

The background of the image is a deep purple with a network of glowing, intersecting diagonal lines in shades of cyan and magenta, creating a sense of dynamic movement and digital connectivity.

AVEVA WORLD

ACCELERATE INDUSTRIAL INTELLIGENCE

AVEVA WORLD 2026, MILAN

Expand the reach, scale, and value of your operations with AVEVA™ PI Server

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AVEVA

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Portfolio, PI System

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AVEVA WORLD MILAN, MAY 2026

Agenda

Expand the reach, scale, and
value of your operations with
AVEVA™ PI Server

Allianz MiCo
Milano

Hybrid PI Server and AVEVA PI Data Infrastructure

AVEVA™ PI Server roadmap: Major themes

Key takeaways

Q&A

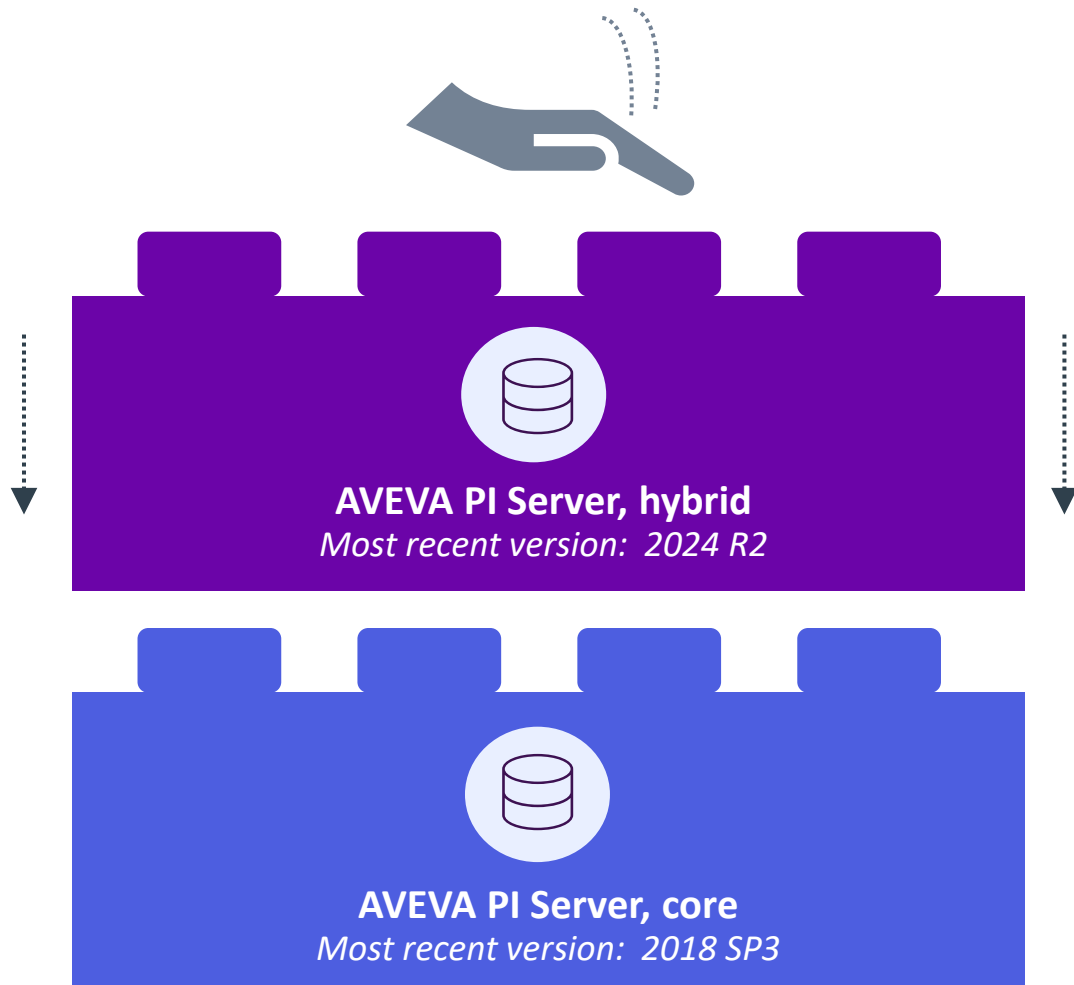
AVEVA WORLD 2026, MILAN

Hybrid PI Server and AVEVA PI Data Infrastructure

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Complementary value of PI Server branches

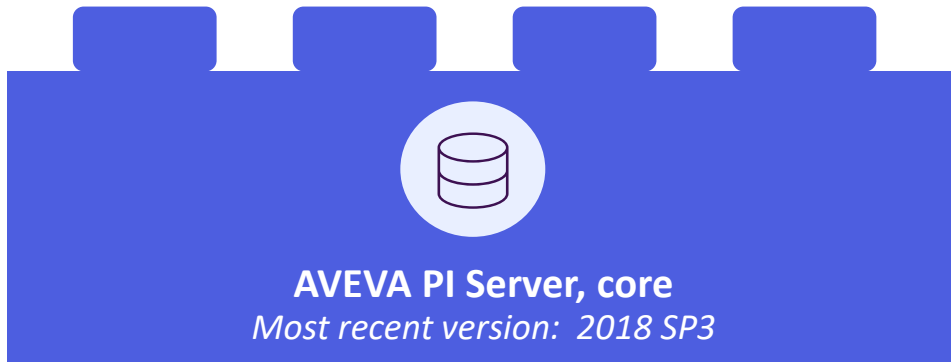
Flexibility to deploy best option across environments, supporting varied system data needs



- ✓ Hybrid branch -> **Enterprise-level** data management capabilities
- ✓ Core branch -> Stay **up to date** and **secure** with as needed patches for environments with low tolerance for software changes

