

17TH NOVEMBER 2022

The Future of AVEVA Unified Supply Chain

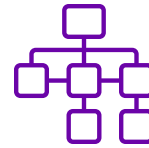
AVEVA Connect and the benefits of Cloud and AI

Daniel Crisp, Senior Product Manager

AVEVA

*Effective economic optimization
of hydrocarbon value chain can
boost profitability by
\$50 to 300 million
per year for a typical
oil refinery*

AVEVA Value Chain Optimization



Business process
improvement



Break down
silos



Better decision
making

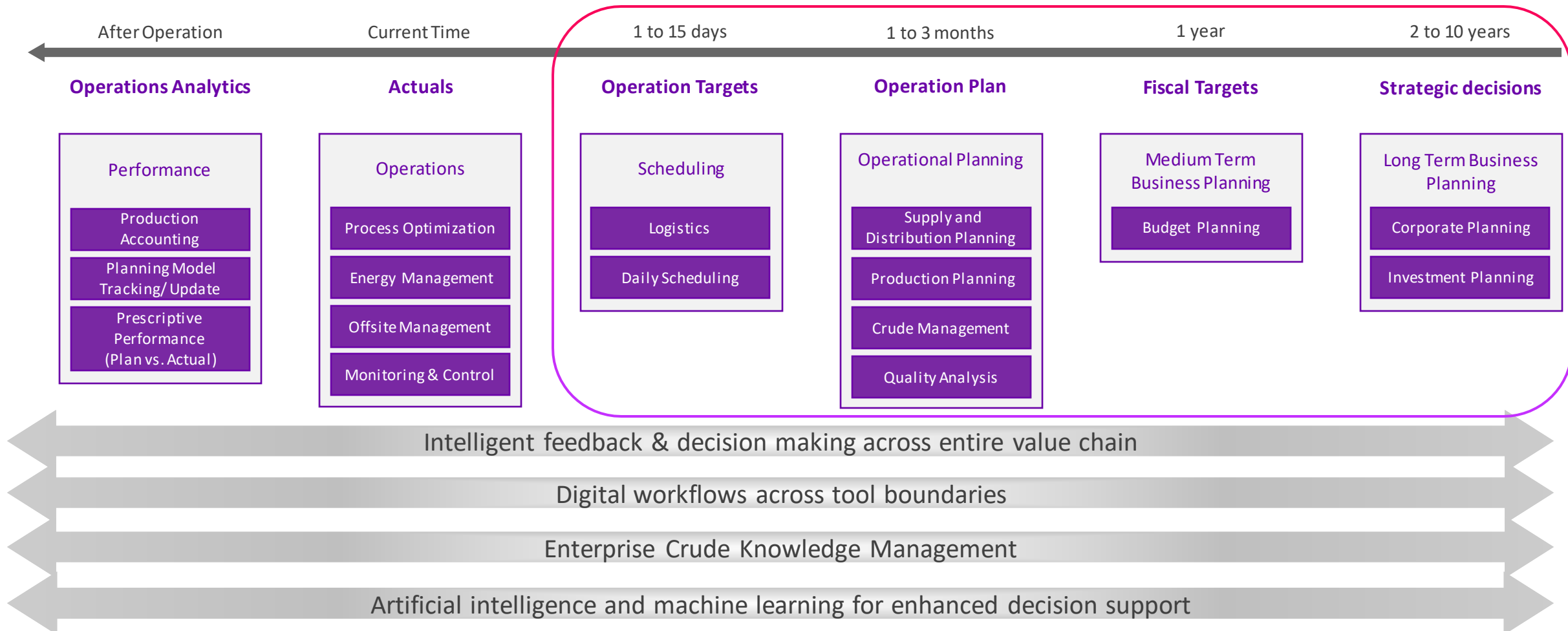


Improve margin
and sustainability

AVEVA

