## **Practical No.5**

Aim :- Manage XEN server XEN center.

## XenCenter

XenCenter is our free management and monitoring product available for XenServer. Many XenServer users have very specific and complex systems and requirements and like to choose the tools and products they need for their industry or usage.

Owing to our open architecture and vendor neutral policy, we allow customers, partners and other vendors (including competitors) to augment XenCenter functionality and integrate XenServer with their own applications.

XenCenter is a platform and dashboard onto which anyone can add specialist components from vendors of their choice, develop their own bespoke tools or pick up free tools from our active developer community; creating a customised solution with the added benefit of avoiding vendor lock-in.

It's an approach that can help both large enterprises and SMB customers slash their costs. XenCenter is free and can be used with XenServer Free. Rather than pay expensive hypervisor licensing fees to support a generalised management console with features designed to support the average users that aren't relevant to many customers.

Many of our customers are choosing more bespoke and relevant products from tier 1 specialists, developing their own functionality or using free components from other community developers.

Full virtual machine installation, configuration and lifecycle management. Access to VM consoles: VNC for installation-time, Xvnc for graphical displays on Linux, and Remote Desktop for Windows. vApps. Remote storage configuration, including NetApp and DellEqualLogic StorageLink, and HBA (Fibre Channel and hardware iSCSI) support. Host networking management, including VLANs and internal networks, bonded and dedicated NICs.

 Computer 
 Local Disk (G:) 
 MSC-IT SEM 2 
 cloud softwares 
 Cloud Software 
 Cloud Practicals 
 Prac 4 XEN Serve - 44 Organize ▼ 👘 Install ▼ Burn New folder = - -0 Name Date modified Туре Size ☆ Favorites 3/2/2014 1:32 PM Microsoft Office ... 📕 ds XEN Server Prac 4 2,427 KB a Desktop XenServer-6.2.0-install-cd 7/20/2013 9:45 AM WinRAR archive 576.610 KB 🚺 Downloads 🛃 XenServer-6.2.0-XenCenter 10/26/2013 2:28 PM Windows Installer ... 49,649 KB 3 Recent Places SkyDrive 词 Libraries Documents Music Pictures Videos 💻 Computer 💑 Local Disk (C:) Real Local Disk (G:) 👊 Networl XenServer-6.2.0-XenCenter Date modified: 10/26/2013 2:28 PM Windows Installer Package Size: 48.4 MB Date created: 3/2/2014 1:08 PM - 🍡 🛱 🌗 🕴

STEP 1: Now Install XEN Center by double clicking on XEN Center to install.

STEP 2: It will display the Welcome screen for Citrix XenCenter installation. Click on Next.



STEP 3: Installing virtual machine using XenCenter. Click Next.

🖞 Citrix XenCenter Setup	x
Destination Folder Click Next to install to the default folder or click Browse to choose another.	
Install Citrix XenCenter to:	
C:\Program Files (x86)\Citrix\XenCenter\	
Browse	
Install for:	
◎ <u>A</u> ll Users	
Oust Me	
<u>B</u> ack <u>N</u> ext Cancel	

Ready to install Citrix Xe	enCenter
Click Install to begin the inst installation settings. Click Ca	allation. Click Back to review or change any of your ncel to exit the wizard.
Citrix XenCenter Setup	Back Install Cancel
	Completed the Citrix XenCenter Setup Wizard
CİTRIX	Click the Finish button to exit the Setup Wizard.

STEP 4: Open Citrix XenCenter.



## STEP 5: Click on ADD a Server.

Server View	XenCenter     Home Search Tags Loc	15				
XenCenter			Citrix X	enServer		
		Industry leadir	ng, open source platform f	for cloud, server and desktop	virtualization	
		LEARN about using XenCenter	ADD a server	UPGRADE XenServer	TRY Desktop Virtualization	
			• Network • Visit the • Learn m	upport Partners cwith other XenServer users Citrix Knowledge Center ore about partner offerings		

STEP 6: Add new server window will popup. Now here enter all the details and click on Add.

😣 Add New Se	erver 2 X										
Enter the hos and your use	Enter the host name or IP address of the server you want to add and your user login credentials for that server.										
Server:	192.168.232.129 👻										
User login cr	edentials										
<u>U</u> ser name:	root										
Password:	•••••										
	Add Cancel										

STEP 7: Click on Save and restore server connection state on startup. Click on Ok.

