

Hands-On Lab: z/VSE Tape-less Installation

Last formatted on: Thursday, July 07, 2016

Ingo Franzki ifranzki@de.ibm.com

Wilhelm Mild milhelm.mild@de.ibm.com



Disclaimer

This publication is intended to help VSE system programmers to set up infrastructure for their operating environments. The information contained in this document has not been submitted to any formal IBM test and is distributed AS IS. The information about non-IBM ("vendor") products in this manual has been supplied by the vendor and IBM assumes no responsibility for its accuracy or completeness. The use of this information or the implementation of any of these techniques is a customer responsibility and depends on the customer's ability to evaluate and integrate them into the customer's operational environment. While each item may have been reviewed by IBM for accuracy in a specific situation, there is no guarantee that the same or similar results will be obtained elsewhere. Customers attempting to adapt these techniques to their own environments do so at their own risk. Any pointers in this publication to external Web sites are provided for convenience only and do not in any manner serve as an endorsement of these Web sites. Any performance data contained in this document was determined in a controlled environment, and therefore, the results that may be obtained in other operating environments may vary significantly. Users of this document should verify the applicable data for their specific environment. Reference to PTF numbers that have not been released through the normal distribution process does not imply general availability. The purpose of including these reference numbers is to alert IBM customers to specific information relative to the implementation of the PTF when it becomes available to each customer according to the normal IBM PTF distribution process.

Trademarks

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

CICS IBM Language Environment VSE/ESA z/VSE
DB2 System z VM/ESA z/VM

IBM® IBM (logo)®

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

The following terms are trademarks of other companies:

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and/or other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows XP, .Net, .Net logo, and the Windows logo are trademarks of Microsoft Corporation in the United States and/or other countries.

1. Introduction

This Hands-On Lab provides an opportunity to perform an **initial z/VSE V6.1 installation in a z/VM virtual machine**. The z/VSE installation will be performed tapeless, by creating a z/VSE Installation Disk from the downloaded installation material.

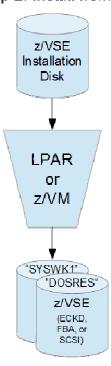
Step 1: Create a z/VSE Installation Disk

Physical Delivery
On DVD

LPAR
or
z/VM

"ZVSEID"
z/VSE
Installation
Disk
(ECKD)

Step 2: Install from Disk



We will perform the following steps:

- 1. Create an z/VSE Installation disk under z/VM
- 2. Install a z/VSE V6.1 system using the z/VSE Installation disk
- 3. Perform post-installation tasks such as hardware configuration, changing passwords, etc.

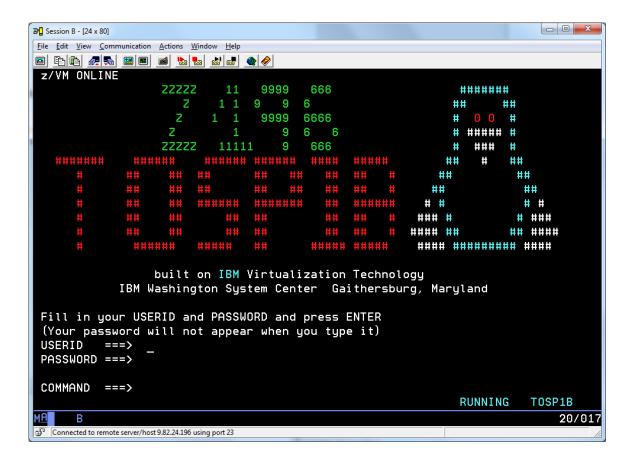
Note: You can also use tape-less installation in an LPAR environment (without z/VM), but this is not subject of this Hands-On Lab. Please see Appendix A for more details.

2. Software prerequisites on the workstation

For this Hands-On Lab, we only need a 3270 terminal emulator being available on the workstation. The laptops we use in this Hands-On Lab have **IBM Personal Communications** (PCOM) installed.

You will find an icon on the desktop of the laptop in front of you to start a terminal session to the z/VM system that we are using in this Hands-On Lab.

Please note that on PCOM, the "Control" key is assigned to the "Enter" function. So whenever you are asked to press "Enter" you need to press the "Control" key.



3. Create an z/VSE Installation disk

3.1. Obtaining the z/VSE installation files

In order to install z/VSE V6.1, you normally need to order it using IBM ShopZ. Since this is a new version, you would normally also have to obtain a new license for z/VSE 6.1. You can order z/VSE on tape, on DVD, or for download. In order to use tape-less installation, you need to choose DVD or download.

For this Hands-On Lab, we have already made available all required files on a shared CMS disk.

