



# *EU OS: learnings from 1 year advocating for a common Desktop Linux for the public sector*

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EU OS: Why do we do it?

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## OS to support older Hardware

- With Windows 10 end-of-life, older hardware does not meet requirements for an update on Windows 11 (planned obsolescence of 240 Mio devices).
- With Linux, older (and newer) hardware can be used longer.
  - Schools and universities, libraries, public administration, etc.

## OS to support high regulatory requirements (security, sovereignty, privacy)

- With Windows 10 and 11, connected (cloud) services are difficult to control.
- With open source software like Linux, a high level of control is achievable
  - Government: competition authorities, data protection authorities, courts
  - Embassies, secret services, armed forces, critical infrastructure sector

## Perceived Problems

- During migration two systems must be supported: Windows and Linux
- Expensive migration: cost-saving effects only for large desktop fleets
- Little in-house know-how and small ecosystems: shortage of expertise
- In the absence of role models: many unknowns and risk to fail
- User aversion against new or non-standard software (or change in general)

## Possible Solution

- Synergies between organisations: common approach to Linux and its migration
- Synergies between building blocks: reuse cloud technologies and expertise

## What is EU OS not?

- It is not a project of the European Union, but *it should be*.
- It is not a new Linux distribution. It is not for private home users.
- It is not a project producing original code. EU OS reuses existing software.

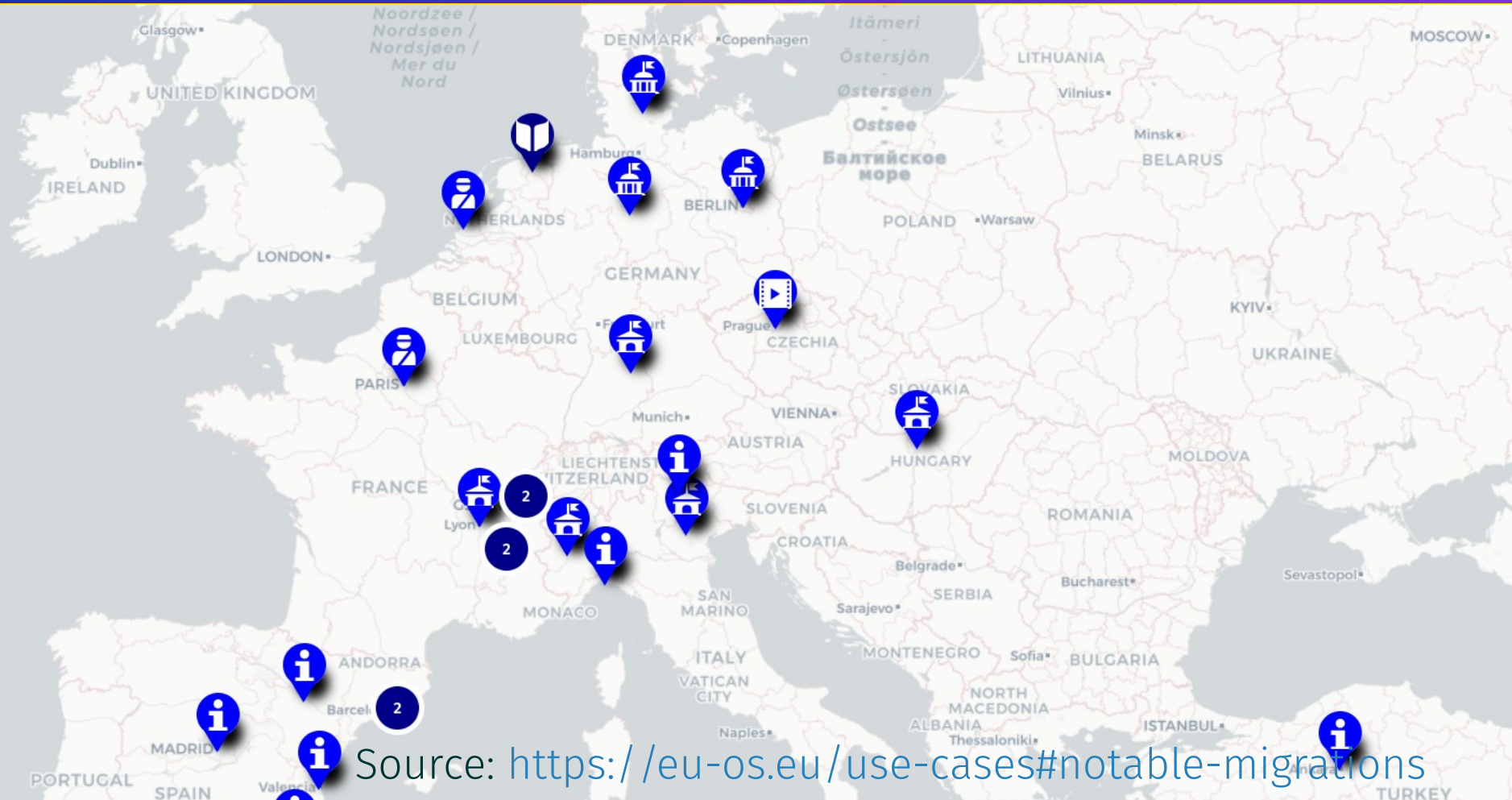
## What is EU OS then?

