

System z Expo

October 13 – 17, 2008 – Las Vegas, Nevada



z/VSE in the Elevator

Session ID: zEG07

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

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All customer examples cited or described in this presentation are presented as illustrations of the manner in which some customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will vary depending on individual customer configurations and conditions.

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Objective

**Learn
Everything
You needed to know about z/VSE**

And tell others about it !



IBM Böblingen Research & Development Center

The Home of z/VSE and Linux on System z



The Difference between Perception ...

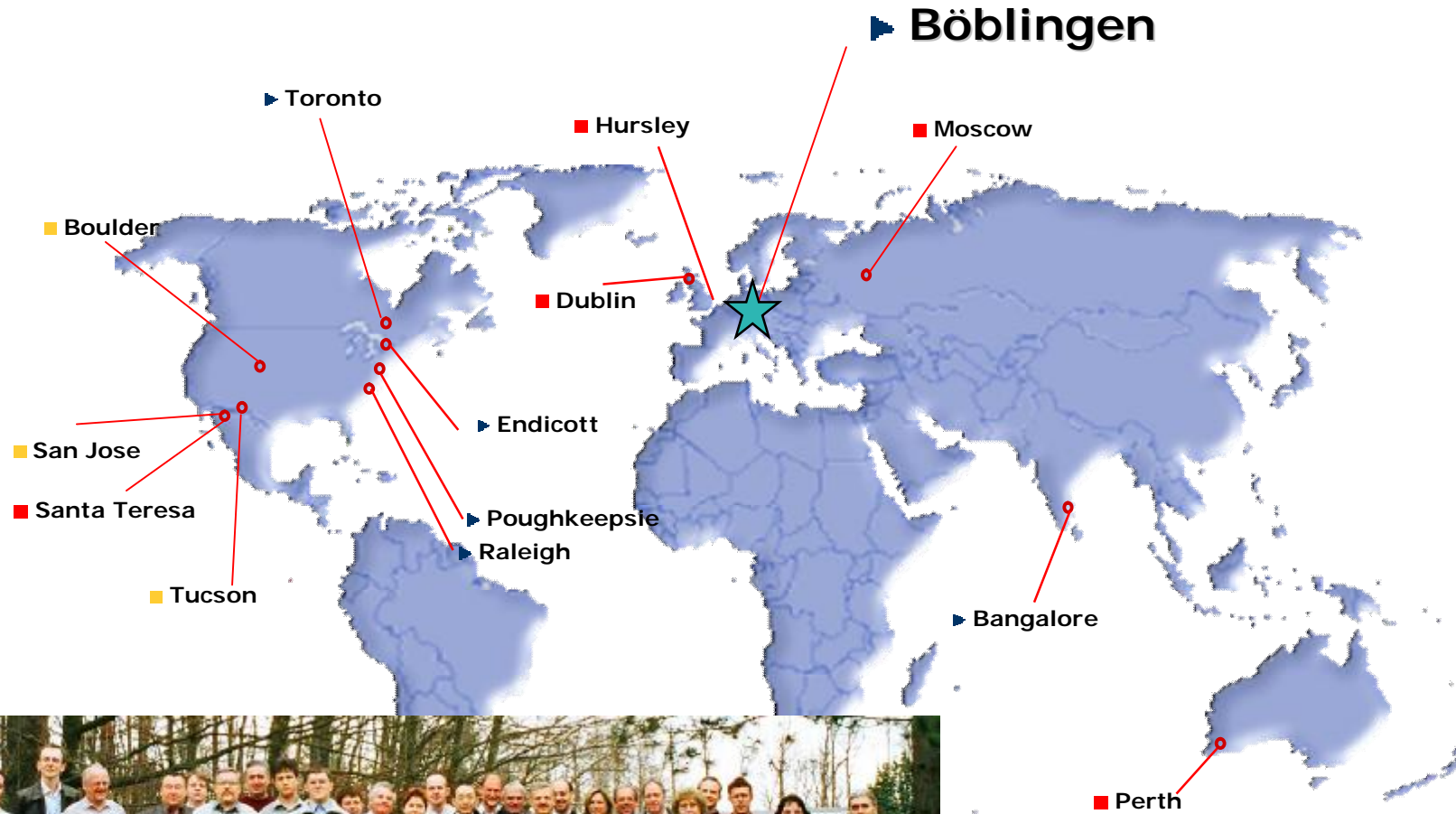


... and Reality

Your Friends, the z/VSE Development Team



The most important z/VSE Centers Worldwide



- ▲ Research
- Hardware Development
- Software Development
- ▶ Hardware and Software Development

