z/VSE Strategie & Modernisierung

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Operating Systems on IBM System z

§ 33% of worldwide traditional mainframe operating system installs are z/VSE or VSE/ESA
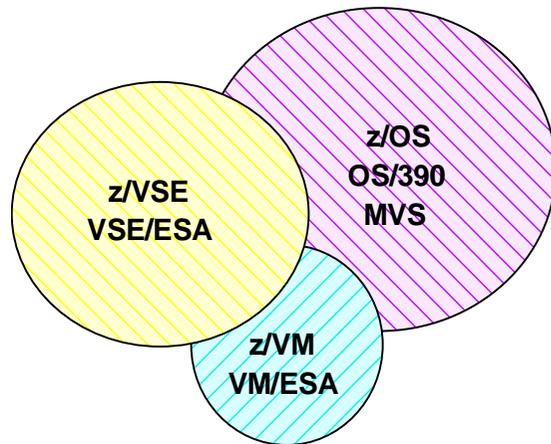

§ VSE* population is 40% in US, 40% in Europe, 20% in RoW

§ Worldwide 50% run VSE under VM, in Europe 90+% are VSE under VM

§ IFLs play an important role in VSE's strategy

§ zIIP/zAAP have no meaning to VSE

(*) The term "VSE" stands for both, VSE/ESA and z/VSE.
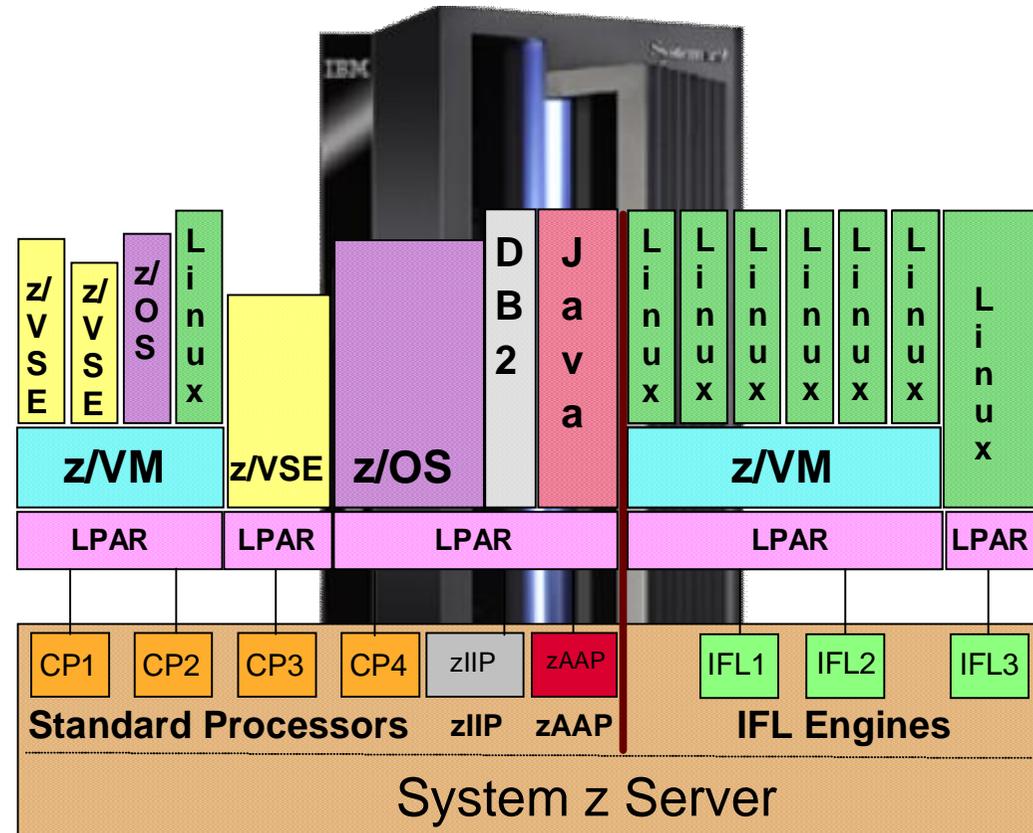
z/VSE Evolution
and its Success Factors
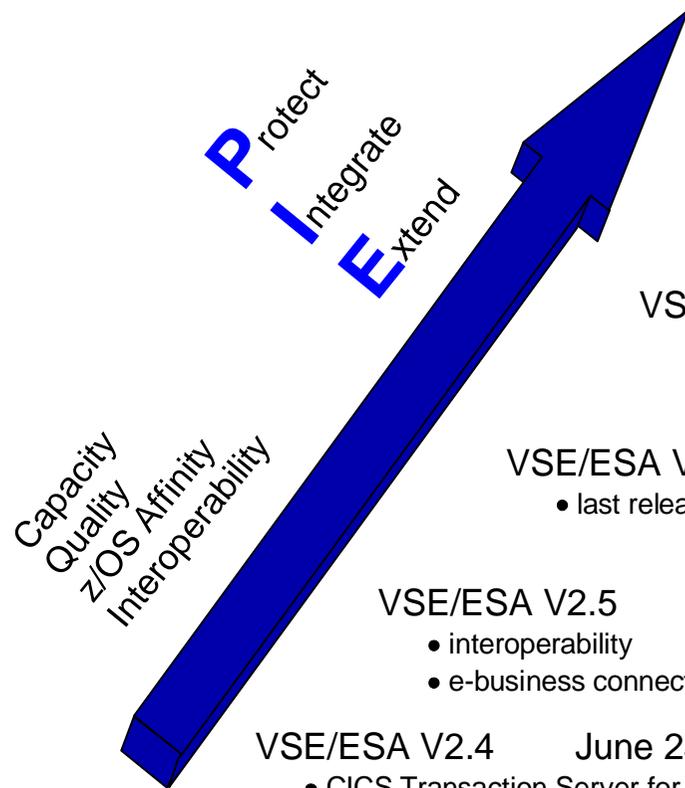
z/VSE V4.2 - Preview Oct 9, 2007
- **More tasks, more memory**
- **EF for z/VSE, SCRT on z/VSE**
- **SoD for CICS/VSE**

Future

z/VSE V4.1   March 16, 2007
- z/Architecture only
- 64-bit real addressing
- MWLC full & sub-cap pricing

Pricing

z/VSE V3.1*   March 4, 2005
- zSeries features, FCP/SCSI
- 31-bit mode only

Rebranding

VSE/ESA V2.7   March 14, 2003
- enhanced interoperability
- ALS2 servers only

VSE/ESA V2.6   Dec 14, 2001
- last release to support pre-G5 servers

VSE/ESA V2.5   Sept 29, 2000
- interoperability
- e-business connectors

Strategy

VSE/ESA V2.4   June 25, 1999
- CICS Transaction Server for VSE/ESA
- e-business

Protect **I**ntegrate **E**xtend

Capacity
Quality
z/OS Affinity
Interoperability

Agenda

→ **1.** **Strategy**

2. **Rebranding**

3. **Pricing**

4. **Future**

§ **Customer Examples**

z/VSE Strategy

alias

§ 3-tier Strategy

§ Connector Strategy

§ Migration Strategy

§ Coexistence Strategy

§ Linux Strategy

§ **PIE Strategy**

IBM System Storage

IBM System z Enterprise Server

System i
System p
System x
System z
BladeCenter

Web

Connectors

CICS Transaction Gateway ECI
DB2 Connect
WebSphere MQ Series
VSE e-business connectors
VSE Web Services

IBM System

Clients

Business Services

Tran/Data Services
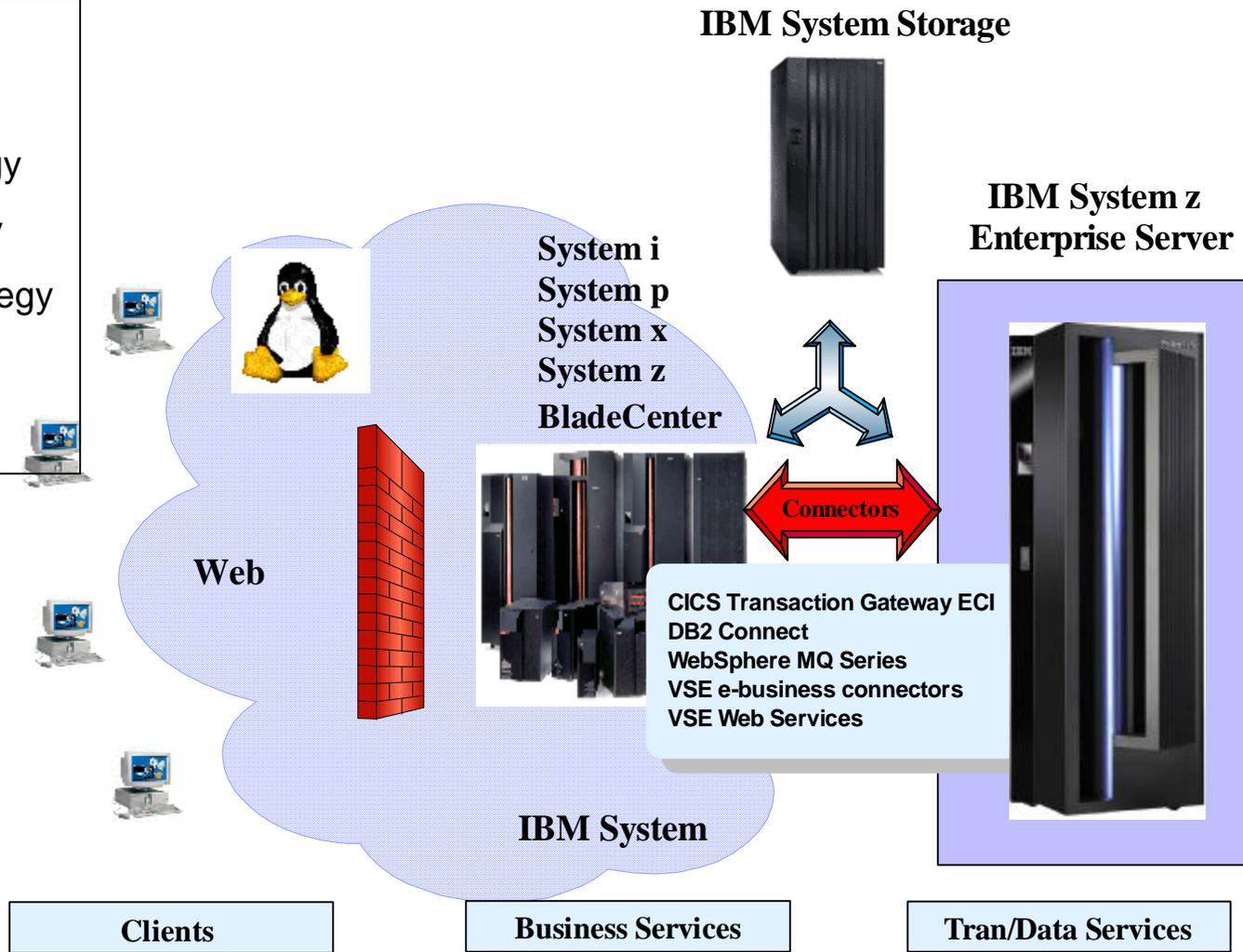
z/VSE Strategy with Linux on System z

IBM System Storage

Linux on System z
(IFL engines)

z/VSE
(Standard engines)

