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Empowering AVEVA™ PI System™ users with visualization

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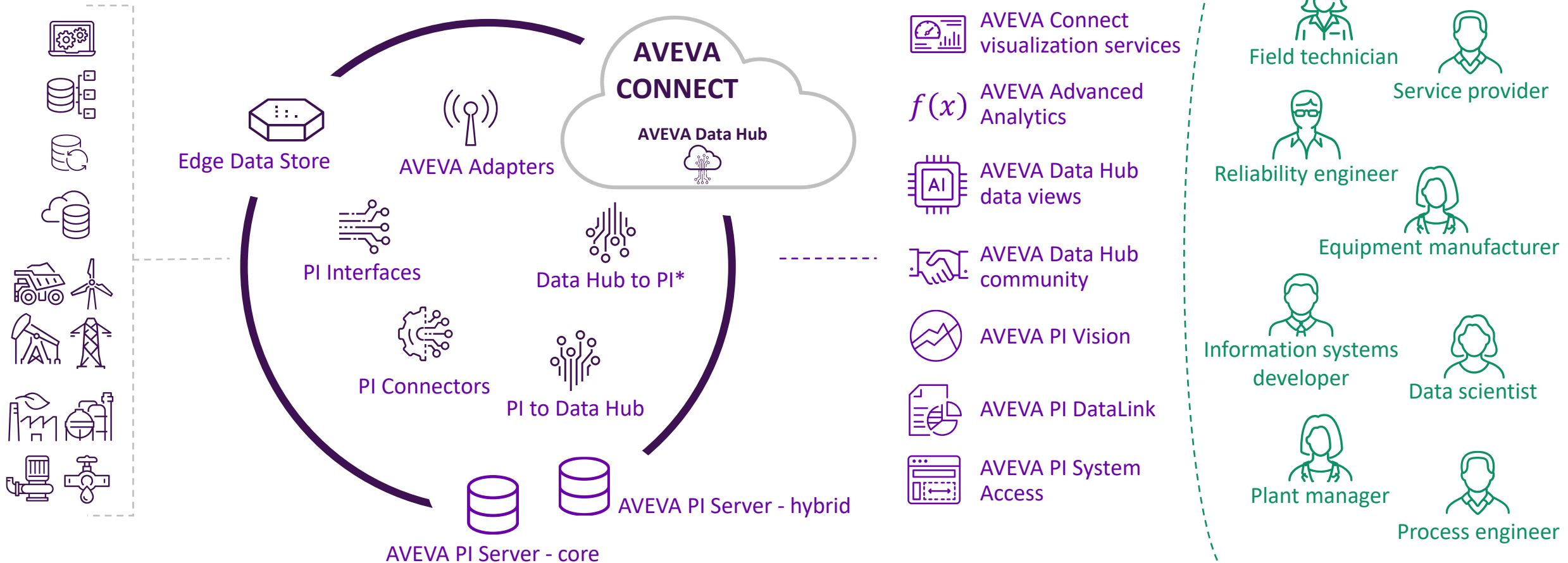
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Agenda

- AVEVA™ PI Vision™ overview
- Recent releases + roadmap
- AVEVA™ Connect visualization services overview

