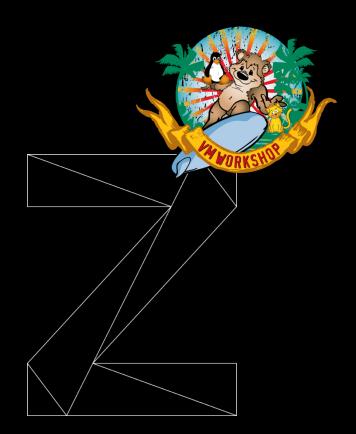
z/VSE Business, Status and Strategy Update

VM Workshop 2021



Rene Trumpp, Manager z/VSE Business, Development & Service IBM Deutschland Research & Development GmbH



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DB2*	HiperSockets	IBM z14	RACF*	System z10*	z/VM*
DS6000*	HyperSwap	IBM z15	Storwize*	Tivoli*	z/VSE*
DS8000*	IBM LinuxONE	OMEGAMON*	System Storage*	zEnterprise*	z Systems*
ECKD	Emperor	Performance Toolkit for VN	1Svstem x*	z/OS*	
FICON*	IBM LinuxONE	Power*	System z*	•	
	Rockhopper	PowerVM	•		
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Performance is in Internal Throughput Rate (ITR) ratio based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput improvements equivalent to the performance ratios stated here.

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About me

- Rene Trumpp, Product Manager for z/VSE
 - Responsible for z/VSE Business, Development and Service

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Business Update



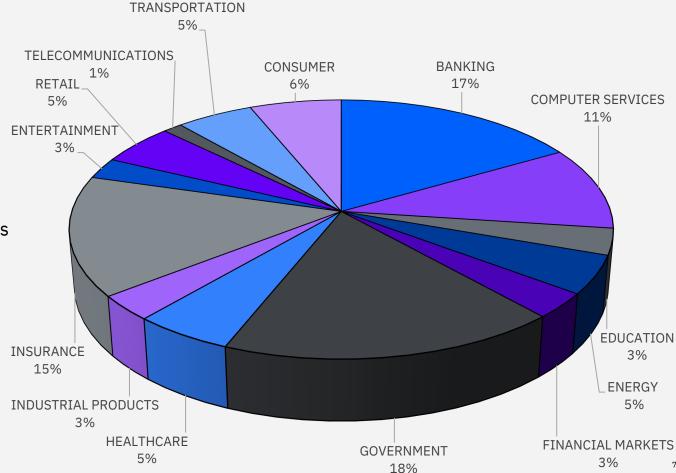
Business Worldwide

z/VSE drives the business everywhere*.



^{*} the bigger the circle, the more customers in the geo

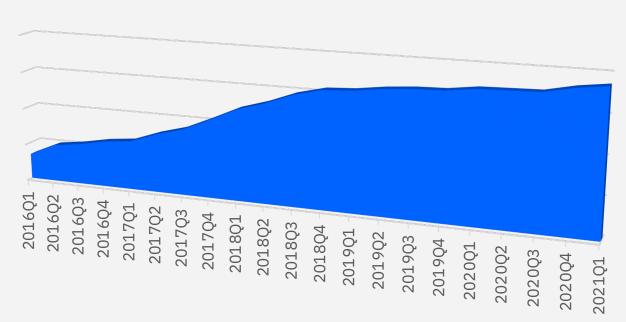
Industries



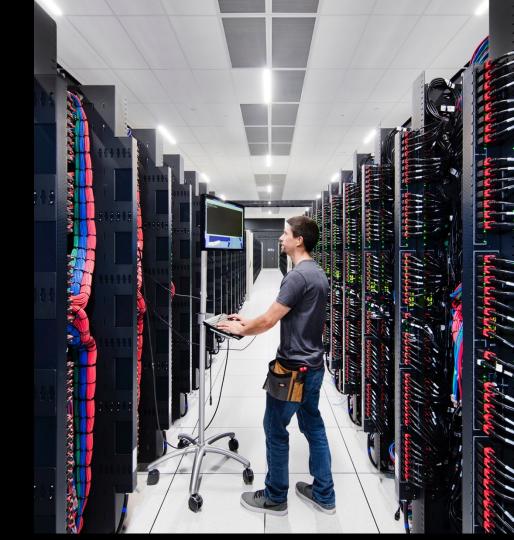
z/VSE remains important for all kind of different industries

Growth

Number of z/VSE 6 customers is growing.



