## **Certification Process & Funding**

Malcolm Woodman, Oliver Koch M R Woodman Consulting / UK Linde Engineering / Germany



CAPE-OPEN 2021 Annual Meeting, October 2021 (© CO-LaN 2021)

www.colan.org

### **Overview**

### □ Certification

- Process
- Actors & Interactions
- □ Funding proposal
- □ Feedback & discussion



www.colan.org

# **Certification – Process (1)**

### □ Software Developer implementing CAPE-OPEN interfaces

- Downloads CAPE-OPEN Test Suite
- [Optional] Tests their implementation during development cycle using the Test Suite, running both:
  - CO-LaN provided tests (mandatory certification & optional)
  - [Optional] Tests implemented by developers
- Runs Test Suite using standard CO-LaN provided certification tests
  - On final release candidate of new version of software
- Submits test report to CO-LaN Chief Certification Officer

www.colan.org



# **Certification – Process (2)**

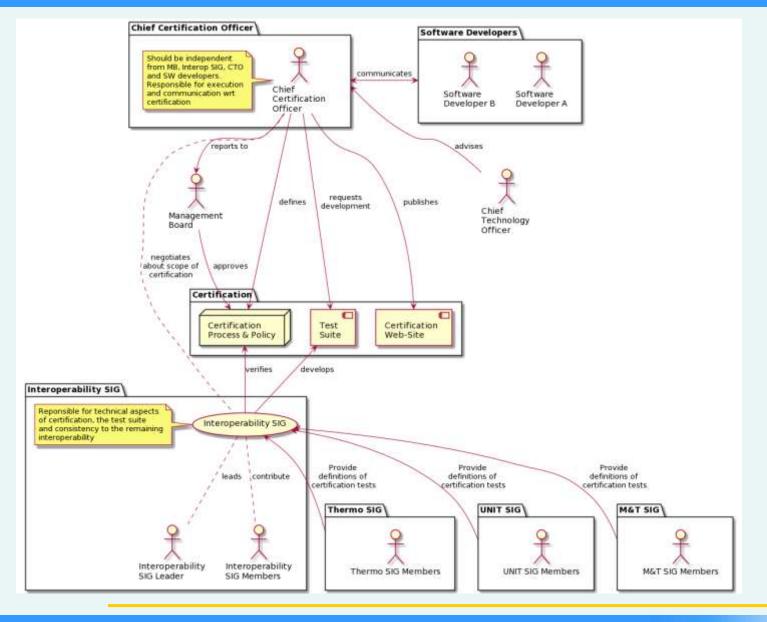
### □ Chief Certification Officer (CCO)

- Reviews test report submitted by Software Developer
  - CCO will not re-run the tests routinely
- Requests additional information / clarification if required
- When compliance is established
  - Certificate is granted for version of software tested
  - Notifies Software Developer
  - Publishes result on Certification website
- Feedback loop if compliance is not established
  - If changes are required to vendors software to ensure compliance
  - If changes are required to Test Suite
    - Note that CCO may grant Compliance Certification if Test Suite is the cause of the non-compliance, before the Test Suite is updated

www.colan.org



### **Certification – Actors & Interactions**

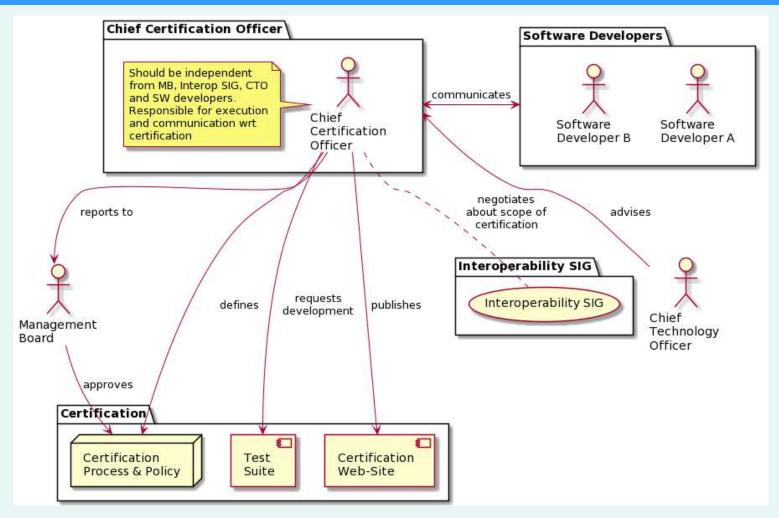


CAPE-OPEN 2021 Annual Meeting, October 2021 (© CO-LaN 2021)

