



E00: An e-business Roadmap for VSE/ESA Customers -

***Part 1 of a coordinated
series including E01, E02,
and E03.***

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An e-business Roadmap for VSE/ESA Customers - *or...*

***How you can be as
competitive as you want
to be***





Agenda

- Introduction to VSE/ESA V2.5
- Background
- e-business Roadmap
- Customer Options



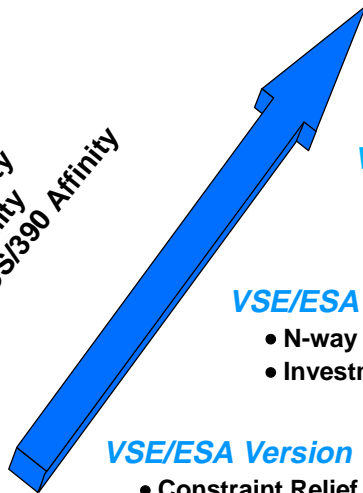
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Evolving to Meet Customer Needs



Capacity
Quality
OS/390 Affinity



VSE/ESA V2.5 *Preview*

- Enhanced Interoperability



VSE/ESA V2.4 *June 1999*

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

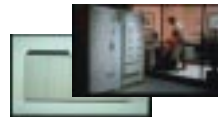


VSE/ESA Version 2 *1994*

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

VSE/ESA Version 1 *1990*

- Constraint Relief
- ESA exploitation



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VSE/ESA V2.5 Preview



- **Interoperability** between VSE and WebSphere Application Server
 - ▶ VSE Connectors (BSD sockets-based)
 - connectivity via TCP/IP
 - server code on VSE
 - JavaBeans/Servlets on Web Application Server
 - access to VSAM, POWER, Librarian, ICCF, VSE console
 - ▶ DB2-based connectors (uses DRDA)
 - connectivity via TCP/IP or SNA
 - DB2 stored procedures on VSE
 - JDBC/ODBC calls on Web Application Server
 - access to VSAM and DL/I (DB2 or course, but that's not new)
 - ▶ *complementary to existing IBM and vendor connectors*

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VSE/ESA V2.5 Preview



- **'Traditional'** Enhancements
 - ▶ More Dynamic Classes
 - ▶ VSAM LSR Hashing
 - ▶ FlashCopy (ESS) support
 - ▶ VSAM support for IXFP/SnapShot
- Support Dropped for
 - ▶ LANRES/VSE
 - ▶ Distributed Workstation Feature (DWF)
 - ▶ VisualLift Runtime Environment (RTE)
 - ▶ OCR/MICR (but IBM 3890 Check Sorter support continues)
 - ▶ Unattended Node Environment

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VSE/ESA V2.5 Preview

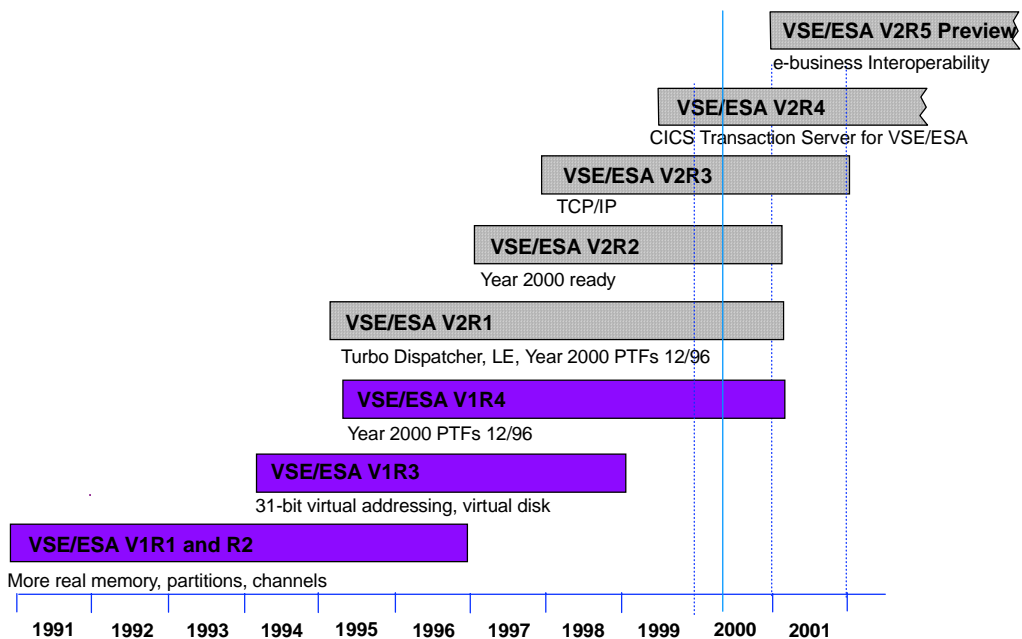


- Planning Considerations
 - ▶ Preview, not an Announcement
 - ▶ Built on VSE/ESA V2.4
 - ▶ Fast Service Upgrade from V2.4 will be available
 - ▶ Note: BTAM support ends 3/31/2002

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Release Status



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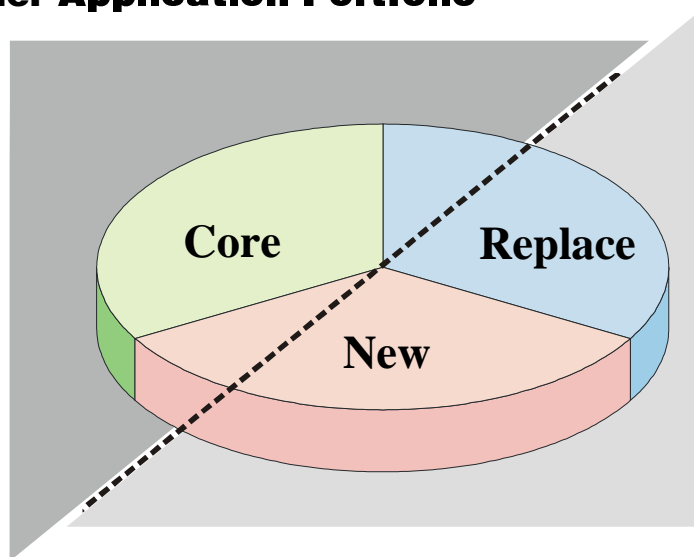
- Introduction to VSE/ESA V2.5
- **Background**
- e-business Roadmap
- Customer Options



