

# Sovereign Cloud Stack: Joining forces to build open standards and free software together

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# Open Source 50 years ago



The four freedoms



# FOSS is the answer

- Gives a huge amount of control to the user
- No need to restrict OSS origin to your own country / continent / legal sphere
- Building on top and learning from each other: We truely stand on the shoulders of giants



# Today: Permissionless innovation (aka OSS) has created and runs the Internet



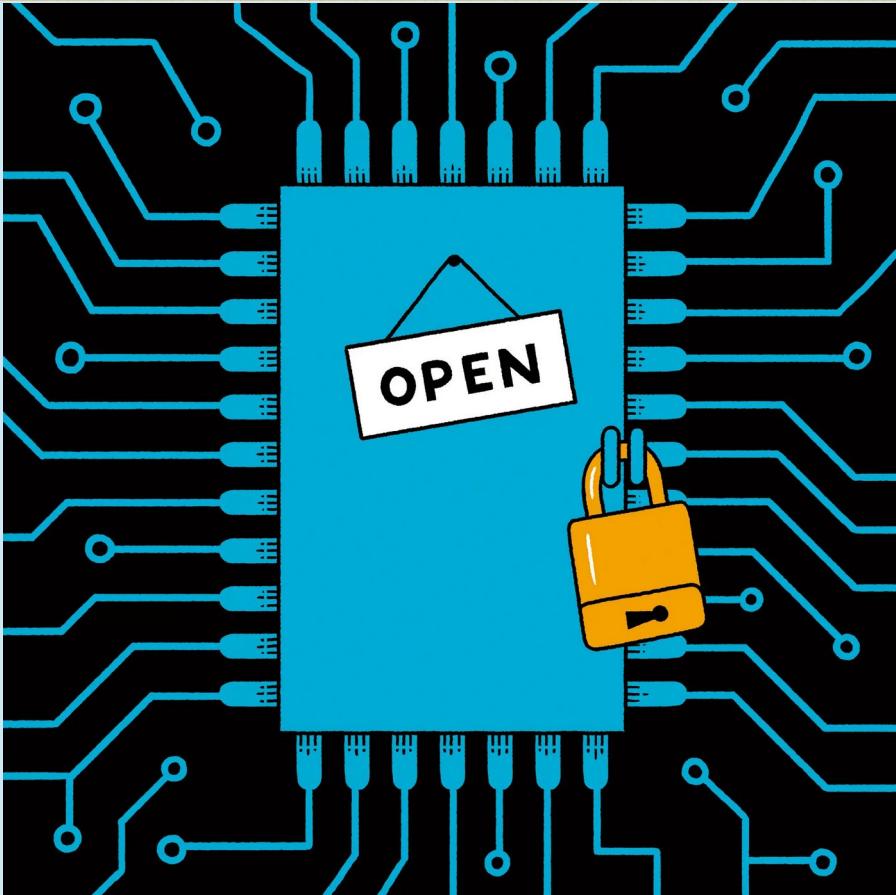
# So OSS won?



