



**AVEVAWORLD**  
PARIS



AVEVAWORLD  
PARIS

OCTOBER 2024

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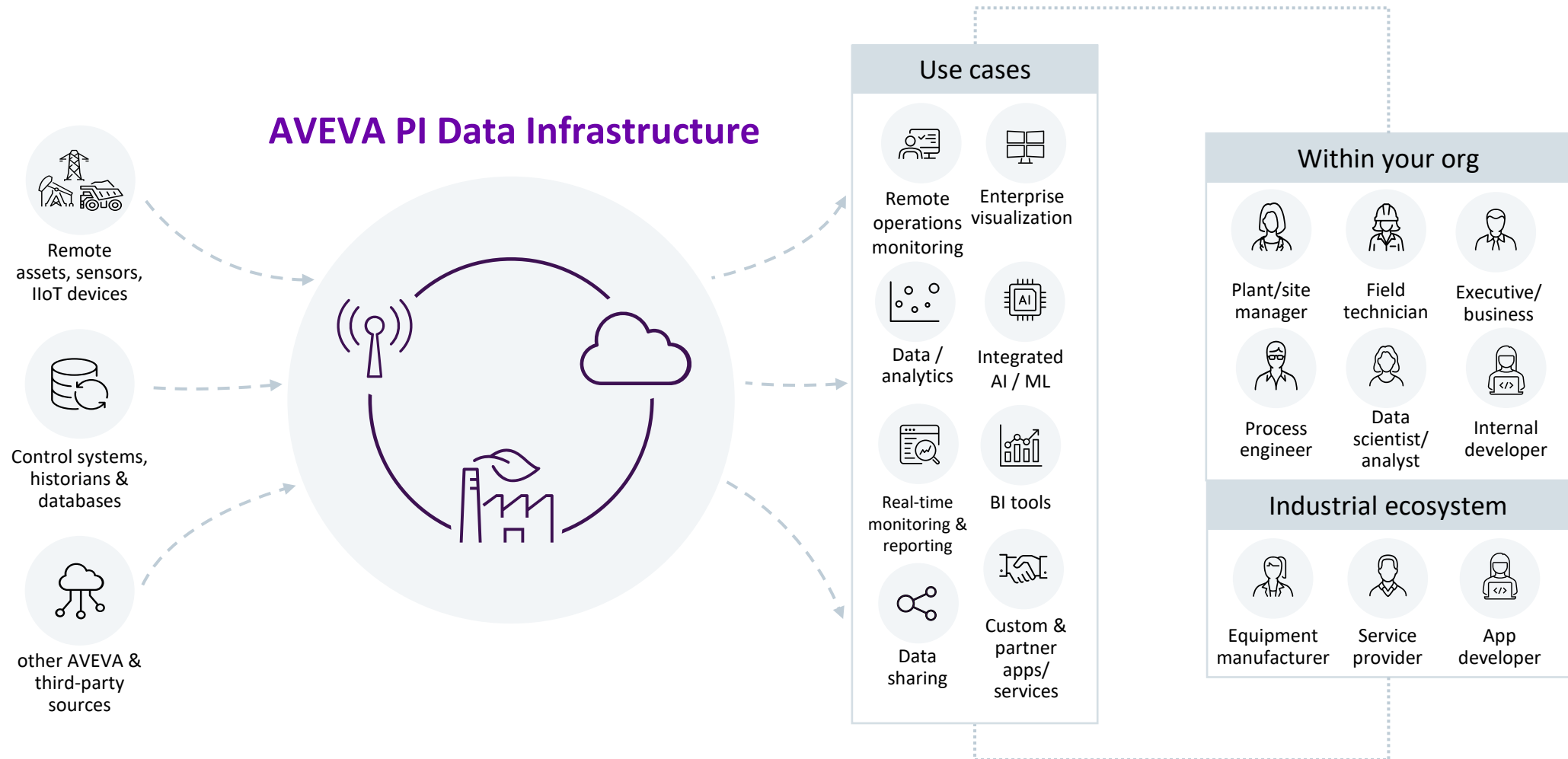
# Visualizing your operations data with AVEVA™ PI Vision™