40+ Years of IBM Mainframe and z/VSE Heritage

§ S/360->S/370->4300->9370->ES9000->S/390->zSeries->System z9

§ **DOS/360**->DOS/VS->DOS/VSE->(SSX)->VSE/SP
->VSE/ESA V1->VSE/ESA V2->z/VSE V3->**z/VSE V4**

§ S/360 Model 30

- ▶ 30 KIPS (.03 MIPS)
- ▶ 16 – 64 KB

§ DOS/360

- ▶ 1 batch partition
- ▶ basic, but lovable

§ System z9 BC

- ▶ 26-480 MIPS (1-way)
- ▶ 8 – 64 GB

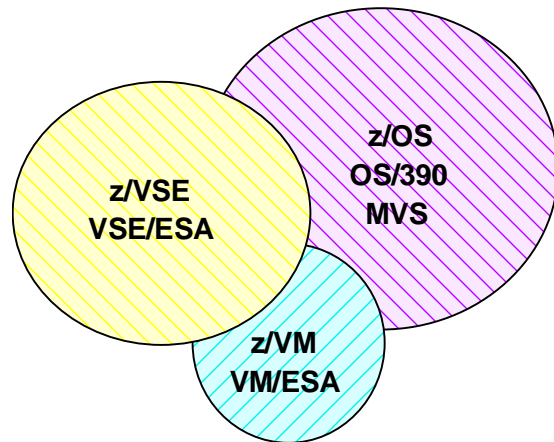
§ z/VSE V4

- ▶ Batch and OLTP
- ▶ SOA
- ▶ still lovable



Operating Systems on IBM System z

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



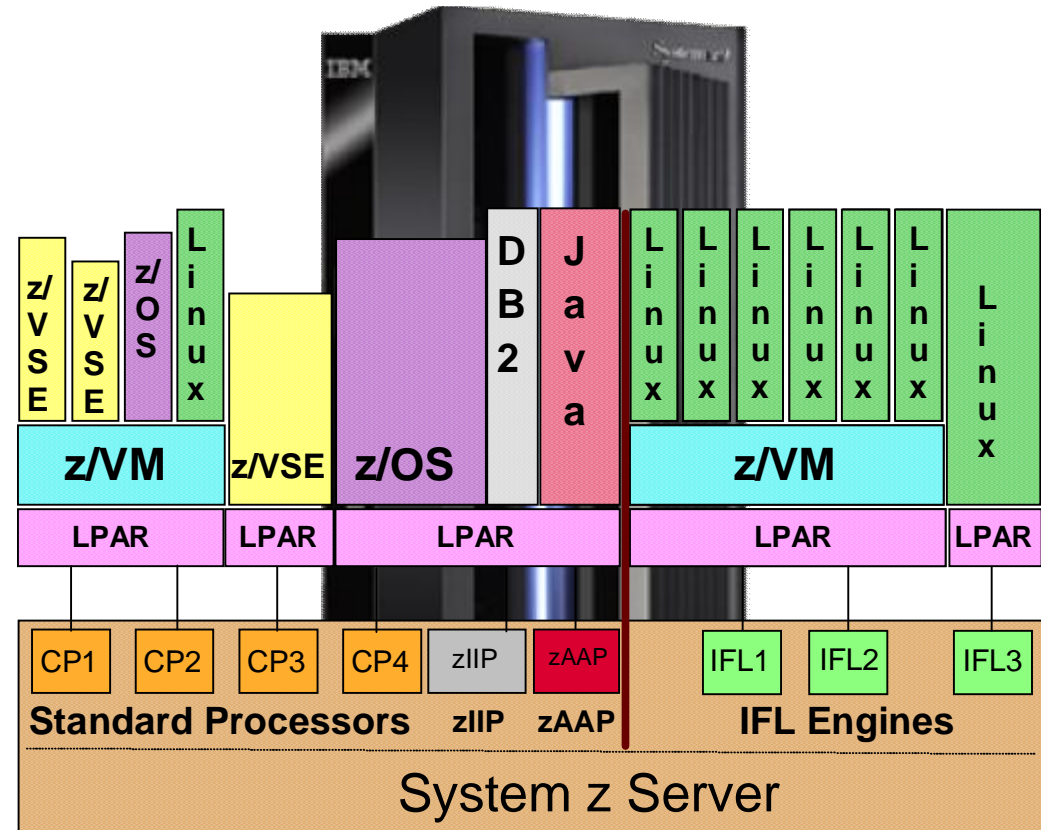
§ VSE* population is 40% in US, 40% in Europe, 20% in RoW

§ 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.



Typical VSE Customer

What is VSE?

- § Traditional mainframe operating system, similar to z/OS but smaller and simpler
- § Less capacity, availability, security; no Unix system services
- § Designed for smaller accounts with less demanding needs

Why do customers use VSE?

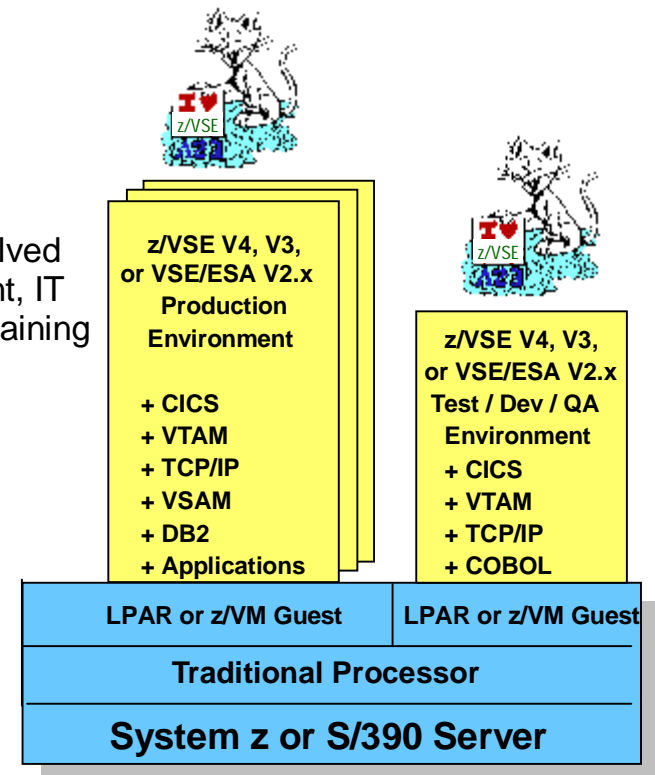
- § Cost-efficient, high performance, robust (almost no downtime)
- § Customers have a significant cumulative investment in proven, highly evolved homegrown core VSE application code (CICS and batch), data, equipment, IT skills, company & industry expertise, business processes, and end-user training
- § History – familiarity, comfort, confidence

What are VSE customer's biggest concerns?

- § **Applications!!** (no Java, WAS, Tivoli, Lotus, SAP, Oracle, etc.)
- § **Cost!!** (or at least the perception of high mainframe costs)
- § **Skills!** (especially availability of new mainframe skills)
- § **Future!** (vitality of VSE key components and products)

Why not just migrate to another platform?

- § Cost, time, risk, lost opportunity – not an easy task
- § z/OS: cost, skills, benefits perceived to be marginal
- § Unix, Linux, Windows, or i5/OS: complete redesign and rewrite of tailored, homegrown VSE CICS applications often required and/or packaged applications may be costly and not meet customer requirements



Note: The term "VSE" stands for both, VSE/ESA and z/VSE.

