OCTOBER 25, 2023

# An introduction to the next generation P&ID environment

ERIC CARNET – AVEVA Engineering & Schematics Senior Portfolio Manager



#### An introduction to the next generation P&ID tool

#### Challenge











#### **Solution**

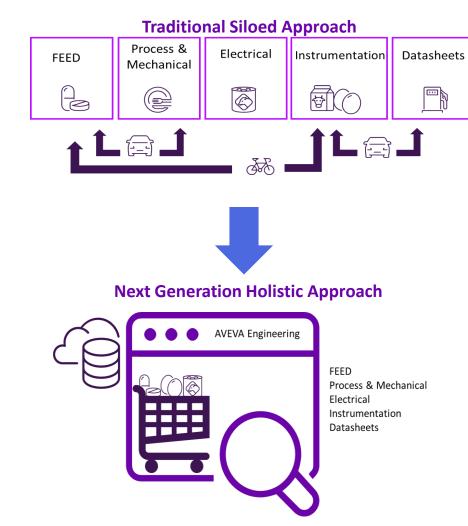
 Next Generation P&ID powered by AVEVA™ Engineering on Unified Engineering will deliver a completely new user experience for P&ID drafting

#### **Results**

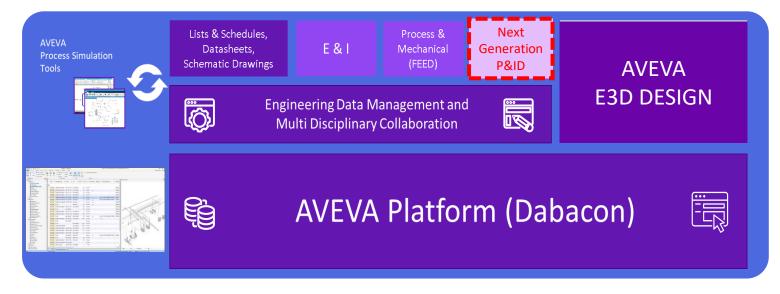
- Holistic Configurable Class hierarchy Conceptual model
- Multidisciplinary Engineering environment
- Embedded AVEVA DRAW graphic engine using underlying live data
- Data sustainability from Simulation to Functional and Detail design project lifecycle



### AVEVA Engineering (R)evolution



Next generation P&ID discipline, finalizing AVEVA Engineering (R)evolution from siloed integrated discipline applications to a multi-disciplinary data centric holistic environment.

