From Data to Knowledge: Empower your Asset Lifecycle using a Digital Thread

AVEVA/Aras Strategic Partnership brings you Asset Lifecycle Management

Malcolm Panthaki  |  VP of Global Alliances  |  Aras Corp.
From Data to Knowledge: Empower your Asset Lifecycle using a Digital Thread

AVEVA/Aras Strategic Partnership brings you Asset Lifecycle Management

Malcolm Panthaki | VP of Global Alliances | Aras Corp.
24 October 2023
The Aras Commitment

PURPOSE
Enable our customers to create safe and innovative products that play an essential role in our lives

VISION
Transform the way the world makes products

MISSION
Reinvent software for engineering and manufacturing to empower our customers with the flexibility to overcome tomorrow’s challenges
Megatrends Speeding Up Change and Disruption

Smart, Connected & Autonomous
- Embedded Software
- Materials Advancements
- Additive Manufacturing
- Generative Design
- Simulation
- Systems Engineering

Accelerating Complexity
- Electrification
- Industry 4.0
- IoT Connectivity

Cloud
- Security
- Sustainability
- Workforce Transformation
- Agile Processes
- New Regulations & Compliance
- Product-as-a-Service
Fastest Growing Product Lifecycle Management (PLM) Company

35% ARR growth in 2022

95% gross retention rate of subscriptions

550+ subscribers worldwide

800+ employees globally

35% product development

150+ partners worldwide

40% support
Most Installed, Fully Functional PLM Solution in the World

132,000 installations in over 76,000 environments

4 million enabled users worldwide last 3 years

1000+ apps built by the community

+1 million license activations over the last 10 years – 30/day

80k users in our largest accounts
Global Enterprises Use Aras to Design, Build, and Operate Complex Products
DATA IS IN OUR “Collective” DNA
### Why Asset Lifecycle Management (ALM)?

<table>
<thead>
<tr>
<th>Owner Operators</th>
<th>Highly Regulated Industries</th>
<th>EPC Capital Projects</th>
<th>Marine</th>
</tr>
</thead>
<tbody>
<tr>
<td>“A data centric approach to managing Asset Information to deliver trusted asset data”</td>
<td>“A digital twin to manage requirements, configuration, and change management; through the entire lifecycle”</td>
<td>“An integrated Digital Platform For efficient project delivery, modular design &amp; re-use and improved supply chain collaboration”</td>
<td>“Traceability between requirements, CAD, equipment, BOM, sourcing, cost management, planning, and sister ship configuration”</td>
</tr>
</tbody>
</table>
4 Tenets of Industrial Information Management

A unified data platform for better and faster decision-making combining both the engineering and operational data segments of industrial information.

- **Data Aggregation**: Aggregate and align information from multiple sources to create a single source of truth for a given piece of data.

- **Data in Context**: 1D/2D/3D contextual enrichment of information to improve the quality and speed of decisions.

- **Data Management**: Configuration, change management, approval and baselining of engineering data and requirements.

- **Data Sharing**: Democratize access to information for internal and external stakeholders (OEMs, Partners, etc.).
From Information Management to Asset Lifecycle Management

A unified data platform for better and faster decision-making combining both the engineering and operational data segments of industrial information.

- **Data Aggregation**: Aggregate and align information from multiple sources to create a single source of truth for a given piece of data.
- **Data in Context**: 1D/2D/3D contextual enrichment of information to improve the quality and speed of decisions.
- **Data Management**: Configuration, change management, approval and baselining of engineering data and requirements.
- **Data Sharing**: Democratize access to information for internal and external stakeholders (OEMs, Partners, etc.)

**UNIFICATION OF DATA IN THE DIGITAL TWIN**

Asset Lifecycle Management using a Digital Thread
Challenges with existing, legacy PLM platforms

- NOT Flexible
- NOT Easy-to-Extend
- NOT Scalable
- NOT Open

With Restricted SaaS Offerings
Why did AVEVA choose Aras?

