ShopzSeries: Ordering service and Products for z/VSE and z/VM on-line

Stev Glodowski IBM Germany

Email: glodowsk@de.ibm.com

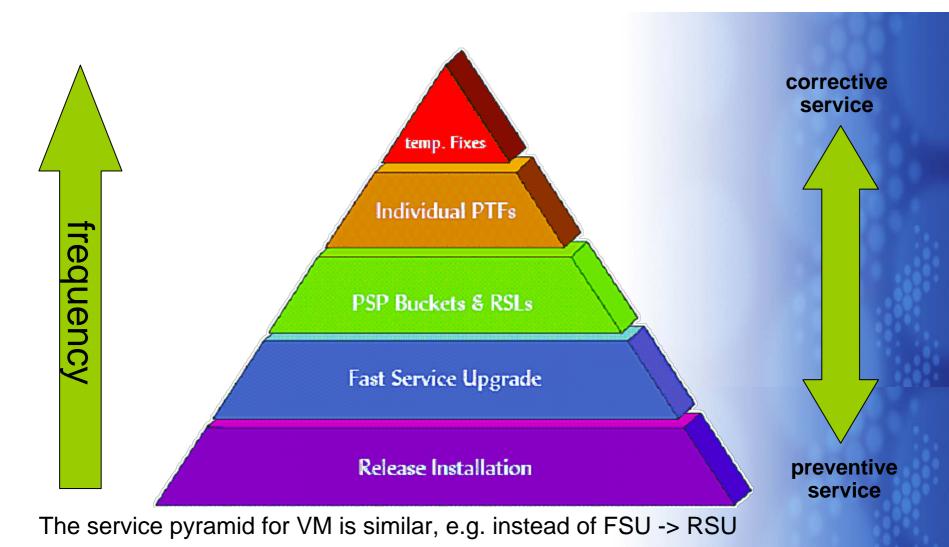


April 18-22, 2008 Chattanooga

Agenda

- Service deliverables
 - * Refresh, PSP, RSL, RSU ...
- How to help yourself in case of a problem
 - Search for APARs and PTFs
- ShopzSeries
 - Ordering service and products
 - Installing downloaded PTFs and products

VSE service pyramid



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
 - for PTF installation
- ❖ IBM announces End-of-Service dates at least 12 Month ahead

VSE: http://www.ibm.com/servers/eserver/zseries/zvse/

❖ VM: http://www.vm.ibm.com/techinfo/lpmigr/vmleos.html

Consult your software vendors for upgrades and specific information

End-of-Service dates

Product	End of Marketing	End of Service	
z/VSE 4.1	-	-	
z/VSE 3.1	May 31, 2008	July 31, 2009	
VSE/ESA 2.7	September 30, 2005	February 28, 2007	
VSE/ESA 2.6	March 14, 2003	March 31, 2006	
VSE/ESA 2.5	December 14, 2001	December 31, 2003	

http://www.ibm.com/servers/eserver/zseries/zvse/about/status.html

Product	End of Marketing	End of Service	
z/VM 5.3	-	September 2010	
z/VM 5.2	-	April 2009	
z/VM 5.1	September 2006	September 2007	
z/VM 4.4	March 2006	September 2006	
z/VM 4.3	August 2003	May 2005	

http://www.vm.ibm.com/techinfo/lpmigr/vmleos.html

VSE: Refreshes

- **❖ VSE Base Tapes + Optional Product Tapes**
 - For Fast Service Upgrade (FSU) (always possible for 2 follow-on releases)
 - ❖ Upgrade from older releases Releases (e.g. VSE/ESA 2.7 -> z/VSE 4.1)
 - ❖ Refresh to a higher Level (e.g. z/VSE 3.1.0 -> z/VSE 3.1.3)
 - For base installation
- Contains all PTFs available until a cut off day
- have undergone a basic regression test by IBM
- are orderable until a new refresh level or new release becomes available

Product	End of Marketing	End of Service	
z/VSE 4.1.1	-	-	
z/VSE 3.1.3	May 31, 2008	July 31, 2009	
VSE/ESA 2.7.3	September 30, 2005	February 28, 2007	
VSE/ESA 2.6.3	March 14, 2003	March 31, 2006	

VM: Recommended Service Upgrade (RSU)

- List of recommended PTFs at specified cut off day
 - Contains not only HIPER PTFs
 - Only available for VM
- Updated 2-3 times a year
- Can be ordered from IBM Service or Internet
 - use RSU Number (e.g., UM97520)
 - ShopzSeries: http://www.ibm.com/software/shopzseries
 - RSU Lists: http://www.vm.ibm.com/service/rsu/
 - Additional info: http://www.vm.ibm.com/service/oi.html
 - Will be shipped like PTF Service Envelope's

VSE: Recommended Service Levels (RSLs)

- ❖ List of ALL available PTFs at specified cut off day
 - contains not only HIPER PTFs
 - only available for VSE
- Kept up to date on a 2-3 Month period
- Can be ordered from IBM Service or Internet
 - copy & paste PTF List into the service order (ShopzSeries)
- Will be shipped as PTF Tape's
 - http://www.ibm.com/servers/eserver/zseries/zvse/support/preventive.html#rsl

VSE: Recommended Service Levels (RSLs)

