



Integrating your Operations Data

Chloe Carasso, Robert Kambach

AVEVA

Agenda

How to integrate your operational data to Data Hub

PI to Data Hub

AVEVA Historian

Through AVEVA PI System

Direct to Data Hub

For OCS Users

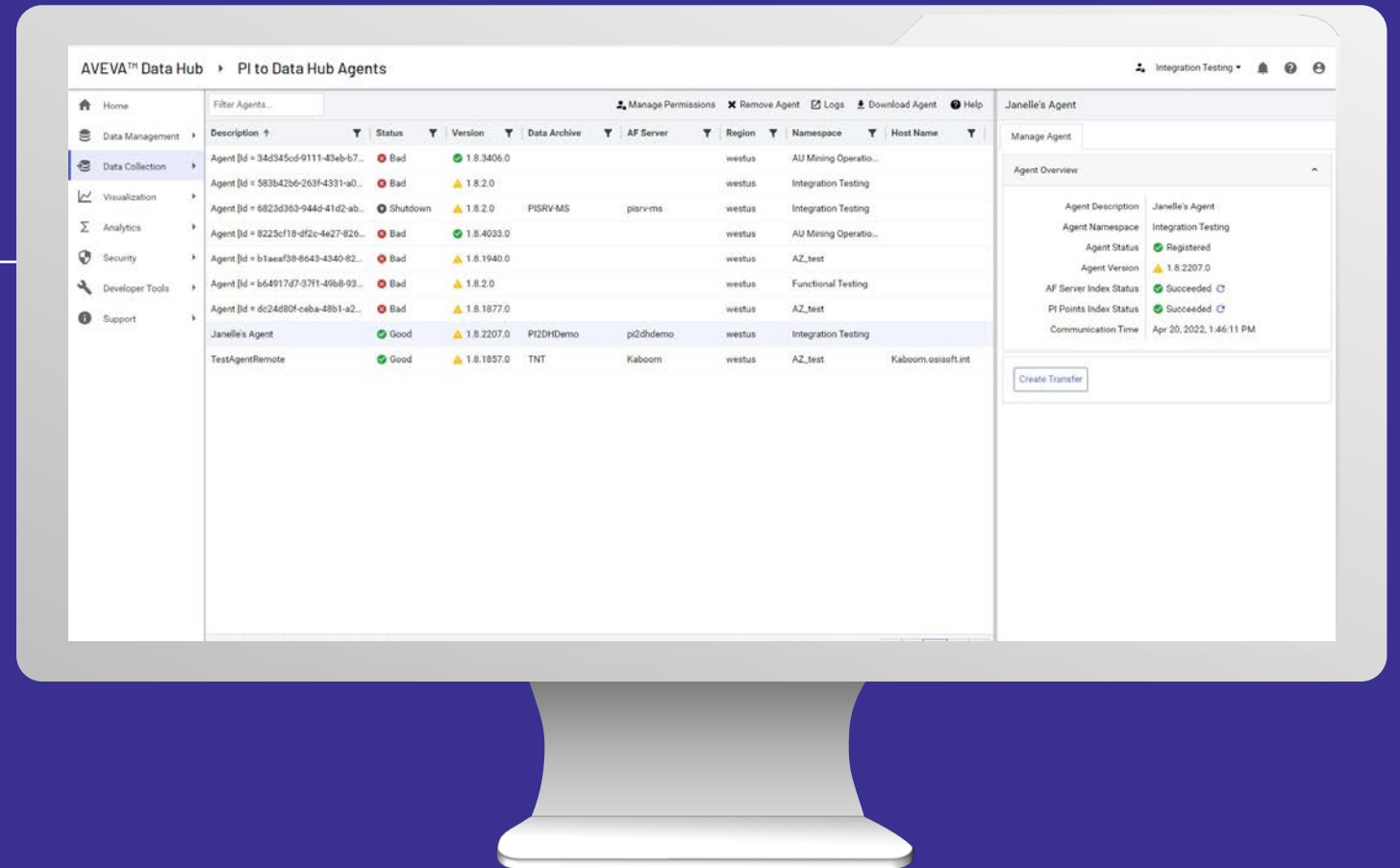
Questions

Quick Poll!

- Do we have any existing PI users in the room?
- Any existing OCS users in the room?
- Any existing ADH users in the room?
- Any existing AVEVA historian users in the room?



