AVEVA™ Integration Service on CONNECT
Service Description

Contents

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Document Purpose and Audience

Document Purpose

This document describes AVEVA Integration Service on CONNECT, including key features and limitations, as well as the operational parameters.

This document must be read in conjunction with the CONNECT 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 Integration Service on CONNECT

AVEVA Integration Service on CONNECT (AIS Cloud) is a cloud native service that runs on CONNECT.

AIS Cloud works with the on-premises AVEVA Integration Service (AIS On Premise), a server application that is installed, configured, and executed in the same network environment as the Unified Engineering solution. The network environment can be on-premises at a customer's location, on AVEVA cloud, or when delivery is via AVEVA Unified Engineering on CONNECT. AIS Cloud enables secure read access to the engineering data created in Unified Engineering tools from cloud and on-premises locations.

AIS Cloud may be enabled for an active CONNECT account.

Key Features and Benefits

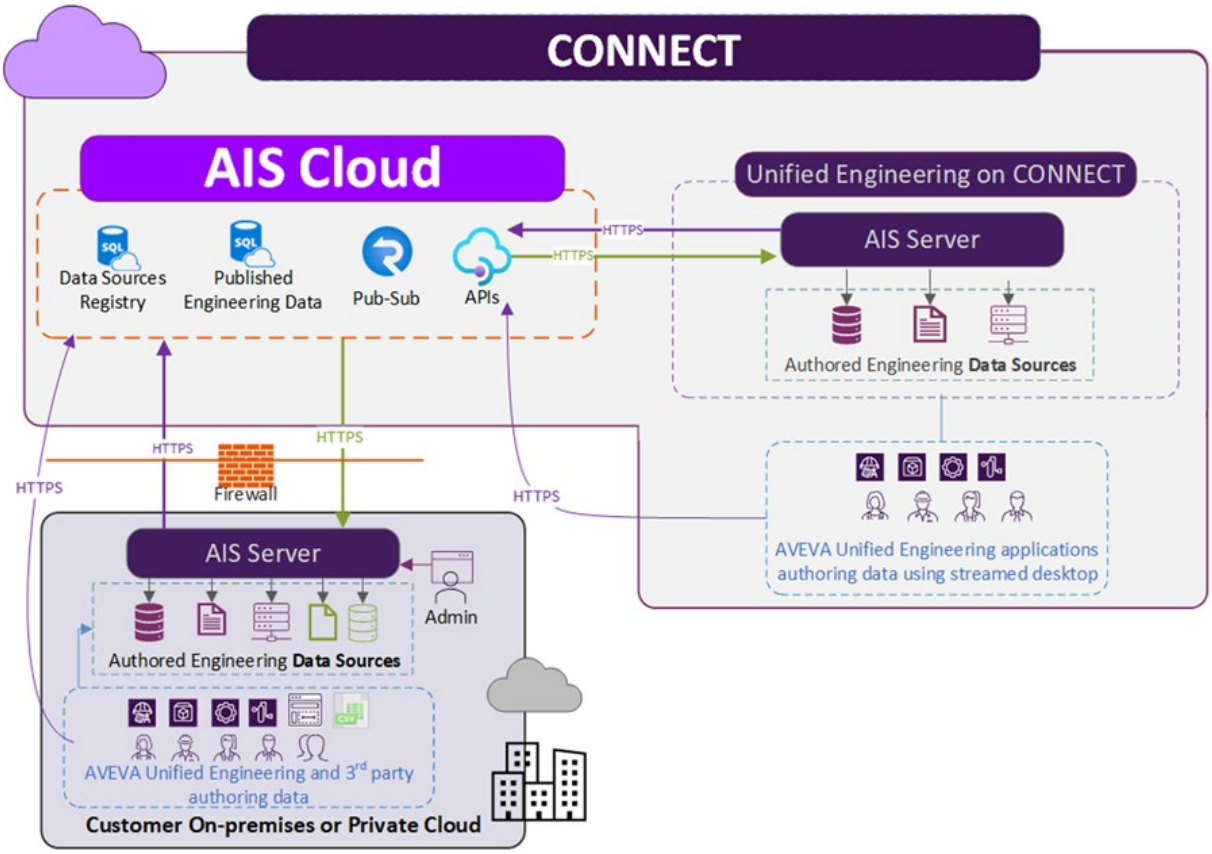
- Provides web API based on open standards that allow AVEVA applications and services to share authored engineering data, while enabling customers and partners to integrate third-party applications and processes using open standards technology or tools.
- The AVEVA-supported AIS SDK is available, simplifying the connection complexity for developers and integrators.
- Offers a smooth transition and adoption for customers using AIS On Premise who want to make authored engineering data in specific projects accessible outside of the enterprise network perimeter.
- Since AIS Cloud is a Software as a Service (SaaS) offering that is developed, operated, and maintained by AVEVA, there are no infrastructure or system upgrades for customers to manage or maintain.

- Supports publication of notifications, which may contain human-readable content or structured event data that is machine-readable for processing by applications. These notifications are designed for communication and feedback purposes, facilitating the exchange of information between users or systems. A typical use case for notifications is to notify subscribing client apps that data has been published to AIS Cloud.

Architecture

AIS Cloud is a cloud native multi-tenant solution built using the latest Microsoft Azure technologies and platform to provide high levels of scalability, reliability, and security.

RESTful APIs allow authorized AVEVA client applications to publish a point in time read-only snapshot of an authored engineering data set from any on-premises or cloud location. The applications can then share that data with registered subscribers using web sockets (SignalR).