Amit Dutta – Senior Product Manager

AVEVA

# Hybrid data infrastructure

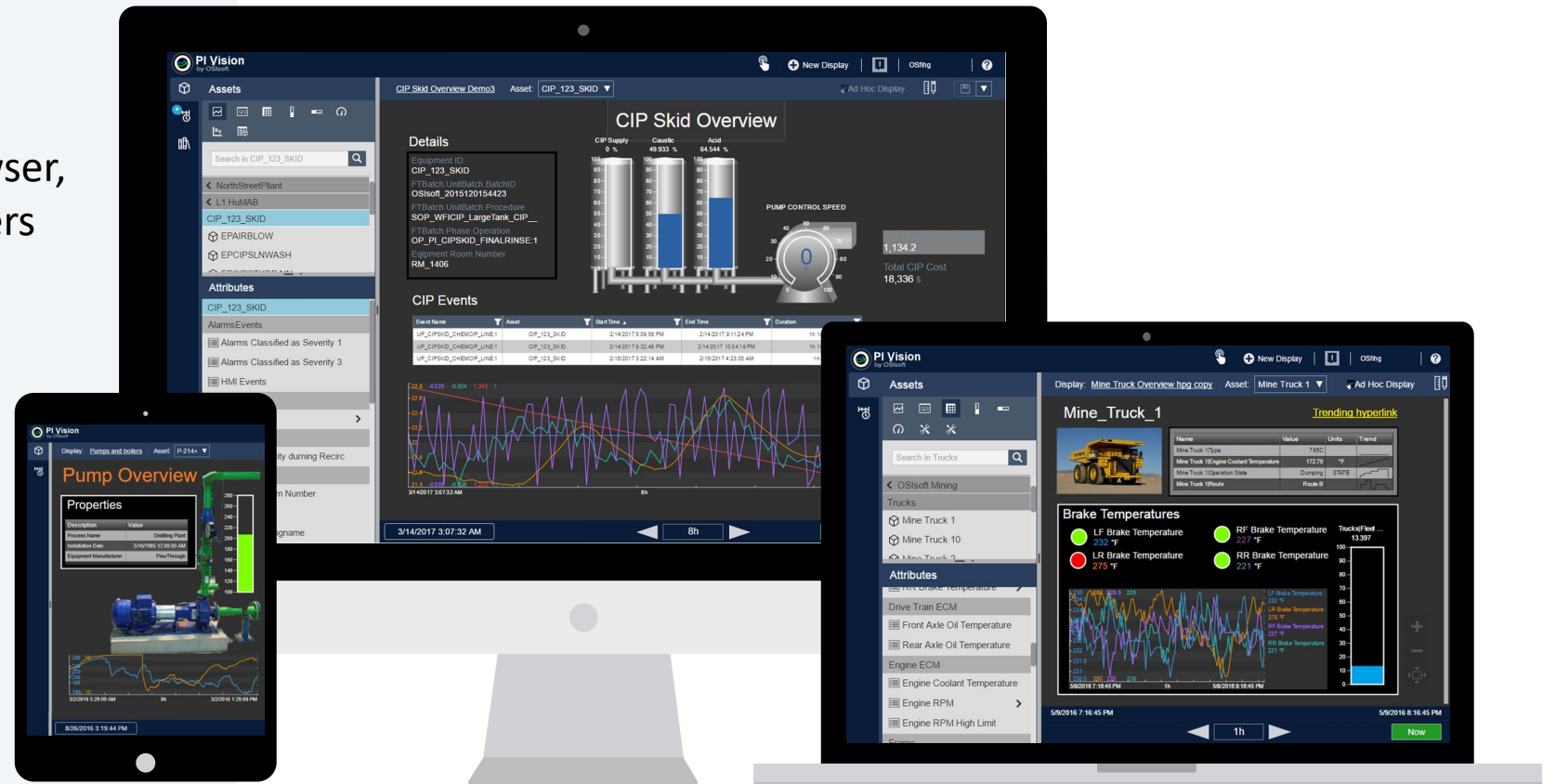
From edge to plant to community



# AVEVA PI Vision

The fastest, easiest way to visualize AVEVA PI Server data

- An **easy to use, self-service, scalable** solution
- Access data from any web browser, including **mobile** device browsers
- **Organize and share** displays across your organization





# Gain visibility into operations

## Operations data visualization outcomes for industrial organizations



### Rapid response

University of Maryland reduced electrical outage response times from up to 90 minutes to **almost instantaneous**

University of Maryland, College Park



### Collaboration

Algoma Steel users built over **1,500 displays** to provide deeper insights shared across departments.

