Linux System Monitor

https://www.fosslinux.com/41735/the-10-best-linux-performance-monitoring-tools.htm

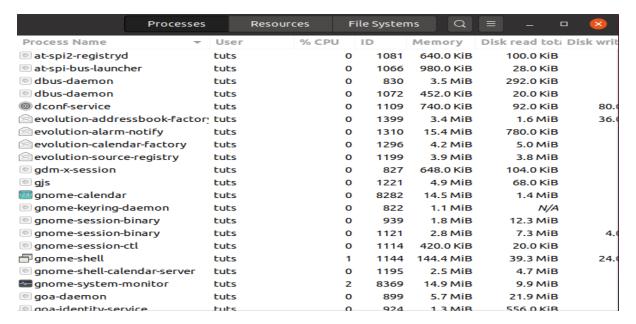
The Performance Monitoring Tools That Comes with Your Desktop Environment

Finally, for the average and casual Linux users, we would recommend to try out the performance monitoring tools that come built-in with your desktop environment.

It is worth mentioning that these are much more rudimentary compared to some of the advanced monitoring tools mentioned on the list. But then again, it comes pre-installed, and you don't have to configure it separately or download any other dependencies or packages to run it.

Furthermore, if all you need is surveillance over the basic system resource usage, then these tools are more than sufficient. Now, there are tons of Linux desktop environments out there in the market. But for the sake of demonstration, we have only included the two most popular options – GNOME and KDE.

GNOME System Monitor



The GNOME System Monitor is available with any Linux distro that runs; you guessed it – GNOME. It gives you access to a graphical interface for monitoring the different processes running on your system, the system resources, and the file systems.

Apart from using it to monitor your resource consumption, it can also help you kill processes and even change the priority of a process.

To find the GNOME system monitor, log in to your GNOME powered Linux PC and head on over to System > Administrator > System Monitor

You can also type in the following command in the terminal to launch it:

\$ gnome-system-monitor

KDE System Guard



KDE System Guard or KSysGuard

And then, for Linux distros running KDE, we have KDE System Guard, also known as KSysGuard. It is a much more advanced option compared to what GNOME has to offer. With KDE System Guard, you can monitor not only the local system but also any remote system that you have access to. Not just that, but the tool represents all the statistics in graphical format, which is a pleasure to look at.

Now to open the KSysGuard, you will need to first log in to your KDE powered Linux PC and then navigate to *System > Administrator > System Monitor*.

Or, you can enter the following command in the terminal:

\$ ksysguard

Note: Even though these tools come pre-installed with their respective desktop environments, they are not confined to these desktop environments only. As such, you are free to install GNOME System Monitor on a Linux PC running KDE, and vice versa.

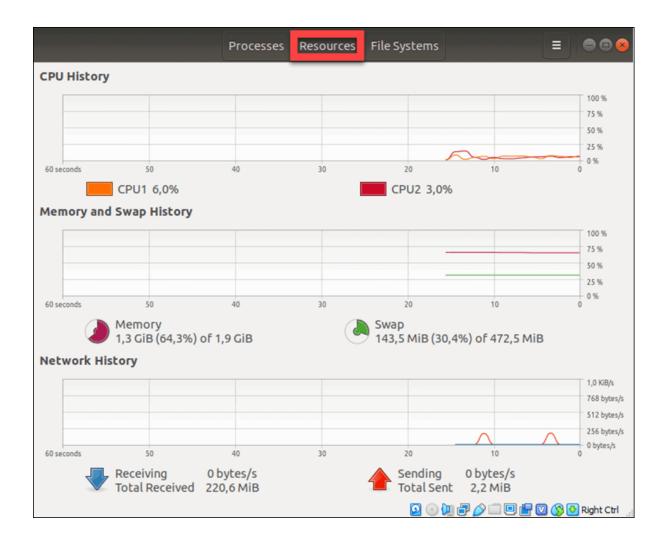
https://phoenixnap.com/kb/linux-commands-check-memory-usage Checking Memory Usage in Linux using the GUI

Checking Memory Usage in Linux using the GUI

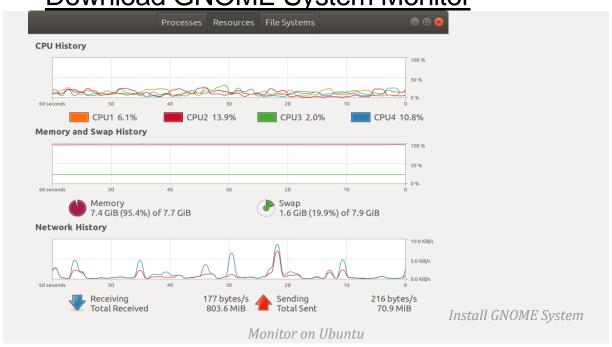
Using a graphical interface for server administration is not common practice. However, certain data sets are much clearer, with a visual representation of memory usage.

