


# How to Install PowerShell 7 on Red Hat Enterprise Linux (RHEL)

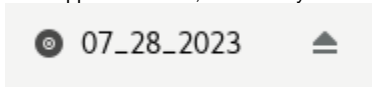
## Red Hat Enterprise Linux Prerequisites

This guide assumes you have already installed Red Hat Enterprise Linux (RHEL) on the target device, and that you are currently signed into an account with "sudo" privileges.

- Make sure you have a method of **Burning Files** to an .ISO File, on your **Primary Machine (NOT YOUR TARGET MACHINE)**.
- Make sure your RHEL user account is a member of the "**sudoers**" group, or that you have access to an account which is already a member of the "**sudoers**" group.
  - This means that the account you are utilizing can execute "**sudo**" commands.

## How to Install PowerShell 7 on Red Hat Enterprise Linux

1. **The Latest Version of PowerShell 7** can be downloaded here: [PowerShell 7 Releases - PowerShell/PowerShell - GitHub](#)
  - a. Click on the "Latest" release of PowerShell (Example: "**v7.3.9 Release of PowerShell**").
  - b. To download it, scroll-down until you reach the "Assets" section, and click on **powershell-7.3.9-linux-x64.tar.gz** (or the latest version supported for your RHEL installation).
2. Once you have downloaded the latest release of **PowerShell 7**, you need to **burn** the "powershell-7.3.9-linux-x64.tar.gz" (or the latest version supported for your RHEL installation), **to an .ISO file**.
  - a. If you are using **AnyBurn**, you would choose the option "**Create image file from files/folders**".
  - b. Click "**Add +**", navigate to where you downloaded the "powershell-7.3.9-linux-x64.tar.gz" file, click on the file, and click "**Add**".
  - c. Click "**Next >**", click the folder icon on the top-right, navigate to where you want to save the .ISO file to, type "**powershell-7.3.9-linux-x64.tar.gz.iso**" for the "**File name:**", and click "**Save**".
  - d. Click "**Create Now**", when it has finished creating the .ISO file it will say, "**Creating image file finished successfully.**" in the "**Message**" section, once you get this message, click "**Exit**".
  - e. Now that the .ISO file has been created, navigate to where you saved the .ISO file to.
    - i. **Standalone Red Hat Enterprise Linux:** Copy the "**powershell-7.3.9-linux-x64.tar.gz.iso**" to an external drive, and insert the external drive into the RHEL machine.
    - ii. **Red Hat Enterprise Linux VM:** Mount the "**powershell-7.3.9-linux-x64.tar.gz.iso**" in the VM Manager for your Virtual Machine.
      1. **VMWare:** Click on your Red Hat Enterprise Linux Virtual Machine, and click on "**Edit virtual machine settings**".
        - a. Click on "**Add...**", click on "**CD/DVD Drive**", and click "**Finish**".
        - b. Click on "**New CD/DVD (SATA)**", click on "**Use ISO image file:**", and click "**Browse...**".
        - c. Navigate to where you stored your "**powershell-7.3.9-linux-x64.tar.gz.iso**" file, and click on it.
        - d. Click "**Open**", check the box that says "**Connected**", and then click "**OK**".
      2. **VirtualBox:** Click on your Red Hat Enterprise Linux Virtual Machine, and click on "**Settings**".
        - a. Click on "**Storage**", click on "**Controller: IDE**", click on , click "**Optical Drive**", and click on "**Add**".
        - b. Navigate to where you stored your "**powershell-7.3.9-linux-x64.tar.gz.iso**" file, click on it, and click "**Open**".
        - c. Click the box that says "**Choose**" at the bottom right-hand corner, and then click "**OK**".
3. Open the "**Files**" application, and make sure that the "**powershell-7.3.9-linux-x64.tar.gz.iso**" file shows up in the File System.
  - a. It will appear as a CD, followed by the date you created the .ISO file, on the left side.



- b. Once you have verified that it is there, open the "**Terminal**" application, type the command "**lsblk**", and press "**Enter**".
  - a. Look for the "**MOUNTPOINT**" associated with the CD Drive that the file is attached to (The "**SIZE**" should be about "**68.4M**", if the "**power shell-7.3.9-linux-x64.tar.gz**" is the only file on there).

```
[sandbox@localhost ~]$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sr0          11:0    1  1024M  0 rom
sr1          11:1    1    68K  0 rom /run/media/sandbox/07_21_2023
sr2          11:2    1    64K  0 rom /share/repo/yum.repos.d
sr3          11:3    1   89.1G  0 rom /share/repo/Media
sr4          11:4    1   23.1G  0 rom /share/repo/Linux
sr5          11:5    1  151.6M  0 rom /run/media/sandbox/07_28_2023
sr6          11:6    1   68.4M  0 rom /run/media/sandbox/07_28_20231
nvme0n1     259:0    0   150G  0 disk
├─nvme0n1p1 259:1    0   300M  0 part /boot
├─nvme0n1p2 259:2    0    7.9G  0 part [SWAP]
└─nvme0n1p3 259:3    0  141.9G  0 part /
```

