



VM WORKSHOP 2018 – Greensboro, NC

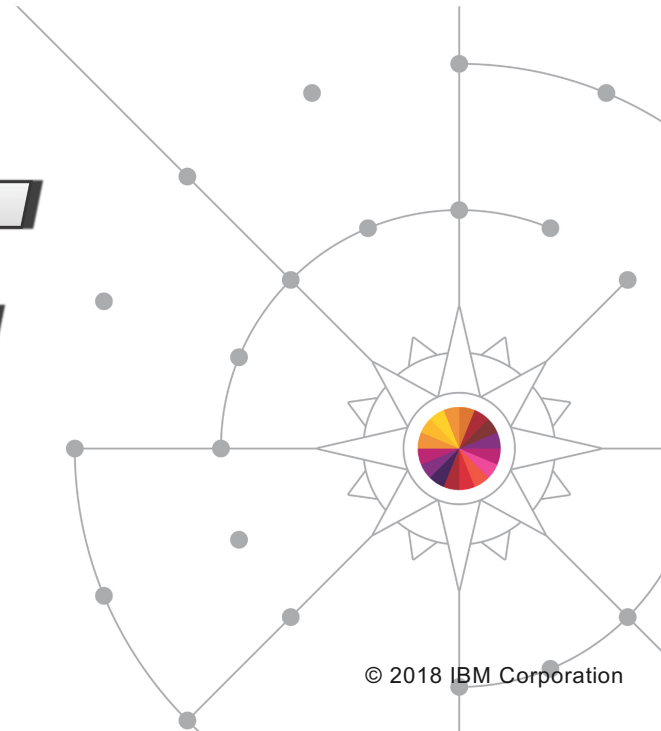


z/VSE Strategy, Business and News

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Offering Manager for z/VSE & z/VM

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z/VSE



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Agenda

- **Strategy and Business**
- News

z/VSE “facelift”



z/VSE Strategy

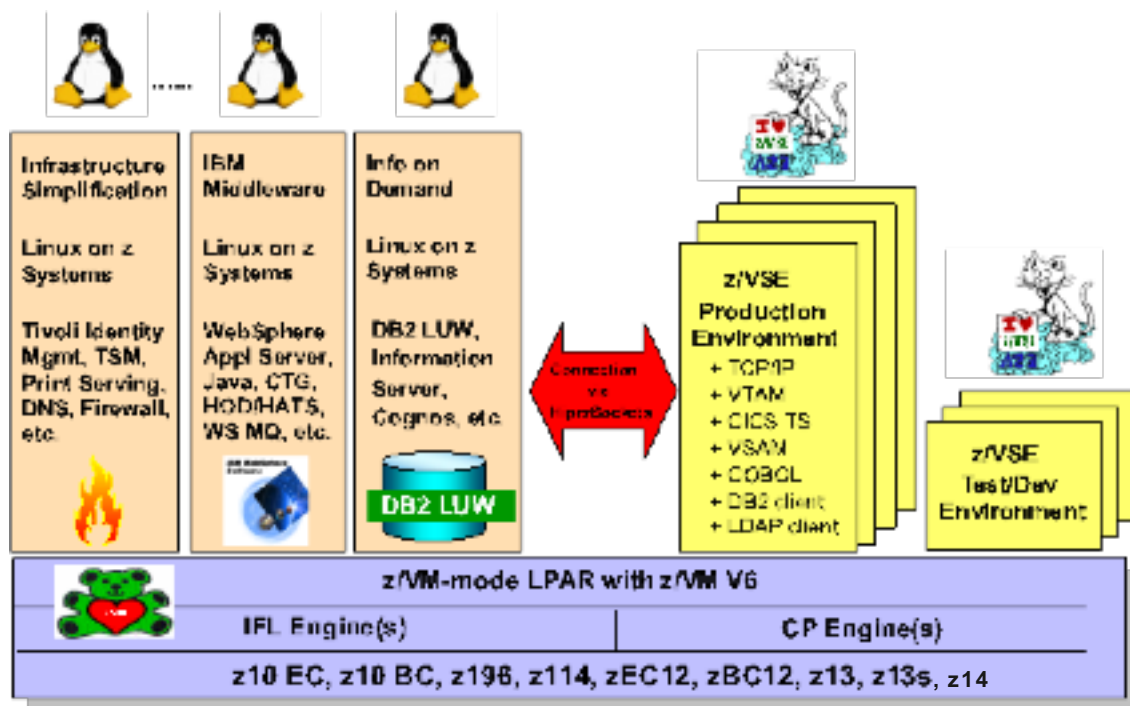
Protect existing z/VSE investments

Integrate using middleware and z/VSE connectors

Extend with Linux on IBM Z technology & solutions



- Hybrid Environment leveraging z/VSE, z/VM, and Linux on IBM Z



z/VSE Protects your investment on IBM Z

- Your solutions and homegrown application are your most important assets
- z/VSE provides new IBM Z HW, Storage enablement and other enhancements
- **Your existing customer's homegrown applications continue to work with new IBM Z HW**



