



La storia dei Sistemi Operativi

Stefano Borzi

Primo programmatore?

Ada Lovelace

Matematica britannica - 1800



1945-1955 valvole termoioniche



anni '50-'60



Transistor

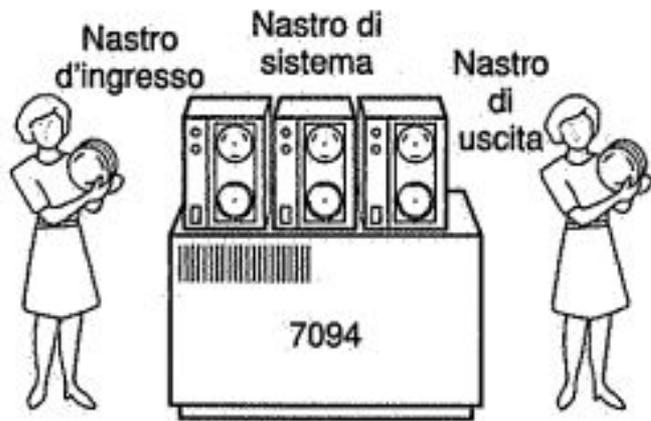
```
helloworld.f + (~) - VIM
program helloworld
implicit none
character*13 hello_string
hello_string = "Hello, world!"
write (*,*) hello_string
end program helloworld
```

FORTRAN



(a)

(b)

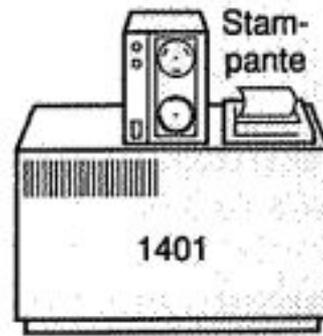


(c)

(d)

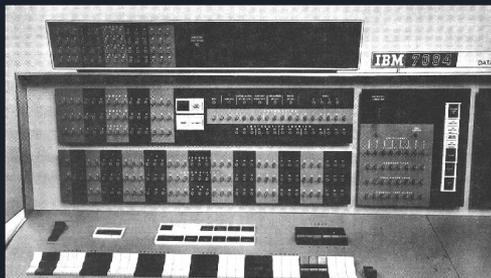


(e)



(f)

1965 - 1980



IBM 7094



IBM 1401



IBM System/360 (1964)

Time-sharing

CTSS

MULTICS

PDP-1

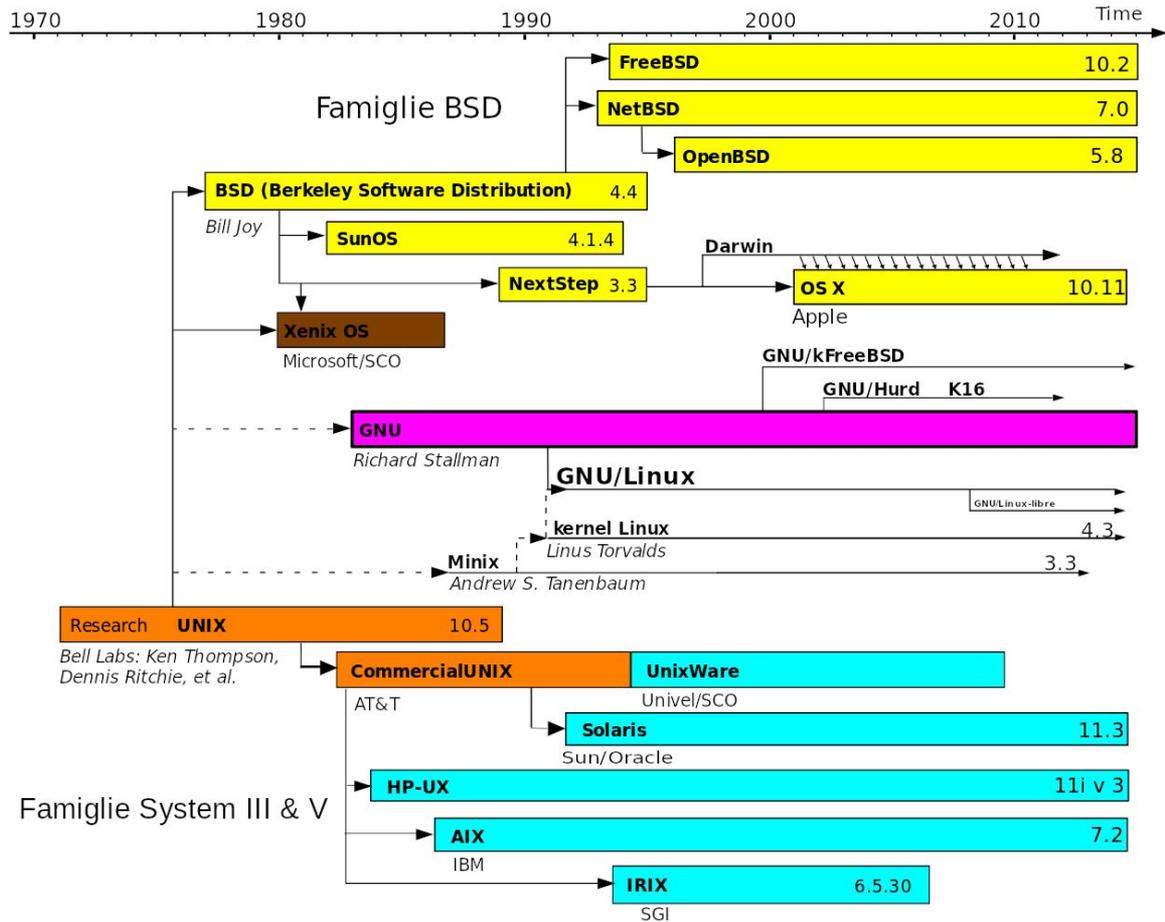
1965 - 1980



Ken Thompson con Dennis Ritchie



UNIX e derivate





1800



1945



1950

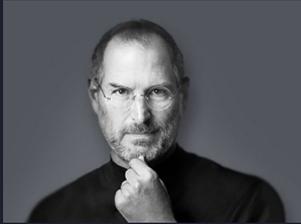


1965



1969

Personal Computer (1976)