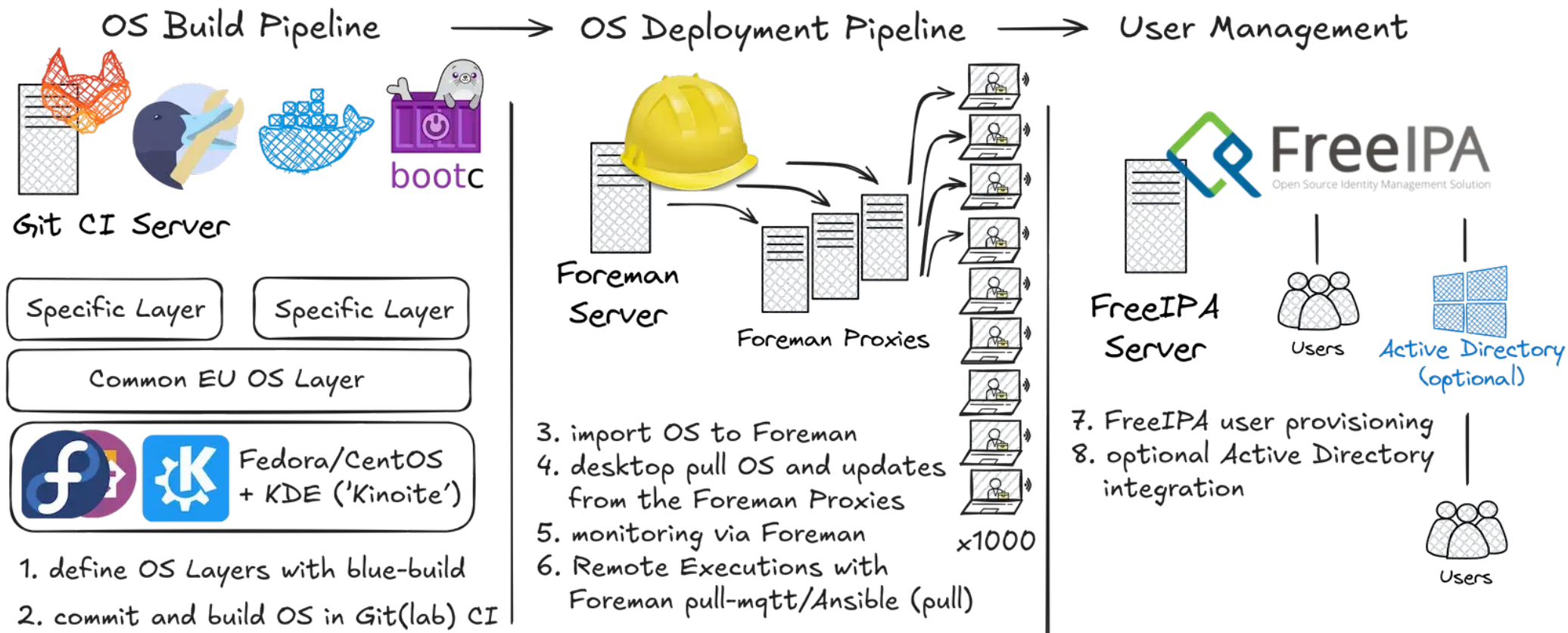
- It is a Proof-of-Concept (PoC) for the deployment of **a Fedora-based Linux** OS with a **KDE Plasma desktop** environment and *bootable container technology* in a typical public sector organisation (corporate environment).
- Private sector organisations with similar requirements may also use EU OS.
- EU OS is also a community and a knowledge data base.

