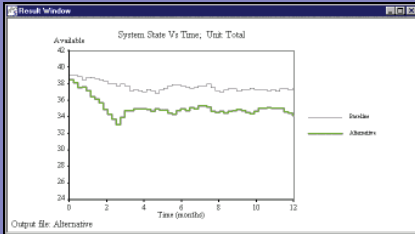
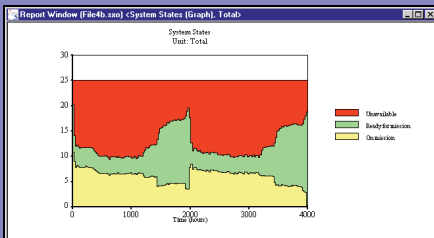


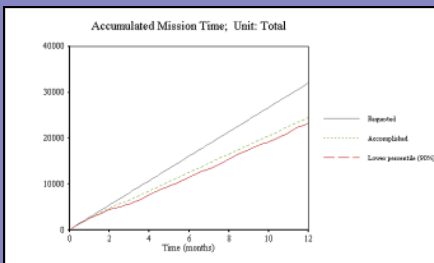
The Most Powerful and Cost Effective Logistics Support Simulation Tool



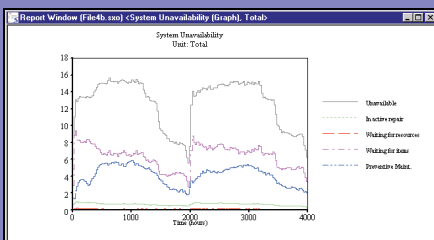
Graphic representation of how Systems' Availability varies over time for different support solutions



Graphic representation of system states (unavailable / available / on mission) as a function of Time.



Accumulated achieved operational hours versus requested (with 90:th percentile).



Unavailability broken down by reason for failure.

Overview

- SIMLOX is an advanced and versatile Logistics Support Simulation Tool.
- SIMLOX executes accurate simulations of how system availability varies over time given a specific operational profile, support structure and resources
- SIMLOX enables reduction of risks and costs, without compromising either.
- SIMLOX permits detailed modeling of real world scenarios without computational constraints.
- SIMLOX is an ideal tool for capability assessment
- SIMLOX can be used together with OPUS10 or as a stand-alone tool
- The development of SIMLOX is based on extensive experience from the development of previous simulation packages and the powerful optimization tool OPUS10.

Features & Benefits

- Event based simulation based on Monte Carlo Technique
- Flexible and effective data entering and data communication.
- Fast simulations, even for cases with high demand flows and large number of part numbers
- Graphical presentation of results, confidence limits and the logistics support organizations.
- Direct and automatic data transfer from OPUS10

Applications:

SIMLOX is used

...in early logistics studies

- for fleet dimensioning
- to pinpoint the most cost effective design solutions
- to assist in optimizing initial support concepts

...in the tendering phase

- by both users and contractors to evaluate alternative allotments of spares and other resources
- for detailed sustainability or endurance studies
- to verify operational requirements such as:
 - “Number of achieved operational hours should be at least 85% of requested hours”
 - “Number of unavailable systems shall not exceed 4 during any 24 hour period with 90% confidence”

...in the operational phase

- to find bottlenecks and weak points in the support organization
- for reallocation of existing logistics support resources
- for analyzing the effect of proposed improvements and modifications

...in all phases

- to extend the logistics analysis based on OPUS10 results
- to study the impact of time dependent factors such as peak loads, transient and changing configurations

Technical Specification

Unlimited number of system and item breakdown levels

Unlimited number of levels in support organization

No symmetry restrictions

Global or item specific support organization

Repairable, non-repairable and partly repairable items

Easy handling of System Variants, System Priorities, Lateral Support, Damages, Resources Transfers etc.

Robbing, batched transports, priorities etc.

Corrective and preventive replacements

Compatible with Windows 95, 98, ME, NT, 2000 & XP

Pentium 3 with minimum 128Mb recommended. But runs on most hardware platforms

ODBC – compatible for communication with Oracle and MS-Access databases

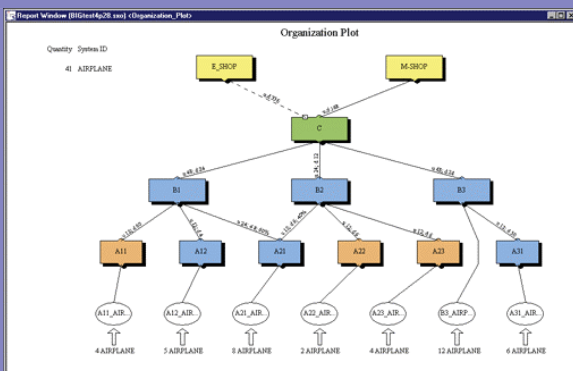
Sample simulation time for 10 000 independent variables < 1 min *

Direct interface to Spares Optimization Tool OPUS10

* 1GHz, 512Mb RAM, 20 replications

MTID	DESCR	NOS	MNOS	DURN	MSUCPT	TFOUT	PRI
Mission identifier	Description	Nominal number of systems	Minimum number of systems	Mission duration [Hours]	Mission success point	Mission out time fraction	Priority
1	F1-A11_AIRPLANE	4	3	2.5	<1 0>	<0.000>	<1>
2	F2-A12_AIRPLANE	5	4	2.5	1.0		
3	F3-A21_AIRPLANE	8	7	2.5	1.0		
4	F4-A22_AIRPLANE	2	1	2.5	1.0		
5	F5-A23_AIRPLANE	4	3	2.5	1.0		
6	F6-A31_AIRPLANE	6	5	2.5	1.0		
7	F7-B3_AIRPLANE	12	11	2.5	1.0		

Input forms for fast and easy data entry and overview, combining the advantages of spreadsheet and database.



SIMLOX can handle – and visualize – any kind of support organization, non-symmetrical as well as item specific

Effectiveness and Confidence

For a given set of data SIMLOX derives a number of values that measure the ability of a support organization to fulfill its purpose, i.e. ensure satisfactory system availability performance in a general sense. Examples of such measures of effectiveness are:

- Average Number of Backorders
- Mean Waiting Time for Spares
- Mean Down Time for Systems
- Average Operational System Availability
- Number of System Operational Ready
- Risk of Shortage of Spares
- Probability of no Backorders etc.

In addition to mean values, SIMLOX is capable of calculating confidence limits and overall performance over time considering:

- Limited resources (staff, tools, equipment etc.)
- Cannibalization/Robbing
- Damages
- Batched transports
- Mission dependent configurations
- Scheduled transfers of systems

Service and Upgrades

- Regular Training Courses for beginners as well as for advanced users.
- Consulting services by experienced logisticians and developers

For customers with Upgrade and Support Agreement:

- Outstanding Support
- Free Regular Upgrades
- User Group Meetings and Seminars
- Annual visits