



Transition and news from IBM z/VSE to 21CS VSEn 6.3

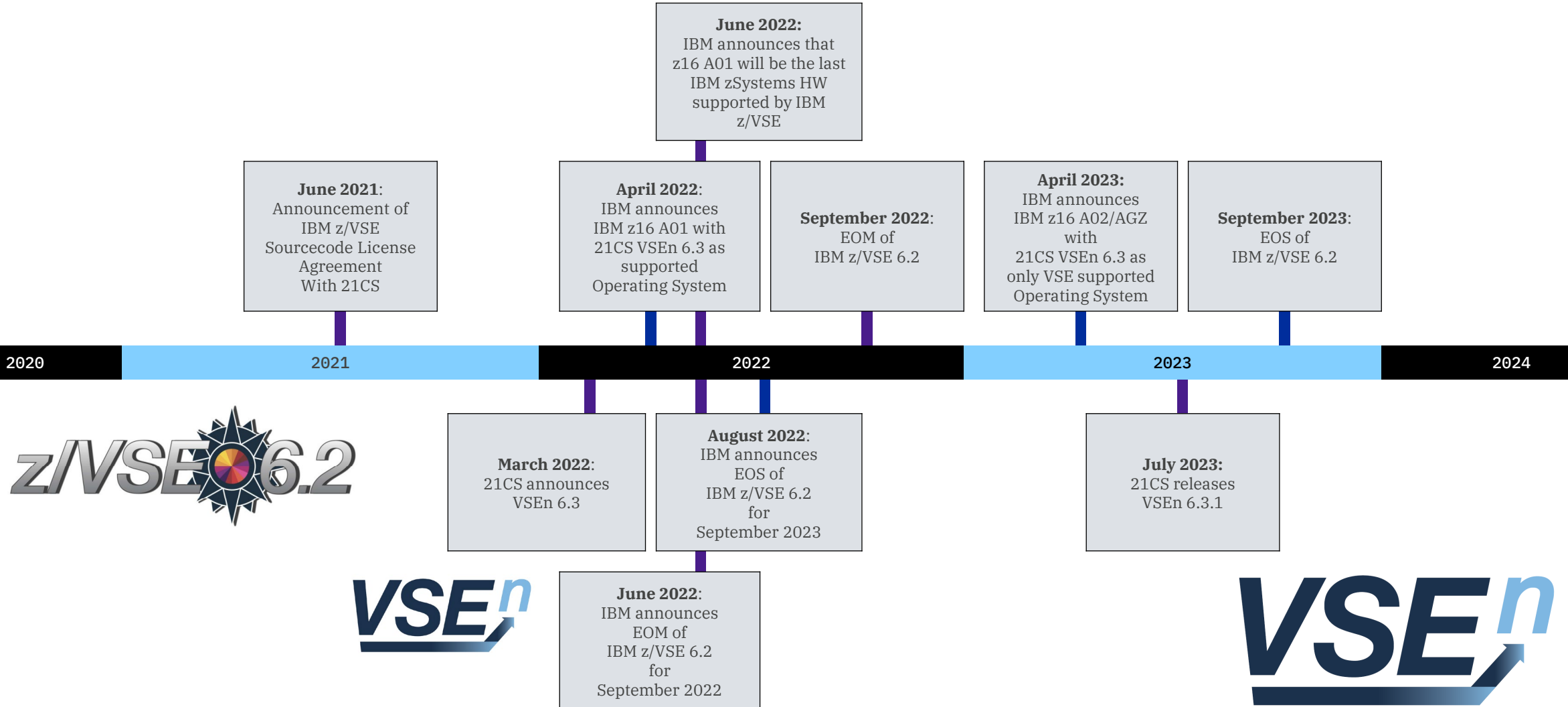
The future of VSE

Gonzalo Muelas Serrano
Vice President - VSEn R&D
Center of Excellence Germany
Gonzalo.Muelas@21cs.com

