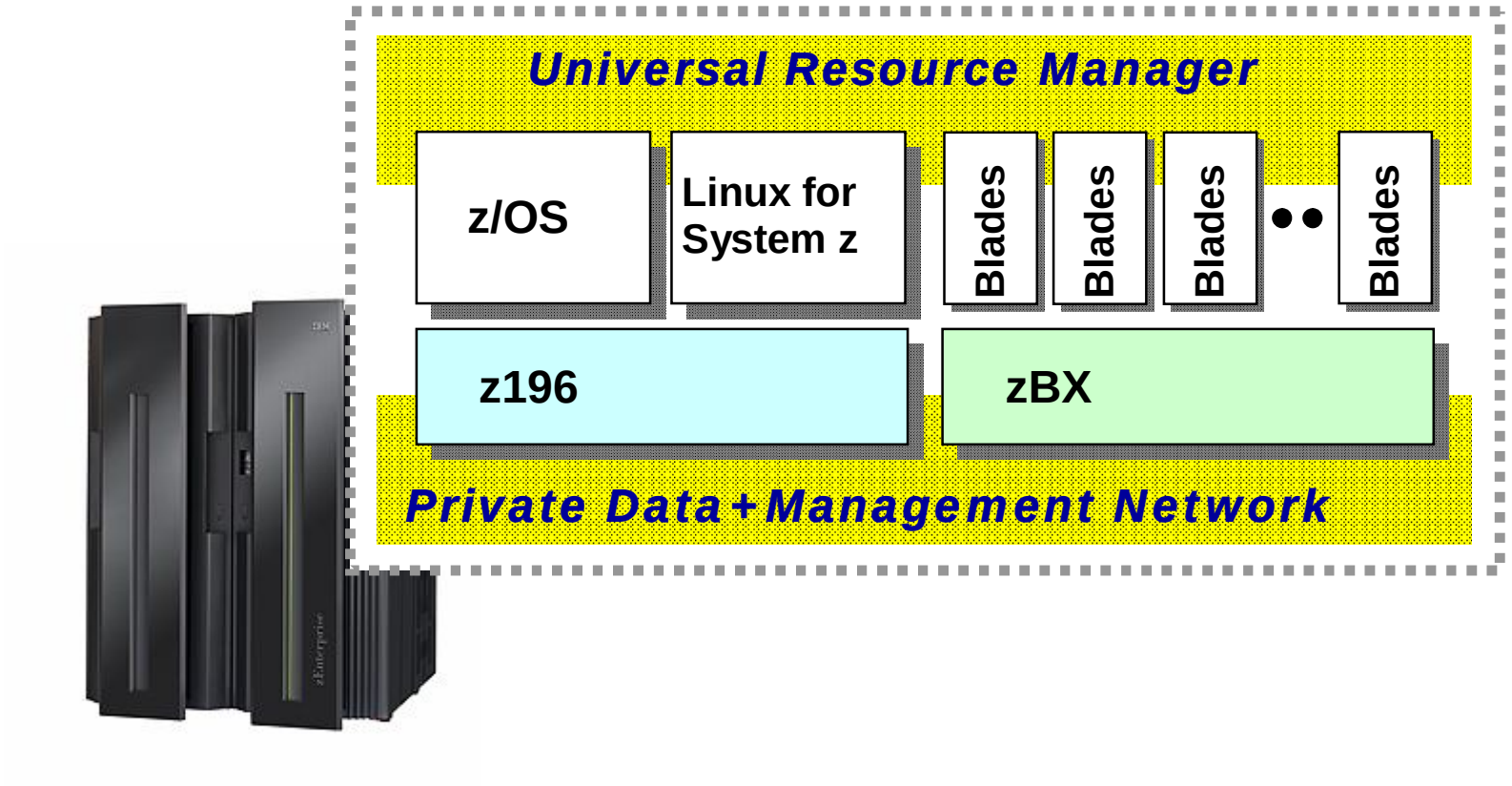
Efficient -- very low overhead so scalability can be addressed
Secure -- no network, can't be sniffed or hacked
Fast -- for very high volume workloads