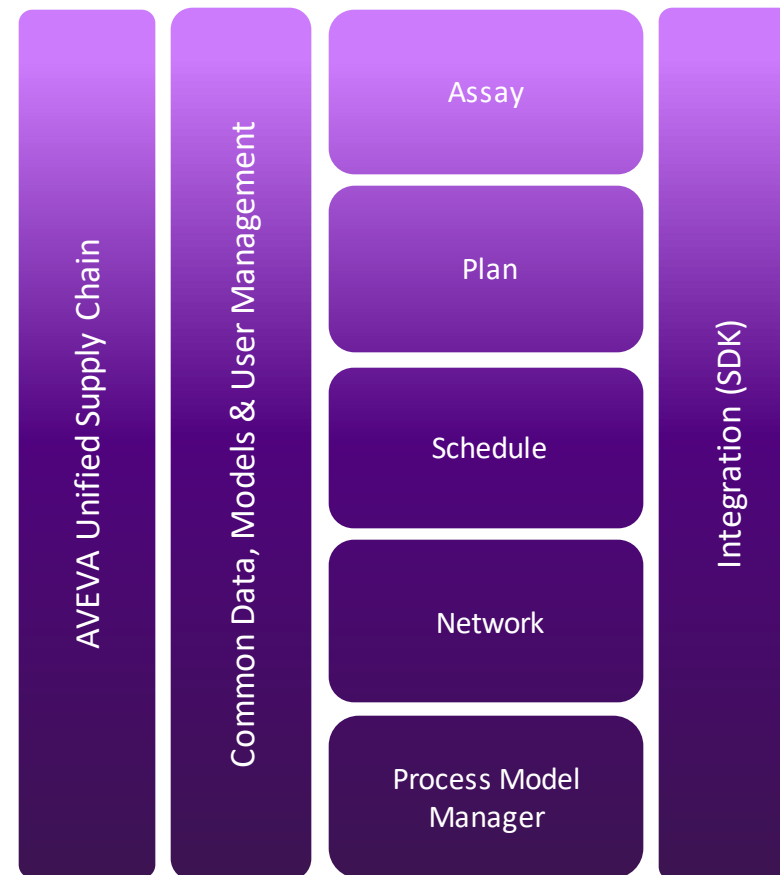
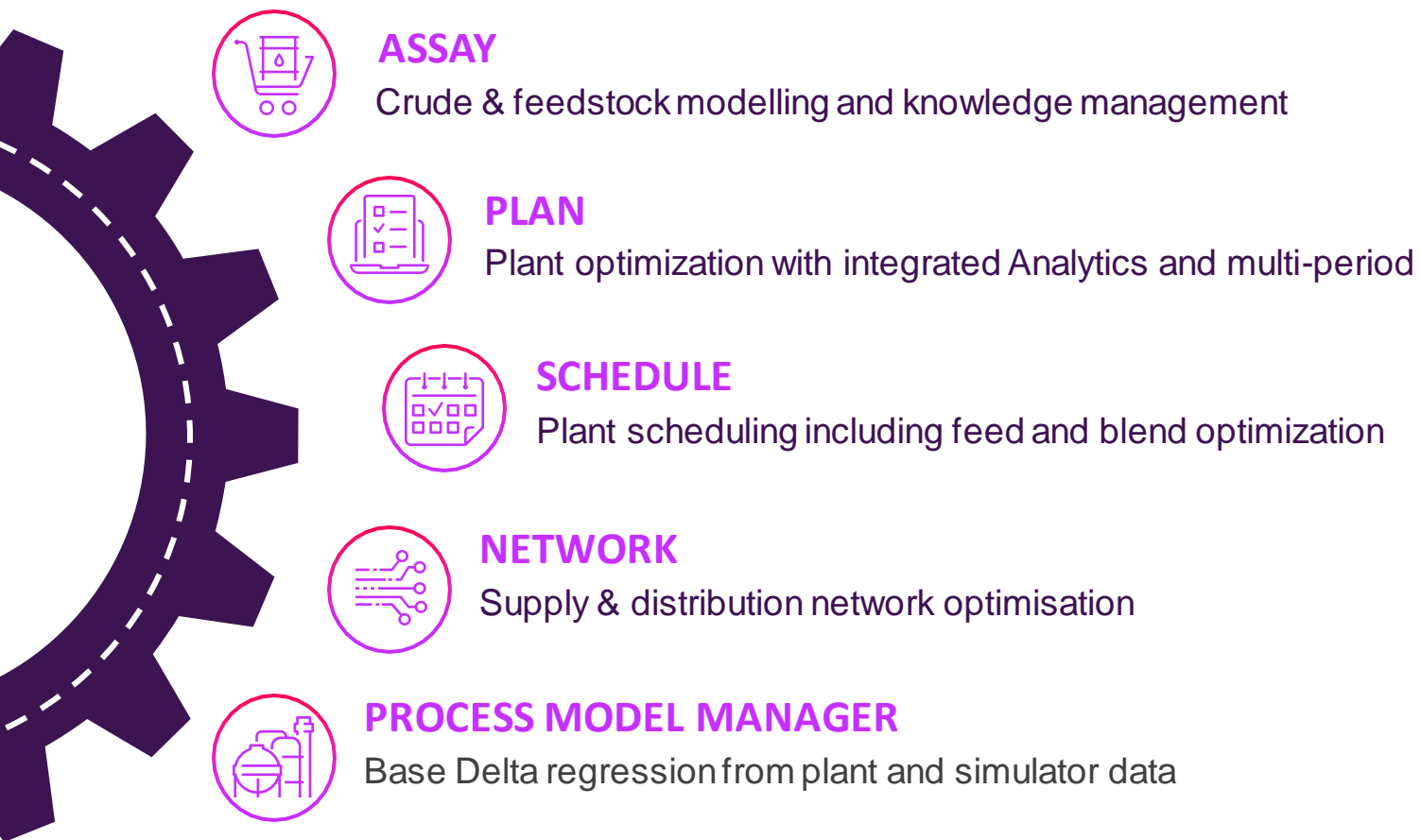
AVEVA Value Chain Optimization

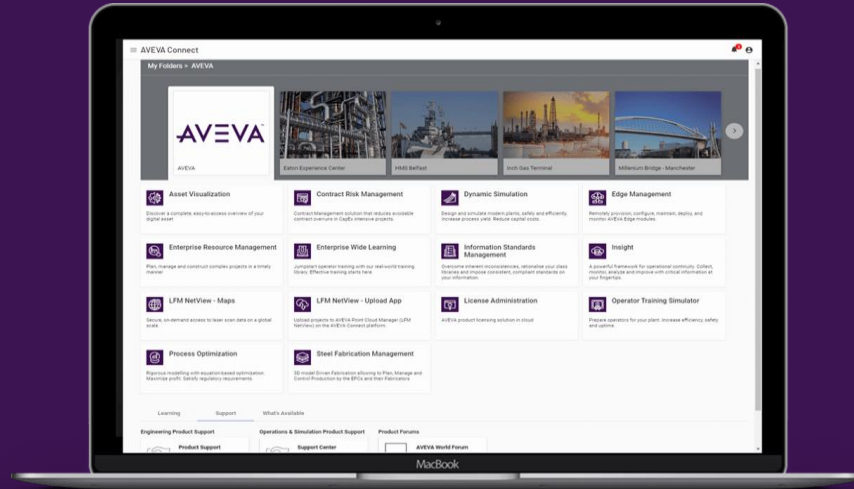
Enable Enterprise Collaboration & Agility to Maximize Profitability Across the Value Chain



AVEVA Unified Supply Chain

Solution Overview





AVEVA Connect

The AVEVA common cloud platform

- AVEVA Connect is this single go to place to access our products and services from engineering to operations and information management in the cloud, in a secure and always available environment.

