

# **Modular Model Management**

Training	Modular 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	This course provides an insight to the tools and methodologies that are employed for the efficient modular management of Simulation Models in ANSA.  Upon course completion, participants should be able to:
	<ul> <li>Work in a data sharing environment managed with ANSA DM</li> <li>Build subsystems from Parts</li> <li>Build subsystems from existing include files</li> <li>Understand the key concepts of the Smart Assembly methodology</li> <li>Prepare efficiently Subsystems for inter-modular assembly</li> <li>Assemble a complete Simulation Model consisting of several Subsystems</li> <li>Validate the integrity of Simulation Models</li> <li>Integrate new Subsystem versions to existing Simulation Models and create new iterations</li> </ul>
Prerequisites	Participants should have a basic knowledge of the software.
Suggested follow-up courses	Modular Run Management
Language	English *ask for more languages

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 Modular Run Management

- Model management based on Model Browser Containers
- Run architecture
- Introduction to Data Management
  - What is a Data Management system
  - Types of data handled in ANSA DM
  - Metadata (Primary/Secondary attributes)
  - Data storage
  - Data model
- Overview of the Model Browser
  - ANSA Parts and their types
  - Creation and handling of Part attributes
  - ANSA Subsystems
- Overview of the DM Browser
  - Navigating through the DM contents
  - Performing queries
  - Tracking and visualization of DM object relations
- DM update status
- Basic settings and the Modular Environment Profile

#### Subsystem Management in ANSA

- Subsystem creation
  - Create subsystems from parts
  - Create subsystems from existing include files
- In-depth description of Subsystems and their contents
- Intra-modular assembly
- Subsystem preparation for the inter-modular assembly
  - "Smart Assembly" methodology
  - Marking of interfaces (interface points and interface sets)
- Management of Ids on Subsystem level
- Validation of Subsystem with the out-of-the-box Build process
- Save Subsystems in DM
- Subsystems in the DM Browser
- Creating new Subsystem iterations



## Day 2

## Simulation Model Management in ANSA

- Simulation Model creation and assembly
  - Using Subsystem definitions from DM
  - Simulation Model creation
  - ANSA Connector entities
  - The Connecting Subsystem
- Build and Save Simulation Model in DM
  - The default Build Process for Simulation Models
  - Simulation Model save options
  - Simulation Models in the DM Browser
- Inter-modular assembly scenarios
- Adaptation on Simulation Model level
  - ANSA Adapters and Adapting attributes
  - Adaptation of Ids
  - Adaptation of position
- Simulation Model updates and maintenance

#### Exercise

Assemble a Simulation Model using Smart Assembly