

SIXNET ISaGRAF Open

Truly Open Application Development Tools and Runtime Software

ISaGRAF® is the industry standard for open automation software development. SIXNET has taken ISaGRAF to a new level by fully integrating the latest ISaGRAF technology into the easy-to-use SIXNET applications tools to significantly reduce your development time.



Highlights of SIXNET ISaGRAF Open

- **Fully supports all five IEC 61131-3 programming languages**

Ladder logic, function blocks, sequential function charts, structured text, and instruction lists – the familiar tools you have always used to program PLCs and process controllers.

- **Saves time and makes your job easier**

Customers have reported a 30% savings in applications development time over previously used software solutions.

- **Ideal for large distributed projects**

The SIXNET ISaGRAF SCS runtime (**S**calable **C**ontrol **S**ystems) links multiple controllers into one seamlessly integrated and fully synchronous process. ISaGRAF SCS turns IPm controllers into a high end and truly open modern DCS solution.

- **Ideal for small projects**

The SIXNET ISaGRAF RTU runtime is a full suite of 61131-3 applications development tools and is included in every IPm RTU at no cost to you!

- **One solution for all projects**

The same ISaGRAF Open tools are used to develop ISaGRAF RTU and ISaGRAF SCS applications – the same tools for both small and large projects – eliminating the learning curve and the burden of supporting different tools. One easy-to-use tool kit for all projects.

- **State-of-the-art Windows Tools**

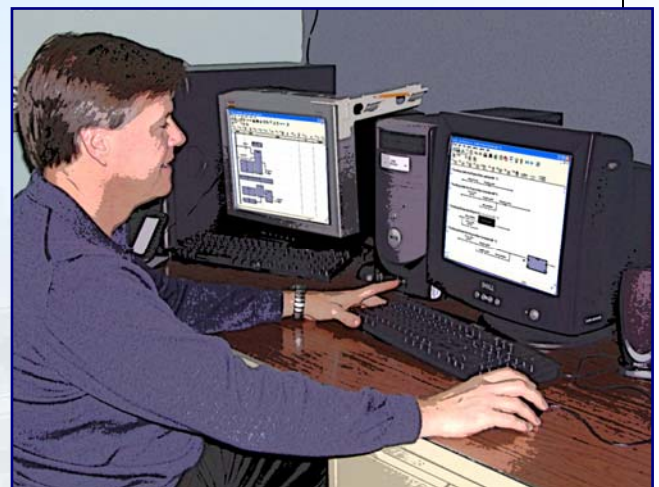
ISaGRAF Open is 32-bit software optimized for Windows XP and beyond.

- **The perfect upgrade path**

SIXNET continues to fulfill our promise of 100% forward compatibility. Existing ISaGRAF v3 programs will run transparently in the upgraded ISaGRAF RTU runtime. A conversion utility is provided at no cost to upgrade ISaGRAF RTU programs into ISaGRAF SCS distributed systems.

- **The deal of a lifetime**

SIXNET will provide an ISaGRAF Open Workbench key to any existing SIXNET ISaGRAF key holder with a 50% credit, regardless of their age. We are committed to making your job easier – forever!



ISaGRAF Open Workbench – Making your Job Easier

Key Workbench Features

The same Workbench tools can be used to develop and maintain both the ISaGRAF-RTU and ISaGRAF-SCS runtime programs. You have only one set of intuitive Windows Tools for all of your control projects! A conversion utility is supplied to migrate your legacy ISaGRAF-v3 programs into these upgraded time saving tools.

For both RTU and SCS Runtimes

- ISaGRAF Open Workbench is seamlessly integrated into the SIXNET Tool Kit
Saves up to 30% of your application development time !!