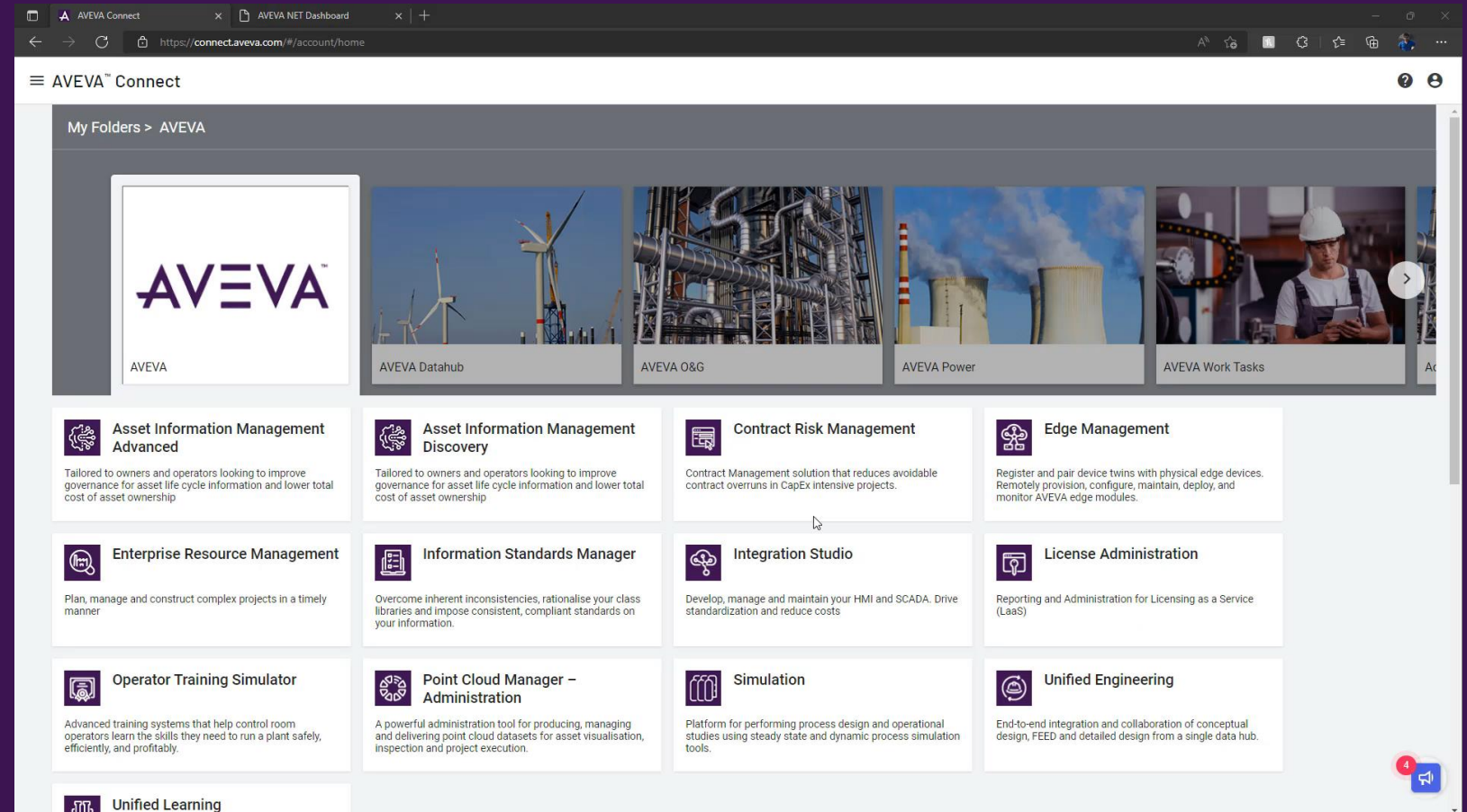
Accelerate Digital Transformation with AVEVA Connect



- AVEVA Connect comprises core services (authorization, authentication, AVEVA Flex Credit management, and reporting) as well as shared services (such as AVEVA Edge Management, cloud storage, cloud platform hosting, licensing and entitlement), and makes use of standard practices for data storage, data backup and disaster recovery. AVEVA Connect functional services are governed by Service Level Agreements.

Demo

AVEVA Connect Administration



AVEVA

Proven Business Outcomes



Fast & Efficient

Improved **accuracy**,
eliminated the need for
re-work, and **reduced**
project time schedules
SaaS model delivered
commercial **advantages**
for fluctuating usage



Commonwealth
Fusion Systems



Flexible & Scalable

Flexibility to start small
and upscale
Moved from manual
processes to **fully**
digital
“We were seeing data
within hours”

c·care



Remote Collaboration

Train up to **2,000**
operators per year from
anywhere
Faster commissioning of
simulator models
IT Maintenance **savings**
No hardware footprint



Secure & Available

Access to a **secure** and
always **available** system
allowed greater focus
on core business
resulting in **50%**
reduction in energy
costs





