z/VSE Wellness
How to keep your z/VSE in good shape

Ingo Franzki, IBM
Trademarks

The following are trademarks of the International Business Machines Corporation in the United States, other countries, or both.

Not all common law marks used by IBM are listed on this page. Failure of a mark to appear does not mean that IBM does not use the mark nor does it mean that the product is not actively marketed or is not significant within its relevant market.

Those trademarks followed by ® are registered trademarks of IBM in the United States; all others are trademarks or common law marks of IBM in the United States.

For a complete list of IBM Trademarks, see www.ibm.com/legal/copytrade.shtml:

* AS/400®, e business(logo)®, DBE, ESCO, eServer, FICON, IBM®, IBM (logo)®, iSeries®, MVS, OS/390®, pSeries®, RS/6000®, S/30, VM/ESA®, VSE/ESA, WebSphere®, xSeries®, z/OS®, zSeries®, z/VM®, System i, System i5, System p, System p5, System x, System z, System z9®, BladeCenter®

The following are trademarks or registered trademarks of other companies.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries. Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license therefrom.
Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.
Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.
Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States, other countries, or both.
UNIX is a registered trademark of The Open Group in the United States and other countries.
Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.
ITIL is a registered trademark, and a registered community trademark of the Office of Government Commerce, and is registered in the U.S. Patent and Trademark Office. IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency, which is now part of the Office of Government Commerce.

* All other products may be trademarks or registered trademarks of their respective companies.

Notes:
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.
IBM hardware products are manufactured from new parts, or new and serviceable used parts. Regardless, our warranty terms apply.
All customer examples cited or described in this presentation are presented as illustrations of the manner in which some customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics will vary depending on individual customer configurations and conditions.
This publication was produced in the United States. IBM may not offer the products, services or features discussed in this document in other countries, and the information may be subject to change without notice. Consult your local IBM business contact for information on the product or services available in your area.
All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. Information about non-IBM products is obtained from the manufacturers of those products or their published announcements. IBM has not tested those products and cannot confirm the performance, compatibility, or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

Prices subject to change without notice. Contact your IBM representative or Business Partner for the most current pricing in your geography.
Notice Regarding Specialty Engines (e.g., zIIPs, zAAPs and IFLs):

- Any information contained in this document regarding Specialty Engines ("SEs") and SE eligible workloads provides only general descriptions of the types and portions of workloads that are eligible for execution on Specialty Engines (e.g., zIIPs, zAAPs, and IFLs). IBM authorizes customers to use IBM SE only to execute the processing of Eligible Workloads of specific Programs expressly authorized by IBM as specified in the “Authorized Use Table for IBM Machines” provided at [http://www.ibm.com/systems/support/machine_warranties/machine_code/aut.html](http://www.ibm.com/systems/support/machine_warranties/machine_code/aut.html) ("AUT").
- No other workload processing is authorized for execution on an SE.
- IBM offers SEs at a lower price than General Processors/Central Processors because customers are authorized to use SEs only to process certain types and/or amounts of workloads as specified by IBM in the AUT.
z/VSE & z/VM Release Status

→ z/VSE: [http://www.ibm.com/systems/z/os/zvse/about/status.html#vse](http://www.ibm.com/systems/z/os/zvse/about/status.html#vse)

<table>
<thead>
<tr>
<th>Supported z/VSE releases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version.Release</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>z/VSE V6.1</td>
</tr>
<tr>
<td>z/VSE V5.2</td>
</tr>
<tr>
<td>z/VSE V5.1</td>
</tr>
</tbody>
</table>

Note: z/VSE V6.1 requires an initial installation. To ease the migration to z/VSE V6.1, z/VSE V5.2 will still be orderable after general availability of z/VSE V6.1 for a transition period.


<table>
<thead>
<tr>
<th>VM End of Service Effective Dates (mm/dd/yyyy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/VM Product</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>z/VM (5741-A07)</td>
</tr>
<tr>
<td>z/VM (5741-A07)</td>
</tr>
<tr>
<td>z/VM (5741-A05)</td>
</tr>
</tbody>
</table>
z/VSE Server Support

http://www.ibm.com/systems/z/os/zvse/about/status.html#server

For older and unsupported release, please see here:
http://www.ibm.com/systems/z/os/zvse/about/statusold.html#server

<table>
<thead>
<tr>
<th>IBM z Systems, IBM System z, zSeries and SJ390 Server</th>
<th>z/VSE V6.1</th>
<th>z/VSE V5.2</th>
<th>z/VSE V5.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM z13s (1,4)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM z13 (1,4)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM zEnterprise EC12 (1)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM zEnterprise EC12 (2)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM zEnterprise 114</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM zEnterprise 196</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM zEnterprise BladeCenter Extension (zBX) - IEDN Support</td>
<td>Yes (2,3)</td>
<td>Yes (2,3)</td>
<td>Yes (2,3)</td>
</tr>
<tr>
<td>IBM System z10 BC</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM System z10 EC</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM System z60 EC (formerly z9-100)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM System 29 BC</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>zSeries 990, 990</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>zSeries 900, 900</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>SJ90 Parallel Enterprise Server G5/G6</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>SJ90 Multiple 3000</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**Note (1):** The z13s, z13, zEC12 and zBC12 allow to configure OSA-Express4S and later with OSA/SF in HMC. Starting with the zEC12, ESCON channels are no longer supported.