Features:

- Microsoft SQL Azure Database is a relational database as a service (DBaaS) and provides secure storage of published engineering data and user-defined Data Source configuration and metadata. Microsoft provides an availability SLA of 99.99% for SQL Azure Database.
- Publish-subscribe (Pub/Sub) is provided by Azure SignalR Service, a cloud technology that enables AIS Cloud to connect to remote AIS Server instances located behind the firewall on-premises or in other cloud locations.

As the primary API for AIS Cloud, the Data API:

  - Handles requests for data updates from registered remote Data Sources.
  - Stores data request updates from Data Sources in the Data Store.
  - Publishes and subscribes to notifications and acknowledgements events.
  - Retrieves latest published data from the Data Store in response to client requests.
  - Subscribers receive real-time notifications when new data is published by a client.
- The Config API handles Data Source configurations and storage.
- All communication with AIS Cloud APIs is via HTTPS/TLS for clients either publishing or consuming data.

Service Overview

AVEVA Integration Service on CONNECT (AIS Cloud) complements the existing AIS On Premise service to provide cloud access to data authored by users of AVEVA Unified Engineering applications.

AVEVA Unified Engineering applications can retrieve data through AIS Cloud using the integrated Compare & Update tool and pass notifications of updated data to subscribing users. This means that end users do not directly interact with AIS Cloud but through use of the publish mechanism and built-in capabilities of the AVEVA applications.

Engineering data generated by non-AVEVA applications can also be published and made available to Unified Engineering users via AIS Cloud using out-of-the-box Data Source adapters (for example Excel, Oracle, etc.).

Project administrators use AIS On Premise functionality to create Data Sources that specify the project engineering data they wish to share with consumers via the AIS Cloud Service API. This way, they can manage and control the data that is accessible. Users, their roles, and their associated permissions are managed in CONNECT.

While AIS On Premise supports similar API technology, it's use is limited within the enterprise boundary and does not have the ability to capitalize on CONNECT user identity and access control.

Service Limitations

AVEVA Integration Service on CONNECT has the following limitation:

- AIS Cloud is limited to a single cloud region; customers are unable to choose other cloud regions to host the service.

Prerequisites to service usage include:

- AIS Cloud must be enabled on the account,
- The project administrator that creates valid Data Sources with AIS On Premise must provide the source data location, and
- Users must be assigned to the appropriate roles and permissions for the respective data sources.

Regional Cloud Availability

AVEVA Integration Service on CONNECT is accessed via the public Internet using HTTPS/TLS (a secure transport mechanism). The web applications can be accessed via any supported web browser.

AIS Cloud uses the following regions:

- Data stored in the Europe West - Netherlands - Amsterdam region is available worldwide with the exception noted below.
- Data is backed up to the Europe North - Ireland - Dublin region.

Note AVEVA Integration Service is not provided from any cloud regions based in China, as these are autonomous facilities operated in isolation from cloud regions outside of China. Cross-region replication and operations between China regions and outside of China are not supported.

Users inside China can expect high network latency when connected to any web services outside of China. As such, AVEVA Integration Service on CONNECT cannot formally support users inside China.

Hardware and Software Requirements

AVEVA Integration Service on CONNECT service is executed through application streaming technology. Therefore, client hardware requirements are minimal. Client software requirements are given below.

Client Software

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

Security Standards and Compliance

In addition to the technologies and architectural practices that ensure high security for CONNECT:

- AVEVA Integration Service on CONNECT uses only port 443 to access the SSL-encrypted APIs.
- AIS Cloud uses CONNECT user access management (UAM) to provide access control to user and groups on the individual data sources.
- Client authentication happens via a CONNECT access token provided with the REST API calls to the service, which is validated against established access rights.
- User and Service access tokens are supported in the following manner:
    - User access tokens are used in interactive application (for example, Compare/Update)
    - Service access tokens are used for unattended, non-interactive processes.

Decommission of the Service

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

All user access to Integration Service on CONNECT will be removed immediately. The service will be suspended for 30 days, after which it will be permanently turned off for the customer account. If the customer needs to restore the service, they must contact AVEVA Support within the 30-day suspension. If service is restored, the customer will need to recreate user access to the service.

Production data, including Data Source definitions, is retained for at least 30 days after receiving the decommission 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 Integration Service on CONNECT follows the timelines given below.

- **Database Storage**: Data is stored on Azure SQL Database.
- **Data Backup**
  - Full backups are completed every week.
  - Database archive logs for point-in-time recovery are backed up every **12 hours**.
  - All backup data is stored in the same cloud region as the cloud service. All data is replicated across multiple data centers within the same region and geo-paired regions.
  - All backup data is retained for **7 days**.
- **Disaster Recovery**

  In the event of a service failure, AVEVA initiates a recovery process in accordance with RPO and RTO objectives detailed below.

Cloud Service	**Recovery Point Objective (RPO)**
AVEVA Integration Service on CONNECT	1 hour

Cloud Service	**Recovery Time Objective (RTO)**
AVEVA Integration Service on CONNECT	12 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.

Service Maintenance

Maintenance Activities and Schedules

Implementation of the maintenance activities are generally done as per the following schedules.

Activity	**Notice period**
Scheduled Maintenance Scheduled maintenance means the period of time when AVEVA Integration Service services are unavailable because of network, hardware or services maintenance, service upgrades. The maintenance window typically occurs every 90 days.	Minimum 72 hours

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/.