

# CAPE-OPEN

Delivering the power of component software  
and open standard interfaces  
in Computer-Aided Process Engineering

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## CAPE-OPEN Laboratories Network

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[www.colan.org](http://www.colan.org)

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## IMPORTANT NOTICES

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## CAPE-OPEN LABORATORIES NETWORK

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- **Who are we?**

The CAPE-OPEN Laboratories Network (CO-LaN) is the internationally recognised, user-driven organisation for the management of the CAPE-OPEN (CO) standard. The standard defines rules and interfaces that allow CAPE (Computer-Aided Process Engineering) environments or components to interoperate. CO-LaN also facilitates implementation of CO standard interfaces in commercial or non-commercial software to make open simulation a practical reality.

- **What is the CAPE-OPEN Standard?**

The CAPE-OPEN standard is the de facto standard for interfacing process modelling software components for use in the design and operation of processes that transform matter and energy. It is based on universally recognised software technologies, such as COM and CORBA middleware. The CO standard is open, multi-platform, uniform and available free of charge. It is described in a formal documentation set covering areas such as unit operations, physical properties and numerical solvers, which is available on the CO-LaN web site. In practice, it enables software components supplied by third parties, such as niche physical property packages or unit operation models, to be used in “plug and play” mode in commercial simulators, such as Aspen Plus, Aspen Hysys, PRO/II, UniSim Design or gPROMS. This removes a major barrier to the construction of best in class process models in specialist areas.

- **What are the Missions of the CO-LaN?**

- ❑ To work with software vendors to clarify user priorities for the CO standard
- ❑ To promote the exploitation and dissemination of the CO standard
- ❑ To manage the life cycle of the CO standard
- ❑ To facilitate practical interoperability by supplying compliance testers, loggers and organising interoperability tests
- ❑ To ensure that training/migration facilities are developed and available

- **How is the CO-LaN organised?**

CO-LaN is organized as a non-for-profit Society under French law. The Society counts more than 80 members at the beginning of 2010, including most of the process simulation software

software vendors and its membership is spread worldwide.

## **CO-LaN members**

Membership is organised in two categories: full members and associate members. Full members are industrial users of CAPE software, such as Air Liquide, Akzo Nobel, BP, BASF, Dow, IFP, Shell and Total.

Associate members are providers of CAPE software, government agencies, academic institutions carrying out research activities in the field of CAPE, and other interested parties. Full members are requested to contribute a yearly membership fee. There are no fees for associate membership. Most associate members contribute in kind to CO-LaN by providing free-of-charge licences of their software products. The membership is kept informed via the CAPE-OPEN Update newsletter and the CO-LaN web site.

## **Management Board**

The business and affairs of the Society are governed by its Management Board, which possesses all of the powers of the Society, and is elected at the General Meeting of Members by the full members.

## **Special Interest Groups (SIGs)**

CO-LaN maintains and develops the CAPE-OPEN interface specifications and manages the software component testing process via SIGs initiated by the Management Board. Each SIG deals with a particular topic, e.g. unit operations or thermodynamics, and any member of CO-LaN with relevant expertise can apply to join.

### **• What are the Benefits of CO-LaN Membership?**

With today's fast-paced rate of technology change, both CAPE software users and providers recognise the value of co-operation in infrastructure areas of mutual benefit, so that more effort can be focused on areas of real competition. CO-LaN's collaborative ethos, born out of the CAPE-OPEN and Global CAPE-OPEN EU and IMS projects, fits this business model perfectly in the CAPE software domain. Through CO-LaN membership, organisations and individuals can benefit in a variety of ways:

- **Fast Track to Open Simulation:** CO-LaN contains many of the foremost world experts on the use and provision of process simulation technology. There is no better forum in which to share experiences of new techniques in this fast moving area and hence achieve successful results in the shortest possible time.

- ❑ **Influence the Technology Adoption Process:** CO-LaN provides a unique cross industry forum for both software vendors and industrial users in the CAPE field. This helps both parties to plan ahead with more assurance. The interoperability tests conducted by CO-LaN significantly help software vendors to progress in their support of CAPE-OPEN interfaces.
- ❑ **Influence the Formation of New Business Models:** Again the CO-LaN cross industry forum provides ready access to a wide spectrum of opinions on current problems in the process industry and attitudes to new developments made possible by the advent of component technology.

Specifically for a full member the benefits of membership are:

- ❑ **Recognition with third party software companies and developers:** Companies that have outsourced most or all of their simulation software need to ensure that this strategy is cost effective in both licensing and usage. CO-LaN is an enabler to ensuring the benefits of outsourcing without incurring additional costs due to interfacing different applications. It also allows wider software selection fit for your business rather than tied to a single vendor.
- ❑ For companies who still retain some applications in-house, such as own thermodynamics routines or unit models, membership provides **access to build wizards, sample code and interoperability testing**. Membership provides access to an independent and supportive developer community enabling faster progress when scarce in-house developer resources struggle for support.
- ❑ **Interoperability testing on new releases of key software in common use by full member companies:** This directly improves quality by early identification of issues, but also sustains focus of key suppliers to sustaining quality and installed functionality. Membership enables a say in getting your key applications on the list, reducing your own in-house testing requirements and by ensuring quality of your key suppliers a stable platform is available for other developers you wish to engage.

Current full member companies can provide examples in all these areas which have provided payback on their membership of CO-LaN. Due to the commercial nature of each full members in-house developments and relationship with their suppliers it is not possible to publish a value statement on the benefit. It will be for a prospective member to put these benefits in context of their own business to put a value on joining.

- **How do I find out more?**

Visit our web site at [www.colan.org](http://www.colan.org), which contains more information on CO-LaN, application forms for membership and full details of the CAPE-OPEN standard.