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Demystifying OS/390

intelliWare
SYSTEMS, INC.
The VSE Technology Company™

Open for VSe-business™

*Intelli*Ware Systems, Inc.
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Demystifying OS/390 ?!

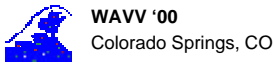*Or: "How I learned to stop worrying and love the bomb."*

Secondary title to:

" *Dr. Strangelove* "

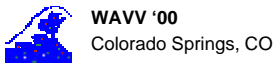## intelliWare   *Open for VSe-business*   WAVV99-2

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Trademarks

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S/390	Sysplex	DB2
VM/ESA	Multiprise	MQSeries
OS/390	CICS	Net.Commerce
IBM	VSE/ESA	VisualAge
S/390	WebSphere	

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Win/VSE	Web/VSE Host
iFrame	

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UNIX	FLEX-ES	JAVA
Lotus	Lotus Domino	

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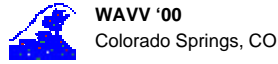
Objective:

- IS **NOT**:
    - To convince you to migrate to OS/390
    - To tell you about migration tools
- It **IS**:
    - To tell you about some useful OS/390 tools
    - To tell you how it can work **with** VSE/ESA
    - To show how it can be affordable

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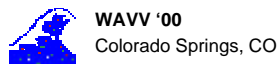**IntelliWare**
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Agenda

* How OS/390 can be affordable
  * Multiprise 3000 H30 Migration Option
  * OS/390 Workload Transition offering
* Why you might want to use OS/390
  * Advanced *e*business solutions
  * UNIX Services and related apps.
* How OS/390 can connect to your VSE/ESA
  * TCP/IP : FTP, NFS, etc.
  * "Connectors" (VSE/ESA 2.5)
  * Web connections, Web/VSE Host (and OS/390)

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But first, a Reminder

- Each system has it's strengths and even weaknesses
- Our objective is to use each to it's best advantage
- No one system is best for all purposes, sometimes we have to use more than one!

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Think of them this way...

VSE   OS/390   VM/ESA

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Multiprise 3000 H30 Migration Option

- Designed to make big jumps easier
  - 60 MIPS would be a high entry point
- Upgrade to Multiprise 3000 H30
  - From old/small processor
  - GOLC pricing is good to start with
- Get discounted GOLC pricing
  - Discount varies according to 'from' system
  - Smaller 'from' systems get larger discounts
  - Discount can range up as high as 50%

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Good price on VSE/ESA

- OK, now I've got a good price on VSE/ESA on my new MP 3000, but isn't OS/390 *expensive*??

VSE/ESA +

Limited time offer

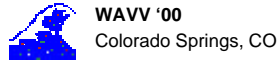Price good for 3 years

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OS/390 Workload Transition Offering

- Intended to assist VM/ESA and VSE/ESA customers 'transition' to OS/390
- Also a good way to use and try out OS/390 for three years at little/no cost
  - Then decide if you like/want it
- Only available on GOLC licensed systems
  - Currently, only Multiprise 3000
- Few "Terms and conditions"

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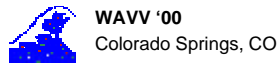
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What you Get

- OS/390 license (current version/release)
  - And "OS/390 middleware software whose function is similar to VM and/or VSE software installed on the same Multiprise 3000 processor"
- Optional preloaded OS/390 system
- IBM Education card
  - One person
  - Intended for taking OS/390 courses

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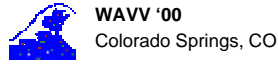

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What it Cost

$ 0.00

- For three years
- Then normal GOLC for processor

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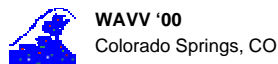Colorado Springs, CO

What's the Catch?

- ... "customers are expected to have one or more OS/390 applications in full production within 36 months of the acceptance of this offering".
- No specified cancellation or other penalties

  Try it, you might like it……

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But ... WHY ?

OK, I can get OS/390 for a very reasonable cost. But why would I want to?

In a word: **Tools**

More tools to work with and exploit.

(you can never have too many tools)

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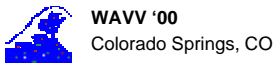Colorado Springs, CO

Tools for *e*Business

- VSE has some nice tools
  - http (web) Servers
  - zWeb/Host
  - TCP/IP (with FTP, NFS, etc.)
- But, in keeping with VSE philosophy
  - Fairly basic functions... nothing 'fancy'
  - No complete development environment for advanced web functions

VSE has a good toolbox of wrenches, sockets, and screwdrivers, but if you have a new car to maintain, you need a computer driven diagnostic center.