EU OS: How do we do it?

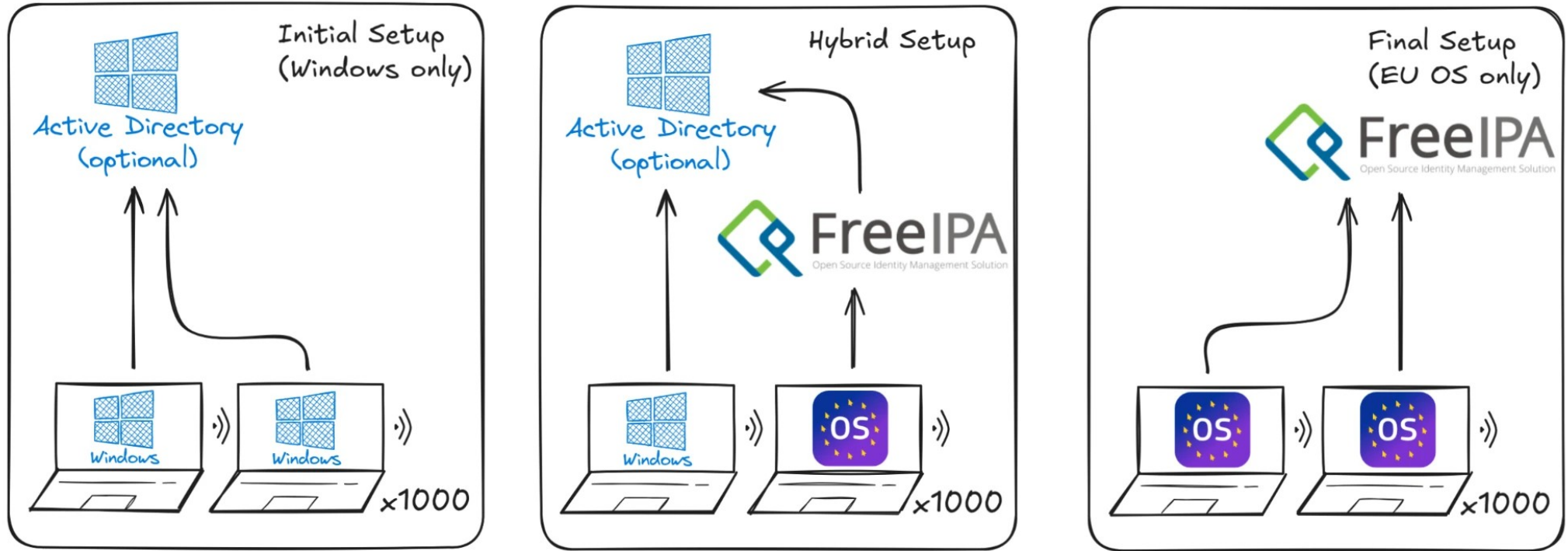
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# Map of Linux-on-the-Desktop in the European Public Sector









