Confidential

AVEVA Pipeline Simulation Products

Agenda

PIPEPHASE 2021 Release

Pipeline Simulation Overview

Roadmap Walkthrough

Pipeline Competency Training

© 2020 AVEVA Group plc and its subsidiaries. All rights reserved.



Confidential

PIPEPHASE 2021 Features and Updates

- Simplified Menus
- Upgraded Ribbon Bar
- Improved PFD View
- Consolidated User Databases
- Workflow Improvements
- Infrastructure Updates



New Features in AVEVA™ PIPEPHASE™ Pipeline Network Design 2021

eLearning

New Features in AVEVA™ PIPEPHASE™ Pipeline Network Design 2021 introduces the new features available in version 2021.

Engineering | PIPEPHASE Pipeline Network Design

English | Complimentary / FREE Offering

https://industrialtraining.aveva.com/global/portal/catalog.cfm?fuseaction=coursedetails&calendarID=183&courseContentID=20466

AVEVA™

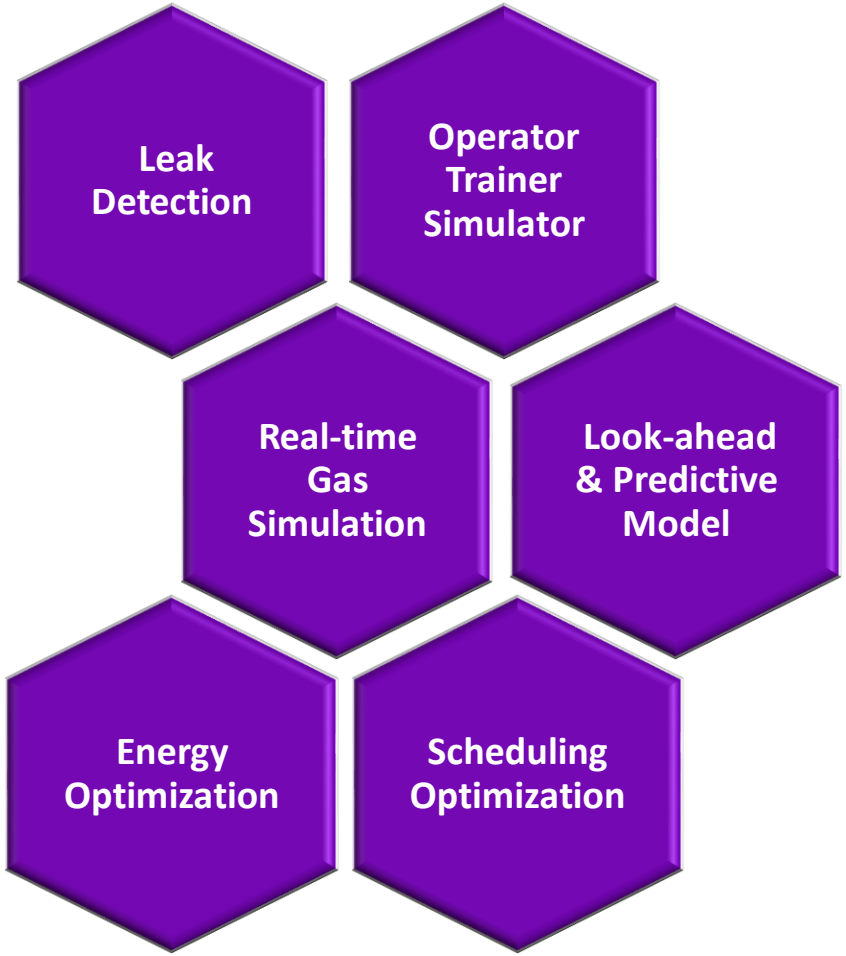
Pipeline Simulation Product Introduction

Overall Functionality

Pipeline Simulation (SimSuite)

- High Fidelity Hydraulic Pipeline Model
- Gas, Liquids & Two-phase
- Steady State & Transient Conditions
- Compatible with all SCADA technologies

Product Applications



Confidential

© 2020 AVEVA Group plc and its subsidiaries. All rights reserved.

