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AVEVA™ Pipeline Training Simulator 2021

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Pipeline Simulation Sustainability and Safety Applications

Pipeline Integrity Monitor

Protecting People, Property and the Environment

- Multiple Leak Detection Methods
- Detailed Hydraulic Profiles
- Batch & Pig Tracking
- Regulatory Compliant (PHMSA)

Pipeline Training Simulator

Promoting Pipeline Safety through Effective Operator Training

- Meets Industry and Regulatory Requirements for Operator Training (PHMSA)
- Customer Specific 'Flight Simulator' Experience
- AVEVA Unified Learning Offering: Pipeline Competency Training

Energy Management Application Suite

Optimize Pipeline OP Cost w/+ Impact on Sustainability

- Analyze Current Operating Cost in Real-Time
- Recommend Set Point Changes for Optimal Cost
- Obeys Operating and Safety Constraints
- Early Warning & Penalty Avoidance

SUPPORTING SAFE and EFFICIENT PIPELINE OPERATIONS

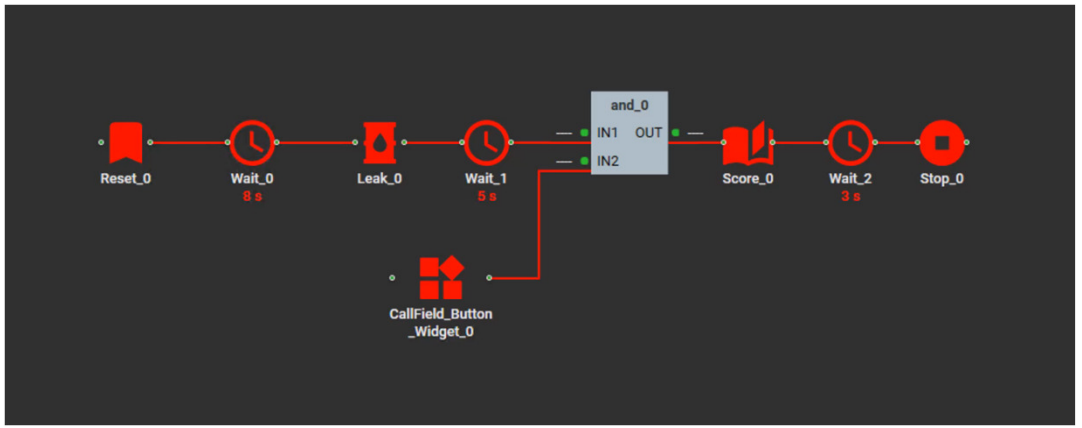
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AVEVA™ Pipeline Training Simulator 2021

Release Highlights:

- Release Date: May 2021
- Gas Chromatograph Transmitter Type
- Improved Flowsheet Animation
- Default Detailed and Summary Qualification Reports
- Remote Data Service
- AVEVA Learning Management System Integration
- Support for Cloud based Pipeline Competency Training available as part of AVEVA Unified Learning



