

# **Monitor Update Utility (MUU)**

## **User Guide**

**For Linux Version**

**Version: 2.01**

<b>Version</b>	<b>Date</b>	<b>Description</b>
V2.01	11/15/2024	1. Initial release

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## Introduction

This guide will instruct users on how to install Linux Monitor Update Utility(MUU) installation package, which is available in two formats: deb for Ubuntu and rpm for OpenSUSE operating systems. It should be noted that theoretically, any system that supports these two installation formats can also be used.

## Support Model Name List

Aura Display Model	Content/Description
6150B15	15" Basic Monitor
6150P15	15" Premium Monitor
6150B16	15.6" Basic Monitor
6150P16	15.6" Premium Monitor
6150B19	19.5" Basic Monitor
6150P19	19.5" Premium Monitor
6150B24	23.8" Basic Monitor
6150P24	23.8" Premium Monitor

## Installation Preparation

- Host with Ubuntu or OpenSUSE operating system.
- MUU installation packages in deb and rpm formats.

## Dependencies

- libusb version >= 1.0.8 (Used by aipfwupdate)

## How to install libusb

Usually the latest version of the system has libusb installed by default. You can use the following command to check whether libusb is installed.

**Debian/Ubuntu:**

```
dpkg -l libusb*
```

```
tes@sampo-4900786: ~/Desktop
tes@sampo-4900786:~/Desktop$ dpkg -l libusb*
Desired=Unknown/Install/Remove/Purge/Hold
| Status=Not/Inst/Conf-files/Unpacked/halF-conf/Half-inst/trig-aWait/Trig-pend
|/ Err?=(none)/Reinst-required (Status,Err: uppercase=bad)
||/ Name                Version              Architecture          Description
+++-+-----+-----+-----+-----+
un  libusb-0.1-4           <none>               <none>                (no description available)
ii  libusb-1.0-0:amd64 2:1.0.25-1ubuntu2   amd64                 userspace USB programming library
un  libusbmuxd-tools      <none>               <none>                (no description available)
ii  libusbmuxd6:amd64    2.0.2-3build2       amd64                 USB multiplexor daemon for iPhone and
```

Redhat/OpenSUSE:

```
rpm -qa libusb*
```

```
tes@localhost.localdomain:~
tes@localhost:~> rpm -qa libusb*
libusbredirparser1-0.7.1-1.29.x86_64
libusbredirhost1-0.7.1-1.29.x86_64
libusbmuxd-2_0-6-2.0.2-150400.1.6.x86_64
libusb-1_0-0-1.0.24-150400.3.3.1.x86_64
tes@localhost:~>
```

Ubuntu Install libusb Command:

```
sudo apt-get install libusb-1.0-0
```

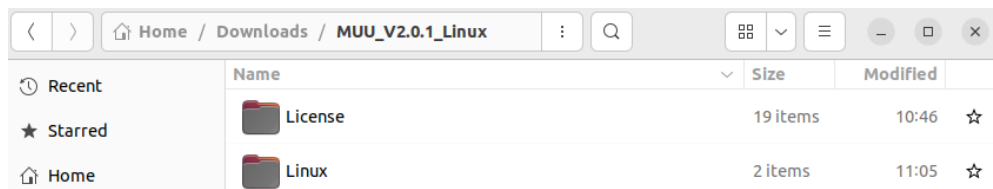
OpenSUSE Install libusb Command:

```
sudo zypper install libusb-1_0-0
```

## Installation process for Ubuntu

Take the installation of **toshiba-muu-op-linux\_2.0.1-00\_all.deb** as an example

