## Configuring VMware Workstation Player 16 for VSI OpenVMS x86\_64

### We will assume

VMDIR = "C:\temp\Connect"
VMNAME = "VSI OpenVMS x86\_64"

and use %VMDIR% and %VMNAME% to refer to these below.

### Preparation

- Download X860922OE.ZIP from VSI Service Portal to %VMDIR% UNZIPping it creates %VMDIR%\X860922OE.ISO (and X860922OE.ISO\_VNC)
- Download PuTTY from <a href="https://www.chiark.greenend.org.uk/~sgtatham/putty/">https://www.chiark.greenend.org.uk/~sgtatham/putty/</a>
- Download & install VMware Workstation 16 or 17 Player from vmware.com

### Workstation Player Configuration

- Start VMware Player
- Click "Create a New Virtual Machine"

Home	Welcome to VMware
	Workstation 16 Player
	Create a New Virtual Machine Create a new virdal machine, which will then be added to the top of your library.
	Open a Virtual Machine Open an existing virtual machine, which will then be added to the top of your library.
	Upgrade to VMware Workstation Pro           Get advanced features such as snapshots, virtual network management, and more.
	Yiew online help.
	This product is not licensed and is authorized for non- commercial use only. For commercial use, purchase a license.

• Select "I will install the Operating System Later", Click Next

nstall from:			
🔿 Installer disc:			
No drives available	2	~	
O Installer disc image file	(iso):		
X860922OE.ISO		×	Browse
	ng system later.		
RI will install the operation The virtual machine wi	ll be created with a blank	hard disk.	

• Select Guest OS "Other", Version "Other 64-bit", Click Next

Guest operating system			
O Microsoft Windows			
Linux			
Rother			
Version			
Other 64-bit			

• Enter VM Name: %VMNAME%, Location %VMDIR%, Click Next

#### Name the Virtual Machine

What name would you like to use for this virtual machine?

VSI OpenVMS x86_64			
Location:			
C:\temp\Connect		Bro	wse

• No change for disk capacity settings, as the default harddisk will be deleted. Click Next

Specify Disk Capacity					
How large do you wa	ant this disk	to be?			
The virtual machine's hard di physical disk. These file(s) st files, and data to your virtua	sk is stored a art small and I machine.	as one or d become	more files o larger as yo	n the host ou add app	t computer's blications,
Maximum disk <u>s</u> ize (GB):	8.0				
Recommended size for Other	64-bit: 8 G	в			
O Store virtual disk as a sing	gle file				
Split virtual disk into multi	ple files				
Splitting the disk makes it	easier to m	ove the vi	rtual machi	ne to anot	her computer
but may reduce performa	ance with ve	ry large d	isks.		
Help	1	< Back	Nev	- Ak +	Cancel
nep			<u>Mex</u>	22	Cancer

• Select Customize Hardware

Ready to Create Virtua	I Machine
------------------------	-----------

Click Finish to create the virtual machine. Then you can install Other 64-bit.

nect 16.2.x		
16.2.x		
nd Card		
	nd Card	nd Card

• Memory: 8GB (minimum)

Device	Summary	Memory	
Memory	256 MB	Specify the amount of memory allo	cated to this virtual machine. The memory
Processors	1	size must be a multiple of 4 MB.	
New CD/DVD (IDE)	Auto detect	Memory for this virtual machine:	8192 MB
P Network Adapter	NAT		
(1) Sound Card	Auto detect	130.00	
Display	Auto detect	120 GB	
		22 GP -	
		16 GB	Maximum recommended memory
		8 GB 4	Maximum recommended memory
		4 GB . 13	occur beyond this size.)
		2 GB -	13.4 GB
		1 GB	10.100
		512 MB -	Recommended memory
		256 MB -	256 MB
		128 MB -	
		64 MB -	Guest OS recommended minimu
		32 MB -	32 MB
		16 MB -	
		8 MB -	
		4 MB -	
	Add Remove		
			(chara) (urb

### • Processors: 2 (minimum)

Device	Summary	Processors
Memory	8 GB	Number of processor cores: 2
E Memory	8 GB 2 Auto detect NAT Auto detect Auto detect	Virtualization engine Virtualize Intel VT-x/EPT or AMD-V/RVI Virtualize CPU performance counters Virtualize IOMMU (IO memory management unit)

- CD/DVD: Select "Use ISO image file"
- Select Browse, Choose %VMDIR%\X860922OE.ISO