Agenda

- What happened with VSE, who is 21CS and news since last Event
- Planning for 21CS VSEⁿ 6.3
- Ordering and Pricing
- Support
- Installation considerations
- Roadmap

IBM z/VSE and 21CS VSEⁿ Announcements

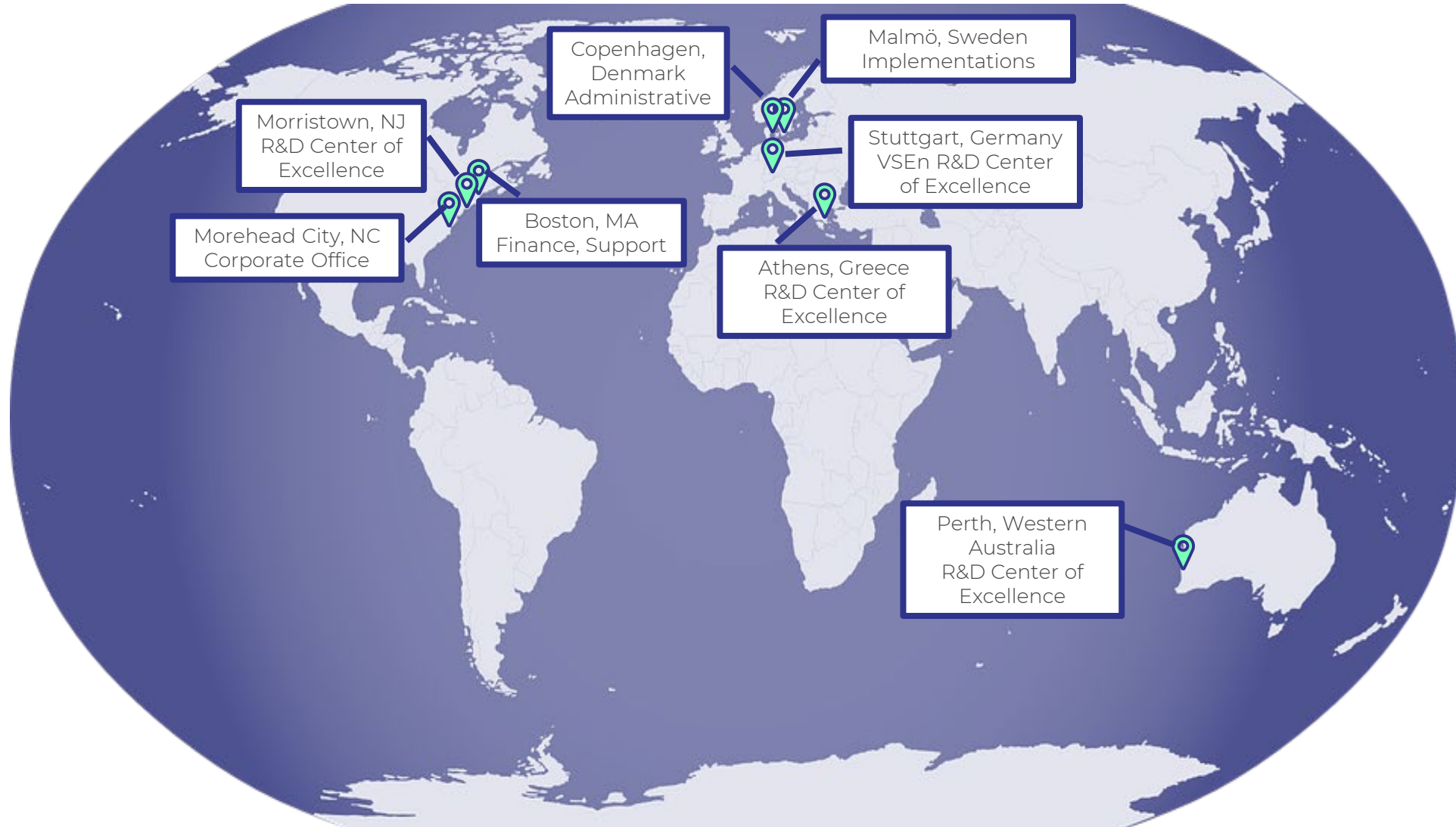


Who is 21CS and why did IBM choose them?



