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Inherited an AVEVA™ PI System™?

Ten things to know!

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AVEVA



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- Started at OSIsoft in 2019, now part of AVEVA
- Former AVEVA PI System customer in the energy industry
- Support, services, and teaching roles

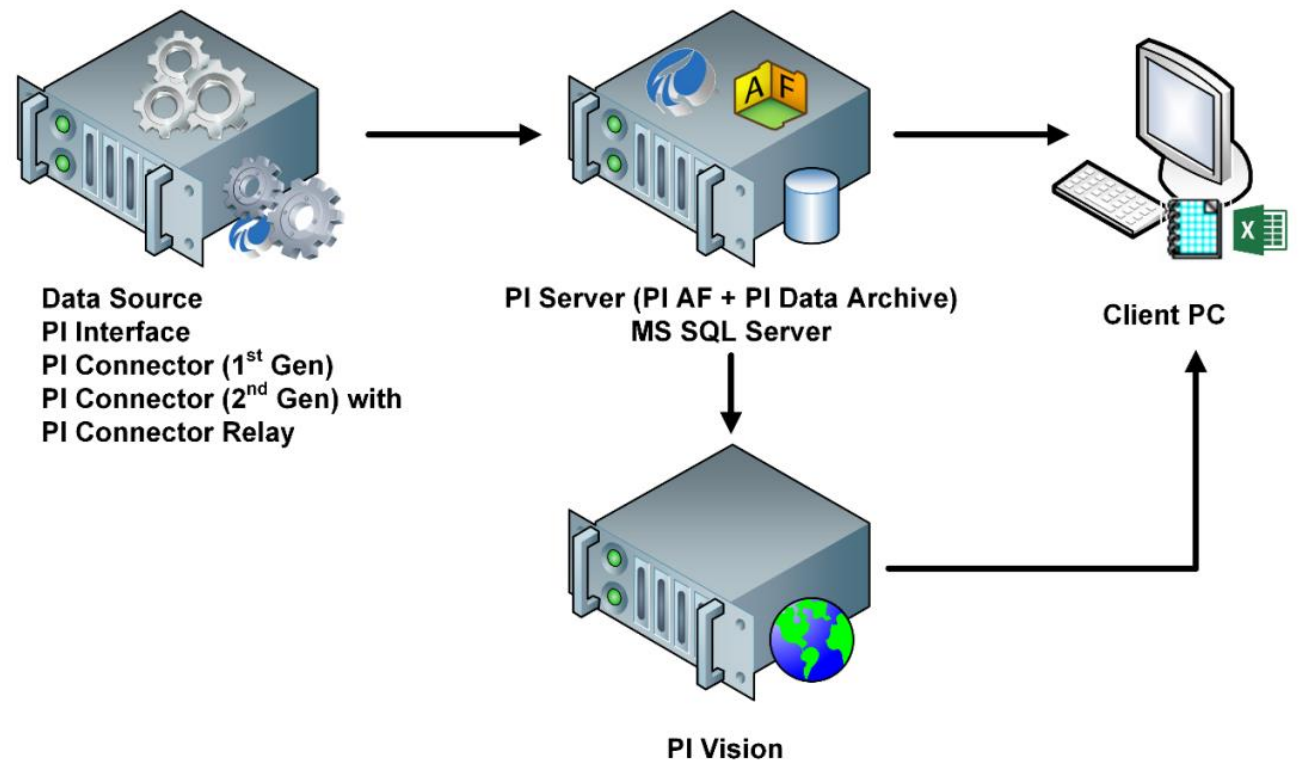
Topics

- Intended for new AVEVA™ PI System™ admins
- High-level discussion of architecture, best practices, troubleshooting, further education
- Focused on discovery in on-premises systems
- Not an exhaustive list

If you are not sure about something...
reach out to support!