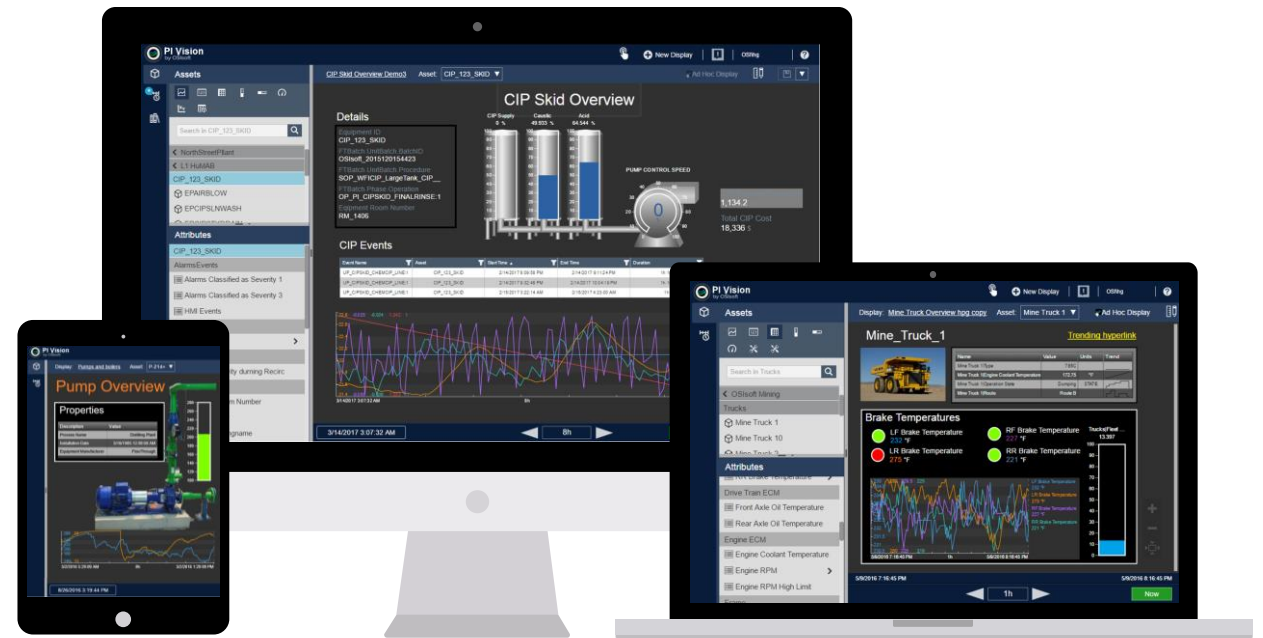
A hybrid data infrastructure from edge to plant to community

AVEVA PI Data Infrastructure



The fastest, easiest way to visualize AVEVA™ PI Server data

- An **easy-to-use, self-service, scalable** solution
- Access data from any web browser, including **mobile** device browsers
- **Organize and share** displays across your organization



AVEVA™ PI Vision™ serves data consumers across your company



Operator & engineer

Build real-time data displays in minutes

- **Fast, self-service** display building
- **No waiting** for IT assistance
- **View** on any device



Plant manager

Optimize the performance of your team

- **Quick access** to data
- **Mobile** capabilities
- **Shorten the learning curve** of new team members



Data analysts & IT

Reduce the resources needed to help operations with data access

- **Rapid** deployment and roll-out
- **Centrally** manage displays



Business managers

Easily view KPIs across your entire organization

- **Visibility** into enterprise information
- **Conserve** IT resources

What's new in AVEVA™ PI Vision™ 2022?

Enhanced event analysis and display standardization

- Overlay attributes in Event Comparison trends
- Freehand zoom and pan Event Details trends
- Maximize a trend
- Show traces and scales with colors and line styles that ease visual comprehension and prioritization
- Align child event frames by name
- Expand/collapse all event frames on Gantt chart
- Switch between different units of measure at the symbol level
- Custom display default settings to organizational standards
- Display trend value while moving the trend cursor



PI Vision has been re-branded to AVEVA PI Vision.

AVEVA™ PI Vision™ 2023

Streamlined, secure access: modern authentication comes to AVEVA PI System

- Reduce IT effort and integrate AVEVA PI System with your identity provider of choice
 - Enabling **single-sign on (SSO)**, helping you to more easily and securely manage resources and users across your enterprise



What's new in AVEVA™ PI Vision™ 2023?

Streamlined, secure access: modern authentication comes to AVEVA PI System

- Claims-based authentication via OpenID Connect for AVEVA PI Vision end users
- AVEVA PI Vision authentication mode configurable from admin site
- Configure user access levels from AF identities
- User log-out capability

The image displays two overlapping screenshots of the AVEVA PI Vision administration interface. The top screenshot shows the 'Identity' configuration page with the following settings:

- Identity AF Server: CSAF-OIDC
- Authentication Mode: Windows OpenID Connect
- Prompt for Windows username and password when required

The bottom screenshot shows the 'User Access Levels' configuration page. It includes a table defining access levels for different user roles across various identities.