**Note (2):** z/VSE V6.1, V5.1 and V5.2 can participate in an IEDN through OSA-Express for zBX devices (LPAR or zVM guests).

**Note (3):** z/VSE V6.1, V5.1 and V5.2 can transparently participate in an IEDN through a z/VM VSWITCH. This requires z/VM V6.1 or later.

**Note (4):** The Crypto Express5s is the only crypto adapter that can be used on a z13 or z13s.

**Note:** Before migrating your z/VSE system to a newer server, please order the corresponding PSP bucket.

**Note:** Server names shown in red are no longer supported by IBM, or an end of support date has been announced.
# z/VSE Storage Support

[http://www.ibm.com/systems/z/os/zvse/about/status.html#storage](http://www.ibm.com/systems/z/os/zvse/about/status.html#storage)

## z/VSE storage support

<table>
<thead>
<tr>
<th>IBM Disk Storage Systems</th>
<th>Attachment</th>
<th>z/VSE V6.1</th>
<th>z/VSE V5.2</th>
<th>z/VSE V5.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM TotalStorage Enterprise Storage Server model 760, 600 and 800 Turbo</td>
<td>ECKD</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM System Storage DS8000 series</td>
<td>ECKD (TCP)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM System Storage DS8880 family (models DS8884 and DS8888)</td>
<td>ECKD (TCP)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM System Storage DS8880</td>
<td>ECKD (TCP)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM System Storage SAN Volume Controller (SVC), IBM Storwize V7000, IBM Storwize V5000, IBM Storwize V3000, IBM Storwize V5100, IBM FlashSystem V900</td>
<td>ECKD (TCP)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IBM XIV Storage System</td>
<td>ECKD (TCP)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Parallel Access Volume Feature (PAV)</td>
<td>ECKD (TCP)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Note (1):** IBM System Storage DS8000 does not offer ESCON connectivity.

**Note (2):** Full Disk Encryption is supported by z/VSE 4.1 and later.

**Note (3):** SSD (Solid State Disk) is supported by z/VSE 4.1 and later. For performance considerations refer to the IBM Storage home page.

## z/VSE support for adapters and crypto

<table>
<thead>
<tr>
<th>Adapter</th>
<th>z/VSE V6.1</th>
<th>z/VSE V5.2</th>
<th>z/VSE V5.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSA-Express, OSA-Express2, OSA-Express3, OSA-Express4S (1), OSA-Express6S (1)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>FICON Express, FICON Express2, FICON Express4, FICON Express8S, FICON Express16S</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Crypto Express2, Crypto Express3, Crypto Express4S, Crypto Express6S (2)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CP Assist for Cryptographic Function (CPACF)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Note (1):** The 213s, 213, 2EC12 and 2BC12 allow to configure OSA-Express4S and later with OSA/AF in HMC.

**Note (2):** The Crypto Express5s is the only crypto adapter that can be used on a z13 or z13s.

**Note:** z/VSE supports selected functions or modes. For details please refer to the z/VSE Planning manual or to the related announcement letter. Additional PTFs might be required.

## IBM Tape Storage Systems

<table>
<thead>
<tr>
<th>Controllers</th>
<th>z/VSE V6.1</th>
<th>z/VSE V5.2</th>
<th>z/VSE V5.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS1140 (3592 Model ED7) Encryption capable</td>
<td>C07, C06</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>TS1130 (3592 Model ED6) Encryption capable</td>
<td>C07, C05</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>TS1120 (3592 Model ED5) Encryption capable</td>
<td>C07, C06, J70</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3592 Model J1A</td>
<td>C06, J70</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>TS3400 Tape Library (Autoloader) containing up to two TS1120 tape drives</td>
<td>C06</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3590 Model H, E and B</td>
<td>A50, A60</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3490E</td>
<td>A10, C20</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3490</td>
<td>A01, A02</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3480</td>
<td>A22</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Note (4):** Additional PTFs are required.

