



OPEN PHA™

3D Fire and Gas Mapping Software

Open PHA™ provides a no cost, easy to use, light-weight platform for performing HAZOP and LOPA analysis standalone when your computer is not connected to the Internet. The no cost version can be downloaded at www.kenexis.com, under the software menu, and installed on Windows, MAC, and Linux. Open PHA™ Premium runs in a browser, performs language translation, and integrates with Vertigo™ and Arbor™ to provide SIL verification calculation, IPL-SIF linking, and black box - fault tree analysis.

Vertigo™ is a cradle to grave SIS Lifecycle tool to track all aspects of maintaining your SIS throughout its lifecycle including SIL Verification calculations with our Extensive Equipment Failure Rate Database, developing conceptual designs, documenting, and tracking design changes and maintaining design documentation. Making it easy to tell which systems need attention to stay in compliance.

Arbor™ is a powerful Fault Tree Analysis tool. This is very useful in the performance of calculations in situations where the problem is too complex for LOPA.

Effigy™ is our robust engineering tool for performance-based Fire & Gas Mapping to determine scenario coverage and detector placement. Solves the problem of where each detector should be and why.

The development of Open PHA™ is guided by the vast experience of the Kenexis process safety engineering team who have facilitated thousands of HAZOP and LOPA studies around the world. Open PHA™ was developed with the intent of providing a low-cost, fast, and flexible HAZOP and LOPA application which address the most significant shortcomings of the competing software packages address the needs faced by Kenexis clients.

No Cost Version & Premium Version

There are two versions of Open PHA™. The first version, Open PHA™ can be downloaded at no cost after you register. This version will run standalone on your Windows, Mac, or Linux computer. The updater will actually check the version you have on your computer to see if there is a new version and update automatically each time you launch the software.

The no cost version is a complete-powerful version designed to run in actual facilitations whether or not an Internet connection is available. The Premium version requires an Internet connection. Our engineers use both to facilitate HAZOPs regardless of the location and Internet capability and then upload the file into the Premium version for further integration with Vertigo™ and Arbor™ when they have Internet access.

The second version is Open PHA™ Premium and is integrated with the other Kenexis online software tools running in our private and secure cloud. The Premium version makes sharing HAZOP and LOPA information with other tools and across an organization seamless. For collaboration, you can easily setup your vendor, integrator, and licensor so that they also can see the results to your HAZOP and LOPA securely. Additionally, you can assign permission for Kenexis to see your project for additional assistance with complex scenarios like a focused QRA or fault tree analysis. By default, not even Kenexis can see your data in the secure cloud infrastructure. Contact Kenexis for a proposal to purchase Open PHA™ Premium at Info@Kenexis.com.

Other integrated tools in the near future will include a Dashboard in Premium which will provide additional information for manager level review and additional reporting options.





Features

Open PHA™ Premium Version

Cross Platform Desktop Application and Cloud-Based Enterprise Solution
Seamless Integration of PHA, LOPA and SIS Design
Integration with Vertigo SIS Lifecycle Management Software
Flexible and Configurable Open-Source Data Structure

Open PHA™ - No Cost Version

Free Download
Runs Standalone (Internet not required)
Upload to Projects to Premium Version for Added Features
Cross-Platform Desktop and Cloud-Based Solution

From small process safety consulting groups to large multi-national corporations, Kenexis provides an Open PHA™ solution to meet your PHA/LOPA needs. The basic installation of Open PHA™ is a light-weight desktop application with cross-platform and multi-lingual support. Open PHA™ Standard can be downloaded at no cost and provides a great solution for companies looking for alternatives to the over-priced legacy PHA/LOPA applications that you may be using today.

Open PHA™ Premium edition adds to the functionality of the Open PHA™ Standard installation by providing integration of PHA/LOPA studies with the cloud-based Kenexis Integrated Safety Suite™ (KISS). Integration with the KISS suite of tools transforms Open PHA™ into part of a powerful enterprise solution for managing all things process safety. Synchronization of LOPA results with the Kenexis Vertigo™ SIS Lifecycle Management Software, powerful dash boards across multiple studies, sites or operating groups and enhanced reporting features are all made possible with an Open PHA™ Premium subscription at a cost substantially less than competing PHA/LOPA software applications.

Integration of PHA, LOPA and SIS Design

The Open PHA™ data structure for PHA and LOPA is fully integrated making the transition for PHA to LOPA seamless. Gone are the days of porting data from PHA to LOPA and worrying about the consistency of information across multiple files, studies, or data structures. Open PHA™ was developed as an integrated PHA/LOPA application from its inception. As a result, all data common to PHA and LOPA are part of a single shared data set saving you the time, effort, and frustration of managing replicated data in multiple locations.

Integration with Vertigo

PHA/LOPA analysis is the preferred method of risk assessment for most operating companies when it comes to determination of Safety Integrity Level (SIL) requirements in SIS design. Open PHA™ Premium leverages the power of the Kenexis Integrated Safety Suite™ to Synchronize Independent Protection Layers (IPLs) in LOPA studies with the SIS lifecycle management tools in Kenexis Vertigo™. During project or conceptual design phases, Vertigo™ SIF lists can be automatically generated from IPL lists in Open PHA™. Following PHA/LOPA revalidation studies, Vertigo™ SIL Verification Calculations and Safety Requirements Specifications can be synchronized with Open PHA™ automatically to update risk reduction and SIL requirements.

Open-Source Data Structure

Managing Process Safety Information can be challenging, particularly in organizations where many software tools are being used from multiple vendors to manage documentation. A great deal of time and effort may be spent manually moving information from one place to another. While the Kenexis Integrated Safety Suite™ provided an integrated process safety solution with seamless sharing of data





across applications in the suite, we realize that many companies have installed software bases where transitioning to more modern cloud-based solutions may either be a slow process or in some cases, not feasible. Because PHA/LOPA studies are at the center of process safety documentation we believe it is important for the information contained within the PHA/LOPA to be easily shared across applications and platforms. This is why Open PHA™ was developed with an Open-Source Data Structure which makes it simple for application program interfaces (APIs) to be built to access and pull data from Open PHA™ into third party software tools. This philosophy is a paradigm shift in PHA software as file data structures have historically been proprietary to prevent third-party access and discourage the use of competing software tools.



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.