PI Vision is using OpenID Connect to authenticate users. User access levels are defined using AF Identities.

Identities: CSAF-OIDC	Administrator	Publisher	Explorer
Engineers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operators	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
World	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Manageable software

Seamless infrastructure

Increased value and scope of data

What is next for AVEVA™ PI Vision™?

Released: PI Vision 2023

Modern Authentication

OpenID Connect for the PI Vision main site

Released: PI Vision 2022

Display theming

Default symbol and display configuration for standardizing display styles

Enhanced event comparisons

New capabilities to compare events, including overlay attributes, freehand zoom

Trend cursor values

Easily view the changes in value as you drag the cursor across the trend

Units of measure

View AF attribute data in the unit of measure most applicable to your end users

In Development

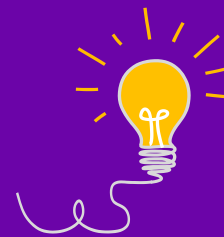
Modern Authentication

OpenID Connect for the PI Vision admin site and Display Utility

Advanced tag search

Ability to filter on specific tag attributes

See the Feedback Site for up-to-date information on features being evaluated!



Researching

More display editing capabilities

More process monitoring capabilities

More display and user management capabilities

521	Font Size
<input type="button" value="VOTE"/>	Can we have the option to specify font size for all symbols? There is currently no way to set font size in tables, bar chart/gauge, scale values in trends, etc.
246	Edit multiple objects at once
<input type="button" value="VOTE"/>	It would be nice to edit the colors, sizes, and how they are displayed in bulk all at one time. What I used to created in 1 minute in Coresight 2015 takes 10-15 minutes now.
208	Table: Archived Values
<input type="button" value="VOTE"/>	Provide a symbol in PI Vision which displays the timestamp and archive values of a data item in a table based on the display's time range. Customer Issue: Customer uses PI Vision to monitor the most recent 100 seconds of data on their production ...

What's coming in AVEVA™ PI Vision™ 2023 SP1?