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Customer Application Portfolio



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

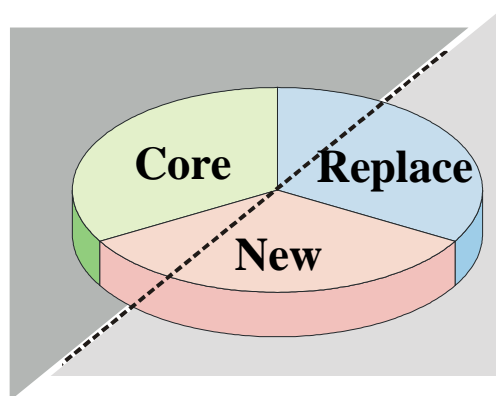
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Underlying Technology (simplified)



-S/390
CICS
COBOL
VSAM
3270 interface



-Platform Specific
'Client/Server'
C or C++
Relational
'GUI' interface

-Almost Any Platform
WebSphere
Java
Relational
Std Browser-based interface

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1999 Survey Results



- What other Platforms are Currently Installed (not counting VM)?
 - ▶ 100% Windows NT
 - ▶ 100% AIX/Linux/Other Unix
 - ▶ further back in the pack
 - 60% Novell
 - 25% AS/400
 - 70% all other

There are an average of 3.5 types of platform per customer.
One might even say there are no "VSE customers", only
"customers with VSE"

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1999 Survey Results



- Are You Growing Your VSE?
 - ▶ 70% + say 'Yes'
- How? Why?
 - ▶ 80% growth of existing applications
 - ▶ 60% new users/consolidation
 - ▶ 50% new applications

Core applications are mostly alive, doing well, and growing on VSE

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1999 Survey Results



- Will You Move *Some* VSE Work to Another Platform?
 - ▶ almost 50 % say 'Yes'
- *If* so, Where?
 - ▶ Windows NT
 - ▶ AIX/Linux/Other Unix (a very close second)
 - ▶ further back in the pack
 - OS/390
 - Novell
 - AS/400
 - all other

Some customers are both a) growing core applications on VSE, and b) implementing Replacement Apps on a variety of platforms

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1999 Survey Results



- Why?
 - ▶ solutions available
 - ▶ tie - company policy
 - ▶ tie - performance/functionality
 - ▶ cost/price

Customers select replacement platforms for a number of reasons, many of which are unpredictable

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1999 Survey Results



- What's Your Preferred Platform for e-business?
 - ▶ tie - VSE/ESA
 - ▶ tie - Windows NT
 - ▶ tie - AIX/Linux/Other Unix
 - ▶ further back in the pack
 - VM/ESA, OS/390
 - ▶ even *further* back in the pack
 - Novell, AS/400, OS/2, all other

VSE must deal with an e-business platform of choice that's unpredictable

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Key Conclusions



- It's a 'Mixed-Platform' World
 - 3.5 **types** on average (no one system does everything well)
 - IBM product diversity is a potential strength
- Core Applications
 - mostly alive, doing well, and growing
- Platform of choice for Replacement Apps is unpredictable
 - often there's **both** core growth *and* replacement
- Platform of choice for New Applications is unpredictable

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

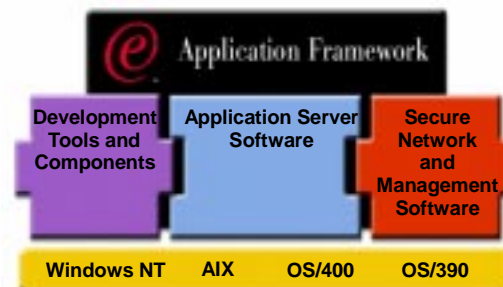
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What's the Answer?



- the *IBM Application Framework for e-business*
 - provides a **comprehensive**, robust e-business model
 - is based on a set of industry **standards** and technology
 - offers **leadership** products
 - supports **key platforms**
 - helps **protect** core investments



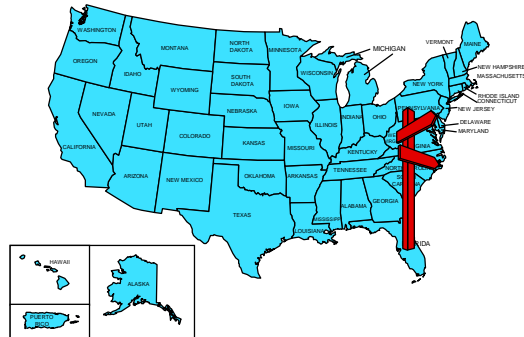
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Agenda

- Introduction to VSE/ESA V2.5
- Background
- **e-business Roadmap**
- Customer Options



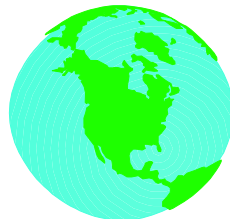
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**Alice - "Would you tell me, please,
which way I ought to go from
here?"**

**.....Lewis Carroll 'Alice's Adventure in
Wonderland'**



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Cheshire Cat - "If you don't know where you're going, you might wind up somewhere else..."

.....Lewis Carroll 'Alice's Adventure in Wonderland'



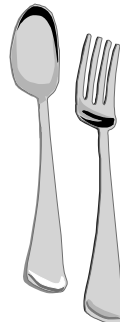
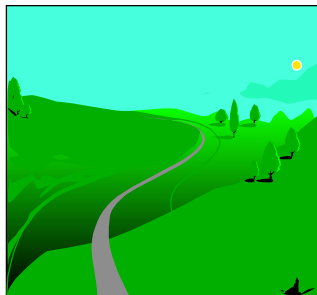
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"When you get to a fork in the road - take it!"