Save and Restore Connection State	? ×
XenCenter can remember login credentials for your managed serv restore the connection state of your servers when you start a sessi Save and restore server connection state on startup	vers and use them to automatically on.
Master password When set, the master password protects all your server login cree password at the beginning of each session.	dentials. You will need to enter this
Require a master password	Change Master Password
	OK Cancel

STEP 8: Once server is added we will start will virtual machine deployment process.

- 🙆 Forward - 🛛 🔂 Add	New Server   👯 New Pool 愶 New Storage	1 New VM 🛛 🙆 S	hut Down 🙀 Reboo	t Suspend			v	No Syst
nver View		•		<u> </u>			Logged in as:	ocal roc
, inclusion	Search General Memory Storage Netwo	rking NICs Console	Performance Users	Logs			Loggeannas	
nCenter xenserver-yajxihma DVD drives	xenserver-yajxihma Overview							
Local storage	Search Options 💌							
👹 Removable storage	Name	CPU Usage	Used Memory	Disks (avg / max KBs)	Network (avg / max KBs)	Address	Uptime	
	xenserver-yajxihma Default install of XenServer	1% of 1 CPU	841 of 2048 MB	178	0/0	192.168.232.129	10 minutes	

STEP 9: First keep RedHat iso image in one folder; (example we are keeping h-rel62x6.iso RedHat iso image in Cloud SW folder). Right click on Cloud\_SW folder. Click on specific people option from pop menu.

Organize 🔻 🛛 湇 Open	Include in library 🔻 🛛 S	Share with 🔻	Burn New folder					2
★ Favorites       ■ Desktop       ▶ Downloads       № Recent Places	Name Mame Adt-bundle-windows-x8 Corracticals Cloud softwares	36_64-20131030	Date modified 2/10/2014 12:46 PM 3/23/2014 1:05 PM 2/28/2014 11:48 AM 3/23/2014 1:43 PM	Type File folder File folder File folder	r r r	Size		
Libraries Documents Music Pictures Videos Computer Local Disk (C:) Docal Disk (C:) Network ACCOUNTS ADMINOFFICE1-1 ADS-SMS FRP Cloud SW File folder Date for State of the folder of the	Cidud SW Cidud SW Cidud SW Cilipse FOR ACN PracticalExams SK Somaiya 13022014 R-3.0.2-win William William William William William Cilipse VMware-viclient-all-5.1 VMware-VMvisor-Insta VMware-VMvisor-Insta State: 32 Shared modified: 3/23/2014 1:33 PM Cilipse Cilipse Cilipse Cilipse State: 32 Shared Milliam Cilipse	Open in r Open in r Open as l Share wit Restore p Include in Add to ar Add to ar Compres Open sol Compres Open sol Compres Send to Cut Copy Create sh Delete Rename	new window mmand Window Here Notebook in OneNote h revious versions h library chive Cloud SW.rar" s and email s to "Cloud SW.rar" and ema )	sil		Nobody Homegroup (Read) Homegroup (Read/W Specific people	rite)	

STEP 10: It will give you "Choose people to share with" screen. Add Everyone.

Choose people to share with	
The second sheep shell Add as she	
Type a name and then click Add, or click	the arrow to find someone.
	✓ Add
Name	Permission Level
& MSCIT-13	Owner
I'm having trouble sharing	

Cal	XenCenter	🛛 💷 🛶 🕹 🚽 🖉			
	<u>File View Pool Server VM</u> St	ge <u>I</u> emplates Too <u>l</u> s <u>W</u> indow <u>H</u> elp			0
Ê	🕒 Back 👻 🔘 Forward 👻 🛛 📑 Add I	w Server   🏪 New Pool 🛅 New Storage 🛅 New VM   🕹 Shut Down 🛞 Reboot 🕕 Suspend 🛛 🔕 System Alerts: 13	Q		A Find +
Paste	Views: Server View 🔻	a xenserver-sbppawkb Logged in as: Local root account		Emphasis - Change	Select *
C	Search 🔎	Search General Memory Storage Networking NICs Console Performance Users Logs			Editing
	<ul> <li></li></ul>	Xerser       Image: Search of the serve with         Choose people to share with       Type a name and then click Add, or click the arrow to find someone.         Image: Imag			
Page: 28		< III >		2 120% 🕤	⊽€
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And and Address	
🕞 🔉 File Sharing	
Choose people to share with Type a name and then click Add, or click the arrow t	to find someone.
Everyone	✓ <u>A</u> dd
Name	Permission Level
🚨 MSCIT-13	Owner
I'm having trouble sharing	
	S <u>h</u> are Cancel

