

RHEL | Mounting ISO and Setting as Local Repo

Prerequisite

1. A Free RedHat Account
2. Official Redhat Linux ISO

No Redhat license is required.

Step 1: Identify the Red Hat OS version

Run the following command in the terminal:

```
cat /etc/os-release
```

Look for the line `VERSION="8.7 (Ootpa)"` in the output. This will show the version number.

```
[user@lab-rhel8 ~]$ cat /etc/os-release
NAME="Red Hat Enterprise Linux"
VERSION="8.7 (Ootpa)"
ID="rhel"
ID_LIKE="fedora"
VERSION_ID="8.7"
PLATFORM_ID="platform:el8"
PRETTY_NAME="Red Hat Enterprise Linux 8.7 (Ootpa)"
ANSI_COLOR="0;31"
CPE_NAME="cpe:/o:redhat:enterprise_linux:8::baseos"
HOME_URL="https://www.redhat.com/"
DOCUMENTATION_URL="https://access.redhat.com/documentation/red_hat_enterprise_linux/8/"
BUG_REPORT_URL="https://bugzilla.redhat.com/"
```

Step 2: Download the RHEL ISO of the correct version

If you do not have an account, you must register a free account before downloading. Download the RHEL ISO of your version from the [official RHEL download website](#).

Step 3: Mount the ISO from your Hypervisor

From your Hyper-V manager, add the ISO to the DVD drive device of the Virtual Machine.

Step 4: Identify the DVD Drive inside Red Hat Linux

Run the following to identify the correct device name of the DVD drive: `lsblk`

Look for the label `rom` in the `TYPE` column. For below example, it is `sr0`. This means that DVD drive is located at `/dev/sr0`. **Take note of this device.**

```
[user@lab-rhel8 ~]$ lsblk
```

NAME	MAJ:MIN	RM	SIZE	RO	TYPE	MOUNTPOINT
sda	8:0	0	100G	0	disk	
└─sda1	8:1	0	2G	0	part	/boot
└─sda2	8:2	0	97G	0	part	
└─rhel-tmp	253:0	0	5G	0	lvm	/tmp
└─rhel-var_log	253:1	0	20G	0	lvm	/var/log
└─rhel-var	253:2	0	10G	0	lvm	/var
└─rhel-swap	253:3	0	12G	0	lvm	[SWAP]
└─rhel-home	253:4	0	10G	0	lvm	/home
└─rhel-root	253:5	0	30G	0	lvm	/
└─rhel-var_log_audit	253:6	0	5G	0	lvm	/var/log/audit
└─rhel-var_tmp	253:7	0	5G	0	lvm	/var/tmp
sdb	8:16	0	300G	0	disk	
└─sdb1	8:17	0	300G	0	part	/appdata

Step 5: Create a Mountpoint and mount the DVD Drive locally

For this guide, the mountpoint used will be in `/mnt/disc`.

Run the following command `file /mnt/disc` to create a mountpoint, if it does not exist yet.

Output will show `No such file or directory` if it does not exist.

```
[user@lab-rhel8 ~]$ file /mnt/disc
/mnt/disc: cannot open `/mnt/disc' (No such file or directory)
```

Create the mountpoint `/mnt/disc` directory with `sudo mkdir /mnt/disc`.

```
[user@lab-rhel8 ~]$ sudo mkdir /mnt/disc
[user@lab-rhel8 ~]$ file /mnt/disc
/mnt/disc: directory
```

Next, mount the DVD drive (`/dev/sr0`) to the mountpoint (`/mnt/disc`) with the command `mount -o loop RHEL7.9.iso /mnt/disc`.

```
[user@lab-rhel8 ~]$ sudo mount -o loop /dev/sr0 /mnt/disc
```

