



## Plant Simulation – Data Exchange and Dialogs

This course examines the use of Plant Simulation's interfaces, focusing on the data exchange with other programs and the use of databases. Participants also learn how to create their own dialogue window in Plant Simulation. For most of the content, the Plant Simulation interface package is required.

## Possible Course Content

### Plant Simulation and Excel

- COM-interface – remote access to Plant Simulation
  - o Access to methods, variables and object attributes
  - o React to events from Plant Simulation in VBA (e.g. end of simulation)
- Data exchange using DDE
  - o Read data in Plant Simulation from Excel
  - o Write data from Plant Simulation to Excel
- Plant Simulation DDE Hotlinks
- Data exchange using ActiveX
  - o Create Excel-files dynamically
  - o Simultaneous work with different Excel-files
  - o Read data from Excel
  - o Write data to Excel

### Databases

- Database design
- The most important SQL commands
- The ODBC-interface
  - o Setting up ODBC data sources
  - o Write, read, change and delete data in databases
- SQLite
  - o Create databases
  - o Create tables
  - o Read, write, change and delete data
- ActiveX ADO and ADOX
  - o Create databases and tables dynamically
  - o Read, write, change and delete data

### XML and file interfaces

- Nested tables
- Read, write and change XML files
- Read and write text files

### User defined dialogs

- Dialog control, call back method
- Dialog elements, set values, read values
- Pictures on dialogs

The content is taught as far as possible using examples from your own production processes. Participants need to have gained some initial experience with Plant Simulation and SimTalk. Basic knowledge of SQL and VBA would also be helpful.

The training course is based on the following book:

Tecnomatix Plant Simulation (Springer, 2015)

### Duration:

5 Days

### Costs:

3.800 € \*

### Location:

On-site in your company

\* The price does not depend on the number of course participants and includes all travel expenses.

Version: 02/2017