HiperSockets

Connectors

DB2 UDB

CICS Transaction Gateway
DB2 Connect
WebSphere MQ Series
VSE e-business connectors
VSE Web Services

Web

z/VM

LPAR or z/VM

IBM System z

| Clients | Business Services | Tran/Data Services |
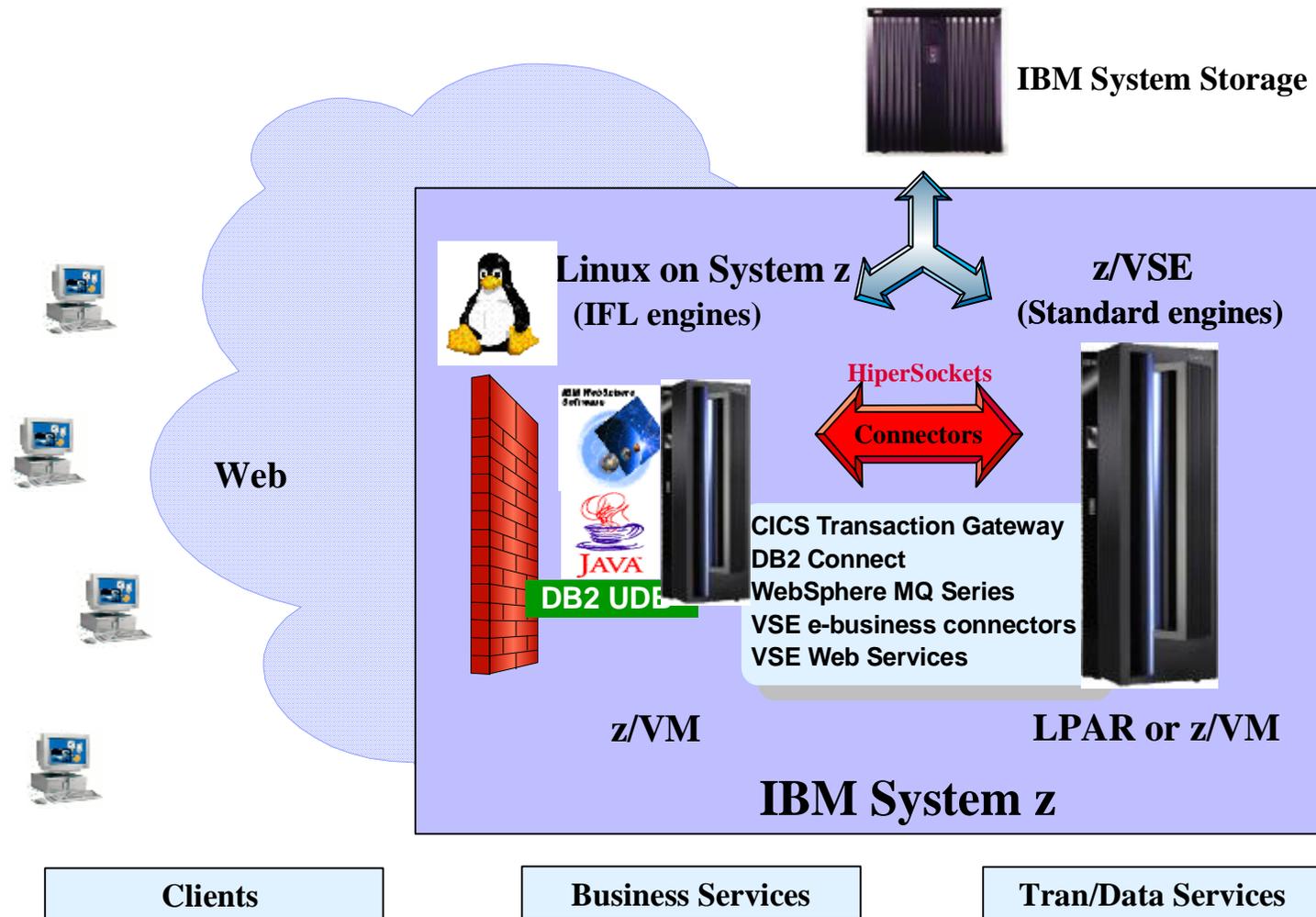
z/VSE Strategy "easy as P I E"

Protect
existing investment

§ Existing core applications continue to run unchanged

§ Continuous follow-on development for HW and SW
— from S/390 via zSeries to IBM System z
— from VSE/ESA to z/VSE

§ z/VSE is the platform of choice for transaction oriented core applications with CICS

§ Excellent support from IBM Lab in Boeblingen & Poughkeepsie
— z/VSE worldwide development is located in Boeblingen --> deep skills available
— PoC – Proof of Concept (customer individual)
— Briefings (customer individual)

Integrate
with IBM middleware using connectors

§ Integration of z/VSE into heterogeneous environments

§ z/VSE is a very stable operating system that can easily be connected to open systems (Linux)
— access to external data (e.g. on Linux) or programs (e.g. Java) via standard connectors or via free of charge VSE specific connectors
— exploitation of HiperSockets within the server – no physical network outside the box

### Extend
with Linux on System z

§ Extension of existing solutions with Linux on System z

§ Cooperation and coexistance with Linux on System z and z/VM

§ z/VSE is open and connectable to various different client/server platforms

Scenario 1: DB2 LUW for z/VSE Customers
Data consolidation and data warehouse solutions with DB2 UDB on System z


Linux on System z

DB2 UDB (64-bit)

DB2 UDB

DB2 VSE/VM

VSAM

Connection via HiperSockets

z/VSE Production Environment

+ CICS
+ TCP/IP
+ VSAM
+ COBOL
+ DB2 Client
+ VSAM Redir.

z/VSE Test Environment

+ CICS
+ VSAM
+ COBOL

LPAR or z/VM	z/VSE Production System LPAR or z/VM	z/VSE Test System LPAR or z/VM
IFL Engine	Standard Engine	

IBM System z
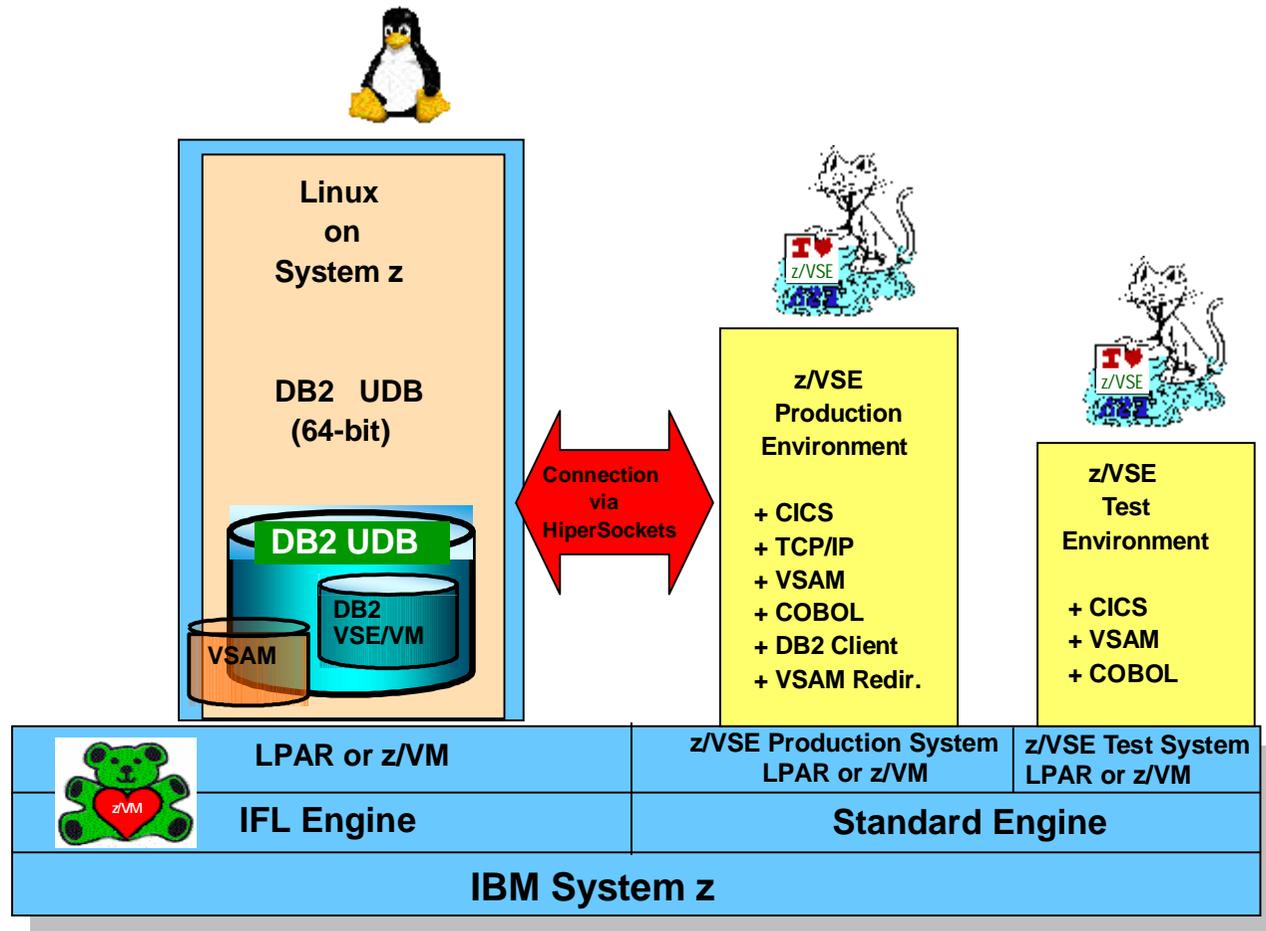
Scenario 2: „Webification" for z/VSE Applications
Web enable existing applications with Inter/Intranet frontend

Linux on System z

WAS
HoD
HATS

Connection via HiperSockets

z/VSE Production Environment

+ CICS
+ TCP/IP
+ VSAM
+ COBOL

z/VSE Test Environment

+ CICS
+ VSAM
+ COBOL

| z/VM V5	z/VSE Production System LPAR	z/VSE Test System LPAR
IFL Engine	Standard Engine	

