



Top Integrated Energy Company Optimizes Supply Chain with Aspen Unified PIMS™

“Aspen Unified PIMS is a fantastic tool...very easy to use...our team has become more efficient by using it.”

– Senior Processing Engineer, Top Integrated Energy Company

CHALLENGE

- Optimizing a large, complex set of assets
- Identifying the best available tool for production planning
- Short migration period from existing tool to new tool
- Many users needing to be trained on a new tool, system
- Inefficient software installation, deployment and upgrade processes

SOLUTION

After thoroughly evaluating available options, the company selected Aspen Unified PIMS.

VALUE CREATED

- Enables better business decisions resulting in higher margins and reduced emissions
- Powerful proprietary engine solves optimization problem faster and more reliably
- Streamlined, automated connection with internal database replaces manual data management
- Easy migration and training enables quick onboarding and uptake of new tools



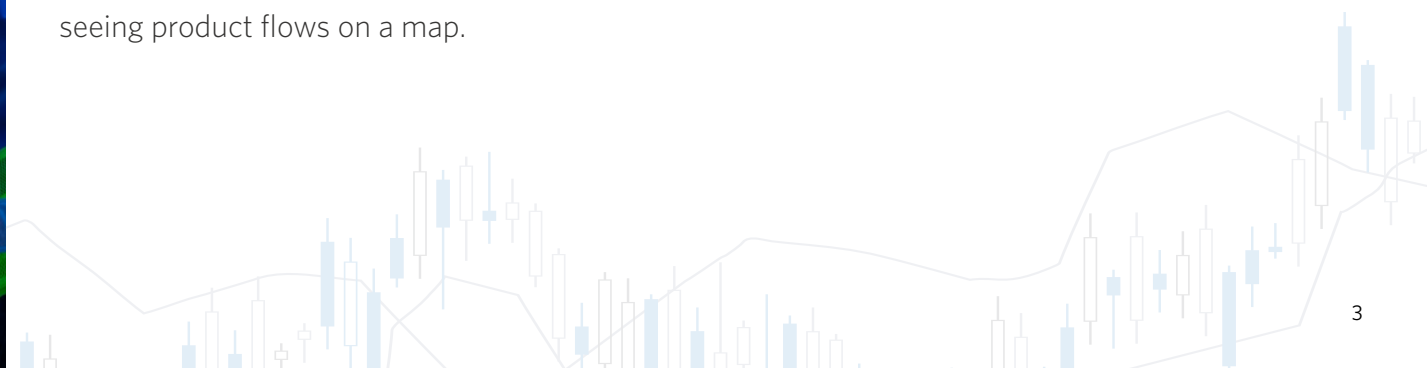
Overview

A leading integrated energy company had been using Aspen PIMS™ successfully since 1996 to manage its single and multisite refinery production planning and optimization. In 2021, the company, a national major oil producer and refiner, performed a thorough evaluation and assessment of competitive solutions available in the market and selected Aspen Unified PIMS because the solution exceeded all technical and economic requirements.

Aspen Unified PIMS: Adoption and Deployment

After choosing Aspen Unified PIMS, the company quickly trained 25 users (within the first month). Deployment took less than three months and included migrating Aspen PIMS to Aspen Unified PIMS for 12 models (including refineries, terminals, pipelines and markets). Aspen Unified PIMS uses the same proven, proprietary optimization engine as Aspen PIMS-AO. It also includes a number of additional powerful features such as a streamlined interface, improved cloud support and easy integration with other systems through APIs. As part of the migration, AspenTech and the customer made a number of enhancements and all models were upgraded from Aspen PIMS version 8.8 to Aspen Unified PIMS v12.1.

The company was thrilled to finish the deployment so quickly and appreciated the fast, streamlined, migration made possible by staying within the Aspen PIMS family. Once the deployment was complete, the company utilized Aspen Unified PIMS at all its refineries. Using Aspen Unified PIMS provided the company's planners an easier, faster way to share information—on the one Unified server. The refiner no longer had to archive models and send attachments via email or a shared drive. The multisite model was especially improved because planners at different sites could easily collaborate within the Unified environment, for example viewing individual refinery models and seeing product flows on a map.





