Enterprise Dynamics®

Scenario Manager User guide

Simulation Software

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Explanation

The scenario manager makes it possible to run multiple models containing experiments, without user intervention. Users can specify which library and model need to be loaded, and what folder the results need to be stored. The scenario manager then loads Enterprise Dynamics with the specified library, loads the model and runs the experiment defined therein. When it is finished the next run will be executed.

This document describes how the scenario manager can be used.

Definitions

The scenario manager makes it possible to run multiple models created in Enterprise Dynamics. These models require a library to be loaded, and need to have an experiment defined in them. This experiment must be made in the Experiment Environment.

1. Experiment

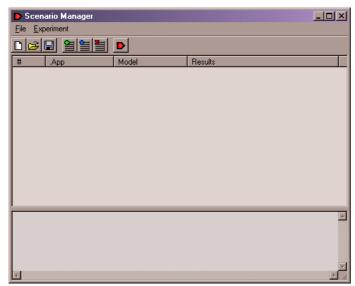
In the scenario manager the term experiment is defined as: a startup library definition (.app file), a model file containing an experiment as defined in Enterprise Dynamics (.mod file), and a folder to store the result files.

2. Scenario

A scenario is defined as a set of experiments.

3. Interface

The scenario manager provides functionality to create and edit scenarios. Adding, editing and removing experiments from a list achieve this.

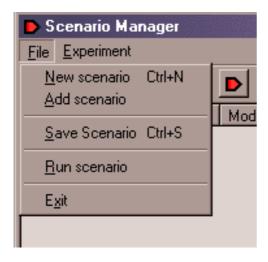


The main interface exists of

- Menu and toolbar for the basic editing of the scenario
- List of experiments (the scenario)
- Log

The individual elements will be described below.

Menu



The menu exists of two main groups: 'File' and 'Experiment'. The file-menu consists of commands to load and save scenarios, as well as run them.

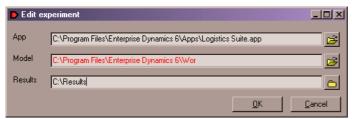
It is possible to run several saved scenarios in one session. By clicking 'Add scenario' and then selecting one or more previously saved scenarios, the experiments defined in them are added to the list. It may be necessary to clear the list first, by clicking 'New scenario'.

The created list of experiments can be saved in a new scenario-file by clicking 'Save scenario'. This will save an XML document, which can be manually edited if the user desires.



The experiment-menu offers functionality to add, edit and remove individual experiments.

When adding or editing, the user is asked to manually enter the locations of an .app file, a .mod file and a folder to store the results:



The locations can be typed by hand, or searched for when clicking the button to the right of the text field. When an invalid filename or folder name is entered, the text in the field will become red, indicating that this particular file or folder could not be found on the computer.

Editing a particular experiment can be done by selecting the experiment from the list, and selecting 'Edit' from the menu or toolbar.

Toolbar



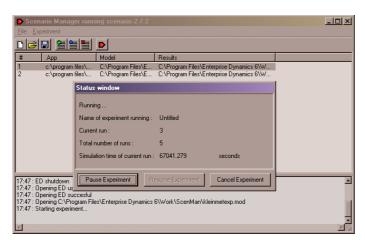
The toolbar contains the most-used functions of the menu. From left to right:

- ⇒ New scenario
- ⇒ Load scenario
- ⇒ Save scenario
- ⇒ Add experiment
- ⇒ Edit experiment
- ⇒ Run scenario

Running the scenario

When the user selects 'Run scenario', the scenario manager first checks whether the scenario is valid. The filenames and folders in all experiments are checked, making sure those files exist. If a file could not be found, the user is asked to correct the error.

Then, for each experiment, Enterprise Dynamics is loaded using the .app file specified in the experiment. When Enterprise Dynamics has started up, the model file is loaded. A check is then performed to see if an ED-experiment has been defined in the model. If this is not the case, the experiment is aborted.



Then the model is run, and the scenario manager waits for Enterprise Dynamics to signal it is finished. The results are written to the folder specified, and Enterprise Dynamics gets shutdown. If there are more experiments in the list, they get executed in the same manner.

Should an error occur while loading or running, the scenario manager aborts the experiment, writes a note in the log about the error, and continues with the next experiment.

Technical considerations

This section is targeted at users who have more than one installation or version of Enterprise Dynamics on their computer.

The scenario manager communicates with Enterprise Dynamics via ActiveX. When Enterprise Dynamics is started, it writes information about itself to Windows' registry. This means that the information in the registry refers to the last version that was started up.

Therefore it could happen that the scenario manager starts a different version of Enterprise Dynamics, in another folder than you intended. To make sure this does not happen, load the version of Enterprise Dynamics that you want to run the scenario in, once before you run the scenario.