Complementary value of PI Server branches

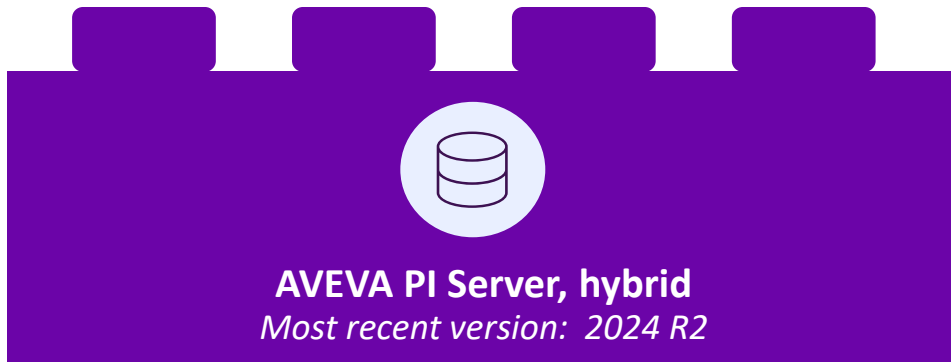
Keep your environment current and stable with minimal effort with core PI Server



- ✓ Stay **up to date** and **secure** in environments with **low tolerance for change**
- ✓ Most updates come in the form of **as-needed patches**
- ✓ New features come to the core PI Server via **major upgrade** every few years
- ✓ Major upgrades are **communicated well in advance** to allow you to plan for adoption

Complementary value of PI Server branches

Evolve your operations data infrastructure with hybrid PI Server



- ✓ Hybrid PI Server evolves your real-time data infrastructure with **new and innovative enterprise-level features**
- ✓ Releases occur on a regular schedule, providing **continuous new features** that deliver **consistent value**
- ✓ Available as part of **AVEVA PI Data Infrastructure**

Evolve. Trust. Expand.

Industrial intelligence
Predictive maintenance
Digital twins
Process optimization
Workforce augmentation
Automation



AVEVA Edge Data Store

AVEVA PI Server

CONNECT

AVEVA PI Data Infrastructure

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AVEVA™ PI Server roadmap: Major themes

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AVEVA PI Server & PI Data Infrastructure

Expands the **reach** of your operations data to more people via more modern authentication methods



Supports expanded **scale** of PI Server as more and more data is added to PI System



INCREASES IN
PERFORMANCE AND
AGILITY AT SCALE!



Consistently delivers new **value** to PI Server via new hybrid features and continued investment in on-premises PI System



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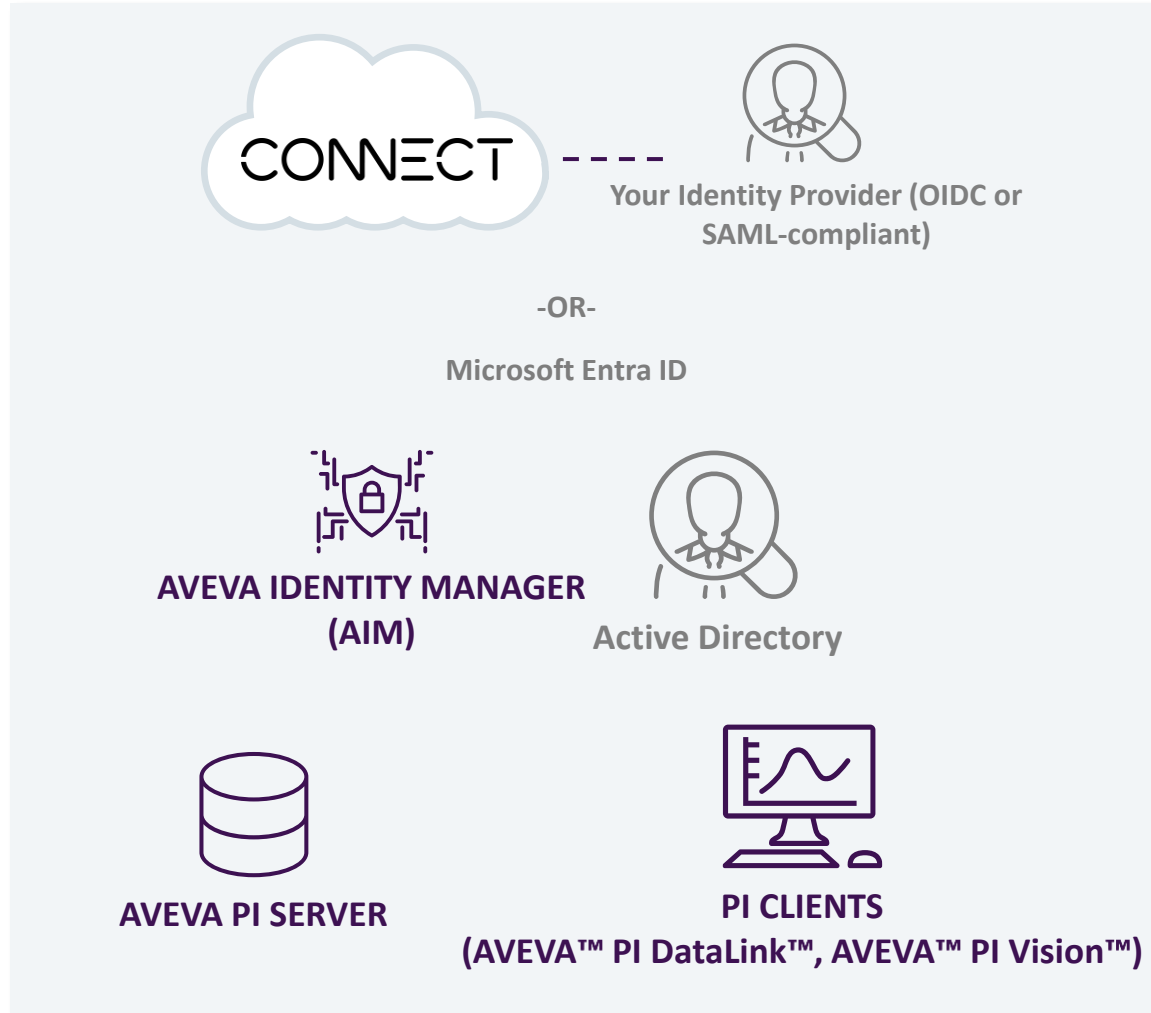