Choose people to share with Type a name and then click Add, or click the arrow to fi	
Type a name and then click Add, or click the arrow to fi	
Type a name and then click Add, or click the arrow to fi	
	ind someone.
	→ Add
Name	Permission Level
S MSCIT-13	Owner
I'm having trouble sharing	
	Share Can
S Paragraph S	Styles
G 🔀 File Sharing	
Choose people to chare with	
Type a name and then click Add, or click the arrow to t	find someone.
	bb4
Name	
Reveryone	Read/Write  Read
& MSCIT-13	Owner Read/Write
	Remove
72	
I'm having trouble sharing	
	Share Cancel

STEP 12: Share path is \\MSCIT-13-PC\Cloud SW. Note down this share path (in place of pc name we can give ip address of machine also). Click on Done.





STEP 13: First we need to create a storage repository where we will store all the iso images of virtual machine. So for that click on "New Storage" (i.e. Our Own storage for Red hat Linux iso).

3 Xen	Center			I X
<u>F</u> ile	<u>View Pool S</u> erver V <u>M</u> ck + 〇 Forward - I 🔂 A	St <u>o</u> ra Add Nev	ge _Iemplates Tools <u>W</u> indow <u>H</u> elp w Server   🚏 New Pool 🛅 New Storage 🛅 New VM   📦 Shut Down 🛞 Reboot 🕕 Suspend 🛛 🔀 System /	Alerts: 1
Views:	Server View	•	xenserver-sboppawkb Logged in as: Local root	t accour
Search		Q	Search General Memory Storage Vice Vice Console Performance Users Logs	
- 3	XenCenter		xenserver-sbppawkb Overview	
	UVD drives Cocal storage Cred iso		Search Options	
	🗑 Removable storage		Name         CPU Usage         Used Memory         Disks (avg / max KBs)         Network (avg / max KBs)	o <b>rk</b> x KBs)
			E xenserver-sbppawkb 0/0 Default install of XenServer 2% of 1 CPU 840 of 1912 MB 0/0	
			ereiso	
			CIL2 120 FIDLADÀ [1/1251108:3108	
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3				

STEP 14: Select Windows File Sharing (CIFS) option, and then click on Next.

<b>Type</b> Name Location	Virtual disk storage <ul> <li>NFS ⊻HD</li> <li>Software i§CSI</li> <li>Hardware <u>H</u>BA</li> <li>StorageLink technology</li> </ul> ISO library <ul> <li>Windows File Sharing (<u>C</u>IFS)</li> <li>NFS ISO</li> </ul>	NFS servers are a common form of shared filesystem infrastructure, and can be used as a storage repository substrate for virtual disks. As NFS storage repositories are shared, the virtual disks stored in them allow VMs to be started on any server in a resource pool and to be migrated between them using XenMotion. When you configure an NFS storage repository, you simply provide the hostname or IP address of the NFS server and the path to a directory that will be used to contain the storage repository. The NFS server must be configured to export the specified path to all servers in the pool.
<b>CİTRIX</b>		

<b>Type</b> Name Location	Virtual disk storage NFS <u>V</u> HD Software i <u>S</u> CSI Hardware <u>H</u> BA StorageLink technology ISO library Windows File Sharing (CIFS)	Select this option if you have a library of VM installation ISO images available as a Windows (CIFS) share that you wish to attach to your host or pool.
	NFS ISO	

STEP 15: In Name, give any name of your choice.

New Storage Repository - xer	erver-sbppawkb	
What do you want t	call this Storage Reposit	pry?
Type Name	Provide a name and a de	scription (optional) for your SR.
Location	Na <u>m</u> e: Red Hat I	50 Image Library
	Autogenerate descrip           Description:	tion based on SR settings (e.g., IP address, LUN etc.)
CİTRIX.		<mark>&lt; Previous <u>N</u>ext &gt; Cancel</mark>

STEP 16: In Location, give the path of the shared folder which contains all the images of virtual machine & Click Finish.

