

NEW FUNCTIONALITY IN SIMLOX VERSION 4

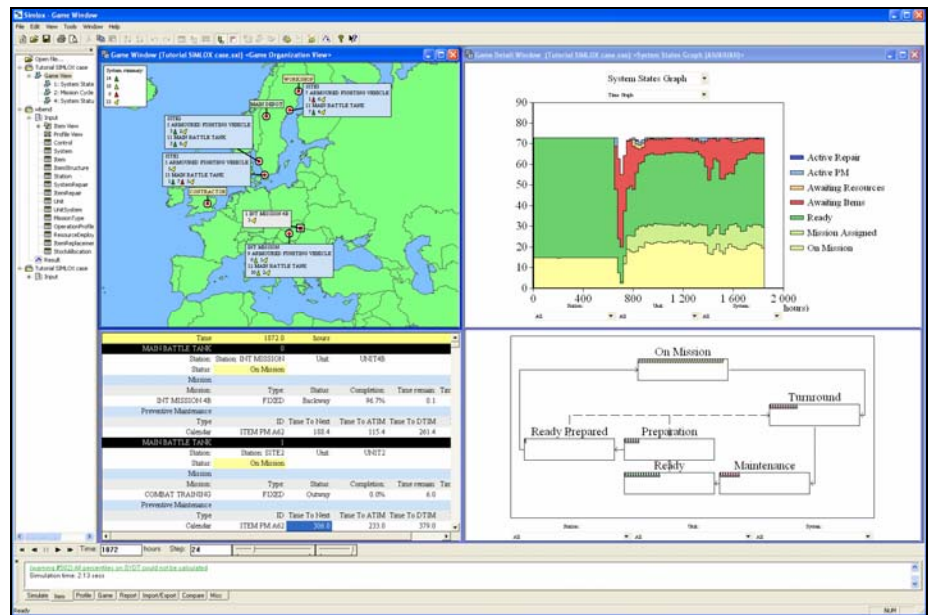


The enhancements in SIMLOX version 4 further improve the flexibility to create and gradually refine models of virtually any logistic support scenario. These include an improved graphical interface, single-click navigation between different scenarios' input, result and report windows and customizable result views.

KEY ENHANCEMENTS

- RANDOM MISSIONS
- ALTERNATIVE SYSTEM FORMATIONS FOR MISSIONS
- IMPROVED MODELLING OF PREVENTIVE MAINTENANCE
- RESOURCE REQUIREMENTS FOR MISSIONS
- EXTENDABLE MISSIONS
- NEW RESULT WINDOW
- EXPLORER VIEW
- IMPROVED PERCENTILE RESULTS
- EXTERNAL CONTROL

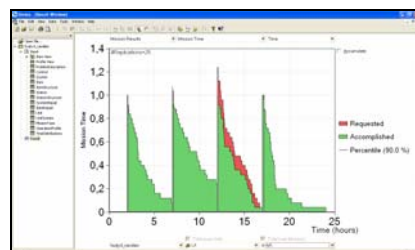
SIMLOX IS A POWERFUL AND VERSATILE TOOL FOR SIMULATION AND ANALYSIS OF COMPLEX OPERATIONAL AND LOGISTIC SUPPORT SCENARIOS. SIMLOX MAKES IT POSSIBLE TO SIMULATE HOW PERFORMANCE VARIES OVER TIME GIVEN A CERTAIN OPERATIONAL PROFILE, SUPPORT STRUCTURE, SPARES ASSORTMENT AND MAINTENANCE RESOURCES.



SIMLOX GAME VIEW, SHOWING NEW EXPLORER VIEW (LEFT) AND LOG WINDOW (BOTTOM)

RANDOM MISSIONS

SIMLOX version 4 introduces the possibility to define random mission profiles. A capability that is very suitable for simulating emergency service operations and other unpredictable scenarios.



REQUESTED VS ACCOMPLISHED MISSION TIME - SAMPLE RESULT FROM 24 HOUR SCENARIO WITH RANDOM MISSION LENGTH

Any or all of the following parameters may be randomly generated according to specified stochastic profiles:

- Mission length
- Number of missions
- Mission distribution

ALTERNATIVE SYSTEM FORMATIONS FOR MISSIONS

In the new version, scenarios can include many alternative system combinations (formations) that are capable of performing a certain mission.

Each described formation is given a priority that decides the order of preference. The results show to what extent each formation has been utilized.

MTID	FID	PRI	NOT	UNIT	MTID	FID	TFRAC
Mission type identifier	Formation identifier	Priority	Use Note	Unit identifier	Mission type identifier	Formation identifier	Fraction used in this formation
1	M1	F1A	1	U1	M1	F1A	0.72
2	M1	F1B	2	U1	M1	F1B	0.02
3	M2	F2A	2	U1	M2	F2A	0.07
4	M2	F2B	1	U1	M2	F2B	0.65
5	M2	F2C	3	U1	M2	F2C	0.09

MISSION FORMATION INPUT TABLE (LEFT) AND UTILIZATION RESULTS (RIGHT)