- Founded in 1992, 21CS is a global organization committed to providing its customers with solutions that deliver value to the zSystems ecosystem, while enabling them to benefit from world-class customer support.
- 21CS is 100% focused on the Mainframe software ecosystem, especially in the z/OS platform and now also VSE.
- 21CS has had a successful relationship with IBM for many years in the z/OS ecosystem, so this made 21CS the best candidate to invest in the VSE stack and drive it into the future
- June 1st, 2021, 21CS announced entering into a source code license agreement with IBM, where 21CS licensed most of the z/VSE Stack source code, and that Gonzalo Muelas Serrano would be responsible for the VSE R+D and Business within 21CS

Global locations



21CS is investing in the future



- R&D Center of Excellence in Stuttgart, Germany :
 - Achieve global coverage of 21CS services on local time zones with 3 main locations (MA/NJ US, Stuttgart Germany, and Perth Australia)
 - Build a team with skills on IBM zSystems, especially VSE, but also, z/OS
- The highly-motivated team, with a mix of very experienced z/VSE and z/OS developers and fast-learning university hires, successfully achieved to build, "whitewash", and test and deliver our derivative product, VSEⁿ 6.3



News since last VM Workshop

- New 21CS VSEⁿ SW available :
 - 21CS PPF for VSEⁿ 2.3 (based on IBM PSF)
 - 21CS PDCF for VSEⁿ 1.2 (based on IBM PPFA)
 - 21CS EFM for VSEⁿ 1.2 (based on IBM OGL)
- Additionally:
 - 2 additional RSLs (fix bundles)
 - New SMDMU (DITTO) Tape-to-Tape compare support for logical comparison
 - Support for Batch Rest Web Service client – till now it was only available for OLTP (CICS), but now also available for Batch workloads!
 - Crypto Services/OpenSSL Enhancement – option to choose mode of closing connection to avoid long time outs
 - New Enhanced tracing for 21CS VSEⁿ Crypto Services (OpenSSL)
 - New SDAID Enhancements (support for all instructions, including z16)
 - VSEnSCRT enhancements and fixes
- New People joined the team



VSEⁿ Customer Experiences

"Very simple and transparent process"

*-Mike Riggs
Supreme Court of Virginia*

"Good experience, easy migration"

*-Jean Francoise Bourget
NRB*

"Good experience, appreciate the periodical use of SCRT, we find it very useful"

*-Dave Murry
Kaiser-Francis Oil Company*

"Very responsive team"

*-Dave Stuart
Blue Hill Data Services*

"With my previous experience upgrading VSE was enough to migrate to VSEn without problems."

*- Alice de Jesus Farías
HCL*

"Migration was pretty good, smooth"

- Dale Theisen

"No known issues with VSEn in specific"

*- John Pavelka
Farmers Insurance*

"At my level, nothing came up as a problem during migration and we continue doing things as we have for 30 years without change"

*- Gregory Kocek (CIO)
Amicable American Insurance*

21CS VSEⁿ 6.3 SW Stack

- Includes base and optional products
- Focus on compatibility with and easy upgrade (Fast System Upgrade) from IBM z/VSE 5.2, z/VSE 6.1 and z/VSE 6.2
 - New descriptive names („whitewashed“) only for messages and dialogs (no commands or APIs changes)
 - Increase internal and external release numbers
- HW requirements: IBM z114/z196 or newer, including support for the latest IBM z16 and z17 and commitment to support next HW generations