PI to Data Hub

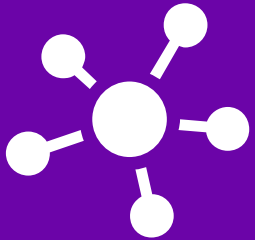


PI to Data Hub makes it easy to integrate your PI System Data with AVEVA Data Hub

PI to Data Hub

Native Ingress to AVEVA Data Hub
Central, Simple, Secure

Central Configuration



Configure and Manage
Data Transfers,
Security from Data Hub

Simple to use



Simple to install
Agent Runs On-Prem

Secure



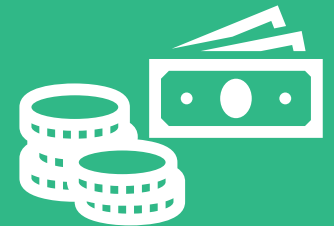
Secure authentication
in the cloud
Windows accounts
authenticate against on-
Prem PI Server(s)

Native Software



Off-the-shelf software
24/7 Support

Leverage your investment

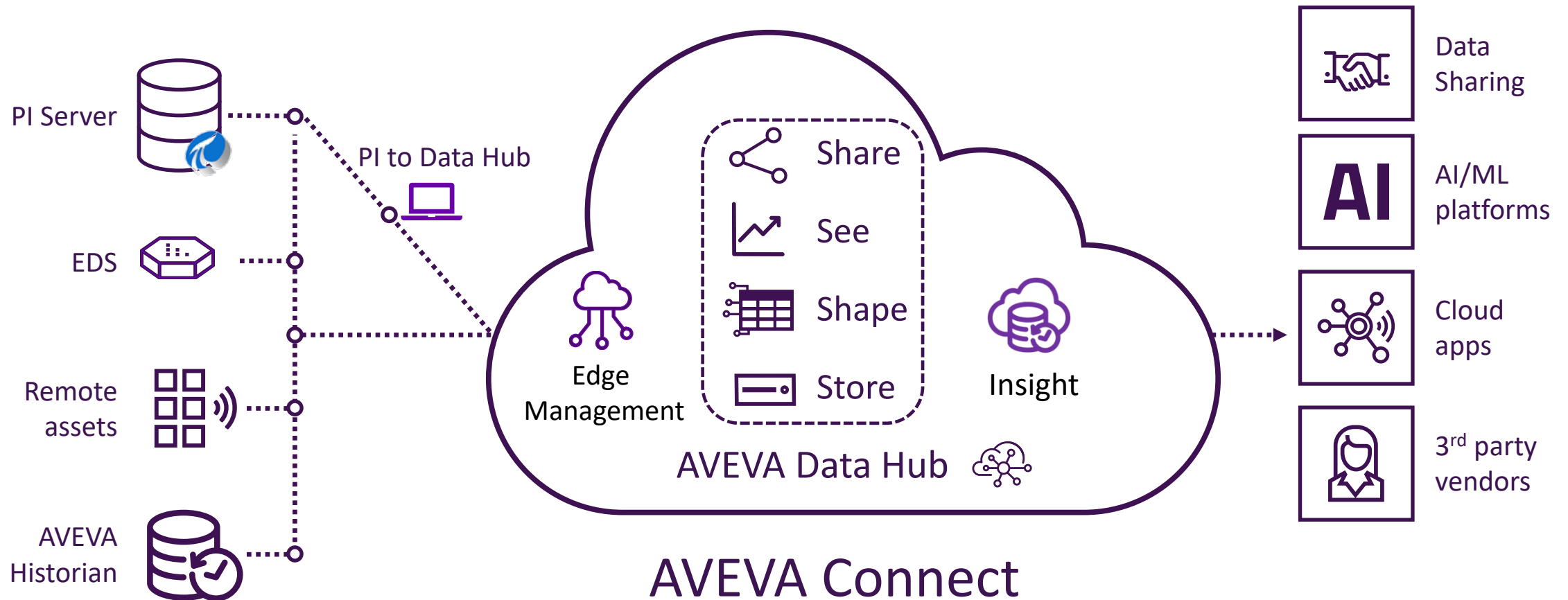


Enable Data Science,
Partner Applications
and Community Data
Sharing

AVEVA

AVEVA Data Hub

Your shared version of the truth bridging OT, IT, and business domains



What's New in PI to Data Hub 2.0



AF Replication

- AF Elements
- AF Attributes
- PI Point references
- Constant values/strings
- Excluded attributes