## IBM Tape Library Systems

<table>
<thead>
<tr>
<th>Controllers</th>
<th>z/VSE V6.1</th>
<th>z/VSE V5.2</th>
<th>z/VSE V5.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS7000 ProtecTIER Deduplication Gateway</td>
<td>C06, tape drives: virtual 3592 J1A</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>TS7700 Virtualization Engine (5)</td>
<td>See info for tape drives.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Copy Export Function</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Multi-Cluster Grid Support</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3484 Virtual Tape Server (VTS)</td>
<td>See info for tape drives.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>T25500/3564 UltraScalable Tape Library</td>
<td>J70, C06</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3494 TotalStorage Tape Library</td>
<td>J70, C06, A60</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Note (5):** When using the TS7700 tape library with z/VM’s VGS (VSE Guest Support) you need to install z/VM APAR VM54657/PTF UM32727 (DFSMS/VM).

**Note:** For more information about supported devices please see the [z/VSE Planning manual](http://www.ibm.com/systems/z/os/zvse/about/status.html#storage).
Hardware Upgrades & Migrations

- **Hardware Migration**
  - New System z box
  - Add more capacity (processors, capacity setting)
    
    IBM = **Install Bigger Machine 😊**
  - New disks, tapes, cards, etc
  - Move to a new datacenter

- **Software Migration**
  - New z/VSE release or version
  - New z/VM release or version
  - New (homegrown or purchased) Application
  - Add new or additional workload
  - Update the service level (apply PTFs)
Hardware Upgrades & Migrations

- **Planning for a migration**
  - Order latest updates, Products, PTFs, RSLs, PSPs, etc
  - Order latest Vendor products and updates
  - Consider system layout changes (if needed)
  - Performance
    - Activate a performance monitor
    - Keep monitor data from old and new system for an extended time frame
  - Testing
    - Make sure test systems are available to test the migration first
    - Plan for an extended testing phase
    - Test your applications, your data, performance
    - Test with high load, with lots of users, lots of data, etc
  - Plan for final cutover
    - Data migration (reorganization, reformat, etc)
    - Keep an old system just in case (as backup or live)
  - Plan for fallback
    - Make sure you have a proper backup available
    - Migrating data back might be tricky, if new features have been used on new system
Hardware Upgrades & Migrations

- **Order related PSP (Preventive Service Package) before migrating to the new hardware**
  - e.g. search for “2827DEVICE” (2827 = zEC12):

<table>
<thead>
<tr>
<th>No.</th>
<th>PSP Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Upgrade 2827DEVICE, Subset 2827/ZOS DEVICE 2827</td>
<td>2013-03-13</td>
</tr>
<tr>
<td>2.</td>
<td>Upgrade 2827DEVICE</td>
<td>2013-03-13</td>
</tr>
<tr>
<td>3.</td>
<td>Upgrade 2827DEVICE, Subset 2827/ZVM DEVICE 2827</td>
<td>2013-03-07</td>
</tr>
<tr>
<td>4.</td>
<td>Upgrade 2827DEVICE, Subset 2827/ZVSE DEVICE 2827</td>
<td>2012-12-07</td>
</tr>
</tbody>
</table>

- **Concurrent microcode upgrade for IBM System Storage**
  - **ECKD disks**: z/VSE recommends to shutdown the z/VSE system prior to the microcode upgrade.
  - **FCP-attached SCSI disks**: z/VSE does not support concurrent microcode upgrade for FCP-attached SCSI disks.

- **Recommendation for IBM Tape Storage**:
  - z/VSE with the latest service level supports concurrent microcode upgrade for IBM Tape Storage
  - z/VSE recommends to take the tape units offline (z/VSE OFFLINE command) prior to the microcode upgrade or use the next maintenance window
  - Once the upgrade completed, take the tape units online again (z/VSE ONLINE command)
  - Please check with your software vendors (e.g. tape management systems), if they support concurrent microcode upgrade.
Hardware Upgrades & Migrations

- New processor
  - At first IPL on new processor, you will see ‘OVERLAP ON UNEXPIRED FILE’ messages
    - Page dataset
    - Label area (old systems only, newer systems use VDISK)
  → Enter DELETE to let it reformat the page dataset

- For a shared system
  - Make sure CPUID is changed in ASIPROC
  - Check DLF NCPU parameter is still sufficient

- OSA/SF for SNA configuration

<table>
<thead>
<tr>
<th>Adapter</th>
<th>OSA/SF in HMC</th>
<th>OSA/SF (latest PTFs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSA Express 3</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>OSA Express 4S</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>OSA Express 5S</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Hardware Sizing and Capacity Planning

- **Sizing a system for z/VSE is different from sizing a system for z/OS**
  - In general, a faster single CPU is better than multiple smaller CPUs

- **IBM Processor Capacity Reference for System z (zPCR)**
  - It is designed to provide capacity planning insight for IBM System z processors running various workload environments
  - Capacity results are based on IBM's LSPR data supporting all IBM System z processors
  - For VSE use z/VSE workloads Batch, Online or Mixed
  - ‘As is’, no official support, e-mail to zpcr@us.ibm.com