VSEⁿ



21CS VSEⁿ Stack (base and optional) 1 of 2

IBM PID	IBM z/VSE Stack Product Name	21CS VSE ⁿ Stack Product Name
5686-VS6	IBM z/VSE 6.2 (including LE, LE DBCS, OS/390 APIs, REXX, z/VSE Connectors)	21CS VSE ⁿ 6.3 (including LE, LE DBCS, OS/390 APIs, REXX, VSE ⁿ Connectors)
5686-065	IBM ACF/VTAM VSE/ESA	21CS VCDD for VSE ⁿ
5655-VSE	IBM CICS TS for z/VSE	21CS OLTP for VSE ⁿ
5747-DS2	IBM ICKDSF	21CS ICKDSF for VSE ⁿ
5656-260	IBM EREP	21CS IDRP for VSE ⁿ
5686-CS1	IBM TCP/IP for z/VSE	21CS TCP/IP for VSE ⁿ
5686-BS1	IBM IPv6/VSE	21CS IPv6/VSE
5696-234	IBM HLASM	21CS HLASM for VSE ⁿ
5648-099	IBM DITTO (base and optional)	21CS SMDMU for VSE ⁿ (optional, in 6.3.1 part of base)
5686-VS6	IBM Encryption Facility for z/VSE (optional)	21CS Encryption Facility for VSE ⁿ (optional)
5696-234	IBM HLASM ToolKit (optional)	21CS HLASM ToolKit for VSE ⁿ (optional)
5686-068	IBM COBOL for VSE/ESA (optional)	21CS COBOL for VSE ⁿ (optional)
5686-069	IBM PL/I for VSE/ESA (optional)	21CS PL/I for VSE ⁿ (optional)
5686-A01	IBM C for VSE/ESA	21CS C for VSE ⁿ (optional)
5686-A02	IBM Debug Tool for VSE/ESA (included in „Full Function“ compilers) (optional)	21CS Debug Tool for VSE ⁿ (optional)
5746-RG1	IBM DOS/VS RPG II	21CS RPG II for VSE ⁿ (optional)
5746-SM3	IBM DFSORT/VSE (optional)	21CS SMCART for VSE ⁿ (optional)
5746-XE7	IBM VSE/ACLR (optional)	21CS AUDT for VSE ⁿ (optional)
5746-XX1	IBM DL/I VSE (optional)	21CS HDB for VSE ⁿ (optional)
5697-F42	IBM DB2/VSE Server	21CS SDB Server for VSE ⁿ (optional)
5697-F42	IBM DB2/VSE Client	21CS SDB Client for VSE ⁿ (optional)
5746-XXT	IBM SDF II CICS SCREEN DEF. VSE	21CS SCRDEF for VSE ⁿ (optional)

21CS VSEⁿ Stack (more optional) 2 of 2

IBM PID	IBM z/VSE Stack Product Name	21CS VSE ⁿ Stack Product Name
5686-057	IBM GDDM/VSE	21CS GPSP for VSE ⁿ
5668-723	IBM GDDM-IVU	21CS GPSP-IVU for VSE ⁿ
5668-801	IBM GDDM-IMD	21CS GPSP-IMD for VSE ⁿ
5668-812	IBM GDDM-PGF	21CS GPSP-PGF for VSE ⁿ
5655-U97	IBM WebSphere MQ Server	21CS MQ Server for VSE ⁿ
5686-040	IBM PSF/VSE	21CS PPF for VSE ⁿ
5688-190	IBM PPFA/370 VSE Feature	21CS PDCF for VSE ⁿ
5688-191	IBM OGL/370 VSE Feature	21CS EFM for VSE ⁿ
5648-B33	IBM AFP Font Collection for VSE	21CS AFP Font Collection for VSE ⁿ

Strong relationship with VSE ISVs

Adaptigent	Rocket Software (including ASG & B.O.S)	SDS
Broadcom	Lattwein	Sine Nomine
BSI	Log-on	SVA
Cincom	MacKinney	SysperTec Virtel
CSI	MainstorConcept	Thigpen
C/Trek	Mantissa	Treehouse Software
Cyber Gent	Phoenix Software International	UMB
Data 21	Precisely	UNICOM Macro 4
Eradani	Q Group	Velocity
FIS		XPS
H&W Computer Systems		Zellis

