

Dysfunctional Analysis and Simulation (DAS)

Ensure Product Safety



Today's high safety requirements, increasing systems complexity, and stringent regulations are making it harder to manage all aspects of safety assessment and maintain levels required by certification authorities. Now more than ever, it is critical to identify safety compliancy issues early in the design phase where you can positively impact cost and end user safety.

It is essential to have a systems engineering application that enables you to perform studies and simulations, create reusable libraries of equipment, improve collaboration, and integrate with other systems engineering applications.

Systems Engineering has emerged as a distinct professional discipline to better control product development

DAS is a systems engineering application that provides the ability to:

- Validate product compliancy to systems safety requirements
- Perform engineering studies and simulations
- Improve collaboration between design engineers and safety engineers
- Create reusable libraries of equipment thereby reducing cycle time
- Integrate with other systems engineering applications.



System Architecture, Simulation and Safety Assessment

System Architecture Definition

- System architecture modeling
- (Dys)Functional simulation
- System failure conditions.

Dysfunctional Simulation

- Verification of architecture robustness by faults injection
- Failure events sequence simulation.

System Safety Assessment

- Fault tree analysis
- Master minimum equipment list
- Event sequences
- System-FMEA Studies
- Common mode analysis
- Zonal analysis.

Validate product safety requirements compliancy early in the design phase

System Design including dependability assessment

DAS enables design engineers to simulate dysfunctional behavior for a given system during design phase that includes

- Modeling of system architectures by means of reusable components libraries
- Interactive graphical simulation
- Automatic generation of dependability studies and reports for certification authorities.

For more information

Call 1-800-395-3339 or e-mail cadcam@us.ibm.com



IBM Corporation Software Group Route 100 Somers NY 10589 USA

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