Demo Creating Transfer with AF

PI2DHDemo - Remote Desktop

AVEVA Connect

Data Hub

Data Hub

+

datahub.connect.aveva.com/tenant/cee3a3fd-aeb2-4950-80f5-4b72c77322b1/agents/overview/?id=13094296-d870-4115-ae33-d019e0e9dc4e

AVEVA Connect

AVEVA™ Data Hub

PI to Data Hub Agents

AVEVA-Events-SaaS

Home

Data Management

Data Collection

Visualization

Analytics

Security

Developer Tools

Support

Filter Agents...

Manage Permissions

Remove Agent

Logs

Download Agent

Help

Description	Status	Version	Data Archive	AF Server	Region	Namespace
CURT2016 to ADH	Good	2.0.0.0	curt2016	CURT2016	westus	Development
My Plant	Good	2.0.0.0	PI2DHDemo	PI2DHDemo	westus	AVEVA-Events-SaaS
PRGDA1	Good	1.8.2.0	PRGDA1	PRGPROD	westus	AVEVA-Events-SaaS
SLTC Agent	Good	1.8.2.0	oakpi-slrc01.dev.osi...	oakpi-slrc01	westus	AVEVA-Events
Windtopia-ocssamplesapi	Good	1.8.2.0	dfpiserverprd.osiso...	dfpiafserverprd.osi...	westus	AVEVA-Events

Showing 1 - 5 of 5

My Plant

Manage Agent

Agent Overview

Agent Description

My Plant

Agent Namespace

AVEVA-Events-SaaS

Agent Status

Registered

Agent Version

2.0.0.0

AF Server Index Status

Succeeded

PI Points Index Status

Succeeded

Communication Time

May 4, 2022, 12:59:50 PM

Create Transfer

What's New in PI to Data Hub 2.0



AF Replication

- AF Elements
- AF Attributes
- PI Point references
- Constant values/strings
- Excluded attributes



Edit Transfer

- Transfer Name
- Transfer Description
- Data Privacy Settings
- Add/Remove AF Elements
- Add/Remove PI Points



Data Privacy

- Configure the data privacy level for stream metadata replication

Demo Editing Transfer with AF

PI2DHDemo - Remote Desktop

AVEVA Connect

Data Hub

Data Hub

datahub.connect.aveva.com/tenant/cee3a3fd-aeb2-4950-80f5-4b72c77322b1/agents/overview/?id=13094296-d870-4115-ae33-d019e0e9dc4e

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SLTC Agent	Good	1.8.2.0	oakpi-slct01.dev.osi...	oakpi-slct01	westus	AVEVA-Events
Windtopia-ocssamplesapi	Good	1.8.2.0	dfpiserverprd.osiso...	dfpiafserverprd.osi...	westus	AVEVA-Events

Showing 1 - 5 of 5

Items per page: 50

My Plant

Manage Agent

Transfer Metrics

Agent Overview

Agent Description

My Plant

Agent Namespace

AVEVA-Events-SaaS

Agent Status

Registered

Agent Version

2.0.0.0

AF Server Index Status

Succeeded

PI Points Index Status

Succeeded

Communication Time

May 4, 2022, 1:13:34 PM

Transfer Overview

Transfer Name

Reactor Data

Transfer Description

My Reactors

Transfer Status

Started

Current Activity

Sending Streaming Data

Last Modified

May 4, 2022, 1:04:21 PM

View/Edit Transfer

Remove Transfer

Stop Transfer

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What's New in PI to Data Hub 2.0



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- PI Point references
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Edit Transfer

- Transfer Name
- Transfer Description
- Data Privacy Settings
- Add/Remove AF Elements
- Add/Remove PI Points



Data Privacy

- Configure the data privacy level for stream metadata replication



Health Events

- View Warnings, Errors for your Transfer and Agent
- Sort, Export, Clear Health Events

Demo Health Events

PI2DHDemo - Remote Desktop

AVEVA Connect

Data Hub

Data Hub

datahub.connect.aveva.com/tenant/cee3a3fd-aeb2-4950-80f5-4b72c77322b1/agents/overview?id=13094296-d870-4115-ae33-d019e0e9dc4e

