# Simulation Manager®

# 🛆 Altair | HyperWorks

Simulation	Manager 😭 🖪 🗟	3 Seat Sled Analysis	Q Search for	dvanced Seadmin Ovanced 1 Messages (1)
Jan Star	Seat Sled Analysis			
Project Summary	Properties	/	Summary	
Classification	Content Type : Safety Template Name : Seat Sled Analysi Type of Analysis : Seat Sled Analysi		Total Goals : <b>2</b> Active Simulations : <b>0</b> Baselined Simulation : <u>28mph</u>	
6 Goals	Status : Not Started Description : Classification completed :	v		
Simulations Summary		Pelvis_Disp (mm) 600 Not Evaluated Create	Thorax_Accel (g)	
	(i) Details	History	C Traceability	Preview
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Repoates	Goals Documents Simulations	KPI Sysis.open		•

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 simulation project life cycle are provided to the user, starting from project creation, setting up of Key Performance Targets (KPT), modeling, job submission, analysis, extraction of Key Performance Indicators (KPI), subsequent validation and powerful dashboards.

## **Product Highlights**

- Data Management of projects and simulations
- Seamless access to Compute Manager<sup>™</sup>, Results Visualization Service, Display Manager<sup>™</sup>, and Process Manager
- Key performance indicator
  dashboards for goals and simulations
- Goals and Metrics Management
- Seamless integration of desktop and remote/HPC applications

Learn more: altairhyperworks.com/simcloud

#### **Benefits**

- Traceability
- Rapid traceability and knowledge query into simulation data
- Standardization of CAE processes and data storage
- Unified interface for entire simulation life cycle management through a single portal
- Elevation of simulation project data through the entire enterprise using comprehensive dashboards
- Seamless access to compute and remote visualization infrastructure

#### **Minimize Effort Duplication**

- Reduce efforts for reworking of models and obtain traceability of CAE models and reports to CAD/PDM
- Manage projects, simulations, and targets/goals within the context of product classification such as programs, categories or simulation disciplines
- Define and compare actual observations against set product performance targets

#### Ease of Use:

- · Easy to use web based application
- Seamless connection to local and remote data repositories

- Product validation according to standard enterprise workflows
- Search of simulations based on metadata or full text

#### Automation

- Automatic metadata extraction from CAD/ CAE models, inputs and results, such as materials, thickness, versions, and more
- Access to desktop and remote applications via web browser
- Extraction of plots and animation results from huge result files without download
- Automatic status updates from PDM systems

#### **Capabilities**

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

#### **Data Management**

- CAE project and simulation data can be organized and categorized via classification and project templates
- For better organization, existing datatypes can be modified or new ones added



Comparison of metrics across simulations

#### **Goals and Metrics Management**

- Faster qualitative conclusions for simulations and cross discipline collaborations are enabled via dashboards
- Multiple ways to visualize and analyze goals
- Manage standard goals from a catalogue and reuse them across projects

#### **Process Management**

- Define and capture CAE workflows
- Capture input and output for each task
- · Send notifications for task assignments
- Execute human and automated tasks

#### **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 allow quick access to simulation data
- Register custom parsers to extract customer specific meta data
- Powerful search filters

# Integrated with Compute Manager and Display Manager

- Interactive job submission and monitoring
- Remote access of result files directly on HPC infrastructure without downloading
- Seamlessly access desktop and remote applications



Automatic preview extraction for all common types of CAE and CAD files

#### **Traceability and Dashboards**

- Comprehensive view of simulation history
- Traceability from CAD/PDM to the final CAE report and vice versa
- · Summary dashboards of simulation projects

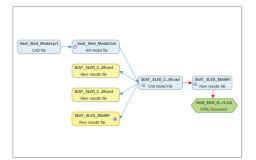
#### Security

- Optional Lightweight Directory Access Protocol (LDAP) integration
- Role- or user based access controls

#### **Growing Demand for Simulation Manager**

Easy access to HPC and cloud computing resources, coupled with lower costs of hardware infrastructure and the general trend for increasing simulation model size, complexity and model variations is leading to an explosion in the amount of simulation data. Typical PLM systems are not designed to handle the vast amount 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, counterintuitive, and expensive with long implementation cycles. Altair's Simulation Manager is designed to work within the CAE environment without disrupting the CAE workflow and is compatible with existing CAD, PDM and simulation tools. Without any installations at the client site, users are able to organize



Traceability from CAD to report

and manage their simulation data though 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.

#### **Installation & Deployment**

Altair recognizes the importance of making data management systems easy to deploy, configure, and use. Simulation Manager can be used out-of-the-box with minimal configuration, such as meta data changes and addition of new content types. Additionally, Altair offers professional services to configure and customize Simulation Manager based on customer requirements.

## **Supported Platforms**

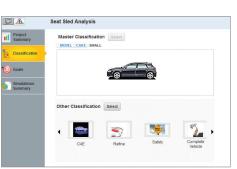
- Operating Systems (Server)
  - Windows Server 2008/2012 R2 64-bit - Linux 64-bit
  - LINUX 64-0 - SLES 12
  - SLES 12 - RHEL 6
  - CENTOS 6

## • Supported Browsers (Clients)

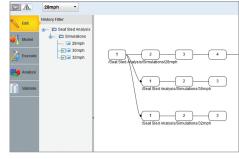
- Windows: Firefox, Chrome and Internet Explorer



Track status, changes, and flow of data across simulations



Categorize data based on programs, BOMs, disciplines, and release gates



Track changes for any data through history view