

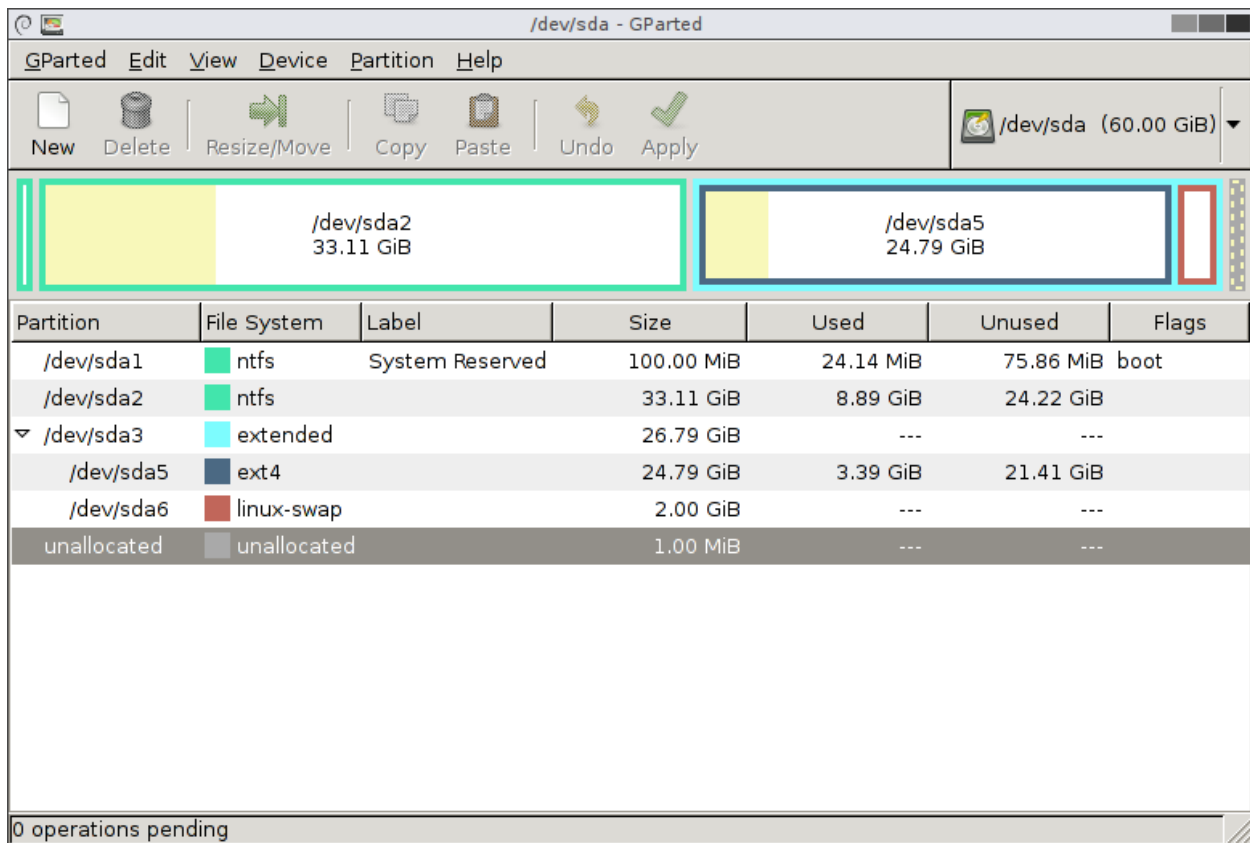
Best Linux Software: Our Editorial List

This content will touch upon all the categories for selecting Best Linux software. This article is a compilation content of all other top best list content which already published in this site. Thus it's going to help you to get all the Best Linux apps in one place based on various categories. As UbuntuPIT mostly deals with Ubuntu Linux, so I will focus on the installation process for [best Ubuntu apps](#).

This content will grow every day as and when a new Linux list content gets published.

1. Partition Manager – Gparted

There are lots of choices comes to mind when the question arises about [best Linux Partition Manager](#). If you are a new Linux user or not comfortable with a text-based partition manager, then GUI based Gparted is the best option for you to choose. You can do almost all the task of disk partitioning using this free and open source partition manager.

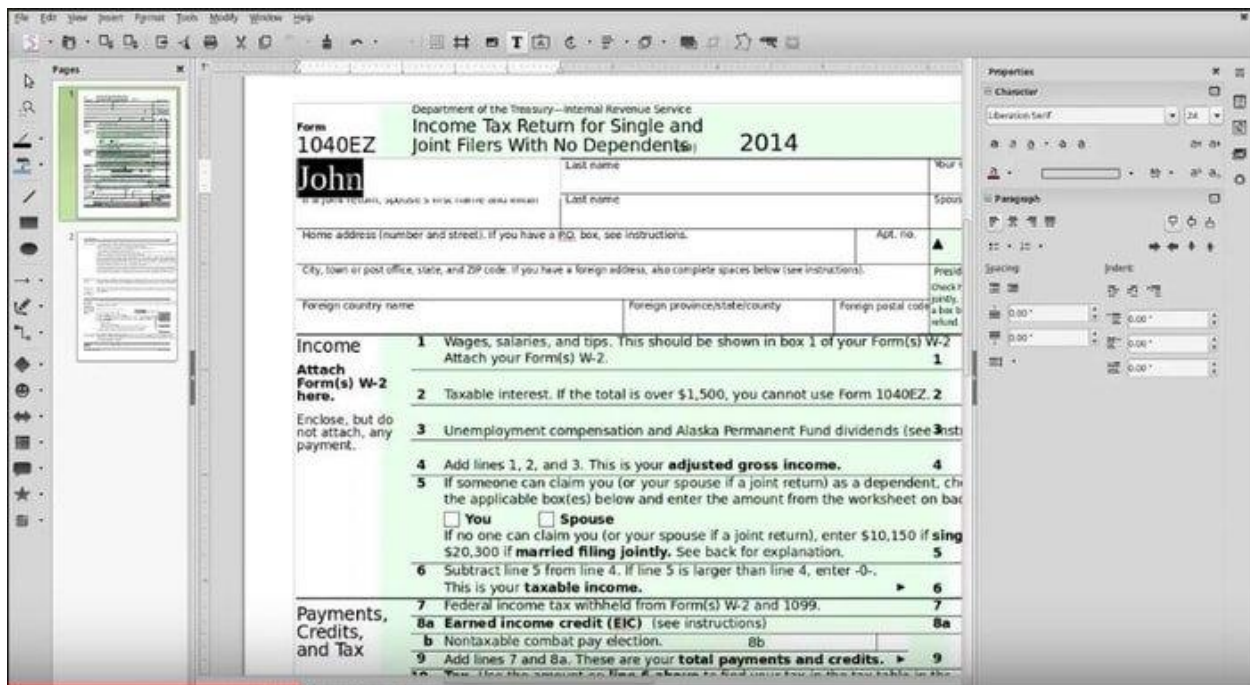


[Download Gparted](#)

Resource Link: [Linux Partition Manager: Best 8 Reviewed and Compared](#)

2. Best PDF Editor – LibreOffice Draw

PDF is considered the best way of emailing, sharing or printing various documents. It's a well-supported format across all the OS including Linux, Windows, Mac OS, Android and much more. There are many good options out there for selecting [best Linux PDF Editor](#) for every OS.



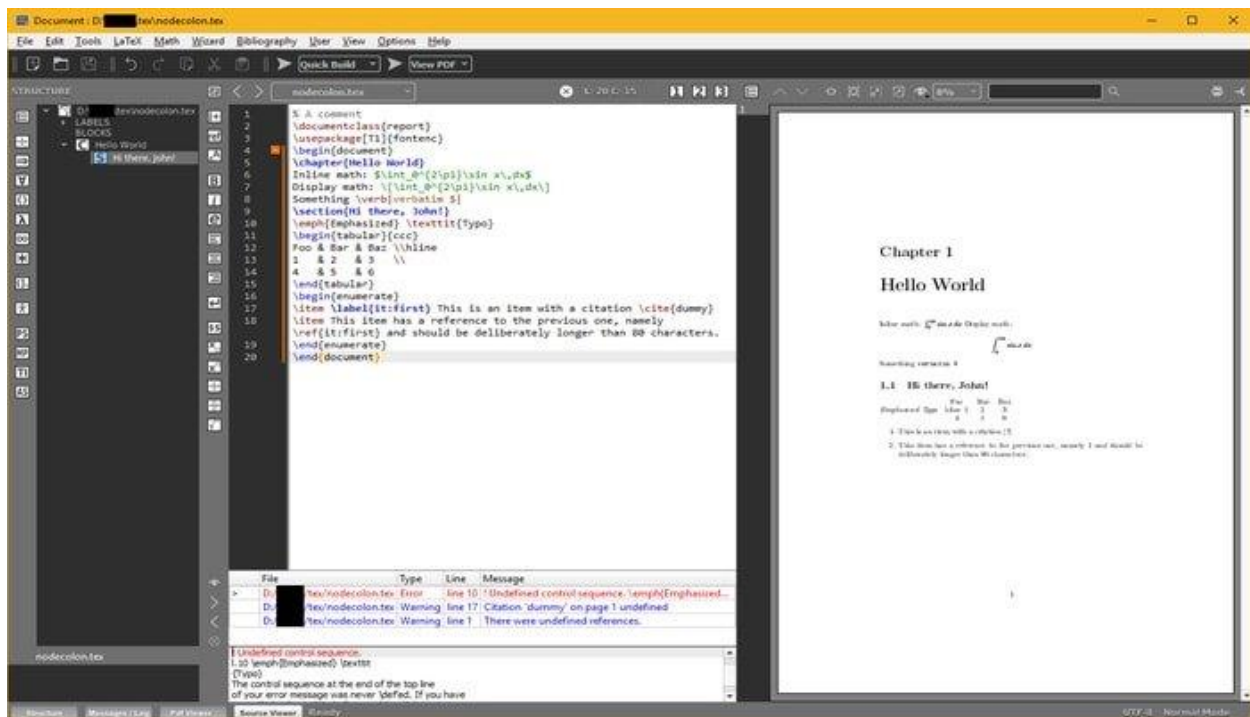
[LibreOffice Draw](#) is one of them which comes preinstalled in all the major Linux distros. It's a free and open source Linux pdf editor which let you fulfill the necessary task. Master PDF Editor is another one which comes with lots of features and tools for editing PDF files in Linux, but it's not a free and open source.

[Download LibreOffice](#)

Resource Link: [Linux PDF Editor: Top 15 Reviewed and Compared](#)

3. LaTeX Editor – TeXmaker

In the arena of Linux, LaTeX is considered as a standard markup language. It helps the users for editing the documents to markup level. [TeXmaker](#) is one of the best LaTeX editor available out there. It's to be the most user-friendly LaTeX IDE for the newbie.



Download TeXmaker

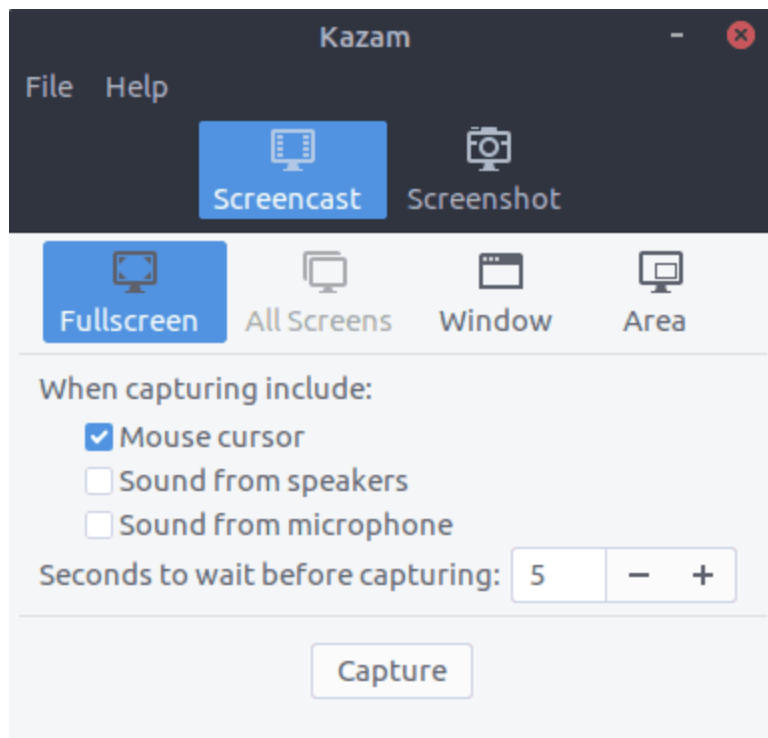
There are lots of [best LaTeX Editor](#) available for Linux, but it seems difficult to choose the Best LaTeX Editor for both advanced and beginner. For that reason, I have written a detailed LaTeX tutorial and how to install those on Ubuntu Linux which will help you to get the best one. Please see the resource link for that tutorial.

Resource Link: [Best LaTeX Editor: 33 LaTeX Editors Reviewed for Linux Nerds](#)

4. Screen Recorder – Kazam

Screencasting is an important task for many people for many reasons including making a video tutorial, creating a presentation, compiling a how-to tutorial or do a software review or having the fun of streaming while playing pc games. Moreover now a day many users are making an earning opportunity for themselves through YouTube, Facebook video or any other video hosting sites by making many helpful how-to guide videos.

[Kazam](#) is one of the best lightweight screen recorder available for Linux desktop. It's straightforward and nifty tool for screencasting.



Install on Ubuntu

Run the following command into the Terminal:

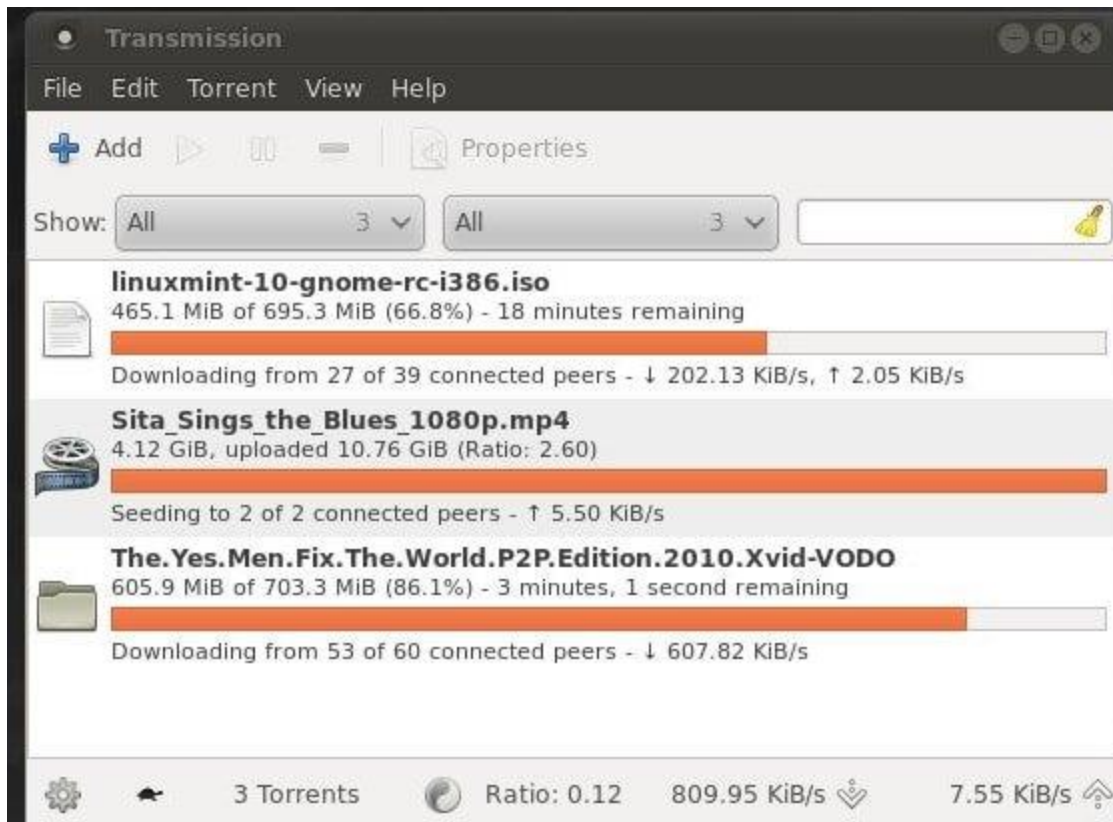
```
sudo apt install kazam
```

There are lots of [Linux screen recorder](#) available in the market, but here I am only going to share a list of [best Linux screen capture](#) and Live video streaming software, and how to install those on Ubuntu as this site focuses solely on Ubuntu Linux.

Resource Link: [15 Best Linux Screen Recorder and How to Install those on Ubuntu](#)

5. Best Torrent Client – Transmission

If you are searching for something that is entirely free, open source and comes with minimum configuration, then [Transmission torrent client](#) is one of them. It supports cross-platform like Windows, Linux, Mac OS, and Unix based systems.



Download Transmission

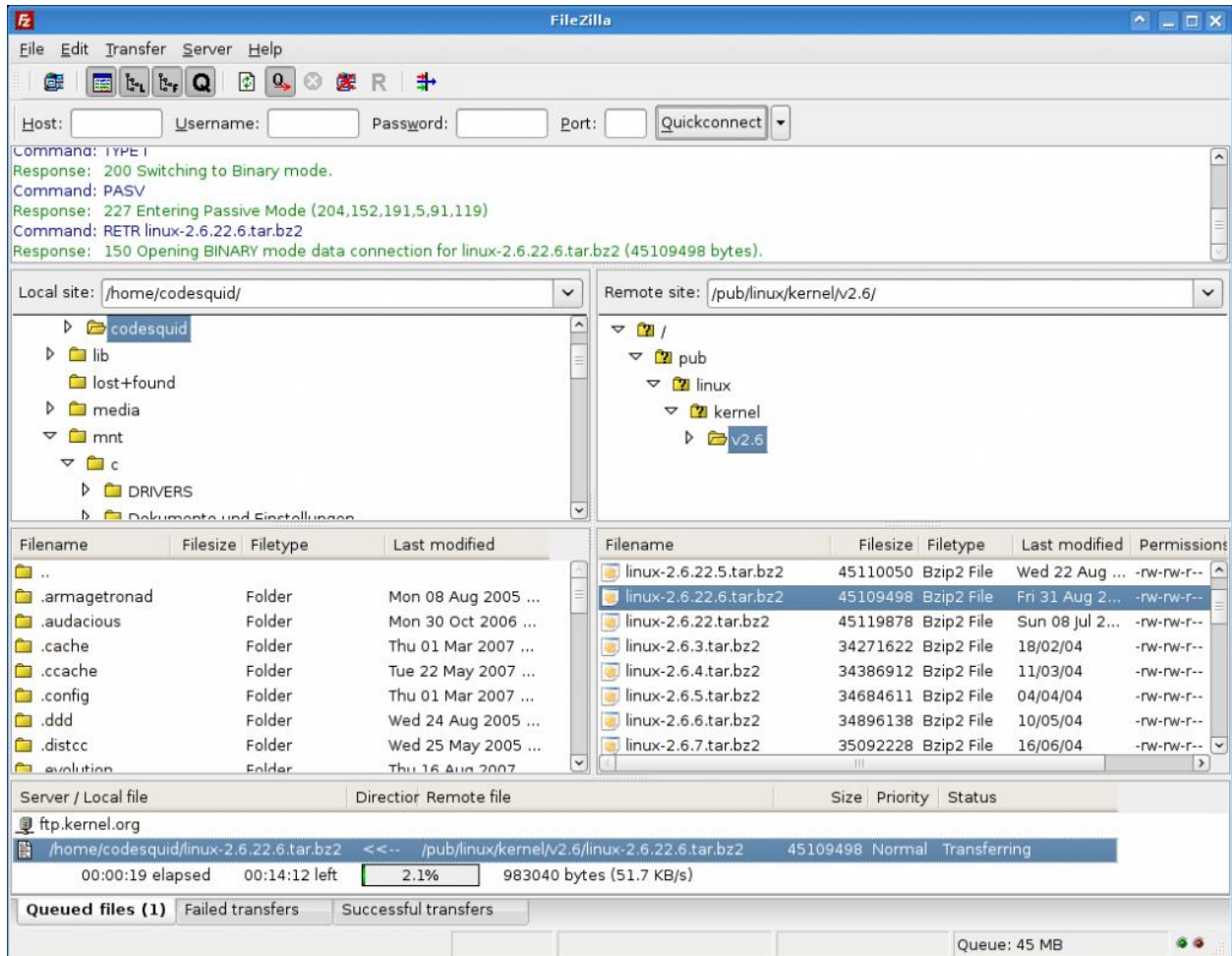
There are lots of favorite torrent clients available in the market. But it's challenging to find out which one comes with the best set of features. Here I am reviewing and sharing a collection of [open source torrent client for Linux](#) so that you don't need to waste your valuable time by installing and checking all those torrent clients one by one.

Resource Link: [Open Source Torrent Client for Linux: Top 10 Reviewed for Linux Nerds](#)

6. FTP Client – FileZilla

FTP (File Transfer Protocol) is one of the great and efficient ways of transferring files over a TCP based system like the internet. It helps to move a large number of computer files from one host or system to another host or system without any hassle and complexity.

[FileZilla](#) comes on top of this list of [best Linux FTP Client](#). This FTP app is one of the best and secured FTP client for all the major platforms like Linux, Unix, Windows, and MacOS. FileZilla is a reliable and fast FTP, FTPS and SFTP client for Linux.



Install FileZilla on Ubuntu via PPA

Run the following command to install FileZilla on Ubuntu:

```
sudo apt update
```

```
sudo apt install filezilla
```

Download from Official site

Download FileZilla Client for Linux

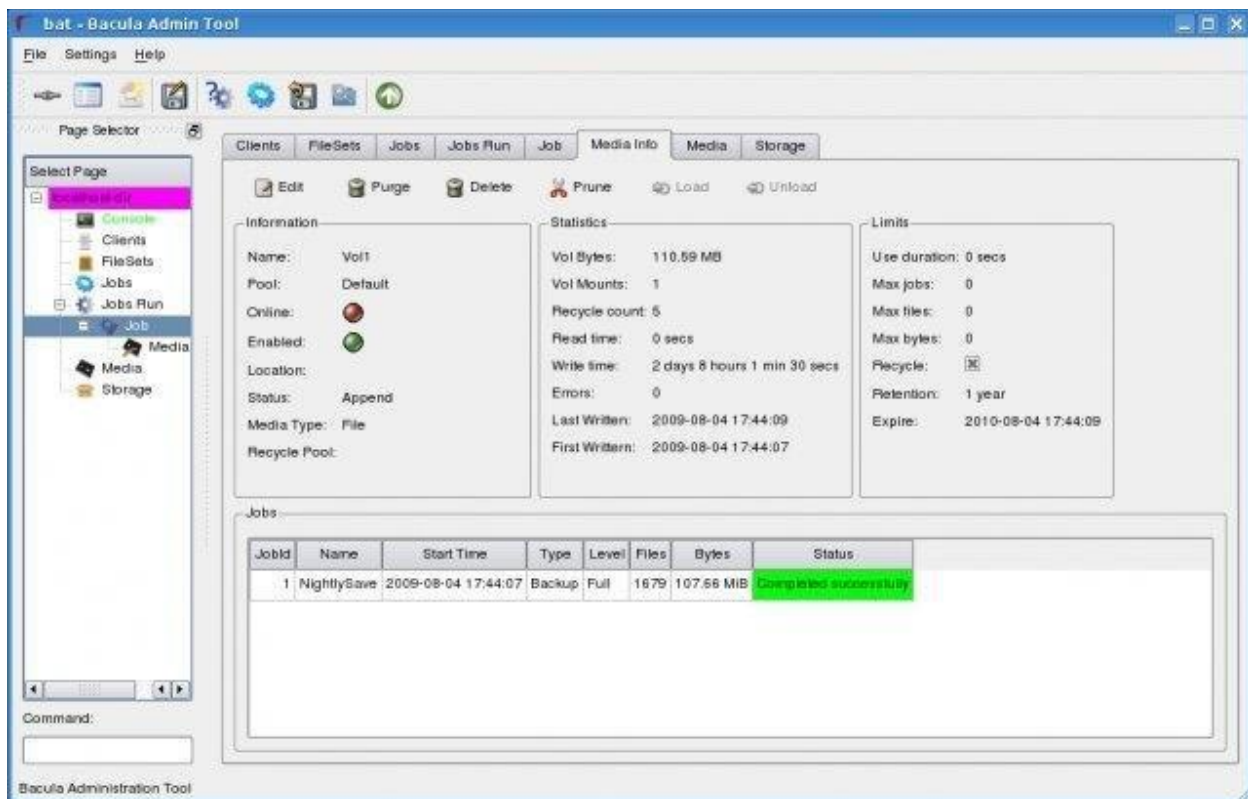
There are lots of [robust and secure Linux FTP Client](#) available in the market. But here my tutorial will help you to get more.