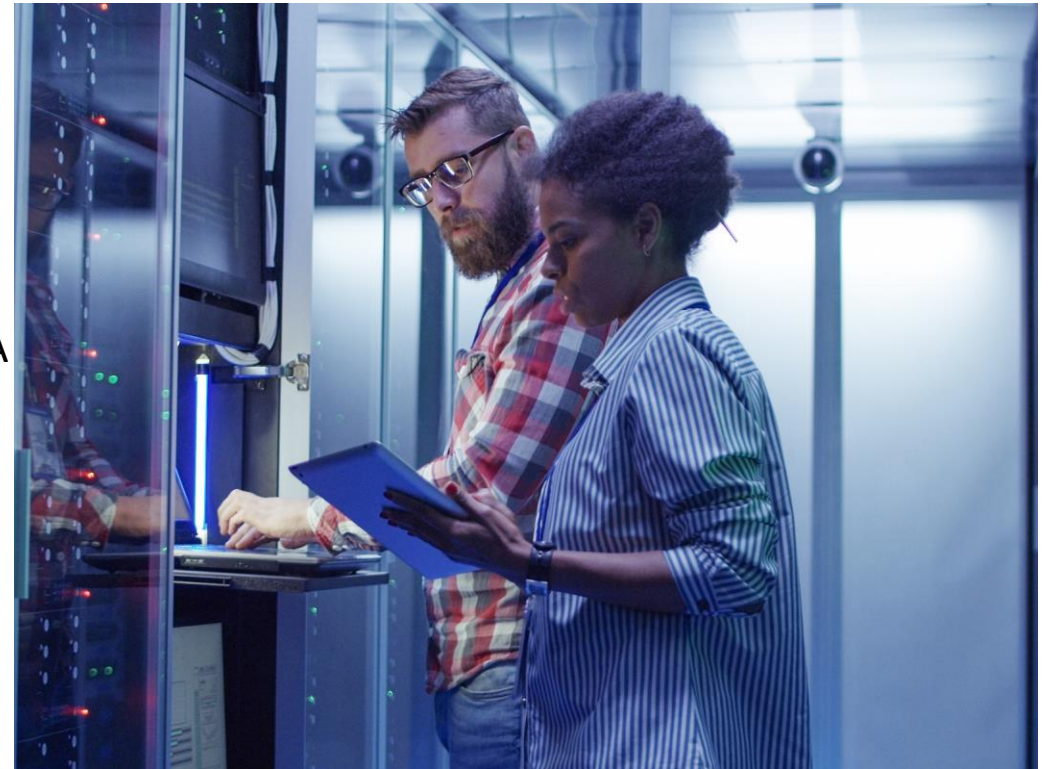
#1: What is AVEVA™ PI System™?

- **AVEVA™ PI Server™/Data archive**
 - Receives incoming data, stores in AVEVA PI System tags, and serves it to clients
- **Asset framework server**
 - Adds structure and metadata to PI tag data
 - Analysis + notifications services
- **Data collectors**
 - AVEVA PI Interfaces, AVEVA PI Connectors, AVEVA Adapters
 - PI AF SDK, OMF Ingress w/PI Web API
- **Data egress**
 - Visualization: AVEVA™ PI Vision™, AVEVA™ PI DataLink™
 - Management: PI System Management Tools, PI System Explorer, PI SDK Utility



#2: Who do I need to know?

- “Data source” group
 - Controls, OT, operators
 - Responsible for daily operations, availability, safety, config changes
- IT group
 - Responsible for server and network infrastructure used by AVEVA PI System software
- Compliance group
 - Enforce regulatory compliance
 - May have change control process
- End user group
 - Data consumers
 - Your users are your customers!