Algoma Steel



### Self-service

One user at ADM visualized over 550 assets' data in one display in **less than 10 minutes**

ADM



# Powerful capabilities added in recent releases

## 2019-2023 AVEVA PI Vision releases

### 2019

- PI ProcessBook migration
- Ad hoc trending

### 2020

- Tag based calculations
- Multiple time contexts
- Display usage monitoring
- Additional PI ProcessBook migration

### 2021

- Asset based calculations
- Offline display management
- Attributes in events table

### 2022

- Enhanced event frame visualization
- Trend cursor on drag
- Unit of measure support
- Default display and symbol settings

### 2023

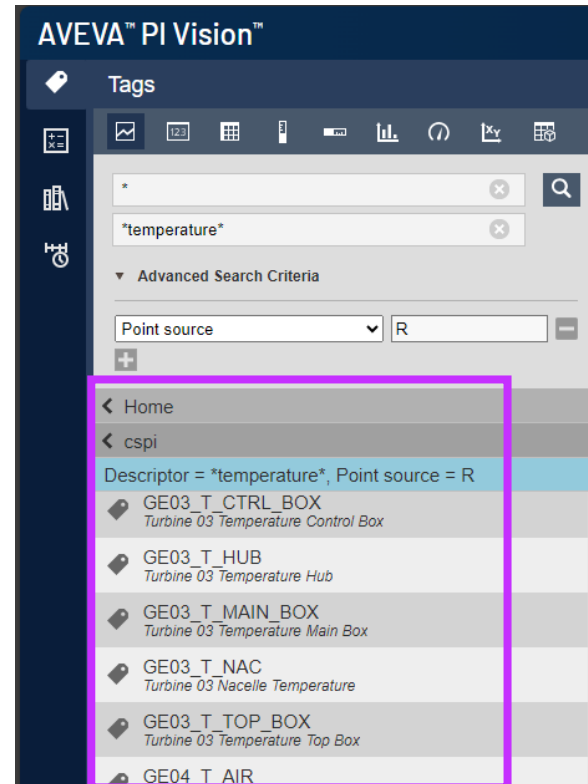
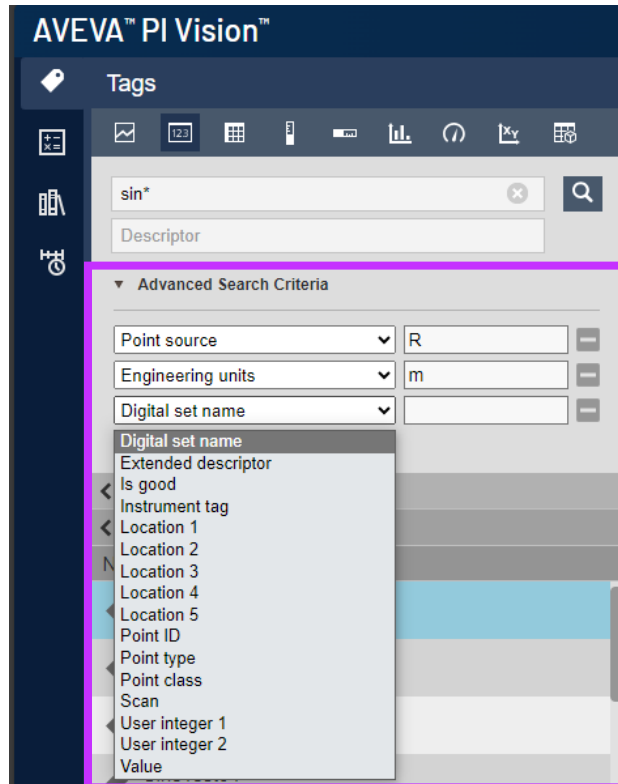
- Modern authentication
- Advanced tag search

# Advanced tag search in AVEVA PI Vision 2023 SP1



Streamline finding the right tags with advanced search features

Released Jan 2024



## Features

- Filter by multiple tag attributes at the same time.
- Select operator symbols for filtering on a relevant attribute.
- View description alongside tag name in tag search results.
- View current tag value and timestamp on hover in search results.

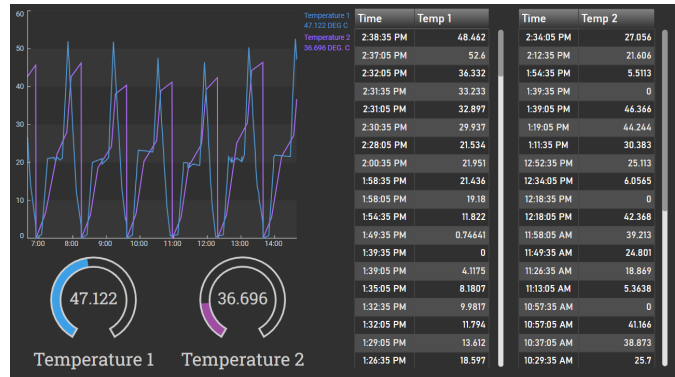
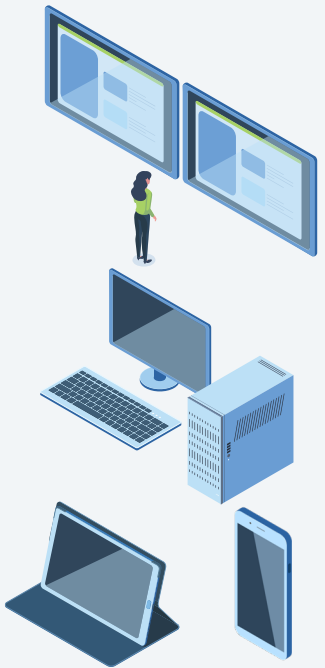
## Benefits