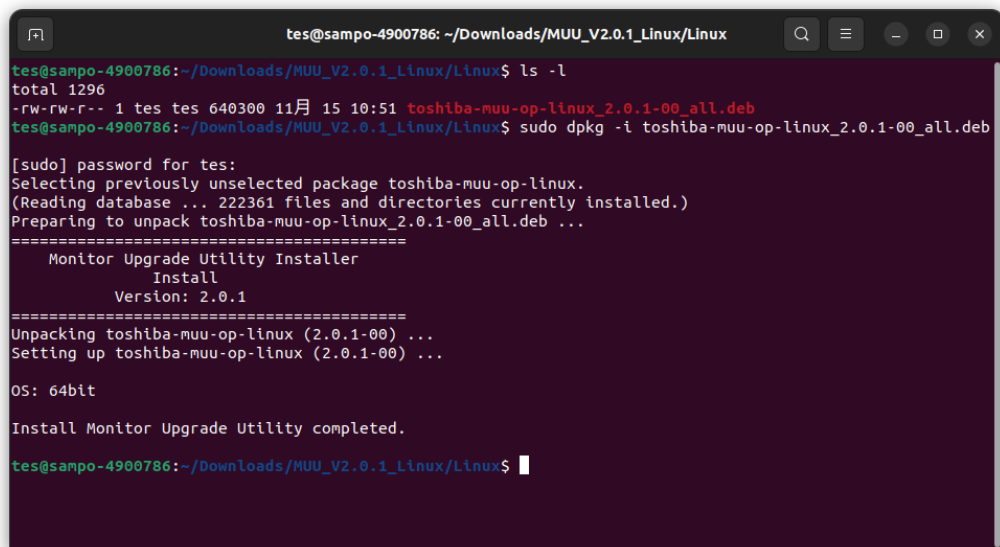
1. Unzip the **MUU\_V2.0.1\_Linux.zip** and there are 2 folders: the 1st folder is the License folder to place the Multi-language license files.



Another folder Linux contains two installation packages in deb and rpm formats, one named **"toshiba-muu-op-linux\_2.0.1-00\_all.deb"** and the other named **"toshiba-muu-op-linux-2.0.1-00.x86\_64.rpm"**

2. Open the Terminal
  - Open the terminal by finding it in the applications menu or pressing the shortcut key Ctrl + Alt + T.
3. Navigate to the directory containing the **toshiba-muu-op-linux\_2.0.1-00\_all.deb** package file
4. Execute the Installation Command
  - Run the following command to install the .deb package:

```
sudo dpkg -i toshiba-muu-op-linux_2.0.1-00_all.deb
```



```
tes@sampo-4900786: ~/Downloads/MUU_V2.0.1_Linux/Linux
tes@sampo-4900786:~/Downloads/MUU_V2.0.1_Linux/Linux$ ls -l
total 1296
-rw-rw-r-- 1 tes tes 640300 11月 15 10:51 toshiba-muu-op-linux_2.0.1-00_all.deb
tes@sampo-4900786:~/Downloads/MUU_V2.0.1_Linux/Linux$ sudo dpkg -i toshiba-muu-op-linux_2.0.1-00_all.deb

[sudo] password for tes:
Selecting previously unselected package toshiba-muu-op-linux.
(Reading database ... 222361 files and directories currently installed.)
Preparing to unpack toshiba-muu-op-linux_2.0.1-00_all.deb ...
=====
Monitor Upgrade Utility Installer
Install
Version: 2.0.1
=====
Unpacking toshiba-muu-op-linux (2.0.1-00) ...
Setting up toshiba-muu-op-linux (2.0.1-00) ...

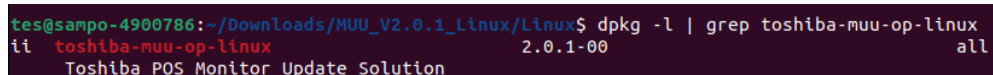
OS: 64bit

Install Monitor Upgrade Utility completed.
tes@sampo-4900786:~/Downloads/MUU_V2.0.1_Linux/Linux$
```

5. Resolve Dependency Issues (If Any)
  - If there are dependency issues during the installation process, run the following command to fix them:

```
sudo apt-get install -f
```

