AVEVA™ PRO/II™ Simulation

EMEA Advisory Group Meeting

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June 2021

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AVEVA™ PRO/II™ SIMULATION

Agenda

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Roadmap

Key Features in version 2021

Aha! Ideas Review

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AVEVA™ PRO/II™ Simulation Release Plan

Rel 10.2.3 May 2020
2020.1 Aug 2020

10.2.3 rel May 2020

- Defects since PRO/II rel 2020 certification
- Convergence of large models

2020.1 rel August 2020

- Support of Valve Cv calculation
- Vary number of trays
- Ultimate Analysis tool improvements
- Defect fixes

Release 2021
June/July

Release 2021

- Copy/Paste across simulations
- Plug Flow Reactor Two-phase reactions
- Rigorous Heat Exchanger Improvements
- PFD input and summary display for quick audit
- Keyword input file importing enhancements
- Improvements in Error and Warning messages
- LNG information improvements
- Ejector model enhancements
- Calculation changes to solve individual units if overall model does not solve
- Stream Bubble point initial estimate
- User Experience Modernization
- Case run Link with modeFrontier

Future Patches and Release Features Proposed

- Standard Gas Turbine unit operation
- Refining Reactor Models
- Yield specification for conversion reactors
- Vapor Frac specs on Partial Condenser
- Integration with MySep

Under consideration

- Heat transfer in pipe unit operation
- Divided Wall Column
- Excel view for stream calculator
- Calculation Sequencing
- Depress model
- Improved HXRIG&HTRI convergence
- Navigational access to data on objects, color coding
- New Distillation Shortcut method
- Distillation column auto-troubleshooting

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Key New Features in version 2021

Rigorous Heat Exchanger

- Reflux condenser calculation option
- New temperature approach specifications
- Relative duty tolerance for rating exposed in GUI
- Right click access to HTRI file

Humidifier

- duty specification

Reactors

- Support for mixed phase reactions in CSTR and PFR
- Extended data entry dialogs
- Pre-defined combustion reactions for use with conversion reactor
- Reaction normalization

Ejector

- Real CpCv for stream
- Print option for design mode history

Output Upgrades

Columns

- Extension on vary trays functionality

Solid fuel characterisation

- Inclusion of fluorine & chlorine as additional components

Streams

- Stream estimate for dew and bubble point streams
- Conversion of assay streams to streams w/ petro-components

Usability

- Find stream enhancements
- Copy and paste between models
- Convergence plots
- Run and update estimates
- Convergence messages to include unit names
- P2View on Tools ribbon
- Control of location of temporary Excel file with Excel unit op and Excel calculator
- Import of incomplete keyword files
- Password enhancements
- Data review in Excel

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Aha Ideas Board Top Ten (From Last Time)

SimIdeas	Votes		Status	
I-45	4	CSTR/PFR reactor models to handle two-phase reactions	In Progress	**Done**
I-30	4	Standard Gas Turbine Model	In Roadmap	**Planned**
I-110	4	Change Numbering Scheme on PRO/II Columns	Submitted	
I-41	3	Import any keyword file with incomplete unit op data	In progress	**Done**
I-19	3	Provide more process detail fired heater combustion section	Considered	
I-70	3	New Short-cut Method for Distillation Column Study	Submitted	
I-102	3	Gas/Solid Cyclone	Submitted	
I-89	2	Enhancement HXRIG	In Progress	**Done**
I-80	2	Sequence Block	Considered	
I-109	2	Option to reset to base case solution between iterations of case study	Submitted	**Done**

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Aha Ideas Board Update, Top Votes

SimIdeas	Votes		Status
I-110	8	Change Numbering scheme on the columns in PROII	Submitted
I-109	7	Option to reset base case solution between iterations of case study	Submitted
I-41	6	Import any keyword file with incomplete Unit Op data	Considered for Roadmap
I-81	6	COM commands for running Case Study for PROII link with modeFrontier	**Implemented**
I-123	6	Calculator enhancement	Submitted
I-148	6	Use of DEFINE directly in a stream	Submitted
I-163	6	Enhancement of Ejector model	**Implemented**
I-30	5	Standard Gas Turbine Model	Considered for Roadmap
I-38	5	Increase default timeout setting for HTRI	**Implemented**
I-45	5	CSTR and PFR two-phase support	**Implemented**

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PRO/II: AVEVA strives to put priority on fixing defects and bugs. Aside from this priority, what area do you believe PROII Development resources should mostly concentrate?
Please pick one:

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PRO/II: Did you participate in the PRO/II Simulation 2021 Beta testing?

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PRO/II: Where do you think we could apply AI/ML with PROII in your business? (Please type in your response.)

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PRO/II: To modernize PRO/II further, what would you suggest? (Please type your response.)

ⓘ Start presenting to display the poll results on this slide.

- Q/A Discussion