- b. Example: My "**powershell-7.3.9-linux-x64.tar.gz.iso**" file would be located in "**/run/media/sandbox/07\_28\_20231**", since I created the .ISO file on this date, and the file size is about "**68.4M**".
5. If you are logged into an account that does not have "**sudo**" permissions: Open the **Terminal**, type in the command, "**su [account name with sudo permissions]**", press "**Enter**", input the password for that account, and then press "**Enter**".
    - a. **WARNING: BE CAREFUL OF WHAT YOU CHANGE/DO WHILST UTILIZING AN ACCOUNT WITH SUDO PERMISSIONS.**

- b. Example: My account with "sudo" permissions would be "sandbox", so I would Input the command, "su sandbox"
6. Now that we are currently utilizing the an Administrator user account, we can create the directory for PowerShell 7.
  - a. Type in the command "mkdir /home/[username]/Desktop/PowerShell\_7", and press "Enter"
  - b. Example: My username is "sandbox", so I would type in the command "mkdir /home/sandbox/Desktop/PowerShell\_7".
7. Type in the command "cd /home/[username]/Desktop", and press "Enter"
  - a. Type in the command "ls -al", press "Enter", and verify that the "/PowerShell\_7" directory was created successfully.
8. Type in the command "sudo cp ["MOUNTPOINT" of "powershell-7.3.9-linux-x64.tar.gz.iso"] /home/[username]/Desktop/PowerShell\_7 -r", and press "Enter"
  - a. Example: My "powershell-7.3.9-linux-x64.tar.gz.iso" was mounted to "/run/media/sandbox/07\_28\_20231".
  - b. So the command I would input is: "sudo cp /run/media/sandbox/07\_28\_20231 /home/sandbox/Desktop/PowerShell\_7 -r"
9. Type in the command "cd /home/[username]/Desktop/PowerShell\_7", and press "Enter"
  - a. Example: "cd /home/sandbox/Desktop/PowerShell\_7"
10. Type in the command "ls -al", press "Enter", and verify that the "[date that you created the .ISO]" file was copied successfully.
11. Type in the command "sudo chmod 755 -R [the date you created the .ISO]", press "Enter"
  - a. Example: "sudo chmod 755 -R 07\_28\_20231"
12. Type in the command "ls -al", press "Enter", and verify that the folder, with the name of the date that you created the .ISO, has the permissions "d rwxr-xr-x".
13. Type in the command "cd /home/[username]/Desktop/PowerShell\_7/[the date you created the .ISO]", and press "Enter"
  - a. Example: "cd /home/sandbox/Desktop/PowerShell\_7/07\_28\_20231"
14. Type in the command "ls -al", press "Enter", and verify that the "powershell-7.3.9-linux-x64.tar.gz" (or your corresponding PowerShell 7 version) file has the permissions "-rwxr-xr-x."
15. A screenshot of these file permissions, is attached below.

```
[root@localhost 07_28_20231]# ls -al
total 69948
drwxr-xr-x. 2 root root      47 Jul 28 16:40 .
drwxr-xr-x. 3 root root      25 Jul 28 16:40 ..
-rwxr-xr-x. 1 root root 71623311 Jul 28 16:40 powershell-7.3.4-linux-x64.tar.gz
[root@localhost 07_28_20231]#
```

- a.
16. Type in the command "sudo tar -xvzf powershell-7.3.9-linux-x64.tar.gz", and press "Enter"
  - a. This will extract all of the PowerShell 7.3.9 files to this directory.
17. Now type in the command, "sudo ./pwsh", and you should be good to go!
18. **IMPORTANT: If you switched into an account that has "sudo" permissions: SWITCH BACK TO YOUR NORMAL USER ACCOUNT** - Type in the command, "su [your user account]", and press "Enter".
  - a. **Ex:** My normal/personal user account is called "sandbox", so I would input the command, "su sandbox"
19. You have successfully installed PowerShell 7 on Red Hat Enterprise Linux!
  - a. This will allow you to be able to do things, such as utilizing Evaluate-STIG Answer Files on Red Hat Enterprise Linux now!