Top Concerns of VSE* Customers

→ **1. Applications**



2. Cost



3. Skills



4. Future

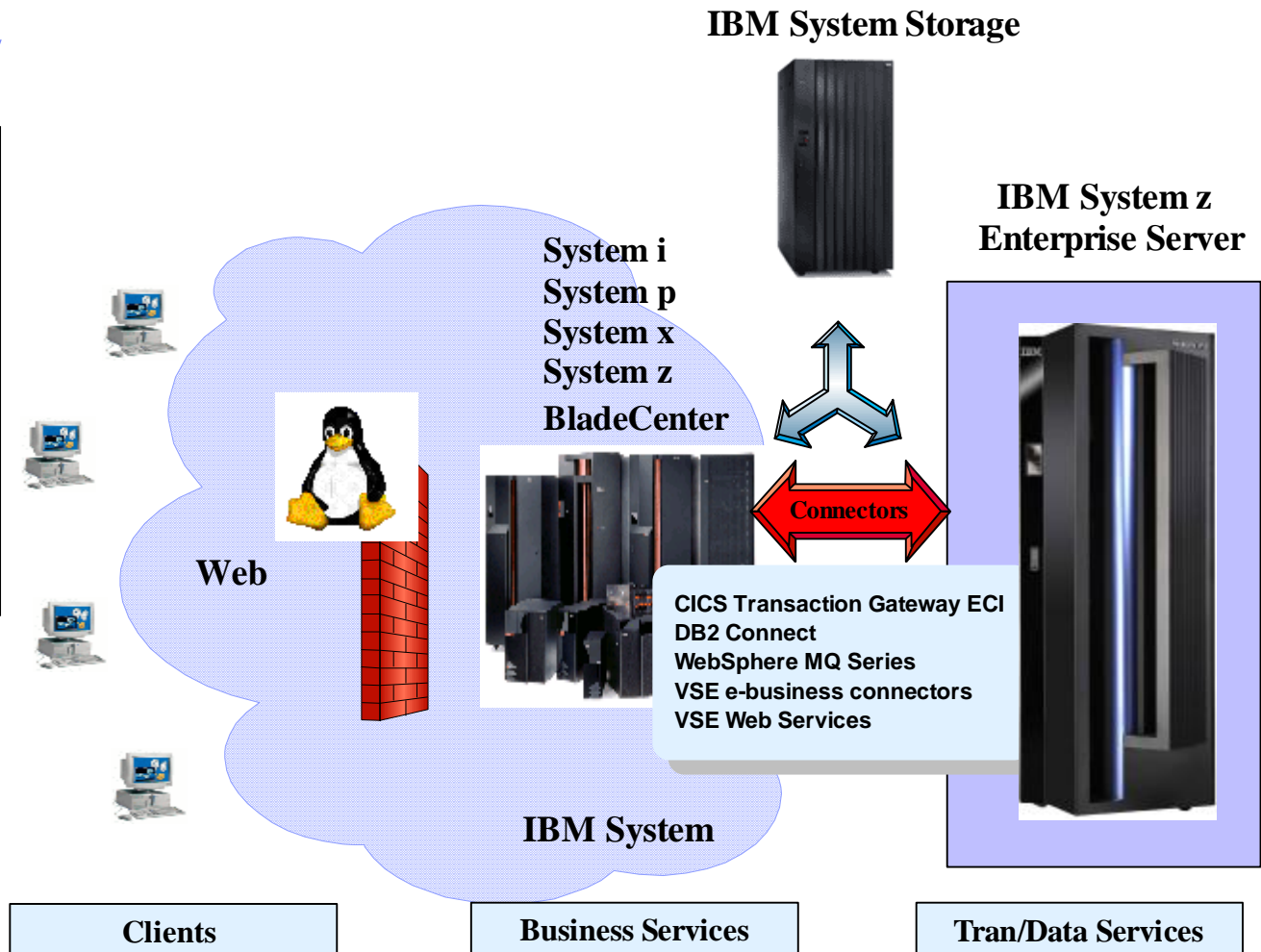


(*) The term "VSE" stands for both, VSE/ESA and z/VSE.

z/VSE Strategy

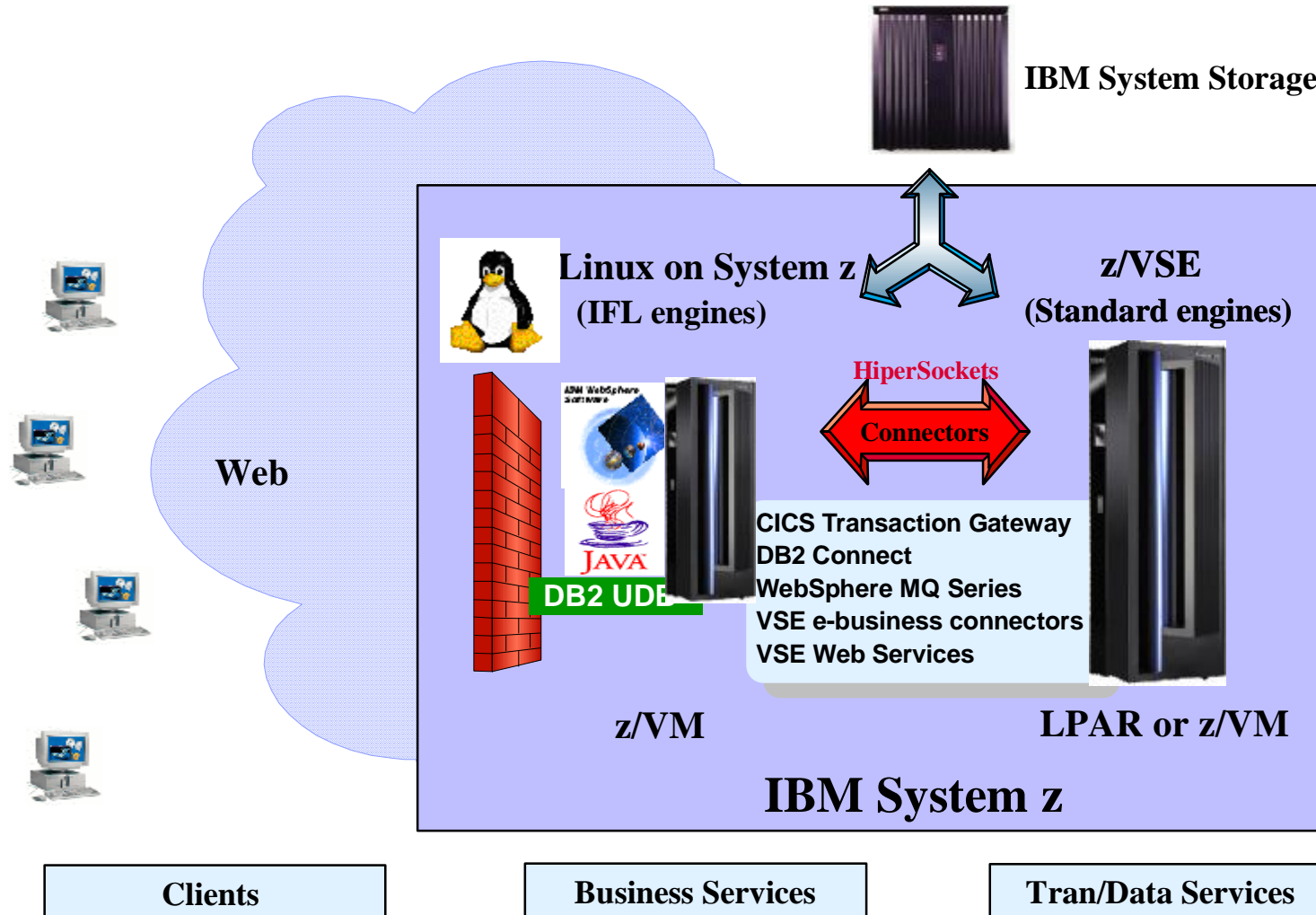
alias

- § 3-tier Strategy
- § Connector Strategy
- § Migration Strategy
- § Coexistence Strategy
- § Linux Strategy
- § **PIE Strategy**



