

## RiskVu V4 Technical Specification

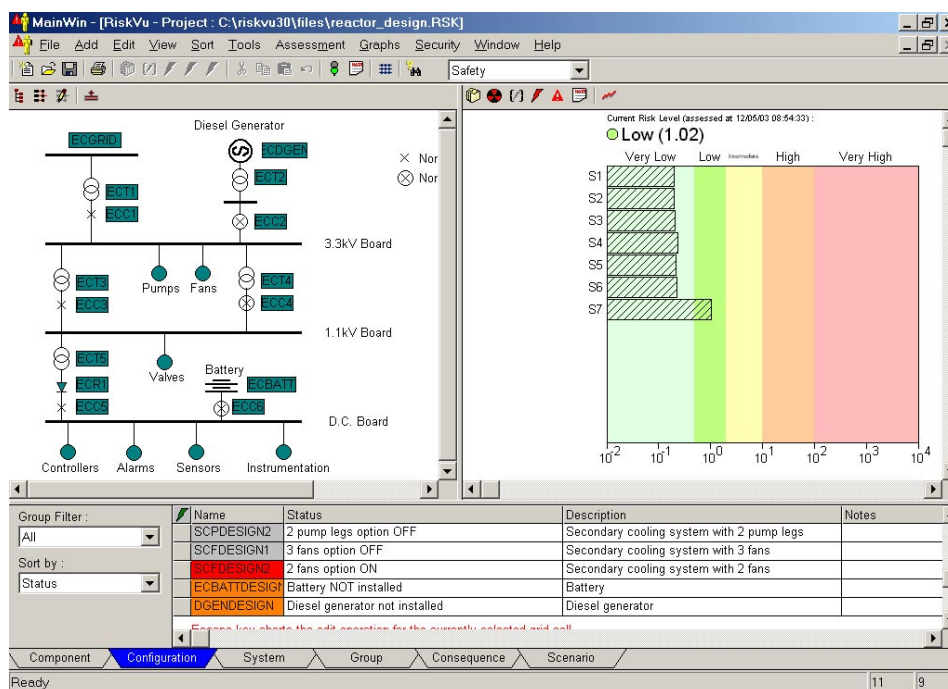
### Platform

Runs under Windows 95, 98, NT, 2000, Me, Xp. Recommended host memory requirements 32Mb+

### Using RiskVu as a Design Comparison Tool

Fault and event tree analysis methods are widely applied to system availability and reliability problems in most engineering disciplines. They may be used to predict the performance of a system at various stages of the design process and indicate reliability weakspots in the design. Experienced reliability engineers may modify the structure of the fault and event trees in order to compare predicted system performance from different design options. The computer program FaultTree+ is used by thousands of engineers to hold the fault and event tree data, analyse the system, and report on the results. A detailed understanding of fault and event tree construction methods and the reliability logic for the systems being modeled is required to allow possible design changes to be reflected in the fault and event tree structures.

The RiskVu computer program provides a high level interface to the FaultTree+ program allowing system designs to be compared by personnel with no experience in fault or event tree analysis methods. RiskVu also provides a more controlled framework to compare and record design options and the predicted performance parameters.



*Comparing the risk from different design options. Design options may be selected using the schematic diagram and the resulting risk changes viewed in graphs.*

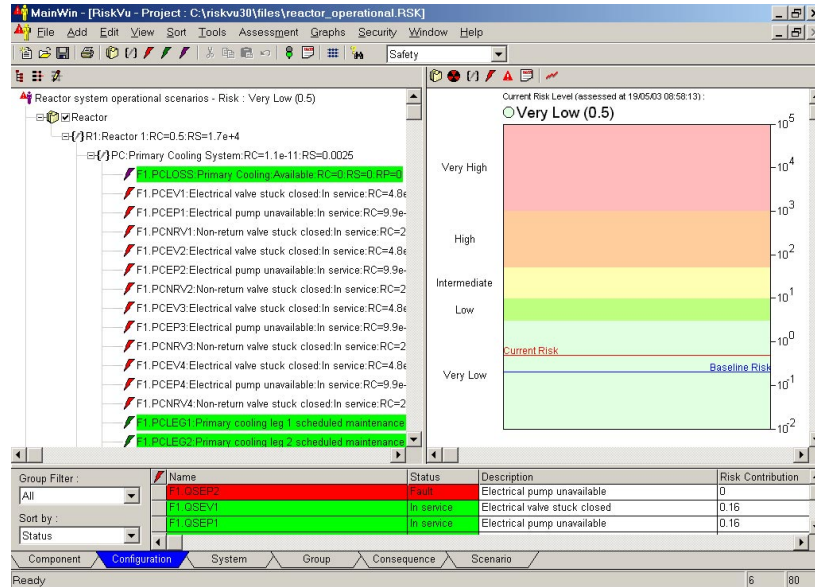
### Using RiskVu as a Real-Time Risk Monitor

Fault and event tree analyses are widely used techniques for performing probabilistic safety assessments (PSAs). These methods have traditionally been used as part of a safety case. However, fault and event tree analysis techniques may also be used in an operational environment monitoring the effect of failures and scheduled maintenance tasks.

# Isograph Reliability Software

www.isograph-software.com

RiskVu allows operators to precisely assess the current safety status of safety systems in a few seconds. Future scheduled maintenance scenarios may also be computed within seconds and results viewed in schematic, graphical or tabular format. The RiskVu risk monitor need not require the end-user to know anything about fault trees or probability theory. Experienced reliability engineers can develop the basic fault tree models off-line using FaultTree+.



Viewing the current risk compared to the baseline risk with systems undergoing scheduled maintenance and a pump fault

## RiskVu Functionality

RiskVu analyses probabilistic risk models that have been created using the FaultTree+ computer program. RiskVu does not require FaultTree+ to be installed on the same machine in order to run. Instead RiskVu accesses one or more project files created by the FaultTree+ program. The probabilistic risk models developed using FaultTree+ contain fault and event tree models which link component failures and other events through sub-system and system failures to consequences for which risks may be quantified. A RiskVu user need not know anything about these fault and event tree models that are entirely constructed in FaultTree+.

RiskVu may be used to perform the following principal functions :

- Vary the reliability of individual components or groups of components and determine the effect on risk and cost.
- Modify the configuration or design of a system and determine the effect on risk and cost. This function allows a system design to be optimised from a risk and cost viewpoint.
- Compare the risk from different system designs by saving design 'scenarios' and their associated probabilistic risk values.
- Determine the effect on risk due to current component outages due to maintenance or failure. This feature provides the facilities of a risk monitor and enables operators to determine the current safety status of an operating system.
- Determine the effect on risk due to planned maintenance activities. This function allows the scheduling of maintenance activities to minimise risk.

RiskVu provides a sophisticated graphical user interface that allows data to be accessed and displayed using custom schematic diagrams, hierarchy diagrams, tables and graphs.