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Manage Agent

Transfer Metrics

Agent Overview

Agent Description

My Plant

Agent Namespace

AVEVA-Events-SaaS

Agent Status

Registered

Agent Version

2.0.0.0

AF Server Index Status

Succeeded

PI Points Index Status

Succeeded

Communication Time

May 4, 2022, 2:24:08 PM

Transfer Overview

Transfer Name

Reactor Data

Transfer Description

My Reactor Data

Transfer Status

Started

Current Activity

Sending Streaming Data

Last Modified

May 4, 2022, 1:15:58 PM

View/Edit Transfer

Remove Transfer

Stop Transfer





**GOOD
NEWS
IS COMING**

COMING SOON

PI to Data Hub: **Change Synchronization**

Phase 1:

Detect changes to **items** in existing transfer configuration and replicate to Data Hub

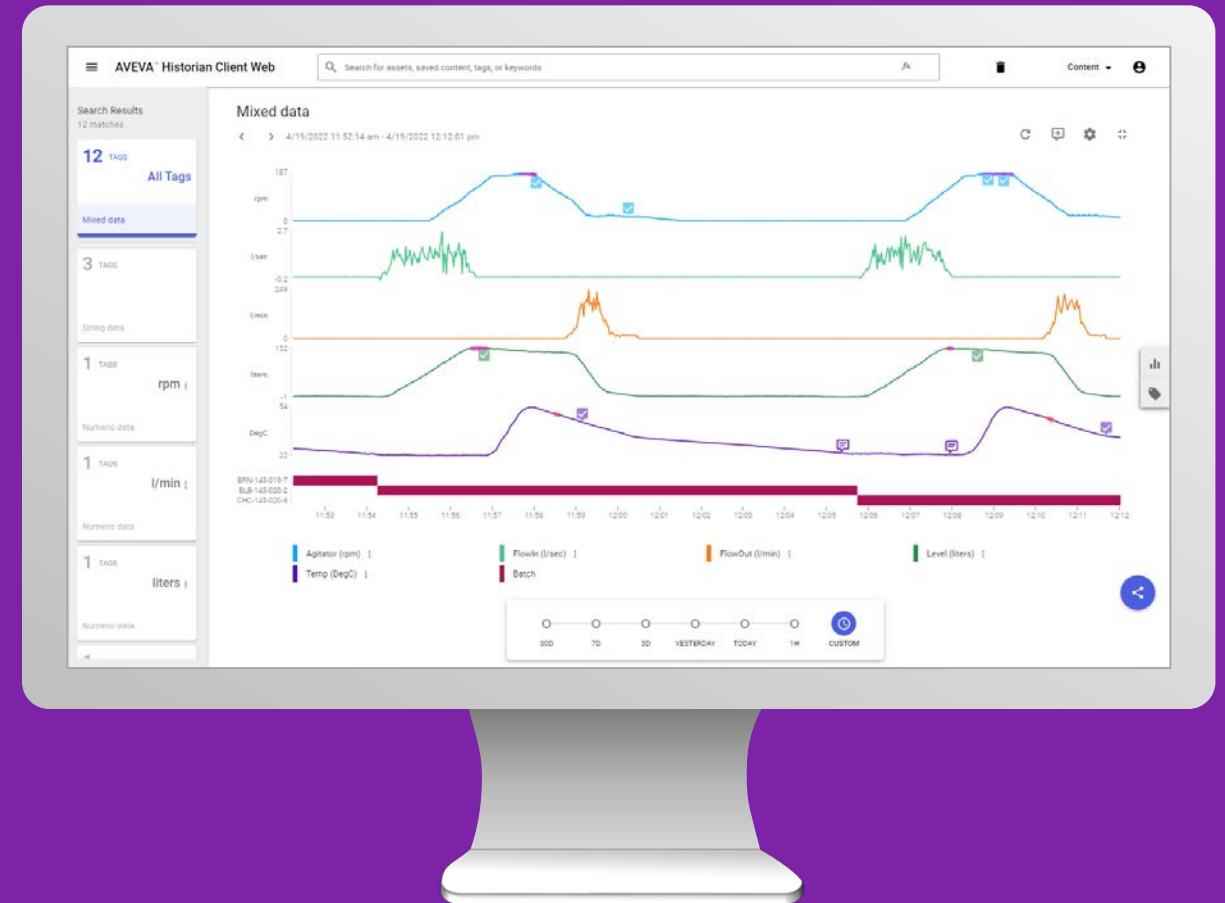
Phase 2:

Detect changes to **data** in existing transfer configuration and replicate to Data Hub

Must opt-in to replicate deletions from Data Hub

AVEVA System Platform

AVEVA Historian



AVEVA Operations Control

Expanding Operations Control to Enterprise domain

Enterprise Edition

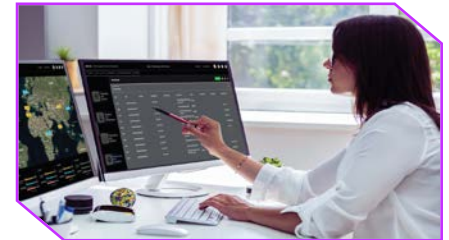
Long Term Focus
(up to 1 Year)
Enterprise View
IT/OT Convergence



Command Center



Remote Operations Center



Casual User

Supervisory Edition

Medium Term Focus
(up to 1 Week)
Process View
OT Convergence



Control Room



Area Workstation



Mobile Supervisor

Edge Edition

Short Term Focus
(up to 1 Shift)
Work Cell View
Control Convergence



Panel-based Operations



Tablet-based Operations



Off-site Operations

Unifying Operations

Unique 360° view of asset and operations life cycle

Create Context Driven Actionable Information

Intelligently detect inefficiencies and potential problems, automatically triggering remedial action to constantly optimize operations performance.

Automate Process Workflows

Feel confident every day that risks are minimized, costs (including energy efficiency) are mitigated, and workforce efficiency is at its optimum.

Increase Visibility to KPI Performance

Remove complexity by controlling all operations with a single-pane-of-glass, a system of systems, with connectors integrating all IT and OT systems.



AVEVA Monitoring & Control Integration with PI System

Distinct Operational Roles

BUSINESS NETWORK	<div>AVEVA Unified Operations Center ENTERPRISE VISUALIZATION</div>	<ul style="list-style-type: none">• IT/OT Convergence• Industry Vertical Content	<ul style="list-style-type: none">• Contextualized Data & Applications• End to End Visibility
	<div>AVEVA PI System INDUSTRIAL DATA PLATFORM</div>	<ul style="list-style-type: none">• Data/Information Mgmt. Platform• Performance Intelligence	<ul style="list-style-type: none">• Data Contextualization• Process/Business Analytics
PROCESS CONTROL NETWORK	<div>AVEVA Historian/System Platform SUPERVISORY HISTORIAN</div>	<div>Well-Known Brands<ul style="list-style-type: none">• Wonderware• Citect• Indusoft</div>	<ul style="list-style-type: none">• Operational Reporting• Process Analytics
	<div>AVEVA HMI/SCADA PROCESS VISUALIZATION</div>	<ul style="list-style-type: none">• Real Time Operations• Command and Control	<ul style="list-style-type: none">• Operator Effectiveness• Edge to Enterprise

