2013 CAPE-OPEN Annual Meeting

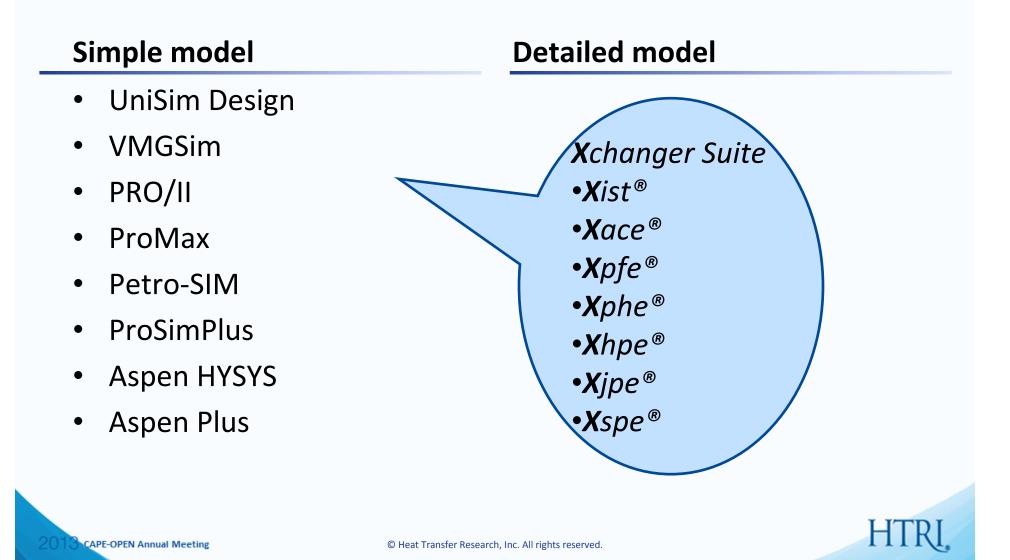
HTRI Developments and CAPE-OPEN

David Gibbons

Technical Lead, Process Simulation and Engineering Product Interfaces

HTRI

Unit Operations – Simple or detailed



Types of links

• HTRILink

(e.g., *Xist* to UniSim Design, Petro-SIM, and Aspen HYSYS) Link developed by HTRI to extend the process simulator capabilities

• Directly embedded

(e.g., within UniSim Design, PRO/II, and VMGSim) Typically, link developed by process simulator vendors

• CAPE-OPEN standard

Allows links to any simulator that supports CAPE-OPEN



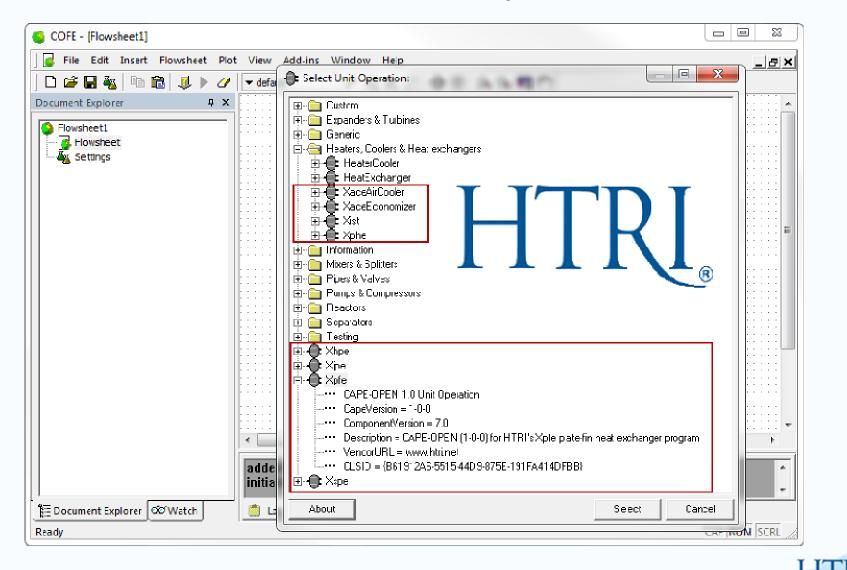
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What is new in SP1?