Resource Link: [Best Linux FTP Client: Top 10 Reviewed for Linux Geeks](#)

7. Backup Software – Bacula

To recover from some unexpected situations like human errors, Disk failure or RAID, Corruption of file systems we need a good backup plan.

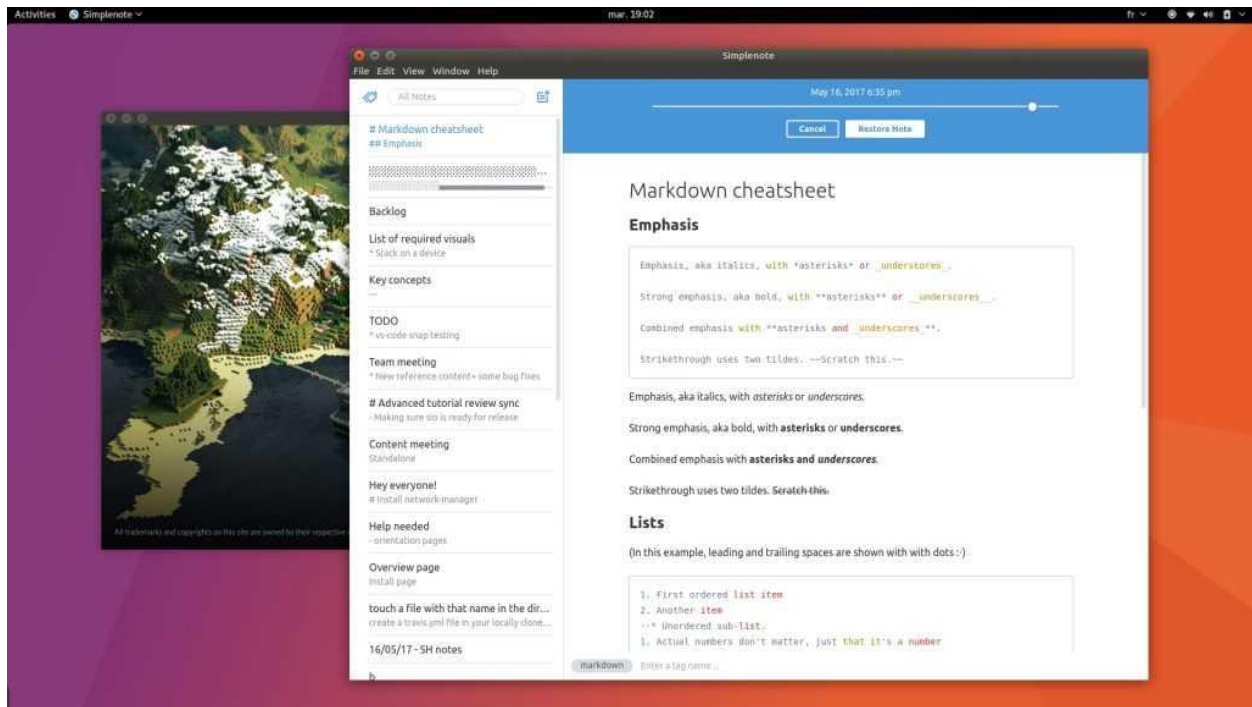
[Bacula](#) is an [Open Source Backup Software](#). This computer backup system can work in various networks. It is an automated task that need not require intervention from a systems administrator or computer operator. Bacula supports Linux, UNIX, and Windows backup clients.



Resource Link: [Top 15 Open Source Backup Software for Linux](#)

8. Note Taking App – Simplenote

[Simplenote](#) is the [best note taking the app](#) for Linux right now. It provides all the features that a modern and professional note-taking app must have.



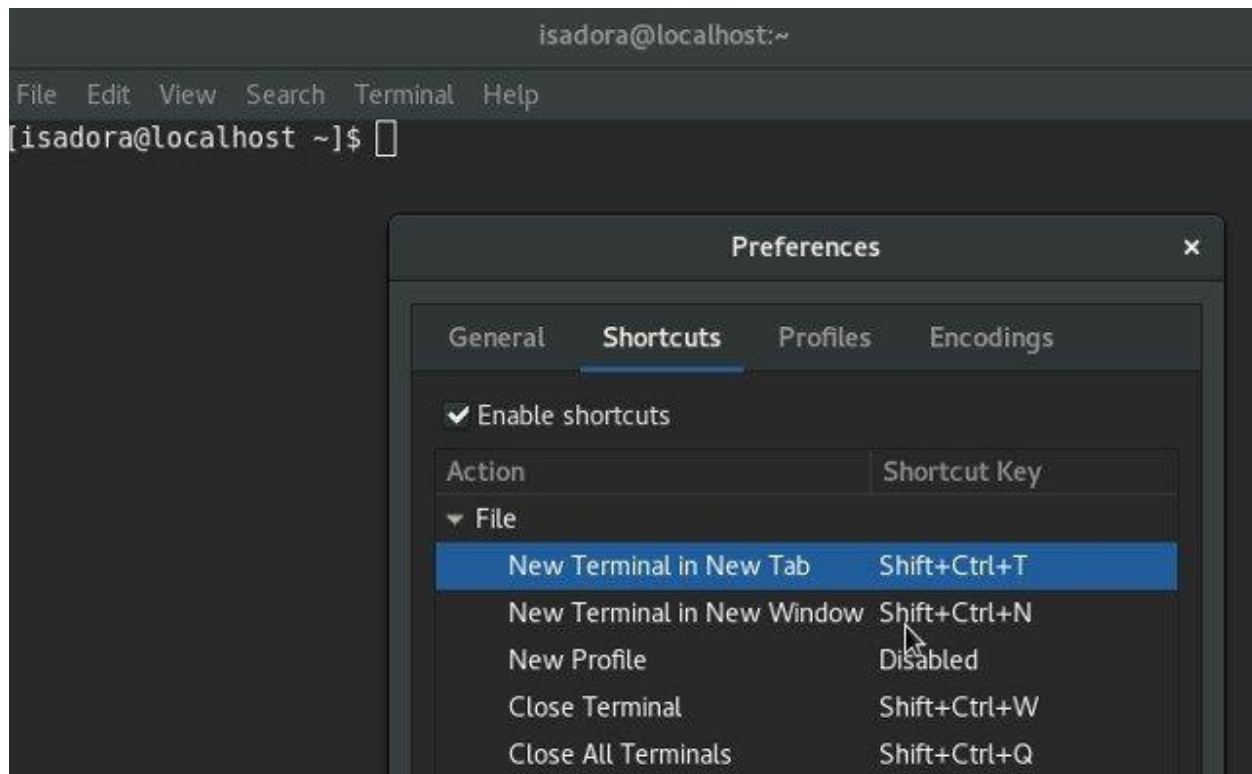
Download & Install Simplenote

Evernote is one of the best and top graded note taking apps for all the dominant OS. But Evernote doesn't provide an official client for Linux. That's why I have created a tutorial which will offer you a list of [best Linux note-taking apps](#) (Evernote Alternative).

Resource Link: [13 Best Evernote Alternative Note Taking Apps for Linux](#)

9. Terminal Emulator – GNOME Terminal

[Gnome Terminal emulator](#) is one of the best Linux Terminal Emulators for Linux Gnome [desktop environment](#). It has lots of practical and useful features that make it standalone from others.



Most of the users are satisfied with the default Terminal emulator of their Linux Distributions. But the option is always open to trying a different one and get settled with that. Here I am going to share a generic list of 15 [Best Linux Terminal Emulators](#) for both beginners and advanced Linux users.

Resource Link: [Linux Terminal Emulator: Top 15 Reviewed and Compared](#)

10. Code Editor – Atom

Coding is great fun. You can make useful and great apps for your operating system if you can learn well how to do coding. To be a great applications developer, you have to know about all the details of coding or programming in various applications.

[Atom](#) is a **Linux code editor** that is smart, trendy, approachable, and yet customizable to the core. This excellent Linux text editor offers you to customize it to do anything you want.



```
272
273
274   getComponent () {
275     if (!this.component) {
276       this.component = new TextEditorComponent({
277         element: this,
278         mini: this.hasAttribute('mini'),
279         updatedSynchronously: this.updatedSynchronously
280       })
281       this.updateModelFromAttributes()
282     }
283     return this.component
284   }
285 }
286
287 module.exports =
288 document.registerElement('atom-text-editor', {
289   prototype: TextEditorElement.prototype
290 })
291
```

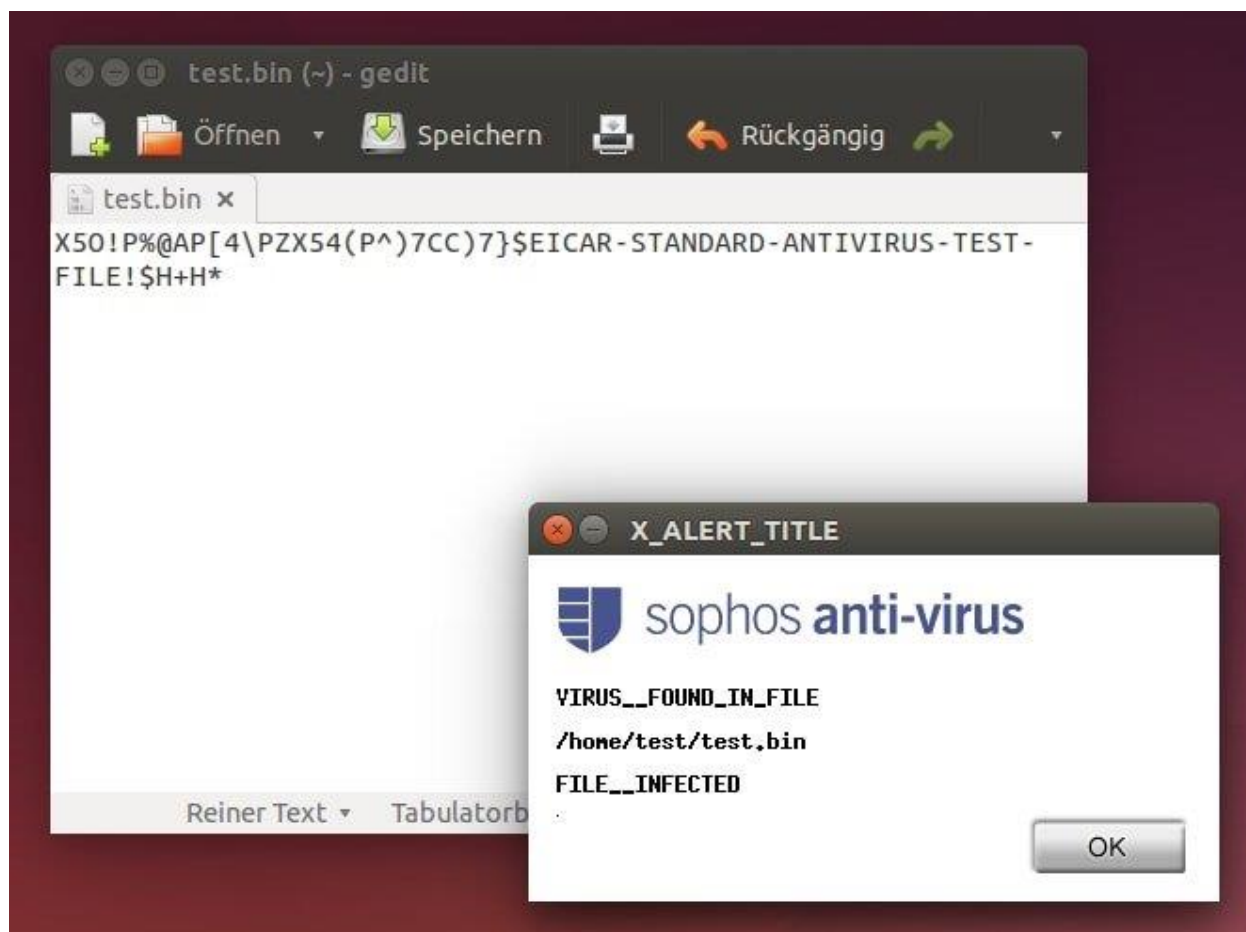
There are various types of code editors or [text editors](#) or HTML editors for several operating systems which are available to make your coding capability easy and quick, while some of them have worked great across the OS. For creating new software in Linux, there are lots of Linux code editor available out there; those can make you an expert Linux code developer.

Resource Link: [Best Linux Code Editor: Top 10 Reviewed and Compared](#)

11. Linux Antivirus – Sophos

In the world of computer Operating System, there is always errors and problems especially intentionally made errors which we call trojan, malware, virus. Linux OS is much more efficient and secure OS but still, there are possibilities to have these problems. To decreasing this issues, security specialist has developed [a Linux antivirus](#) to detect and remove those threats before they harm the system.

In the AV-Test, [Sophos](#) is one of the best free antiviruses for Linux. It does support not only on-demand scanning but also provide real-time scanning feature.



Resource Link: [Best Linux Antivirus: Top 10 Reviewed and Compared](#)

12. Educational Software – KDE Edu Suite

An educational expense is always high all over the world. This expense will be more if you want to use educational software on your machine. You may be searching over the net to get the [best educational software](#) for the kids or yourself.

[KDE Edu suite](#) is not just software; it is a package of software for different user purpose. This software was started as a free educational package named as KDE educational project which now included lots of software package.



Installation of KDE Edu Suite:

KDE Edu Suite can be installed on most GNU/Linux distributions; It can also be installed from the software center. If not found, you can install the latest KDE Edu Suite on Ubuntu/Mint by typing the following commands in the console:

```
sudo apt-add-repository ppa:mutlaqja/ppa
```

```
sudo apt-get update
```

```
sudo apt-get install indi-full kstars-bleeding
```

If you are a student, you may doubt in mind that Linux rarely provides software which supports educational purposes. Wait a minute, You should correct yourself now as you will see a great list of Best Linux Educational Software.

Resource Link: [Top 10 Best Linux Educational Software for Your Kids](#)

13. Video Editing Software – Open Shot

Video editing on Linux is very easy if you find the best Video Editing Software. There is a lot of [open source Video Editing Software](#) available on Linux. You can easily customize or edit any kinds of media files with those Video Editing Software.

[Open Shot video editor](#) is an open source Video Editing Software on Ubuntu. It works well in the other distribution of Linux.



Installation on Ubuntu:

Open Shot Video Editor is very easy to [install on Various Linux distribution](#). You can install it from the software center or use this command:

```
sudo add-apt-repository ppa:openshot.developers/ppa
```

```
sudo apt update
```

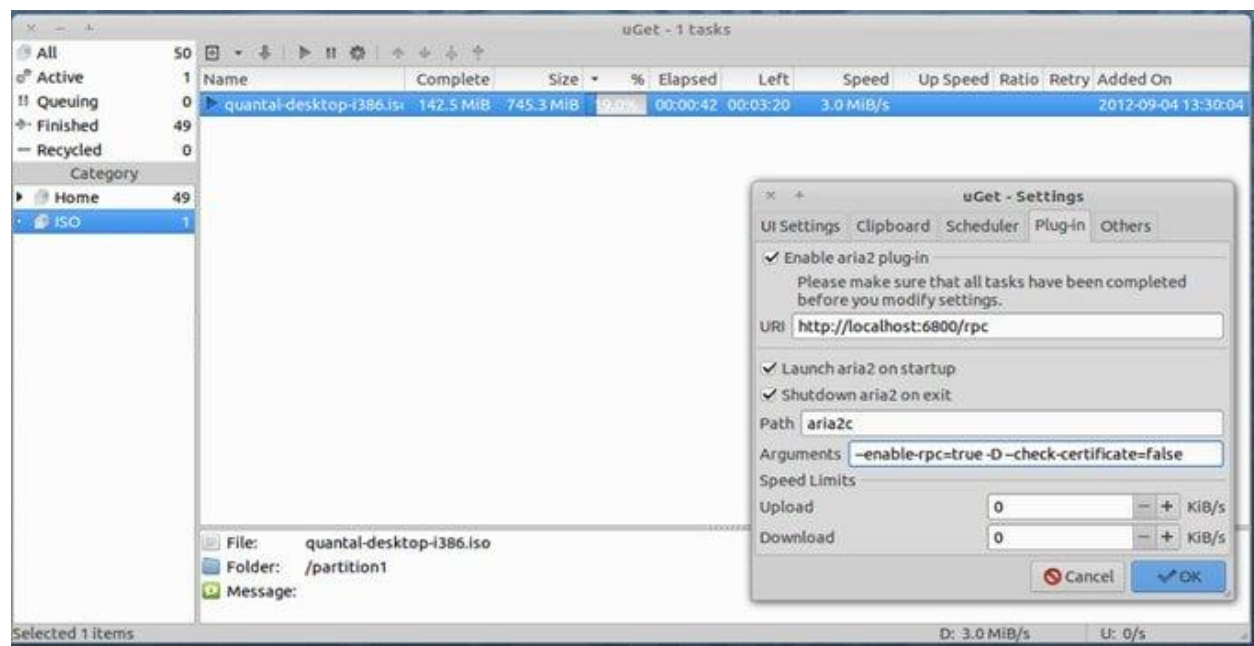
```
sudo apt install openshot-qt
```

Resource Link: [Top 10 Best Video Editing Software for Linux](#)

14. Download Manager – uGet

It's obvious to have a good [download manager for Linux](#) or Ubuntu. Though all the modern browsers have default download manager, it's not good enough to handle effective downloading system. When the question comes whether a web browser can handle multiple download, pause system, [torrent integration](#) or fast download, then the answer is not satisfactory.

[uGet](#) is an open source download manager for Linux which will download your files fast. This download manager can be efficiently organized and highly configurable. You can control your downloads in one central place.



uGet on Ubuntu

It is straightforward to install uGet on Ubuntu. Just follow the instructions below:

```
sudo add-apt-repository ppa:plushuang-tw/uget-stable
```

```
sudo apt-get update
```

```
sudo apt-get install uget
```

A download manager required when you go for downloading big files or multiple files. So as you are a user coming from windows or a newbie Linux user or advanced user, here I am going to share a generic list of 10 [best download managers for Linux](#) or mainly focused on Ubuntu.

Resource Link: [Download Manager for Linux: Top 8 Reviewed and Compared](#)

15. Video Player – VLC

[VLC Media Player](#) is one of the best and most popular **Best Linux Software** in the category of video players. It is an open source media player which support almost all media file types on Linux. VLC Media Player support network shares are browsing, downloading subtitles, video playlists, pop-up video, etc.



Best Video Players – VLC

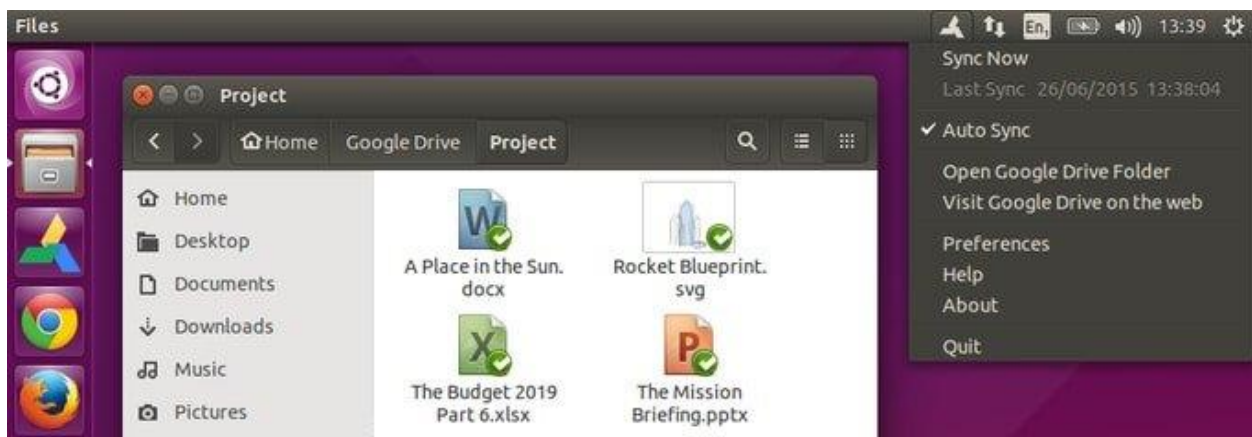
There are a lot of [video players available for Linux](#). Those video players mainly do the same thing to play a video file. So, you need to find which video player will offer you the additional features of playing any video. Here I will be sharing top 10 [free and best Linux video players](#) with the best features that every app offers.

Resource Link: [Top 10 Best Linux Video Players: Enjoy Ultimate Movie and Music](#)

16. Google Drive Client – overGrive

Google Drive offers an official client for all the dominant OS except Linux until now. As a Linux user, you have lots of ways and alternatives for using Google Drive. There are many [Google Drive Linux Client software](#) available out there that can do the work for you seamlessly.

If you think [Insync](#) – Google Drive desktop client is costly, then overGrive can be an excellent choice. You can enjoy all the features and tools that Insync can offer but just for \$4.99 one time payment. overGrive supports all the major [Linux desktop environments](#) and distros.



[Download overGrive – Free Trial](#)

Resource Link: [Top 12 Best Google Drive Linux Client Software](#)

17. Web Browser – Chromium or Google Chrome

Generally, web browsers allow you to visit a wide range of information by accessing the online web. As there is plenty of [browsing software available for Linux](#), undoubtedly it will puzzle you to choose the best one for your Ubuntu system.



Chromium and Google Chrome, Both the web browsers come with malware blocking that ultimately ensures personal information security. Moreover, there are lots of plugins in the chrome store which eventually let you increase the functionality of the browser in the Linux system.

Install Chromium on Ubuntu Linux

```
sudo apt install -y chromium-browser
```

Run the following command if you need flash support:

```
sudo apt install -y pepperflashplugin-nonfree
```

```
sudo update-pepperflashplugin-nonfree --install
```

Install Google Chrome on Ubuntu Linux

Download Google Chrome

If above link doesn't work, get the direct link

Direct Download Google Chrome for Ubuntu

Resource Link: [13 Best Linux Web Browsers: Which One is Right for You?](#)

18. Media Server Software – Kodi

Linux Media Server software can help you to set up a cost and resource useful media server which ultimately let you [watch or share or listen all the media files](#) from a remote location on Smartphone or desktop.



[Kodi](#) is one of the best free and [open source media server software](#) available in the market. It offers an intuitive graphical user interface with lots of customization options. Kodi is an all in one entertainment software center which supports all the primary OS including Android, Linux, Windows, iOS, and MacOS.