# EU OS



Some Public Body

- awareness raising campaign in full swing (social media, personal networks)
  - EU organisations: EDPS, EC DIGIT/CNECT/HR, EC JRC, Eurojust, Europol, EU Parliament, Court, ...
  - International organisations: ICRC, UN, ICC, ICJ
  - EU member states: DINUM , Zendis , Schleswig-Holstein , OSPO , OSPO
- Demo of proof-of-concept in The Hague
- Next: Madrid administration in February
- **on-going feasibility study with pilot comprising ≈ 150 seats** running EU OS

## EU OS: Community Feedback from 2025

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- boring, but battle-tested (robust)
- enterprise support
- enterprise tools (fleet management, monitoring, etc.)
- compliance/certification/accreditation (supply chain security, testing, hardening, etc.)
- consolidation to one/few Linux distributions (incl. containers, VMs, servers)
- third-party support (think of SAP, SPSS, Matlab or FreeIPA)
- sovereignty and sustainability
- support local economy

Think of countries exchanging software (LaSuite, openDesk, etc.)

- “Launched as a competition under the [Cloud III Dynamic Purchasing System](#) (Cloud III DPS), the tender will allow EU institutions, bodies, offices and agencies to procure sovereign Cloud services over 6 years. The tender establishes a benchmark for how sovereignty is applied in practice to cloud services.”
- “This document defines Sovereignty Objectives relevant for the provision of Cloud services requested in this procedure. [...]” ([version 1.2.1](#) – Oct. 2025)
- Framework doesn't apply, but can inform us.
- Criterion SOV-1: Strategic Sovereignty. ‘[...] It assesses **ownership stability**, governance influence, and alignment with EU strategic priorities.’
- Criterion SOV-5: Supply Chain Sovereignty. ‘[...] **geographical origin**’



[More info:](#)  
Emiel Brok  
(opensuse)  
on Sun 11:05  
in UA2.118

## EU OS: the big picture

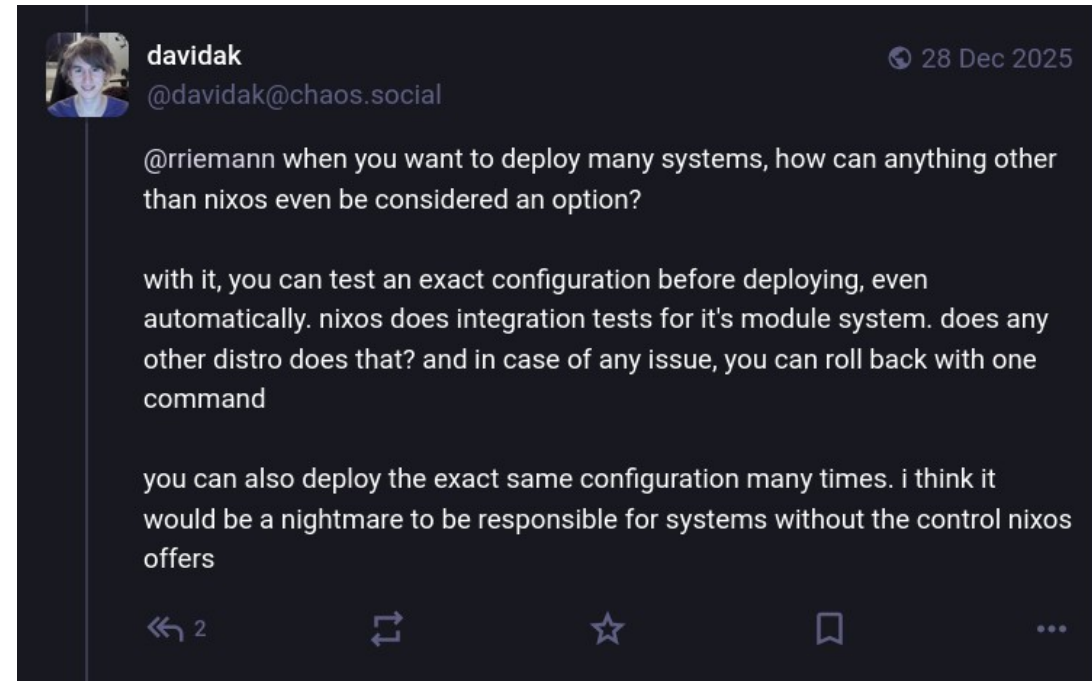
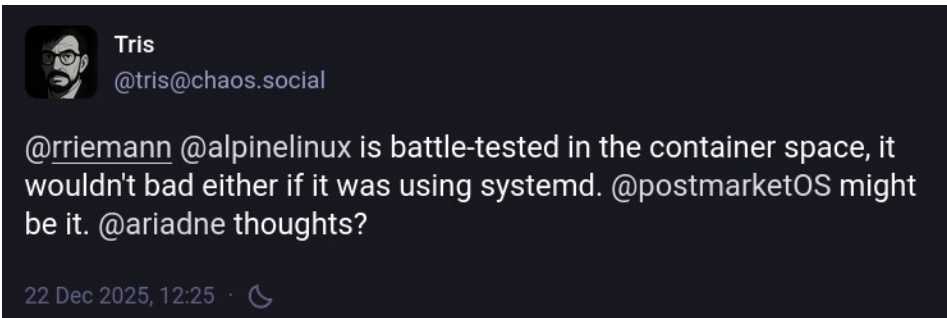
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- Blog post: [Which Linux Distribution fits Europe best](#) on Fedora Planet and Planet openSUSE