Service reco	ommended for	PTF Order List	Cutoff Date	
z/VSE 4.1.1	Base Products	PTFs 411B	January 31,	
	Optional Prod.	PTFs 4110	2008	
z/VSE 4.1.0	<u>Base Products</u>	PTFs 410B	October 12,	
	Optional Prod.	PTFs 4100	2007	
z/VSE 3.1.3	Base Products	<u>PTFs 313B</u>	January 31,	
	Optional Prod.	Recommended serv	2008 vice levels	
z/VSE 3.1.2	Base Products	PTF numbers November 30, 2005:		
	Optional Prod.	z/VSE 3.1.1 base p	z/VSE 3.1.1 base products	
z/VSE 3.1.1	Base Products	(total size of RSL: 16.9MB)		
	Optional Prod.		erver for VSE/ESA 1.1.1 UK07779 UK08223 UK08	
z/VSE 3.1.0	Base Products	DITTO/ESA VERSION 1.3.0 UK07731 UK08473		
	Optional Prod.	EREP 3.5.0 VD52922 VD52943 VD52946		
		ICKDSF 1.17.0 UK07981		

The PTF list can be copy & pasted into a service order in ShopzSeries

Preventive Service Planning (PSP Buckets)

- **❖ List of PTFs that solve "High Impact or Pervasive" (HIPER) problems**
- Available for every refresh level
 - ❖ e.g. zVSE313, zVSE411...
- Are permanently maintained and kept up to date by the product change teams
- are divided into subsets for the individual components and hardware devices
 - ❖ e.g.. IBMLANG/75K, 2086DEVICE
- Can be ordered from IBM Service or Internet
 - ❖ use PSP name plus subset (e.g. zVSE313 BASESERVICE)
 - ShopzSeries: http://www.ibm.com/software/shopzseries
 - List: https://techsupport.services.ibm.com/server/390.psp390
- Will be shipped as PTF Tape's or Service Envelop's

Comparison of the service deliverables

	Refresh	RSU	RSL	PSP	PTF
What is it	Complete Product (includes all PTFs)	List of recommende d PTFs at a cut off day	List of ALL PTFs at a cut off day	List of selected PTFs (HIPER)	Official Fix for a code problem (APAR)
When is it available	Every 6-12 Month, usually for the newest release	Updated 2-3 times a year	Every 2-3 Month	Is constantly kept up to date	Will be created when a fix is available
When should it be installed	For base install or Fast Service Upgrade (FSU)	Preventive to stay on an current level	Preventive to stay on an current level	After a refresh installation and preventive to avoid HIPER problems	To fix a certain problem

Service recommendations

It is essential to have a preventive maintenance strategy

- ❖Install the latest Refresh
 - every 12 Month
- If you are on a current refresh level:
 - ❖Install the newest RSL
 - every 6 Month
 - ❖Install the newest PSP Bucket
 - every 3 Month
 - also order the hardware bucket when you install new hardware



Service recommendations

* When migrating onto a new release or version:

- Order and install the latest refresh level
- Order and install the newest RSLs and PSP buckets for this refresh
- Also consult your Software Vendors for their corresponding service levels
- * Have a testing period to make sure everything runs well as it did before
- Order and install the newest PSP bucket again 2-3 weeks before production cutover
- Before production cutover have a fallback plan in place

❖ When you migrate to a new hardware

- Order and install the corresponding hardware buckets before you migrate to the new hardware
- Before production cutover have a fallback plan in place

Agenda

- Service deliverables
 - Refresh, PSP, RSL, RSU ...
- How to help yourself in case of a problem
 - Search for APARs and PTFs
- ShopzSeries
 - Ordering service and products
 - Installing downloaded PTFs and products

How to help yourself in case of a problem

- What to do if you encounter a problem ???
 - What did change since it worked the last time? Make sure you carefully document every change!
 - Change back all changes step by step. Do you still encounter the problem?
 - Is the problem reproducible? If yes, what do you do to force the problem to occur? Try different variations.
 - Collect information about the problem
 - When exactly does it occur? What is the trigger?
 - What is the result of the problem? Error message, Dump, Hardwait, Loop, Performance loss, ...
 - Which products or components are affected?

How to help yourself in case of a problem

Is this already a known and fixed problem?

- Search the APAR database
 - https://techsupport.services.ibm.com/server/zseries.srchBroker
 - Keywords: Message number, symptom, ...
- VSE: APAR Lists available for each release and component on the VSE support page
 - http://www.ibm.com/servers/eserver/zseries/zvse/support/corrective.html
- VSE Hot Service News:
 - http://www.ibm.com/servers/eserver/zseries/zvse/support/index.html#news

Call IBM Support

IBM L1 searches internal problem database and/or passes the problem to the L2 team

Search under Corrective Service

Service and support

Introduction Preventive Corrective Problem Mamt. General CICS Transaction Server Advanced functions (AF) VSE Connectors · VSAM TCP/IP *POWER · DL/I · Interactive interface & ICCF · Language Environment (LE) ·REXX VSE VTAPE z/VSE V4.1 | z/VSE V3.1 | Unsupported releases VSE/VSAM

- → Details about VSE/VSAM
- → Documentation for VSE/VSAM
- ↓ Important news about VSE/VSAM
- ↓ Latest VSEA/SAM 8.1 APARs for zA/SE V4.1

Important news

May 16, 2007 'IDC2950I INVALID FORMAT STRUCTURE' on MASTERCATALOG LISTCAT

For a detailed description please see IDC2950I INVALID FORMAT STRUCTURE (PDF, 24KB)

