# OSADL
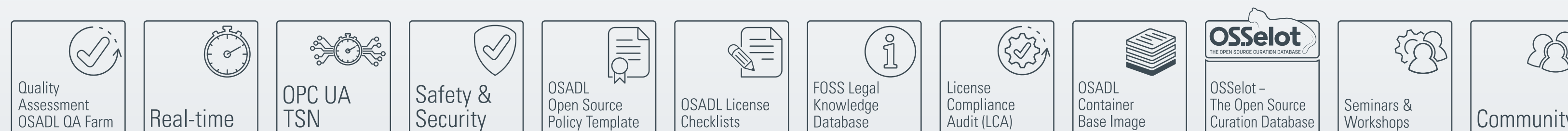
# OSADL IS THE COMMUNITY FOR OPEN SOURCE IN INDUSTRY

The Open Source Automation Development Lab (OSADL) eG provides everything that is needed to use, distribute and license Open Source software components in industrial products. This includes the software itself, but also considers quality, licensing and compliance as well as safety and security aspects.

The OSADL business model is based on the principle:
"Develop once for the use of many."

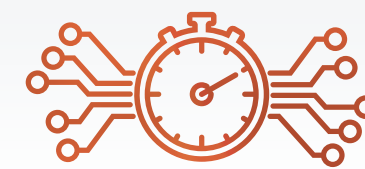Quality Assessment OSADL QA Farm | Real-time | OPC UA TSN | Safety & Security | OSADL Open Source Policy Template | OSADL License Checklists | FOSS Legal Knowledge Database | License Compliance Audit (LCA) | OSADL Container Base Image | OSSelot – The Open Source Curation Database | Seminars & Workshops | Community

# The OSADL QA Farm

→ is a quality assurance and assessment test center for embedded systems

→ monitors and optimizes hardware and software of about 200 Linux and other computer systems

→ ensures general reliability and stability and provides fine-tuning of individual systems

→ helps companies select the most appropriate embedded system for a particular application

→ offers a wide variety of research opportunities for scientific studies

→ rack space is included in the regular OSADL membership
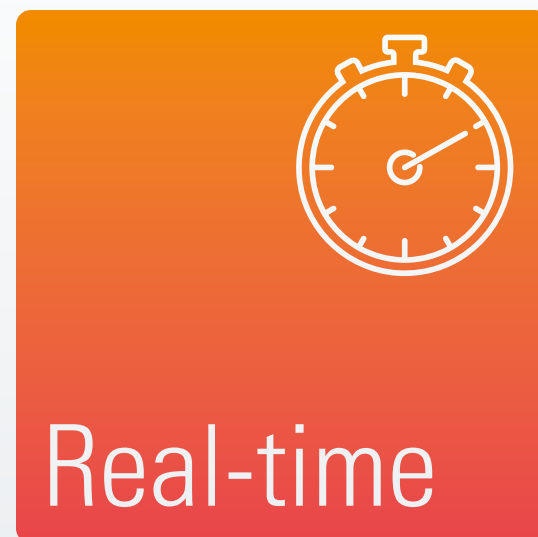
# The OSADL real-time Linux services

→ are based on the so-called PREEMPT_RT patches of the Linux kernel

→ help companies get the most out of Linux-based real-time systems

→ include kernel additions to detect the origin of unsatisfying real-time behavior ("latency fighting")

→ are closely coordinated with the Linux Foundation RTL Collaborative Project and include funding of the work

OSADL

## OPC UA TSN

# The OSADL OPC UA PubSub over TSN project

→ is committed to foster the development of next generation real-time communication via Ethernet
→ is closely related to the open62541.org project on an Open Source implementation of OPC UA PubSub
→ includes activities to improve TSN support of the Linux kernel
→ uses the OSADL QA Farm to continuously demonstrate the performance progress of the project

## Safety & Security

# Safety and security projects

→ include the SIL2LinuxMP project that aims to provide documents to facilitate safety certification
→ support development of methods and services to protect embedded systems against malware
→ intend to develop a pentesting service to ensure systems withstand cyber attacks
→ to support with organizational aspects of saftey and security

The OSADL portfolio of technical services is continuously expanded and adapted to OSADL members' requests.