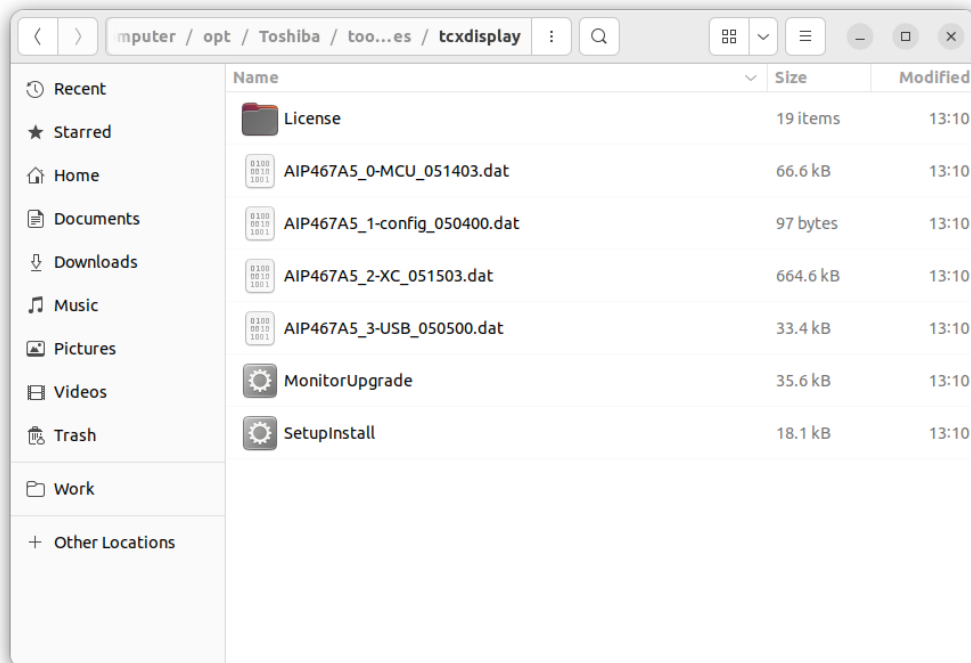
6. Verify the Installation
  - After the installation is complete, you can verify if the package was successfully installed by running the following command:



```
tes@sampo-4900786:~/Downloads/MUU_V2.0.1_Linux/Linux$ dpkg -l | grep toshiba-muu-op-linux
ii  toshiba-muu-op-linux 2.0.1-00 all
    Toshiba POS Monitor Update Solution
```

- You can also check the below path with FW .dat and multi-language license files:

**/opt/Toshiba/toolsutilities/tcsdisplay**



7. Reboot the host system and the MUU will start the FW update.

8. Uninstall the **toshiba-muu-op-linux\_2.0.1-00\_all.deb** package

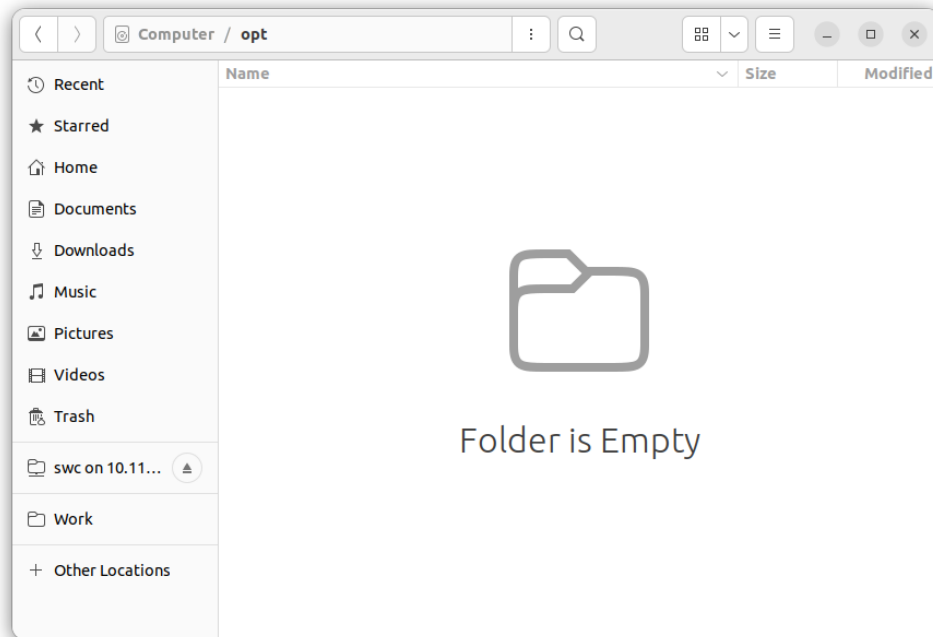
- If you need to uninstall the package, run the following command:

```
sudo dpkg -r toshiba-muu-op-linux
```

```
tes@sampo-4900786: ~/Desktop
tes@sampo-4900786:~/Desktop$ sudo dpkg -r toshiba-muu-op-linux
[sudo] password for tes:
(Reading database ... 222402 files and directories currently installed.)
Removing toshiba-muu-op-linux (2.0.1-00) ...
=====
      Monitor Upgrade Utility Installer
            Uninstall
            Version: 2.0.1
=====
OS: 64bit
Remove Monitor Upgrade Utility completed.
tes@sampo-4900786:~/Desktop$
```

