



AVEVA™ PI Data Infrastructure Service Description

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AVEVA PI Data Infrastructure on CONNECT

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Document Purpose and Audience

Document Purpose

This document describes AVEVA PI Data Infrastructure on CONNECT, including key features and limitations, as well as the operational parameters.

This document must be read in conjunction with the CONNECT data services service description, which describes the common services available for all functional digital services on CONNECT. Any additions or exceptions to the common services are described in this document.

Audience

The audience of this document are IT departments and business decision makers who are investigating whether to leverage AVEVA cloud offers in their own IT landscape.

About AVEVA PI Data Infrastructure on CONNECT

The AVEVA PI System is a data infrastructure solution for real-time data management, allowing users to leverage real-time operations data to drive operational excellence and create business value. The multiple layers of the system allow users to collect, store, contextualize, visualize, and analyze asset and operations information. It is now more commonplace to see multi-site, distributed PI System deployments that brings the challenge of information governance and configuration across the enterprise and aggregating site-level data with a standard-driven approach. AVEVA PI Data Infrastructure complements the PI System by leveraging the power of CONNECT (AVEVA's industrial cloud platform) and CONNECT data services (AVEVA's cloud-native data management software as a service) to add transformational value to business operations.

AVEVA PI Data Infrastructure augments the on-premises PI System with cloud-enabled functionalities, providing enough data scope and scale to manage ever increasing data sources as well as enable enterprise collaboration. The solution provides a data infrastructure expanding from edge to plants to community.

AVEVA PI Data Infrastructure provides more flexibility for scaling data usage in large, multi-site deployments, giving users more control over the architecture and deployment of their PI System.

Key Benefits

- Connecting on-premises PI Systems to CONNECT allows an enterprise or globally deployed system to be more easily managed. The system can be viewed in aggregate or as a single data infrastructure.
- As part of the AVEVA PI Data Infrastructure solution, remote maintenance engineers can use CONNECT visualization to provide enhanced value for remote maintenance engineers, simplifying sharing of operational data to remote users.

Key Features

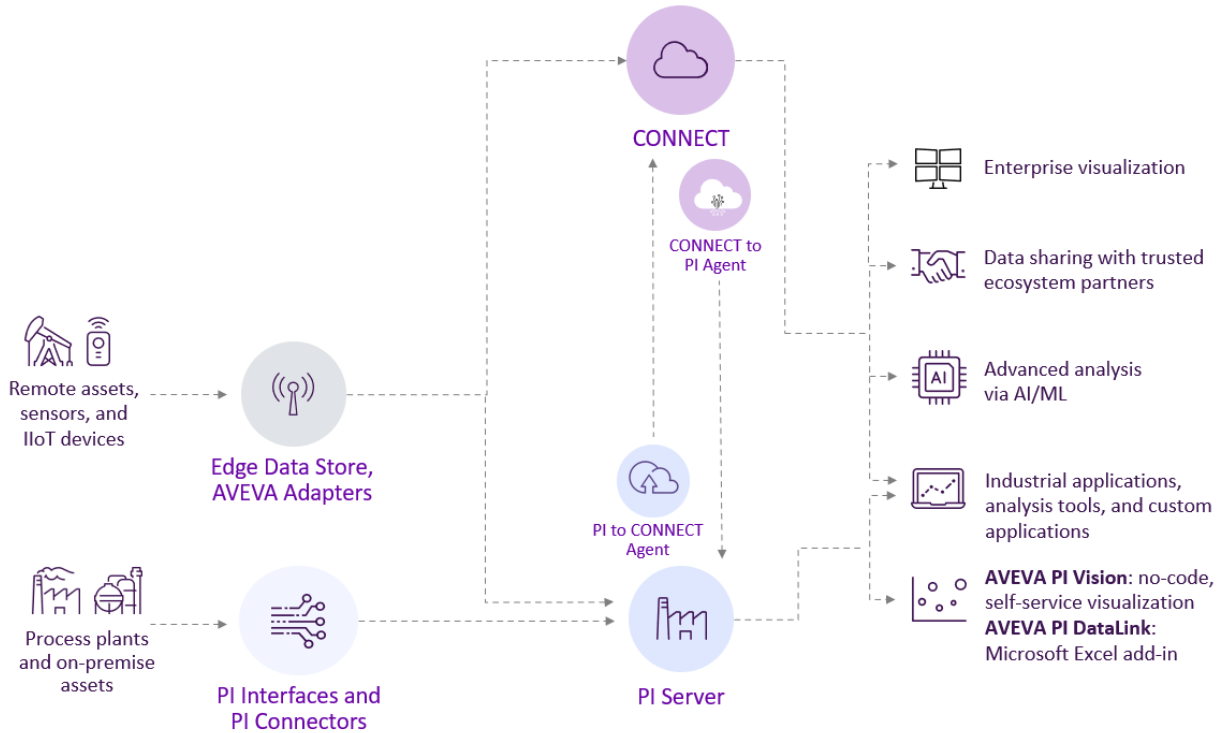
- AVEVA PI Data Infrastructure provides a seamless data infrastructure from edge to plant to community by leveraging Edge Data Store, AVEVA PI Server, and CONNECT data services.
- CONNECT visualization provides added value on top of the seamless data infrastructure, enhancing visibility by converging engineering, operations, and business data in context.
- Reduces IT effort by enabling Single Sign-on and supporting OpenID Connect (OIDC).

