AMERICAS ADVISORY GROUP

Unified Engineering

Julien de Beer – Head of Portfolio Management, Engineering Business Unit

Friday October 16, 2020

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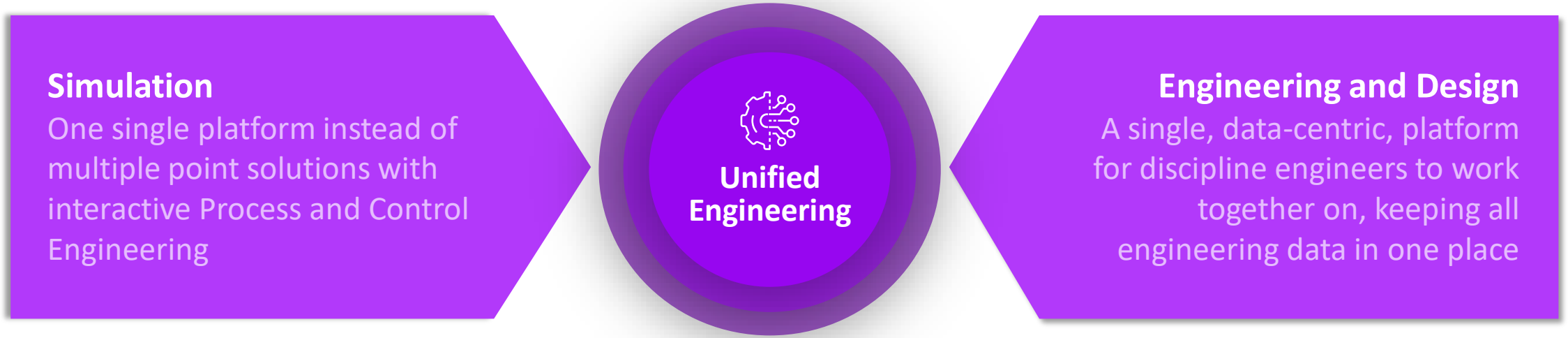
AVEVA Unified Engineering

Multi-discipline collaboration of conceptual, FEED and detailed design with seamless information flow from one single data hub



Accurate and mature design deliverables
Efficient collaboration and automated updates
Bi-directional data flow
Digital Twin Data Model

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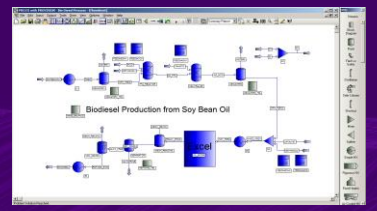
AVEVA Unified Engineering

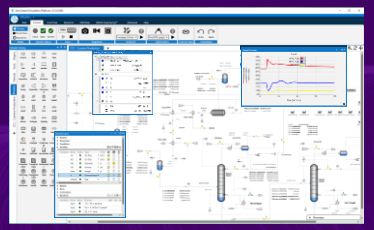
AVEVA products included in the Unified Engineering solution

AVEVA PRO/II Simulation



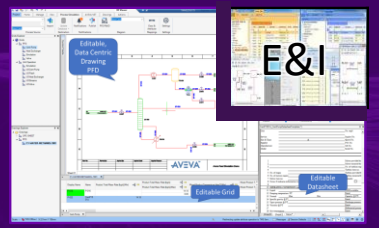
- Process Simulation

AVEVA Process Simulation*



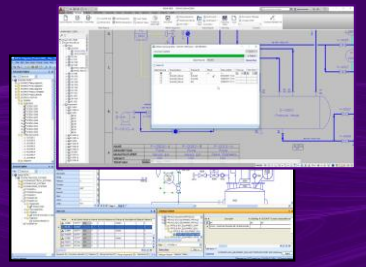
- Process Simulation
- Fluid Flow Rating Simulation
- Dynamic Simulation

AVEVA Engineering



- PFD
- Data sheets
- Lists

AVEVA P&ID AVEVA Diagrams



- PID

AVEVA E3D Design



- 3D

** Previously known as SimCentral*

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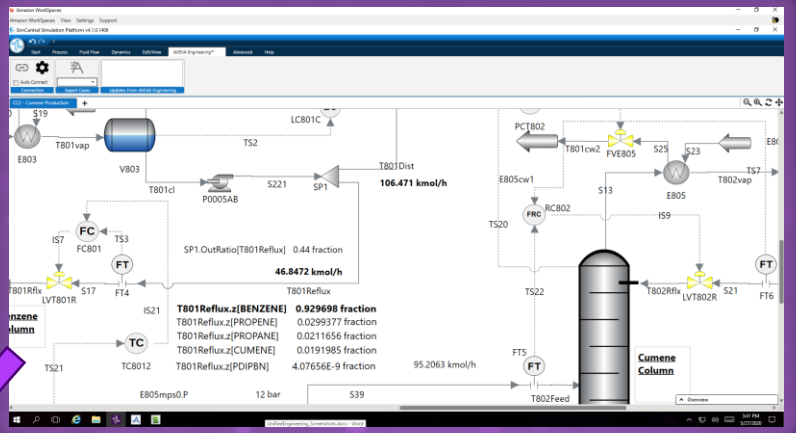
1. Simulate the static process operational conditions