IBM System z
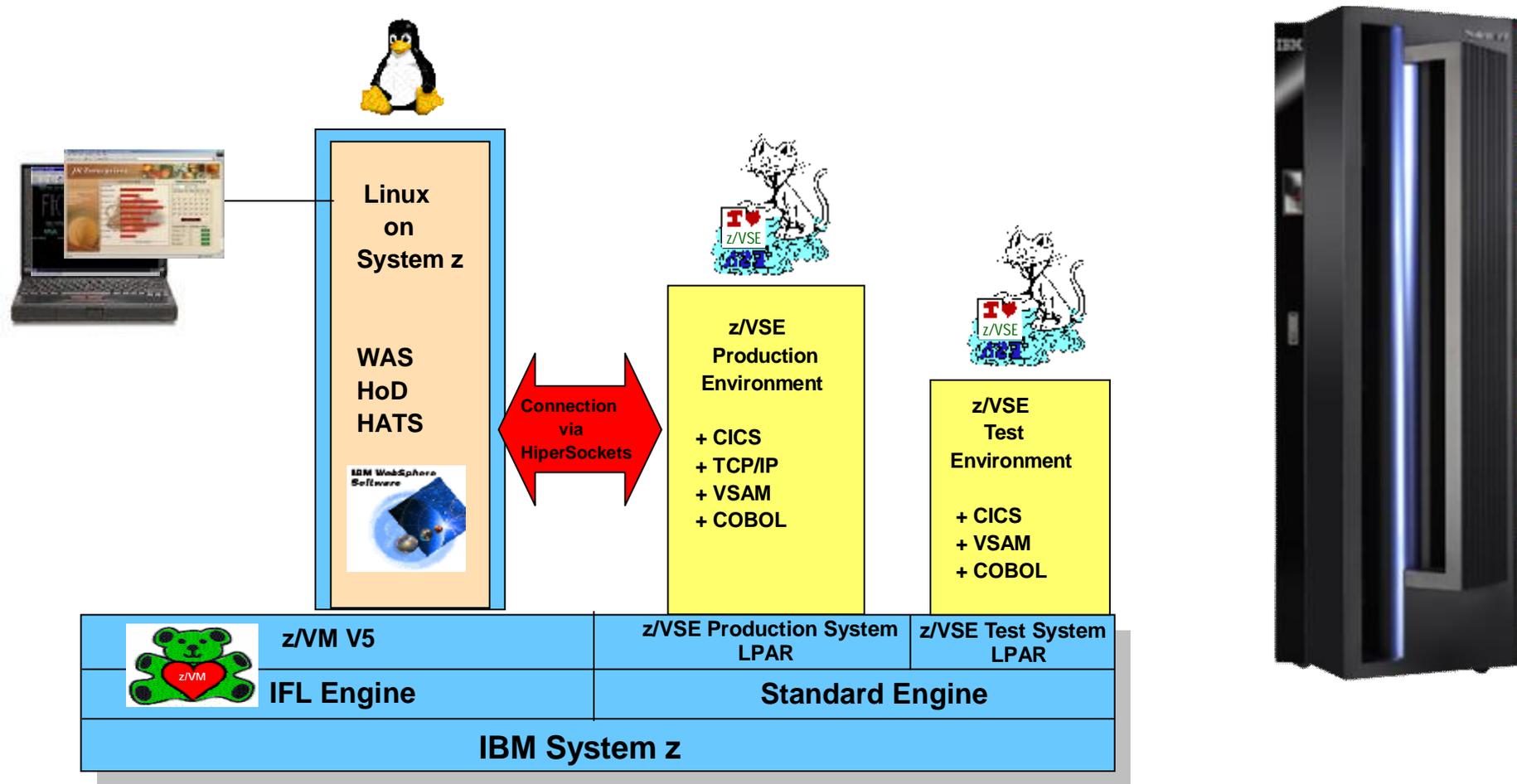
Scenario 3: WebSphere Portal for z/VSE Customers
A portal for administration and integration of employees / customers / providers

**Linux on System z**

WAS
WS Portal
WS MQ

Connection via HiperSockets

z/VSE Production Environment

+ CICS
+ TCP/IP
+ VSAM
+ COBOL

z/VSE Test Environment

+ CICS
+ VSAM
+ COBOL

z/VM V5	z/VSE Production System LPAR	z/VSE Test System LPAR
IFL Engine	Standard Engine	
IBM System z		
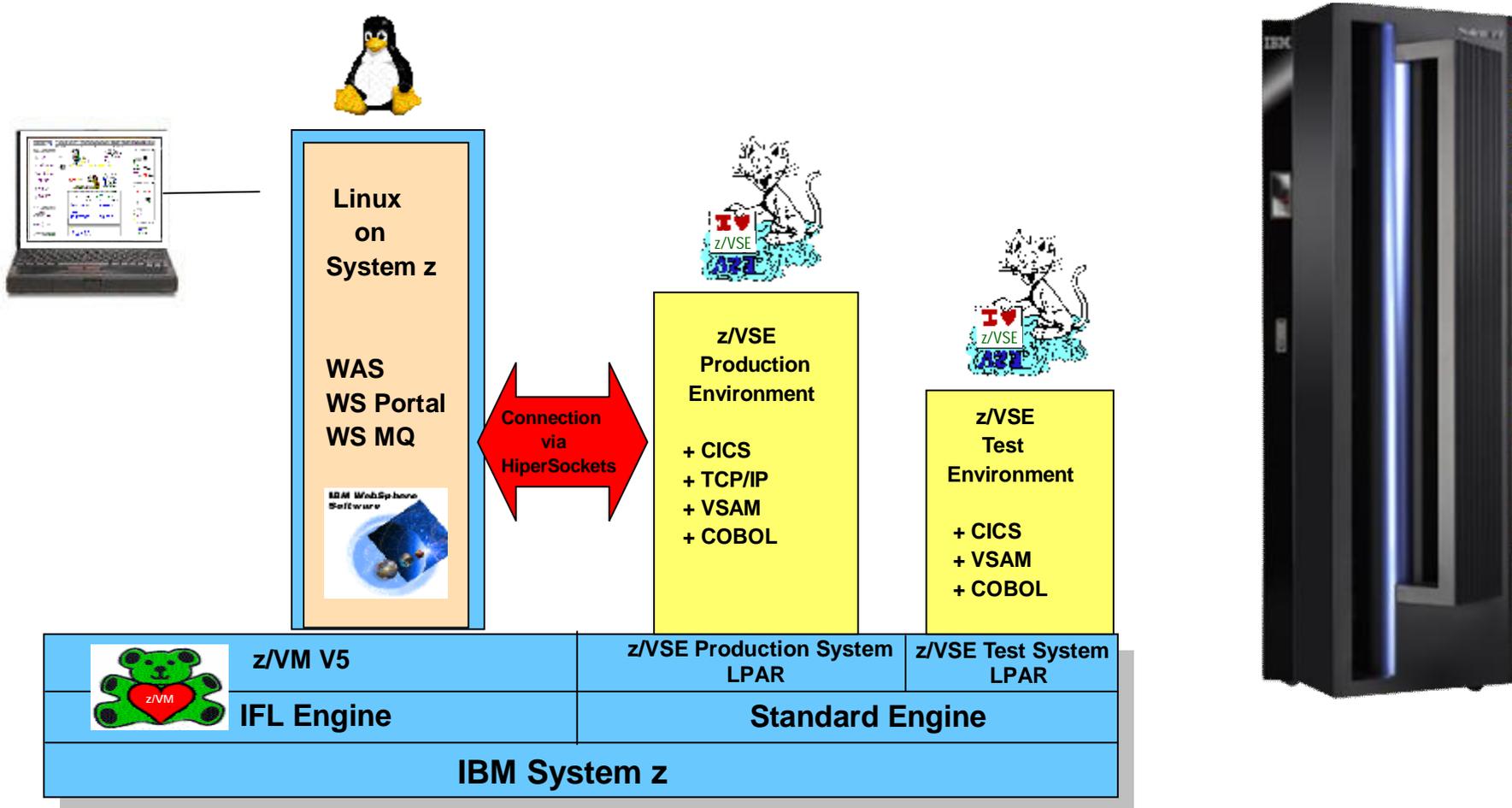
Scenario 4: Network Infrastructure Simplification

3745/46 (NCP) and TN3270 replacement with Linux on System z

TN3270

SNA   TCP/IP

Easy, high-value transition

IP

Linux on System z

IBM Comm. Controller (NCP)

IBM Comm. Server (TN3270 server)

SNA

z/VSE Production Environment

+ CICS
+ VTAM
+ TCP/IP
+ VSAM
+ Cobol
+ ISV Products

z/VSE Test Environment

+ CICS
+ VSAM
+ COBOL

z/VM V5	z/VSE Production System LPAR (or VM guest)	z/VSE Test System LPAR (or VM guest)
IFL Engine	**Standard Engine**	

IBM System z
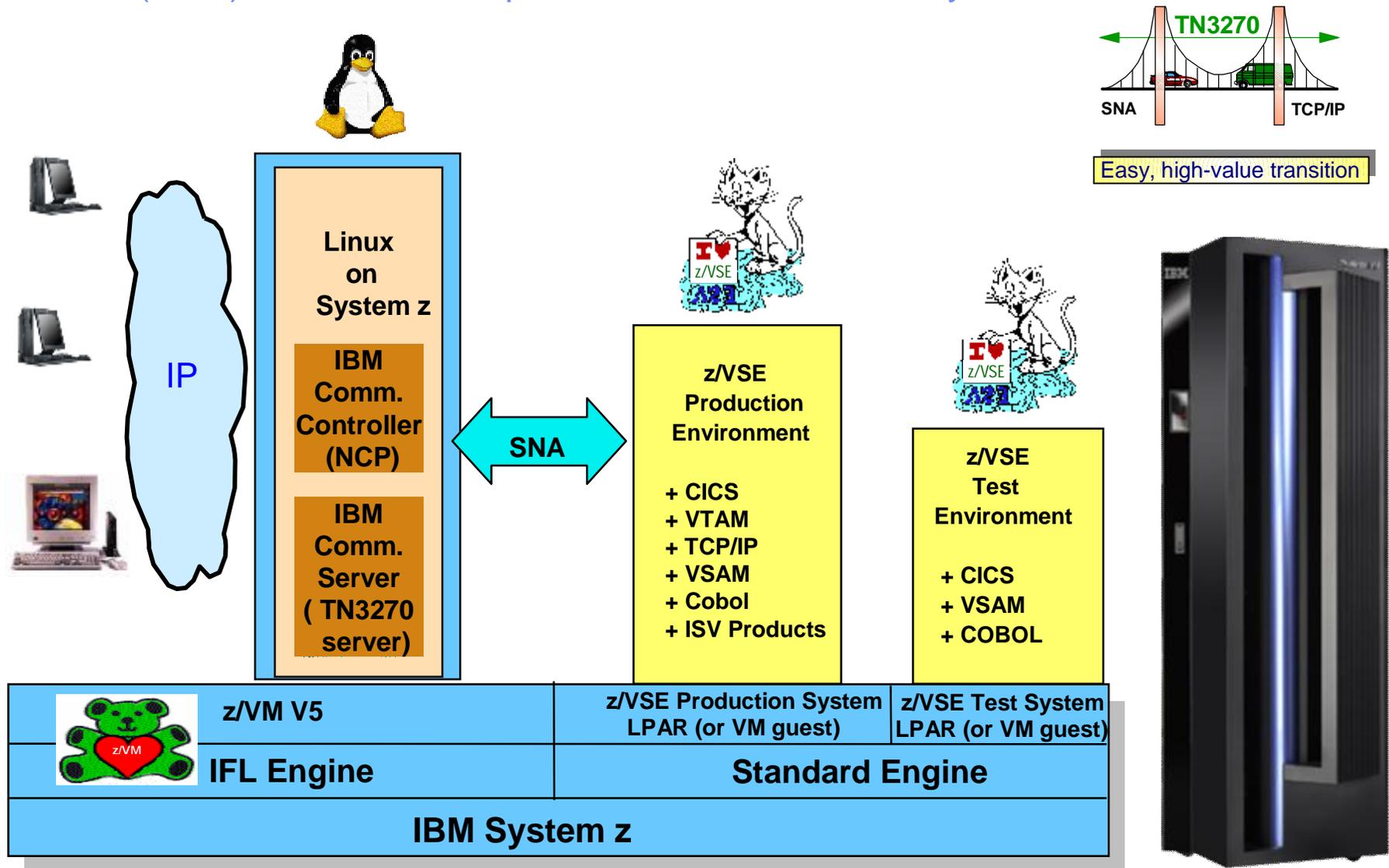
Scenario 5: Backup/Restore Concepts for z/VSE
Integrate z/VSE with TSM on Linux on System z

