Installation de RHEL sur un serveur UCS C240 M5 autonome.

Contenu

Introduction

Cet article décrit la procédure d'installation de RHEL sur la configuration RAID locale dans un serveur UCSC C240 M5 autonome.

Configuration utilisée

UCSC-C240-M5L
Contrôleur RAID : adaptateur HBA SAS Cisco 12G (UCSC-SAS-M5)
4 000 disques durs secteur
CIMC : 3.1(3 bis)
OS : RHEL 7.3

Conditions préalables

1. Téléchargez l'ISO RHEL et l'ISO du pilote de contrôleur :

   RHEL : rhel-server-7.3-x86_64-boot.iso

   ISO du pilote : [ucs-cxxx-drivers-linux.3.1.3.iso](#)

   (Dans l'ISO, accédez à Stockage -> LS -> UCSC-SAS-M5 -> RHEL -> RHEL7.3 -> mpt3sas-23.00.00.00_el7.3-1.x86_64.iso.gz)

2. Si vous extrayez le fichier mpt3sas-23.00.00.00_el7.3-1.x86_64.iso.gz, vous obtiendrez le pilote ISO -> mpt3sas-23.00.00.00_el7.3-1.x86_64.o

3. De même, si vous utilisez un contrôleur UCSC-RAID-M5 sur votre serveur, vous pouvez accéder au pilote correspondant.

Procédure

Étape 1. Puisque le serveur a des lecteurs secteur 4k, nous allons faire un démarrage UEFI. L'ordre de démarrage doit être le suivant :

Étape 2. Ouvrez le KVM et mappez l'ISO RHEL :

Étape 3. Appuyez sur F6 et démarrez à partir de l'UEFI : vDVD1.24 mappé sur Cisco vKVM