Ordering and Pricing

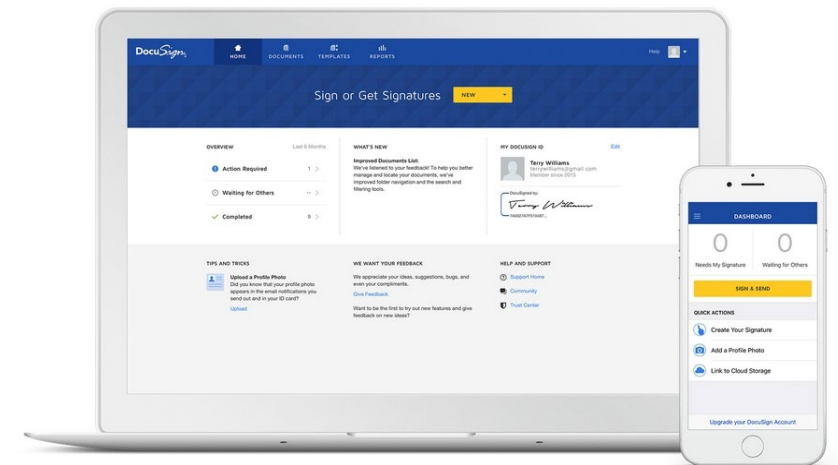
Ordering and Pricing: like IBM z/VSE pricing but much simpler (and cheaper):

- First contact triggered by the customer via email vse@21cs.com
- Only one license metric with **option for full capacity or sub-capacity pricing**
 - In case of sub-capacity, using VSEnSCRT native on VSEⁿ to generate, see and provide monthly 4HRA MSUs peaks reports
- Monthly License Charge includes support as long as the product is supported (5 years since GA, releases every 2-3 years)
- Commercial hosting pricing: "Hosters" that have a license 21CS VSEⁿ are allowed to provide IT Services (including usage of VSEⁿ but not exclusive to it) to multiple users
- Up to 3 months test waiver (if not use for production before)
- Upgrade and consulting services also offered extra in regions where no VSE consultants are known



Contracts:

- First contact triggered by the customer via email vse@21cs.com
- Only two documents to review and sign via DocuSign:
 - 21CS CRA (similar to IBM CRA, including NDA)
 - 21CS VSEⁿ Product Order License
- Upon signature (and Purchase Order receipt), the product is offered via Box folder invite



This Photo by Unknown Author is licensed under [CC BY-SA-NC](https://creativecommons.org/licenses/by-sa/4.0/)

