
AVEVAWORLD
PARIS

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OCTOBER 2024

Accelerating remote asset insights with CONNECT

Chris Felts - Staff Strategic Product Manager, AVEVA

Zoe Dodgson - Senior Product Manager, AVEVA

AVEVA

OCTOBER 2024

Agenda

AVEVA World 2024

- CONNECT overview
- CONNECT use case for remote asset insights
- Data collection products
- Spotlight on enterprise visualization
- Resources
- Question & answer

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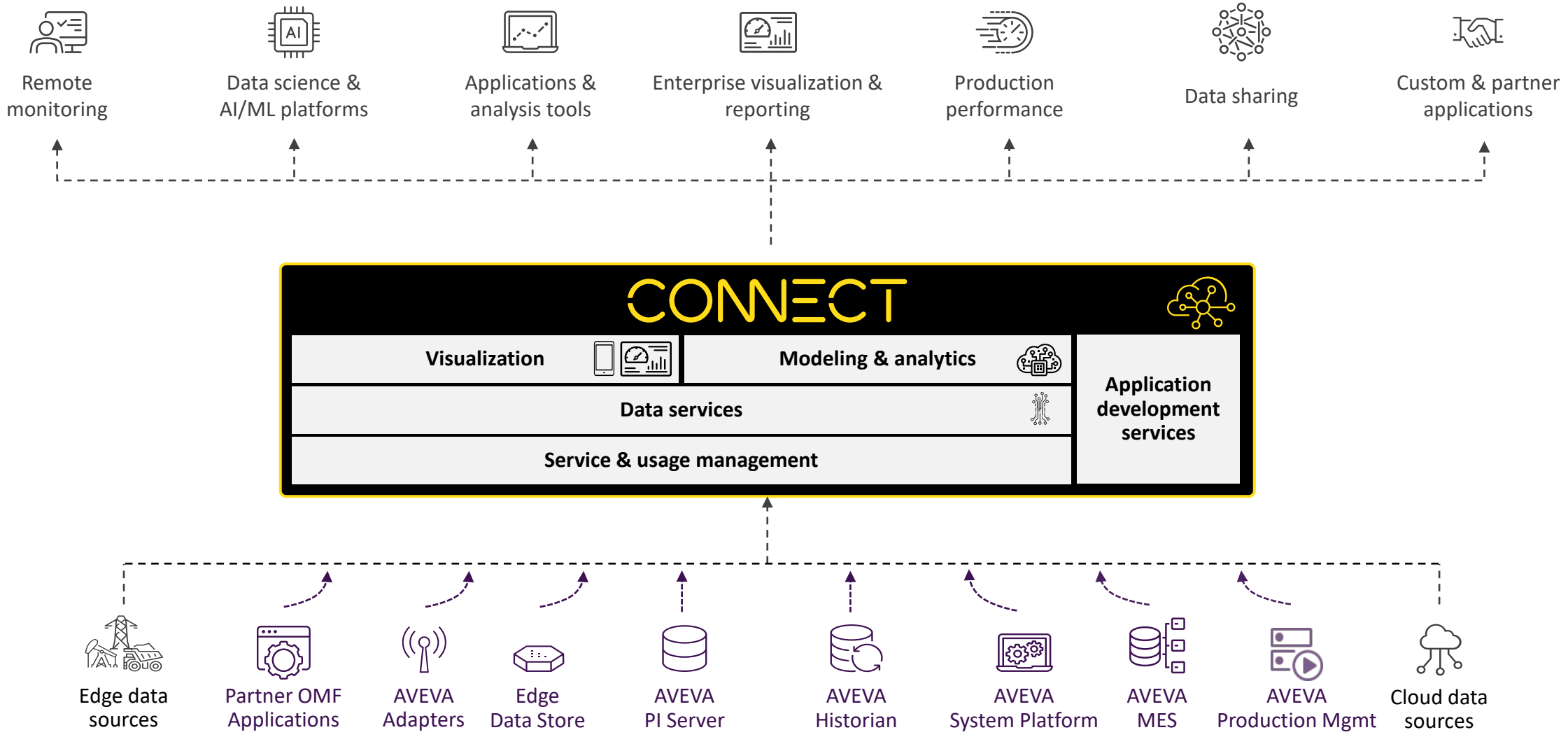
Industrial intelligence platform

Providing hybrid solutions to accelerate new value creation for AVEVA customers



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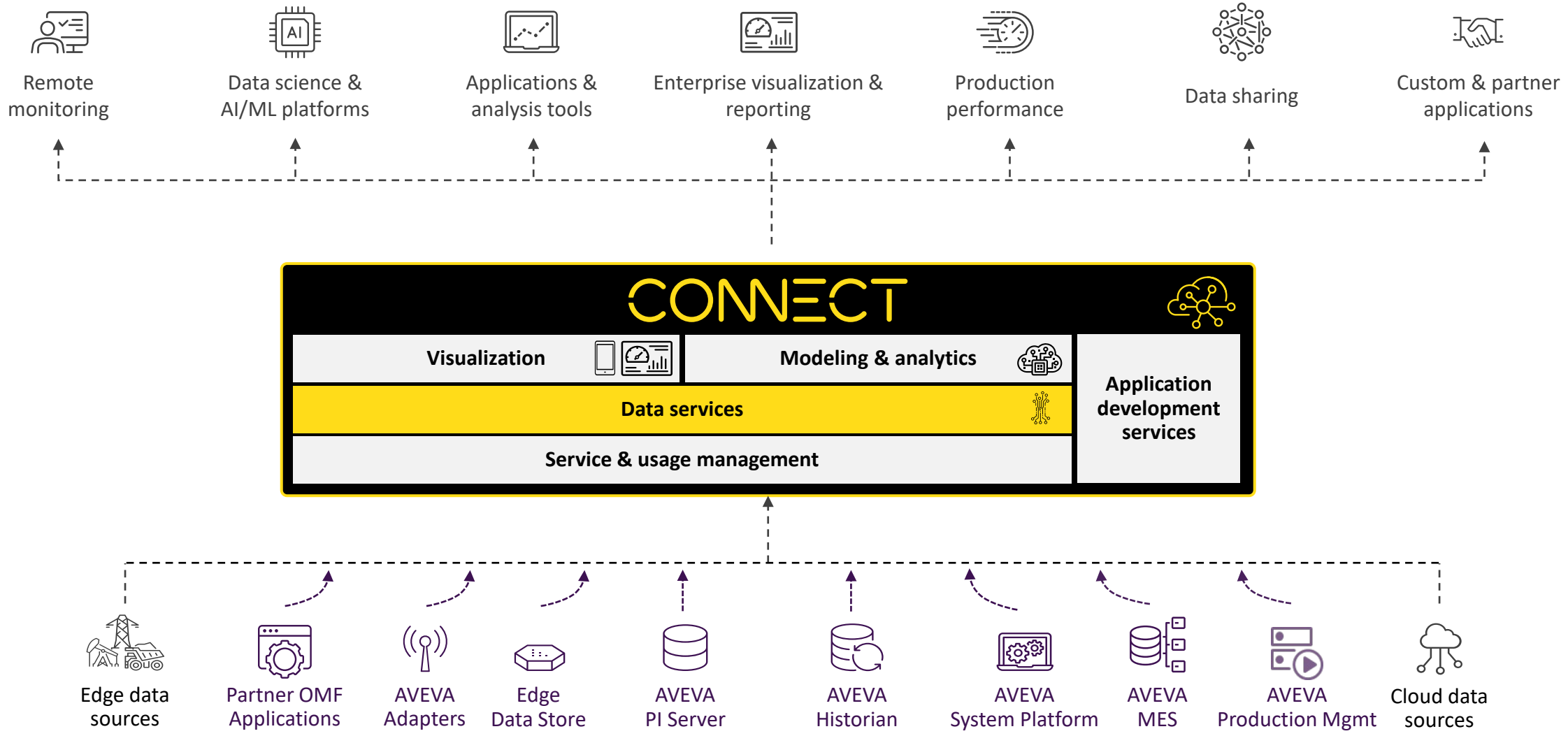

