



IBM ITSO Poughkeepsie - the zSeries Redbooks people

WebSphere software

WebSphere & z/OS News & Outlook



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Objectives

- WebSphere on zSeries news & expectations
- WebSphere Development
- zSeries recent Announcements



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zSeries eBusiness Expectations

■ z/OS

- Personalization server (in progress)
- Portal server (committed)
- Commerce Suite (in progress)
- Domino (available)
- B2B Server (committed)
- WAS will deliver FF WebServices

■ Linux

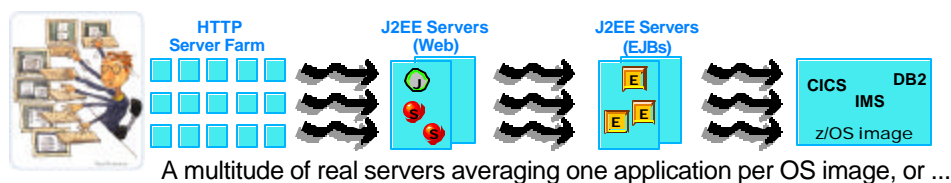
- Personalization server (available)
- Commerce Suite (available)



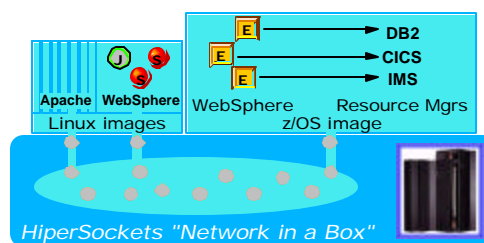
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AE V4: coming soon to Linux zSeries

- SuSe Linux 7.0 available for zSeries (pure Linux, no alterations!)
- WAS AE V4 is committed for YE2001 delivery



... a multitude of virtual servers on a few real systems where each virtual server can run multiple applications in a single OS image



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WebSphere AD

■ **WebSphere Studio** is the brand name for the next generation of tooling:

■ **Products:**

▶ **WebSphere Studio Site Developer**

- ◆ Focused on development of Web Services, JSPs, Servlets, XML, WAS and Basic Team support.
- ◆ WebSphere Studio 4.0 'Classic' will contain the Beta

▶ **WebSphere Studio Application Developer**

- ◆ Includes all WebSphere Studio Site Developer functionality
- ◆ Focused on development of J2EE and database applications in a team environment
- ◆ VisualAge for Java EE 4.0 will contain the Beta



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Workbench Key ISV Partners

- Rules based development
 - ▶ Versata
- Connectors
 - ▶ Extricity
 - ▶ Neon
- Development tools
 - ▶ Instantiations
 - ▶ Macromedia
- Business Process Modeling
 - ▶ Holosofx
- Requirement Management
 - ▶ RationalSuite Analyst Studio
- Application and Data Modeling
 - ▶ RationalSuite Developer Studio
 - ▶ TogetherSoft
- Web Content Management
 - ▶ Interwoven SiteExpress
- Software Configuration Management
 - ▶ Rational ClearCase / ClearQuest
 - ▶ Merant PVCS
 - ▶ Serena ChangeMan
- Quality Assurance / Performance
 - ▶ RationalSuite Test Studio
 - ▶ Sitraka
- Business Process Integration
 - ▶ CommerceQuest
- Personalization
 - ▶ IBM Personalization Server
- JCA Adapter Toolkit
 - ▶ WebSphere Business Integrator



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z/VM Announcement

z/VM Version 4 is the strategic zSeries virtualization technology which enables customers to run hundreds of Linux images on a single IBM eServer zSeries or S/390 processor.

The IBM S/390 Virtual Image Facility for Linux (VIF), which was introduced in September 2000, has limited capabilities compared to z/VM and does not provide the extensive function required by the majority of our customers needing virtualization technology. In addition, VIF has since been functionally stabilized and we intend to announce the End of Marketing for VIF in the near future. End of Service for VIF was announced in the VIF Software Announcement, ZP00-0443, dated August 1, 2000 and is effective December 31, 2002.

z/VM 4.2 includes the z/VM System Administration Facility which provides for simplified management of Linux images similar to that provided by VIF. For customers already running VIF, z/VM 4.2 has a utility to assist with migration. For more information on z/VM 4.2 see the z/VM Web site below.

