



AVEVA WORLD

AVEVAWORLD

APRIL 9, 2025

Easily deploy AVEVA™ Adapters to collect remote data

Alan Izar, Technical Product Manager

AVEVA

AVEVA WORLD 2025

Agenda

Easily deploy AVEVA Adapters to
collect remote data

Moscone West Center
San Francisco

Hybrid data infrastructure

AVEVA Adapters and AVEVA Edge Management

Deploying an AVEVA Adapter remotely

Health & configuration management

Expanding deployments with ease

Demo

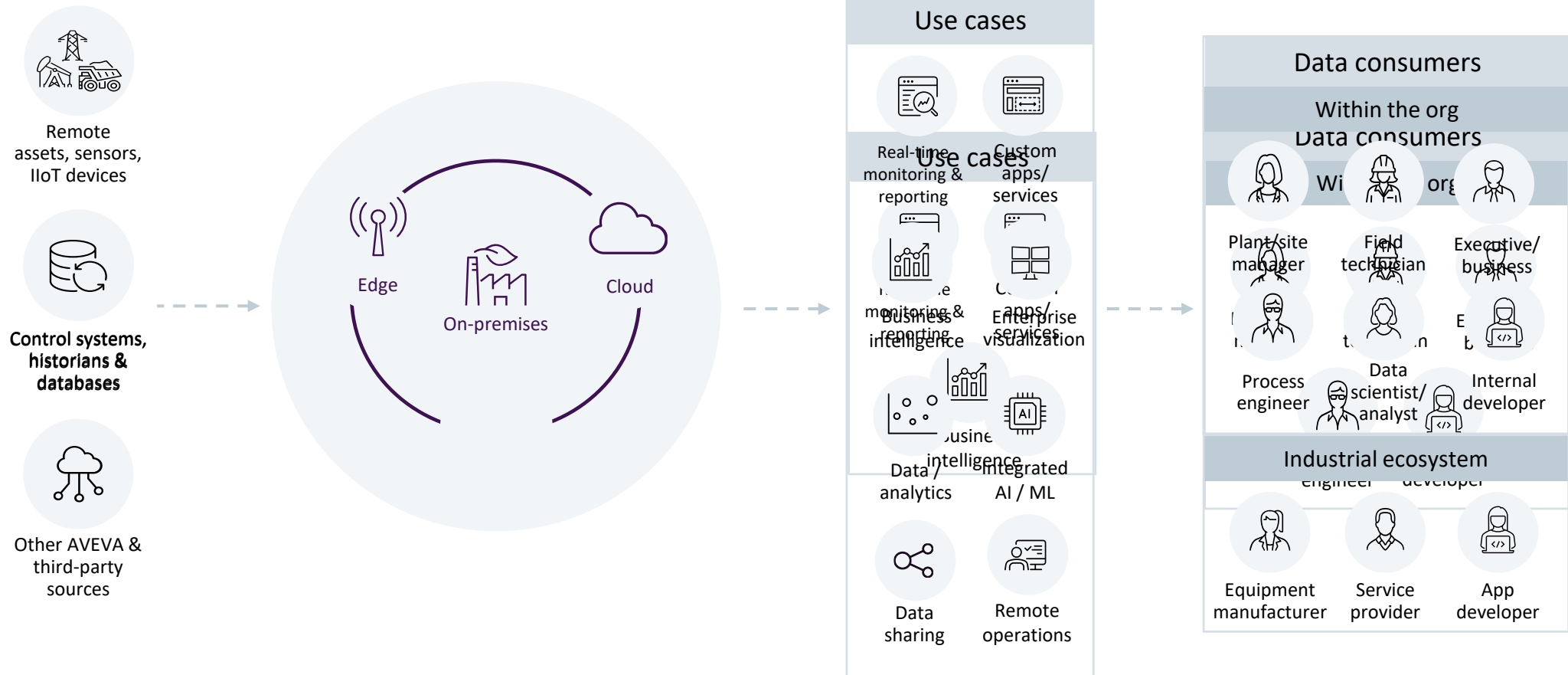
Key Takeaways

Hybrid data infrastructure



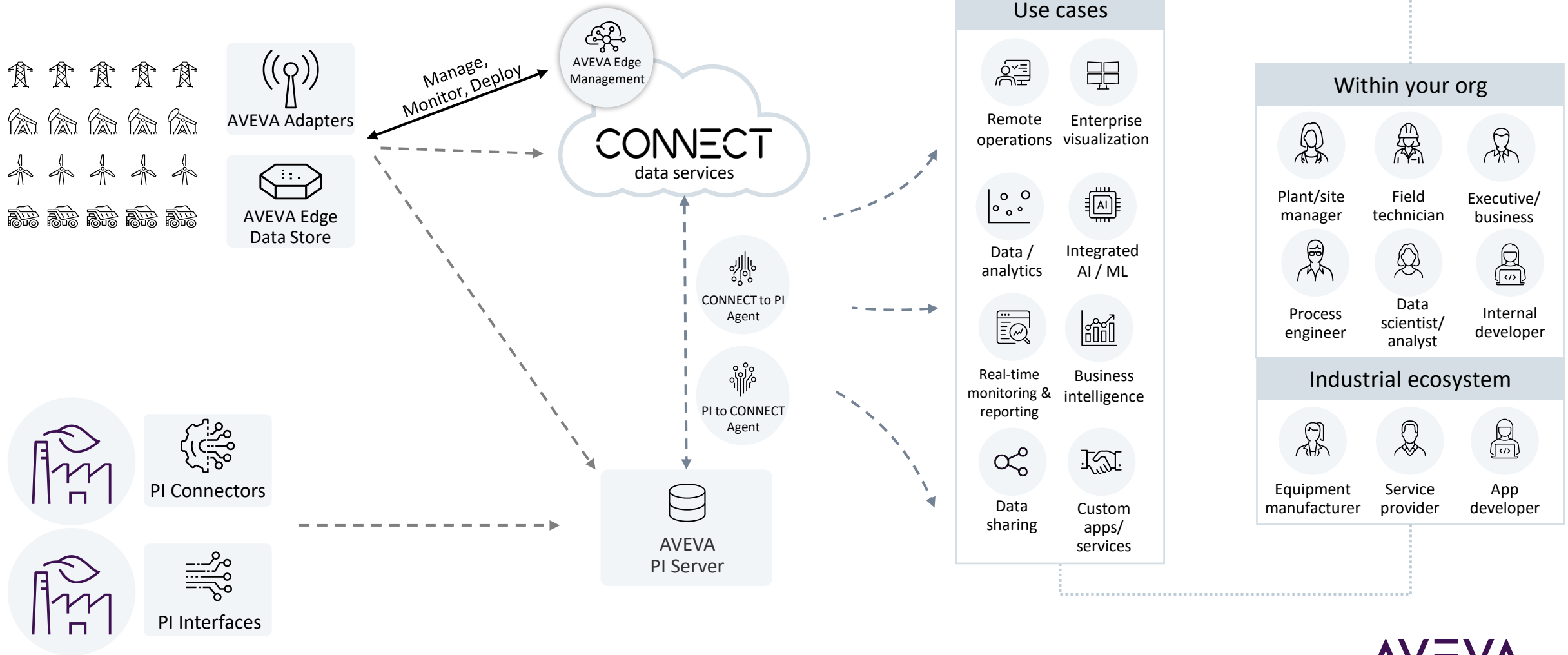
Supporting evolving data needs

Flexibility needed in today's connected, data-driven industry



Remote operations monitoring use case

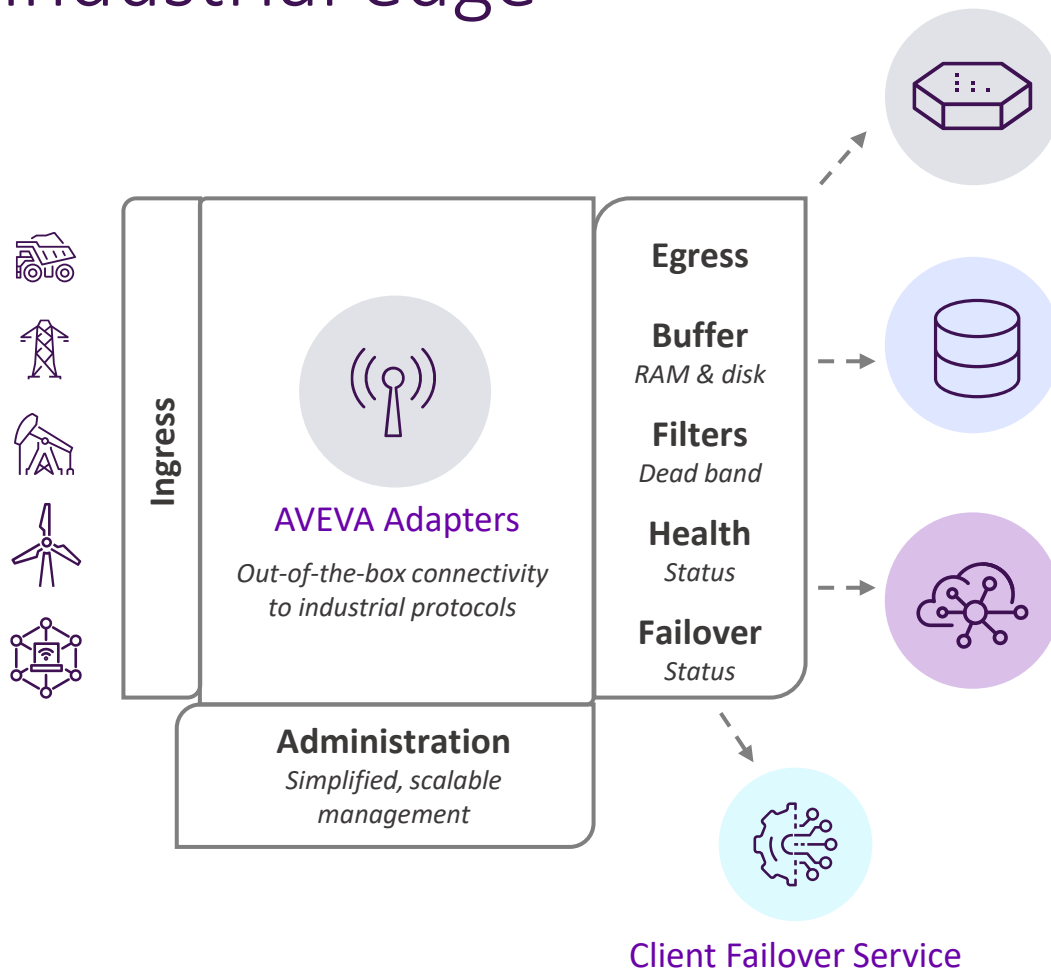
Realize the full potential of AVEVA Edge Management



