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Deploy Edge Data Store and adapters in minutes with AVEVA™ Edge Management

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AVEVA

Introduction to AVEVA™ Edge Management

AVEVA™ Adapters & Edge Data Store

Deploy Edge Data Store and Adapters in Minutes [DEMO]

Summary

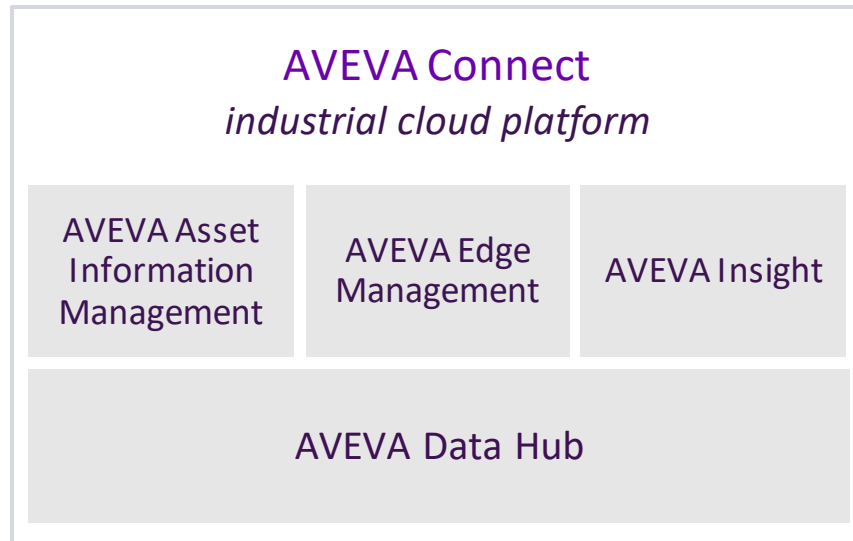


AVEVA Edge Management



Securely consume & manage solutions with AVEVA Connect today

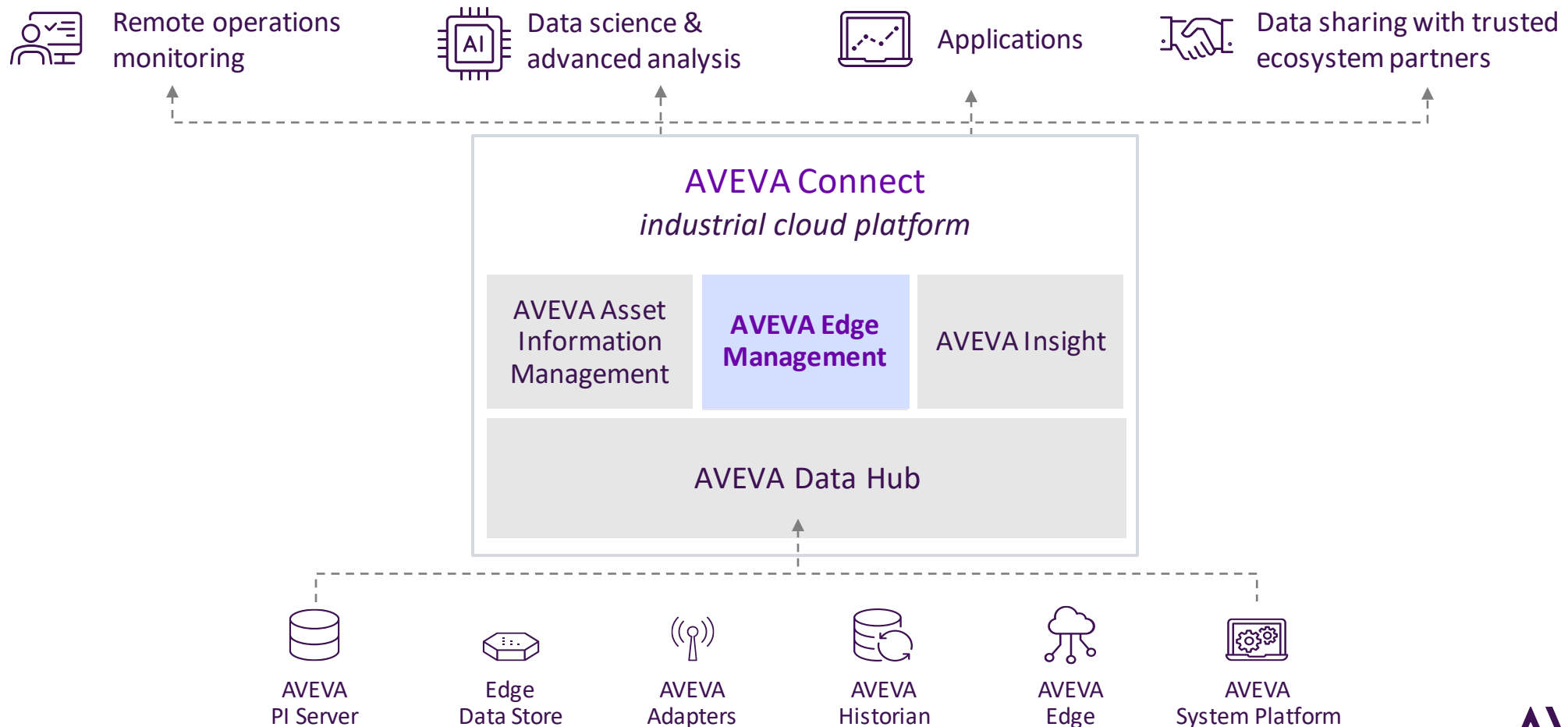
Centralized access to SaaS and hybrid offerings across AVEVA's broad industrial portfolio