Device		
and the second	2.00	Connected
Memory	8 GB	Connect at nower on
Processors	2	
Wew CD/DVD (IDE)	Auto detect	Connection
P Network Adapter	NAT	
Sound Card	Auto detect	O use physical unive:
Uispiay	Auto detect	Auto detect
		Use ISO image file:
		X8609220E.ISO V Browse
		Advanced

- Select Advanced
- Select SATA
- Select SATA 0:4, Click OK

SATA 0:4	Y
⊖scsi	
SCSI 0:0	- Q
OIDE	
IDE 1:0 CD/DVD (IDE)	~
roubleshooting	
Legacy emulation	

Network Adapter: Select Bridged

Device	Summary	Device status
Memory	8 CB	Connected
Processors	2	Connect at power on
New CD/DVD (TDF)	Lising file X860922OF.ISO	
Network Adapter	NAT	Network connection
다 Sound Card	Auto detect	Reidged: Connected directly to the physical network
Display	Auto detect	Replicate physical network connection state
		Sonfigure Adapters
	ONAT: Used to share the host's IP address	
	O Host-only: A private network shared with the host	
		Custom: Specific virtual network
		VMnet0 ~
		O LAN segment:
		LAN Segments
	Add Remove	

• Sound Card: Remove (optional)

Device Memory Processors New CD/DVD (IDE) Network Adapter	Summary 8 GB 2 Using file X8609220E.ISO Bridged (Automatic)	Device status Connected Connect at power on Connection
Sound Card	Auto detect	O Use default host sound card
Display	Auto detect	U Spectry host sound card: Headset Earphone (Sennheiser DE V
		Echo cancellation
	Add Remove	]

• Click Add, Select Network Adapter, Select Host-Only

### Hardware Type

What type of hardware do you want to install?

CD/DVD Driv Floppy Driv USB Contro USB Contro Sound Caro Parallel Por Serial Port Printer Generic SC	ive ve dapter dler d t SI Device	Add a network adapter.
Device ■ Memory ■ Processors S New CD/DVD (DDE) Network Adapter 2 ■ Display	Summary 8 GB 2 Using file X8609220E.ISO Bridged (Automatic) NAT Auto detect	Device status       Cancel         Connected       Connect at power on         Network connection       Bridged: Connected directly to the physical network         Bridged: Connected directly to the physical network       Replicate physical network connection state
_] Display		Configure Adapters     NAT: Used to share the host's IP address     Host-only: A private network shared with the host     Custom: Specific virtual network     Whnet0     LAN segment:
		LAN Segments Advanced
	Add Remove	

• Click Add, Select Serial Port

### Hardware Type

What type of hardware do you want to install?

lardware types:	Explanation
CD/DVD Drive Floppy Drive USB Controller Sound Card Parallel Port Serial Port Printer Generic SCSI Device	Add a serial port.
	Finish Cancel

### • Select "Use named Pipe"

### Name: <u>\\.\pipe\opa0</u>

Select "This end is the server", "The other end is an application" Check "Yield CPU on poll"

	Summary	Device status	
Memory	8 GB		
Processors	2	Connect at power on	
New CD/DVD (IDE)	Using file X860922OE.ISO		
Network Adapter	Bridged (Automatic)	Connection	
Network Adapter 2	Host-only	O Use physical serial port:	
Serial Port	Using port COM5	COM5	~
☐Display Auto detect	Auto detect	◯ U <u>s</u> e output file:	
		Browse	
		O Use <u>n</u> amed pipe:	
		\\pipe\opa0	
		This end is the server.	~
		The other end is an application.	~
	L/f1modo		
		I/O mode     Medic CPU on poli     Allow the guest operating system to use this serial port in     opposed to interrupt mode).	polled mode (as
		I/O mode Weld CPU on poli Allow the guest operating system to use this serial port in opposed to interrupt mode).	polled mode (as
	Add <u>R</u> emove	I/O mode Weld CPU on poli Allow the guest operating system to use this serial port in opposed to interrupt mode).	polled mode (as

### • Close Customize Hardware

Memory	manual full 1				
an the more y	8 CB	Accelerate 3D graphics			
Drocessore	2				
New CD/DVD (TDE)	Lising file X860922OE TSO	Monitors			
Network Adapter	Bridged (Automatic)	O Use host setting for monitors			
	Host-only	O Specify monitor settings:			
Serial Port	Using named nine \\\nine\o	Number of monitors:			
Display Auto detect					
			2560 x 1600 🗸		

### • Finish VM Creation

#### Ready to Create Virtual Machine

Click Finish to create the virtual machine. Then you can install Other 64-bit.