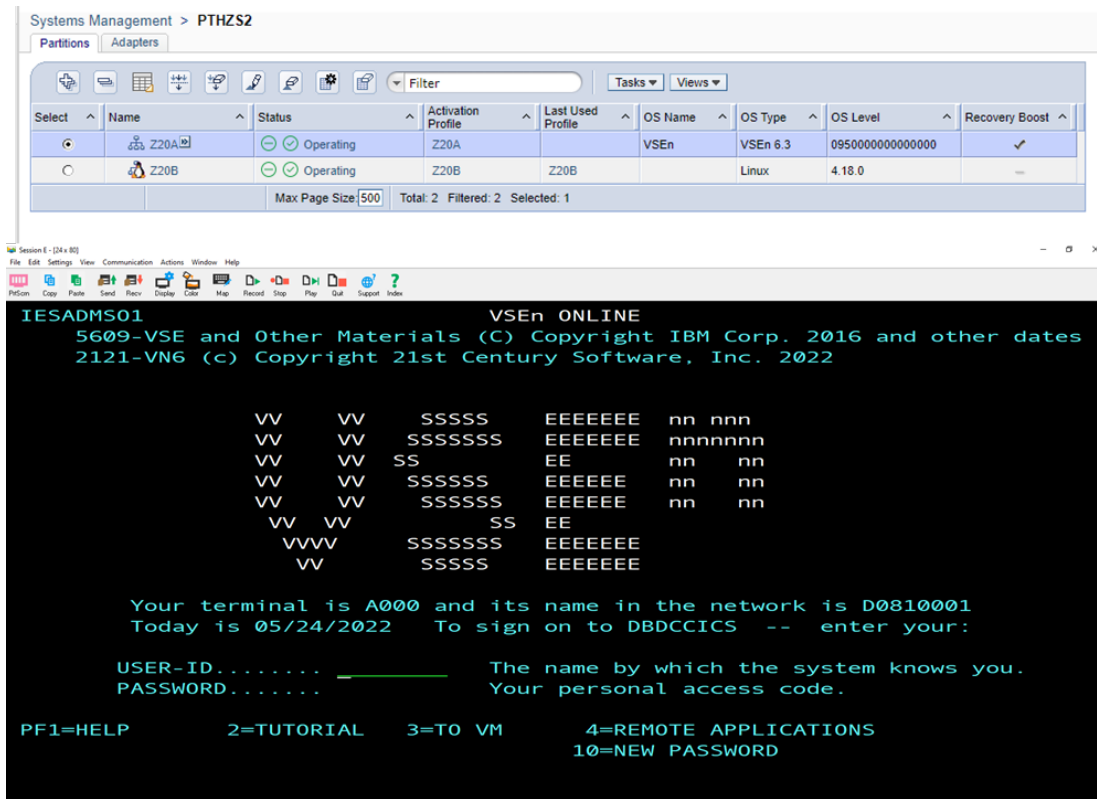
Technical Support

- Support:
 - Included in the MLC as long as the release is supported
 - 24x7
 - WW coverage
 - via email support@21cs.com and telephone: +1 978-451-1010
- In case of dumps
 - Upload to Box to your folder (not shared with any other customer)
- APARs, PTFs and RSLs
 - Delivered via Box folder
 - Generated and installed with MSHP (like you are used to)



Installation considerations

- Supports IBM z114/z196 or newer generations (including z16 and z17)
- Supports LPAR and z/VM
- Supports FICON attached disk storage (IBM, Hitachi, Dell/EMC)
- Supports FCP/SCSI attached disk storage
- Supports FICON attached tape storage (real or virtual)
- A, B, C environments sizes remain with the same req. as IBM z/VSE 6.2 on CPU, Memory/Main Storage and Disk Storage
- Supports new installation and FSU from IBM z/VSE 5.2, 6.1 and 6.2 directly to 21CS VSEn 6.3
- Using Sub-Capacity Pricing? Remember to have the CMT Task running in ALL VSEn systems!
- Apply preventive service (before installing 21CS Optional products): first RSL Base, then HLASM, then TCPIP and then install optional products (backup IBM, delete IBM, install 21CS)



Work in Progress - VSEⁿ & the Cloud

- Public Cloud deployment options
- VSEⁿ Connectors cloud native (containerized)



Work in Progress - VSEⁿ Enhancements

- + IBM z17 support for DPU / OSA Hybrid / EQDIO
- + VSEⁿ 6.4: Next release (target 3Q 2025) with z14 Architecture Level Set and optimize OS, Compilers and Middleware to it
- + System License Key
- + IBM Z Secure Boot support
- + Batch REST client support
- + OLTP (CICS) hardening
- + Disk Messages on-hold simplification
- + SDB (DB2) Client support for longer passwords
- + Security enhancements: VSEⁿ Crypto Services/openSSL currency/enhancements, VSEⁿ Connectors OpenJDK / JRE currency, MQ currency