z/VM Web site <http://ibm.com/zseries/zvm/>



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z900 Hipersockets

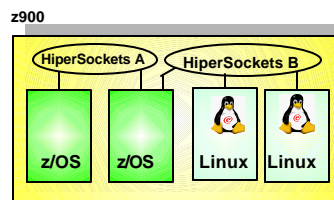
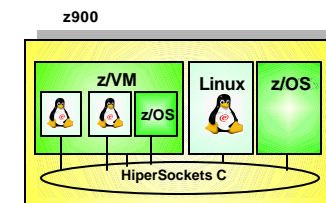
■ Hipersockets - The Network in the Box

IP networking among virtual servers in a z900

- Improved response time due to low latency
 - High Speed connectivity via memory bus
- Highly Secure
 - Data never flows outside the server
- Highly available
 - Integrated zSeries hardware, no external parts
- Cost savings
 - No external network, attachment, or cables
- Flexible
 - Combinations of z/OS, Linux, and z/VM
- Simple to install, operate, maintain
 - Transparent to applications

Pre-requisites

- z/OS 1.2, Linux kernel 2.4, z/VM 4.2
- z900 Microcode

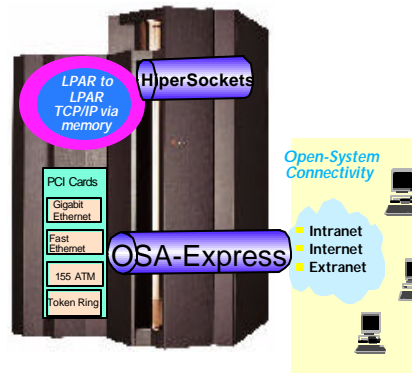


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z900 Network Connectivity

OSA-Express

- Gb Ethernet
- Fast Ethernet
- 155 ATM
- Token Ring
- Up to 24 ports on 12 cards
- Faster, more cost effective than channel attached control units
- HiperSockets
- High speed "inter-partition" TCP/IP communications
- No external network dependency



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z/OS Announcement Security Enhancements

PCI Cryptographic Accelerator (PCICA)

- Extending zSeries leadership
- Up to 3850 SSL handshakes /sec

Extending z900 crypto support to IFLs*

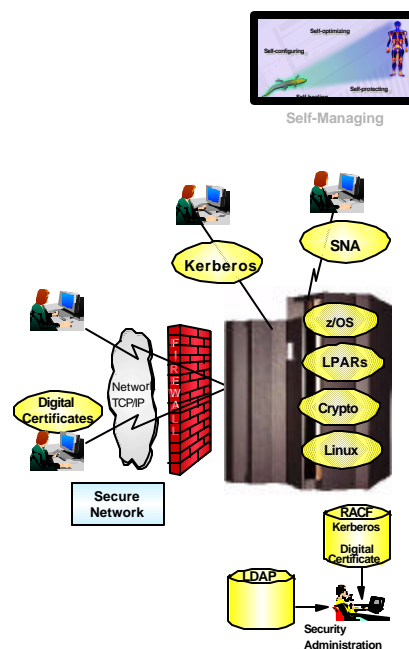
z/OS 1.2 Intrusion Detection Services

- Further protection against hacking

Extend the scope and ease of administering z/OS security technologies:

- Internet - Digital Certificates, SSL
- Intranet - Kerberos

*SOD



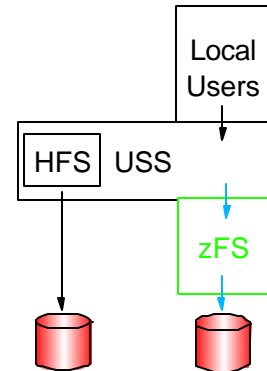
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z/OS Announcement

zFS

A new UNIX file system for z/OS!

- Up to 33% improved performance
 - Long running I/O jobs
 - Sequential reads of large files
 - Random I/Os
- Improved recovery
- Easy to implement
 - Same UNIX APIs; no recompiles required
 - DCE is NOT required
- Other features:
 - "Shared zFS" across a sysplex
 - Disk space sharing between file systems in the same data set
 - File system cloning
- Complementary to HFS

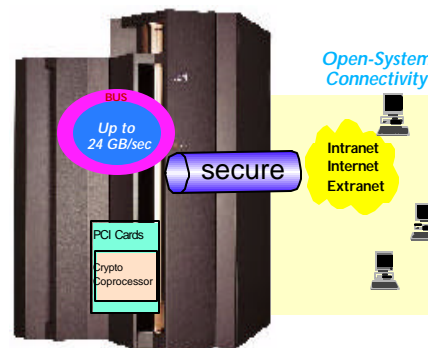


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z900 PCI Cryptographic Coprocessor Card

