

How to Install STIG Viewer 2.17 on Red Hat Enterprise Linux (RHEL)


Red Hat Enterprise Linux Prerequisites

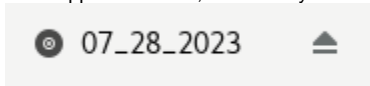
This guide assumes you have already installed Red Hat Enterprise Linux (RHEL) on the target device, and that you are currently signed into an account with "sudo" privileges.

- Make sure you have a Method of **Burning Files** to a .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 a member of the "**sudoers**" Group.
 - This means that the account you are utilizing can execute "**sudo**" Commands.

How to Install STIG Viewer 2.17 on Red Hat Enterprise Linux

This guide assumes you have already completed the "**Red Hat Enterprise Linux Prerequisites**" Portion of the Guide, and that you are currently signed into an account with "sudo" privileges.

1. **STIG Viewer 2.17** (or the Latest Release of STIG Viewer) can be found here: <https://public.cyber.mil/stigs/downloads/>
 - a. To Download it, in the "**Search:**" Box Type "**STIG Viewer**", and Click on "**STIG Viewer 2.17-Linux**" (or the Latest Release of STIG Viewer).
2. Once you have Downloaded the Latest Release of **STIG Viewer**, you need to extract the "**U_STIGViewer_2-17_Linux.zip**" File, to a Folder called, "**U_STIGViewer_2-17_Linux**".
3. Once you have Extracted the **STIG Viewer** Files to a Folder, you need to Burn the "**U_STIGViewer_2-17_Linux**" (or the Latest Release of STIG Viewer), 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 Created the "**U_STIGViewer_2-17_Linux**" Folder, Click on the Folder, and Click "**Add**".
 - c. Click "**Next >**", Click the Folder Icon at the Top Right, Navigate to where you want to Save the .ISO File to, Type "**U_STIGViewer_2-17_Linux.iso**" for the "**File name:**", and Click "**Save**".
 - d. Click "**Create Now**", and when it has Finished Creating the .ISO File it will say, "**Creating image file finished successfully.**" in the "**Message**" Section.
 - e. Now that the .ISO File has been Created, Navigate to where you Saved the .ISO File to.
 - i. **If it is a Standalone Red Hat Enterprise Linux:** Copy the "**U_STIGViewer_2-17_Linux.iso**" to an External Drive, and Insert the External Drive into the RHEL Machine.
 - ii. **If it is a Red Hat Enterprise Linux VM:** Mount the "**U_STIGViewer_2-17_Linux.iso**" in the VM Manager to your Virtual Machine.
 1. **For 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 "**U_STIGViewer_2-17_Linux.iso**" File, and Click on it, and Click "**Open**".
 - d. Check the Box that says "**Connected**", and then Click "**OK**".
 2. **For 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 "**U_STIGViewer_2-17_Linux.iso**" File, and Click on it, and Click "**Open**".
 - c. Check the Box that says "**Choose**" at the Bottom Right-Hand Corner, and then Click "**OK**".
4. Open the "**Files**" Application, and make sure that the "**U_STIGViewer_2-17_Linux.iso**" Folder 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.
5. 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 "**151.6M**", if the "**U_STIGViewer_2-17_Linux**" is the only Folder on there).

```
[sandbox@localhost Desktop]$ 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
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.
- c. **Ex:** My "**U_STIGViewer_2-17_Linux.iso**" File would be Located in "**/run/media/sandbox/07_28_2023**", since I created the .ISO File on this date, and the File Size is about "**151.6M**"

6. Now we can Create the Directory for STIG Viewer.
 - a. Type in the Command "**mkdir /home/[username]/Desktop/STIG_Viewer**", and Press "**Enter**"
 - i. Ex: My Username is "**sandbox**", so I would type in the command "**mkdir /home/sandbox/Desktop/STIG_Viewer**".
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 "**/STIG_Viewer**" Directory was Created Successfully.
8. Type in the Command "**sudo cp ["MOUNTPOINT" of "U_STIGViewer_2-17_Linux.iso"] /home/[username]/Desktop/STIG_Viewer -r**", and Press "**Enter**"
 - a. Ex: My "**U_STIGViewer_2-17_Linux.iso**" was mounted to "**/run/media/sandbox/07_28_2023**".
 - i. So the Command I would Input is: "**sudo cp /run/media/sandbox/07_28_2023 /home/sandbox/Desktop/STIG_Viewer -r**"
9. Type in the Command "**cd /home/[username]/Desktop/STIG_Viewer/[the date you created the .ISO]**", and Press "**Enter**"
 - a. Ex: "**cd /home/sandbox/Desktop/STIG_Viewer/07_28_2023**"
 - b. Type in the Command "**ls -al**", Press "**Enter**", and Verify that the "**U_STIGViewer_2-17_Linux**" (or your Corresponding STIG Viewer Folder) was Copied Successfully.
10. Type in the Command "**cd /home/[username]/Desktop/STIG_Viewer**", and Press "**Enter**"
 - a. Ex: "**cd /home/sandbox/Desktop/STIG_Viewer**"
11. Type in the Command "**sudo chmod 755 -R [the date you created the .ISO]**", Press "**Enter**"
 - a. Ex: "**sudo chmod 755 -R 07_28_2023**"
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 "**drwxr-xr-x**".
13. Type in the Command "**cd /home/[username]/Desktop/STIG_Viewer/[the date you created the .ISO]/U_STIGViewer_2-17_Linux**", and Press "**Enter**"
 - a. Ex: "**cd /home/sandbox/Desktop/STIG_Viewer/07_28_2023/U_STIGViewer_2-17_Linux**"
14. Type in the Command "**ls -al**", Press "**Enter**", and Verify that the Files have the Permissions "**drwxr-xr-x**".
 - a. The "**release**" and "**STIGViewer**" Files will have the Permissions, "**-rwxr-xr-x**".
15. A Screenshot of these File-Permissions, is attached below