3. Validate functional design by rating simulation to determine valve operating positions, relief back pressures etc.

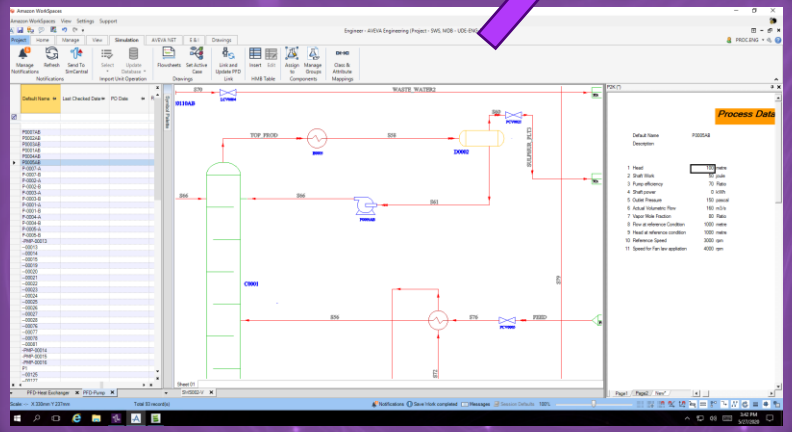
5. (Analyze pressure drop of actual 3D physical piping layout)*



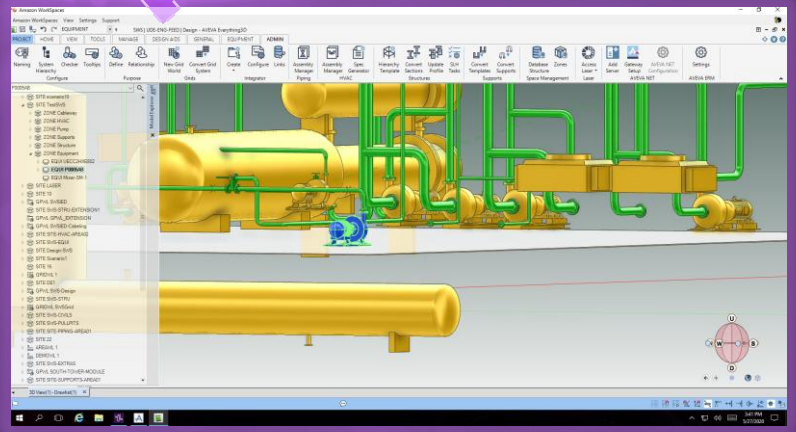
Unit Operation and Stream Data for multiple simulated operating cases

Governing case data including actual vendor equipment properties

(3D piping physical layout)*



Vendor equipment and piping topology



2. Consolidate the different cases to determine the governing case as a basis for design and produce FEED deliverables such as PFDs, P&IDs and datasheets.

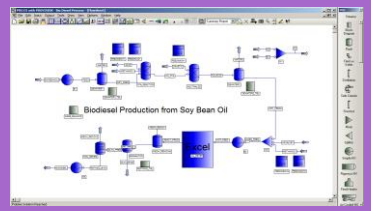
4. Drive 3D Design from the functional definition and governing case data

Pressure drop validation of 3D piping layout not yet implemented

AVEVA™

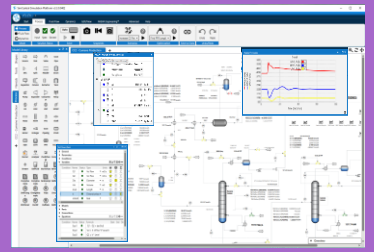
Unified Engineering is a Cloud only solution

AVEVA PRO/II Simulation



Process Simulation

AVEVA Process Simulation



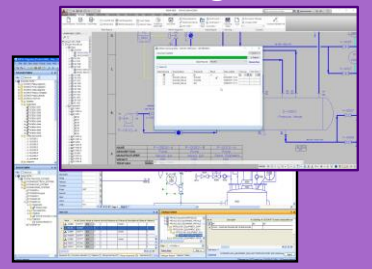
Process Simulation

Fluid Flow Rating Simulation

Dynamic Simulation

AVEVA Dynamic Simulation*

AVEVA P&ID
AVEVA Diagrams



PID

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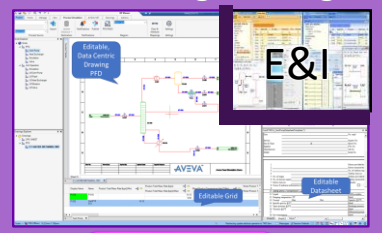

PFD

AVEVA E3D Design



3D

* To be added to Unified Engineering in 2021

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Unified Engineering Architecture