Steve Jobs



Steve Wozniak



1976



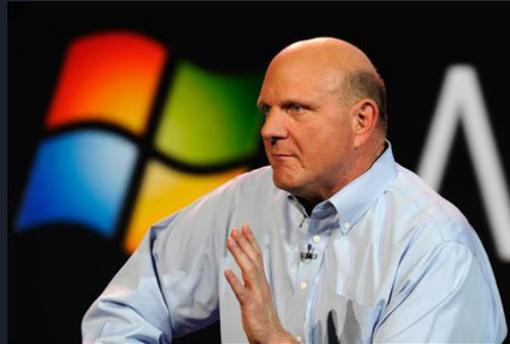
1984 - Mac OS



1975



Bill Gates



**Steve Ballmer
(2008)**



**Satya Nadella
(2014)**



VS



1983

1991

1997

2007



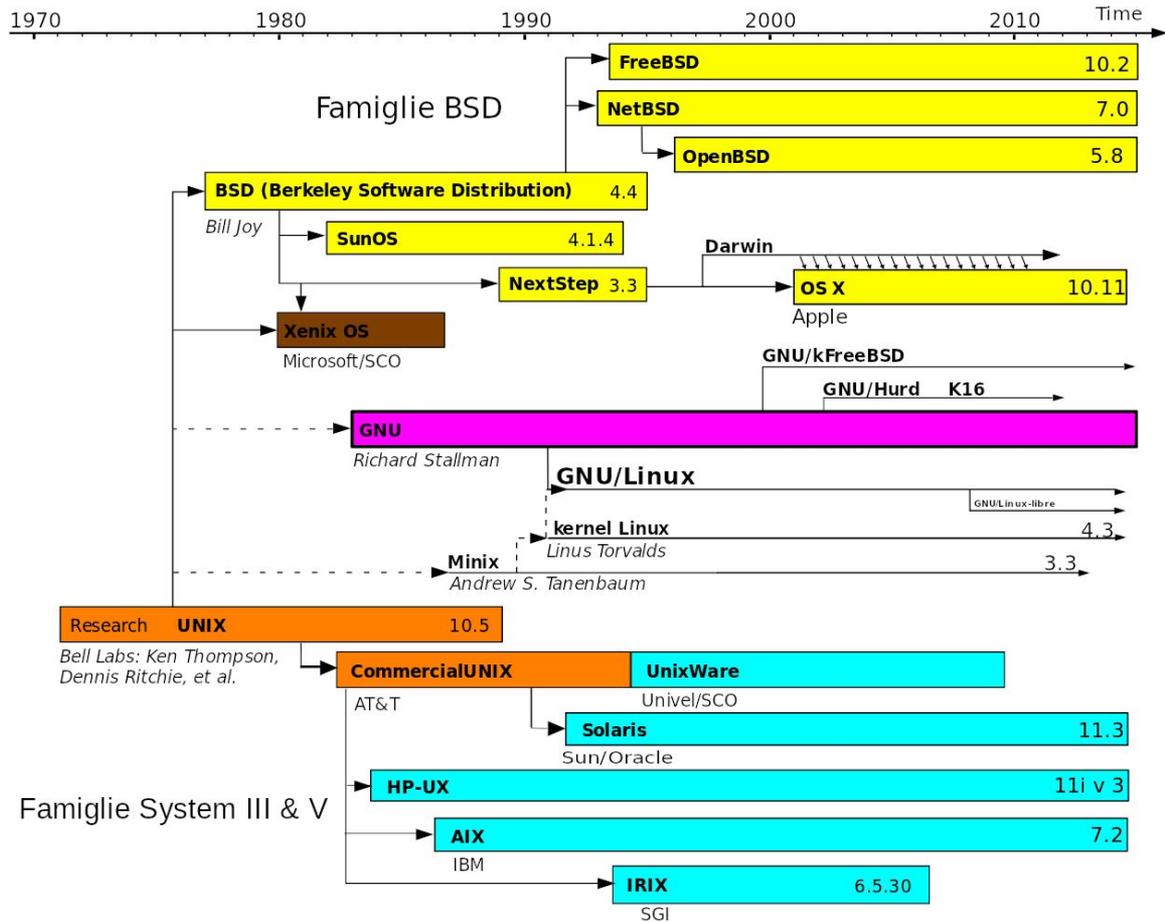
BSD



OS X



UNIX e derivate



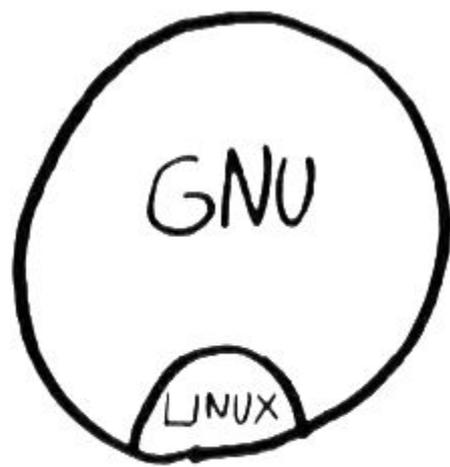
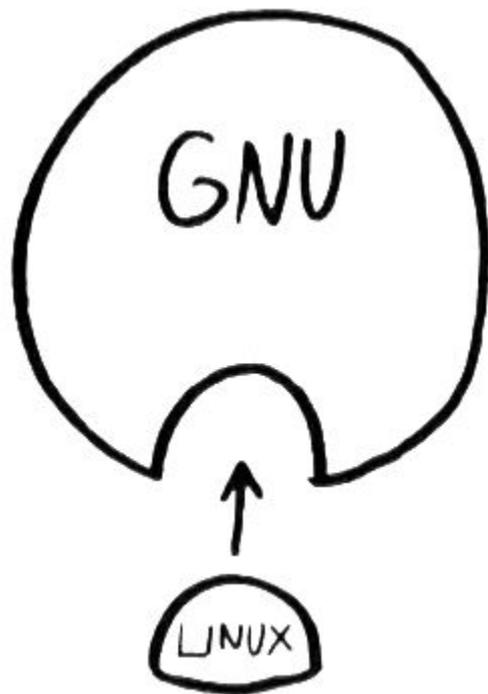
GNU Linux