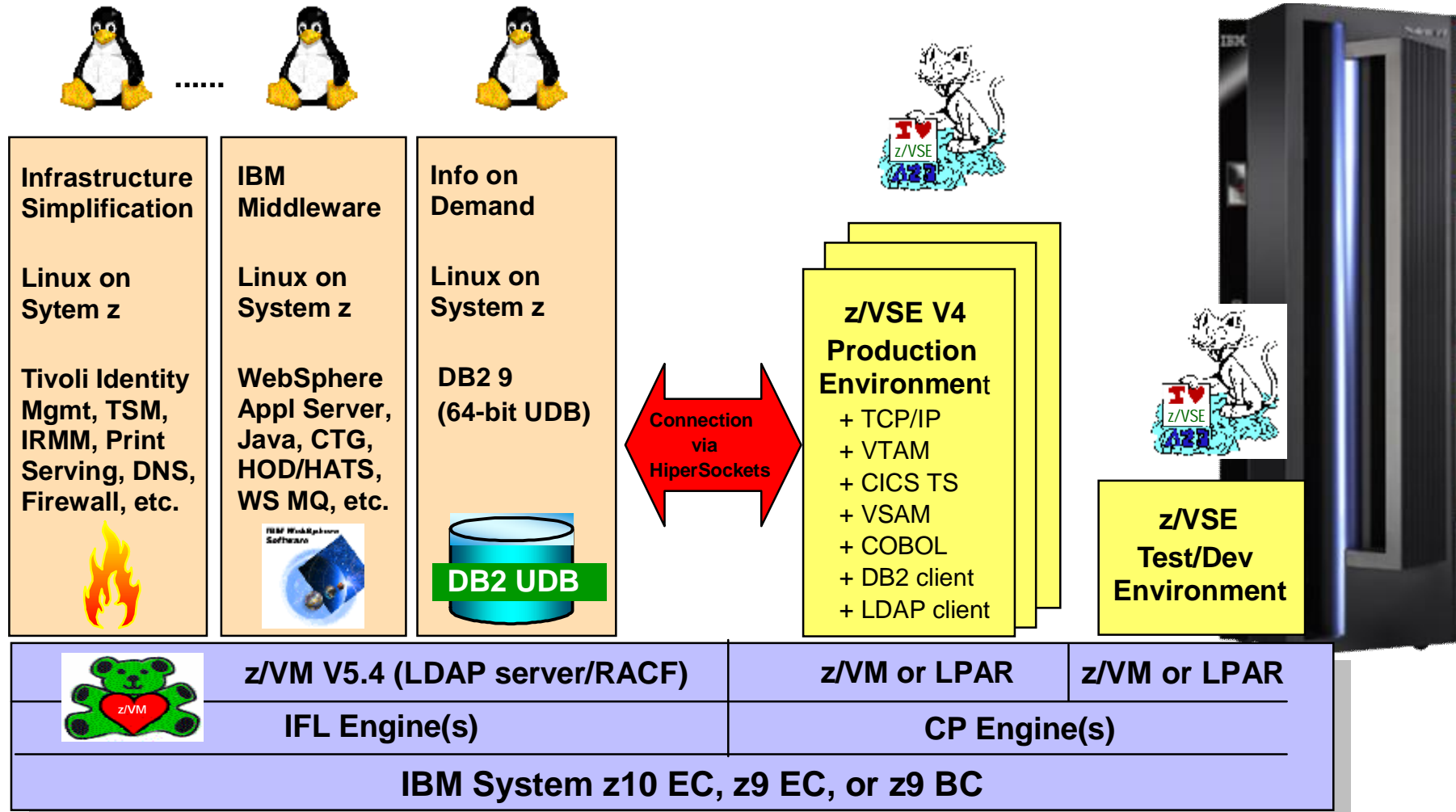
Protect existing VSE investments
Integrate using middleware and VSE connectors
Extend with Linux on IBM System z technology & solutions

z/VSE Strategy with Linux on System z



z/VSE Vision: Hybrid Environment leveraging z/VSE V4, z/VM V5, Linux on System z

- Protect** existing VSE investments
- Integrate** using middleware and VSE connectors
- Extend** with Linux on IBM System z technology & solutions



Top Concerns of VSE* Customers

1. Applications



2. Cost



3. Skills



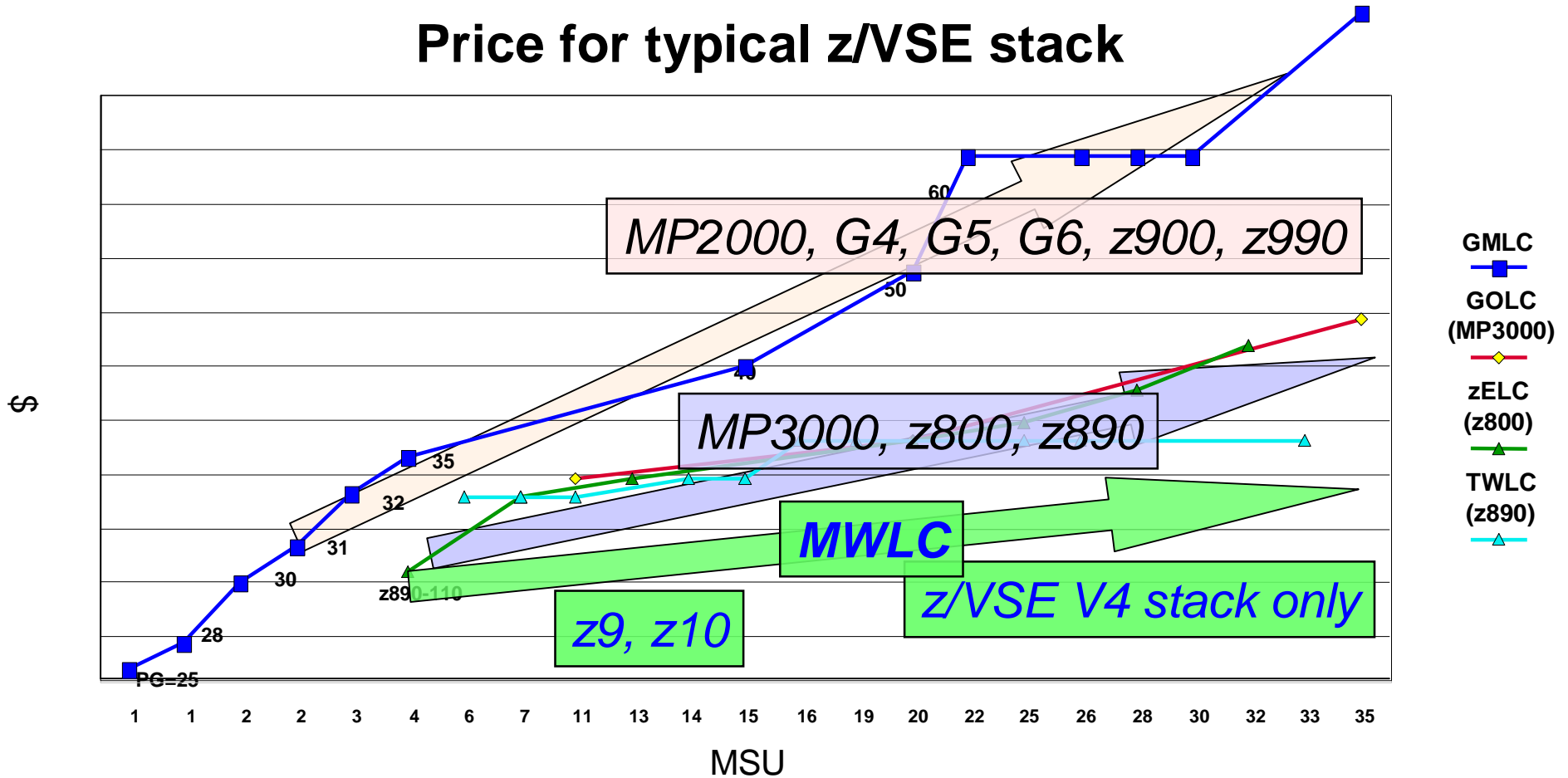
4. Future



(*) The term "VSE" stands for both, VSE/ESA and z/VSE.