.....Yogi Berra



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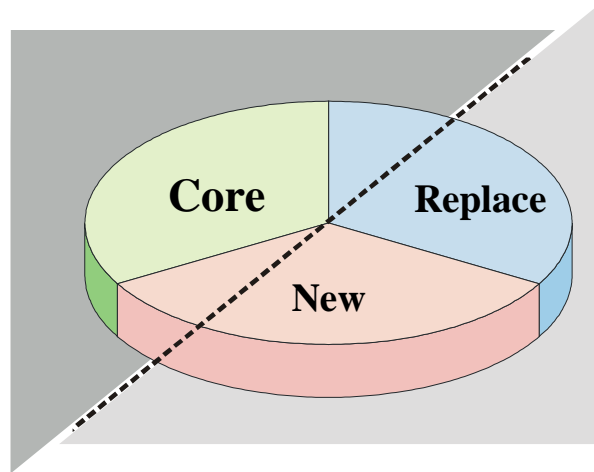
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Core Applications

CICS-Based

VSE/ESA (and VM/ESA)	S/390
OS/390	S/390



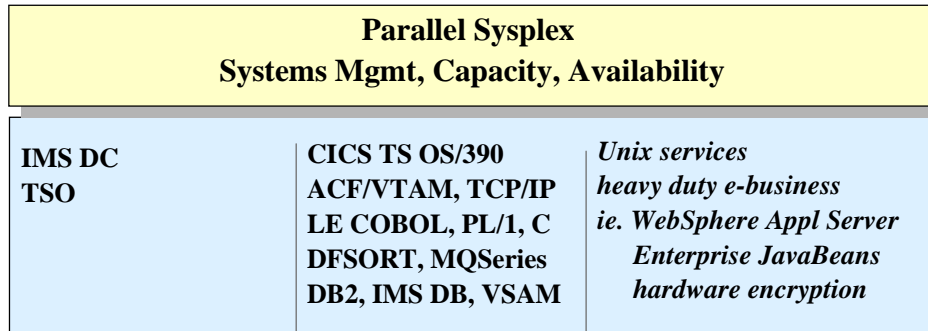
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Scope of Affinity



OS/390

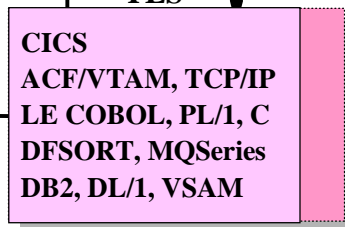


Unique to MVS

YES

Evolving OS/390

No



Limited,
supplemented by
vendor solutions

VSE/ESA

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IBM Product Diversity

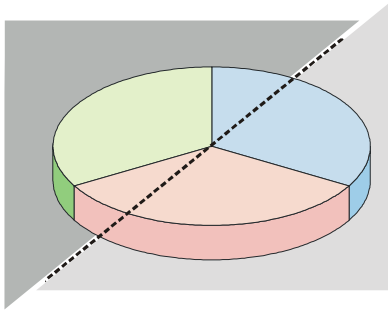


CICS-Based

VSE/ESA (and VM/ESA) S/390

OS/390

S/390



UNIX-based

OS/390 (UNIX branded) S/390

AIX

RS/6000

SCO UnixWare

Netfinity

DYNIX/ptx

NUMA-Q

Linux

all IBM servers planned

Windows NT-based

Netfinity, NUMA-Q

OS/400-based

AS/400

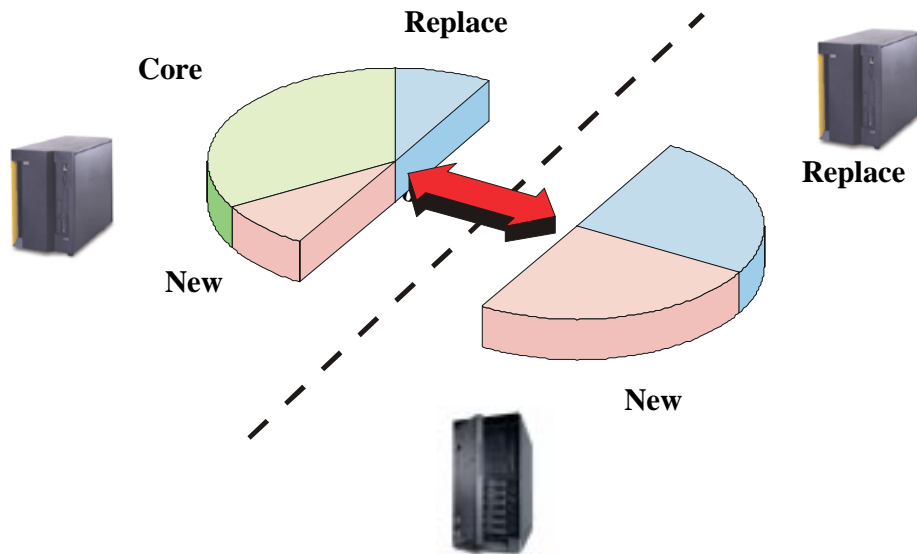
'Hosting'

IBM Global Services

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Working Together in a Mixed Server Environment



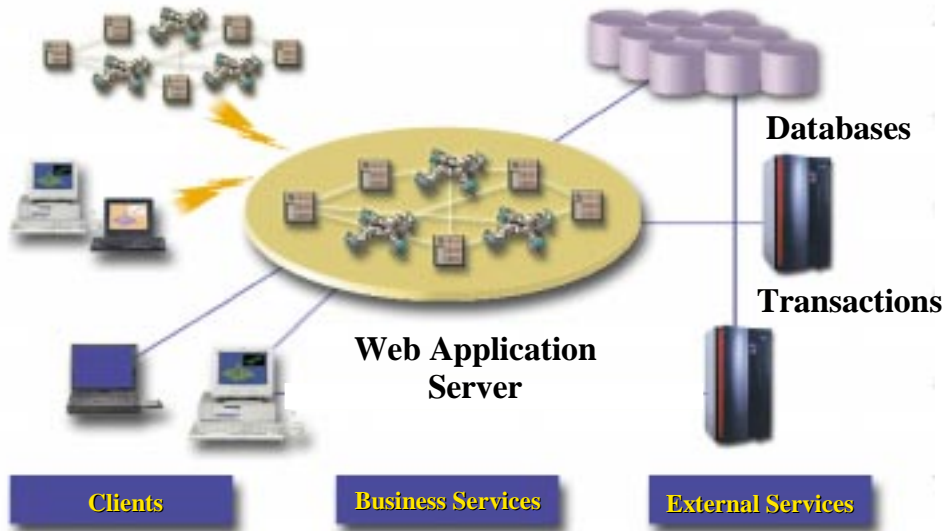
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IBM Application Framework for e-business - a 3-tier logical model