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WebSphere WAS*

- JAVA based application / development environment
- HTTP Server (with CGI)
- JAVA for OS/390
- Component based application deployment
  - Enterprise Java Beans and Component Broker

Complete *e*Business Web development and delivery system

*WAS = Web Application Server

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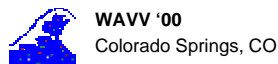
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Net.Commerce

- Presents web pages built dynamically from a database
- Support individual 'stores' and 'malls' of multiple stores
- Provides 'shopping cart' and payment support
- A 'database' at heart
- A toolkit, not a turnkey solution
- Includes high-level interfaces to DB2 and net.data

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UNIX Services

- Fully branded, *'UNIX-95'*(+) system
- Standard and 'automatic' with OS/390
- Interfaces to traditional OS/390 files and interfaces
- Supports UNIX based Apps
  - Lotus Domino – Notes
  - SAP R/3
  - PeopleSoft

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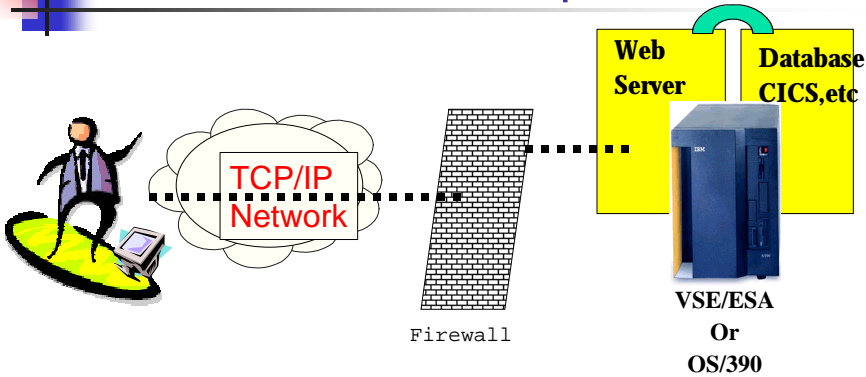WAVV99-18

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Now, HOW to utilize OS/390's tools

- VSE/ESA 2.5 has 'Connectors'
  - VSE External Services
    - Access to VSAM, Power, ICCF
  - DB2 Infrastructure
    - Access to VSAM and DL/1 files
- OS/390 has 'Connectors'
  - First Generation (API) connectors
  - Second Generation (Java) connectors
  - Third Generation (Enterprise Java) connectors

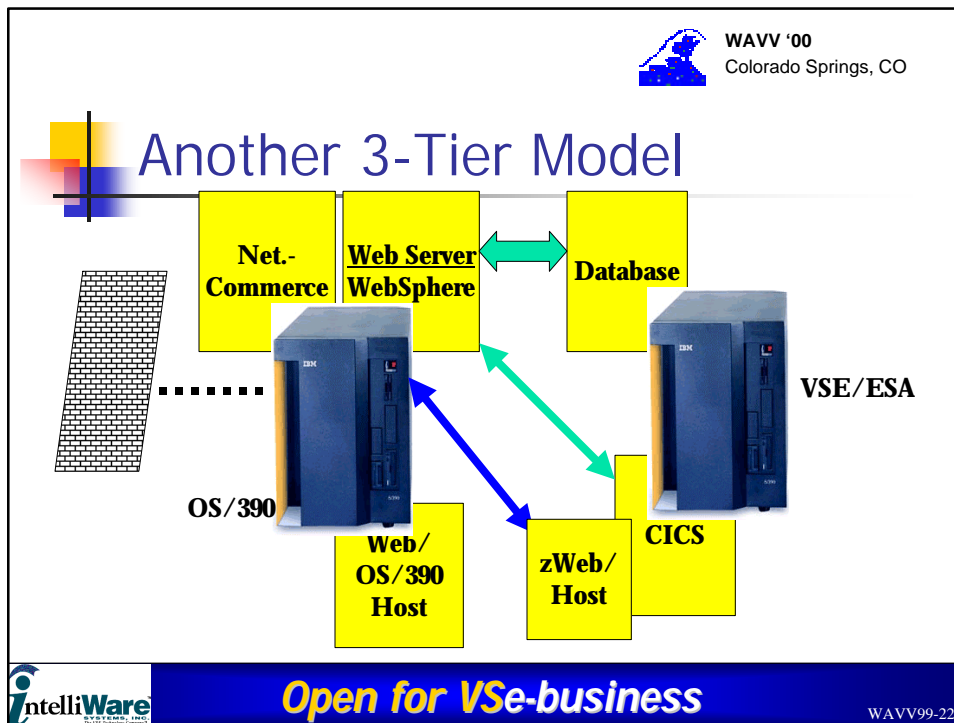*IntelliWare*

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Basic 2-Tier Example

Web Server   **Database CICS,etc**

TCP/IP Network

Firewall

VSE/ESA Or OS/390

Note: Future examples will only show 'inside' of firewall.