Modern authentication: Domainless support

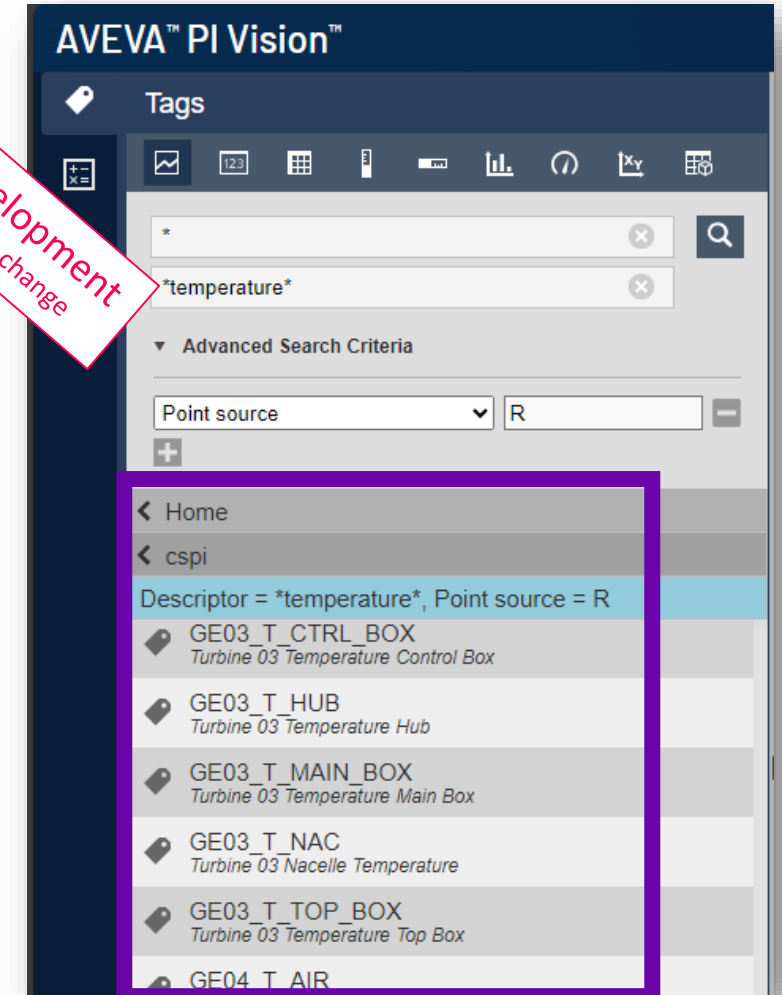
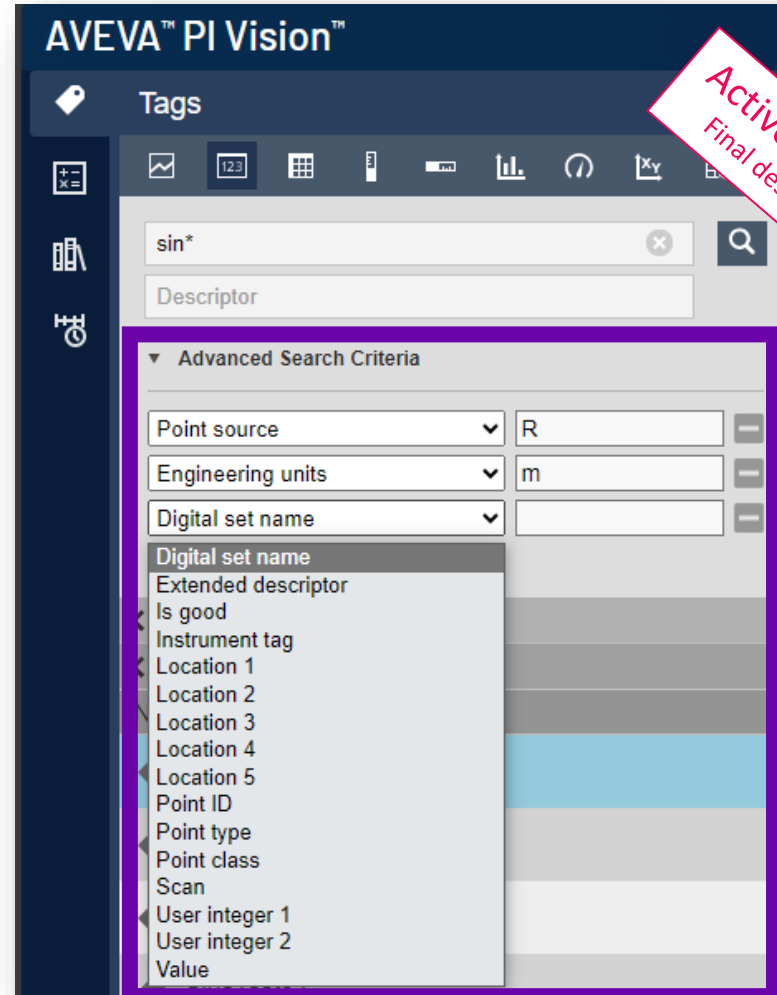
- Support OpenID Connect authentication to AVEVA PI Vision admin site and display utility
- Support architectures where AVEVA PI Vision is not joined to a domain
- Support a Kerberos-free configuration



What's coming in AVEVA™ PI Vision™ 2023 SP1?