Successful Outcomes, High Level of Customer Satisfaction

Overall, the company's users were very pleased with the Aspen Unified PIMS implementation. The refiner's planning models run faster and more stably, with faster, better decision-making.

Below is a list of Aspen Unified PIMS features and enhancements appreciated by the company:

- Aspen PIMS-AO solver incorporated in Aspen Unified PIMS runs faster and more reliably, ensures global optimization
- Easy to migrate models as well as specific input data such as purchases (i.e., the BUY table)
- Experienced users can leverage Aspen PIMS knowledge to be more effective, more quickly (*continued on next page*)

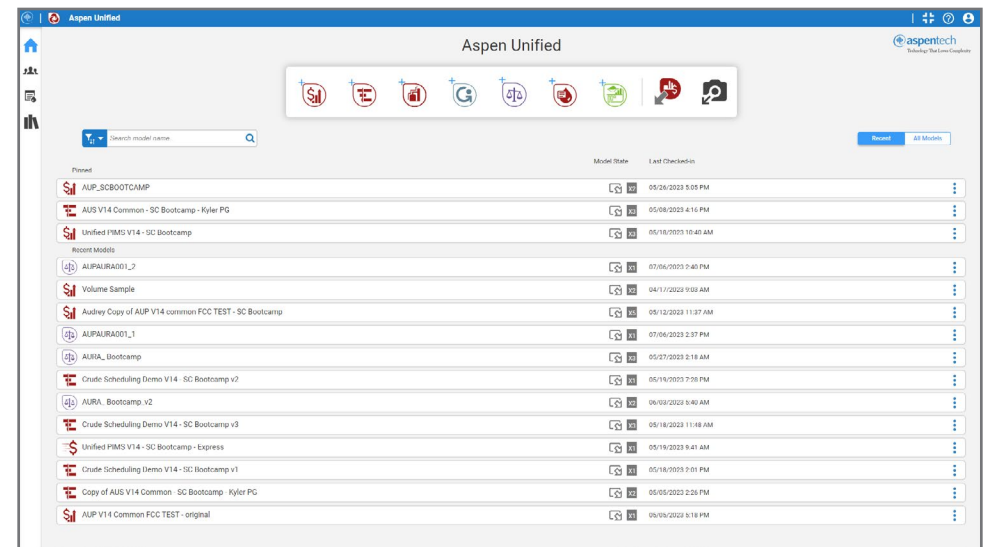


Figure 1. Aspen Unified home page, with apps and recent models.

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- User friendly
 - Able to continue working while running cases, viewing reports, reviewing other parts of the model
 - Easy to share data, reports and screens through HTML (URL) links
 - Review model changes for easy share/review before accepting (similar to MS Word's "track changes" feature)
- Improved user productivity
 - Faster runs using server vs local/desktop computer
 - Efficient access to the SQL results database with Power Query
- Parametric analysis provides a quick way to study how one variable affects the model, such as the throughput of an important unit like the FCC, for different variables in the model
- Price catalog allows studying feedstock prices by the components that make up the price, e.g. marker, premium, freight, etc.
- Better version control of models and tracking who changed what, when

Features highlighted by the company's IT team include:

- Centralized and efficient high-performance deployment covering all team members and refineries
- Efficient software updates on centralized server
 - Significant savings in time and resources (both IT and Planner's)
 - Easier to be on the latest version, with more features and fixes
 - Everyone is on the same version
- Ability for multiple team members to access the system simultaneously
- Microsoft Azure Active Directory (AD) support