Architecture

AVEVA PI Data Infrastructure includes AVEVA PI Server, Edge Data Store, CONNECT data services, PI System connectivity products (AVEVA Adapters, and standard PI Interfaces and PI Connectors), and CONNECT visualization. Other PI System products include, but are not limited to, AVEVA PI Vision, AVEVA PI DataLink, and AVEVA PI Web API.

- **AVEVA PI Server.** Data storage and processing software for managing huge volumes of time-series operational data and associated contextual information, analytics, events, and notifications.
- **AVEVA PI Vision.** Web-based dashboard tool for configurable, self-service visualization, and analysis of AVEVA PI Server data. It includes straightforward web and mobile interfaces for rapidly building, managing, and sharing reusable, real-time displays without programming.
- **AVEVA PI Datalink.** Microsoft Excel add-in that enables users to pull information from AVEVA PI Server directly into a worksheet. Users can aggregate, monitor, analyze, and report data using the familiar computational, graphical, and formatting capabilities of Excel.
- **AVEVA PI Web API.** Retrieve and manipulate time series, asset meta data, and events stored in AVEVA PI Server with this RESTful API.
- **PI to CONNECT (formerly PI to Data Hub) Agent.** The PI to CONNECT (formerly PI to Data Hub) Agent is included with the PI Server installation kit and is required for reporting tag metrics to the cloud for the aggregate tag licensing model of PI Data Infrastructure. Each PI Server in the aggregate tag model requires that the PI to CONNECT Agent be installed and configured. Both the PI Server and PI to CONNECT Agent are installed on premises. The PI to CONNECT Agent can also optionally replicate process data to CONNECT data services.
- **CONNECT to PI Agent.** The CONNECT to PI Agent enables the transfer of data from streams in CONNECT data services to PI Tags in the AVEVA PI Server. The CONNECT to PI Agent, installed on premises, allows data that has been analyzed and used at scale in CONNECT to be written back to the PI Server for use within the operations environment.

The CONNECT to PI Agent includes the CONNECT to PI Agent portal, a page in CONNECT data services for users to centrally create, configure, and manage data transfers and monitor the statuses of installed agents. Administrators may download the installation kit from the CONNECT to PI Agent portal.



Service Overview

AVEVA PI Data Infrastructure interacts with CONNECT and CONNECT data services.