New with the IBM z14 Model ZR1

- Faster I/O with FICON Express16S+ with link rate of 16 Gbps (ECKD/DASD & SCSI/FCP)
- Integrated Storage options
- Better performance with OSA Express6S and security with firewall functionality
- Better performance with HW Encryption with Crypto Express6S and CPACF

**More details from Ingolf!
Thursday, 10:15am: z/VSE HW Update**



z/VSE Integrates IBM Z in your heterogeneous environment

- z/VSE is not alone in your IT infrastructure
- z/VSE Connectors & APIs integrate z/VSE Data and Processes with other platforms
- **Your critical data & processes do NOT need to be migrated**

z/VSE Connectors and Tools

- GUI to z/VSE: z/VSE Navigator
- z/VSE Health Checker
- z/VSE Monitoring: SNMP Agent

- Synch. of VSAM or DB2 data
- Integration of SQL DBs via DBCLI API
- 3270 -> Web : CICS Web Support
- Webservices (SOAP and REST)

- LAN Printer enablement
- Virtual Tape Server

- Operation/Workflow Integration with z/VSE Script Server
- GUI Development Env.



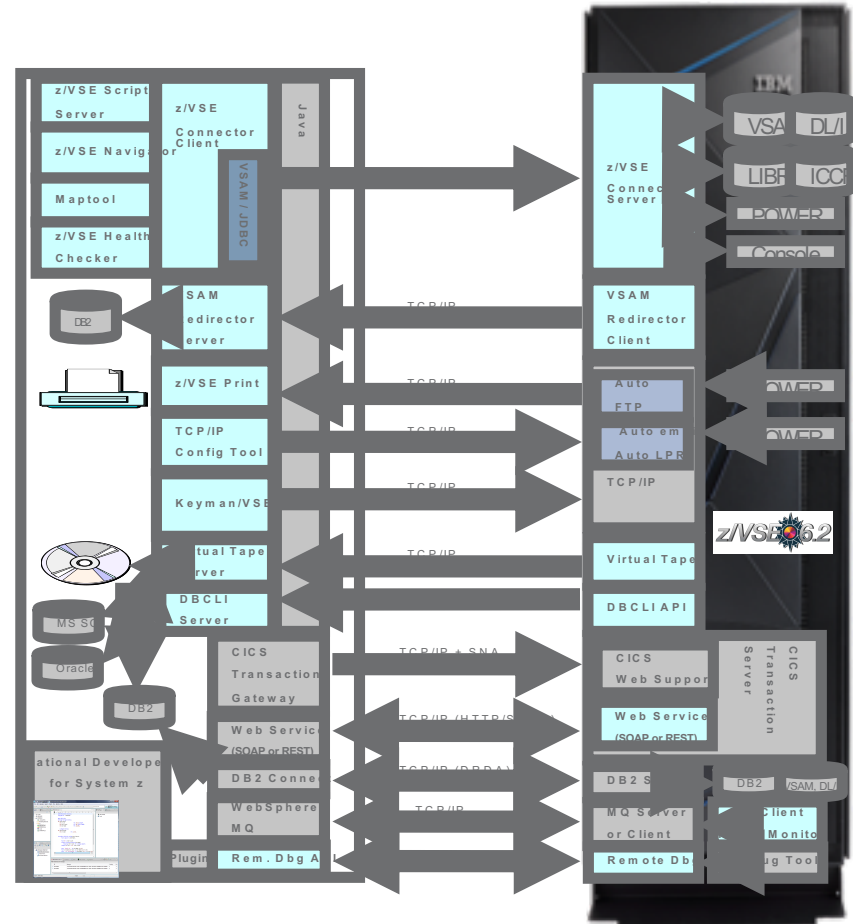
z/VSE Extends existing Workloads with co-located NEW Workloads on Linux on Z