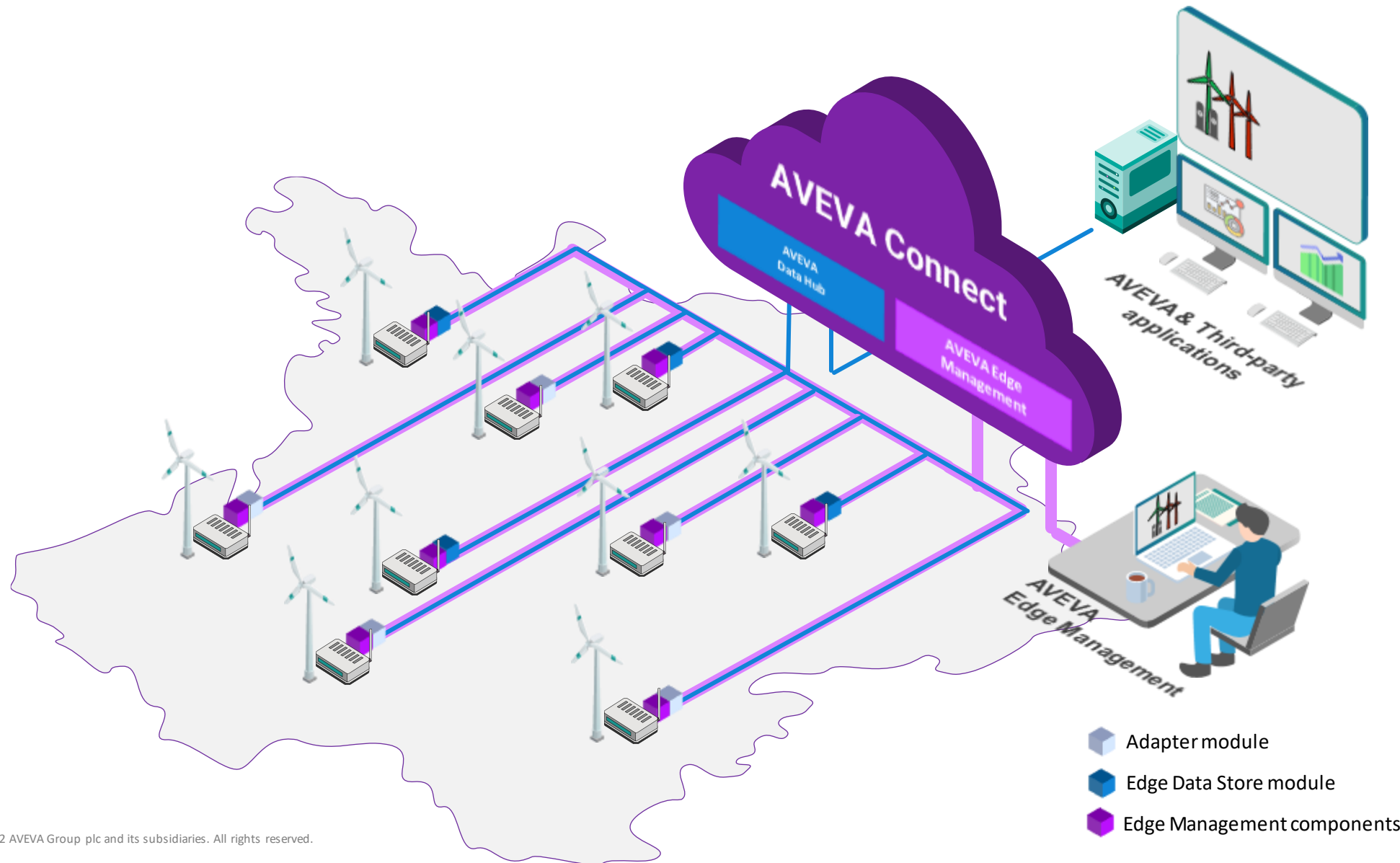
- Manage organization's access to AVEVA's portfolio
- Centralized user management
- Integrated AVEVA Flex credit reporting and usage monitoring

Accelerate time to value with AVEVA's portfolio from edge to cloud

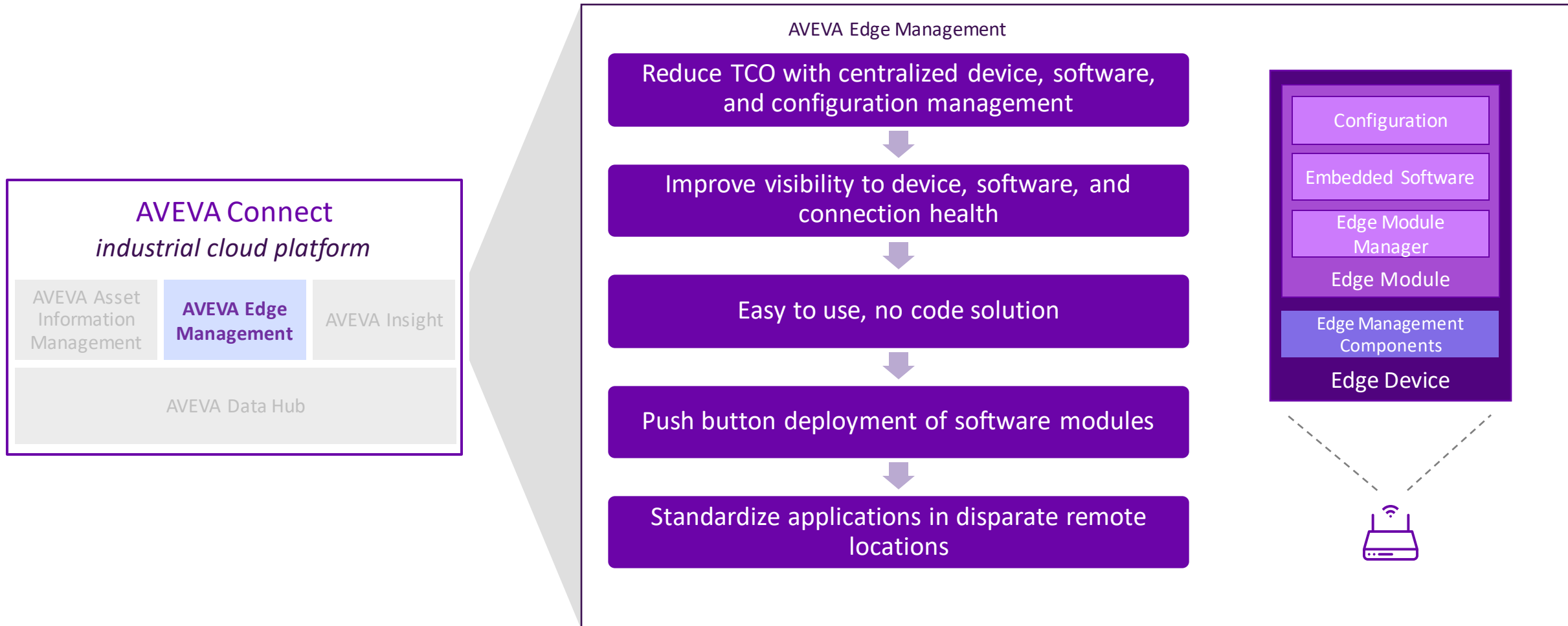
AVEVA Connect enables a hybrid data architecture through cloud offerings