Latest VSE/VSAM 8.1 APARs for z/VSE V4.1

Last update: February 11, 2008

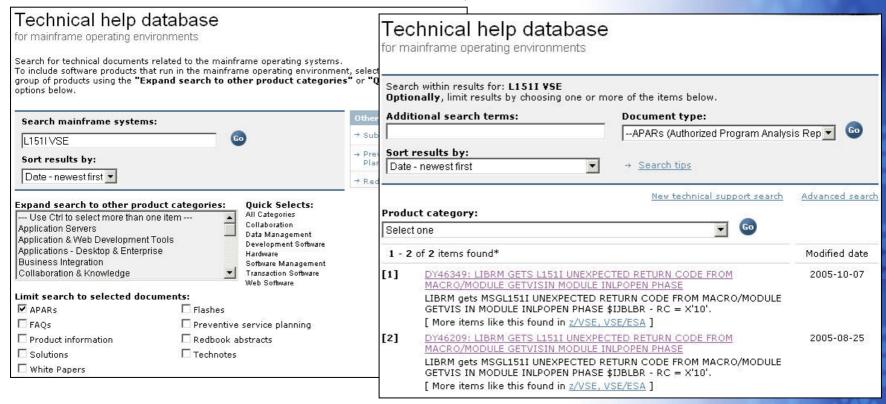
	DTF	
APAR Date	PTF	Contents
DY46854 2008/01/22	UD53308	Performance Degradation, Storage Overlays, ABENDS Under CICS
DY46861 2008/01/25	UD53311	Invalid FREEVIS After Unsuccessful GETVIS
DY46853 2008/01/17	UD53307	SHOWCB Macro Returns Negative Value in RKP Field for Compressed ESDS Files
DY46775 2007/12/10	UD53238	SDUMP From IKQBFE +x'834' Exclusive Control
DY46816 2007/11/08	UD53276	 MSG0S03I PROGCK in IKQIOE SDUMPs from IKQIXS w/ 5- Level Index SDUMPs from IKQIOD w/ Real 3380 Vols Program Check with LE/VSE COBOL Program MSGDFHFC0304 MSGDFHFC0959 ERROR During CLOSE Under CICS
DY46795 2007/11/07	UD53274	Behaviour of POINT MACRO at End of File Changed for RRDS Files
DY46726 2007/09/10	UD53194	Multiple OPEN/CLOSE Lead to Partition GETVIS Storage Fragmentation

http://www.ibm.com/servers/eserver/zseries/zvse/support/corrective.html

Example – Search with Message number

The following message occurs:

L151I UNEXPECTED RETURN CODE FROM MACRO/MODULE GETVIS
IN MODULE INLPOPEN PHASE \$IJBLBR - RC = X'10'



https://techsupport.services.ibm.com/server/zseries.srchBroker

Example – Search results

DY46209: LIBRM GETS L151I UNEXPECTED RETURN CODE FROM MACRO/MODULE GETVISIN MODULE INLPOPEN PHASE \$IJBLBR - RC = X'10'

A fix may be available

Obtain the fix for this APAR

APAR status

Closed as program error.

Error description

LIBRM gets MSGL151I UNEXPECTED RETURN CODE FROM MACRO/MODULE GETVIS IN MODULE INLPOPEN PHASE \$IJBLBR - RC = X'10'. GETVIS RC X'10' means "maximum number of subpools exceeded".

Local fix

Problem summary

- * USERS AFFECTED: LIBRM in 7x24 partition.
- * PROBLEM DESCRIPTION: MSGL1511 UNEXPECTED RETURN CODE
- * RECOMMENDATION

LIBRM gets MSGL151I UNEXPECTED RETURN CODE FROM MACRO/MODULE CETVIS IN MODULE INLPOPEN PHASE \$IJBLBR - RC = X'10'.

GETVIS RC X'10' means "maximum number of subpools exceeded".

This occurs in a never ending partition using LIBRM macros in different subtasks. The Librarian uses subpool IDs built of the string 'INLC' or 'INLG' concatenated with the task identifier (TID). The subpool ID is not freed at end of task. Therfore the maximum of 128 subpools is exceeded after some time.

Problem conclusion

For partition GETVIS requests the TID is no longer part of the subpool ID.

Temporary fix

Comments

APAR information

APAR number DY46209 Reported component name VSE/AF SVR BAM Reported component ID 568606606 Reported release 65C Status CLOSED PER PE NoPE HIPER **NoHIPER** Submitted date 2005-02-03 Closed date 2005-03-22 Last modified date. 2005-08-25

APAR is sysrouted FROM one or more of the following:

APAR is sysrouted TO one or more of the following: UD52738 UD52739 DY46349

Modules/Macros

INLPGVFV

Fix information

Fixed component name VSE/AF SVR BAM Fixed component ID 568606606

Applicable component levels

- PTF can be ordered using this link
- Or copy & paste it into a ShopzSeries order

Agenda

- Service deliverables
 - Refresh, PSP, RSL, RSU ...
- How to help yourself in case of a problem
 - Search for APARs and PTFs
- ShopzSeries
 - Ordering service and products
 - Installing downloaded PTFs and products

What is ShopzSeries?