- Linux enables a huge modern ecosystem
- z/VSE and Linux on IBM Z provides unique capabilities to host different workloads, maintaining security, scalability and proximity
- **Leverage the digital transformation and modernization with z/VSE and Linux on Z**
- Some examples:
 - IBM z/VM Cloud Connector and IBM Cloud private for **Multicloud environment**
 - IBM Mobile First for **Mobile enablement**
 - Spark, Cognos, DB2 Warehouse, Watson Explorer and Data Science Experience for **Analytics and Cognitive**
 - QRadar for **Security** monitoring



z/VSE Connectors

- GUI to z/VSE: z/VSE Navigator
- z/VSE Health Checker
- z/VSE Monitoring: SNMP Agent
- Synch. of VSAM or DB2 data
- Integration of SQL DBs via DBCLI API
- 3270 -> Web : CICS Web Support
- Webservices (SOAP and REST)
- LAN Printer enablement
- Virtual Tape Server
- Operation/Workflow Integration with z/VSE Script Server
- GUI Development Env.



Don't miss Ingo's sessions:

Thursday, 3pm: z/VSE Connectors Introduction, Use Cases, and News

Friday, 1:45pm: Using RESTful web services with z/VSE, including Live Demo

Saturday, 10:15am: z/VSE Connectors with focus on CICS Connectivity and WebServices



z/VSE Roadmap

z/VSE Continuous Delivery
DL/I 1.12.1 with support for >4GB
HW enablement, Networking, Security

z/VSE 6.2: GA: 1.12.2017
z114/z196 or newer, MVM,
HW exploitation, CICS TS V2.2 (HTTP 1.1) & CICS
Explorer, RESTfull Engine, Easy of use, Networking and
Security enhancements

z/VSE 6.1 GA: 27.11.2015 **end of marketing: 1.12.2017**
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 marketing: 13.3.2017**
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



z Systems support (or **not**)

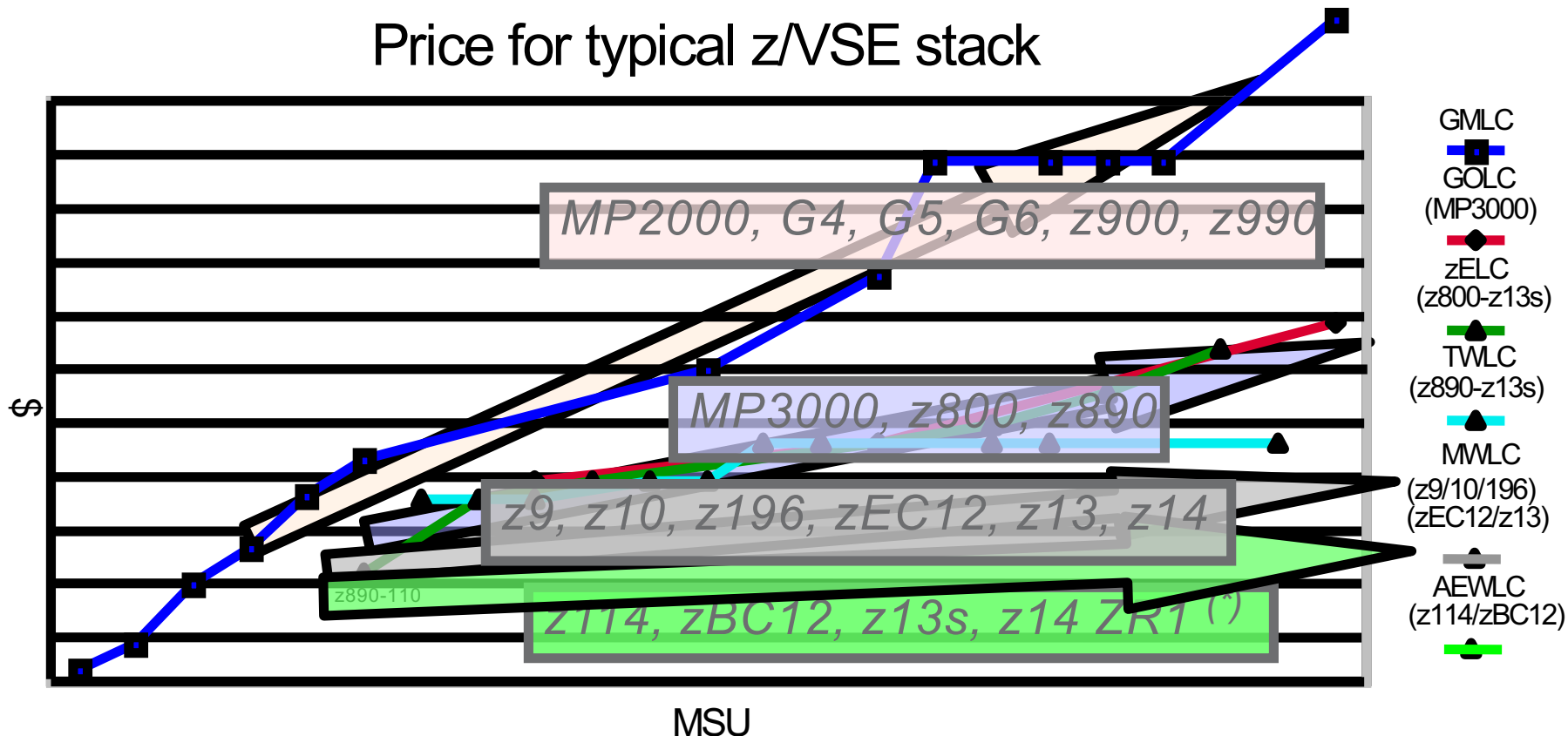
VSE Release	z900 / z800	z990 / z890	z9 EC <small>(eos 10.2017)</small> / z9 BC <small>(eos 1.2019)</small>	z10 EC / z10 BC	z196 / z114 / zEC12 / zBC12 / z13 / z13s	z14
z/VSE 6.2	No	No	No	No	Yes	Yes
z/VSE 6.1 <small>(eos 6.2019)</small>	No	No	No	Yes	Yes	Yes
z/VSE 5.2 <small>(eos 10.2018)</small>	No	No	Yes	Yes	Yes	Yes
z/VSE 5.1 <small>(eos 6.2016)</small>	No	No	Yes	Yes	Yes	Yes restricted
z/VSE 4.3	Yes	Yes	Yes	Yes	Yes	Yes restricted
z/VSE 4.2	Yes	Yes	Yes	Yes	Yes	Yes restricted
z/VSE 4.1	Yes	Yes	Yes	Yes	Yes	Yes restricted
z/VSE 3.1	Yes	Yes	Yes	Yes	Yes	No
VSE/ESA 2.7	Yes	Yes	Yes	Yes	Yes	No
VSE/ESA 2.6	Yes	Yes	Yes	Yes	Yes	No
VSE/ESA 2.5	Yes	Yes	No	No	No	No
VSE/ESA 2.4	Yes	No	No	No	No	No
VSE/ESA 2.3	Yes	No	No	No	No	No

