

VSE 'Plays Well With Others'

2002 WAVV Conference and EXPO

April 12-16, 2002

Ft Mitchell, KY

G. M. (Jerry) Johnston
Senior Advisor
IBM Böblingen Laboratory
p798000@us.ibm.com



IBM @server. For the next generation of e-business.

Greetings from VSE Development

IBM @server



IBM @server. For the next generation of e-business.

VSE Update and Directions

IBM @server

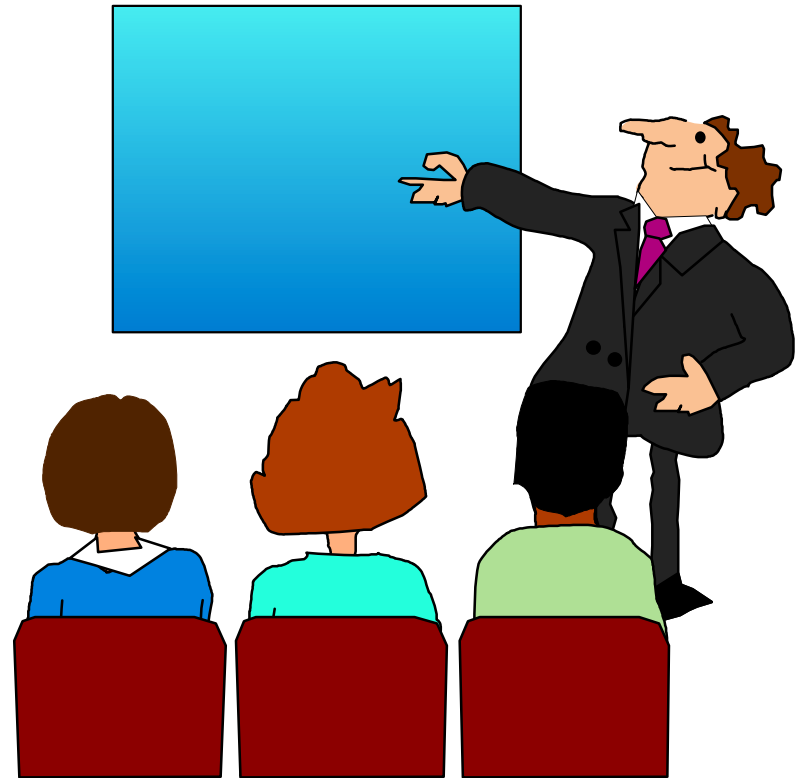
VSE Update

- V2.6
- V2.7 Preview
- Status

e-business Roadmap

Customer Choices

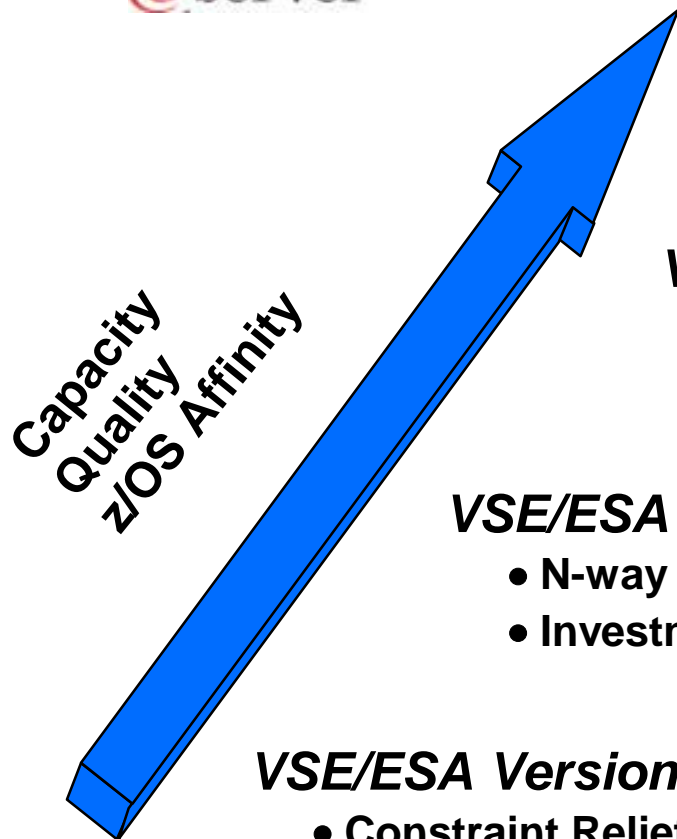
VSE Directions



IBM @server. For the next generation of e-business.

Responding to Customer Needs

IBM @server



VSE/ESA V2.6 **Dec 2001**

- Enhanced Interoperability



VSE/ESA V2.4 **1999**

- CICS Transaction Server for VSE/ESA
- *e-business*

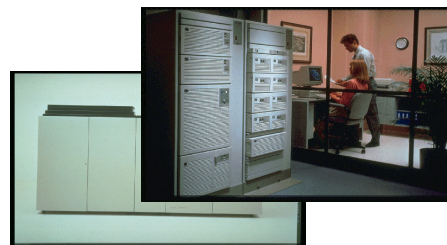


VSE/ESA Version 2 **1994**

- N-way S/390 Servers
- Investment Protection - Year 2000

VSE/ESA Version 1 **1990**

- Constraint Relief
- ESA exploitation



IBM @server. For the next generation of e-business.

z/OS Affinity

IBM @server

z/OS

Parallel Sysplex
Systems Mgmt, Capacity (incl 64-bit), Availability


IMS DC TSO	CICS Trans Server ACF/VTAM, TCP/IP LE COBOL, PL/1, C DFSORT, MQSeries DB2, IMS DB, VSAM	<i>Unix System Services</i> <i>heavy duty e-business</i> <i>ie. WebSphere Appl Server</i> <i>Enterprise JavaBeans</i>
---------------	---	--

Unique to MVS



IBM @server. For the next generation of e-business.

VSE/ESA Version 2 Release 6 - GA 12/2001

IBM 

Secure Sockets Layer (SSL) added to TCP/IP for VSE/ESA

- native implementation
- including DES, triple DES, authentication using digital certificates
- secure connections to CICS using CWS

Currency of Existing Connectors (VSE as enterprise server)

- update to J2EE ('JAVA2' or JDK1.2/1.3) standard

New Connector (VSE as client)

- VSE/VSAM redirector

TCP/IP support for CICS External Call Interface (ECI)

- used by CICS Transaction Gateway connector
- VSE <=> Linux

Hardware

- OSA Express (Gigabit ethernet, token ring)
- FICON
- VSAM support for large 3390-9 DASD

 For the next generation of e-business.

VSE/ESA e-business connectors (V2.5 and later)

IBM @server

VSE Connector (BSD sockets based)

- connectivity via TCP/IP
- implemented as long running server partition on VSE
- Java beans on Web Application Server
- access to VSAM, POWER, Librarian, ICCF, VSE console

DB2-based Connector (uses DRDA)

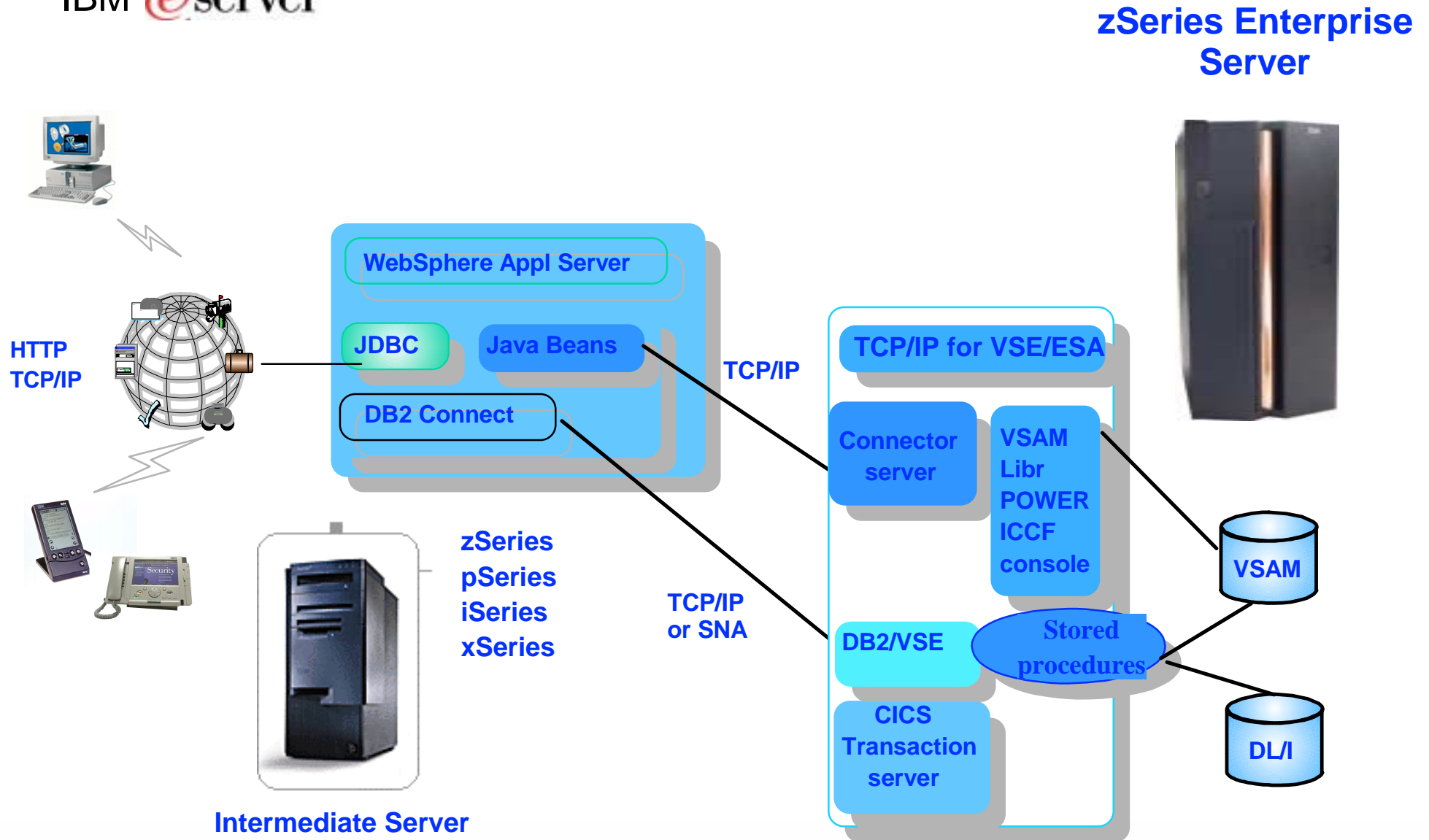
- connectivity via TCP/IP or SNA
- implemented as DB2 stored procedures on VSE
- standard JDBC/ODBC calls on Web Application Server
 - using DB2 Connect or DB2 UDB
- access to VSAM and DL/I (and DB2 or course)

Complementary to existing IBM and ISV connectors

IBM @server. For the next generation of e-business.

VSE e-business connectors

IBM @server



IBM @server. For the next generation of e-business.