If order on DVD, you receive a DVD that contains the following files:

 VSE610EN.AWS 	z/VSE base tape in AWS format
 VSE610XB.AWS 	z/VSE extended base tape in AWS format
• DB2xxxxx.AWS	DB2 help text tape in AWS format
 READM610.TXT 	Readme file
 VSE610EN.INS 	Installation file for tape-less install in LPAR mode
 VSE610END.INS 	Installation file for tape-less install in LPAR mode
 VSE610ENI.INS 	Installation file for tape-less install in LPAR mode
 VSE610ENID.INS 	Installation file for tape-less install in LPAR mode
 VSE610EN.IPL 	Installation file for tape-less install in LPAR mode
 VSE610EN.PSW 	Installation file for tape-less install in LPAR mode
 VSE610END.LP 	Installation file for tape-less install in LPAR mode
 VSE610ENI.LP 	Installation file for tape-less install in LPAR mode
 VSE610ENID.LP 	Installation file for tape-less install in LPAR mode
 VSEIDISK.EXEC 	Installation file for tape-less install in z/VM mode
 VSEIDISK.MODULE 	Installation file for tape-less install in z/VM mode
 VSEIDISK.HELPCMS 	Installation file for tape-less install in z/VM mode

If you ordered for download, you get one or more ZIP files that contain the 3 tape images:

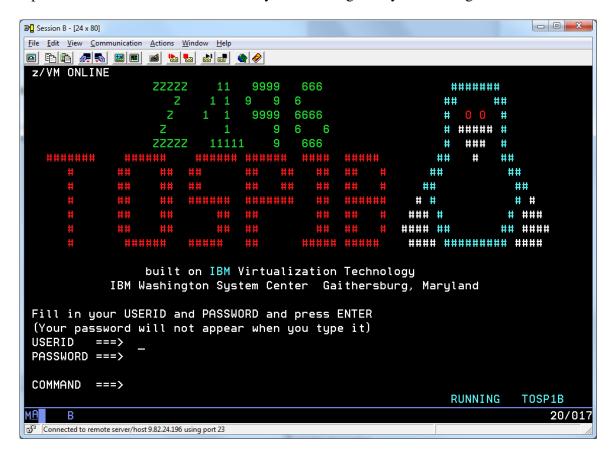
-	VSE610EN.AWS	z/VSE base tape image
-	VSE610XB.AWS	z/VSE extended base tape image
_	DB2xxxxx.AWS	DB2 help text tape image

The remaining files need to perform a tape-less installation must be downloaded separately from IBM ShopZ. It is located in the **Additional Materials** section of your ShopZ order.

3.2. Logging on to your z/VM guest

For this Hands-On Lab, each team has its own z/VM guest. The z/VM guests are named **VMTM001** to **VMTM015**. Please use the z/VM guest according to your team number.

Open a terminal session to the z/VM system and logon to your z/VM guest:



☐ USERID ===> VMTM0xx (xx is your team number)
☐ PASSWORD ===> VMTM0xx (xx is your team number)

Each z/VM guest has an initially empty A disk (191) and 3 model 3 DASDs (300-302) which we will use for installing z/VSE.

3.3. Access the tape-less installation files

For this Hands-On Lab, we have already made available all required files on a shared read-only CMS disk 0001.

Enter the following command to access the shared CMS disk as file mode X:

☐ ACC 0001 X

```
acc 0001 x
DMSACP723I X (001) R/0
Ready; T=0.01/0.01 08:03:25
```

You can now take a look at these files using the FILELIST command:

☐ FILEL * * X

VMTM	020 FILE	_IST_SO\	V 16	9 Trur	nc=169	Size=4 Line=1	Col=1 Al	t=0	
Cmd	Filename	Filetype	Fm	Format	Lrecl	Records	Blocks	Date	Time
	VSEIDISK	HELPCMS	Х1	V	80	141	3	5/23/16	6:21:21
	VSEIDISK	EXEC	Х1	V	80	557	12	5/23/16	6:21:08
	VSEIDISK	MODULE	Х1	٧	65535	4	17	5/23/16	6:20:55
	VSE610EN	AWS	Х1	٧	80	3370422	67475	5/23/16	6:09:29

As you can see, the shared CMS disk contains the following files:

•	VSE610EN.AWS	z/VSE base tape in AWS format
•	VSEIDISK.EXEC	REXX script to create a z/VSE installation disk in a z/VM CMS environment.
•	VSEIDISK.MODULE	Utility program to create a z/VSE installation disk in a z/VM CMS environment.
•	VSEIDISK.HELPCMS	Help text in standard z/VM CMS format.

If you would have obtained these files from a ShopZ order, you would first have to upload them to your z/VM guest to a variable block CMS file. Upload must be done in BINARY. Afterwards, the VSEIDISK files need to be reblocked using the PIPE command. For more details on this, please see the z/VSE Installation manual.

For this Hands-On Lab, we have already uploaded and reblocked the files. No further action is required.

☐ Press **PF3** to leave the file list

3.4. Run the VSEIDISK utility to create a z/VSE Installation disk

As a next step, we now create the z/VSE Installation disk using the VSEIDISK utility. The VSEIDISK utility reads the specified z/VSE base tape in AWS format (i.e. VSE610EN.AWS) and creates a z/VSE installation disk out of it on the specified DASD.

Note: The z/VM guest needs at least 64 MB storage in order to run the VSEIDISK utility. The z/VM guest used in this hands-on-lab fulfills this requirement.

Our z/VM guest has access to the 3 model 3 DASDs (300-302) which we will use for installing z/VSE:

- We will install z/VSE onto the first two DASDs **300** (DOSRES) and **301** (SYSWK1).
- We will create the installation disk on the third DASD **302**.

To run the VSEIDISK utility to create an z/VSE installation disk, enter the following command. This will read the z/VSE base tape VSE610EN.AWS from file mode X (the shared read-only CMS disk) and create an z/VSE Installation disk on DASD 302.