- Streamline finding the right tags, even when tag names lack standard conventions, mismatch the source system, or have similarities with other tags.
- Quickly narrow and interpret tag search results.
- Easily differentiate between recent tags and similar archived tags.

# Addressing critical visualization needs

## Upcoming AVEVA PI Vision 2024 release

Ensure a better overall end-user experience.



Time	Temperature
4/18/2024 2:14:35 PM	184.19 DEG. C
4/18/2024 2:09:05 PM	182.03 DEG. C
4/18/2024 2:02:05 PM	176.14 DEG. C
4/18/2024 1:52:35 PM	176.37 DEG. C
4/18/2024 1:47:35 PM	174.18 DEG. C
4/18/2024 1:45:05 PM	169.46 DEG. C
4/18/2024 1:40:35 PM	170.23 DEG. C
4/18/2024 1:36:35 PM	169.96 DEG. C
4/18/2024 1:34:05 PM	168.86 DEG. C
4/18/2024 1:24:35 PM	170.76 DEG. C
4/18/2024 1:21:35 PM	163.74 DEG. C
4/18/2024 1:16:05 PM	163.8 DEG. C
4/18/2024 1:07:35 PM	171.86 DEG. C
4/18/2024 1:03:05 PM	172.79 DEG. C

Time	Level
11:58 PM	31.332
11:49 PM	40.644
11:37 PM	43.119
11:17 PM	22.594
11:09 PM	21.571
10:58 PM	0.38098
10:48 PM	0
10:39 PM	11.156
10:34 PM	28.967
10:26 PM	39.51
10:14 PM	41.305
9:57 PM	25.202
9:48 PM	23.864
9:37 PM	1.6205

## Feature highlights

- New time-series table symbol
- Configurable font and font size on all AVEVA PI Vision symbols
- Ability to bulk edit multiple symbols on a display
- Improved display sorting and tabular view of displays
- Granular folder and display permissions
- Additional multi-state capabilities

Addressing 20+ enhancements requests from the AVEVA™ PI System™ Feedback Portal, spanning 2500+ votes



# View recorded values from AVEVA PI Server

## New time-series table symbol

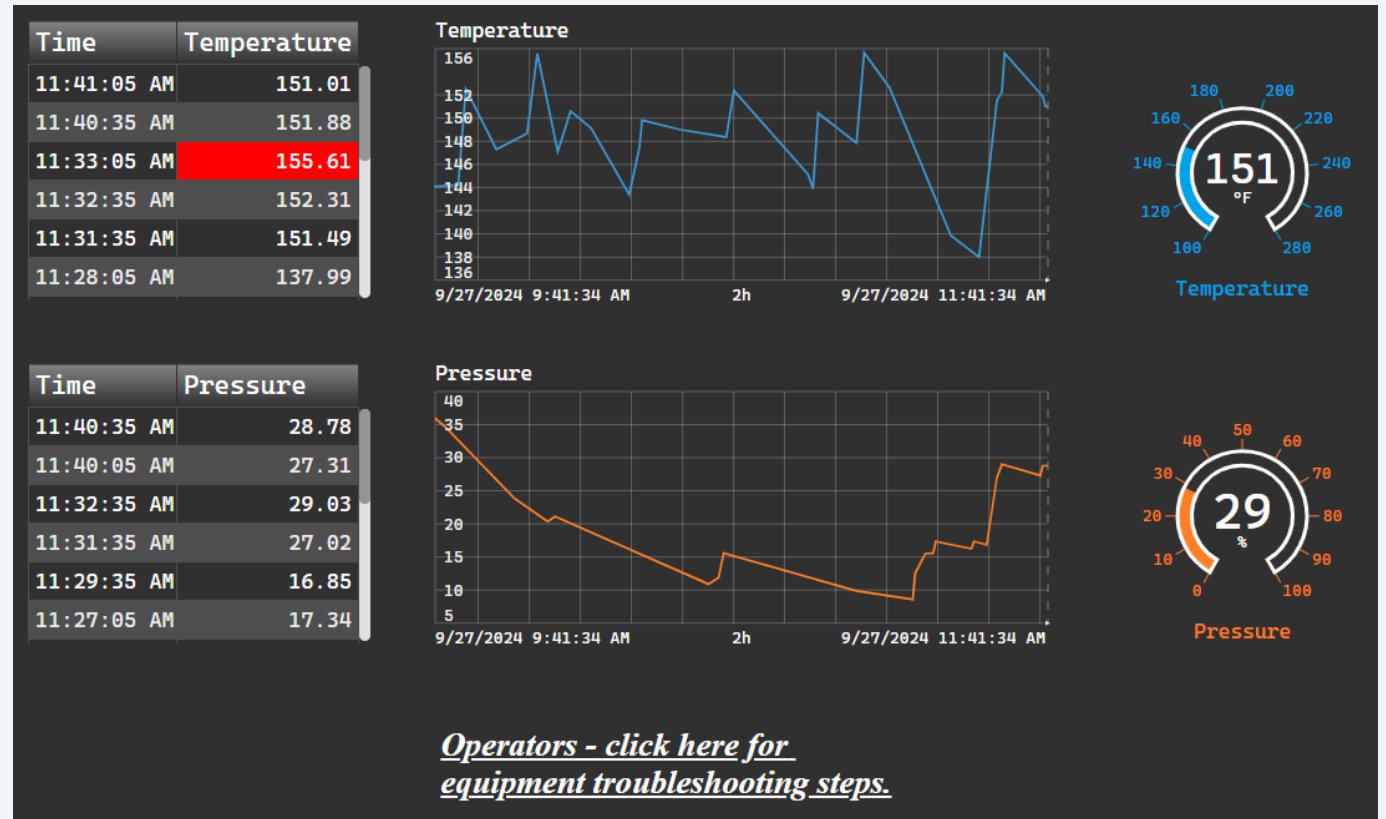
- View recorded PI tag values and timestamps over a specified time range
- Can be configured to show fixed number of values
- Supports multi-state configuration