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Expanded reach: Modern hybrid authentication

More simplified, flexible, and scalable security with support for OpenID Connect (OIDC)

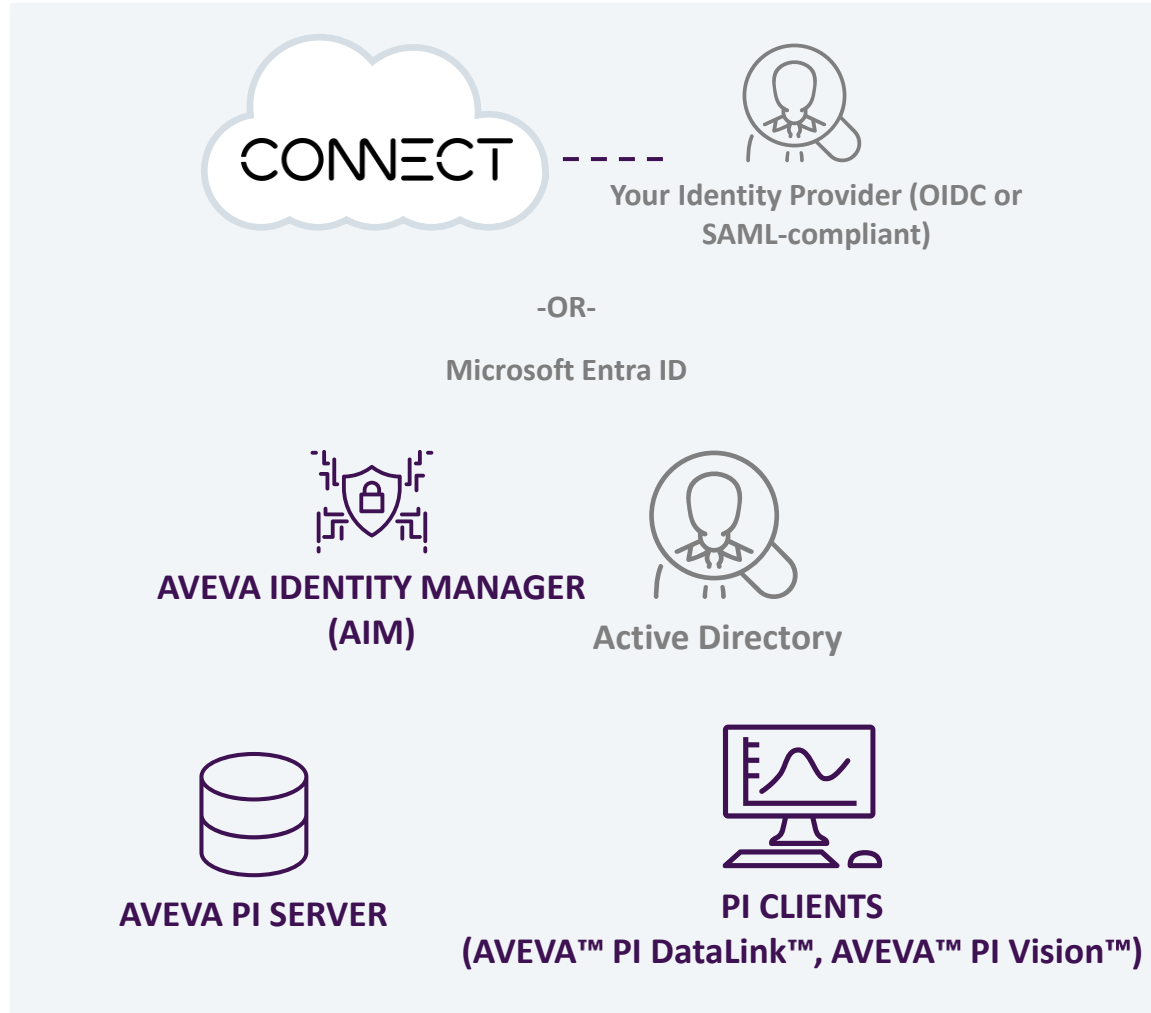


AVEVA PI Server 2023

- **Expanded authentication options** to meet your enterprise needs
- **Enhanced security** with federated identity and access management
- **Reduced IT admin burden**
- **Improved user productivity** with single sign-on (SSO)

Expanded reach: Modern hybrid authentication

More simplified, flexible, and scalable security with support for OpenID Connect (OIDC)



AVEVA PI Server 2023

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AVEVA PI Server 2024

- Support for **automatic TLS certificate rotation and renewal**
- Support for **TLS 1.3**

Expanded reach: Modern hybrid authentication

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NOW

New in PI Server 2024 R2: Improved claims support via AIM server redundancy

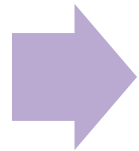


High-availability for AVEVA Identity Manager configured with AVEVA PI System

- **Redundant Single Sign-On Servers (RSSOs)** that share SSO capability of System Management Server
- **Automatic failover** between RSSOs for the claims-aware PI System