The virtual machine will be created with the following settings:

	VSI OpenVMS X86_64
Location:	C:\temp\Connect
Version:	Workstation 16.2.x
Operating System:	Other 64-bit
Hard Disk:	8 GB, Split
Memory:	8192 MB
Network Adapter:	Bridged (Automatic), Host-only
Other Devices:	2 CPU cores, CD/DVD, Serial Port
<u>C</u> ustomize Hardwa	are

### • Click "Edit VM settings"

Home	
VSI OpenVMS x86_64	
	Virtual Machine Name:
	Virtual Machine Name: VSI OpenVMS x86_64
	Virtual Machine Name: VSI OpenVMS x86_64 State: Powered Off
	Virtual Machine Name: VSI OpenVMS x86_64 State: Powered Off OS: Other 64-bit
	Virtual Machine Name: VSI OpenVMS x86_64 State: Powered Off OS: Other 64-bit Version: Workstation 16.2.x virtual machine
	Virtual Machine Name: VSI OpenVMS x86_64 State: Powered Off OS: Other 64-bit Version: Workstation 16.2.x virtual machine RAM: 8 GB
	Virtual Machine Name: VSI OpenVMS x86_64 State: Powered Off OS: Other 64-bit Version: Workstation 16.2.x virtual machine RAM: 8 GB

• Hard disk (IDE): Remove

Device	Summary	Disk file	
Memory	8 GB	C:\temp\Connect\VSI OpenVMS x86_64.vmdk	
Processors	2		
Hard Disk (IDE)	8 GB	Capacity	
CD/DVD (IDE)	Using file X860922OE.ISO	Current size: 1.1 MB	
Network Adapter	Bridged (Automatic)	System free: 64.8 GB	
₽ Network Adapter 2 Serial Port	Host-only Using named pipe \\.\pipe\o	Maximum size: 8 GB	
Display	Auto detect	Disk information	
		Disk space is not preallocated for this hard disk.	
		Hard disk contents are stored in multiple files.	
		Disk utilities	
		Map this virtual machine disk to a local volume.	Map
		Defragment files and consolidate free space.	Defragment
		Expand disk capacity.	Expand
		Compact disk to reclaim unused space.	Compact
			Advanced
	Add Remove		

• Click Add, Select Hard Disk, Click Next

### Hardware Type

What type of hardware do you want to install?

lardware types:	Explanation
Hard Disk CD/DVD Drive Floppy Drive Vetwork Adapter Sound Card Parallel Port Serial Port Printer Generic SCSI Device	Add a hard disk.
	< Back Next> Cancel

• Select SATA, Click Next

#### Select a Disk Type

What kind of disk do you want to create?

() IDE	(Recommen	nded)		
⊖ scsi				

• Select "Create a new virtual disk", Click Next

#### Select a Disk

Which disk do you want to use?

appear as a easily be co	is composed of one or more files on the host file system, which w single hard disk to the guest operating system. Virtual disks can bied or moved on the same host or between hosts.
O Use an exist	ng virtual disk
Choose this	option to reuse a previously configured disk.
O Use a physic	al disk (for advanced users)
Choose this Requires ad	option to give the virtual machine direct access to a local hard disl ministrator privileges.

- Maximum disk size: 15GB
- Check "Allocate all disk space now"
- Select "Store virtual disk as a single file", Click Next

Specify Disk Capacity

How	large	do	you	want	this	disk	to	be?	
-----	-------	----	-----	------	------	------	----	-----	--

Maximum disk size (GB):	
Recommended size for Other 6	4-bit: 8 GB
Allocate all disk space now.	
Allocating the full capacity or disk space to be available ri virtual disk starts small and	can enhance performance but requires all of the physical ght now. If you do not allocate all the space now, the grows as you add data to it.
Store virtual disk as a single	file
) Split virtual disk into multiple	files
Splitting the disk makes it ea but may reduce performance	asier to move the virtual machine to another computer ce with very large disks.

### • Click Finish

### **Specify Disk File**

Where would you like to store the disk file?