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CONNECT Data services

Remote monitoring

Data science & AI/ML platforms

Applications & analysis tools

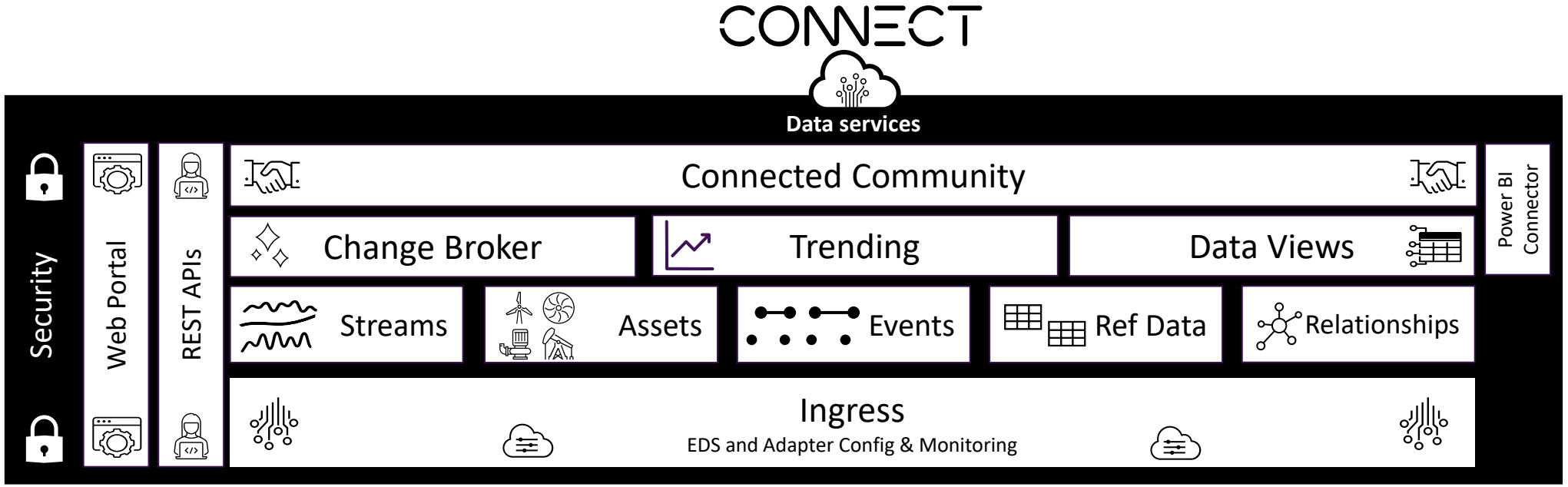
Enterprise visualization

Reporting & dashboards

Production performance

Data sharing

Custom & partner applications



CONNECT visualization services

AVEVA Advanced Analytics

$f(x)$

Partner OMF Applications

AVEVA Adapters

Edge Data Store

AVEVA PI Server

AVEVA Historian

AVEVA System Platform

AVEVA MES

AVEVA Production Mgmt

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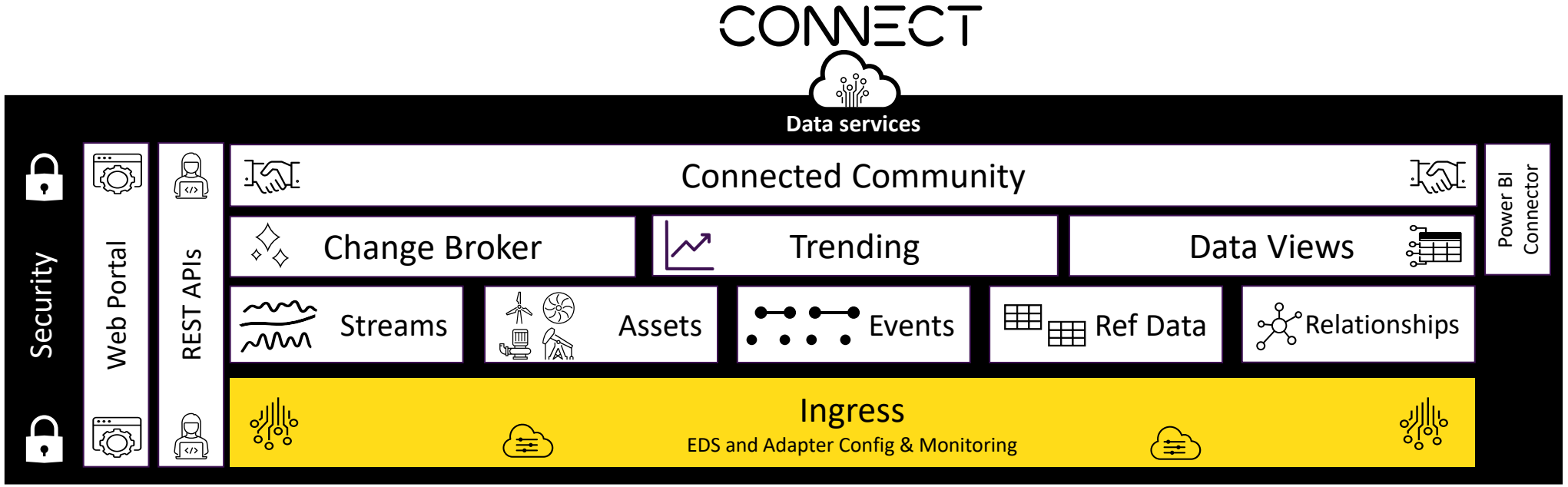