How to Install Kodi on Ubuntu Linux

You can easily install Kodi on Ubuntu and Ubuntu based on other [Linux distros](#) by running the following command:

```
sudo apt-get install software-properties-common
```

```
sudo add-apt-repository ppa:team-xbmc/ppa
```

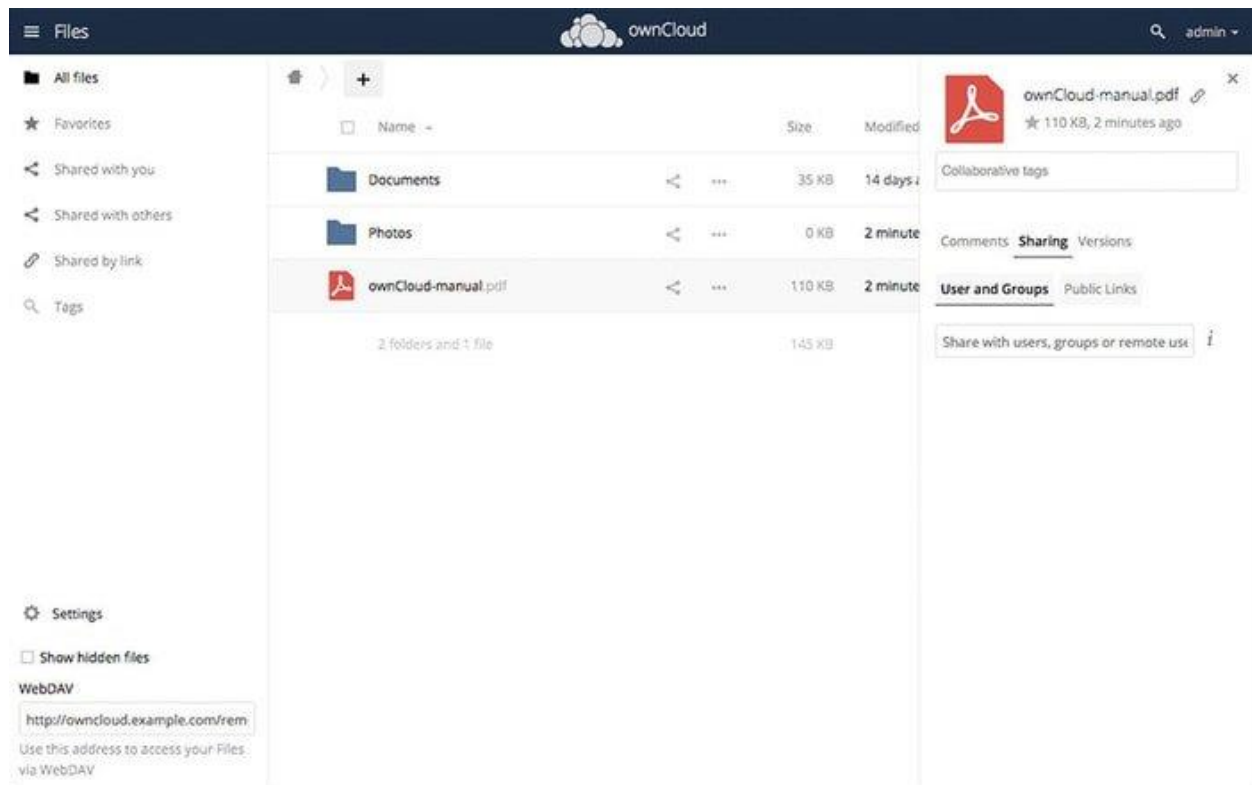
```
sudo apt-get update
```

```
sudo apt-get install kodi
```

Resource Link: [13 Best Linux Media Server Software for Making Your Own Home Theater PC](#)

19. Cloud Storage – OwnCloud

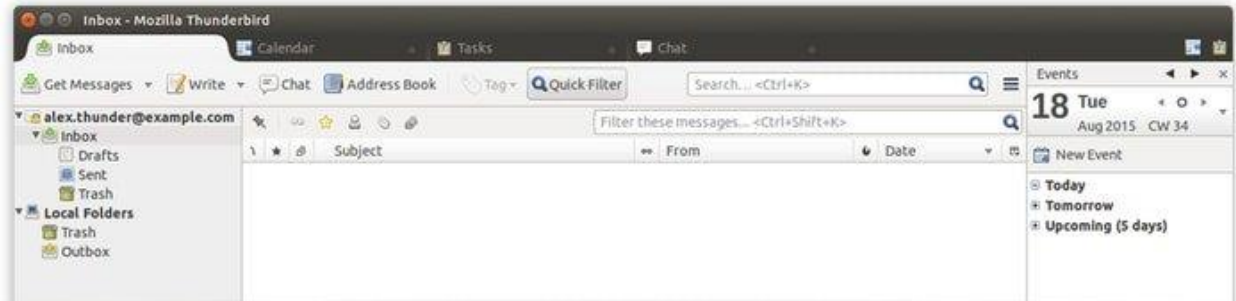
[OwnCloud](#) is one of the popular and most prominent open source community driven [cloud software](#) available in the market. It let you create easy to use a personal cloud server for both home and office use. You can also have full control over your data and who can have access at all.



[Download OwnCloud](#)

Resource Link: [Best Cloud Storage for Linux: 15 Reviewed and Compared for Linux Nerds](#)

20. Email Client – Thunderbird



Thunderbird – Open Source Email Client

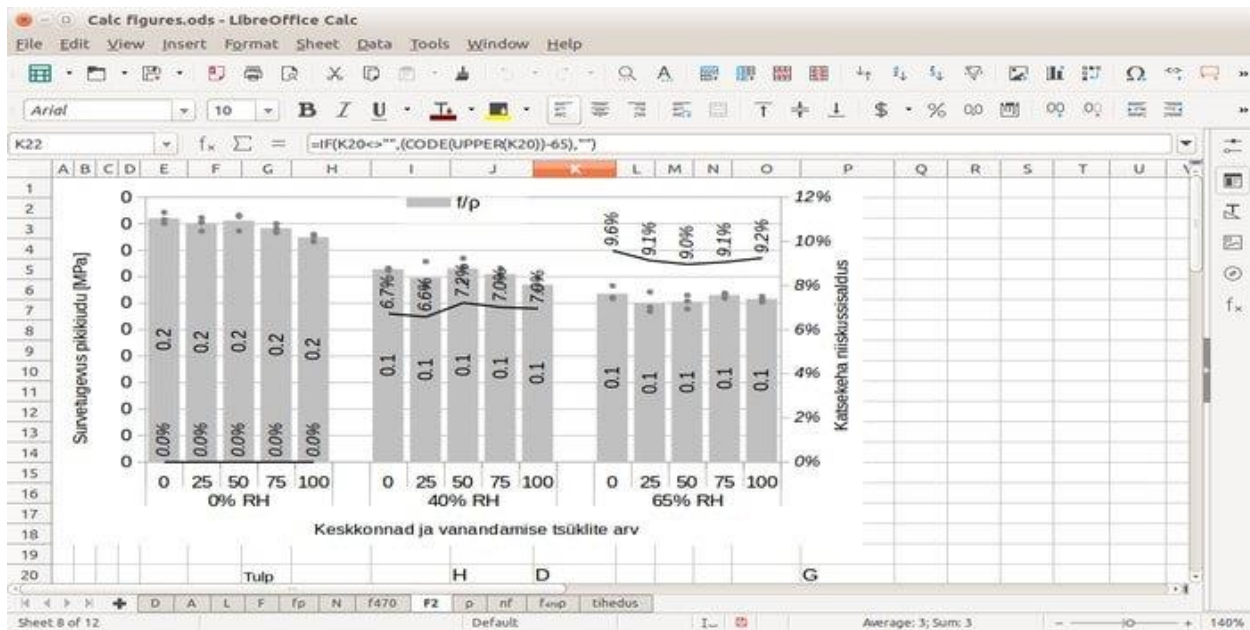
I believe you know about Mozilla foundation and its Firefox browser which is lightning fast and patron of open source software. Thunderbird is an incredible [open source and faster Linux email client](#) from the same development house of Firefox. It's a cross-platform, more rapid, modern web email technologies for using email services.

[Download Mozilla Thunderbird](#)

Resource Link: [Top 10 Best Open Source Linux Email Client Software](#)

21. Free Office Suite – LibreOffice

[LibreOffice](#) is the most favorite and well known [best free office suite](#) in the Linux community. LibreOffice is forked of popular but discontinued office suite Apache OpenOffice. Now LibreOffice is the default free office suite for many [Linux environments](#).



[Download LibreOffice](#)

Resource Link: [Top 10 Best Free Office Suite Software as MS Office Alternative for Linux](#)

22. Password Manager – KeePassXC

Remembering password is always tricky if you have multiple passwords for various site and apparently, it is. So to mitigate this sort of problem, password manager comes into focus. [KeePassXC](#) Password Manager is there for the Linux user for quite a long time, and it fulfills the need successfully.

Resource Link:

- [Linux Password Manager: 22 Reviewed and Compared for Linux Nerds](#)
- [KeePassXC – an Open Source Password Manager for Linux](#)

23. Image Editor – GIMP

[GIMP](#) is an insanely popular open source Free [Photo Editing Software Like Photoshop](#). It's a multi-platform supported software which supports various system

like Windows, Linux, Mac OS X and so forth. Users can quickly complete the job with this free software.

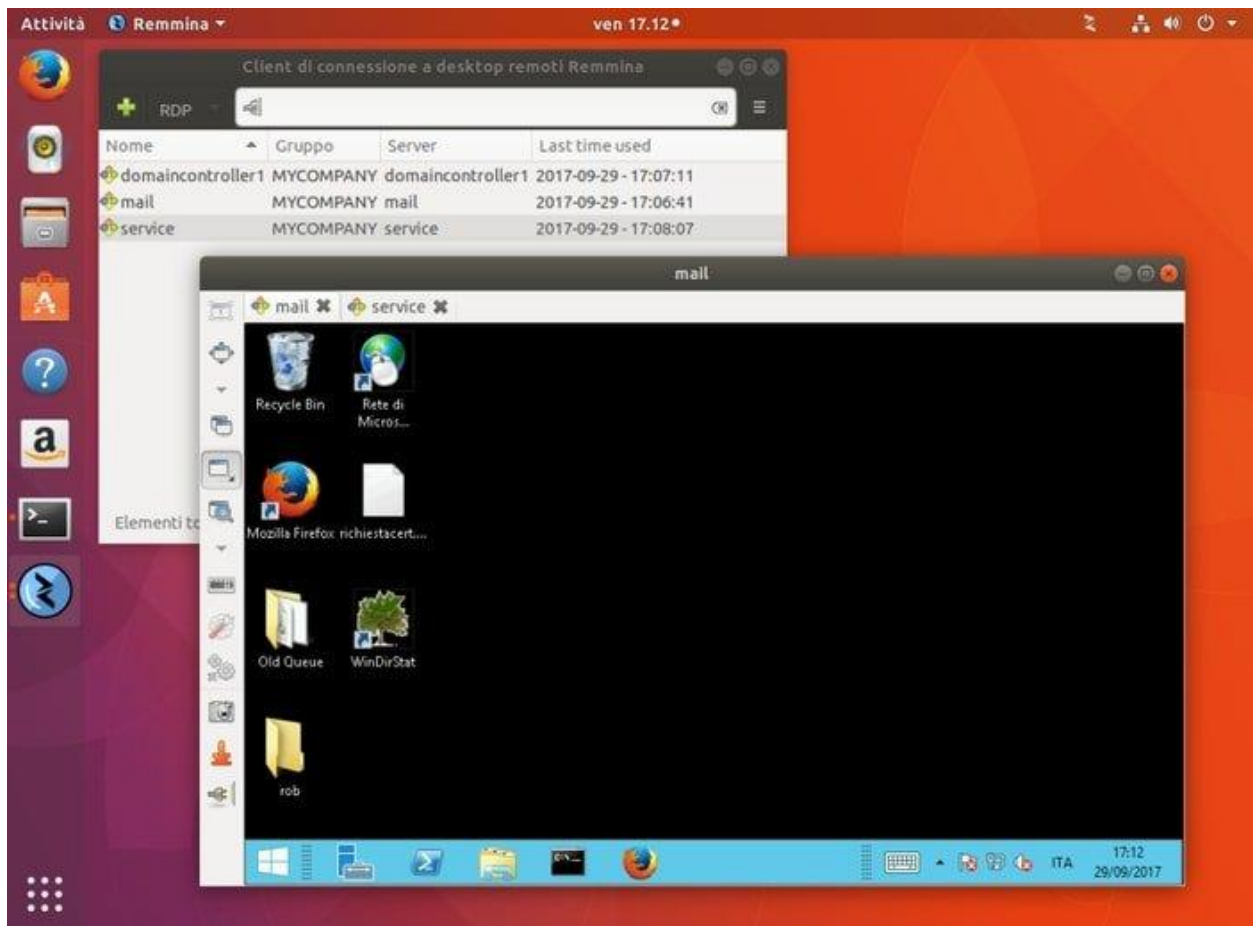


Resource Link:

- [GIMP – Best Photoshop Alternative Image Editing Software for Linux](#)
- [Top 10 Linux Photoshop Alternative Photo Management Software](#)

24. Secure Remote Desktop Client – Remmina

[Remmina](#) Remote Desktop Client is an open source, free and powerful [remote desktop sharing tool](#) for Linux and Unix based system. It offers feature-rich useful tools for the administrator and travelers to have easy and smooth remote access.



[Download Remmina](#)

Read More: [10 Fast and Secure Remote Desktop Client Software for Linux](#)

25. Firewall Software – Iptables

[Iptables](#) or Netfilter is the most popular and blazing fast open source CLI based [Linux firewall](#). Many system administrators prefer to use it for their [server protection](#) as it plays the first line of defense of a [Linux server protection](#).

[Download Iptables](#)

Resource Link: [Top 10 Linux Firewall Software For Protecting Your Linux System](#)

26. VPN Client and Services – ExpressVPN

[ExpressVPN](#) is one of the best VPN for Linux, and it supports a wide range of Linux distros including Ubuntu, Debian, CentOS, Fedora, etc. This VPN service provides important Linux support and speedy performance.

Resource Link: [Top 10 Linux VPN Client and Services For You To Get Protected](#)

27. Online Linux Terminal – Codeanywhere

[Online Linux Terminal](#) or emulator is the best way to practice or learn Linux commands without having a full-fledged Linux subsystem. There are no online Linux Terminals and bash scripts available in the market which let you run various shells, scripts, and commands to test or analyze the results. Among all of them, Codeanywhere is the best online Linux Terminal.

Resource Link: [Top 15 Online Linux Terminal Emulators and Bash Editors](#)

28. Linux Task Manager – Htop

[Htop](#) is an interactive process viewer and text-based [task manager for Unix system](#). This tool offers lots of useful options to the system admin like stopping, restarting and overall controlling the programs.

Resource Link: [Best Linux Task Manager: Top 12 Reviewed For Linux Nerds](#)

29. Linux Monitoring Tools

There are many [Linux Monitoring Tools](#) available in the market including open source software, third-party solutions, and homemade scripts run via cron. Each has its advantages and disadvantages. I have compiled a comprehensive list of Linux monitoring tools which includes all the elements of a Linux system like network, process management, server maintain etc.

Resource Link: [Most Comprehensive List of Linux Monitoring Tools For SysAdmin](#)

30. Linux Data Recovery Tools – Ddrescue

Ddrescue is GNU license holder software that you can use for free of cost for recovering the lost data. This Linux data recovery distro is an expert in rescuing data when read errors happen.

Resource Link: [Top 15 Linux Data Recovery Tools: The Professionals' Choice](#)

31. Project Management Tools – Confluence

It is a joint workplace that lets you form and control all of your projects. The tool is quite dissimilar to file-sharing and document tools. The reason lies in the sense that it is both exposed and cooperative.

Resource Link: [Top 20 Best Project Management Tools for Linux](#)

32. Linux PDF Viewer – Okular

This software allows to underlines, markup, highlighting your pdf files. And every user always feels the necessity of these tasks. On the other hand, the tool never allows editing, converting which can break the security of the files.

Resource Link: [Linux PDF Viewer: Best 15 PDF Readers Reviewed for Linux Users](#)

33. Best Markdown Editor – Visual Studio Code

One of the [best open source code editors](#) we've seen these couple of years, [Visual Studio Code](#) combines performance with highly flexible core feature sets. It aims at providing you with a natural working environment when writing your next web document using markdown.

Resource Link: [Best Markdown Editor: Top 20 Reviewed For Linux Users](#)

34. Music Player – Audacious

[Audacious](#) is the software that is considered as the best Linux Audio Player. This is the small software but it gives you a lot of options. Pause, skip song, repeat, shuffle everything you can do naturally with Audacious.

Resource Link: [Best 15 Linux Music Player Software for the Music Lover](#)

35. Linux Text Editor – Vim

A clone of Vi, the most powerful Linux text editor the world has ever seen, [Vim](#) offers all that you get with Vi, plus additional feature sets to provide ultimate user convenience.

Resource Link: [Linux Text Editor: 20 Text and HTML Editors Reviewed for Linux Nerds](#)

36. Best CCleaner Alternative – Stacer

Are you looking for **CCleaner alternative for Linux** that comes with a modern user interface? If yes, then this is the one you need. This **CCleaner alternative** covers four sections such as the app cache, apt-cache, system logs as well as the crash reports.

Resource Link: [Best CCleaner Alternative for Linux: Top 6 Reviewed for Linux Geeks](#)

37. Free AutoCAD Alternative – FreeCAD

Do you know about [FreeCAD](#)? Well, FreeCAD is a free open-source solid parametric modeler for 3D design. You can easily design real-life objects with FreeCAD regardless of their size. FreeCAD is frequently used in engineering and architecture fields.

Resource Link: [Free AutoCAD Alternative: Top 15 CAD Software For Linux](#)

38. Ethical Hacking and Penetration Testing Tools

Here I will not discuss any particular software for ethical hacking and pen testing tools but I will share a comprehensive list of best tools for ethical hacking and pen testing on your Linux system.

Resource Link: [An Ultimate List of Ethical Hacking and Penetration Testing Tools for Kali Linux](#)

39. Linux Productivity Software

In this sector, there are lots of options available in the software store. Moreover, Linux productivity software is a generic term which may include a wide range of software varieties. So I recommend you to check out the resource link for a different set of Linux productivity software and tools for your desktop.

Resource Link: [Top 15 Linux Productivity Software and Tools That Worth Your Attention](#)

40. Best Podcast App – CPod

[CPod](#) (formerly known as Cumulonimbus) is a free, open source and cross-platform podcast player for Linux, MacOS, and Windows. CPod is built on top of web technology, written in the JavaScript, and used the Electron framework.

Resource Link: [Best Podcast App: Top 20 Reviewed For Linux Podcatcher](#)

41. Linux Window Manager – i3

This manager can be configured in any way its user wants, from the placement of opened application to the custom keyboard shortcuts; it is configurable in every way.

Resource Link: [Best 20 Linux Window Managers: A Comprehensive List for Linux Users](#)

42. Best News Aggregator – Winds

“[Winds](#)” is free and open source multiplatform beautiful RSS reader specially developed on stream AI. The best thing about “Winds” is its based on AI and machine learning technology to give you better services.

Resource Link: [Best News Aggregator: Top 20 Reviewed For Linux Readers](#)

43. Linux Security Tools

Like Linux productivity software and monitoring tools, Linux security tools offer a wide range of taste for different users needs. Here, we will also focus on a set of best Linux security tools for all the Linux users.

Resource Link: [Best 20 Linux Security Tools: Recommendation from the Linux Experts](#)

Top 20 Irresistible Linux Security Tools

The security tools described below have been sorted out after a lengthy research to provide you with the best ones with authentic information. Each of the tools contains general discussion with an impressive feature section to help you understand the potential of the tool in details.

1. MISP

MISP, elaborately known as “Malware Information Sharing Platform” is a threat intellect platform to share, store and correlate signs of the threat intelligence, economic racket information, susceptibility information, and counter-violence information. The Linux security utility is useful both for storing, sharing,

collaborating cyber safety signs, malware exploration and for using information and the IoCs for detecting and preventing the threats.

Published	Org	Owner Org	Id	Clusters	Tags	#Attr	Email	Date	Threat Level	Analysis	Info	Distribution	Actions
☒	ORNAME	ORNAME	6			0	admin@admin.test	2017-10-10	High	Completed	rootkit	Community	
☒	ORNAME	ORNAME	5			0	admin@admin.test	2017-10-10	High	Completed	rootkit	Community	
☒	ORNAME	ORNAME	4			0	@gmail.com	2017-10-10	High	Completed	Malware iOS	Community	
☒	ORNAME	ORNAME	3			0	admin@admin.test	2017-10-10	High	Ongoing	Ransomware	Community	
☒	ORNAME	ORNAME	2			1	admin@admin.test	2017-10-10	High	Ongoing	Banking malware	All	
☒	ORNAME	ORNAME	1			0	@gmail.com	2017-10-09	High	Initial	Mẫu mã độc trên Android	All	

Page 1 of 1, showing 6 records out of 6 total, starting on record 1, ending on 6

Important features

- Flexible enough to express complex objects and allied them together to reveal threat intelligence, occurrences or linked elements.
- The “intuitive user-interface” lets the end-users build, upgrade and cooperate on indicators/attributes and events.
- Stores facts in an organized layout with a widespread cyber-security signs’ support.
- Combines signing and encryption of the warnings through PGP or/and MIME/S considering your preferences.

Download MISP

2. Privacy Badger

It is basically a [privacy safeguard](#) for [browsers](#) that provides those with security against the trackers of a website visitor. The trackers normally gather information about your browser. The collected information is frequently shared by the third parties. It is often used for creating a fake profile of a specific browser. In such a case, this Linux security program hinders the data collection.



Important features

- Runs as an extension on Opera, Firefox, and Chrome.
- Reviews the requested web-pages and deactivates those by replacing content or simply blocking the requests.
- Disables WebRTC that reveals the inner IP addresses.
- Helps you browse the net more securely.
- Requires a little space.

Install Privacy Badger

3. Aircrack-ng

It is an [outstanding network application](#) suite that consists of a packet, sniffer, detector, WPA/WPA2-PSK cracker and WEP, and an analysis utility for '802.11' wireless LANs. The software perfectly functions with any "wireless network interface controller" whose driver can nose 802.11g and 802.11a, 802.11b traffic and also supports the raw observing mode.

```
Aircrack-ng 1.2 rc4 - (C) 2006-2015 Thomas d'Otreppe
http://www.aircrack-ng.org

usage: aircrack-ng [options] <.cap / .ivs file(s)>

Common options:

-a <amode> : force attack mode (1/WEP, 2/WPA-PSK)
-e <essid> : target selection: network identifier
-b <bssid> : target selection: access point's MAC
-p <nbcpu> : # of CPU to use (default: all CPUs)
-q        : enable quiet mode (no status output)
-C <macs> : merge the given APs to a virtual one
-l <file> : write key to file

Static WEP cracking options:

-c        : search alpha-numeric characters only
-t        : search binary coded decimal chr only
-h        : search the numeric key for Fritz!BOX
-d <mask> : use masking of the key (A1:XX:CF:YY)
-m <maddr> : MAC address to filter usable packets
-n <nbits> : WEP key length : 64/128/152/256/512
-i <index> : WEP key index (1 to 4), default: any
-f <fudge> : bruteforce fudge factor, default: 2
-k <korek> : disable one attack method (1 to 17)
-x or -x0 : disable bruteforce for last keybytes
-x1       : last keybyte bruteforcing (default)
-x2       : enable last 2 keybytes bruteforcing
```



Important features

- Runs under Windows, OS X, Linux, OpenBSD, and [FreeBSD](#).
- Its packet can seize and export data to the text-files for additional processing by the tools of the third party.
- Replays attacks, counterfeit access points, de-authentication, and other related things through packet injection.
- Checks the capabilities of the drivers and WiFi cards as well.
- Able to crack both WPA PSK and WEP.