MWLC – Midrange Workload License Charge

Price for typical z/VSE stack

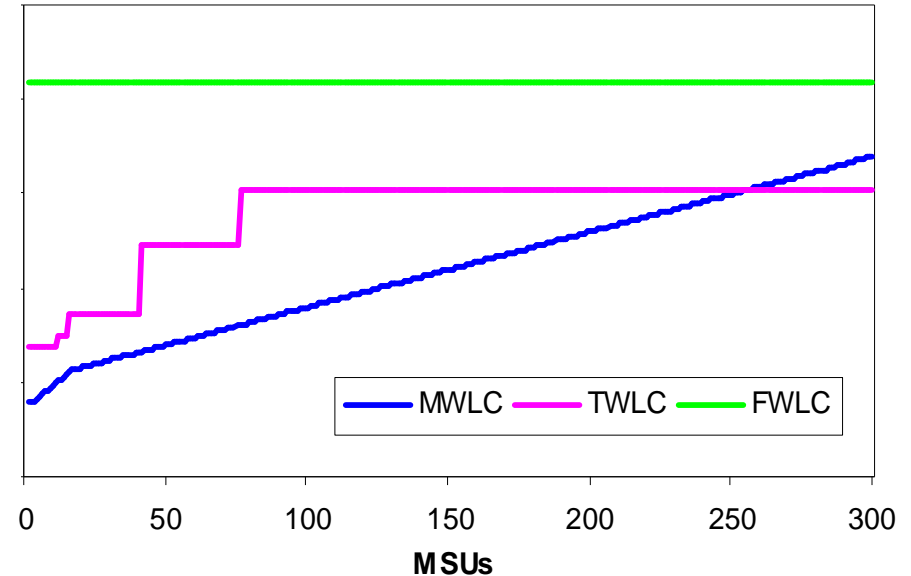


§ “I just got our April software bill from IBM for the first month on our z9 under z/VSE 4.1 and MWLC. We were paying \$22,965 per month on our z800 under z/VSE 3.1.2. The April bill is for the same software and it is \$12,318: a difference of \$10,647 per month.”
Mike Moore, IT Manager, Alabama Judicial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

Improved TCO through new Pricing Metric and Sub-Capacity Pricing with z/VSE V4

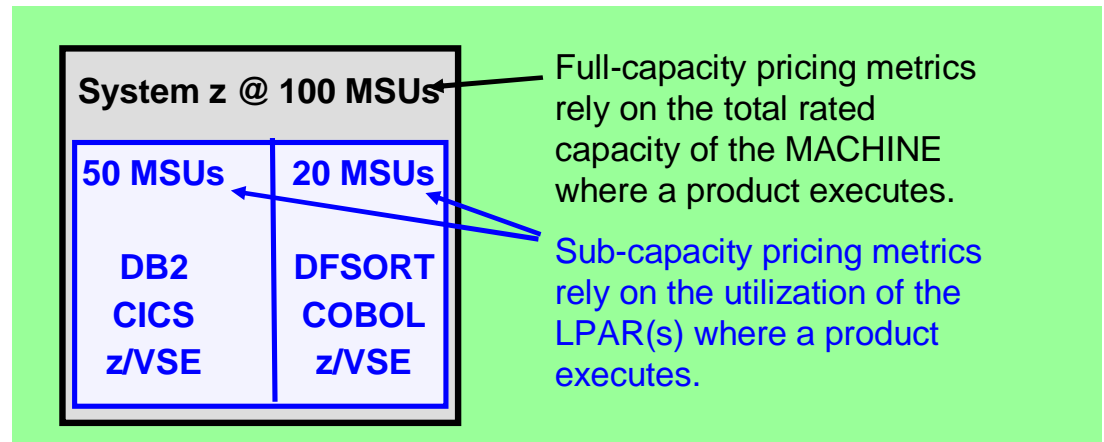
§ z/VSE price/performance through new pricing metric

- ▶ Midrange Workload License Charge (MWLC)
- ▶ MWLC requires current HW (z9* or z10) and z/VSE V4



§ Additional price/performance through sub-capacity option

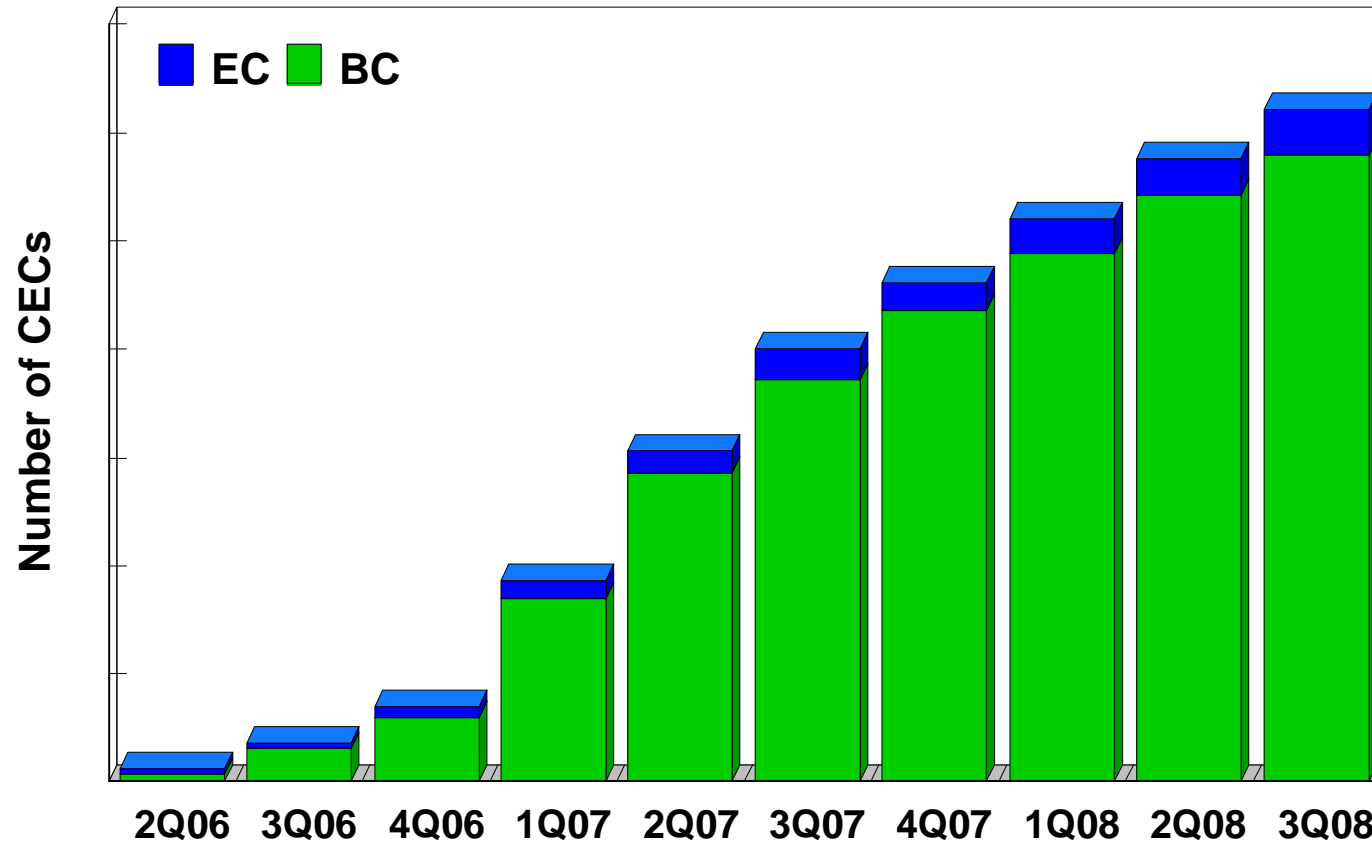
- ▶ Some hardware footprint **consolidations** more attractive now
- ▶ Presence of z/VSE V3 or VSE/ESA™ forces full-capacity pricing



* z9 BC A01 is priced zELC, not MWLC.