AVEVA Unified Supply Chain

Roadmap Direction

AVEVA Connect

Feature development
leveraging the benefits of our
industrial cloud platform

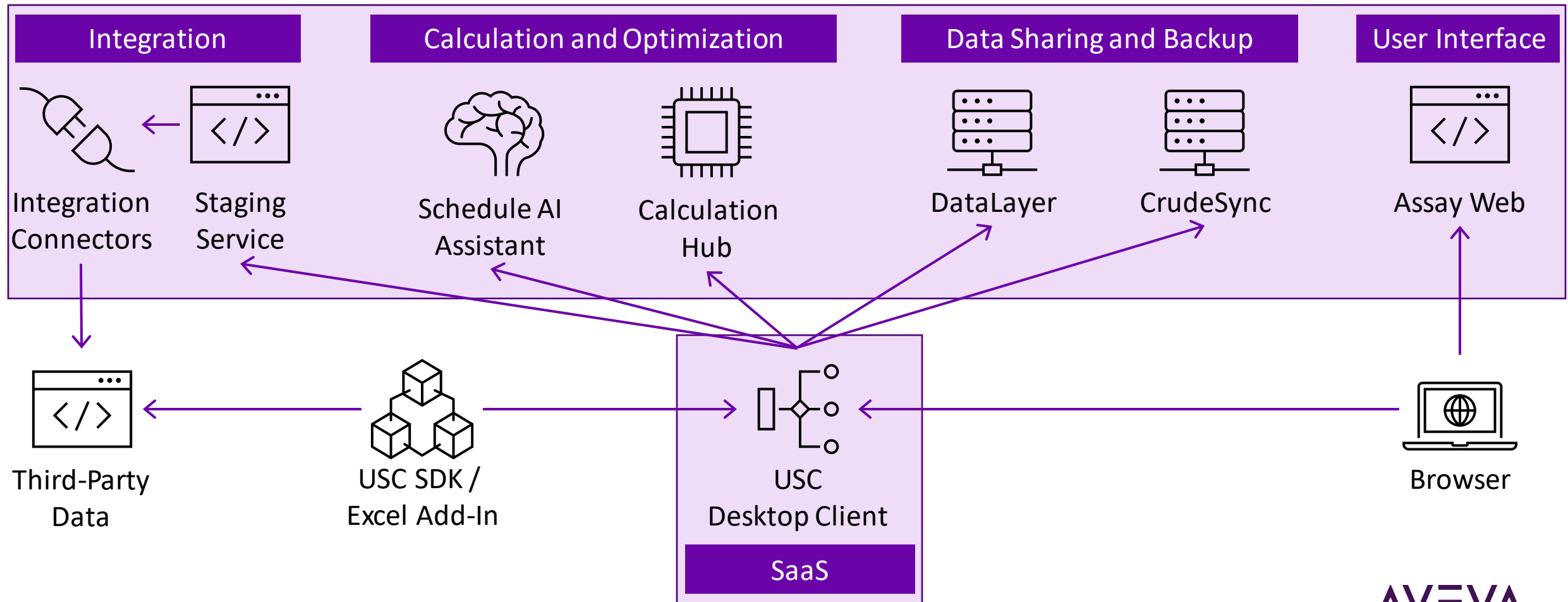
Self Hosted

Feature development for the
sole benefit of self hosted
customers



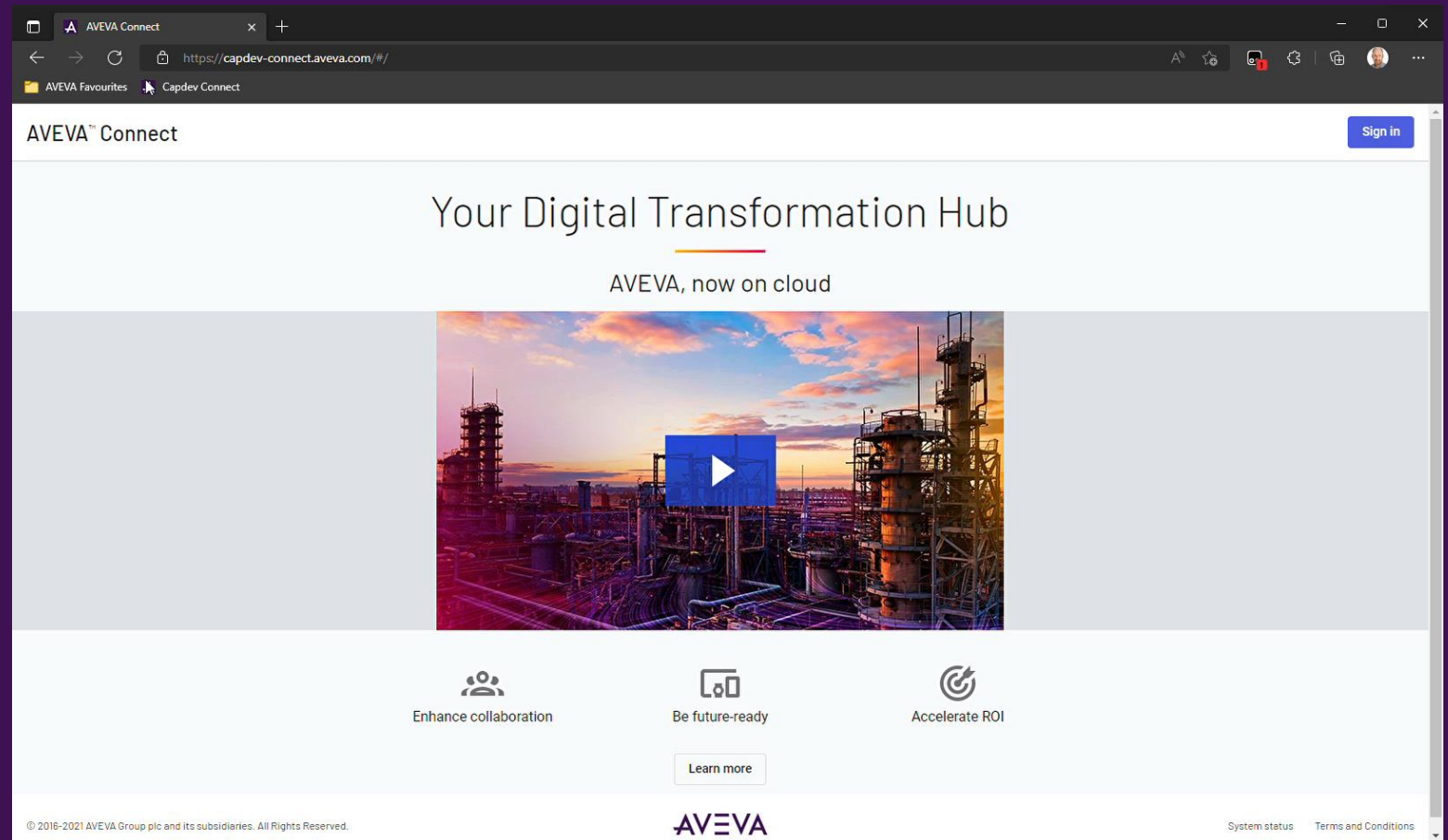
AVEVA Unified Supply Chain

Cloud Components



Demo

AVEVA Unified Supply Chain SaaS



AVEVA

AVEVA Unified Supply Chain SaaS

Customer Value



Lower cost of ownership



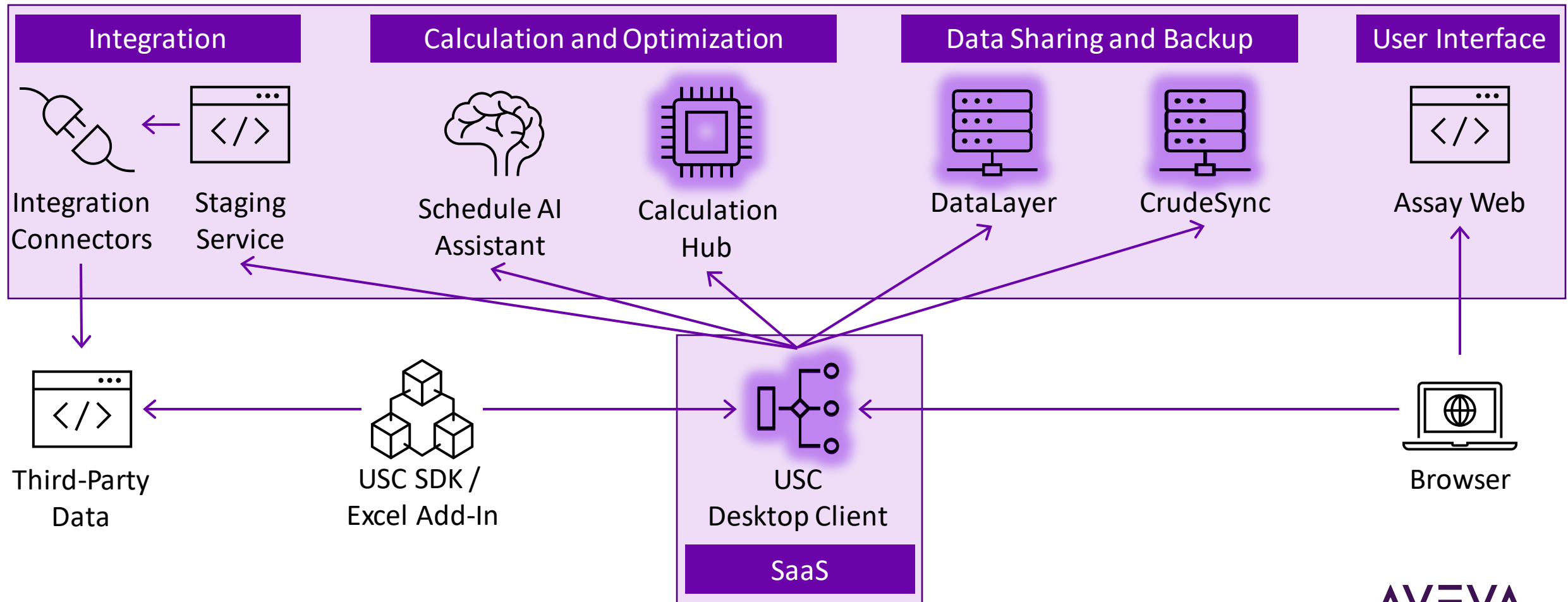
Scalability



Regular updated versions

AVEVA Unified Supply Chain

Cloud Components




Demo


AVEVA Unified Supply Chain SaaS with Calculation Hub

≡ AVEVA™ Connect


My Folders > USC CHP Development




USC CHP Development

 Unified Supply Chain: Assay

Create accurate and detailed crude oil assays using powerful modelling, to inform purchasing and blending decisions.

 Unified Supply Chain: Plan | Schedule | Network


Optimise and manage the entire supply chain in a unified environment, from planning and scheduling through to supply and distribution.

 Unified Supply Chain: Process Model Generator

Regress and validate the base delta structure of process unit models, used as part of planning and scheduling models.


LearningSupportWhat's Available

Services Catalog



Discover other cloud services from AVEVA.

What's New



Test

AVEVA

My Folders > USC CHP Development



USC CHP Development



Unified Supply Chain: Assay

Create accurate and detailed crude oil assays using powerful modelling, to inform purchasing and blending decisions.



Unified Supply Chain: Plan | Schedule | Network

Optimise and manage the entire supply chain in a unified environment, from planning and scheduling through to supply and distribution.



Unified Supply Chain: Process Model Generator

Regress and validate the base delta structure of process unit models, used as part of planning and scheduling models.

Learning

Support

What's Available

Services Catalog



Discover other cloud services from AVEVA.