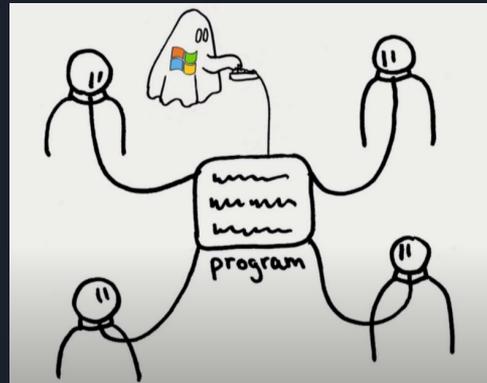
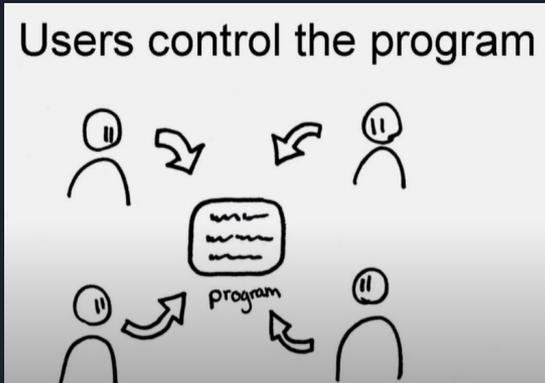
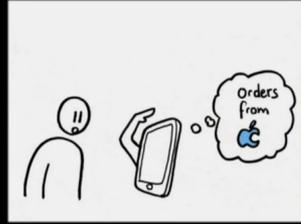


Richard Stallman



Linus Torvalds







1985

Hacker News

Lenovo liable for 20000€ in damages for refusing a 42€ Windows refund

[Article](#), [Comments](#)

FSFE - Free Software Foundation Europe

Refund of pre-installed Windows: Lenovo must pay 20,000 euros in damages - FSFE

In a historic judgment in Italy, in a case initiated by FSFE supporter Luca Bonissi, Lenovo was ordered to pay 20,000 euros in damage...



02-03-2021

Linus Torvalds insulta Nvidia per il supporto

"Nvidia: Fuck you" e un ditto
epiteto molto chiaro
vista, la situa
operat

a usato un
unto di
a

Linus Torvalds: "HFS+ è certamente il peggiore filesystem mai creato".

guru. Torvalds ha
regola e si è anche detto
abilità, prendendo spunto da una
Optimus, che permette l'uso del core
secondo il carico di lavoro.