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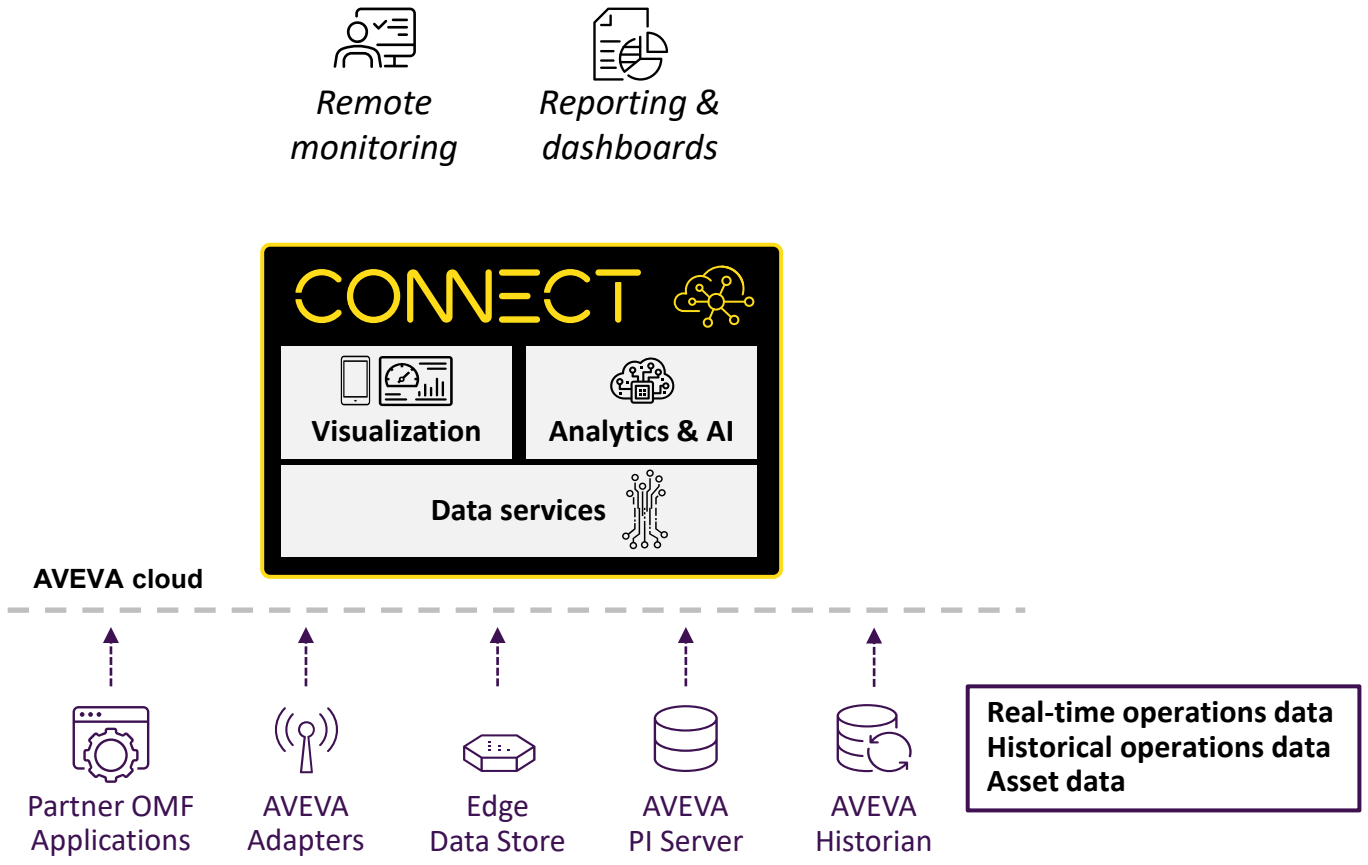
CONNECT Use Case: Data monitoring and reporting

Expand access to data from remote assets and improve content for environmental and sustainability reporting



Process

- Integrate real-time data from AVEVA Adapters and partner OMF applications, near-real time data from Edge Data Store, and historical data from the PI Server and AVEVA Historian with CONNECT data services
- Leverage data and content for numerous dashboards and visual displays in the cloud. Or share data with 3rd party tools like Microsoft Power BI or Tableau
- Use internal reporting tools and access reports across geographies and functions
- Customize dashboards based on business needs

Results

- Data sets and industrial context for tackling performance, operations reporting and other actionable requirements
- View equipment performance over a period of time, downtimes, utilization, OEE, and incidents, including potential alarms
- Drill down into specific events and detailed trends to understand total uptime and utilization impacts

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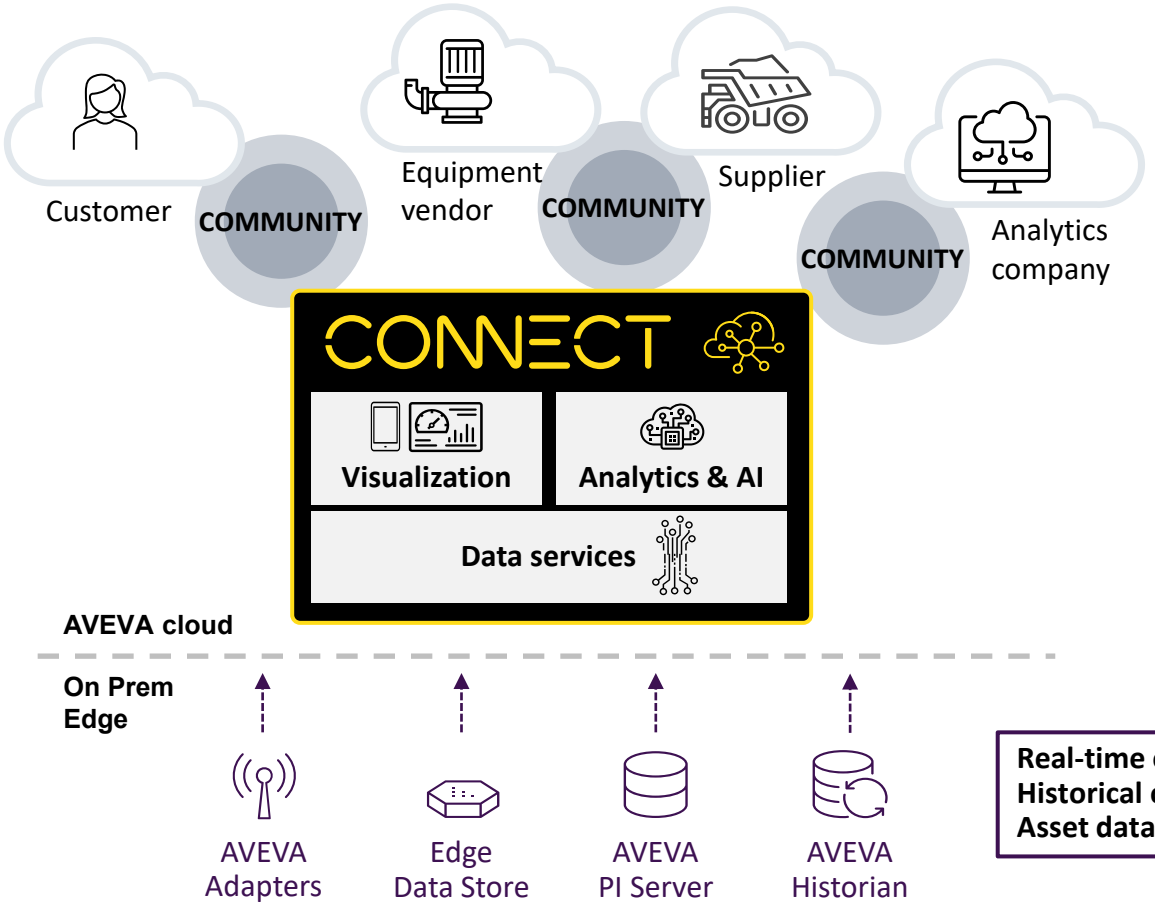
CONNECT Use Case: Community data sharing