MWLC is driving z9/z10 Adoption with z/VSE V4

z9/z10 CECs with z/VSE V4



Top Concerns of VSE* Customers

1. Applications

2. Cost



3. Skills



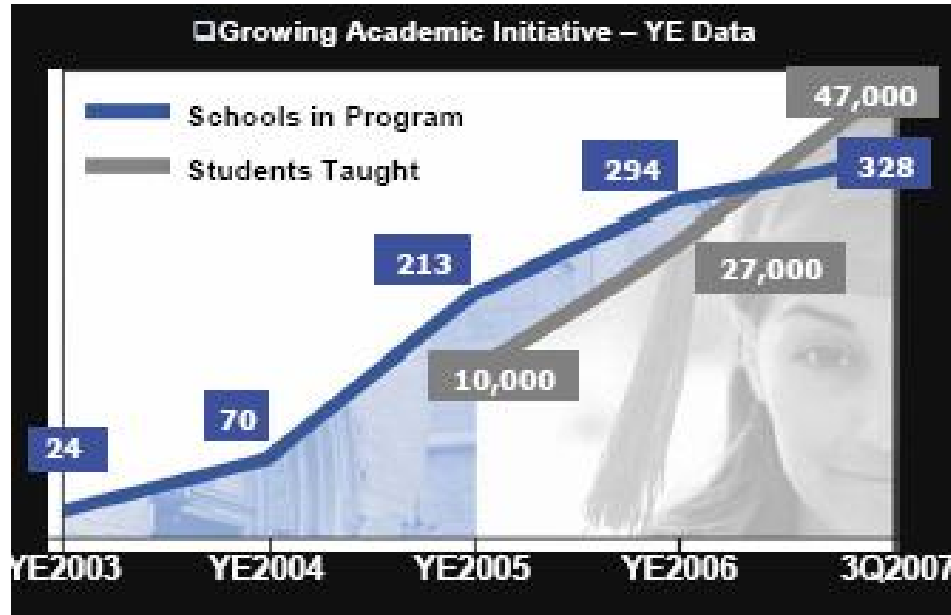
4. Future



(*) The term "VSE" stands for both, VSE/ESA and z/VSE.

Building Skills: IBM Academic Initiative for System z

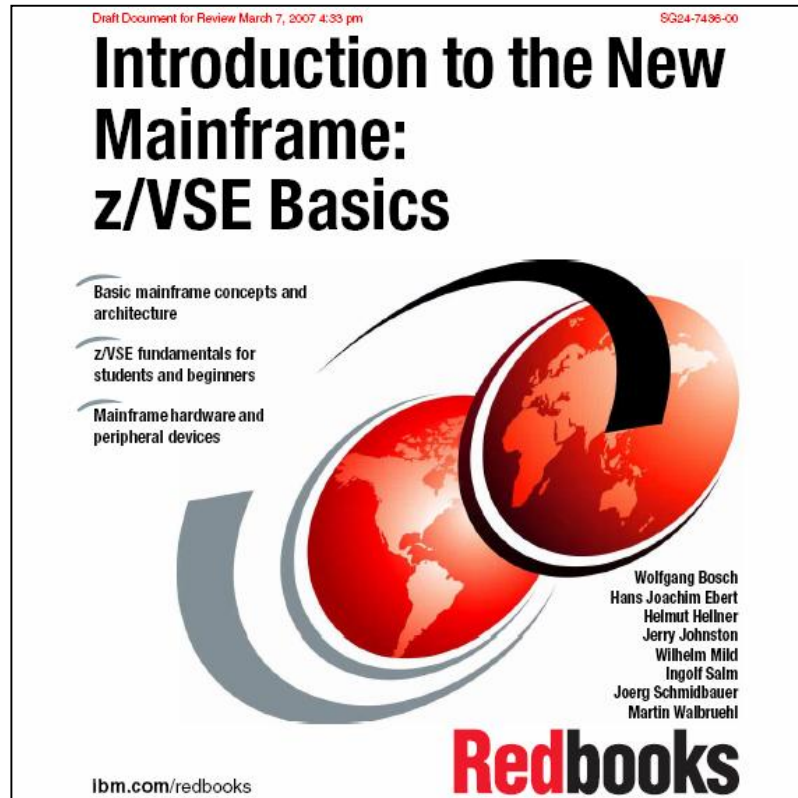
IBM is committed to training 20,000 new students on the mainframe by 2010



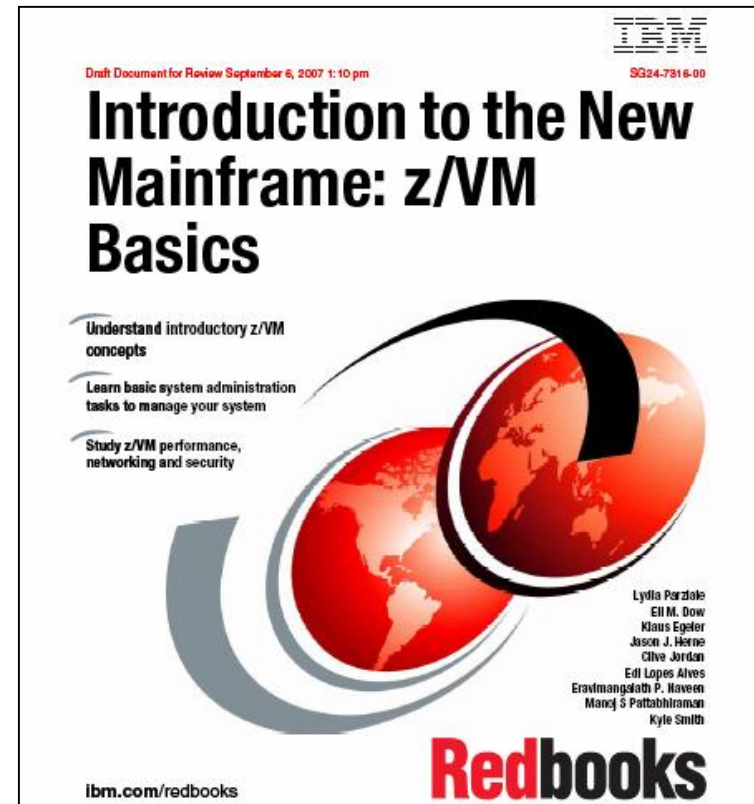
§ Academic Initiative by the numbers:

- ▶ Participation – Over 325 schools registered, over 47,000 students
- ▶ Courses – 21 Courses (10 more coming) & Mastery Exam Certification
- ▶ zCommunity – Running local roundtables with Client / School / ISV
- ▶ Resources – Systems at 6 university HUBs + loaned systems and SW
- ▶ Student MF Contests - >4,500 students, >700 schools ... more coming WW
- ▶ IBM Help – zSkills Help Desk (zskills@us.ibm.com) + over 200 IBM MF ambassadors
- ▶ Assist Professors – Education seminars, Faculty awards
- ▶ www.ibm.com/university/systemz
- ▶ <https://www14.software.ibm.com/webapp/devtool/scholar/web/coursewarePickPage.do?source=ai-course-systemz>

z/VSE and z/VM Beginner's Education



SG24-7436-00



SG24-7316-00

www.redbooks.ibm.com

z/VSE Navigator: Windows-like VSE Interface

File Edit Selected Configuration Functions Help

KEY	FIRMA	TEXT	PLZ
TST010	<-----NEW RECORD	10-----	----
00001	Stinnes-Data-Service GmbH	3	45472
00003	GUILLEAUME-WERK GmbH	5	53229
00004	Zuger Kantonalbank	2	6301
00009	Württembergische Bau BG	4	71032
00013	A.V.U.S. GmbH	3	80339
00014	prego services GmbH	4	66121
00015	Flora Frey GmbH	3	42653
00018	E.ON AG	5	40479
00020	ZF Getriebe GmbH	4	66117
00027	Brunata Wärmemesser GmbH & Co	3	81379
00030	Stadlbauer GesmbH & Co.KG	2	4600
00031	Markenverlag GmbH	4	50968
00037	EnBW Ostwürttemb. DonauRies AG	3	73479
00039	Ravensburger AG	4	88214
00044	SCHNEIDER electronics GmbH		86842
00050	Franz Wiltmann GmbH & Co.KG	5	33775
00051	D M W Datenservice GmbH	4	81377
00053	BG-PHOENICS GmbH	5	80335
00058	Bremer Tageszeitungen AG	3	28195
00060	Steigenberger Rechenzentrum	1	60528
00062	STI	5	36341
00064	Ludwig Schokolade GmbH & Co.KG	5	51469
00066	Motorenfabrik Hatz		94099
00067	Stadtverwaltung Pirmasens	2	66953
00079	Stadtwerke Saarbrücken AG	3	66117
00082	Heidelberger Medien Gestaltung	4	69117

153 row(s) received

0 view(s) loaded | 8 data fields in map

Refresh
Rename
Add ...

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
- § z/VSE Tools – An Overview
- § z/VSE Mid-Year Update – z/VSE V4.2

§ + more planned ... watch z/VSE web site

§ typically set for Thursday, 11:00 am – Noon ET

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/>



Major z/VSE Customer Conferences in 2008

§ 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



§ 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



Top Concerns of VSE* Customers

1. Applications

2. Cost



3. Skills



→ 4. Future



(*) The term "VSE" stands for both, VSE/ESA and z/VSE.

Press on z/VSE Future



- HOME
- NEWS
- MARKETS
- MY PORTFOLIO
- TECHNOLOGY
- JOBS
- PERSONAL FINANCE
- LUX

<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



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:

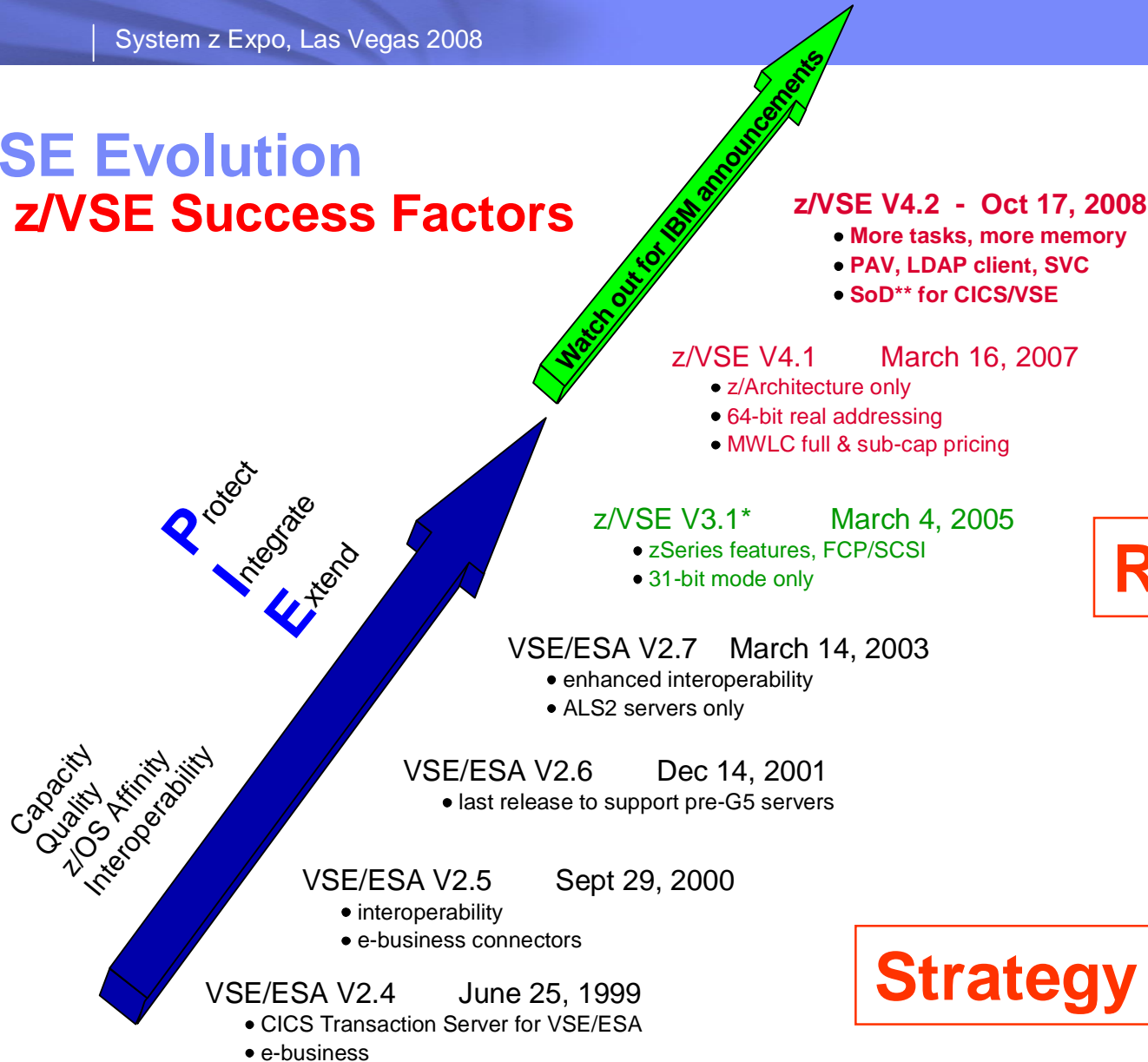
-- More z/VSE tasks and more real storage designed to improve scalability

- | | |
|---------------------|-----------------------------|
| 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. |

The collage features several news snippets:

- heise online:** "Arkeia Software präsentiert seine..."
- CNN Money:** "IBM verspricht Weiterentwicklung von z/VSE". Text: "Immer mehr Anwender der IBM-Mainframes setzen nicht nur Linux ein, sondern lassen ihre Linux-Anwendungen in einer virtuellen Maschine auf dem Großrechner laufen. Diesen Trend zur Konsolidierung sieht jedenfalls Dr. Klaus Goebel, Leiter des z/VSE-Produktentwicklungs-Teams. 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:** "Research". Text: "IBM Continues the Evolution of Its z/VSE Mainframe Operating System".
- COMPUTERWOCHE.de:** "Totgesagte leben länger: IBM entwickelt VSE weiter". Text: "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 Integration 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)"

z/VSE Evolution and z/VSE Success Factors



•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 IBM selected features of IBM System z hardware.