Backup

Linux
on
System z

Tivoli
Storage
Manager

Tivoli

Connection via HiperSockets

z/VSE V4.1
Production
Environment

+ CICS
+ TCP/IP
+ VSAM
+ COBOL
+ Virtual Tape

z/VSE V4.1
Test
Environment

+ CICS
+ VSAM
+ COBOL

LPAR or z/VM

IFL Engine

z/VSE Production System LPAR or z/VM

z/VSE Test System LPAR or z/VM

Standard Engine
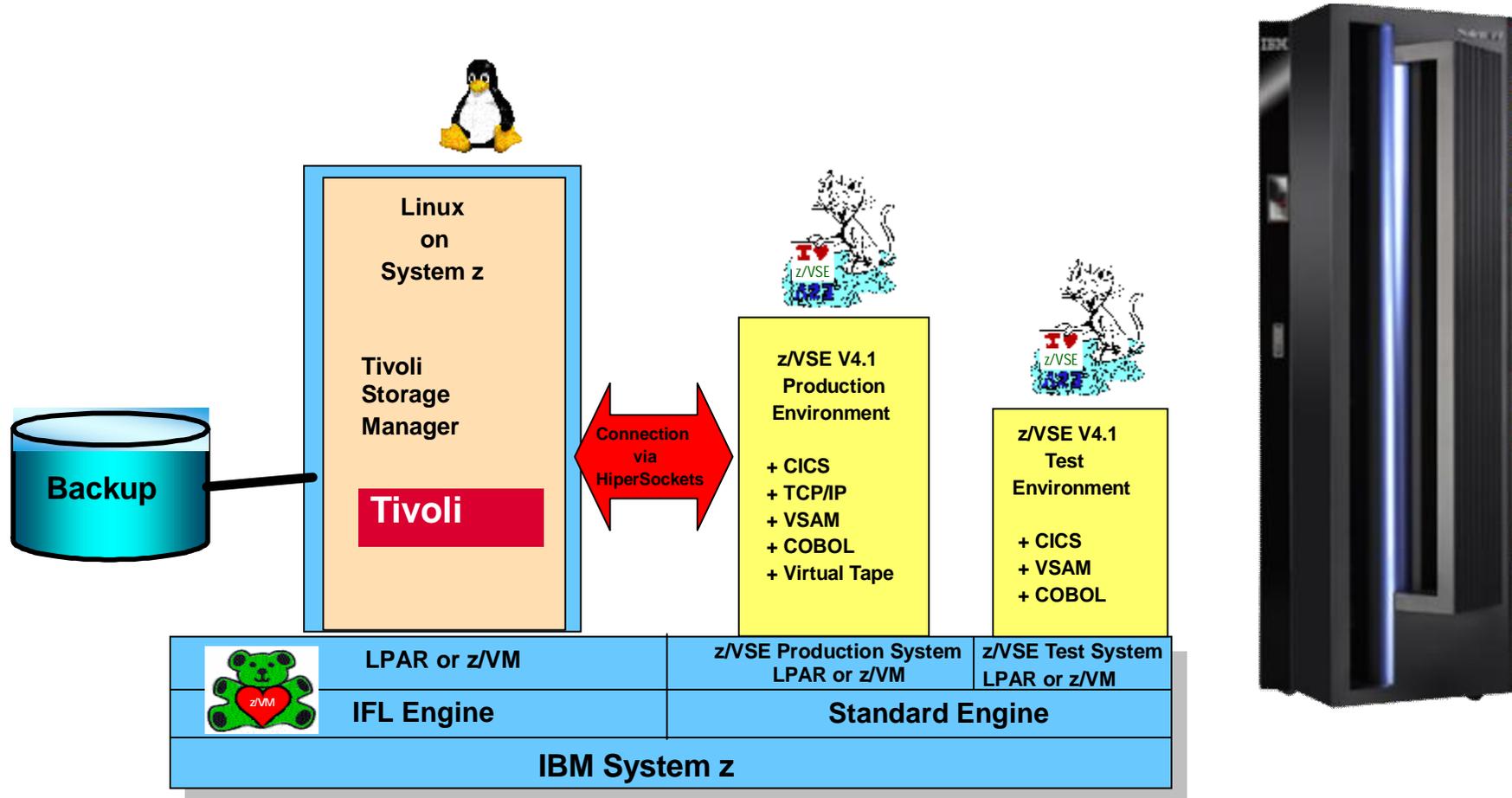
IBM System z

Summary: z/VSE's PIE Strategy w/ Linux on System z

Protect existing VSE investments

Integrate using middleware and VSE connectors

Extend with Linux on IBM System z technology & solutions

......

Linux on System z	Linux on System z	Linux on System z
Firewall, ISV Appl, Open Source Appl, etc.	WAS, HATS, HoD, MQSeries, etc.	DB2 UDB, Tivoli TSM, WDz, IRMM, etc.

DB2 UDB

Connection via HiperSockets

z/VSE Production Environment

+ CICS TS
+ VTAM
+ TCP/IP
+ VSAM
+ DB2
+ Applications

z/VSE Test Environment

+ CICS TS
+ VTAM
+ VSAM
+ COBOL

z/VM V5

IFL Engine

z/VSE Production System LPAR or z/VM	z/VSE Test System LPAR or z/VM

Standard Engine

IBM System z

COURSE 2008: z/VSE Strategie & Modernisierung

Agenda

1. **Strategy**

→ 2. **Rebranding**

3. **Pricing**

4. **Future**

§ **Customer Examples**

z/VSE Rebranding and added Functionality

§ **Rebranding, reversioning, repricing**

  ► **3/2005: VSE/ESA Version 2 à z/VSE Version 3 ***

  ► **3/2007: z/VSE Version 3 à z/VSE Version 4**

§ **Functional enhancements to z/VSE operating system**

  ► **z/Architecture, 64-bit real addressing, subcapacity, FCP/SCSI, crypto enhancements, more memory, more tasks, more security, etc. etc.**

§ **Enhancements to z/VSE middleware & tools (few examples only)**

  ► **TCP/IP for VSE**

  ► **VTAM for VSE**

  ► **DB2 Server for VM and VSE**

  ► **DL/I**

  ► **WebSphere MQ for VSE**

  ► **Encryption Facility for VSE**

  ► **Keyman for VSE**

  ► **SOAP for VSE**

  ► **VSE Navigator**

  ► **VSAM Redirector**

  ► **VSE Health Checker**

  ► **CICS2WS**

  ► **IRMM**

  ► **DB2 UDB**

  ► **Tivoli Storage Manager**

  ► **WebSphere Developer for System z**

* z/VSE V3 can operate in 31-bit mode only. It does not implement z/Architecture and specifically does not implement 64-bit mode capabilities. z/VSE V3 is designed to support selected features of IBM System z hardware.

Items marked in 'blue' have an additional more detailed slide following this one.

DB2 for z/VSE and z/VM V7.5

§ **In the past, DB2 VSE client functionality could be obtained via PRPQ P10154**

§ **Now, DB2 offers a <u>runtime only client edition</u> for z/VSE and z/VM (no PRPQ required)**

§ **Plus performance enhancements, e.g.**

▶ **bind file support**

▶ **reduced DRDA code path length**

▶ **and many more ...**
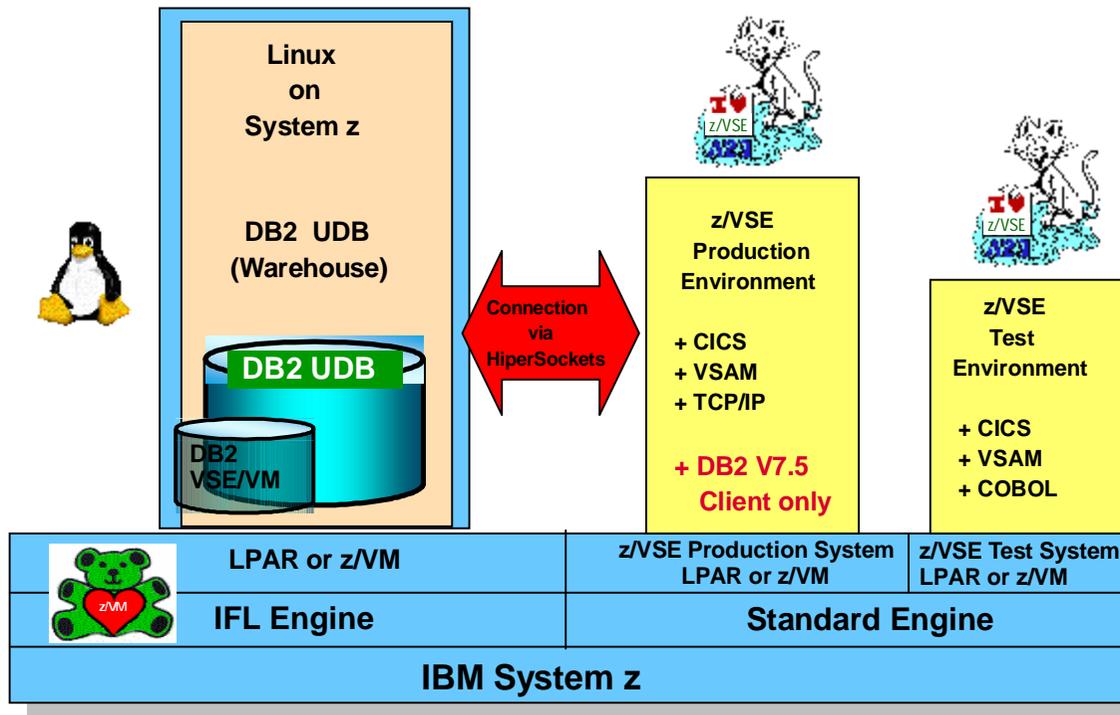
Encryption Facility for z/VSE V1.1

§ **Announce:**   **Oct-09-2007**

§ **GA:**   **Nov-30-2007**

§ **Optional priced feature for VSE Central Functions V8**

► requires z/VSE V4.1 or later

► MWLC-eligible

§ **Requires CP Assist for Cryptographic Function (CPACF)**

► no charge feature

► only on z990, z890, z9 EC, z9 BC, and z10 EC servers

§ **Extends affinity between z/VSE and z/OS**

► function roughly equivalent to EF for z/OS V1.1

► compatible with EF for z/OS V1.1 (Encryption Facility System z format)

● EF for z/VSE tapes can be read by EF for z/VSE, EF for z/OS, EF for z/OS Java Client, and Decryption Client for z/OS

● EF for z/OS V1.1 and EF for z/OS Java client tapes can be read by EF for z/VSE V1.1

§ **Complements z/VSE support for IBM TS1120 tape**

► TS1120 preferred solution for high volume backup/archive

► EF option for limited backup/archive and/or exchange with partners with no TS1120

EF for z/VSE V1.1 (Details)

IBM Encryption Facility for z/VSE V1.1
Program number: 5686-CF8-40
Runs on: System z10 EC, z9 EC, z9 BC
            zSeries 890 or 990

Requires: z/VSE 4.1 (with DY46717) or higher

IBM Encryption Facility for z/OS V1.1
Program number: 5655-P97
Runs on: System z10 EC, z9 EC, z9 BC
            zSeries 900 or 990
            zSeries 800 or 890
Requires: z/OS 1.4 or higher; z/OS.e 1.4 or higher

Optional Priced z/VSE Feature*

§ Supports encrypting, decrypting, and compression of data at rest (tapes, disk).