[Download Aircrack-ng](#)

4. Archery

Archery is a fabulous Linux security tool that helps you collect information regarding the vulnerabilities exists within your operating system. The software doesn't only concentrates on the authentic scanning but also allows management of the findings in an interface that is essentially web-based. Here follow the outstanding features of the utility:



Important features

- Comprises features such as dashboards, reporting, and searching.
- Can make interaction with other applications comprising the distinguished susceptibility scanners.
- Manages scans and susceptibility in CD/CI setting for DevOps teams.
- Its assessment and managing of vulnerability are completely Open Source.
- Manages all the vulnerabilities of web-scan and discovers threats in your programs.
- Also manages all the network scans and discovers threats in the infrastructure.

Download Archery

5. Anchore

Anchore is such a Linux security program that can help you detect, assess and authenticate the container images. You can store the images both in the cloud and on-premises. The tool is mostly concentrated on the developers so that they can accomplish successful scrutiny on the container images. Running inquiries and producing reports are the typical activities of Anchore.



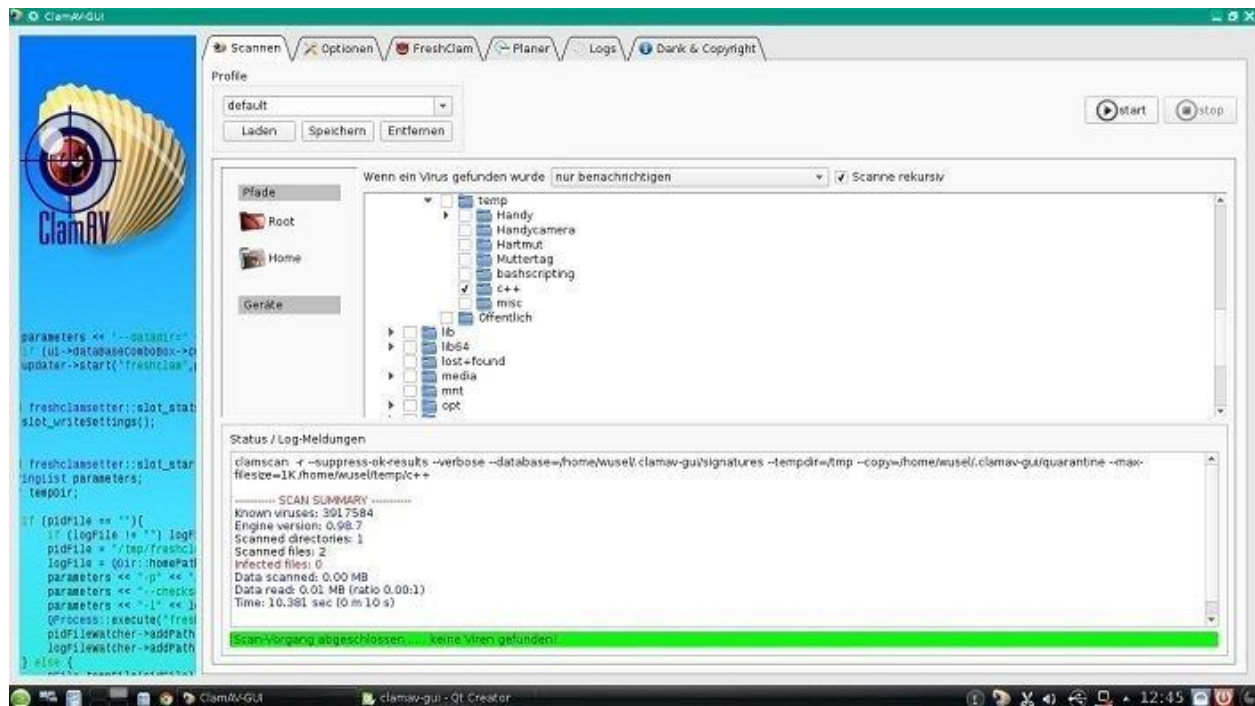
Important features

- Inspects your container images and generates a complete list of config files, Java archives, and many things more.
- Integrates with instrumentation platforms to guarantee that the images run are verified by your organization.
- Defines strategies to manage security susceptibilities, expose ports, manifest changes, and so on.

Try Anchore

6. ClamAV

ClamAV is a standard Linux security program for detecting mischievous program or malware. Though ClamAV is known as an [anti-virus engine](#), yet it perhaps will not come across numerous viruses because they are rare now. So, this software is more expected to discover other types of malware including ransomware, worms, and backdoors.



Important features

- You can use the tool in a number of techniques from completing a random scan-up to scanning in a group.
- Doesn't run 'on-access scanning' but you can combine it with supplementary tools for obtaining alike functionality.
- Can be adapted to assist scanning the incoming emails for detecting malicious contents.
- Supports numerous signature languages and file formats, and unpacking of archive and file.
- Includes command-line utilities and a multi-threaded scanner daemon for instant scanning of files and update of signature automatically.

Download ClamAV

7. Hashchat

It is the self-declared world's swiftest password retrieval tool that had a copyrighted code-base till 2015 and now is a completely free program. Microsoft LM hashes, Cisco PIX, MD4, MySQL, MD5, Unix Crypt formats, and SHA-family are the basic instances of hashcat supported hashing algorithms. The application comes both in GPU and CPU based variants. Its editions are compatible with [Windows](#), Linux, and OS X.

```
Enter YES in uppercase if you accept this EULA:
YES
Initializing hashcat v0.50 with 1 threads and 32mb segment-size...

Device.....: Intel(R) Core(TM) i5-4278U CPU @ 2.60GHz
Instruction set.: x86_64
Number of threads: 1

Hash type: MD4
Speed/sec: 16.38M words

Hash type: MD5
Speed/sec: 13.59M words

Hash type: SHA1
Speed/sec: 10.29M words

Hash type: SHA256
Speed/sec: 5.04M words

Hash type: SHA512
Speed/sec: 2.07M words

Hash type: SHA-3(Keccak)
Speed/sec: 1.88M words

Hash type: GOST R 34.11-94
Speed/sec: 949.61k words
```

Important features

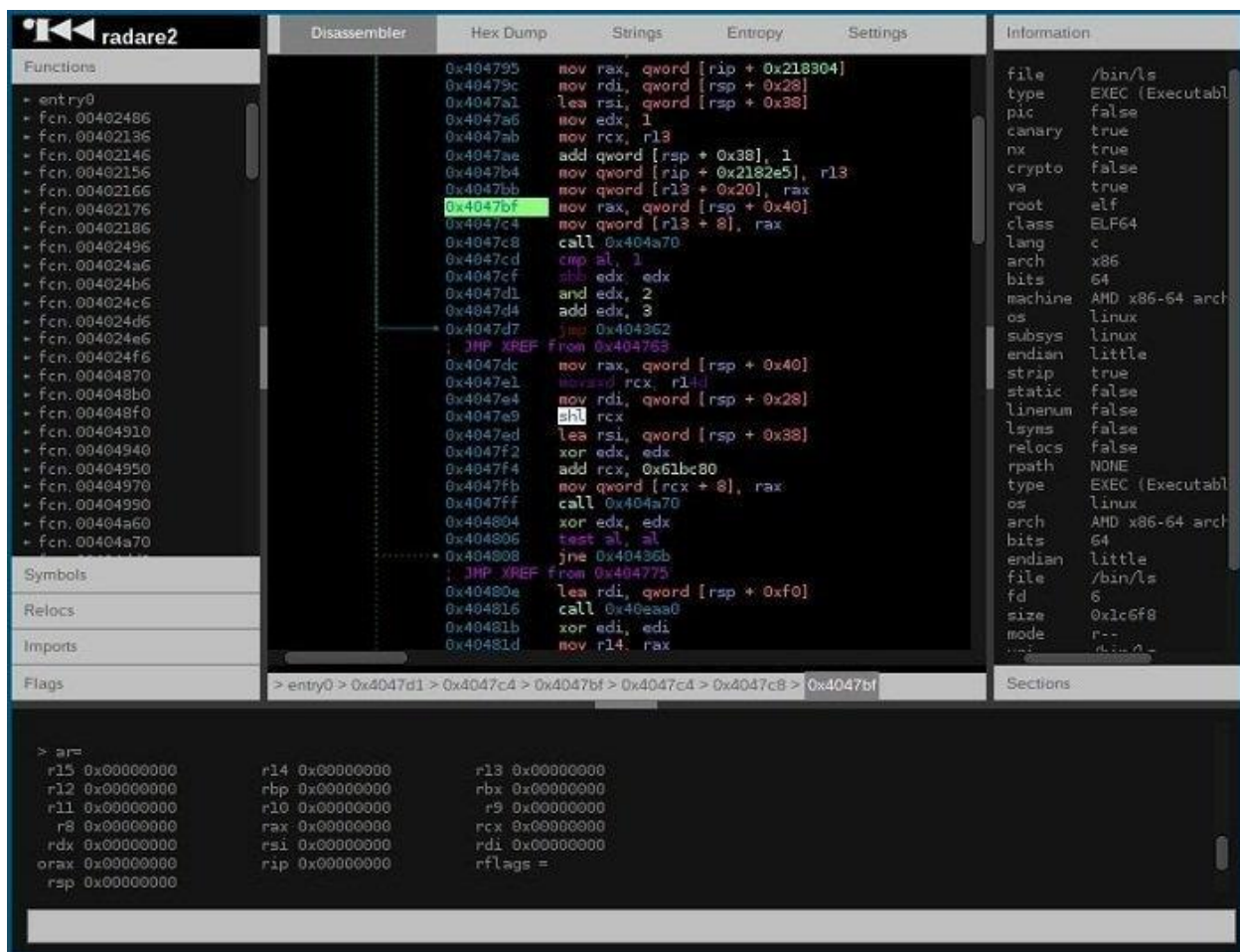
- Supports the brain functionality of password candidate.
- Supports reading the password candidates both from stdin and file.
- Supports circulated cracking networks.
- Supports hex-charset and hex-salt.
- Supports automated key space ordering Markov-chains.

- Contains inbuilt benchmarking system.
- Supports automated tuning of performance.

Download Hashchat

8. radare2

Radare2 is one of the popular Linux security frameworks for performing “reverse engineering” on several dissimilar file types. You can use the tool to explore firmware, malware or any other kind of ‘binary files’. In addition to “reverse engineering”, you can even use it for forensics upon filesystems and data carving. With it, you can script the tasks as well. It is capable of using software exploitation function in it.



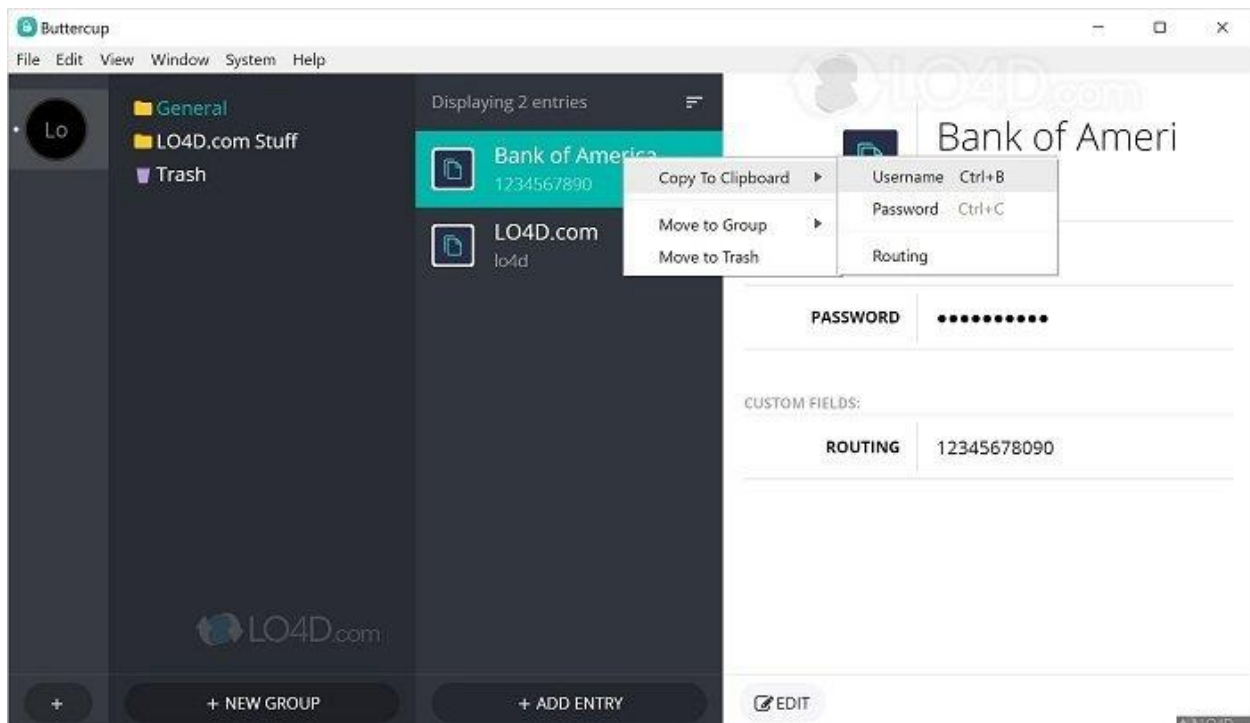
Important features

- Supports various [programming languages](#) like JavaScript, Go, and Python.
- Uses influential analysis aptitudes for speeding up the reversing.
- Visualizes data configurations of a number of file types.
- Debugs with both local and distant debuggers.
- Patches applications to expose new and exciting features or repair susceptibilities.
- Disassembles several, unlike architectures.

Download radare2

9. Buttercup for desktop

No, it's not a name of any delicious dessert that we are going to present to convince you to eat. Instead, it is a [mind-blowing password manager](#) that is intended to help you control your credentials. A powerful encryption is used by it for guarding your sensitive files and materials under only one master password.



Important features

- Allows you to use more difficult passwords for individual service and stores those securely.
- You can install it directly on Google Chrome while on Mozilla Firefox the tool is found as an extension.
- Includes simple to use interface where saving and finding the details of login is easier
- Completely free to use on all the key platforms.
- Serves equally both on Android and Ios mobile phones.

Install Buttercup

10. Bro

“Bro” helps you extensively perform the monitoring of security looking into the activities of the network. This Linux security utility is able to identify the doubtful data streams. Considering the data, the program alerts reacts, and even integrates with other related tools. This [fabulous software](#) has been advanced by Vern Paxson who now leads the project with a potential group of scholars and developers.

```
[ 22%] Built target plugin-Bro-BackDoor
make[3]: Entering directory `/root/Downloads/bro/build'
Scanning dependencies of target plugin-Bro-ARP
make[3]: Leaving directory `/root/Downloads/bro/build'
make[3]: Entering directory `/root/Downloads/bro/build'
[ 22%] Building CXX object src/analyzer/protocol/arp/CMakeFiles/plugin-Bro-ARP.dir/ARP.cc.o
[ 22%] Building CXX object src/analyzer/protocol/arp/CMakeFiles/plugin-Bro-ARP.dir/Plugin.cc.o
[ 22%] Building CXX object src/analyzer/protocol/arp/CMakeFiles/plugin-Bro-ARP.dir/events.bif.cc.o
[ 22%] Building CXX object src/analyzer/protocol/arp/CMakeFiles/plugin-Bro-ARP.dir/events.bif.init.cc.o
Linking CXX static library libplugin-Bro-ARP.a
```

Important features

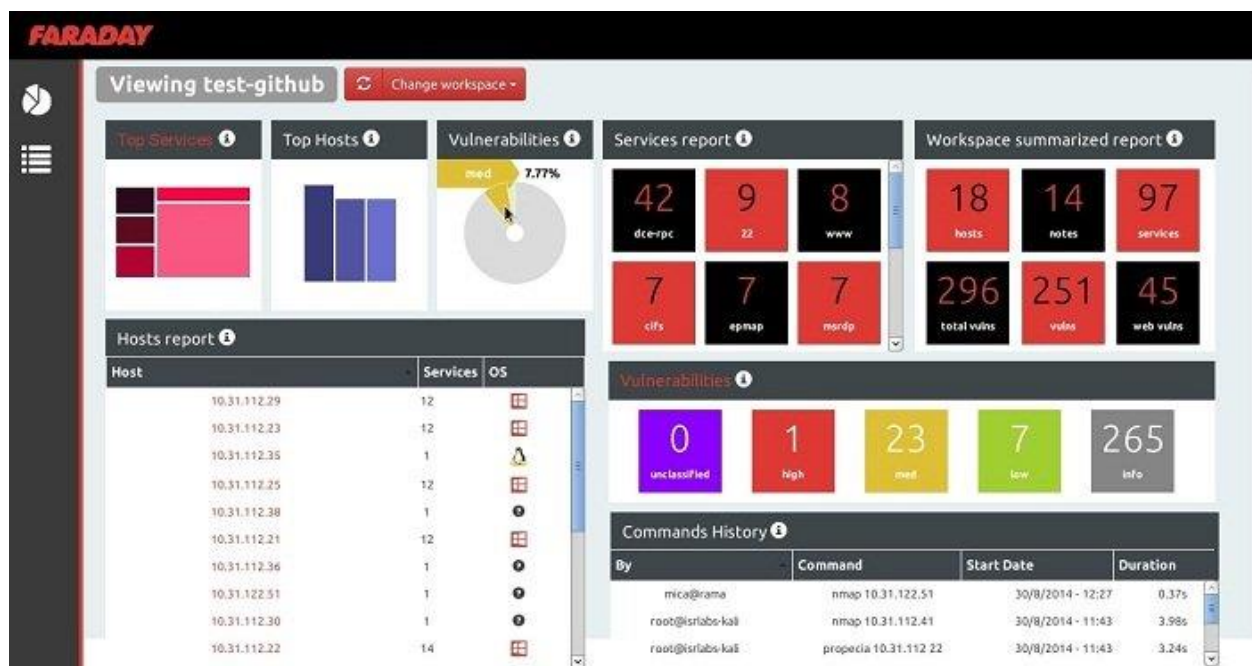
- Its domain based scripting language facilitates site-specific observing strategies.
- Aims at high-performance networks.
- Not bound to any specific discovery tactic and doesn't depend on outdated signatures.

- Expansively records what it finds and offers a high-level store of the activities of a network.
- Interfaces with other programs for the give-and-take of information in real-time.
- Maintains far-reaching program-layer state regarding the network it observes.

[Download Bro](#)

11. Faraday

Faraday is a real-time cooperative utility that upsurges velocity, efficiency, and transparency for your and your teams' assessments. This Linux security framework provides you with superior perceptibility and helps make cooler safekeeping investment. The software serves many organizations all over the world. It is even able to meet the requirements of different organizations offering appropriate solutions to each case.



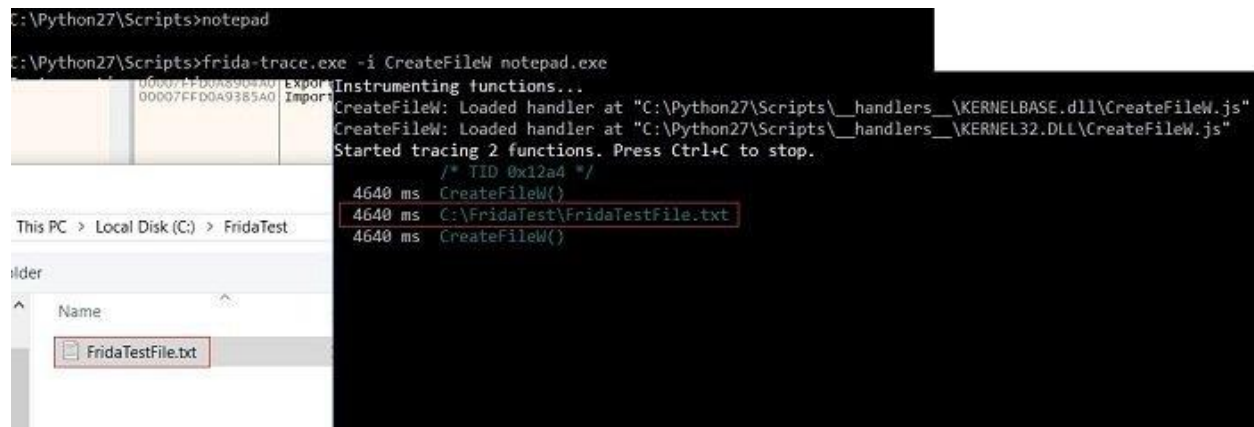
Important features

- Equipped with simplicity with a particular set of functional activities that help you develop accomplishing your work.
- As a user, you have the opportunity for generating a timeline that contains each historical modification within the existing penetration investigation.
- Gives the opportunity for making a comparison of two, unlike pentests.
- Enables the corporates, penetration testers, and [project managers](#) to have a real-time view of the work in development.

[Download Faraday](#)

12. Frida

Another great Linux security framework- “Frida” lets the researchers and developers inoculate ‘custom scripts’ into ‘black box methods’. In this way, the tool provides all the functions with a hook, letting you trace the performed instructions. It even approves uninterrupted manipulation and observes the outcomes.



Important features

- You can get Frida with available bindings for [various programming languages](#) that allow relating to processes.
- Doesn't require any source code for tracing personal application code and hooking functions.
- Allows you to edit, store, and examine the outcomes.
- Contains a complete test-suite.
- Available options for personalization and addition.
- Compatible with QNX, Windows, GNU/Linux, Android, [macOS](#), and iOS.

Install Frida

13. PTF

PTF, the short form of or “PenTesters Framework” is a Python script that aims at keeping your penetration analysis toolkit latest. It is an excellent Linux security program that is intended to run under [Ubuntu](#), Arch Linux, [Debian](#), or associated clones. It basically functions with modules where you get the definition of the method of fetching a tool and an overview of the needed things for building the tool.

```
ptf> show modules

The PenTesters Framework Modules
=====

Name                Description
----                -
modules/install_update_all    This will install or update all tools with modules within PTF
modules/exploitation/beef      This module will install/update the Browser Exploitation Framework (BeEF)
modules/exploitation/set       This module will install/update the Social-Engineer Toolkit (SET)
modules/exploitation/ridenum   This module will install/update RIDENUM
modules/exploitation/responder This module will install/update Responder
modules/post-exploitation/meterssh This module will install/update MeterSSH
modules/post-exploitation/unicorn This module will install/update Unicorn
modules/intelligence-gathering/recon-ng This module will install/update Recon-NG
modules/intelligence-gathering/dictionary This module will install/update download a massive list of dictionaries.

ptf> use modules/install_update_all
[*] You are about to install/update everything. Proceed? [yes/no]:yes
```

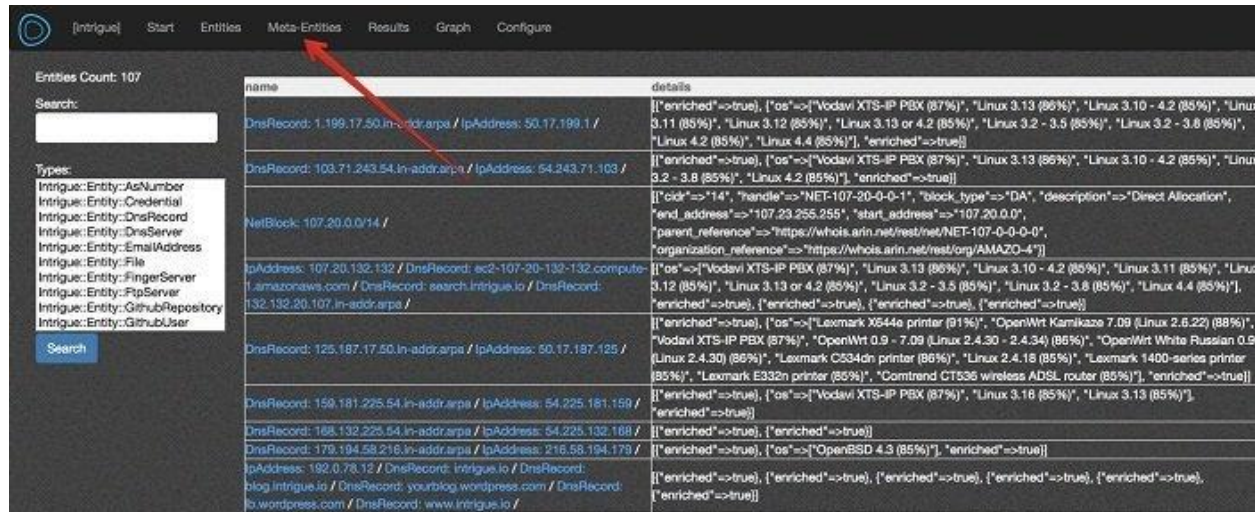
Important features

- Capable of retrieving, compiling, and installing the tools normally used by you.
- The tool is a modular structure; you are allowed to utilize lots of typical [pen-testing tools](#) and attach your own utilities.
- Makes sure that each and everything is structured according to the “Penetration Testing Execution Standard.”