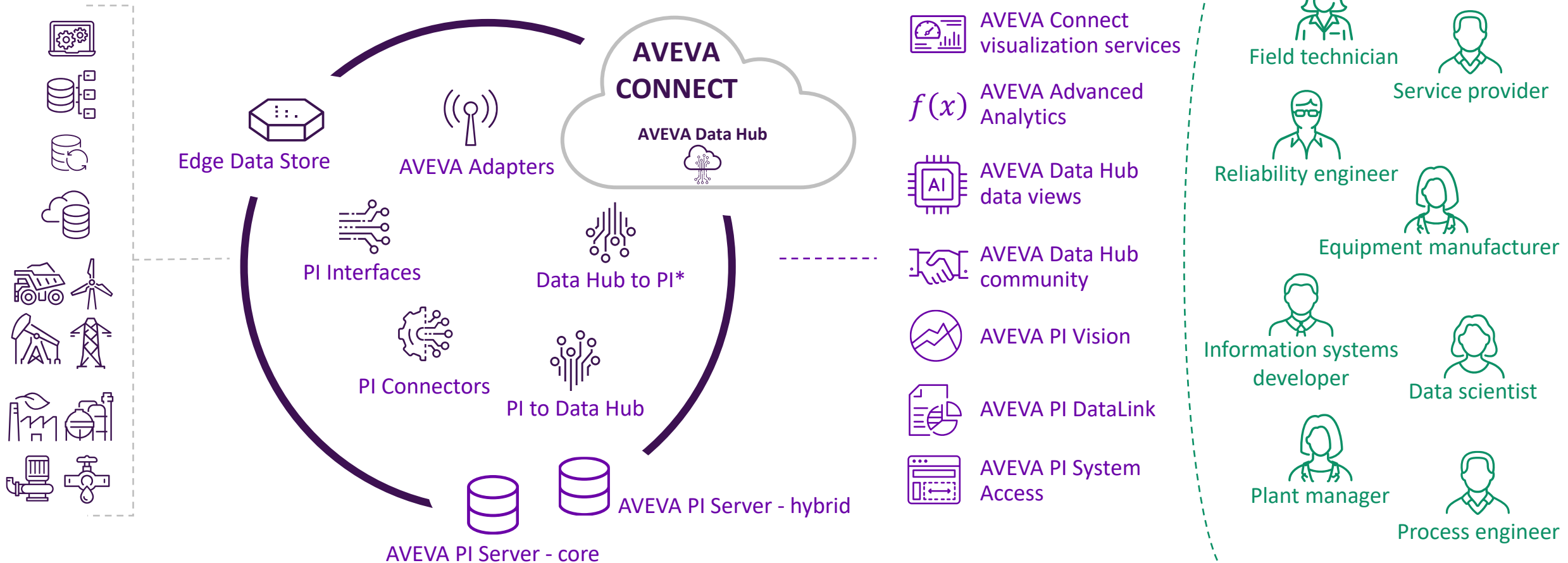
Advanced Tag Search

- Narrow tag search results by filtering on tag attributes
- View description alongside tag name in tag search results
- View current tag values on hover in tag search results



A hybrid data infrastructure from edge to plant to community

AVEVA PI Data Infrastructure



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Enterprise visualization through AVEVA™ Connect

Zoe Dodgson

AVEVA

How to address the changing workspace?

Information silos and inconsistency; slow responsiveness

- Local teams primarily own access to information and spend time manipulating the data into other forms
- Off-site leaders must wait for report and insight delivery
- Further inquiries or inconsistencies require restarting the information cycle



How to address the changing workspace?

