



Expert Guidance for Fault Tree Analysis

Dyadem's innovative FTA-Pro is a highly efficient solution that helps you avoid costly safety and reliability shortfalls through better Fault Tree Analysis of hardware and software systems. Used in aerospace and defense, medical devices, the power industry, robotics, semiconductors and process industries, FTA-Pro can dramatically improve your FTA process, reducing the time, manpower and cost involved, and producing safer, more reliable products.

What is Fault Tree Analysis

Fault Tree Analysis (FTA) is a top-down approach for analyzing pre-event failures with systems in development, beginning with the top event (the potential failure), then determining all the ways it can occur. Similarly, post-event failures can be analyzed to find the root cause of the failure. An FTA analysis can identify the complex underlying causes leading to the top event, measure the importance of the contributing events, and prevent their recurrence.

Flexible and Complementary

Unlike the FTA tools on the market, the FTA-Pro™ user interface, currently in Version 4, is so easy to use that you can start creating fault-trees within minutes, even if you don't have a background in reliability analysis or statistics. The point-and-click functionality enables rapid development, access and understanding. Despite having an abundance of features, the all-in-one-screen virtual workspace enables you to see only what you need, with no redundancies.

Featuring the best calculation engine in the industry, FTA-Pro has three independent and sophisticated calculation engines in one program –

Binary Decision Diagram, Monte Carlo and Approximate Decomposition – allowing you to verify your results on a fault-tree at least three times.

The built in integration module allows you to seamlessly import data from Dyadem's FMEA-Pro™ software and apply FTA methodology for selected Failure Modes. FTA-Pro also provides you with easy integration with Stature™ enterprise solutions. In addition, FTA-Pro allows you to significantly increase your calculation speed, saving time and money, view information graphically and reduce study time. The intuitive GUI, user-friendly workspace area, quick and easy access to specific historical information, FTA development tools, FTA and FMEA references and easy reporting capabilities make this all possible.

FTA-Pro also features impressive mathematical support, including Exposure Time Percentage, the Markov chain method, the Monte Carlo method, Approximate Decomposition method, event failure modeling, importance measures and more.

New Features in Version 4:

- Multi-threading approach in Monte Carlo calculation method is implemented
- MTTR parameter is added to Dormant Event
- Not logical gates (NOR, NAND, NOT, XOR) and corresponding calculations are implemented
- Frequency calculation results can be displayed on FT diagram
- Separating sign "I" is added between basis events in cut set report
- Unavailability and Frequency for each cut set are calculated and included in result report
- Inhibit gate is added to FTA-Pro
- Event and Gate reports are available
- PFDavg calculation is added
- Enhanced Multi-language



Transparency of Data

Advanced professional reporting features, pre-formatted print reports, enhanced undo/redo functions, enhanced print functions and auditing tools provide you with superior visibility into your system fault tree analyses. Validation feature checks for events with incorrect inputs or gates with no inputs, means that failures that would normally slip through the cracks are much more likely to be detected. The report generator outputs reports on cut sets, importance measures and calculation results. Users can copy information from one FTA to another and develop FTAs from FMEA .xml files, providing superior flexibility in dealing with your fault tree analyses.

Enterprise Ready

FTA-Pro is available standalone, or networked and enterprise-ready for powerful support corporation-wide. The solution offers outstanding flexibility, expandability, access and savings and will install in as little as ten minutes.

Addressing your Industry's Challenges

Improve maintenance programs and new designs, understand failure mechanisms, ensure compliance with safety requirements and prevent future occurrences, all with the help of FTA-Pro. Although designed for the

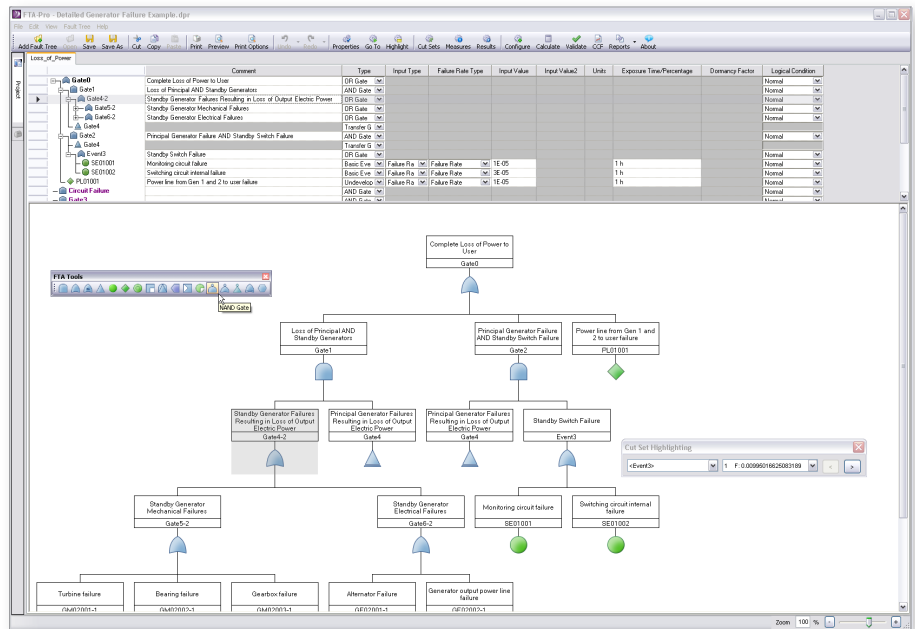
pre-construction of possible failure events and their expected results, you can also use FTA-Pro to perform thorough analyses of post-event failures.

Applicable across a wide cross-section of global industries including: aerospace, automotive, transportation, electronics, semiconductor, pharmaceutical, general manufacturing, chemical, oil & gas, petrochemical, defense and IT, FTA-Pro helps you comply with:

- IEC 61025
- NUREG 0492
- NASA Fault Tree Handbook with Aerospace Applications

Why use Fault Tree Analysis:

- Identify the complex underlying causes leading to a top event
- Measure the importance of the contributing events
- Prevent recurrence or mitigate the consequences
- Verify reliability or performance of a process or system
- Optimize use of resources
- Design new sophisticated systems or processes
- Identify critical safety components
- Perform an incident/accident investigation



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