OCTOBER 25, 2023

AVEVA™ PI Vision™ performance

Best practices and remedies

Presented by: Eduardo Miller

What are AVEVA™ PI Vision™ potential bottlenecks for performance?

- Client browser
- Network
- PI AF server
- PI data archive
- AVEVA PI Vision application
- Web server

PI AF related players

- Some PI AF attributes are calculated client side (at AVEVA PI Vision)
  - Analysis
  - Custom
  - Formula
  - String builder
  - URI builder

  - Table lookup* (cached in memory at runtime)

PI data archive attention points

- High density of data in trends
  - Very frequent and variant data values in source point
  - Large time range

- Extensive usage of PI calculations
  - Tag-based: calculated at PI data archive
  - Asset-based: calculated at AVEVA PI Vision

What about some examples?

- Expensive analysis data reference calculation
  - `TagTot('PIPointAttribute','*-1mo','*')`

- Nested formulas
  - `Formula: 'Attribute_1'+'PIPoint'`
    - `Attribute_1: 'Attribute_2'+'PIPoint'`
      - `Attribute_2: 'Attribute_3'+'PIPoint'`
        - `Attribute_3: 'Attribute_4'+'PIPoint'`
          - …

AVEVA

Demo time!

PI Vision

PI Vision

https://pisrv01.pischool.int/PIVision/#/

AVEVA™ PI Vision™

New Display | PISCHOOL\student01

Show private displays

Home

Filter by Keywords

All Displays

Favorites

My Displays

Recent

Home

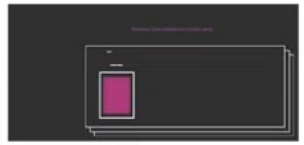
Generic displays

Home (4)

Select all

Display AnalysisDR multiple values

PISCHOOL\student01



Display AnalysisDR single value

PISCHOOL\student01

Display TableLookupDR

PISCHOOL\student01

Formula attributes

PISCHOOL\student01

Eduardo Miller

ENG 14:48 12/09/2023

Eduardo Miller

Eduardo Miller

Tech Support Principal Engineer

- AVEVA
- eduardo.miller@aveva.com

Finally…

Our recommendations are intended to provide you the best experience with our products!

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

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

@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

AVEVA