Time	Temperature
10:14:05 AM	82.5
10:13:35 AM	84.8
10:09:35 AM	84.3
10:08:35 AM	91.0
10:07:35 AM	92.6
10:04:35 AM	92.8
9:29:05 AM	82.0
9:19:05 AM	77.2
9:18:35 AM	79.6
9:17:35 AM	81.4
9:17:05 AM	86.7
9:13:35 AM	85.9
8:57:35 AM	78.7

Time	Temperature
4/18/2024 2:14:35 PM	184.19 DEG. C
4/18/2024 2:09:05 PM	182.03 DEG. C
4/18/2024 2:02:05 PM	176.14 DEG. C
4/18/2024 1:52:35 PM	176.37 DEG. C
4/18/2024 1:47:35 PM	174.18 DEG. C
4/18/2024 1:45:05 PM	169.46 DEG. C
4/18/2024 1:40:35 PM	170.23 DEG. C
4/18/2024 1:36:35 PM	169.96 DEG. C
4/18/2024 1:34:05 PM	168.86 DEG. C
4/18/2024 1:24:35 PM	170.76 DEG. C
4/18/2024 1:21:35 PM	163.74 DEG. C
4/18/2024 1:16:05 PM	163.8 DEG. C
4/18/2024 1:07:35 PM	171.86 DEG. C
4/18/2024 1:03:05 PM	172.79 DEG. C

# Increased visibility of symbols and displays

- Font and font size selection available on all symbols
- New rich text editor for the static text symbol
- Display zoom level preserved for each user

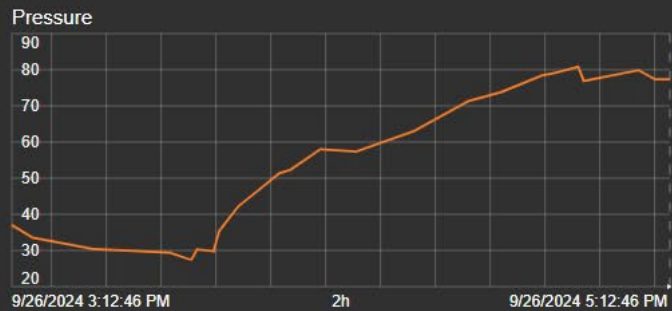
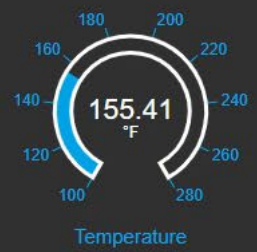
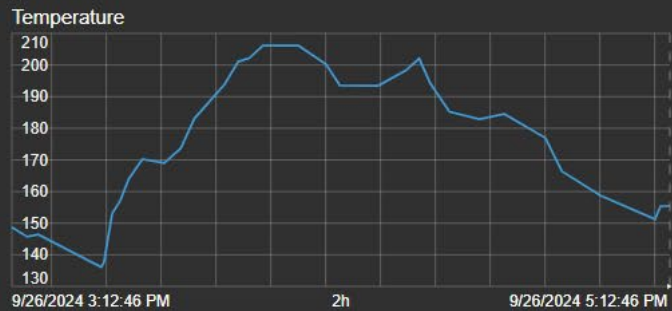




