

# Interoperability SIG Report, 2020/21

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# Overview

- ☐ SIG Charter & Work process
- ☐ SIG Membership
- ☐ CO-LaN Software Development Resource
- ☐ TLB/PIA Installer
- ☐ Support to Test Suite development
- ☐ Testing of CO-LaN software
- ☐ Feedback

# Interoperability SIG Charter

## Task:

- ☐ To provide tools and advice to support the achievement of CAPE-OPEN interoperability and to carry out interoperability testing where appropriate.

## Key Responsibilities:

- ☐ Provide new tools, as required, to support the achievement of CAPE-OPEN interoperability by PMC and PME developers
- ☐ Develop and maintain the existing CO-LaN portfolio of software tools
- ☐ Use the suite of vendor-licensed software available to CO-LaN to assist in interoperability testing

# Interoperability SIG Work Process

- ☐ Monthly conference calls to survey progress and identify actions
- ☐ Regular joint meetings with M&T SIG, covering issues that overlap the 2 SIGs
- ☐ SIG oversees the work done by the CO-LaN Software Development Resource
- ☐ Independent work by individual SIG members between the calls

# SIG Membership, October 2021

- ☐ **Malcolm Woodman,** **M R Woodman Consulting Ltd**
- ☐ **Michel Pons,** **Chief Technology Officer**
  
- ☐ **Michael Halloran stepped down from the SIG during the year, following his retirement from AVEVA**
  - **My personal thanks to Michael for his work for the SIG over many years**
  
- ☐ **One or more new member of the SIG is now required. Needs to be:**
  - **Familiar with CO software development**
  - **Good knowledge of IT architecture & development tools**
  - **Independent of the M&T SIG**

# CO-LaN Software Development Resource

❑ Marcus Bruno, Independent contractor, Brazil

❑ Loic d'Anterroches, Céondo

❑ Jasper van Baten, AmsterCHEM



❑ Relationship is working well

❑ Work undertaken so far:

- Maintenance of COLTT & TLB/PIA Installer, including upgrade to latest versions of development software
- TLB/PIA Installer Updates
- CO-LaN Test Suite
  - Design
  - Development of prototype

# TLB/PIA Installers. v2.1.1

- ❑ **Version 2.1.1 released 31<sup>st</sup> July 2021**
  - **Replaces v2.0, released on 23<sup>rd</sup> February 2017**
  - **Addition of new interface definitions**
    - **Flowsheet Monitoring and Custom Data**
  - **Addition of a new “extension” type library**
    - **To avoid any risk of older type library (1.1) overwriting newer one**
    - **3 type libraries now installed**
      - **TLB v1.0 (unchanged from installer v2.0)**
      - **TLB v1.1 (unchanged from installer v2.0)**
      - **The extension TLB (installed with no risk that it could be overwritten)**
  - **Architecture unchanged from v2.0**
    - **No additional PIA - the new definitions are included in PIA 1.1**
    - **2 installation packages**
      - **one for 64-bit, one for 32-bit**
    - **2 merge modules**

# TLB/PIA Installers. v2.1.2

- ❑ Version 2.1.2 released 23<sup>rd</sup> September 2021
- ❑ Corrects the following
  - Missing event definition in Flowsheet Monitoring specification
  - Adds version information for the CAPE-OPEN 1.1 PIA
  - Corrects the installation procedure for “current user”



# TLB/PIA Installers. Versioning

- ❑ Versioning of TLB / PIA Installer follows the versioning scheme previously proposed and presented at the Annual Meeting 2020
  - Major.minor.patch.revision or build
  - Minor digit only updated, as these are additive changes
    - v2.0 → v2.1.1. Addition of new interfaces
    - v2.1.1 → v2.1.2. Patch to correct issues
  - Demonstrates the versioning scheme as proposed is workable
- ❑ TLB/PIA Installers cover multiple CAPE-OPEN versions, so version number does not match a specific CAPE-OPEN standard version

# Support to Test Suite Development

- ❑ **Interoperability SIG** has been closely involved in the development of the design of the Test Suite, through
  - **Offline review of documents**
  - **Phone conferences with Software Development Resource**
  - **Consideration of design in joint meeting with M&T SIG**
  
- ❑ **A key role of the SIG** will be to continue to provide this oversight and review at all stages of the development of the Test Suite

# Interoperability SIG – Plans for 2021/22

- ❑ Recruit at least one additional member to the SIG
- ❑ Management of & support to continued development of CO-LaN Test Suite
  - Release version for Thermo PMC
- ❑ Release of COLTT v2.5
  - Logging of energy/info streams and ports & Flowsheet Monitoring
  - Built using TLB/PIA Installer v2.1.2
  - (Most of development work is already complete)
- ❑ Other maintenance of COLTT & TLB/PIA installer as required
- ❑ Continued regular meetings with M&T SIG

# Testing of CO-LaN software

- ❑ **TLB/PIA Installer development has shown the importance of adequate testing before release**
- ❑ **Especially important for:**
  - **TLB / PIA Installer – essential component of vendor software**
  - **COBIA – again, integrated into vendor software**
  - **Test Suite – Underpins certification**
- ❑ **Less important for debugging tools such as COLTT**
- ❑ **A suggestion**
  - **CO-LaN members should be invited to participate in a formal beta testing process before release of the 3 tools identified above**
  - **Discuss!**

# Feedback

- ❑ **Nominations / volunteers to join the Interoperability SIG?**
- ❑ **Is a formal beta test programme for CO-LaN software a good idea?**
- ❑ **.....**