Securely share data in context with your trusted business partners



Process

- Integrate real-time data from AVEVA Adapters, near-real time data from Edge Data Store, and historical data from the PI Server and AVEVA Historian with CONNECT data services
- Create secure data communities and share data with external stakeholders. Data access is granular and can be revoked at any time by the data owner

Results

- Enables collaboration among stakeholders, sharing information and creating mutual business value
- Extends current investments with new solutions
- Supports innovative business models for solution providers
- COMING SOON! Writeback of Community data to the PI Server for sharing Community insights to stakeholders on premises

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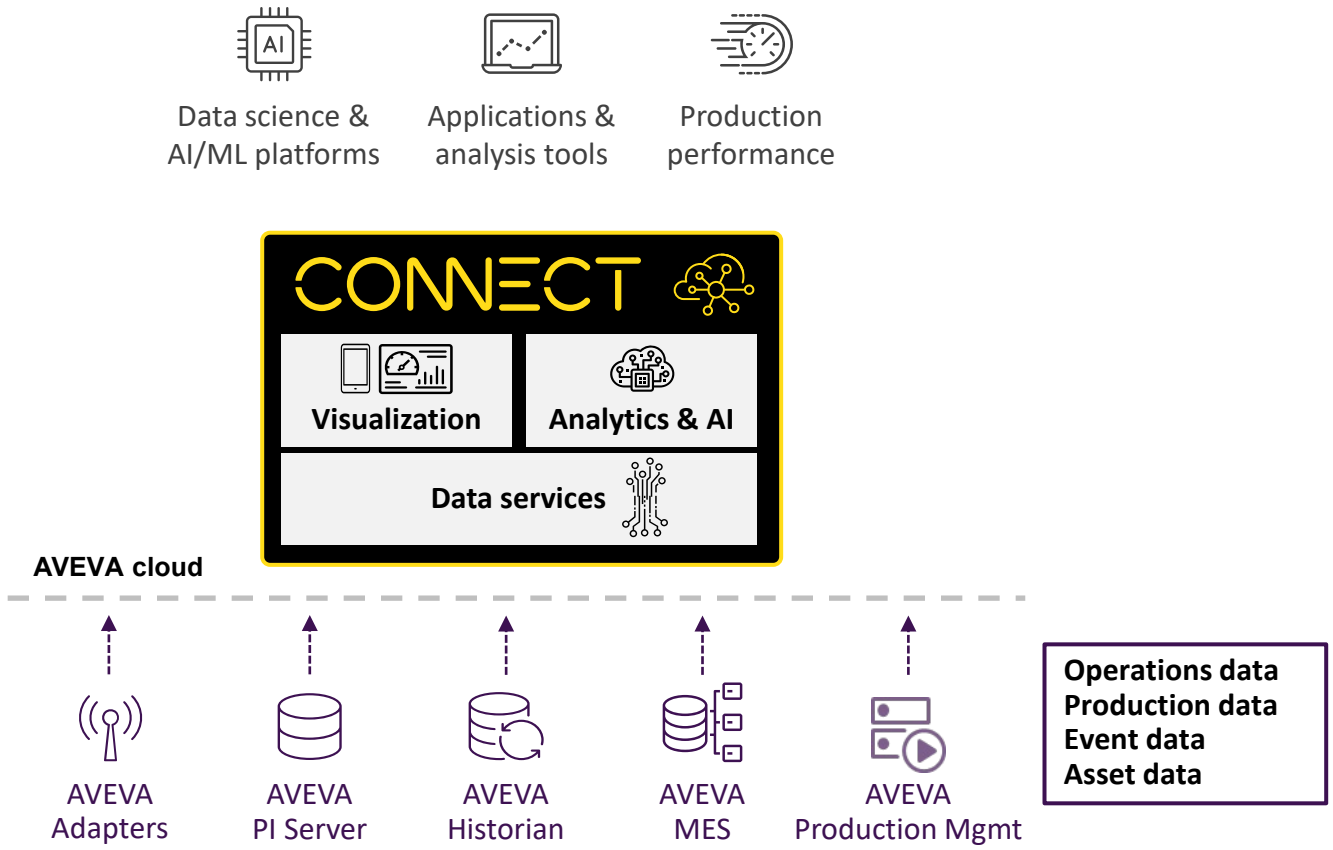
CONNECT Use Case: Predictive downtime events

Provide enterprise-wide visibility into manufacturing operations and proactively manage production



Process

- Integrate MES, Production Management, and operations data into CONNECT data services
- Train AI/ML models on previous production runs to detect potential downtime conditions when producing a specific product
- Suggest corrective action to operations teams based on detected conditions
- Provide stakeholders with greater visibility to recommendations to avoid downtime
- Customize dashboards based on business needs

Results

- Proactively manage production through analytical guidance to operations. Real-time alerts to and recommendations for avoiding downtime events
- Monitor and view data, trends and performance outcomes through CONNECT visualization or 3rd party tools

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CONNECT Data collection products

Collect, normalize and transfer real-time and historical operations, asset, event, and production data

AVEVA PI Server

- ➢ PI to CONNECT Agent
  - Transfer PI Point data to CONNECT data streams and assets
  - Current and historical data, asset data
- ➢ CONNECT to PI Agent
  - Transfer CONNECT data streams to PI Points
  - Current, historical, and future data

Edge Data Store

- Real-time data collection, persistent data storage, data access, and flexible data transfer
- Native integration of Modbus TCP and OPC UA data sources

AVEVA Adapters

- Real-time data collection and data transfer
- Native integration of Azure Event Hubs, BACnet, DNP3, Modbus TCP, MQTT, OPC UA, RDBMS and structured data files

Partner OMF Applications

- OMF = open message format
- Open and flexible for use in custom application development when AVEVA products are not available or do not meet the needs of the use case

AVEVA Historian

AVEVA System Platform

- ➢ Replication
  - Transfer Historian tag data to CONNECT data streams and assets
  - Current and historical data, asset data; historical data backfill

AVEVA MES

AVEVA Production Mgmt

- ➢ AVEVA Events to CONNECT Agent
  - Collects and transfers MES, Production Management, and event data to CONNECT events and assets
  - Enables integration of MES and production data with operations data
  - Stores equipment hierarchy as assets and stores downtime, production, and metrics modules as events

Remote Management

- ➢ Edge Management
  - Securely install, manage and update AVEVA data collection software on remote devices
- ➢ CONNECT data services
  - Remote monitoring and configuration management of AVEVA data collection software