- After uninstallation is completed. Check the folder

**“/opt/Toshiba/toolsutilities/tcsdisplay”** is no any data:



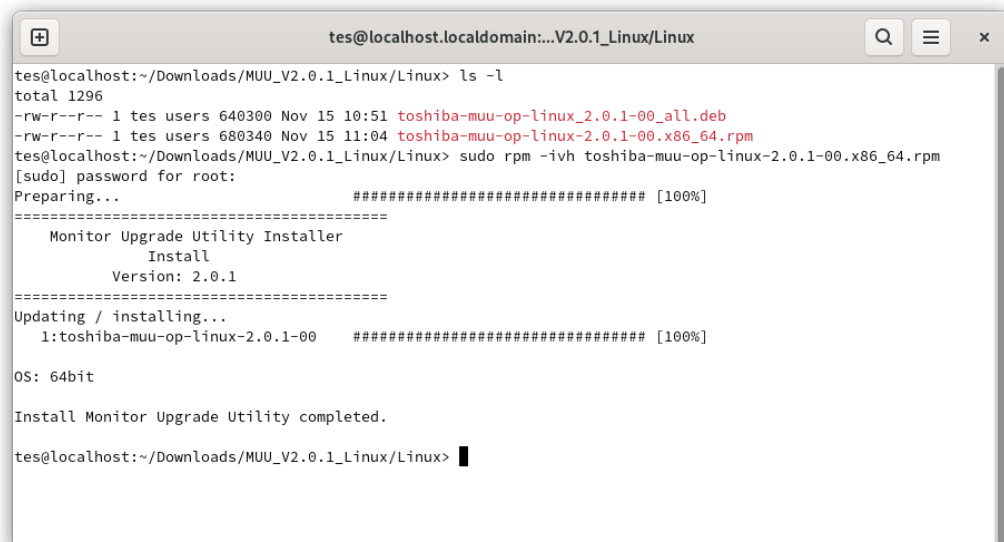


# Installation process for OpenSUSE

Take the installation of **toshiba-muu-op-linux-2.0.1-00.x86\_64.rpm** as an example

1. Open the Terminal
  - Go to the folder where **toshiba-muu-op-linux-2.0.1-00.x86\_64.rpm** is located, right-click the mouse to pop up the menu and select "Open In Terminal".
2. Execute the Installation Command
  - Run the following command to install the .rpm package:

```
sudo rpm -ivh toshiba-muu-op-linux_2.0.1-00.x86_64.rpm
```



```
tes@localhost.localdomain:~/V2.0.1_Linux/Linux
tes@localhost:~/Downloads/MUU_V2.0.1_Linux/Linux> ls -l
total 1296
-rw-r--r-- 1 tes users 640300 Nov 15 10:51 toshiba-muu-op-linux_2.0.1-00_all.deb
-rw-r--r-- 1 tes users 680340 Nov 15 11:04 toshiba-muu-op-linux-2.0.1-00.x86_64.rpm
tes@localhost:~/Downloads/MUU_V2.0.1_Linux/Linux> sudo rpm -ivh toshiba-muu-op-linux-2.0.1-00.x86_64.rpm
[sudo] password for root:
Preparing...##### [100%]
=====
Monitor Upgrade Utility Installer
Install
Version: 2.0.1
=====
Updating / installing...
 1:toshiba-muu-op-linux-2.0.1-00##### [100%]

OS: 64bit

Install Monitor Upgrade Utility completed.
tes@localhost:~/Downloads/MUU_V2.0.1_Linux/Linux> █
```

- Resolve Dependency Issues (If Any)
- It is known that OpenSUSE15 does not install insserv-compatible by default, which causes chkconfig to fail to work properly, prompting the following “/sbin/insserv: No such file or directory” error.
- Please run the following command to install insserv-compatible

```
sudo zypper install insserv-compatible
```