Remote and virtual teams still need access to reliable data

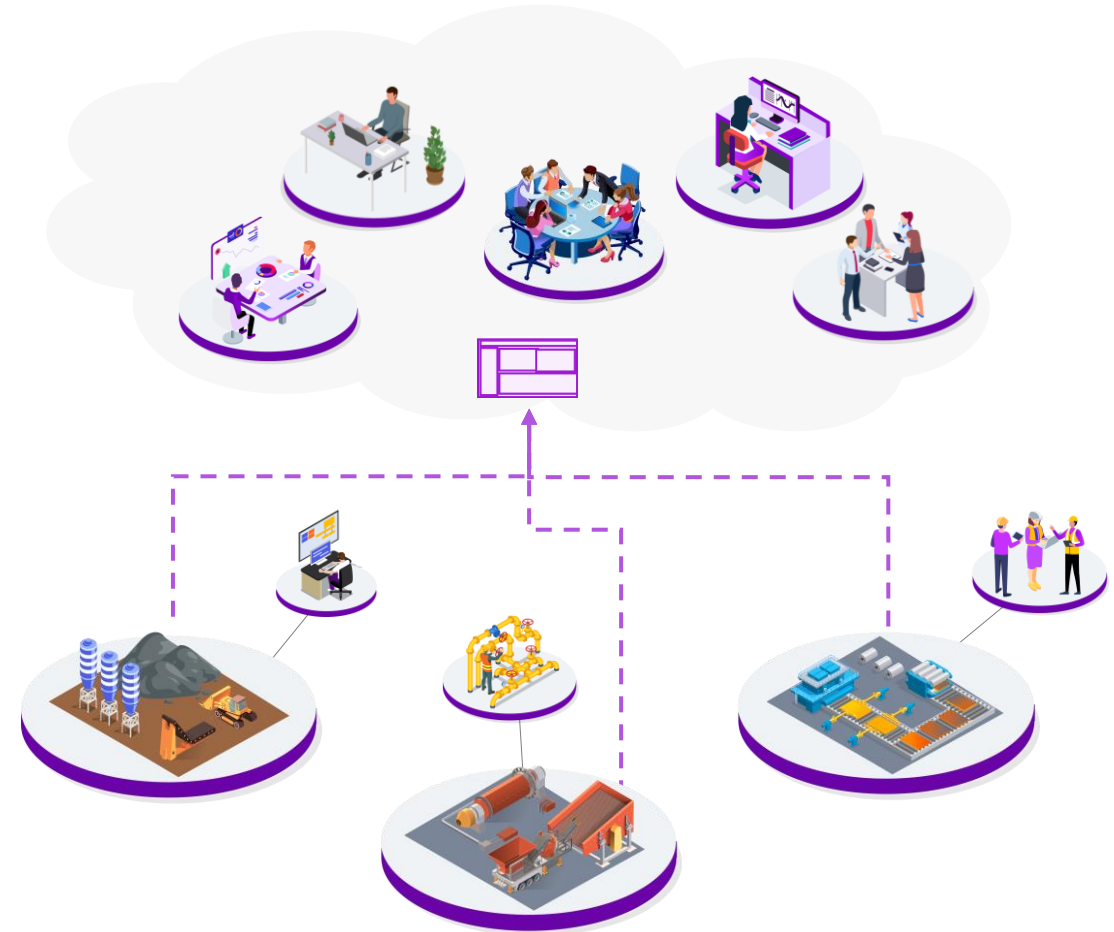
- Labor shortages, costs, and other dynamics are shifting workforces off-site
- These remote and virtual teams still require access to information generated on-premise