#### www.colan.org

CO 7 LaN

# **Certification – Chief Certification Officer**

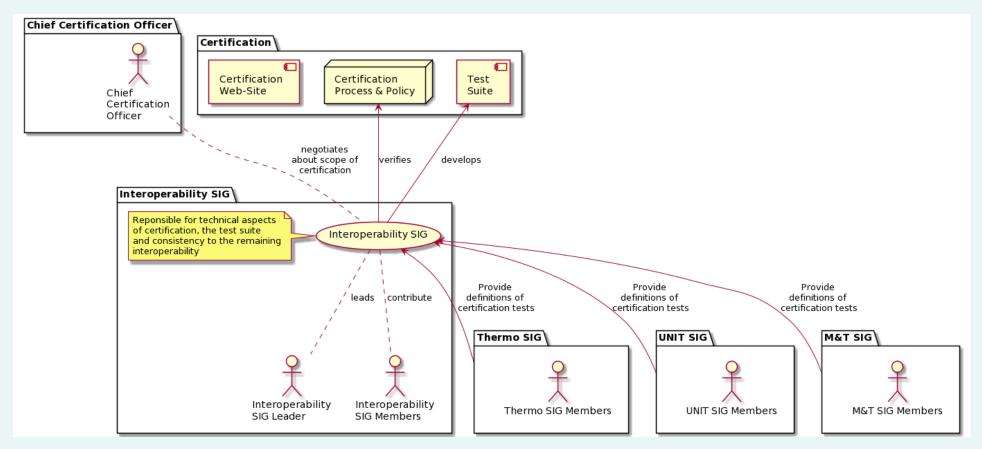


- □ Note: There is no Certification SIG!
- Resolution of challenges to certification decisions will be provided by Management Board and/or CTO

www.colan.org

CO • LaN

## **Certification – Interoperability SIG**



- **CTO** is a member of the Interoperability SIG by default
- □ It is the other SIGs responsible for the specifications who define the tests required for certification, NOT the Interoperability SIG

www.colan.org

CO 7 LaN

Including traceability of tests to the textual specification

# **Funding Proposal – Test Suite**

- □ Available to all CO-LaN members
  - Of any category
  - For use on software owned by a CO-LaN member only
- NOT available to non-members
  - Non-members can join CO-LaN to obtain access
- Will need to be reviewed in 2025
  - at the latest
  - When current membership fee arrangements are reviewed
- D Pros
  - A positive benefit of CO-LaN annual membership fees
  - No separate commercial arrangements or licensing
- Cons
  - Expensive for potential full members who are not current members
  - Can be circumvented if a CO-LaN member organisation uses Test Suite on behalf of a non-member organisation

COyLaN

# **Funding Proposal – Request for Certification**

- Unlimited requests by any CO-LaN member initially allowed
- Subject to annual review, depending on experience and cost to CO-LaN of providing certification
  - Future possible option to limit number of requests per organisation per year?
- Organisations that are not members of CO-LaN cannot request certification in this way, as do not have access to Test Suite to produce certification report
- **Pros** 
  - No barrier to requesting certification for CO-LaN members
  - No additional cost beyond CO-LaN annual membership fee
- Cons
  - CO-LaN membership fees may not be sufficient to cover cost to CO-LaN of providing certification

www.colan.org

Joining CO-LaN may be seen as a barrier to certification by nonmembers



# Funding Proposal – Certification "Service"

- CO-LaN offers a service to both members and non-members, to run the tests on their behalf and provide certification
- Cost based on man-hours required to complete the work for each certification
- **Pros** 
  - Allows certification for software developed by non-members and for members who do not have the resources to make use of the Test Suite
  - Additional income stream for CO-LaN if charges incorporate a premium on the man-hour costs of the person doing the certification

www.colan.org

- Cons
  - Complex for CO-LaN to provide the service



## **Test Suite as Open Source**

- Previous suggestion has been to provide the Test Suite as open source
- Incompatible with limiting access to Test Suite to CO-LaN members?
- Proposal is therefore to provide binaries only at this time
- Could consider writing license agreement that allows access to source for CO-LaN members (only)
  - But adds unnecessary complexity?
  - However, a licence agreement will be required for distribution of the binaries
- □ To be reviewed when funding model is reviewed



www.colan.org

## **Feedback & Discussion**

Feedback on certification process?
Role of CCO – is it correct?
Thoughts on funding proposal?
.....



www.colan.org