New Storage Repository - xen:	iserver-sbppawkb
Enter a path for your	r CIFS storage
Type Name	Provide the name of the share where your SR is located. You can optionally specify alternative credentials by setting the server options.
Location	<u>S</u> hare Name: \\192.168.3.168\Cloud SW  ▼
	Example: \\server\sharename
	✓ Use different user name
	User name: sa
	Password:
CITRIX	
	< Previous Einish Cancel

STEP 17: Now we have new storage in which we have all the iso files required for installation of VMs. So let's create new virtual machine. For that click on New VM.

XenCenter		100	_			All and a diversity of					_ 0 <u>_ x</u>
<u>File View P</u> ool	Se	rver V <u>M</u> St <u>o</u> rage <u>T</u> er	nplates	Too <u>l</u> s <u>W</u> indow <u>H</u> elp							
G Back 🝷 💮 Fo	rward	Add New Server	P Nev	w Pool 👘 New Storage 🛅	New VM 🕴 🕘 S	hut Down 🛞 Reboo	t 🕕 Suspend			$\checkmark$	No System Alerts
Views: Server View		🔹 🔂 🔹	server-yaj	jxihma						Logged in as:	ocal root account
Search		🔎 Search	General N	Memory Storage Networking	NICs Console	Performance Users	Logs				
🖂 🐼 XenCenter	univih	xenser	ver-yajxi	ihma Overview							
DVD di		New V <u>M</u>									
Remov	t 🔟	New SR	ons	5 💌							
	1	Import		Name	CPU Usage	Used Memory	Disks	Network	Address	Uptime	
		Add to Pool	+ er-y	yajxihma			-	0/0	192.168.232.129	10 minutes	
		Enter Maintenance Mode	inst	tall of XenServer	1% of 1 CPU	841 of 2048 MB					
	8	Reboot Shut Down									
		Restart Toolstack									
		Disconnect									
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<b>Femplate</b>	Search		$\mathbf{Q}$	
Name	Name	Category	<b>^</b>	
installation Media	Oracle Enterprise Linux 6 (32-bit)	Oracle		
Home Server	🚱 Oracle Enterprise Linux 6 (64-bit)	Oracle		
CPU & Memory	Red Hat Enterprise Linux 4.5 (32-bit)	Red Hat		
Storage	Red Hat Enterprise Linux 4.6 (32-bit)	Red Hat		
Vetworking	Red Hat Enterprise Linux 4.7 (32-bit)	Red Hat	=	
inish	Red Hat Enterprise Linux 4.8 (32-bit)	Red Hat		
	Red Hat Enterprise Linux 5 (32-bit)	Red Hat		
	💽 Red Hat Enterprise Linux 5 (64-bit)	Red Hat		
	Red Hat Enterprise Linux 6 (32-bit)	Red Hat		
	🜏 Red Hat Enterprise Linux 6 (64-bit)	Red Hat		
	SUSE Linux Enterprise Server 10 SP1 (32-bit)	SUSE	Ŧ	
TDIY	Copy host BIOS strings to VM			

STEP 18: In template field select the name of the virtual machine you want to install. Then in name field provide name of the virtual machine of your choice.

😣 New VM		- 🗆 🗙
Name the new virtual	machine	0
Template Name Installation Media Home Server CPU & Memory Storage Networking Finish	Enter a name that will help you to identify the virtual machine later. This could be a name that d software and hardware such as RHEL DHCP Server, Win2K3 XenApp Server or Exchange 2007 Clic Server. This name will also be displayed in XenCenter's Resources pane and can be changed later. You can also add a more detailed description of the VM, if you wish.          Name:       Red Hat Enterprise Linux 6 (64-bit) (1)         Description:	lescribes its ent Access .r.
CİTRIX'		
	< Previous Next >	Cancel

STEP 19: In the Installation Media field select the iso image of the VM from the storage repository we created earlier. Click Next.