AVEVA Monitoring & Control Integration with Data Hub

Distinct Operational Roles



Markets Compared

Enterprise



41+

years as a leader

20,800+

sites

2.0B+

points

96K

average points

Supervisory



34+

years as a leader

132,000+

sites

1.0B+

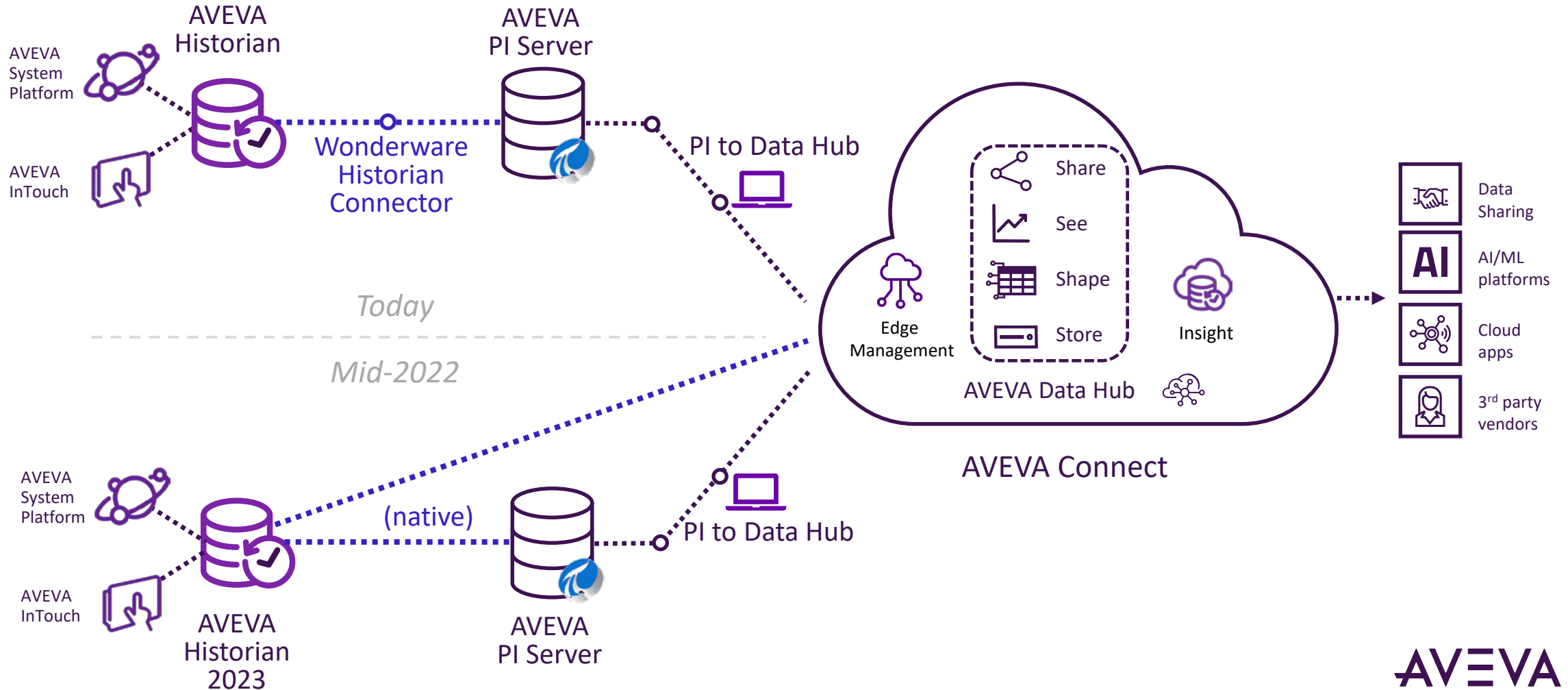
points

6K

average points

AVEVA Data Hub

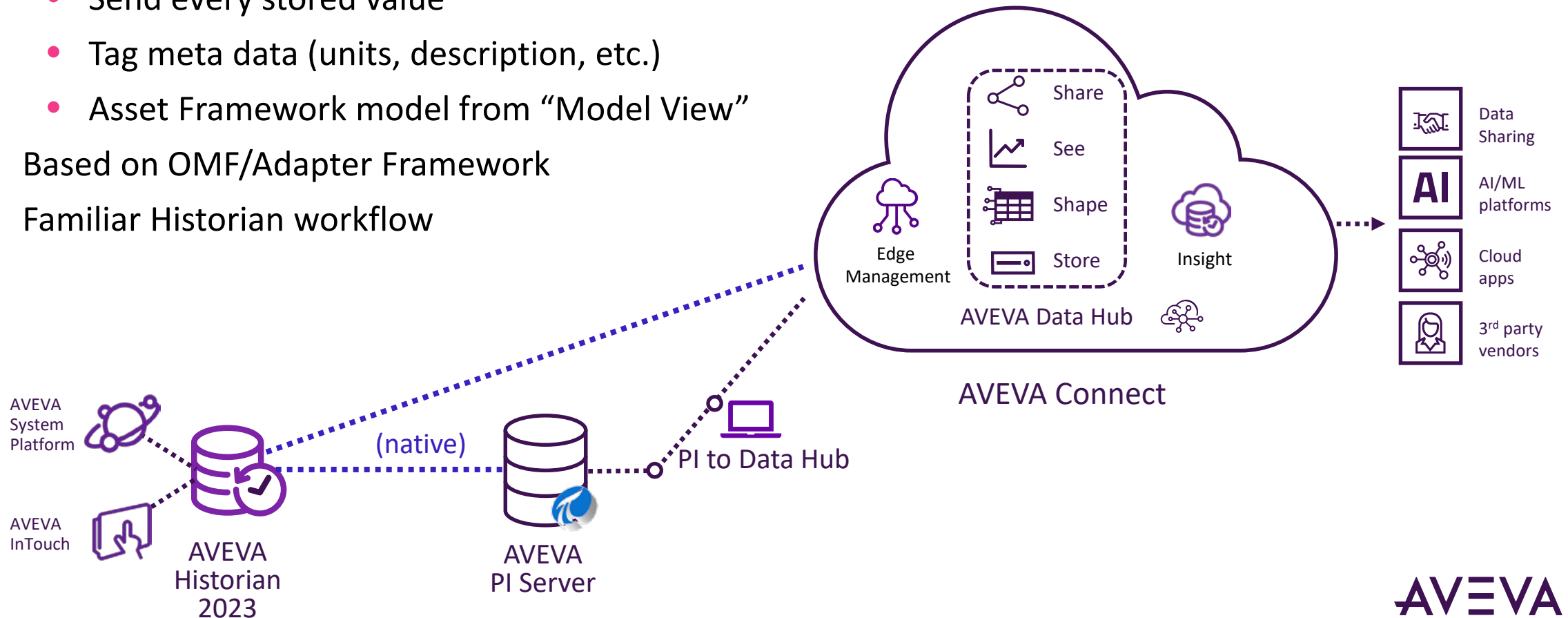
Including AVEVA Historian in the shared version of the truth