```
[redacted]@localhost U_STIGViewer_2-17_Linux]# ls -al
total 16
drwxr-xr-x. 7 sandbox sandbox 101 Jul 28 15:21 .
drwxr-xr-x. 3 sandbox sandbox 37 Jul 28 15:21 ..
drwxr-xr-x. 2 sandbox sandbox 33 Jul 28 15:21 bin
drwxr-xr-x. 4 sandbox sandbox 105 Jul 28 15:21 conf
drwxr-xr-x. 17 sandbox sandbox 4096 Jul 28 15:21 legal
drwxr-xr-x. 4 sandbox sandbox 4096 Jul 28 15:21 lib
-rwxr-xr-x. 1 sandbox sandbox 255 Jul 28 15:21 release
-rwxr-xr-x. 1 sandbox sandbox 129 Jul 28 15:21 STIGViewer
drwxr-xr-x. 2 sandbox sandbox 46 Jul 28 15:21 SWIDTAG


[redacted]@localhost U_STIGViewer_2-17_Linux]#
```

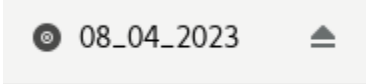
16. Now Type in the Command, "**sudo ./STIGViewer**", Press "**Enter**", and you should be good to go!
17. You have Successfully Installed STIG Viewer 2.17 on Red Hat Enterprise Linux!
18. **Note:** None of the .CKL "Checklist" Files will come along with STIG Viewer. If you want to add .CKL, "Checklist" Files, you can check out the "**How to Install the STIG Checklist Library on Red Hat Enterprise Linux**" Portion of the Guide.

How to Install the STIG Checklist Library on Red Hat Enterprise Linux

This guide assumes you have already completed the "**Red Hat Enterprise Linux Prerequisites**" and "**How to Install STIG Viewer 2.17 on Red Hat Enterprise Linux**" Portions of the Guide, and that you are currently signed into an account with "**sudo**" privileges.

1. The STIG Checklist Library, "**Compilation - SRG-STIG Library**" can be found here: <https://public.cyber.mil/stigs/compilations/>
 - a. To Download it, Click on "**Compilation - SRG-STIG Library**".
2. Once you have Downloaded the Latest Release of the STIG Checklist Library, you need to extract the "**U_SRG-STIG_Library_2023_07v1.zip**" File, to a Folder called, "**U_SRG-STIG_Library_2023_07v1**".
3. Once you have Extracted the **STIG Viewer** Files to a Folder, you need to Burn the "**U_SRG-STIG_Library_2023_07v1**" (or the Latest Release of the STIG Checklist Library), 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 Created the "**U_SRG-STIG_Library_2023_07v1**" Folder, Click on the Folder, and Click "**Add**".
 - c. Click "**Next >**", Click the Folder Icon at the Top Right, Navigate to where you want to Save the .ISO File to, Type "**U_SRG-STIG_Library_2023_07v1.iso**" for the "**File name:**", and Click "**Save**".
 - d. Click "**Create Now**", and when it has Finished Creating the .ISO File it will say, "**Creating image file finished successfully.**" in the "**Message**" Section.
 - e. Now that the .ISO File has been Created, Navigate to where you Saved the .ISO File to.
 - i. If it is a **Standalone Red Hat Enterprise Linux**: Copy the "**U_SRG-STIG_Library_2023_07v1.iso**" to an External Drive, and Insert the External Drive into the RHEL Machine.
 - ii. If it is a **Red Hat Enterprise Linux VM**: Mount the "**U_SRG-STIG_Library_2023_07v1.iso**" in the VM Manager to your Virtual Machine.
 1. For **VMWare**: Right-Click on your Red Hat Enterprise Linux Virtual Machine, and Click on "**Settings...**" or "**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 "**U_SRG-STIG_Library_2023_07v1.iso**" File, and Click on it, and Click "**Open**".
