

Process Safety Office® ioLogic™



Design Tool for Constructing Fault Trees & Performing SIL/SIS Analysis

Risk Analysis and Visual Fault Tree Design Software

Process Safety Office® ioLogic™ component makes it easy to create and edit fault trees for any purpose. This powerful software offers an intuitive graphical interface for generating compact new layouts for any scale of fault tree.

Built to be a one-stop shop, users can link HAZOP and LOPA studies, embed fault tree studies into their PHA, and many more features. Users can then generate reports containing all of their work products with a single click.

Main Features & Benefits

Intuitive Fault Tree Analysis for Safety Systems

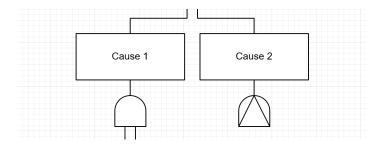
ioLogic™ enables engineers to quickly and accurately build fault trees (FTs) for Safety Instrumented Functions (SIFs). With a WYSIWYG interface and drag-and-drop capabilities, users can focus on logic development while the software handles the technical drawing details.

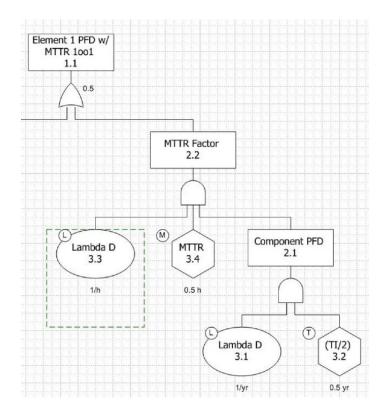
- Visual fault tree editing with automatic layout.
- Predefined templates for common voting groups (e.g., 1002, 2003).
- Real-time graphical updates during modifications.
- Simplified branch creation with grafting and pruning tools.

Powerful Quantitative Safety Calculations

Designed for precision, ioLogic™ quantitatively computes PFDavg values, minimal cut sets, and sensitivity metrics essential for SIF reliability verification. It supports rigorous SIL compliance assessments for complex architectures.

- Automatic PFDavg calculation using failure rate inputs.
- Minimal cut/path set identification for sensitivity analysis.
- Incorporates diagnostic coverage and proof test data.
- Compatible with diverse SIL/SIS voting configurations.





Streamlined Workflow and Data Integration

As part of the Process Safety Office® suite, ioLogic™ offers integrated failure databases and compatibility with broader safety lifecycle documentation. This allows users to complete end-to-end SIF verification within a single environment.

- Built-in failure rate databases for key SIS elements.
- Seamless data flow from hazard analysis to verification.
- Supports both Route 1H and Route 2H compliance.
- Interfaces with Process Safety Office® for lifecycle traceability.

