

FaNMANTM File and Data Manipulation Software Tool Kit

Background

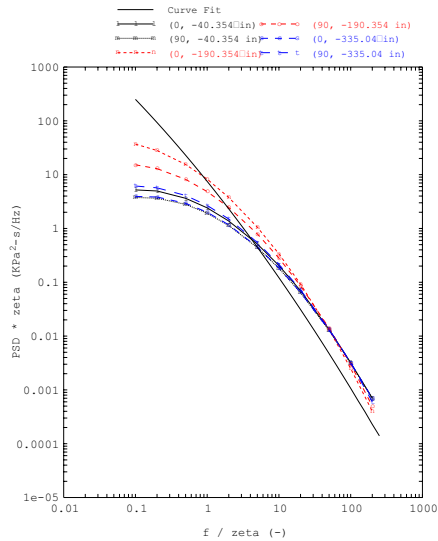
Westinghouse's FaNMAN™ File and Data Manipulation Software Tool Kit is its latest software tool for manipulating large amounts of complex data corresponding to performing safety analyses of nuclear power plants.

FaNMAN software tool kit was designed to be portable across Windows®, Linux® and UNIX® environments, allowing a company to maximize its investment while removing the need to rerun analyses in each environment because the data were not transferable from one to the other. The current version of FaNMAN software tool kit has modules for manipulating large amounts of data, searching and exploring data, and performing algebraic data transformations. The functional road map for FaNMAN software tool kit includes the ability to plot large amounts of complex data and manipulate output plot files, as well as the capability of even greater data-manipulation expansion.

Description

Currently, FaNMAN software tool kit includes five modules with the following functionalities:

1. Data Manipulation: Ability to number output data lines, select and operate on blocks of lines anywhere in the file, reorder lines of output, merge whole output files, or select columns from multiple files and sample/compare data at specified frequencies.
2. Parametric Grep: Ability to search for information in an output file with multiple “and/or” criteria, choose case sensitivity, optionally include hidden characters, globally change and create a new pattern, and create a new file for the output.
3. Data Plotting: Make data plots from new output files or existing files, and manipulate data scales of multiple curves.
4. Algebraic Transformations: Transform data with algebraic manipulations applied to fields or columns, as well as text conversions between lower and upper case, and file conversions.
5. Find Files: Ability to locate and search through files with specific patterns without leaving the tool, and have the output available for manipulation within the tool.



Sample data plot

Deliverables

The FaNMAN software tool kit license includes the following:

- License pack for multiple concurrent (unnamed) users in option packages of 10, 25 or 100 users
- Online user's manual
- Installation guidelines

Cost Benefit

Advanced file and data manipulation allows an organization to better utilize its highly trained workforce for the complex analysis needed to safely operate a nuclear power plant, as it reduces the time needed to determine how to suitably format data for analysis.

Flexibility in operating system platforms allows the organization to take full advantage of the tool without concern for which platform is used and removes the need to invest in multiple tools that may become stranded or obsolete.

Benefits

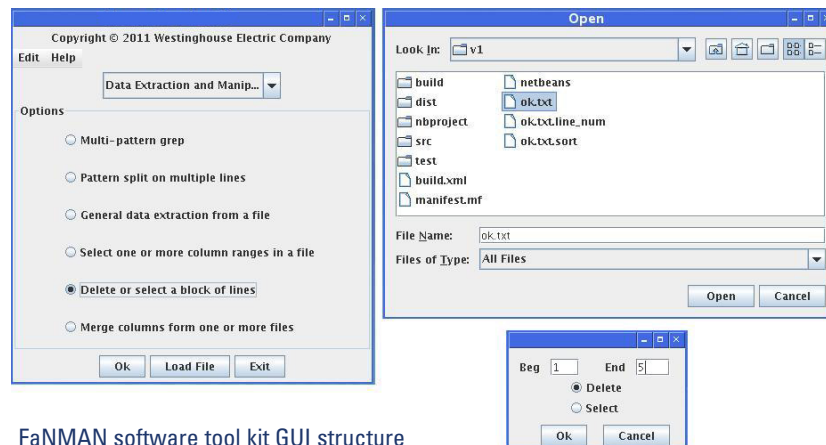
FaNMAN software tool kit simplifies the complex task of manipulating large amounts of data, allowing the

engineer and/or analyst to spend more valuable time actually analyzing the data. The following are some additional benefits:

- Automation increases productivity of engineers during analysis activities that require large amounts of data.
- Portability of the tool across multiple operating system environments provides organizational flexibility.
- The intuitive interface allows engineers to quickly begin using the tool to assist them in their analyses.
- Error reduction results from avoiding inappropriate or manual manipulations possible in generic data-manipulation tools.
- The task-oriented design supports analysis for the nuclear engineer and remains independent of plant design.

Experience

Used for many years internally by Westinghouse nuclear and mechanical engineers, FaNMAN software tool kit is now being offered to customers. Selected early adopters will be given the opportunity to guide the road map for the future functionality of FaNMAN software tool kit.



FaNMAN software tool kit GUI structure

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