# OSADL LEGAL SERVICES

OSADL has developed a broad portfolio of tools and services for Open Source license compliance and is a partner and know-how supplier for companies that use Open Source software in industrial products.

OSADL
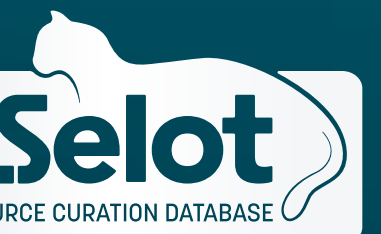Open Source
Policy Template

OSADL License
Checklists

FOSS Legal
Knowledge
Database

License
Compliance
Audit (LCA)

OSADL
Container
Base Image

OSSelot –
The Open Source
Curation Database

![OSADL logo]

## The OSADL Open Source Policy Template

→ helps companies establish a company-wide Open Source policy with appropriate processes
→ is used to instruct all employees of a company how to deal with Open Source software
→ consists of a collection of documents which can be adapted to create an individual policy
→ contains supplements with in-depth training material and background information
→ is planned to take product security processes into account

**OSADL Open Source Policy Template**

## The OSADL License Checklists

→ contain transcripts of over 100 Open Source licenses with respect to license obligations
→ allow to select particular use cases (e.g. source code delivery or binary delivery)
→ allow to merge the obligations of multiple licenses and check for license compatibility
→ are recommended to be included into a company's Open Source policy
→ have been developed in close collaboration with international legal experts

**OSADL License Checklists**

## The OSADL FOSS Legal Knowledge Database

→ is a practical collection of recommendations how to convey Free and Open Source software (FOSS) compliantly

→ consists of FAQ and legal assessments based on questions of general interest asked by OSADL members

→ is established and continuously expanded in close collaboration with OSADL's General Counsel

→ is available exclusively to OSADL members

**FOSS Legal Knowledge Database**

## The OSADL License Compliance Audit (LCA)

→ is an in-house audit undertaken by a software specialist and a specialized lawyer

→ helps companies distribute a Linux based system compliantly

→ focuses on the Linux kernel, C library and relevant company documents

→ provides a detailed audit report including hints to close possible gaps detected during the audit

→ if successful, is rewarded with a certificate

**License Compliance Audit (LCA)**

# The OSADL Container Base Image

→ is a universally applicable container layer including complete licensing information

→ is available as binary-only image with template for written offer to provide the complete corresponding source code on request

→ is also available with complete corresponding source code included in the image for immediate distribution without written offer

→ is continuously updated for various architectures and frequently used distributions such as Alpine, Debian and Ubuntu

**OSADL Container Base Image**

# OSSelot – The Open Source Curation Database

→ provides diligently curated licensing information of commonly deployed software packages

→ is availale in standardized SPDX formats for import into various tools and as ready-to-use disclosure documents

→ can easily be re-used and adapted to clear earlier or later versions of a particular software package

→ is licensed under CC0-1.0 to grant maximum freedom

→ includes tools, use cases and explanations to help benefit from the material

**OSSelot – The Open Source Curation Database**

The OSADL portfolio of legal services is continuously expanded and adapted to OSADL members' requests.

OSADL

Seminars & Workshops

OSADL offers a broad range of training courses, seminars and workshops (online, inhouse or in Heidelberg)
covering legal and technical aspects of using Open Source software in industry.
Current topics include license compliance, advanced network protocols, software scanning with FOSSology,
real-time Linux latency fighting, security challenges of embedded systems, safety certification of Open Source software, etc.

HOT HEIDELBERG OSADL TALKS

COOL COMPACT OSADL ONLINE LECTURES

OSADL NETWORKING DAY

WORK SHOPS OSADL

EVENTS 2024

EVENTS 2025

# OSADL MEMBERSHIP

The Open Source Automation Development Lab (OSADL) eG is a registered cooperative and welcomes members from all over the world.