Étape 4.Sélectionnez l'option " Installer Red Hat Enterprise Linux 7.3 " et appuyez sur e
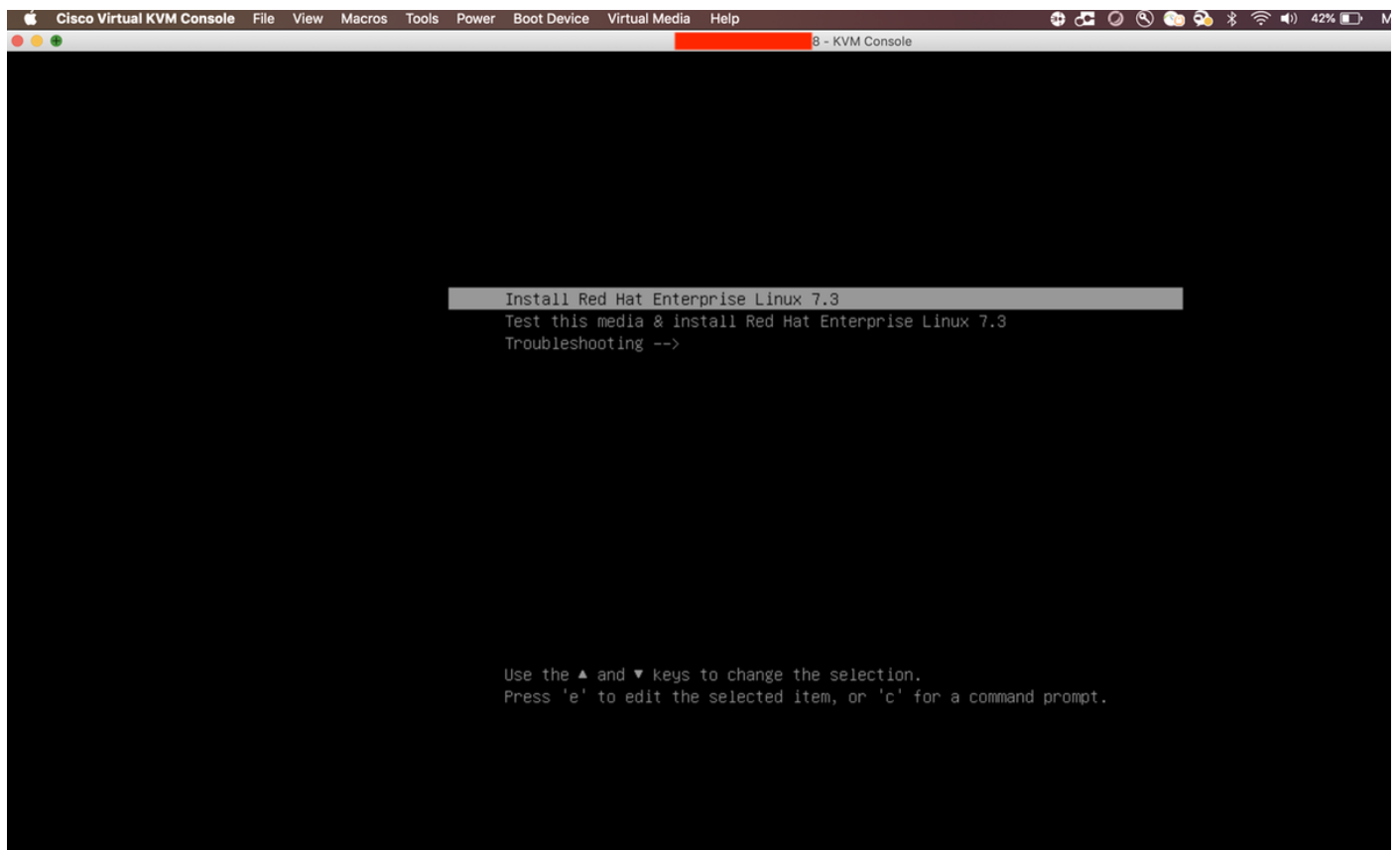
Étape 5. L'écran ci-dessous s'affiche :
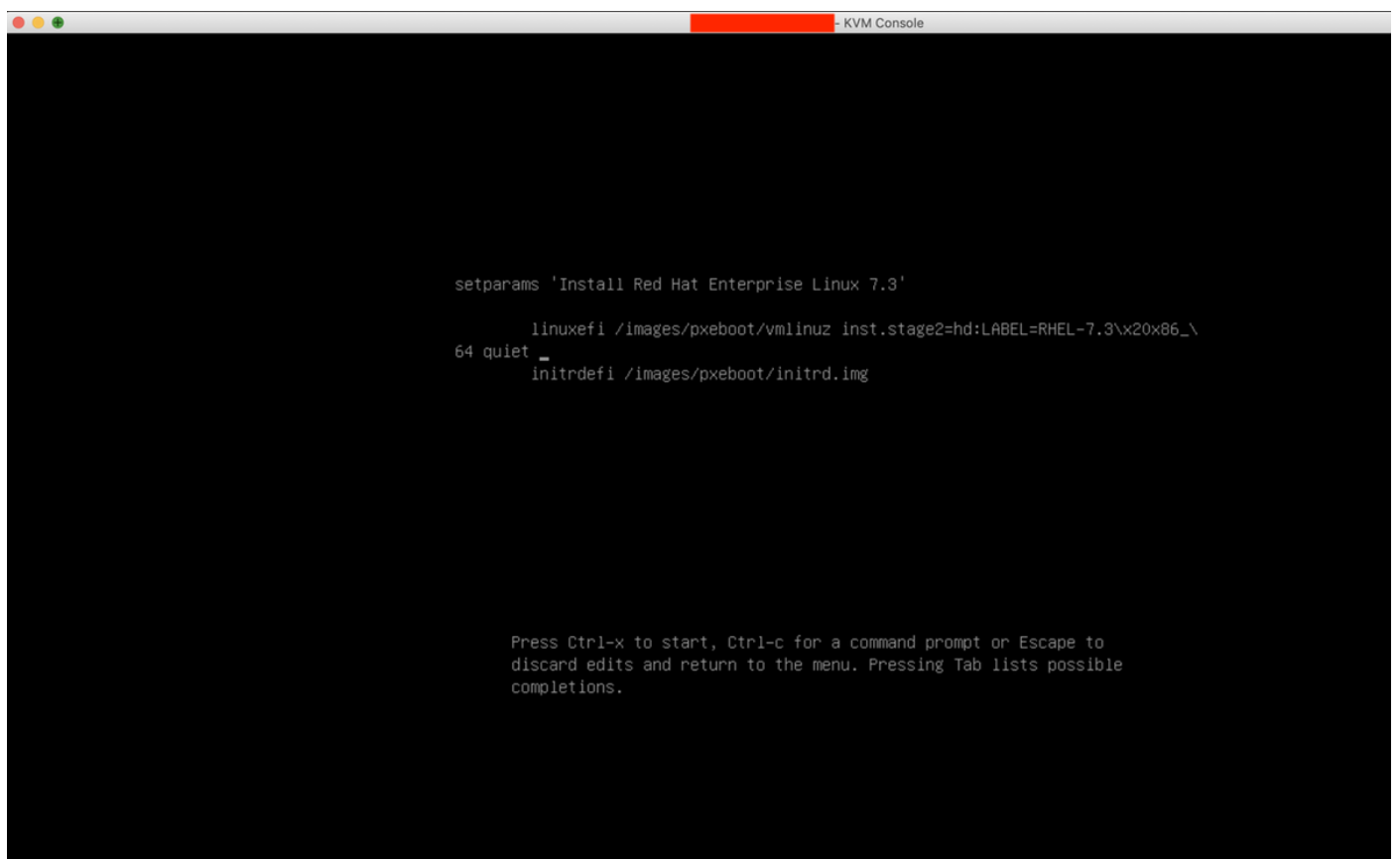
Étape 6. Entrez la commande " linux dd " et faites un Ctrl + x

```
setparams 'Install Red Hat Enterprise Linux 7.3'

            linuxefi /images/pxeboot/vmlinuz inst.stage2=hd:LABEL=RHEL-7.3\x20x86_\
64 quiet linux dd_
            initrdefi /images/pxeboot/initrd.img




Press Ctrl-x to start, Ctrl-c for a command prompt or Escape to
discard edits and return to the menu. Pressing Tab lists possible
completions.
```