To access the **System Monitor**:

- 1. Navigate to Show Applications.
- 2. Enter System Monitor in the search bar and access the application.
- 3. Select the Resources tab.
- 4. A graphical overview of your memory consumption in real time, including historical information is displayed.



Download GNOME System Monitor



GNOME System Monitor is a GNOME process viewer and system monitor with an attractive, easy-to-use interface, It has features, such as a tree view for process dependencies, icons for processes, the ability to hide processes that you don't want to see, graphical time histories of CPU/memory/swap usage, the ability to kill/renice processes needing root access, as well as the standard features that you might expect from a process viewer.

How to Install and Use GNOME System Monitor?

https://techsphinx.com/linux/install-gnome-system-monitor/



Contents hide

- 1_Features of GNOME System Monitor
- 2_Pre-Requisites
- 3_Install GNOME System Monitor
- 4_Launch GNOME System Monitor
- 5_Using GNOME System Monitor
- 5.1 Process Tab
- 5.2 Resources Tab
- 5.3 File System Tab

- 5.4 Other Options
- 6_Install System Monitor Extension
- 6.1 Install this System Monitor Extension on Ubuntu
- 6.2 Install System Monitor Extension on CentOS/Fedora/RHEL
- 7_Uninstall GNOME System Monitor
- 8 Conclusion

This post may contain affiliate links/ads and I may earn a small commission when you click on the links/ads at no additional cost to you. As an Amazon Affiliate, I earn from qualifying purchases. Techsphinx also participates in the StationX Affiliate program. You can read my full disclaimer here.



Brief: After following this guide to the end, you'll be able to install, understand and even uninstall Gnome System Monitor on your Linux Distro.

Linux has many graphical and command-line task managers. One of such is GNOME System Monitor.

It is a simple and elegant task manager that comes pre-installed on systems that have GNOME installed. Although it comes pre-installed on many popular Linux distros like Ubuntu, CentOS etc., your particular OS version may lack it.

In this post, I will also show you how to install an extension to System Monitor, so that you don't have to open task manager to monitor your resources every now and then.

Let's start by looking at some features that Gnome System Monitor offers.

Features of GNOME System Monitor

- It has a graphical User Interface.
- Monitor Processes.
- Control process behaviours (Stopping, Killing, Changing Priority etc.)
- Search for open files.
- Monitor CPU, Network history, Memory and swap usage.
- Monitor File Systems (available space, used space, Type, mount point etc.)

Pre-Requisites

- Linux Based OS with Graphical User Interface
- GNOME Desktop Environment (Only if you want to install and use system monitor extension)
- Active internet connection
- Sudo privileges

Install GNOME System Monitor

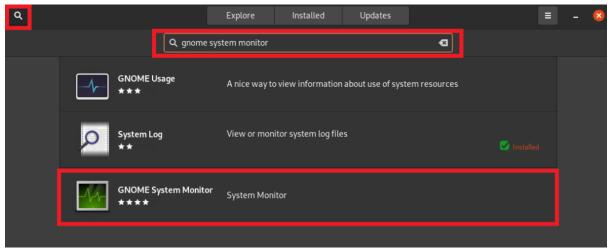
You can install system monitor graphically or through command-line. First, let's have a look at the graphical method.

Install Graphically

You can install Gnome System Monitor graphically via software installer in Linux.

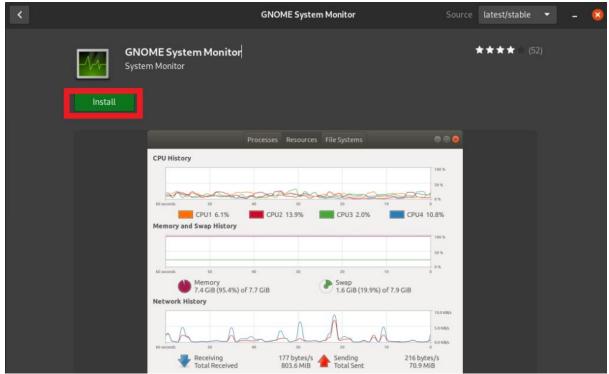
(I am installing it via Ubuntu's Software Installer.)

1. Open software installer and search for GNOME System Monitor.



Search for GNOME System Monitor

2. Click on Install.



Install Gnome System Monitor

(You'll be asked to authenticate before installing)

3. Once Installed, you'll see the option to remove.

Install via Terminal

To install Gnome System Monitor via terminal use one of the following command according to your Linux distro.

For Ubuntu/Debian/Mint/Elementary OS etc. use:

sudo apt install gnome-system-monitor

For CentOS/Fedora/RHEL etc. use:

sudo dnf install gnome-system-monitor

Launch GNOME System Monitor

After installing the gnome system monitor, you can navigate to the applications menu and click on system monitor icon to launch it.