Up to 8 PCI Cryptographic Cards with 16 processors

- High performance (greater than 2,000 SSL-Transactions/sec/ system)
- Managed by z/OS ICSF
- Encryption of Transactions
- Network Encryption
- Support of TDES and SSL
- PCICC is programmable User Defined Extensions (UDX)
 - Rapidly deploy new standard functions
 - Enable migration from IBM 4753 channel attached crypto units
 - Customized User Defined Extensions (UDX)



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z900 PCI Cryptographic Accelerator Card

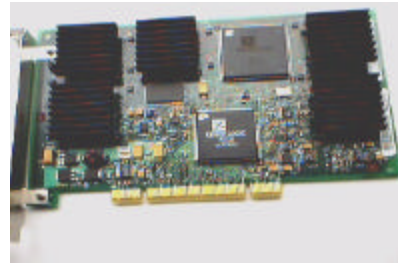
Up to 6 PCI Cryptographic Accelerator Cards with
12 processors

Provides increases SSL throughput and price
performance (> 50%)

High performance asymmetric encryption (Public
Key) accelerator

3,850 transactions/sec/system

Managed by z/OS ICSF



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Appendix

WSAD Details

WS Personalization

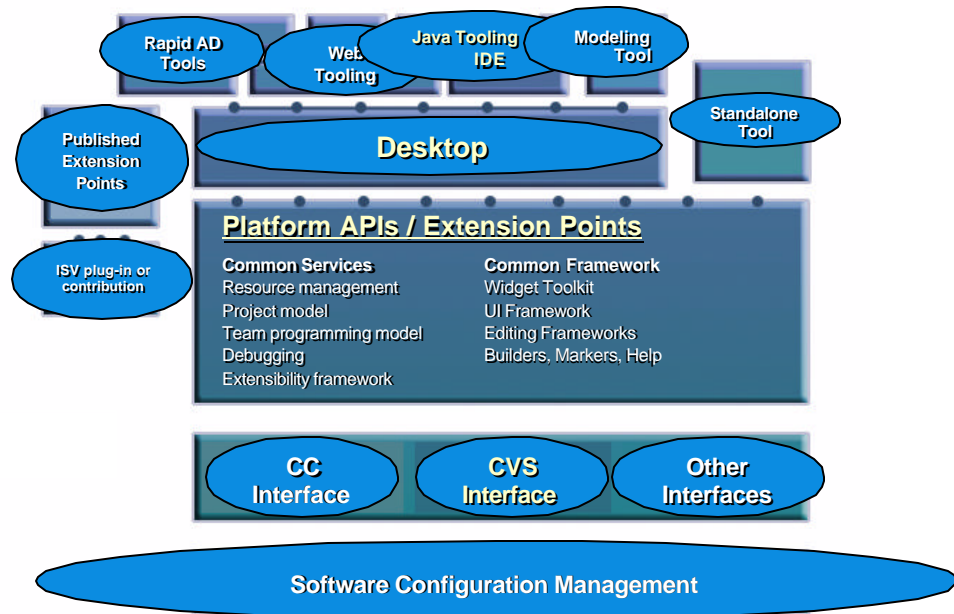
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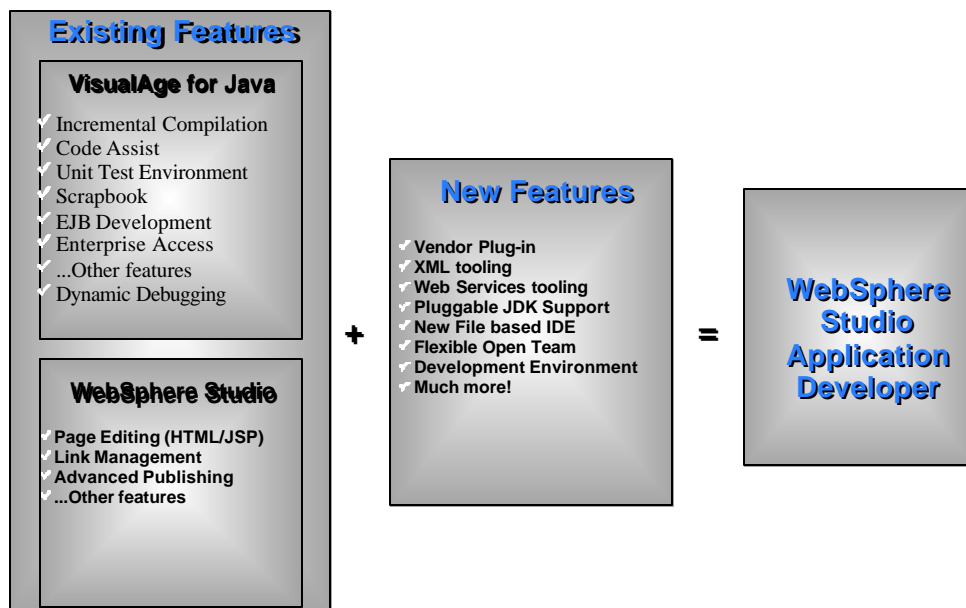