# Dangers

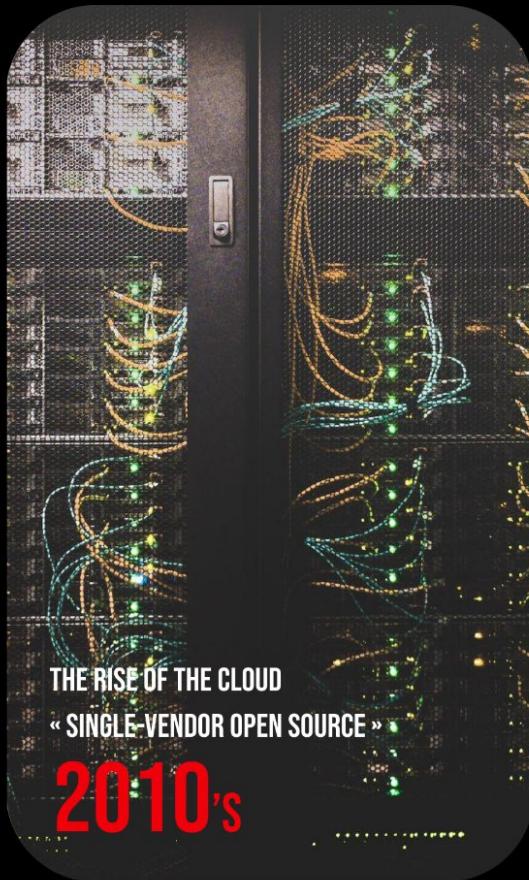


# Open-washing



Luci Gutiérrez

# Single-vendor OSS easily becomes proprietary (Thierry Carrez @ FOSDEM24)



MariaDB  
Mongo  
CockroachDB  
Elastic  
Terraform  
Redis  
...

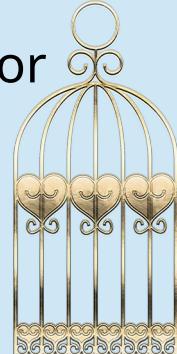
# Being embraced

Microsoft ❤️ Linux

# Infrastructure platforms



- They all use a large amount of open source code
- They are all proprietary
  - You can not change the platforms
  - You can not run them yourselves (except VMware in the past)
  - Innovation defined by single vendor that you depend on
- Lock-In



# Digital Sovereignty

Our Taxonomy: How do platforms enable digital sov'ty?