IBM's productivity tool for planning and ordering zSeries software

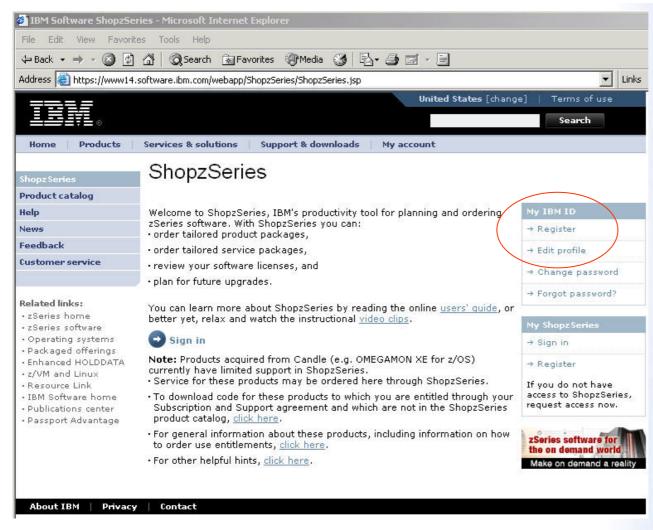
With ShopzSeries you can:

- order tailored product and service packages for z/OS, z/OS.e, z/VM and VSE/ESA, z/VSE
- review your software licenses in all of these environments
- plan for future upgrades.

***URL**:

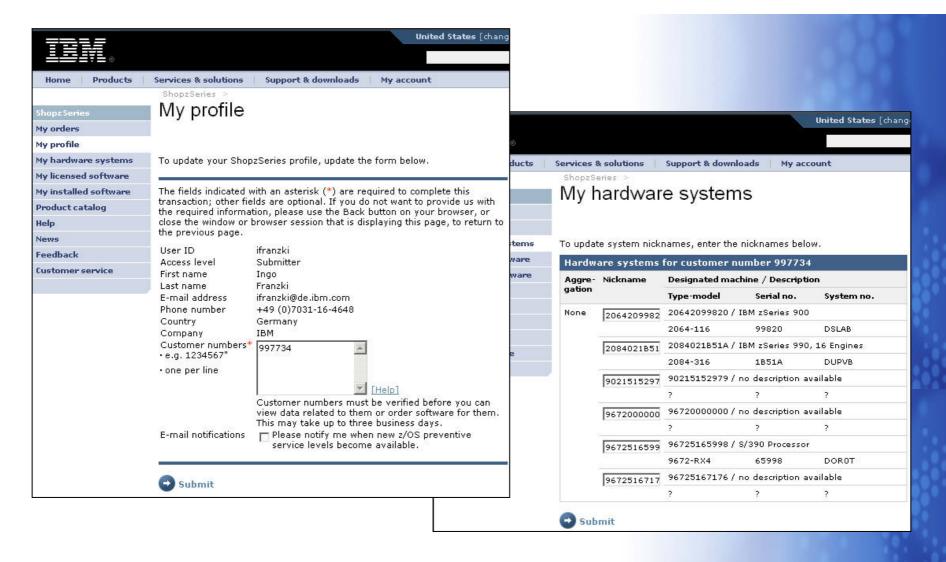
http://www.ibm.com/software/shopzseries

IBM ShopzSeries - Sign in

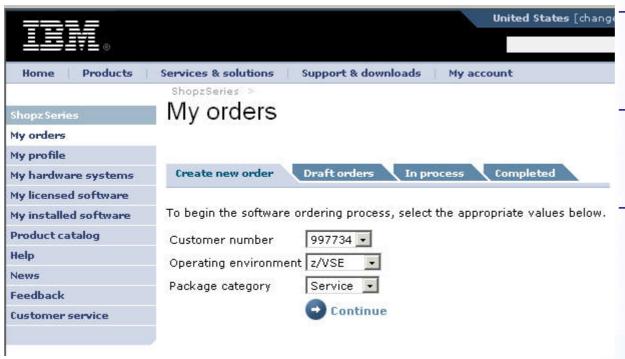


- You need an IBM-ID
- The IBM-ID is free of charge and can be registered within minutes
- With ShopzSeries
 you create a profile
 that contains your
 hardware systems

IBM ShopzSeries - Profile

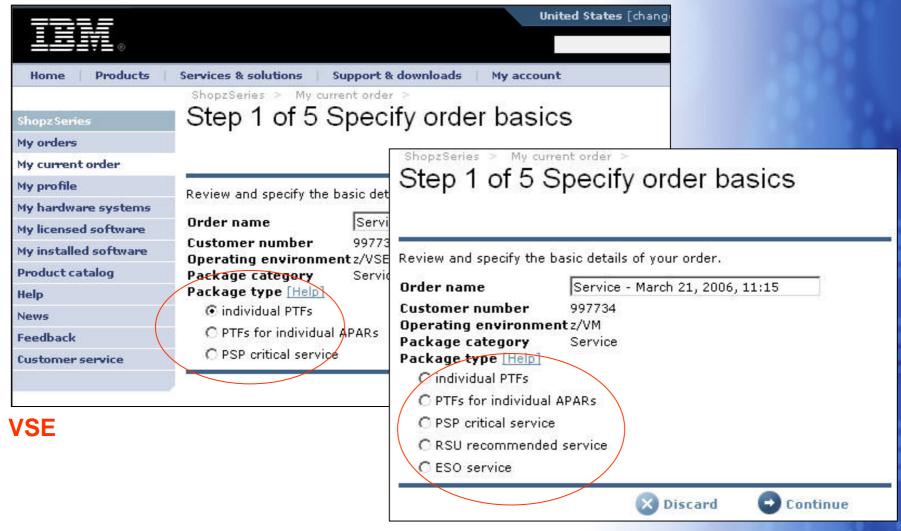


IBM ShopzSeries – Create an order



- You can order products or service for VSE, VM and z/OS
- You will get a notification e-Mail when your order is ready
- You can download the product or service packages or you get it on CD-ROM or tape