VSE/VSAM Redirector (*new* in V2.6)

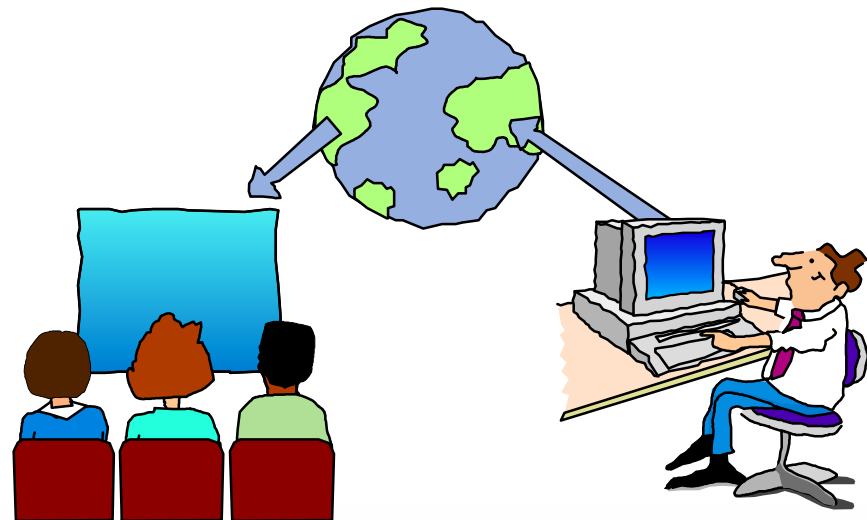
IBM @server

VSAM Redirector Client (runs on VSE)

- based on generic VSAM exit
- transparent (no changes) to VSE application
- intercepts VSAM request and routes to Redirector Server

VSAM Redirector Server (runs on any Java Platform)

- implemented in Java
- fields request from VSE client
- calls file-specific handler
- returns result to VSE



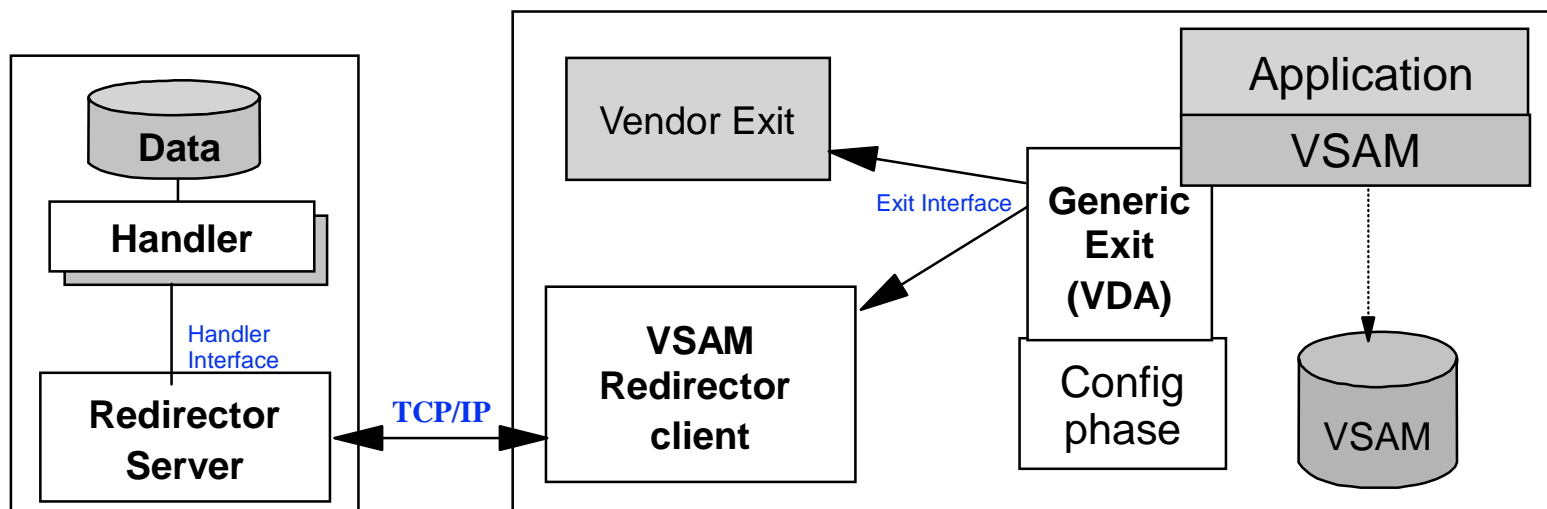
IBM @server. For the next generation of e-business.

VSE/VSAM Redirector

IBM @server

Java Platform

VSE/ESA V2.6



IBM @server. For the next generation of e-business.

VSE/ESA Version 2 Release 7 Preview



IBM @server

Hardware

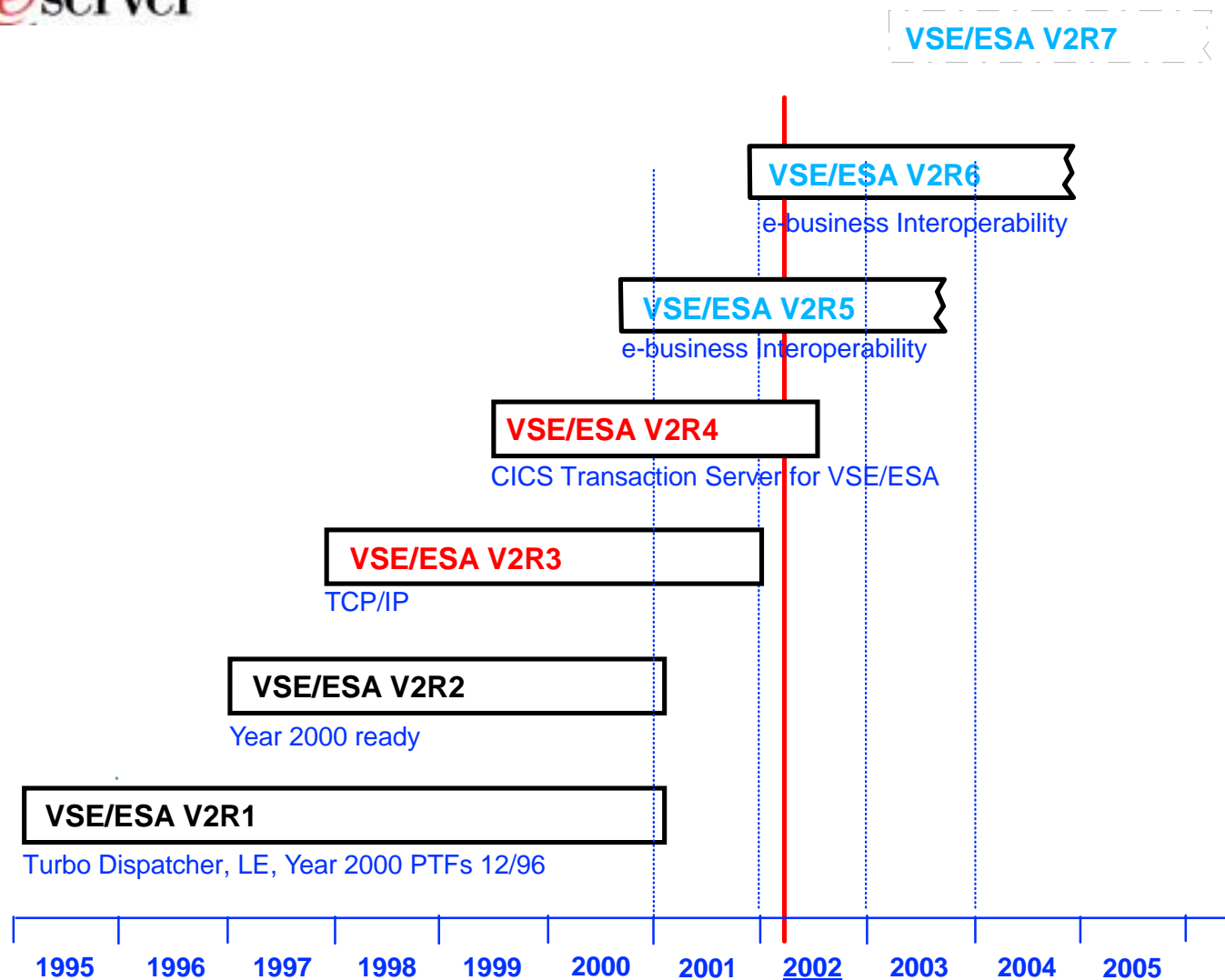
- HiperSockets (for *very fast* memory-to-memory communication)
 - VSE interoperability with Linux on zSeries
- PCICA hardware encryption assist
 - enhances SSL
- Support for
 - zSeries 900 and **zSeries 800** in 31-bit mode
 - S/390 G5/G6
 - S/390 Multiprise 3000
 - equivalent



IBM @server. For the next generation of e-business.

VSE/ESA Version 2 Status

IBM @server



IBM @server. For the next generation of e-business.

