



Simulation Model Management

Training	Modular Simulation Model Management in ANSA
Duration	2 days (16 hours)
Level	Intermediate
Who should attend	CAE Engineers working in model building teams
Training description and objectives	<p>This course provides an insight to the tools and methodologies that are employed for the efficient modular management of Simulation Models in ANSA.</p> <p>Upon course completion, participants should be able to :</p> <ul style="list-style-type: none">- Work in a data sharing environment managed with ANSA DM- Build subsystems from CAD data- Build subsystems from existing include files- Handle efficiently subsystem assemblies- Integrate new CAD versions to existing models- Handle efficiently carry-over parts during new CAD releases- Assemble a complete Simulation Model consisting of several subsystems- Integrate new subsystem versions to existing Simulation Models
Prerequisites	Participants should have a basic knowledge of the software.
Suggested follow-up courses	Simulation Run Management with ANSA and META
Language	English <i>*ask for more languages</i>

Course content is subject to change without notice.
Course content and duration may be adjusted to audience requirements or background.



Suggested topics

Day 1

- Introduction to Data Management
 - What is a Data Management system
 - Types of data handled in ANSA DM
 - Metadata (Primary/Secondary attributes)
- Overview of the Model Browser and the entities managed:
 - ANSA Parts and their types
 - Creation and handling of Part attributes
 - Parts merging
 - Part contents and relations
 - Parts positioning
 - ANSA Subsystems
- Data management using the Model Browser:
 - Saving Parts in DM
 - Creation of new Study Versions
 - DM Update Status
 - Updating existing Parts with Parts from the DM
- Overview of the DM Browser
 - Navigating through the DM contents
 - Performing queries
 - Downloading entities from the DM in the ANSA session
- Use Case 1: From CAD to Subsystem
 - Translation of CAD files
 - Creation of meshed representations
 - Assembly of Parts
 - Management of Ids
 - Marking of interfaces
- Use Case 2: Create Subsystem from existing includes
 - Manual creation of Subsystems from Includes
 - In-depth description of Subsystem and their contents
 - ANSA plugin: "From Includes to Model Browser Containers"
- Save Subsystem in DM
 - Management of Ids on Subsystem level
 - Saving options
- Exercise: From CAD to Subsystem



Day 2

- Simulation Model creation
 - From scratch
 - Using a simulation configuration table
 - Handling of Simulation Model and Subsystem variants
 - Adapting attributes
 - Management of Ids on Simulation Model level
- Save Simulation Model in DM
 - Saving options
 - Simulation Models in the DM Browser
 - ANSA definition file
 - Simulation Model output
- Assembly of Subsystems
 - “Smart Assembly” concept
 - Marking of interfaces (interface points and interface sets)
 - Interface representation file in DM
 - Subsystem assembly scenarios
- Updating existing Simulation Models
 - Handling new Subsystem versions
- Exercise: Assemble a Simulation Model using Smart Assembly