And change the name of the project to [#US-IBM-Linux](#), cause that is the right name, as long as Fedora is the choice, however you try to rebrand the facts.  
Why are you helping a [#288bn\\$](#) US tech company to get more users & business over a small EU FOSS tech company like Suse without value of SA for EU?

14:05 · 22 Dec 2025





- Consider distributions for corporate use (with a lot of testing before release)
- **Debian** is a community non-profit managed by volunteers
- **Ubuntu** is owned by Canonical Ltd. (revenue 300m\$, 1k staff)
- **OpenSUSE/SLES** is owned by Société Anonyme (revenue 700m\$, 2.5k staff)
- **RedHat** is owned by IBM  
(revenue 4.5B\$, 20k staff (source) of which 13k and 4.5k )
- RedHat competes against **AlmaLinux** Foundation  
(AWS, Azure, Meta, CERN, some Japanese companies )
- RedHat competes against **RockyLinux** Foundation  
(AWS, Google, vmware, RISC-V)

- RedHat/Fedora is factor 10 bigger and most developers in the EU work with it.
- Many people overestimate the market share of Ubuntu in the Linux market.
- Source: [my Mastodon poll](#)
- Some explanations from reactions:
  - openSUSE is the choice of SAP, SAP is big (annual rev. ≈40B\$)
  - Ubuntu has less paying users



Robert Riemann 

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Today I learnt [#suse](#) [#opensuse](#) is about twice as big as [#ubuntu](#) in terms of annual revenue and staff members.

suse: est. 700m\$ with 2.5k staff  
ubuntu: est. 300m\$ with 1k staff

Who would have thought that?

Is it the server business? Has Ubuntu so much more non-paying "customers"?

82% I thought Ubuntu is larger



11% I thought SUSE is larger



7% I knew the facts before



[Refresh](#) · 87 people · 6 days left

cf. fosdem talk: [public product organisation](#)

## Ownership Stability

- non-profit foundation with financial sustainability (for the EU: at best in the EU)
- state-owned

## Current Enterprise-ready Distribution Landscape

- IBM/Redhat is US based, Fedora has no separate legal entity (foundation)
- SUSE Enterprise is EU based, openSUSE has no separate legal entity (foundation)
- AlmaLinux may not be sustainable, is US based, but a foundation
- Ubuntu is UK based; Debian has several legal entities (including non-profit in France), but has no bootc/atomic support

Debian with bootc support; Almalinux/SUSE Foundation in EU would help a lot!