 - d. Check the Box that says "**Connected**", and then Click "**OK**".
 2. For **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 **"U_SRG-STIG_Library_2023_07v1.iso"** File, and Click on it, and Click **"Open"**.
 - c. Click the Box that says **"Choose"** at the Bottom Right-Hand Corner, and then Click **"OK"**.
4. Open the **"Files"** Application, and make sure that the **"U_SRG-STIG_Library_2023_07v1.iso"** Folder 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.
5. 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 **"300.7M"**, if the **"U_SRG-STIG_Library_2023_07v1"** is the only Folder 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
sr4          11:4    1  23.1G  0 rom
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
sr7          11:7    1  224K  0 rom /run/media/sandbox/08_02_2023
sr8          11:8    1   70K  0 rom /run/media/sandbox/08_02_20231
sr9          11:9    1 300.7M  0 rom /run/media/sandbox/08_04_2023
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.
 - c. **Ex:** My **"U_SRG-STIG_Library_2023_07v1.iso"** File would be Located in **"/run/media/sandbox/08_04_2023"**, since I created the .ISO File on this date, and the File Size is about **"300.7M"**
6. Now we can Create the Directory for the STIG Checklist Library.
 - a. Type in the Command **"mkdir /home/[username]/Desktop/STIG_Checklist_Library"**, and Press **"Enter"**
 - b. **Ex:** My Username is **"sandbox"**, so I would type in the command **"mkdir /home/sandbox/Desktop/STIG_Checklist_Library"**.
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 **"/STIG_Checklist_Library"** Directory was Created Successfully.
8. Type in the Command **"sudo cp ["MOUNTPOINT" of "U_SRG-STIG_Library_2023_07v1.iso"] /home/[username]/Desktop/STIG_Checklist_Library -r"**, and Press **"Enter"**
 - a. **Ex:** My **"U_SRG-STIG_Library_2023_07v1.iso"** was mounted to **"/run/media/sandbox/07_28_2023"**.
 - b. So the Command I would Input is: **"sudo cp /run/media/sandbox/07_28_2023 /home/sandbox/Desktop/STIG_Checklist_Library -r"**
9. Type in the Command **"cd /home/[username]/Desktop/STIG_Checklist_Library"**, and Press **"Enter"**
 - a. **Ex:** **"cd /home/sandbox/Desktop/STIG_Checklist_Library"**
10. Type in the Command **"sudo chmod 755 -R [the date you created the .ISO]"**, Press **"Enter"**
 - a. **Ex:** **"sudo chmod 755 -R 07_28_2023"**
11. 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 **"drwxr-xr-x"**.
12. Type in the Command **"cd /home/[username]/Desktop/STIG_Checklist_Library/[the date you created the .ISO]/U_SRG-STIG_Library_2023_07v1"**, and Press **"Enter"**
 - a. **Ex:** **"cd /home/sandbox/Desktop/STIG_Viewer/07_28_2023/U_SRG-STIG_Library_2023_07v1"**
13. Type in the Command **"ls -al"**, Press **"Enter"**, and Verify that the Files have the Permissions **"drwxr-xr-x"**.
 - a. The Checklist Files will have the Permissions, **"-rwxr-xr-x"**.
14. A Screenshot of these File-Permissions, is attached below

