

SOLUTION BRIEF

AVEVA™ PI Data Infrastructure

Hybrid, edge-to-cloud data management for industrial operations

Experience data without boundaries—without the limitations of data silos, the need for expensive infrastructure, or having to overcome organizational borders. AVEVA PI Data Infrastructure empowers you to make high-fidelity, real-time operations data available to more decision-makers and data users in your enterprise and beyond.

Modern industrial operations produce valuable data in an expanded environment of connected systems, remote sites outside the primary control network, mobile assets, and IIoT devices. Increasingly, stakeholders outside the plant are using this data to achieve industrial transformation and sustainability, increase asset reliability, drive AI algorithms, and collaborate with third-party partners and service providers in real time.

AVEVA PI Data Infrastructure is an integrated, hybrid solution you can use to collect, enrich, visualize, and share operations data anywhere it can be valuable: at the industrial edge, within and across multiple plants and operating sites, in the cloud, and with a community of trusted business partners.

Benefits

- Collect and store high-volume, vendor-neutral data streams automatically from hundreds of industrial systems, including remote and mobile assets and IIoT devices.
- Aggregate real-time and historical data in the cloud to instantly scale and easily integrate with other data and applications.
- Share select data securely via the internet with trusted stakeholders inside and outside the company.
- Move industrial data seamlessly from edge to plant to cloud to community, as needed.
- Purchase via subscription to easily expand without the need to purchase new products or licenses.

Key functionality

To make it easier to deploy a hybrid industrial data infrastructure, AVEVA now offers a single software subscription that provides access to all the functionality you need to centrally manage data coming from the industrial edge, any number of plants, and relevant cloud-based data sources and applications. This single solution offers:

Visibility of data across the enterprise:

Access and act on real-time data, even when it comes from geographically distant locations. Leverage the capabilities of AVEVA Edge Data Store: software for collecting, storing, and accessing data from sensors, IIoT devices, mobile assets, and other sources outside your primary control network. Deploy this lightweight, multi-platform software on low-cost Windows or Linux devices.

Vendor-neutral data collection:

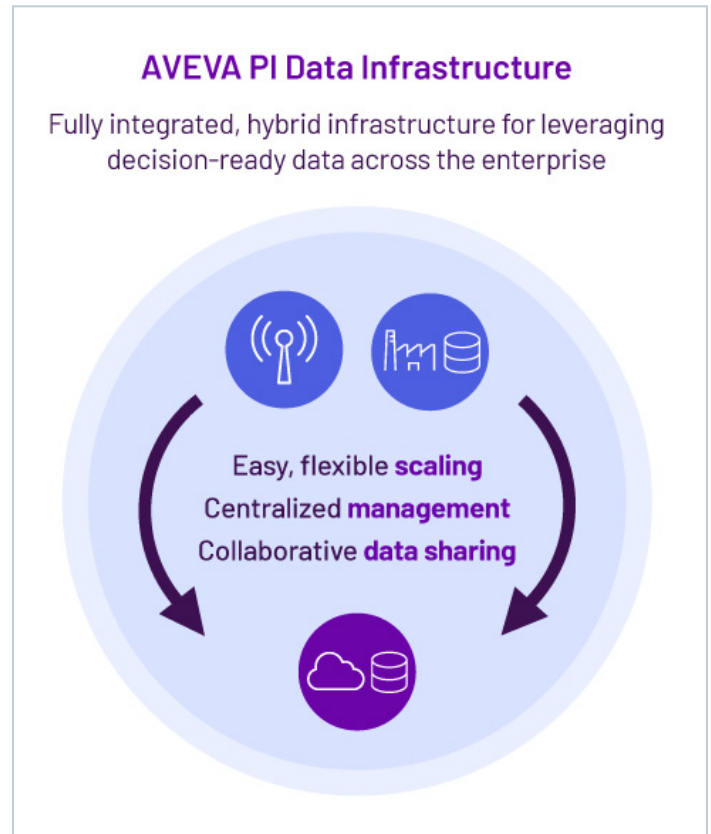
Connect to any data source, irrespective of vendor, location, or environment. AVEVA supplies a full set of off-the-shelf interfaces, connectors, and adapters to enable automatic, high-volume, high-fidelity data collection.

High volume storage and processing:

Collect, enrich, and process time-series operations data using the proven, high-performance capabilities of AVEVA™ PI System™. Much more than a data historian, AVEVA PI Data Infrastructure can store and process huge volumes of historical, real-time, and future data, along with its associated context.

Cloud scalability and easy access:

Use, share, and analyze operations data in the cloud by leveraging AVEVA™ Data Hub SaaS services from within the AVEVA™ Connect common cloud platform. Aggregate data from multiple sites, give users outside the plant access to real-time data views, and share select data securely with trusted business partners and service providers.



AVEVA PI Data Infrastructure's integrated edge-plant-cloud components

Enterprise-wide visualization:

Leverage the capabilities of AVEVA Connect, common cloud platform, visualization services to create custom data views and dashboards that combine operations data with information from engineering or manufacturing execution systems (MES). Connect visualization complements the capabilities of AVEVA™ PI Vision™, the self-service tool for visualizing AVEVA PI System data.

Data without boundaries

The edge-to-cloud architecture of AVEVA PI Data Infrastructure lets you move data freely within your operating environment, capture and store data generated outside your process control network, and share data securely in real time with trusted stakeholders and applications beyond the company network.

AVEVA PI Data Infrastructure forms a digital data highway that enables fast, secure transfer of high-fidelity industrial data anywhere it's needed, with complete data integrity and end-to-end security.