- **A z/VSE Capacity Planning Offering is now available**
  - Available for Business Partners and Customers
  - Performance data collection is based on a new version of the CPUMON Tool
  - Analysis is done using zCP3000

  - Contact techline@us.ibm.com and ask for z/VSE Capacity Planning Support
Some Terms and Definitions

- **Version / Release / Modification Level**
  - z/VSE 5.1.2 = Version 5, Release 1, Modification Level 2
  - Version and Release start counting at 1
  - Modification Level starts counting at 0
    - At GA of a new Version or Release, the Modification Level is zero
    - z/VSE 6.1 GA = z/VSE 6.1.0

- **Refresh or Refresh Level**
  - Same as a new Modification Level
    - e.g. z/VSE 5.1.1 is a Refresh of z/VSE 5.1(.0)
  - When you order z/VSE you always get the newest Refresh Level
  - SPE = Small Programming Enhancement (usually as part of a Refresh)

- **GA Version (GA = Globally Available)**
  - The service level at the time the Version or Release becomes available
  - Usually no PTFs applied (vanilla system)

- **PTF-1**
  - A set of PTFs that are already available at the time of GA
  - Fixes problems that have been found between shipment to the distribution centers, and GA
  - It is strongly recommended to order and apply those PTFs right after or during migration!
Some Terms and Definitions - continued

- **HIPER = High Impact or Pervasive APAR**
  - An APAR that was flagged as especially important
    - Data loss, integrity
    - Device or hardware specific

- **PSP bucket = Preventive Service Planning**
  - PSP buckets contain all HIPER PTFs
    - For a specific set of products or components
    - On a given z/VSE refresh level

- **RSL = Recommended Service Level**
  - Fills the gap between z/VSE refresh levels and the HIPER service (PSP buckets)
  - An RSL consists of a list of ALL APAR/PTF numbers, not only the HIPER service.
    - which are available at specific cutoff dates
  - RSLs are updated more frequently than refreshes
  - [http://www-03.ibm.com/systems/z/os/zvse/support/preventive.html#rsl](http://www-03.ibm.com/systems/z/os/zvse/support/preventive.html#rsl)

- **Installed Software Report Tool (ISR Tool)**
  - To be used with Shopz service orders
  - Report contains a list of products and PTFs that are already installed on your system
    - MSHP RETRACE PRODUCT and RETRACE PTFS
    - Allows Shopz to ship only those PTFs that are not applied
**z/VSE Service Deliverables**

**Priority 1: Stay on a supported level**

- Make sure that your system is always on a supported level to get help and support from IBM when you need it.

- Plan ahead sufficient time for release or version upgrade and for PTF installation.

- Consult your software vendors for upgrades and specific information.

<table>
<thead>
<tr>
<th>Refresh</th>
<th>RSL</th>
<th>PSP</th>
<th>PTF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is it</strong></td>
<td>Complete Product (includes all PTFs)</td>
<td>List of ALL PTFs at a cut off day</td>
<td>List of selected PTFs (HIPER)</td>
</tr>
<tr>
<td><strong>When is it available</strong></td>
<td>Every 6-12 Month, usually for the newest release</td>
<td>Every 2-3 Month</td>
<td>Is constantly kept up to date</td>
</tr>
<tr>
<td><strong>When should it be installed</strong></td>
<td>For base install or Fast Service Upgrade (FSU)</td>
<td>Preventive to stay on an current level</td>
<td>After a refresh installation and preventive to avoid HIPER problems</td>
</tr>
</tbody>
</table>
Service Recommendations

➔ It is essential to have a preventive maintenance strategy

Our recommendations:

➔ Install the latest Refresh every 12-24 months

➔ Install the newest RSL every 6-12 months

➔ Install the newest PSP Bucket every 3-6 months

➔ Install Fix/PTFs for vendor software every 3-6 months

➔ Install the hardware PSP before you install new hardware

➔ And plan sufficient time for service installation!
Ordering Products and Service

- **Order a new z/VSE System or a Refresh**
  - You get 2 (or 3) tapes (as AWS images)
    - z/VSE Base Tape
    - z/VSE Extended Base Tape
    - (DB2 Help Texts)
  - For Base Install
  - Or Fast Service Upgrade (FSU)

- **Order Optional Products**
  - You get 1 to N stacked tapes (as AWS images)
  - To be installed through Interactive Interface dialogs

- **Order APARs, PTFs, RSLs, PSPs**
  - You get a set of PTFs
  - As binary file with LRECL 80 (most likely zipped to save download time)
  - Apply via Interactive Interface dialogs
    - Through PTF.FILE (IJSYSPF)
    - Or VTAPE

IBM Shopz:  
Ordering z/VSE 6.1

A new license is required for the new versions of IBM TCP/IP for z/VSE V2.1 and CICS TS for z/VSE V2.1 on z/VSE V6.1.