Dimension of competence

Technological dimension

Freedom of choice

Legal dimension



# SCS deliverables



1

Certifiable Standards



2

Modular Open Source  
Reference Implementation

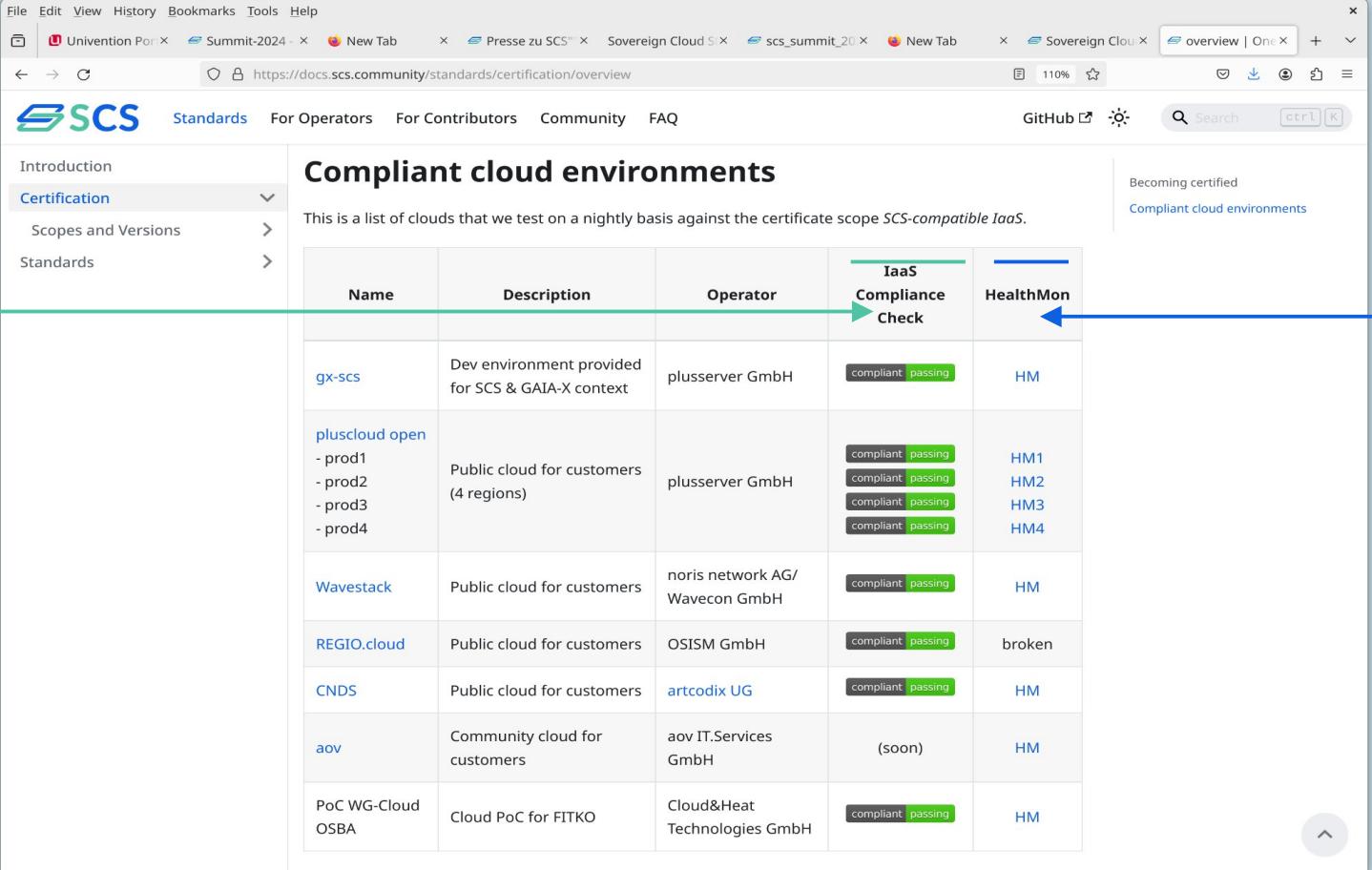


3

Accessible  
operational knowledge

# Open, documented standardization

Daily updated standard conformity result (here: IaaS SCS-compatible)