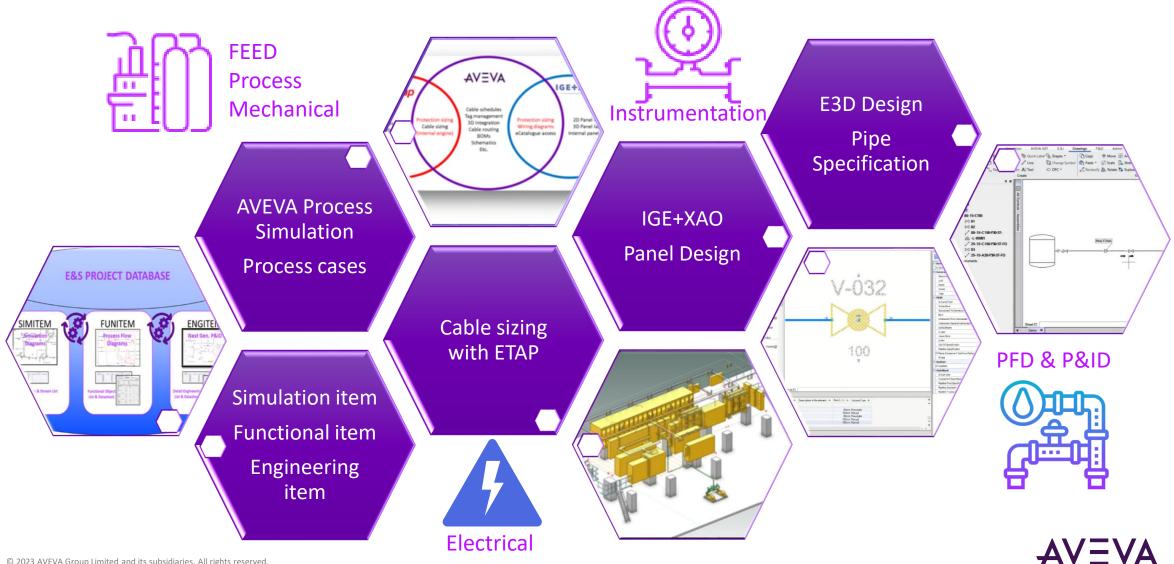




## AVEVA Engineering (R)evolution - Multi Disciplinary Platform



AVEVA Engineering (R)evolution - Multi Disciplinary Business Logic



### What is AVEVA Engineering Next Generation P&ID?

An efficient
Multidisciplinary
Engineering
Environment

A User-friendly Draw embedded graphic canvas A new Data driven
Engineering holistic environment

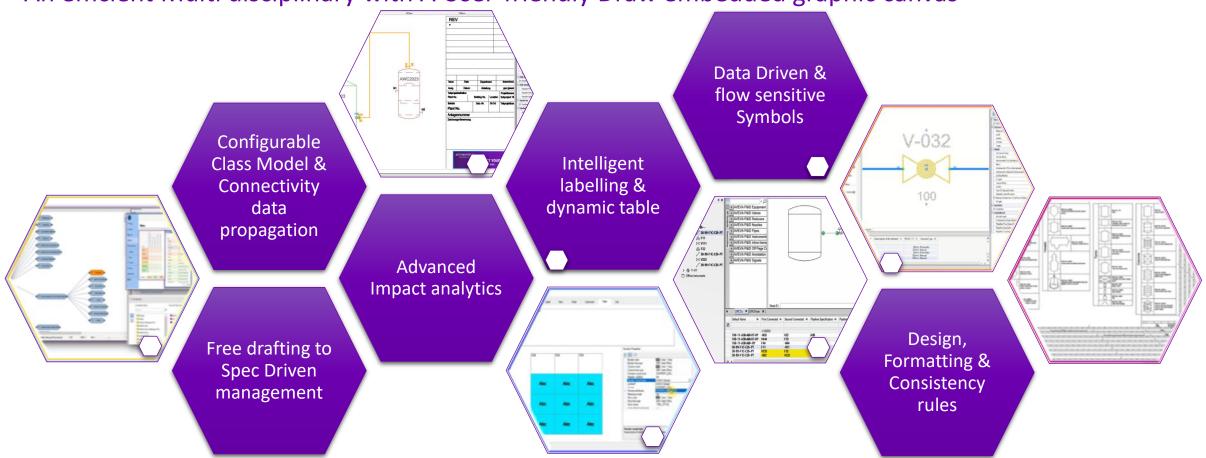
A best-in-Class Project lifecycle workflow



#### What is AVEVA Engineering Next Generation P&ID?

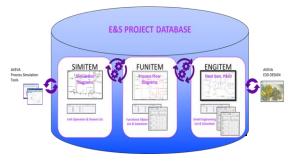
A new holistic Engineering environment

An efficient Multi disciplinary with A User-friendly Draw embedded graphic canvas