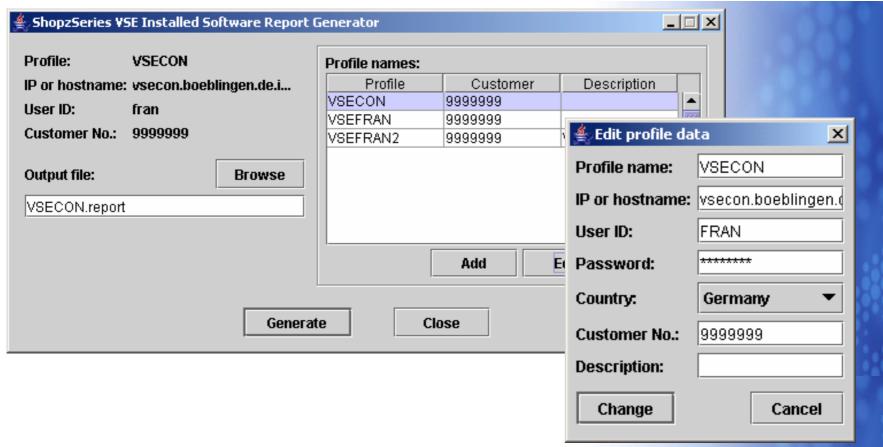
IBM ShopzSeries – Order service



Upload your Installed Software Report



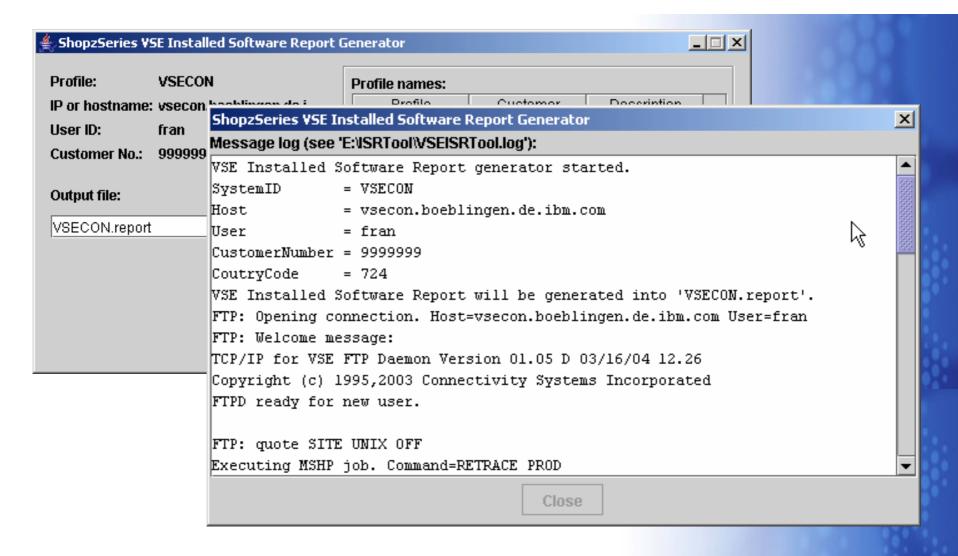
VSE: Installed Software Report Tool



Download:

http://www.ibm.com/servers/eserver/zseries/zvse/downloads/tools.html#isrtool

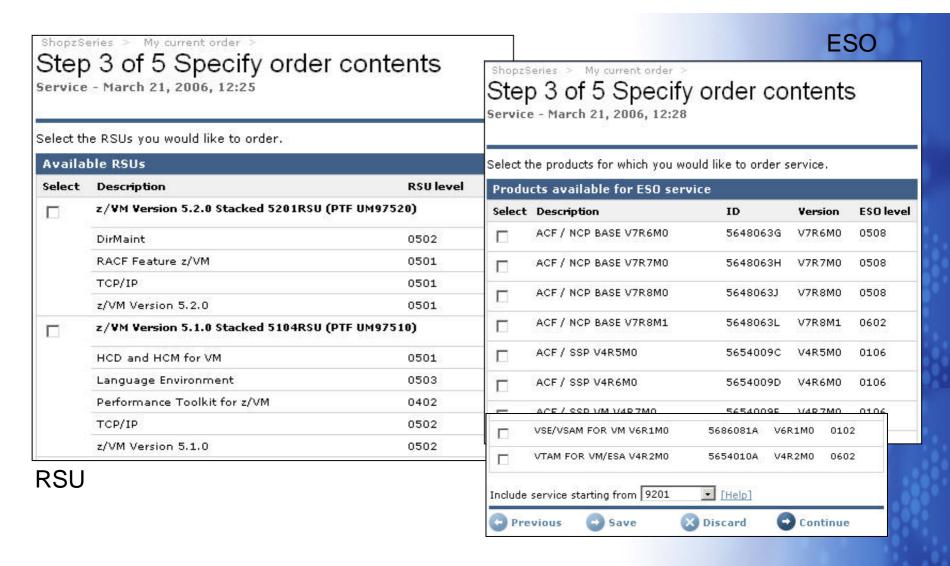
VSE: Installed Software Report Tool



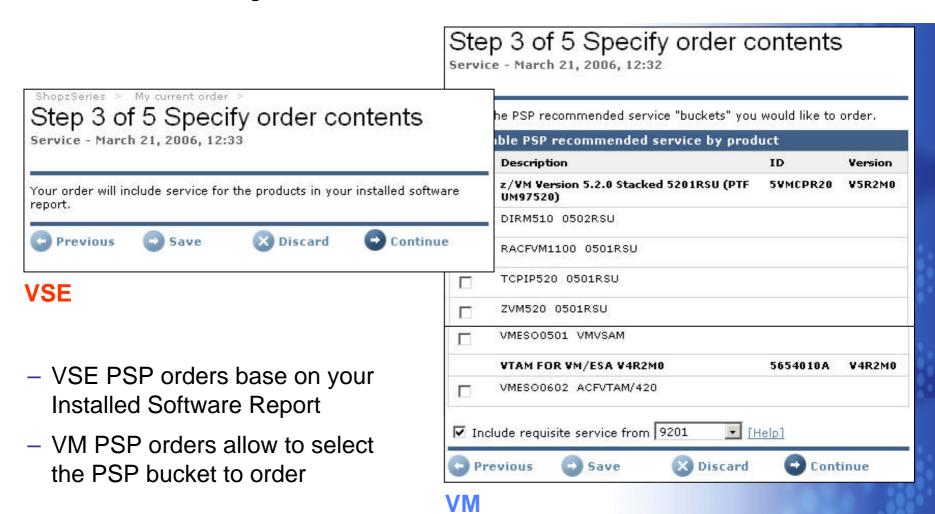
VM: Create an Installed Software Report

- Logon with MAINT User-ID
- Command VMFBTMAP ALL
 - ❖ z/VM 5.1.0 or later
- Creates a file named VMPFXALL BITMAP on the System Inventory Disk (Default: 51D - File Mode D)
- Download this file to your workstation in binary

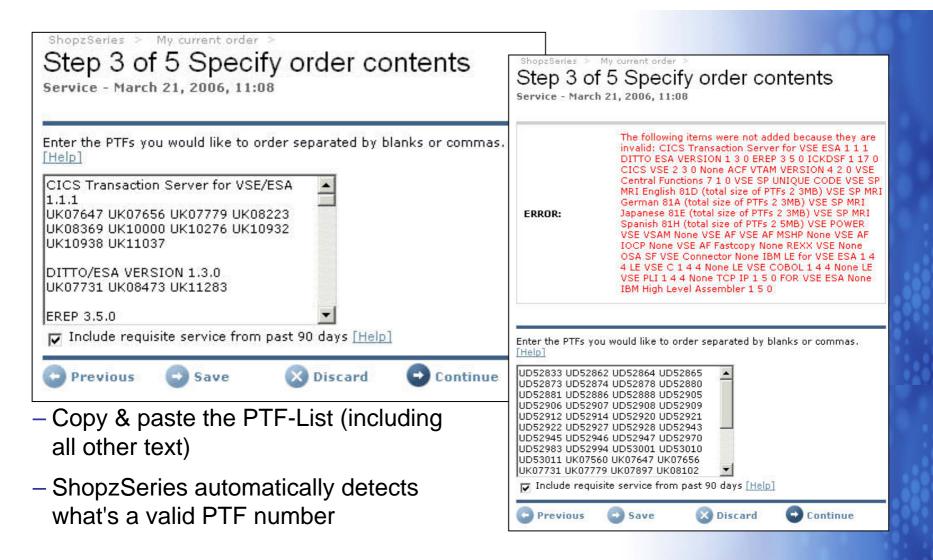
IBM ShopzSeries – Order VM RSUs/ESOs



IBM ShopzSeries – Order PSP service



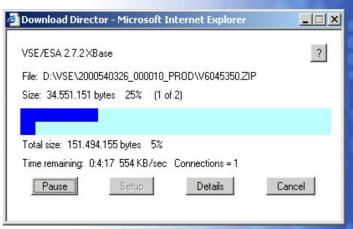
IBM ShopzSeries – Order PTFs and RSLs



IBM ShopzSeries – Download the packages

- ❖ You will be notified by e-Mail, when your order is ready
- Download Director
 - small Java Applet
 - resume downloads when connections are lost
 - increases download speed using multiple connections





VSE: Installing downloaded PTFs

❖ You get ONE binary job stream (fixed 80)

- Zipped with PKZIP (ShopzSeries)
- includes all ordered PTFs

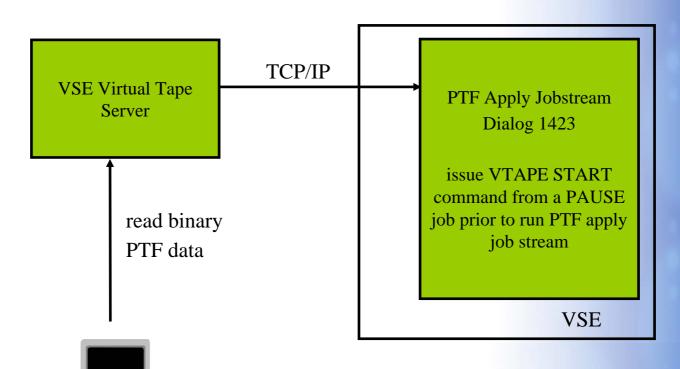
Recommended installation procedure:

- Unzip the package into a temporary directory on your PC
- upload it into PTF.FILE (IJSYSPF)
 - http://www.ibm.com/servers/eserver/zseries/zvse/documentation/edelivery.html#eptf
- or use Virtual Tape (PTF tape simulation)