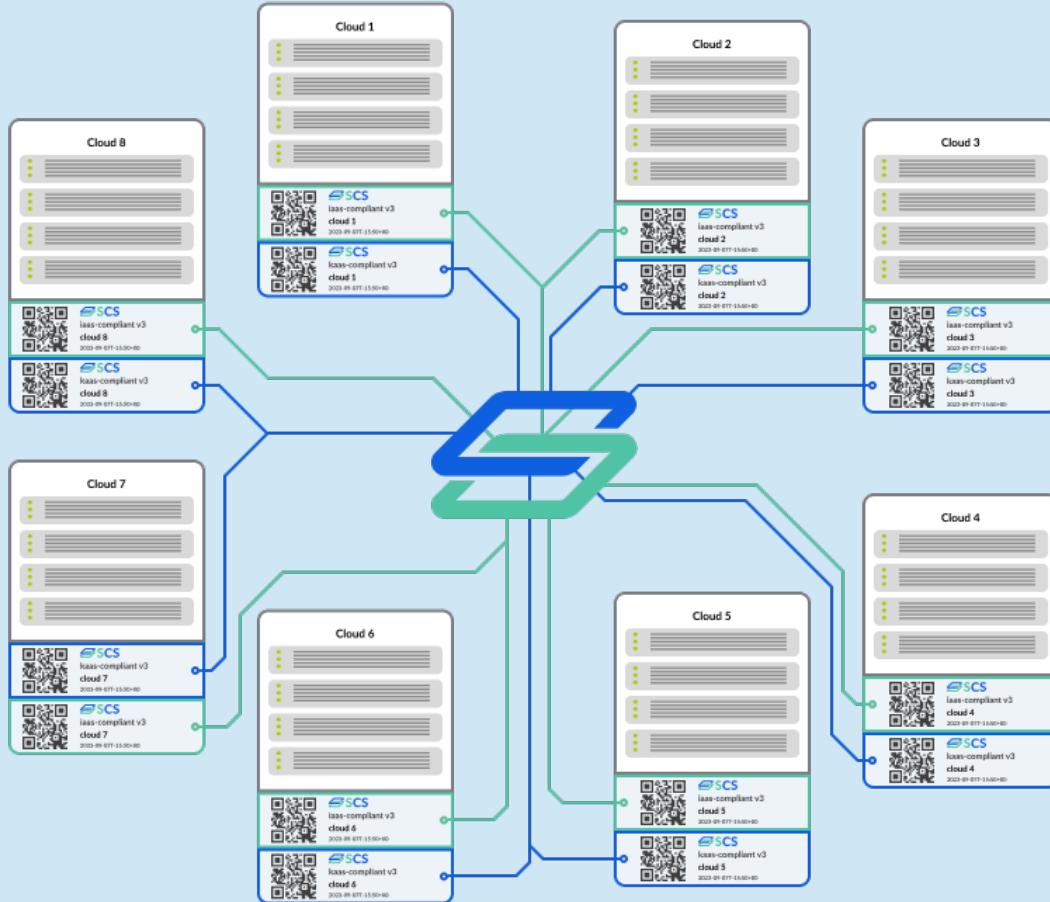


The screenshot shows a web browser displaying the Sovereign Cloud Stack (SCS) certification overview page. The URL is <https://docs.scbs.community/standards/certification/overview>. The page title is "Compliant cloud environments". A sidebar on the left has sections for Introduction, Certification (selected), Scopes and Versions, and Standards. The main content area displays a table with columns: Name, Description, Operator, IaaS Compliance Check, and HealthMon. The table lists several cloud environments:

Name	Description	Operator	IaaS Compliance Check	HealthMon
gx-scs	Dev environment provided for SCS & GAIA-X context	plusserver GmbH	compliant passing	HM
pluscloud open - prod1 - prod2 - prod3 - prod4	Public cloud for customers (4 regions)	plusserver GmbH	compliant passing compliant passing compliant passing compliant passing	HM1 HM2 HM3 HM4
Wavestack	Public cloud for customers	noris network AG/ Wavecon GmbH	compliant passing	HM
REGIO.cloud	Public cloud for customers	OSISM GmbH	compliant passing	broken
CNDS	Public cloud for customers	artcodix UG	compliant passing	HM
aov	Community cloud for customers	aov IT.Services GmbH	(soon)	HM
PoC WG-Cloud OSBA	Cloud PoC for FITKO	Cloud&Heat Technologies GmbH	compliant passing	HM

OpenStack Health Monitor dashboard:  
Public realtime monitoring of errors and performance

# SCS: Resilient Open Source cloud network



# SCS project

- Standardization and Open Operations initiatives
- We develop and assemble SCS transparently **as fully open source project** and encourage and appreciate all input, half-yearly releases
- **We contribute back into the upstream projects** that we have integrated such as OpenStack, Kubernetes, Keycloak, Ceph, ...
- All is on **GitHub**: <https://github.com/SovereignCloudStack>
- Matrix chat, Weekly Community Calls, mailing lists, ...
- Funding from German BMWK in Gaia-X context
- <https://scs.community/>

Supported by:



Federal Ministry  
for Economic Affairs  
and Climate Action

on the basis of a decision  
by the German Bundestag

# Adoption

Cloud services based on Sovereign Cloud Stack



Standards:

+syseleven  
+Cloud&Heat  
+Cleura

Ref.Impl.:

+scaleUp  
+BASF  
+TLRZ  
+Kyndryl  
+T-Systems

# SCS: future in two entities

## Both privately funded

### SCS Brand (Forum @ OSBA e.V.)

Holds the IP rights on the **SCS brand** (and is thus unique), sets the rules for the brand usage

Charitable / Non-profit (OSBA)

Cares for and orchestrates a fair and transparent ecosystem as „neutralizor“.

Further development of **Standards und Certifications**, employs personell for this

Membership and usage fees from Operators and Partners (prerequisite for brand usage)

Creates visibility and trust in the market and the whole ecosystem

Collaborates with upstream communities

Partner for „certification-only partners“

### **S7n Cloud Services GmbH**

Partner for users of the SCS **Software (Reference Implementation)**

Brand usage only possible within the limits set by Forum SCS @ OSBA e.V.

Further development, warranty, maintenance and backend support for SCS Software

Earns maintenance & support fees

Pays for technology partners plus own personell that participates in OSS communities for further development of SCS Software and upstream technology

Several such commercial entities may exist

# Discussion

- Funding by creating a sustainable business vs project funding
  - Public sector as customers (a key market segment)
  - VMware migrations
- Contributing to ∞ra (IPCEI-CIS)?
- Regulation to the help?
- Bringing OSS companies to collaborate beyond building code: Standards, Operations (Skill-building)
- More ideas ... ?