z/VSE release / Hardware status: ftp://public.dhe.ibm.com/eserver/zseries/zos/vse/pdf3/zVSE_Status.pdf
ftp://public.dhe.ibm.com/eserver/zseries/zos/vse/pdf3/zVSE_Status_Unsupported.pdf



z/VSE Software Pricing Metrics

Price for typical z/VSE stack



(*) The entry models of these servers, capacity settings A01 or 110, are priced using zELC.

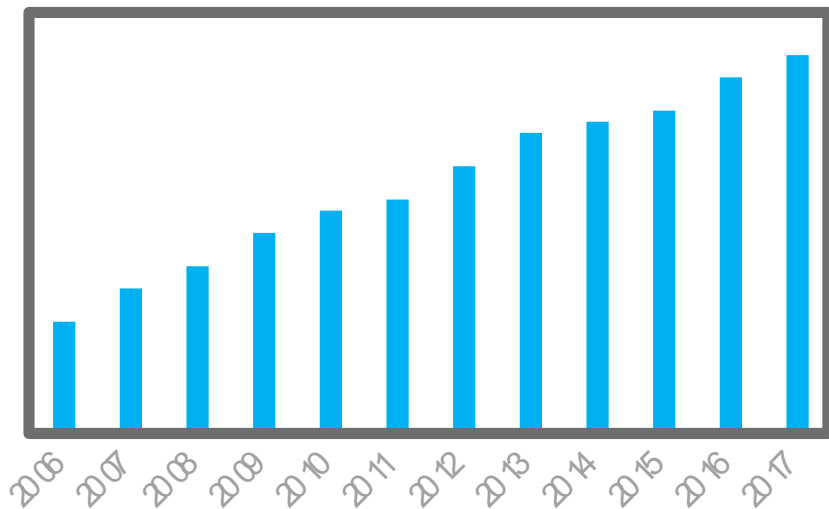
Typical z/VSE stack consists of z/VSE Operating System, LE, CICS TS, VTAM, TCP/IP, DB2