§ Supports either Public Key/Private keys or passwords to create highly-secure exchange between partners.

§ Can use z/OS Java Client or Decryption Client for z/OS for data exchange with client systems or decryption on z/OS.

§ Use zvse@de.ibm.com mailbox for questions about z/OS Java Client and Decryption Client for z/OS when used in conjunction with z/VSE.

Java Client
Web Downloadable

Java technology-based code that allows client systems (z/OS and non-z/OS) to decrypt and encrypt data for exchange with z/OS and z/VSE systems.

Decryption Client for z/OS
Web Downloadable

Decryption only code designed to run on z/OS systems. Can process data encrypted and compressed or just encrypted by the Encryption Facility for z/OS or Encryption Facility for z/VSE.

Feature: Encryption Services

Optional Priced Feature*

§ Supports encrypting and decrypting of data at rest (tapes, disk)

§ Supports either Public Key/Private keys or passwords to create highly-secure exchange between partners

Feature: DFSMSdss Encryption

Optional Priced Feature*

•Variable Workload License Charges (VWLC, MWLC), Entry Workload License Charges (EWLC), zSeries Entry License Charges™ (zELC), Parallel Sysplex® License Charges (PSLC) **Statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

z/VSE Navigator: Windows-like VSE Interface

Application Development for z/VSE and the Enterprise
Modern Appl Dev with Eclipse and WebSphere Developer for System z
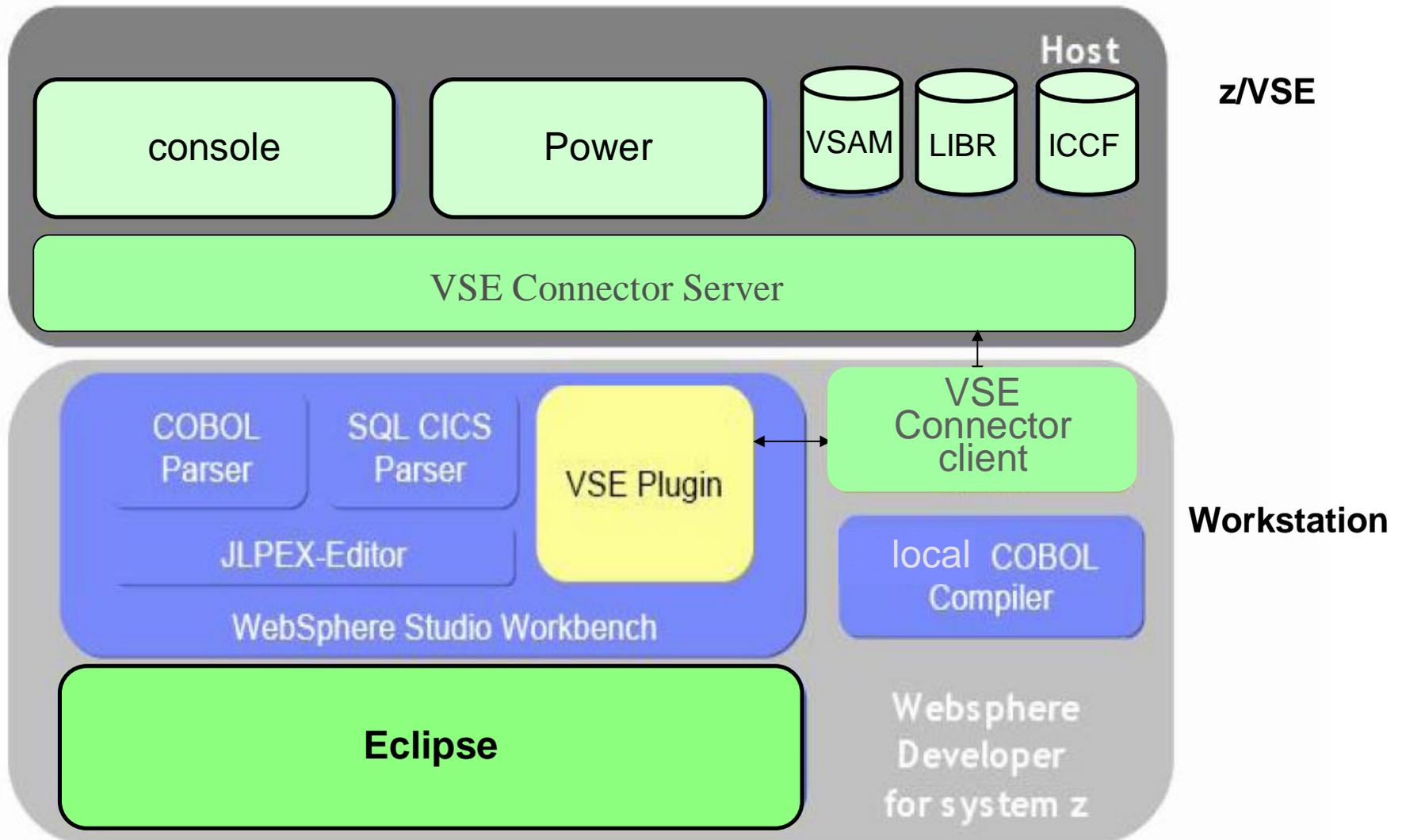
IBM WebSphere Developer (WDz) in z/VSE Perspective

Agenda

1. Strategy

2. Rebranding

→ **3. Pricing**

4. Future

§ Customer Examples

MWLC – Midrange Workload License Charge

Price for typical z/VSE stack

MP2000, G4, G5, G6, z900, z990

MP3000, z800, z890

MWLC

z9, z10

z/VSE V4 stack only

GMLC

GOLC
(MP3000)

zELC
(z800)

TWLC
(z890)

MSU
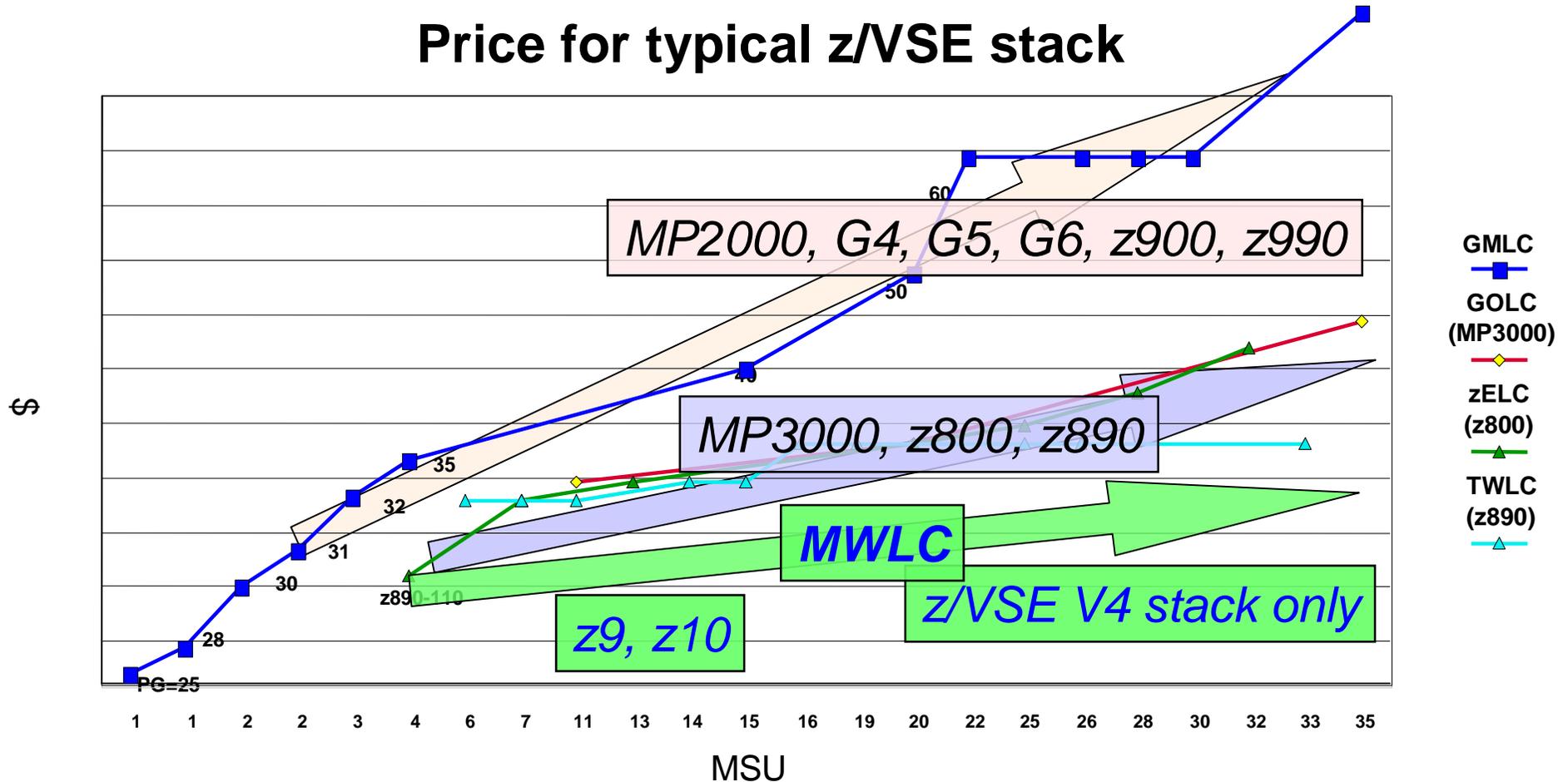
§ *"I just got our April software bill from IBM for the first month on our z9 under z/VSE 4.1 and MWLC. We were paying $22,965 per month on our z800 under z/VSE 3.1.2. The April bill is for the same software and it is $12,318: a difference of $10,647 per month."* Mike Moore, IT Manager, Alabama Judical Datacenter, Alabama

Transition to z/VSE V4 MWLC Pricing

§ **Basic Requirements**

- ► **IBM System z10 EC, z9 EC or z9 BC (exception: z9 BC A01 is priced zELC)**
- ► **z/VSE V4**
- ► **If running under VM: z/VM 5.2 (or later) is required**

Very simple !