Workbench - Architecture



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WSAD



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WSAD Content

• Content

- Partial WS Studio Pro 4.0 (Classic) Features
- WAS 4.0 Exploitation
- SOAP, WSDL, UDDI
- JSP 1.1 & Servlet 2.2 Exploitation
- JDK 1.3 Exploitation
- Web Services Tools (Creation & Consumption)
- XML Tools
- Integrated Java IDE
- Database tooling (Limited)
- Team Support
- Server Configuration
- Deployment to WebSphere SE/AE4.0
- Deployment to Apache & Jakarta/Tomcat
- Migration from Studio 4.0 Classic

• Content

- WebSphere Studio Site Developer plus...
- EJB 1.1 creation, mapping, testing, assembly and deployment tools
- Creation of all required J2EE packaging artifacts
- Version control and team support (WebDAV / CC LT)
- Basic Java IDE for editing and debugging of server side artifacts
- Command line code gen & deploy tools
- Migration and interoperation tools from and for VisualAge Java
- Database support: DB2, DB2/400, DB2/390, Oracle, Sybase, SQL Server
- Web-based Developer Community support

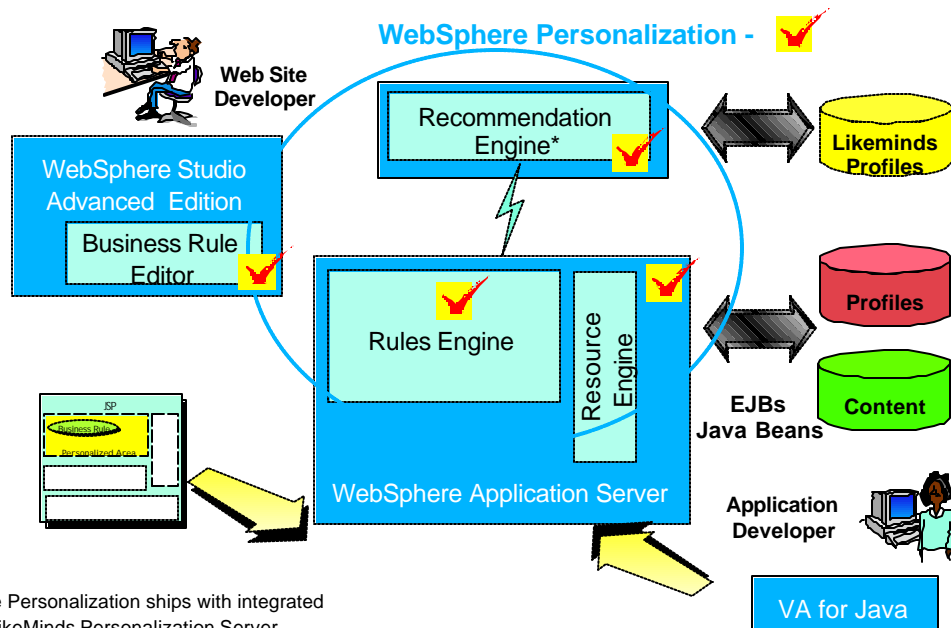
• Enterprise Connector Feature (optional / priced)

- Bi-modal EAB/SAP tools support for CCF and JCX connectors
- Implementation of J2EE Connectors Architecture (JCX 1.0)
- J2EE enabled connectors (SAP, CICS)
- New J2EE connectors (PeopleSoft, Oracle Financials, JD Edwards)



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WebSphere Personalization



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