- Tunneling into on-site applications can present cybersecurity, accessibility, and maintenance challenges
- These users might still need to spend time extracting and manipulating data from on-premise tools



How to address the changing workspace?

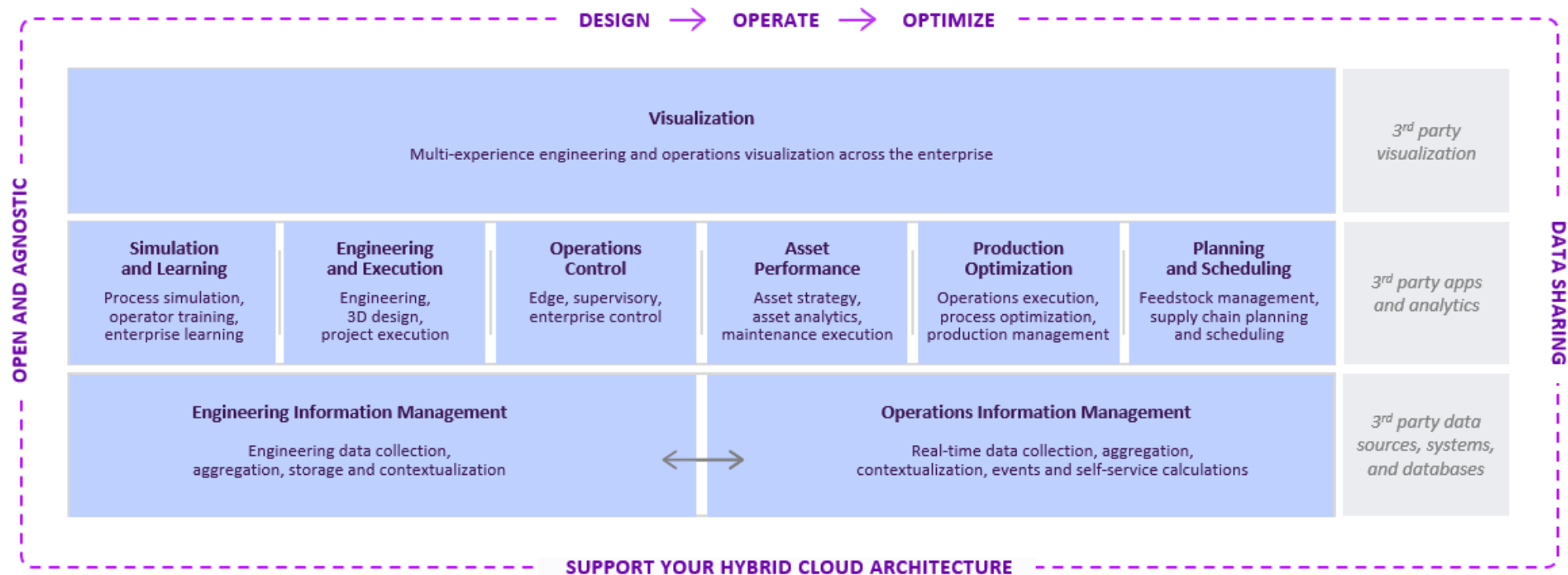
Aggregated data with cloud-based applications provides seamless access

