The Leak software calculates the leak frequencies of equipment, segments, areas and installations from base element data. It comes equipped with a large database of historical failure frequencies ready for you to use for calculating leak frequencies used in onshore and offshore quantitative risk assessments.

Leak’s output can be used to provide important information on which parts of a plant or equipment are most likely to generate leaks. It ensures that a frequency assessment of changes to an installation can be executed quickly and easily and sensitivity analysis can be performed efficiently and in a structured manner.

Leak is based on historical data from the UK Health and Safety Executive, Hydrocarbon Release Database. Since 1992, all operators in the UK sector of the North Sea have been required by law to report hydrocarbon releases. The database is a compilation of all reported hydrocarbon releases and is the most comprehensive database available. The database has been analysed and filtered to remove reports with partial or invalid data to ensure the quality of the data and your leak frequency calculations.

To calculate frequencies for events based on historical records you use the historical failure frequencies for leaks of different sizes from different types of equipment, (e.g. flanges, pipes, vessels), and multiply these frequencies by the inventory in your system. These calculations are simple, but if your system is complex, it can involve a large volume of input data and can be laborious. Leak makes your task much easier and provides you with the database of failure frequencies on which you can build.

Benefits
- An effective way to reduce your costs and improve safety
- UK Health and Safety Executive, Hydrocarbon Release Database
- Discrete and continuous leak data
- Reporting to Microsoft® Excel
- A living database that can be quickly updated with your corporate or other published data
- Easy-to-do sensitivity analysis
- Quality control with an auditable trail for leak frequencies

Fully featured
- Established historical database of leak frequency data from reliable sources
- Reports include: Input, Leak Frequency and Contribution of Base Element Types
- Grid data entry for base elements and output categories
- Hierarchical defaulting for pressure and gas/liquid fraction inputs
- Frequency modification factor