□ VSEIDISK VSE610EN AWS X 302

Enter **CONTINUE** on message "IDSK151D REPLY 'CONTINUE' TO ALTER DASD 302, ELSE 'CANCEL'":

☐ CONTINUE

The VSEIDISK utility will now format DASD 302 using ICKDSF, make it IPLable, and then write the AWS tape image onto the disk.

```
ICK00002I ICKDSF PROCESSING COMPLETE. MAXIMUM CONDITION CODE WAS 0
IDSK143I CREATING Z/VSE INSTALLATION DISK ...
IDSK000I Z/VSE INSTALLATION DISK TOOL 6.1.0
IDSK009I VALIDATING TAPE IMAGE VERSION AND RELEASE ...
IDSK009I EXTRACTING BOOT PHASE AND WRITING IT TO DISK ...
IDSK009I GENERATING BOOT RECORDS AND WRITING THEM TO DISK ...
IDSK009I WRITING TAPE IMAGE TO DISK ...
IDSK009I Z/VSE INSTALLATION DISK CREATED SUCCESSFULLY
Ready; T=0.92/1.08 08:32:15
```

You may need to press the CLEAR key (Pause/Break on your keyboard) when the screen shows "MORE..." when more messages are issued than fit on one screen.

When you see message "IDSK009I Z/VSE INSTALLATION DISK CREATED SUCCESSFULLY" then you are ready for the next chapter.

4. Install z/VSE V6.1 using the installation disk

Now that you have created a z/VSE Installation disk, you can install a z/VSE system using it.

You can use the same installation disk to install as many z/VSE systems as you like. The installation disk will be used read-only during installation processing.

You can use this installation disk to install z/VSE systems under z/VM as well as in LPAR mode. You can also create an installation disk in LPAR mode (using "Load from Removable Media or Server" on the Management Console (HMC) or primary Support Element (SE) - not subject of this Hands-On Lab. See Appendix A and the z/VSE Administration manual for details. Installation disks created either way can be used to install z/VSE systems under z/VM as well as in LPAR mode.

4.1. Preparation of the CMS guest to run z/VSE

z/VSE needs up to 3 terminals (in addition to the master console). For this Hands-On Lab we have already defined 3 terminals (GRAFs) at addresses 0030-0032 for your z/VM guest, so that you can then dial to this terminal once z/VSE is installed and up and running.

Verify that the GRAFs are available:

☐ Q V GRAF

```
q v graf
GRAF 0030 NOT DIALED SUBCHANNEL = 0000
GRAF 0031 NOT DIALED SUBCHANNEL = 0001
GRAF 0032 NOT DIALED SUBCHANNEL = 0002
Ready; T=0.01/0.01 04:02:09
```

Next, we switch the console from line mode to 3270 mode:

```
☐ TERM CONMODE 3270
```

You will receive a message like the following when you enter above command. Don't worry, that's expected:

08:53:13 * MSG FROM VMTM020 : DMSCIT171T Permanent console error; re-IPL CMS HCPGIR450W CP entered; disabled wait PSW 000A0000 80F1476C

4.2. Perform base installation

To star 302):	t the base insta	llation using the installation disk, IPL the installation disk (DASD			
	IPL 302 Press Enter to identify the IPL console				
	When the term press the "CL"	ninal shows "HOLDING" in the bottom right corner, EAR" key.			
	dalone version s as follows:	of z/VSE will now show up with a series of propmpts. Enter the			
	ER ID: VMTMO	z/VSE 6.1 TURBO (01) USER: 20 TIME: YOU WANT TO DO AN AUTOMATIC INSTALLATION (YES/NO)?			
	0 YES	(Yes, we want to perform an automatic installation)			
BG-00	00 SAO2D IF	YOU WANT A LISTING, SPECIFY PCUU OF PRINTER, ELSE (ENTER)			
	0	(We don't want a listing)			
BG-00	00 SI70D IF	YOU WANT TO INSTALL VSE ON SCSI SPECIFY YES, ELSE NO			
	0 NO	(No, we install on ECKD, not on SCSI)			
BG-0	000 SI02D	ENTER PCUU OF DOSRES			
	0 300	(The first DASD of our z/VM guest)			
BG-0	000 SI03D	ENTER PCUU OF SYSWK1			
	0 301	(The second DASD of our z/VM guest)			
BG 0	000 SI09I	DOSRES IS 300, DEVICE TYPE ECKD SYSWK1 IS 301, DEVICE TYPE ECKD START WITH AUTOMATIC INSTALLATION (YES/NO)?			
	0 YES	(Yes, we want to start with automatic installation)			
		ss now formats DASD 300 and 301 using ICKDSK, restores d then automatically re-IPLs from DASD 300.			

After some additional system startup messages, another series of prompts are shown. Enter the answers as follows:

BG-0000 YES/NO	IESI0051D	DO YOU WANT TO CONFIGURE TCP/IP DURING INITIAL STARTUP?
D 0	NO	(No, we don't want to configure TCP/IP at that time)
BG-0000 (LARGE)		SELECT AN ENVIRONMENT OUT OF A (SMALL), B (MEDIUM) OR C
0	В	(We select environment B - medium)
BG-0000	IESI0079D	DO YOU WANT TO RUN YOUR SYSTEM WITH SECURITY ON? YES/NO
0	NO	(No, we want to run with security off)
BG-0000	IESI0062D	CHECK YOUR ANSWERS. DO YOU WANT TO CONTINUE? YES/NO
0	YES	(Double check your answers)
BG-000	0 IESI006	S5D IS THE LOCAL CONTROL UNIT AN SNA CU? YES/NO
0	NO	(No, it's not a SNA unit)
BG 000 BG-000		064I DEFINE UP TO 3 LOCAL VTAM TERMINALS 059D ENTER A 3270 ADDRESS (PCUU) OR "END"
0	030	(The first GRAF)
BG-000	00 IESIO	059D ENTER A 3270 ADDRESS (PCUU) OR "END"
0	031	(The second GRAF)
BG-000	00 IESIO	059D ENTER A 3270 ADDRESS (PCUU) OR "END"
0	032	(The third GRAF)
BG-0000	IESI0062D	CHECK YOUR ANSWERS. DO YOU WANT TO CONTINUE? YES/NO
0	YES	(Double check your answers)
A few job	os will now 1	run, followed by the following prompt:

```
BG 0000 * EXECUTE THE PROCEDURE FOR THE FORMS CONTROL BUFFER THAT YOU BG 0000 * WANT LOADED INTO YOUR PRINTER OR IF NOT REQUIRED EXECUTE THE BG 0000 * PROCEDURE FOR THE CHARACTER SET BUFFER YOU WANT LOADED INTO BG 0000 * YOUR PRINTER. IF NEITHER IS REQUIRED REPLY "0 (END/ENTER)". BG-0000 // PAUSE
```

□ 0 (No forms control buffer)

The remaining of the installation will now run. You will see a series of jobs that perform several installation steps. The whole installation will take a few minutes.

This part of the z/VSE installation is complete when you see the following messages:

```
BG 0000 * BASE INSTALL PROCESSING IS NOW FINISHED. COMPLETION OF THE
BG 0000 *
BG 0000 * INSTALL PROCESS MUST BE PERFORMED USING THE VSE DIALOGS
BG 0000 *
BG 0000 EOJ CLEANUP MAX.RETURN CODE=0000
DATE 05/23/2016, CLOCK 09/55/42, DURATION 00/00/00
BG 0001 1Q34I BG WAITING FOR WORK
```

5. Perform z/VSE system configuration

The z/VSE system has now been installed on DASDs 300 and 301, but you must perform further steps in order to complete the installation. These steps must be done before you do any optional installation tasks or use the z/VSE system. Otherwise, your system might not operate properly.

5.1. Perform POST / BASE processing

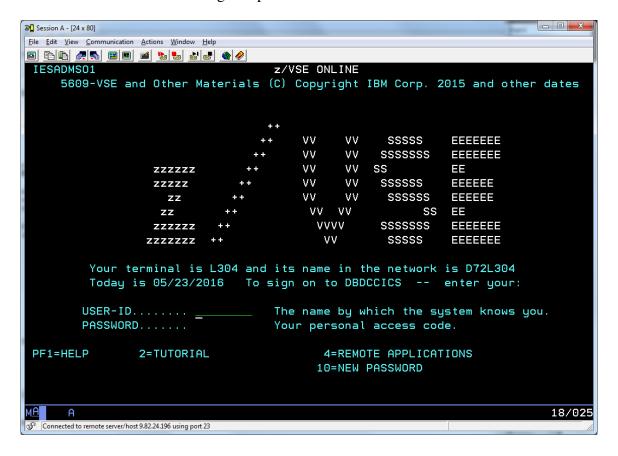
Open a second terminal window.

☐ In IBM Personal Communications: Menu "File" → "Run the same" or use the icon on the desktop.

Dial to your z/VSE system:

☐ COMMAND ===> D VMTM0xx (xx is your team number)

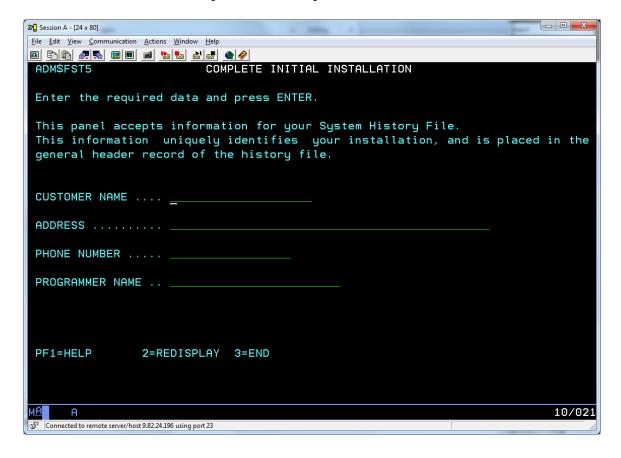
You will now see the z/VSE sign on panel:



Sign on with user **POST** and password **BASE**:

☐ USER-ID..... POST_____
☐ PASSWORD..... BASE

You will now see the MSHP personalization panel:



☐ Enter your personal information as you wish and press Enter

The next panel shows "Initial Installation is complete."

You may verify in the master console (the first terminal window) that the MSHP jobstream named **PERSONAL** has been executed.