VSI OpenVMS x86 64-0.vmdk		Bro	wse
			moern

This creates the virtual disk. The device node is set to the default: SATA 0:0



• Click OK, Close Edit VM settings

Device	Summary	Device status
Memory	8 GB	Connected
Processors	2	Connect at power on
New Hard Disk (SATA) CD/DVD (SATA) CD/DVD (SATA) CO/DVD (SATA) CO/DVD (SATA) CO/DVC (S	15 GB (Preallocated) Using file X8609220E.ISO Bridged (Automatic) Host-only Using named pipe \\.\pipe\o Auto detect	Connection O Use physical drive: Auto detect Use ISO image file:
		X8609220E.ISO V Browse

### • Close VMware Player

😽 VMware Workstation 16 Player (Non-commercial	use only)	. <del></del>	
Player 🖌 🕨 – 🖶 🔲 🔯			ĺ
Home	Welcom Worksta	e to VMware ition 16 Player	
	Creat Creat top	eate a New Virtual Machin ate a new virtual machine, which will the of your library.	I <b>E</b> n be added to the
	Ope the	en a Virtual Machine n an existing virtual machine, which will top of your library.	then be added to
	Get man	grade to VMware Worksta advanced features such as snapshots, agement, and more.	ation Pro
	? He	l <b>p</b> ronline help.	
	Com Buy	product is not licensed and is authorized mercial use only. For commercial use, pu <u>now.</u>	d for non- irchase a license.

### • Start Explorer, Go to %VMDIR% Right Click %VMNAME%.vmx, Select Edit

Connect		× +			- U X
$\leftarrow  \rightarrow  \uparrow$	С	🖵 > … Local Disk (C:) >	temp > Connect >	Conr	ect durchsuchen
🕀 Neu - 🔏	Q	🗈 🔿 🖻 🖞 1	🖞 Sortieren 🕤 🗮 Anzeigen 🗸	••••	📑 Details
🛓 Downloads	ж	Name ^	Änderungsdatum	Тур	Größe
Dokumente	*	VSI OpenVMS x86_64.vmdk	04.04.2024 10:34	VMware.VirtualDisk	1 KB
Rilder	*	VSI OpenVMS x86_64.vmsd	04.04.2024 10:34	VMSD-Datei	0 KB
Musik	*	SI OpenVMS x86_64.vmx	GA GA 2024 10-45	VMware virtual m	2 KB
Videos	*	VSI OpenVMS x86_64.vmxf			1 KB
📰 Connection Central	*	VSI OpenVMS x86_64-0.vmc	😼 Öffnen	Enter	1 KB
tonnect		VSI OpenVMS x86_64-0-flat.	🐻 Öffnen mit	>	Enlitor
Connect		SI OpenVMS x86_64-s001.v	🙆 Freigabe		Notepad++
OpenVMS		VSI OpenVMS x86_64-s002.v	7 Zu Favoriten hinzufügen		WMwara Player
- Pildschirmfotos		🗋 VSI OpenVMS x86_64-s003.v	Pa In 7IP. Datei komprimieren		
		X860922OE.ISO			Microsoft Store du
Dieser PC		X860922OE.ISO_VNC	Als Pfad kopieren	Strg+Shift+C Alt+Enter	Andere App auswa
> Local Disk (C:)		2860922OE.ZIP	Im Editor bearbeiten		782.505 KB
12 Elemente 1 Element a	usgewä	ihlt (1,60 KB)			

• Append lines:

```
firmware = "efi"
efi.serialconsole.enabled = "TRUE"
efi.shell.activeByDefault = "TRUE"
efi.quickBoot.enabled = "FALSE"
```

	VSI OpenVMS x86	i_64.vm> •	+	_		×
Datei	Bearbeiten	Ansicht				ŵ
seri exte flop sata sata sata sata sata sata	ndedConfigFile py0.present = 0.present = " 0:0.fileName = 0:0.present = 0:4.deviceType 0:4.fileName = 0:4.present = ware = "efi"	E = "VSI 0 "FALSE" TRUE" = "VSI 0p "TRUE" E = "cdroi = "X86092 "TRUE"	OpenVMS enVMS x8 m-image" 20E.ISO"	x86_64.vm 6_64-0.vm	uxf" udk"	
efi. efi.	serialconsole shell.activeBy	.enabled yDefault	= "TRUE" = "TRUE"			1
efi.	quickBoot.enal	bled = "F	ALSE"			
			l			
Ze 58, 5	p 1 119 von 1.71	15 Zei ( 100	% Wir	ndows (CRLF	UTF-8	

Save file

VSI Ope	nVMS x86_64	4.vm) ×	+	-		×
Datei Bear	rbeiten ,	Ansicht				ŝ
Neue Registe	erkarte	Strg+	N 15 x86	5_64.vm	xf"	
Neues Fenste	e <b>r</b> Stre	g+Umschalt+	N			
Öffnen		Strg+	o x86_6	54-0.vm	dk"	
Speichern		Strg+	s 50"			
Speichern un	ter <sub>Str</sub>	g+Umschalt+	s			
Alle speicher	n	Strg+Alt+	s JE"			
Seiteneinrich	tung		1			
Drucken		Strg+	Р			
Registerkarte	schließen	Stra+\	Window	ws (CRLF	UTF-8	