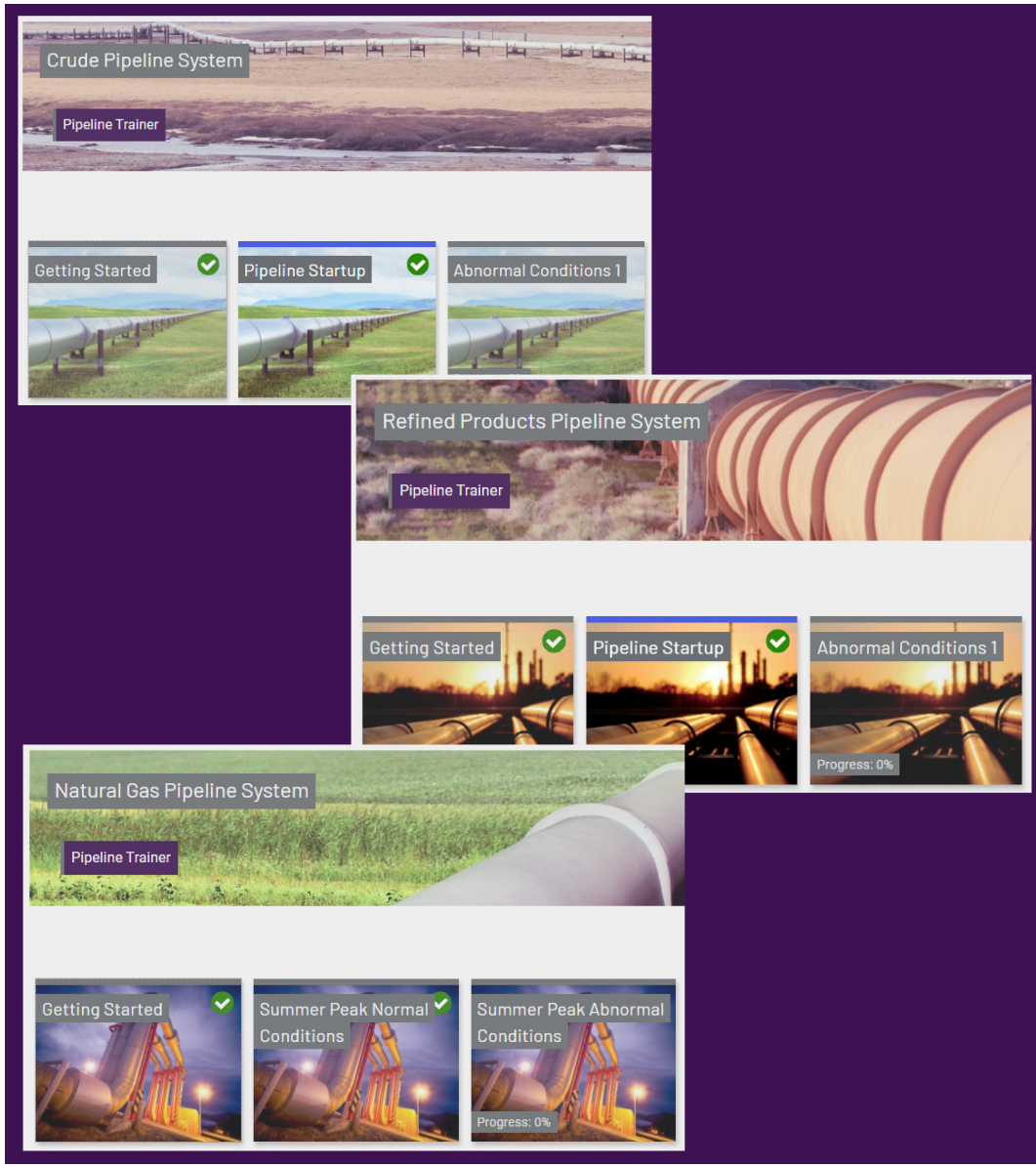
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AVEVA™ Unified Learning: Pipeline Competency Training

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.



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Progressive learning for all stages

Course content

LEARN

NEW OPERATORS

- Introduce SCADA systems and UI controls
- Experience pipeline hydraulic behavior
- Understand normal operating procedures

PRACTICE

EXPERIENCED OPERATORS

- Practice rare or abnormal operations
- Practice operational optimization

QUALIFY

REGULATORY COMPLIANCE

- Evaluate and Qualify Operators
- Track training compliance
- Meet DOT CFR 192 & 195 Requirements

Learning objectives

- ✓ Understand pipeline hydraulic behavior
- ✓ Understand SCADA and UI controls
- ✓ Perform standard operating procedures
- ✓ Operate pipelines under different ranges and conditions
- ✓ Optimize normal operations
- ✓ Identify and troubleshoot abnormal conditions
- ✓ Respond and mitigate abnormal conditions

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AVEVA™ Unified Learning: Pipeline Competency Training- Liquids

Normal Operating Conditions

- Normal pipeline startup and planned shutdown
- Delivery operation
- System flow rate adjustments
- System volume balancing

Abnormal Operating Conditions

- High pressure shutdown
- Station pressure control malfunction
- Unintended shutdown by safety device
- Unintended valve closure
- Hazardous atmosphere alarm
- Plant shutdown
- Restart after abnormal condition
- Accident on pipeline
- Loss of communication
- Commodity release from equipment failure



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AVEVA™ Unified Learning: Pipeline Competency Training- Natural Gas System

Normal Operating Conditions:

- Startup/Shutdown stations
- Maintain demand pressure
- Operate valves and control devices
- Monitor flow and maintain system balancing

Abnormal Operating Conditions

- Unintended valve closure
- High CO2 concentration alarm
- Blocked gas flow filter
- Loss of communication
- Pipeline rupture



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Demo

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What would you consider to be the best use of Pipeline Competency Training?

ⓘ Start presenting to display the poll results on this slide.

