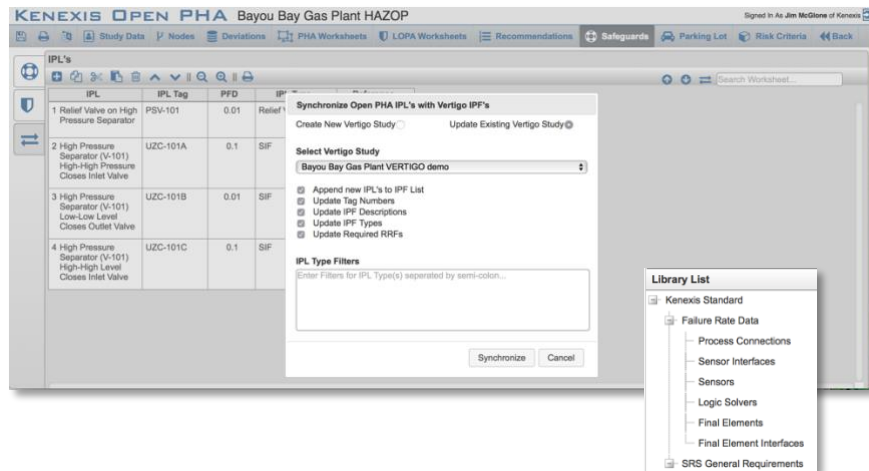


# VERTIGO™

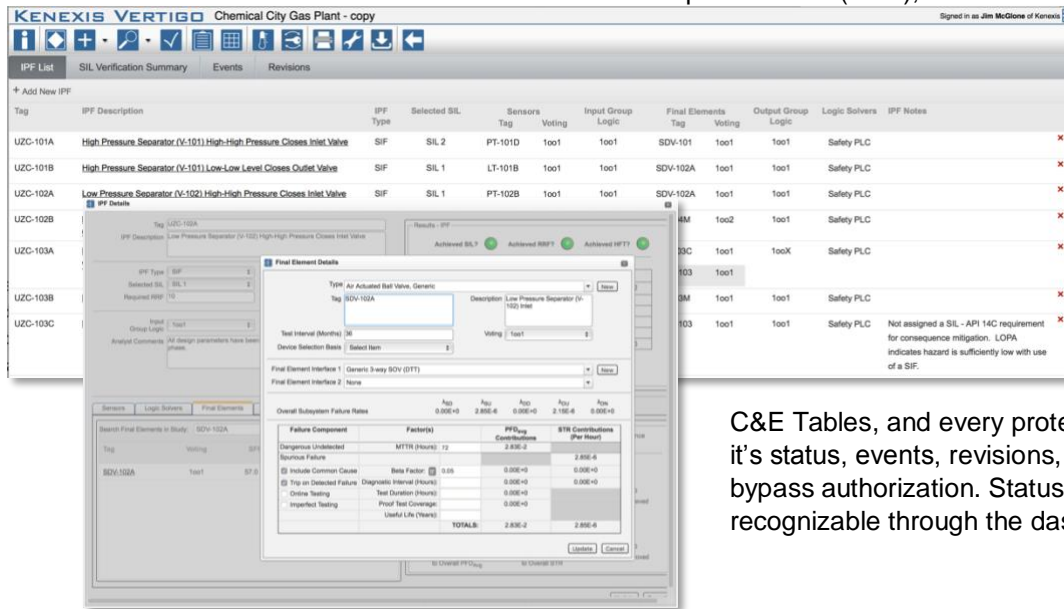
SIS Lifecycle Management Software

Vertigo™ SIS Safety Lifecycle software was developed by experienced process safety engineers and is deployed to provide a flexible and effective tool for managing the systems that safeguard process plants. It was specifically designed to manage your SIS in accordance with the industry standard ISA61511/ISA84. It provides users with a facility or enterprise solution for developing conceptual designs, documenting, tracking, proof testing, and maintaining documentation throughout the entire life of the system.

Instrumented Protective Functions (IPFs) can either be entered manually or synchronized from Open PHA™ Premium as shown in the image to the right. After selecting the Sensors, Logic Solvers, and Final Elements using either Kenexis Standard Failure Rate Data or your own data, you can perform SIL Verification Calculations in Vertigo. Vertigo keeps track Safety Requirement

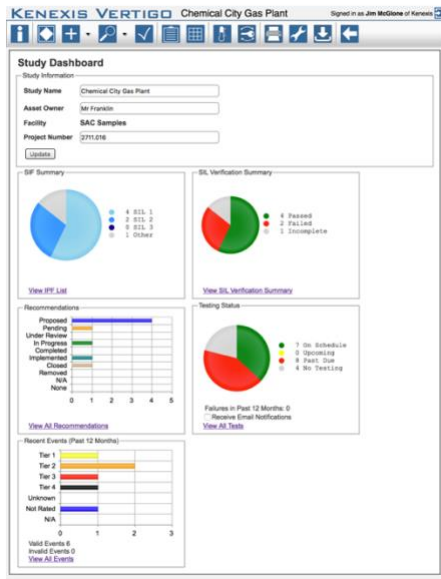


## Specifications (SRS),



C&E Tables, and every protective function, it's status, events, revisions, testing, and bypass authorization. Status is immediately recognizable through the dashboard.





## Features

- ✓ Extensive Equipment Failure Rate Database
- ✓ SIL Verification Calculation Engine
- ✓ Enterprise, Multi-Site, Multi-User Web-Based Platform
- ✓ Safety Requirements Specifications (SRS) Documentation

## Failure Rate Database

Vertigo utilizes an extensive database of instrument failure rate data developed over years of experience by Kenexis engineers. This database includes both generic and application specific failure rate data collected from both published industry sources as well as data collected by Kenexis from various client sites worldwide. In addition, vendor specific data is included for most popular makes/models of instruments. Vertigo also allows users to create custom databases specific to their plant or organization.

## SIL Verification in Compliance with ISA

### TR84.00.02

SIL Verification calculations can be performed in Vertigo using a simple, easy to use interface. All calculations performed by the Vertigo calculation engine have been extensively validated and are in conformance with the recommended practice of *ISA TR84.00.02 Safety Instrumented Functions (SIF) – Safety Integrity Level (SIL) Evaluation Techniques*. Arbor™ provides a process safety engineer designed fault-tree analysis tool for complex evaluations.

## Robust SRS Data Structure

Allows users to quickly develop SRS documentation with intuitive data structure. Simplifies the process of creating SRS by avoiding duplicate entries while providing outputs in a variety of formats which are specific to the needs of the document user. Requirements are collected at the individual instrument level at the SIF level and at the overall system/project level. In addition to the written requirements of the system, Vertigo also automatically creates a compact and efficient functional logic representation of your system through cause and effect diagrams.



## About Kenexis

Kenexis is an independent engineering consulting firm headquartered in Columbus, Ohio, with offices in Houston, Singapore, and Dubai. Kenexis was established in 2004 and is a privately held. Kenexis clients span the globe in many industries. Kenexis has performed engineering services for over 500 different major process industry customers in locations spanning over 20 countries.

