Simulation Manager
Manage the Life Cycle of Simulation Projects

Altair’s Simulation Manager allows users to manage the life cycle of simulation projects through an intuitive web based portal. Guidance for different aspects of a project life cycle starting from project creation, setting up of Key Performance Targets (KPT), modeling, job submission, analysis, extraction of Key Performance Indicators (KPI) and subsequent validation are provided to the user. Powerful dashboards in Simulation Manager provide a clear status of the model variations, simulations history, KPI status allowing complete traceability of the project from inception to completion across multiple users.

Simulation Manager Meets a Growing Demand for:

Easy access to HPC and cloud computing resources coupled with lower cost of hardware infrastructure along with the general trend for increasing simulation model size, complexity, model variations is leading to an explosion in the amount of simulation data. Simulation data is unique in its complexity, owing to vast simulation conditions that may be associated with a single product release across multiple study disciplines. Typical PLM systems are not designed to handle the vast amounts of data that is generated during the simulation life cycle.

A top down approach to implement simulation data traceability with PDM systems can be disruptive, counter intuitive, expensive with long implementation cycles. Altair’s Simulation Manager is designed to work within the CAE environment without disrupting the CAE workflow and by being compatible with existing CAD, PDM and simulation tools. With zero footprint on the client site (nothing to install locally), users are able to organize and manage their simulation data through a simple web browser. With comprehensive dashboards and role-based access controls, CAE analysts, managers, and executives are able to obtain easy access to the state of their simulation projects through a simple and powerful web portal.

Ideal for Customers Who:

- Want to massively reduce efforts of re-working of models and obtain traceability of CAE models to CAD.
- Need to manage projects, simulations and targets/goals within the context of product classification such as programs, categories or simulation disciplines.
- Want to define and compare actual observations against set product performance targets.
- Seek an easy-to-use web portal to manage the simulation life cycle of projects.
- Need to connect to their local and remote data repositories, seamlessly.
- Want to manage CAE data as part of standard enterprise workflows.
- Need to extract plots and animation results from huge result files without downloading them.
- Seek a powerful, but easy-to-use search methodology to locate simulation content based on metadata or full text search.
- Require automated meta data (from CAD/CAE models, inputs and results such as materials, thickness, versions, etc.) extraction.
Benefits
With Simulation Manager, users can:
• Obtain rapid traceability and knowledge query into simulation data
• Standardize CAE process and data storage
• Obtain an unified interface for entire simulation life cycle management though a single portal
• Elevate CAE project and simulation data through the entire enterprise using comprehensive dashboards

Capabilities
Simulation Manager offers a complete set of capabilities for users to manage their simulation life cycle.

Data Management
• Provides a context of a CAE project to simulation data to help organize and categorize them
• Offers hook points to add new data types or modify out of the box data types to add more attributes

Goals and Metrics Management
• Provides an infrastructure to reduce the time taken for qualitative conclusions for simulations and enable cross discipline collaborations
• Provides multiple ways for visualizing and analyzing goals
• Allows simulation groups to manage standard goals in a catalogue and reuse them across projects

Process Management
• Define and capture CAE workflows
• Capture inputs and outputs for each task
• Send notifications for task assignments

Indexing and Query
• Simple and advanced searches and classification-based searches allow users to find their CAE data easily
• Automated data capture and indexing framework allows quick access to simulation data
• Framework provides the ability to register custom parsers to extract customer specific meta data

Integrated with Compute Manager
• Users can submit and monitor jobs seamlessly
• Option to utilize results directly from HPC infrastructure and/or move files to managed areas

Supported Platforms
• Operating Systems (Server)
  – Windows 64 bit server
  – Windows Server 2008
  – Windows Server 2008 R2
  – Linux 64 bit
  – SLES 10/11
  – RHEL 5/6
  – CENTOS 5

For more information about Simulation Manager, visit www.altair.com to request a quote or view a demo.

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