AVEVA Data Hub

Including AVEVA Historian in the shared version of the truth

- Includes
 - Send every stored value
 - Tag meta data (units, description, etc.)
 - Asset Framework model from “Model View”
- Based on OMF/Adapter Framework
- Familiar Historian workflow





Local Replication

**This Slide Contains An Embedded Video Of
Replicating to Data Hub**

OCS customers will have a migration path to AVEVA Data Hub



AVEVA will contact OCS customers to discuss migration (commercial & technical)



Migration is designed to minimize downtime and customer involvement

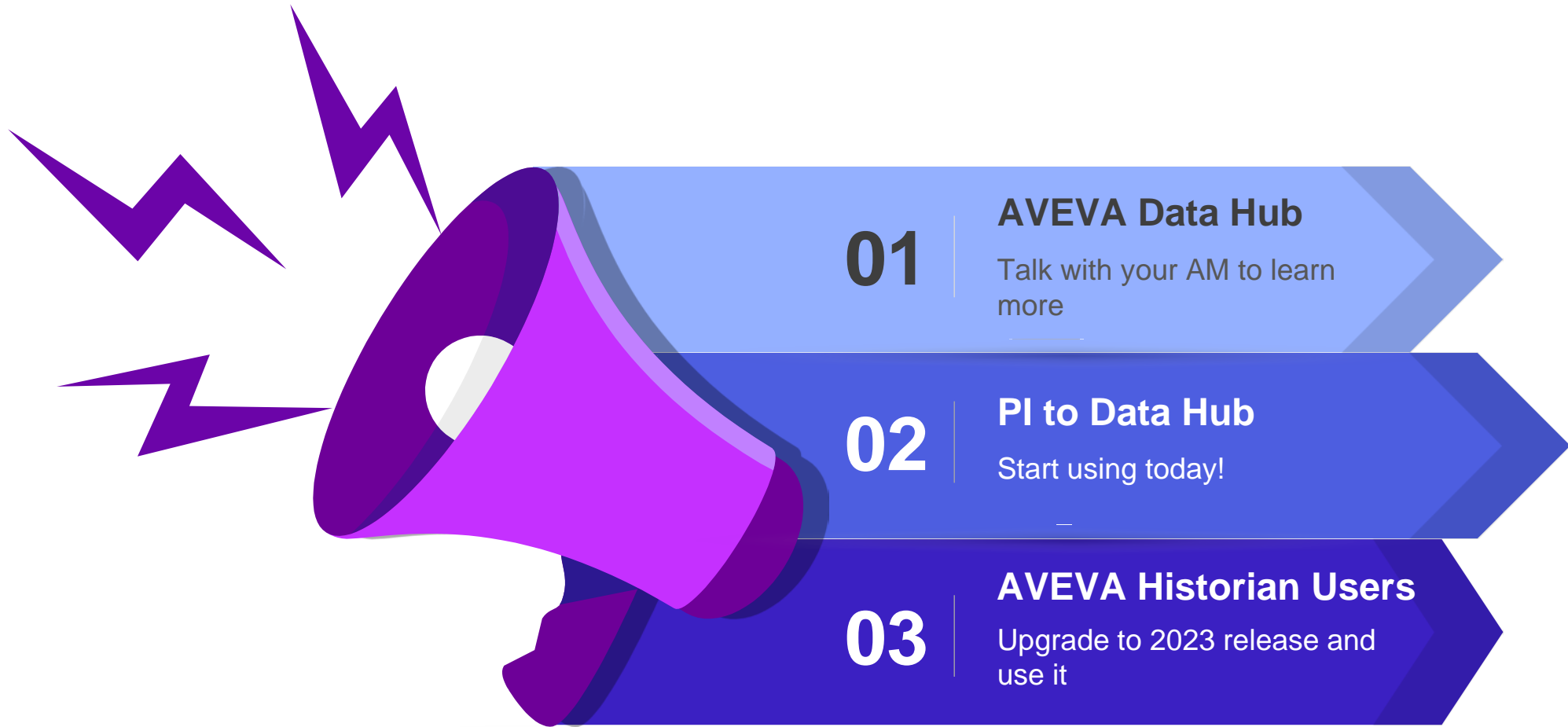


All use of generally available features will be migrated



Migration will be available beginning in June

Call to Action



Communicate with AVEVA Product Managers



<https://feedback.osisoft.com>

.....
If it is not shared on the feedback portal, it didn't happen!



Chloe Carasso dit Carson

Technical Product Manager

- AVEVA
- chloe.carassoditcarson@aveva.com



Robert Kambach

Director, Solution Management

- AVEVA
- rob.kambach@aveva.com

THANK YOU

謝謝

DZIĘKUJĘ CI

NGIYABONGA

TEŞEKKÜR EDERİM

DANKIE

TERIMA KASIH

GRACIES

WHAKAWHETAI KOE

DANKON

TANK

TAPADH LEAT

SALAMAT

SPASIBO

GRAZIE

MATUR NUWUN

ХВАЛА ВАМ

MULTUMESC

PAKMET CIZGE

고맙습니다

GRAZIE

شكرا

FAAFETA

ESKERRIK ASKO

HVALA

GO RAIBH MAITH AGAT

БЛАГОДАРЯ

GRACIAS

ТИ БЛАГОДАРАМ

MAHADSANID

TEŞEKKÜR EDERİM