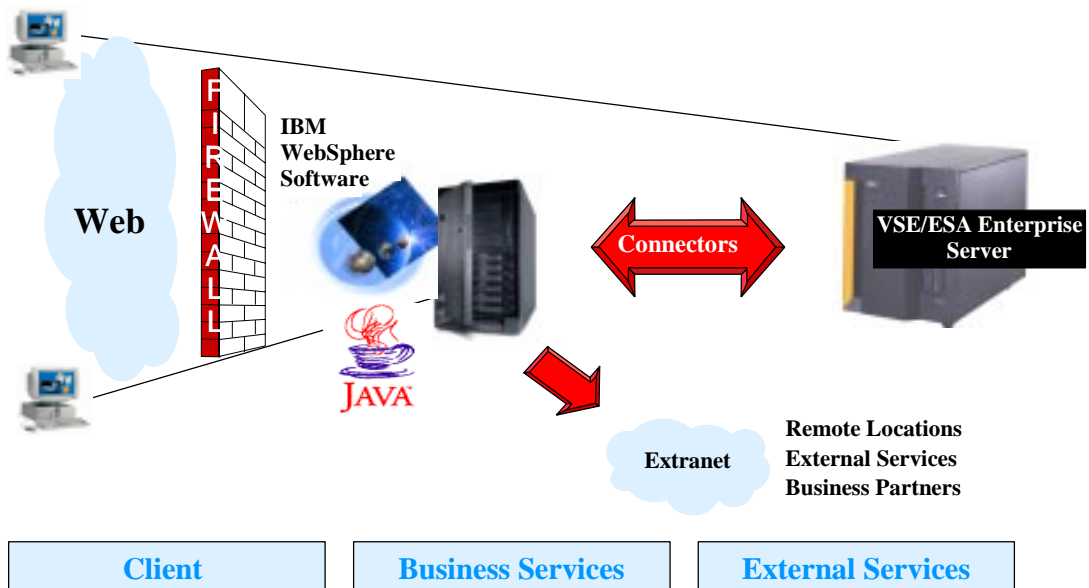
World Wide Web



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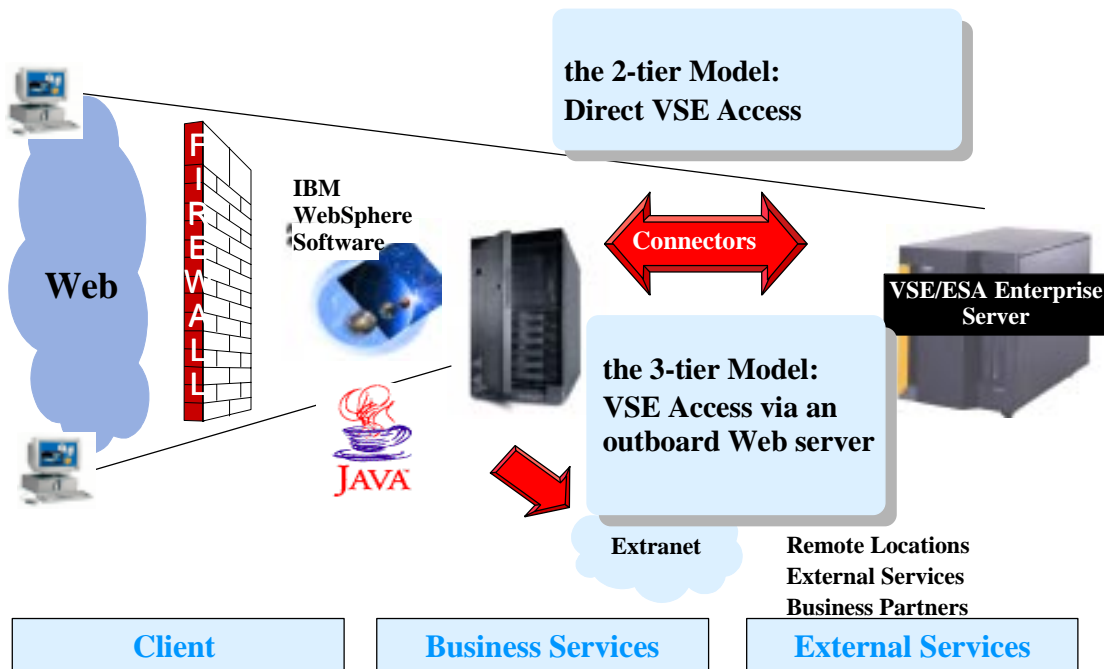
VSE and the Application Framework for e-business



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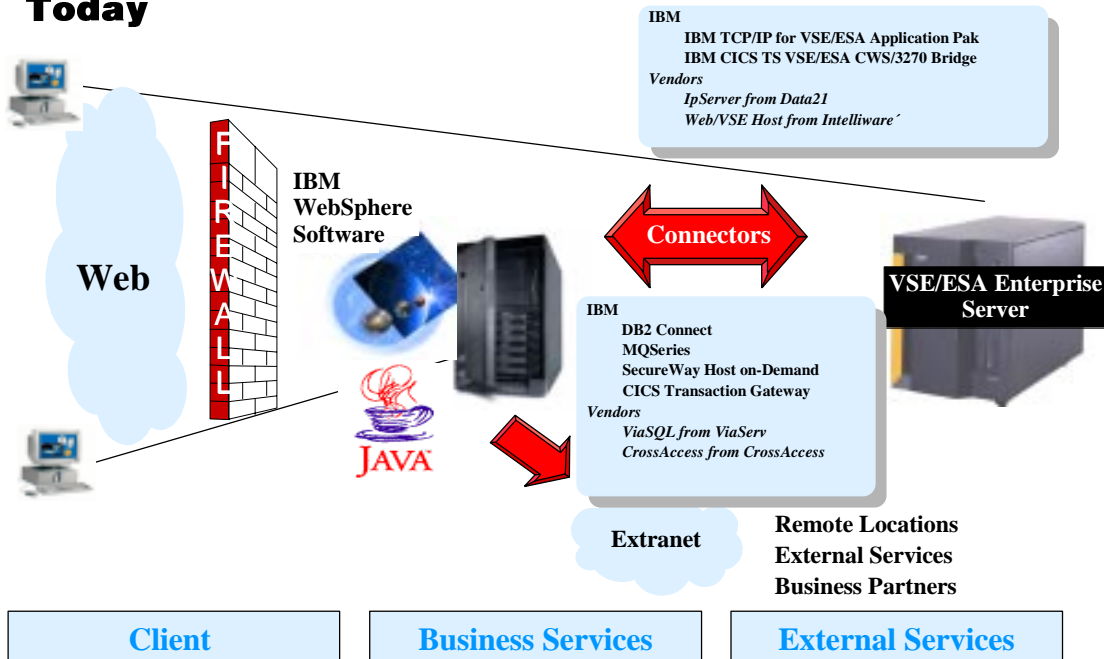
2-tier and 3-tier e-business Models