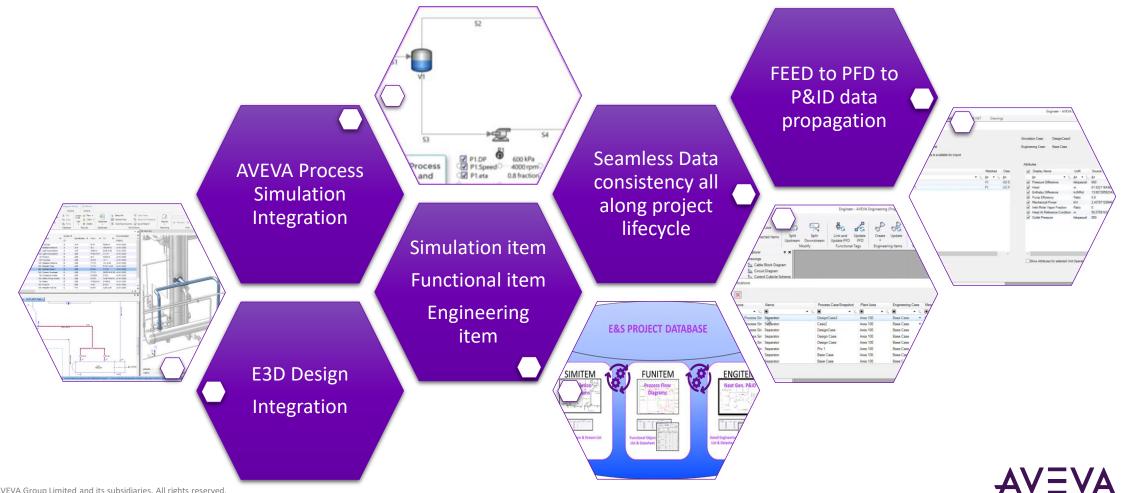




## What is AVEVA Engineering Next Generation P&ID? "="



A Best-in-class project lifecycle workflow for data sharing and integrity



## What is AVEVA Engineering Next Generation P&ID?

An efficient
Multidisciplinary
Engineering
Environment

- Project creation with Library content reference and Engineering facilities
- Drawing, Typicals & Patterns configuration
- Pipe Specification configuration with E3D integration facilities
- Configurable Class Model& Connectivity datapropagation

A User-friendly Draw embedded graphic canvas

- Easy and fast free drafting environment with Standard CAD commands.
- Advanced UI with PBS,
   Ribbon bar, Powerwheel,
   unassigned items & item
   list facilities
- Symbols and assemblies auto-orientation and flow sensitive

A new Data driven
Engineering holistic environment

- Multidisciplinary underlying up to date information
- Data driven symbols & lines style
- Intelligent labelling & Dynamic Tables
- User Define rules
- For Consistency and Formatting rules
- For Data propagation

A best-in-Class Project lifecycle workflow

- Multi disciplinary holistic environment
- Process simulation, PFD to P&ID data & E3D Data propagation
- Instrumentation graphical definition & association
- DEXPI Legacy data migration



## Unified Engineering

#### 2023/24 Projected Feature Delivery



- **Draw: AVEVA Whitespace Optimizer support Draw: Single Line Representation**
- **Piping: PCF interface**
- **Piping: AVEVA Process Simulation Export Interface**
- **Inclusion of Pointcloud Manager 23.1**
- MultiCAD Import: Support for new CAD format versions
- **BuildingSmart IFC certified 2x3 Export**



#### Unified Engineering 2.0

- Structures: Analysis Interface
- **Mining: Conveyor Improvements**
- **HVAC** Redesign (for production)
- **MultiCAD Import: Support for new CAD format versions**



- Browser Access Option
- **Communities/Data Sharing X-Account Permissions**
- Isometrics: Draw based deliverable
- **Piping: Sub-components**
- Piping: Improved P&ID design integration
- Piping & Structures: Auto-Generative Design
- Inclusion of Pointcloud Manager x.x
- **Engineering: Spectrum enabled**
- · Engineering: E&I On Dabacon Updates
- Engineering: Next Gen P&ID

Q2 2023

Apr-Jun

Q3 2023

Jul-Sept

Q4 2023

**Oct-Dec** 

Q1 2024

Jan-Mar

Q2 2024

Apr-Jun

Q3 2024

Jul-Sept

Q4 2024

Oct - Dec

Q1 2025

Jan-Mar



#### **Lighthouse Customer Program**

- Q2 2024
- On-Prem
- 4-6 weeks max for 10-15 customers
- AVEVA Engineering workflows evaluation (all disciplines in relation with P&ID)

Roadmap based upon current requirement understanding and feature scope.

Please note delivery targets are subject to PO/Stakeholder verification of feature and passing of quality gateways.

## **Questions?**

Please wait for the microphone. State your name and company.



## Please remember to...

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## ERIC CARNET

AVEVA Engineering & Schematics
Senior Portfolio Manager



Thank you!



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Over 20,000 enterprises in over 100 countries rely on AVEVA to help them deliver life's essentials: safe and reliable energy, food, medicines, infrastructure and more. By connecting people with trusted information and AI-enriched insights, AVEVA enables teams to engineer efficiently and optimize operations, driving growth and sustainability.

Named as one of the world's most innovative companies, AVEVA supports customers with open solutions and the expertise of more than 6,400 employees, 5,000 partners and 5,700 certified developers. The company is headquartered in Cambridge, UK.

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