User, USA



User, Brazil



Sub Contractor, Europe

AVEVA Connect

Workspace

AVEVA Unified Engineering

- AVEVA Engineering
- AVEVA E3D
- AVEVA Electrical & Instrumentation
- AVEVA Diagrams
- AVEVA PRO/II
- AVEVA SimCentral
- AVEVA Admin
- AVEVA P&ID



Directory Server



Active Directory Domain



AVEVA Services

Integrated AVEVA Cloud Services



LaaS Connect

AVEVA Common Cloud Platform



Health Monitoring



SSO WorkSpace Launch



Cloud UE Service Catalogue



Self-service User Management

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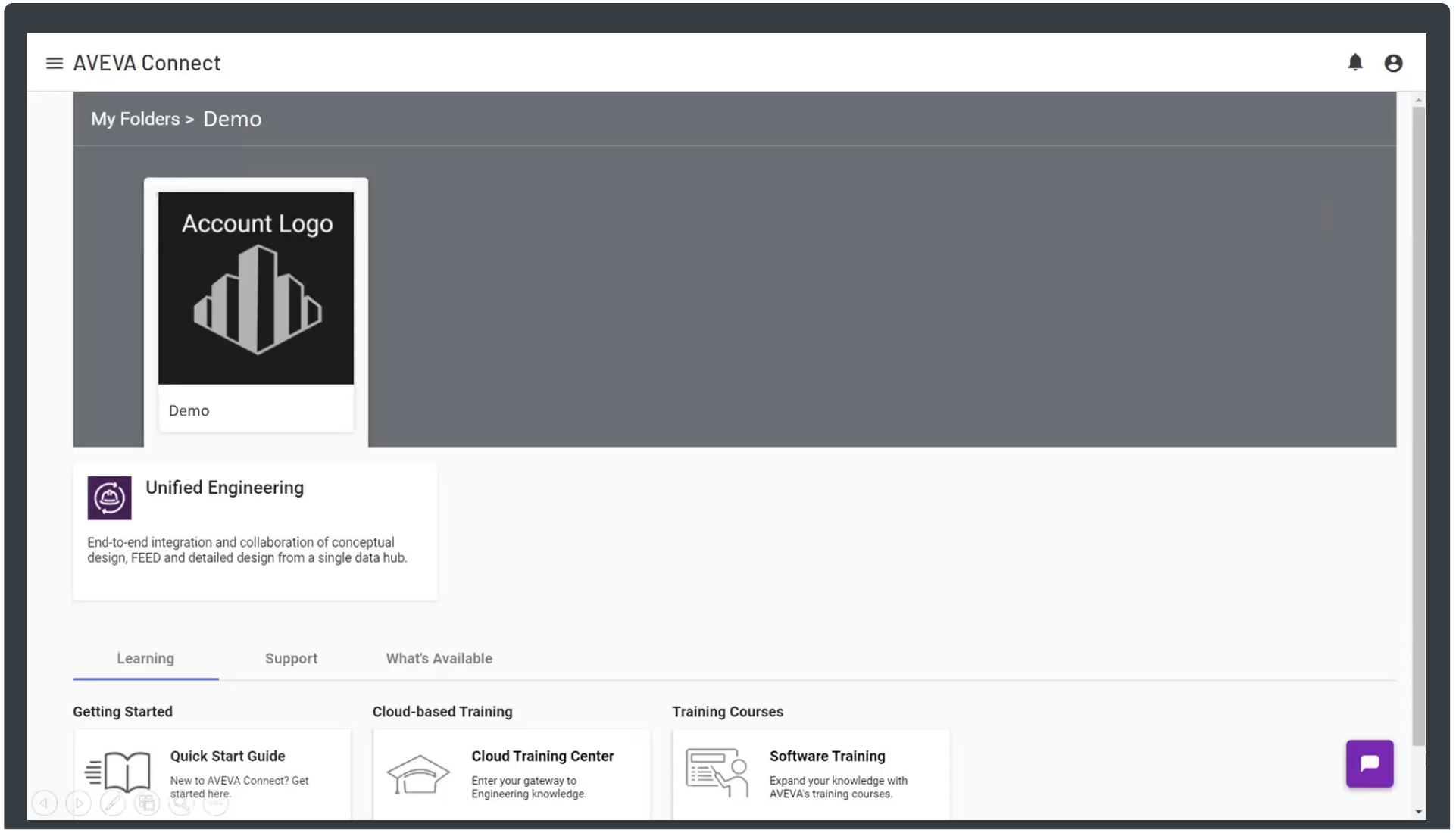

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ABOUT AVEVA

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The company's engineering, planning and operations, asset performance, and monitoring and control solutions deliver proven results to over 16,000 customers across the globe. Its customers are supported by the largest industrial software ecosystem, including 4,200 partners and 5,700 certified developers. AVEVA is headquartered in Cambridge, UK, with over 4,400 employees at 80 locations in over 40 countries.

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