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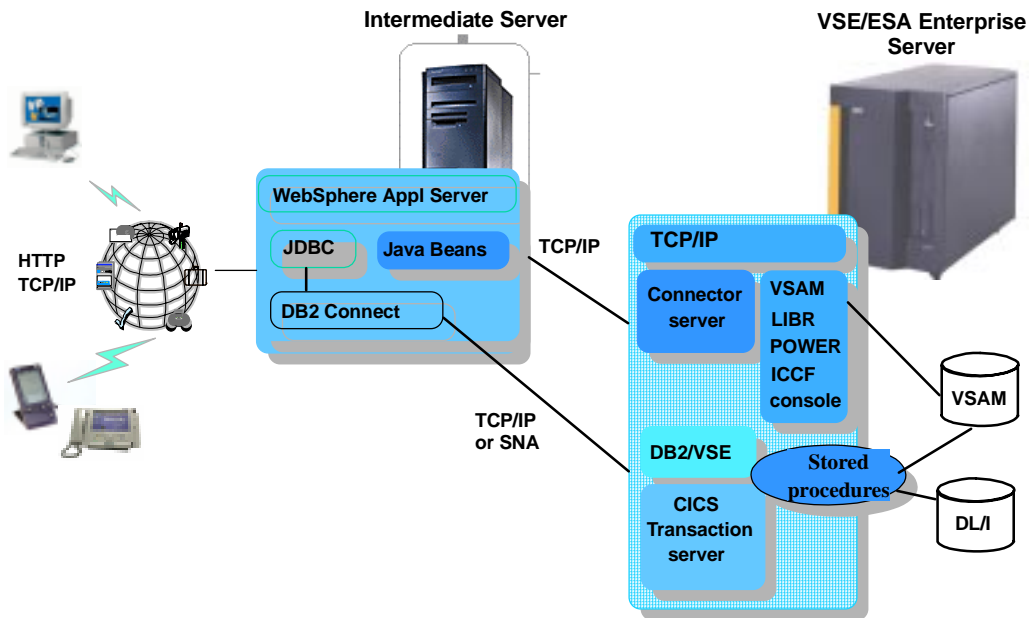
2-tier and 3-tier VSE Implementations Today



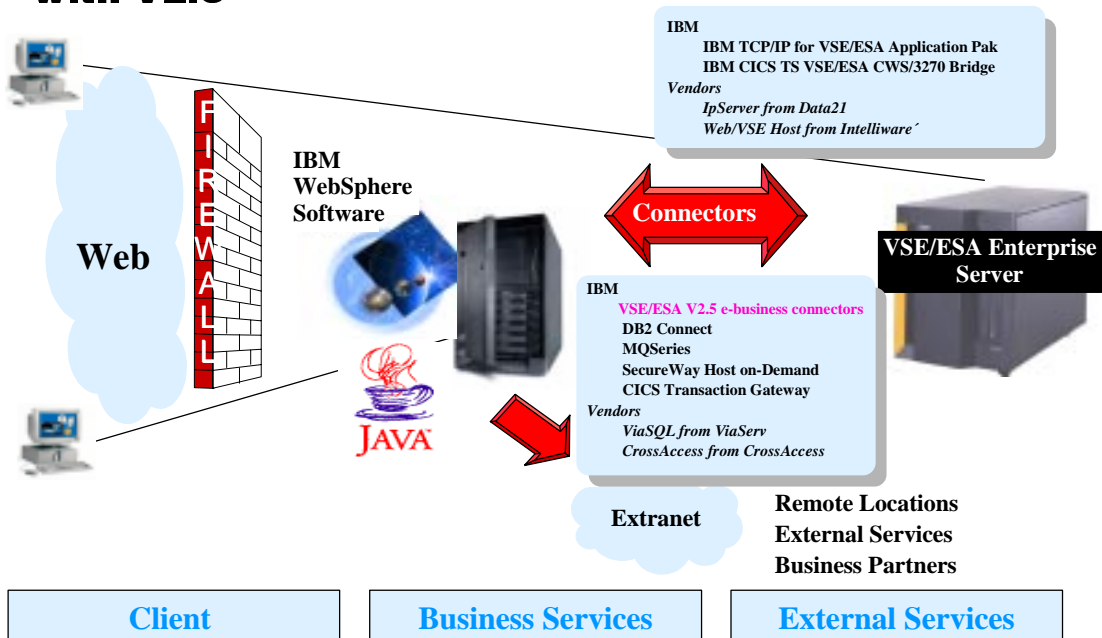
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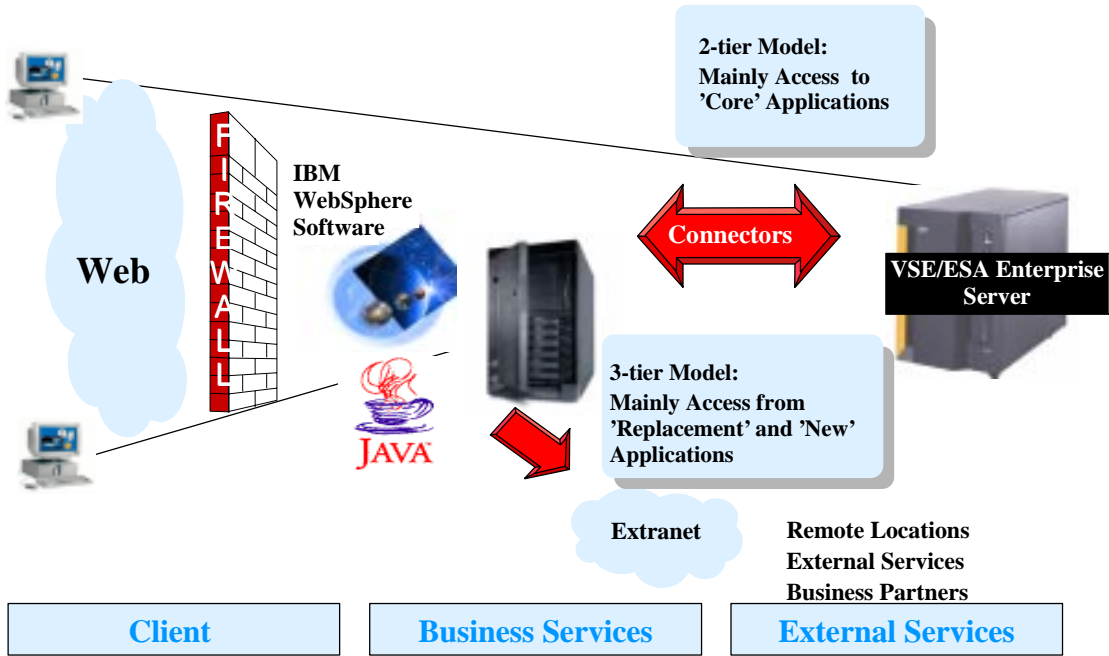
New VSE/ESA V2.5 3-tier e-business Connectors