Étape 7. La commande ci-dessus démarre le mode interactif :

```
[   18.162151] i8042: Can't read CTR while initializing i8042
[  OK  ] Started Show Plymouth Boot Screen.
[  OK  ] Reached target Paths.
[  OK  ] Reached target Basic System.
[  OK  ] Started Device-Mapper Multipath Device Controller.
         Starting Open-iSCSI...
[  OK  ] Started Open-iSCSI.
         Starting dracut initqueue hook...
[   22.750254] nouveau 0000:60:00.0: priv: HUB0: 10ecc0 ffffffff (1e40822c)
[   22.824043] nouveau 0000:60:00.0: DRM: Pointer to TMDS table invalid
[   22.824060] nouveau 0000:60:00.0: DRM: Pointer to flat panel table invalid
[   23.399872] nouveau 0000:61:00.0: priv: HUB0: 10ecc0 ffffffff (1a40822c)
[   23.463012] nouveau 0000:61:00.0: DRM: Pointer to TMDS table invalid
[   23.463029] nouveau 0000:61:00.0: DRM: Pointer to flat panel table invalid
[   24.037598] nouveau 0000:62:00.0: priv: HUB0: 10ecc0 ffffffff (1d40822c)
[   24.101383] nouveau 0000:62:00.0: DRM: Pointer to TMDS table invalid
[   24.101400] nouveau 0000:62:00.0: DRM: Pointer to flat panel table invalid
[   24.676850] nouveau 0000:63:00.0: priv: HUB0: 10ecc0 ffffffff (1c40822c)
[   24.740881] nouveau 0000:63:00.0: DRM: Pointer to TMDS table invalid
[   24.740897] nouveau 0000:63:00.0: DRM: Pointer to flat panel table invalid
[  OK  ] Created slice system-driver\x2dupdates.slice.
         Starting Driver Update Disk UI on tty1...
[  OK  ] Started Show Plymouth Boot Screen.
[  OK  ] Reached target Paths.
[  OK  ] Reached target Basic System.
[  OK  ] Started Device-Mapper Multipath Device Controller.
         Starting Open-iSCSI...
[  OK  ] Started Open-iSCSI.
         Starting dracut initqueue hook...
[  OK  ] Created slice system-driver\x2dupdates.slice.
         Starting Driver Update Disk UI on tty1...
DD: starting interactive mode

(Page 1 of 1) Driver disk device selection
      /DEVICE   TYPE     LABEL          UUID
   1) sda1      vfat     ESXi           591C-E3E2
   2) sda2      vfat                    4C6C-A2D4
   3) sda3      VMFS_vol                5aa6e18d-304835ba-1711-4c776d996e2e
   4) sda5      vfat                    4C6C-A2CA
   5) sda6      vfat                    4C6C-A2CD
   6) sda8      vfat                    4C6C-A2C8
   7) sr0       iso9660  RHEL-7.3\x20x86_64  2016-10-19-17-41-40-00
# to select, 'r'-refresh, or 'c'-continue: _
```