AVEVA Adapters and AVEVA Edge Management



Extending real-time data connectivity to the industrial edge

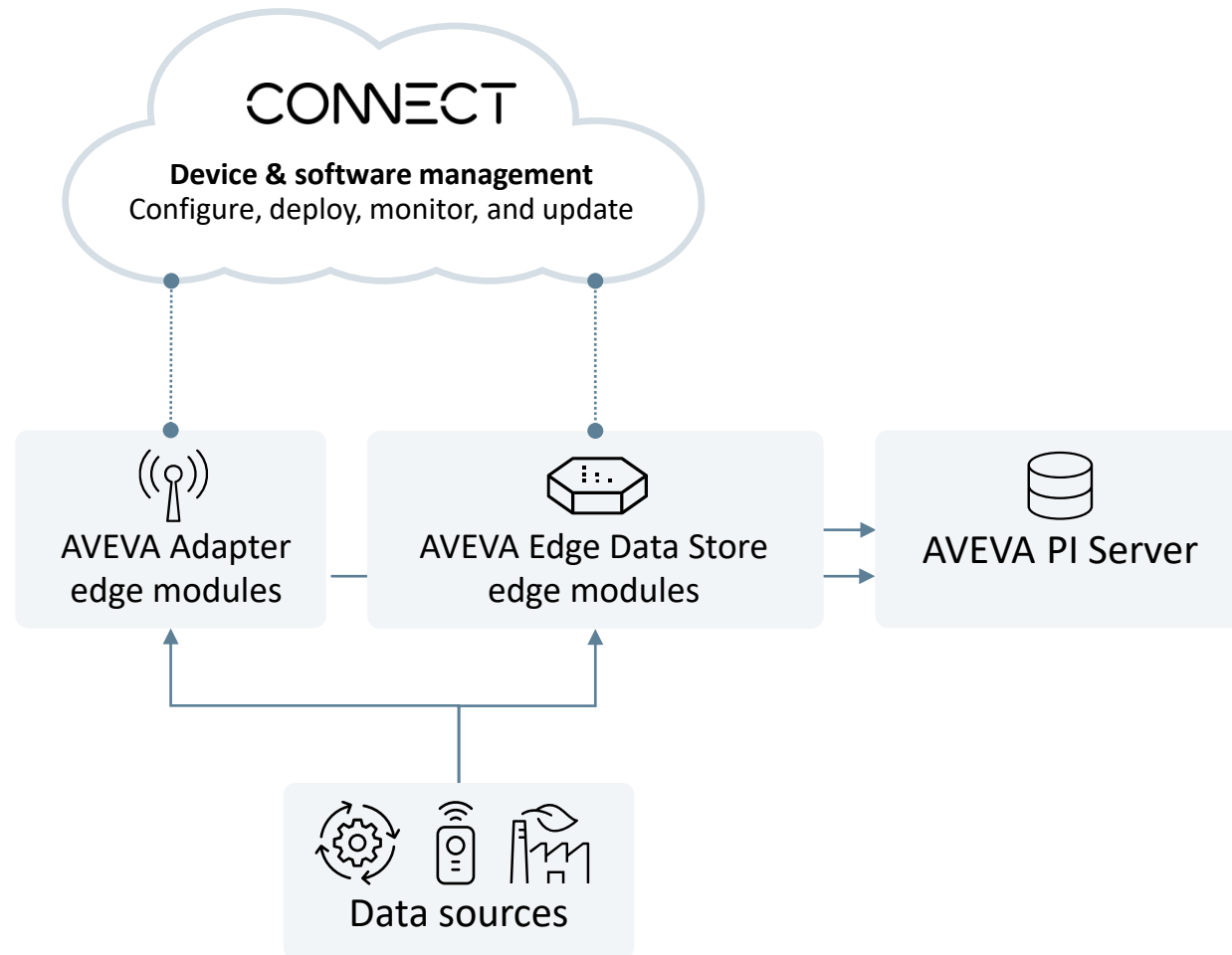


AVEVA Adapters

- Lightweight, robust, real-time data collection
- No-code connectivity to common industrial protocols*
- Health and diagnostics data for monitoring and troubleshooting
- Maximize uptime with client-side and server-side failover
- Multiple data destinations
- Run on Windows and Linux devices or in Docker containers
- Centralized, remote installation, configuration, and management

* Azure Event Hubs, BACnet, DNP3, Modbus TCP, MQTT, OPC UA, RDBMS, Structured Data Files