2-tier and 3-tier VSE Implementations with V2.5



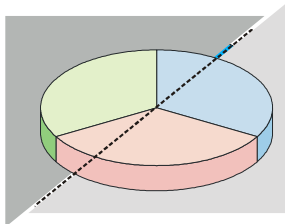
Primary 2-tier and 3-tier usage



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e-business Models: Applications



Core
Replacement
New

2-tier

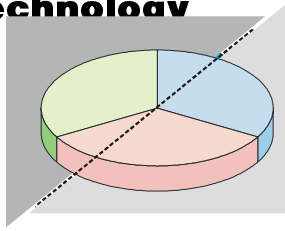
3-tier (logical)

Primary	
Secondary	Primary
Secondary	Primary

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e-business Models: Basic Enabling Technology



Core
Replacement
New

2-tier

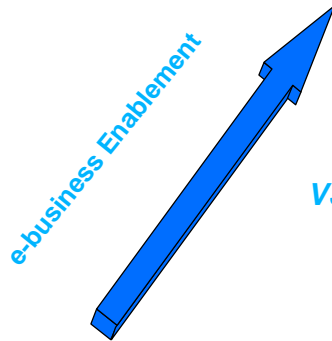
3-tier (logical)

CICS Trans Server	
<i>CICS Trans Server</i>	WebSphere
<i>CICS Trans Server</i>	WebSphere

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VSE Directions



VSE/ESA V2.5 Preview
 • Enhanced Interoperability



VSE/ESA V2.4 June 1999
 • CICS Transaction Server for VSE/ESA
 • *e-business*

Emphasis is on 3-tier e-business enablement, *somewhat* less on traditional VSE/ESA priorities such as more capacity, quality improvements, and expansion of OS/390 affinity



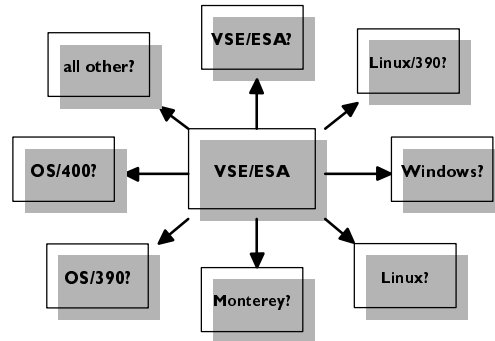
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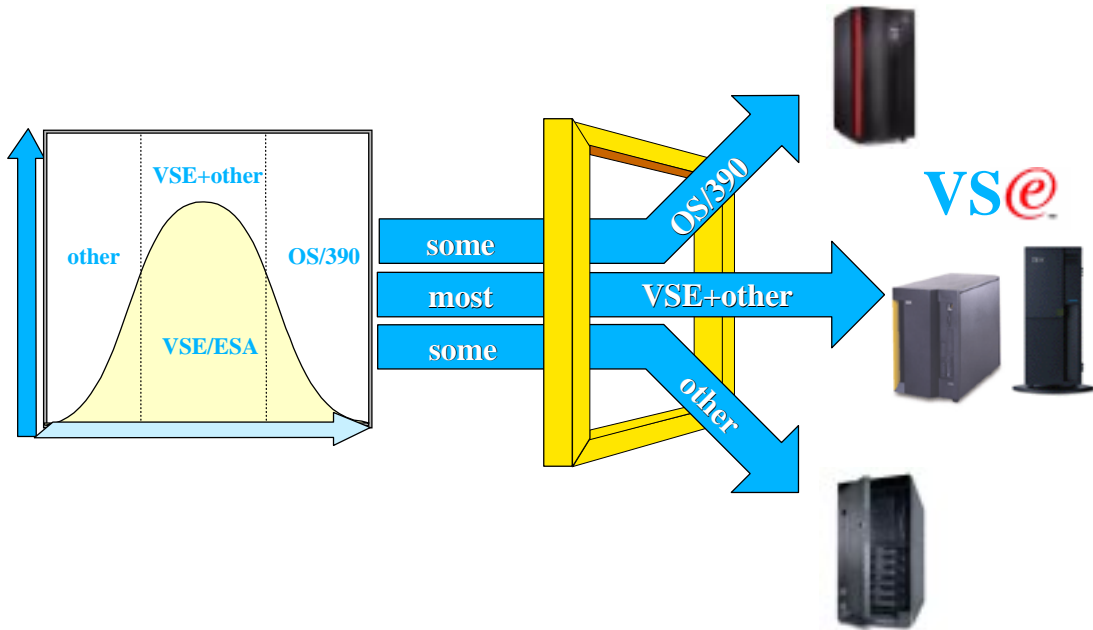
- Introduction to VSE/ESA V2.5
- Background
- e-business Roadmap
- **Customer Options**