torvalds/linux



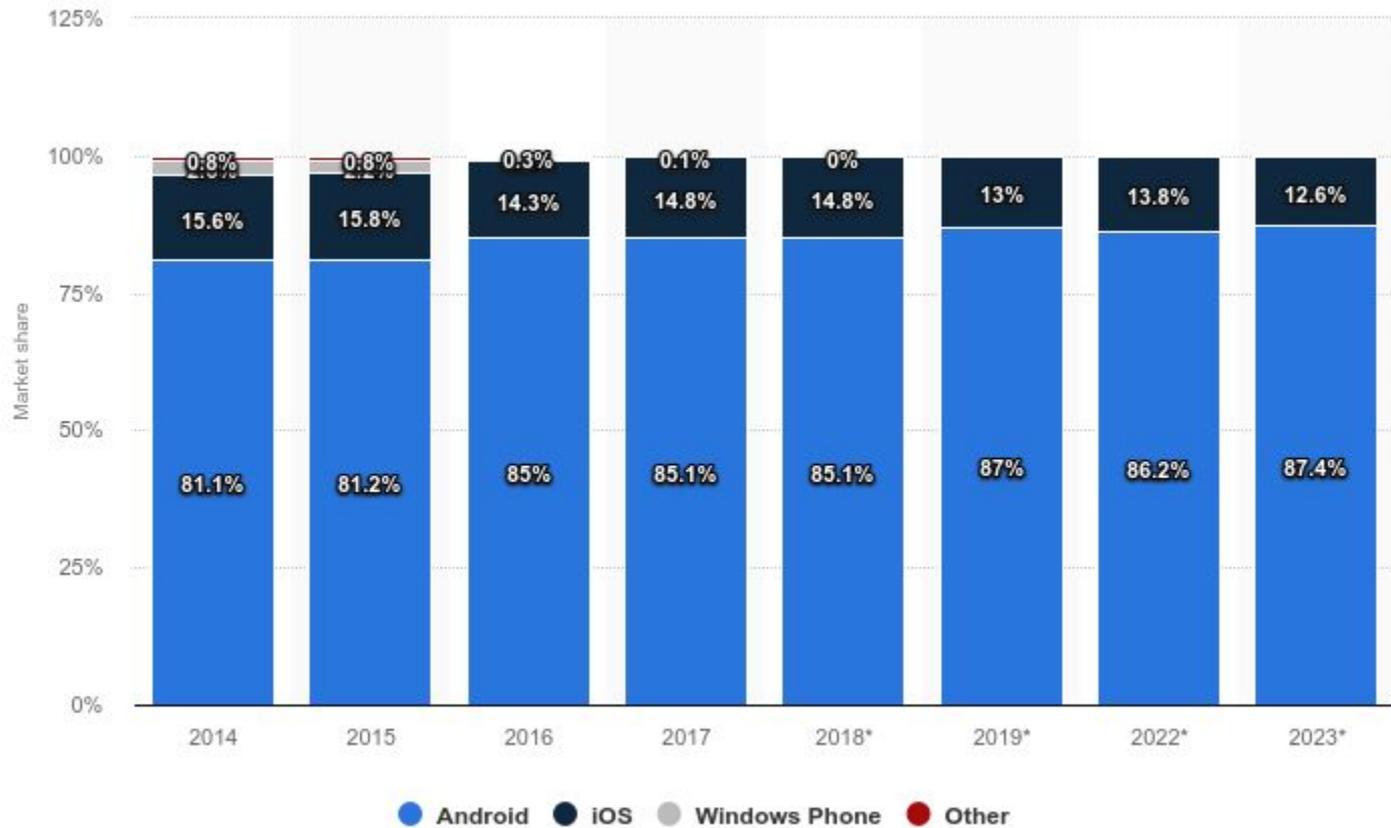


2005



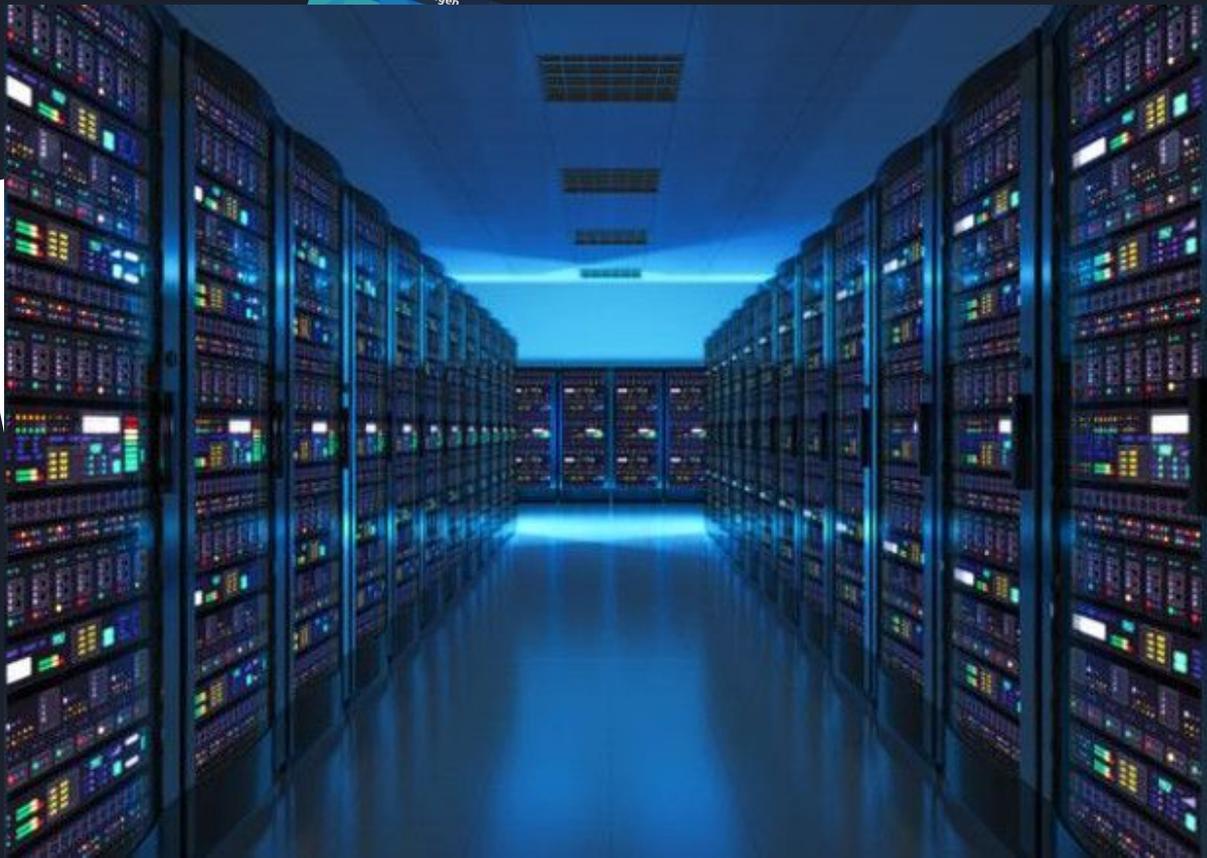
2017





(2019)

Dov'è usato Linux?



Anwendungen





**Steve Ballmer
(2008)**



Iphone

Embrace, extend, and extinguish (EEE)



THE HALLOWEEN DOCUMENTS

1998 – Microsoft Corporation compelled to admit the authenticity of some Confidential memoranda about the suppression of Open Source Systems.

Facts, consequences and main events about the documents which put Microsoft in a big pickle at the end of 90's.

Microsoft: we were wrong about open source

Microsoft has embraced open source and even Linux in recent years

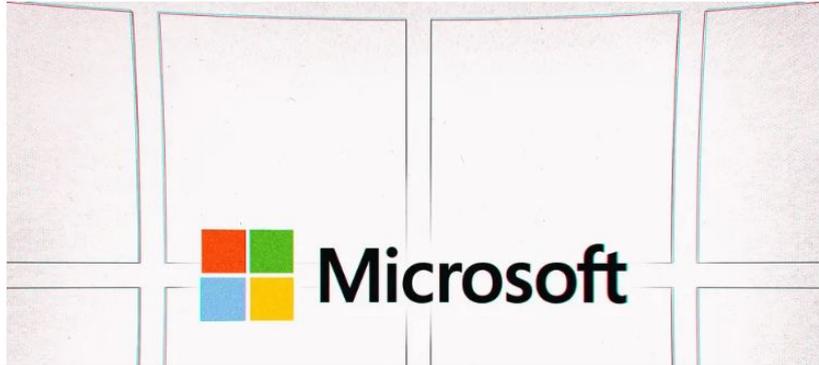
By Tom Warren | @tomwarren | May 18, 2020, 8:26am EDT