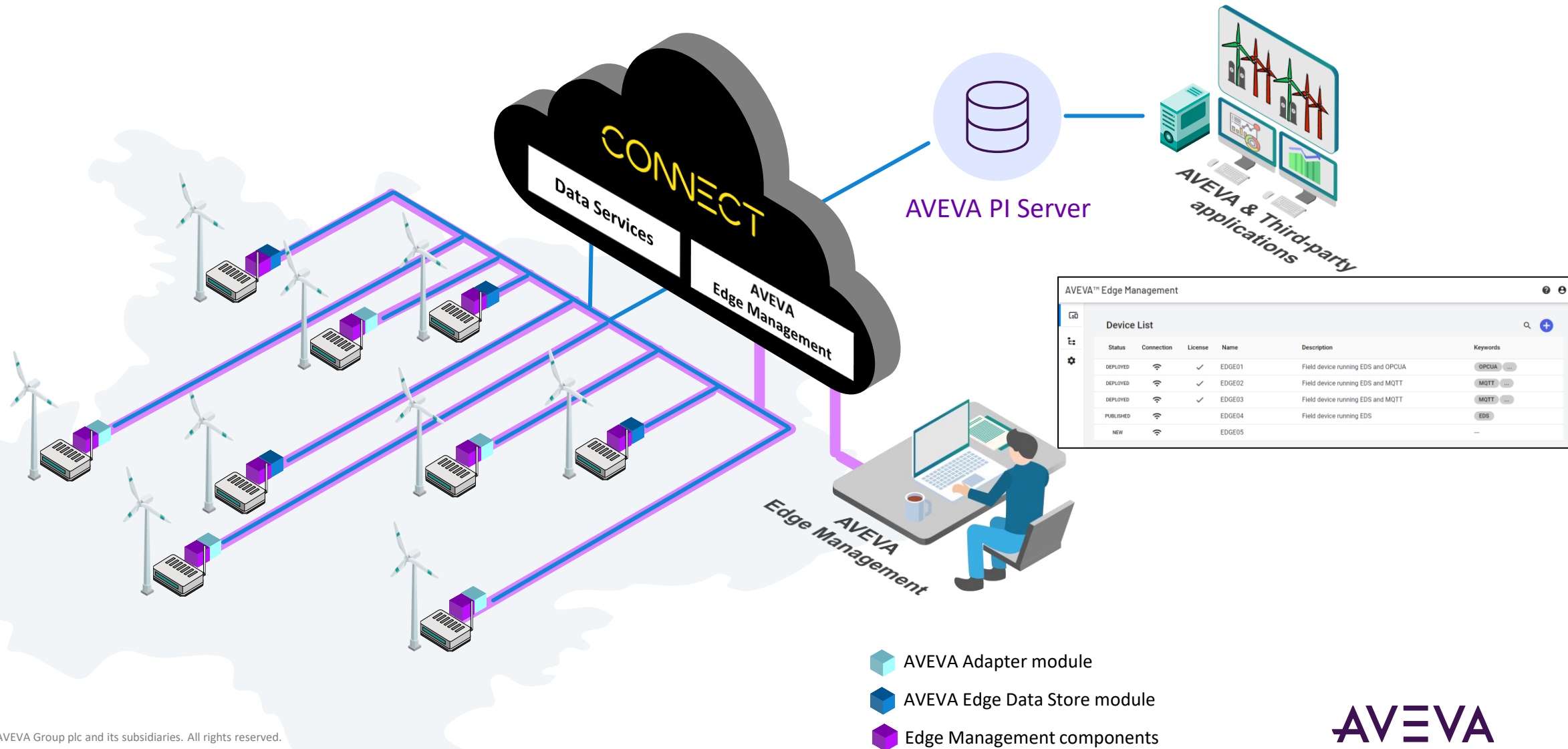
Managing your devices remotely



AVEVA Edge Management

- Easily configure, deploy, monitor, and update from CONNECT
- Enable device twins, remote software installations, and version management
- Easy software configuration management and monitoring
- Greatly reduce installation, configuration, and maintenance efforts
- Edge Management and CONNECT data services provided with AVEVA PI Data Infrastructure

Manage software deployments at scale with AVEVA Edge Management



Deploying an AVEVA Adapter remotely



Edge Management – Push-button deployment experience



Device List

Status	Connection	License	Name
PUBLISHED		✓	HL LinuxOnV
DEPLOYED		✓	HLLinuxOnW
DEPLOYED			AuroraM1M:
DEPLOYING			Vishwa Eflou
PUBLISHED			gambitEdge
NEW			ElsanTestNa
DEPLOYED		✓	VictoriaDem
DEPLOYED		✓	IoActiveTest
NEW			zrEmbedded
DEPLOYED		✓	daedalus se
DEPLOYED		✓	Vishwa Sani
DEPLOYED		✓	cwEnhanced
PUBLISHED		✓	TestARMST

Items per page: 16 1 – 16

Device List

Status	Connection	License	Name
NEW			temp 06162023
NEW			OPCUASystemTest2
PUBLISHED			DHARDASeUFF
NEW			Vishwa SS R1
NEW			Ryan Test
NEW			Vishwa EDS MQTT
PUBLISHED			MQTTSystemTestGA1
NEW			JSLinux
NEW			edstest
NEW			Connected AVEVA World Demo Device
DEPLOYED		✓	OPCUAARMSTT4
DEPLOYED		✓	EDSARM64SystemTestGA1

Items per page: 16 97 – 112 of 123

AVEVA World Demo Device

Summary Details Modules Deployment

[Back To Add Modules >>](#)

AVEVA Adapter for MQTT
5/mo

Versions *
1.2.0.59

Deployment Name *
adapter_mqtt_module

Configuration File *
mqtt_configuration.json