Étape 8. Démapper l'ISO RHEL et mapper le pilote du contrôleur ISO :

Étape 9. Tapez r pour actualiser la liste des disques du pilote :

```
[  OK  ] Started Open-iSCSI.
         Starting dracut initqueue hook...
[   22.750254] nouveau 0000:60:00.0: priv: HUB0: 10ecc0 ffffffff (1e40822c)
[   22.824043] nouveau 0000:60:00.0: DRM: Pointer to TMDS table invalid
[   22.824060] nouveau 0000:60:00.0: DRM: Pointer to flat panel table invalid
[   23.399872] nouveau 0000:61:00.0: priv: HUB0: 10ecc0 ffffffff (1a40822c)
[   23.463012] nouveau 0000:61:00.0: DRM: Pointer to TMDS table invalid
[   23.463029] nouveau 0000:61:00.0: DRM: Pointer to flat panel table invalid
[   24.037598] nouveau 0000:62:00.0: priv: HUB0: 10ecc0 ffffffff (1d40822c)
[   24.101383] nouveau 0000:62:00.0: DRM: Pointer to TMDS table invalid
[   24.101400] nouveau 0000:62:00.0: DRM: Pointer to flat panel table invalid
[   24.676850] nouveau 0000:63:00.0: priv: HUB0: 10ecc0 ffffffff (1c40822c)
[   24.740881] nouveau 0000:63:00.0: DRM: Pointer to TMDS table invalid
[   24.740897] nouveau 0000:63:00.0: DRM: Pointer to flat panel table invalid
[  OK  ] Created slice system-driver\x2dupdates.slice.
         Starting Driver Update Disk UI on tty1...
[  OK  ] Started Show Plymouth Boot Screen.
[  OK  ] Reached target Paths.
[  OK  ] Reached target Basic System.
[  OK  ] Started Device-Mapper Multipath Device Controller.
         Starting Open-iSCSI...
[  OK  ] Started Open-iSCSI.
         Starting dracut initqueue hook...
[  OK  ] Created slice system-driver\x2dupdates.slice.
         Starting Driver Update Disk UI on tty1...
DD: starting interactive mode

(Page 1 of 1) Driver disk device selection
    /DEVICE  TYPE      LABEL          UUID
 1) sda1     vfat      ESXi           591C-E3E2
 2) sda2     vfat                     4C6C-A2D4
 3) sda3     VMFS_vol                 5aa6e18d-304835ba-1711-4c776d996e2e
 4) sda5     vfat                     4C6C-A2CA
 5) sda6     vfat                     4C6C-A2CD
 6) sda8     vfat                     4C6C-A2C8
 7) sr0      iso9660   RHEL-7.3\x20x86_64   2016-10-19-17-41-40-00
# to select, 'r'-refresh, or 'c'-continue: r

(Page 1 of 1) Driver disk device selection
    /DEVICE  TYPE      LABEL          UUID
 1) sda1     vfat      ESXi           591C-E3E2
 2) sda2     vfat                     4C6C-A2D4
 3) sda3     VMFS_vol                 5aa6e18d-304835ba-1711-4c776d996e2e
 4) sda5     vfat                     4C6C-A2CA
 5) sda6     vfat                     4C6C-A2CD
 6) sda8     vfat                     4C6C-A2C8
 7) sr0      iso9660   CDROM          2017-05-26-05-44-09-00
# to select, 'r'-refresh, or 'c'-continue:
```