😣 New VM	
Locate the operating	system installation media
Template Name	Select the installation method for the operating system software you want to install on the new VM.
Installation Media Home Server CPU & Memory Storage Networking Finish	<ul> <li>Install from ISO library or <u>D</u>VD drive:</li> <li><u>DVD drive 0 on xenserver-yajxihma</u> ▼ <u>New ISO library</u></li> <li>Install from <u>U</u>RL:</li> </ul>
citrix.	Advanced OS <u>b</u> oot parameters Enter any advanced boot parameters here. Leave this box blank if you do not wish to supply any parameters. graphical utf8
	< <u>P</u> revious <u>N</u> ext > Cancel

🗴 New VM	
<b>D</b> Locate the operat	ing system installation media
Template Name	Select the installation method for the operating system software you want to install on the new VM.
Installation Media Home Server	<ul> <li>Install from ISO library or <u>D</u>VD drive:</li> <li>h-rel62x6.iso</li> <li>✓ New ISO library</li> </ul>
CPU & Memory Storage	DVD drives on xenserver-sbppawkb     DVD drive 0 on xenserver-sbppawkb     and isa
Networking Finish	h-rel62x6.iso XenServer-6.2.0-install-cd.iso XenServer Tools xs-tools.iso
citativ:	Advanced OS <u>b</u> oot parameters Enter any advanced boot parameters here. Leave this box blank if you do not wish to supply any parameters. graphical utf8
СПКІХ	< <u>P</u> revious <u>N</u> ext > Cancel

Template Name	Select the installation method for the operating system software you want to install on the new VM.
Installation Media	Install from ISO library or DVD drive:
Home Server CPU & Memory	h-rel62x6.iso
Storage	Install from URL:
Networking	
Finish	
	Advanced OS <u>b</u> oot parameters
	Enter any advanced boot parameters here. Leave this box blank if you do not wish to supply any parameters.

STEP 20: Keep Home Server field unchanged and click Next.

New VM	
Select a home server	0
Template Name Installation Media Home Server CPU & Memory	<ul> <li>When you nominate a home server for a virtual machine, the virtual machine will always be started up on that server if it is available. If this is not possible, then an alternate server within the same pool will be selected automatically.</li> <li>Don't assign this VM a home server. The VM will be started on any server with the necessary resources. (Shared storage required)</li> </ul>
Storage Networking Finish	Place the VM on this server:      xenserver-sbppawkb 1055 MB available (1912 MB total)
CITRIX.	
	< <u>P</u> revious <u>N</u> ext > Cancel

JII Allocate process	r and memory resources
Template Name Installation Media Home Server CPU & Memory Storage Networking Finish	Specify the number of virtual CPUs and the amount of memory that will be initially allocated to the virtual machine. Number of vCPUs: 1 + Memory: 1024 + MB

## STEP 22: Provide the Storage for VM.

Template Name Installation Media Home Server CPU & Memory	The virtual machine template you selected earlier provides the virtual disks listed below. You can change the properties of these virtual disks, and add more disks if required. Alternatively, you can select the second option below to create a diskless VM that can be booted from the network and does not use any virtual disks. When you have finished configuring disks for the new virtual machine, click Next to continue to the next					
Storage	<ul> <li>Use these virtual disks:</li> </ul>					
Networking	Location	Size	Shared	<u>A</u> dd		
	Eocal storage on xenserver-yajxihma	20 GB	False	<u>D</u> elete P <u>r</u> operties		
	Use storage-level <u>f</u> ast disk clone					
	Create a diskless VM that boots from the	e network				

Configure sto	rage for the new	VM		0
Template Name Installation Media Home Server CPU & Memory Storage	The v prope Alterr netwo When step.	irtual machine template you selected earlier provide trites of these virtual disks, and add more disks if req natively, you can select the second option below to rk and does not use any virtual disks. I you have finished configuring disks for the new vir	s the virtual disks listed below. You uired. reate a diskless VM that can be bo ual machine, click Next to continu	u can change the let / n oted from the 1 ue to the next
Networking Finish	• 0	se these virtual disks: Location Local storage on xenserver-sbppawkb	Size Shared 8 GB False	Add Delete Properties
citrix.	0 0	Add Virtual Disk     Enter a name, description and size for your virt     of any VM the disk belongs to will affect which     Name: New virtual disk     Description:	ual disk. The size of your disk and t storage locations are available.	থি হয় the home server setting