Connection Port *
5590

AVEVA Data Hub Client Credentials [Setup](#)

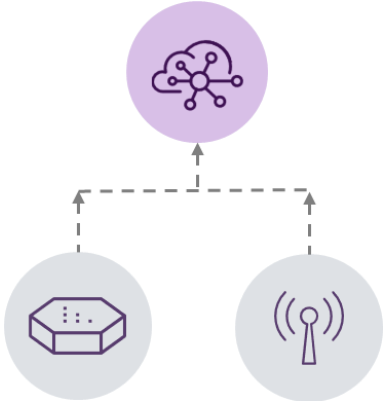
Secret Store
Type
File Store [Setup](#)

[Cancel](#) [Update](#)

Health & configuration management



CONNECT data services – Edge system health monitoring



Overview of system health across fleet

Filter by Status, Type, and more

Easy access to edge system configuration

The screenshot shows the 'CONNECT Data services' interface for 'Edge Data Store & Adapters'. The left sidebar contains navigation options: Home, Data Management, Data Collection, Visualization, Analytics, Security, Developer Tools, and Support. The main area features a 'Systems' section with a search bar and filters for 'Good', 'Lost Communication', and 'Device In Error'. A table lists various devices with columns for Device Name, Status, and Type. The right sidebar shows details for 'SPA1', including its ID, status, memory usage, storage usage, and last contacted time. Below this, there are 'Components' sections for 'CPG' and 'OmfEgress', each showing health and IO rate metrics.

Device Name	Status	Type
SPA1	Good	AVEVA System Platform A...
RDBMS1	Good	AVEVA Adapter for RDBMS
RDBMS2	Good	AVEVA Adapter for RDBMS
MQTT1	Lost Communication	AVEVA Adapter for MQTT
SPA_Demo	Good	AVEVA System Platform A...
EDGE01	Lost Communication	Edge Data Store
SPA2	Lost Communication	AVEVA System Platform A...
MQTT2	Good	AVEVA Adapter for MQTT
EDGE02	Good	Edge Data Store
OPC Black Mesa	Good	AVEVA Adapter for OPC UA
SPA45	Lost Communication	AVEVA System Platform A...