□ Press Enter

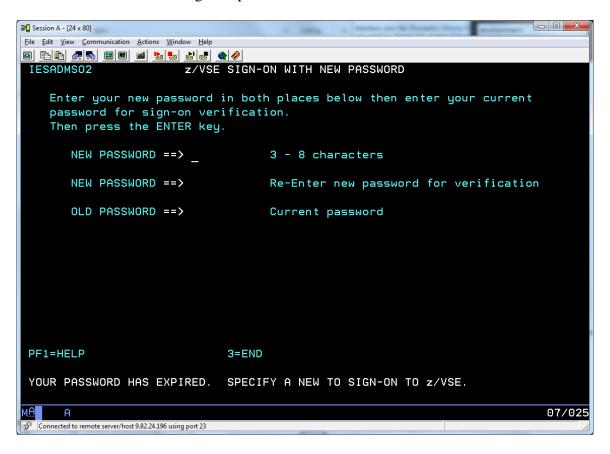
You are now back at the z/VSE sign on panel.

5.2. Complete hardware configuration

Sign on with user SYSA and password SYSA:

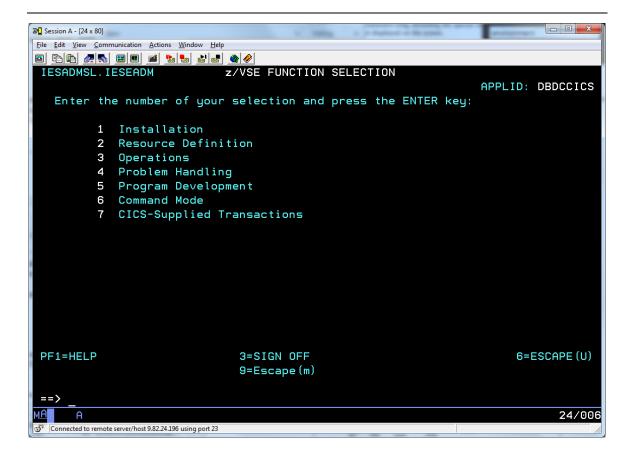
□ USER-ID...... SYSA_____ □ PASSWORD..... SYSA

You are now forced to change the password of user SYSA.



□ Enter a new password (e.g. SYSAPWD) in the "NEW PASSWORD" fields
 □ Enter the old password (i.e. "SYSA" in the "OLD PASSWORD" field
 □ Press Enter

You are now on the main z/VSE function selection panel.



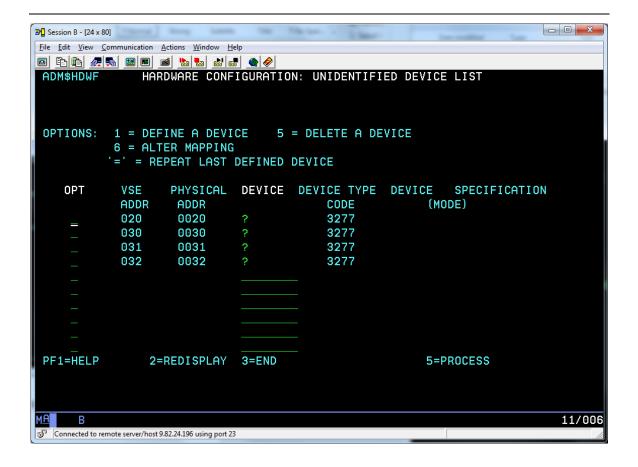
During the initial installation process, the IPL program sensed and defined all available devices in your system. These definitions were used to create hardware configuration tables. This tables contain information about your devices and are used by other Interactive Interface dialogs.

If information is missing for one or more devices, the system asks you to define these devices on the Hardware Configuration Panel - Unidentified Device List.

To add missing information, start with the Function Selection panel and select:

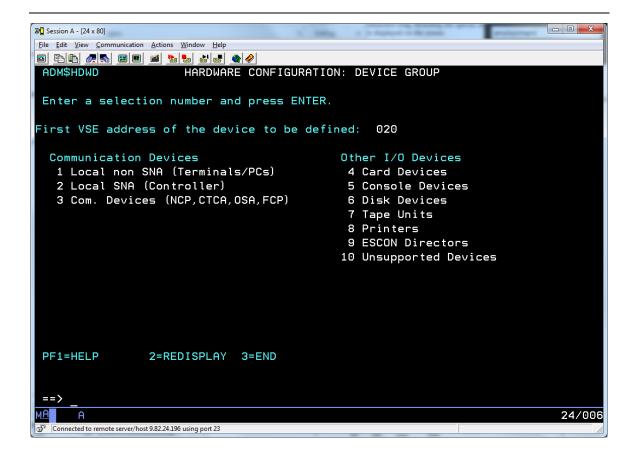
- ☐ 2 (Resource Definition)
- ☐ 4 (Hardware Configuration and IPL)
- ☐ 1 (Configure Hardware)

You will now see a list of unidentified devices. You can now complete the definitions of the devices, or delete them if you don't want to use them in z/VSE. Press PF8 to scroll forward, if the list is longer than one screen.



