

# Future Directions for the CAPE-OPEN Interfaces

CAPE-OPEN Annual Meeting 2012  
Lyon

# Agenda

- ◆ **Brief Presentation of current CO-LaN proposals**
  - ⇒ **CAPE-OPEN Object Model**
  - ⇒ **CO-LaN Consultancy Service**
  - ⇒ **“CAPE-OPEN Tour” dissemination**
- ◆ **Associate Member presentations**
  - ⇒ **AspenTech**
  - ⇒ **.....**
  - ⇒ **Feedback from CERE / ChemSep / HTRI / PDVSA / Reaction Design**
- ◆ **Round table discussion**
  - ⇒ **Not necessarily expecting to reach conclusion**
  - ⇒ **Will inform on-going discussions by Management Board**

# CAPE-OPEN Object Model

- ◆ **CO-LaN could develop & maintain CO-specific middleware**
- ◆ **Would allow access to .Net, JAVA, high performance computing etc.**
- ◆ **Easier & less error-prone CO software development**
- ◆ **Maintain functionality of existing COM & Corba interfaces**
- ◆ **Will not be cheap!**

# CO-LaN Consultancy Service

- ◆ Provide funding for access to a specialist consultant for:
  - ⇒ Development of new CO interfaces
  - ⇒ Improvements to existing CO interfaces
- ◆ (Initially) Jasper van Baten (Amsterchem)
- ◆ Open to any associate member of CO-LaN
- ◆ Process for making an application will be published
- ◆ Approval will be provided by CO-LaN Management Board

# “CAPE-OPEN Tour” Dissemination

- ◆ **Standard presentation materials**
  - ⇒ **What is CAPE-OPEN**
  - ⇒ **What can be done with CAPE-OPEN**
  - ⇒ **The benefits**
- ◆ **CO-LaN would provide presentation sessions as required**

# Associate Member presentations

# Feedback

- ◆ **CERE (Centre for Energy Resources Engineering)**
  - ⇒ **Libraries to simplify CO implementation**
    - Current examples not straight forward
  - ⇒ **Implementations of Flowsheet Monitoring standard**
  - ⇒ **Object Model: No, will require too much maintenance**
  - ⇒ **Consultancy Service: Possibly in future**
  - ⇒ **“CAPE-OPEN Tour”**: Would like access to the materials
  
- ◆ **ChemSep**
  - ⇒ **ChemSep “just works” if PME provides CO interfaces**
  - ⇒ **Needs bug-free & maintained interfaces in commercial simulators**
  - ⇒ **Complete the standard for electrolyte systems**

# Feedback (2)

## ◆ HTRI

- ⇒ Need end-users to be aware of the benefits of CAPE-OPEN, to drive implementations by vendors
- ⇒ CO-LaN testing is important
- ⇒ Interfaces should be seamless, so end-user is not even aware they are being used
- ⇒ Nominal membership fee for associate members
  - Increases CO-LaN budget
  - Gives access to meetings, testing etc.
- ⇒ Object model: step in the right direction
- ⇒ Consultancy Service. Not required directly, but can see the benefits
  - Especially if offered to non-members
- ⇒ “CAPE-OPEN Tour”. Yes
  - Expand to include advertisements and journal articles

# Feedback (3)

## ◆ PDVSA

- ⇒ Support is required for development of new components
- ⇒ Refinery Reactors interface is needed
- ⇒ CO-LaN as a bridge between developers
- ⇒ Object Model: Yes
- ⇒ Consultancy Services: Yes
- ⇒ “CAPE-OPEN Tour”: Yes, in Venezuela

# Feedback (4)

## ◆ Reaction Design

### ⇒ More example code

- Don't want to get “bogged down” in implementation details
- Keep the code up-to-date
  - With operating systems and programming languages

### ⇒ Object Model: Yes

- Higher priority than new interfaces

### ⇒ “CAPE-OPEN Tour”: No

# Round Table Discussion