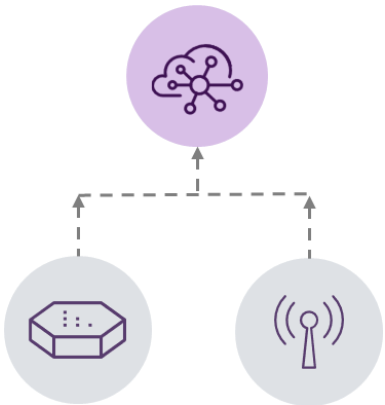
Details for SPA1 (AVEVA System Platform Adapter 23.1.000):

- Id: CPG.SystemPlatformAdapter
- Status: Good
- Memory: 178.3 MB
- Storage Used: 106.8 GB / 274.4 GB (39%)
- Last Contacted: a few seconds ago
- Last Modified: [unspecified]

Components:

- CPG**: Health Good, Type Count 19, Stream Count 546, IO Rate 58.967 event/s, Error Rate 0 event/s
- OmfEgress**: Health Good, IO Rate 58.967 event/s

CONNECT data services – Edge system configuration



Quick start with default config

Validate edge system config

Templatize/Export edge system config

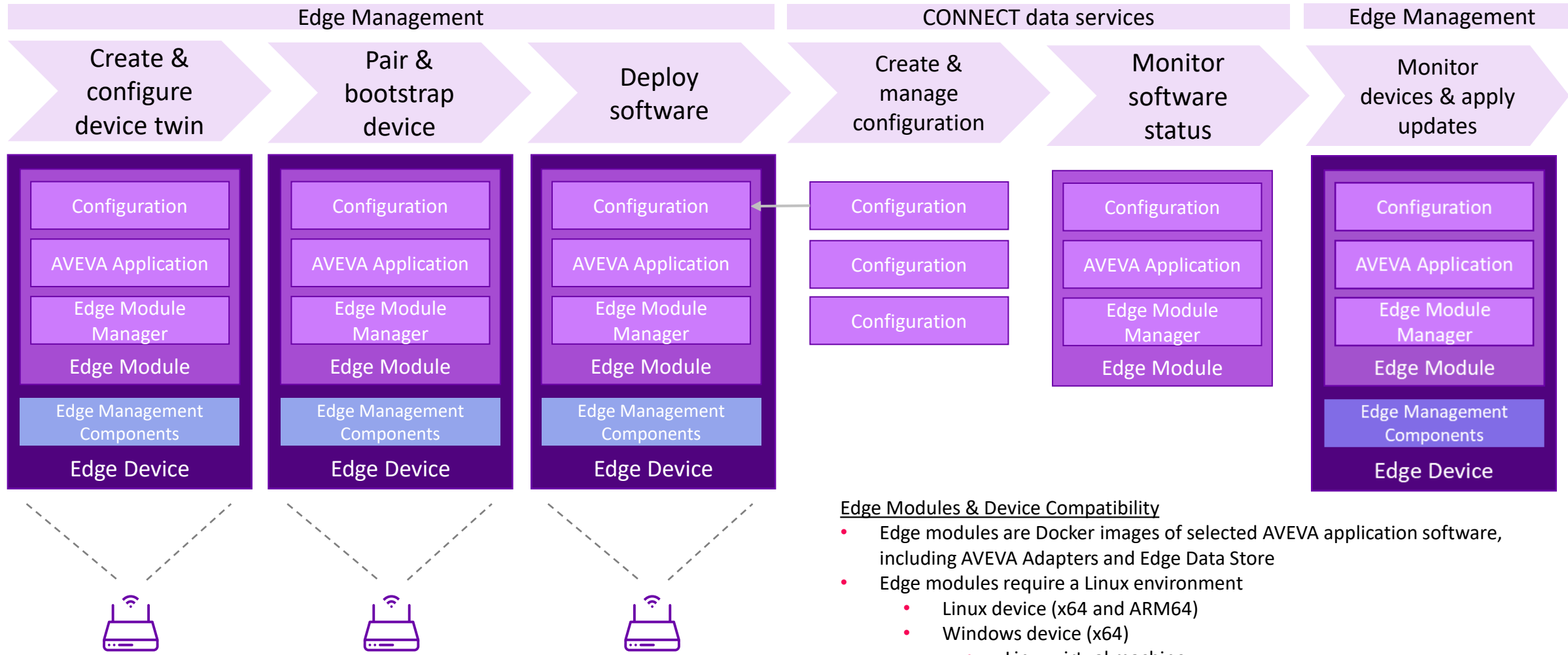
The screenshot shows the 'CONNECT Data services' interface for 'Edge Data Store & Adapters'. The left sidebar contains navigation options: Home, Data Management, Data Collection, Visualization, Analytics, Security, Developer Tools, and Support. The main area displays the configuration for 'Big Buffalo OPC UA' (Type: AVEVA Adapter for OPC UA, Version: 1.5.0). The configuration is shown in a code editor with a 'JSON Configuration' dropdown. A context menu is open over the configuration, showing 'Export Configuration' and 'Remove' options. The configuration includes a 'DataSelection' array with three entries and a 'System' object with logging, health endpoints, and components.

```
73   "DataSelection": [  
74     {  
75       "selected": true,  
76       "name": null,  
77       "nodeId": "ns=1;s=GE01.pow",  
78       "streamId": "GE01.Power",  