VSE Update and Directions

IBM @server

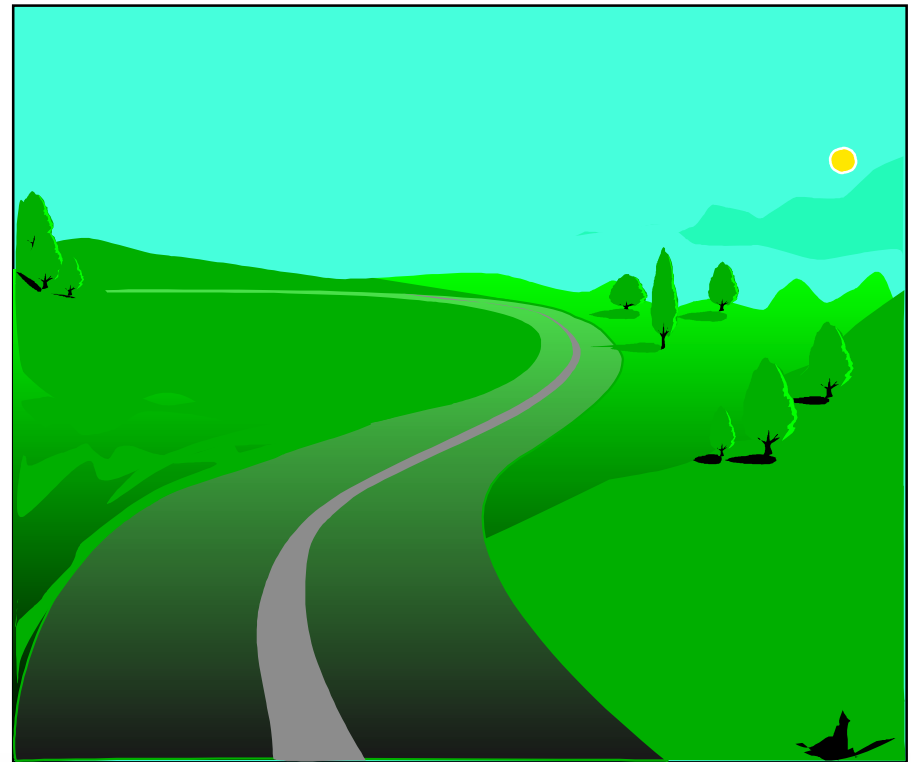
VSE Update

e-business Roadmap

- applications
- IBM Application Framework
- hybrid model
- Linux on zSeries

Customer Choices

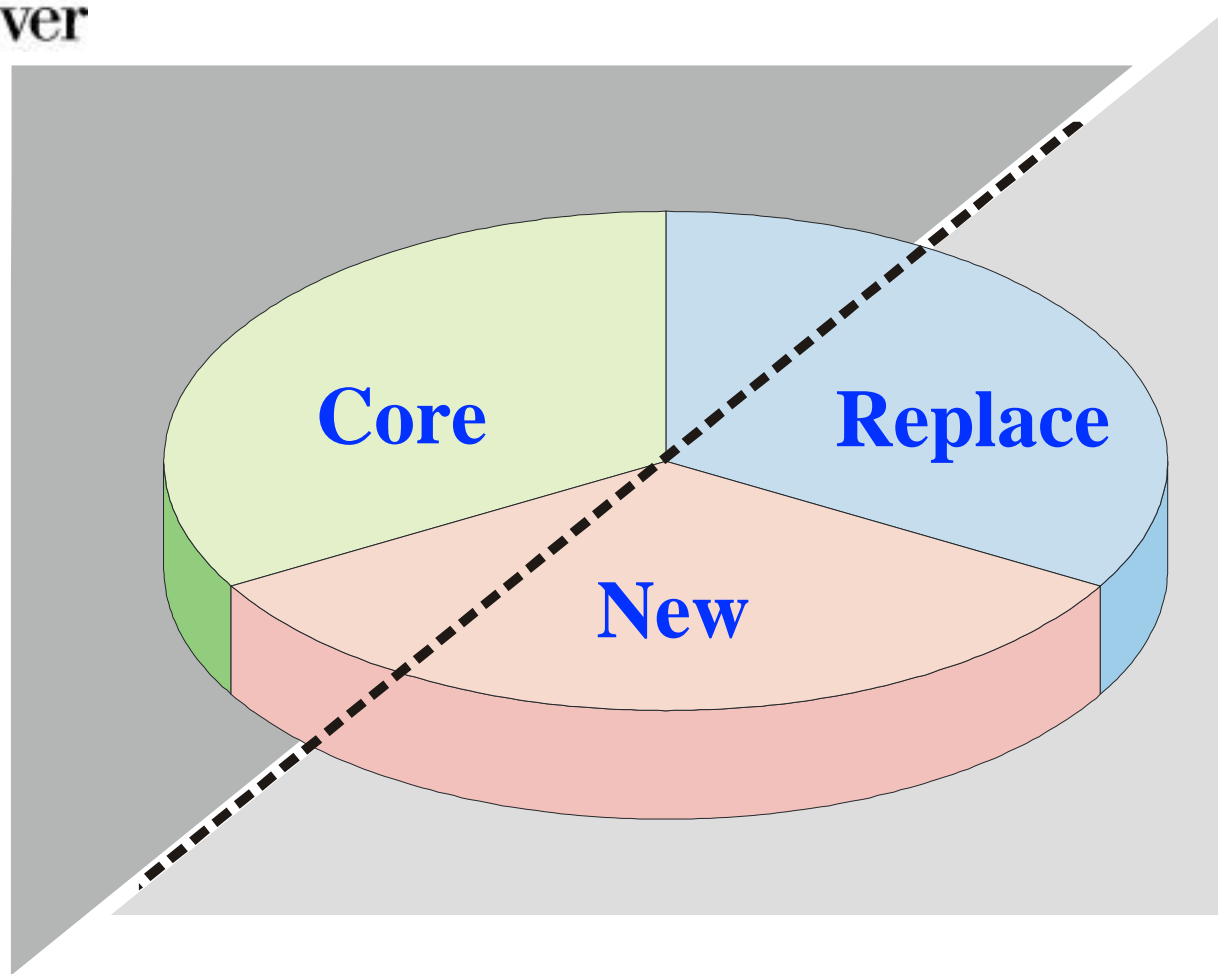
VSE Directions



IBM @server. For the next generation of e-business.

Application Portfolio

IBM @server

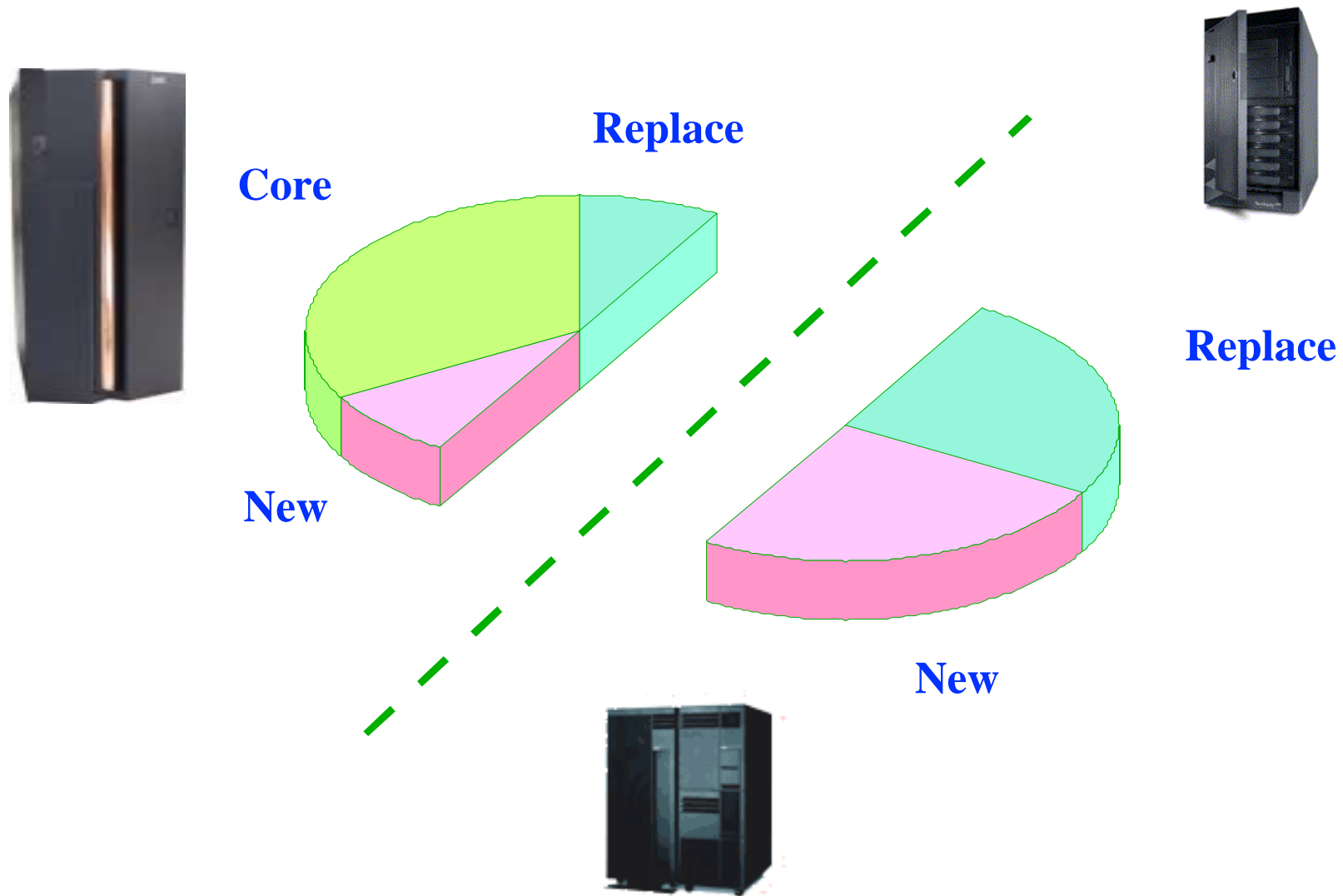


Note: Pie arbitrarily divided into thirds. Percent of applications in each category varies widely among individual customers

IBM @server. For the next generation of e-business.

Hybrid Environment

IBM @server



IBM @server. For the next generation of e-business.

'Typical' Customer Environment

IBM @server

It's a hybrid world

- average 3.5 unique platforms incl Windows and Unix dialects
- no single hardware/software platform is always best

Core VSE applications

- mostly alive, doing well, and growing

Replacement applications

- platform driven by application selection
- often customers have growing core applications and replacement

New infrastructure and e-business applications

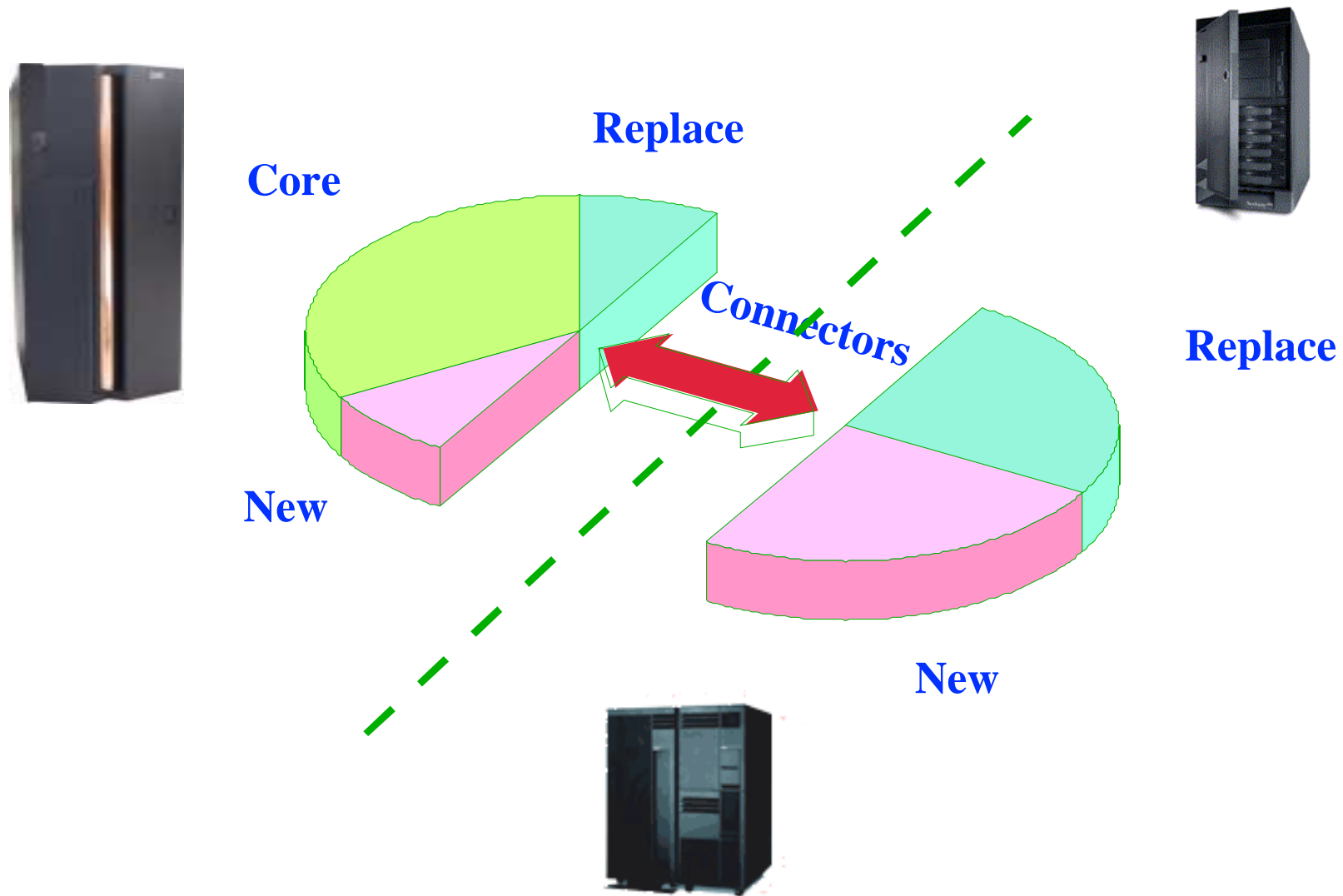
- other platforms (not VSE) are often a better choice

Customers need an e-business model that's flexible and extendable, while protecting existing core investments

IBM @server. For the next generation of e-business.