Étape 10. La liste ISO du pilote de contrôleur s'affiche. Tapez 7 et effectuez la sélection :

```
[   23.463012] nouveau 0000:61:00.0: DRM: Pointer to TMDS table invalid
[   23.463029] nouveau 0000:61:00.0: DRM: Pointer to flat panel table invalid
[   24.037598] nouveau 0000:62:00.0: priv: HUB0: 10ecc0 ffffffff (1d40822c)
[   24.101383] nouveau 0000:62:00.0: DRM: Pointer to TMDS table invalid
[   24.101400] nouveau 0000:62:00.0: DRM: Pointer to flat panel table invalid
[   24.676850] nouveau 0000:63:00.0: priv: HUB0: 10ecc0 ffffffff (1c40822c)
[   24.740881] nouveau 0000:63:00.0: DRM: Pointer to TMDS table invalid
[   24.740897] nouveau 0000:63:00.0: DRM: Pointer to flat panel table invalid
[  OK  ] Created slice system-driver\x2dupdates.slice.
         Starting Driver Update Disk UI on tty1...
[  OK  ] Started Show Plymouth Boot Screen.
[  OK  ] Reached target Paths.
[  OK  ] Reached target Basic System.
[  OK  ] Started Device-Mapper Multipath Device Controller.
         Starting Open-iSCSI...
[  OK  ] Started Open-iSCSI.
         Starting dracut initqueue hook...
[  OK  ] Created slice system-driver\x2dupdates.slice.
         Starting Driver Update Disk UI on tty1...
DD: starting interactive mode

(Page 1 of 1) Driver disk device selection
    /DEVICE  TYPE      LABEL              UUID
 1) sda1     vfat      ESXi               591C-E3E2
 2) sda2     vfat                         4C6C-A2D4
 3) sda3     VMFS_vol                     5aa6e18d-304835ba-1711-4c776d996e2e
 4) sda5     vfat                         4C6C-A2CA
 5) sda6     vfat                         4C6C-A2CD
 6) sda8     vfat                         4C6C-A2C8
 7) sr0      iso9660   RHEL-7.3\x20x86_64 2016-10-19-17-41-40-00
# to select, 'r'-refresh, or 'c'-continue: r

(Page 1 of 1) Driver disk device selection
    /DEVICE  TYPE      LABEL              UUID
 1) sda1     vfat      ESXi               591C-E3E2
 2) sda2     vfat                         4C6C-A2D4
 3) sda3     VMFS_vol                     5aa6e18d-304835ba-1711-4c776d996e2e
 4) sda5     vfat                         4C6C-A2CA
 5) sda6     vfat                         4C6C-A2CD
 6) sda8     vfat                         4C6C-A2C8
 7) sr0      iso9660   CDROM              2017-05-26-05-44-09-00
# to select, 'r'-refresh, or 'c'-continue: 7
DD: Examining /dev/sr0
mount: /dev/sr0 is write-protected, mounting read-only

(Page 1 of 1) Select drivers to install
 1) [ ] /media/DD-1/rpms/x86_64/kmod-mpt3sas-23.00.00.00_el7.3-1.x86_64.rpm
# to toggle selection, or 'c'-continue: _
```