**Don't miss my session:
Thursday, 4:15pm: z/VSE Pricing**

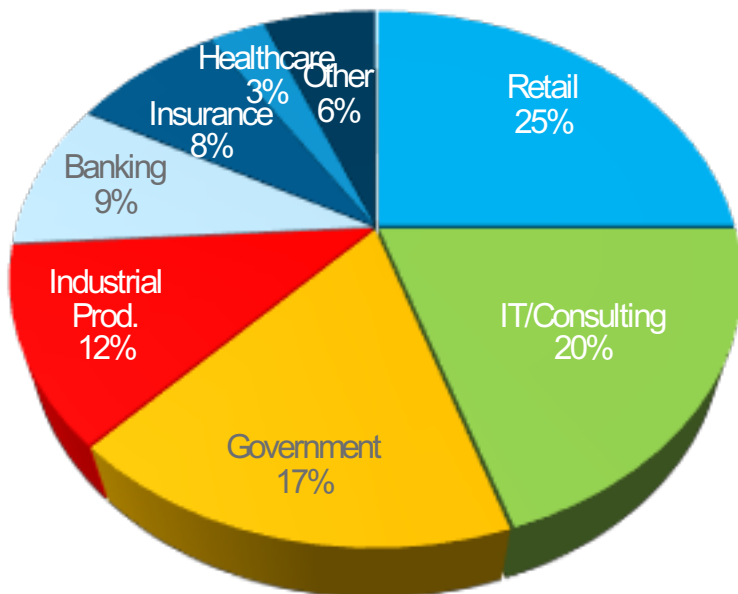
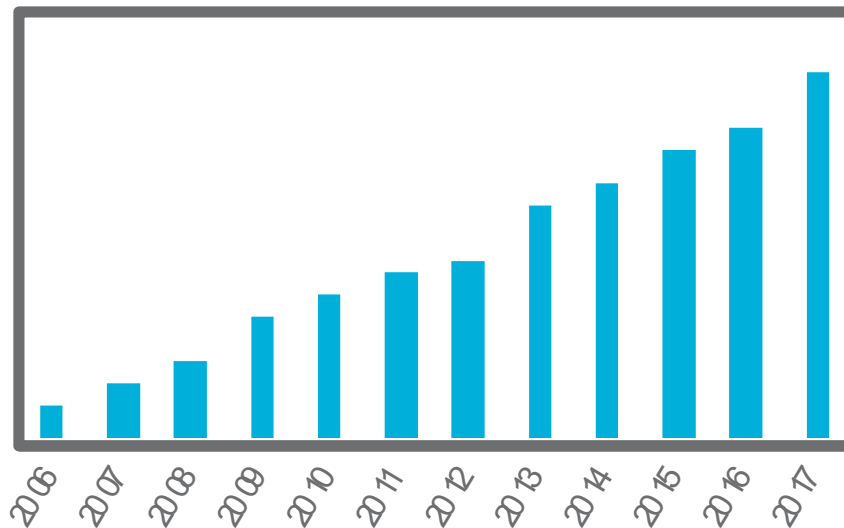


Business

z/VSE Traditional Workload MIPS/License



Linux on z MIPS driven and integrated with z/VSE



- **z/VSE customer's workload continue to grow driven by new (Linux) collocated workload**
- **z/VSE remains important for critical Industries**

Agenda

- Strategy and Business
- **News**

Announcements

- z/VSE V6.2 GA - <https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=an&subtype=ca&appname=qpateam&subappname=ca/6/897/&letternum=ENUS217-203>
- IBM DL/I VSE V1.12.1 and z/VSE V6.2 update - https://www-01.ibm.com/common/ssi/ShowDoc.wss?docURL=/common/ssi/rep_ca/6/897/ENUS218-086/index.html&request_locale=en
- z14 Model ZR1 - <https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=an&subtype=ca&appname=qpateam&subappname=ca/6/897/&letternum=ENUS118-018>
- z/VM V7 Preview - <https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?infotype=an&subtype=ca&appname=qpateam&subappname=ca/6/897/&letternum=ENUS218-150>
- IBM TS7700 R4.1.2 - https://www-01.ibm.com/common/ssi/ShowDoc.wss?docURL=/common/ssi/rep_ca/6/897/ENUS118-006/index.html&request_locale=en