Status Update



Roadmap

We switched to continuous delivery, that means

- We are more flexible
- We ship new functionality, when it's finished
- You don't have to wait for the next release for additional functionality
- No version upgrade hazzle anymore

z/VSE Continuous Delivery

DL/I 1.12.1 with support for >4GB partitions, DL/I recovery, PAV support fo ICKDFS FlashCopy, *OpenSSL TLS 1.3, Networking, Security,*

10

z/VSE 6.2 GA: 1.12.2017

z114/z196 or higher, HW exploitation, CICS TS 2.2 (HTTP 1.1) & CICS Explorer, RESTfull Engine, Easy of use, Networking and Security enhancements

z/VSE 6.1 GA: 27.11.2015 (end of service: 30.6.2019) CICS TS for z/VSE 2.1: CICS Explorer update, Channels & Containers; TCP/IP for z/VSE 2.1, IPv6/VSE 1.2, z10 or newer; z Systems exploitation

z/VSE 5.2 GA: 25.4.2014 (end of service: **31.10.2018**)

zEnterprise exploitation, device support

Tapeless installation, networking / security enhancements

z/VSE 5.1 GA: 11.2011 (end of service: 30.6.2016)
64 bit virtual, zEnterprise exploitation, z9 or newer
z/VSE 5.1.1 GA: 6.2012: CICS Explorer, LFP in LPAR, database connector
z/VSE 5.1.2 GA: 6.2013: TS1140, 64 bit I/O, openSSL, db connector enhancements

Latest development items (1)

OpenSSL update (2Q2020)

- Support for TLS 1.2 and encryption in Galois Counter Mode (GCM) for highest available security.
- Transparently use of cryptographic hardware when available for improved performance.
- The z/VSE SSL/TLS implementation is delivered as part of the z/VSE Cryptographic Crypto Services component.

TLS 1.3 support (1Q2021)

Support for TLS 1.3

System recovery boost in LPAR (3Q2020)

- z/VSE systems can benefit from z/VM support for System Recovery Boost (no guest support).
- z/VSE systems in LPAR will be able to benefit from System Recovery Boost, which accelerates the restoration of service from planned and unplanned outages (during IPL and shutdown).



Latest development items (2)

DL/I VSE 1.12.1 utility improvements for database recovery (2Q2021)

 To enable correct recovery in all situations in which DL/I message DLZ004I (I/O-error) or DLZ005I (out of space) can occur, extensions to the DL/I Log Print utility and DL/I Data Base Backout utility have been provided

VSE/POWER network acceleration (2Q2021)

 Accelerate data transfer between PNET TCP/IP nodes by up to 50 times

z/VSE 6.2 Continuous Delivery and IBM z15

z/VSE benefits from the HW features of the new z15

- Air-cooled z15 Model T02
- System Recovery Boost
- Faster I/O with the FICON Express 16S
- IBM Fibre Channel Endpoint Security, which provides server authentication and data encryption
- Better performance with the OSA-Express7S
- Better performance with HW Encryption with Crypto Express7S and CPACF



z/VSE Support for IBM Mainframe Servers



IBM Servers	z/VSE 6.2	z/VSE 6.1 (out of service)	z/VSE 5.2 (out of service)	z/VSE 5.1 (out of service)	z/VSE 4.3 (out of service)
IBM z15 & z15 Model T02	V	V	V	V	~
IBM z14™ & z14 Model ZR1	V	V	~	~	~
IBM z13® & z13s™	V	V	V	V	~
IBM zEnterprise® EC12 & BC12	V	V	~	V	V
IBM zEnterprise® 196 & 114	V	V	V	V	~
IBM System z10® EC & z10 BC	×	V	V	V	~
IBM System z9® EC & z9 BC	×	×	V	V	V
zSeries® 990, 890	×	×	×	×	V