```

-rwxr-xr-x. 1 root root 1363909 Aug 4 11:37 U SOL 11 SPARC V2R8 STIG.zip
-rwxr-xr-x. 1 root root 1359741 Aug 4 11:37 U SOL 11 x86 V2R8 STIG.zip
-rwxr-xr-x. 1 root root 869198 Aug 4 11:37 U SPEC Innovations_Innoslate_4-x_V1R1 STIG.zip
-rwxr-xr-x. 1 root root 3933460 Aug 4 11:37 U Splunk Enterprise 7-x_for Windows V2R4 STIG.zip
-rwxr-xr-x. 1 root root 4092776 Aug 4 11:37 'U Splunk Enterprise 8-x_for Linux V1R4_STIG.zip'
-rwxr-xr-x. 1 root root 3556251 Aug 4 11:37 U SS Android 11 Knox 3-x STIG.zip
-rwxr-xr-x. 1 root root 1659574 Aug 4 11:37 U SS Android OS 13 KPE 3-x_Y23M01_STIG.zip
-rwxr-xr-x. 1 root root 1746765 Aug 4 11:37 U SS SDS EMM V1R3 STIG.zip
-rwxr-xr-x. 1 root root 1150544 Aug 4 11:37 U Storage Area Network V2R4 STIG.zip
-rwxr-xr-x. 1 root root 1635665 Aug 4 11:37 U SYM ProxySG Y20M04 STIG.zip
-rwxr-xr-x. 1 root root 711198 Aug 4 11:37 U Tanium 7-0 V1R2 STIG.zip
-rwxr-xr-x. 1 root root 1896607 Aug 4 11:37 U Tanium 7-3 V2R2 STIG.zip
-rwxr-xr-x. 1 root root 1806089 Aug 4 11:37 U Tanium 7-x TanOS STIG.zip
-rwxr-xr-x. 1 root root 1727083 Aug 4 11:37 U Tanium 7-x V1R2 STIG.zip
-rwxr-xr-x. 1 root root 1771428 Aug 4 11:37 U TM TippingPoint Y22M07 STIG.zip
-rwxr-xr-x. 1 root root 1258675 Aug 4 11:37 U Traditional Security Checklist V2R4.zip
-rwxr-xr-x. 1 root root 292996 Aug 4 11:37 U Trend Micro Deep Security 9-x_V1R1_STIG.zip
-rwxr-xr-x. 1 root root 1051248 Aug 4 11:37 U UEM Y23M04 SRG.zip
-rwxr-xr-x. 1 root root 871014 Aug 4 11:37 U VMW Horizon 7-13 V1R1 STIG.zip
-rwxr-xr-x. 1 root root 4401032 Aug 4 11:37 U VMW NSX-T Y23M07_STIG.zip
-rwxr-xr-x. 1 root root 1400337 Aug 4 11:37 U VMW vRealize Automation 7-x_Y21M07_STIG.zip
-rwxr-xr-x. 1 root root 994078 Aug 4 11:37 U VMW vRealize Ops 6-x_Y21M07_STIG.zip
-rwxr-xr-x. 1 root root 365772 Aug 4 11:37 U VMW vRealize Ops Mgr Cassandra V1R1_STIG.zip
-rwxr-xr-x. 1 root root 3730572 Aug 4 11:37 U VMW vSphere 7-0 Y23M07 STIG.zip
-rwxr-xr-x. 1 root root 1057562 Aug 4 11:37 U VMW WS1 UEM V2R1 STIG.zip
-rwxr-xr-x. 1 root root 1047540 Aug 4 11:37 U VPN V2R5 SRG.zip
-rwxr-xr-x. 1 root root 786477 Aug 4 11:37 U Web Server V3R1 SRG.zip