😣 Add Vi	rtual Disk
Enter a r of any V	name, description and size for your virtual disk. The size of your disk and the home server setting M the disk belongs to will affect which storage locations are available.
<u>N</u> ame:	New virtual disk
<u>D</u> escript	ion:
<u>S</u> ize:	60 <u>→</u> GB ▼
<u>L</u> ocatior	Cocal storage on xenserver-sbppawkb 71.98 GB free of 71.99 GB
	Add Cancel

D Configure storage	for the new VM			
Template Name Installation Media Home Server CPU & Memory	The virtual machine template you selected earlier provides the virtual disks listed below. You can change the properties of these virtual disks, and add more disks if required. Alternatively, you can select the second option below to create a diskless VM that can be booted from the network and does not use any virtual disks. When you have finished configuring disks for the new virtual machine, click Next to continue to the next step.			
Storage	<ul> <li>Use these virtual disks:</li> </ul>			
Networking	Location	Size	Shared	<u>A</u> dd
Finish	S Local storage on xenserver-sbppawkb	8 GB	False	Delete
	Local storage on xenserver-sbppawkb	60 GB	False	P <u>r</u> operti
	Use storage-level <u>f</u> ast disk clone			
	Create a diskless VM that boots from the network			

😣 New VM	the law has been been been been	- • ×
Configure networking	on the new VM	0
Template Name Installation Media	The virtual machine template you have selected provides the virtual network interfaces listed can configure or delete the default virtual network interfaces here, and add more if required. Virtual network interfaces on Red Hat Enterprise Linux 6 (64-bit) (1)	below. You
Home Server	MAC Network	<u>A</u> dd
CPU & Memory	📥 <autogenerated mac=""> Network 0</autogenerated>	Delete
Storage		Properties
Finish	(i) Using a Default template, you can configure up to 4 virtual network interfaces during VM creation. To configure more than 4, create a Custom template or add extra virtual network interfaces from the Network tab after creating the new VM.	
	< <u>P</u> revious <u>N</u> ext >	Cancel

STEP 25: Keep networking field as default and then click on Create Now.

r information has been collected and the wizard is ready to provision the new virtual he settings shown below. tings, then click Previous if you need to change anything. Otherwise, click Create Now to M. It may take several minutes to create the new VM. Red Hat Enterprise Linux 6 (64-bit) Red Hat Enterprise Linux 6 (64-bit) (1) CD rce h-rel62x6.iso xenserver-sbppawkb
Red Hat Enterprise Linux 6 (64-bit)         Red Hat Enterprise Linux 6 (64-bit) (1)         CD         rce       h-rel62x6.iso         xenserver-sbppawkb
Red Hat Enterprise Linux 6 (64-bit) (1) CD rce h-rel62x6.iso xenserver-sbppawkb
CD rce h-rel62x6.iso xenserver-sbppawkb
rce h-rel62x6.iso xenserver-sbppawkb
xenserver-sbppawkb
1
1024 MB
8 GB
60 GB
VM automatically

STEP 26: Once created it will automatically power on.

😣 Xen	Center		- 11	Contracting in Concerning	
<u>F</u> ile	View Pool Server VM ack • 💮 Forward •   📑	St <u>o</u> r Add Ne	rage <u>T</u> emplates Too <u>l</u> s ew Server   🏪 New Pool	<u>W</u> indow <u>H</u> elp	Suspend System Alerts: 13
Views:	Server View	•	Red Hat Enterprise L	inux 6 (64-bit) (1) on 'xenserver-sbppawkb'	Logged in as: Local root account
Search.		Q	General Memory Storage	Networking Console Performance Snapshots Logs	
	XenCenter	x 6. (64	VM General Properties	5	
	DVD drives	x 0 (04	P <u>r</u> operties		Expand all Collapse all
	red iso		General		
	📔 Removable storage 🐻 xenserver-tqvcnahk		Name:	Red Hat Enterprise Linux 6 (64-bit) (1)	
			Description:		
			Tags:	<none></none>	
			Folder:	<none></none>	
			Operating System:	Unknown	
			BIOS strings copied:	No	
			Virtualization state:	Unknown	
			Time since startup:	0 minutes	
			UUID:	eb89a6de-2f1a-714f-3354-02ff49046ba9	
			Boot Options		
•		4			
		7			