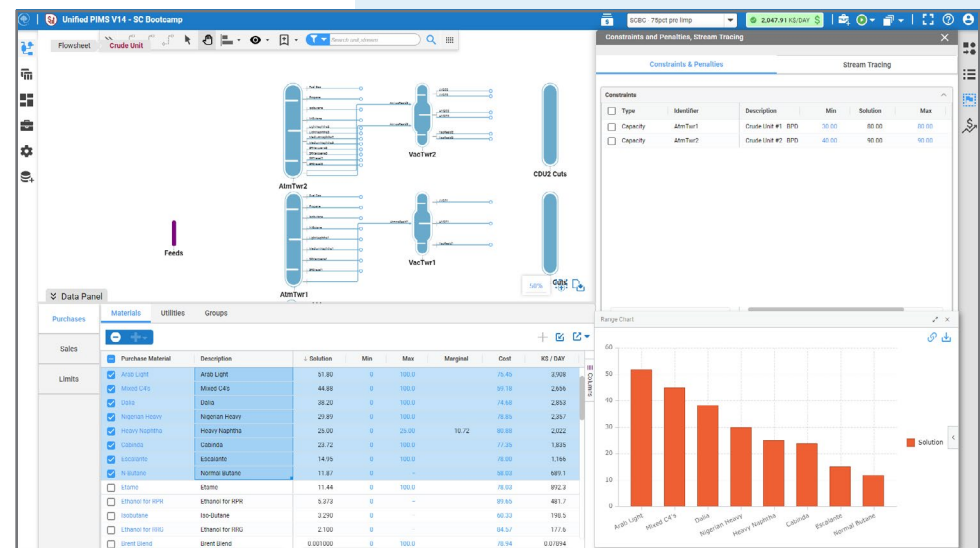


Figure 2. Aspen Unified PIMS flowsheet and quick right-click graphing.

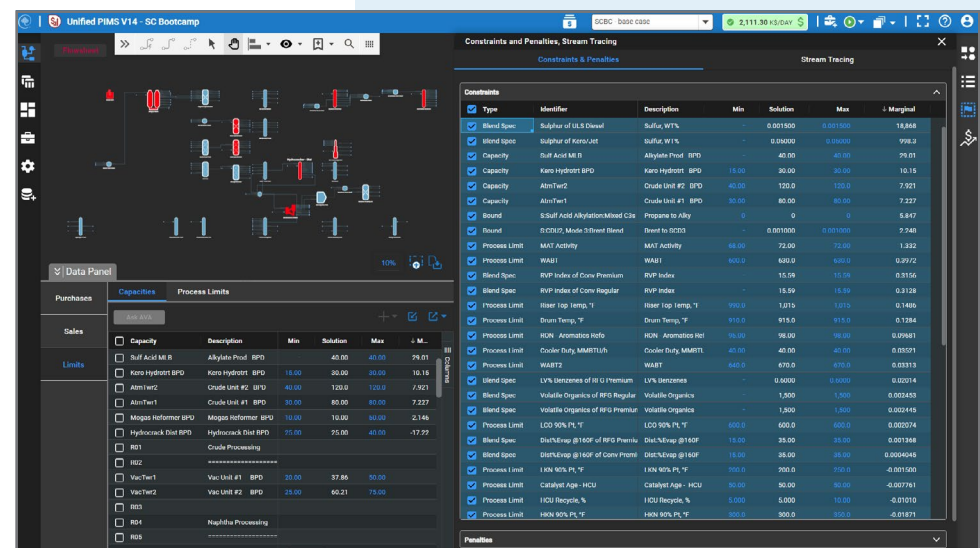


Figure 3. Flowsheet with constraints panel in dark mode.

Conclusion

The refiner is very pleased with the results from using Aspen Unified PIMS and plans to continue leveraging the solution's advanced capabilities to maximize margins.

“One of the biggest benefits of using Aspen Unified PIMS is the solver. It is much faster, more reliable and more stable—and it finds the global optimum repeatedly.”