'Risk management comes at a price, but that **cost of strategic autonomy, of sovereignty can also be shared.**

Collective investments in resilience are cheaper than everyone building their own fortresses. Shared standards **reduce fragmentations.** Complementarities are positive sum. And the question for middle powers like Canada is not whether to adapt to the new reality – we must. The question is whether we adapt by simply building higher walls, or whether **we can do something more ambitious.**'

Source: [independent.co.uk](https://www.independent.co.uk)

Can we share the cost of (EU) OS with all middle powers?

Which distribution could get broadest support?

Thank you. Questions?

contact: [robert-eu-os@riemann.cc](mailto:robert-eu-os@riemann.cc)

Backup

## What is already proven?

- Several public sector organisations have migrated to Linux, so that's proven.
  - [French Gendarmerie](#) (fleet with 82k seats)
  - [Chinese Government](#) (90% of seats in government on Linux, [video](#))
- The European Commission has studied Linux on the desktop already in [2005](#):
  - ‘In general, the Linux platforms that were tested **show a very fair level of usability and compatibility**. An environment based on **Linux is today technically feasible for limited groups** with specific needs. Although there are many other factors that could play a role in the decision in favour of the implementation of an environment based on Linux, the present testing shows that is **not possible** to implement it at this moment in time **on a large scale**. Amongst the most **blocking factors** is the availability of Commission and local **applications**.’
  - ‘Apart from this technical evaluation, it must be said that the Commission has a political role to play in ensuring that the competition rules are respected.’

### EU OS wants to proof that ...

- enough **synergies** exist, so that migration to Linux (EU OS) is feasible and economically viable in much more public sector organisations
- a migration is doable in **rather 2 years than 20 years** (check out [use cases](#))
- Linux offers today an alternative to Windows that is **more secure, sovereign, sleek** (efficient/eco-friendly)
- Linux deployments can scale to thousands of users

Hence, EU OS PoC is more about **developing a *common* vision for and collaboration in digital transformation** than it is about code or technology.





```
user@laptop> sudo bootc status -v
```

- Booted ostree

```
    Commit: b23063e41c9e2bd5fe115d78ef376188e ...
    StateRoot: fedora
    Deploy serial: 0
    Staged: no
    Soft-reboot: yes
```

```
Rollback ostree
```

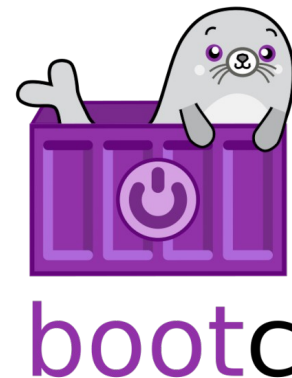
```
    Commit: 4e2da3123fc1000924ccee67952e8c13e ...
    StateRoot: fedora
    Deploy serial: 0
    Staged: no
    Soft-reboot: no
```

```
user@laptop> sudo bootc upgrade
```

```
user@laptop> sudo bootc switch registry.code.europa.eu/eu-os/eu-ec/jrc:latest
```

```
user@laptop> sudo bootc switch registry.code.icc-cpi.int/icc-os/icc-os:latest
```

```
user@laptop> sudo bootc rollback
```



[bootc-dev.github.io](https://bootc-dev.github.io)

‘Your laptop is a git repo!’



**CLOUD NATIVE**  
COMPUTING FOUNDATION

```
name: eu-os-demo
base-image: registry.code.europa.eu/eu-os/base
image-version: 2025.10

modules:
- type: default-flatpaks
  configurations:
    - notify: true # notify users
      scope: system
      install:
        - org.mozilla.firefox
        - org.kde.okular

- type: dnf
  repos:
    copr:
      - rriemann/eu-os
  install:
    packages:
      - eu-os-backgrounds
      - plymouth-theme-eu-os
      - freeipa-client

- type: files
  files:
    - source: system
      destination: / # copy files in 'system' to file tree

- type: script
  scripts: [] # list with filenames from folder files/scripts
  snippets:
    - "for h in /home/*; touch /home/$f/.default; done"

- type: systemd
  system:
    enabled:
      - corporate-vpn.service

- type: signing
```