Integrating Hybrid Environments

IBM @server



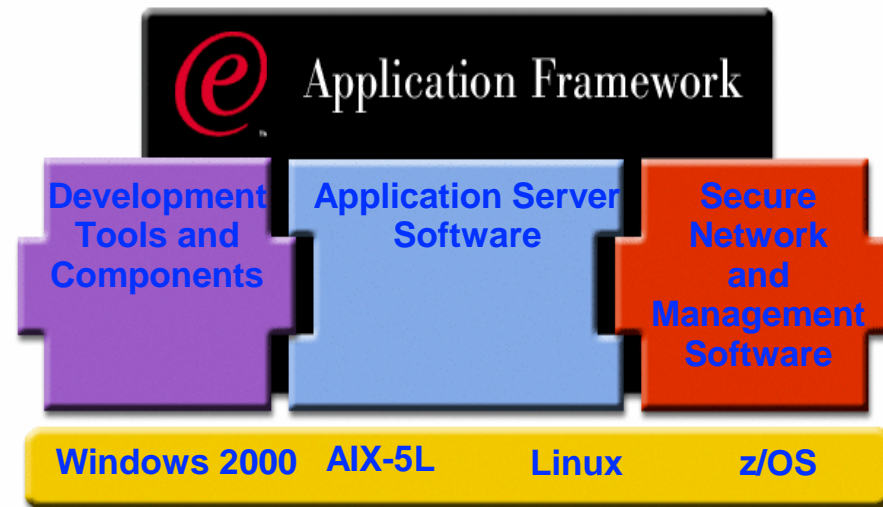
IBM @server. For the next generation of e-business.

How?

IBM @server

the IBM Application Framework for e-business

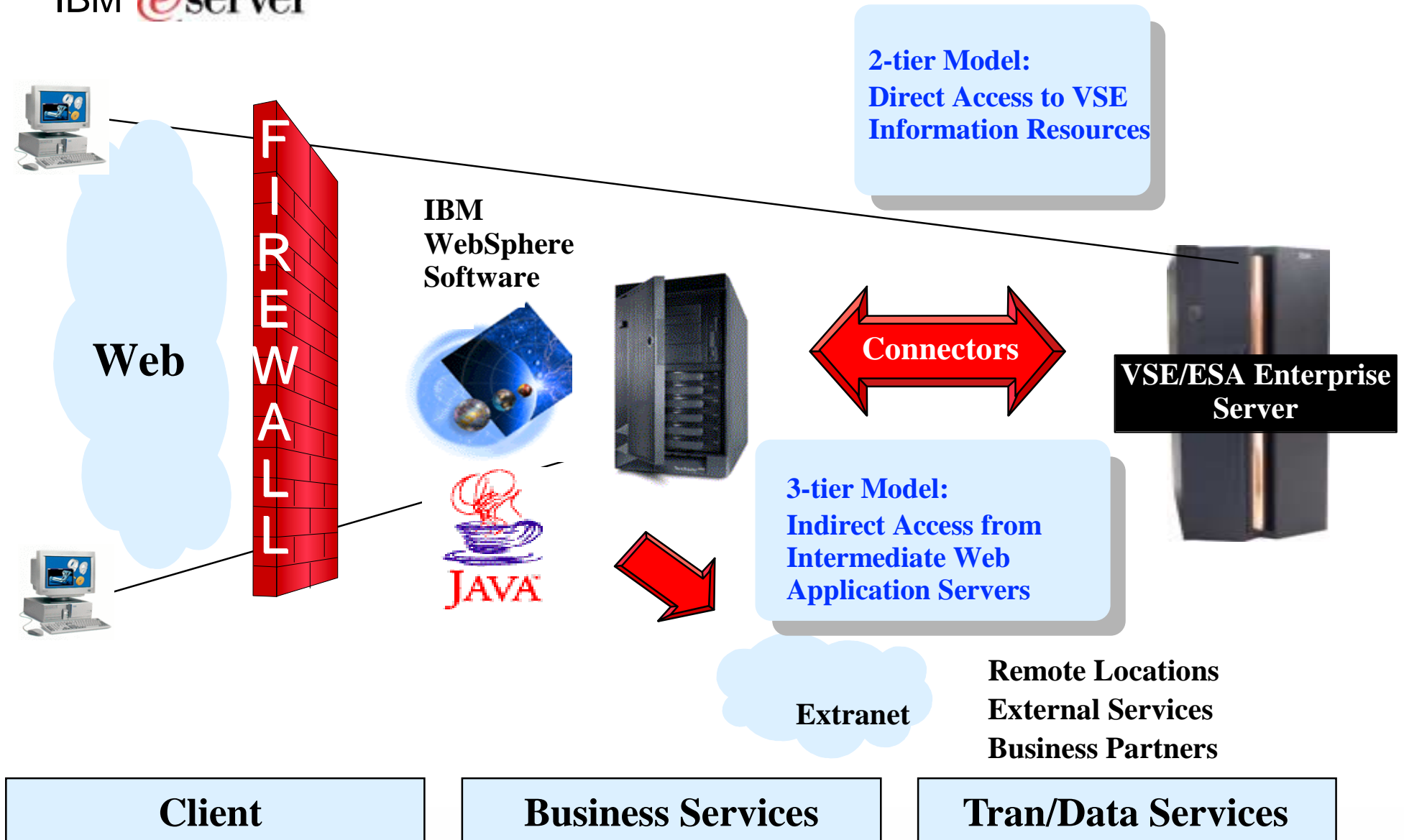
- provides a *comprehensive*, robust e-business model
- based on a set of open industry *standards*
- offers *leadership* products
- supports *key platforms*
- helps *protect core investments*



IBM @server. For the next generation of e-business.

IBM Appl Framework: 2-tier & 3-tier models

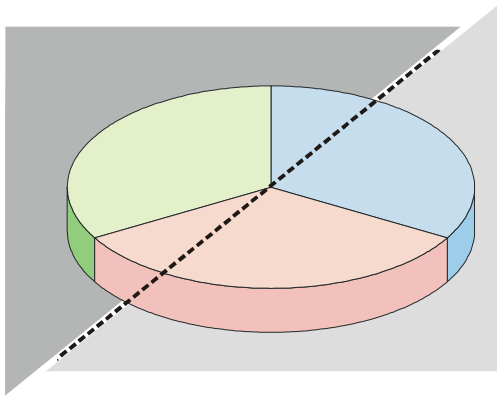
IBM @server



IBM @server. For the next generation of e-business.

Preferred Application Models

IBM @server



2-tier

3-tier (logical)

Core

Primary

Replacement

Secondary

Primary

New

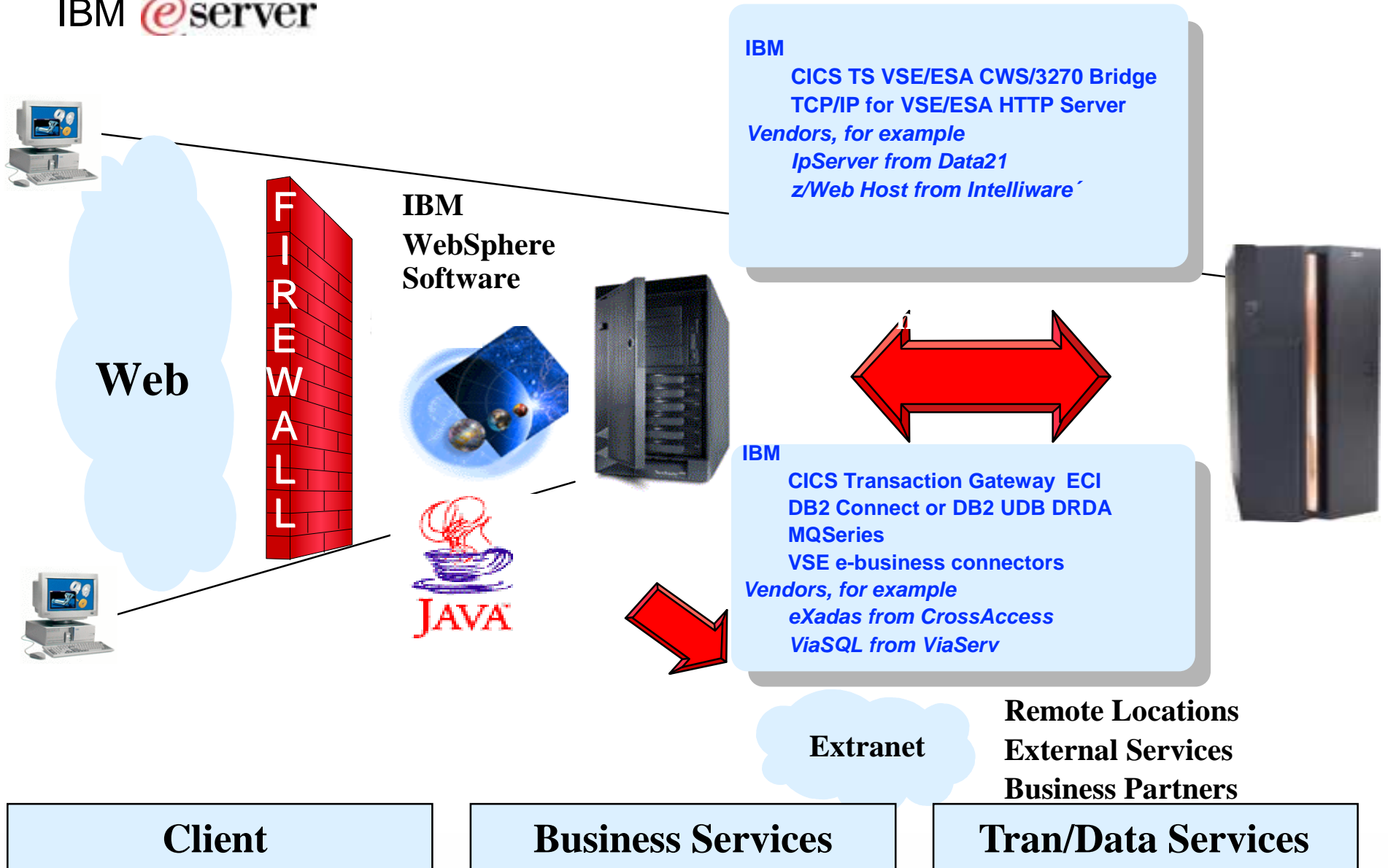
Secondary

Primary

IBM @server. For the next generation of e-business.

