

Actually, you can have it all !



VSE/ESA Version 2 Release 7: focus on interoperability



With on-going maintenance and normal enhancements, many of your VSE applications will continue to meet their business objectives for the foreseeable future. All else being equal, you may prefer to continue utilizing these proven, cost-effective assets.

What's new in VSE/ESA V2.7?

VSE/ESA V2.7 builds on the interoperability of V2.5/V2.6; adding new Web services for SOAP and XML, support for HiperSockets™ and PCICA encryption assist, and ESS Large Volume Support.

VSE/ESA V2.7 basics

Transaction Processing

CICS Transaction Server for VSE/ESA (CICS TS VSE/ESA) can help you to improve your availability because it is designed to reduce both scheduled and unplanned downtime.

CICS TS VSE/ESA represents a major rewrite and restructuring of CICS. Major tables, control blocks, and many CICS modules have been moved 'above the line' to provide significant virtual storage constraint relief. Ease-of-use is improved with the addition of capabilities such as resource definition on-line; (RDO) for files.

Shared data tables can improve response time. CICS TS VSE/ESA also exploits the zSeries Subsystem Storage Protect (SSP) feature.

Highlights

- **Protect your core VSE investments. Run the core VSE applications that continue to be critical to your business.**
- **Exploit all your e-business opportunities. Integrate state-of-the-art Web technologies and your core VSE applications and data.**
- **Low total cost-of-ownership (TCO). Linux® on zSeries™ allows you to build new world-class applications as well as consolidate existing distributed servers.**

Value that's almost legendary

VSE enables proven, robust, and cost-effective solutions. VSE on S/390® and IBM @server™ zSeries servers is designed to benefit thousands of companies in a variety of industries all over the world.

VSE provides sturdy batch and industrial strength on-line transaction processing (CICS®) capabilities. VSE is designed to provide solid, near 24 hours a day, 365 days a year availability (excluding planned downtime). VSE/ESA™ V2.7 can fit comfortably into a legacy of thrifty, dependable VSE solutions.

Protect core VSE investments

Over time, you may have accumulated sizable investments in your VSE systems. That investment includes application code, data, IT skills, equipment, as well as business processes and end user training.

You have a choice of security options. For basic sign-on and transaction ID protection, VSE/ESA V2.7 contains a Basic Security Manager at no extra charge. If you have more demanding security needs, full function security managers are available from Independent Software Vendors.

Business Intelligence

DB2® Server for VSE and VM is a powerful, full-function, relational database management system. It supports batch and transaction processing, as well as e-business and business intelligence environments. DB2 Server for VSE and VM Version 7 is an optional, priced component of the VSE/ESA V2.7 'base.'

Networking

IBM TCP/IP for VSE/ESA provides the standard TCP/IP network protocol and 'Sockets' API. It also provides common network applications such as file transfer (FTP client and server), terminal emulation (Telnet client and TN3270

server), print distribution and serving (LPR/LPD), and basic HTTP serving. Network File Server (NFS) and General Print Server (GPS) are optional priced features.

TCP/IP for VSE/ESA V1.5 supports the SSL (Secure Sockets Layer) security standard as well as OSA-Express, HiperSockets, and PCICA encryption assist.

IBM TCP/IP for VSE/ESA is an optional, priced product shipped with every VSE. It is available worldwide from IBM through an agreement with CSI International.

z/OS Affinity

Traditional affinity between VSE and z/OS™ helps ensure your VSE investments can be migrated to z/OS if you choose.

New value from your existing VSE assets

CICS TS VSE/ESA includes CICS Web Support (CWS) and 3270 Bridge at no extra charge. CWS allows direct, secure Web access to your core CICS applications and