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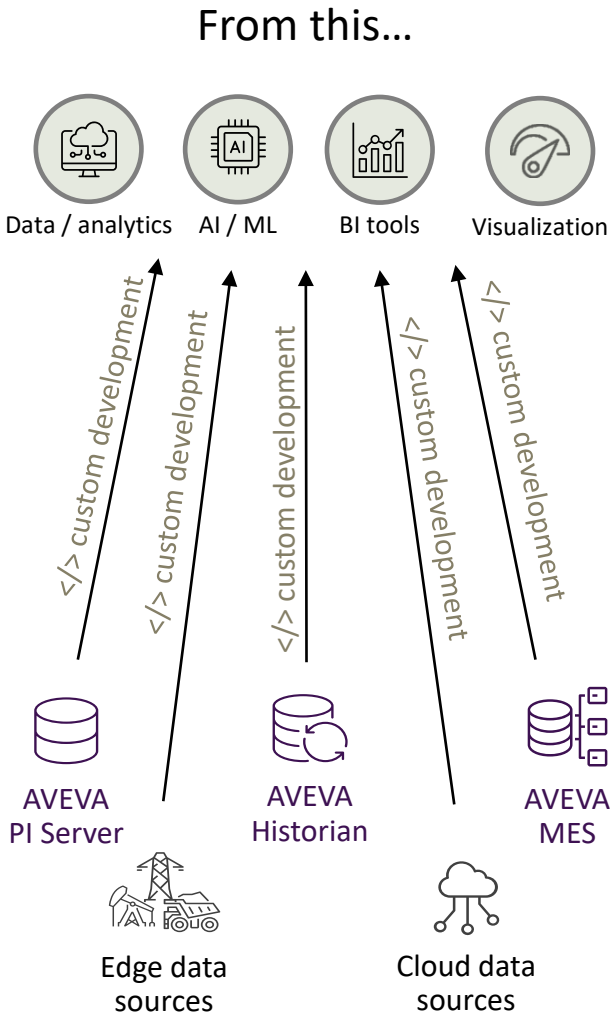
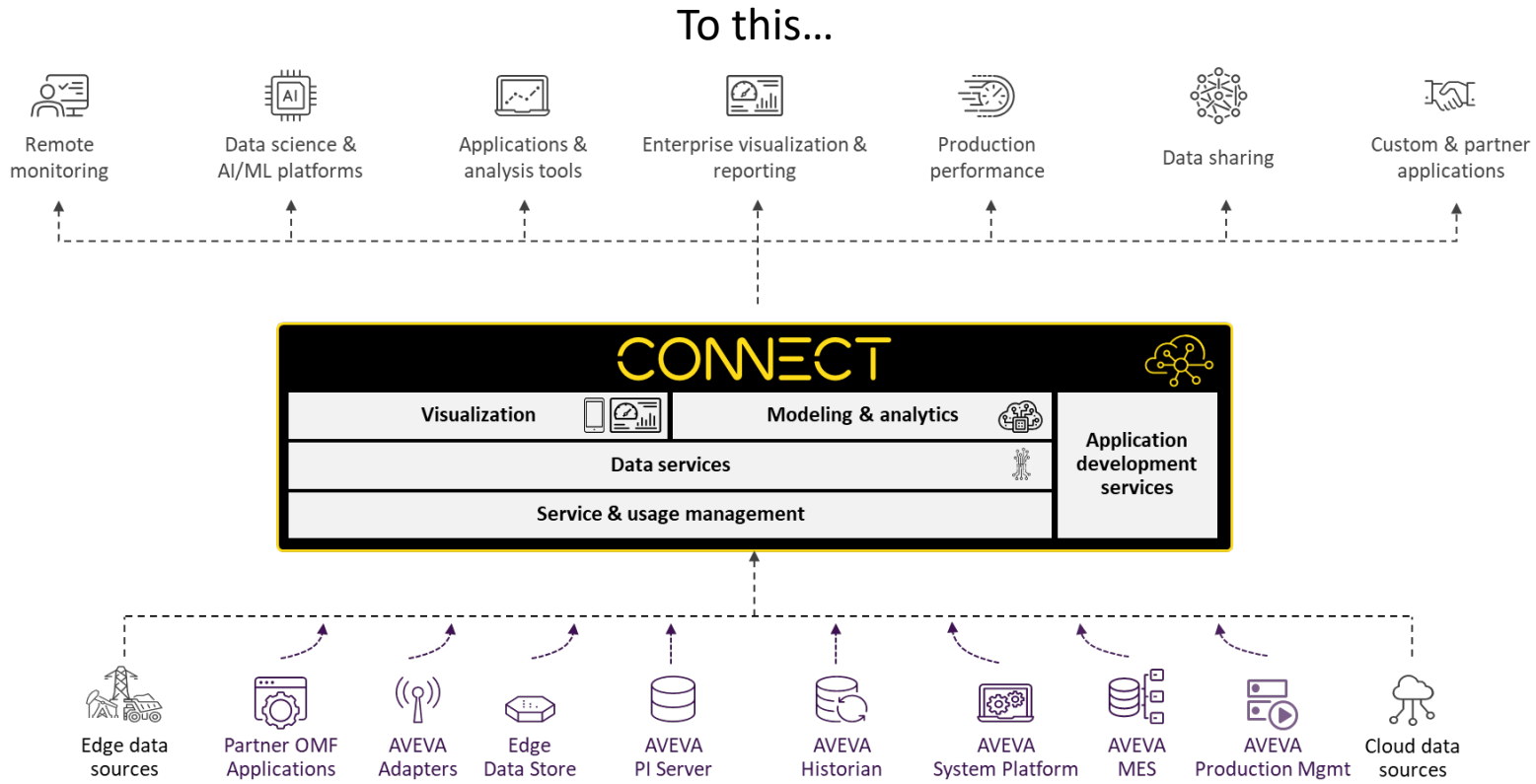
CONNECT transforms point solutions to a unified industrial ecosystem





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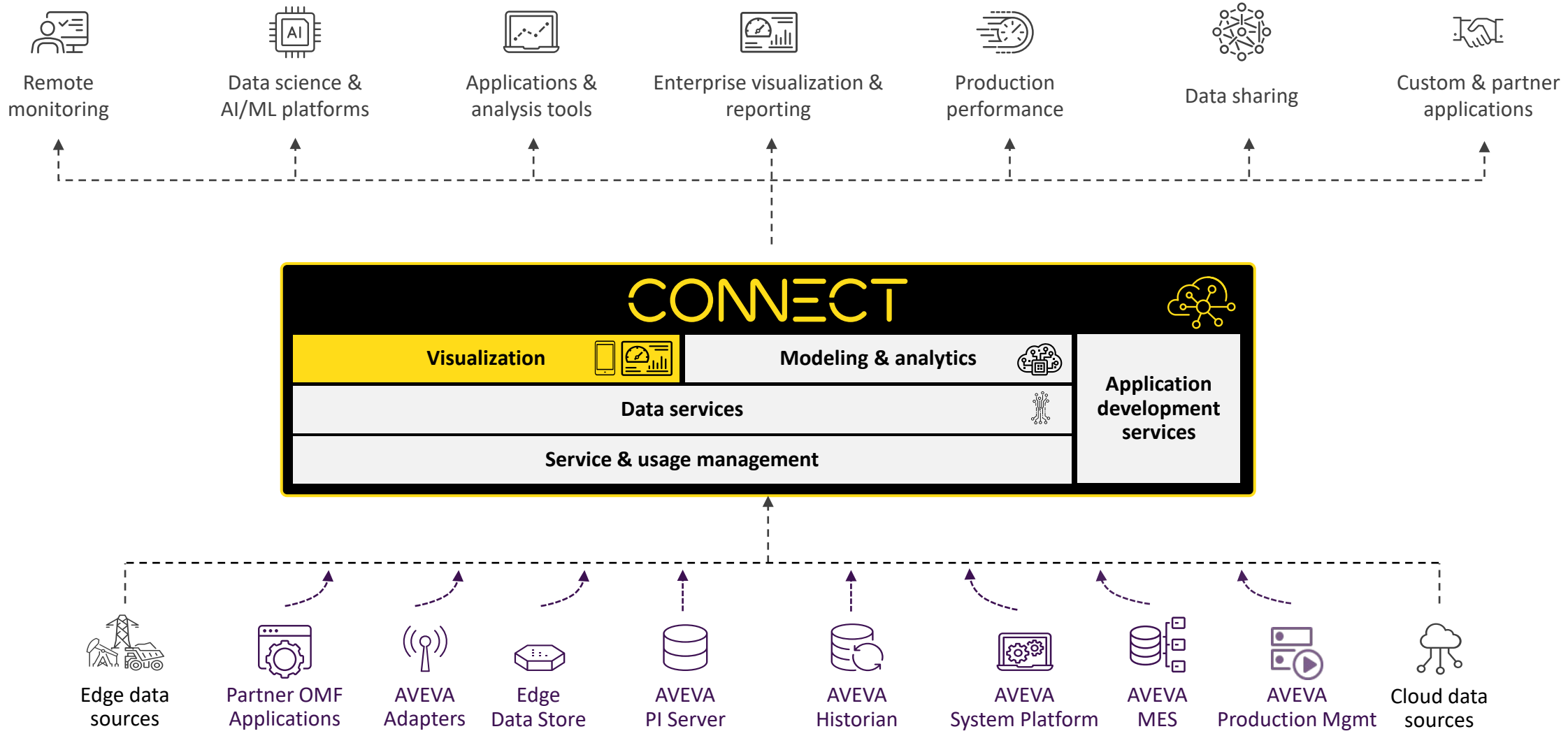

