



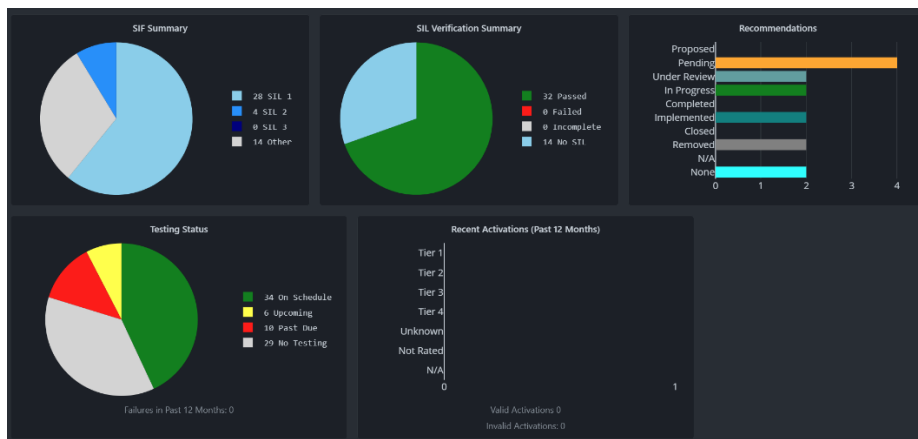
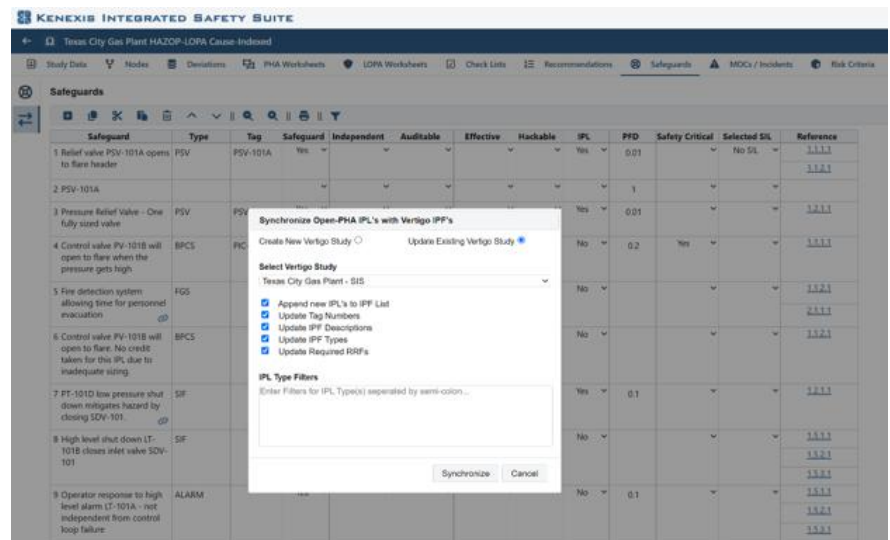
ISA/IEC 61511 SIS Lifecycle Management and SIL Verification

[Kenexis® SIS \(formerly Vertigo™\)](#) is the SIS safety-lifecycle tool in the [Kenexis Integrated Safety Suite](#) — a site or enterprise solution for developing, documenting, tracking, proof testing, and maintaining SIS documentation across the entire life of the system. Instrumented Protective Functions (IPFs) can either be entered manually or synchronized from PHA/LOPA studies stored in [Kenexis® Open-PHA®](#) Cloud. — so, the SIL targets identified in LOPA become your verification design targets without re-entry.

With Kenexis® SIS (formerly Vertigo™) you can develop and track Safety Requirement Specifications (SRS) in multiple ways. Kenexis® SIS (formerly Vertigo™) supports SRS development using both clause-based general requirements and customizable SIF/Instrument SRS datasheets.

Additionally, SIS logic specifications can be developed using built-in Cause & Effect (C&E) Diagrams.