Resilience

robust and highly
available claims-based
authentication



Simplicity

CONNECT as external
identity provider



Flexibility

securely support hybrid
environments

Expanded reach: Modern hybrid authentication



Coming Soon: Native OIDC support for back-end services

Next major AVEVA PI Server release will:

- include **native OIDC support for PI Analysis Service and PI Notifications**
- allow you to implement a fully, **end-to-end claims-aware** PI Server architecture
- **mitigate risks** posed by potential deprecation of legacy authentication options

AVEVA PI Server & PI Data Infrastructure

Expands the **reach** of your operations data to more people via more modern authentication methods



Supports expanded **scale** of PI Server as more and more data is added to PI System



INCREASES IN
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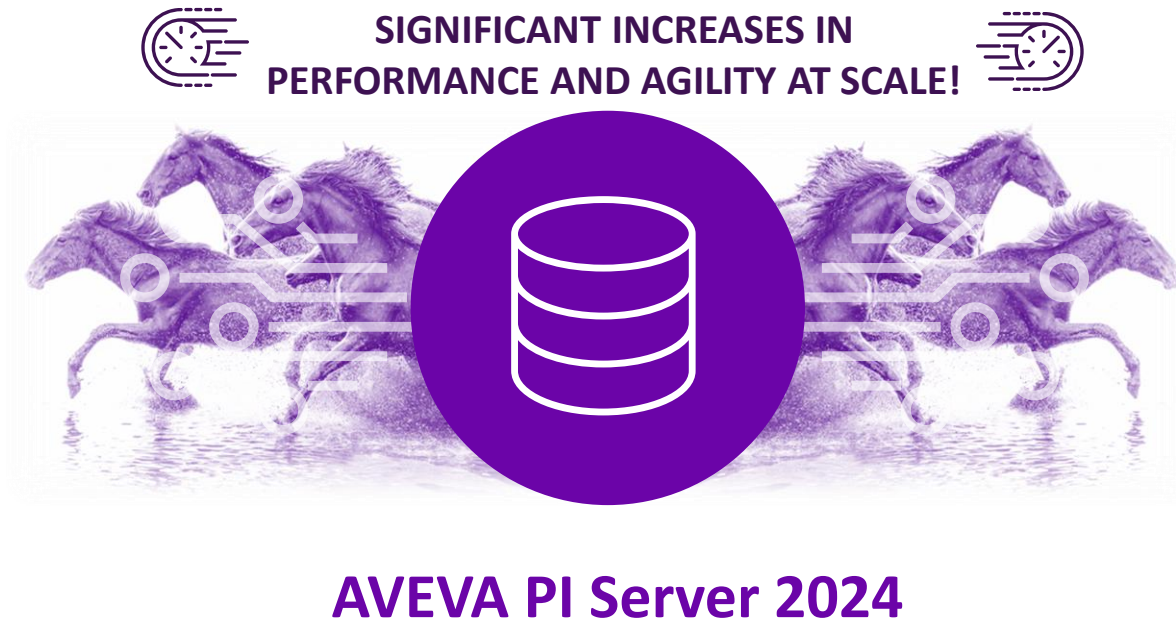


Consistently delivers new **value** to PI Server via new hybrid features and continued investment in on-premises PI System



Expanded scale: Handling more data coming into PI System

Meeting the challenge of increasing volumes of data, analytics, and data agility

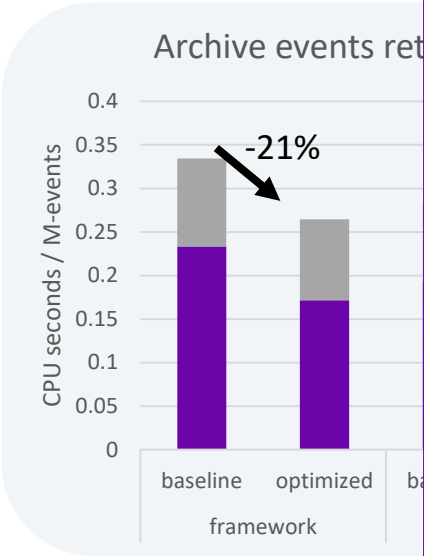


- **Increased scale** for asset analytics
- **More recalculations**, less performance hit
- **Quicker response** to outages
- Improved data read performance, read cache tuning

Expanded scale: Handling more data coming into PI System

AVAILABLE
NOW

New in PI Server 2024 R2: Improved performance for AF SDK PI tag data retrieval



TODAY, @ 4:15 pm
Brown 3 - Level 2

How AVEVA™ PI Data Infrastructure has
accelerated analytics insight

ives data from

for multi-event

tion/power

on, PI Web API,

baseline optimized baseline optimized
framework net8

Expanded scale

Handling more data coming into AVEVA PI System

More usage
of Asset Analytics
presents challenges,
requiring **constant**
innovation.