Download PTF

14. Intrigue

It is one of the finest Linux security utilities that is extensively used to discover the attack surface. The discovery relates to applications and infrastructure, vulnerability, and security research.



name	details
DnsRecord: 1.199.17.50.in-addr.arpa / IpAddress: 50.17.199.1 /	[{"enriched":true}, {"os":["Vodafone XTS-IP PBX (87%)", "Linux 3.13 (86%)", "Linux 3.10 - 4.2 (85%)", "Linux 3.11 (85%)", "Linux 3.12 (85%)", "Linux 3.13 or 4.2 (85%)", "Linux 3.2 - 3.5 (85%)", "Linux 3.2 - 3.8 (85%)", "Linux 4.2 (85%)", "Linux 4.4 (85%)"], "enriched":true}]
DnsRecord: 103.71.243.54.in-addr.arpa / IpAddress: 54.243.71.103 /	[{"enriched":true}, {"os":["Vodafone XTS-IP PBX (87%)", "Linux 3.13 (86%)", "Linux 3.10 - 4.2 (85%)", "Linux 3.11 (85%)", "Linux 3.12 (85%)", "Linux 3.13 or 4.2 (85%)", "Linux 3.2 - 3.5 (85%)", "Linux 3.2 - 3.8 (85%)", "Linux 4.2 (85%)", "Linux 4.4 (85%)"], "enriched":true}]
NetBlock: 107.20.0.0/14 /	[{"cidr":"14", "handle":"NET-107-20-0-0-1", "block_type":"DA", "description":"Direct Allocation", "end_address":"107.23.255.255", "start_address":"107.20.0.0", "parent_reference":"https://whois.arin.net/rest/net/NET-107-0-0-0-0", "organization_reference":"https://whois.arin.net/rest/org/AMAZO-4"}]
IpAddress: 107.20.132.132 / DnsRecord: ec2-107-20-132-132.compute-1.amazonaws.com / DnsRecord: search.intrigue.io / DnsRecord: 132.132.20.107.in-addr.arpa /	[{"os":["Vodafone XTS-IP PBX (87%)", "Linux 3.13 (86%)", "Linux 3.10 - 4.2 (85%)", "Linux 3.11 (85%)", "Linux 3.12 (85%)", "Linux 3.13 or 4.2 (85%)", "Linux 3.2 - 3.5 (85%)", "Linux 3.2 - 3.8 (85%)", "Linux 4.2 (85%)", "Linux 4.4 (85%)"], "enriched":true}, {"enriched":true}, {"enriched":true}, {"enriched":true}]
DnsRecord: 125.187.17.50.in-addr.arpa / IpAddress: 50.17.187.125 /	[{"os":["Vodafone XTS-IP PBX (87%)", "OpenWrt 0.9 - 7.09 (Linux 2.4.30 - 2.4.34) (86%)", "OpenWrt White Russian 0.9 (Linux 2.4.30) (86%)", "Lexmark C534dn printer (86%)", "Linux 2.4.18 (85%)", "Lexmark 1400-series printer (85%)", "Lexmark E332n printer (85%)", "Comtrend CT536 wireless ADSL router (85%)"], "enriched":true}]
DnsRecord: 159.181.225.54.in-addr.arpa / IpAddress: 54.225.181.159 /	[{"os":["Vodafone XTS-IP PBX (87%)", "Linux 3.13 (86%)", "Linux 3.10 - 4.2 (85%)", "Linux 3.11 (85%)", "Linux 3.12 (85%)", "Linux 3.13 or 4.2 (85%)", "Linux 3.2 - 3.5 (85%)", "Linux 3.2 - 3.8 (85%)", "Linux 4.2 (85%)", "Linux 4.4 (85%)"], "enriched":true}]
DnsRecord: 168.132.225.54.in-addr.arpa / IpAddress: 54.225.132.168 /	[{"enriched":true}, {"os":["Vodafone XTS-IP PBX (87%)", "Linux 3.13 (86%)", "Linux 3.10 - 4.2 (85%)", "Linux 3.11 (85%)", "Linux 3.12 (85%)", "Linux 3.13 or 4.2 (85%)", "Linux 3.2 - 3.5 (85%)", "Linux 3.2 - 3.8 (85%)", "Linux 4.2 (85%)", "Linux 4.4 (85%)"], "enriched":true}]
DnsRecord: 179.194.58.216.in-addr.arpa / IpAddress: 216.58.194.179 /	[{"enriched":true}, {"os":["Vodafone XTS-IP PBX (87%)", "Linux 3.13 (86%)", "Linux 3.10 - 4.2 (85%)", "Linux 3.11 (85%)", "Linux 3.12 (85%)", "Linux 3.13 or 4.2 (85%)", "Linux 3.2 - 3.5 (85%)", "Linux 3.2 - 3.8 (85%)", "Linux 4.2 (85%)", "Linux 4.4 (85%)"], "enriched":true}]
IpAddress: 192.0.78.12 / DnsRecord: intrigue.io / DnsRecord: blog.intrigue.io / DnsRecord: yourblog.wordpress.com / DnsRecord: lb.wordpress.com / DnsRecord: www.intrigue.io /	[{"enriched":true}, {"enriched":true}, {"enriched":true}, {"enriched":true}, {"enriched":true}, {"enriched":true}]

Important features

- Includes a bunch of scripts to sort out the required information.
- Provides unmatched visibility of external asset.
- Identifies the uncovered susceptibilities in the program stacks and their core hosts.
- Lets you export vulnerability information for the management teams.
- Helps the security teams gain perceptibility of the third party risk.
- Allows you to enrich the existing data and carry out OSINT exploration.
- Enables security teams to identify the un-used assets that still pose a threat to the company.

SignUp Intrigue

15. Vault

It is a fantastic secret management program made by HashiCorp that is an expert in preserving your invaluable data. The secrets stored by it are normally utilized by software scripts and components. Vault employs an API to let you have an access to the encoded secrets. The confidential issues themselves can either be prevalent or dynamically created.

Vault Authentication -> Authorization Flow



Important features

- Allows storing confidential things including STS/ AWS IAM credentials, value/key pairs, NoSQL/ SQL databases, SSH credentials, X.509 certificates, and many other sensitive details.
- Includes leasing, auditing, key rolling, and key revocation.
- Offers encryption just like a service with 'integrated key management.'
- Simplifies the encryption of data both at rest and in transit across datacenters and clouds.

[Download Vault](#)

16. CAIRIS

CAIRIS, an outstanding Linux security framework basically stands for "Computer Aided Integration of Requirements and Information Security." It is such a great platform that with it you can elicit, specify, and validate the functioning systems. The tool was created to support each element required for analysis of risk, usability, and requirements.

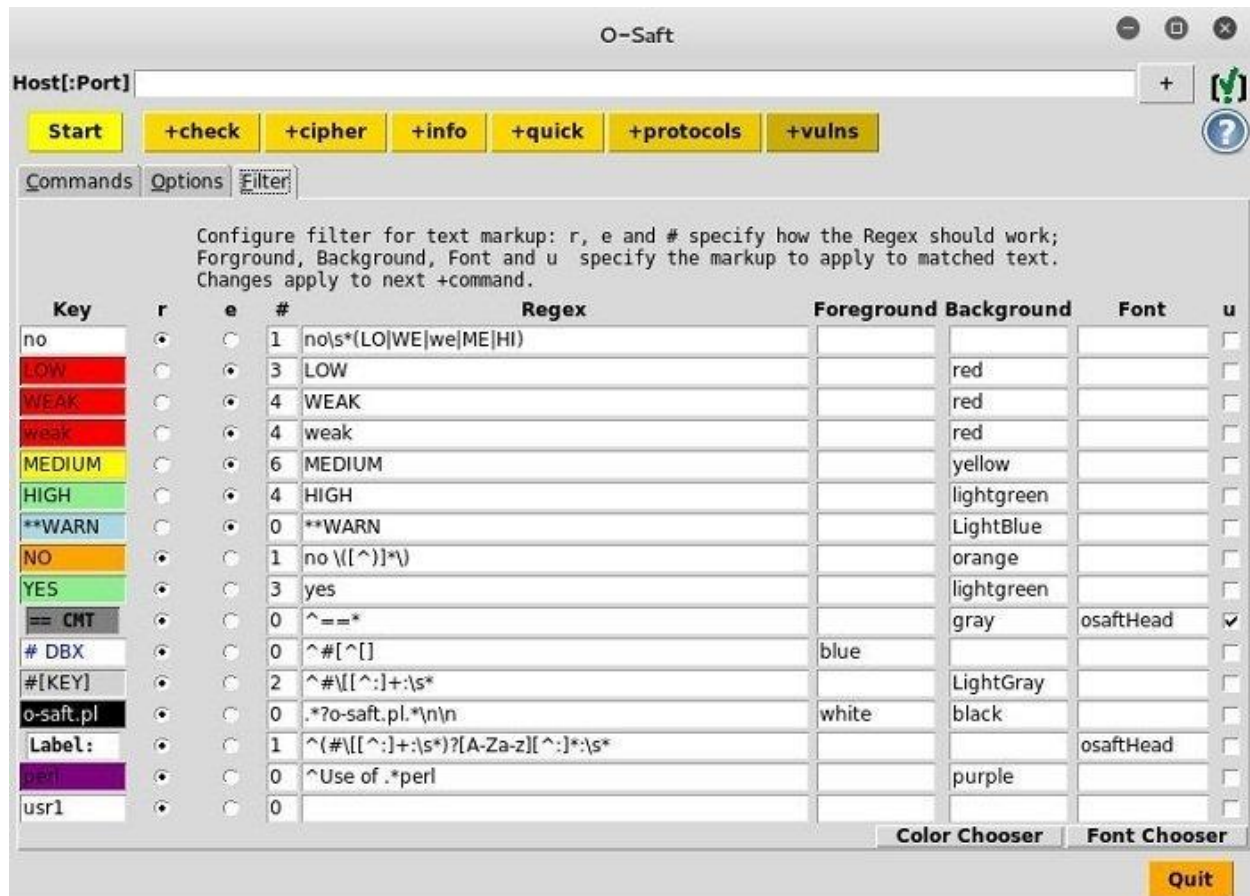
The screenshot displays the CAIRIS (Cognitive Architecture for Integrated Reasoning and Inference System) interface. The top navigation bar includes a home icon, the CAIRIS logo, and several menu items: System, Requirements, Risk, UX, Models, and Options. A search bar and a Logout button are also present.

The main interface is divided into several sections:

- Environment:** A dropdown menu showing "Psychosis".
- Goal:** A dropdown menu showing "All".
- Use Case:** A dropdown menu showing "All".
- Goal properties panel:** A panel on the right side of the interface showing details for a selected goal. The goal is named "Analysis complete acknowledgement". Other properties include:
 - Originator:** SF
 - Category:** Achieve
 - Priority:** Medium
 - Definition:** An acknowledgement is sent to the workflow submitter when analysis is complete.
 - Fit Criterion:** TBC
 - Issue:** None

The central part of the interface displays a complex goal network diagram. The diagram consists of various goal nodes (represented by rectangles) and their relationships (represented by lines). The nodes are organized into a hierarchical structure, with some nodes being expanded to show their sub-goals. The diagram illustrates the decomposition of a high-level goal into more specific, actionable goals.

It is one of those rare [command-line tools](#) that you can use both in closed settings and offline. The Linux security application contains a Tk/Tcl based graphical user interface. Besides, you can turn it into an online CGI-utility.



Important features

- Provides convenient SSL configuration information with its elementary parameters.
- Performs more particular tests with limited tool tuning.
- Allows you to gather information, test penetration, assess security, scan vulnerability, or analysis of web application.
- Supports STARTTLS for different types of protocols including SMTP, IRC, POP3, XMPP, IMAP, RDP, LDAP.
- Checks for securities against some attacks such as BEAST, FREAK, DROWN, CRIME, and so on.
- Shows the details of certificate and SSL connection.

18. YARA

YARA is another fabulous Linux security utility that is intended to assisting the malware scholars to recognize and categorize the malware samples without any limitation. With this framework, you can easily produce descriptions of the malware families or anything else according to your desire grounded on binary or textual patterns. All the descriptions, which are also known as rules, consisting of a boolean expression and a bunch of strings.

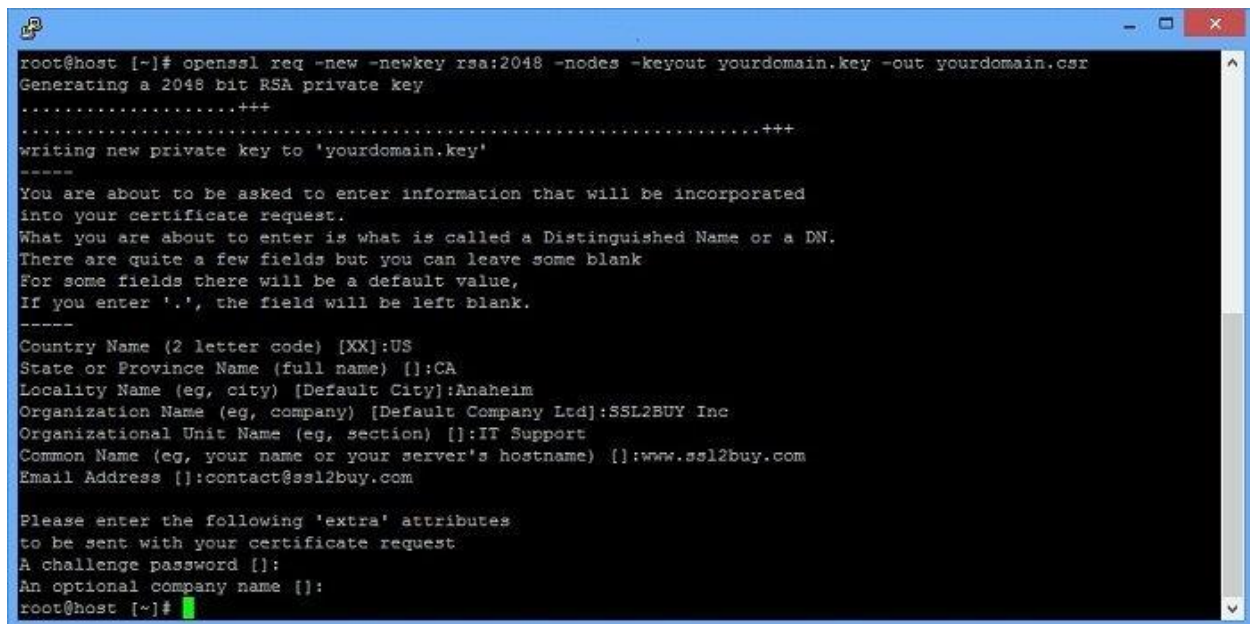
```
rule pdf_1.7_contains_few_links {  
  
  meta:  
    author = "Sean Whalen"  
    last_updated = "2017-06-08"  
    tlp = "white"  
    category = "malicious"  
    confidence = "medium"  
    killchain_phase = "exploit"  
    description = "A PDFv1.7 that contains one or two links - a common phishing tactic"  
  
  strings:  
    $pdf_magic = {25 50 44 46}  
    $s_anchor_tag = "<a " ascii wide nocase  
    $s_uri = /\[http.+\/\]/ ascii wide nocase  
  
  condition:  
    $pdf_magic at 0 and (#s_anchor_tag == 1 or (#s_uri > 0 and #s_uri < 3))  
}
```

Important features

- Lets you create more compound and influential rules using case-insensitive strings, wild-cards, special operators, regular expressions, and several other features.
- Equally runs on Linux, Mac OS X, and Windows.
- You can use it from your personal "Python scripts" with an extension of Yara-python or via YARA's [command-line interface](#).

19. OpenSSL

This is a marvelous software library, which is suitable for the applications that you use to protect interactions over the computer networks against overhearing. The central library is written using C [programming language](#). This Linux security utility is extensively adopted in the web servers of the Internet, and now a majority of the websites is served by it.



```
root@host [~]# openssl req -new -newkey rsa:2048 -nodes -keyout yourdomain.key -out yourdomain.csr
Generating a 2048 bit RSA private key
.....+++
.....+++
writing new private key to 'yourdomain.key'
-----
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [XX]:US
State or Province Name (full name) []:CA
Locality Name (eg, city) [Default City]:Anaheim
Organization Name (eg, company) [Default Company Ltd]:SSL2BUY Inc
Organizational Unit Name (eg, section) []:IT Support
Common Name (eg, your name or your server's hostname) []:www.ssl2buy.com
Email Address []:contact@ssl2buy.com

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:
An optional company name []:
root@host [~]#
```

Important features

- Includes an open source execution of the TLS and SSL protocols.
- The core library can execute fundamental cryptographic tasks and provide different tool functions.
- Wrappers are available that allow you to use the OpenSSL library with multiple computer languages.
- Editions are compatible with Windows, OpenVMS, and most Unix and Unix-like operating systems including Linux, Solaris, QNX, macOS, etc.

Download OpenSSL

20. Confidant

Confidant, popularly known as “storage of secrets” provides you with a substitute by preserving your confidential facts in a database instead of a configuration file. The tool functions in such a way that it doesn’t give access to all applications to have the facts. Even often the system managers are not given access if anything dubious is captured by Confidant.

Important features

- Solves the verification egg and chicken problem using IAM and AWS KMS.
- Stores your confidential files in an append-only method creating an exclusive KMS data-key for the revisions of all the secrets.
- Provides an “AngularJS web interface” that lets the end-users manage the secrets and their mappings very easily.

**

20 Command Line Tools to Monitor Linux Performance

by [Ravi Saive](#) | Published: April 27, 2014 | Last Updated: January 3, 2015

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It’s really very tough job for every System or Network administrator to monitor and debug Linux System Performance problems every day. After being a Linux Administrator for 5 years in IT industry, I came to know that how hard is to monitor and keep systems up and running. For this reason, we’ve compiled the list of Top 20 frequently used command line monitoring tools that might be useful for every Linux/Unix System Administrator. These commands are available under all flavors of Linux and can be useful to monitor and find the actual causes of performance problem. This list of commands shown here are very enough for you to pick the one that is suitable for your monitoring scenario.



Linux Command Line Monitoring

1. Top – Linux Process Monitoring

Linux Top command is a performance monitoring program which is used frequently by many system administrators to monitor Linux performance and it is available under many Linux/Unix like operating systems. The top command is used to display all the running and active real-time processes in ordered list and updates it regularly. It displays CPU usage, Memory usage, Swap Memory, Cache Size, Buffer Size, Process PID, User, Commands and much more. It also shows high memory and CPU utilization of a running process. The top command is much useful for system administrator to monitor and take correct action when required. Let's see top command in action.

```
# top
```

```
root@tecmin:~# http://www.tecmint.com
top - 11:36:04 up 1 day, 22:51, 2 users, load average: 0.06, 0.11, 0.09
Tasks: 141 total, 1 running, 139 sleeping, 0 stopped, 1 zombie
Cpu(s): 0.7%us, 0.5%sy, 0.0%ni, 98.8%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st
Mem: 1021108k total, 982904k used, 38204k free, 134576k buffers
Swap: 2046968k total, 0k used, 2046968k free, 599576k cached

  PID USER      PR  NI  VIRT  RES  SHR  S %CPU  %MEM    TIME+  COMMAND
 25454 root        20   0 397m 107m 13m  S   2.3   10.8   25:19.18 skype
    269 root        20   0     0     0   0  S   0.3    0.0    0:51.24 scsi_eh_1
      1 root        20   0 2872 1400 1200  S   0.0    0.1    0:00.89 init
      2 root        20   0     0     0   0  S   0.0    0.0    0:00.00 kthreadd
      3 root        RT   0     0     0   0  S   0.0    0.0    0:00.16 migration/0
      4 root        20   0     0     0   0  S   0.0    0.0    0:51.23 ksoftirqd/0
      5 root        RT   0     0     0   0  S   0.0    0.0    0:00.00 migration/0
      6 root        RT   0     0     0   0  S   0.0    0.0    0:00.33 watchdog/0
      7 root        RT   0     0     0   0  S   0.0    0.0    0:00.10 migration/1
      8 root        RT   0     0     0   0  S   0.0    0.0    0:00.00 migration/1
      9 root        20   0     0     0   0  S   0.0    0.0    6:44.34 ksoftirqd/1
     10 root        RT   0     0     0   0  S   0.0    0.0    0:00.27 watchdog/1
     11 root        20   0     0     0   0  S   0.0    0.0    0:04.05 events/0
     12 root        20   0     0     0   0  S   0.0    0.0    0:04.87 events/1
     13 root        20   0     0     0   0  S   0.0    0.0    0:00.00 cgroup
     14 root        20   0     0     0   0  S   0.0    0.0    0:00.00 khelper
     15 root        20   0     0     0   0  S   0.0    0.0    0:00.00 netns
     16 root        20   0     0     0   0  S   0.0    0.0    0:00.00 async/mgr
     17 root        20   0     0     0   0  S   0.0    0.0    0:00.00 pm
     18 root        20   0     0     0   0  S   0.0    0.0    0:00.23 sync_supers
```

Top Command Example

For more examples of Top command read : [12 TOP Command Examples in Linux](#)

2. VmStat – Virtual Memory Statistics

Linux VmStat command used to display statistics of virtual memory, kernel threads, disks, system processes, I/O blocks, interrupts, CPU activity and much more. By default vmstat command is not available under Linux systems you need to install a package called sysstat that includes a vmstat program. The common usage of command format is.

```
# vmstat

procs -----memory----- ---swap-- -----io---- --system-- -----cpu--
---
 r  b    swpd    free   inact active    si   so    bi    bo    in   cs us sy id wa
st
 1  0        0 810420  97380  70628     0    0   115    4   89   79  1  6 90  3
0
```

For more Vmstat examples read : [6 Vmstat Command Examples in Linux](#)

3. Lsof – List Open Files

Lsof command used in many Linux/Unix like system that is used to display list of all the open files and the processes. The open files included are disk files, network sockets, pipes, devices and processes. One of the main reason for using this command is when a disk cannot be unmounted and displays the error that files are being used or opened. With this commmand you can easily identify which files are in use. The most common format for this command is.

```
# lsof
```