- Customers using IBM TCP/IP for VSE/ESA V1.5 on z/VSE V5, require a new license for the new version of IBM TCP/IP for z/VSE V2.1 when ordering z/VSE V6.1.
- Customers using CICS TS for VSE/ESA V1.1.1, require a new license for the new version of CICS TS for z/VSE V2.1 when ordering z/VSE V6.1.

- In order to ensure licensing for the new TCPIP and CICS TS product versions, you need to select the product(s) applicable when ordering z/VSE V6.1 in Shopz, or by placing an additional order for either of the products, if you have ordered z/VSE V6.1 already.

- z/VSE V6.1 only supports CICS TS for z/VSE V2.1 and IBM TCP/IP for z/VSE V2.1. Older versions of these 2 products are not supported with z/VSE V6.1.
Information about APARs and PTFs


Technical help database
for System z

Search
Search for:
Sort by: Newest first Hits per doc type: 10

Search tips
Start a new search

Document types
- All
- APARs
- FAQs
- Product information
- Education
- Technotes
- Flashes
- Preventive service planning
- Redbook abstracts
- Solutions
- White papers
Recommended Service Levels and PSP Buckets

PSP Buckets
http://www.ibm.com/systems/z/os/zvse/support/preventive.html#psp
  e.g. search for "ZVSE610" or "ZVSE511"

```
1-10 of 41 results | Next 

<table>
<thead>
<tr>
<th>DATE</th>
<th>SUBSET ALTERED</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>13/02/22</td>
<td>IBMLANG/51K</td>
<td>SECTION 4, ADDED ITEM 6 DM01999 UK81611</td>
</tr>
<tr>
<td>13/02/21</td>
<td>ZVSE/51C</td>
<td>SECTION 4, ADDED ITEM 24 D471544 D033929</td>
</tr>
<tr>
<td>13/02/20</td>
<td>ZVSE/51D</td>
<td>SECTION 4, ADDED ITEM 25 D47454 D033929</td>
</tr>
<tr>
<td>13/02/08</td>
<td>ZVSE/51C</td>
<td>SECTION 4, ADDED ITEM 23 D474592 D033927</td>
</tr>
<tr>
<td>12/12/21</td>
<td>ZVSE/51C</td>
<td>SECTION 4, ADDED ITEM 21 D474472 D033922</td>
</tr>
<tr>
<td>12/12/20</td>
<td>ZVSE/51C</td>
<td>SECTION 4, ADDED ITEM 22 D474466 D033921</td>
</tr>
<tr>
<td>12/12/11</td>
<td>ZVSE/51C</td>
<td>SECTION 4, ADDED ITEM 20 D473491 D033946</td>
</tr>
<tr>
<td>12/11/30</td>
<td>IBMLANG/51K</td>
<td>SECTION 4, ADDED ITEM 6 RM74318 US82396</td>
</tr>
<tr>
<td>11/12/29</td>
<td>IBMLANG/51K</td>
<td>SECTION 4, ADDED ITEM 7 RM73473 US82183</td>
</tr>
<tr>
<td>11/12/28</td>
<td>IBMLANG/51K</td>
<td>SECTION 4, ADDED ITEM 8 RM73461 US82432</td>
</tr>
<tr>
<td>11/12/27</td>
<td>IBMLANG/51K</td>
<td>SECTION 4, ADDED ITEM 9 RM73446 US82432</td>
</tr>
</tbody>
</table>
```

Recommended Service Levels (RSLs)
http://www.ibm.com/systems/z/os/zvse/support/preventive.html#rsl

```
Recommended service levels

PTF numbers 15/01/16

z/VSE base Products - 6.1.0
  CICS Transaction Server for z/VSE 2.1
  none

DITTO/ESA VERSION 1.3.0
  UI29161 UI32441

ERE 3.5.0
  none

ICKDSF 1.17.0
  UI33410
```

Copy & Paste the entire PTF order list into ShopZ
  ➢ Don’t worry about the text around, ShopZ will filter out anything that’s not a PTF number
IBM Subscription Services

→ Get notified when APARs are closed

IBM Subscription Services

→ Get notified when APARs are closed
IBM Subscription Services

➤ Get notified when APARs are closed
IBM Subscription Services

Get notified when APARs are closed
IBM Subscription Services

Get notified when APARs are closed

Ordering PTFs using IBM Shopz


Welcome to Shopz! The major features of Shopz which you are authorized to use are explained below. You can link to them directly from the left navigation area.

**My orders** lets you manage all of your software orders. You can:

- create new software orders for service or products.
- continue preparing draft orders that you haven’t submitted yet,
- track, process and download in process orders, and
- review your completed orders which are retained indefinitely for your reference.

**My hardware systems** lets you review your hardware systems and provide your own details for them.

**My licensed software** lets you view your software licenses in a variety of report formats.

**My installed software** lets you manage the installed software reports that you provide Shopz so that it can tailor your software orders to your current environment.