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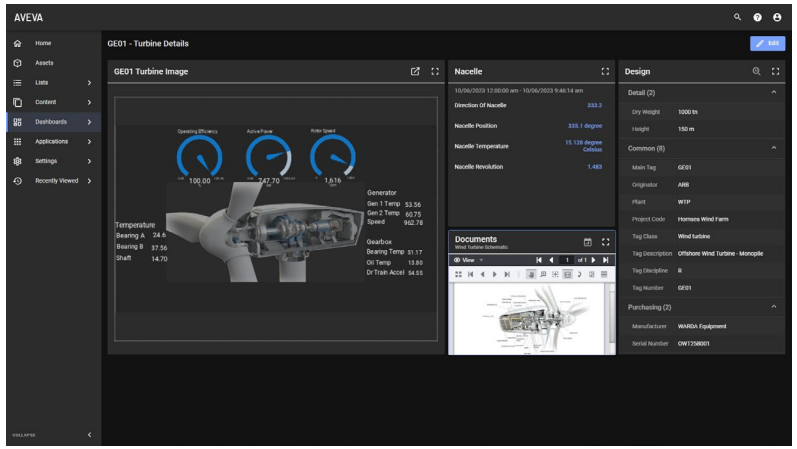
Visualization





Visualization experiences

- Editable dashboards
- Arrange various content types
- No code experience
- Search for content
- Adjustable historical view

Domain applications

- Custom developed experiences
- Rich animations and dynamic styling
- Asset driven navigation
- Complex interactions
- Holistic operations view

Visualize industrial data using self-service and pre-defined dashboards

- Visually relate disparate data sources & systems in context to each other
- Gather insights between applications and across data types quickly and easily
- Share actionable information with operations, reliability, business, and other teams, anywhere through a browser

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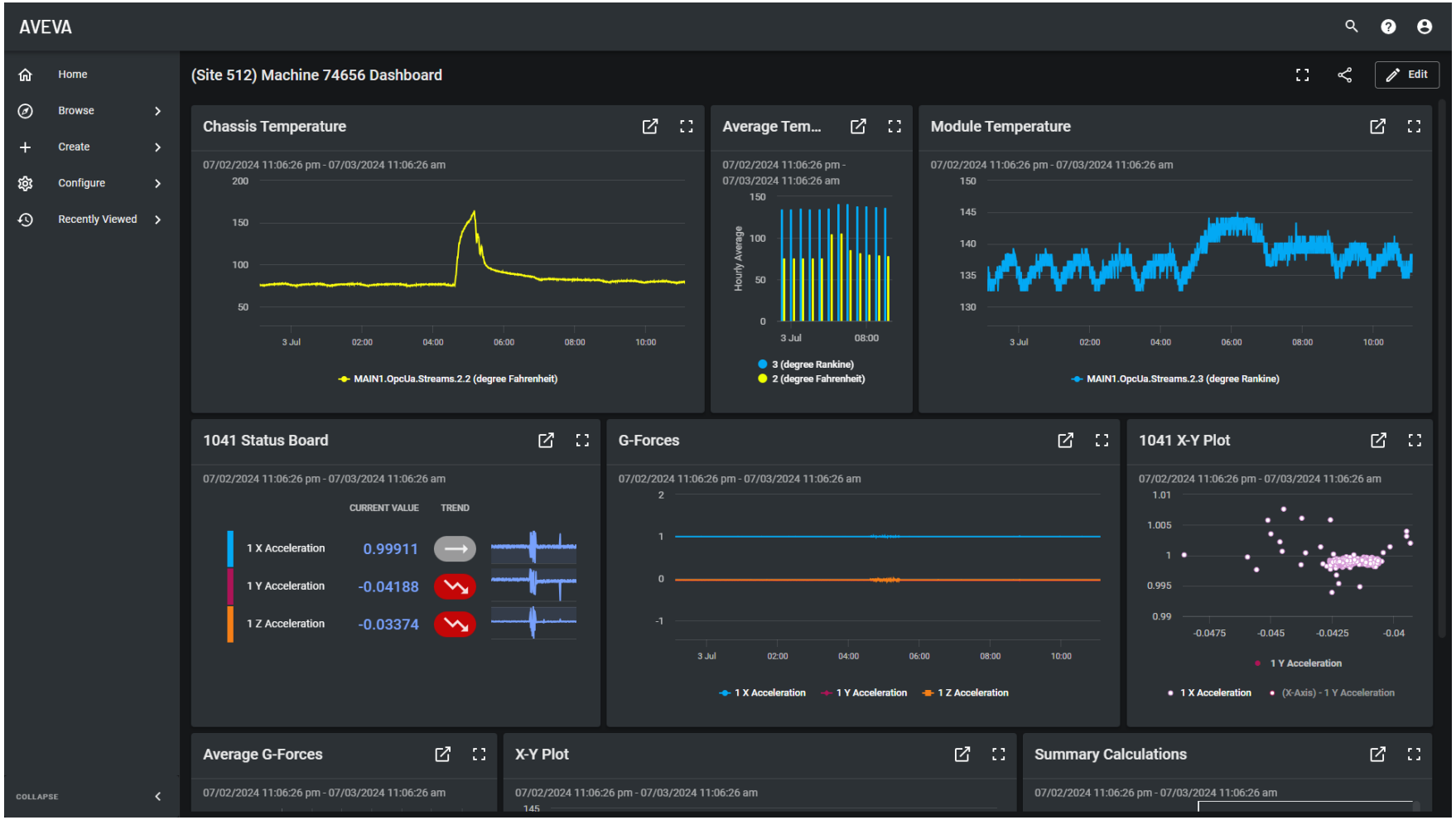
Visualization