- Enter '1' in front of any terminal device (Device Type: 3277)
- ☐ Press Enter

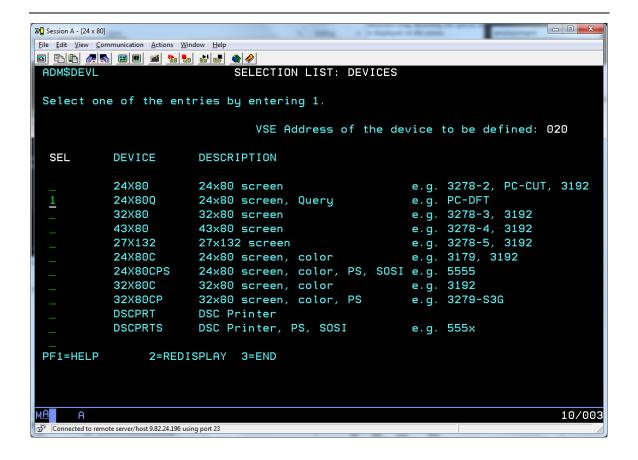
You are now on a panel to select the device group for the first terminal device:



☐ Enter '1' to select "Local non SNA (Terminals/PCs) "

On the next panel, select "24X80Q":

☐ Enter '1' in front of device 24X80Q

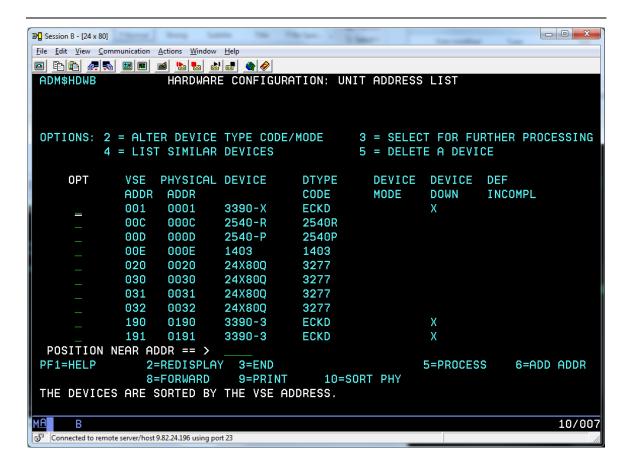


☐ Repeat the previous steps to configure the remaining terminal devices the same way.

You should now have defined the terminals 020, 030, 031 and 032 as 24X80Q. When you are finished configuring the devices, process your configuration by pressing PF5.

- □ Press PF5
- □ Press Enter on the next panel.

You are now on the hardware configuration panel. Here you see a list of all devices that are currently defined to your z/VSE system. Press PF8 to scroll forward, if the list is longer than one screen.



This list of devices has been sensed during installation. It may contain devices that you don't want to use on this z/VSE system. You can now delete those devices.

Note: Do NOT delete the following devices:

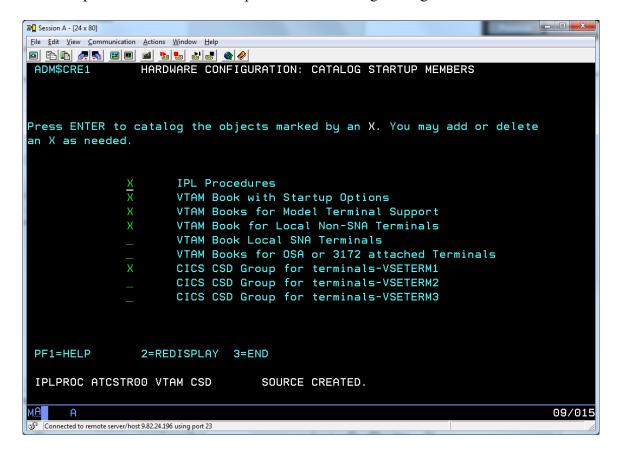
- Master console (address 020)
- Terminals (addresses 030-032)
- Your z/VSE DASDs (addresses 300 and 301)
- FBAV device (address FDF) needed for label area on virtual disk
- z/VM Reader, Printer and Puncher devices (addresses 00C, 00D, 00E)
- DUMMY devices (addresses FEC, FED, FEE, FEF, FFA, FFC, FFD, FFE, FFF)
- □ Enter '5' in front of any ECKD-DASD devices (Device Type: ECKD) other than address 300-301 to delete the device.
- ☐ Enter '5' in front of any FBA-DASD devices (Device Type: FBA) other than the FBAV on address FDF.

You may keep the OSAX devices. Those are required in case you want to setup TCP/IP at a later time.

When you are finished configuring the devices, process your configuration by pressing PF5.

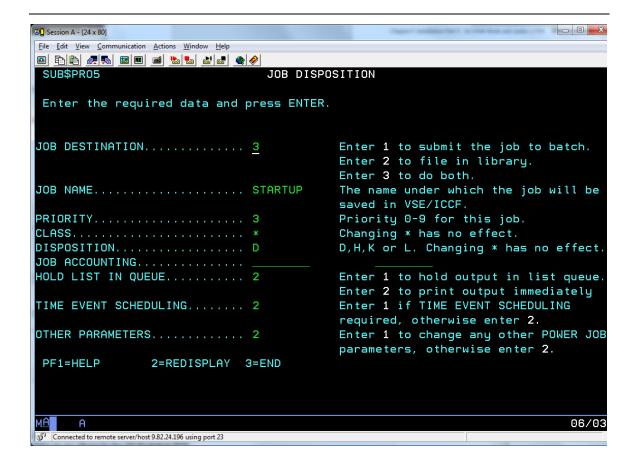
□ Press PF5

The next panel shows which startup members are being cataloged:



□ Press Enter

On the next panel you can choose if the generated catalog job should be submitted to batch, or just filed in the ICCF library.



☐ Enter '3' for the JOB DESTINATION (submit to batch and file)

The remaining settings can be left as is.

□ Press Enter

Verify in the master console (the first terminal window) that the jobstream named **STARTUP** has been executed.