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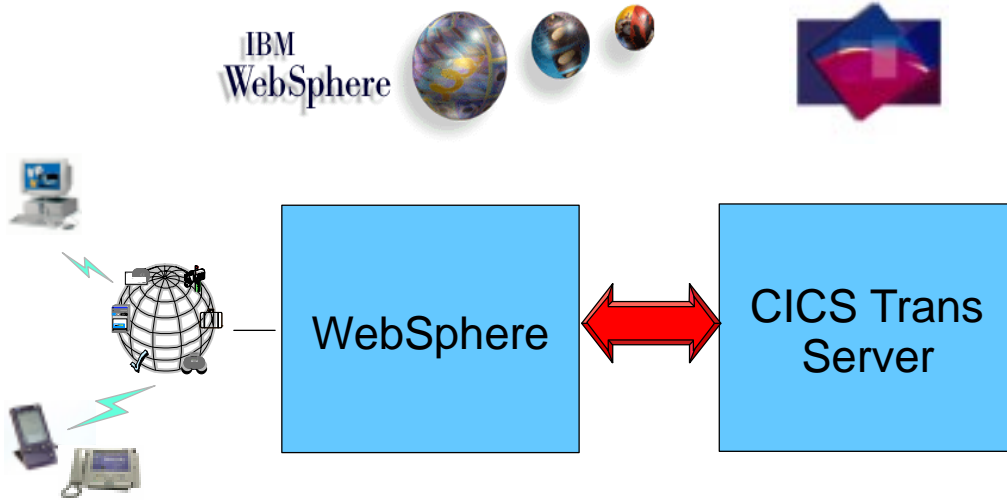
Options



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A Common 3-tier logical Model



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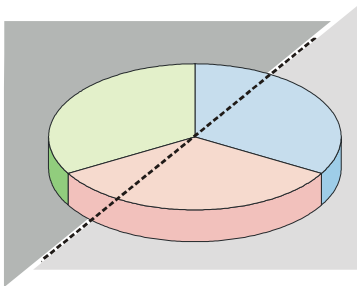
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Future IT Infrastructure



CICS-Based

VSE/ESA (and VM/ESA) S/390
OS/390 S/390



Application Framework/WebSphere-Based

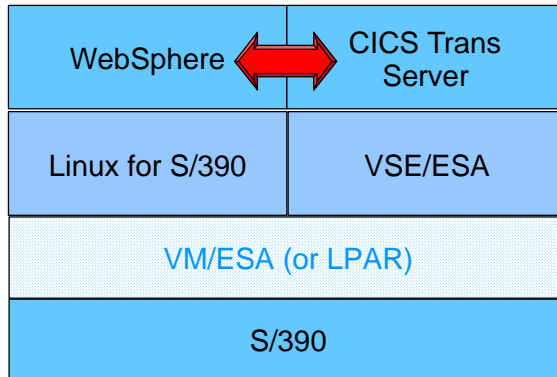
OS/390 (UNIX services)	S/390
Project Monterey	RS/6000, Netfinity, NUMA-Q
Linux	all IBM servers (incl S/390)
Windows 2000	Netfinity, NUMA-Q
OS/400	AS/400
'Hosting'	IBM Global Services

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**Linux for S/390 Option:
3-tier logical / 2-tier
physical**

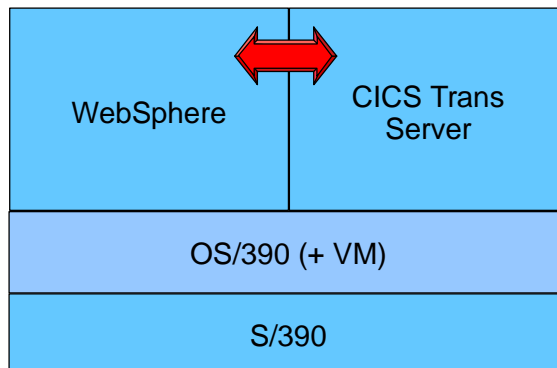


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**OS/390 Option:
3-tier logical / 2-tier
physical**

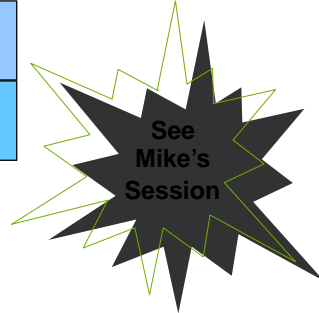
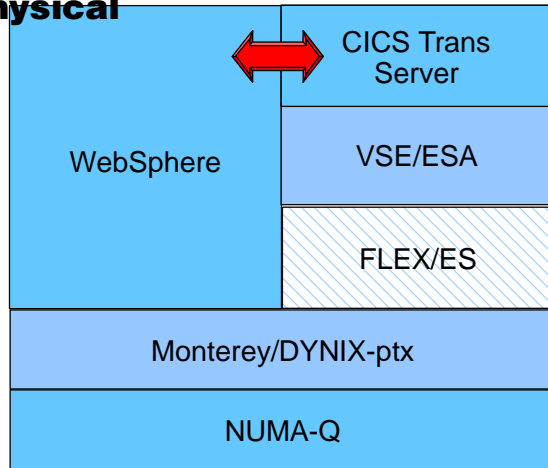


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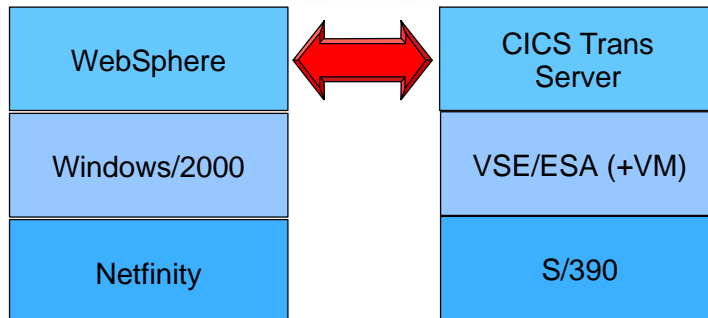
**New: NUMA-Q Option:
3-tier logical / 2-tier
physical**



