

Open Source in Thales

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Sébastien LEJEUNE



Sébastien
LEJEUNE



WHO AM I ?

- **Software** Architect, Technical Directorate
- 20 years of dev / architecture / design
- Open Source **enthusiast**, help people in Thales to **share** and **contribute**



Thales overview

Over **77000***
employees



* Excluding ground transportation

68

Countries
Global presence



€1 bn
Self-funded R&D**



** Does not include externally financed R&D

Sales in 2022
€17,6 bn



Thales's Mission

SENSING & DATA
GATHERING

DATA TRANSMISSION
& STORAGE

DATA PROCESSING
& DECISION MAKING



Digital Identity and Security



Defence and Security



Aerospace



Space



Ground Transportation

WE HELP CUSTOMERS **MASTER DECISIVE MOMENTS**
BY PROVIDING THE RIGHT INFORMATION AT THE RIGHT MOMENT

Thales Open Source Hardware

- Sovereignty
- Open source community
- Security & Safety
- SWaP & customization

Invests
in RISC-V



Open Hardware
group technical
LEADER

- No vendor-locking
- Large ecosystem
- Performance

Image source: Internet, Fotolia / psvetlana

OPEN

Objectives

THALES

to become
a first class
actor

FOSTER

OSS model
across
all GBUs

DEVELOP

software
hardware
communities

RELY ON

the success
of Inner Source

PROVIDE

an unique
OSS process

FACILITATE

communication
between all
contributors

Thales OSS governance

- **COMMITMENT**

- Technical experts
- Legal experts
- Management
- Strategic support

THALES
OSPO



USE

CONTRIBUTE

PUBLISH

MINDSET

ACTIVE MEMBERSHIPS

- Linux Foundation
- OpenHardware Group
- RISC-V International
- Eclipse Foundation
- OSPO Alliance / GGI
- Systematic OSS Hub
- OASIS

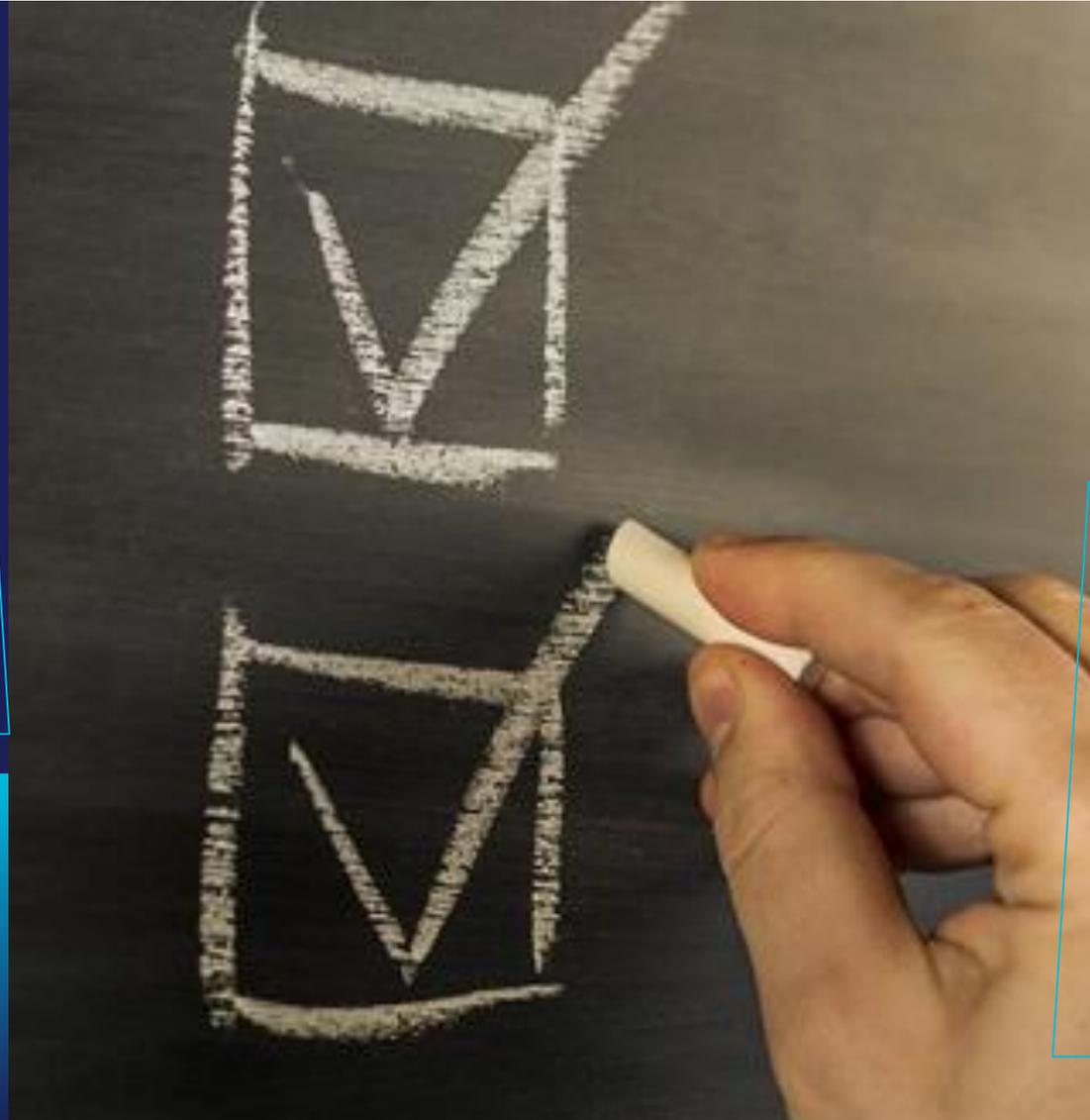
Image source: Internet, Fotolia / psvetlana