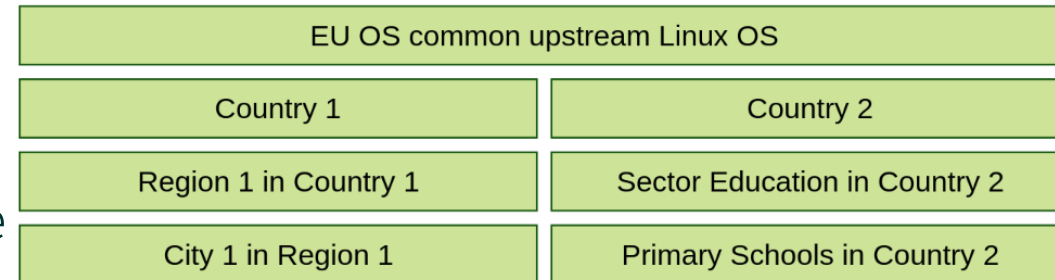
The **easiest** way to build your  
own desktop Linux images.

[blue-build.org](https://blue-build.org)

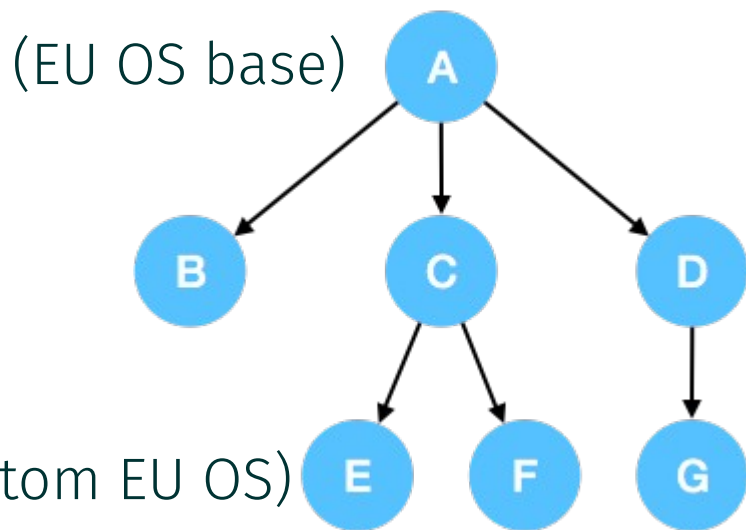
Full Example: EU OS Base Demo

## Based on ...

- open software and open standards: transparency, control, zero-margin costs
- wide-spread container technology (docker): in-house expertise often available
- wide-spread deployment technologies (Gitlab): infrastructure often available
- wide-spread enterprise linux (Fedora, possibly others): existing ecosystem
- hierarchy of shared containers:
  - synergies on many levels (EU, country, region, sector, ...) for building, testing, compliance
  - subsidiarity and flexibility
- Automation tools: scalability for large fleets with many seats (goal: thousands)



- Bootable Containers (bootc) have each one base container to inherit
- Collaboration on the highest (most generic) level possible
- Subsidiarity on the lowest level (custom EU OS variant)



EU OS common upstream Linux OS	
Country 1	Country 2
Region 1 in Country 1	Sector Education in Country 2
City 1 in Region 1	Primary Schools in Country 2

- EU OS community is made up of
  - the project Gitlab <https://gitlab.com/eu-os/>
  - the Matrix chat space with ~ 170 participants <https://matrix.to/#/#eu-os-space:kde.org>
  - the Fediverse account [@eu\\_os](#) with ~ 2,6k followers
- EU OS [partnerships](#) with organisations offering pro bono help or a platform
  - French Government [Hackdays in June 2025](#)
  - ATIX/orcharhino <https://orcharhino.com/en/>
  - B1 Systems <https://www.b1-systems.de/en/>
  - GONICUS <https://www.gonicus.de/>
  - international information campaign <https://endof10.org/>
  - pending formalisation: a German public sector agency
- EU OS would like to have more partners from all over Europe!