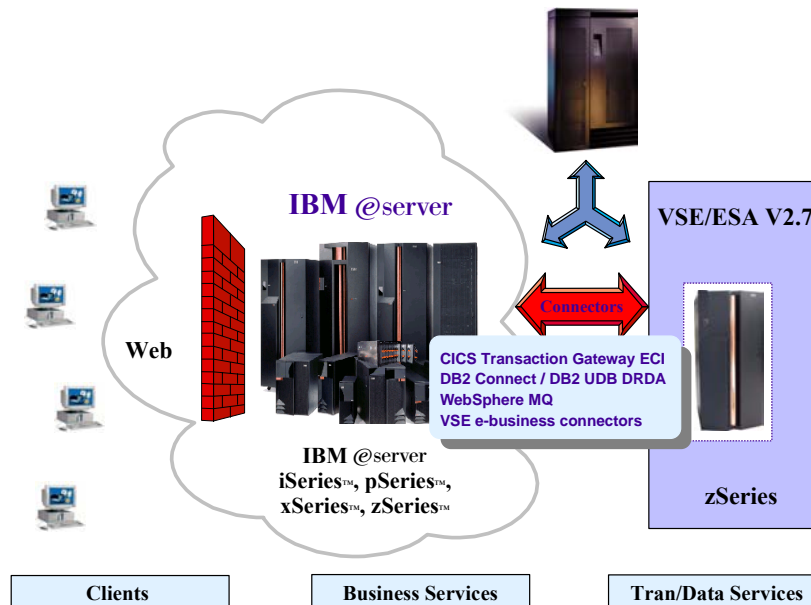
data. With CWS, new and existing CICS applications gain wider access and flexibility, as well as greater ease-of-use by replacing older text-based 3270 interfaces with modern browser-based user interfaces.

To ease transition, CICS/VSE® V2.3 continues to be shipped along with CICS TS VSE/ESA at no additional charge.

DB2 Distributed Relational Database Architecture™ (DRDA®) provides the structure needed to join together all the databases in your enterprise with integrity. That means your VSE system can be a client or server with easy access to, or from, databases on other platforms.

Integrate all your IT platforms

Frankly, no single server platform is the answer to every IT need. The real world is heterogeneous and multiplatform. Most customers have an IT infrastructure that includes a variety of platforms in addition to their VSE system.



For many VSE customers, the challenge is to leverage their existing VSE investments without being limited by them.

One solution is a hybrid model that helps you exploit the best of VSE and other platforms.

VSE/ESA V2.7 'Plays Well with Others'

VSE/ESA V2.7 is designed for open, standards-based interoperability. Using one or more 'connectors,' you can integrate core VSE systems and your choice of server platforms. VSE interoperability supports most common server platforms including Linux, Windows®, AIX®, and others.

VSE e-business Connectors

Interoperability is the focus of VSE/ESA V2.7. It offers a selection of connectors at no additional charge. VSE connectors conform to J2EE standards and include:

- *Java based connectors provide secure access to VSE resources such as VSAM files, DL/I databases, Librarian files, ICCF libraries,*

POWER queues, and VSE console from any Java capable platform.

- *DB2 based connectors provide access to DB2, DL/I, and VSAM data from another platform.*
- *VSAM Redirector gives core VSE programs transparent access to selected files or databases on any Java capable platform.*
- *Virtual tape allows tape image transfer between VSE and any Java capable platform. Transfers appear to your VSE systems as if they were normal tape operations.*
- *Web services include support for Simple Object Access Protocol (SOAP) and Extensible Markup Language (XML).*

IBM Middleware

Optional IBM middleware products provide additional interoperability:

- *WebSphere® Application Server*
- *CICS Transaction Gateway*
- *DB2 UDB/DB2 Connect™*
- *WebSphere MQ*

Who says you must 'think outside the box'?