Étape 11. Entrez « 1 », puis « c » pour continuer :

```
[   24.101400] nouveau 0000:62:00.0: DRM: Pointer to flat panel table invalid
[   24.676850] nouveau 0000:63:00.0: priv: HUB0: 10ecc0 ffffffff (1c40822c)
[   24.740881] nouveau 0000:63:00.0: DRM: Pointer to TMDS table invalid
[   24.740897] nouveau 0000:63:00.0: DRM: Pointer to flat panel table invalid
[  OK  ] Created slice system-driver\x2dupdates.slice.
         Starting Driver Update Disk UI on tty1...
[  OK  ] Started Show Plymouth Boot Screen.
[  OK  ] Reached target Paths.
[  OK  ] Reached target Basic System.
[  OK  ] Started Device-Mapper Multipath Device Controller.
         Starting Open-iSCSI...
[  OK  ] Started Open-iSCSI.
         Starting dracut initqueue hook...
[  OK  ] Created slice system-driver\x2dupdates.slice.
         Starting Driver Update Disk UI on tty1...
DD: starting interactive mode

(Page 1 of 1) Driver disk device selection
     /DEVICE   TYPE      LABEL              UUID
  1) sda1      vfat      ESXi               591C-E3E2
  2) sda2      vfat                         4C6C-A2D4
  3) sda3      VMFS_vol                     5aa6e18d-304835ba-1711-4c776d996e2e
  4) sda5      vfat                         4C6C-A2CA
  5) sda6      vfat                         4C6C-A2CD
  6) sda8      vfat                         4C6C-A2C8
  7) sr0       iso9660   RHEL-7.3\x20x86_64 2016-10-19-17-41-40-00
# to select, 'r'-refresh, or 'c'-continue: r

(Page 1 of 1) Driver disk device selection
     /DEVICE   TYPE      LABEL              UUID
  1) sda1      vfat      ESXi               591C-E3E2
  2) sda2      vfat                         4C6C-A2D4
  3) sda3      VMFS_vol                     5aa6e18d-304835ba-1711-4c776d996e2e
  4) sda5      vfat                         4C6C-A2CA
  5) sda6      vfat                         4C6C-A2CD
  6) sda8      vfat                         4C6C-A2C8
  7) sr0       iso9660   CDROM              2017-05-26-05-44-09-00
# to select, 'r'-refresh, or 'c'-continue: 7
DD: Examining /dev/sr0
mount: /dev/sr0 is write-protected, mounting read-only

(Page 1 of 1) Select drivers to install
  1) [ ] /media/DD-1/rpms/x86_64/kmod-mpt3sas-23.00.00.00_el7.3-1.x86_64.rpm
# to toggle selection, or 'c'-continue: 1

(Page 1 of 1) Select drivers to install
  1) [x] /media/DD-1/rpms/x86_64/kmod-mpt3sas-23.00.00.00_el7.3-1.x86_64.rpm
# to toggle selection, or 'c'-continue:
```

Étape 12. Le pilote .rpm se trouve dans le fichier .iso. Il se peut que vous receviez un avertissement indiquant que " contenu DD repo n'est pas un " de fichier, mais qu'il s'agit seulement d'un avertissement - le pilote aurait été installé.

Étape 13. Vous devez revenir au menu " de sélection du périphérique de disque " Driver. Démappez l'ISO du pilote et mappez à nouveau votre ISO RHEL. Appuyez sur r pour actualiser, puis sur c pour continuer l'installation RHEL. Le programme d'installation doit être capable de reconnaître le contrôleur RAID et les disques gérés par celui-ci.