VSE Middleware Technology

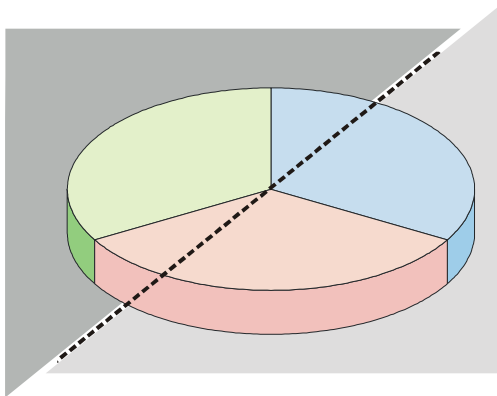
IBM @server



IBM @server. For the next generation of e-business.

Preferred Enabling Technology

IBM @server



2-tier

3-tier (logical)

Core

CICS TS VSE/ESA

Replacement

CICS TS VSE/ESA

WebSphere A S

New

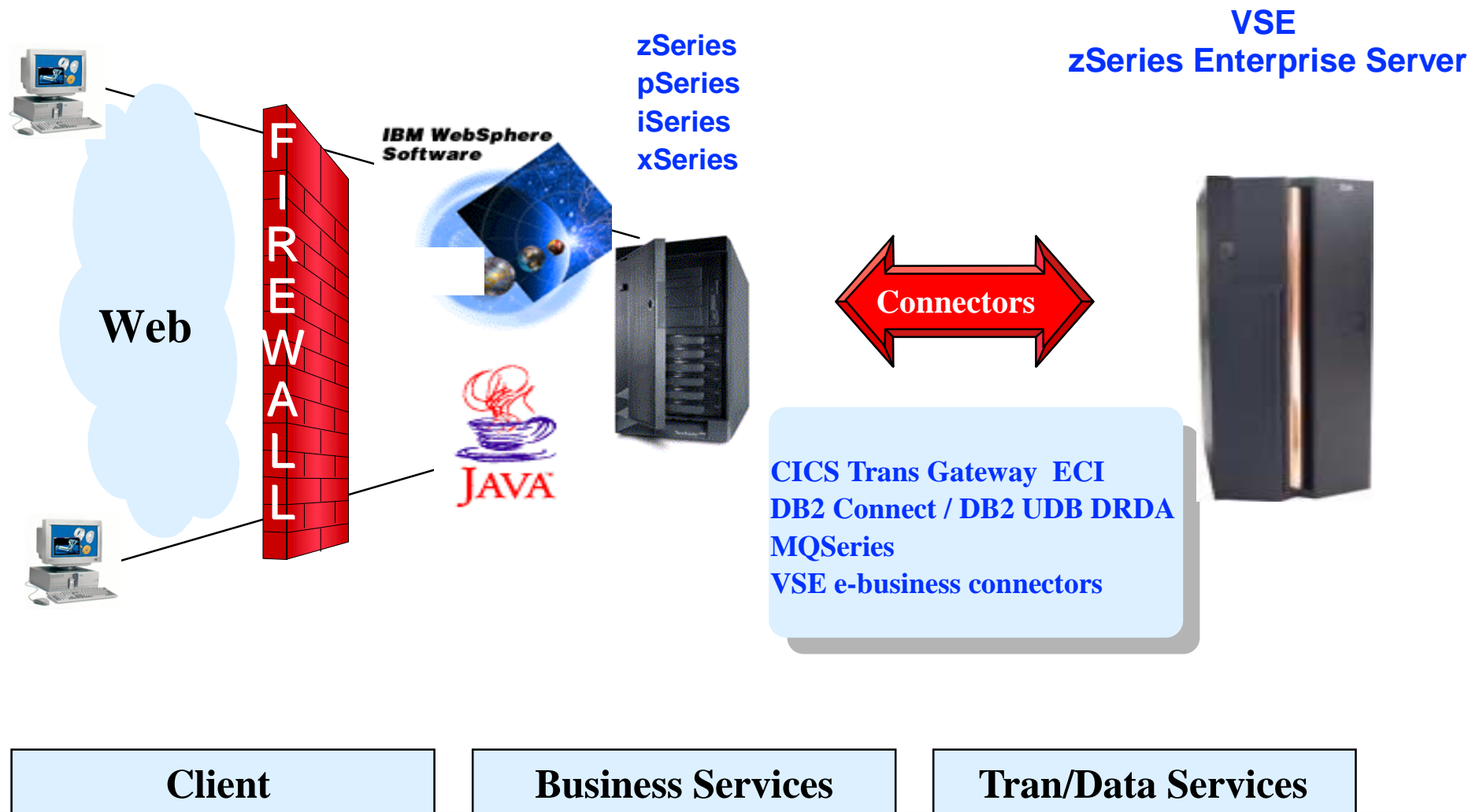
CICS TS VSE/ESA

WebSphere A S

IBM @server. For the next generation of e-business.

Generic Hybrid (3-tier) Model

IBM @server

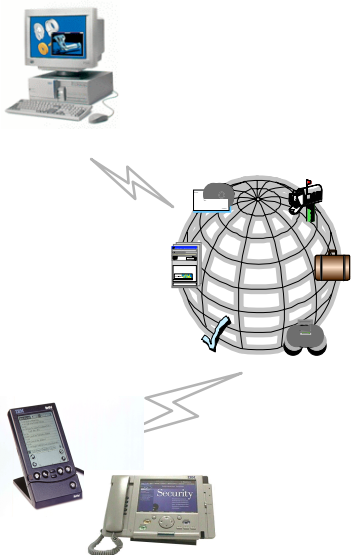


IBM @server. For the next generation of e-business.

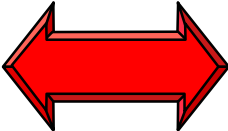
Middleware for Hybrid Environment

IBM @server

IBM
WebSphere



WebSphere AppServer
Apache or HTTP server
JDK1.2/1.3
CICS Trans Gateway
DB2 Connect
MQSeries Clients
VSE Connector Clients



VSE/ESA V2.6/2.7
TCP/IP for VSE/ESA
CICS TS for VSE/ESA
DB2 Server V7
MQSeries
VSE Connector Server

IBM @server. For the next generation of e-business.

Preferred* Hybrid Solution

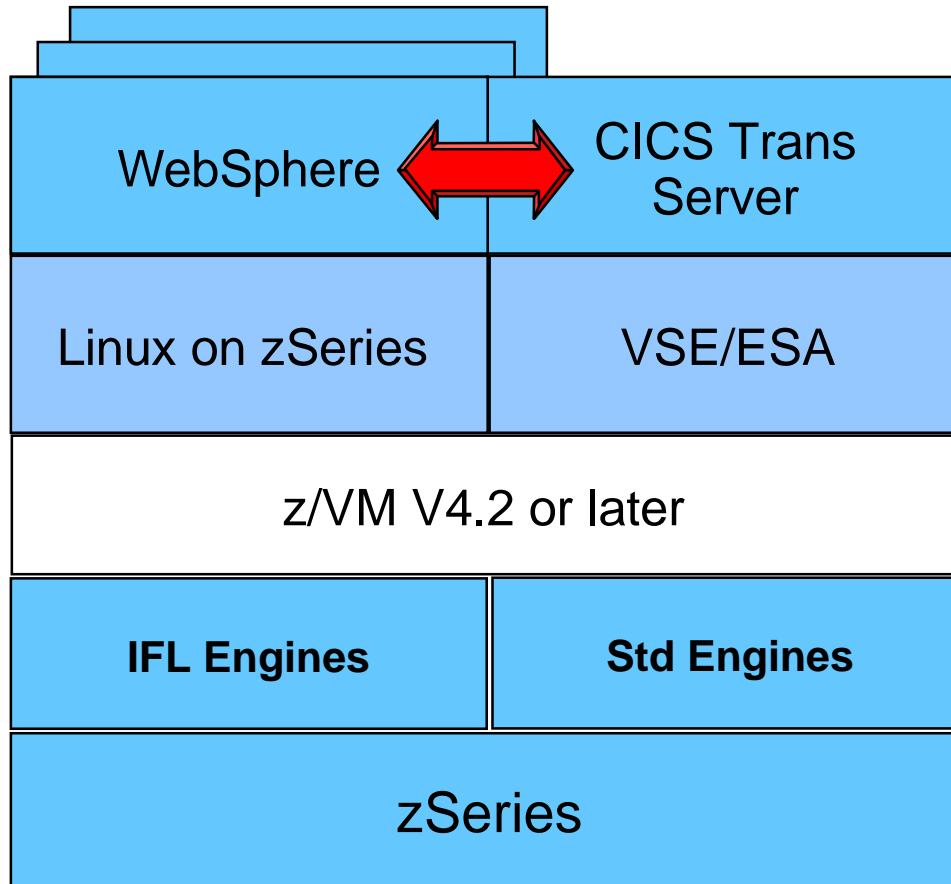


IBM @server

ESS (Shark)



zSeries



* at least my own preferred solution

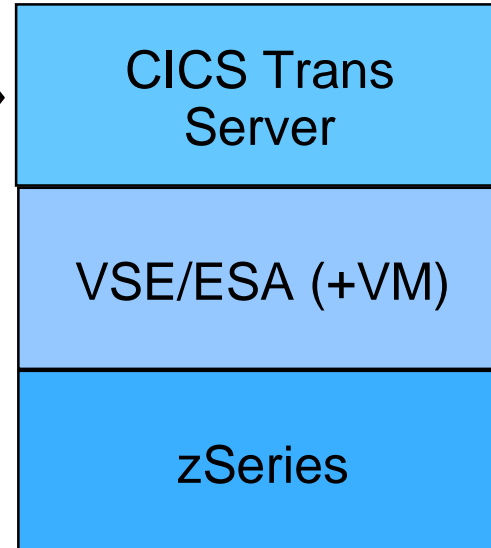
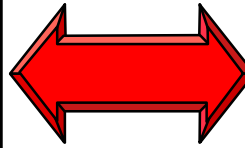
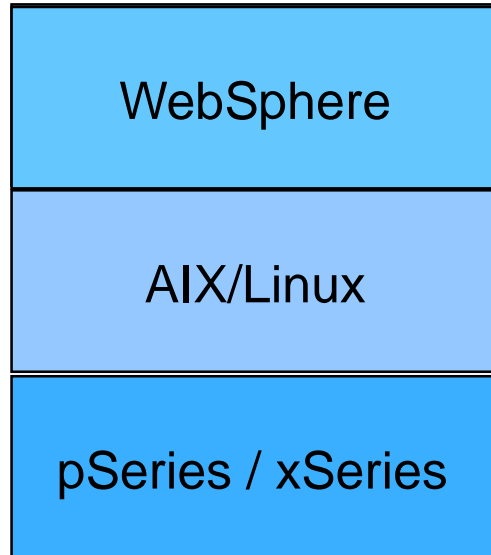
IBM @server. For the next generation of e-business.