# Bulk edit symbols on a display

- Select multiple symbols on a display and configure them together
- Reduce the time to build complex displays
- Configure symbols to use the same properties

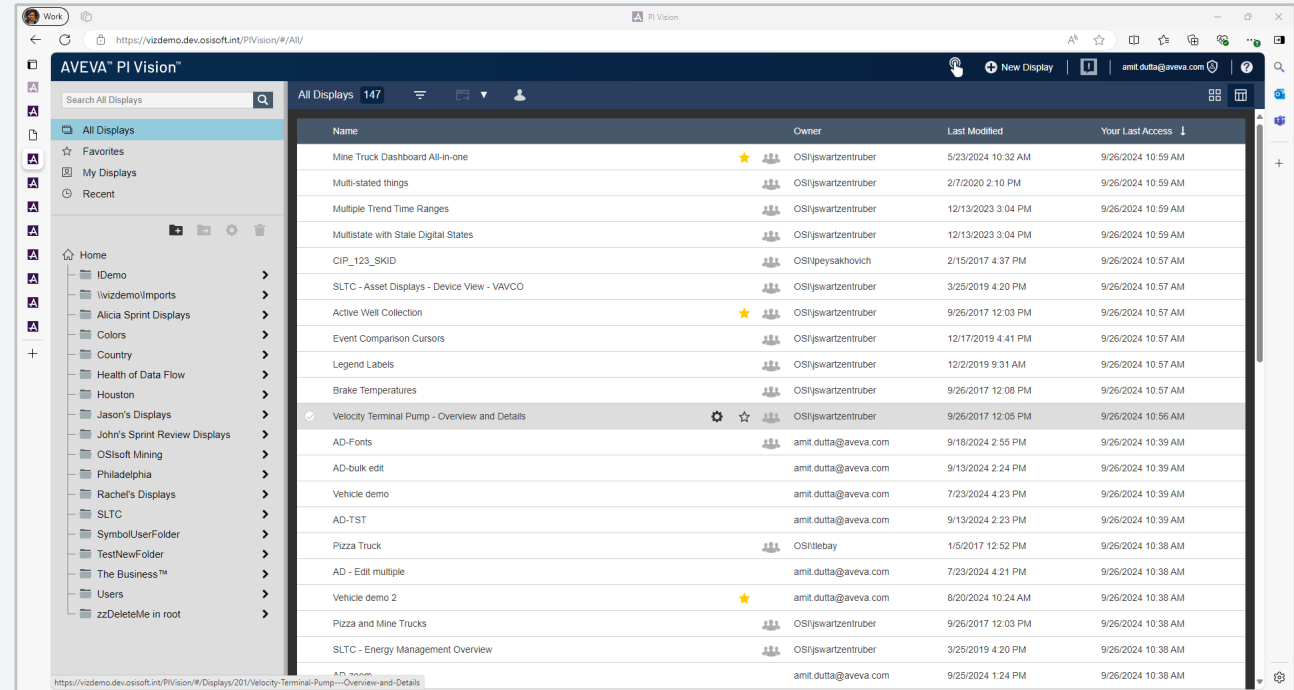




[Operators - click here for equipment troubleshooting steps.](#)

# Home page enhancements and folder permissions

- Sort displays by name, owner, last modified, or last accessed
- Tabular view of displays
- Access AVEVA PI Vision folders directly via URL
- More granular folder and display permissions model



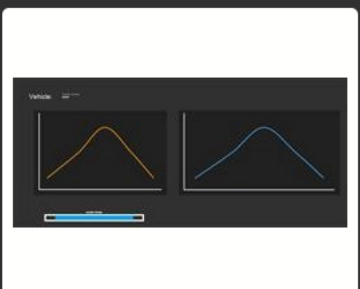
Search All Displays

All Displays 147 | Accessed

- All Displays
- Favorites
- My Displays
- Recent

+ [Icons]

