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Linux-Original History

➢ In 1964 **Bell Laboratories** starts a project where multi users can use/work in a single OS and This Project starts in **New Jersey**.

➢ The total team members are 5 but 3 of them/Bell Laboratories stop/Withdrawal the project in **1969**. But the remaining 2 members they won't give up they Continued to work on that project.

➢ They are **"Dennis Ritchie (the founder of C language)"** and another one is **"Ken Thompson"**, These two persons start the project in the name of **UNICS (Uniplexed Information and Computing Services)** and they invented **UNICS** in **1969** and After it converts as **UNIX OS**.

➢ They gave this UNIX OS as **Free** for everyone, because everyone can use this OS without paying any amount. Next in **1975** the **UNIX OS** is Updated as **UNIX Version 6**, This version is getting **more populated** on those days.

➢ In between years **1975-1980's** As-usual some companies build their own OS by using this UNIX OS example **IBM builds AIX**, **HP builds HP UX**, and **SUN SOLARIS builds sun os**. We can call them as **"flavors of Unix's"**.

➢ In **1991** There was a Student **"Linus Torvalds"** and he is studying **University of Helsinki** in his graduation time and he had to do a project in his graduation then he selects the **OS** based concept. In those days the updated Unix os is in paid mode.

➢ In **1991** if anyone wants to use that os they have to be pay **5000$** this is costliest os on that time. But he didn't buy that os's of different companies because those companies' charges on their os's actually they mentioned tags on their os's and release paid mode.

➢ After that he taken the reference of **UNIX OS** and he read and follow the **MINIX OS** which is developed by **"Andrew Tanenbawn"**. he is a **writer** and **professor**, the main reason to invented this MINIX OS is for to teach his students.

➢ After that in **1991 "Linus Torvalds"** created his own Linux OS from the Scratch. But he didn't take any reference from UNIX OS to create Linux OS.

➢ He make **Linux OS free for everyone** and also it gets more popular on those days.

➢ In between years 1991 to 1995 there are some moments happened like free OS moments among this moment one of the moments is GNU. This GNU is Launch the Linux OS. Here, **GNU is Software** and Linux is Kernel, the combination of **GNU and Kernel** is called as **Linux OS**.

➢ **Kernel** is one of the **parts of OS** only. But if you add software to this kernel then it is called as OS. Here, **software** means **combination of packages**.

➢ From this Linux Some companies created their own OS like **RHEL (Red Hat Enterprise Linux), Fedora, Debian** and others. In this list of OS'S have the paid version and free also they charge form user because they provide 24/7 support regarding os that's why they charged. The **free OS** are **Ubuntu**, **centos (Community enterprise OS)** and **Amazon Linux**.

➢ Here, Ubuntu OS is most used OS and it is developed by One **African** the meaning of **Ubuntu is Unity** and **Centos** is developed by **Community enterprise OS**.

➢ Here another os is there in Linux that is **kali Linux os** this is used with **hackers**.

➢ Now OS are two types one is **CLI (Command line Interface)** and another one is **GUI (Graphical User Interface).** In those os's Gui is most popular because the

everything visible in graphical way there is no need any training for working on GUI Os, this is user-friendly, anyone can work on that example in windows to create a file we have to give right click and select new file give name of file press enter. Coming to the CLI it is a command line interface in this os u can work by commands. Example Linux OS in windows CMD is there right on that how it looks like same Linux working platform also same.

➢ Here, **GUI LINUX OS** also available but they are not that much popular compare to **Linux OS(CLI).**

➢ Here **Linux is kernel not OS**, but everyone called it as **LINUX OS** actually the Kernel is part of Linux OS.

➢ Linux is not a **Unix derivative**, it was written form **scratch**.

➢ **Linux OS** or **Linux distribution** both are same. here, **distribution means versions** for example **Debian**, **Fedora** and **RHEL** this are the **Linux os versions/distribution** like the windows have **windows version 7, 8, 10** etc. same as Linux os is the versions/distribution os. **LINUX OS= Kernel+GNU**. Here, GNU means Collection of Software and kernel is interpreter like API. Kernel works between **user** and **applications** its works like a **translator**.

➢ Everyone use windows os right but your companies use Linux os? Because in windows os everything is **user-friendly**, but if you want to change some configurations in windows that's not possible you have to uses it how the window os is there that's it, there no any configuration, if you use windows you have to buy license of windows os here windows didn't share code of windows Os it's just given the access to use their Os. If they give code of windows os then everyone can create their configured os right, that's why they didn't gave and

coming to Linux it is free and it has distributions like versions for example if you want to do hacking then you choose kali Linux os, and another user they chosen their Linux os like RHEL, Debian and fedora etc.….

➢ The Linux features/advantages are the open source means Linux code is free by using this code you can create your own configured os like RHEL, Debian and Fedora etc.…the mobile os android is written by Linux os the background of android kernel is Linux kernel.

➢ ▯ Linux is most secure os in worldwide because if in windows some files get virus easily its spread to entire the os and if you want to remove that virus you can buy anti-virus and use it, and it's also chargeable right, and even after using antivirus your system is not recovered on that time you have to re install Windows OS. that's why IT companies doesn't use windows if virus attacked you have to buy antivirus and if not removed by antivirus you have to re install windows os again, if you're working in a windows os from last 2 years and by getting virus on your system you have to re install os that's not a possible thing right.

➢ In Linux os it will not be affected by viruses. If in case it's affected by virus to a file or through copying file from other resource then that virus is stay in that file only it will not spread all os like windows. If u Remove that virus there is no need to use anti-Virus just deletes the infected file and copy that infected file again. This is the reason the companies use Linux os.

➢ Another reason for Linux is more secure is compare to windows os Linux is somewhat difficult to use because windows is user friendly right like same manner hacker also easily hack windows os but in Linux os they can't because

Linux runs/works on commands right if hacker try to hack Linux os he learns the commands first at least he learns 2000-3000 commands to hack Linux os that's not an easy task. There is chance to hack Linux os also but that's not that much easy compare to windows. That's why Linux os is most secure operating system.

➢ Here in Linux to update of software's are very easy you can update with **single command**.

➢ Another advantage is light weight here when you install Linux os its consumptions less ram space. For example, you buy new mobile and ram is 32 gb right but its shows free space 16 gb reaming gb space is consumption by your android os. But coming to Linux os its consumptions very less amount of ram space compares to windows, for windows os it's consumption is 30 gb ram but for Linux it needs only 2gb.if you spend 1gb for Linux os for its performance for windows it needs 50gb.

➢ Another advantage is Multi-user Muti-tasks, here in Linux os it has a chance to create N number of multi users and they can work easily without any disturbances like there is no any performance issues for users. In single Linux machine you can create N number of users, for example, in real time companies they create 20users in a single Linux machine it gives CPU and hard disk this machine shares for each and every one CPU equally and every user work is stored in the same hard disk they can use it equally. In windows also, you can create users but there is a limitation. In organizations one single Linux machine is connected to number of users with monitors and they work easily.

➢ Another advantage is multiple distributions like RHEL, Debian and Fedora etc.…. Based up on usage the user can choose their Linux os. But in windows there is

no any distributions / there is no any os in windows like Linux os and you can use what windows have there is no other option for windows.