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What other modules would you like to see added to Pipeline Competency Training?

ⓘ Start presenting to display the poll results on this slide.

AVEVA™ Pipeline Training Simulator Roadmap

Highlights

- Q3-Q4 2021:
  - Pipeline Competency Training –
    - Instructor-led training
    - Qualification Only Course
  - Composite Scenario Events
  - SCADA Data Manager
- Next Releases:
  - Pipeline Competency Training: Late Q3 2021
  - Pipeline Training Simulator: Q4 2021



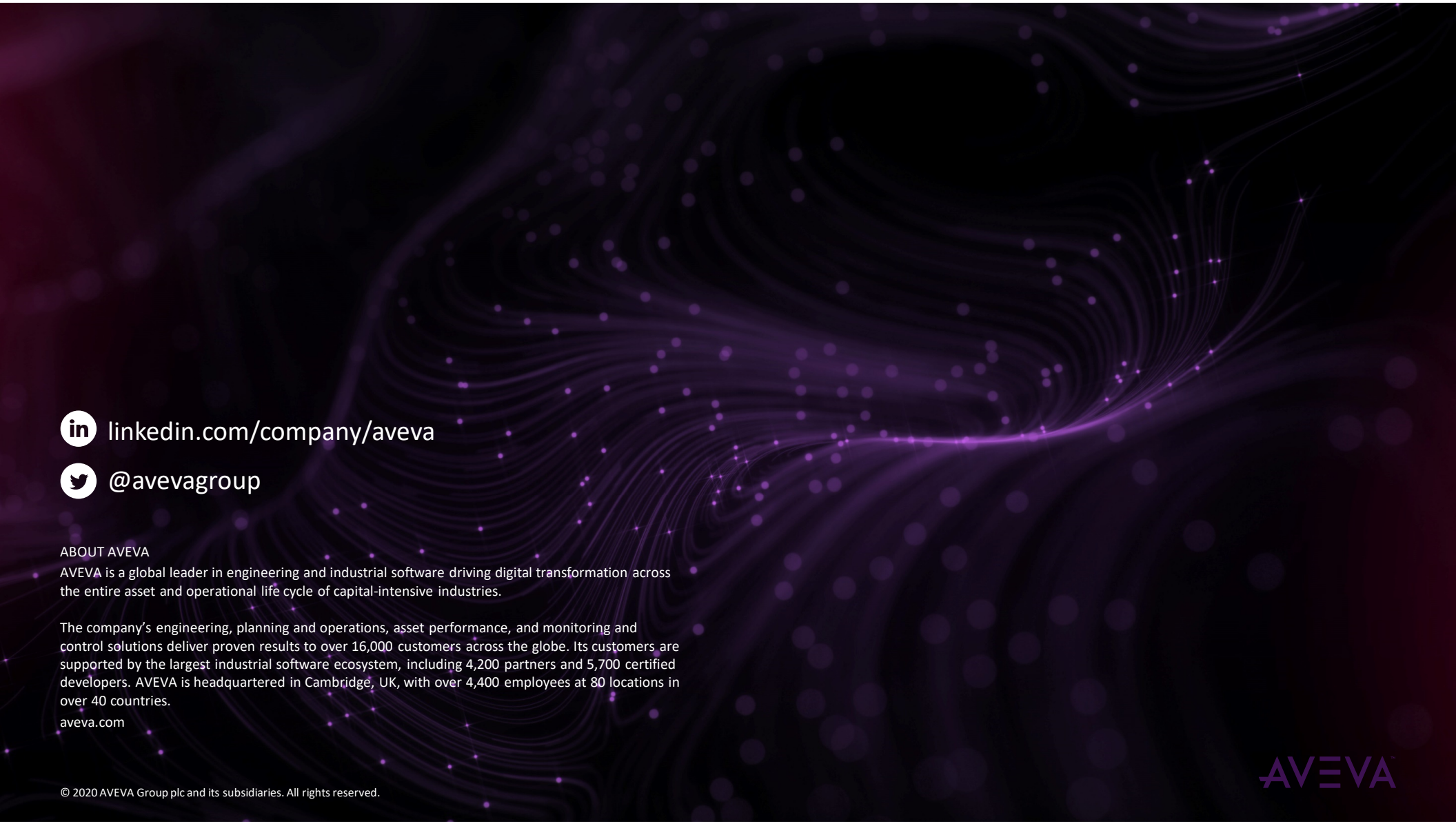
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ABOUT AVEVA

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.

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