



= Session-(1.7) =

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## Ubuntu Package Management & Local Package Cache

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Considering Ubuntu/Debian Based Distributions

**apt-cacher-ng**

**apt**  
**apt-get**  
**dpkg**  
**gdebi**

## 1.7.2 = Local Package Cache (**apt-cacher-ng**)

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### What is it?

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A caching proxy, primarily used for Debian (and Debian based) distributions. It is also can be used for redhat based distributions.

### Simply What it does?

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Suppose, you have 5 servers running with ubuntu-18.04. You are going to install virtualization package. You have configured apt-cacher properly. Now if you install all those virtualization package in one server, it will cache all those packages.

Now if you install virtualization packages in the rest of the servers, rest of the server will get those package from the local-cache server and those server will get those package at LAN speed.

### Why should I use it?

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First of to save time and as well as bandwidth.

How to install it?

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```
apt install -y apt-cacher-ng
```

```
echo "BindAddress: 0.0.0.0" >> /etc/apt-cacher-ng/acng.conf  
echo "Port:4444" >> /etc/apt-cacher-ng/acng.conf  
echo "PidFile: /var/run/apt-cacher-ng/pid" >> \  
/etc/apt-cacher-ng/acng.conf
```

```
# Enable apt-cache to use itself as proxy
```

```
echo 'Acquire::http { Proxy "http://127.0.0.1:4444"; };' > \  
/etc/apt/apt.conf.d/50apt-cacher
```

```
# Restart service and enable at boot
```

```
/etc/init.d/apt-cacher-ng restart  
systemctl enable apt-cacher-ng
```

## How to use it?

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A little configuration on the client side is needed. On client machines point to proxy server by modifying settings:

```
echo 'Acquire::http {Proxy "http://192.168.108.8:4444";} ' > /etc/apt/apt.conf.d/30proxy;
```

```
http://192.168.108.8:4444/           #for a config page  
http://192.168.108.8:4444/acng-report.html #for the statictis page
```

## 1.7.1 = Ubuntu Package Management

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### apt

**apt update**

**apt upgrade**

**apt full-upgrade**

**apt search <package-name>**

**apt install <package-name>**

**apt remove <package-name>**

**apt remove --purge <package-name>**

**apt autoremove**

**apt autoclean**

## apt-get

**apt-get update**

**apt-get upgrade**

**apt-cache search <package-name>**

**apt-get install <package-name>**

**apt-get install --reinstall <package-name>**

**apt-get remove <package-name>**

**apt-get remove --purge <package-name>**

**apt-get install -f**

## dpkg

```
dpkg -l  
dpkg -l | grep <package-name>  
dpkg -i <package-name>  
dpkg -r <package-name>
```

## gdebi

```
gdebi <package-name>
```

There are also some other package arrangement application like **snappy**, **flatpack** & **appimage**. Among them appimage is totally distribution independent and it works out of the box. AppImage keep all the component in its single file. It only requires the executable permission to run it.

Example: **Download** the following libreoffice appimage file from the following link.

<http://192.168.108.8/sanog32/LibreOffice.AppImage>

**RightClick On It → Goto Properties → Permission → TickOn Execute Option → Close The Dialogue.**

**Now just DoubleClick On it | RightClick → Open**