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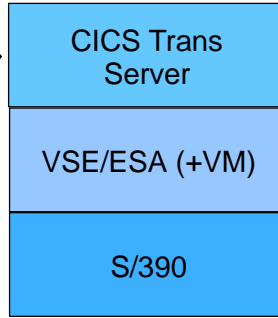
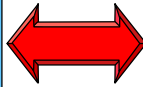
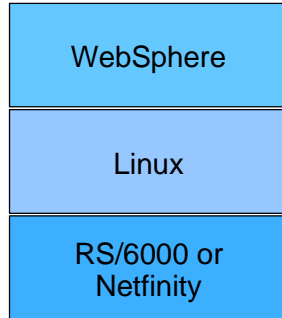
**Windows 2000 (r)
Option:
3-tier logical / 3-tier
physical**



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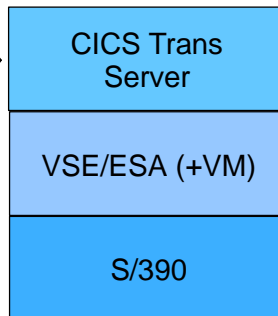
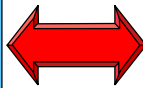
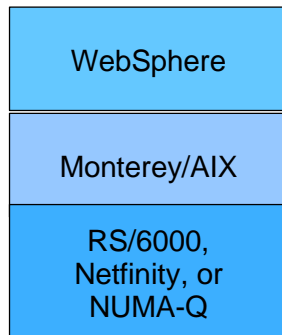
**Linux Option:
3-tier logical / 3-tier
physical**



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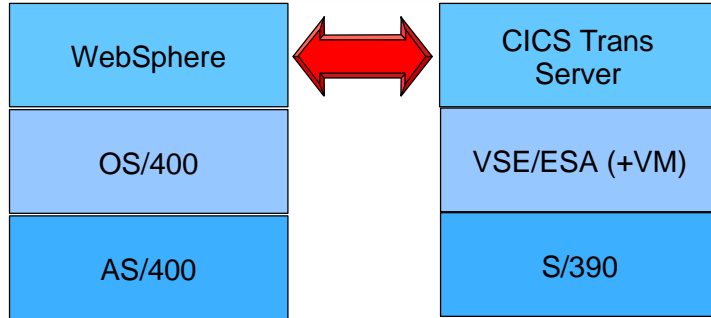
**Monterey (UNIX)
Option:
3-tier logical / 3-tier
physical**



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**OS/400 Option:
3-tier logical / 3-tier
physical**



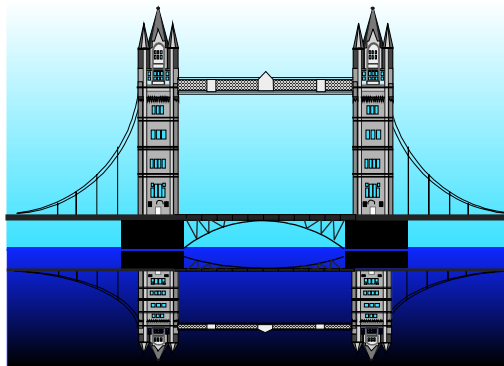
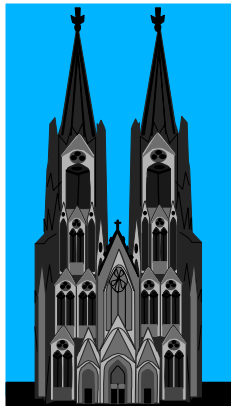
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**Basic Enabling
Technology**



IBM
WebSphere



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Summary



- Protect Your Core VSE Investments
 - ▶ modernize using
 - **CICS TS VSE/ESA**
 - DB2 Server, Visual Tools, etc.
 - ▶ extend core applications to the Web
- IBM *Application Framework for e-business* for significant Replacement and New Applications
 - ▶ **WebSphere**
 - ▶ IBM Servers including
 - S/390 (of course)
 - but also NUMA-Q, Netfinity, RS/6000, or AS/400

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Important New Things For You to Consider



- **IBM Application Framework for e-business**
- **WebSphere Application Server**
- **Linux for S/390**
- **IBM NUMA-Q (formerly Sequent)**
- **Modernized Core Applications**
 - ▶ CICS TS VSE/ESA
 - ▶ DB2 Server
 - ▶ 'Visual' tools (VisualAge Generator, Cobol, etc.)

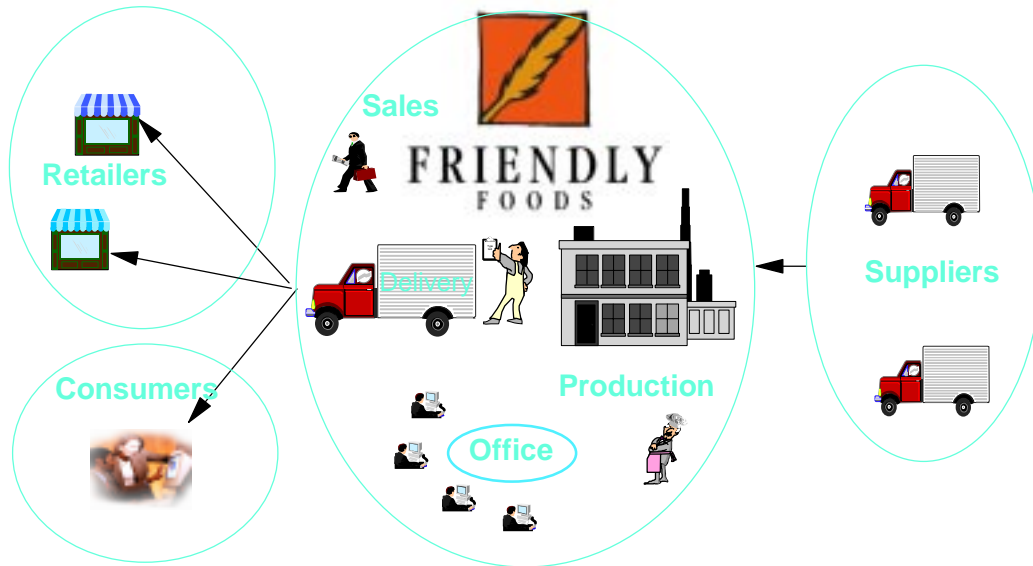


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Friendly Foods

an entirely fictitious company used to demonstrate
e-business solutions



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After Almost 35 Years
Providing Cost/Effective
Solutions to IBM
Customers the World
Over, VSE Doesn't Get
Older - It Gets Better.
Now, through the IBM
Application Framework
for e-business, **you can
be as competitive in
e-business as you want to
be!**



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