§ **The resulting savings can – and should – be used to invest in new solutions, e.g.**

- ► **SOA**
- ► **Linux on System z**
- ► **new middleware**
- ► **new standard software**
- ► **new application development**
- ► **new projects with IBM**

Transition to z/VSE V4 MWLC Sub-Capacity Pricing

§ **Basic Requirements**

▶ **IBM System z10 EC, z9 EC or z9 BC (exception: z9 BC A01 is priced zELC)**

▶ **z/VSE V4 (no older VSE version allowed on the processor, i.e. no VSE/ESA V2, no z/VSE V3)**

▶ **If running under VM: z/VM 5.2 (or later) is required**

§ **Reporting Requirements**

▶ **Must report on <u>all</u> LPARs and z/VM guests (production, test, development, etc.)**

▶ **95% data collection**

▶ **Default (i.e. worst case) is full-capacity prices**

▶ **2-month full-capacity transition period**

§ **Timing Requirements**

▶ **Sub-Capacity Pricing begins with the submission of 1st full month report**

▶ **Data <u>collection</u> period: 2nd of the previous month - 1st of the current month**

▶ **Data <u>submission</u> period: 2nd - 9th following data collection**

July	August	September	October

Apply Service

Collect July Data (2 July - 1 Aug)

Run July Report (2 Aug)

Submit July Report (9 Aug)

Billing Effective Date for July Report (1 Sept)

Billing Effective Date for August Report

Billing Effective Date for Sept Report

Pricing may be Full-Cap WLC, Full-Cap MWLC

Pricing is Sub-Capacity MWLC
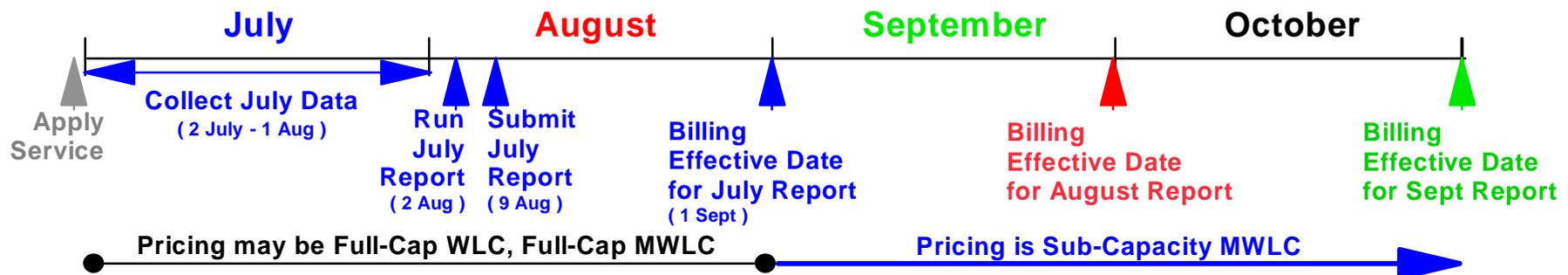
Sub-Capacity Example Report

Press & Analyst Papers

z JOURNAL

MWLC for z/VSE 4.1:

Can It Save You Software Costs?

By John Lawson
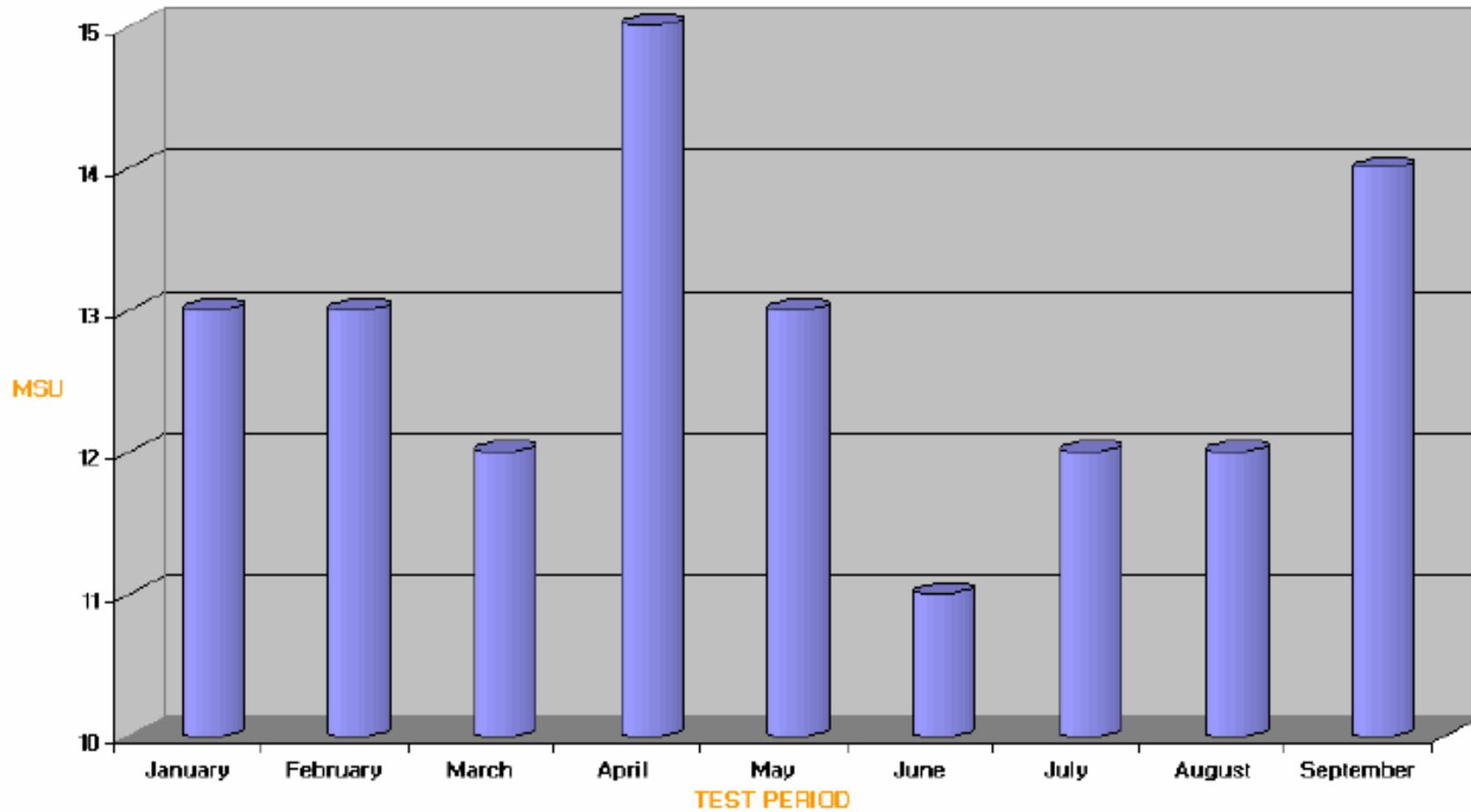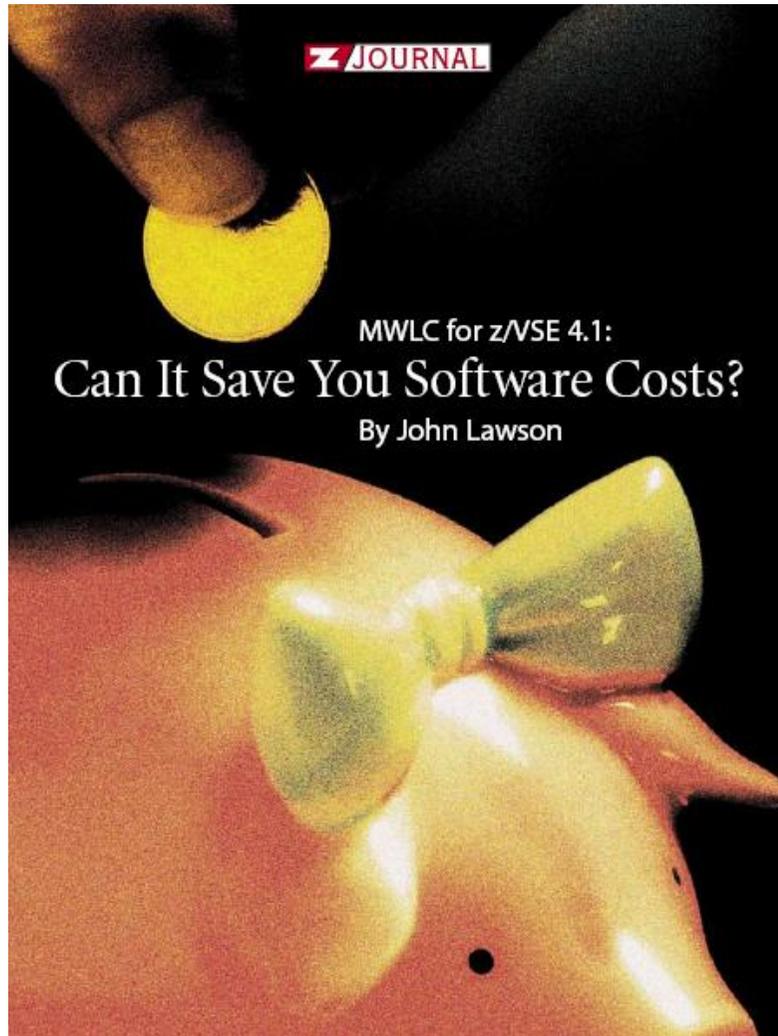
Source: z/Journal, April / May 2007

VSE users receive an offer they can't refuse

Most of the activity in the IBM mainframe world not surprisingly focuses on the z/OS environment, but there is still a sizeable population of users running systems based on VSE, often in conjunction with the VM hypervisor.

Many of these sites are slow growers with limited in house technical skills and a reluctance to upgrade their hardware or software even in exchange for significant cost savings. As a result their relationship with IBM (and with other ISVs supporting their applications) is a difficult one.

In its recent announcement of z/VSE 4.1, IBM has shown some of the 'carrot and stick' tactics that often characterize its product developments in this part of the market.

The latest version of the operating system offers many attractions for small mainframe users, including some important enhancements to SOA/web service support and tape encryption. Moreover the software is accompanied by a new pricing scheme (Midrange Workload License Charge), which can bring sub capacity benefits and very significant savings to VSE users. But to get the savings they need to upgrade to a z9 BC or EC.

Even for VSE users, it is becoming increasingly difficult to make a cost case for avoiding an upgrade to the latest hardware, and the months ahead are likely to witness a steady stream of VSE-base upgrades to the z9 BC.

© Arcati Limited, 2007   Source: The Arcati Mainframe Yearbook 2007   33

z/VSE: A Roadmap For Cost savings and Exploiting Technology

Prepared for:
IBM Corporation

By:
Sine Nomine Associates
43596 Blacksmith Square
Ashburn, VA 20147

IBM-2007-04569-E-01
August, 2007
SNA Proprietary – Confidential

z/VSE Roadmap
6 September 2007

Source: Sine Nomine Associates, August 2007

Agenda

1. **Strategy**

2. **Rebranding**

3. **Pricing**

→ **4.** **Future**

§ **Customer Examples**

Summary of Changes over a 12-Month Sample

§ 02/28/2007 - End-of-Service for VSE/ESA V2.7 effective

§ 03/16/2007 - z/VSE V4.1 General Availability

§ 03/16/2007 - SecureFTP PTF for z/VSE available

§ 04/18/2007 - IBM System z9 EC and z9 BC Enhancements

§ 05/18/2007 - IBM TS1120 encrypting tape PTF available for z/VSE V4.1

§ 06/05/2007 - End-of-Marketing for z/VSE V3.1 *announced* (effective 5/31/2008)

§ 06/18/2007 - IBM TS1120 encrypting tape PTF available for z/VSE V3.1

§ 07/10/2007 - IBM TS3400 Tape Library attachment to System z

§ 08/07/2007 - End-of-Service for z/VSE V3.1 announced (effective 7/31/2009)

§ 08/09/2007 - DL/1 enhancement (up to 10 datasets for HD databases) available

§ 10/09/2007 - z/VSE V4.2 Preview

§ 10/09/2007 - Encryption Facility for z/VSE V1.1 announced (available 11/30/2007)