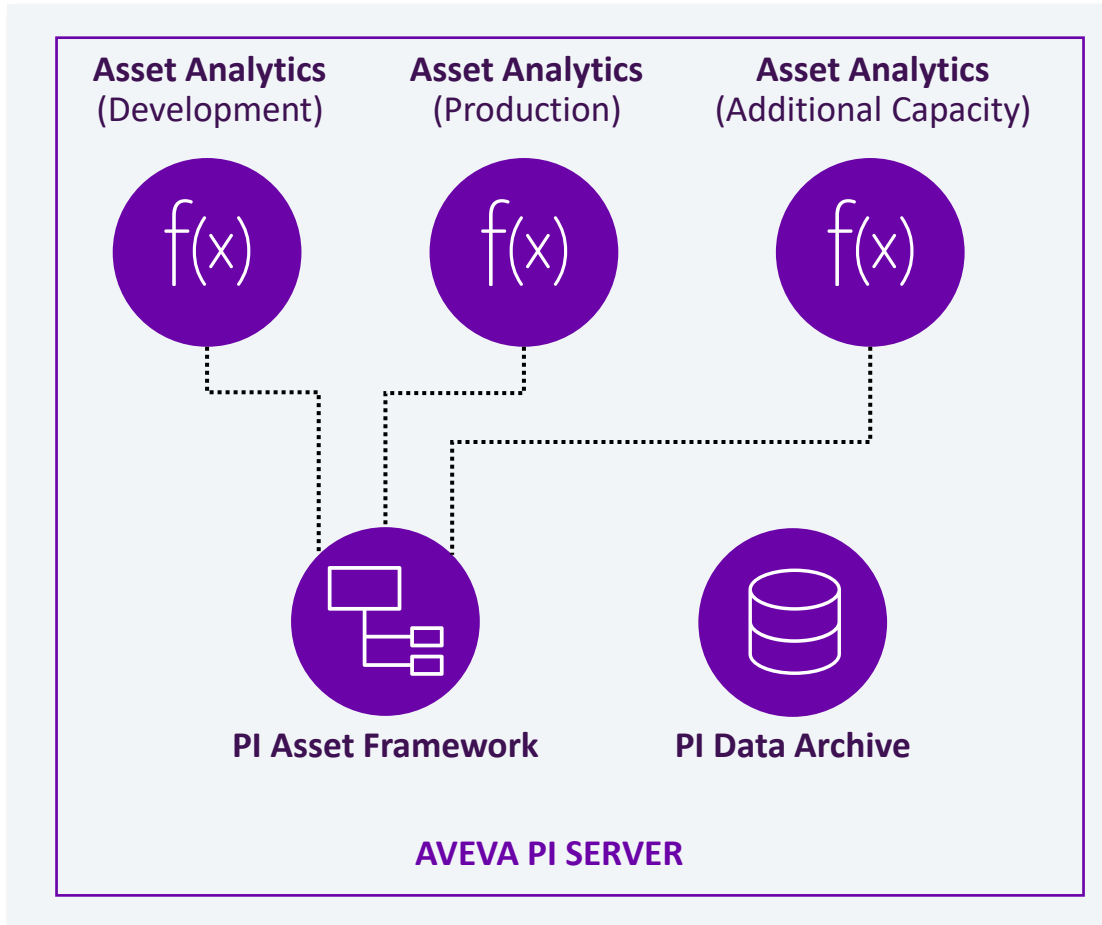
Scale-related challenges

- Increases in **resource consumption**
- More **complex manageability** of analyses
- Hard to differentiate **critical from non-critical** analyses
- More difficult **troubleshooting issues**

Scale out of Asset Analytics



Multiple Analysis Service instances per Asset Framework server



- Clear **isolation**, **control** and **ownership** of analytics
- **Safer testing** and **faster troubleshooting** without production risk
- Scalable analytics with **consistent, predictable performance**

AVEVA PI Server & PI Data Infrastructure

Expands the **reach** of your operations data to more people via more modern authentication methods



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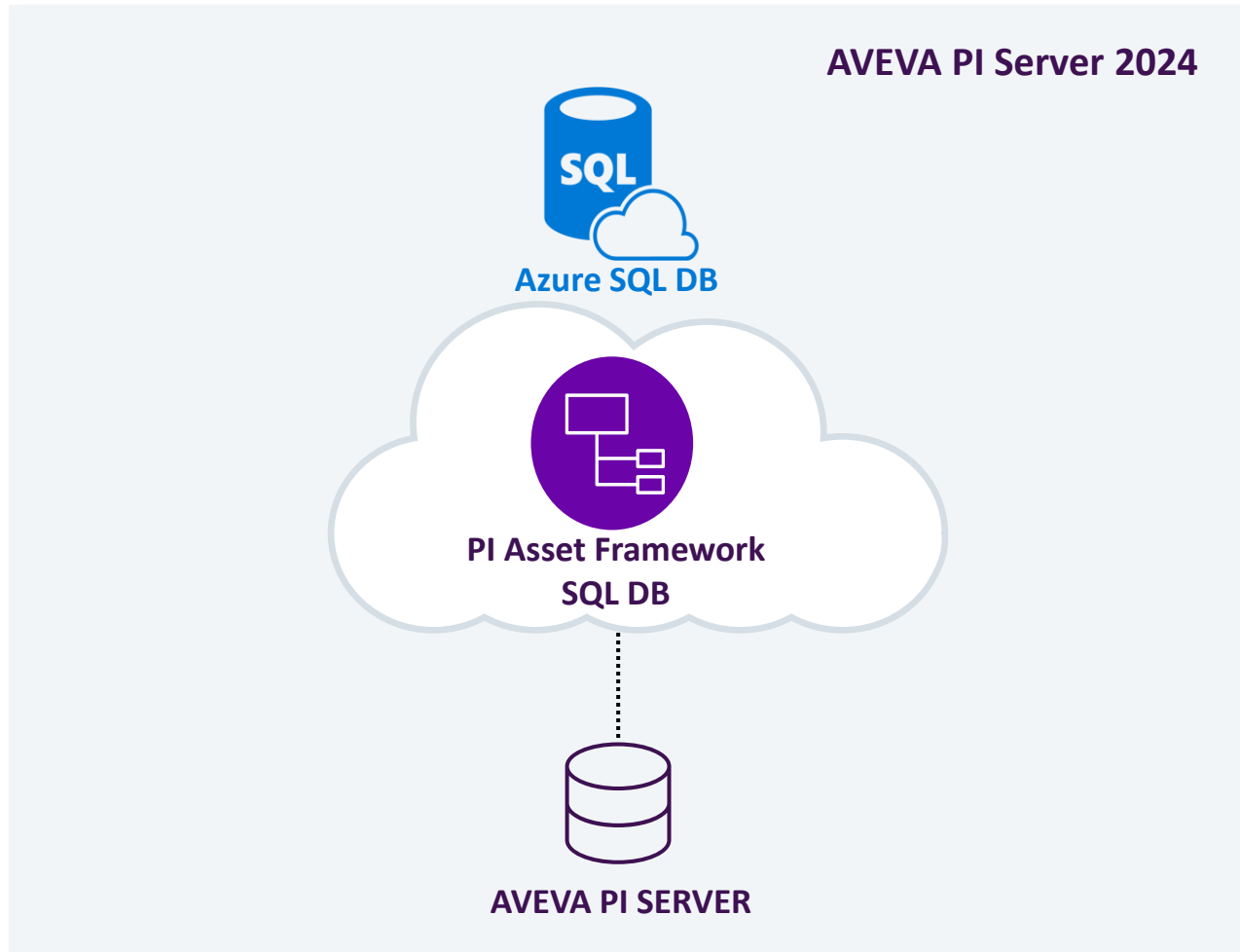