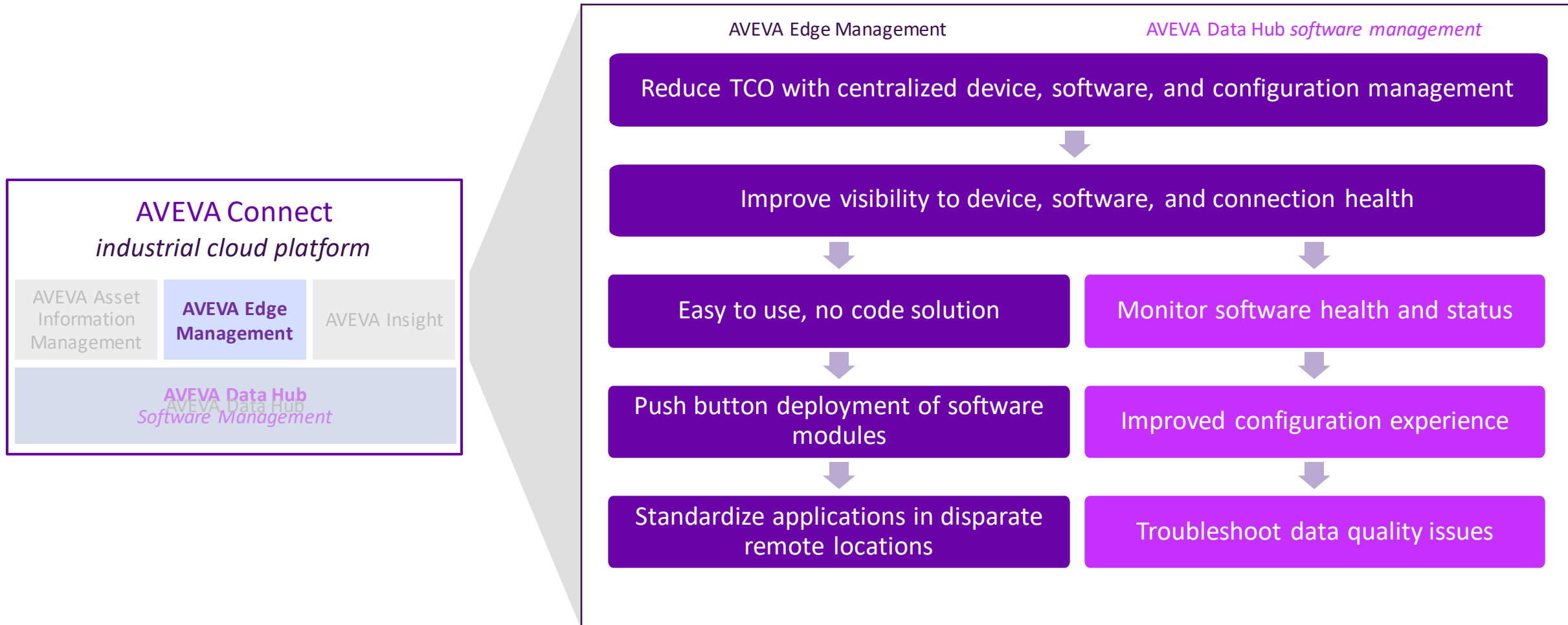
AVEVA Edge Management unlocks remote operations monitoring