Service Limitations

AVEVA PI Data Infrastructure has the same service limitations as CONNECT data services. CONNECT data services has the following limitations:

- A CONNECT data services tenant may have more than one namespace, and each namespace maps to a unique folder in a CONNECT account.
- The CONNECT data services portal supports only the English language.

For more information, see the CONNECT and CONNECT data services service descriptions.

Regional Cloud Availability

AVEVA PI Data Infrastructure supports the same deployed geographic locations as CONNECT data services. For more information, see the CONNECT data services service description.

Hardware and Software Requirements

AVEVA PI Data Infrastructure has the same browser requirements as CONNECT data services, which are shown in the following table:

Component	Minimum/Recommended
Web browser	HTML5 compatible browser, including the latest versions of Google Chrome, Mozilla Firefox, and Microsoft Edge.

For AVEVA PI Data Infrastructure purchased with the aggregate tag licensing model, PI Servers will need to report their tag count to CONNECT daily (through the PI to CONNECT [formerly PI to Data Hub] Agent) to be in compliance with their contract. If an AVEVA PI Data Infrastructure PI Server loses the connection to CONNECT, the customer will continue to be charged. There are no latency or bandwidth requirements for AVEVA PI Data Infrastructure and CONNECT.

Security Standards and Compliance

Since AVEVA PI Data Infrastructure may report usage data to CONNECT, and optionally replicates process data to CONNECT data services, the same security policies for CONNECT and CONNECT data services apply to AVEVA PI Data Infrastructure. For more information, see the CONNECT and CONNECT data services service descriptions.

PI Server 2023, PI Vision 2023, PI DataLink 2023, and PI Web API 2023 can be configured for OIDC authentication. For more information about PI System security, see the knowledge base article *KB00833: Seven best practices for securing your PI Server* <https://customers.osisoft.com/s/knowledgearticle?knowledgeArticleUrl=KB00833>.

Decommission of the Service

Upon request and confirmation from the customer to decommission a CONNECT service, AVEVA will follow a process for the decommissioning and destruction of data to include the deletion of all files and data held within the service.

Data is retained for 30 days after receiving the deletion request to safeguard against accidental or wrongful deletion. After this period, the process of deleting data is initiated.

Refer to AVEVA Software Legal Information and Policies on the AVEVA Legal site at: <https://www.aveva.com/en/legal/>

High Availability, Business Continuity, and Data Protection

To ensure high availability, business continuity, and data protection, AVEVA PI Data Infrastructure adheres to the timelines given below.

- **Database Storage**

- Because AVEVA PI Data Infrastructure is reporting to CONNECT, the procedures for data storage, backup, and retention are the same as CONNECT. For more information, see the CONNECT service description.
- For on-premises PI Servers, it is up to the customer to provide sufficient data storage (drive space), perform backups, and store backups in a safe place.
- PI Servers will report their daily tag count and account identifier to CONNECT to correctly charge for usage; no other data is stored.

- **Disaster Recovery**

In the event of a service failure, AVEVA initiates a recovery process in accordance with RPO and RTO objectives for CONNECT, which are:

Cloud Service	Recovery Point Objective (RPO)
AVEVA PI Data Infrastructure	1 hour

Cloud Service	Recovery Time Objective (RTO)
AVEVA PI Data Infrastructure	24 hours

Service Level Commitment

AVEVA Cloud Services are governed by the AVEVA General Terms and Conditions.

The AVEVA Cloud Service Level Commitment is a supporting document that describes the service level commitment for all available AVEVA Cloud Services.

Both documents are available on the AVEVA web site at <https://www.aveva.com/en/legal>.

Additional Services

AVEVA offers an extensive collection of Customer Success Accelerators, well-defined, outcome-based services that are designed to ensure you realize the maximum benefit from your investment in our software through all the lifecycle stages of your software application.

For more details, visit the Customer Success Accelerators site at <https://www.aveva.com/en/support/customer-first/success-accelerators/>.