**My downloads** lets you download the software for your licensed standalone products and fixes.
Ordering PTFs using IBM Shopz

Ordering PTFs using IBM Shopz

Ordering PTFs using IBM Shopz

Ordering PTFs using IBM Shopz

Ordering PTFs using IBM Shopz

Ordering PTFs using IBM Shopz


---

**Step 5 of 5 Review and submit**

*My VSE Service order*

Your order is ready to be submitted for **fulfillment**. Please review it before submitting it.

**Order basics**

<table>
<thead>
<tr>
<th>Order name</th>
<th>My VSE Service order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date created</td>
<td>2016-06-15 20.37.06</td>
</tr>
<tr>
<td>Last modified</td>
<td>2016-06-15 20.37.06</td>
</tr>
<tr>
<td>Customer number</td>
<td>S006XFXTQ0</td>
</tr>
<tr>
<td>Operating environment</td>
<td>z/VSE</td>
</tr>
<tr>
<td>Package category</td>
<td>Service</td>
</tr>
<tr>
<td>Package type</td>
<td>Individual PTFs by PTF number</td>
</tr>
</tbody>
</table>

[← Edit Order basics]

**Installed software**

None
Ordering PTFs using IBM Shopz

Ordering PTFs using IBM Shopz

Applying electronic PTFs


- **Using upload (TCP/IP FTP or IN$FILE)**
  - Upload this file into PTF.FILE (IJSYSPF)
    - in BINARY with LRECL 80 and BLKSIZE 10320
  - Apply service using the Interactive Interface dialog (1423)
    - Service Medium is DISK

- **Using VTAPE**
  - Rename Shiptfs.bin to Shiptfs.ptf
  - Apply service using the Interactive Interface dialog (1423)
    - Service Medium is TAPE
    - Select to use virtual tape
    - On panel UTL$VTA2 specify the IP address or hostname of your PC or workstation (where the VSE Virtual Tape Server runs)
    - Also specify the full qualified path and file name of the shiptfs.ptf file where it resides on your PC or workstation

- **PTF files should NOT be transferred directly to the z/VSE system (POWER reader), because**
  - PRE- and CO-requirements may not be fulfilled due to wrong order of PTFs, CO-requirements will not work at all
  - POWER JECL included in the data part of the PTFs will be processed while running the job
    - This leads to modified contents of the PTF and also might cause the code to be incomplete
  - Missing POWER JECL in the PTF file causes POWER to extract VSE JOB cards, this also leads to modified contents of the PTF and may also be incomplete due to job termination
  - No indirect application possible
Applying electronic PTFs using PTF.FILE (IJSYSPF)

- Define the PTF.FILE (IJSYSPF) to TCP/IP
  - For CSI: `DEFINE FILE,TYPE=ESDS,DLBL=IJSYSPF,PUBLIC='IJSYSPF'`
- Transfer the PTF file directly to disk into the VSAM file IJSYSPF:
  ```
  ftp> quote site unix off
  ftp> bin
  ftp> quote site recfm fb
  ftp> quote site lrecl 80
  ftp> quote site blksize 10320
  ftp> put ptffile.bin IJSYSPF
  ```
- Apply service using IUI dialog, service medium is **disk**. Fastpath 1423

```
SRVSHP19  APPLY PTF

Enter the required data and press ENTER.

SERVICE MEDIUM.............. ... 2
  Is the service file on tape? (Enter 2 if on disk)
  Enter 1 if service tape is a remote virtual tape.
  For list of valid addresses see HELP.
  Enter the number of service tapes
  1=ALL  2=INCLUDE  3=EXCLUDE

VIRTUAL TAPE.................. 2

TAPE UNIT ADDRESS.............

TAPE QUANTITY.................. 1

TYPE........................... 1

Enter 2 for NO and 1 for YES
BACKUP.......................... 1

FORCE INDIRECT............... 2

ADD INFO TO THE LIST........ 1

PF1=HELP        2=REDISPLAY   3=END
```
Applying electronic PTFs using VTAPE