• Start VMware Player, Click Play VM



### This starts the VSI Boot Manager

MSI C Player	PpenVMS x86_64 - VMware Workstation 16 Player (Non-commercial use only) ▼      ▼ 母 回 阅
ME	Image: Software       BOOT       DEVICES       SYSINFO       INSTALL       SHELL         ESSAGES:       PROGRESS       SYSBOOT       EXECINIT       SYSINIT       ACPL       CONFIG       DRIVERS         DOT       MODES:       BOOTMGR>       XDELTA>       BREAK>       SYSDBG>       SYSBOOT>       VERBOSE         UTOACTION:       HALT       HALT       HALT       HALT       HALT
	VSI OpenVMS Boot Manager: V9.2-x Build 136 ENABLED: Symmetric Multi-Processing ENABLED: Crash Dump Processing ENABLED: Console output to Legacy COM 1 Port ENABLED: Using Environment Defaults
	Checking Required Processor Features: PASSED BOOT MANAGER DEVICE: DKA400 DEFAULT BOOT COMMAND: BOOT 0x00 0x00000000 VIRTUAL MACHINE GUEST:
	VMware (tm) No Mouse support; Use Commands or Arrow Keys CONNECT A REMOTE TERMINAL SESSION NOW. Enter the TERMINAL command for remote connection assistance. BOOTMGR>

### PuTTY Configuration

• Start PuTTY

Select Window / Translation Choose Remote Character Set: DEC-MCS

⊡- Session	Options controlling character set translation
En Logging	Character set translation Remote character set:
Bell	DEC-MCS T ~
Features 	(Codepages supported by Windows but not listed here, such as CP866 on many systems, can be entered manually)
Behaviour     Translation     E     Selection	Treat CJK ambiguous characters as wide Caps Lock acts as Cyrillic switch
Selection     Colours     Connection     Oata     Proxy     SSH     SSH     Serial     Telnet     Rlogin     SUPDUP	Adjust how PuTTY handles line drawing characters Handling of line drawing characters: Use Unicode line drawing code points Poor man's line drawing (+, - and I) Font has XWindows encoding Use font in both ANSI and OEM modes Use font in OEM mode only Copy and paste line drawing characters as lqqqk

 Select Session Select Connection type: Serial Serial line: <u>\\.\pipe\opa0</u>
 Speed: 115200

Category:					
	Basic options for your PuTTY session				
Terminal Bell Features	Specify the destination you want to conner Serial line \\.\pipe\opa0 Connection type:	ct to Speed 115200			
- Window	◯ SSH O Serial ◯ Other: Telne	t 🗸			
Behaviour     Translation     Selection     Colours     Connection	Load, save or delete a stored session Saved Sessions Pipe OPA0 Default Settinos	Load			
Data     Proxy     SSH     Serial     Telnet     Rlogin     SUPDUP		Save Delete			
	Close window on exit: Always Never Only on c	lean exit			
About Help	O gn	Cancel			

- Enter a name in Saved Session field, e.g. "VMS x86\_64 Console"
- Click Save
- Click Open

• Check that when entering DEVICES<RETURN> in PuTTY, it is duplicated in Boot Manager window

<sup>1</sup>愛 VSI OpenVMS x86\_64 - VMware Workstation 16 Player (Non-commercial use only) Player マート **III** マー母 口 泡

m s Software BOOT DEVICES SYSINFO INSTALL SHELL		
ESSAGES: PROGRESS SYSBOOT EXECUTIT SYSINIT ACPT CONFIG DRT OOT MODES: BOOTMGR> XDELTA> BREAK> SYSDBG> SYSBOOT> VERBOSE	VERS	
VSI OpenVMS Boo PVMware OPA0		
ENABLED: Symi ENABLED: CraiBOOTMGR> DEVICES ENABLED: Con ENABLED: Con ENABLED: UsiBOOTABLE DEVICES: B = BootMgr Device, V = Default VMS Boot Devi	ce	A
Checking Requ PASSED BOOT_MANAGER BOOTMGR> []	1481	MB SAT
URTUAL MACHII VMware (tm) N		
CONNECT A REM Enter the TER		
BOOTMERS DEVICE		
BOOTABLE DEVICE B DKA400		
BOOTMGR>		

# TA DAAA!

• To proceed, enter BOOT DKA400 <RETURN>