With the DVD drive mounted, you can now list the content inside the disc with `ls -al /mnt/disc`.

```
[user@lab-rhel8 ~]$ ls -al /mnt/disc
total 53
dr-xr-xr-x. 7 root root 2048 Apr  4 2019 .
drwxr-xr-x. 3 root root  18 May 12 14:51 ..
dr-xr-xr-x. 4 root root 2048 Apr  4 2019 AppStream
dr-xr-xr-x. 4 root root 2048 Apr  4 2019 BaseOS
-r--r--r--. 1 root root  60 Apr  4 2019 .discinfo
dr-xr-xr-x. 3 root root 2048 Apr  4 2019 EFI
-r--r--r--. 1 root root 8266 Mar  1 2019 EULA
-r--r--r--. 1 root root 1455 Apr  4 2019 extra_files.json
-r--r--r--. 1 root root 18092 Mar  1 2019 GPL
dr-xr-xr-x. 3 root root 2048 Apr  4 2019 images
```

```
dr-xr-xr-x. 2 root root 2048 Apr 4 2019 isolinux
-r--r--r--. 1 root root 103 Apr 4 2019 media.repo
-r--r--r--. 1 root root 1669 Mar 1 2019 RPM-GPG-KEY-redhat-beta
-r--r--r--. 1 root root 5134 Mar 1 2019 RPM-GPG-KEY-redhat-release
-r--r--r--. 1 root root 1796 Apr 4 2019 TRANS.TBL
-r--r--r--. 1 root root 1566 Apr 4 2019 .treeinfo
```

Step 6: Copying the media.repo file

Copy the media.repo file from the root of the mounted directory to /etc/yum.repos.d/ and set the permissions to 644.

```
[user@lab-rhel8 ~]$ sudo cp /mnt/disc/media.repo /etc/yum.repos.d/rhel8dvd.repo
[user@lab-rhel8 ~]$ sudo chmod 644 /etc/yum.repos.d/rhel8dvd.repo
```

Step 7: Editing the rhel8dvd.repo

Edit the new repo file:

```
[user@lab-rhel8 ~]$ sudo vi /etc/yum.repos.d/rhel8dvd.repo
```

Copy the following into the file:

```
[InstallMedia-BaseOS]
name=Red Hat Enterprise Linux DVD BaseOS
mediaid=None
metadata_expire=-1
gpgcheck=1
cost=500
enabled=1
baseurl=file:///mnt/disc/BaseOS
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-redhat-release

[InstallMedia-AppStream]
name=Red Hat Enterprise Linux DVD AppStream
mediaid=None
metadata_expire=-1
```

```
gpgcheck=1
cost=500
enabled=1
baseurl=file:///mnt/disc/AppStream
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-redhat-release
```

Disable the any repo files that is not in use. Look for the line `enabled = 1` and make sure that all are set to `enabled = 0` in the other repo files.

```
[user@lab-rhel8 ~]$ cd /etc/yum.repos.d/
[user@lab-rhel8 yum.repos.d]$ sudo vi redhat.repo
```

Step 8: Clear the yum cache

Clear the cache and check whether you can get the packages list from the DVD repo

```
[user@lab-rhel8 ~]$ sudo yum clean all
[user@lab-rhel8 ~]$ sudo yum repolist enabled
Updating Subscription Management repositories.
repo id                      repo name
InstallMedia-BaseOS          Red Hat Enterprise Linux 8.7.0 BaseOS
InstallMedia-AppStream        Red Hat Enterprise Linux 8.7.0 AppStream
```

Now, you can install any packages with `yum install <packagename>` or update installed packages with `yum update`.

Disabling the Local Repo and Unmounting the DVD

This step is to be done before unmounting the DVD. To disable the local repo, simply delete the local repo file.

```
[user@lab-rhel8 ~]$ cd /etc/yum.repos.d
[user@lab-rhel8 yum.repos.d]$ sudo rm rhel8dvd.repo
```

Unmount the DVD Drive from the mountpoint

```
[user@lab-rhel8 yum.repos.d]$ sudo umount /mnt/disc
```

Links

- [Official RHEL Download Website](#)
- [Need to set up yum repository for locally-mounted DVD on Red Hat Enterprise Linux 7 - Red Hat Customer Portal](#)

Revision #4

Created 1 January 2024 04:47:36 by aki

Updated 4 January 2024 15:54:58 by aki