OBRIGADO

TAK

DANKE

MAHALO IĀ 'ŌE

TAKK SKAL DU HA

MERCİ

DI OU MÈSI

ĐAKUJEM

RAHMAT

MERCİ

GRAZZI

PAKKA PÉR

HATUR NUHUN

PAXMAT CAĞA

CẢM ƠN BẠN

WAZVIITA

FALEMINDERIT

ありがとうございました

SIPAS JI WERE

TERIMA KASIH

UA TSAUG RAU KOJ

ТИ БЛАГОДАРАМ

СИПОС

KÖSZÖNÖM

KEA LEBOHA

MISAOTRA ANAO

БЯЯРЛАЛАА

ТАРАДХ ЛЕІВН

ДЗЯКУЎ

FAAFETA

ESKERRIK ASKO

HVALA

TEŞEKKÜR EDERİM

OBRIGADO

MERCİ

DI OU MÈSI

ĐAKUJEM

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PAXMAT CAĞA

CẢM ƠN BẠN

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ありがとうございました

SIPAS JI WERE

TERIMA KASIH


UA TSAUG RAU KOJ


ТИ БЛАГОДАРАМ

СИПОС

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

ABOUT AVEVA

AVEVA is a global leader in industrial software, driving digital transformation and sustainability. By connecting the power of information and artificial intelligence with human insight, AVEVA enables teams to use their data to unlock new value. We call this Performance Intelligence. AVEVA's comprehensive portfolio enables more than 20,000 industrial enterprises to engineer smarter, operate better and drive sustainable efficiency. AVEVA supports customers through a trusted ecosystem that includes 5,500 partners and 5,700 certified developers around the world. The company is headquartered in Cambridge, UK, with over 6,500 employees and 90 offices in over 40 countries.

Learn more at www.aveva.com