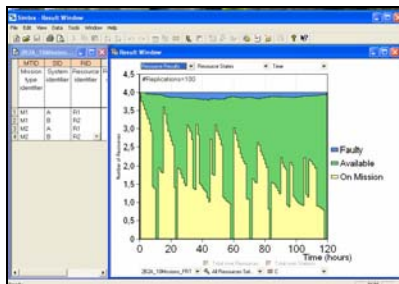
IMPROVED MODELLING OF PREVENTIVE MAINTENANCE

SIMLOX version 4 offers improved ability to define rules and restrictions for accurate simulation of Preventive Maintenance (PM). For example:

- Ability to prevent PM at certain units for certain periods of time
- System *Prelifing* for PM actions has been improved and is now applied per system.
- *Enforced regularity* enables PM to be performed according to a fix schedule with no influence from different kinds of delays.
- Control of when, during PM, item demands arise and how the total PM turnaround time is affected by any waiting time for items.
- The maximum number of systems concurrently in PM for a unit (optional restriction) may now vary over time according to a profile.

RESOURCE REQUIREMENTS FOR MISSIONS

In earlier SIMLOX versions, resources could only be allocated to maintenance activities. In version 4, resources may also be required for a system to be able to perform a certain mission.



RESOURCE REQUIREMENT INPUT TABLE (LEFT) AND RESOURCE UTILIZATION DIAGRAM (YELLOW = "ON MISSION")

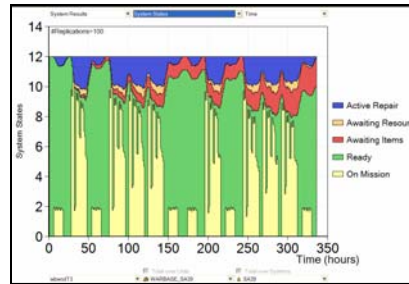
In such cases, the mission can only start if the required resource is available. In the same way, a resource failure during a mission means the related system must abort that mission

EXTENDABLE MISSIONS

SIMLOX version 4 introduces a new mission type, *Extendable mission*. Like a *Continuous Mission*, it may recover and continue after a failure. The difference is that any delays, due to failures or damage, will be compensated by extending the mission calendar time. Not until requested *mission duration* has been accomplished it is completed.

NEW RESULT WINDOW

The result window has been improved significantly, to be much more flexible and interactive.

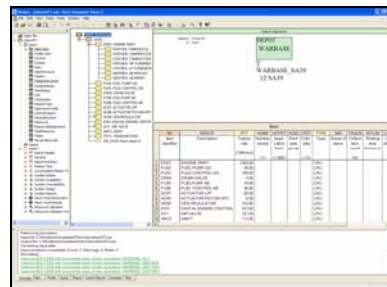


NEW INTERACTIVE RESULT WINDOW

Graphical result diagrams that were previously only available through the report generator are now available in drop down menus directly in the result window. Furthermore, results from several cases can be viewed and compared in the same graph.

EXPLORER VIEW

The explorer view that has simplified navigation in recent versions of OPUS10 and CATLOC is now also introduced in SIMLOX.

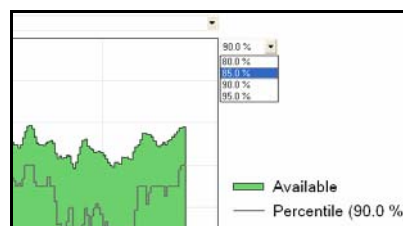


NEW EXPLORER VIEW (UPPER LEFT) AND NEW LOG WINDOW (BOTTOM)

The navigation tree in the explorer view provides a clear overview of all open windows and makes it a lot easier to navigate between different scenarios and views.

IMPROVED PERCENTILE RESULTS

In SIMLOX version 4, several percentile levels may be entered and calculated simultaneously.



DROP DOWN FOR SELECTING PERCENTILE LEVEL TO BE DISPLAYED

A couple of new percentile results have also been added.

Using a drop down list, it is possible to select which of the entered percentile levels to display in the result view.

EXTERNAL CONTROL

Activation and control of SIMLOX can now be done from external applications using command prompt options. This improvement enables external execution of one or a series of basic operations, e.g.:

- Import data from OPUS10
- Import data from an external database
- Open an input file, run simulation and generate report

OTHER ENHANCEMENTS

Resource Probability

Resource requirements for maintenance activities can now be defined with a probability.

Criticality Probability

The item criticality no longer has to be deterministic but may be defined with a probability.

Mission Preparation Failures

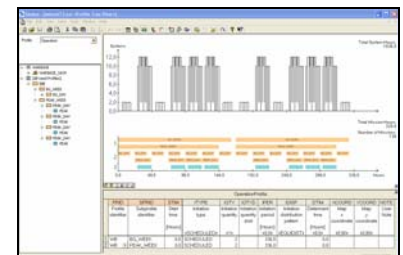
In the new model any failure generation during mission preparation must be modeled explicitly and can be different for different items. The value is not absolute but is specified as a factor relative the ordinary failure rates.

Import from OPUS10 Output

It is now possible to import data directly from an OPUS10 output file. Another new feature is the option to import only the stock allocation data from OPUS10.

Operation Profile View

The operation profile viewer has been improved in several ways. Different types of missions or mission sequences are now shown with different symbols which make them easier to distinguish. Furthermore, a new palette of buttons offers several display options to select from



NEW OPERATION PROFILE VIEW