

## Simplified PHA Management: Clear Pricing, Easy Access & Legacy Migration

[Kenexis® Open-PHA®](#) redefines Process Hazard Analysis (PHA) software by addressing the frustrations common with competitive products, such as hidden fees, high costs, and restrictive licensing. Unlike other platforms, Kenexis® Open-PHA® offers a transparent pricing structure, with a free desktop version for unlimited use and a premium cloud platform at a fraction of the cost of competitors. Its flexible licensing eliminates barriers to collaboration, allowing multiple users to access and work on studies without extra charges or complications.

Kenexis® Open-PHA® also empowers users to maintain full control over their data with exportable, non-proprietary formats, ensuring seamless integration with other tools and no vendor lock-in. Designed by engineers for engineers, Kenexis® Open-PHA® delivers unmatched value and user-friendliness, making it the smart choice for organizations looking for efficiency and cost-effectiveness in PHA, HAZOP, and LOPA studies.

### Deliberately Different

First, our comprehensive, cloud-based software includes a **free** desktop version suitable for remote HAZOP and LOPA workshops with limited internet access, but capable of fulfilling most PHA documentation requirements. While the desktop version functions independently as a scaled-down solution, it seamlessly complements the cloud-based version, allowing users to leverage advanced features.

Second, unlike other PHA software, Kenexis® Open-PHA® employs a unique and adaptable data structure, facilitating effortless integration with various tools. This feature enables the creation of dashboards and customized reports.

Third, both the Kenexis® Open-PHA® Cloud and Desktop versions remain up to date automatically at **no additional cost**. The annual subscription for Kenexis® Open-PHA® Cloud includes **free** revisions, upgrades and training.

Finally, due to its unique design, Kenexis® Open-PHA® doesn't restrict your HAZOP and LOPA study data in a cumbersome format. You can easily export your study data for use in other applications.

| KENEXIS INTEGRATED SAFETY SUITE                                                                                                  |                                                            |                                                                                                                                                                                                           |     |                                                                        |       |          |          |              |   |   |    |               |                |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------------------------------------------------------|-------|----------|----------|--------------|---|---|----|---------------|----------------|
| Texas City Gas Plant HAZOP-LOPA Cause-Indexed                                                                                    |                                                            |                                                                                                                                                                                                           |     |                                                                        |       |          |          |              |   |   |    |               |                |
| Study Data Nodes Deviations PHA Worksheets LOPA Worksheets Check Lists Recommendations Safeguards MOCs / Incidents Risk Criteria |                                                            |                                                                                                                                                                                                           |     |                                                                        |       |          |          |              |   |   |    |               |                |
| 1. (HP Gas) Production Header through High Pressure Separator (V-101) to Gas Export Pipeline                                     |                                                            |                                                                                                                                                                                                           |     |                                                                        |       |          |          |              |   |   |    |               |                |
| Deviation                                                                                                                        | Cause                                                      | Consequence                                                                                                                                                                                               | CAT | Safeguards                                                             |       |          |          | Consequences |   |   |    |               |                |
|                                                                                                                                  |                                                            |                                                                                                                                                                                                           |     | Safeguard                                                              | Type  | Tag      | Hackable | IPL          | S | L | RR | LOPA Required | ALARP Required |
| 1.1 High Pressure                                                                                                                | 1.1.1 Production header pressure operates above 1200 psig. | 1.1.1.1 Potential overpressure of V-101. Potential loss of mechanical integrity. Potential rupture of High Pressure Separator resulting in large release of hydrocarbons and potential fire or explosion. | S&E | 1 Relief valve PSV-101A opens to flare header                          | PSV   | PSV-101A | Yes      | Yes          | 4 | 3 | IV | Yes           | Yes            |
|                                                                                                                                  |                                                            |                                                                                                                                                                                                           |     | 133 Explosion-Preventer                                                | Other |          | Yes      | Yes          |   |   |    |               |                |
|                                                                                                                                  |                                                            |                                                                                                                                                                                                           |     | 4 Control valve PV-101B will open to flare when the pressure gets high | BPCS  | PIC-123  | No       | No           |   |   |    |               |                |
|                                                                                                                                  |                                                            |                                                                                                                                                                                                           |     | 33 PT-104D high pressure shut down causes shutoff of C-104.            |       |          | No       | No           |   |   |    |               |                |
|                                                                                                                                  | 1.1.2 External fire in the vicinity of HP Separator V-101. | 1.1.2.1 Potential overpressure of V-101. Potential loss of mechanical integrity. Potential rupture of High Pressure Separator resulting in large release of hydrocarbons and                              | S&E | 1 Relief valve PSV-101A opens to flare header                          | PSV   | PSV-101A | Yes      | Yes          | 4 | 3 | IV | Yes           | No             |
|                                                                                                                                  |                                                            |                                                                                                                                                                                                           |     | 5 Fire detection system allowing time for personnel                    | FGS   |          | No       | No           |   |   |    |               |                |
| 1 Consider performing a LOPA analysis to understand this high consequence scenario in more detail                                |                                                            |                                                                                                                                                                                                           |     |                                                                        |       |          |          |              |   |   |    |               |                |