§ 10/10/2007 - SCRT V14.2 available for z/VSE V4.1

§ 11/14/2007 - IBM DB2 Server for VSE & VM V7.5 announced (available 11/30/2007)

§ 11/30/2007 - z/VSE V4.1.1 available

§ 01/18/2008 - z/VSE V3.1.3 available

§ 02/26/2008 - IBM System z10 Enterprise Class

à **There is VSE related news every 3 weeks, on average !!!**

z/VSE: Looking ahead
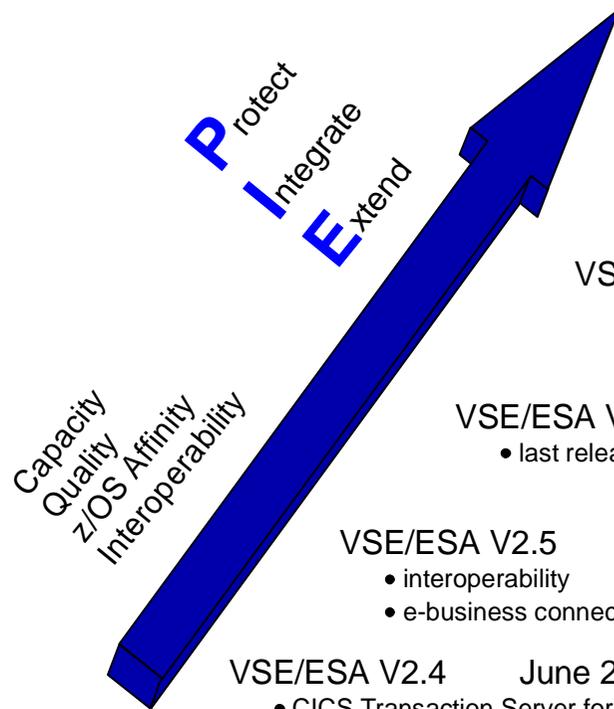
z/VSE V4.2 - Preview Oct 9, 2007
- **More tasks, more memory**
- **EF for z/VSE, SCRT on z/VSE**
- **SoD** for CICS/VSE**

z/VSE V4.1   March 16, 2007
- z/Architecture only
- 64-bit real addressing
- MWLC full & sub-cap pricing

z/VSE V3.1*   March 4, 2005
- zSeries features, FCP/SCSI
- 31-bit mode only

VSE/ESA V2.7   March 14, 2003
- enhanced interoperability
- ALS2 servers only

VSE/ESA V2.6   Dec 14, 2001
- last release to support pre-G5 servers

VSE/ESA V2.5   Sept 29, 2000
- interoperability
- e-business connectors

VSE/ESA V2.4   June 25, 1999
- CICS Transaction Server for VSE/ESA
- e-business

Protect **I**ntegrate **E**xtend

Capacity Quality z/OS Affinity Interoperability

- Note: z/VSE V3 can operate in 31-bit mode only. It does not implement z/Architecture and specifically does not implement 64-bit mode capabilities. z/VSE V3 is designed to support selected features of IBM System z hardware.
** All statements regarding IBM's plans, directions, and intent are subject to change or withdrawal without notice.

z/VSE Next

No change to PIE Strategy !

§ **z/VSE V4.2 - previewed Oct-9-2007**
- ► **Planned availability: 4Q2008**
- ► **IBM System z10 EC, z9 EC and z9 BC servers**
- ► **IBM eServer zSeries 990, 890, 900, 800 servers**
- ► **Up to 32 GB real processor storage**
- ► **More than 255 tasks to enable growth**
- ► **Sub-Capacity Reporting Tool (SCRT) integrated**
- ► **Support for TS3400 Tape Library and TS7740 Virtualization Engine**

§ **CICS TS for z/VSE**
- ► **Statement of Direction (SoD)**: z/VSE V4.2 is planned to be the last release to offer CICS/VSE.**

§ **And much more ...**
- ► **Wait for full product announcement!**

IBM System Storage and TotalStorage

Linux on System z (IFL engines)

Connectors

z/VSE V4 (std CP engines)

CICS Transaction Gateway ECI
HOD/HATS
DB2 Connect™ / DB2 UDB DRDA®
WebSphere MQ
VSE e-business connectors
VSE SOA Web services

LPAR or z/VM

IBM System z9

LPAR or z/VM

Clients **Business services** **Trans/Data services**

** All statements regarding IBM's plans, directions, and intent are subject to change or withdrawal without notice.

Recent Press Reaction

CNNMoney.com

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http://money.cnn.com/news/newsfeeds/articles/marketwire/0317343.htm

IBM Continues the Evolution of Its z/VSE Mainframe Operating System

October 19, 2007: 08:01 AM EST

marketwire

IBM (NYSE: IBM) today announced that the z/VSE mainframe operating system is being updated to help address customer needs for scalability, security and integration. z/VSE V4.2 is designed to support growing mainframe applications and drive stronger investment protection.

"Many customers are beginning to put new Linux applications on the same IBM System z9 mainframe that also runs their production z/VSE applications. This integrated approach is designed to offer the best of Linux, the robust data serving capabilities of z/VSE, and the potential for low total cost of ownership of the System z9 mainframe," said Dr. Klaus Goebel, Development Executive Project Manager and z/VSE PDT Leader. "IBM's powerful mainframe virtualization system, z/VM, is fundamental to these integrated environments. It helps customers get the most from their Linux and z/VSE applications, integrate their business, and support business growth."

Previewed at a special international meeting of the GUIDE SHARE EUROPE (GSE) mainframe user group earlier this week, z/VSE enhancements include a range of new features, especially important to modern applications, such as on-line commerce. Capabilities include:

-- More z/VSE tasks and more real storage designed to improve scalability

and many more, e.g.	§ Wall Street Journal
§ yahoo.com	§ news.moneycentral.msn.com
§ pressebox.de	§ marketwatch.com
§ verivox.de	§ businessweek.com
§ boerse-go.de	§ smartmoney.com, etc. etc.

heise online — Arkeia Software präsentiert seine ...

news 19.10.2007 16:37

IBM verspricht Weiterentwicklung von z/VSE

Immer mehr Anwender der IBM-Mainframes setzen nicht nur Linux ein, sondern lassen ihre Linux-Applikationen in einer virtuellen Maschine auf dem Großrechner laufen. Diesen Trend zur Konsolidierung sieht jedenfalls Dr. Klaus Göbel, Leiter des z/VSE-Produktentwicklungsteams. Darum soll die für das vierte Quartal 2008 erwartete nächste Version des Betriebssystems mehr parallele VSE-Tasks und mehr Hauptspeicher unterstützen. Zudem will man Linux-Anwendungen besseren Zugriff auf z/VSE-Daten

The New York Times — Sunday, October 21, 2007 — Research

WORLD | U.S. | N.Y./REGION | BUSINESS | TECHNOLOGY | SCIENCE | HEALTH | SPORTS | OPINION | ARTS | STYLE | TRAVEL | JOBS | REAL E

International Business Machines   IBM (nyse) $112.26   ▼ $-2.52 -2.20%

IBM Continues the Evolution of Its z/VSE Mainframe Operating System

BOEBLINGEN, GERMANY, Oct 19, 2007 (MARKETWIRE via COMTEX) -- IBM (IBM) today announced that the z/VSE mainframe operating system is being updated

COMPUTERWOCHE.de

http://www.computerwoche.de/nachrichten/582317/

NACHRICHTEN

Totgesagte leben länger: IBM entwickelt VSE weiter

19.10.2007 um 15:50 Uhr

Der Investitionsschutz lebe hoch: IBM hat angekündigt, das "Legacy"-Großrechnerbetriebssystem z/VSE weiterzuentwickeln.

Die neue Version z/VSE 4.2 ist einer IBM-Pressemitteilung allerdings erst in rund einem Jahr (Q4/2008) generell verfügbar. Sie soll dann mehr Tasks und realen Storage unterstützen, eine Verschlüsselungseinrichtung (Encryption Facility) beinhalten und last, but not least Intregration mit Linux auf System z bieten. Damit sollen Kunden z/VSE-Produktionsdaten in neuen Linux-Anwendungen - etwa Data Warehouses mit DB2 UDB - übernehmen können. Vorgestellt wurden die Verbesserungen in dieser Woche auf einer internationalen Tagung der Mainframe-Usergroup Guide Share Europe (GSE). (tc)

Agenda

1. **Strategy**

2. **Rebranding**

3. **Pricing**

4. **Future**

§ **Customer Examples**

New z/VSE Reference Customers

As a reference available:

- **Wessels & Müller, Germany**
  - z9 BC w/ z/VSE V3, IFL, DB2 UDB
- **Häfele, Germany**
  - z9 BC w/ z/VSE V4, ESS
- **Bau Rechenzentrum, Germany**
  - z9 BC w/ z/VSE V4, DS6000
- **WM Gruppe, Germany**
  - z9 EC w/ z/VSE V3, DB2, DL/1
- **Hypo Real Estate Systems, Germany**
  - z9 BC w/ z/VSE V3, DS8000, TSM
- **American Stock Transfer & Trust, USA**
  - z9 BC w/ migration from DB2 on VSE/ESA to DB2 UDB on Linux
- **Calkins Media, USA**
  - z890 w/ z/VSE V4, ESS, HATS
- **Fratelli Carli, Italy**
  - z9 BC w/ z/VSE V4, IFL, RHEL, DS8000, DB2 UDB

With case study published:

- **Scheidt & Bachmann, Germany**
  - z9 BC w/ z/VSE V4, DS6000, PoC for IFL
- **Rheinland Versicherung, Germany**
  - z890 w/ z/VSE V3, IFL, DB2, Oracle
- **Edeka Rhein-Ruhr, Germany**
  - z9 BC w/ z/VSE V3, IFL, DB2 UDB
- **Brunata, Germany**
  - z9 BC w/ z/VSE V4, IFL, DB2 UDB
- **GE Money Bank, Switzerland**
  - z890 w/ z/VSE V3, AFP, Macro4
- **Pulsen, Sweden**
  - z9 BC w/ z/VSE V3, 2xIFL, DB2 UDB
- **Securex, Belgium**
  - z9 BC w/ z/VSE V3, IFL, DB2 UDB, BEA Weblogic, WebSphere MQ
- **Alcad, Slovenia**
 - z9 w/ z/VSE V4, IFL, DB2 UDB, SOA, RAD, WDz, WAS, WS Process Server

Securex, Belgium:
Migration from DB2 on VSE to DB2 on Linux on System z

production lpar1   production lpar2   test lpar   accept lpar   system lpar

VM lpar   lnxprd0   lnxtst0   lnxacc0   lnxsys0

lnxtst1   lnxacc1

weblogic prod   .net prod   weblogic test   .net test   weblogic accept   .net accept