OPEN

Thales OSS process & tools

- Publication requests
- Contribution requests
- Approval steps
- Efficiency over process
- Shared by all Thalesians

OUR PROCESS



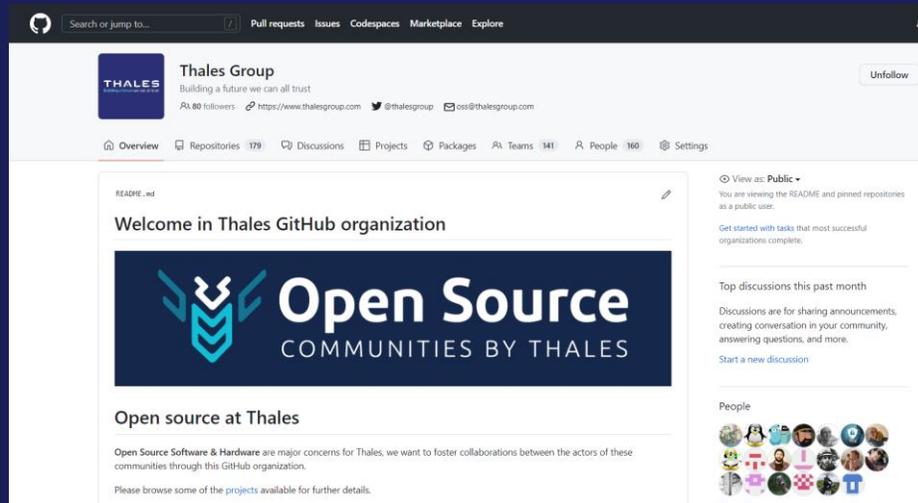
OSS CLEARANCE

- Mandatory step
- Vulnerability Assessment
- OSS compliance
- Continuous Risk management
- SCA tooling

Image source: Internet, Fotolia / psvetlana

OPEN

Thales GitHub organization



<https://github.com/thalesgroup>

- Follow the Thales OSS process to publish
- New OSS asset **MUST** be deployed here
- Monitor security alerts
- Templates for best practices

OUR
OSS ASSETS

Ranking made by Clarivate Analytics

OPEN

Thales GitHub organization



Thales GitHub organization

You are **free**
to **contribute**
to any project on any **foundation**

OUR
CONTRIBUTIONS

Our Rules

- Preserve Thales reputation
- Follow the Thales OSS process
- Respect the foundation rules
- Fork into our GitHub

Ranking made by Clarivate Analytics

[OPEN](#)

From Inner to Open source

Q3
2021

IDEATION

2022

INNER
SOURCED

Q1
2023

OPEN
SOURCED

FREYJA

BL: SIX - Theresis CYBER

VM MANAGER, CLI, ROOTLESS, KVM/QEMU/LIBVIRT BUT EASIER,
IMMUTABLE OS.