- Visualization of time-series data using chart and industrial graphics visuals
- Create visual experience using Engineering data
- Enhance production visuals with Manufacturing Execution and event data



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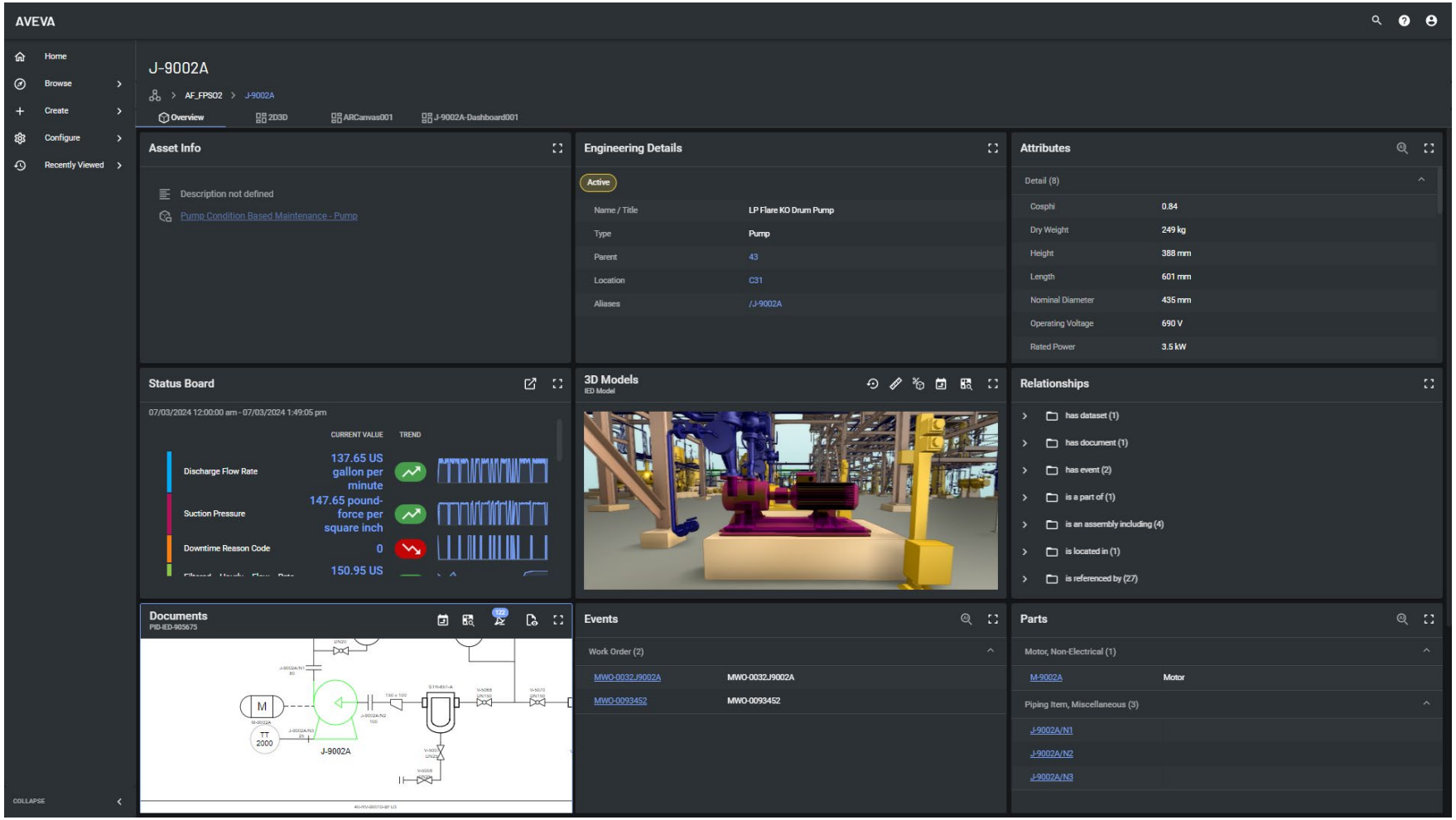

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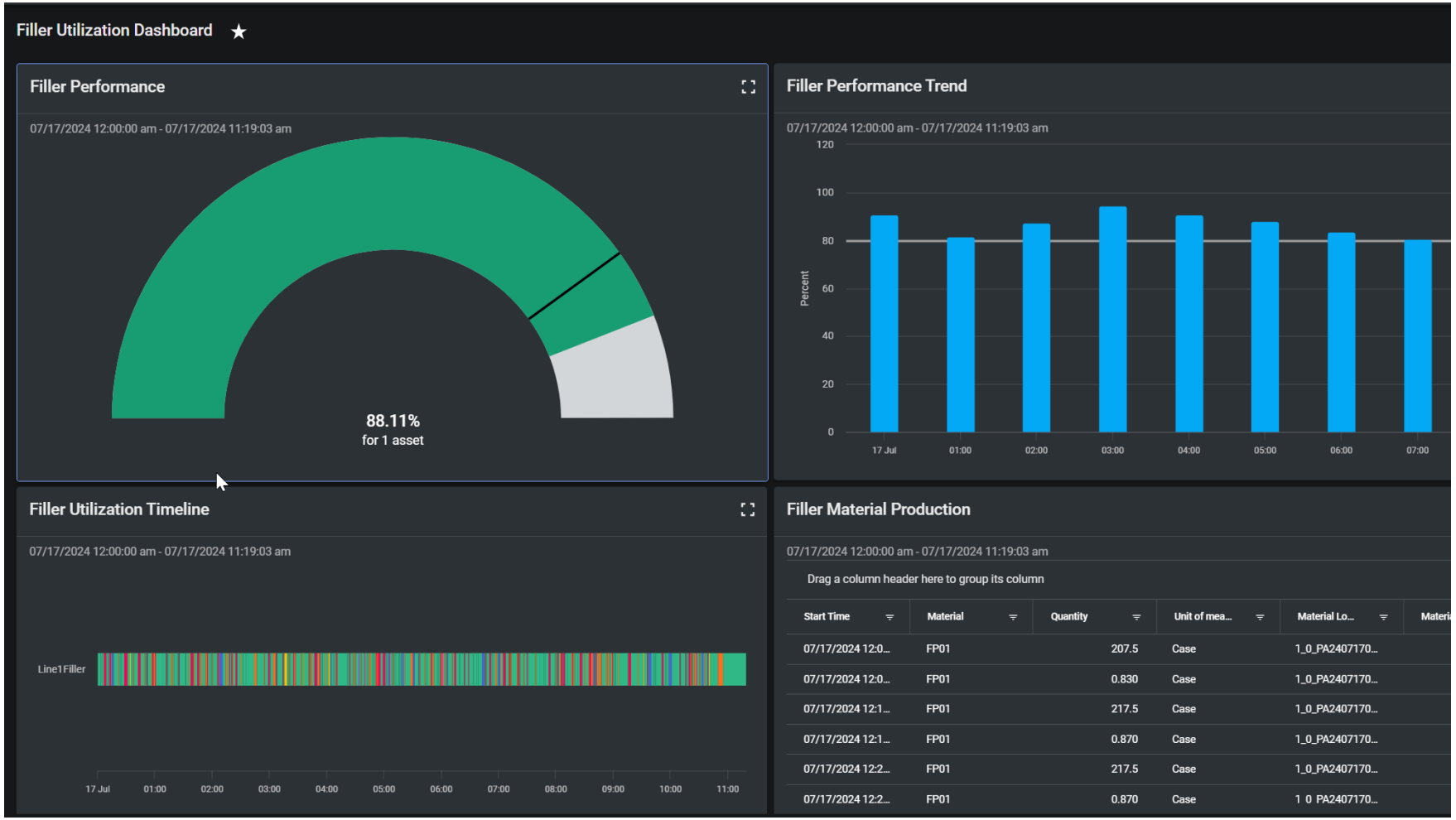