- Extract Shiptfs.bin from ZIF file downloaded from ShopZ
- Change file extension, e.g. shiptfs.bin → shiptfs.ptf
- Apply service using IUI dialog, Fastpath 1423
  - Service Medium is Tape
  - VIRTUAL TAPE = 1 (yes) → prompts for parameters for VTAPE on next panel

```
SRV$PH19
Enter the required data and press ENTER.
SERVICE MEDIUM.................. 1
VIRTUAL TAPE.................... 1
TAPE UNIT ADDRESS............... 161
TAPE QUANTITY.................... 1
TYPE............................. 1
Enter 2 for NO and 1 for YES
BACKUP............................ 1
FORCE INDIRECT................... 2
ADD INFO TO THE LIST........... 1
PF1=HELP  2=REDISPLAY  3=END

APPLY PTF

Is the service file on tape?
(Enter 2 if on disk)
Enter 1 if service tape is a
remote virtual tape.

UTLSVTA3
VIRTUAL TAPE: SPECIFY THE DATA SET
Enter the required data and press ENTER.
Service application from remote virtual tape,
Specify the following residence values of the service tape:

Hostname my.vtape.server.ibm.com
or
IP Address: ________________________________
... ________________________________
... ________________________________
PORT.... ______ TCP/IP port number
DATA SET NAME : d:\VSE/shiptfs.ptf
... ________________________________
... ________________________________
... ________________________________
PF1=HELP  2=REDISPLAY  3=END
```
Hints & Tips for z/VSE

http://www-03.ibm.com/systems/z/os/zvse/documentation/#hints

System Hints and Tips for z/VSE
- z/VSE Problem Determination Guide (PDF, 220KB)
- Hints and Tips for z/VSE 6.1 (PDF, 960KB)
- Hints and Tips for z/VSE 5.2 (PDF, 1.1MB)
- Hints and Tips for z/VSE 5.1 (PDF, 900KB)
News & Announcements


<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| April 12, 2016  | Announcement: z/VSE V6 - What will be next  
|                 | For more information please see the Announcement letter                                                                                                                                                                                                                                           |
| April 4, 2016   | A new license is required for the new versions of IBM TCP/IP for z/VSE V2.1 and CICS TS for z/VSE V2.1 on z/VSE V6.1  
|                 | Customers using IBM TCP/IP for VSE/ESA V1.5 on z/VSE V5, require a new license for the new version of IBM TCP/IP for z/VSE V2.1 when ordering z/VSE V6.1.  
|                 | Customers using CICS TS for VSE/ESA V1.1.1, require a new license for the new version of CICS TS for z/VSE V2.1 when ordering z/VSE V6.1.  
|                 | In order to ensure licensing for the new TCP/IP and CICS TS product versions, you need to select the product(s) applicable when ordering z/VSE V6.1 in Shopz, or by placing an additional order for either of the products, if you have ordered z/VSE V6.1 already.  
|                 | z/VSE V6.1 only supports CICS TS for z/VSE V2.1 and IBM TCP/IP for z/VSE V2.1. Older versions of these two products are not supported with z/VSE V6.1.                                                                                                                                 |
| November 27, 2015 | IBM z/VSE V6.1 is now available                                                                                                                                                                                                                                                                                                                |
## Hot Service News

http://www-03.ibm.com/systems/z/os/zvse/support/#news

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| April 25, 2016| **z/VSE 6.1.0 PSP Bucket Shopz orders**  
At the moment (as of April 25, 2016) there is no HIPER flagged service available for z/VSE 6.1.0. This means there is no need to place a PSP bucket order on Shopz when you have just installed the new z/VSE 6.1.0 release.  
If you have already placed such a PSP Bucket order for z/VSE 6.1.0, then you will receive PTF’s for a back level release of EREP (5656-260-01-D10) which can be ignored. If you try to install them, you will receive message ‘Product 260D10 is not installed on your system’. This can then be ignored. |
| April 4, 2016 | **A new license is required for the new versions of IBM TCP/IP for z/VSE V2.1 and CICS TS for z/VSE V2.1 on z/VSE V6.1**  
- Customers using IBM TCP/IP for VSE/ESA V1 5 on z/VSE V5, require a new license for the new version of IBM TCP/IP for z/VSE V2.1 when ordering z/VSE V6.1.  
- Customers using CICS TS for VSE/ESA V1.1.1, require a new license for the new version of CICS TS for z/VSE V2.1 when ordering z/VSE V6.1.  
In order to ensure licensing for the new TCP/IP and CICS TS product versions, you need to select the product(s) applicable when ordering z/VSE V6 1 in Shopz, or by placing an additional order for either of the products, if you have ordered z/VSE V6 1 already.  
**z/VSE V6 1 only supports CICS TS for z/VSE V2.1 and IBM TCP/IP for z/VSE V2.1. Older versions of these two products are not supported with z/VSE V6.1.**  
| Feb 10, 2016  | **z/VSE 6.1.0 RSL** has been created at the Jan 15, 2016 level and **z/VSE 5.2.0 & 5.1.2 RSL** have been updated to the Jan 15, 2016 level.                                                                 |
| November 27, 2015 | **IBM z/VSE V6.1 is now available**                                                                                                                                                |
# z/VSE related Events

http://www-03.ibm.com/systems/z/os/zvse/events/

## z/VSE events

The following IBM z Systems and z/VSE related events are currently planned. If you know a z Systems or z/VSE event and want it to be added to this list, please contact the [z/VSE team](http://www-03.ibm.com/systems/z/os/zvse/events/).