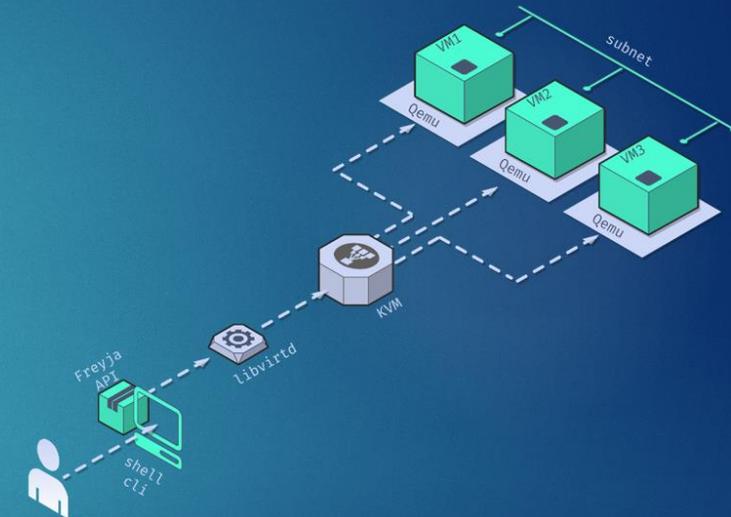
Freyja is a solution developed by ThereSIS Cyber to help developers deploying virtual guests very easily, on a daily basis, with simple YAML configurations.

Working with KVM, QEMU and LIBVIRT, it is compliant with almost every Linux distribution for hypervision. Starting from an OS image for QEMU, just configure your virtual guests in one YAML file and deploy them with one single command.

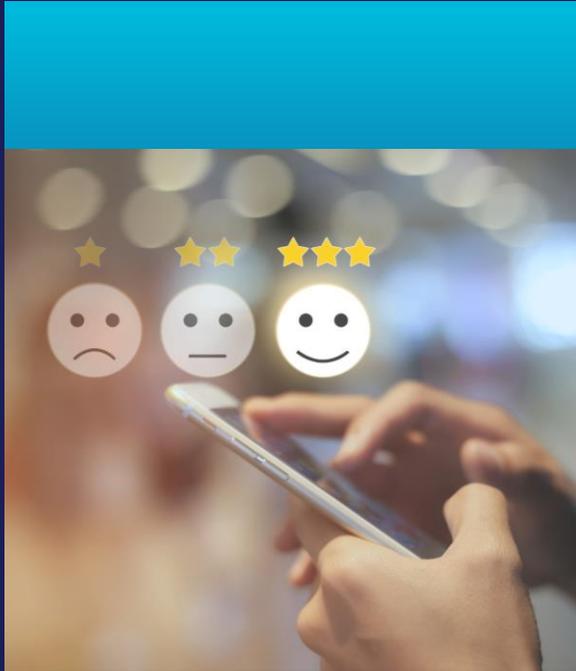
It also supports Cloud-Init and Ignition for OS configurations and provisioning, even if they are read-only.

Open & Inner Source

Official documentation: <https://theresis.pages.thalesdigital.io/freyja/>
Main contacts: louis.cailliot@thalesgroup.com; olivier.bettan@thalesgroup.com;



Return of experiences after 3 years



From cost reduction to **Open Innovation**

OSS **mindset** : use, contribute, publish

Open Source initiates **synergies**

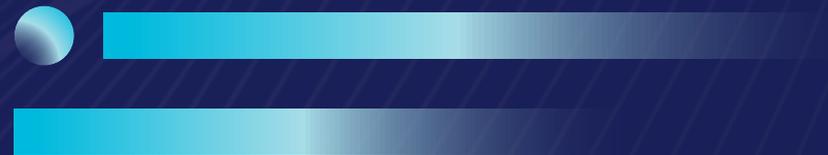
Towards OSS **business models**

Image source: Internet

OPEN



Q & A



OPEN

**THANK
YOU**

STAY IN TOUCH !

- <https://github.com/thalesgroup>
- oss@thalesgroup.com