- *Xpfe* as a CAPE-OPEN unit operation
- Support for CAPE-OPEN Thermo 1.1 in HTRI unit operations



CAPE-OPEN – HTRI Unit Operations



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CAPE-OPEN – Xpfe

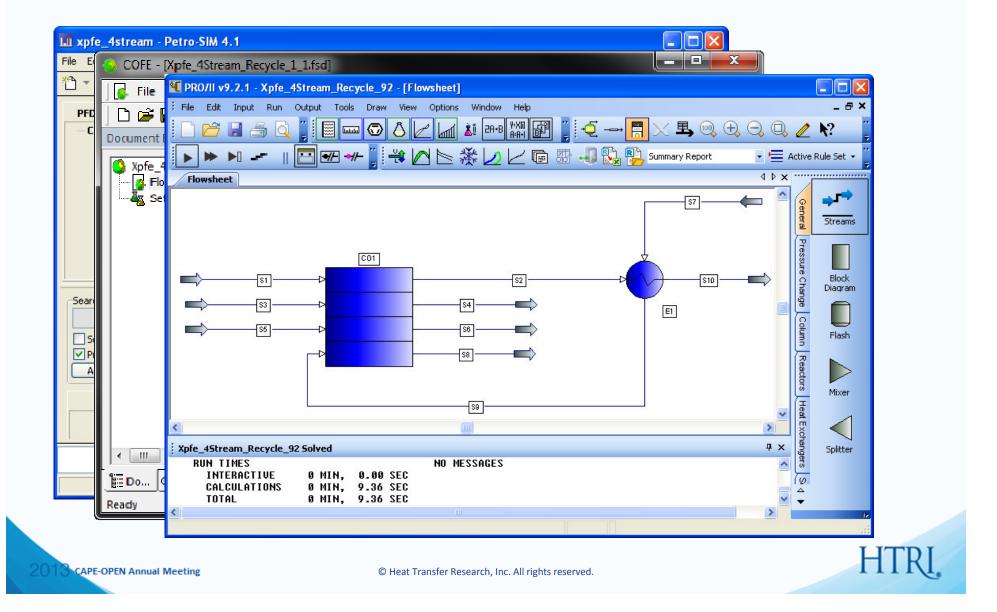


Plate-fin calculations using *Xpfe* can be performed in flowsheets via CAPE-OPEN

Requirements

- Xchanger Suite
 - Version 7 License
 - Version 7 SP1
- CAPE-OPEN compliant simulator

Benefits

- Availability of *Xpfe* in simulator supporting CAPE-OPEN
- Support for CAPE-OPEN Thermo 1.1 standard for all supported exchanger types



CAPE-OPEN – *Xchanger Suite* 6 and Thermo 1.0

Property Generator	
CAPE-OPEN Case Configuration	
 □ - CapeOpen CThermoSystem □ - OATS Thermo System (CAPE-OPEN 1.0) □ - TEA (CAPE-OPEN 1.0) □ - alkanes □ - C1_C2 □ - C1_C2 (EOS) □ - HDA □ - n-depropropanizer □ Water-nButanol-UNIQUAC □ - Test CO Thermo System (CAPE-OPEN 1.0) □ - UniSim Thermo server ⊡ - Standalone Packages 	Package: alkanes Description: COCO Thermodynamics for Engineering Applications ProgID: COCO_TEA.ThermoPack.1 CLSID: {90DAC7FA-E0E4-40B5-A903-E0B12774D52B} CAPE-OPEN version: 1.0 Component version: 2.6.0.0 Vendor: http://www.cocosimulator.org/ About: CAPE-OPEN 1.0 Thermo Package - Copyright 2013 cocosimulator.org
	OK Cancel
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CAPE-OPEN – *Xchanger Suite* 7 and Thermo 1.1

Property Generator	
 CAPE-OPEN Case Configuration CapeOpen.CThermoSystem OATS Property Package Manager (CAPE-OPEN 1.1) OATS Thermo System (CAPE-OPEN 1.0) TEA (CAPE-OPEN 1.0) TEA (CAPE-OPEN 1.1) alkanes C1_C2 C1_C2 (EOS) HDA n-depropropanizer Water-nButanol-UNIQUAC Test CO Thermo System (CAPE-OPEN 1.0) UniSim Thermo server Standalone Packages (v1.0) Standalone Packages (v1.1) 	Package: alkanes Description: COCO Thermodynamics for Engineering Applications ProgID: COCO_TEA.PropertyPackManager.1 CLSID: {B6AC41D3-7755-4ED5-B307-B58841E05C74} CAPE-OPEN version: 1.1 Component version: 2.6.0.0 Vendor: http://www.cocosimulator.org/ About: CAPE-OPEN 1.1 Property Package Manager - Copyright 2013 cocosimulator.org
or Help, press F1	Done Modified

Version 7 SP1 is now in testing

- Internal, member, and sub-contractor testing underway
- Release version planned for November 2013