Remote device management – AVEVA Edge Management



Remote device management – Software Management



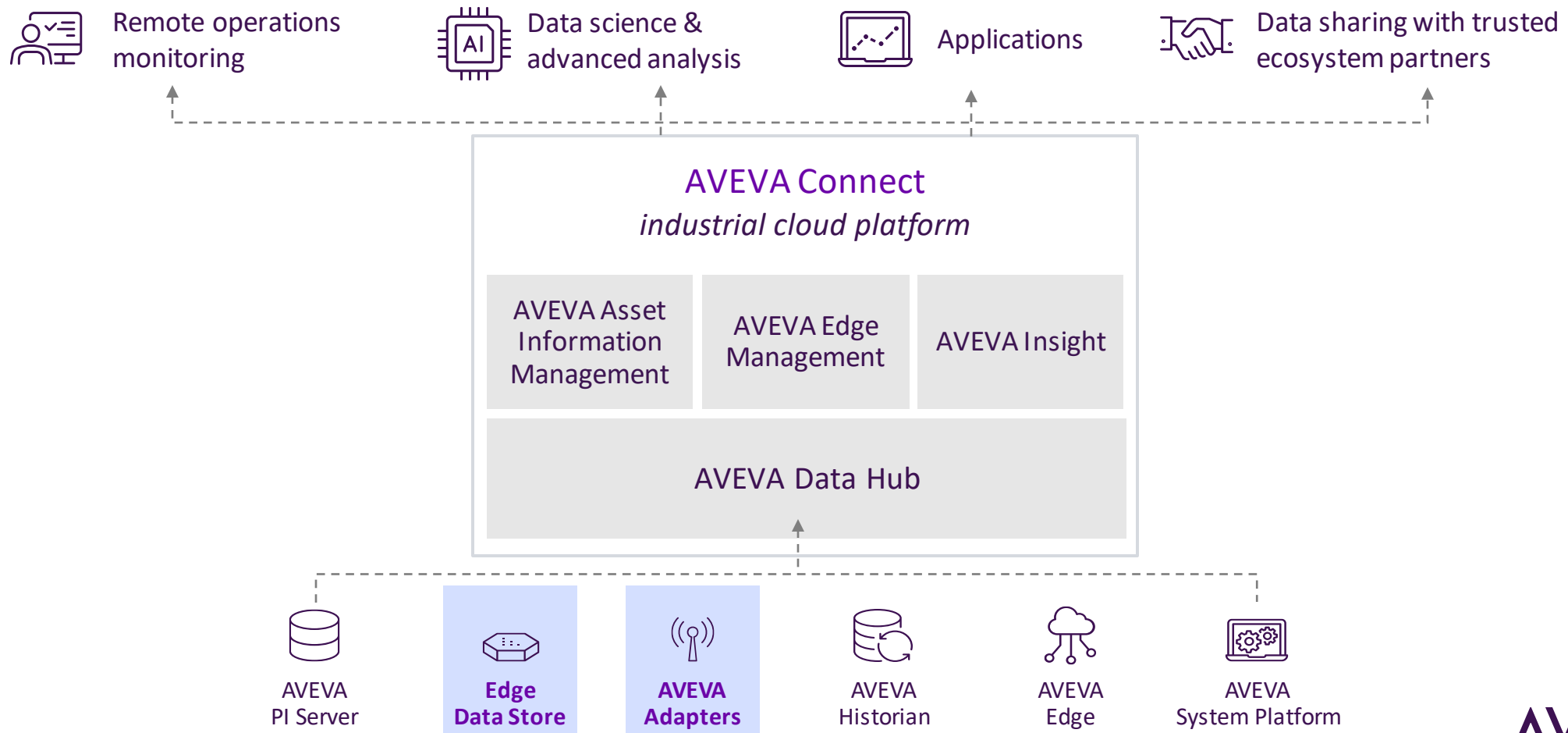


AVEVA Adapters & Edge Data Store



Accelerate time to value with AVEVA's portfolio from edge to cloud

AVEVA Connect enables a hybrid data architecture through cloud offerings

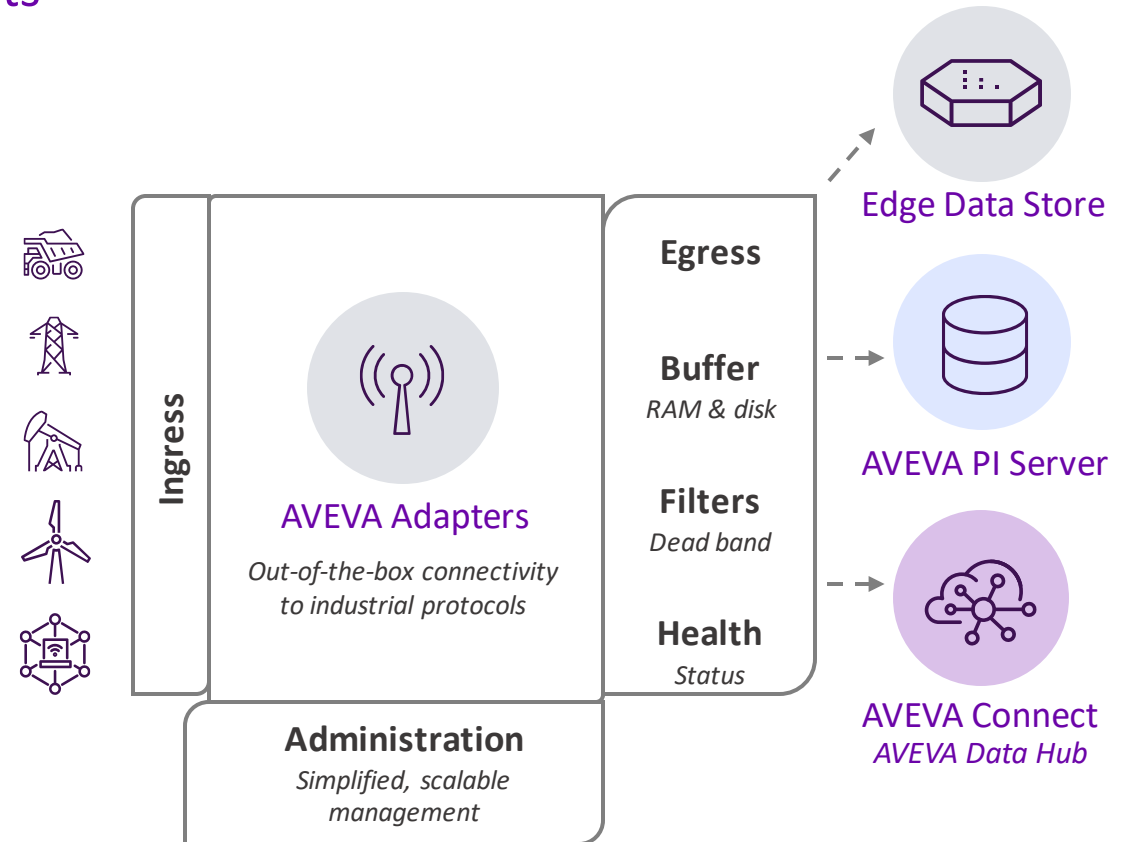


Extending real-time data connectivity to remote assets

Ready off-the-shelf, lightweight footprint, flexible end-points

AVEVA Adapters

- **Out-of-the-box connectivity to standard industrial protocols** such as OPC UA, MQTT, Modbus TCP, DNP3, BACnet, etc.
- **Resilient and purpose-built for harsh and/or uncrewed environments** - buffering technology protects data when the asset loses power or connectivity, or moves out of range
- **Flexible end-points**, send real-time data to PI Servers and/or AVEVA Data Hub, or supplement Edge Data Store's built-in connectivity when you need remote storage



Bring critical ops data out of the shadows

Edge Data Store provides rugged IIoT storage to connect from edge to cloud

Deploys and works in remote environments **without IT support**

Empower remote technicians with **access to real-time performance data** and **enable edge analytics**

Out-of-the-box connectivity to industrial protocols such as OPC UA and Modbus TCP