COMMAND	PID	USER	FD	TYPE	DEVICE	SIZE	NODE	NAME
init	1	root	cwd	DIR	104,2	4096	2	/
init	1	root	rtd	DIR	104,2	4096	2	/
init	1	root	txt	REG	104,2	38652	17710339	
/sbin/init								
init	1	root	mem	REG	104,2	129900	196453	
/lib/ld-2.5.so								
init	1	root	mem	REG	104,2	1693812	196454	
/lib/libc-2.5.so								
init	1	root	mem	REG	104,2	20668	196479	
/lib/libdl-2.5.so								
init	1	root	mem	REG	104,2	245376	196419	
/lib/libsepol.so.1								
init	1	root	mem	REG	104,2	93508	196431	
/lib/libselinux.so.1								
init	1	root	10u	FIFO	0,17		953	
/dev/initctl								

More lsof command usage and examples : [10 lsof Command Examples in Linux](#)

4. Tcpdump – Network Packet Analyzer

Tcpdump one of the most widely used command-line network packet analyzer or packets sniffer program that is used capture or filter TCP/IP packets that received or transferred on a specific interface over a network. It also provides a option to save captured packages in a file for later analysis. tcpdump is almost available in all major Linux distributions.

```
# tcpdump -i eth0
```

```
tcpdump: verbose output suppressed, use -v or -vv for full protocol decode
```

```

listening on eth0, link-type EN10MB (Ethernet), capture size 96 bytes
22:08:59.617628 IP tecmint.com.ssh > 115.113.134.3.static-
mumbai.vsnl.net.in.28472: P 2532133365:2532133481(116) ack 3561562349 win
9648
22:09:07.653466 IP tecmint.com.ssh > 115.113.134.3.static-
mumbai.vsnl.net.in.28472: P 116:232(116) ack 1 win 9648
22:08:59.617916 IP 115.113.134.3.static-mumbai.vsnl.net.in.28472 >
tecmint.com.ssh: . ack 116 win 64347

```

For more tcpdump usage read : [12 Tcpdump Command Examples in Linux](#)

5. Netstat – Network Statistics

Netstat is a command line tool for monitoring incoming and outgoing network packets statistics as well as interface statistics. It is very useful tool for every system administrator to monitor network performance and troubleshoot network related problems.

netstat -a | more

```

Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 *:mysql                 *:.*                    LISTEN
tcp        0      0 *:sunrpc                 *:.*                    LISTEN
tcp        0      0 *:realm-rusd            *:.*                    LISTEN
tcp        0      0 *:ftp                   *:.*                    LISTEN
tcp        0      0 localhost.localdomain:ipp *:.*                    LISTEN
tcp        0      0 localhost.localdomain:smtp *:.*                    LISTEN
tcp        0      0 localhost.localdomain:smtp localhost.localdomain:42709 TIME_WAIT
tcp        0      0 localhost.localdomain:smtp localhost.localdomain:42710 TIME_WAIT
tcp        0      0 *:http                  *:.*                    LISTEN
tcp        0      0 *:ssh                   *:.*                    LISTEN

```

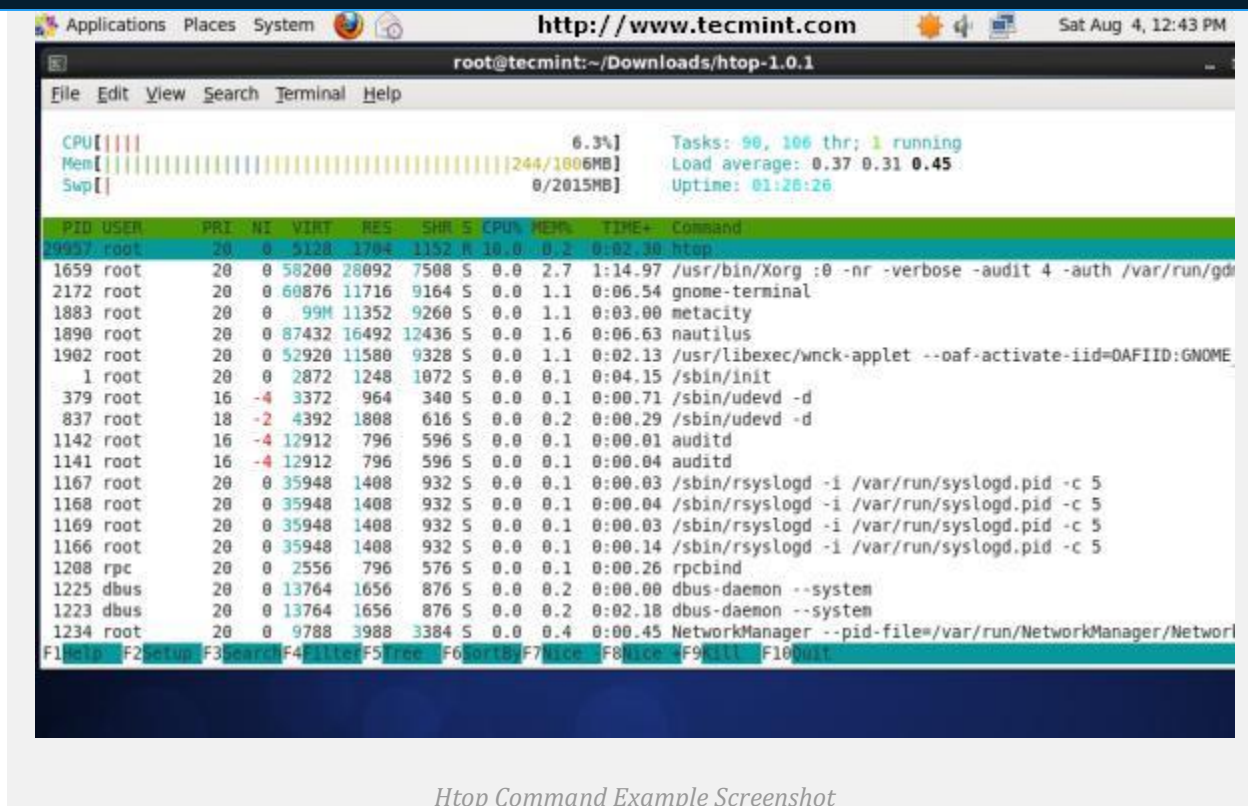
```
tcp      0      0 *:https
LISTEN
```

More Netstat examples : [20 Netstat Command Examples in Linux.](#)

6. Htop – Linux Process Monitoring

Htop is a much advanced interactive and real time Linux process monitoring tool. This is much similar to Linux top command but it has some rich features like user friendly interface to manage process, shortcut keys, vertical and horizontal view of the processes and much more. Htop is a third party tool and doesn't included in Linux systems, you need to install it using YUM package manager tool. For more information on installation read our article below.

```
# htop
```



Htop Command Example Screenshot

For Htop installation read : [Install Htop \(Linux Process Monitoring\) in Linux](#)

7. Iotop – Monitor Linux Disk I/O

Iotop is also much similar to top command and Htop program, but it has accounting function to monitor and display real time Disk I/O and processes.

This tool is much useful for finding the exact process and high used disk read/writes of the processes.

iotop

TID	PRIO	USER	DISK READ	DISK WRITE	SWAPIN	IO>	COMMAND
20869	be/4	mongod	0.00 B/s	0.00 B/s	0.00 %	0.00 %	mongod -f /etc/mongod.conf
23239	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	konqueror -mimety-ctory file:///root
7183	be/4	ubersvn	0.00 B/s	0.00 B/s	0.00 %	0.00 %	java -Djava.util.~up.Bootstrap start
1805	be/3	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[cnic_wq]
1812	be/0	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[bnx2i_thread/0]
7125	be/4	ubersvn	0.00 B/s	0.00 B/s	0.00 %	0.00 %	java -Djava.util.~up.Bootstrap start
7152	be/4	ubersvn	0.00 B/s	0.00 B/s	0.00 %	0.00 %	java -Djava.util.~up.Bootstrap start
25635	be/4	clamav	0.00 B/s	0.00 B/s	0.00 %	0.00 %	clamd
9160	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	perl /usr/libexec~bmin/miniserv.conf
18100	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	automount
8406	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	squid -D
31923	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	Xvnc :1 -desktop ~ -rfbport 5901 -pn
32127	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	nm-applet --sm-disable
2125	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	xulrunner-bin ./application.ini
8355	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	crond
32168	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	gconfd-2 7
25636	be/4	clamav	0.00 B/s	0.00 B/s	0.00 %	0.00 %	clamd
31932	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	sh /usr/bin/startkde
1965	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	klauncher [kdeinit] --new-startup
2064	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	bt-applet --sm-disable
32125	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	bt-applet --sm-disable
2146	be/4	apache	0.00 B/s	0.00 B/s	0.00 %	0.00 %	php-fpm: pool www
8478	be/4	xymon	0.00 B/s	0.00 B/s	0.00 %	0.00 %	hobbitd_channel --og hobbitd_history
13846	be/4	mysql	0.00 B/s	0.00 B/s	0.00 %	0.00 %	mysqld --basedir=~b/mysql/mysql.sock
30015	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	(ncsa_auth) /etc/squid/passwd
32091	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	kdeinit Running...
13831	be/4	mysql	0.00 B/s	0.00 B/s	0.00 %	0.00 %	mysqld --basedir=~b/mysql/mysql.sock
13832	be/4	mysql	0.00 B/s	0.00 B/s	0.00 %	0.00 %	mysqld --basedir=~b/mysql/mysql.sock
13833	be/4	mysql	0.00 B/s	0.00 B/s	0.00 %	0.00 %	mysqld --basedir=~b/mysql/mysql.sock

Iotop Command Example Screenshot

For Iotop installation and usage read : [Install Iotop in Linux](#)

8. Iostat – Input/Output Statistics

IoStat is simple tool that will collect and show system input and output storage device statistics. This tool is often used to trace storage device performance issues including devices, local disks, remote disks such as NFS.

iostat

Linux 2.6.18-238.9.1.el5 (tecmin.com) 09/13/2012

avg-cpu:	%user	%nice	%system	%iowait	%steal	%idle
	2.60	3.65	1.04	4.29	0.00	88.42

Device:	tps	Blk_read/s	Blk_wrtn/s	Blk_read	Blk_wrtn
---------	-----	------------	------------	----------	----------

cciss/c0d0	17.79	545.80	256.52	855159769	401914750
cciss/c0d0p1	0.00	0.00	0.00	5459	3518
cciss/c0d0p2	16.45	533.97	245.18	836631746	384153384
cciss/c0d0p3	0.63	5.58	3.97	8737650	6215544
cciss/c0d0p4	0.00	0.00	0.00	8	0
cciss/c0d0p5	0.63	3.79	5.03	5936778	7882528
cciss/c0d0p6	0.08	2.46	2.34	3847771	3659776

For more Iostat usage and examples visit : [6 Iostat Command Examples in Linux](#)

9. IPTraf – Real Time IP LAN Monitoring

IPTraf is an open source console-based real time network (IP LAN) monitoring utility for Linux. It collects a variety of information such as IP traffic monitor that passes over the network, including TCP flag information, ICMP details, TCP/UDP traffic breakdowns, TCP connection packet and byte counts. It also gathers information of general and detailed interface statistics of TCP, UDP, IP, ICMP, non-IP, IP checksum errors, interface activity etc.

```

root@tecmin:~
IPTraf
TCP Connections (Source Host:Port)  Packets  Bytes  Flags  Iface
172.16.25.126:22  >  178  39800  -PA-  eth0
172.16.25.125:1352  >  94  4696  --A-  eth0

TCP: 1 entries  Active

UDP (279 bytes) from 172.16.24.33:5353 to 224.0.0.251:5353 on eth0
UDP (229 bytes) from 172.16.16.52:138 to 172.16.31.255:138 on eth0
UDP (229 bytes) from 172.16.16.87:138 to 172.16.31.255:138 on eth0
UDP (279 bytes) from 172.16.24.33:5353 to 224.0.0.251:5353 on eth0
UDP (229 bytes) from 172.16.19.124:138 to 172.16.31.255:138 on eth0

Bottom  Elapsed time: 0:00
Pkts captured (all interfaces): 325  TCP flow rate: 30.00 kbits/s
Up/Dn/PgUp/PgDn-scroll  M-more TCP info  W-chg actv win  S-sort TCP  X-exit

```

IP Traffic Monitor

For more information and usage of IPTraf tool, please visit : [IPTraf Network Monitoring Tool](#)

10. Psacct or Acct – Monitor User Activity

psacct or acct tools are very useful for monitoring each users activity on the system. Both daemons runs in the background and keeps a close watch on the overall activity of each user on the system and also what resources are being consumed by them.

These tools are very useful for system administrators to track each users activity like what they are doing, what commands they issued, how much resources are used by them, how long they are active on the system etc.

For installation and example usage of commands read the article on [Monitor User Activity with psacct or acct](#)

11. Monit – Linux Process and Services Monitoring

Monit is a free open source and web based process supervision utility that automatically monitors and managers system processes, programs, files, directories, permissions, checksums and filesystems.

It monitors services like Apache, MySQL, Mail, FTP, ProFTP, Nginx, SSH and so on. The system status can be viewed from the command line or using it own web interface.

tecmin.com Monit - Mozilla Firefox

File Edit View History Bookmarks Tools Help

tecmin.com Monit

localhost:2812

Most Visited Red Hat Customer Portal Documentation Red Hat Network

Home> Running Monit on more than one server? Use [M/Monit](#) to manage all your Monit instances monit 5.1.1

http://www.tecmint.com

Monit Service Manager

Monit is running on tecmint.com with uptime, 5m and monitoring:

System	Status	Load	CPU	Memory
tecmin.com	running	[0.10] [0.07] [0.04]	5.0%us, 0.9%sy, 0.9%wa	34.6% [354012 kB]

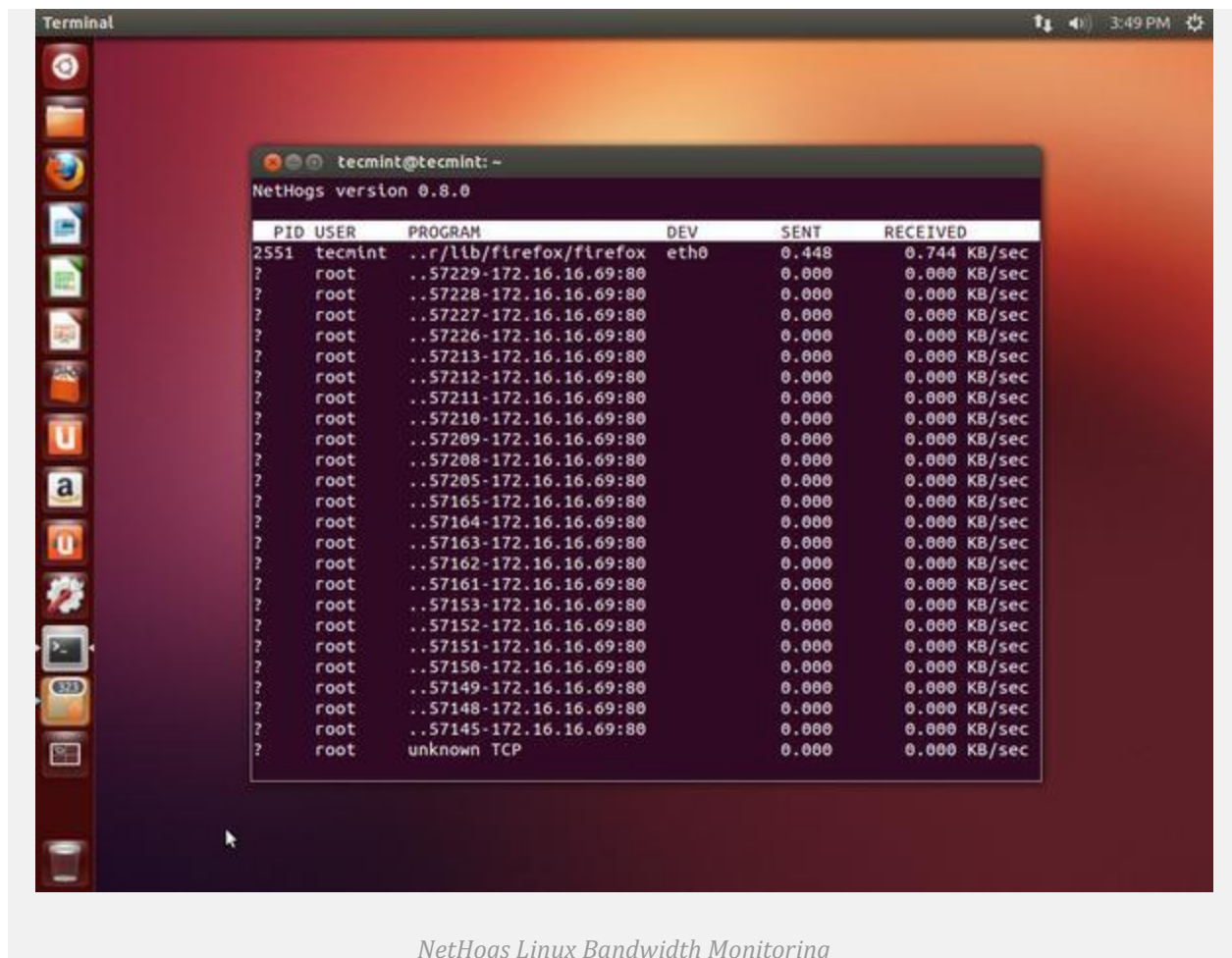
Process	Status	Uptime	CPU	Memory
sshd	running	1d 2h 42m	0.0%	0.0% [636 kB]
mysqld	running	1d 2h 42m	0.4%	2.8% [29068 kB]
proftpd	running	23m	0.0%	0.1% [1748 kB]

Monit Linux Process Monitoring

Read More : [Linux Process Monitoring with Monit](#)

12. NetHogs – Monitor Per Process Network Bandwidth

NetHogs is an open source nice small program (similar to Linux top command) that keeps a tab on each process network activity on your system. It also keeps a track of real time network traffic bandwidth used by each program or application.

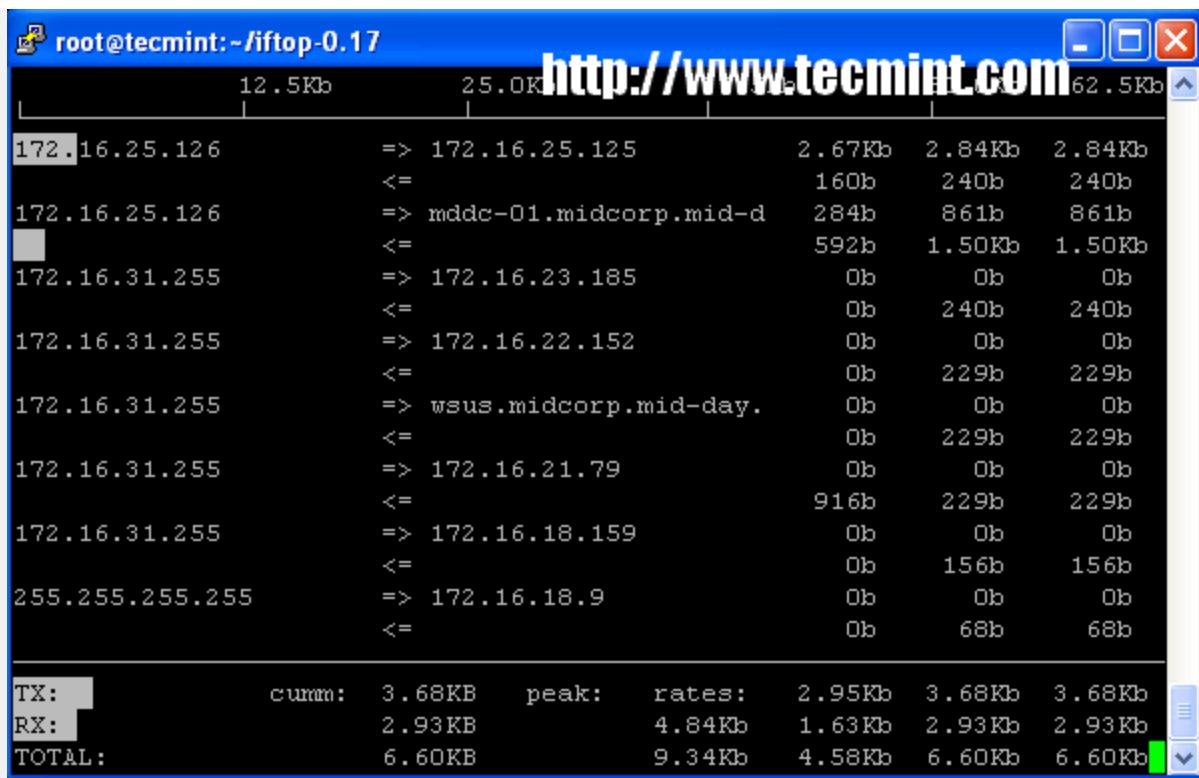


NetHogs Linux Bandwidth Monitoring

Read More : [Monitor Linux Network Bandwidth Using NetHogs](#)

13. iftop - Network Bandwidth Monitoring

iftop is another terminal-based free open source system monitoring utility that displays a frequently updated list of network bandwidth utilization (source and destination hosts) that passing through the network interface on your system. iftop is considered for network usage, what 'top' does for CPU usage. iftop is a 'top' family tool that monitor a selected interface and displays a current bandwidth usage between two hosts.



iftop - Network Bandwidth Monitoring

Read More : [iftop - Monitor Network Bandwidth Utilization](#)

14. Monitorix - System and Network Monitoring

Monitorix is a free lightweight utility that is designed to run and monitor system and network resources as many as possible in Linux/Unix servers. It has a built in HTTP web server that regularly collects system and network information and display them in graphs. It Monitors system load average and usage, memory allocation, disk driver health, system services, network ports, mail statistics (Sendmail, Postfix, Dovecot, etc), MySQL statistics and many more. It designed to monitor overall system performance and helps in detecting failures, bottlenecks, abnormal activities etc.



Monitorix Monitoring

Read More : [Monitorix a System and Network Monitoring Tool for Linux](#)

15. Arpwatch – Ethernet Activity Monitor

Arpwatch is a kind of program that is designed to monitor Address Resolution (MAC and IP address changes) of Ethernet network traffic on a Linux network. It continuously keeps watch on Ethernet traffic and produces a log of IP and MAC address pair changes along with a timestamps on a network. It also has a feature to send an email alerts to administrator, when a pairing added or changes. It is very useful in detecting ARP spoofing on a network.

Read More : [Arpwatch to Monitor Ethernet Activity](#)

16. Suricata – Network Security Monitoring

Suricata is an high performance open source Network Security and Intrusion Detection and Prevention Monitoring

System for Linux, FreeBSD and Windows. It was designed and owned by a non-profit foundation OISF (Open Information Security Foundation).

Read More : [Suricata – A Network Intrusion Detection and Prevention System](#)

17. VnStat PHP – Monitoring Network Bandwidth

VnStat PHP a web based frontend application for most popular networking tool called “vnstat“. VnStat PHP monitors a network traffic usage in nicely graphical mode. It displays a total IN and OUT network traffic usage in hourly, daily, monthly and full summary report.