Not recommended: submit into VSE reader

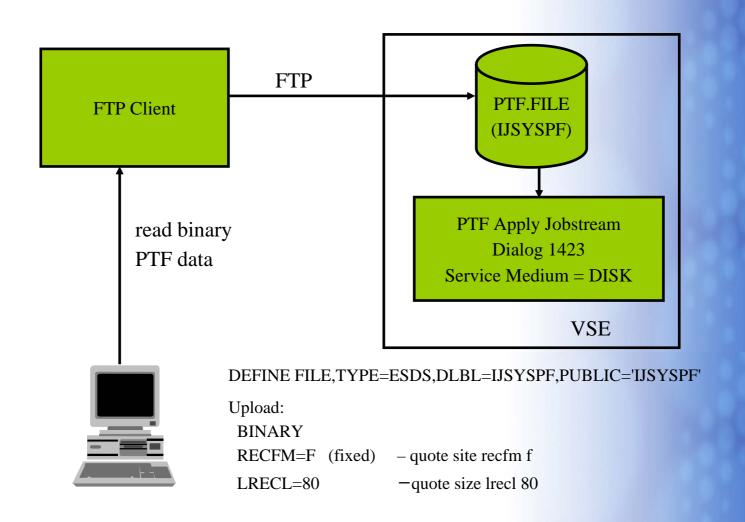
- no indirect PTF apply possible
- PRE- and CO-requirements may not be fulfilled due to wrong order of PTFs
- POWER JECL included in the data part of the PTFs will be processed while running the job.
- Missing POWER JECL in the PTF file causes POWER to extract VSE JOB cards

VSE: Apply PTFs via Virtual Tape



- 1.) Rename file eptf6234.bin to eptf6234.ptf
- 2.) issue VTAPE START command from a PAUSE job // VTAPE START,UNIT=<cuu1>,LOC=<ip-address>, FILE='C:\eptf6234.ptf',READ

VSE: Apply PTFs via PTF.FILE (IJSYSPF)



VSE: Apply PTFs via PTF.FILE (IJSYSPF)

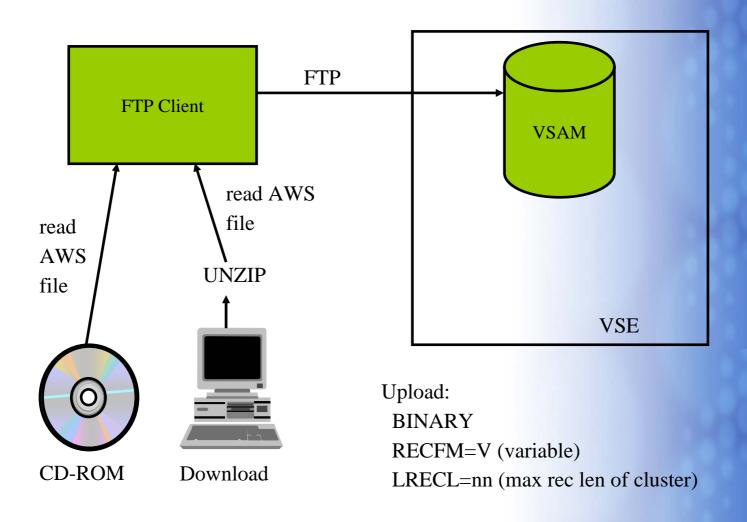
- Transfer the PTF file directly to disk into the VSAM file IJSYSPF.
 The file needs to be defined in TCP/IP
- ftp> quote site unix off ftp> bin ftp> quote site lrecl 80 ftp> quote site recfm f ftp> put ptffile.bin IJSYSPF or put ptffile.bin PTF.FILE
- Apply service using IUI dialog, service medium is disk. Fastpath 1423

```
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
TAPE UNIT ADDRESS......
                                     For list of valid addresses see HELP
TAPE QUANTITY.....
                                     Enter the number of service tapes
                                     Enter the type of mass-application
                                      1=ALL 2=INCLUDE 3=EXCLUDE
Enter 2 for NO and 1 for YES
BACKUP...... 2
                                     Do you want to backup all affected
                                     libraries?
FORCE INDIRECT....... 2
                                     Do you want to apply all PTFs indi-
                                     rectlu?
ADD INFO TO THE LIST...... 1
                                     Do you want to add this info to the
                                     list of your processed service units
                                     For tapes only one tape is possible.
PF1=HELP
              2=REDISPLAY
```

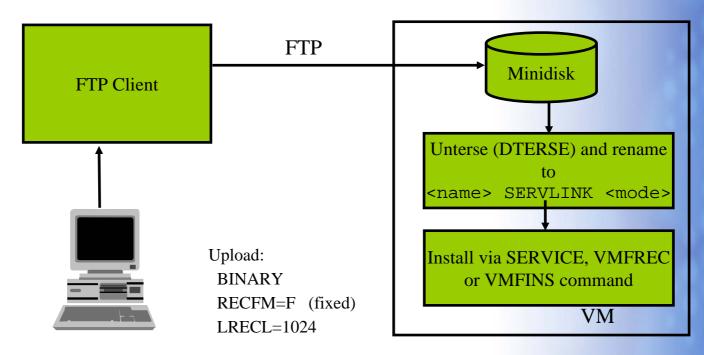
VSE: Performing an Fast Service Upgrade

- FSU from VSE/ESA 2.5.x/2.6.x to VSE/ESA 2.7.x can only be done using a real tape
 - except on MP3000, Flex-ES
 - You need to create a real tape from the tape image
 - Use DITTO Tape to Tape Copy
- ❖ FSU from >= VSE/ESA 2.7.0 to 2.7.x or z/VSE 3.1 or 4.1 can be done with VTAPE (VSAM tape image)
 - upload of tape image into VSAM file needed
- *FSU is done as usual (either from real tape or VTAPE)
 - FSU Preparation Dialog 1432
 - FSU Installation Dialog 1433