Listen to this article



SHARE



Fudzilla



Sorry Steve, Open Source beat you



**Satya Nadella
(2014)**





stonks



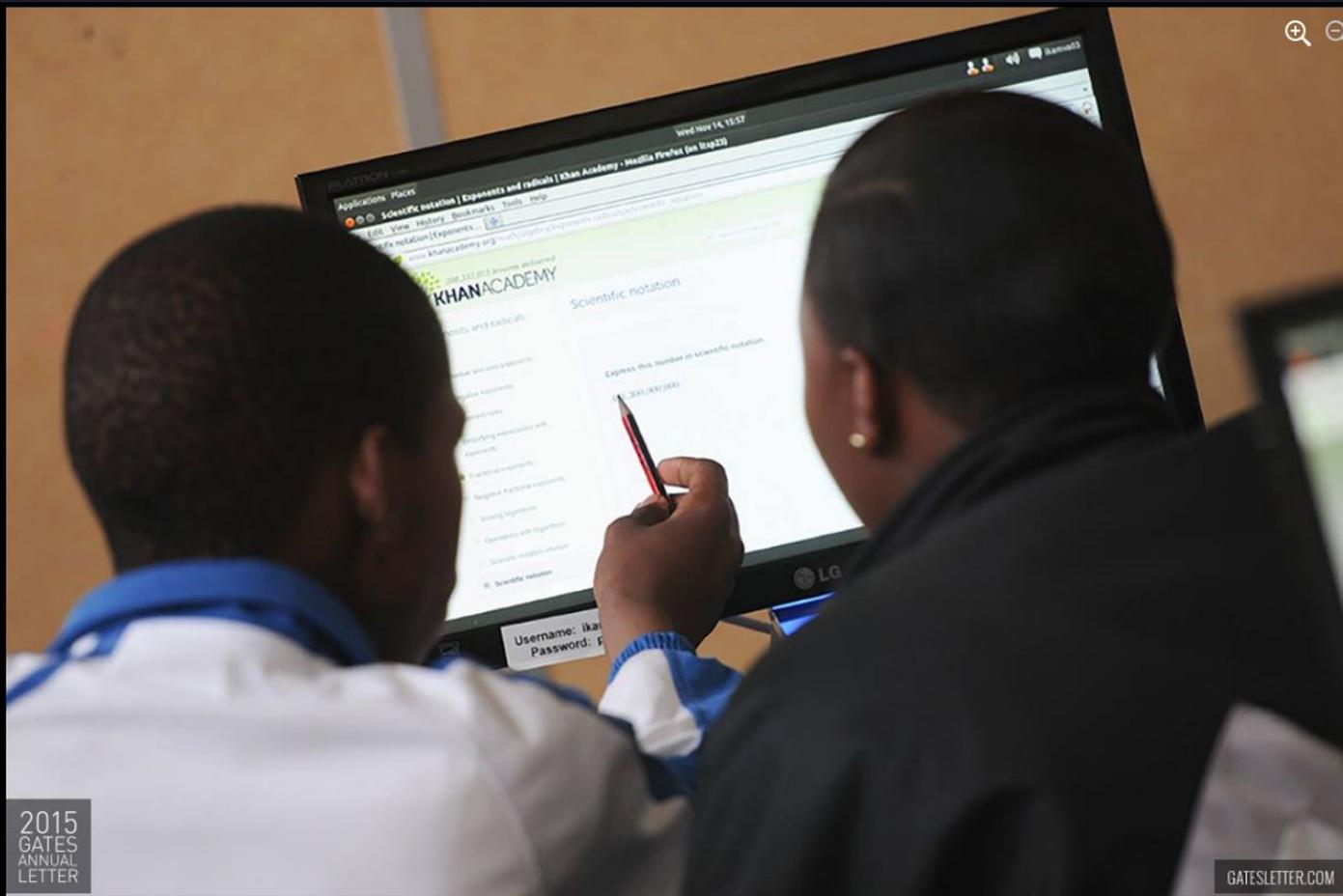
Fonte foto: [Shutterstock](#)

TECH NEWS



Microsoft apre all'open source ed entra nella Linux Foundation

Passo significativo per Microsoft che diventa Platinum member e sborsando 500



2015
GATES
ANNUAL
LETTER

GATESLETTER.COM

Bill Gates
29 gennaio 2015 · 🌐

15 years from now, most people in poor countries will be able to take classes online: <http://b-gates.es/1LiNsLE>

👍👎👏 42 Commenti: 1425 Condivisioni: 2416

👍 Mi piace Commenta Condividi

Più pertinenti ▼

Pemuja Paha Hutao
Bill gate : 15 years again most people will be able to take clases online (2015).
Corona : thats to long bill, i can make it NOW!!! (march 2020). 😊
see, now everyone able to take clases online more faster
People : 🙄🙄🙄🙄

Mi piace · Rispondi · 9 sett. · Modificato 🗨️ 2

Iqbal Fabriansyah
Power of LINUX!!
The Future for Linux

Mi piace · Rispondi · 9 sett.

Wahid
speedrun 10 years

Mi piace · Rispondi · 9 sett.

Kevin ID
Now all of contries take online class, because corona pandemic

Mi piace · Rispondi · 9 sett.

Muhammad Rayhan Maulana
Well apparently it took only 5 years

Scrivi un commento...



1975



1976

Personal
Computer



1984



1985





Technology News / News-Analysis

VALVE SAYS LEFT 4 DEAD 2 RUNS FASTER ON LINUX THAN ON WINDOWS



Valve had announced last month that it is working on porting its popular digital distribution platform for games, Steam, to Linux. The company was also...