Note: If the job did not run, then you have probably missed the previous step to change the JOB DESTINATION to '3' (submit and file). In this case the job has just been filed in your primary ICCF library (10). To submit it from there press PF4, then enter '51', then press Enter. You should see member STARTUP in the list of members. Enter '7' (submit) in front of member STARTUP and press Enter.

5.3. Re-IPL the system to activate the changed hardware table

The changes performed on the hardware configuration will only become active after an IPL.

The next steps are performed on the master console (the first terminal window).

Enter the following commands on the z/VSE master console to shut down the z/VSE subsystems and then re-IPL the system:

MSG F2, DATA=CEMT P SHUT	(Shutdown CICS)
Z NET, QUICK	(Shutdown VTAM)
PEND	(Shutdown POWER)

Wait until POWER has ended, and you see the "PLEASE ASSIGN SYSRDR" message for partition F1 and FB:

```
F3-0003 1100D READY FOR COMMUNICATIONS.
F7-0007 1100D READY FOR COMMUNICATIONS.
F2-0002 1100D READY FOR COMMUNICATIONS.
F4-0004 1I00D
              READY FOR COMMUNICATIONS.
F5-0005 1100D READY FOR COMMUNICATIONS.
BG-0000 1I00D
              READY FOR COMMUNICATIONS.
FB 0011 1N90I
              EOP WAS FORCED BY EOJ
FB 0011 EOJ SECSERV
                     MAX.RETURN CODE=0099
        DATE 05/23/2016, CLOCK 10/53/12, DURATION
                                                   01/47/56
FB-0011 1C10D PLEASE ASSIGN SYSRDR.
F1 0001 1N90I EOP WAS FORCED BY EOJ
F1 0001 E0J POWSTART MAX.RETURN CODE=0000
        DATE 05/23/2016, CLOCK 10/53/12, DURATION
                                                    01/47/56
F1-0001 1C10D PLEASE ASSIGN SYSRDR.
```

☐ REIPL

AR+0015 1IXXD RE-IPL FROM CUU=300? REPLY YES OR NO

□ 15 YES

The system will now re-IPL. Wait until CICS is up and you see message "DBDCCICS Control is being given to CICS".

5.4. Change the password of the predefined users

The z/VSE system comes with a set of user-IDs predefined. One of this is SYSA, which you have already used and for which you have already changed the password.

For security reasons it is highly recommended to change the passwords of the following predefined users as well. The predefined users are defined with an expiration date. Therefore, you must change them during the first logon.

User-ID	Initial password	Profile
PROG	PROG	Programmer
OPER	OPER	System console operator
\$SRV	\$SRV	Remote problem determination
CICSUSER	CICSUS	CICS default user

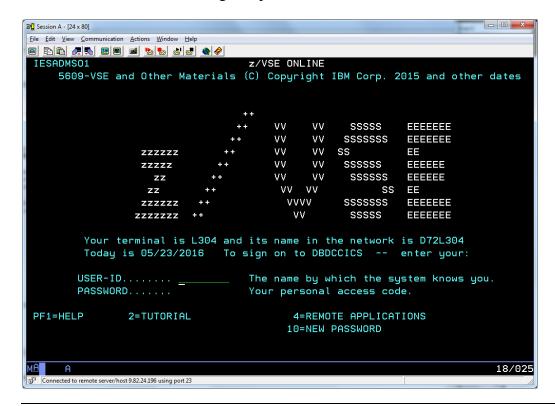
Open a new terminal window and dial to your z/VSE System:

COMMAND ===> D VMTM0xx (xx is your team number)

On the VTAM application Selection Menu (USSTAB), enter 'A' to go to DBDCCICS:

□ A

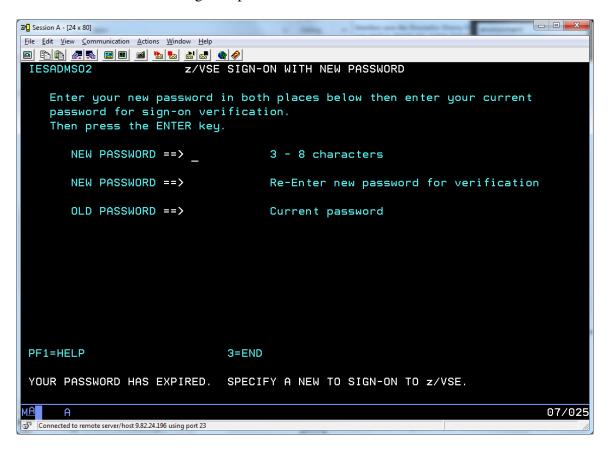
You will now see the z/VSE sign on panel:



Sign on with user **PROG** and password **PROG**:

□ USER-ID...... PROG_____
□ PASSWORD..... PROG

You are now forced to change the password of user PROG.



□ Enter a new password (e.g. PROGPWD) in the "NEW PASSWORD" fields
 □ Enter the old password (i.e. "PROG" in the "OLD PASSWORD" field
 □ Press Enter

You are now on the function selection panel for user PROG.

☐ Press PF3 to return back to the sign on panel

Repeat above steps for user **OPER**, **\$SRV** and **CICSUSER**.

In case of CICSUSER, a message is issued that selection panel DFLESEL is not defined. This user is not designed to sign-on to the system. Ignore this message, the password is changed by the system.

Congratulations you have successfully finished this Hands-On Lab!

Feel free to play with your z/VSE V6.1 system.