What's New



Test

My Folders > USC CHP Development



USC CHP Development



Unified Supply Chain: Assay

Create accurate and detailed crude oil assays using powerful modelling, to inform purchasing and blending decisions.



Unified Supply Chain: Plan | Schedule | Network

Optimise and manage the entire supply chain in a unified environment, from planning and scheduling through to supply and distribution.



Unified Supply Chain: Process Model Generator

Regress and validate the base delta structure of process unit models, used as part of planning and scheduling models.

Learning

Support

What's Available

Services Catalog



Discover other cloud services from AVEVA.

What's New



Test

Assay Engine ready SDK Server ready Telemetry disabled

BP – Oil & Gas Downstream

Business revolution with AVEVA's solution in the cloud

- Goals
 - Simplify and standardize Oil & Gas downstream supply chain management
 - Enhance data management and transparency to improve decision-making
 - Reduce IT cost of ownership and increase agility
- Challenges
 - Lack of transparency and duplication of efforts across the supply chain
 - Inability to make quick decisions that could benefit the business
 - Disconnected processes and tools — multiple local planning solutions
- Results
 - Significant margin improvements through an improved refinery optimization process
 - More robust and lower risk plans — ability to run complex models that weren't possible before
 - Earlier decisions and communications on feedstock purchasing and planning operations
 - Standardization of data and better transparency: all teams and different sites are using the most up-to-date information, sharing best practices for modelling, analyses, and business processes
 - BP is no longer limited by technology, but rather empowered by it

“If you could do in minutes what previously took a day, what would you do? AVEVA's technology in the cloud is creating time, and BP's responsibility is what to do with the time saved. This is revolutionary to our business.”