To become a regular cooperative member of OSADL, one or several shares each of 1,000 euros must be acquired once.
Regular Members can choose between three membership levels: Bronze with one share, Silver with two shares or Gold Member with three or more shares. The votes a member has in the General Assembly equals the number of shares up to three.
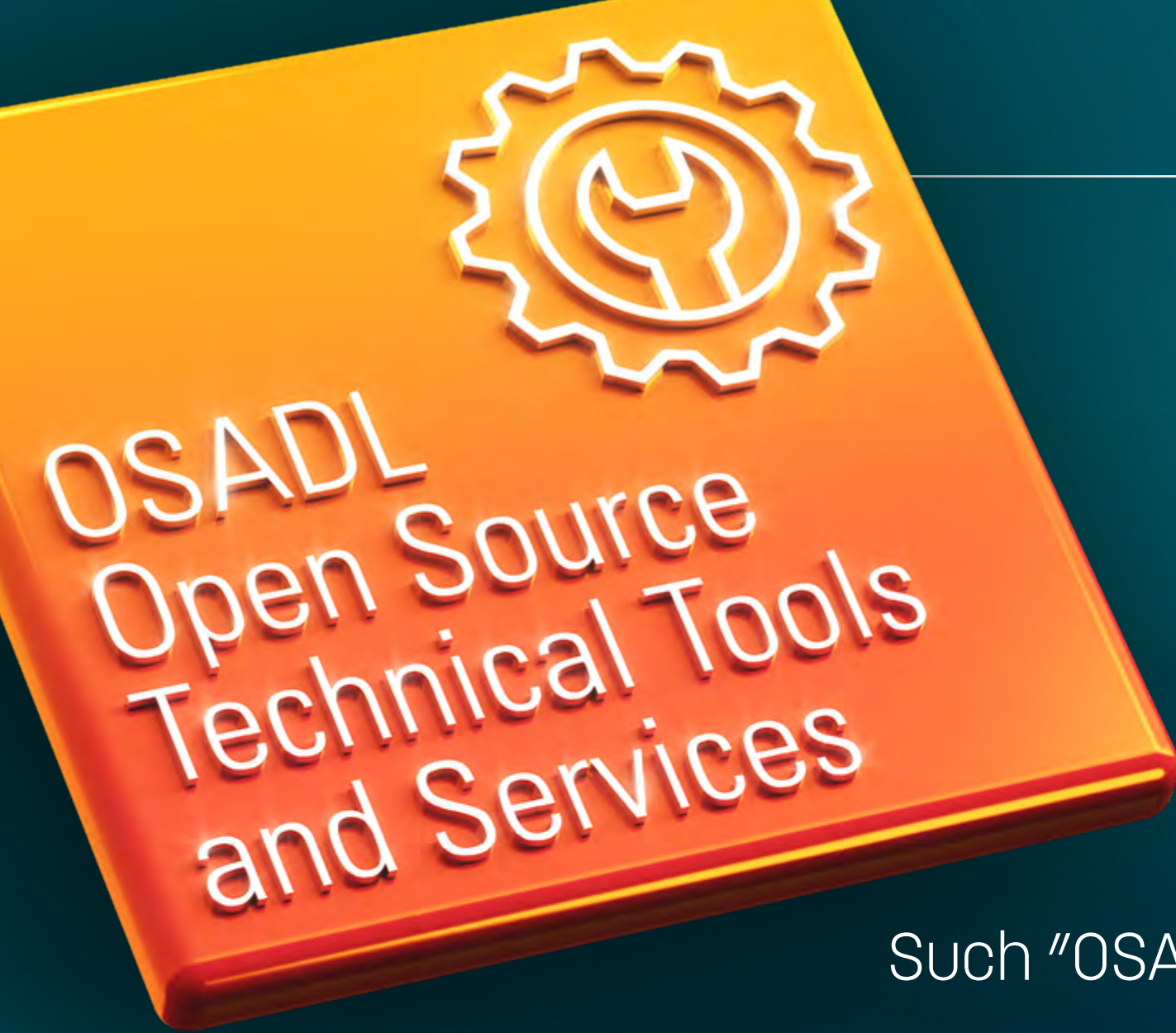Most OSADL services are provided based on an annual membership contribution as flat-rate service fee of 8,000 euros per share.
Different rules apply for Associate and Academic Members.

REGULAR MEMBERS

ASSOCIATE MEMBERS

ACADEMIC MEMBERS

How to join the OSADL community

# INTERESTED?

Ask for an in-depth introduction to OSADL's Open Source world.
Such "OSADL days" are free of charge and offered either via video conference or on-site.

Join OSADL and benefit from a unique experience!

February 2025