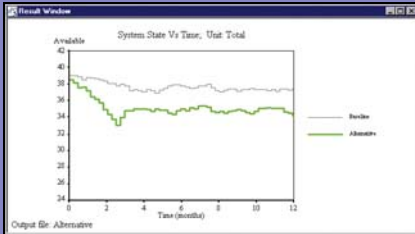
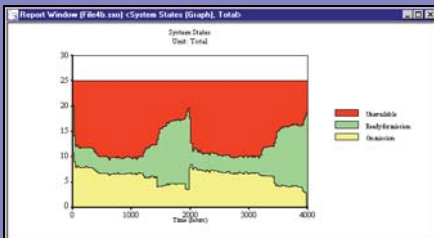


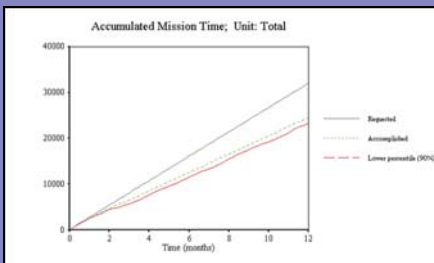
The Most Powerful and Cost Effective Logistics Support Simulation Tool



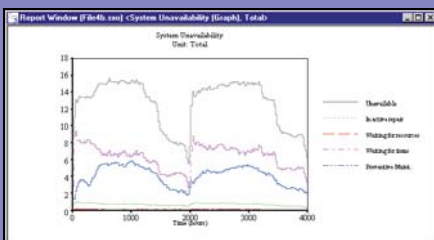
Graphic representation of how Systems' Availability varies over time for different support solutions



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

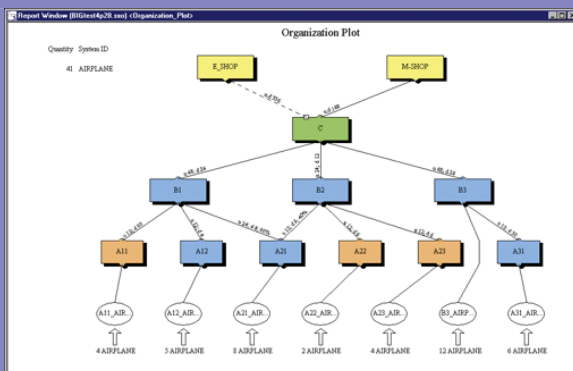
Technical Specification

- 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 | | |
| 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