Empowering Insights by bringing Operations and Engineering Information together

Lori Warda, AVEVA, Sr Product Manager AI & Analytics
AVEVA Asset Information Management
AVEVA Connect Visualization Service
AVEVA 3D Visualization and XR
Bringing Operations and Engineering Together
Demo
Digital Twin - The Challenge

Data Consumers & Applications

Data Consumers

Data Historian

Planning & Scheduling

ERP

Excel

BI tool

Analytics Platform

Data lake

Inspection System

Asset Reliability

CMMS

Asset Information

DMS

Schematic Diagrams

Engineering Data

3D Models

3D Reality Capture

Inspection System

ERP

Excel

BI tool

Analytics Platform

Data lake

Asset Information

CMMS

Asset Reliability

Schematic Diagrams

Engineering Data

3D Models

3D Reality Capture
AVEVA™ Asset Information Management

At a glance

AVEVA Engineering Information Management SaaS solutions provides a continuously evolving single source of truth across the asset life cycle for universal access to engineering and asset information. Enabled by an enterprise data governance to ensure compliance, consistency and completeness, the Digital Twin provides a standardized view of your data to get actionable and contextualized information for faster and reliable decisions bridging the gap between engineering and operation. The solution also provisions the capability to offer best-in-class engineering and design tools to create and maintain the digital twin in a hybrid or SaaS architecture.

- Engineering efficiency and transparency
- Data governance, quality and completion
- Scalable using SaaS/hybrid architecture
- Quick access to data in context
- Creation and evergreen the digital twin platform for operation and maintenance
- Improve handover and operational readiness
- Reduce unplanned downtime, risk and maintenance cost, and drive carbon efficiency
Leverage a holistic portfolio purpose-built for industry

**Convergence IT/OT/ET**
- Enterprise visualization
  - Gain single-pane-of-glass visibility across engineering, operations, and business information

**Applications and analytics**
- Simulation and learning: Accelerate process design innovation
- Engineering and execution: Maximize efficiency of capital projects
- Asset performance: Improve reliability with AI insights
- Production optimization: Optimize productivity and quality in real time
- Planning and scheduling: Stay ahead of a fast-changing market

**Information management**
- Engineering information: Deliver projects on time and improve safety and performance with rapid, intuitive access to the digital twin
- Operations information: Break through silos with contextualized information and self-service tools that accelerate analytics projects

**Automation and control**
- Operations control: Drive instant decision-making and safe operations with responsive visualization and control

**Data sharing**
- Collaborate securely within and beyond the enterprise

**Connected industrial economy**
- 3rd party ERP, CRM, PLM
- 3rd-party apps and analytics
- 3rd-party systems and databases
- 3rd-party sensor data and other data sources
  - SCADA
  - MMMs
  - Historian
  - PLCs
  - DCSs
  - Edge/IIOT
3D Visualization & XR Technology
3D Visualization Demo
AVEVA’s Connect Visualization Experience - Strategy

Contextualized Engagement with the Digital Thread

Key Concepts

- Aligning Siloed Industrial Data thru AVEVA Data Hub
- Aligning other Industrial Operations Data
- Visualization Integration/ One Pane of Glass
- Ability to Assemble Lenses Experiences
- Domain Application Composer
- Contextualized Co-Innovation Teams
- Content/ Application Management Service Across the Enterprise
Supporting virtual competency teams

Virtual competency teams (SMEs)
- Performance guidance
- Best practices
- Expert support

CapEx Project Teams
- Engineering
- IT

Data science

Experts are remote and must be experts of plants they have not visited

The “industrial cockpit”

Operational data on asset, process
- “What is happening? And what happened?”

3D Model (PCM) of “As deployed”
- “What is the physical asset layout / construction?”

Production data
- “What has been made on the asset? When was it made? Shift details?”

Engineering / asset information
- “What details on manufacturer of asset, specs, maintenance history, etc.”

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AVEVA Connect Visualization Capabilities

- Real Time Data Analysis
- Search Based Navigation
- Application Viewing / Interaction
- Asset View
- Dashboarding
- Cloud Solution
- Mobile Capabilities
Bringing real-time data into view in AVEVA Connect Visualization

How to integrate AVEVA Asset Information Management-Advanced

Create a Visualization Solution and a Data Hub Solution

Enable AVEVA Asset Information Management-Advanced integration

Integrate one or more Data Hub Namespaces

Asset Hierarchy and Tag Management
Demo – Using Applications for a custom lens to the digital twin
Demo – Self Service capability for collaboration and analysis
Creating Dashboards
Creating Dashboards Demo
## Release Plans

**AVEVA Connect Visualization/ AVEVA Asset Information Management-Advanced Integration**

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Takeaways

How AVEVA solves the Digital Twin Data Problem

• AVEVA Asset Information Management Advanced is your Cloud Hosted solution for consolidating, organizing, contextualizing and collaborating on your information.

• AVEVA 3D Visualization and XR offers an enhanced experience for viewing and interacting with your site.

• AVEVA Connect is our platform that ties everything together.

• AVEVA Connect Visualization Services brings you access to all of your information in a single application for a 360 view of your information on any device.
Questions?
Please wait for the microphone.
State your name and company.

Please remember to...
Navigate to this session in the mobile app to complete the survey.

Thank you!
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