Collocation, Scalability *and* High Availability



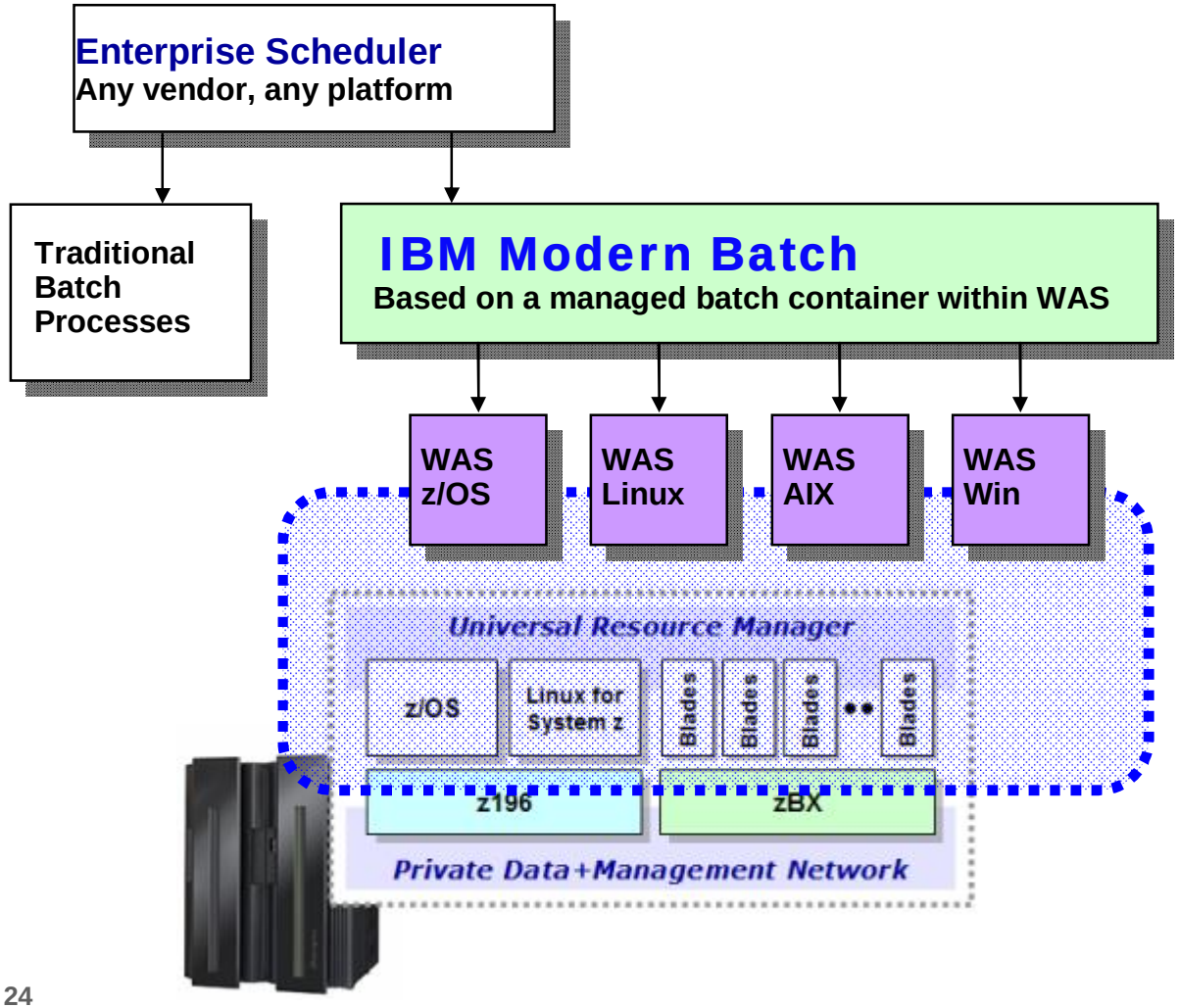
zEnterprise – Best of All Worlds

The z/OS benefits we've discussed for work best suited for that, and a coordinated and integrated multi-system machine it all