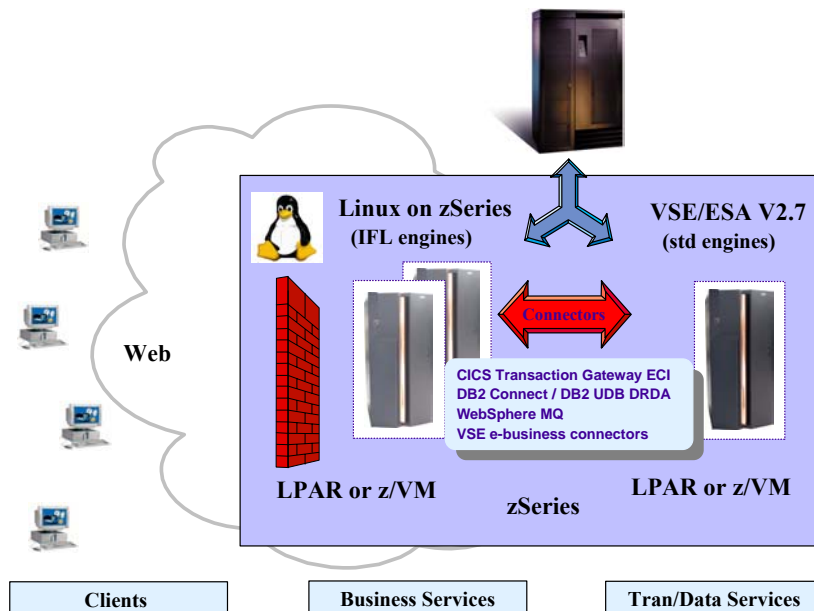
Look at the combination of VSE/ESA V2.7 and Linux on zSeries and you will discover compelling reasons to 'think inside the box.'

Linux on zSeries

Linux gives you the flexibility to deploy a wide choice of infrastructure applications such as file/print servers, mail servers, DNS servers, firewall servers, Web servers, and others. Using Linux on zSeries, you can even consolidate existing distributed servers onto a robust, scalable, manageable zSeries server.

With Linux on zSeries, you can also deploy the kind of comprehensive, world-class e-business on demand solutions that can help you to literally transform your company.

IBM strategic middleware is available for Linux on zSeries; including WebSphere Application Server with Java, CICS Transaction Gateway, DB2 Universal Database™ (UDB) or DB2 Connect, and



WebSphere MQ. Using one or more of these IBM middleware products, and/or VSE e-business connectors, you can exploit the very best that Linux on zSeries has to offer while leveraging your existing investment in VSE information assets.

Linux on zSeries can exploit zSeries Integrated Facility for Linux (IFL) to lower the TCO for new applications, as well as limit the cost of running existing VSE applications.

z/VM™

Many VSE customers depend on z/VM for its flexibility and proven ability to improve VSE operations. Perhaps you are one of them. Don't forget that z/VM provides a uniquely robust, manageable, and scalable environment for Linux on zSeries as well.

You can have it all with zSeries!

IBM Server and Storage Technology

VSE/ESA V2.7 supports robust, scalable, and cost-effective IBM servers ranging from S/390 Multiprise® 3000 to IBM @server zSeries 900 (z900).

IBM @server zSeries 800 (z800)

Available in a selection of models ranging from uni-processors to a 4-way system, many VSE customers will find the z800 compelling. VSE/ESA V2.7 supports zSeries features such as hardware compression, SSP, OSA-Express, HiperSockets, and PCICA encryption assist.

Integrated Facility for Linux (IFL)

IFLs offer you the low TCO needed to deploy comprehensive new Linux solutions and/or consolidate existing distributed servers.

While VSE itself does not run on IFLs, by leaving the server model unchanged IFLs help contain the cost of running VSE workloads. IFLs are an option for S/390 Multiprise 3000, S/390 Parallel Enterprise Server™ G5/G6, zSeries 800 and 900 servers.

IBM TotalStorage™ Enterprise Storage Server™

If you need high performance, large capacity, highly available disk storage, take a look at ESS.

VSE/ESA V2.7 supports the FlashCopy™ feature to make copies of data in seconds. If you have a 'batch window' constraint, ESS and FlashCopy can help keep your online systems available nearly around-the-clock.

VSE/ESA V2.7 also includes ESS Large Volume Support (LVS). LVS gives you the flexibility to define disk volumes that are larger, or smaller, than the widespread 3390-3 format. The result is better utilization of storage. VSE/ESA V2.7 supports Peer-to-Peer Remote Copy (PPRC) to automatically create concurrent copies of key data. ESS can be shared by several servers and server types in a multiplatform environment.