-rwxr-xr-x. 1 root root 601581 Aug 4 11:37 U Zebra Android 11 COBO V1R2 STIG.zip
-rwxr-xr-x. 1 root root 10247763 Aug 4 11:37 U zOS_ACF2_V6R58_Products.zip
-rwxr-xr-x. 1 root root 9471310 Aug 4 11:37 U zOS_RACF_V6R58_Products.zip
-rwxr-xr-x. 1 root root 9389101 Aug 4 11:37 U zOS_TSS_V6R58_Products.zip
-rwxr-xr-x. 1 root root 1971989 Aug 4 11:37 U zOS_V6R58_SRR.zip
-rwxr-xr-x. 1 root root 183026 Aug 4 11:37 'Vendor STIG Acronym List V1R1.pdf'
a. [sandbox@localhost U SRG-STIG Library 2023 07v1]$

```

15. Type in the Command "`cd /home/[username]/Desktop/STIG_Viewer/[the date you created the .ISO]/U_STIGViewer_2-17_Linux`", and Press "Enter"
 - a. Ex: "`cd /home/sandbox/Desktop/STIG_Viewer/07_28_2023/U_STIGViewer_2-17_Linux`"
 - b. If STIG Viewer is located in a different directory, Type in the command, "`cd [location of the STIG-Viewer Folder]`"
16. **Testing the STIG Checklist Library Import:** Now Type in the Command, "`sudo ./STIGViewer`", Press "Enter".
 - a. Now that STIG Viewer is Open, in the Top Left Corner Click on "File", and Click on "Import STIG..."
 - b. Navigate to where you Copied the "`U_SRG-STIG_Library_2023_07v1`" Folder to, Click on "`U_RHEL_8_V1R11_STIG.zip`", and Click "Open".
 - c. Now Click on the "Red Hat Enterprise Linux 8 Security Technical Implementation Guide" in the Top Left Box of the STIG Explorer.

The screenshot shows the DISA STIG Viewer application. The top bar indicates the current rule is V-230221. The left sidebar contains the 'STIG Explorer' panel, which lists various rules under the 'V-230221' category. The main content area displays the 'Red Hat Enterprise Linux 8 Security Technical Implementation Guide' document, including a table of contents and a list of rules.

- 17.
18. If you can see the STIG Checklist, and you have a window that looks like the Screenshot Above, you have Successfully Installed the STIG Checklist Library on Red Hat Enterprise Linux!
19. **Note:** You can use this portion of the guide to add individual .CKL "Checklist" Files , or folders of .CKL "Checklist" Files as well.