**More details from Ingolf!
Friday, 9am: z/VSE 6.2 Technical Update**

**More details from Brian Lang!
Thursday, 8:30am**

**More details from Bill Bitner!
Thursday, 10:15am**



z/VSE 6.2

- **GA since December 1st 2017**
- Hardware support
 - Delivery of **future upgrades of z/VSE on DVD and electronically only**
 - Architecture Level Set requiring **z196 / z114 or later**
 - **Latest available IBM Z Server and Storage (Tape, ECKD, SCSI) Server support**
 - Support for the **IBM z13 Vector Facility (SIMD)** for user applications
 - **High Performance FICON (zHPF)** support
 - **FlashCopy Space Efficient (SE) support for Extent Space Efficient (ESE) volumes** with IBM DS8880 R8.1 Storage Family
 - **Elliptic Curve Cryptography (ECC)** support
- Ease of use functionality for SCSI-only systems
 - **Tapeless initial installation using a SCSI installation disk** added
 - **Standalone dump to SCSI device** added



z/VSE 6.2

▪ CICS Transaction Server for z/VSE V2.2

- Upgraded **CICS Web Support (CWS) to HTTP 1.1** for improved performance and security and to support the latest web browsers and applications
 - Features include: **persistent connections, pipelining and chunking**
- **CICS Explorer** enhancements
- **Channel and container** enhancements
- Support for **standard date and time stamp** format
- Support for Language Environment (LE) **MAIN for Assemble applications**

▪ Security

- **OpenSSL** (part of z/VSE Cryptographic Services) upgraded to **v1.0.2h** for newer SSL/TLS functions and **enabled for CICS Web Support and EZA interface**
- **SSL/TLS** support for **remote VTAPES**
- **LDAP sign-on** support for **RESET option** (clearing cached password) and **wildcard** support for **CHANGE and DELETE commands**
- **Basic Security Manager (BSM)** enhancement



z/VSE 6.2

- z/VSE Connectors enhancements
 - **z/VSE SOAP Engine to exploit Channels and Containers**
 - **z/VSE REST Engine with JSON support**
 - **z/VSE database connector DBCLI enhanced providing a batch and an interactive interface to perform queries, without an application. CICS REXX support added**
- Networking
 - New release of IBM **IPv6/VSE V1.3** with various enhancements
 - New release of IBM **TCP/IP for z/VSE V2.2** with various enhancements



z/VSE 6.2 and z14 Model ZR1

Following HW features are supported by z/VSE

- **TTO** (SW pricing) TU6
- IPL and run in **z/Architecture** mode
- Better performance with **SIMD** support for Vendor and Customers using assembler
- Faster I/O with **FICON Express16S+** with link rate of 16 Gbps (ECKD/DASD & SCSI/FCP)
 - Including **zHPF**
- **Integrated Storage or other options** (IBM or non-IBM, till 16U standard rack)
- Better performance with **OSA Express6S**
- Better performance with HW Encryption with **Crypto Express6S** and **CPACF**
 - Including **>16 domains & ECC** support



Not announced ... IBM Websites

- Motivation: simplify the thousand of websites that each product have to content type oriented, so that related content is easy to find.
- Result: that might be interesting for customers that are not familiar with our products, content...but for customers using our website as reference is a total chaos. Sorry.
- Short guide:
 - 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>
 - Rest Resources: either pdfs, Knowledge Center, IBM Support or Slideshare.
 - Connectors and Tools: <https://www.ibm.com/it-infrastructure/z/zvse-downloads>
 - Upcoming events: <https://www.ibm.com/it-infrastructure/z/zvse-events>
 - Support: <http://www-01.ibm.com/support/docview.wss?uid=iso3T1027442>
ftp://public.dhe.ibm.com/eserver/zseries/zos/vse/pdf3/zVSE_Status.pdf
 - 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
 - White Papers / Articles and Presentations: https://www.ibm.com/support/knowledgecenter/SSB27H_6.2.0/technical_articles_and_whitepapers.html
ftp://public.dhe.ibm.com/eserver/zseries/zos/vse/pdf3/zVSE_Completed_LVCs.pdf
<https://www.slideshare.net/search/slideshow?searchfrom=header&q=z%2FVSE>



One more thing ...

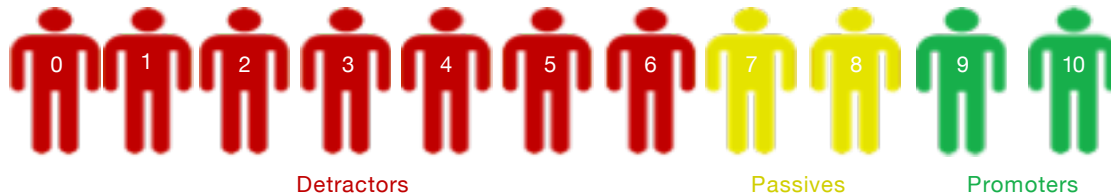
- I present you an instrument for the customers to influence IBM...