Native transfer to **AVEVA PI Server** and **AVEVA Data Hub**

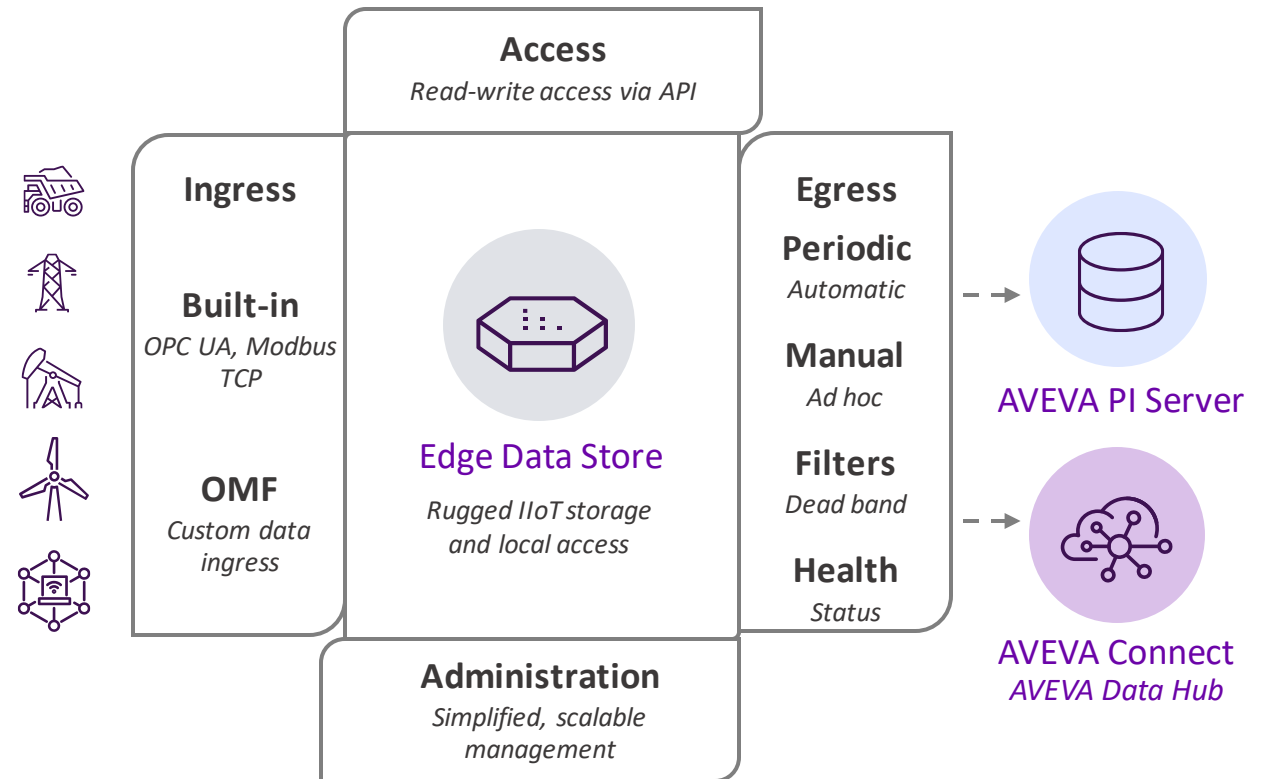


Lightweight data storage and integration at the industrial edge

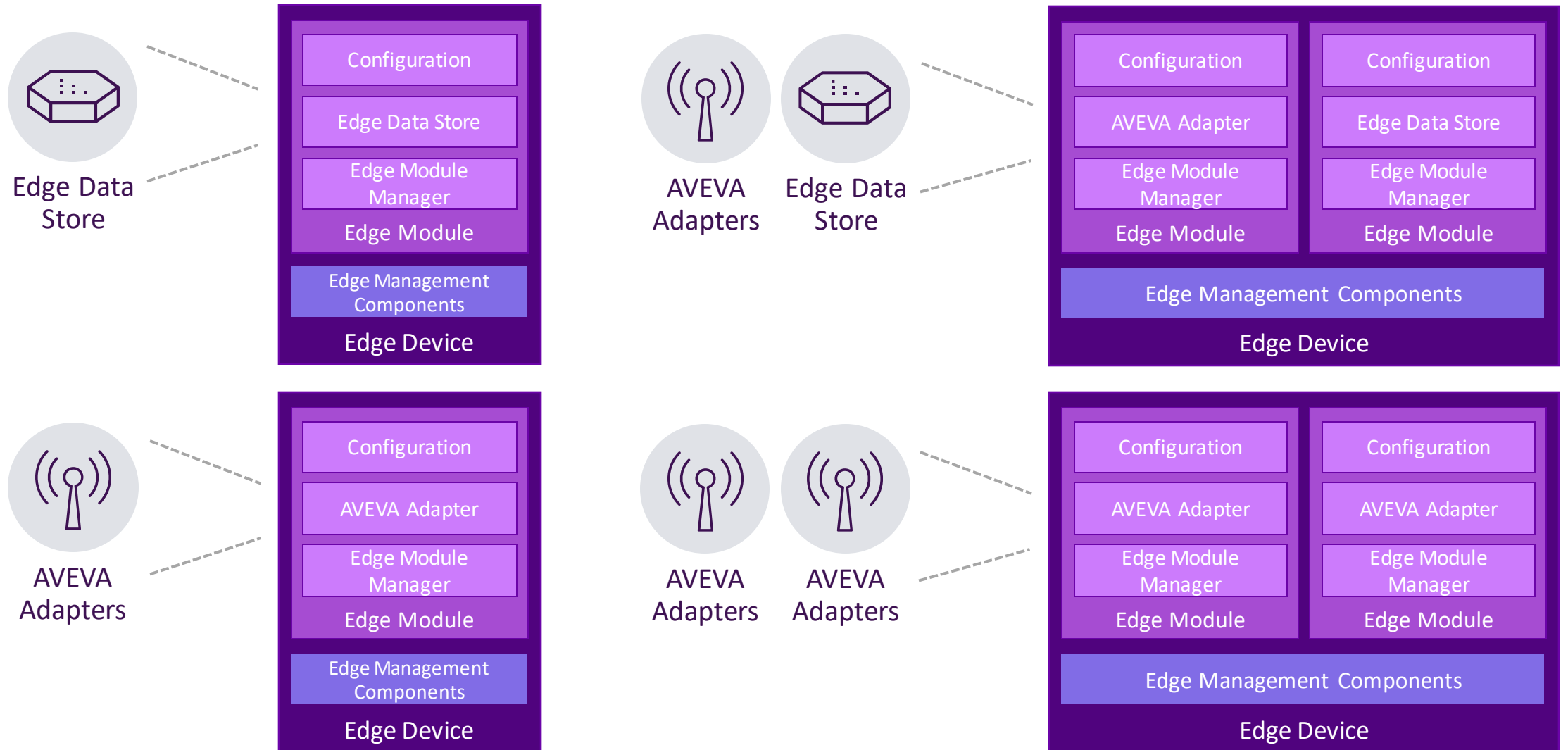
Local storage, self-healing, application platform

Edge Data Store

- **Lightweight storage**, configurable data streams, limited only by the size of underlying device
- **Cross-platform** (Windows, Linux, Docker), and **easy to manage and configure**
- **Feature rich, programmatic API** for application development including **local analytics or visualization**
- **Transfer data natively** to AVEVA PI Server and AVEVA Data Hub with options to optimize bandwidth