VSE/ESA Version 2 Release 7 at a glance

you get these added capabilities with VSE/ESA Version 2 Release 7 when coming from these older versions / releases

VSE/SP V3/V4	VSE/ESA V1.4	VSE/ESA V2.3	
X	X	X	<ul style="list-style-type: none"> • VSE e-business connectors <ul style="list-style-type: none"> – access to VSE/VSAM, DL/I, Librarian, ICCF libraries, VSE/POWER queues, and VSE console from a Java capable platform – access to DB2, VSE/VSAM, and DL/I from DB connect or DB2 UDB on another platform – transparently redirect VSE/VSAM requests to files on a Java capable platform – SOAP and XML web services
X	X		<ul style="list-style-type: none"> • Networking <ul style="list-style-type: none"> – IBM TCP/IP for VSE/ESA V1.5, including: <ul style="list-style-type: none"> – TCP/IP connectivity and Sockets API – FTP, TN3270, LPR/LPD, and Basic HTTP server – Secure Sockets Layer (SSL) – optional Network File Server (NFS) and General Print Server (GPS) features – additional programming interfaces, ie EZA APIs – MQSeries® for VSE/ESA V2.1.2 – CICS Web Support and 3270 Bridge (part of CICS TS VSE/ESA) – ACF/VTAM V4.2 with Advanced Peer-to-Peer Networking (APPN®)
X	X		
X	X		
X	X		
X	X		
X	X	X	
X	X	X	
X	X	X	
X	X	X	
X	X	X	<ul style="list-style-type: none"> • Affinity with z/OS, the IBM flagship zSeries operating system <ul style="list-style-type: none"> – CICS Transaction Server for VSE/ESA – DB2 Server for VSE and VM V7.3 – Language Environment® (LE) V1.4.3 – COBOL, PL/I, and C for VSE – HLASM V1.4, DFSORT™ V3.4
X	X		<ul style="list-style-type: none"> • Ease of use <ul style="list-style-type: none"> – Standard REXX for automating basic operator tasks – New console functions to improve operator productivity – VSAM KSDS files with more than 4 GB – Set Time without reIPL
X	X		
X	X		
X	X		
X	X		<ul style="list-style-type: none"> • Increased capacity and performance potential <ul style="list-style-type: none"> – Turbo dispatcher exploits up to 3-4 processors depending on the applications – Virtual storage constraint relief – POWER and VTAM® in private partitions – Up to 2 GB real storage and virtual addressing – Up to about 200 partitions/address spaces – Dynamic channel subsystem – Up to 1024 local, non-SNA devices – Virtual disk in storage – DASD fast write – Multiple LSR pools – LSR buffer hashing
X	X	X	
X	X		
X	X		
X	X		
X	X		
X	X		
X	X		
X	X		
X	X		
X	X	X	
X	X	X	
X	X		<ul style="list-style-type: none"> • Advanced IBM server and storage technology <ul style="list-style-type: none"> – IBM @server zSeries 800 and 900 – IBM S/390 Multiprise 3000, – IBM S/390 Parallel Enterprise Server G5/G6 – CICS support for Subsystem Storage Protect feature – OSA-Express for fast network connectivity – HiperSockets for fast TCP/IP communication between VSE and Linux on zSeries – PCICA encryption assist (used by SSL) – hardware compression feature – IBM TotalStorage Enterprise Storage Server (ESS) – ESS FlashCopy and PPRC – ESS Large Volume Support (LVS) user defined volume sizes – IBM 3490E and 3590 cartridge tape
X	X		
X	X		
X	X		
X	X		
X	X		
X	X		
X	X		
X	X		
X	X		
X	X		
X			<ul style="list-style-type: none"> • Year 2000-ready operating system, languages, related products <ul style="list-style-type: none"> – operating system is Year 2000-ready
X			<ul style="list-style-type: none"> • European Monetary Union <ul style="list-style-type: none"> – Operating system supports the Euro currency symbol

How can you learn more?

In most parts of the world IBM software, servers, and storage products are available in flexible, cost-effective offerings in cooperation with IBM Business Partners.

Visit the zSeries World Wide Web at ibm.com/servers/eservers/zseries/ or visit the ShopzSeries Web site at ibm.com/software/shopzseries or call IBM DIRECT at 1 800 IBM-CALL in the U.S. and Canada.

Australia	132 426
Austria	0660 5109
Belgium	02 225 33 33
Brazil	0800 111426
China	(20) 8755 3828
France	0800 03 03 03
Germany	1803 313233
Hong Kong	(20) 2825 6222
Hungary	165 4422
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