From design all the way through operations and decommissioning, an industrial facility sees massive amounts of data generated and changed over the course of its lifecycle. The ability to capture and validate that data is the first step to creating a trusted digital twin, which can help industrial organizations achieve a 1-2% growth in revenue, and a 10-30% reduction in expenses. However, because information is commonly distributed across multiple teams and systems in engineering, procurement, and construction (EPC) companies and owner operators, information is more challenging to capture and validate, which jeopardizes the reliability and ultimately the value and ROI of the digital twin.
AVEVA Information Standards Manager helps companies overcome these challenges by rationalizing existing class libraries and imposing structured and compliant information standards. Class libraries can be based on industry standards (CFIHOS, ISO 15926, ISO 14224, etc.) along with other standards (government, international, corporate, etc.) and are easy to manage and integrate in one environment. Users can govern the information model for all data from an industrial facility through the project and data lifecycle, ensuring consistent configuration and trusted information.

Overview

AVEVA Information Standards Manager is a web-based, stand-alone application that can:

- Create and edit class libraries and data models
- Provide audit history and governance of information standards
- Provide validated configurations to authoring software
- Communicate class libraries with customers and suppliers
- Review and compare class libraries
- Provide class library data files that can be used to modify and reconcile information held in multiple applications
- Separate the concerns of business requirements from software requirements and ensure each is governed by different roles and responsibilities

Business benefits

- Avoid costly or dangerous ambiguity with an intuitive, accessible information model based on industry standards
- Improve project compliance with contractual obligations via clear and detailed definitions of information requirements
- Integrate data silos and improve information quality without risk to existing business processes
- Reduced costs, safety risks, and delays caused by data model inconsistencies or incorrect versions
- Manually apply and maintain configurations across applications to reduce risk of error and wasted time and effort
- Create the baseline for automatic data integrity reporting

The data model can be displayed in a ‘network view’ for ease of communication
With AVEVA Information Standards Manager, users can upload, visualize, navigate, and understand an information standards definition, and fully edit, update, and store information standards. The solution automatically checks the consistency of information standards and creates a detailed audit trail of any changes applied to the information standards.

**Key features**

**Class library creation:**
- Functional, physical, document, and attribute classes that form the foundation of the digital asset
- Class hierarchies, providing inheritance of properties and behaviours, which enables a normalized model to be defined without redundancies or discrepancies
- Taxonomies, which provides multiple views of the information model to meet the needs of multi-discipline teams
- Units of measurement, eliminating a common source of inconsistency and costly operational errors
- Naming templates for tags and documents
- Definition of expected or required relationships between objects

- Rich extensibility, enabling any definition to be extended with custom properties

**Class library management:**
- Import class library models from external sources
- Aggregate multiple class libraries into a single information standard
- Consolidate corporate, regional, and asset- or project-level standards
- Check the integrity of class libraries with in-built validation
- Immediate visualization of any changes to the class library
- Simple and advanced search, supporting regular expressions

**Data consistency rules:**
- Define validation requirements of objects and individual attributes
- Define maturity rules to better understand how data requirements change during an object’s lifecycle

**Information export:**
- Export of an entire or partial information standard in XML or Excel format
- Export permissible grid reports for easy communication of requirements
- Export validated configuration for AVEVA™ Asset Information Management

A permissible grid showing class to attribute data requirements

Layers of the information standard can be governed individually