AVEVA Pipeline Integrity Monitor

Pipeline Leak Detection

Over 50,000 miles of pipeline are covered by our leak detection software

- Keystone Pipeline moves 500,000 barrels of crude oil per day
- TC Energy utilizes AVEVA leak detection for environmental safety and AVEVA OTS for operator qualification.
- AVEVA Pipeline Schedule Optimization Tools are used to maximize throughput on the pipeline



Keystone Pipeline

Description: 4,324 km in length running from Hardisty, Alberta (Canada) to Houston, Texas (USA)

Safely transported more than 1.5 billion barrels of crude oil since operations began in 2010

Confidential

Confidential Property of Schneider Electric |

AVEVA Pipeline Operator Training

Customized Training Simulator

Alaska is one of the most environmentally sensitive areas in North America

- Alyeska Pipeline (operator of the Trans-Alaska Pipeline) uses SimSuite OTS to train their operators
- High fidelity hydraulic simulation of pipeline
- Replica logic of control system (PLC1) for most realistic behavior
- AVEVA Dynamic Simulation does the power simulation of pump station generation facilities



Trans-Alaska Pipeline

Description: 800 miles in length running from North Slope of Alyeska to Valdez Marine Terminal (USA)

Pipeline has transported 17 billion barrels of heated crude oil

Confidential

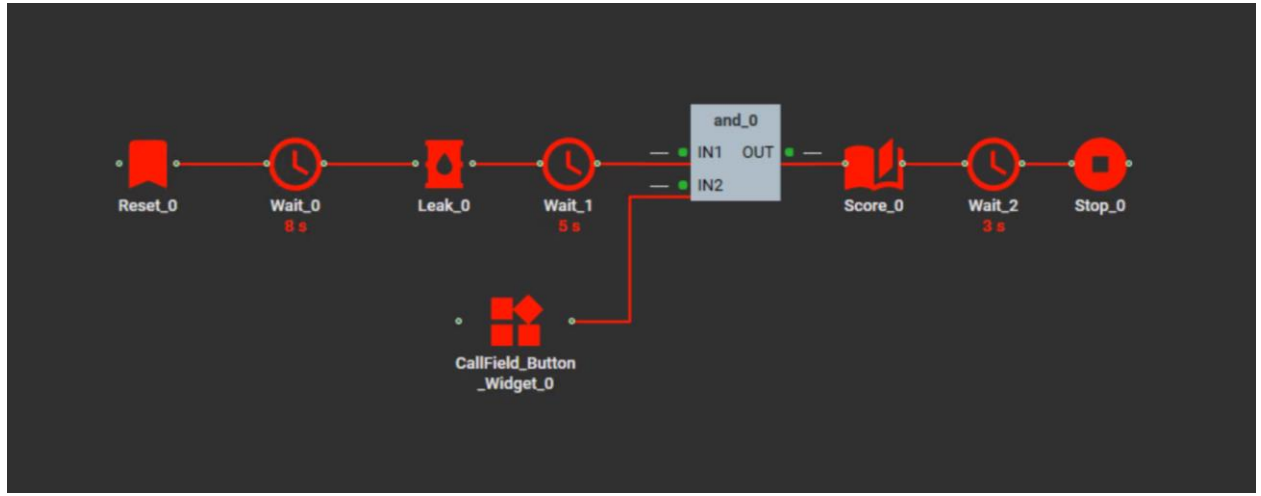
© 2018 AVEVA Solutions Limited and its subsidiaries. All rights reserved.

Pipeline Simulation 2022 Features

AVEVA™ Pipeline Integrity Monitor 2022

Release Highlights:

- November 2021 Release
- CVB Enhancements
  - Reverse Flow



AVEVA™ Pipeline Training Simulator 2022

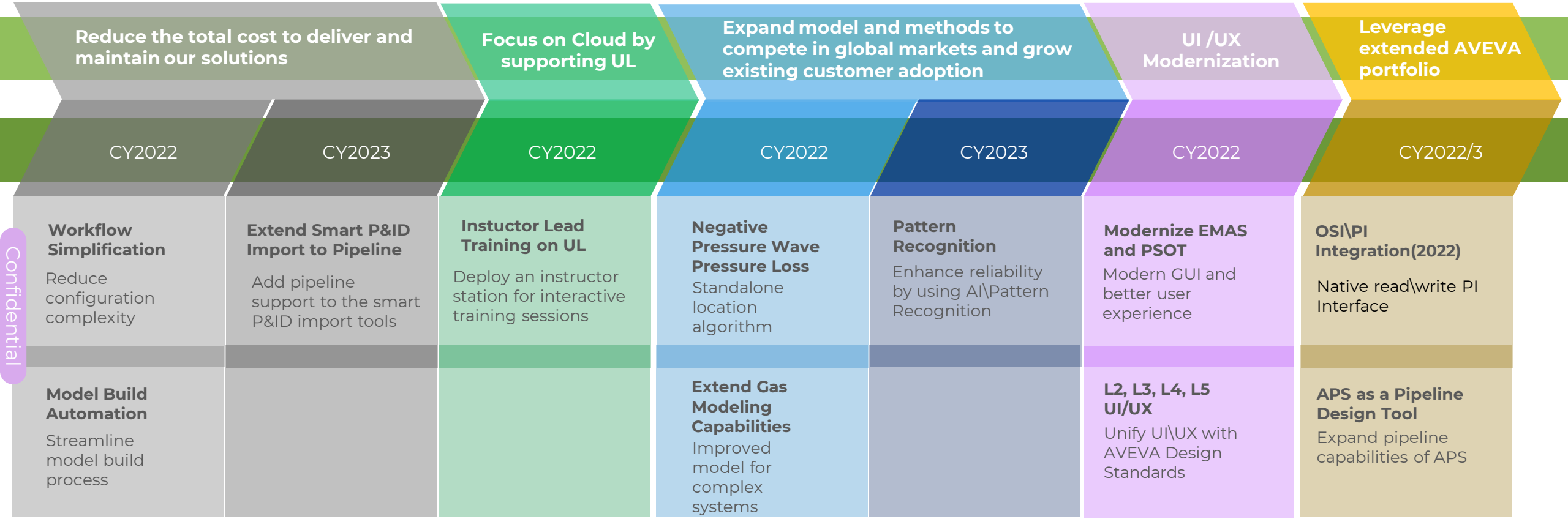
Release Highlights:

- November 2021 Release
- Canvas Improvements
- Logic and Token Management
  - Lockable Tokens and Templates
  - Workflow Simplification
- SCADA Data Manager Enhancements
- Documentation Update
- Rollup of Security and RID Items

Confidential

© 2019 AVEVA Group plc and its subsidiaries. All rights reserved.

Roadmap Highlights



Confidential

Main short-medium term focus:

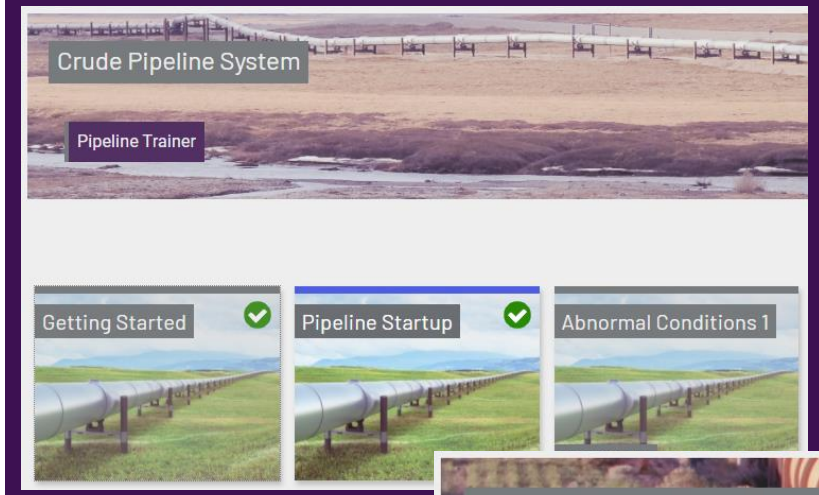
- Improved user experience
- Streamline model and OTS workflow