Other   QUEST SOFTWARE   SAS   Health Center   webMethods   DBVisualizer
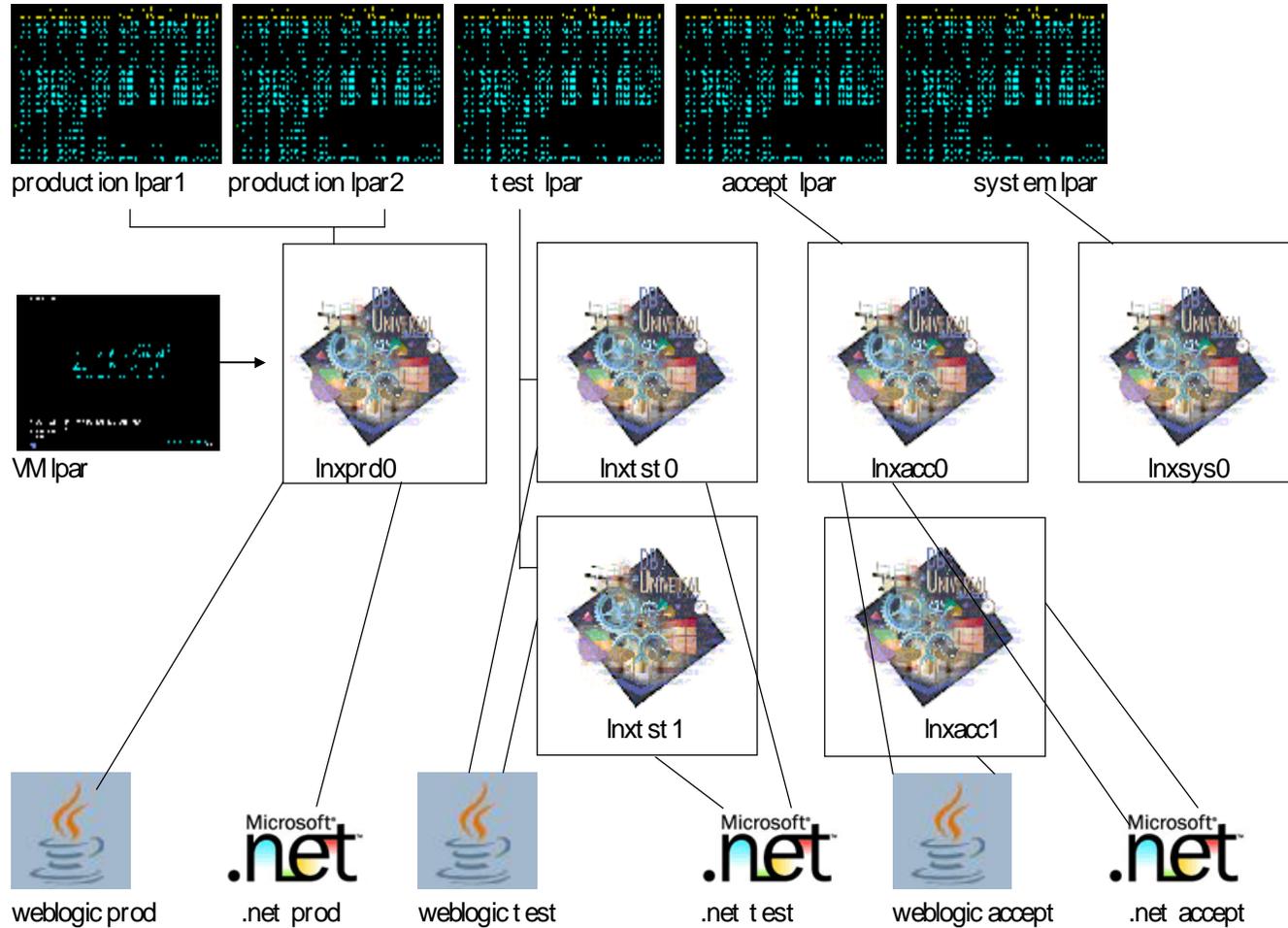
Alcad/Impol, Slovenia: SOA with z/VSE and Linux

Services

§Host Batch VAG

§Host EGL

External Services

VisualAge Generator
EGL
Cobol

IBM *e*server zSeries software

$ LME (London Metal Exchange) to get Exchange Rate and AI price

Services

§RAD (SMS, Mail, trends)

WebSphere. software

WAS
WSAD, RAD

impol industrija aluminija

z9 BC
z/VSE V4.1
SuSE SLES V9

Bladecenter

iSeries
Sirena

Rational. software

WS Business Modeler
WS Integration Developer
WS Process Server
WS Business Monitor
WS Portal

DB2 UDB
DB2 VSE
DB2 OLAP

RAD + EGL
Rational Rose XDE
Developer plus

DB2. Information Management Software

Email from batch or CICS

Virtual Tape

redhat **version 5** zLinux Java application running on Tomcat

AFP / PSF via IPaddress

CICS TS web SOA via HiperSockets

Production Environment

300 files every day transfered to different operating systems (zLinux, Linux, Microsoft)

FTP

VSE Navigator

z/VSE w/ TCP/IP 1.5E

z/VSE Health Checker

DB2 UDB zLinux applications

VSAM Redirector Server via HiperSockets to zLinux DB2 and via Vswitch OSA QDIO to SQL Server

TCP/IP 1.5E only for Telnet applications

Every day 240,000 CICS transactions from 400 Telnet connections

Microsoft SQL server

38

the leading producer of premium olive oil sold directly to consumers

SCHEIDT&BACHMANN SB

search...

Systems for Car Parks and Leisure Centres | Fare Collection Systems | Systems for Petrol Stations | Systems for Signal Technology

Systems for a mobile world

Black Belt Success Story: Scheidt & Bachmann

VSE/ESA 2.2 on **9121-411** w/ **ESS** à **z/VSE 4.1** on **z9 BC A01** w/ **DS6800**

z/VSE and z/VM Customer Conferences in 2008

§ **GSE German Working Group in Bonn (Germany), April 7-9, 2008**
  - ► **Approx 100 attendees, German speaking audience**

§ **WAVV in Chattanooga (Tennessee), April 18-22, 2008**
  - ► **Approx 250 attendees, mainly from the US**
  - ► **This is the prime conference for VM/VSE and Linux within AG**

§ **European IBM System z Technical Conf. in Dresden (Germany), May 5-9, 2008**
  - ► **Approx 500 attendees, mainly from Europe, thereof approx 80-100 for VM and VSE**
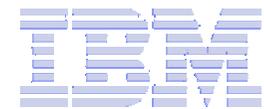
§ **IBM System z EXPO in Las Vegas (Nevada), Oct 13-17, 2008**
  - ► **Expect approx 1000 attendees, worldwide, thereof approx 100-200 for VM and VSE**

§ **GSE European Working Group in Leipzig (Germany), Oct 27-29, 2008**
  - ► **Expect approx 200+ attendees, mainly from Europe**
  - ► **This is going to become the prime conference on VM/VSE and Linux within Europe**

§ **German IT Manager Summit in Bad Reichenhall (Germany), Nov 27-28, 2008**
  - ► **Expect approx 70-80 attendees, German speaking decision makers**

z/VSE Live Virtual Classes in 2007/08

§ z/VSE V4 and MWLC Announcement Overview
§ Midrange Workload License Charges (MWLC)
§ z/VSE V4.1 Solutions based on SOA and DB2
§ z/VSE Security
§ z/VSE V4.1 User Experience
§ IBM System z Hardware
§ New VSAM Tools
§ Bringing You up to Date with z/VSE V4
§ z/VSE Wellness
§ Encryption Facility for z/VSE
§ DB2 for z/VM and z/VSE V7.5
§ Modern Application Development for z/VSE
§ Live Demo of WebSphere Developer for System z

§ + more planned …

§ typically set for Thursday, 5:00 – 6:00 pm

Note: Charts are available on the z/VSE web site the day following each call. Replay available approximately one week later. For more information, please see the z/VSE web site at:

http://www-03.ibm.com/servers/eserver/zseries/zvse/

Summary: Exploiting the Best of all Worlds
with System z, z/VM, z/VSE, Linux, System Storage, and IBM Middleware
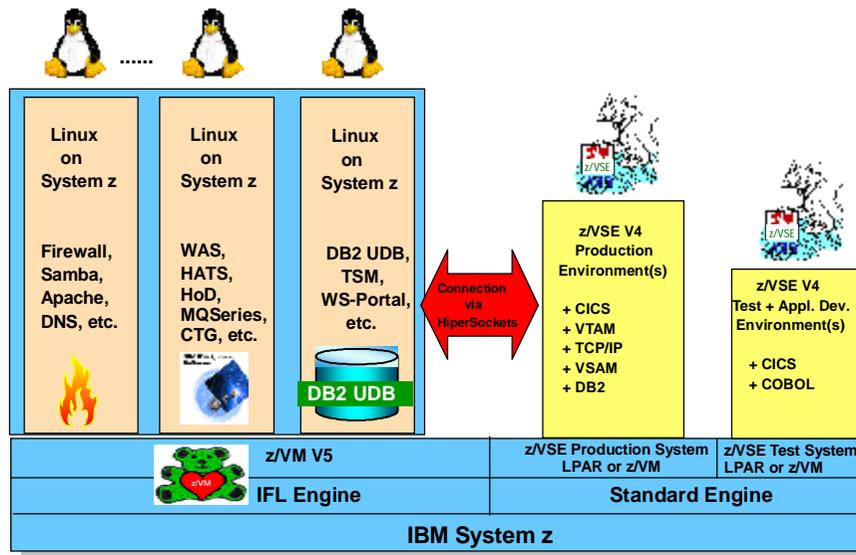
§ z/VSE V4

- ►Protect core IT investments thru PIE
- ►Robust, secure enterprise server
- ►Cost-effective solutions
- ►Interoperability with network / servers
- ►Highly improved price / performance

§ z/VM V5

- ►Highly flexible, industrial strength
- ►Advanced virtualization
- ►Multiple z/VSE and Linux images
- ►Designed to exploit System z9

§ Linux on System z

- ►Large portfolio of new applications
- ►Platform for IBM middleware
- ►Infrastructure Simplification
- ►Massive scalability / consolidation

Questions ?

Feel free to contact the z/VSE team in the Lab in Boeblingen via:

tmcc@de.ibm.com   **– for technical sales support**
boebc@de.ibm.com   **– for briefings and proof of concept**
zvse@de.ibm.com   **– for z/VSE consulting and Q&A**

Appendix: For more Information go to ...

Information Resources (1 of 2)

§ **z/VSE**

► **Homepage:** ibm.com//servers/eserver/zseries/zvse/

► **Solution components:** ibm.com/servers/eserver/zseries/zvse/solutions/

► **Presentations:**
ibm.com/servers/eserver/zseries/zvse/documentation/presentations.html

► **Redbooks:**
ibm.com/servers/eserver/zseries/zvse/documentation/redbooks.html

► **News & announcements:**
ibm.com/servers/eserver/zseries/zvse/news/index.html

► **Downloads:** ibm.com/servers/eserver/zseries/zvse/downloads/

► **Consulting and Q&A:** zvse@de.ibm.com

Information Resources (2 of 2)

§ **Optimizing IT**

►**Web page:** ibm.com/systems/optimizeit

►**Master Sales kit with presentation and sub-theme sales kits:**
ibm.com/PartnerWorld/sales/systems/myportal/_s.155/254?navID=f220s240
&geoID=All&prodID=IBM+Systems&docID=OITmk.skit&docType=SalesKit&
skCat=DocumentType

§ **Linux on System z**

►**Web page:** ibm.com/systems/z/linux

►**Sales kit:**
ibm.com/PartnerWorld/sales/systems/myportal/_s.155/307?navID=f220s240
&geoID=All&prodID=IBM%20Systems&docID=zlinuxsk.skit&docType=Sales
Kit&skCat=DocumentType

►**Software Vendor Products for Linux on IBM System z:**
ibm.com/systems/z/solutions/isv/linuxproduct.html