Alternate 1: Linux (not zSeries) Solution

IBM @server



pSeries (RS/6000)



xSeries (Netfinity)



ESS (Shark)

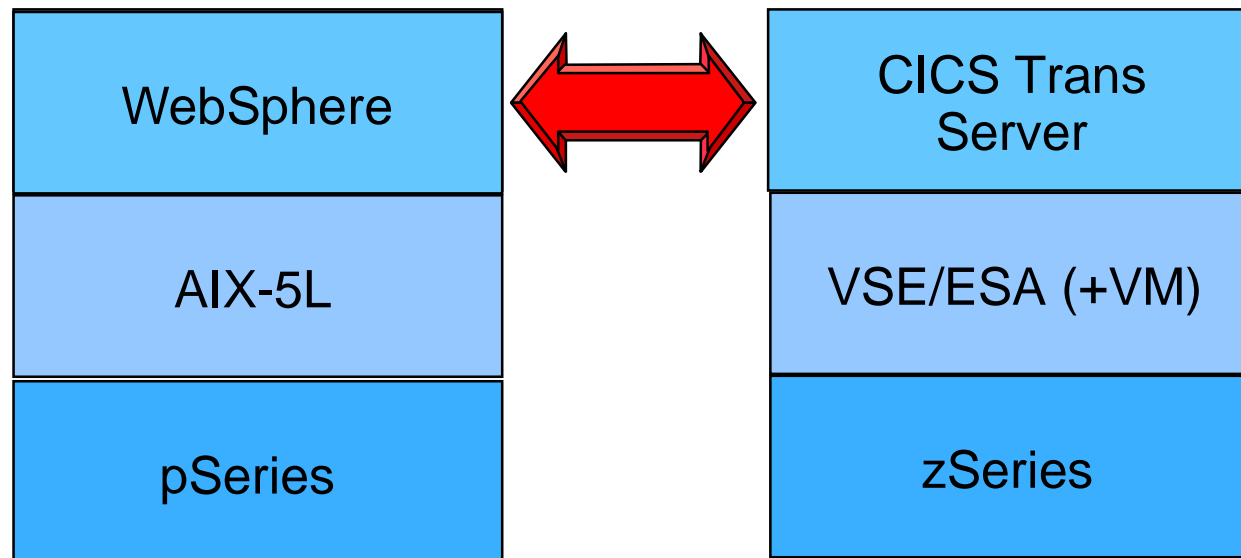


zSeries (S/390)

IBM @server. For the next generation of e-business.

Alternate 2: AIX-5L Solution

IBM @server



pSeries



Shark

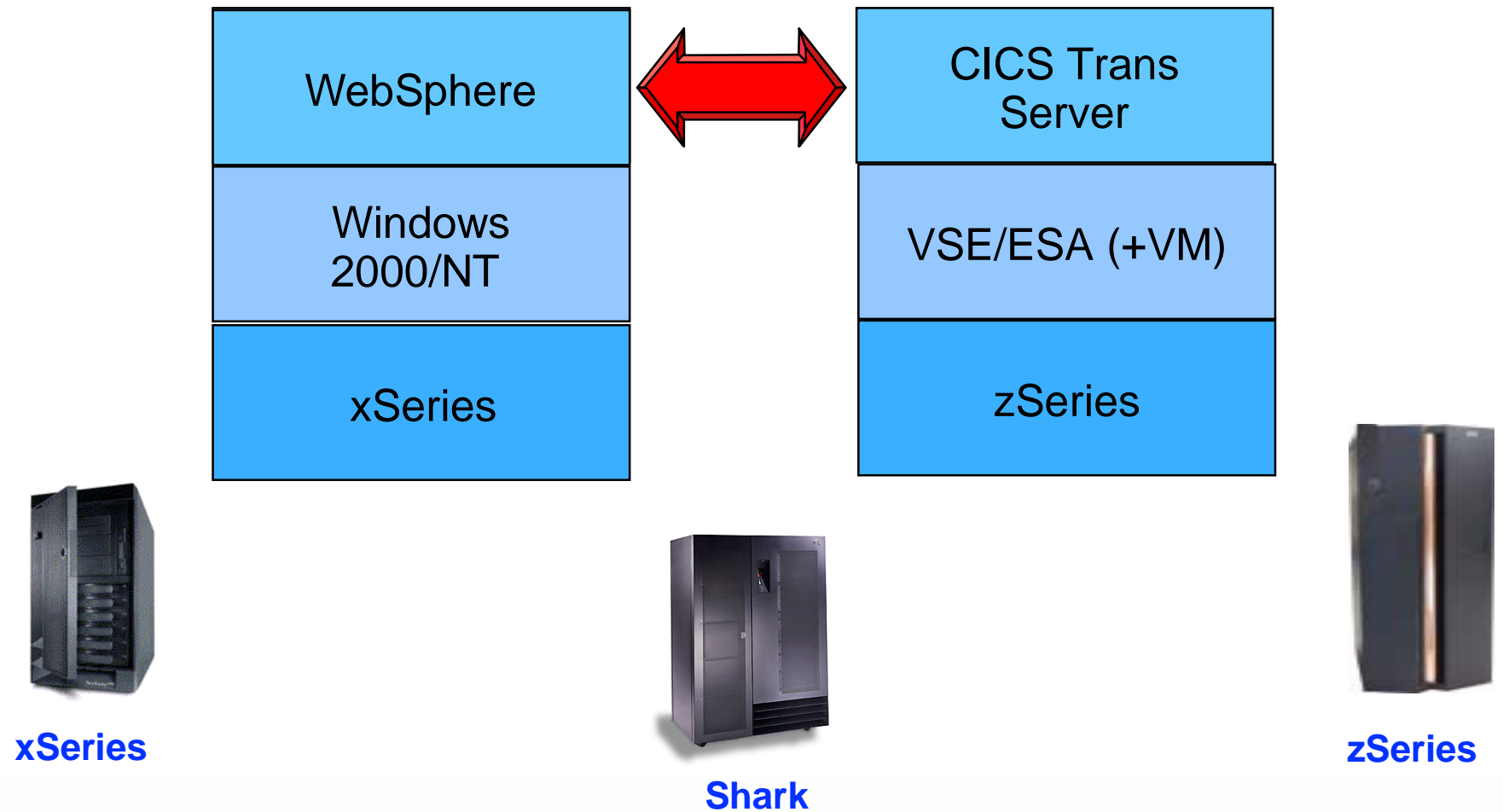


zSeries

IBM @server. For the next generation of e-business.

Alternate 3: Windows Solution

IBM @server



IBM @server. For the next generation of e-business.

VSE Update and Directions

IBM @server

VSE Update

e-business Roadmap

Customer Choices

VSE Directions



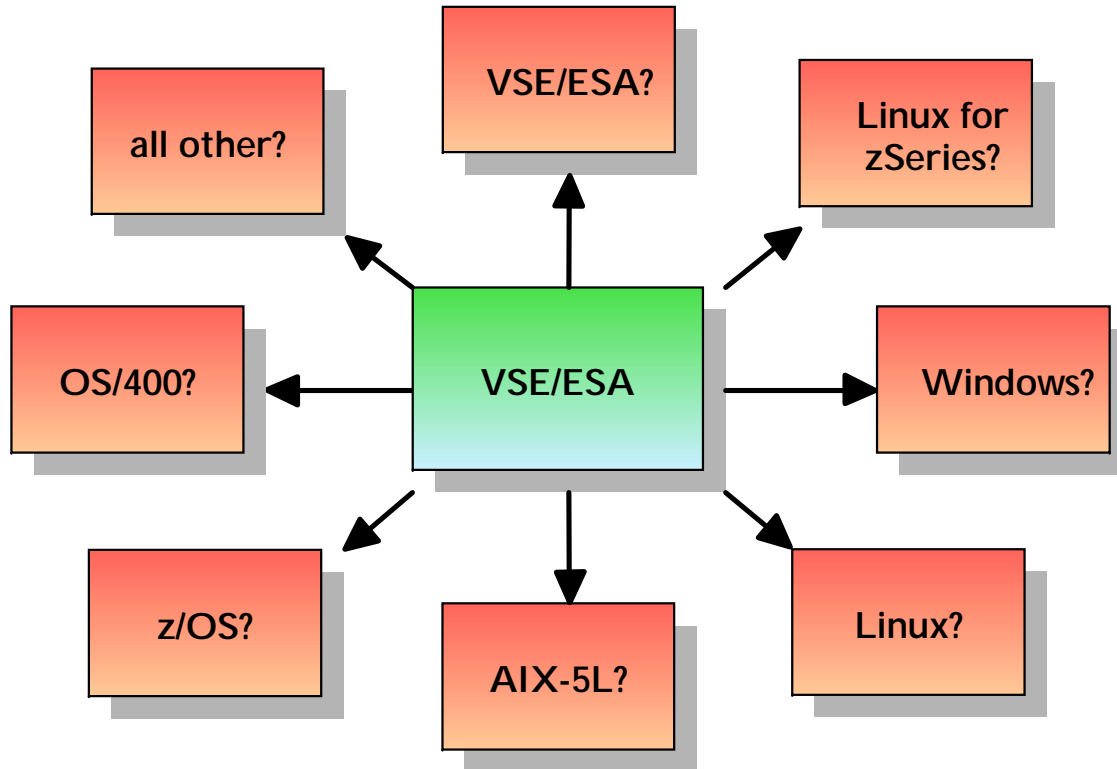
IBM @server. For the next generation of e-business.

What to do?

IBM @server

zSeries?

xSeries?