Create Image

✓ Activate Virtual Devices

✓ rhel-server-7.3-x86_64-boot.iso Mapped to CD/DVD
Map Removable Disk ...
Map Floppy ...

```
  3) sda3      VMFS_vol
  4) sda5      vfat
  5) sda6      vfat
  6) sda8      vfat
  7) sr0       iso9660   RHEL-7.3\x20x86_64
# to select, 'r'-refresh, or 'c'-continu

(Page 1 of 1) Driver disk device selection
   /DEVICE   TYPE     LABEL          UUID
 1) sda1     vfat     ESXi           591C-E3E2
 2) sda2     vfat                    4C6C-AZD4
 3) sda3     VMFS_vol                5aa6e18d-304835ba-1711-4c776d996e2e
 4) sda5     vfat                    4C6C-AZCA
 5) sda6     vfat                    4C6C-AZCD
 6) sda8     vfat                    4C6C-AZC8
 7) sr0      iso9660  CDROM          2017-05-26-05-44-09-00
# to select, 'r'-refresh, or 'c'-continue: 7
DD: Examining /dev/sr0
mount: /dev/sr0 is write-protected, mounting read-only

(Page 1 of 1) Select drivers to install
 1) [ ] /media/DD-1/rpms/x86_64/kmod-mpt3sas-23.00.00.00_el7.3-1.x86_64.rpm
# to toggle selection, or 'c'-continue: 1

(Page 1 of 1) Select drivers to install
 1) [x] /media/DD-1/rpms/x86_64/kmod-mpt3sas-23.00.00.00_el7.3-1.x86_64.rpm
# to toggle selection, or 'c'-continue: 1

(Page 1 of 1) Select drivers to install
 1) [ ] /media/DD-1/rpms/x86_64/kmod-mpt3sas-23.00.00.00_el7.3-1.x86_64.rpm
# to toggle selection, or 'c'-continue: 1

(Page 1 of 1) Select drivers to install
 1) [x] /media/DD-1/rpms/x86_64/kmod-mpt3sas-23.00.00.00_el7.3-1.x86_64.rpm
# to toggle selection, or 'c'-continue: c
DD: Extracting: kmod-mpt3sas
DD: WARNING: DD repo content not a file: /media/DD-1/rpms/x86_64/repodata

(Page 1 of 1) Driver disk device selection
   /DEVICE   TYPE     LABEL          UUID
 1) sda1     vfat     ESXi           591C-E3E2
 2) sda2     vfat                    4C6C-AZD4
 3) sda3     VMFS_vol                5aa6e18d-304835ba-1711-4c776d996e2e
 4) sda5     vfat                    4C6C-AZCA
 5) sda6     vfat                    4C6C-AZCD
 6) sda8     vfat                    4C6C-AZC8
 7) sr0      iso9660  CDROM          2017-05-26-05-44-09-00
# to select, 'r'-refresh, or 'c'-continue:
```
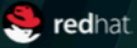
INSTALLATION SUMMARY

RED HAT ENTERPRISE LINUX 7.3 INSTALLATION

⌨ us

Help!

LOCALIZATION

🕐 **DATE & TIME**
Americas/New York timezone

⌨ **KEYBOARD**
English (US)

á **LANGUAGE SUPPORT**
English (United States)

SOFTWARE

◎⚠ **INSTALLATION SOURCE**
Setting up installation source...

⚠ **SOFTWARE SELECTION**
Installation source not set up

SYSTEM

🖴⚠ **INSTALLATION DESTINATION**
No disks selected

🔍 **KDUMP**
Kdump is enabled

↔ **NETWORK & HOST NAME**
Not connected

🔒 **SECURITY POLICY**
Not ready

Quit

Begin Installation

We won't touch your disks until you click 'Begin Installation'.

⚠ Please complete items marked with this icon before continuing to the next step.

Done

⌨ us

Help!

Device Selection

Select the device(s) you'd like to install to. They will be left untouched until you click on the main menu's "Begin Installation" button.

Local Standard Disks

223.57 GiB

ATA Mircon_5100_MTFD
sda / 79 KiB free

5589.03 GiB

TOSHIBA MG04SCA60EA
sdf / 5589.03 GiB free

5589.03 GiB

TOSHIBA MG04SCA60EA
sdg / 5589.03 GiB free

5589.03 GiB

TOSHIBA MG04SCA60EA
sdh / 5589.03 GiB free

TO
s

Specialized & Network Disks

🖵
Add a disk...

Other Storage Options

Partitioning

⦿ Automatically configure partitioning. ○ I will configure partitioning.

☐ I would like to make additional space available.

Encryption

☐ Encrypt my data. *You'll set a passphrase next.*

O disks selected; O B capacity; O B free <u>Refresh...</u>

⚠ No disks selected; please select at least one disk to install to.