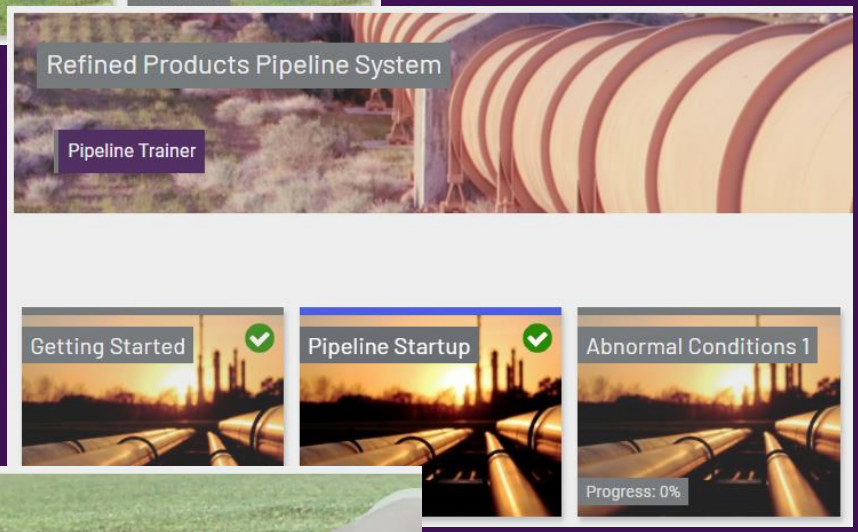
© 2019 AVEVA Group plc and its subsidiaries. All rights reserved.

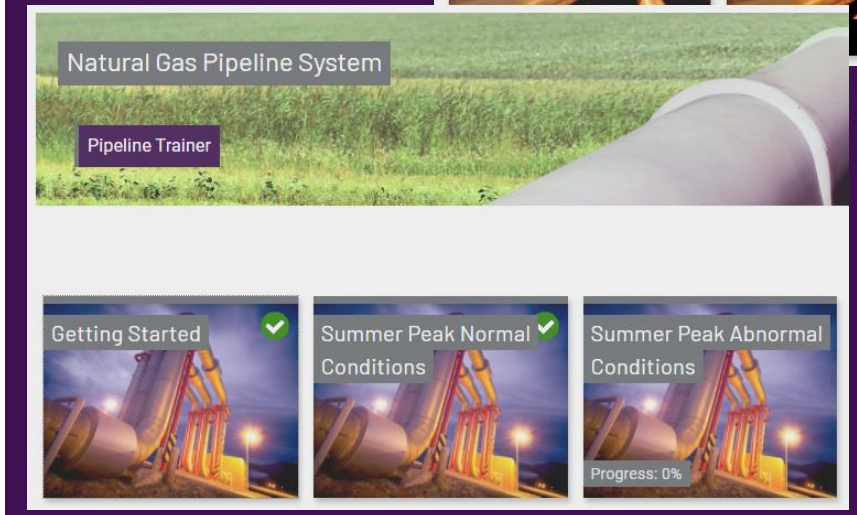
AVEVA™ Unified Learning: Pipeline Competency Training

What is Pipeline Competency Training?

- Highly engaging e-Learning and ready-made simulation-based training scenarios for a variety of normal operations and abnormal conditions.
- 3 Pre-configured pipeline systems:
  - Crude Pipeline System
  - Refined Products Pipeline System
  - Natural Gas Pipeline System
- Full AVEVA Enterprise SCADA and HMI operator interface.
- Accessible on AVEVA™ Connect as part of AVEVA™ Unified Learning
- Designed to enable operator qualification and drive safety and profitability across all levels of an organization.







Confidential

© 2019 AVEVA Group plc and its subsidiaries. All rights reserved.

Courses and training content include reference documentation, eLearning, and experiential operator training to meet regulator requirements for operator qualification.

This presentation may include predictions, estimates, intentions, beliefs and other statements that are or may be construed as being forward-looking. While these forward-looking statements represent our current judgment on what the future holds, they are subject to risks and uncertainties that could result in actual outcomes differing materially from those projected in these statements. No statement contained herein constitutes a commitment by AVEVA to perform any particular action or to deliver any particular product or product features. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect our opinions only as of the date of this presentation.

The Company shall not be obliged to disclose any revision to these forward-looking statements to reflect events or circumstances occurring after the date on which they are made or to reflect the occurrence of future events.

© 2020 AVEVA Group plc and its subsidiaries. All rights reserved.

Q&A


linkedin.com/company/aveva


@avevagroup

ABOUT AVEVA

AVEVA is a global leader in engineering and industrial software driving digital transformation across the entire asset and operational life cycle of capital-intensive industries.

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.

aveva.com

© 2020 AVEVA Group plc and its subsidiaries. All rights reserved.