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 13-17, 2016</td>
<td><strong>IBM z Systems Technical University featuring IBM z Systems and IBM Storage</strong>&lt;br&gt;Munich, Germany</td>
</tr>
<tr>
<td>June 23-25, 2016</td>
<td><strong>VM Workshop 2016 (with z/VSE sessions)</strong>&lt;br&gt;Rutgers University - The State University of New Jersey, NJ, USA</td>
</tr>
<tr>
<td>September 19-22, 2016</td>
<td><strong>IBMEdge 2016 featuring IBM z Systems, IBM Power Systems and IBM Storage</strong>&lt;br&gt;Las Vegas, NV, USA</td>
</tr>
<tr>
<td>October 24-26, 2016</td>
<td><strong>10th European GSE/IBM Technical University for z/VSE, z/VM and Linux on z Systems</strong>&lt;br&gt;Leipzig, Germany</td>
</tr>
</tbody>
</table>

→ [z/VSE presentations from recent conferences](http://www-03.ibm.com/systems/z/os/zvse/events/)
Live Virtual Classes

http://www-03.ibm.com/systems/z/os/zvse/education/

---

**Upcoming Live Virtual Classes**

**Live Demo: Tape-less zVSE installation**

In this session we show how to create an installation disk from an AWS tape and how to use it for zVSE installation. We also show possible pitfalls and explore how VSEIDISK works.

* **Speaker:** Marco Kroll, IBM  
  **Date:** Tuesday, 12 July, 2016  
  **Time:** US & Europe: 11:00 AM New York, 04:00 PM London, 05:00 PM Boeblingen, 15:00 UTC  
  **Or:** Europe & AP 04:00 PM Japan, 07:00 UTC, 03:00 AM New York, 08:00 AM London, 09:00 AM Boeblingen  
  **Duration:** 90 Minutes

  ⇒ Register for the US & Europe event (11:00 AM New York, 04:00 PM London, 05:00 PM Boeblingen, 15:00 UTC)  
  ⇒ Register for the Europe & AP event (04:00 PM Japan, 07:00 UTC, 03:00 AM New York, 08:00 AM London, 09:00 AM Boeblingen)

* **Note:** Please select your time zone on the top right corner on the registration web page.

---

**Completed Live Virtual Classes**

Below you find the playbacks and the charts of the completed live virtual classes:

**z/VSE Latest News (May 4, 2016)**

- z/VSE Latest News (PDF, 1.0MB)  
  Ingolf Salm, IBM

  ⇒ Listen to the playback of this session

**z/VSE 6.1 - a quick overview (December 1, 2015)**

- z/VSE 6.1 - a quick overview (PDF, 1.5MB)  
  Ingolf Salm, IBM

  ⇒ Listen to the playback of this session

**Solution concepts to integrate z/VSE data and applications with your IT (November 10, 2016)**

- Solution concepts to integrate z/VSE data and applications with your IT (PDF, 5.5MB)  
  Wilhelm Mild, IBM

  ⇒ Listen to the playback of this session
Requirements

https://www-03.ibm.com/systems/z/os/zvse/contact/requirement.html

➢ If you think that a function or feature is missing in z/VSE, z/VSE related products, or on this web page, please submit your requirement through the Request for Enhancement (RFE) tool

For z/VSE requirements please select the following:

- Brand = Servers and System Software
- Product family = z Systems Software
- Product = z/VSE
- Component = You may choose the component
- Operating system = IBM z/VSE

For CICS Transaction Server requirements please select the following:

- Brand = Servers and Systems Software
- Product family = Transaction Processing
- Product = CICS Transaction Server
- Component = Runtime or Explorer
- Operating system = IBM z/VSE

To get informed about new z/VSE related RFEs, you can join the z/VSE Group in the RFE tool

Contact the z/VSE Team
https://www-03.ibm.com/systems/z/os/zvse/contact/contact.html

➢ If you have comments or suggestions to make about the z/VSE home page, or if you have questions about the z/VSE operating system, or z/VSE products complete the form below; and then select Submit

➢ This form should not be used to report technical problems with z/VSE or z/VSE products. Please open a PMR (Problem Management Record) instead

https://www-947.ibm.com/support/servicerequest/Home.action
Be Social with z/VSE

z/VSE Homepage:
www.ibm.com/zVSE

Twitter
www.twitter.com/IBMzVSE

z/VSE Blog

LE z/VSE Blog
www.ibm.com/developerworks/community/blogs/lezyvse/

Join System z Advocates (Subgroup z/VSE)
www.linkedin.com

Read at the IBM's System z Blog
www-304.ibm.com/connections/blogs/systemz/

Connect at Facebook
www.facebook.com/IBMsystemz

Watch on YouTube
www.youtube.com/user/IBMSystemZ
Questions?

THANK YOU