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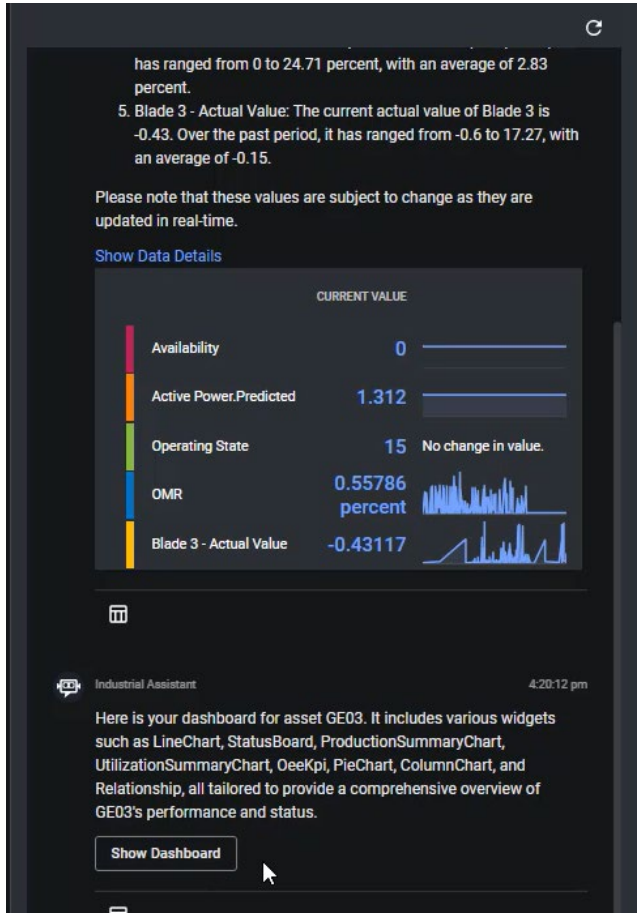
Leveraging the power of Generative AI in CONNECT

Charts



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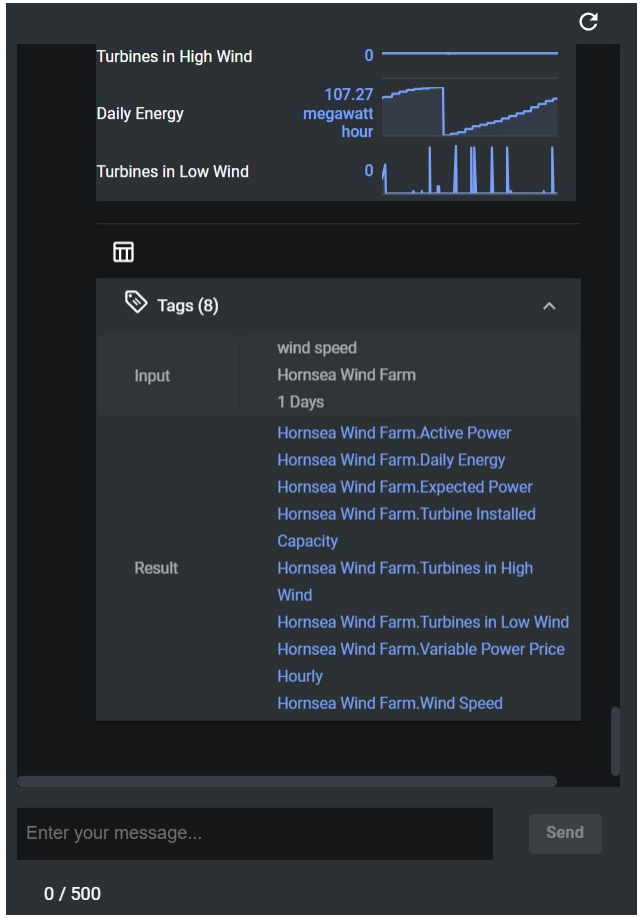

Features

- Integrate the power of Generative AI with your industrial data, so you can quickly find and summarize the information you need.
- Query using common language statements through a chat interface.
- Build relationships using inferencing, no need to pre-build an extensive Knowledge Graph.

Benefits

- Fast onboarding using data inferencing finds relationships without a hierarchy or structured entity relationships.
- Objective-driven queries that breaks down complex requests into multiple sub-tasks to get a consolidated response.
- Supplement SME's and non-SME's using Digital Intellect

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Recommended Sessions

Fueling your Data Infrastructure with AVEVA Connectivity *AVEVA*

CONNECT Innovation, PI System
Wednesday, October 16 @ 9:00 am

AVEVA's industrial AI: Generate impact to achieve greater goals *AVEVA*

CONNECT Innovation
Wednesday, October 16 @ 9:00 am

Increasing industrial information effectiveness, through enterprise visualization *AVEVA*

CONNECT Innovation
Wednesday, October 16 @ 10:45 am

AVEVA: Operations data analytics at cloud-scale; Seamless integration of PI Server data with CONNECT *AVEVA*

CONNECT Innovation, PI System
Wednesday, October 16 @ 2:45 pm

Easily deploy AVEVA Adapters to remotely collect operations data at scale *AVEVA*

CONNECT Innovation, PI System
Wednesday, October 16 @ 3:30 pm



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Innovation Zone

Exciting, modern & engaging experience

- **5 key zones:** CONNECT, Operate & Optimize, Design & Build, Industrial Sustainability, Experiential Zone (hands-on activities)
- **45+ sponsor and exhibitor booths**
- CONNECT Ecosystem Partner kiosk
- Partner solution sessions
- Guided tours by industry
- Game and leisure areas



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NEW! Meet the Experts

1:1 meetings with AVEVA subject-matter experts

- Get answers to product and technical questions, learn best practices, tips and tricks, and more.

- Representatives from:
  - Product Management
  - R&D
  - Pre-Sales
  - Tech Services
  - Support
  - Customer Success







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Q&A

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ABOUT AVEVA

AVEVA is a world leader in industrial software, providing engineering and operational solutions across multiple industries, including oil and gas, chemical, pharmaceutical, power and utilities, marine, renewables, and food and beverage. Our agnostic and open architecture helps organizations design, build, operate, maintain and optimize the complete lifecycle of complex industrial assets, from production plants and offshore platforms to manufactured consumer goods.

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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