Aras’ Disruptive Advantages!

- Low-code platform
- Flexible  |  Adapt faster
- Digital thread
- Open  |  Unlimited connectivity
- Enterprise SaaS
- Powerful  |  Unmatched capabilities
Adding PLM concepts in a data-centric context

Asset Lifecycle Management

- Change Management
- Configuration Management
- Analytics & Tracking
- Requirements Management
- Data-Centric Deliverables
- Supplier Exchange
- BoM Management
- Workflow
The AVEVA/Aras Partnership is in Two Parts

A Re/Co-sell partnership agreement to collaborate on mutual accounts for AVEVA in 2023 and beyond to offer and sell Aras PLM capabilities alongside AVEVA Unified Engineering, AVEVA Marine and AVEVA Asset Information Management products as part of a joint Asset Lifecycle Management (ALM) Solution.

A strategic OEM partnership to create AVEVA Lifecycle Management Products as part of the AVEVA portfolio for release in 2024 using Aras Innovator as a licensed technical platform.
AVEVA ALM Program: Phase 1 Business Goals

**Deliverables Management**

Manage deliverables produced by Unified Engineering and external systems against a project plan –

**Operations Change Manager**

Manage change packages and work sets of data for Owner Operators against an existing Digital Twin Implementation –

**Lighthouse Engagements**

Project solution to manage deliverables produced by Unified Engineering and integrate with data aggregation systems (AIM / IIP)

**Validation as a Service**

AVEVA Connect service to validate Data submissions against Information Standards as part of ALM Data Ingestion. (In Operations Change Manager Scope)
Long Term ALM / Engineering Architecture Strategy

AVEVA Unified Engineering

- Simulation
- Engineering
- Design

AVEVA Unified Project Execution

- Materials
- 4D Scheduling
- 5D Cost
- Procurement
- Construction
- Project Controls

AIM / Industrial Information Platform Services

- ‘Asset Lifecycle Management’
- Baseline & Requirement Management
- Engineering Change Control
- Deliverable Scheduling, Approval and Distribution (Workflow)

- Tags - Engineered to Order
- Tags - Engineer Specified
- Bulk / Commodity Material

- Supplier Information Exchange
- BOM Release

Existing AVEVA Technology

New AVEVA module with ARAS

Key Functionality and Capability from ARAS
In defence of documents

And why we need them

Human-readable

Portable

Flexible
The data-centric approach to Lifecycle Management

And the value it adds

Automated Validation
Integration
Analysis
Joint Value Proposition Example: Deliverables Management Workflow

Asset Lifecycle Management (ALM)

1. AVEVA E3D publishes deliverables to ALM.
2. AVEVA Engineering publishes deliverables to ALM.

3. Deliverables registered, versioned & baselined.

4. Approval workflows executed and deliverables baselined & attached to configuration / requirements.

4a. Comments on Deliverables are addressed in UE.

5. Deliverables made available for visualisation via data hub.

6. Data Aggregation Platform
   - AIM and AVEVA CVS

7. Deliverables referenced in ops & maintenance processes.

Efficient Process and Plant Design – Compliance – CAPEX Optimization

Efficient and Sustainable Operations

Build & Commission

Process and Plant Operations

Maintain & Service Plant

Power Ops Management

Maintain & Service Power

Any Users

View | Decide | Share

Requirements Engineer / Program Manager

Analyze | Investigate | Validate

3D Designer

Design | Modify

©2023 AVEVA Group plc and its subsidiaries. All rights reserved.

Please VISIT the Aras Expo Booth #8 for a Demonstration of this Workflow.
Malcolm Panthaki
Vice President of Global Alliances
Aras
mpanthaki@aras.com

Chris Cran
Program Director
Asset Lifecycle Management
AVEVA
christopher.cran@aveva.com
Questions?
Please speak to us after the session is over or visit us in our booths:

Aras Partner Booth
AVEVA Digital Twin Booth

Thank you!

Please remember to...
Navigate to this session in the mobile app to complete the survey.