SHUNAL DOKE

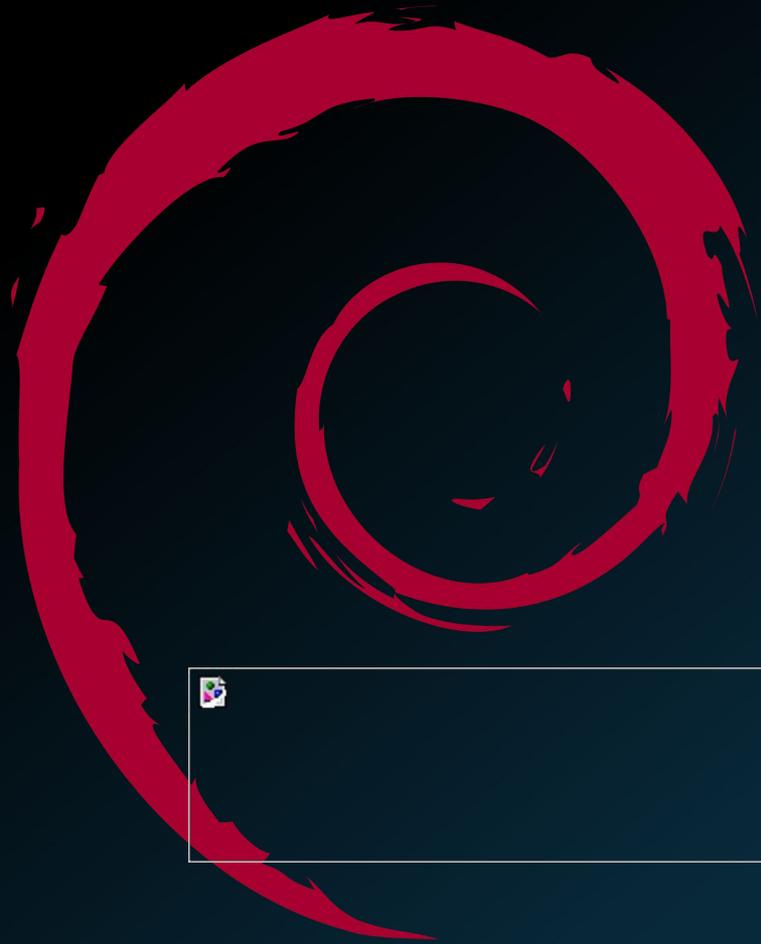
AUG 03, 2012 11:04:55 IST

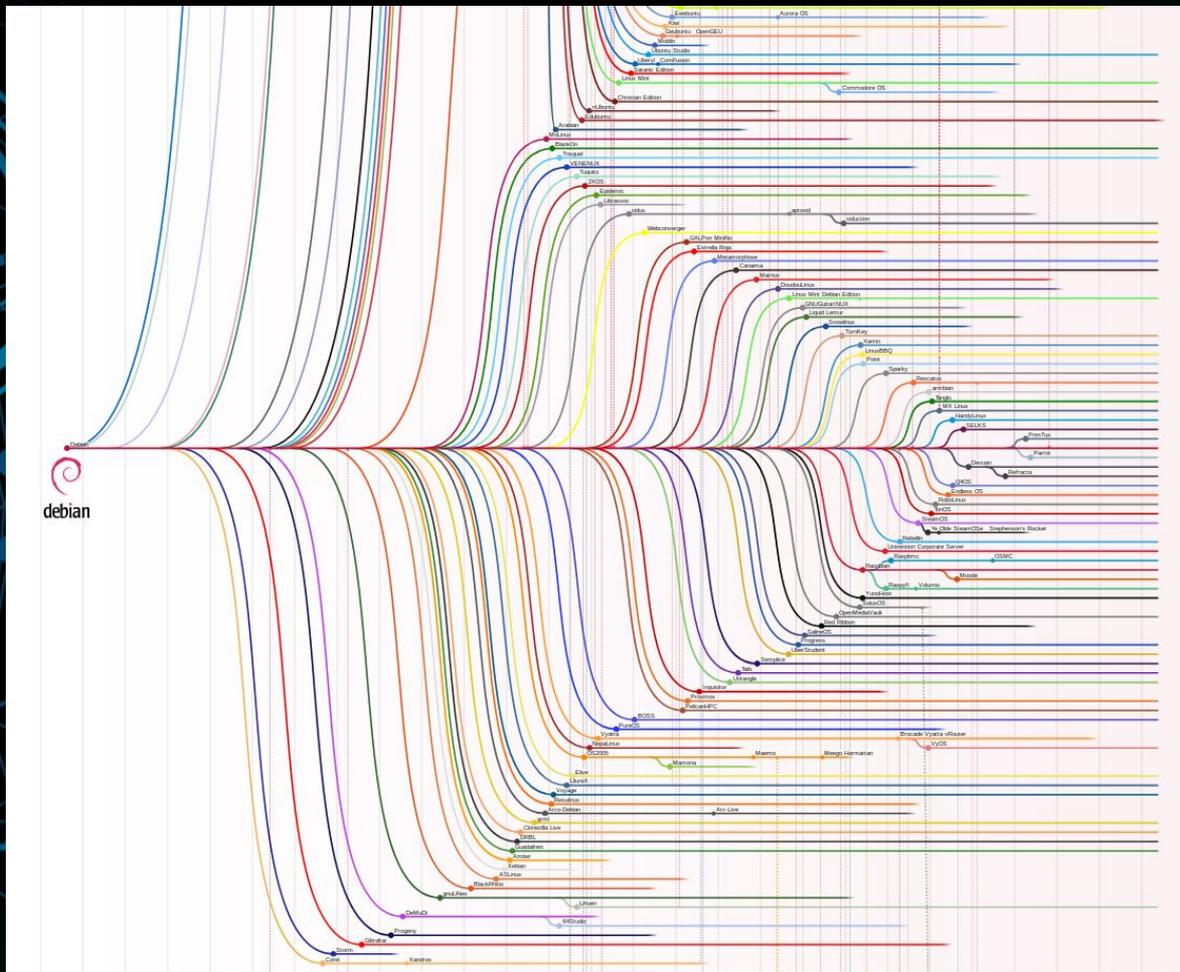
Gabe

STEAM

Steam machine

PAUSA









- Tipo: [Linux](#)
- Basata su: Independent
- Provenienza: [Global](#)
- Architetture: [aarch64](#), [armel](#), [armhf](#), [i686](#), [mips](#), [mipsel](#), [ppc64el](#), [s390x](#), [x86_64](#)
- Desktop: [AfterStep](#), [Awesome](#), [Blackbox](#), [Cinnamon](#), [Fluxbox](#), [flwm](#), [FVWM](#), [GNOME](#), [i3](#), [IceWM](#), [ion](#), [JWM](#), [KDE](#), [LXDE](#), [LXQt](#), [MATE](#), [Openbox](#), [pekwm](#), [Ratpoison](#), [WMaker](#), [XBMC](#), [Xfce](#)
- Categoria: [Desktop](#), [Live Medium](#), [Server](#)
- Stato: [Attiva](#)
- Popolarità: [4 \(1,560 visite al giorno\)](#)





PRO

- ☒ È molto rigido per i software opensource
- ☒ Ha una grande community
- ☒ Supporta la maggior parte delle architetture di qualsiasi distribuzione binaria di Linux.
- ☒ Il formato dei suoi pacchetti “.deb” è uno dei più diffusi
- ☒ È la distribuzione Linux più vecchia e supportata dopo Slackware
- ☒ Sono sempre supportate le seguenti branch di Debian:
 - oldstable
 - stable
 - testing
 - unstable

CONTRO

- ☒ È molto rigido per i software opensource
- ☒ Usa “systemd”