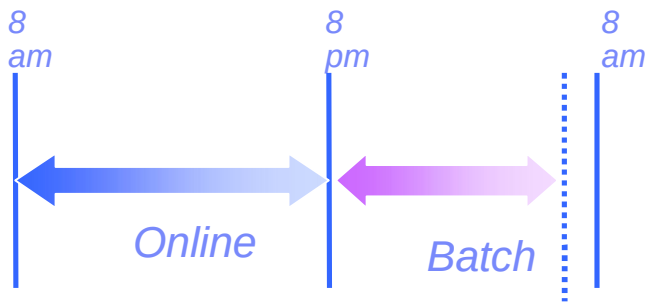
Modern Batch … Coupled with zEnterprise

IBM's Modern Batch provides flexible Java batch processing across multiple environments. Put the zEnterprise underneathe and …

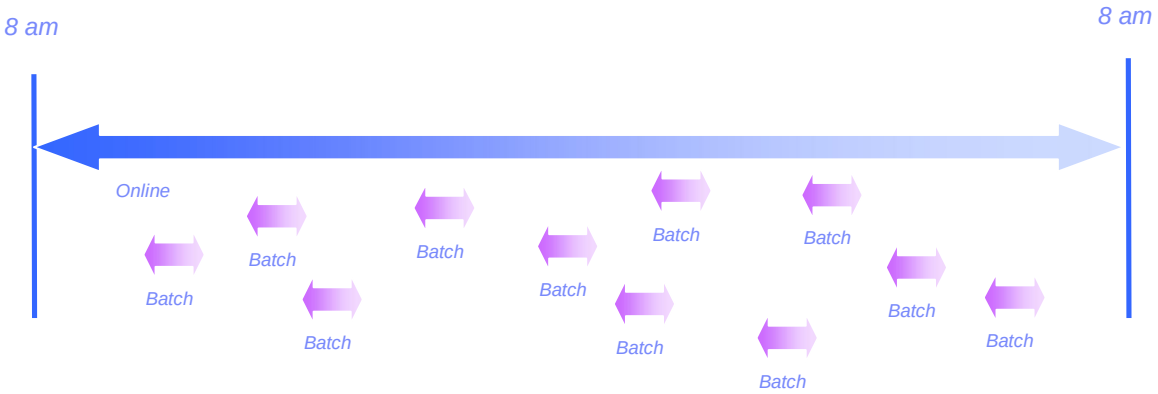


IBM's Modern Batch provides the managed container environment for Java batch
WAS provides the runtime for combined OLTP and Batch
zEnteprise provides the execution environments that allow the best "fit for purpose" for your needs