6. Summary

The following major steps are required to perform a tape-less installation of z/VSE V6.1

- Create a z/VSE Installation Disk
 Use VSEIDISK Utility under z/VM, or "Load from removable Medium" in LPAR mode
- 2. **Perform a base installation using the Installation Disk** IPL the Installation disk, and answer the questions.
- 3. **Perform system configuration**Complete the hardware configuration and re-IPL the system
- **4.** Further system configuration (not performed in this Hands-On Lab) Setup TCP/IP, install optional products, install latest PTFs (PSP & RSL), migrate users and security settings, etc.
- **5. Data migration (not performed in this Hands-On Lab)**Add data disks to the system, import own VSAM catalogs, include other VSE libraries, migrate ICCF libraries, etc.

Please also refer to the **z/VSE Planning** manual, as well as the **z/VSE Installation** manual for more information about how to install a z/VSE system and all optional steps that you may want to perform.

Appendix A: Tape-less z/VSE Installation in LPAR mode

To perform a tape-less installation in LPAR mode, you need the following files:

 VSE610EN.AWS 	z/VSE base tape in AWS format
 VSE610EN.INS 	Installation file for tape-less install in LPAR mode
 VSE610END.INS 	Installation file for tape-less install in LPAR mode
 VSE610ENI.INS 	Installation file for tape-less install in LPAR mode
 VSE610ENID.INS 	Installation file for tape-less install in LPAR mode
 VSE610EN.IPL 	Installation file for tape-less install in LPAR mode
 VSE610EN.PSW 	Installation file for tape-less install in LPAR mode
 VSE610END.LP 	Installation file for tape-less install in LPAR mode
 VSE610ENI.LP 	Installation file for tape-less install in LPAR mode
 VSE610ENID.LP 	Installation file for tape-less install in LPAR mode

If you ordered on DVD, these files should already be contained on the DVD you got. You can then insert this DVD into the DVD drive of your Management Console (HMC) or primary Support Element (SE).

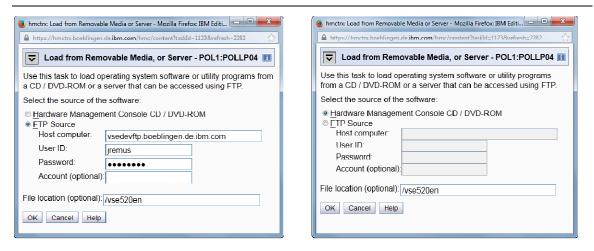
If you ordered for download, then you either need to burn a CD or DVD on your own, or you place these files onto an FTP server that can be reached from the HMC/SE.

To create a z/VSE Installation disk in LPAR mode, you need to prepare an LPAR. Specify at least **512 MB** processor storage in the LPAR profile. The LPAR must have at least on standard processor (CP) assigned. To activate changes in the LPAR profile deactivate / activate the LPAR.

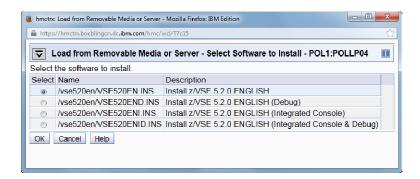
Logon to the HMC/SE and select your LPAR. Then choose "**Recovery**". Select "**Load from Removable Media or Server**" (might be called "Load from CD-ROM, DVD or Server" on older processors). In the task window, select one of the following:

- Hardware Management Console CD-ROM / DVD
- FTP source

If you selected "Hardware Management Console CD-ROM / DVD" and you are using a subdirectory, specify File location (optional). If you selected FTP source, specify the **FTP connection information** for the server (host computer, user ID, and password). If you are using an FTP server directory, enter the path to the directory where you uploaded the required files in **File location** (optional).



The Select Software to Install task window is displayed:



The z/VSE base tape image and boot phase are loaded into processor storage, and the creation of the installation disk is started. Open the 3270 terminal for the LPAR. A standalone version of z/VSE will start and will prompt you to specify the VOLID and the device address (CUU) of the installation disk to create.

```
BG-0000 SI40D ENTER VOLID OF THE INSTALLATION DISK. DEFAULT IS 'ZVSEID' 0 zvse52
BG-0000 SI41D ENTER PCUU OF ZVSE52
0 431
BG-0000 SI45D DO YOU WANT TO CONTINUE WITH CREATION OF INSTALLATION DISK PCUU=0431, CURRENT VOLID=MYWORK (YES/NO) ?
0 yes
BG 0000 SI20I FORMATTING OF ZVSE52 IN PROGRESS
BG 0000 IDSK000I Z/VSE INSTALLATION DISK TOOL 5.2.0
BG 0000 IDSK009I VALIDATING TAPE IMAGE VERSION AND RELEASE ...
BG 0000 IDSK009I EXTRACTING BOOT PHASE AND WRITING IT TO DISK ...
BG 0000 IDSK009I GENERATING BOOT RECORDS AND WRITING THEM TO DISK ...
BG 0000 IDSK009I WRITING TAPE IMAGE TO DISK ...
BG 0000 IDSK009I Z/VSE INSTALLATION DISK CREATED SUCCESSFULLY
BG 0000 SA17W ***** END OF STAND ALONE PROCESSING *****
```

You can use the just created z/VSE Installation disk to install a z/VSE system by IPLing from that disk. The remaining installation process is the same as what we performed in this Hands-On Lab.