- Please run the following command to reinstall rpm to ensure that MUU's chkconfig command works properly

```
sudo rpm -ivh --replacepkgs toshiba-muu-op-linux_2.0.1-00.x86_64.rpm
```

```
tes@localhost:~/Downloads/MUU_V2.0.1_Linux/Linux> sudo zypper install insserv-compat
Retrieving repository 'Update repository with updates from SUSE Linux Enterprise 15' metadata .....[done]
Building repository 'Update repository with updates from SUSE Linux Enterprise 15' cache .....[done]
Loading repository data...
Reading installed packages...
Resolving package dependencies...

The following NEW package is going to be installed:
  insserv-compat

1 new package to install.
Overall download size: 15.0 KiB. Already cached: 0 B. After the operation, additional 8.5 KiB will be used.
Continue? [y/n/v/...? shows all options] (y): y
Retrieving: insserv-compat-0.1-4.6.1.noarch (Main Repository) (1/1), 15.0 KiB
Retrieving: insserv-compat-0.1-4.6.1.noarch.rpm .....[done (2.1 KiB/s)]

Checking for file conflicts: .....[done]
(1/1) Installing: insserv-compat-0.1-4.6.1.noarch .....[done]
tes@localhost:~/Downloads/MUU_V2.0.1_Linux/Linux> sudo rpm -ivh --replacepks toshiba-muu-op-linux-2.0.1-00.x86_64.rpm
[sudo] password for root:
Preparing... ##### [100%]
=====
      Monitor Upgrade Utility Installer
      Install
      Version: 2.0.1
=====
Updating / installing...
  1:toshiba-muu-op-linux-2.0.1-00 ##### [100%]
mkdir: cannot create directory '/opt/Toshiba/toolsutilities/tcxdisplay/.aipfw': File exists

OS: 64bit

Install Monitor Upgrade Utility completed.

tes@localhost:~/Downloads/MUU_V2.0.1_Linux/Linux> chkconfig
MonUpdateRsv 235
tes@localhost:~/Downloads/MUU_V2.0.1_Linux/Linux>
```

Run the **chkconfig** command to check whether **MonitorUpdateRsv** exists in the list. If so, **chkconfig** is successfully executed.

### 3. Verify the Installation

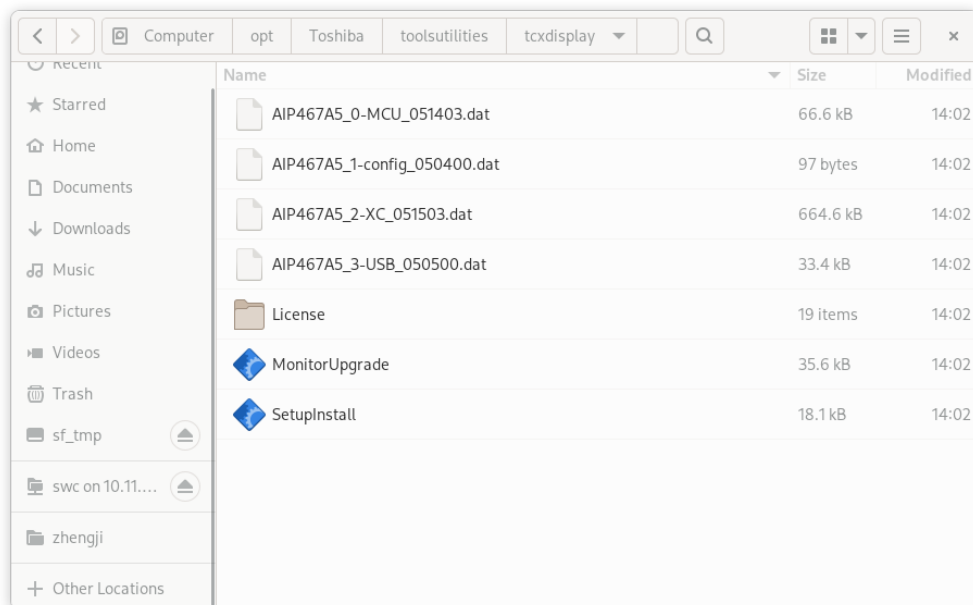
- After the installation is complete, you can verify if the package was successfully installed by running the following command:

```
rpm -qa toshiba-muu-op-linux
```

```
tes@localhost:~/Downloads/MUU_V2.0.1_Linux/Linux> rpm -qa toshiba-muu-op-linux
toshiba-muu-op-linux-2.0.1-00.x86_64
tes@localhost:~/Downloads/MUU_V2.0.1_Linux/Linux>
```