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

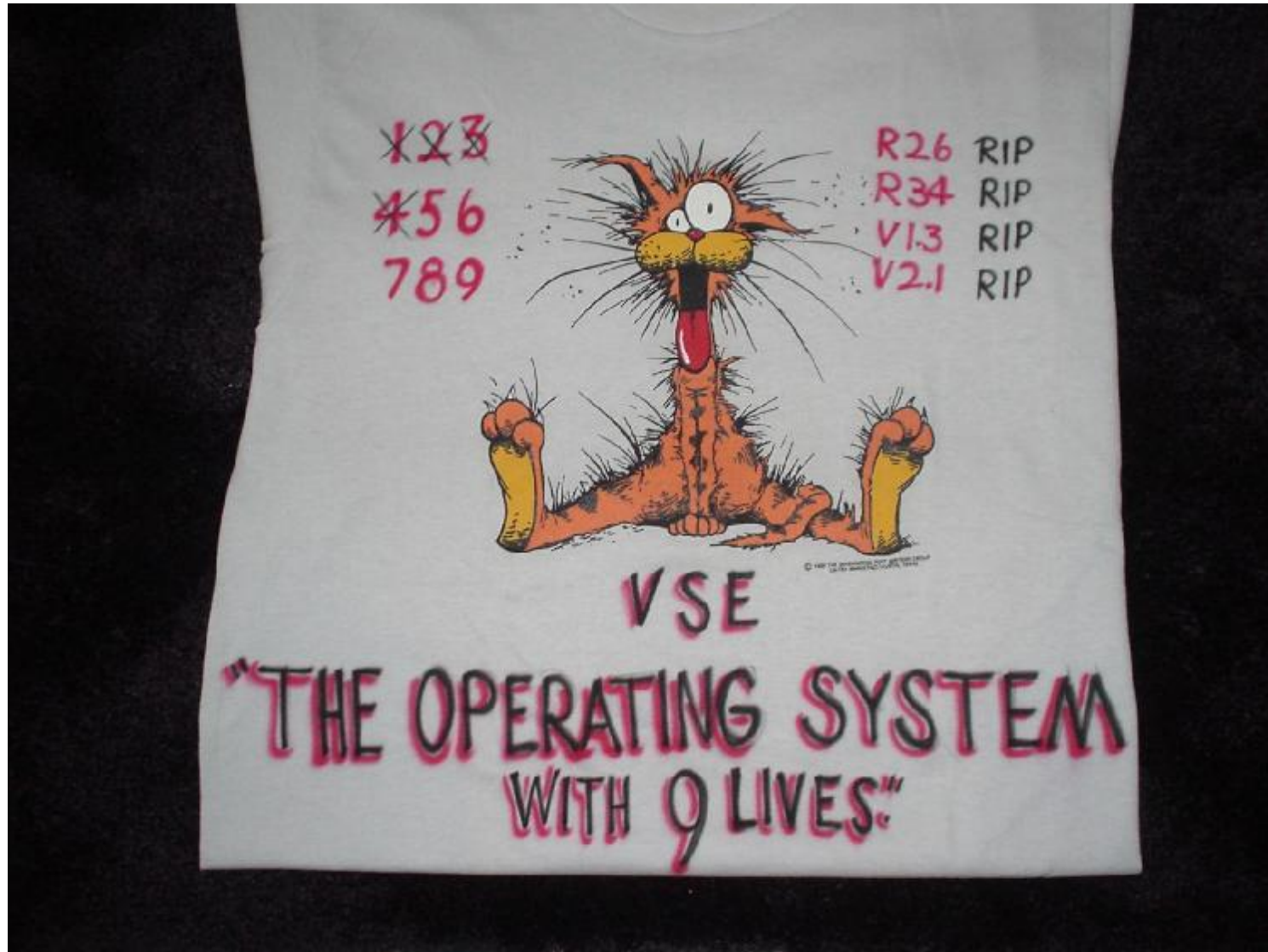
Systems for a mobile world

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**



One more Time: The Difference between Perception ...



.... and Reality



Survived the 25th anniversary, celebrated the 40th birthday

Offers very modern functionality, e.g. SOA, XML, SCSI, SVC, XIV, PAV, LDAP, EF, SSL

... and lots more - to be announced in the future !

Preparing for the Half Century Anniversary Party in 2015 !

For more information, please see the z/VSE web site:
<http://www-03.ibm.com/servers/eserver/zseries/zvse/>

IBM: z/VSE Operating System - Mozilla Firefox: IBM Edition

File Edit View History Bookmarks Tools Help

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

United States [change]

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Welcome Mr. Gerald Johnston [Not you?] [IBM Sign in]

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z/VSE

z/VSE is designed to help provide robust, cost-effective solutions for customers with a wide range of capacity needs, in most industries, worldwide. z/VSE is built on a heritage of ongoing refinement and innovation that spans four decades. It brings the value of innovative IBM System z and IBM System Storage technology to VSE clients.

Learn more

→ [About VSE](#)

→ [News](#)

→ [History of VSE](#)

We're here to help

Easy ways to get the answers you need.

E-mail us

Mark your calendar

IBM Systemz Expo:
October 13-17, 2008
Las Vegas, NV, USA

→ [Register now](#)

Attention System z Infoprint software users

→ [Get information on development and support of System z Infoprint software products.](#)

Announcing

Announcing z/VSE V4.2

Built on a heritage of ongoing refinement and innovation that spans four decades

z/VSE V4.2 Availability Announced

z/VSE Version 4 Release 2 (z/VSE V4.2) is the latest in the ongoing evolution of z/VSE. z/VSE V4.2 continues the z/VSE focus on scalability, security, interoperability, and service-oriented architecture. It is designed to help protect and leverage existing investments in VSE information assets.

z/VSE V4.2 supports IBM System z servers:

- IBM System z10 Enterprise Class (z10 EC)
- IBM System z9 EC and z9 Business Class (z9 BC)
- IBM eServer zSeries 990, 890, 900, and 800

z/VSE V4.2 is designed to support:

- Scalability enhancements
 - Up to 512 VSE tasks (two times the 255 limit in z/VSE V4.1)

Related links

- [Linux on IBM System z](#)
- [z/OS](#)
- [z/VM](#)
- [IBM Storage](#)

Done

start 73.3°F Dallas AT&T Net... 2 IBM L... Microsoft... IBM: z/VS... IBM Lotus... 100% 73° 09:24 AM