Meaningful contextualization

As a provider of software to industrial enterprises for more than four decades, AVEVA lets you enrich raw data with descriptive metadata and lets users build flexible, reusable data structures to represent the physical or logical context of the data.

Modern authentication

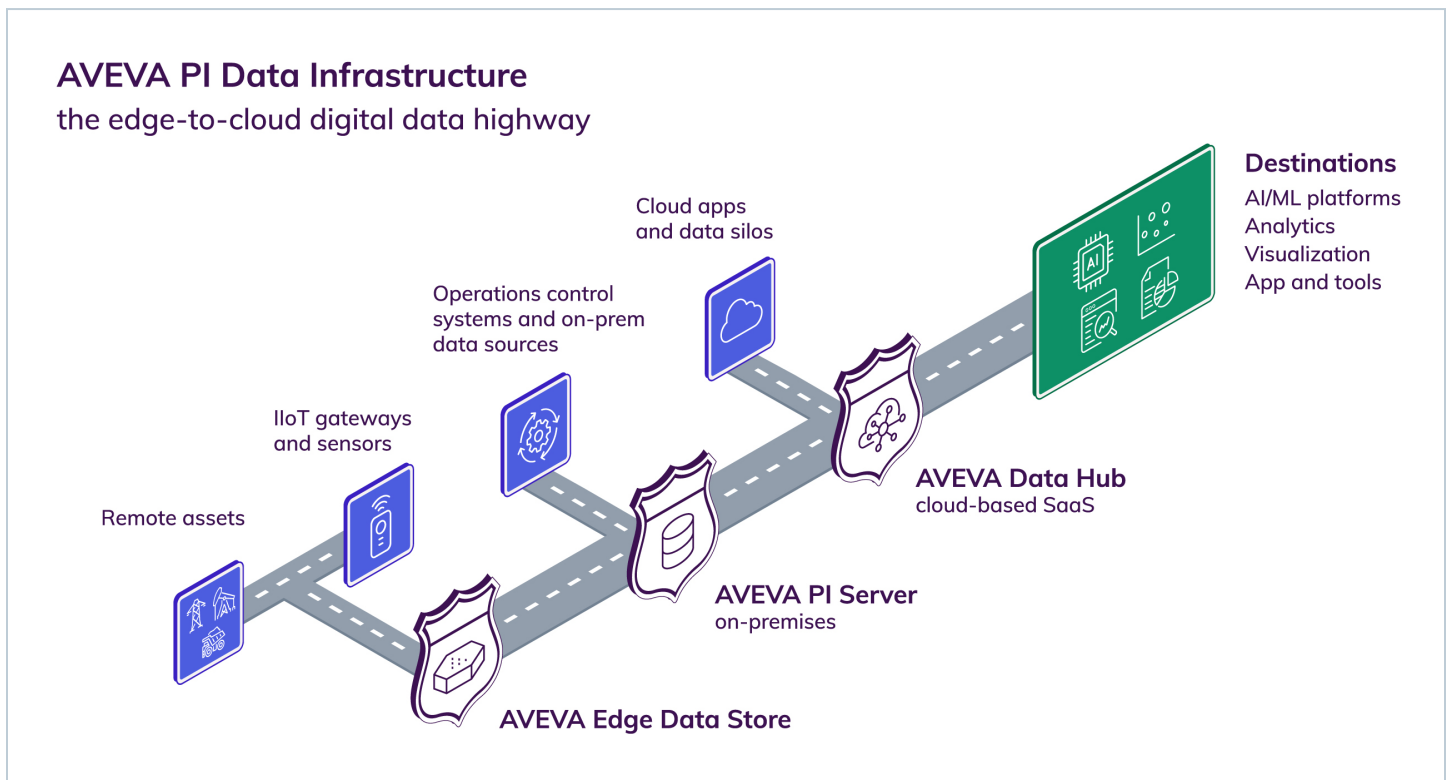
The latest release of AVEVA PI Server delivers modern, claims-based authentication via OpenID Connect—

the leading web standard for single sign-on and identity provision. With OpenID Connect, you can integrate your data management software with your enterprise's common source of account authentication.

Flexible hybrid architecture

A hybrid architecture allows you to locate data storage and processing where it is most efficient for your data users. For example, you can feed edge data directly to local applications to support field engineers. Or you can aggregate data from multiple plants or sites in the cloud to support enterprise-level monitoring and analysis. A cloud-based data hub also lets you share data easily with third-party data scientists and service providers.

The components of AVEVA PI Data Infrastructure work together seamlessly, out-of-the-box, to support a wide variety of use cases and accelerate time-to-value for industrial applications that rely on real-time data.



Flexible purchasing



AVEVA PI Data Infrastructure is sold as a single subscription, offering access to multiple components, and is priced according to the level of your expected usage. You can easily scale your subscription up or down as your business needs change. Flexible purchasing also reduces your upfront infrastructure costs and IT overhead. And managing a single subscription, versus multiple solution licenses, makes it easier for you to add capacity or new users, reduces the paperwork involved in contracting, and accelerates your return-on-investment.

You purchase AVEVA PI Data Infrastructure from the AVEVA Connect portal using Flex credits. The credit system lets you adjust your data infrastructure without new purchasing contracts, so you can address new use cases as they emerge and see the value from your data more quickly.

Learn more about the AVEVA™ Flex [subscription program](#).

For more information about AVEVA PI Data Infrastructure, please contact your local sales representative or visit our website at <https://www.aveva.com/en/products/pi-data-infrastructure/>