## Kenexis® Open-PHA® Desktop

Kenexis® Open-PHA® Desktop is a comprehensive PHA, HAZOP and LOPA software solution available for free download and use on Windows, Mac, and Linux computers. Storing files locally on your computer, Kenexis® Open-PHA® Desktop enables offline work in remote areas without an internet connection, making it suitable for small shops or budget-conscious contractors. If you decide to transition to the cloud version in the future, the upgrade process is straightforward, unlocking the benefits of cloud-based storage and advanced features offered in Kenexis® Open-PHA® Cloud.

## Kenexis® Open-PHA® Cloud

Kenexis® Open-PHA® Cloud utilizes internet-based computing and artificial intelligence to enhance its capabilities. Additional features not only improve the software but also facilitate access with other Kenexis software tools. This includes synchronizing safety instrumented functions from Open-PHA® Cloud to our [Kenexis® SIS \(formerly Vertigo™\)](#) SIS Lifecycle Management tool and exporting PHA scenarios to [Kenexis® Bowtie](#) providing an industry-leading unified solution.

**Built for AI.** Kenexis® Open-PHA® was designed around an open, text-based JSON format from the ground up — not a proprietary binary file. Because your studies are structured data, an AI or LLM agent can read a full HAZOP or LOPA study, reason about its causes, consequences, safeguards, and recommendations, and write changes back. The cloud tier adds a full REST API (available as a separate purchase) so your studies feed risk registers, work-management systems, maintenance and inspection programs, and BI dashboards — answering the question most PHA tools ignore: what happens to the study data after the study is done? With most tools the answer is ‘it sits in a PDF nobody reads until the next revalidation.’ With Kenexis® Open-PHA® it becomes a live enterprise asset. The same open format also lets us build



AI-assisted migration agents that import your legacy studies — dramatically lowering the cost of switching.

**Stop losing days to report assembly.** Post-study report assembly is the largest single time sink in the PHA workflow — for a typical study, two to five days of copying data into Word, formatting it to a report template, building tables of contents, and cross-referencing recommendations. Kenexis® Open-PHA® Cloud generates the entire report directly from your own template in a few clicks: narrative sections, study tables, recommendation and action-item lists, and appendices. Days of work become minutes of review. A facilitator running ten studies a year who saves three days per study reclaims roughly a month of working time annually — the single most tangible reason customers move from the free desktop version to the cloud tier.

Kenexis® Open-PHA® Cloud is built to conform with ISO/IEC 27001 and hosted on Microsoft Azure, with encryption in transit and at rest, role-based access controls, per-tenant data isolation, and audit logging — so it stands up to the IT and OT-security review that gates enterprise deals. For accounts that cannot accept a cloud deployment, the free desktop version keeps all data local. Beyond security, the cloud platform adds advanced features such as controlled storage, sharing, and seamless integration with other Kenexis tools. The storage and sharing capabilities go beyond a simple file storage system. Our secure cloud platform enables controlled access for editing or viewing files at specific sites, corporate levels, and even with third parties. This eliminates the need for emailing files and ensures consistent version control throughout the lifecycle. This becomes particularly crucial when sharing files outside your organization, such as with contract engineering firms.

## Built for the five-year revalidation

OSHA PSM and equivalent regulations require facilities to revalidate their PHAs every five years. Teams working in Excel rediscover that the prior study is effectively a static document — there is no clean way to flag what changed, carry forward recommendations, or update only the affected nodes. Open-PHA holds the study as a living dataset with revision management built in, so a revalidation that drags on for weeks in spreadsheets can be cut substantially: the structure, nodes, and prior recommendations are already in place and simply need updating.