Consistently delivers new **value** to PI Server via new hybrid features and continued investment in on-premises PI System



Expanded value: Hybrid features and investment in PI Server

New cloud-managed SQL options for AF Database

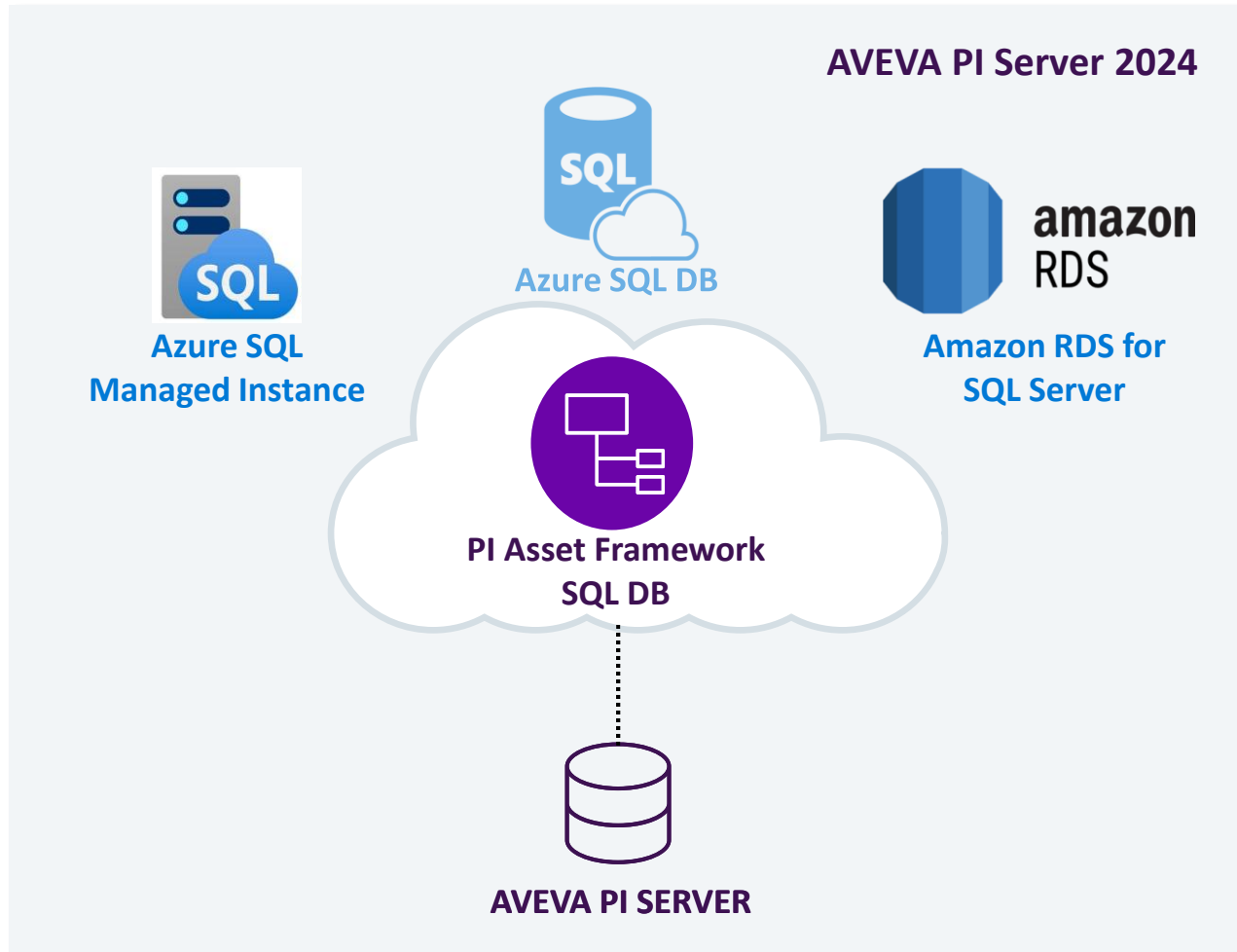


- **Extend hosting options** for PI Asset Framework SQL database to the cloud
- **Delegation of server and admin database tasks** (patching, updates, backups, high availability)
- **Decreased infrastructure costs and admin work** so you can focus on operations data value
- Service Level Agreement that **promises 99.9% availability**
- **Dynamically-adjusting compute** to match customer needs