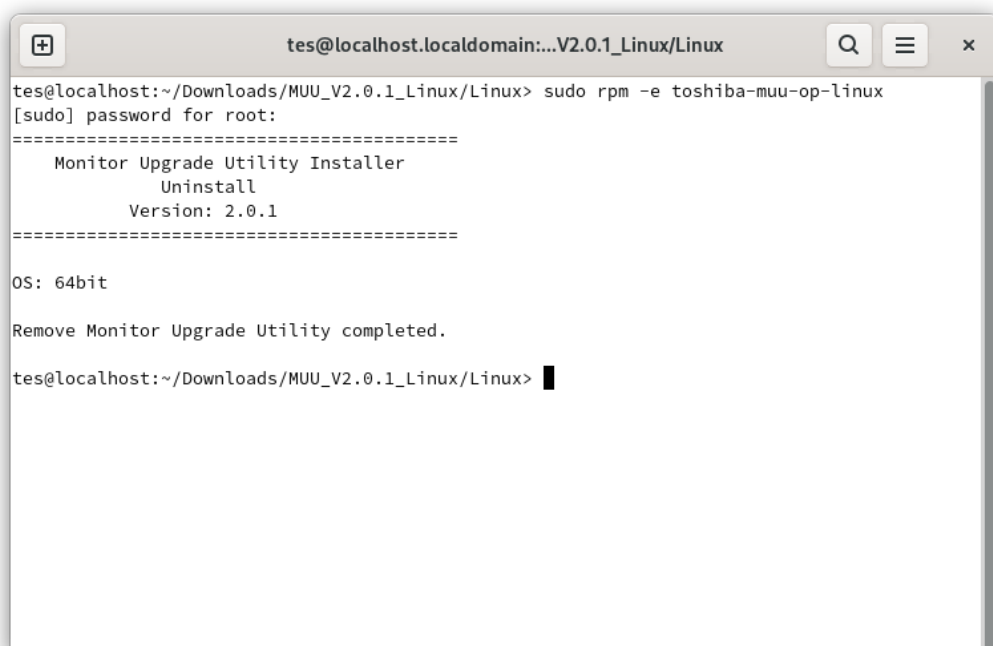
- You can also check the below path with FW .dat and multi-language license files:

**/opt/Toshiba/toolsutilities/tcsdisplay**

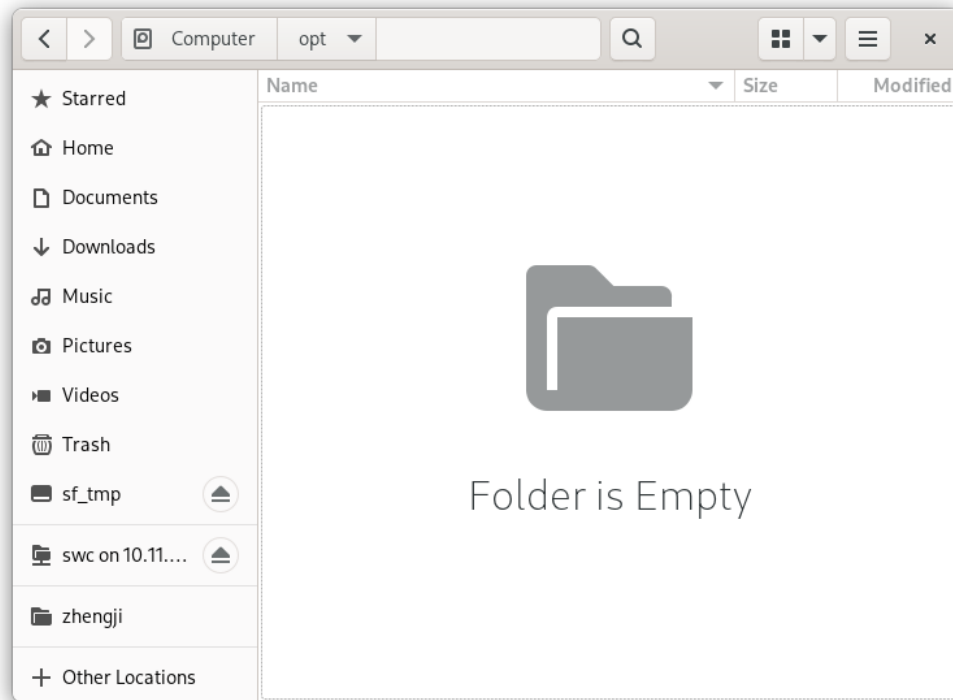


4. Reboot the host system and the MUU will start the FW update.
5. Uninstall the **toshiba-muu-op-linux-2.0.1-00.x86\_64.rpm** package
  - If you need to uninstall the package, run the following command:

```
sudo rpm -e toshiba-muu-op-linux
```



- After uninstallation is completed. Check the folder “/opt/Toshiba/toolsutilities/tcsdisplay” is no any data:



## Monitor Update Utility

### Monitor Update Utility support the Command Line Interface (CLI):

Monitor Update Utility can support the command line interface. Regarding the detail command list and the usage description, please refer to the document: “MonitorUpgrade Command Line Interface Specxxx.txt”.