EDS and AVEVA Adapters as Edge Management modules

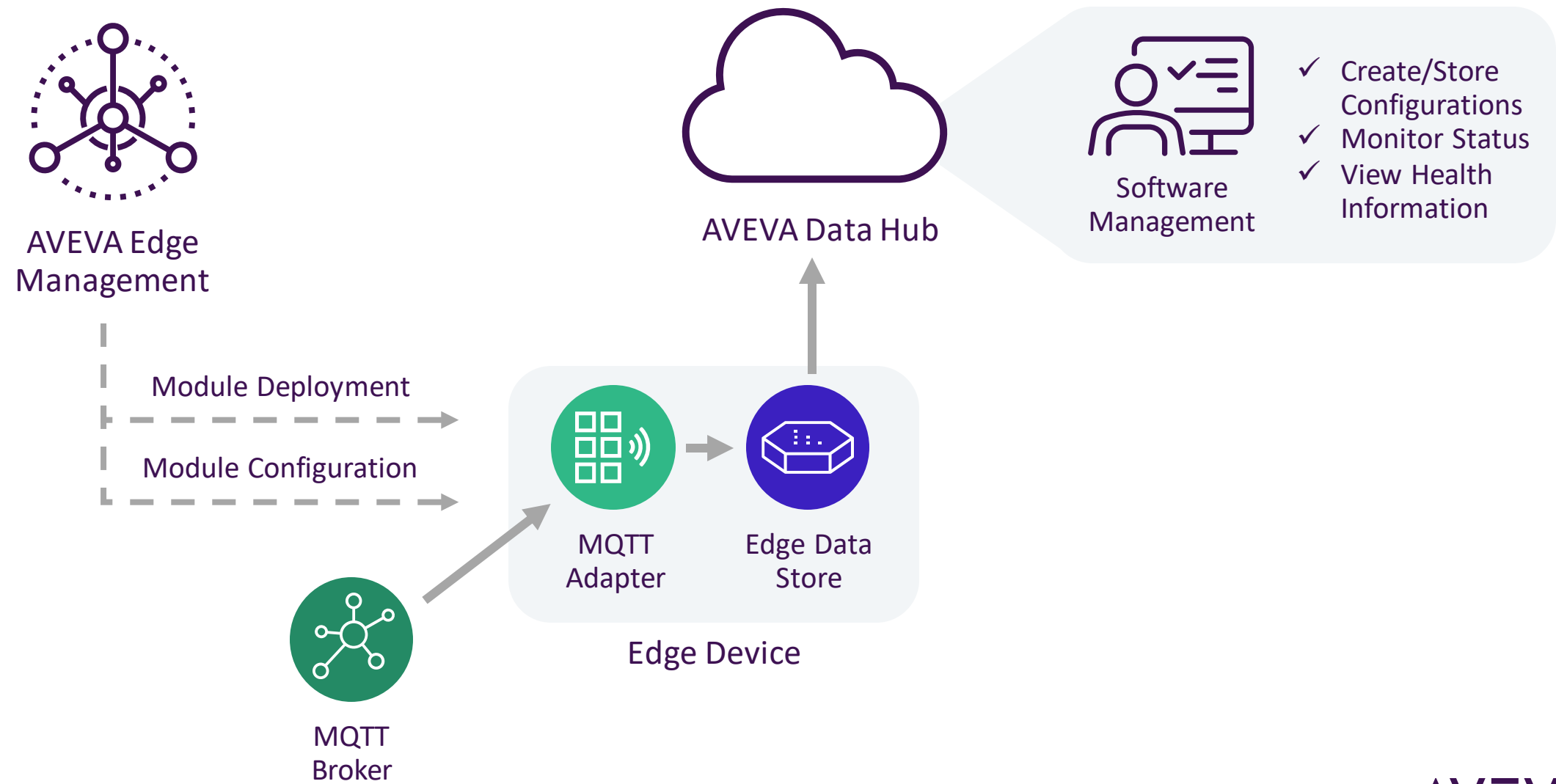


DEMO

Deploy Edge Data Store and adapters in minutes

AVEVA

Demo Scenario



Demo Steps

AVEVA Edge Management

1

Pairing Device

2

Deploy Edge Data Store and
MQTT Adapter Modules

4

Update Edge Data Store and
MQTT Adapter Configurations

AVEVA Data Hub

3

Create Configurations using
Base Configuration

5

Verify Data Flow & View
Software Health

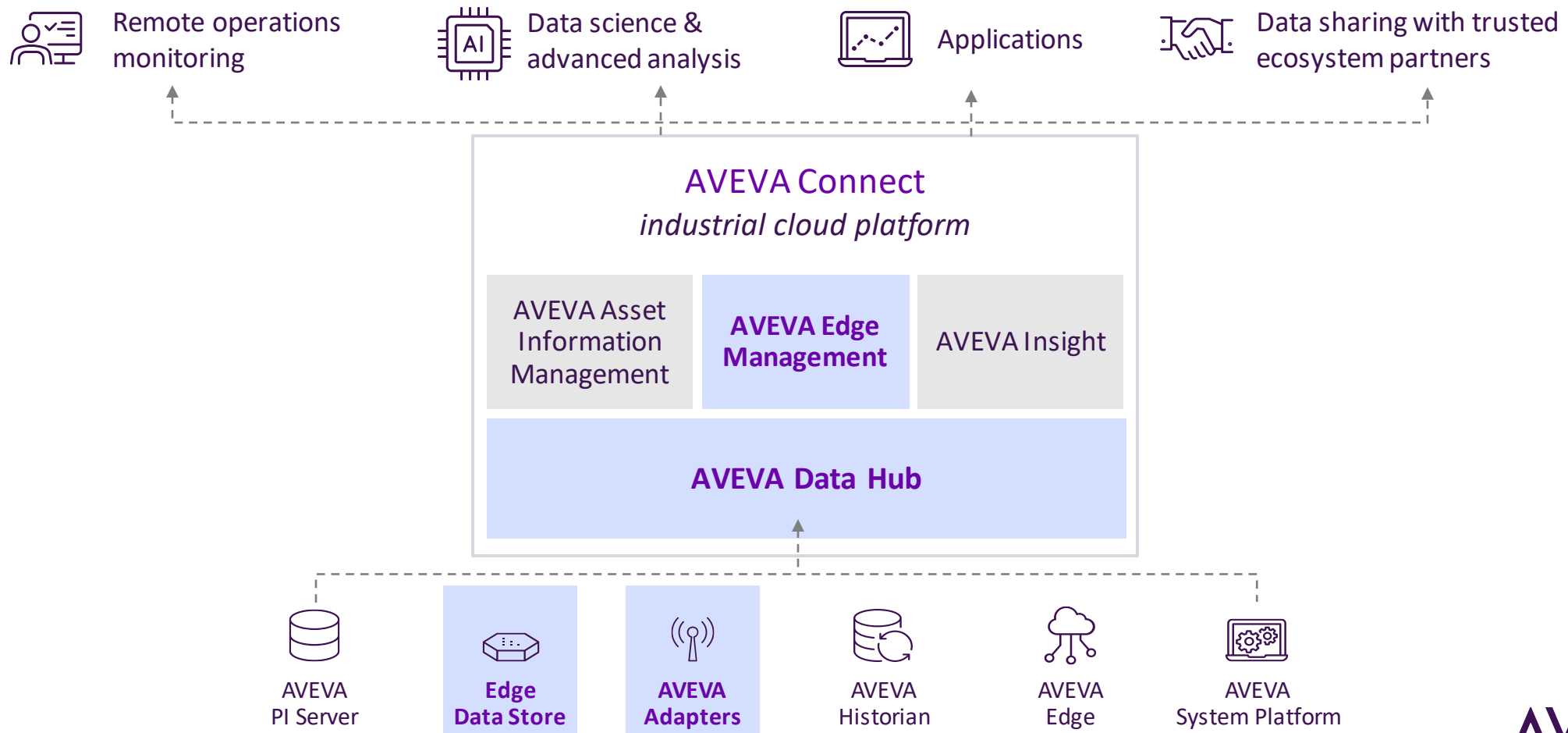


Recorded Demo Placeholder

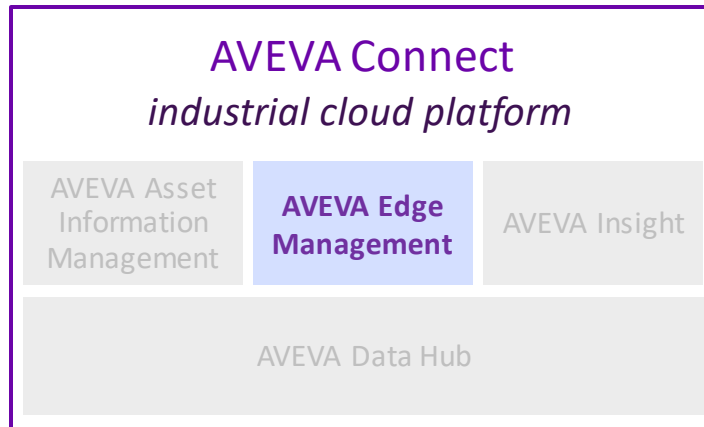
Summary

Accelerate time to value with AVEVA's portfolio from edge to cloud

AVEVA Connect enables a hybrid data architecture through cloud offerings



Remote device management – AVEVA Edge Management



The screenshot displays the AVEVA Edge Management interface, which is used for managing edge devices and their software. The interface is divided into three main sections, numbered 1, 2, and 3.

1. Pair & bootstrap device: This section shows the 'PIADAPTER2' device details. It includes a 'Details' tab with fields for Description, Device Type, Platform, and Keywords. The 'Pairing' section provides a command to run in the Linux terminal to pair the device to its device twin.

2. Deploy software: This section shows the 'Modules' tab for the 'PIADAPTER2' device. It allows users to select modules from a library, such as 'Edge Data Store' and 'PI Adapter for MQTT'. The 'Deployment' tab shows the configuration for the selected modules, including the Deployment Name, Configuration File, Connection Port, and Secret Store.

3. Manage device and software: This section shows the 'Device List' table, which displays a list of devices and their associated software modules.

Status	Connection	License	Name	Description	Keywords
PUBLISHED	Wi-Fi	✓	PIADAPTER1	Field device running Edge Data Store and PI Adapter for MQTT	EDS ...
PUBLISHED	Wi-Fi	✓	PIADAPTER2	Field device running Edge Data Store and PI Adapter for MQTT	EDS ...
PUBLISHED	Wi-Fi	✓	PIADAPTER3	Field device running Edge Data Store and PI Adapter for MQTT	EDS ...
PUBLISHED	Wi-Fi	✓	PIADAPTER4	Field device running Edge Data Store and PI Adapter for MQTT	EDS ...
PUBLISHED	Wi-Fi	✓	PIADAPTER5	Field device running Edge Data Store and PI Adapter for MQTT	EDS ...