Read More : [VnStat PHP – Monitoring Network Bandwidth](#)

18. Nagios – Network/Server Monitoring

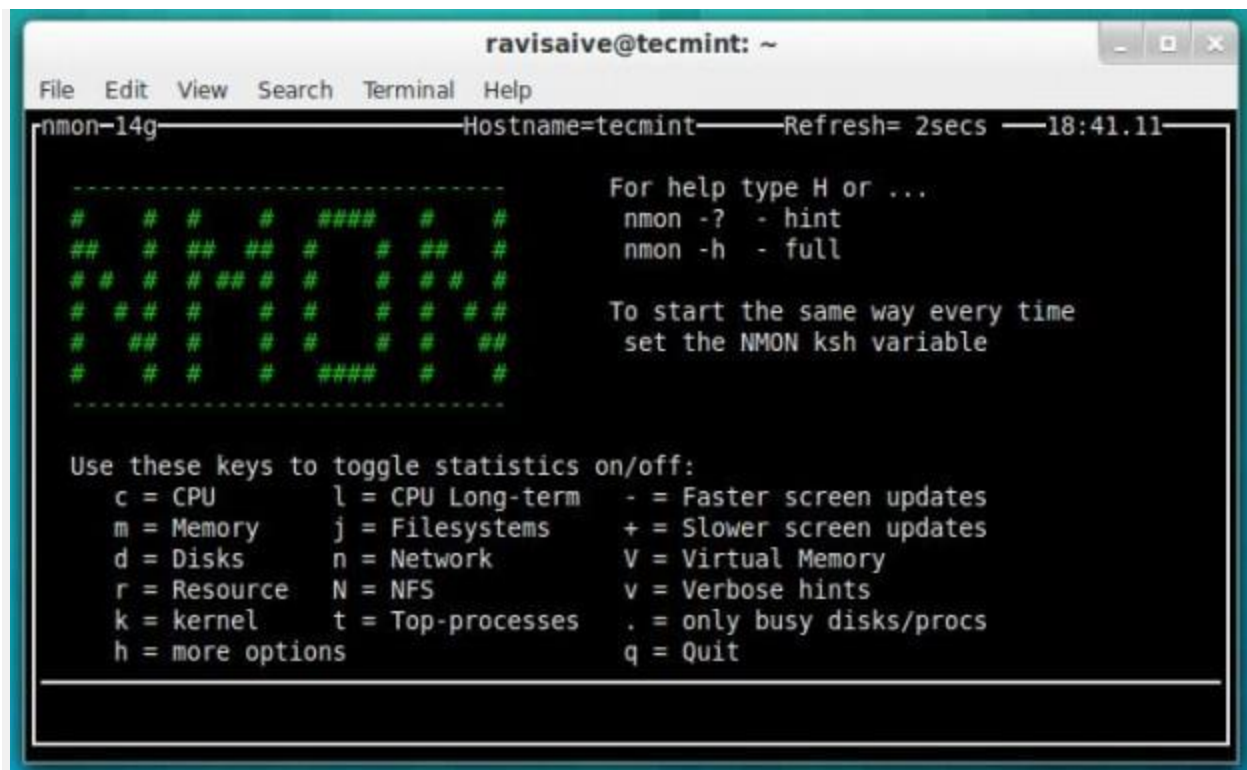
Nagios is an leading open source powerful monitoring system that enables network/system administrators to identify and resolve server related problems before they affect major business processes. With the Nagios system, administrators can able to monitor remote Linux, Windows, Switches, Routers and Printers on a single window. It shows critical warnings and indicates if something went wrong in your network/server which indirectly helps you to begin remediation processes before they occur.

Read More : [Install Nagios Monitoring System to Monitor Remote Linux/Windows Hosts](#)

19. Nmon: Monitor Linux Performance

Nmon (stands for Nigel's performance Monitor) tool, which is used to monitor all Linux resources such as CPU, Memory, Disk Usage, Network, Top processes, NFS, Kernel and much more. This tool comes in two modes: Online Mode and Capture Mode.

The Online Mode, is used for real-time monitoring and Capture Mode, is used to store the output in CSV format for later processing.



```
ravisaive@tecmin: ~
File Edit View Search Terminal Help
nmon-14g-----Hostname=tecmin-----Refresh= 2secs ---18:41.11---

-----
#  #  #  #  #####  #  #
## #  ## ## #  #  ## #
## #  ## ## #  #  ## #
#  #  #  #  #  #  #  #  #
#  ## #  #  #  #  #  ##
#  #  #  #  #  #####  #  #
-----

For help type H or ...
nmon -? - hint
nmon -h - full

To start the same way every time
set the NMON ksh variable

Use these keys to toggle statistics on/off:
c = CPU          l = CPU Long-term    - = Faster screen updates
m = Memory       j = Filesystems      + = Slower screen updates
d = Disks        n = Network          V = Virtual Memory
r = Resource     N = NFS              v = Verbose hints
k = kernel       t = Top-processes    . = only busy disks/procs
h = more options q = Quit
```

Nmon Monitoring

Read More: [Install Nmon \(Performance Monitoring\) Tool in Linux](#)

20. Collectl: All-in-One Performance Monitoring Tool

Collectl is a yet another powerful and feature rich command line based utility, that can be used to gather information about Linux system resources such as CPU usage, memory, network, inodes, processes, nfs, tcp, sockets and much more.

Collectl Monitoring

Read More: [Install Collectl \(All-in-One Performance Monitoring\) Tool in Linux](#)

We would like to know what kind of monitoring programs you use to monitor performance of your Linux servers? If we've missed any important tool that you would like us to include in this list, please inform us via comments and please don't forget to share it.

Read Also: [13 Linux Performance Monitoring Tools – Part 2](#)

13 Linux Performance Monitoring Tools – Part 2

by [Ravi Saive](#) | Published: December 6, 2014 | Last Updated: January 1, 2015

Download Your Free eBooks NOW - [10 Free Linux eBooks for Administrators](#) | [4 Free Shell Scripting eBooks](#)

If you're working as a Linux/Unix system administrator, sure you know that you must have useful monitoring tools to monitor your computers & systems,

monitoring tools are very important in the job of a system administrator or a server webmaster, it's the best way to keep an eye on what's going on inside your system.

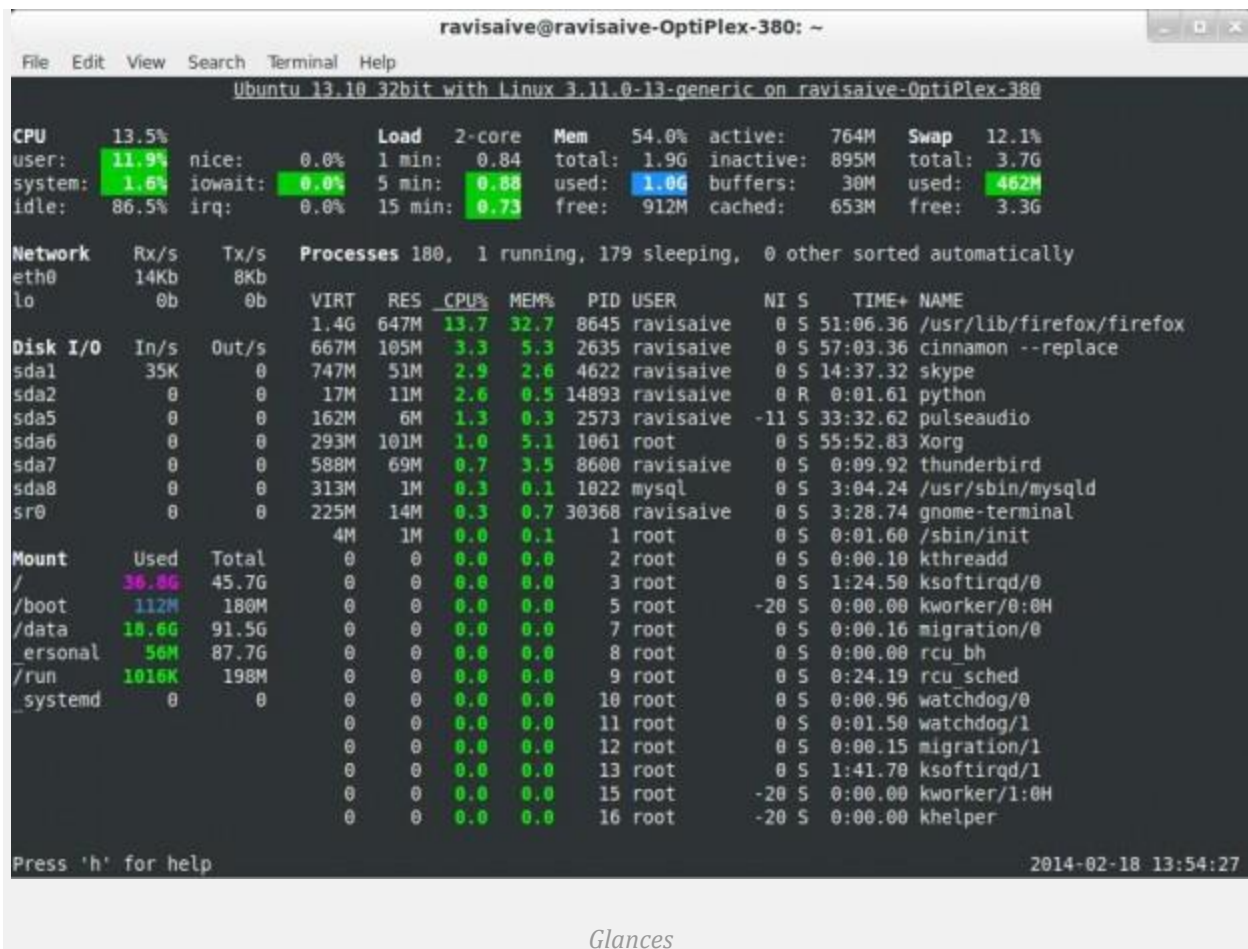
Read Also: [20 Tools to Monitor Linux Performance – Part 1](#)



Today we're going to talk about another 13 Linux monitoring tool that you may use to do the job.

21. Glances – Real Time System Monitoring

Glances is a monitoring tool built to present as much information as possible in any terminal size, it automatically takes the terminal window size it runs on, in other words, it's a responsive monitoring tool.



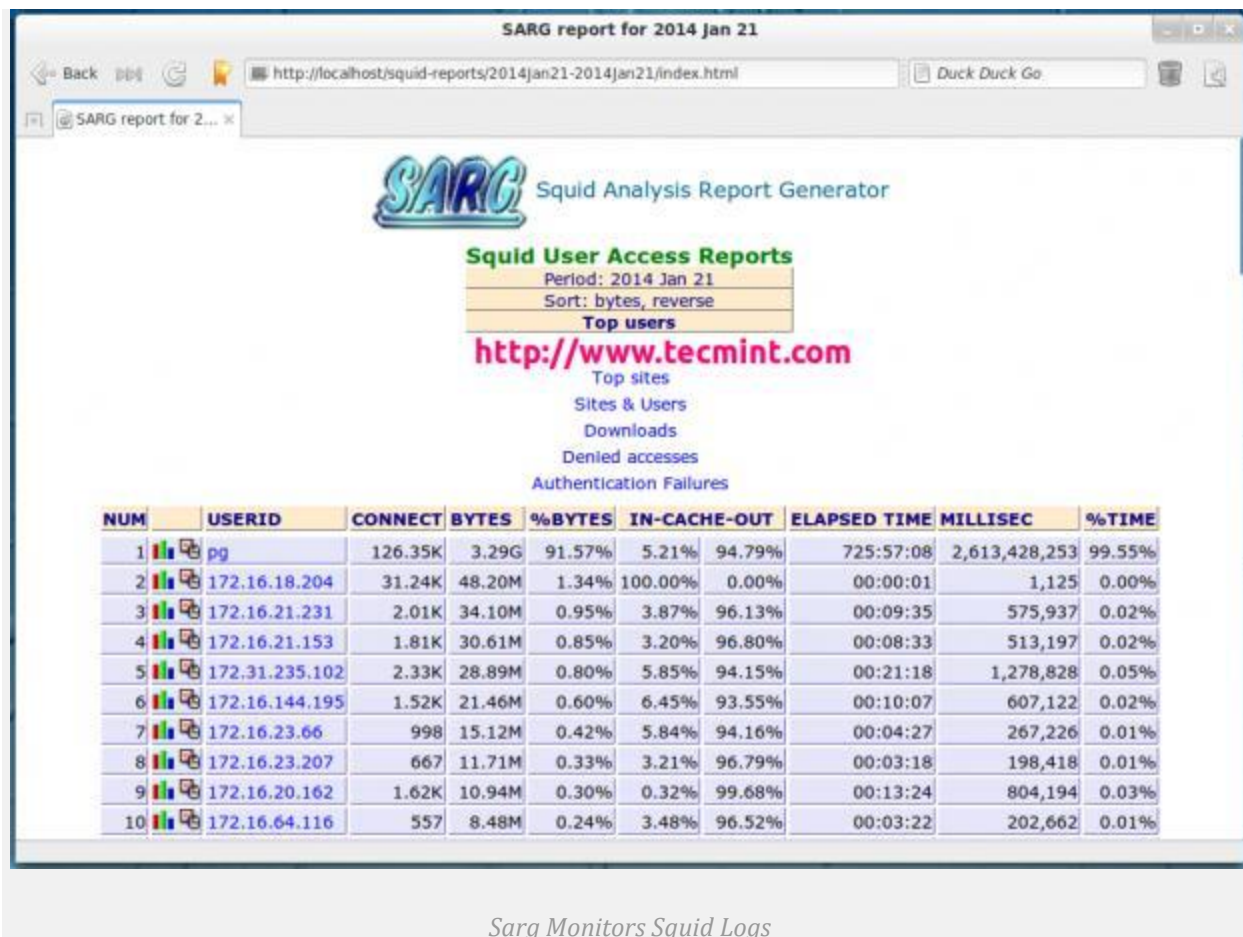
Features

- Licensed under LGPL and written in Python.
- Cross-platform, it works on Windows, Mac, BSD and Linux.
- Available in most Linux official repositories.
- A It gives a lot of information about your system.
- Built using curses.

Read More: [Install Glances on RHEL/CentOS/Fedora and Ubuntu/Debian](#)

22. Sarg – Squid Bandwidth Monitoring

Sarg (Squid Analysis Report Generator) is a free & open-source tool which act as a monitoring tool for your Squid proxy server, it creates reports about your Squid proxy server users, IP addresses, the sites they visit beside some other information.



Features of Sarg

- Licensed under GPL 2 and available in many languages.
- Works under Linux & FreeBSD.
- Generates report in HTML format.
- Very easy to install & use.

Read More: [Install Sarg "Squid Bandwidth Monitoring" Tool in Linux](#)

23. Apache Status Monitoring

Apache Module mod_status is an Apache server module that allows you to monitor the workers status of the Apache server. It generates a report in an easy to read HTML format. It shows you the status of all the workers, how much CPU each one using, and what requests are currently handled and number of working and not working workers.

Apache Status - Mozilla Firefox

File Edit View History Bookmarks Tools Help Related Links

Apache Status

5.175.142.66/server-status

<http://www.tecmint.com>

Apache Server Status for 5.175.142.66

Server Version: Apache/2.2.15 (Unix) DAV/2 PHP/5.3.3
Server Built: Aug 13 2013 17:29:28

Current Time: Tuesday, 14-Jan-2014 04:27:02 EST
Restart Time: Tuesday, 14-Jan-2014 00:33:05 EST
Parent Server Generation: 0
Server uptime: 3 hours 53 minutes 56 seconds
Total accesses: 2642 - Total Traffic: 9.2 MB
CPU Usage: u.87 s1.01 cu0 cs0 - .0134% CPU load
.188 requests/sec - 684 B/second - 3637 B/request
1 requests currently being processed, 4 idle workers

Scoreboard Key:
 " " Waiting for Connection, "s" Starting up, "R" Reading Request,
 "w" Sending Reply, "k" Keepalive (read), "D" DNS Lookup,
 "C" Closing connection, "L" Logging, "G" Gracefully finishing,
 "I" Idle cleanup of worker, "." Open slot with no current process

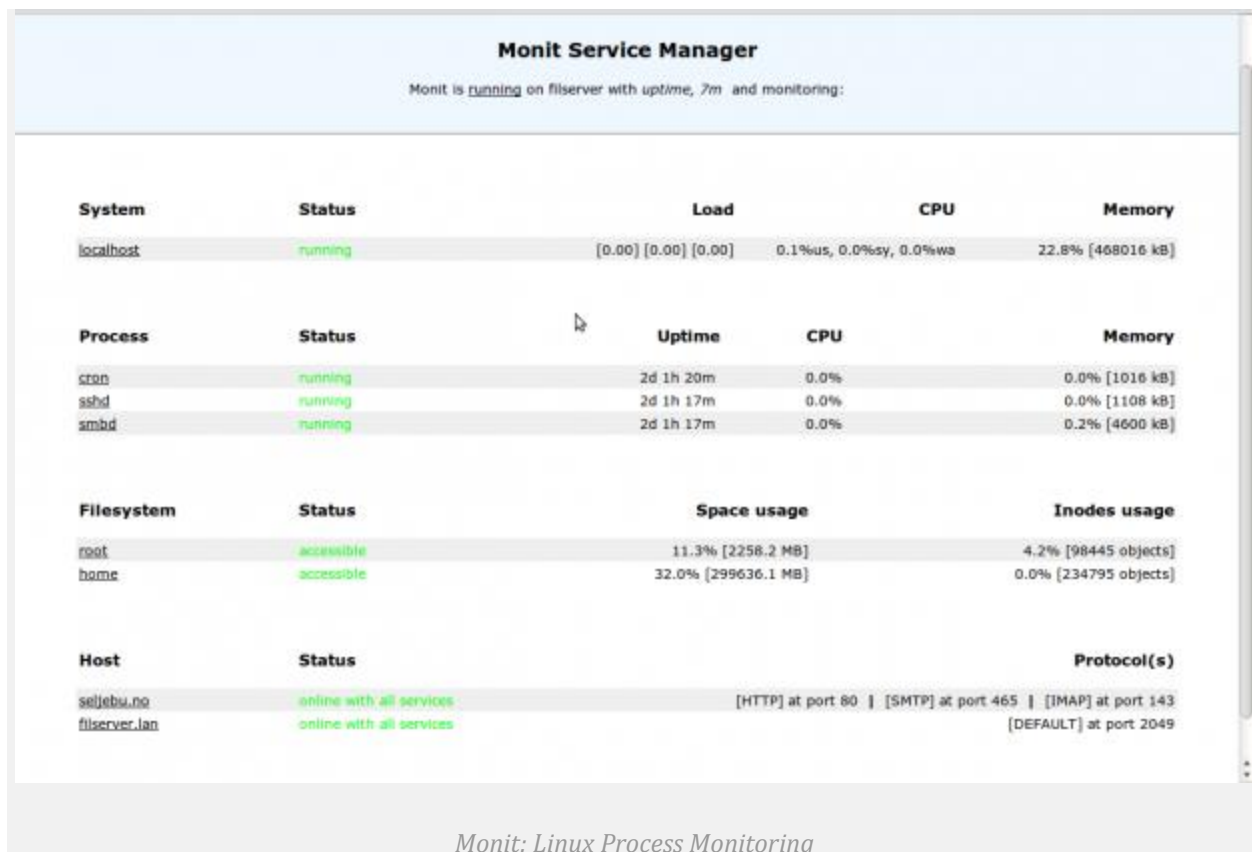
Srv	PID	Acc	M	CPU	SS	Req	Conn	Child	Slot	Client	VHost	Request
0-0	-	0/0/428	.	0.30	5141	0	0.0	0.00	1.34	127.0.0.1	5.175.142.66	OPTIONS * HTTP/1.0
1-0	5606	0/619/619	.	0.45	2	0	0.0	2.10	2.10	115.113.134.14	5.175.142.66	GET /server-status?refresh=5 HTTP/1.1
2-0	5607	0/581/581	.	0.41	18	0	0.0	2.00	2.00	115.113.134.14	5.175.142.66	GET /server-status?refresh=5 HTTP/1.1
3-0	-	0/0/337	.	0.23	5142	0	0.0	0.00	1.09	127.0.0.1	5.175.142.66	OPTIONS * HTTP/1.0
4-0	5701	0/295/295	.	0.21	13	0	0.0	1.13	1.13	115.113.134.14	5.175.142.66	GET /server-status?refresh=5 HTTP/1.1
5-0	5708	0/190/191	.	0.14	8	0	0.0	0.76	0.76	115.113.134.14	5.175.142.66	GET /server-status?refresh=5 HTTP/1.1

Apache Status Monitoring

Read More: [Apache Web Server Load and Page Statistics Monitoring](#)

24. Monit – Linux Process and Services Monitoring

Monit is a nice program that monitors your Linux & Unix server, it can monitor everything you have on your server, from the main server (Apache, Nginx..) to files permissions, files hashes and web services. Plus a lot of things.



Features of Monit

- Free & open-source, released under AGPL and written in C.
- It can be started from the command line interface or via its special web interface.
- Very effective in monitoring all the software on your system and services.
- A nice web interface with beautiful charts for CPU and RAM usage.
- Monit can automatically take actions in emergency situations.
- A lot more..
-

Read More: [Install Monit Tool in RHEL/CentOS/Fedora and Ubuntu/Debian](#)

25. Sysstat – All-in-One System Performance Monitoring

Another monitoring tool for your Linux system. Sysstat is not a real command in fact, it's just the name of the project, Sysstat in fact is a package that

includes many performance monitoring tools like iostat, sadf, pidstat beside many other tools which shows you many statistics about your Linux OS.

```
tecmin@tecmin - $ pidstat -p ALL

Linux 3.11.0-23-generic (tecmin.com)   Thursday 04 September 2014   _i686_

12:51:55  IST  UID      PID    %usr %system %guest    %CPU   CPU   Command
12:51:55  IST  0         1     0.01  0.11   0.00    0.12    1   init
12:51:55  IST  0         2     0.00  0.00   0.00    0.00    0   kthreadd
12:51:55  IST  0         3     0.00  0.01   0.00    0.01    0   ksoftirqd
12:51:55  IST  0         5     0.00  0.00   0.00    0.00    0   kworker/0
12:51:55  IST  0         7     0.00  0.00   0.00    0.00    0   migration
12:51:55  IST  0         8     0.00  0.00   0.00    0.00    0   rcu_bh
12:51:55  IST  0         9     0.00  0.04   0.00    0.04    1   rcu_sched
12:51:55  IST  0        10     0.00  0.00   0.00    0.00    0   watchdog/
12:51:55  IST  0        11     0.00  0.00   0.00    0.00    1   watchdog/
12:51:55  IST  0        12     0.00  0.00   0.00    0.00    1   migration
12:51:55  IST  0        13     0.00  0.01   0.00    0.01    1   ksoftirqd
12:51:55  IST  0        15     0.00  0.00   0.00    0.00    1   kworker/1
12:51:55  IST  0        16     0.00  0.00   0.00    0.00    1   khelper
12:51:55  IST  0        17     0.00  0.00   0.00    0.00    0   kdevtmpfs
12:51:55  IST  0        18     0.00  0.00   0.00    0.00    0   netns
12:51:55  IST  0        19     0.00  0.00   0.00    0.00    0   writeback
12:51:55  IST  0        20     0.00  0.00   0.00    0.00    1   kintegrit
```

Sysstat: Linux Statistics Monitoring

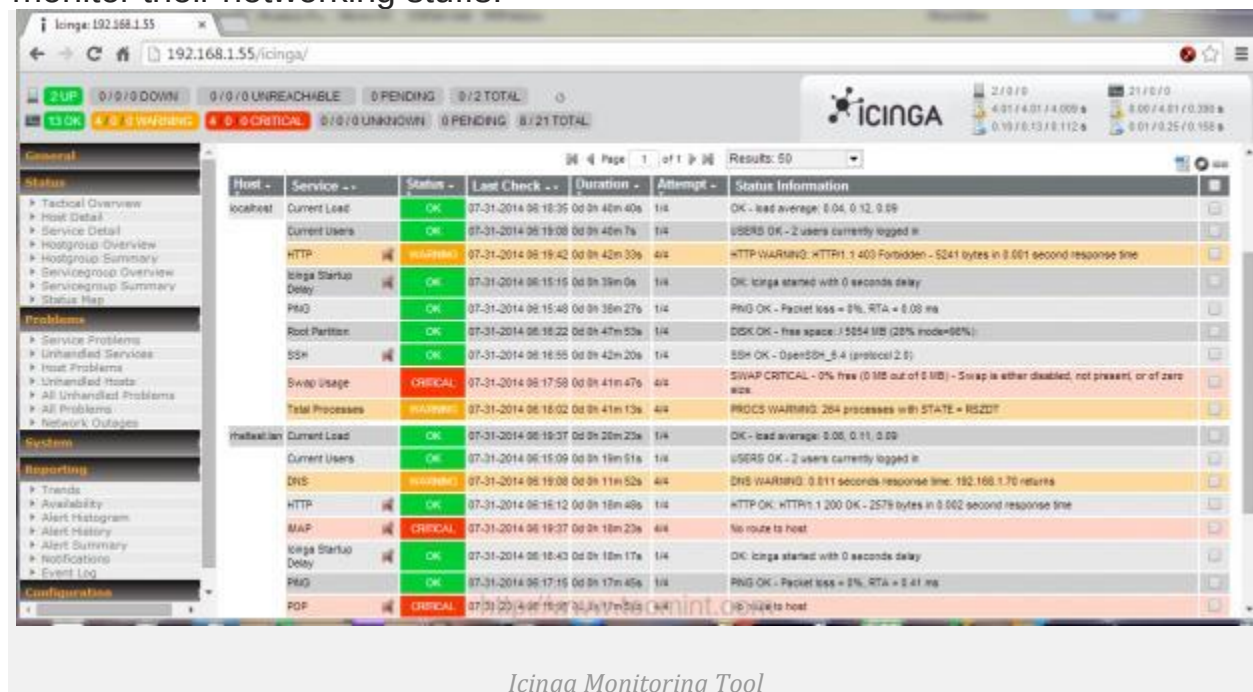
Features of Sysstat

- Available in many Linux distributions repositories by default.
- Ability to create statistics about RAM, CPU, SWAP usage. Beside the ability to monitor Linux kernel activity, NFS server, Sockets, TTY and filesystems.
- Ability to monitor input & output statistics for devices, tasks.. etc.
- Ability to output reports about network interfaces and devices, with support for IPv6.
- Sysstat can show you the power statistics (usage, devices, the fans speed.. etc) as well.
- Many other features..