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Classic 3-Tier

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Web Server
WebSphere
Apache

Database

VSE/ESA

or

OS/390

PC Server
NT, UNIX,
etc

CICS

zWeb/
Host

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Another 3-Tier Model

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Net.-
Commerce

Web Server
WebSphere

Database

VSE/ESA

OS/390

Web/
OS/390
Host

zWeb/
Host

CICS

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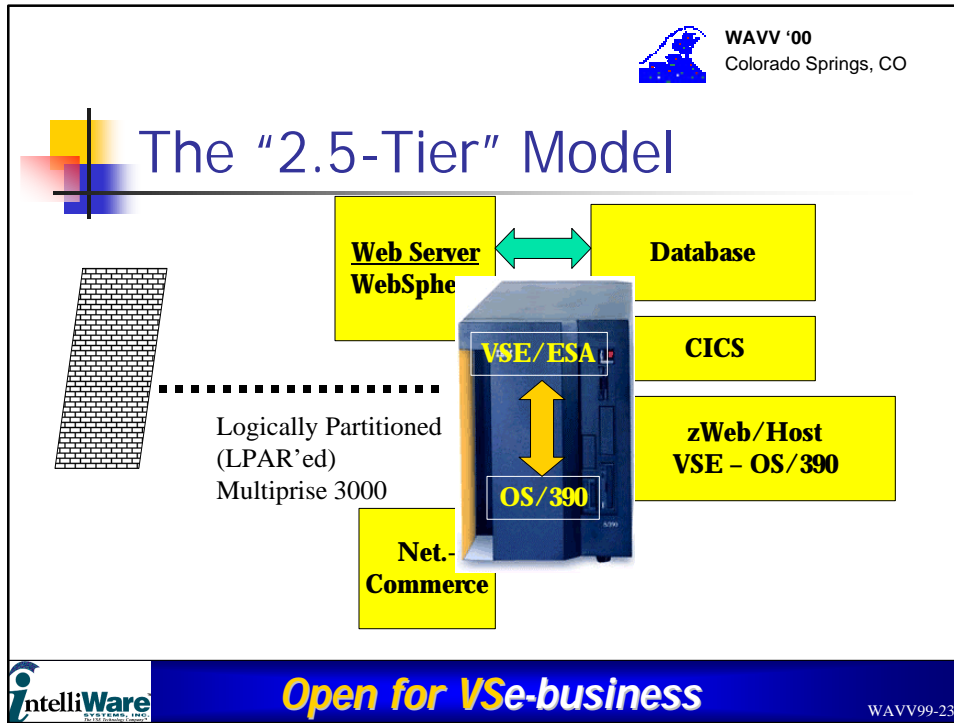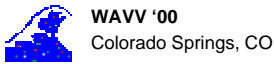
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The "2.5-Tier" Model

Web Server
WebSphe

Database

VSE/ESA

CICS

zWeb/Host
VSE – OS/390

Logically Partitioned
(LPAR'ed)
Multiprise 3000

OS/390

Net.-
Commerce

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Advantages of the "2.5 Tier"

- All the same architecture
  - Same concepts and I/O structures
  - Learning curve not as big
- Compatible / similar software products
  - CICS-TS - DB/2 - VSAM
- Fast! Interconnections
  - ESCON CTC
- Resource balancing
  - Dynamic rebalancing between LPARs

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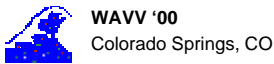**WAVV '00**
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Other OS/390 'Tools'

- Tivoli family of products
  - Systems/Network management
  - ADSM
- Application Development environments
  - TSO
  - UNIX Services

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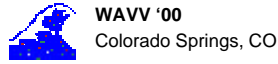---

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How about VM/ESA?

- Another good option:
  - Very flexible
  - Good synergy with VSE
  - Multiple Tools
- But:
  - No "Migration Offering"
  - Not as many "Off the shelf" *e*business tools
    - Websphere, net.commerce, etc

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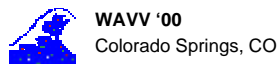

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Linux for S/390 ?

- Good possibilities:
  - Definitely low cost
  - Very flexible
  - Future potential very bright
- Not quite ready
  - Only basic *e*tools (Apache, etc.), not advanced (WebSphere, net.commerce)
  - Steeper learning curve

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Summary: VSE + OS/390

- Not for everyone, but can be useful
- Takes advantage of available, advanced tools within the S/390 family
- Minimal additional cost (for 3 years)
  - And a LOT can happen in 3 years

Maybe you should add
OS/390 to your tool-kit.

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