79       "dataFilterId": null  
80     },  
81     {  
82       "selected": true,  
83       "name": null,  
84       "nodeId": "ns=1;s=GE01.wind",  
85       "streamId": "GE01.WindSpeed",  
86       "dataFilterId": null  
87     },  
88     {  
89       "selected": true,  
90       "name": null,  
91       "nodeId": "ns=1;s=GE01.energy",  
92       "streamId": "GE01.Energy",  
93       "dataFilterId": null  
94     }  
95   ],  
  
"System": {  
  "Logging": {  
    "logLevel": "Information",  
    "logFileSizeLimitBytes": 34636833,  
    "logFileCountLimit": 31  
  },  
  "HealthEndpoints": [  
    {  
      "id": "AVEVADataHub",  
      "endpoint": "https://uswe.datahub.connect.aveva.com/api/v1/tenants/  
OpenClientBigBuffalo",  
      "clientId": "3cc0223e-36e5-4758-85de-bdbd433b0838",  
      "clientSecret": "{{Secret1}}"  
    }  
  ],  
  "Components": [  
    {  
      "componentId": "OpcUa1",  
      "componentType": "OpcUa"  
    },  
    {  
      "componentId": "OmFegress",  
      "componentType": "OmFegress"  
    }  
  ],  
  "General": {  
    "enableDiagnostics": true,  
    "metadataLevel": "Medium",  
    "healthPrefix": null  
  }  
},  
"OmFegress": {  
  "Logging": {  
    "logLevel": "Information",  
    "logFileSizeLimitBytes": 34636833,  
    "logFileCountLimit": 31  
  },  
  "DataEndpoints": [  
    {  
      "id": "AVEVA PI",  
      "endpoint": "https://windtopia-pi/piwebapi/omf",  
      "userName": "piadapter",
```