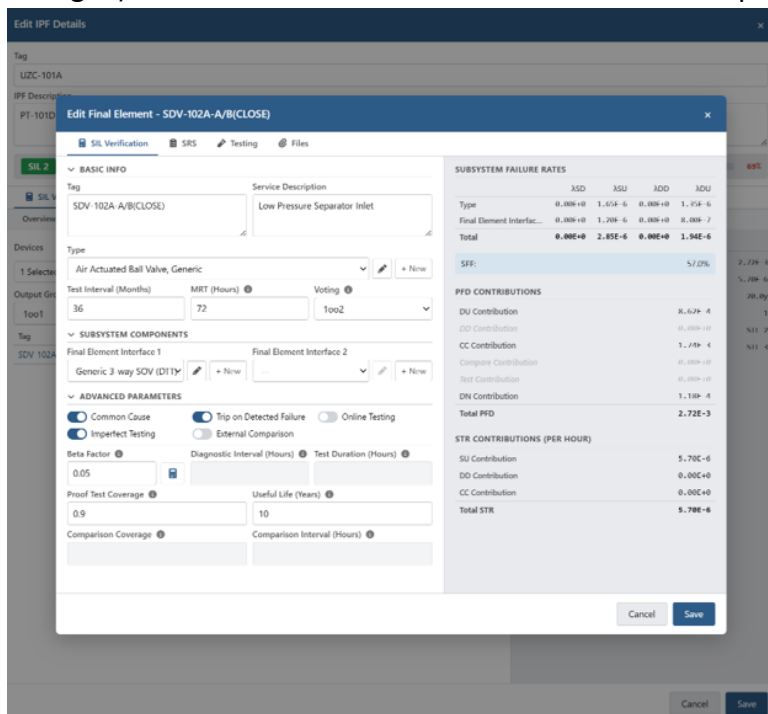
During the operational phase Kenexis® SIS (formerly Vertigo™) tracks SIS key metrics like system activations (trips), bypass activations, and systems failures revealed during testing. Deficiencies in key metrics can easily be identified thanks to easily understood Dashboards.



Features include:

- Extensive equipment failure rate database
- SIL Verification calculation engine
- Enterprise, multi-site, multi-user platform
- Safety Requirements Specifications (SRS) documentation
- Easy access and integration / synchronization with other systems
- Dashboard view of critical information

Kenexis® SIS (formerly 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. Kenexis® SIS (formerly Vertigo™) also allows users to create custom databases specific to their plant or organization.



SIL Verification calculations are easily performed in Kenexis® SIS (formerly Vertigo™) using a simple interface. All calculations performed by the Kenexis® SIS (formerly 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*.

For complex SIL Verification calculations, Kenexis® SIS (formerly Vertigo™) **integrates seamlessly with our [Kenexis® Fault Tree software](#)**.

SRS documentation is easily and quickly developed with our intuitive data structure. Simplifying 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, Kenexis® SIS (formerly Vertigo™) also automatically creates a compact and efficient functional logic representation of your system through cause-and-effect diagrams.

Your SIL data should not be trapped in your tool

Your SIL verification data should not be trapped in your tool. SIL verification is data-heavy work: SIF inventories live in engineering databases, reliability data comes from manufacturer certificates and industry sources, and results have to flow downstream into SRS documents, FSA audits, CMMS proof-test scheduling, and corporate dashboards. Kenexis SIS treats data accessibility as a first-class capability. CSV import and export for every major data object — SIF inventories, reliability data, and verification results — is built into the standard subscription, so your engineers keep working in the formats they already use instead of fighting a proprietary one. A functional safety engineer can upload an existing SIF inventory by CSV and run real verification calculations in minutes — including inside the 30-day trial. For customers who need programmatic enterprise integration, a full REST API is available as a separate purchase.

Built for AI

Because SIF definitions, reliability data, and verification results are stored as structured data, an AI or LLM agent can read your SIF inventories, reason about reliability-data choices, and flag common verification errors — unbalanced redundancy assumptions, missing common-cause factors, or inappropriate failure-rate selections — across related SIFs. Built-in CSV import/export means many AI workflows work with no integration effort at all: an agent ingests a CSV-exported SIF inventory, reasons about it, and produces output your engineer imports back. For live programmatic AI integration across many SIFs and sites, the REST API is available as a separate purchase. Your SIL verification becomes a queryable dataset, not a folder of locked tool files.

Always current, never locked in

Kenexis® SIS (formerly Vertigo™) runs entirely in your browser on the Kenexis Integrated Safety Suite cloud platform — there is no desktop install to manage. Every engineer is on the same current version, so the version drift that plagues desktop SIL tools disappears: a model built today still opens cleanly when you reopen it years later for revalidation, an FSA, or post-incident analysis, and a consultant's deliverable is never stranded on a tool version your team





cannot read. There is no IT-managed upgrade project, and you always have the latest reliability-data libraries.

Enterprise-grade and secure

Kenexis® SIS (formerly Vertigo™) is built to conform with ISO/IEC 27001 and hosted on Microsoft Azure (US East primary, US West failover), with encryption in transit and at rest, role-based access controls and regular access reviews, comprehensive audit logging, and tested backup and recovery — so it stands up to the IT and OT-security review that gates enterprise and national-oil-company deals.

About Kenexis

Kenexis, an independent consulting engineering firm that provides technical safety services for process industries, and other industries that manage risks related to chemicals or stored energy. Kenexis is helping change the way that safety and security are incorporated into industrial business practices by providing best-in-class software tools, associated training, and comprehensive technical support.