IBM will measure client experience with NPS, an industry-wide accepted metric

Net Promoter Score (NPS) calculation

- NPS is based on client responses to a simple question: **“How likely are you to recommend [IBM/Offering] to a colleague or business partner?”**
- Respondents answer on a scale of 0-10, which sorts them into 3 categories that serve as early predictors of churn and lifetime value:



$$\text{NPS} = \% \text{ of promoters} - \% \text{ of detractors}$$

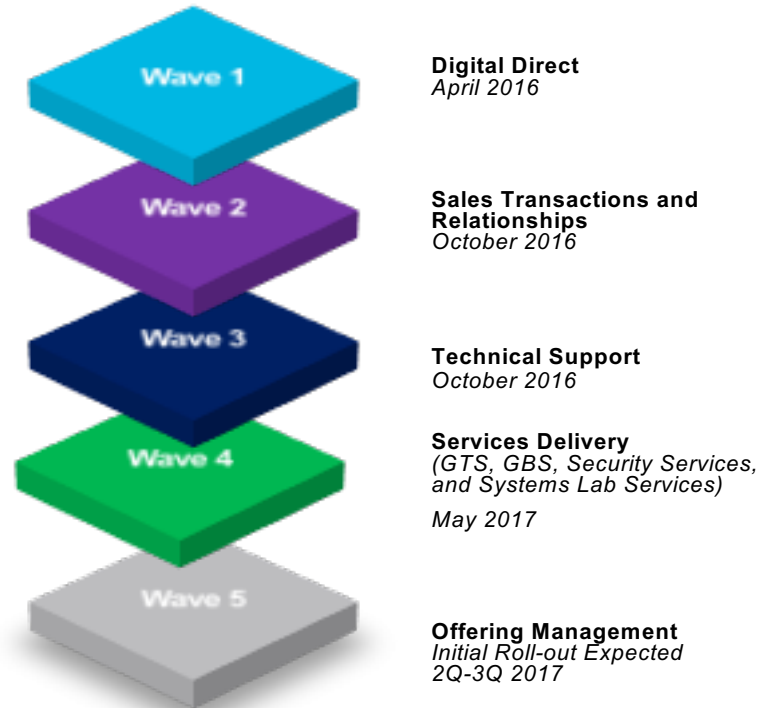
Key benefits of NPS

1
Endorsed by external subject matter experts and internal stakeholders

2
Strong indicator of future growth and competitive standing

3
Relationship NPS (rNPS) provides a comprehensive, long-term assessment of all touchpoints

CX Transformation will provide a Comprehensive View of IBM Client Experience



Example Email

From: IBM Client Advocacy Office <ibm-client-advocacy-office@express.medallia.eu>
To: "Tina (offering_use) Tarquinio" <tinatar@us.ibm.com>
Date: 08/19/2017 02:04 PM
Subject: Your IBM z13s Experience - 1 Minute

Dear Tina (offering_use),

We recently sent you an email about your experience with IBM z13s and noticed that you have not yet shared your feedback. At IBM, we make it a priority to listen to our clients and want to continuously improve our offerings. So, we would love your candid feedback on how we are doing. Please take a moment to answer a few short questions about your experience.

You can begin the survey by answering this question:

How likely are you to recommend IBM z13s to a colleague or business partner?