Expanded value: Hybrid features and investment in PI Server

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New cloud-managed SQL options for AF Database



- **Extend hosting options** to include Microsoft SQL Managed Instance and Amazon RDS for SQL Server
- Support for **varying cloud architectures** and providers
- Client tools (PI System Explorer, afdiag) **work seamlessly** regardless of back-end AF storage

Expanded value: Hybrid features and investment in PI Server

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Comprehensive Audit Trail support for cloud-managed SQL

- Review changes to PI AF objects
- Uses **SQL Server Change Data Capture (CDC)** to generate audit trail
- Supported in most on-premise versions of Microsoft SQL Server

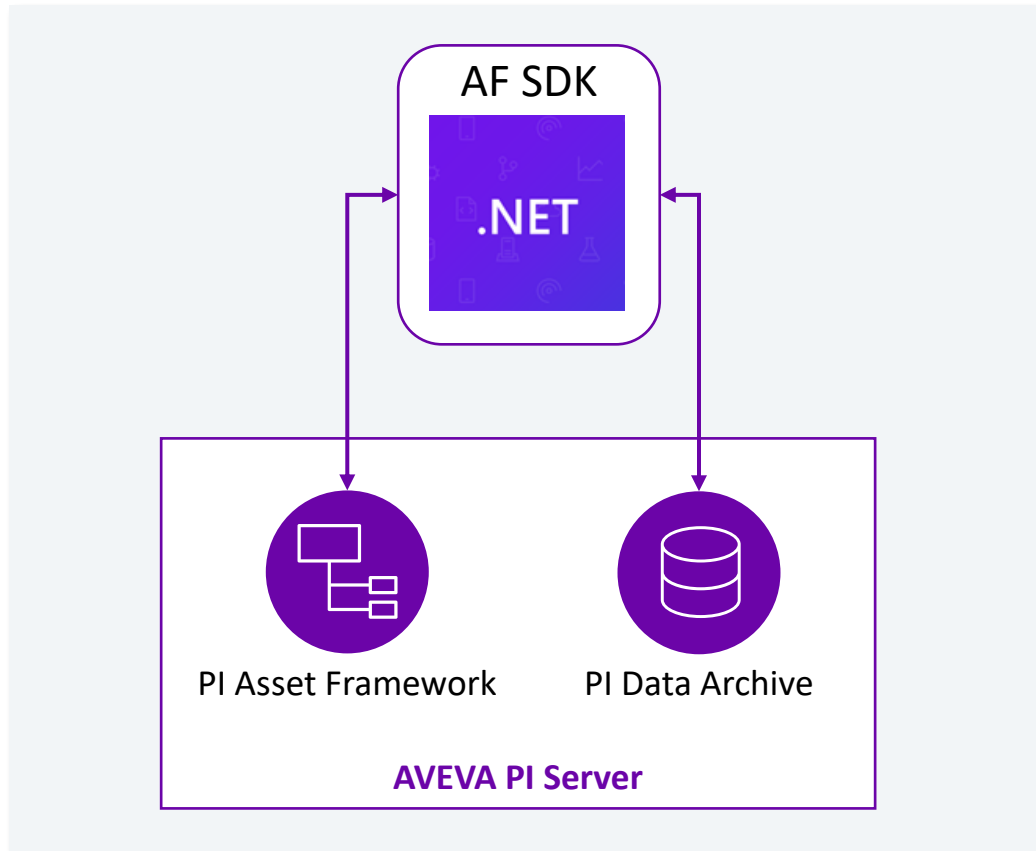
The screenshot displays the 'AF Audit Trail Details' window. On the left, the 'AF Audit Trail' panel shows a list of audit trail entries with a date filter set to '3/24/2025 2:46:30 PM'. The main panel shows the details for a specific audit trail entry. The 'Path\Name' is 'DemoElement', the 'Identity' is '46094a61-08e0-11f0-9aef-000d3a309652', and the 'Date' is '3/24/2025 2:46:30 PM'. Below this, a table lists the audit trail data for the 'DemoElement'.

Action	Name	Id	Property Name	Old Value	New Value
Insert AFELEMENT	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	id		46094a61-08e0-11f0-9aef-000d3a309652
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	rid		3
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	fkdatabaseid		613A3E4E-CA1E-40...
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	name		DemoElement
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	description		
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	elementclass		0
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	fkownerid		NULL
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	hasmultipleversions		0
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	fkdbreferencetypeid		C3A46788-FB66-40...
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	ownerstrength		0
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	categoriesstring		
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	changedby		8c6bafsvr1\madmin
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	fksecurityid		04044e48-3f91-498...
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	hasAnalyses		0
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	hasNotifications		0
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	strid		NULL
	DemoElement	46094a61-08e0-11f0-9aef-000d3a309652	fksecurityowner		1

AF SDK support for latest .NET implementation

AVAILABLE
NOW

Enable your modern applications to more easily consume AVEVA PI System data



- Available via public **NuGet package**
- Build custom PI System applications on **modern technology** stack
- **Decrease development time** and platform dependencies
- Increase applications' life cycle, performance, and compliance



Continued investment in PI Server

Future-proofing PI Server via critical infrastructure updates

Currently, the PI Server only supports timestamps through 03:14:07 UTC on January 19, 2038.

- Existing PI Server timestamps are based on Unix time, starting on 1-Jan-1970, in a 32-bit signed integer.
- Storage will overflow in the year 2038.
- Forecasting data years into the future will be a challenge if not addressed.