1. Pair & bootstrap device: establishes secure communications
2. Deploy software: choose from a library of edge modules
3. Manage device and software: configuration, licensing, versions

Remote device management – Software Management

AVEVA Connect industrial cloud platform

AVEVA Asset
Information
Management

AVEVA Edge
Management

AVEVA Insight

AVEVA Data Hub
Software Management

The screenshot displays the AVEVA Data Hub Software Management interface. The top section shows the 'Configuration' view for the 'EDS1' Edge Data Store, with a JSON configuration editor and a list of actions. The bottom section shows the 'Monitoring' view, which includes a table of Edge Systems and a detailed view of the 'PIADAPTER1' component.

Configuration View (Top):

- Section Select: JSON Configuration
- Configuration * (JSON):

```
1 {
2   "storage": {
3     "periodicIngressEndpoints": [
4       {
5         "id": "pi",
6         "executionPeriod": "00:00:15",
7         "endpoint": "https://plserver1/plueapi/omf/",
8         "username": "username",
9         "password": "password"
10      }
11     ],
12   },
13   "runtime": {
14     "logging": {}
15   },
16   "system": {
17     "logging": {},
18     "healthEndpoints": [
19       {
20         "id": "AVEVA Data Hub",
21         "endpoint": "https://datahub.com",
22         "clientId": "clientId",
23         "clientSecret": "clientSecret"
24       },
25       {
26         "id": "pi",
27         "endpoint": "https://plserver1/plueapi/omf/",
28         "username": "username",
29         "password": "password"
30       }
31     ]
32   }
33 }
```

Monitoring View (Bottom):

Device Name	Status	Type	Version	Last Contacted	Tags
PIADAPTER1	Good	Edge Data Store	1.0.852	a minute ago	
PIADAPTER2	Good	Edge Data Store	1.0.852	a few seconds ago	
PIADAPTER3	Good	Edge Data Store	1.0.852	a minute ago	
PIADAPTER4	Good	Edge Data Store	1.0.852	a few seconds ago	
PIADAPTER5	Good	Edge Data Store	1.0.852	a few seconds ago	
PIADAPTER1	Good	PI Adapter for MQTT	1.1.0.1	a minute ago	
PIADAPTER2	Good	PI Adapter for MQTT	1.1.0.1	a few seconds ago	
PIADAPTER3	Good	PI Adapter for MQTT	1.1.0.1	a few seconds ago	
PIADAPTER4	Device In Error	PI Adapter for MQTT	1.1.0.1	a few seconds ago	

PIADAPTER1 Details:

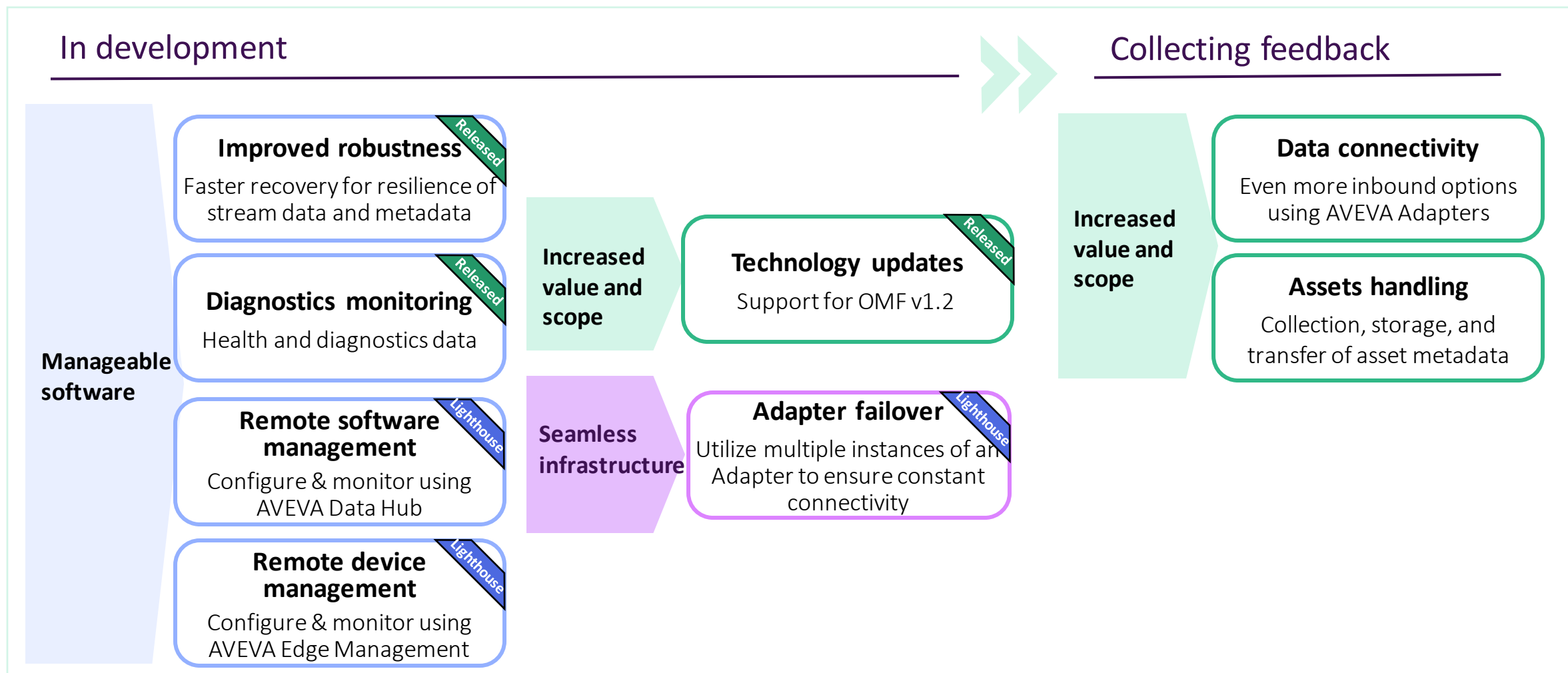
- Id: 1fe10717-9653-4953-a873-6cea73ef56a
- Status: Good
- Version: 1.0.852
- Memory: 171.5 MB
- Storage Used: 9.5 GB / 163.6 GB (9%)
- Last Contacted: a minute ago
- Last Modified: a minute ago
- Tags: []

Components:

- Storage: Good
- Health: Good
- Streams: 111
- Ingress Rate: 54

- Edge system configuration authoring & validation
- Edge system monitoring
 - Status: good, warning, bad
 - Device diagnostics: status, CPU, memory, storage usage
 - Component metrics: health, stream count, IO rate, etc.

What's next for Edge Data Store and AVEVA Adapters?





AVEVA Lighthouse Program

Join us in a Lighthouse Project to prove & shape the value of new technology for your business scenarios!

- **AVEVA provides:**

- AVEVA pre-released software
- Installation & configuration support
- Technical R&D support
- Program management

- **Participating customer provides:**

- Viable scenario
- Resources to use AVEVA pre-released software for your scenario
- Product feedback on use of software for scenario
- Willingness to document a success story and participate in a future AVEVA public presentation

Email us at lighthouse@aveva.com to engage with our team!

AVEVA

Learn more about operational data in the cloud!

Related Sessions @ AVEVA World 2022 – San Francisco

• Day 1: Industrial Cloud Platform & AVEVA PI System

- AVEVA: AVEVA Connect, Industrial Cloud Platform – Vision, roadmap, and starting your operations and engineering digital twin journey [14:00]
- AVEVA: Power your secure industrial ecosystem of data, applications, and partners with AVEVA Data Hub connected communities [14:40]
- AVEVA: Enhancing connectivity to industrial operations, more data from more places [14:40]
- AVEVA: Accelerate Your Time to Value with Analytics and Applications Fueled by AVEVA Data Hub [15:40]
- AVEVA: On your marks, get set, Unleash your Operational Data in the Cloud! [16:20]

• Day 2: Customer Presentations

- IGI: The International Group: Lityx, use AVEVA™ Data Hub (ADH) to implement AI-based analytics, improving yields and generating millions in additional profit at a 20x ROI [10:55]
- Industrial Parts Depot: Real-Time Fleet Monitoring with OCS at Industrial Parts Depot [14:00]
- AVEVA: Digital Transformation Fueling Operational Excellence and the Journey to Net-Zero [16:35]

• Day 3: Industrial Cloud Platform & AVEVA PI System

- AVEVA: Deploy Edge Data Store and Adapters in minutes with AVEVA Edge Management [11:25] [\[this talk\]](#)
- AVEVA: Visualizing the Digital Twin, an Independent Service on the Industrial Cloud Platform [13:30]
- AVEVA: Uniting the connected community through secure and transparent industrial data sharing [14:25]
- AVEVA: How (Not) to Fail at Collecting Data: An Adapter Failover Installation and Configuration Deep Dive [15:30]
- AVEVA: Harnessing the power of Sequential Data Store (Sds) and Assets for developers and partners [15:30]
- AVEVA: Aggregating data with Data Hub asset rules and data views for analytics and applications [16:25]



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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

AVEVA

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ABOUT AVEVA

AVEVA is a global leader in industrial software, sparking ingenuity to drive responsible use of the world's resources. The company's secure industrial cloud platform and applications enable businesses to harness the power of their information and improve collaboration with customers, suppliers and partners.

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. With operations around the globe, we are headquartered in Cambridge, UK and listed on the London Stock Exchange's FTSE 100.

Learn more at www.aveva.com