Claire Dickson, CIO of Downstream



Earlier decisions

2 days → 2 hours
on planning & crude purchase



Improved calculation speed

7 hours → 3 min
to run planning model

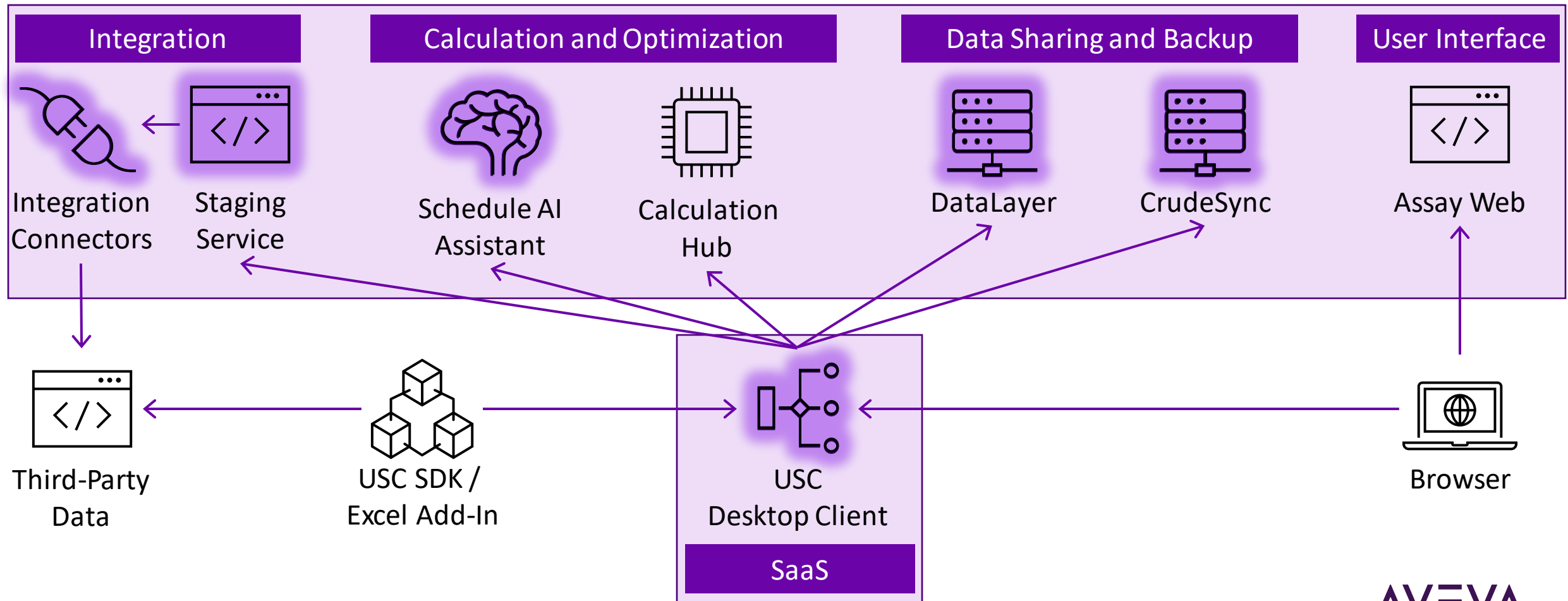


Transparency & collaboration

Instant sharing
of plans across enterprise

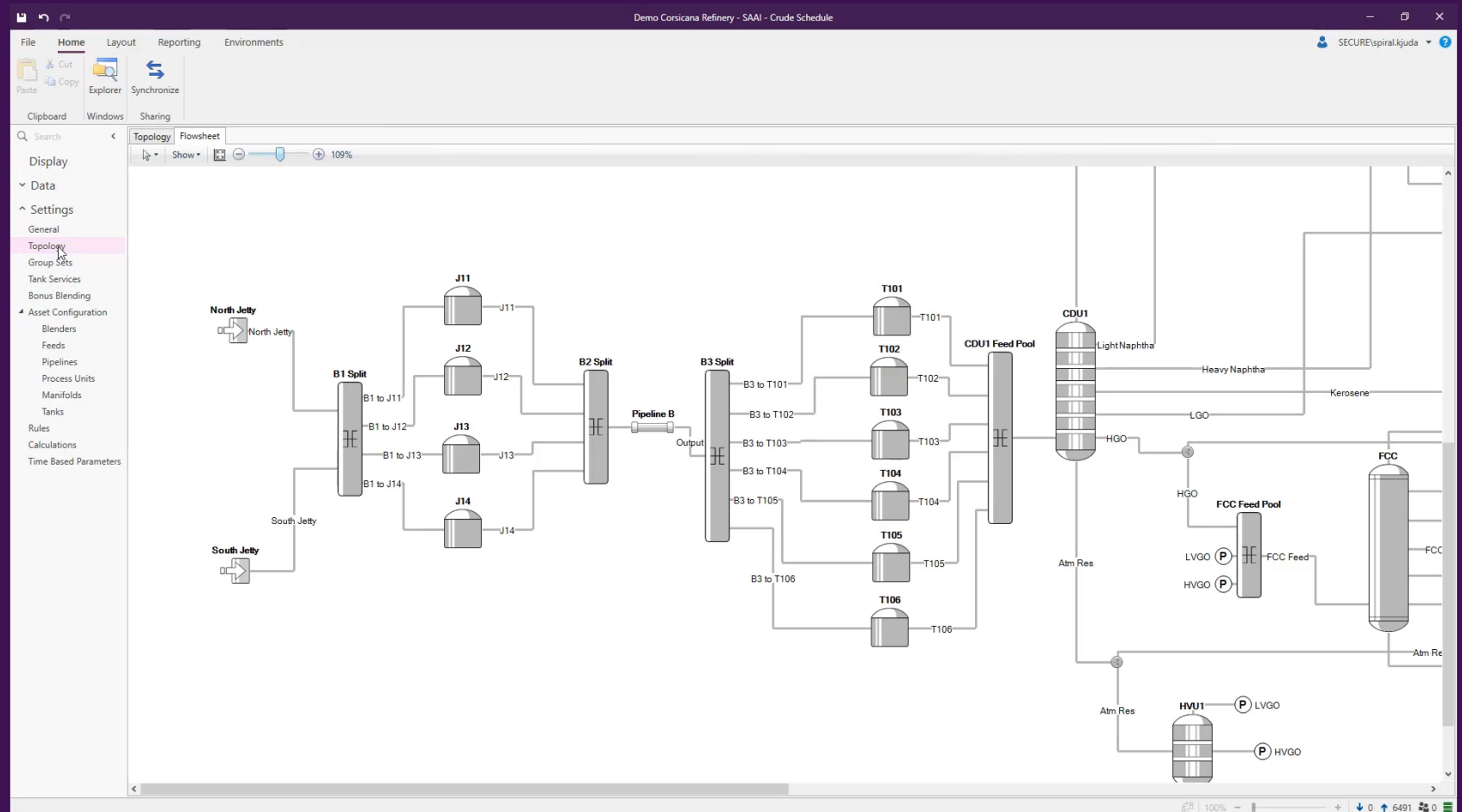
AVEVA Unified Supply Chain

Cloud Components



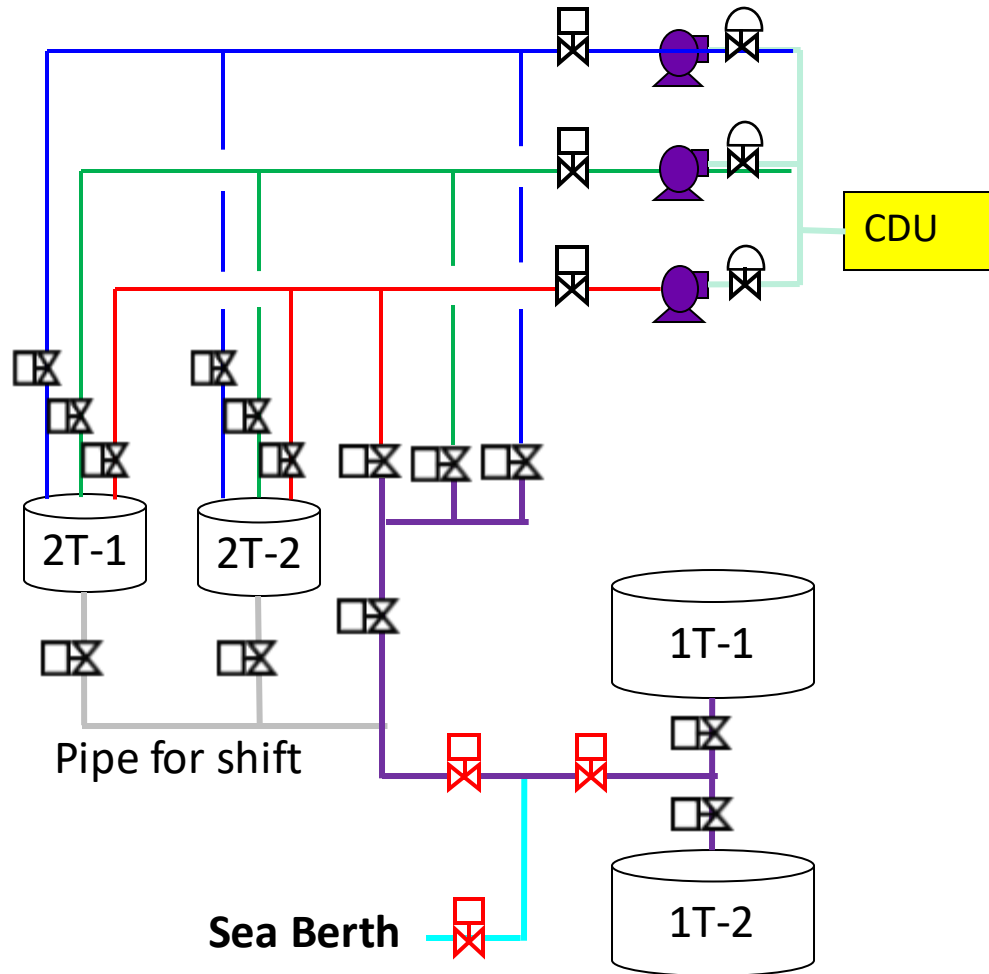
Demo

AVEVA Unified Supply Chain
Schedule AI Assistant



AVEVA

7. Operation Examples (Scheduling Optimization)



Optimization for Crude Oil Unloading & CDU Operation Scheduling, Applying Schedule AI Assistant, which is newly developed enhanced functions with the cooperation of AVEVA and Idemitsu.

Optimize while satisfying the following constraints.

Optimization conditions

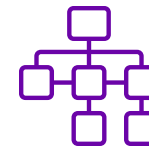
- CDU Product Value MAX
- Minimum number of feed tank switching in a certain period
- Continuous CDU feed (Uninterrupted crude oil feed)

Constraints

- Impossible to charging to CDU from 1T group tanks during receiving crude oil to one of the 1T tanks.
- Impossible to recieving to 2T group tanks or other tanks of 1T group, while charging crude oil from one of the 1T tanks to CDU.
- Maximum pump flowrate restriction
(1 pump < CDU feed rate < 2 pumps)
- Change of API gravity must be within the specified range for each feed tank switching.