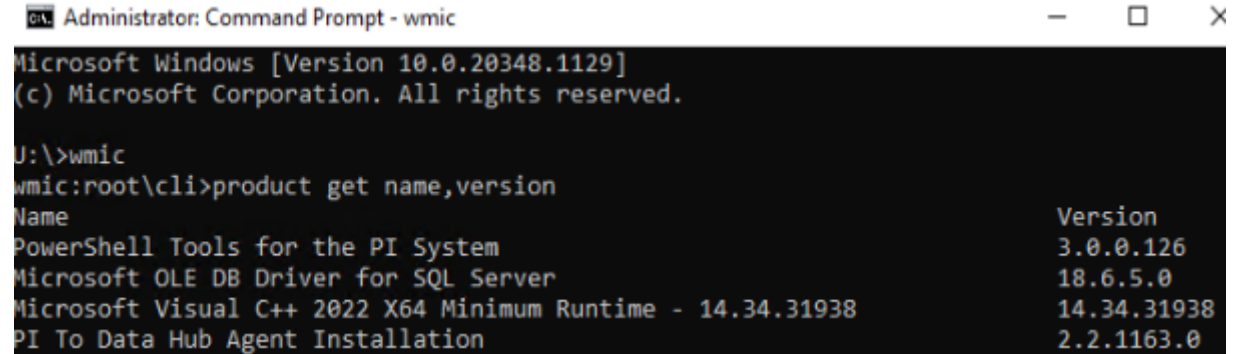
#3: How do I get help?

- Public documentation: docs.aveva.com
- Knowledge base
- AVEVA technical support
 - AVEVA PI System customer portal (web/phone cases)
 - discover.aveva.com/myosisoft-customer-portal/
- Account manager/customer success manager
- AVEVA success acceleration services
- Partners and system integrators

The screenshot shows the OSIsoft customer support portal. At the top left is the OSIsoft logo with the text "OSIsoft is now part of AVEVA". To the right is a search bar with the placeholder text "Search our Knowledge base, Community, and more..." and a search icon. Below the search bar is a navigation menu with links for Home, Products, Cases, Services, Success Objectives, Quotes, Reports, Contact Us, Manage PI DevClub, and Quick Links. A dropdown menu shows "Your Account Team for the selected Site: Oil Systems Incorporated - Philadelphia Office". Below this is a profile card for David Ferguson, Account Manager, with contact information: dferguson@osisoft.com and Philadelphia Office. A message states: "OSIsoft's world-class Technical Support is available 24/7 365 days a year for customers with an active Software Reliance Program (SRP) subscription." Below this are three support options: Phone Support (with a phone icon and text: "Talk with an engineer now! Click to view the full list of support phone numbers, including details on available languages."), Web Support (with a computer icon and text: "Use our online case creation form to get your questions routed to the right person in the right department."), and Community Support (with a group of people icon and text: "Visit PI Square, where you can engage with our community and collaborate with a wide variety of OSIsoft customers, partners and employees.")

#4: How do I tell what is in my system?

- Use what you have first!
 - Check with IT group for any AVEVA PI System architecture diagrams
 - AVEVA PI System service documentation
- Interface list
 - PI SMT > Interfaces > Interface List
 - May include old interfaces
- Command prompt
 - systeminfo
 - wmic product get version, name

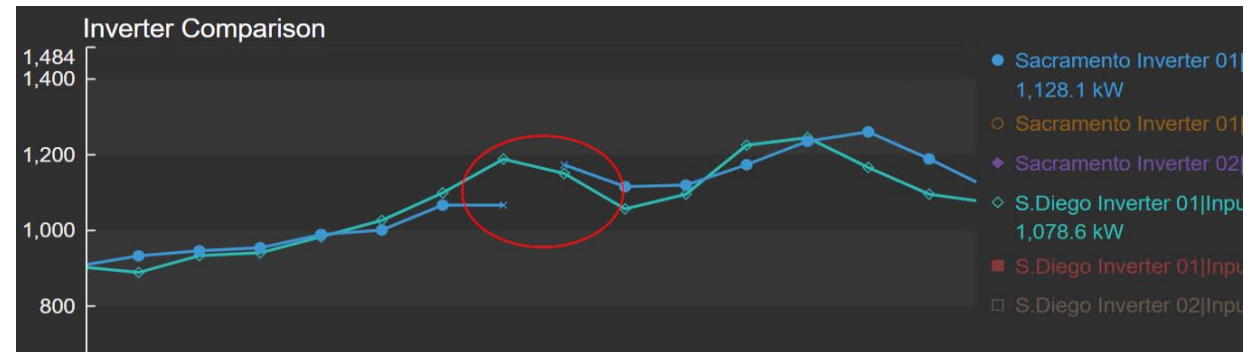


```
Administrator: Command Prompt - wmic
Microsoft Windows [Version 10.0.20348.1129]
(c) Microsoft Corporation. All rights reserved.

U:\>wmic
wmic:root\cli>product get name,version
Name                                     Version
-----                                     -
PowerShell Tools for the PI System        3.0.0.126
Microsoft OLE DB Driver for SQL Server   18.6.5.0
Microsoft Visual C++ 2022 X64 Minimum Runtime - 14.34.31938 14.34.31938
PI To Data Hub Agent Installation         2.2.1163.0
```


#5: How do I see data?