Expanding deployments with ease

AVEVA

Remote device, configuration, & software management



Edge Modules & Device Compatibility

- Edge modules are Docker images of selected AVEVA application software, including AVEVA Adapters and Edge Data Store
- Edge modules require a Linux environment
 - Linux device (x64 and ARM64)
 - Windows device (x64)
 - Linux virtual machine
 - Azure IoT Edge for Linux on Windows (EFLOW)

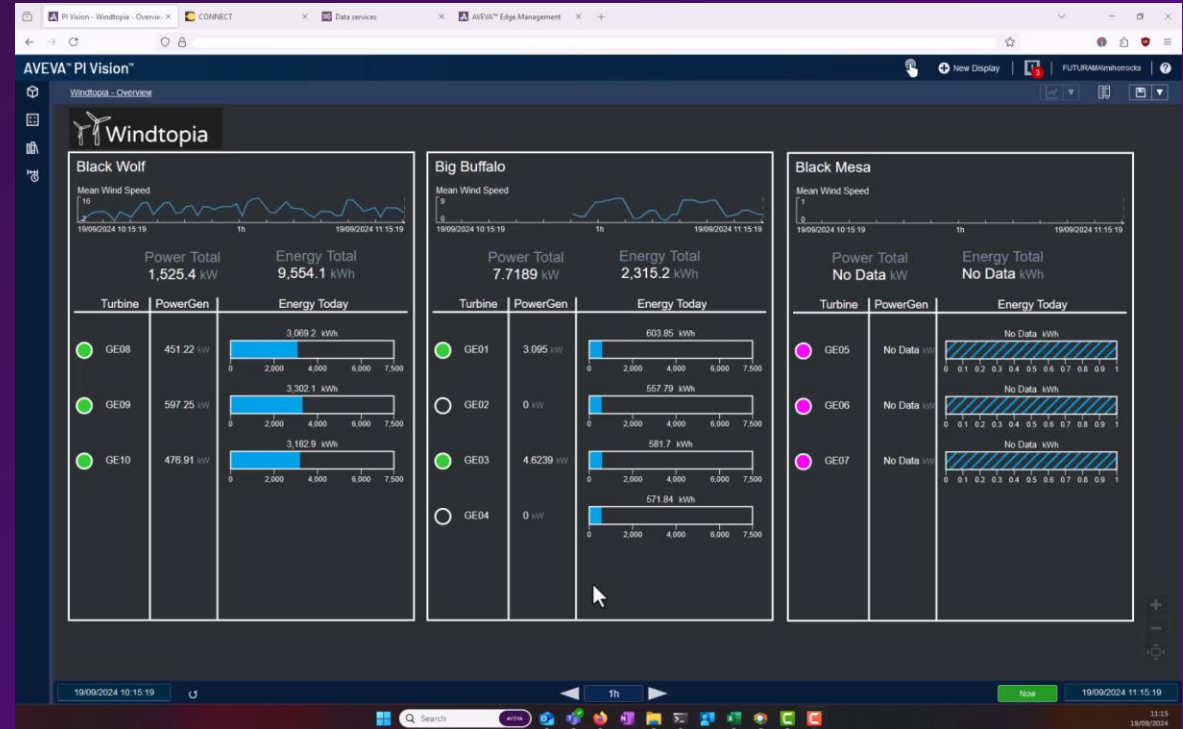
Demo

AVEVA

Demo: deploy complete AVEVA Adapter

AVEVA Edge Management

- Create a device twin
- Bootstrap device
- Create configuration, and configure AVEVA Adapter for OPC UA module, including secrets
- Publish device configuration
- Review final data



Key Takeaways

With AVEVA Edge Management:

- Deploy and configure AVEVA Adapters and AVEVA Edge Data Store from the cloud – even for on-premise use cases
- Use secrets to secure configuration and increase re-usability

With CONNECT data services:

- Create, store, and manage configuration of AVEVA Adapters and AVEVA Edge Data Store
- Use health management to monitor and assess your remote devices, adapters, and AVEVA Edge Data Store

With CONNECT easily deploy AVEVA Adapters to collect remote data

Alan Izar

Technical Product Manager

AVEVA

alan.izar@aveva.com



Day 2 sessions - AVEVA PI System track

Operations on-ramp to AI and advanced industrial analytics

Wednesday, April 09 @ 11:15 am
Room 2009-2011

Easily deploy AVEVA Adapters to remotely collect operations data at scale

Wednesday, April 09 @ 1:15 pm
Room 2000

Offloading admin overhead with cloud-managed SQL for AVEVA PI Server

Wednesday, April 09 @ 2:00 pm
Room 2000

Supporting expanding needs with AVEVA PI Vision

Wednesday, April 09 @ 2:30 PM
Room 2000

Bayer:

Driving manufacturing excellence with standardized AVEVA PI System data and AI

Wednesday, April 09 @ 11:45 am
Room 2009-2011

Saudi Aramco:

Accelerating sustainability - Digital advisory platform for power optimization and cogeneration efficiency

Wednesday, April 09 @ 3:15 pm
Room 2009-2011

Flint Hills Resources:

AVEVA PI System and graph databases

Wednesday, April 09 @ 4:00 pm
Room 2009-2011



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.

Thank you!



Visit us!

Stop by these booths in the Innovation Zone for demos and additional information:

**Extend value through
AVEVA PI Data Infrastructure**
in the CONNECT area

**Transform real-time data into
actionable information with AVEVA PI Server**
in the Operate & Optimize area

**Visualize your operations data with
AVEVA PI Vision**
in the Operate & Optimize area



Innovation zone

Exciting, modern &
engaging experience

5 key zones: CONNECT, operate &
optimize, design & build, industrial
sustainability, experiential zone
(hands-on activities)

45+ sponsor and exhibitor booths

CONNECT ecosystem partner kiosk

Partner solution sessions

Guided tours by industry

Game and leisure areas

This presentation may include predictions, estimates, intentions, beliefs and other statements that are or may be construed as being forward-looking. While these forward-looking statements represent our current judgment on what the future holds, they are subject to risks and uncertainties that could result in actual outcomes differing materially from those projected in these statements. No statement contained herein constitutes a commitment by AVEVA to perform any particular action or to deliver any particular product or product features. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect our opinions only as of the date of this presentation.

The Company shall not be obliged to disclose any revision to these forward-looking statements to reflect events or circumstances occurring after the date on which they are made or to reflect the occurrence of future events.

 [linkedin.com/company/aveva](https://www.linkedin.com/company/aveva)

 [@avevagroup](https://twitter.com/avevagroup)

ABOUT AVEVA

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