Ian Murdock

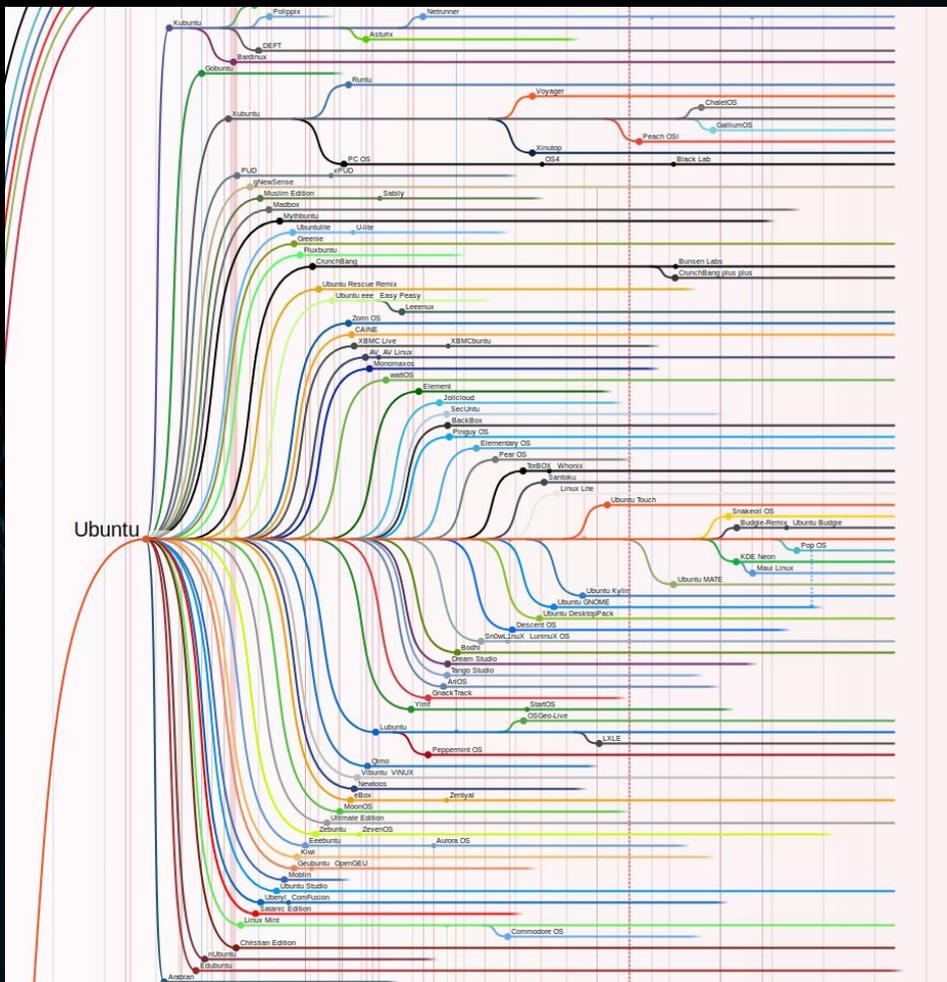


Il 28 dicembre 2015 è stato trovato morto a [San Francisco](#), dove lavorava a [Docker](#). Il giorno prima era stato arrestato per violenza e resistenza a pubblico ufficiale e scarcerato dietro cauzione.^[1] Gli ultimi suoi posts su [twitter](#) denunciano ripetute violenze e umiliazioni, anche sessuali, subite durante la detenzione e proseguite fin dopo il rilascio. Ad una prima intenzione di suicidio espressa sul [social network](#), seguiva un'affermazione della volontà di combattere nel futuro contro l'abuso di potere esercitato dai dipartimenti di polizia americani.

Gli accertamenti medici successivi hanno stabilito che si trattò di [suicidio](#).^[2]









ubuntu



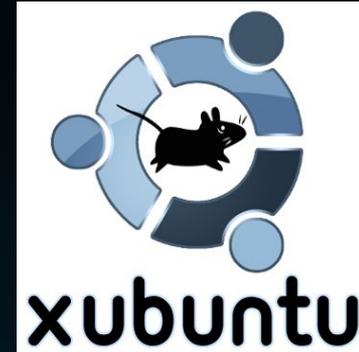
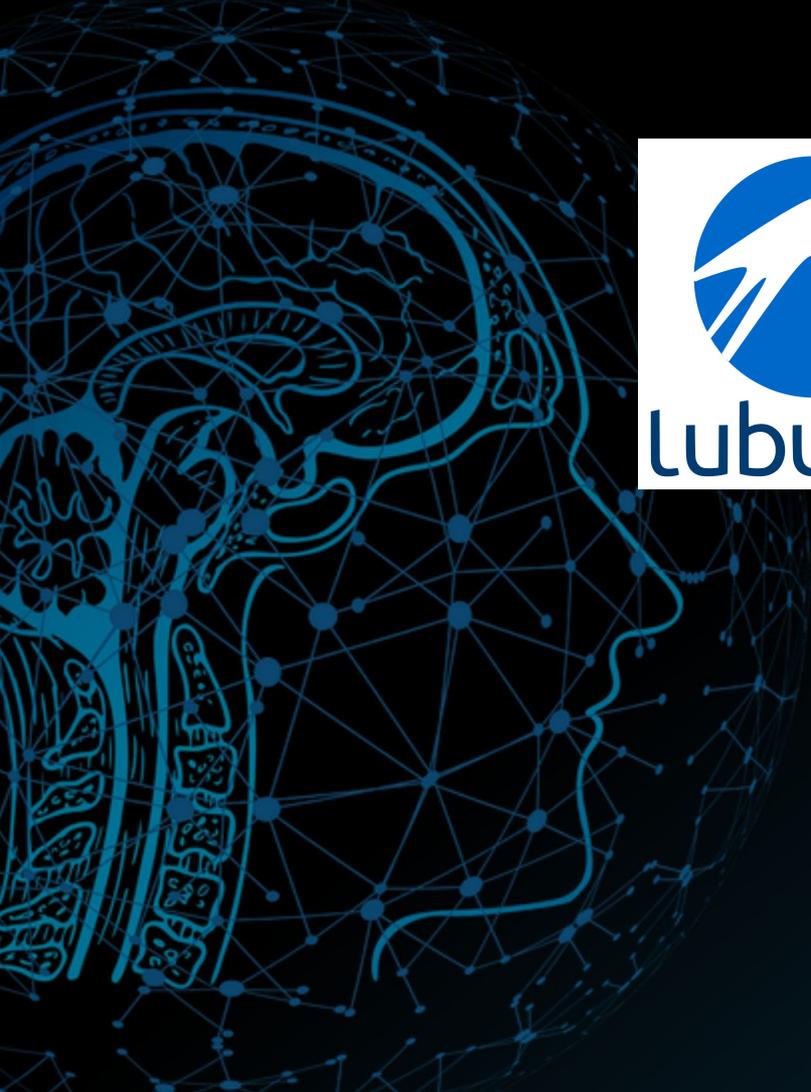
Trash