**– Senior Processing Engineer,
Top Integrated Energy Company**

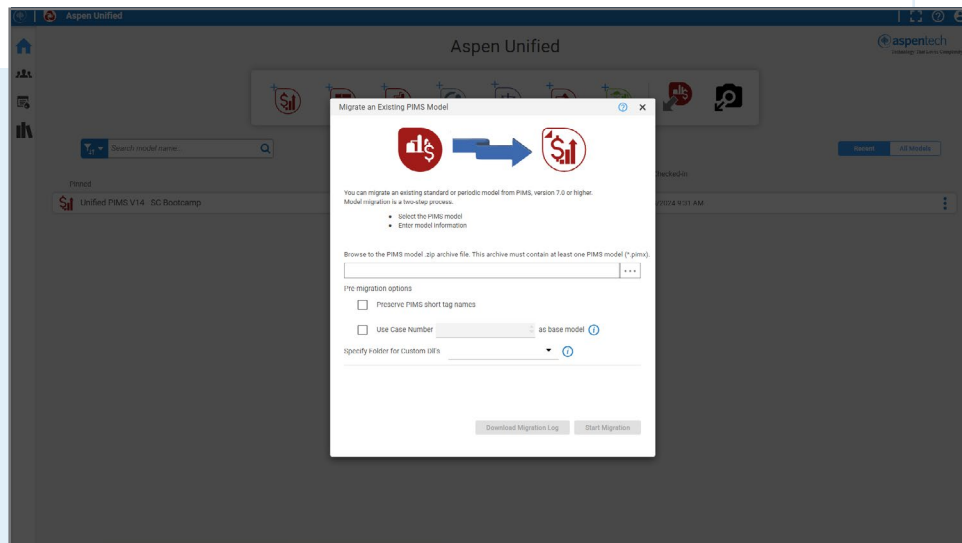


Figure 4. Migrate an existing Aspen Unified PIMS model.

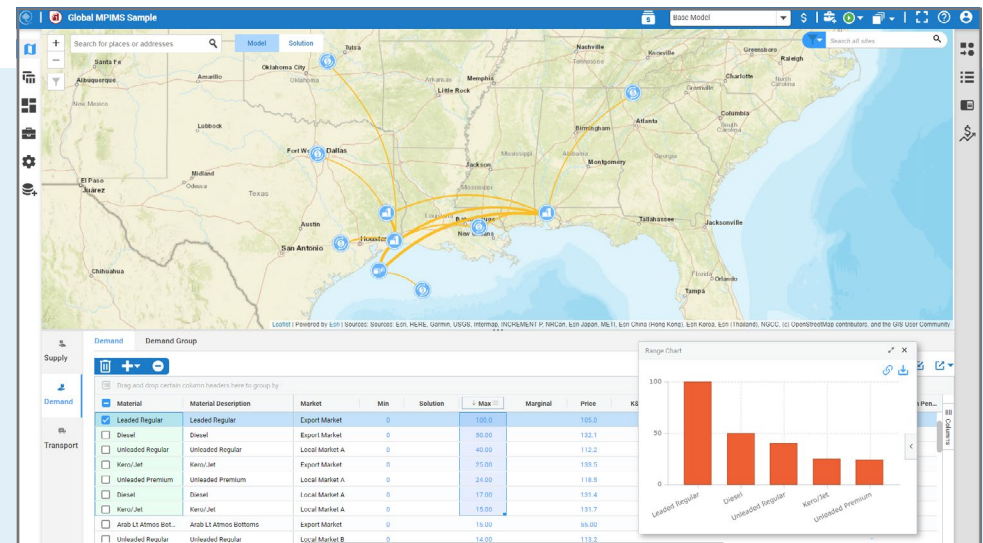


Figure 5. Aspen Unified multisite map and graphing.



About Aspen Technology

Aspen Technology, Inc. (NASDAQ: AZPN) is a global software leader helping industries at the forefront of the world's dual challenge meet the increasing demand for resources from a rapidly growing population in a profitable and sustainable manner. AspenTech solutions address complex environments where it is critical to optimize the asset design, operation and maintenance life-cycle. Through our unique combination of deep domain expertise and innovation, customers in asset-intensive industries can run their assets safer, greener, longer and faster to improve their operational excellence.

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