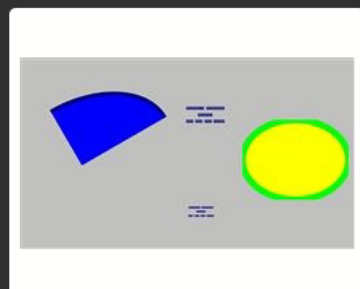
- Home
- IDemo
- \\vizdemo\Imports
- Alicia Sprint Displays
- Colors
- Country
- Health of Data Flow
- Houston
- Jason's Displays
- John's Sprint Review Displays
- OSIsoft Mining
- Philadelphia
- Rachel's Displays
- SLTC
- SymbolUserFolder
- TestNewFolder
- The Business™
- Users
- zzDeleteMe in root



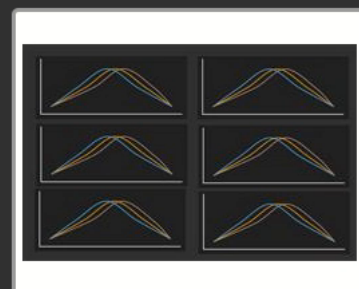
**Vehicle demo 2**  
 amit.dutta@aveva.com  
 Accessed 9/26/2024 1:55 PM



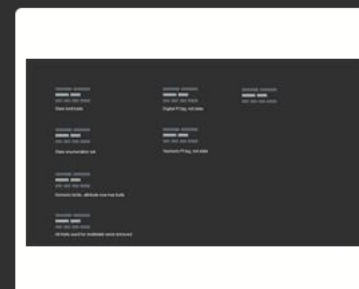
**Mine Truck Dashboard All-in-one**  
 OSIjswartzentruber  
 Accessed 9/26/2024 10:59 AM



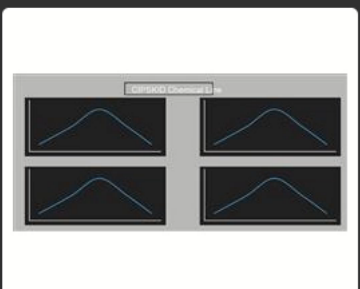
**Multi-stated things**  
 OSIjswartzentruber  
 Accessed 9/26/2024 10:59 AM



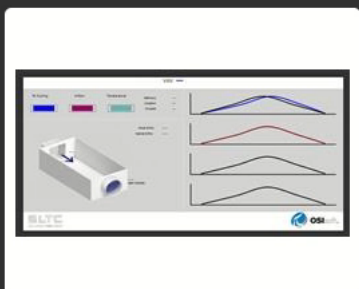
**Multiple Trend Time Ranges**  
 OSIjswartzentruber  
 Accessed 9/26/2024 10:59 AM



**Multistate with Stale Digital States**  
 OSIjswartzentruber  
 Accessed 9/26/2024 10:59 AM



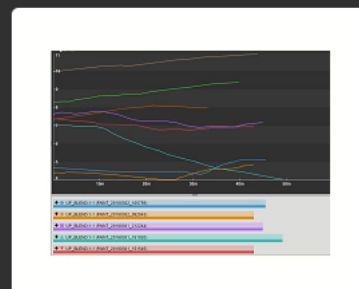
**CIP\_123\_SKID**  
 OSI\peysakhovich  
 Accessed 9/26/2024 10:57 AM



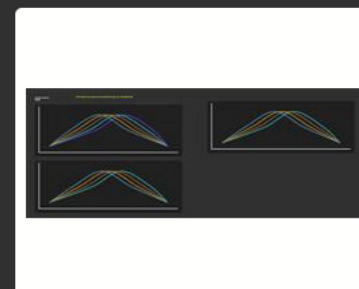
**SLTC - Asset Displays - Device Vie...**  
 OSIjswartzentruber  
 Accessed 9/26/2024 10:57 AM



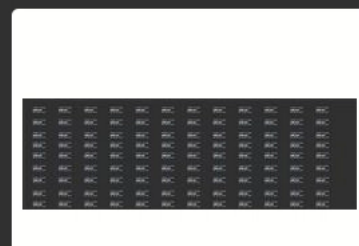
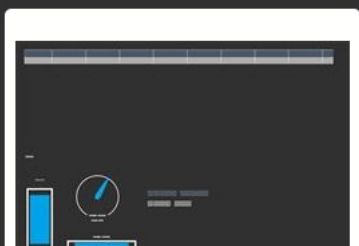
**Active Well Collection**  
 OSIjswartzentruber  
 Accessed 9/26/2024 10:57 AM