Install Ubuntu
19.10

ubuntu

- Tipo: [Linux](#)
- Basata su: [Debian](#)
- Provenienza: [Isle of Man](#)
- Architetture: [armhf](#), [i686](#), [powerpc](#), [ppc64el](#), [s390x](#), [x86_64](#)
- Desktop: [GNOME](#), [Unity](#)
- Categoria: [Beginners](#), [Desktop](#), [Server](#), [Live Medium](#)
- Stato: [Attiva](#)
- Popolarità: [5 \(1,402 visite al giorno\)](#)







List of releases

[Ubuntu Website release cycle page](#)

Current

| Version | Code name | Docs | Release | End of Standard Support | End of Life |
|---------------------------|-------------------------------|-------------------------------|-----------------------------------|---------------------------------|---------------|
| Ubuntu 19.10 | Eoan Ermine | Release Notes | October 17, 2019 | July, 2020 | July, 2020 |
| Ubuntu 19.04 | Disco Dingo | Release Notes | April 18, 2019 | January, 2020 | January, 2020 |
| Ubuntu 18.04.3 LTS | Bionic Beaver | Changes | August 8, 2019 | April 2023 | April 2028 |
| Ubuntu 18.04.2 LTS | Bionic Beaver | Changes | February 15, 2019 | April 2023 | April 2028 |
| Ubuntu 18.04.1 LTS | Bionic Beaver | Changes | July 26, 2018 | April 2023 | April 2028 |
| Ubuntu 18.04 LTS | Bionic Beaver | Release Notes | April 26, 2018 | April 2023 | April 2028 |
| Ubuntu 16.04.6 LTS | Xenial Xerus | Changes | February 28, 2019 | April 2021 | April 2024 |
| Ubuntu 16.04.5 LTS | Xenial Xerus | Changes | August 2, 2018 | April 2021 | April 2024 |
| Ubuntu 16.04.4 LTS | Xenial Xerus | Changes | March 1, 2018 | April 2021 | April 2024 |
| Ubuntu 16.04.3 LTS | Xenial Xerus | Changes | August 3, 2017 | April 2021 | April 2024 |
| Ubuntu 16.04.2 LTS | Xenial Xerus | Changes | February 16, 2017 | April 2021 | April 2024 |
| Ubuntu 16.04.1 LTS | Xenial Xerus | Changes | July 21, 2016 | April 2021 | April 2024 |
| Ubuntu 16.04 LTS | Xenial Xerus | Release Notes | April 21, 2016 | April 2021 | April 2024 |
| Ubuntu 14.04.6 LTS | Trusty Tahr | Changes | March 7, 2019 | April 2019 | April 2022 |
| Ubuntu 14.04.5 LTS | Trusty Tahr | Changes | August 4, 2016 | April 2019 | April 2022 |
| Ubuntu 14.04.4 LTS | Trusty Tahr | Changes | February 18, 2016 | HWE August 2016 | April 2022 |
| Ubuntu 14.04.3 LTS | Trusty Tahr | Changes | August 6, 2015 | HWE August 2016 | April 2022 |
| Ubuntu 14.04.2 LTS | Trusty Tahr | Changes | February 20, 2015 | HWE August 2016 | April 2022 |
| Ubuntu 14.04.1 LTS | Trusty Tahr | Changes | July 24, 2014 | April 2019 | April 2022 |
| Ubuntu 14.04 LTS | Trusty Tahr | Release Notes | April 17, 2014 | April 2019 | April 2022 |

Release announcements are posted on the [ubuntu-announce mailing list](#).



PRO

- ◆ Ogni release ogni 6 mesi
- ◆ Versione LTS
- ◆ Partner Canonical
- ◆ User-friendly, tutto pronto per un utente "beginner"
- ◆ È una delle distro più usate

CANONICAL

CONTRO

- ◆ Poca stabilità
- ◆ Più pesante rispetto ad altre distro



In Africa there is a concept known as '**ubuntu**' - the profound sense that we are human only through the humanity of others

~ Nelson Mandela



Linux Mint
from freedom came elegance



Computer



Home



In



Linux Mint

- **Tipo:** [Linux](#)
- **Basata su:** [Debian](#), [Ubuntu \(LTS\)](#)
- **Provenienza:** [Ireland](#)
- **Architetture:** [i386](#), [x86_64](#)
- **Desktop:** [Cinnamon](#), [MATE](#), [Xfce](#)
- **Categoria:** [Beginners](#), [Desktop](#), [Live Medium](#)
- **Stato:** **Attiva**
- **Popolarità:** [3 \(2,043 visite al giorno\)](#)



Sound & Video

Backup Tool

Universal Access

Bluetooth

Administration

Calculator

Preferences

Calendar

Places

Character Map

Color

Date & Time





PRO

- ❏ Favorisce la diffusione delle tecnologie open source, ma considera anche alternative del mondo proprietario, e l'esperienza dell'utente viene prima dei problemi di licenza
- ❏ È user-friendly, mira ad avere un'esperienza più intuitiva per l'utente
- ❏ Gestisce gli aggiornamenti diversamente da Ubuntu per conferire una maggiore stabilità all'OS.
- ❏ È una delle distro più usate

CONTRO

- ❏ Poca stabilità rispetto a Debian (ma non rispetto ad Ubuntu)
- ❏ Più pesante rispetto ad altre distro
- ❏ Non comunica le date di pubblicazione delle nuove distribuzioni, ma le versioni sono annunciate "quando pronte" (when ready)
- ❏ Open source & software proprietario

<https://community.linuxmint.com/idea/welcome>



\$ whoami

- Stefano Borzì
- @Helias
- github.com/Helias

GRAZIE DELL'ATTENZIONE