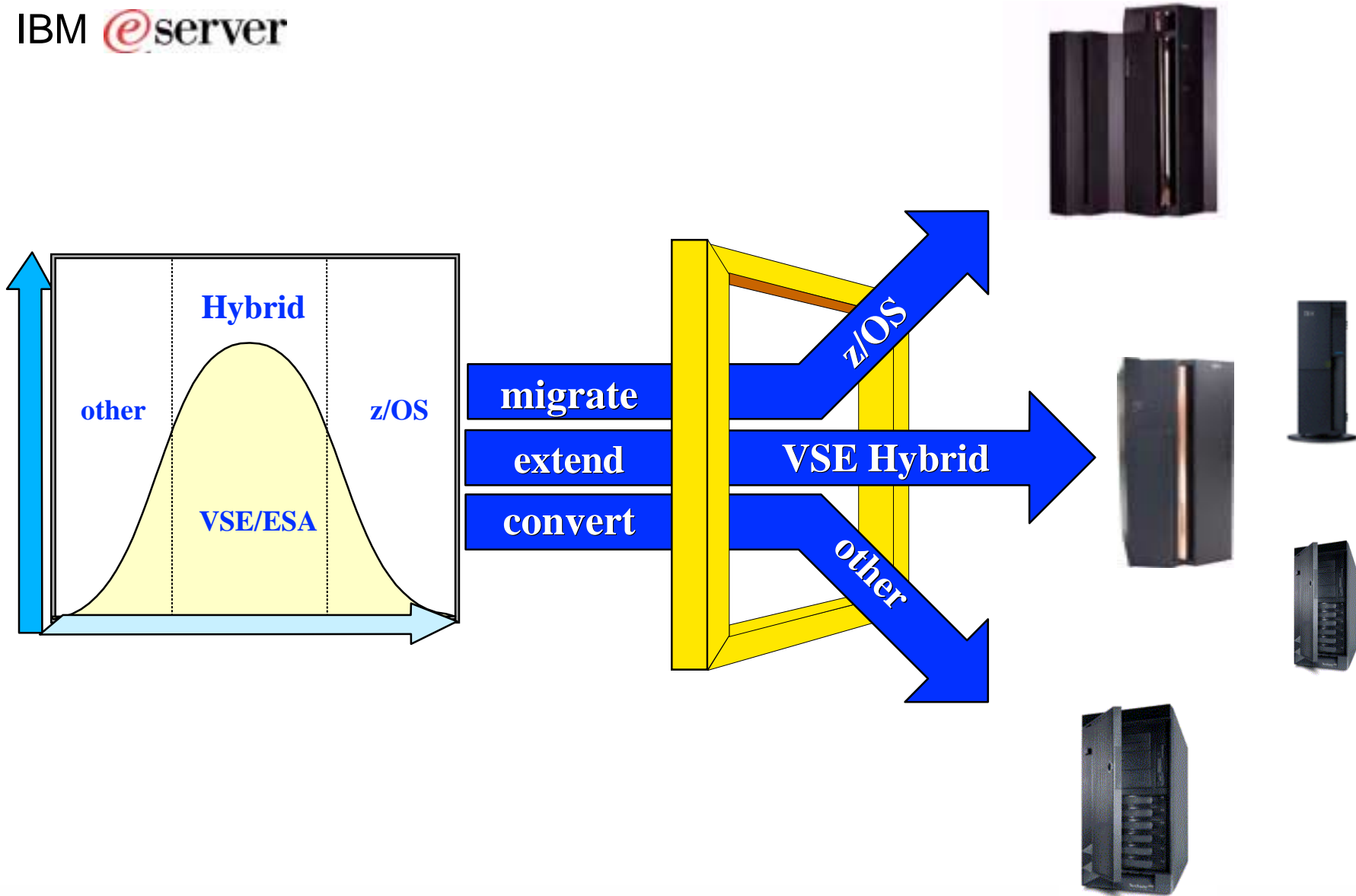
iSeries?

pSeries?

IBM @server. For the next generation of e-business.

Customer Options

IBM @server



IBM @server. For the next generation of e-business.

VSE Update and Directions

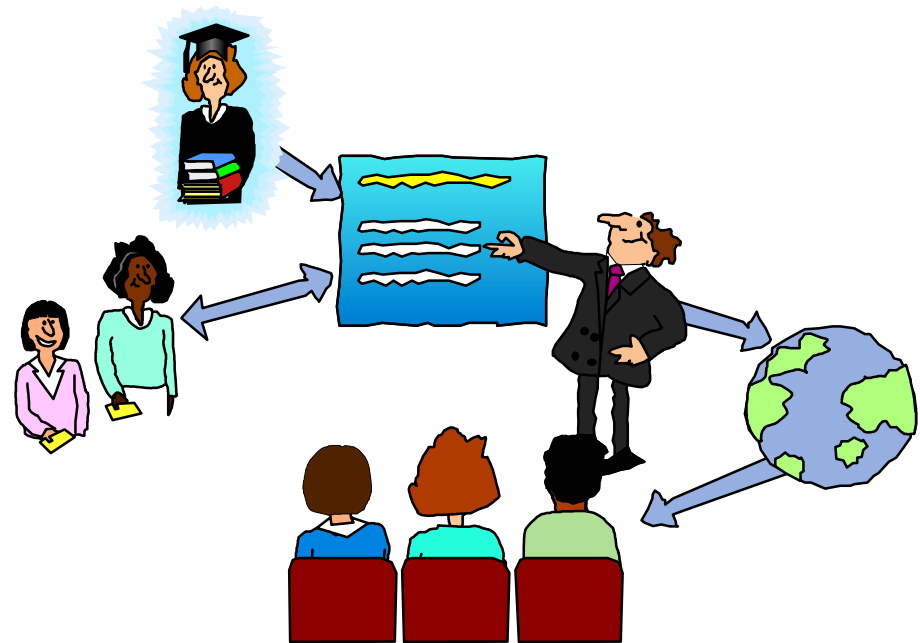
IBM @server

VSE Update

e-business Roadmap

Customer Choices

VSE Directions

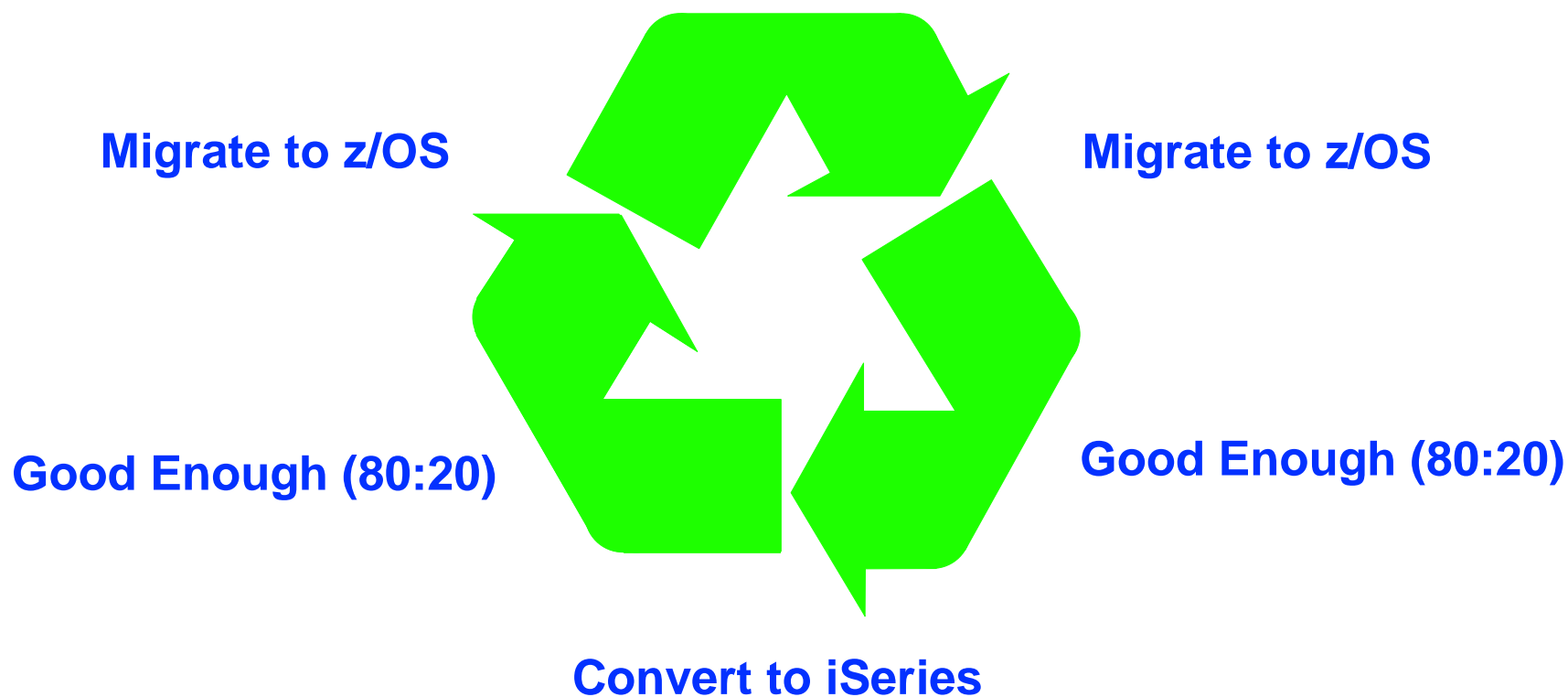


IBM @server. For the next generation of e-business.

Recycling Traditional Strategies?

IBM @server

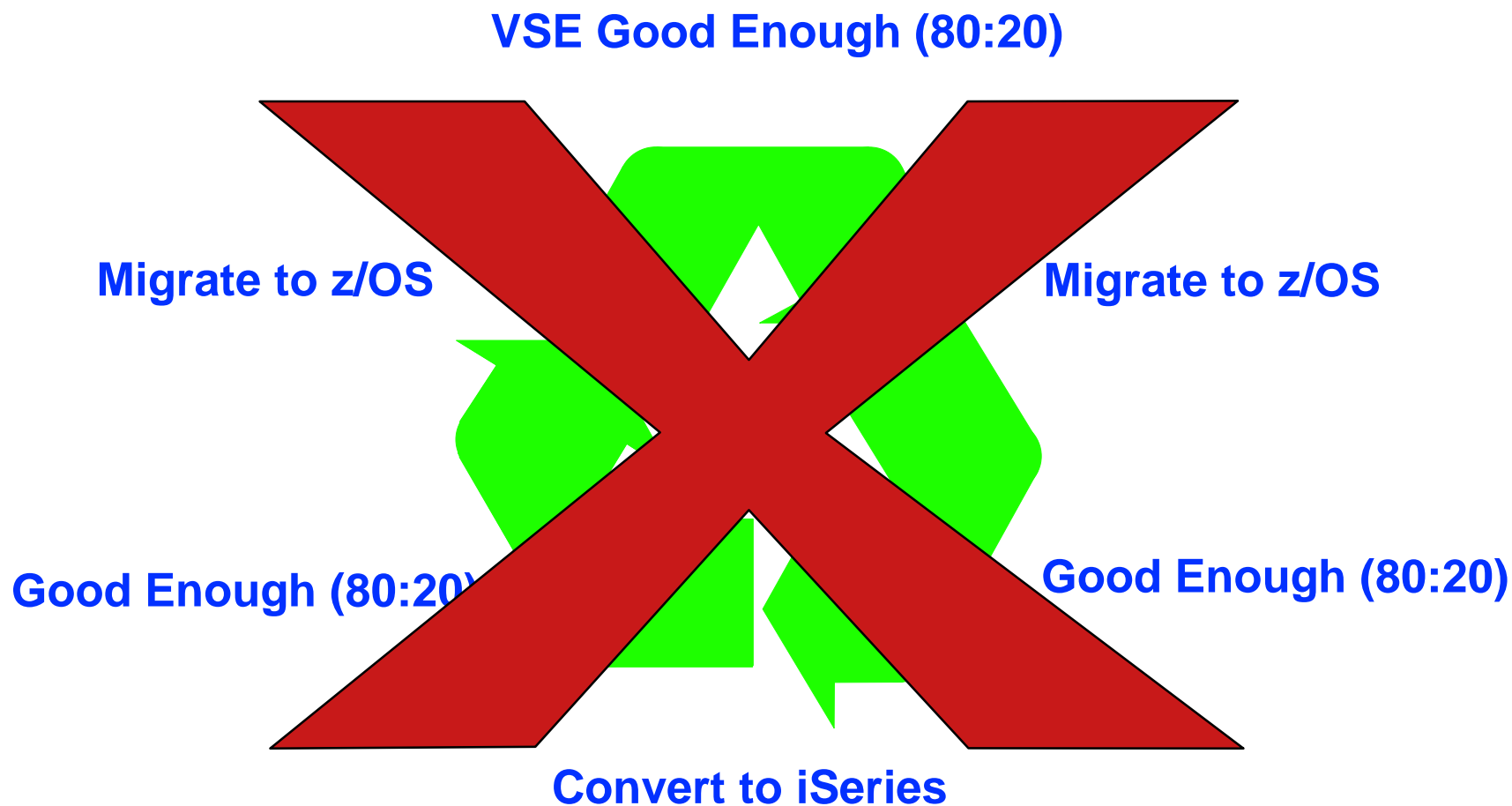
VSE Good Enough (80:20)



IBM @server. For the next generation of e-business.