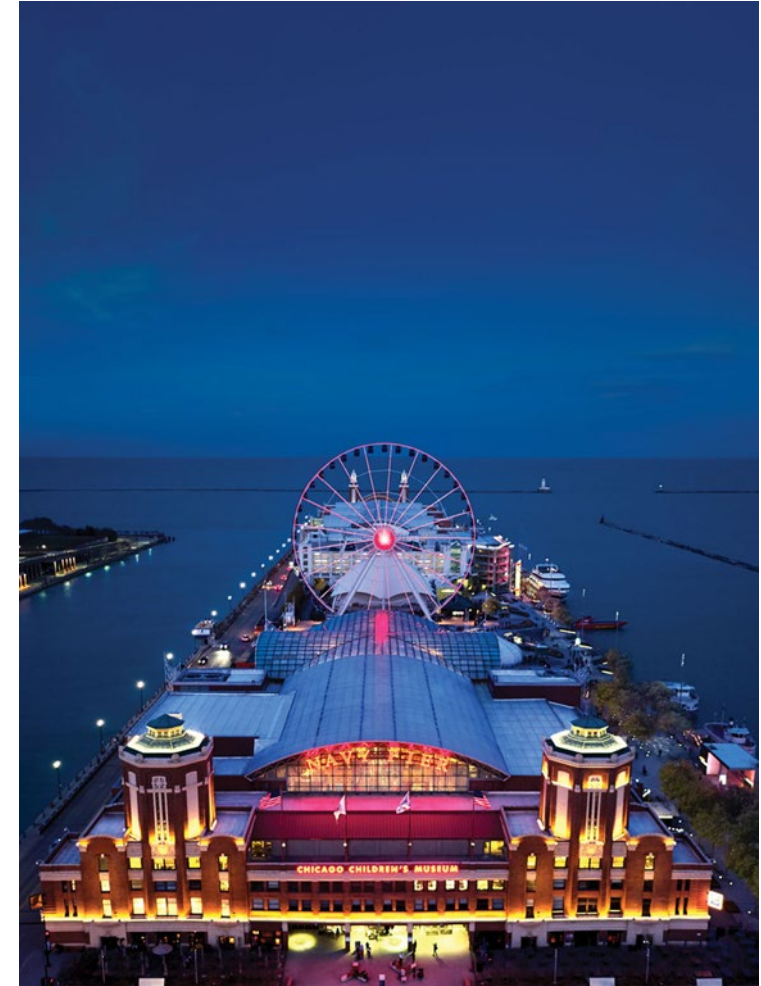
Work in Progress – AI and VSEⁿ... why not?

- + Besides being able to inference your VSEⁿ data/transaction with collocated Linux on Z workloads since the z16 with VSEⁿ Connectors... how about some assistants/bots... ? Sure!
- + Teracloud/21CS Hackathon 2024 winner: VSEⁿ Interactive Assistant Bot!
- + It will be an **on-premises** solution trained and targeted for VSEⁿ allowing for:
 - + **Lightweight** application and model (for normal laptop), **high performance and high accuracy**
 - + In case of deployment/operative tasks, **optional integration with a VSEⁿ environment** to get information about the environment and submit the results after confirmation.
- + Currently on development phase – are you interested?

21CS VSEn Strategy together with IBM and partners

- Build a sustainable VSEⁿ skilled team
- Continue delivering value to customers aligned with IBM's 'P(rotect), I(ntegrate) and E(xtend)' strategy and now we start the R(enaissance) – **PIER**. We are the **PIER** in the harbor for your workloads*
- Identify enhancement opportunities based on customer feedback and business needs
- Continue to strengthen partnerships with IBM and ISVs to offer investment protection for customers and future innovations

* Mike Riggs (retired), Supreme Court of Virginia, USA, VSE Customer





Thank you!



GONZALO MUELAS SERRANO
VP of VSEn R&D
Center Of Excellence Germany

+49.711.2070.3647

cell: +49.151.7271.0485

Gonzalo.Muelas@21cs.com

21st Century Software | **21CS.com** | **+1.800.555.6845**

Friedrichstraße 15 70174 Stuttgart, Germany