Continued investment in PI Server



Update timestamp logic to accept dates beyond January 2038

- Apply forecasting and predictive analytics to **go beyond those timestamps**
- Safely and securely use PI Server to store operations data for **decades into the future**
- **Move data seamlessly** between on-premise PI System and CONNECT with **no timestamp limitations**
- **Increased precision** of timestamps

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AVEVA PI Server: Key takeaways

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AVEVA PI Server – Key Takeaways

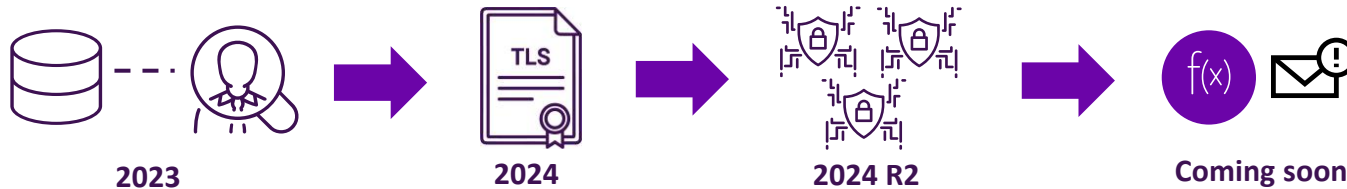
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AVEVA PI Server – Key Takeaways

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Supports e

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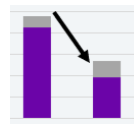
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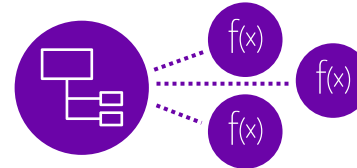
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2024



2024 R2



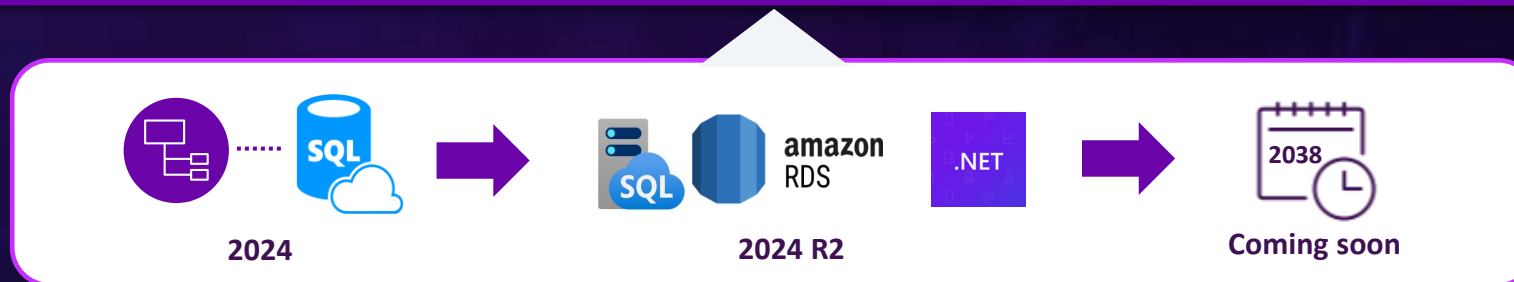
Coming soon

AVEVA PI Server – Key Takeaways

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Sessions of Interest – Day 2, May 20th

AVEVA™ PI Vision™ roadmap: From self-service to strategic insight

AVEVA PI Vision

@ 12:45 pm

Brown 3 - Level 2

Weaving a resilient AVEVA connectivity fabric to support every data user

Industrial data connectivity

@ 3:30 pm

Brown 3 - Level 2

How AVEVA™ PI Data Infrastructure has accelerated analytics insight

High-performance analytics

@ 4:15 pm

Brown 3 - Level 2

Beyond the data stream: Compounding AVEVA PI System value with complementary AVEVA solutions

Increasing value of PI System data

@ 5:00 pm

Brown 3 – Level 2

BREAKOUTS & ROUNDTABLES

**(Repeat) Your Workflow, Your Voice:
Prioritizing AI for AVEVA PI System &
AVEVA Operations Control**

AVEVA Discussion Group

Options @ 1:45 pm & 2:45 pm

Amber 5 - Level 2 - "The Hive"

Roundtable (Hive & Hub)

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Sessions of Interest – Day 3, May 21st

Standards for asset modeling with AVEVA™ PI Data Infrastructure

AVEVA PI Vision deep-dive

@ 9:00 am

Spotlight Theatre - Level 0

User-friendly AVEVA Adapter configuration

AVEVA Adapters

@ 9:30 am

Spotlight Theatre - Level 0

Accessing your AVEVA PI Server through OPC UA

AVEVA PI OPC UA Server

@ 10:30 am

Brown 3 - Level 2

Supporting expanding needs with AVEVA™ PI Vision™ 2025

Session topics

@ 11:15 am

Brown 3 - Level 2



BREAKOUTS



AVEVA

Visit Us!

Stop by these booths in the innovation zone
for demos and additional information:

Transform real-time data into actionable information with AVEVA PI Server

AVEVA PI Data Infrastructure

AVEVA PI Server

Visualize your operations data with AVEVA PI Vision

AVEVA PI Data Infrastructure

AVEVA PI Vision

OT + IT data connectivity, securely between on- premises and cloud systems

Connectivity

Enterprise data integration

Databricks, Snowflake



Visit Us!

Stop by these booths in the innovation zone for demos and additional information:

Intelligent data processing flows for real-time cleansing, filtering, and transformation

AI & analytics

Connectivity

Crosser

AVEVA Technical Communities

PI Square

Heroes HQ

CONNECT

Hands-on with CONNECT

Try it here

Cyber security and resiliency



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.

Visit us in the AVEVA PI Data Infrastructure and
AVEVA PI Server booths in the Innovation Zone to
learn more!

Thank you!

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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.

Learn more at www.aveva.com