Defining the Issues of Traditional Batch on a Mainframe

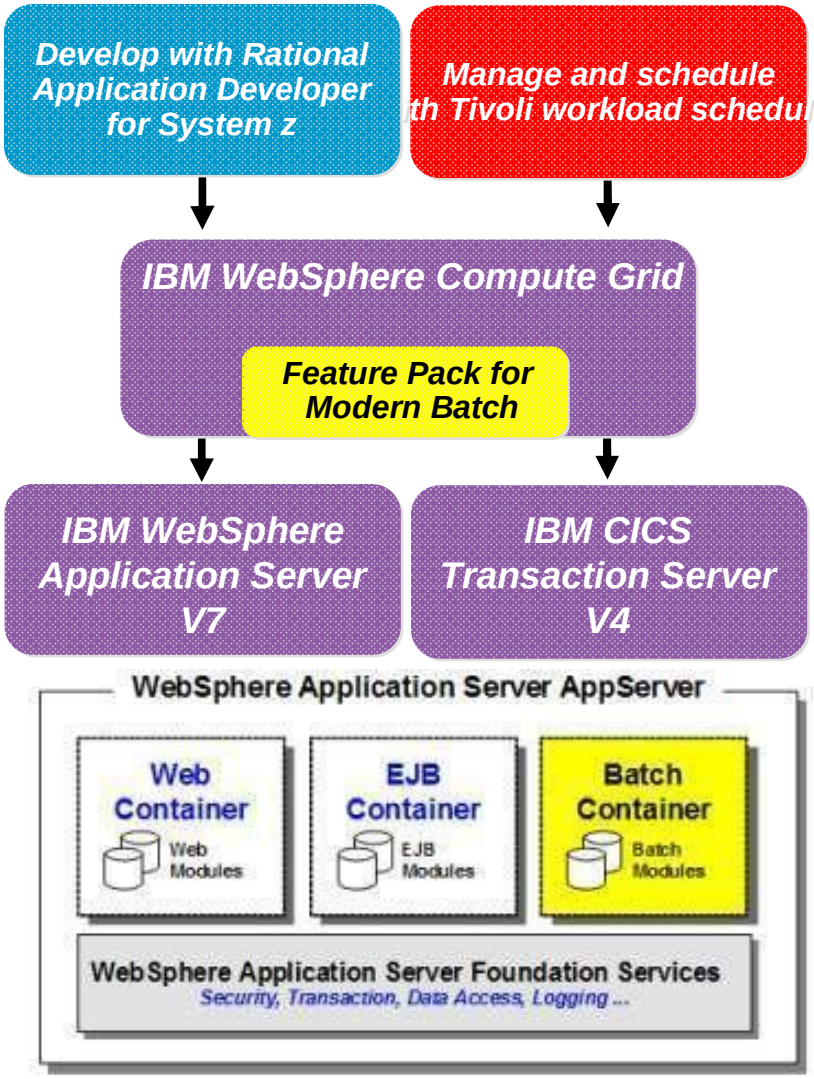


Globalization is putting pressure on traditional "batch windows". There's more data but shrinking batch time.



Is there a way to run batch concurrent with OLTP without affecting SLA for on-line applications?

Improved Utilization using Modern Batch on the zEnterprise



What it is

-- Architectural framework for meaningful integration between OLTP and batch applications. Reincorporates savings of batch processing into today's OLTP environment

What it offers

-- Continuous interweaving of batch and OLTP processes **aka** *24 x 7 batch and OLTP*

-- Reduced cost through business logic sharing on a ***shared*** *infrastructure*

-- Reduced operational cost from OLTP application and batch job ***integration***

-- High throughput and low resource consumption on z/OS for Java Batch when collocated with data subsystems

The *Real World* Reasons For WAS on z

Already have a z/OS culture

- Already understand it
- Already built processes around it
  - Change management / Problem management
- Already know how to manage, measure, operate with it – tooling and experience

Like zSeries Hardware Benefits

- Reliability, availability (5 or 6 nines capable), virtualization
- LPARs and internal network speeds - zBX

Like z/OS Capabilities

- WLM for policy based performance management
- Parallel sysplex for multi-system data sharing
- RACF (resource access control facility) for most robust security system available
- RRS (resource recovery service) for transaction management

Want WAS based products close to mainframe apps

- CICS, IMS, DB2; also z/OS optimizations / h/w optimizations
- Network bandwidth adds up

Possible TCO benefits

- vs. distributed environments

Performance Mgmt and Capacity Planning easier

- Tools and discipline exists – for many years
- vs. distributed concept of `buy more/bigger h/w` - drives up TCO

z doctor is in!
Visit the z Solution Suite for 1-1 consultations; see the zEnterprise in action

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