*Effective economic optimization
of hydrocarbon value chain can
boost profitability by
\$50 to 300 million
per year for a typical
oil refinery*

AVEVA Value Chain Optimization



Business process
improvement



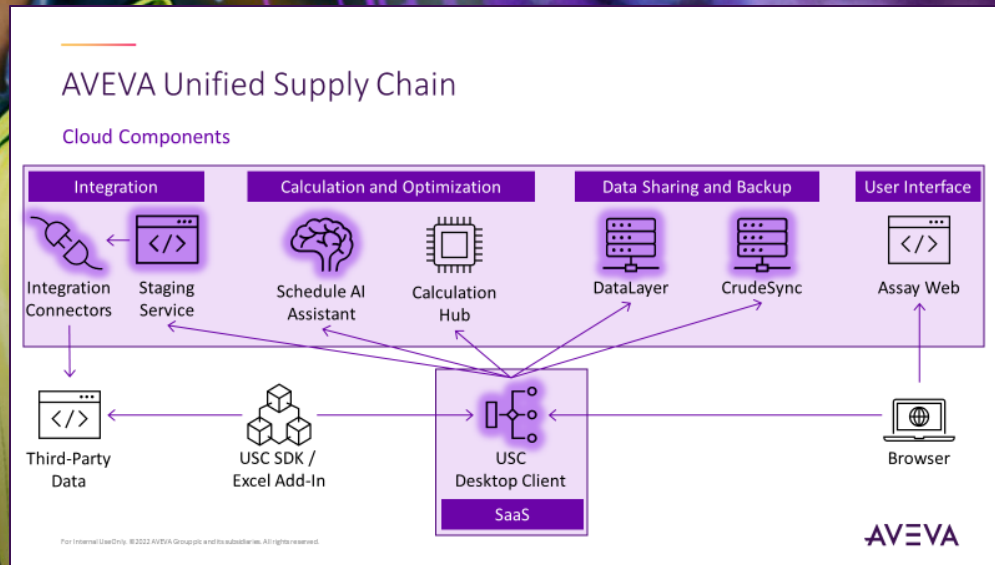
Break down
silos



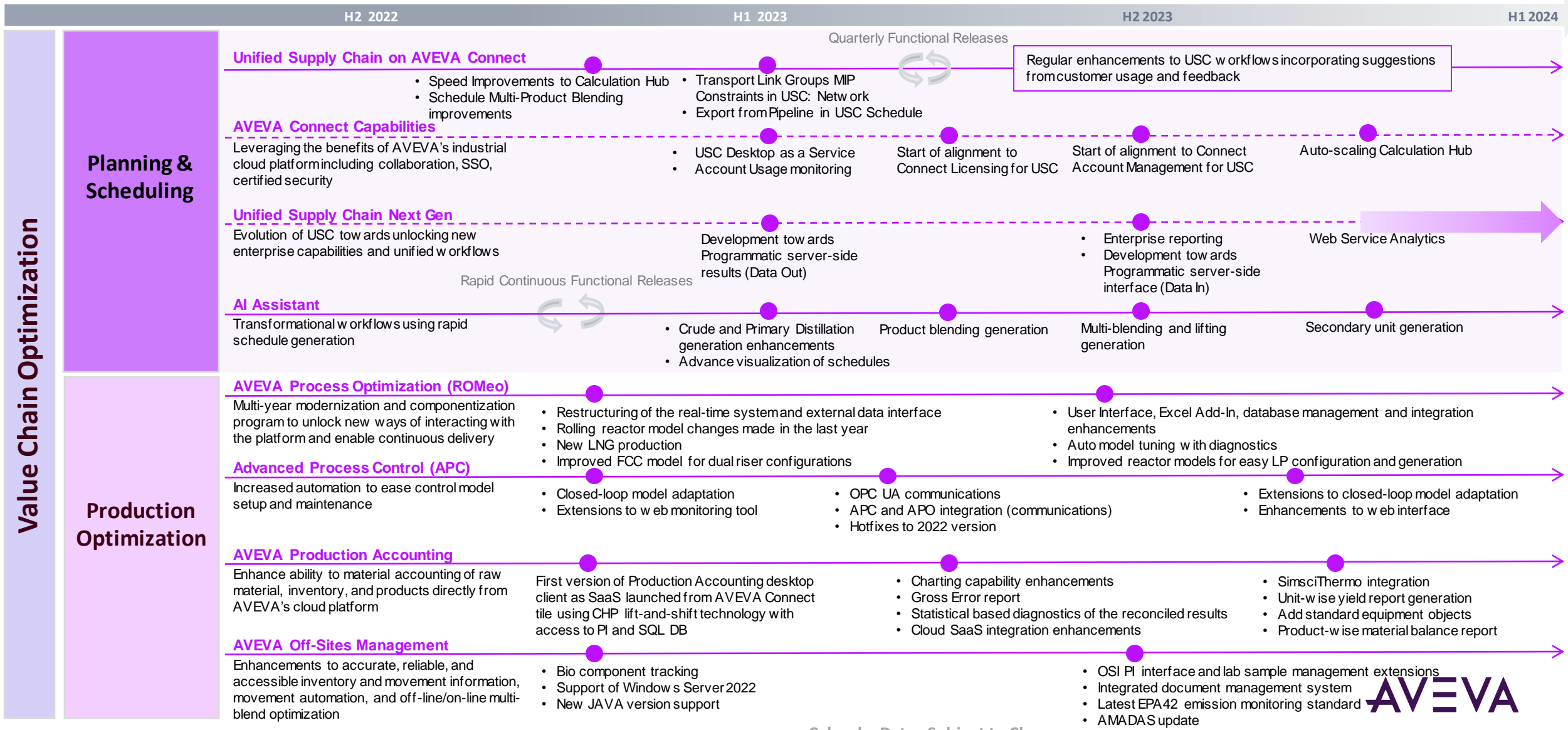
Better decision
making



Improve margin
and sustainability



AVEVA Value Chain Optimization Roadmap



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!

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](https://www.linkedin.com/company/aveva)

 [@avevagroup](https://twitter.com/avevagroup)

ABOUT AVEVA

AVEVA is a global leader in industrial software, sparking ingenuity to drive responsible use of the world's resources. The company's secure industrial cloud platform and applications enable businesses to harness the power of their information and improve collaboration with customers, suppliers and partners.

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. With operations around the globe, we are headquartered in Cambridge, UK and listed on the London Stock Exchange's FTSE 100.

Learn more at www.aveva.com