Important Announcements of the last months

IBM z/VSE 6.2 brings storage, processing, security, recovery, and data transfer enhancements

https://www-

<u>01.ibm.com/common/ssi/ShowDoc.wss?docURL=/common/ssi/rep_ca/1/897/ENUS221-201/index.html&request_locale=en</u>

IBM z15 Model T01 and IBM z15 Model T02 provide increased security, resiliency, performance, and flexibility for mission-critical workloads in a hybrid cloud

https://www-

<u>01.ibm.com/common/ssi/ShowDoc.wss?docURL=/common/ssi/rep_ca/9/897/ENUS121-029/index.html&request_locale=en</u>

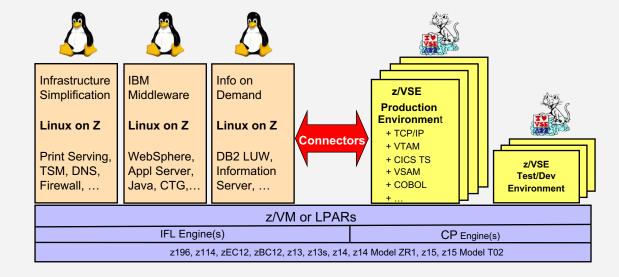


Strategy Update



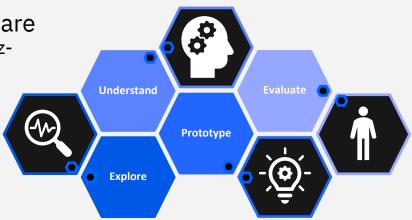
Strategy change

- Everybody knows the z/VSE P.I.E. strategy
- Last year I announced that I work on a new strategy

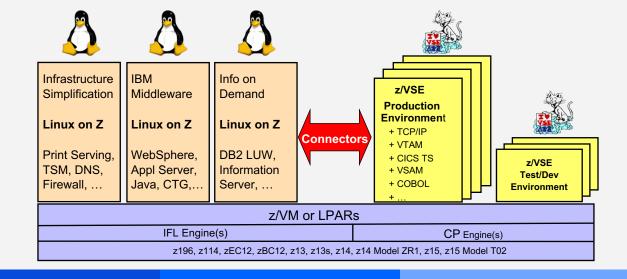


 We partnered with 21st Century Software https://www.21stcenturysoftware.com/license-zvse-code-from-ibm/





Strategy



Protect

existing z/VSE core investments

Integrate

using middleware and z/VSE connectors

Extend

with
Linux on IBM Z
technology &
solutions



Future of IBM z/VSE & 21st Century Software

IBM **continues to support** the existing z/VSE offerings.

Requests for **future enhancements** to the z/VSE Operating System and stack elements should be submitted to **IBM and our new partner 21**st **Century Software**.



More News & Resources



IBM Websites

Marketing pages... Landing page:

https://www.ibm.com/it-infrastructure/z/zvse

Marketplace pages... Products that are sold and high level information about it:

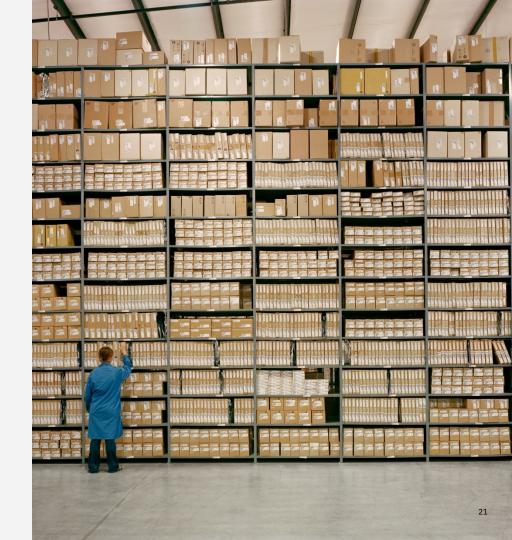
https://www.ibm.com/us-en/marketplace/zvse