- Utilizing the cloud to aggregate and display information reduces on-premise data-gathering hurdles
- Diverse teams across operations, reliability, sustainability and others can access the information that matters to them
- Users can retain the structure, design and format of their work
- Scalability of the cloud ensures short time-to-value for initial deployment with the ability to grow systematically

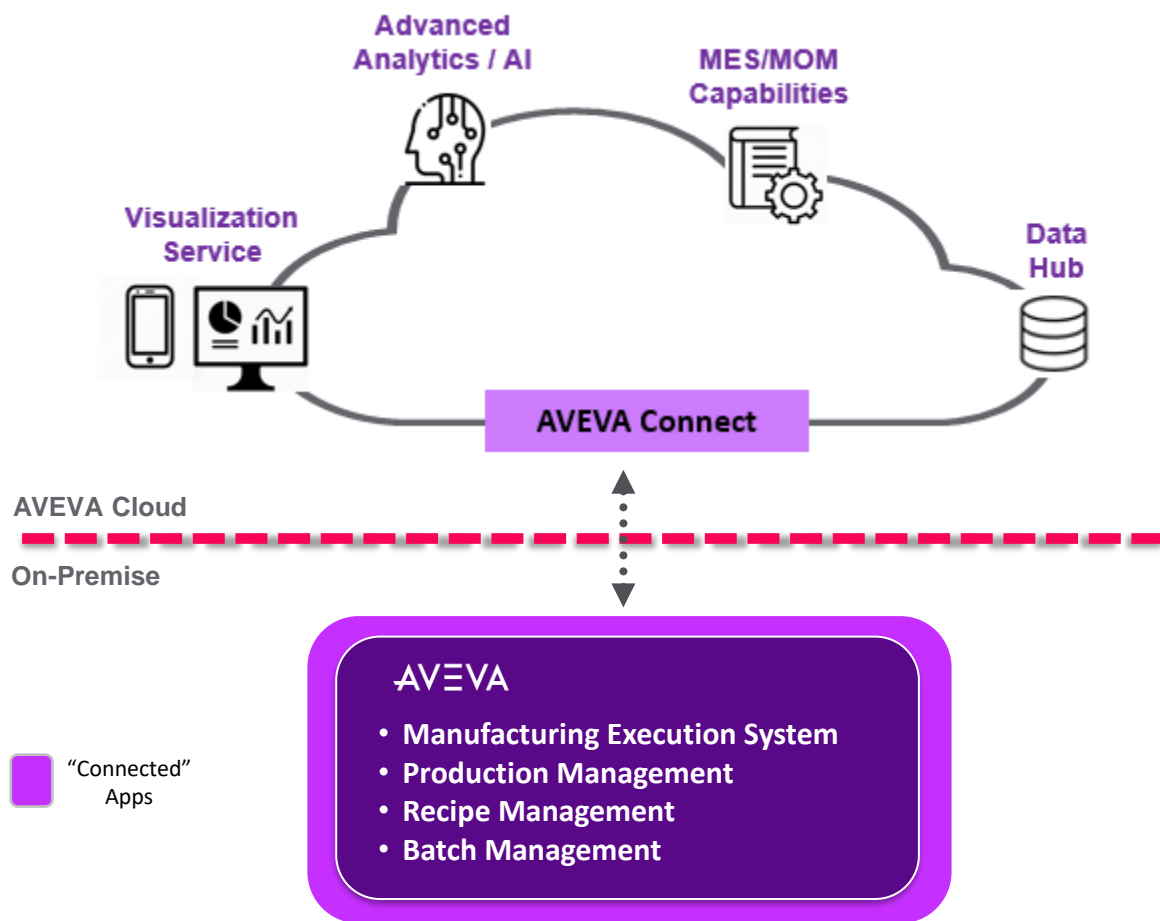


Aligning with the broader AVEVA strategy

AVEVA operations & execution portfolio aligning with broader AVEVA strategy of providing a single “industrial information management” and “visualization” service that spans from engineering to operations...



AVEVA cloud architecture



Native cloud apps & services

These cloud-based apps & services extend our on-premise (edge) and cloud-based capabilities with:

- **Data hub** - enterprise data historization & sharing
- **Visualization service** - enterprise visualization & dashboarding
- **Advanced analytics/AI** - predictive & prescriptive analytics
- **Engineering** – 3D design, project execution, & documentation
- **MES/MOM capabilities** - lightweight, fast time to value

“Connected” applications

- Value-add cloud services from AVEVA Connect
- Content & config managed centrally from AVEVA Connect

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Connect visualization

DEMO

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My folders > AVEVA Datahub



Data Hub

A cloud-native platform for aggregating, storing, enriching, accessing and analyzing real-time operations data from historians, edge devices and more.

Visualization

Composable dashboards using custom and pre-defined content for visualizing AVEVA Data Hub and other data sources

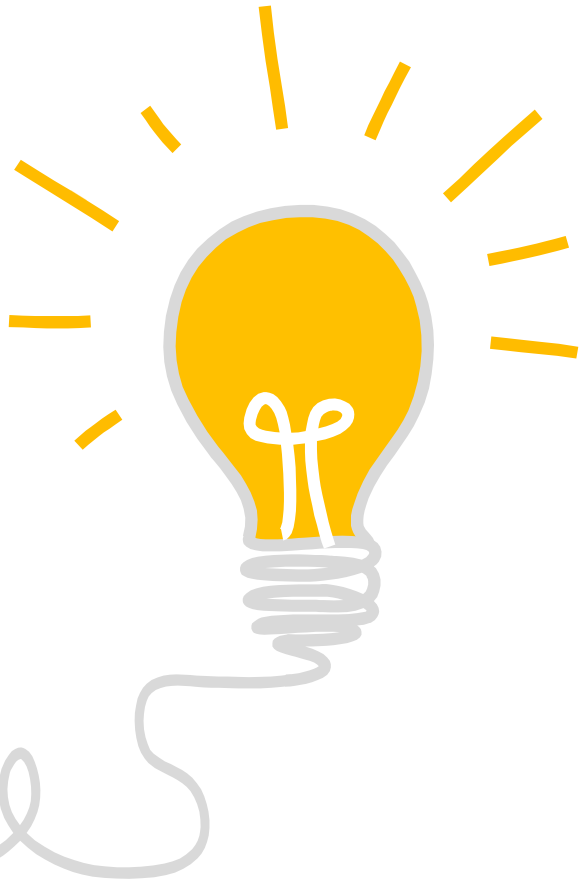
Learning Support What's available

Services catalog



Discover other cloud services from AVEVA.

Influence the AVEVA PI System roadmap



<https://feedback.aveva.com>

Let us know your product feedback!



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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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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.

Learn more at www.aveva.com