- First stop: Data archive
 - PI SMT > Data > Current values
 - Can filter by tags, point source, etc.
- Next: Visualization tools
 - Requires connection to the data archive
 - Trends show the big picture
- What do your users look at?



#6: Where is data coming from?

- “Where is data coming from” KB
- Tag configuration
 - PI SMT > Points > Point Builder
 - Note PointSource and Location1
- Interface configuration
 - Interface ID = Location1
 - Interface settings show source
- Asset framework elements and analyses
- This is a starting point

S.Diego Inverter 01

General Child Elements Attributes Ports Analyses Notification Rules Version

Name: Lifetime Production
Description:
Categories: Production
Analysis Type: Expression Ro

Name	Backfilling
f00 Inverter Status	✓
f00 Lifetime Production	✓
H Low Efficiency	✓
f00 OSIDemo AnomalyGeneration	✓

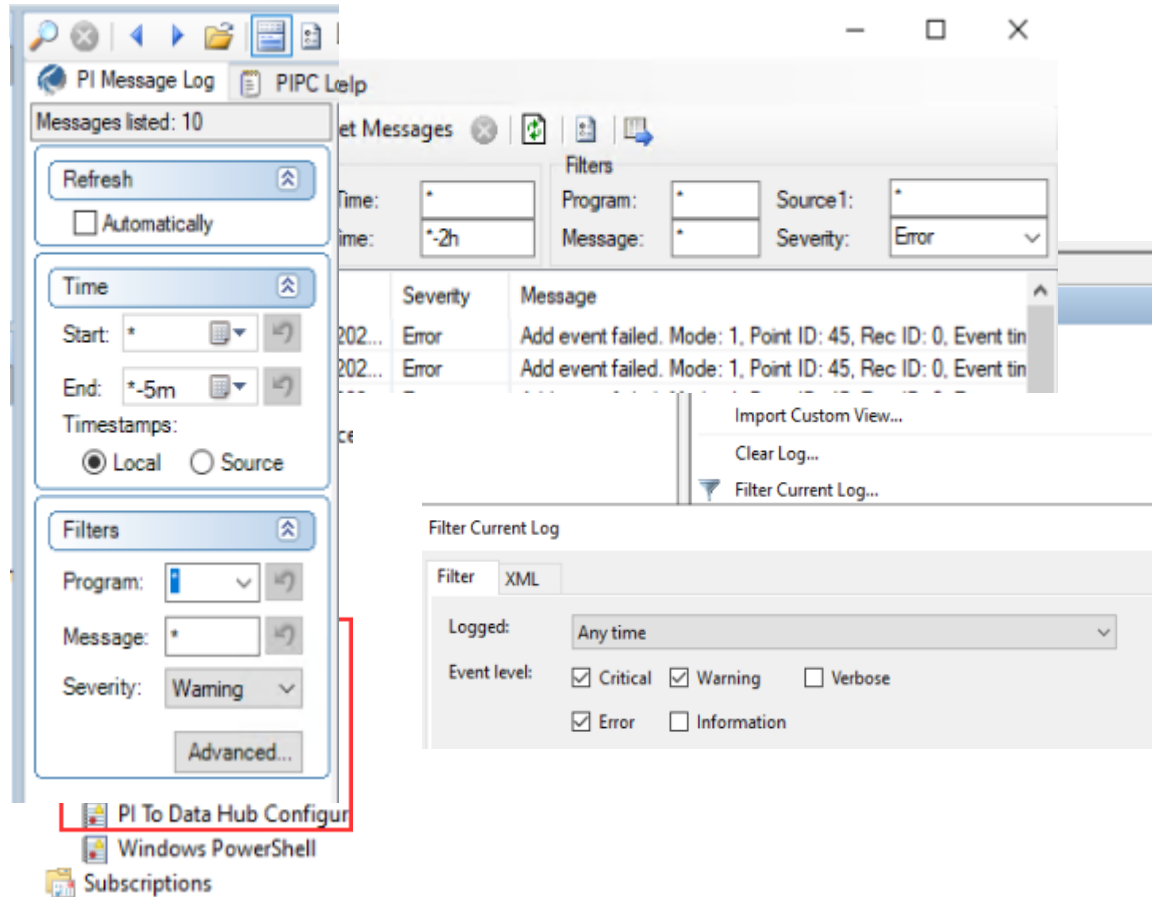
Add a new variable

Name	Expression	Value at Evaluatio	Value at Last Trigg	Output Attribute
Hourly	TagAvg('Output Power Actual PAC')			Lifetime Production (Hourly)
HourlyProduction	Convert(Hourly, "kwh")			Map

Evaluate

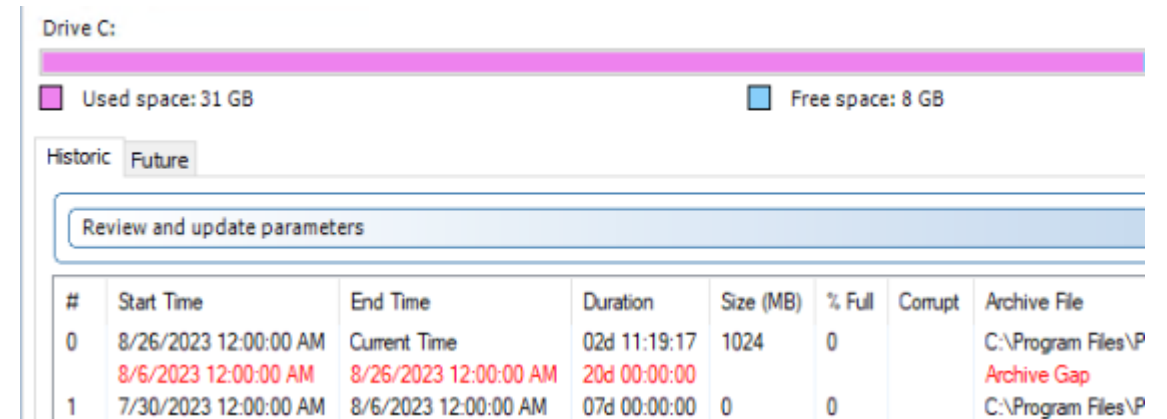
#7: How do I check for errors?

- AVEVA PI System management tools
- “pigetmsg” command
- Event Viewer logs
 - Applications & Services > PI*
- Web application errors
 - HTTP errors show in browser
 - Vision client errors are shown top-right



#8: Data archive health check

- Are services running?
- Queueing or out-of-order data?
 - %piserver%\adm\piartool.exe -qs or -as
- When was the last successful backup?
 - PI SMT > Operation > Backups
- Are there any archive gaps?
 - PI SMT > Operation > Archives
- Any recent error messages?
 - PI SMT > Operation > Message Log



Drive C:

Used space: 31 GB Free space: 8 GB

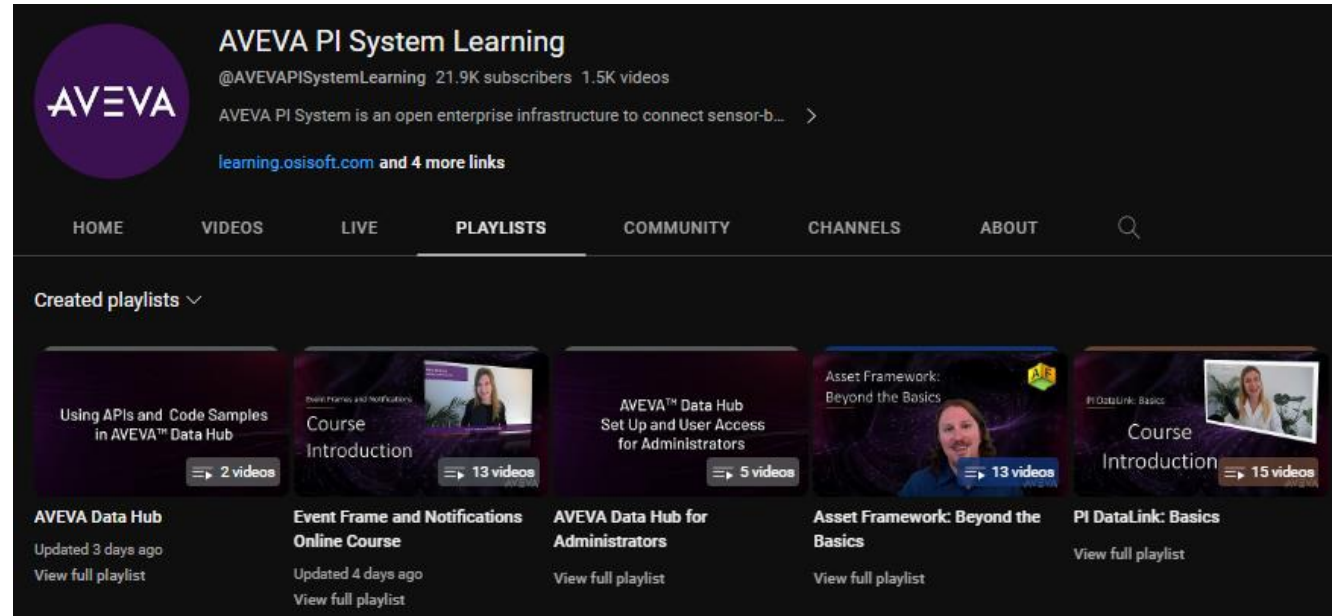
Historic Future

Review and update parameters

#	Start Time	End Time	Duration	Size (MB)	% Full	Corrupt	Archive File
0	8/26/2023 12:00:00 AM	Current Time	02d 11:19:17	1024	0		C:\Program Files\PI
	8/6/2023 12:00:00 AM	8/26/2023 12:00:00 AM	20d 00:00:00				Archive Gap
1	7/30/2023 12:00:00 AM	8/6/2023 12:00:00 AM	07d 00:00:00	0	0		C:\Program Files\PI

#9 Where can I learn more?

- Public documentation site
 - docs.aveva.com
- Knowledgebase
 - “x Playbook”
 - “x Quick Start Guide”
- Youtube @AVEVAPISystemLearning
- Training
 - learning.osisoft.com
 - Self-paced and instructor-led courses



The screenshot shows the YouTube channel page for "AVEVA PI System Learning". The channel has 21.9K subscribers and 1.5K videos. The bio states: "AVEVA PI System is an open enterprise infrastructure to connect sensor-b...". Below the bio, there are links to "learning.osisoft.com" and "4 more links". The navigation menu includes HOME, VIDEOS, LIVE, PLAYLISTS, COMMUNITY, CHANNELS, and ABOUT. The "Created playlists" section displays five playlists:

Playlist Title	Number of Videos	Update Status
Using APIs and Code Samples in AVEVA™ Data Hub	2 videos	Updated 3 days ago
Event Frame and Notifications Course Introduction	13 videos	Updated 4 days ago
AVEVA™ Data Hub Set Up and User Access for Administrators	5 videos	View full playlist
Asset Framework: Beyond the Basics	13 videos	View full playlist
PI DataLink: Basics Course Introduction	15 videos	View full playlist

#10: What's next?

- **Document your system**
- Take new backups
- Secure and optimize
 - [Security Alerts](#) KB article
- Get training
- Configure monitoring
- Configure redundancy

Who has questions?

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!

Useful links

- [Public Documentation Site](#)
- [Where is data coming from?](#)
- [Security alerts](#)
- [How do I find downloads on the customer portal?](#)
- [Partner-hosted alternatives to the NOC service](#)
- [How do I configure and schedule a PI Data Archive backup?](#)
- [How to perform a full backup of the AF SQL database](#)

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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