Read More: [Install Sysstat in Linux](#) and [20 Useful Commands of Sysstat](#)

26. Icinga – Next Generation Server Monitoring

Unlike the other tools, Icinga is a network monitoring program, it shows you many options and information about your network connections, devices and processes, it's a very good choice for those who are looking for a good tool to monitor their networking stuffs.



Icinga Monitoring Tool

Features of Icinga

- Icinga is also free and open-source.
- Very functional in monitoring everything you may have in networking.
- Support for MySQL and PostgreSQL is included.
- Real-time monitoring with A nice web interface.
- Very expendable with modules and extensions.
- Icinga supports applying services and actions to hosts.
- A lot more to discover..

Read More: [Install Icinga in RHEL/CentOS 7/6](#)

27. Observium – Network Management and Monitoring

Observium is also a network monitoring tool, it was designed to help you manage your network of servers easily, there are 2 versions from it;

Community Edition which is free & open-source and Commercial version which costs £150/year.



Observium: Linux Network Monitoring

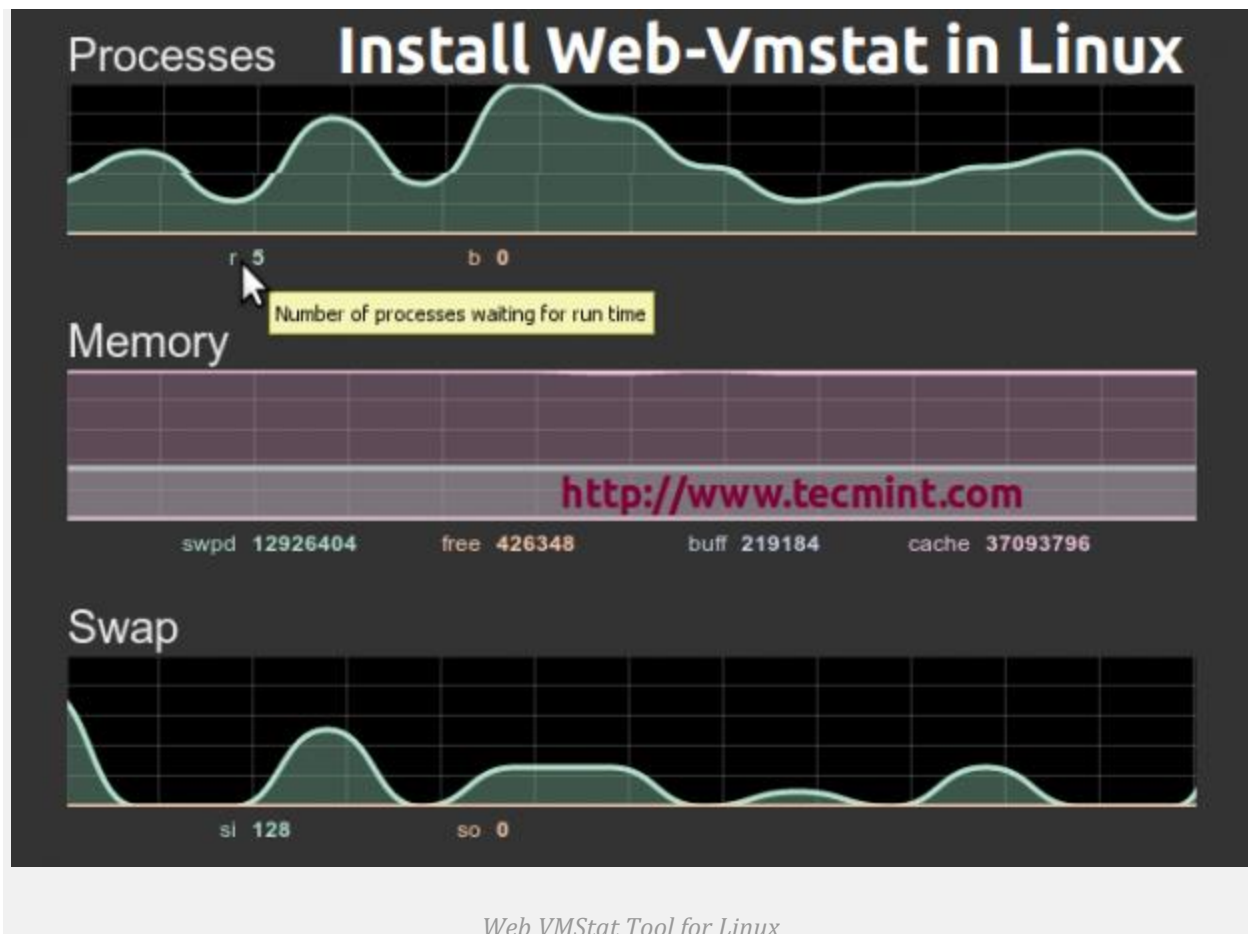
Features of Observium

- Written in PHP with MySQL database support.
- Has a nice web interface to output information and data.
- Ability to manage and monitor hundreds of hosts worldwide.
- The community version from it is licensed under GPL license.
- Works on Windows, Linux, FreeBSD and more.

Read More: [Observium – Network Management and Monitoring Tool for RHEL/CentOS](#)

28. Web VMStat – System Statistics Monitoring

Web VMStat is a very simple web application programmer, that provides a real time system information usage, from CPU to RAM, Swap and input/output information in html format.



Read More: [Web VMStat: A Real Time System Statistics Tool for Linux](#)

29. PHP Server Monitoring

Unlike the other tools on this list, PHP Server Monitoring is a web script written in PHP that helps you to manage your websites and hosts easily, it supports MySQL database and is released under GPL 3 or later.

SERVER MONITOR

StatusServersLogUsersConfigUpdateHelp

Welcome, Pep

Servers

http://www.tecmint.com

SERVICES

+ Add new

Update

	Label	Domain/IP	Port	Type	Latency	Last online	Monitoring	Send Email	Send SMS	Action
🔴	Example FTP	ftp.example.org	21	Service	0.0005 s	6 hours ago	Yes	Yes	Yes	👁️✎️❌
🟢	Gmail SMTP	smtp.gmail.com	465	Service	0.0129 s	about a minute ago	Yes	Yes	Yes	👁️✎️❌
🟢	Google	http://www.google.com	80	Website	0.115 s	about a minute ago	Yes	No	No	👁️✎️❌
🟢	PHP Server Monitor	http://www.phpservermonitor.org	80	Website	0.4881 s	about a minute ago	Yes	Yes	Yes	👁️✎️❌
🟢	SourceForge	http://sourceforge.net/	0	Website	0.3945 s	about a minute ago	Yes	Yes	Yes	👁️✎️❌

Powered by PHP Server Monitor v3.0.5

Back to top

PHP Server Monitor

Install in Arch Linux

PHP Server Monitor

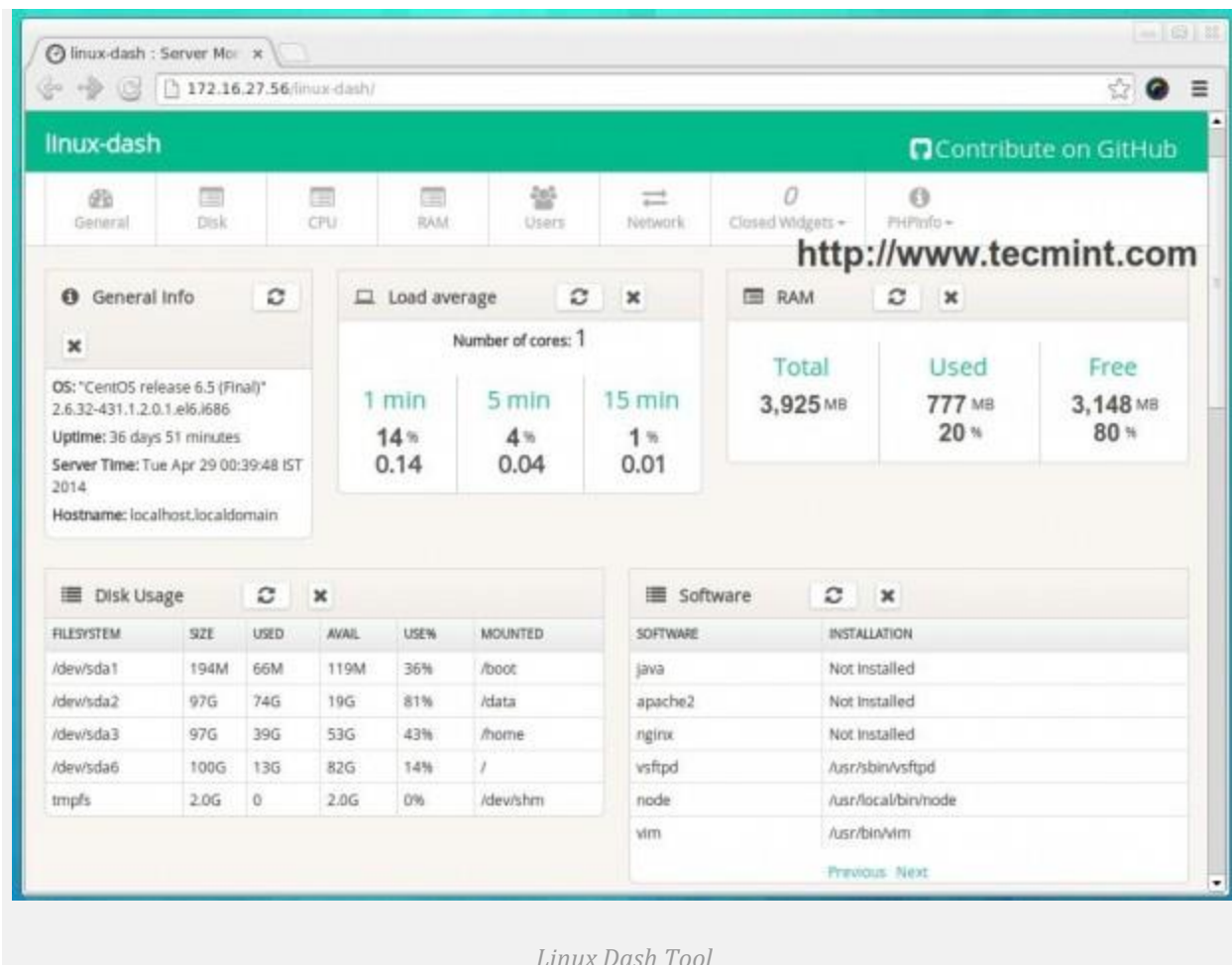
Features

- A nice web interface.
- Ability to send notifications to you via Email & SMS.
- Ability to view the most important information about CPU and RAM.
- A very modern logging system to log connection errors and emails that are sent.
- Support for cronjob services to help you monitor your servers and websites automatically.

Read More: [Install PHP Server Monitoring Tool in Arch Linux](#)

30. Linux Dash – Linux Server Performance Monitoring

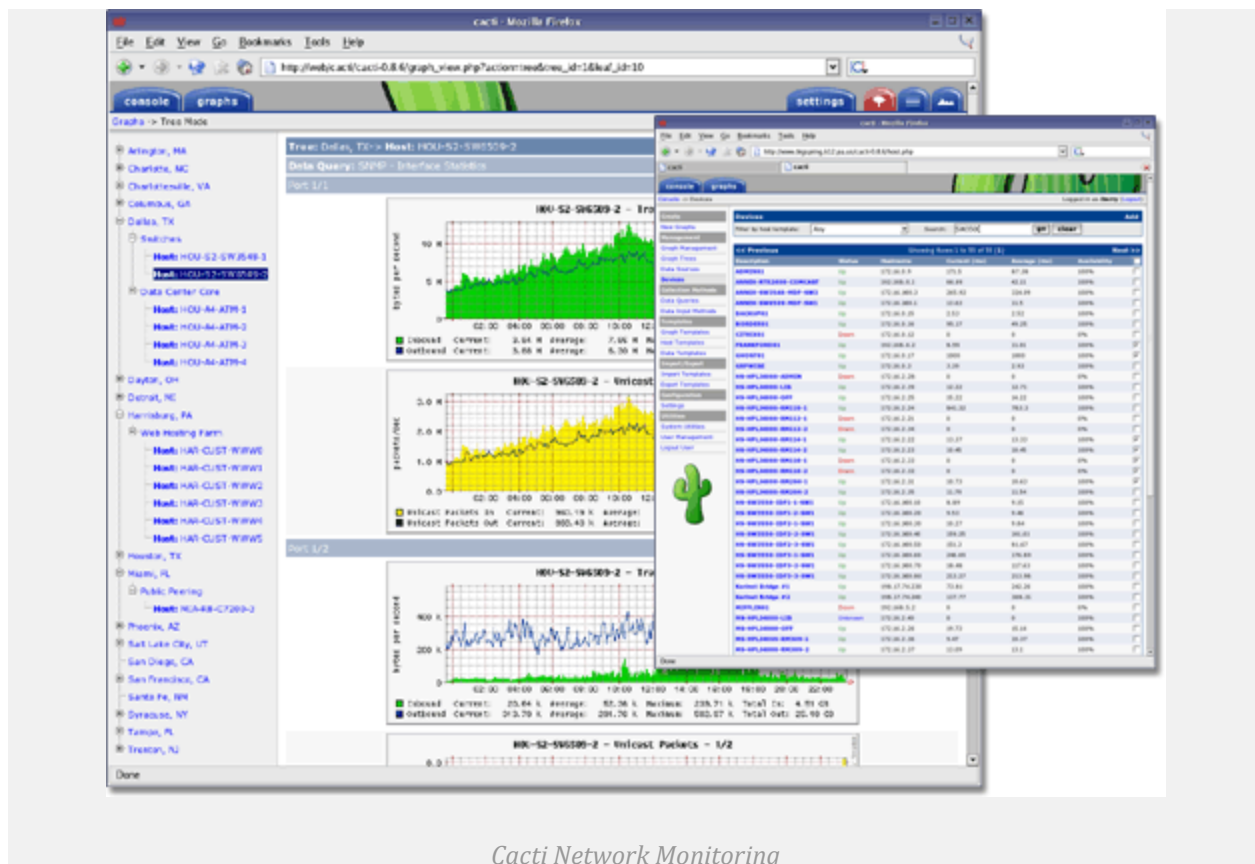
From its name, “Linux Dash” is a web dashboard that shows you the most important information about your Linux systems such as RAM, CPU, file-system, running processes, users, bandwidth usage in real time, it has a nice GUI and it’s free & open-source.



Linux Dash Tool

Read More: [Install Linux Dash \(Linux Performance Monitoring\) Tool in Linux](#)
31. Cacti – Network and System Monitoring

Cacti is nothing more than a free & open-source web interface for RRDtool, it is used often to monitor the bandwidth using SNMP (Simple Network Management Protocol), it can be used also to monitor CPU usage.



Cacti Network Monitoring

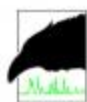
Features of Cacti

- Free & open-source, released under GPL license.
- Written in PHP with PL/SQL.
- A cross-platform tool, it works on Windows and Linux.
- User management; you may create different users accounts for Cacti.

Read More: [Install Cacti Network and System Monitoring Tool in Linux](#)

32. Munin – Network Monitoring

Munin is also a web interface GUI for RRDtool, it was written in Perl and licensed under GPL, Munin is a good tool to monitor systems, networks, applications and services. It works on all Unix-like operating systems and has a nice plugin system; there are 500 different plugin available to monitor anything you want on your machine. A notifications system is available to send messages to the administrator when there's an error or when the error is resolved.



MUNIN

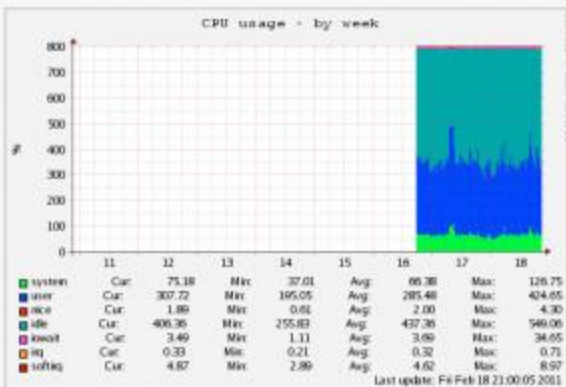
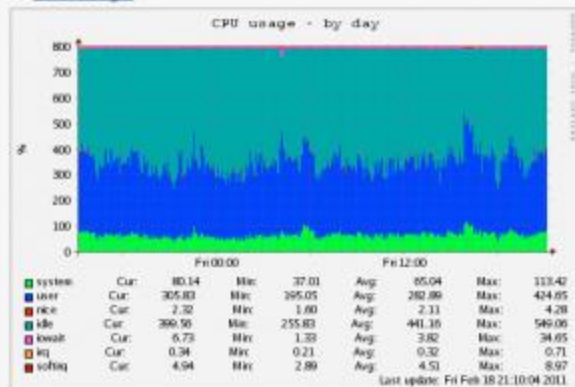
[Overview](#) :: [server1](#) :: server1

server1

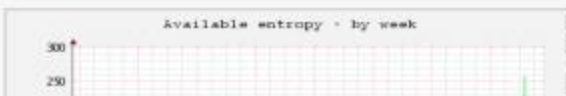
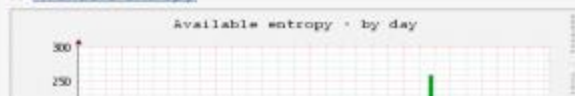
[Apache](#) [Disk](#) [Network](#) [Other](#) [Postfix](#) [Processes](#) [System](#)

System

:: [CPU usage](#)



:: [Available entropy](#)

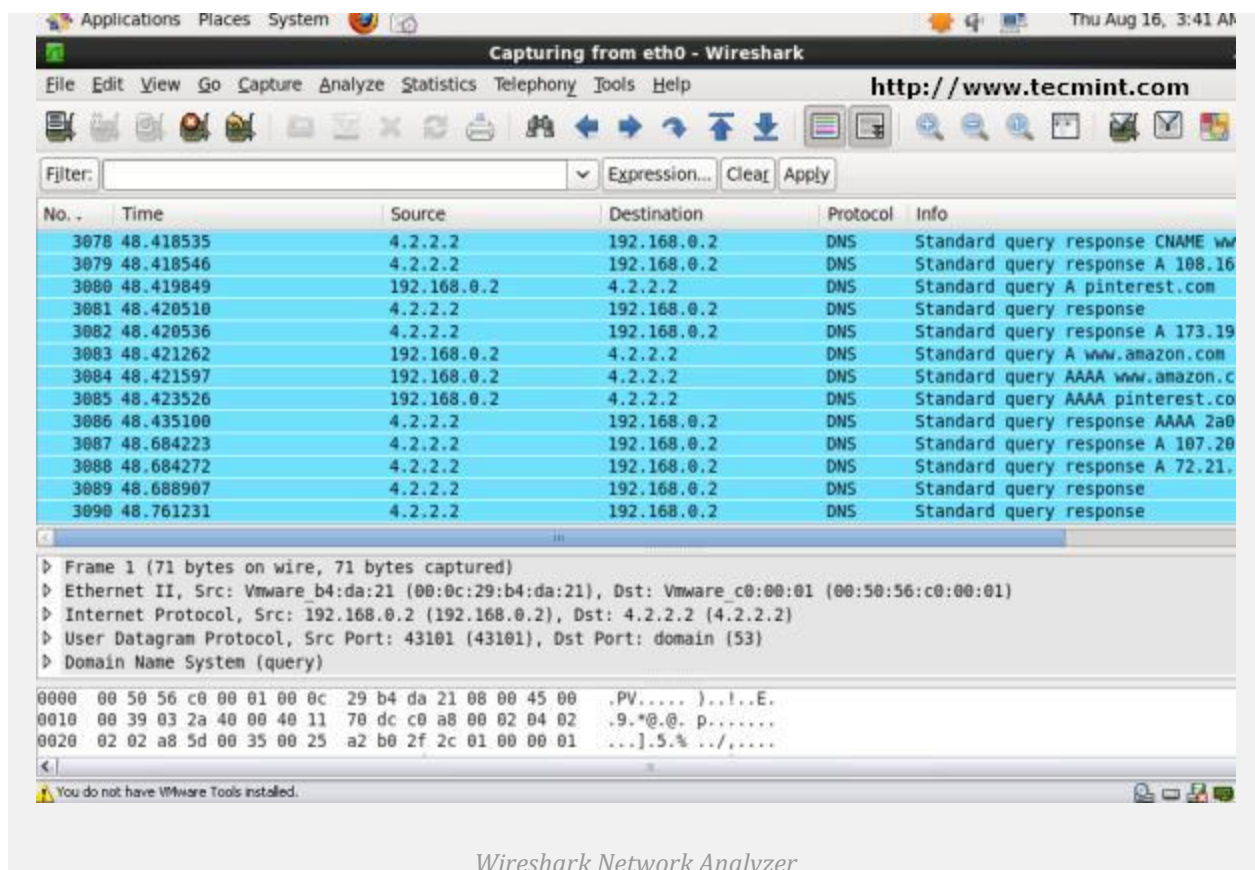


Munin Network Monitoring

Read More: [Install Munin Network Monitoring Tool in Linux](#)

33. Wireshark – Network Protocol Analyzer

Also, unlike all the other tools on our list, Wireshark is an analyzer desktop program which is used to analyze network packets and to monitor network connections. It's written in C with the GTK+ library and released under the GPL license.



Wireshark Network Analyzer

Features

- Cross-platform: it works on Linux, BSD , Mac OS X and Windows.
- Command line support: there's a command line based version from Wireshark to analyze data.
- Ability to capture VoIP calls, USB traffic, network data easily to analyze it.
- Available in most Linux distributions repositories.

Read More: [Install Wireshark – Network Protocol Analyzer Tool in Linux](#)