If Not, Where Is VSE Going?

IBM @server

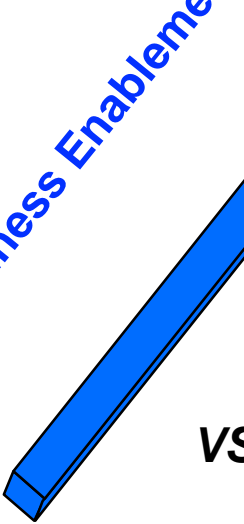


IBM @server. For the next generation of e-business.

VSE will Learn to 'Play Well with Others'

IBM @server

hybrid e-business Enablement



VSE/ESA V2.7 Preview

- more Linux Interoperability

VSE/ESA V2.6 Dec 2001

- Enhanced Interoperability

VSE/ESA V2.5 Sept 2000

- CICS Transaction Server for VSE/ESA
- *e-business connectors*



Protect your existing core VSE investments - emphasize open, hybrid e-business solutions (especially leveraging Linux on zSeries) for many newer workloads.



IBM @server. For the next generation of e-business.

Hybrid Solution - the Best of Both Worlds

IBM @server

z/OS

Parallel Sysplex
Systems Mgmt, Capacity (incl 64-bit), Availability

IMS DC TSO	CICS Trans Server ACF/VTAM, TCP/IP LE COBOL, PL/1, C DFSORT, MQSeries DB2, IMS DB, VSAM	<i>Unix System Services</i> <i>heavy duty e-business</i> <i>ie. WebSphere Appl Server</i> <i>Enterprise JavaBeans</i> <i>DB2 UDB</i>
---------------	---	--

Unique to MVS

No

CICS TS VSE/ESA
ACF/VTAM, TCP/IP
LE COBOL, PL/1, C
DFSORT, MQSeries
DB2, DL/1, VSAM

VSE/ESA

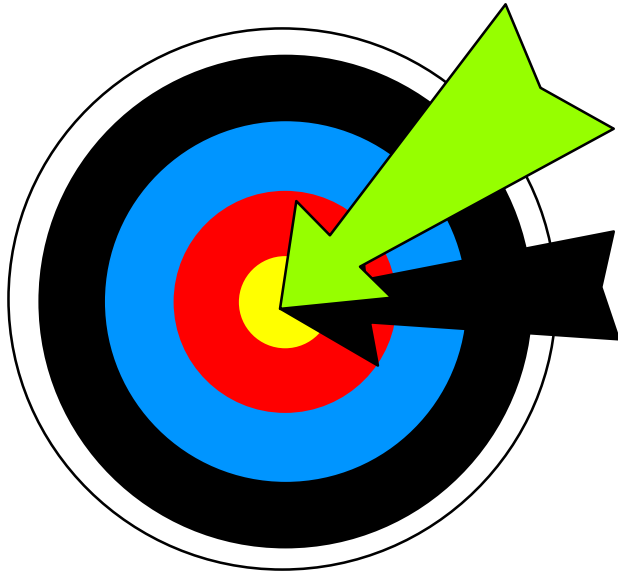
WebSphere Appl Server
Enterprise JavaBeans
DB2 UDB

Linux on zSeries

IBM @server. For the next generation of e-business.

Hybrid Strategy

IBM @server



Leverage Existing Core VSE Investments

- protect programs, data, skills, processes, etc.
- extend VSE enterprise server resources to web

Full Access to Best-of-Breed Applications *regardless of hardware / software platform*

- 'traditional' line-of-business
- e-business
- infrastructure

Based on Open Standards

No Single Platform Best for Every Purpose

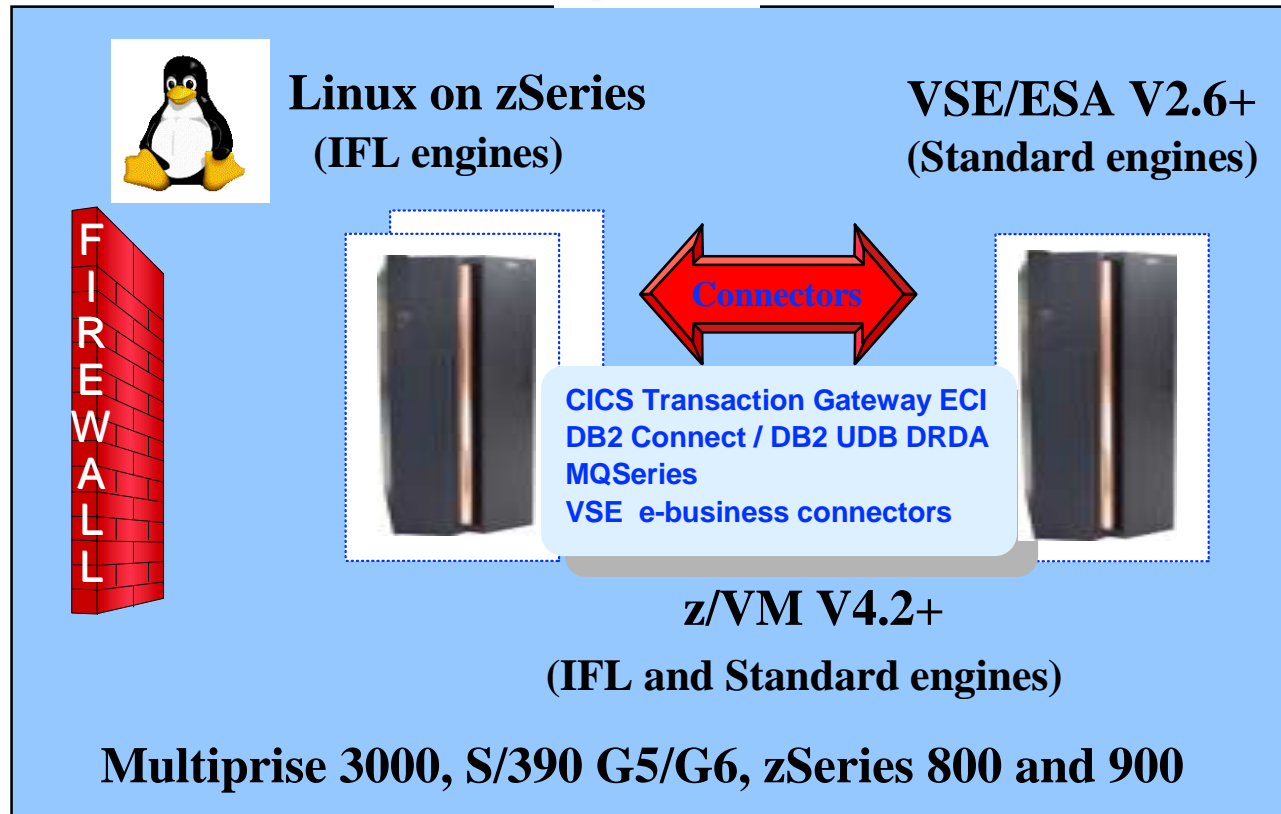
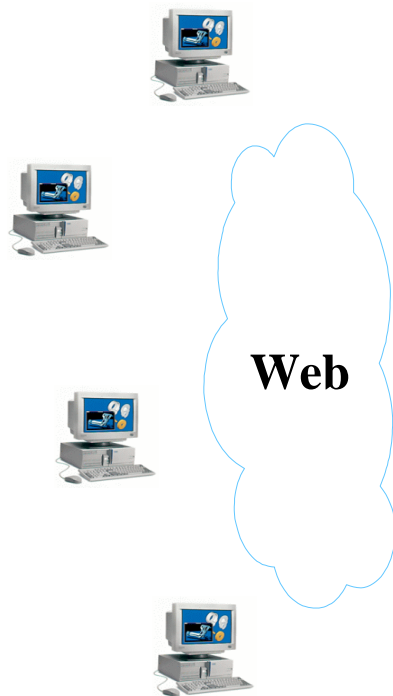
Reduce Total Cost of Computing



IBM @server. For the next generation of e-business.

A Vision for Modern VSE Solutions

IBM @server



Clients

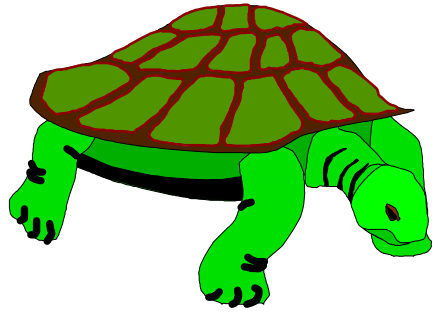
Business Services

Tran/Data Services

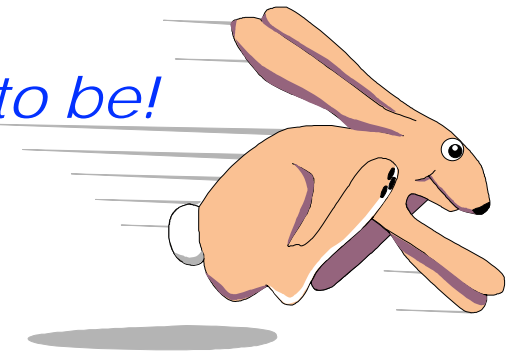
IBM @server. For the next generation of e-business.

Conclusion

IBM @server



After more than 35 Years
Providing Cost/Effective
Solutions to IBM Customers the
World Over, VSE Doesn't Get
Older - It Gets Better. *Now,
because VSE plays well with
others, you can be as
competitive as you want to be!*



IBM @server. For the next generation of e-business.

z/VM, VSE and Linux on zSeries Tech Conf

IBM @server

October 7 - 10, 2002

Miami Beach, FL

Fontainebleau Hotel and Resort (main conference)

Note: Will be held at the same time, in the same location as the z/OS and OS/390 EXPO

The two conferences will share an EXPO area, meals, some common tracks and an evening event



IBM @server. For the next generation of e-business.