ShopZ:

http://www-304.ibm.com/software/shopzseries/ShopzSeries_public.wss

Documentation:

https://www.ibm.com/support/knowledgecenter/SSB27H_6.2.0/zvse_welcome_6.2.0.html



Redbooks and White Papers

Overview:

https://www.ibm.com/support/knowledgecenter/SSB27H_6.2.0/technical_articles_and_whitepapers.html

Redbook: Introduction to the New Mainframe: IBM z/VSE Basics

http://www.redbooks.ibm.com/abstracts/sg247436.html?Open

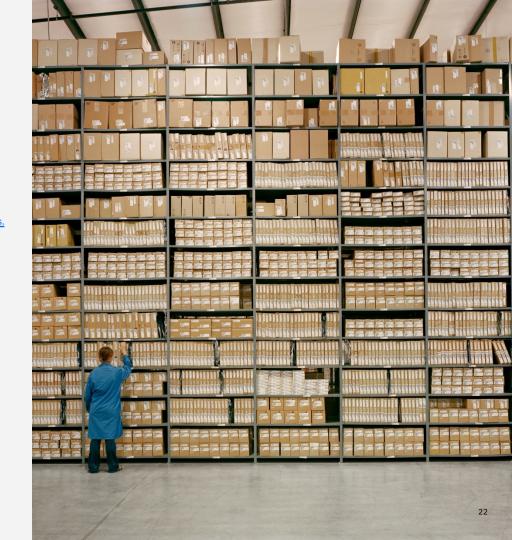
Redbook: Migration to CICS Transaction Server for z/VSE V2.1

http://www.redbooks.ibm.com/abstracts/sg248390.html?Open

Redbook: Security on IBM z/VSE http://www.redbooks.ibm.com/abstracts/sg247691.html?Open

How to use REST support on z/VSE for access to IBM MQ REST API

ftp://public.dhe.ibm.com/eserver/zseries/zos/vse/pdf3/VSE2RESTMQ.pdf



Service & Support

Support overview:

http://www-01.ibm.com/support/docview.wss?uid=isg3T1027442

Supported release status:

https://public.dhe.ibm.com/eserver/zseries/zos/vse/pdf3/zVSE_Status.pdf

Unsupported releases:

https://public.dhe.ibm.com/eserver/zseries/zos/vse/pdf3/zVSE_Status_Unsupported.pdf

IBM Software lifecycle:

https://www.ibm.com/support/lifecycle/

Request for Enhancements (RFE) database:

http://www.ibm.com/developerworks/rfe/

Please select the following for z/VSE requirements:

Brand = Servers and System Software

Product = z/VSE



Tools & other useful stuff

z/VSE Modern Solutions/Use Cases

https://www.ibm.com/support/knowledgecenter/SSB27H_6.2.0/use_cases.html

Connectors and Tools:

https://www.ibm.com/it-infrastructure/z/zvse-downloads https://www.ibm.com/support/knowledgecenter/SSB27H_6.2.0/fa2ws_xref_target_for_toc.html

Upcoming events:

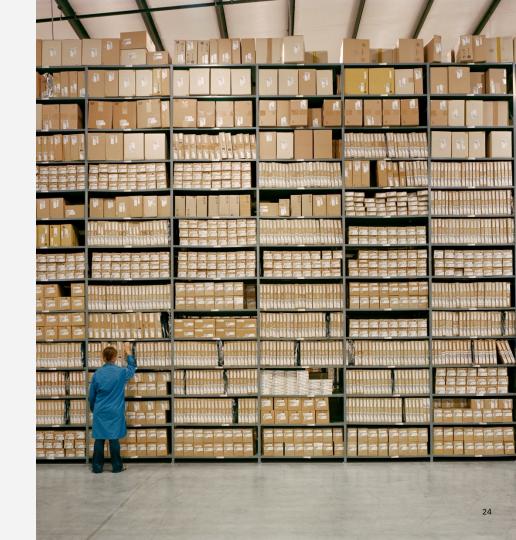
https://www.ibm.com/it-infrastructure/z/zvse-resources

Jens' z/VSE blog:

https://community.ibm.com/community/user/ibmz-and-linuxone/blogs/jens-remus1

VSE-L discussion list:

https://groups.google.com/forum/?fromgroups#!forum/bit.listserv.vse-l



Thank you

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