## Designed by Engineers for Engineers

Kenexis® Open-PHA® offers support for tailored Templates, Reporting, Risk Matrix, Likelihood Categories, Consequence Categories, Risk Rankings, Nodes, Deviations, HAZOP & LOPA Worksheets, Recommendations, Safeguards, a Parking Lot, and Checklist.

Kenexis® Open-PHA® offers customizable views without modifying the underlying data structure. This approach provides flexibility in how forms are displayed while ensuring customizations don't disrupt higher-level reporting and data collection due to incompatible file structures. Kenexis® Open-PHA® also supports both explicit and less common implicit LOPA. In Explicit LOPA, the team establishes a TMEL target based on consequence severity, defines explicit frequencies of cause, and applies frequency modifiers, such as conditional modifiers, enabling events, and probabilities of failure for IPLs. In implicit LOPA, the team operates with the concept of "LOPA credits."

### Adding value with flexibility and consistency

Kenexis® Open-PHA® employs a fully integrated data structure design using a consistent JSON data interchange format, revolutionizing PHA documentation. This design enables tools to present a single set of data in various formats like HAZOP worksheets, LOPA worksheets, or bow-tie diagrams. The days of struggling with data transfer and manipulation, and worrying about information consistency across multiple files, studies, or data structures are over. This approach allows data from multiple scenarios to be consolidated into more user-friendly hazard registers, visualized with graphical tools like bow-tie diagrams, eliminating the challenges of managing duplicated data across different locations and languages.

### Kenexis® Open-PHA® Desktop & Cloud features include:

| Features                                                          | Open-PHA® Desktop | Open-PHA® Cloud |
|-------------------------------------------------------------------|-------------------|-----------------|
| Configurable HAZOP & LOPA Worksheets                              | ✓                 | ✓               |
| Configurable Risk Criteria                                        | ✓                 | ✓               |
| Recommendation Tracking                                           | ✓                 | ✓               |
| Cause & Consequence Indexed PHA Support                           | ✓                 | ✓               |
| Implicit & Explicit LOPA Support                                  | ✓                 | ✓               |
| Deep Copy & Paste, Search & Replace                               | ✓                 | ✓               |
| Cross-Platform Support (Windows/Mac/Linux)                        | ✓                 | ✓               |
| Cloud-Based Enterprise Solution                                   |                   | ✓               |
| Robust User Management and Access Controls                        |                   | ✓               |
| Supports PHA/LOPA Templating                                      |                   | ✓               |
| Reusable Libraries of Causes, Safeguards, etc.                    |                   | ✓               |
| Dashboarding of Key Performance Indicators                        |                   | ✓               |
| Revision Management & Study Version Controls                      |                   | ✓               |
| Integration with Vertigo™ SIS Lifecycle Management Software       |                   | ✓               |
| Custom Report Generation from *.DOCX Templates                    |                   | ✓               |
| AI-Enabled Spell Check & Translation (supports over 60 languages) |                   | ✓               |
| Bowtie Visualization of LOPA Scenarios                            |                   | ✓               |

## Migrating PHA Studies to Kenexis® Open-PHA®

We understand that transitioning your PHA studies from other software, including spreadsheets, to secure cloud-based solutions may seem overwhelming and time-consuming. Let us streamline this process by collaborating with you to develop a data migration tool. With this tool, you can effortlessly transfer your PHA studies into Kenexis® Open-PHA®, enabling you to utilize our unified hazard assessment data structure for SIL Verification, Fault-tree Analysis, Quantitative Bowtie Analysis, and SIS Life Cycle Management. Alternatively, if you prefer, we can handle the entire migration process for you at a reasonable cost.

Given that HAZOP and LOPA studies form the cornerstone of process safety documentation, we recognize the importance of easily sharing information across common applications and platforms. Kenexis® Open-PHA® was designed to facilitate the extraction of data from HAZOP and LOPA studies for use in custom software tools, enabling comprehensive analysis and tailored reporting. This approach represents a significant departure from traditional PHA software, where unwieldy file structures have typically restricted third-party access to your data and discourage the use of alternative software tools.

We are committed to assisting you in transitioning from your existing PHA software to Kenexis® Open-PHA® and will provide comprehensive training to ensure a smooth transition process.

## About Kenexis

Kenexis is a process safety consulting engineering firm that provides technical safety engineering services for new and existing facilities including performance-based fire and gas mapping, and risk analysis for industries that manage risks related to chemicals or stored energy. Focused on process safety, we provide consulting engineering services, software, and training.