VSE: Upload a tape image to VSAM



VM: Install service and products

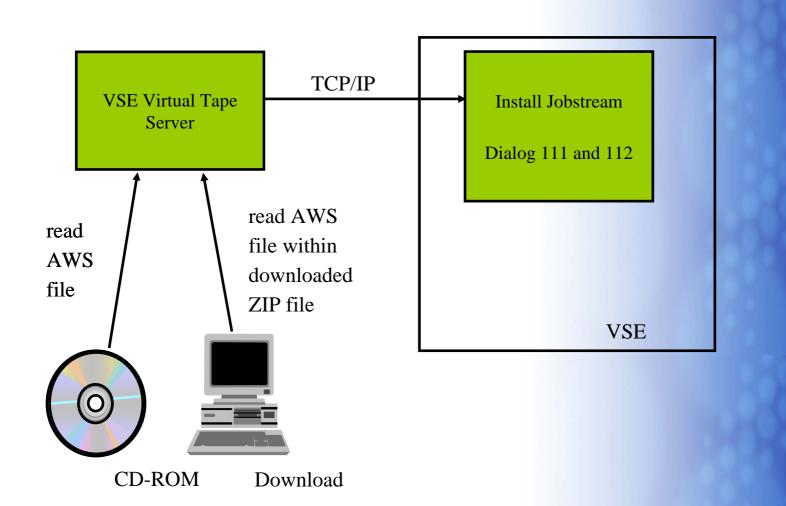


- See "z/VM Guide for Automated Installation and Service"
- "z/VM Summary for Automated Installation and Service (Tape/CD-ROM Installation)"
 - http://www.vm.ibm.com/pubs/v51isum.pdf
- "z/VM Electronic Delivered Service (CORrective or RSU) Installation Instructions"
 - http://www.vm.ibm.com/install/servinst.html

VSE: Installing optional products

- Optional product tapes come in a stacked format
 - all products ordered are contained in one tape image file (e.g. VSEOPT41.aws)
- Optional products can be installed via VTAPE using the dialogs 111 and 112
 - using a remote tape image
 - AWS file (CD-ROM)
 - AWS file within a ZIP file (download)
 - using a VSAM tape image
 - upload of tape image into VSAM file needed

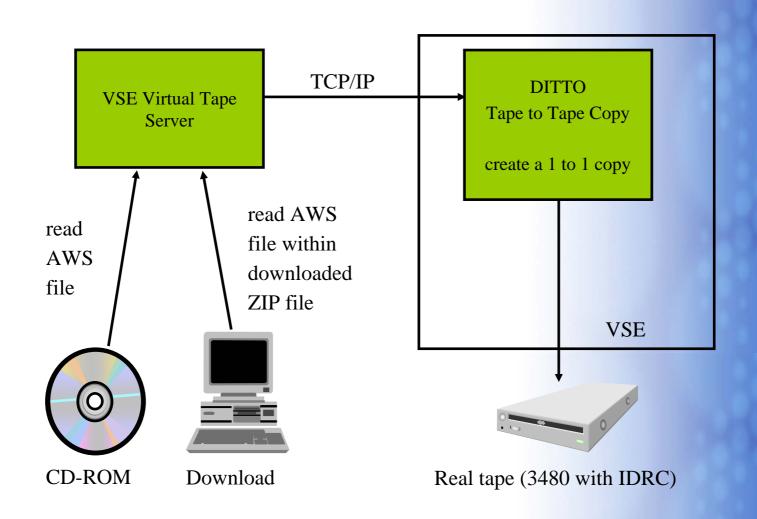
VSE: Installing optional products



VSE: Installing the VSE base system

- Base installation can NOT be done from VTAPE
 - * except on MP3000, Flex-ES
- You need to create a real tape from the tape image
 - Use DITTO Tape to Tape Copy
 - source: VTAPE (remote tape image)
 - destination: real tape
 - Remote Tape image (source) can be
 - AWS file (CD-ROM)
 - AWS file within a ZIP file (download)
- Base installation from real tape works as usual
 - refer to VSE Installation manual

VSE: Create a real tape from a tape image



VSE: Create a real tape from a tape image

```
* $$ JOB JNM=COPYTAPE, CLASS=0, DISP=D
// JOB COPYTAPE
// PAUSE PLEASE MOUNT A TAPE ON <cuu2>
// UPSI 1
DVCDN <cuu1>
// PAUSE - DEVICE DOWN OK
// VTAPE START, UNIT=<cuu1>, LOC=<ip-address>, FILE='<tape image file>', READ
DVCUP <cuu1>
// ASSGN SYS010, <cuu2>,08
* OUTPUT MEDIA, 3480 COMPRESSED
// ASSGN SYS011,<cuul>
* TNPUT MEDIA
// EXEC DITTO
$$DITTO REW OUTPUT=SYS010
$$DITTO REW OUTPUT=SYS011
$$DITTO TT INPUT=SYS011,OUTPUT=SYS010,NFILES=<36>
/*
DVCDN <cuu1>
// VTAPE STOP, UNIT=<cuu1>
DVCUP <cuu1>
/ &
* $$ EOJ
 <tape image file>:
 CD-ROM: D:\VSEOPT41.aws (D: ist Ihr CD-ROM drive)
 Download: C:\VSE\V6045349.ZIP!VSEOPT41.aws
                                  (! separates ZIP name and name of tape image in the ZIP file)
```

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



Questions?



QUESTIONS?



Stev Glodowski glodowsk@de.ibm.com