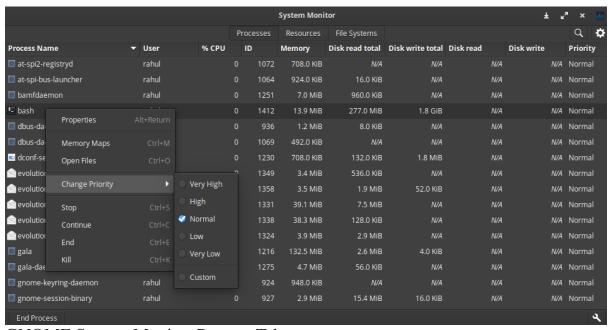
You can also launch it via terminal using the command:

gnome-system-monitor

Using GNOME System Monitor

Now, let's understand what the gnome system monitor has to offer in terms of monitoring and managing a Linux system.

Process Tab



GNOME System Monitor Process Tab

When you open GNOME system Monitor, this is the tab you'll see, by default. Process tab displays all the processes running on your Linux system. Here you can see the following information of each process:

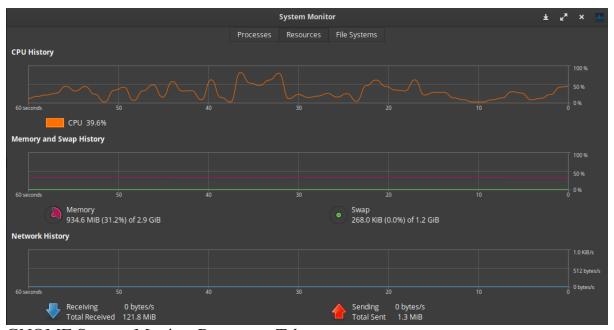
- Process name
- Owner of the process
- CPU usage
- Process ID
- Memory
- Disk read and write info

Priority

You can decide what you want to do with the process based on the above information. You can right-click on any process and you'll be provided with the options to:

- View its detailed properties
- View its memory maps
- List open used files
- Change priority
- Stop the Process
- Continue the stopped process
- End the process
- Kill the Process

Resources Tab

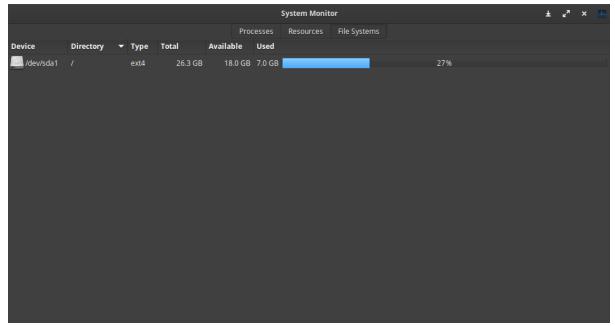


GNOME System Monitor Resources Tab

This tab is very helpful in monitoring the performance of your system. Through the resources tab, you can view the history of usage for the following resources in a graphical format.

- CPU History
- Memory and Swap History
- Network History

File System Tab



GNOME System Monitor File Systems Tab

File system tab provides information about the hard drive(s) on your system. It provides you with the following info about the devices:

- Device Name
- Directory where the device is mounted
- Type of file system
- Total size
- Available space
- Used space

You can also sort the listing based on the above info.

Other Options

If you click on the system monitor icon (or the burger menu icon in some OS) at the top-right corner of the Gnome system monitor window, then you will get to see some more options:

• Search for Open Files

The Search for Open Files dialog lists all the files that processes have open.

Preferences

You can customize settings of the GNOME system monitor from the preferences tab.

Help

You can go to this option, if you need any help related to system monitor.

Install System Monitor Extension

Note: The extension I am using in this post requires GNOME Desktop Environment and GNOME Shell v3.26 or later.

There are many System Monitor extensions available, but I am going to install "gnome-shell-system-monitor-applet" by Mounier Florian (<u>GitHub username – paradoxxxzero</u>).

After installing this extension, you don't have to open system monitor to find out what program is using up your resources, you can get all that info in gnome-shell status bar.

Install this System Monitor Extension on Ubuntu



System Monitor Applet on Ubuntu

You can also install this extension via browser by going to the <u>gnome-system-extensions page</u> and following the steps provided there. Here, I am going to install it using the source file.

1. Download the extension source code from GitHub using "wget" command.

wget https://github.com/paradoxxxzero/gnome-shell-systemmonitor-applet/archive/v38.tar.gz

2. Extract the downloaded tar file.

```
tar -xzvf v38.tar.gz
```

3. Navigate to the extracted directory.

```
cd gnome-shell-system-monitor-applet-38/
```

4. Run the make install command, to install the extension.