UNIT SIG report

Richard BAUR

September 20, 2012

Outline

- **Key responsibilities**

- **Members**

- **Published revised Unit Operation specification**

- **Progress on Dynamic Unit Operation specification**

- **Objectives for 2012/2013**

Responsibilities

- **Maintaining and publishing the standard**

- **Responding to issues raised by developers and users**

- **Prioritize registered issues and give recommendations on how they may be resolved**

- **Promote and support the use of the CAPE-OPEN interface for Unit Operations**

CO▼LaN

Unit SIG Members

- **Members:**
  - **Richard Baur (Shell Global Solutions)**
  - **Jasper van Baten (AmsterCHEM)**
  - **Didier Paen (RSI)**
  - **Thomas Williams (PSE)**
  - **Alain Vacher (Prosim SA)**

- **Join? Contact Richard Baur**

Revised Unit Operation specification 1.0

Version 1.0.6.25
released on 09.08.2012

- **No changes to IDL & type library**

- **Definition of energy and information streams**

  Energy streams are described by an ICapeCollection of parameters with "work" as required parameter.

  Energy ports expose an ICapeCollection with ICapeParameterSpec to specify the type of information which is expected.

  Information stream & ports are similar.

Revised Unit Operation specification 1.0

- **Revision of parameter dimensionalities**

- **Many corrections and clarifications** (e.g. errors returned by methods)

- **Diagrams have been revised**

- **Use cases has been reworked**

http://www.colan.org/News/Y12/news-1212.htm

Dynamic standard specification

- **Various description of pressure & flow network has been documented and checked for consistency**

- **Confusion around "compressibility" (pressure derivative wrt holdup) in various simulation packages is resolved**

- **Draft still needs to be finalized**

- **Request for comments will follow**

CO▼LaN

Additional activities

- **Maintenance of Mixer-Splitter source code sample**

  http://www.colan.org/Download/CAPEOPENMixerSplitterExamples.1.0.1.exe

- **Support for first CO-Refinery Unit prototype; see presentation Pro/II**

- **Presentation planned at 2012 AIChE Annual Meeting**

- **Preparation of an Errata and Clarifications documents:**
    - **UC-018: Save Flowsheet**
    - **UC-020: Retrieve Flowsheet**

- **Finish dynamic standard specification**

- **Look for expertise on equation oriented unit operations**