Not at all Likely

Extremely Likely

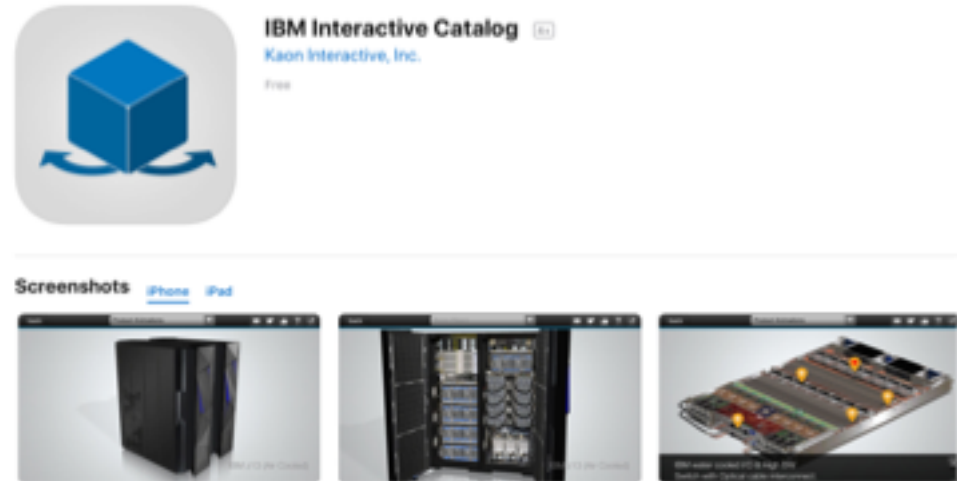


Carolyn Maher
IBM Client Advocacy Officer

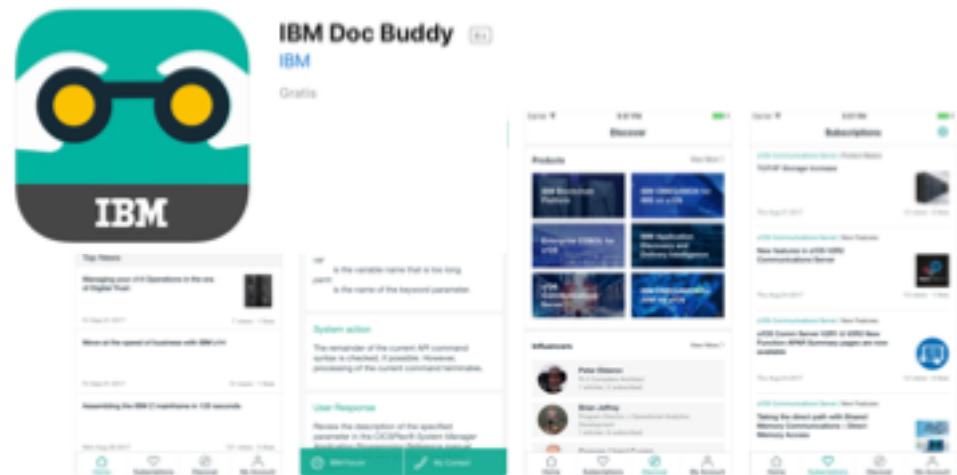


Nice Apps to have

- **IBM Interactive Product Catalog:**
 - IBM HW in 3D and AR in your pocket!
 - iOS [link](#)
 - Android [link](#)



- **IBM Doc Buddy:**
 - Search messages and codes issued from IBM Z products online and offline. Also aggregates mainframe social content.
 - iOS [link](#)
 - Android [link](#)



Need something else?

- You may submit requirements at conferences (GSE, Tech. Univ., VM Workshop, ...)
 - [VM Workshop](#), June 21st – 23rd in Greensboro, NC, US
 - [International GSE](#), October 22nd – 24th in Dresden, Germany
 - [COURSE](#), November 11th – 13th in Marburg, Germany
 - [IBM TechU Comes to You](#), 2018, Worldwide
- z/VSE requirements via the 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
- CICS Transaction Server requirements via the Request for Enhancement (RFE) database:
 - <http://www.ibm.com/developerworks/rfe/>
 - Please select the following for z/VSE-CICS requirements:
 - Brand = Servers and System Software
 - Product = CICS Transaction Server



z/VSE in the internet

- z/VSE Homepage: www.ibm.com/vse
- Redbook: Introduction to the New Mainframe: IBM z/VSE Basics
 - <http://www.redbooks.ibm.com/abstracts/sq247436.html?Open>
- Redbook: Migration to CICS Transaction Server for z/VSE V2.1
 - <http://www.redbooks.ibm.com/abstracts/sq248390.html?Open>
- Redbook: Security on IBM z/VSE
 - <http://www.redbooks.ibm.com/abstracts/sq247691.html?Open>
- z/VSE Knowledge Center:
 - http://www-01.ibm.com/support/knowledgecenter/SSB27H/zvse_welcome.html
- CICS TS for z/VSE Knowledge Center:
 - http://www-01.ibm.com/support/knowledgecenter/SSB2JE_1.1.1/welcome.html
- Ingolf's z/VSE blog:
 - www.ibm.com/developerworks/mydeveloperworks/blogs/vse/
 - Use „Tags“ to search for topics
- VSE-L discussion list:
 - <https://groups.google.com/forum/?fromgroups#!forum/bit.listserv.vse-l>



Questions

THANK YOU!



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