**Event Comparison Cursors**  
 OSIjswartzentruber  
 Accessed 9/26/2024 10:57 AM



**Legend Labels**  
 OSIjswartzentruber  
 Accessed 9/26/2024 10:57 AM



# View connected users

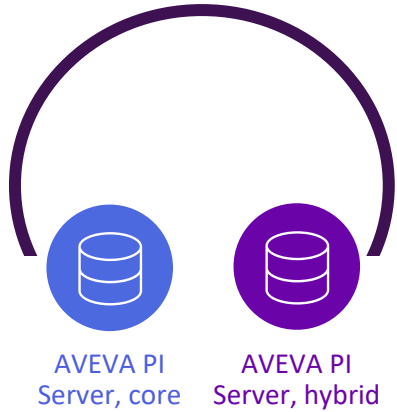
AVEVA™ PI Vision™ Administration
OSI\adutta

- Overview
- Configuration
- Security
- Display Defaults
- User Settings
- Display Management
- Reports
- Display Sessions

## Display Sessions (10) ↻ Last refresh: 09/26/24 11:05:32 AM

ID ↑	Name	User ID	Opened	Updated	First	Latest	Min	Max	Avg	Session ID
-1	New Unsaved Display	OSI\swartzentru...	09/26/24 10:46:22 AM	913ms ago	471ms	18ms	2ms	5s	193ms	7f58a632-0547-4d33-bdb5-b1a7125c3616
2	<a href="#">SLTC - Asset Displays - AC RTU Displa...</a>	OSI\adutta	09/26/24 11:05:25 AM	2s ago	3s	77ms	77ms	3s	1s	35f101ea-7364-4790-9883-fb3bf30df7d8
6	<a href="#">SLTC - Asset-Displays - Device-View - ...</a>	OSI\eschwamm	09/26/24 10:51:50 AM	3s ago	1s	2ms	2ms	1s	18ms	1fbbfc14-37f7-48e7-abb7-3c60dd2ecfc0
11	<a href="#">SLTC - Energy Management</a>	OSI\vav-croman	09/26/24 10:54:43 AM	2s ago	978ms	151ms	147ms	978ms	174ms	433b05b4-fb82-4da5-ba9e-414a5142b8c8
15	<a href="#">SLTC - Energy Management Overview</a>	OSI\aalisha	09/26/24 10:51:59 AM	913ms ago	152ms	151ms	145ms	323ms	160ms	46c7ca3d-2795-4777-80ae-682558fe965c
26	<a href="#">SLTC - Fault and Site Management - C...</a>	OSI\aalisha	09/26/24 10:52:46 AM	913ms ago	774ms	462ms	437ms	866ms	486ms	a3b0713a-c0d9-435e-b850-23befb452c1b
71	<a href="#">Compressor State Changes</a>	OSI\eschwamm	09/26/24 10:50:50 AM	913ms ago	566ms	2ms	1ms	846ms	93ms	c8610278-c8cb-47e1-8f5f-73524c93716b
82	<a href="#">Wind Farm Overview</a>	OSI\posner	09/26/24 10:48:35 AM	5s ago	455ms	11ms	6ms	455ms	12ms	e3d7c790-8843-4d6e-81e5-084def87f4b0
87	<a href="#">Generator Overview</a>	OSI\dryden	09/26/24 10:52:21 AM	3s ago	312ms	4ms	4ms	820ms	29ms	830858c0-a7d0-4e00-a41f-674bdbb41818
87	<a href="#">Generator Overview</a>	OSI\swartzentru...	09/26/24 10:45:23 AM	5s ago	3s	10ms	4ms	3s	43ms	e530345f-81b9-4e22-b02c-fdff289f65a4

# Roadmap: Future considerations for AVEVA PI Vision



Time series table symbol  
Bulk edit symbols  
Font and font size

In development

2024

Claims-based authentication  
Advanced Tag Search

2023 SP1

2023

Claims-based authentication

2022

Enhanced events analysis & display standardization

2021

Asset based calculations & offline display management

2020

Tag based calculations & display usage monitoring



Researching

**More process monitoring and display management capabilities**

*More display editing capabilities  
More process monitoring capabilities  
More display and system management capabilities*





# We hear you loud and clear

AVEVA PI System Feedback Portal is your platform to tell us what you want, and we have been listening!

AVEVA PI Vision 2024 includes 20+ new enhancements based on 2500+ votes from AVEVA PI System Feedback Portal.



<https://feedback.aveva.com>

Let us know your product feedback!





# Recommended sessions and labs

## **Support expanding needs with AVEVA PI Vision 2024**

Wednesday, October 16 @ 5:00pm  
Room 241

## **PI Vision: Basics**

Wednesday, October 16 @ 1:00pm

## **PI Vision: Beyond the Basics**

Thursday, October 17 @ 9:00am

## **Migration from PI ProcessBook to PI Vision**

Wednesday, October 16 @ 9:00am

# Amit Dutta

Senior Product Manager

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# Questions?

**AVEVA**

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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.

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