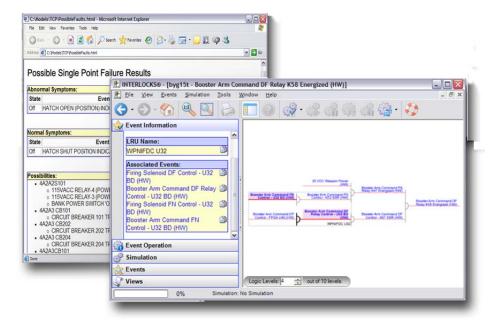


Fault Analysis

The determination of how well the system controls potential hazards is a central part of any system and software safety analysis. Several fault analysis tools have been developed based on failure modeling (e.g. fault tree analysis, event tree analysis) to identify the possible failures that could contribute to such a mishap.

The INTERLOCKS® approach differs from traditional fault analysis tools and models the normal safety-related operation of the system. It captures all aspects of the system that control hazards (hardware, software, operator actions) into a discrete event logic model.



The modeling and simulation tool automatically analyzes all paths of system operation to find potential failures. Any inadequate safety controls and system failures are identified to the individual casual factor. The findings report details the system operational state, the potential hazard event(s), and all possible faults and initiating events that could inadvertently cause the mishap to occur. The interactive logic diagrams provide the analyst with detailed understanding of system behavior by depicting and emulating the results of the identified failures.