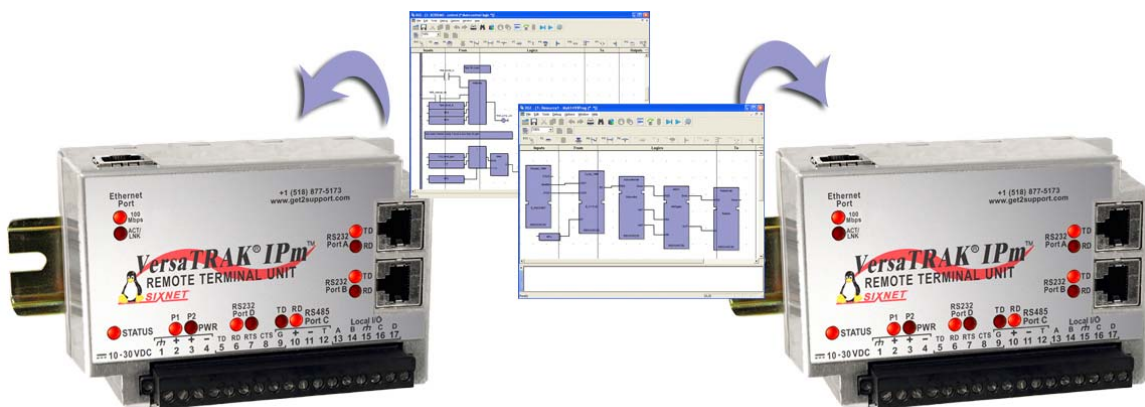
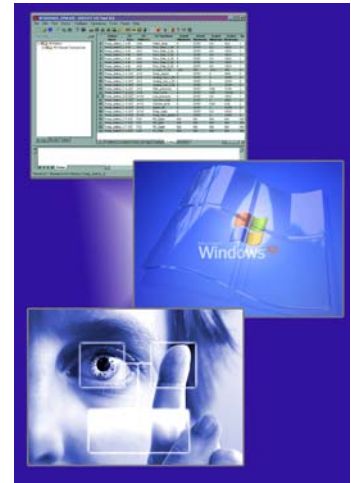
- Optimized to take advantage of Windows XP and beyond
- 32 bit look and feel – intuitive Windows software
- New editors to make your job easier and faster
- New features to give you creative control and flexibility
- Dynamic Tag Sharing – Tags configured in I/O Tool Kit are automatically loaded into the Workbench – saving you time

(The selective tag export capability is of course still available.)

- Continues to fully support all five IEC 61131-3 languages
- Upgrade existing ISaGRAF v3.x projects with ease
- All SIXNET-supplied features including the extensive function block libraries
- Easy-to-use Graphical Interface
- Drag-and-Drop programs between controllers
- Online Program Modification
- Password Protected Version Control
- Automatic Documentation Generator

For SCS Runtime

- Multiple Programs in a Single Controller
- Fully supports IEC61499 DCS Function Block programming
- Multi-developer Environment – a must for big projects
- Advanced Step-by-Step Debugging Support



SIXNET®

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SIXNET ISaGRAF Runtimes



SIXNET ISaGRAF RTU Runtime

Installed at No Cost!

- ISaGRAF-RTU is factory installed in every IPm RTU and process controller at no additional cost. Saves you time and, of course, money!



100% Upward Compatible

- ISaGRAF-RTU is 100% upward compatible with the field proven ISaGRAF v3 previously installed in every SixTRAK controller and VersaTRAK RTU including all IPm products
- 100% compatible with all existing Workbench versions
- Existing ISaGRAF v3 programs run transparently in the ISaGRAF RTU runtime
- *SIXNET perpetual compatibility at its finest!*
Growth without obsolescence!

Other ISaGRAF RTU Benefits

- Ideal solution for stand-alone RTU applications
- Perfect for process control applications
- World standard IEC 61131-3 compliant
- Supplied with a rich suite of SIXNET function blocks (SPC calculations, enhanced PID, datalogging, starting C programs, external event triggers, modem control, ...)
- Completely integrated into the IPm RTU and process controller hardware for optimized performance and functionality
- Seamlessly runs with third party Linux scripts and C programs for wide open flexibility



SIXNET ISaGRAF SCS Runtime

The SCS Runtime is based on ISaGRAF v5 and enhanced by SIXNET, transforming your IPm controllers into a powerful DCS solution!

True Distributed Control

- Supports full suite of IEC 61311-3 tools
- Includes **IEC 61499** standard for process control function blocks
- Runs multiple controller (distributed) applications, whether your network is small or large
- Manages peer-to-peer process communications
- Automatically regulates and synchronizes interactions between controllers to provide truly robust system execution

Upward Compatible and Scalable

- 100% upward compatible with ISaGRAF RTU
- Maintains SIXNET's rich tradition of providing truly open, Scalable Control Systems (SCS)
- Start small and scale upward quickly and easily. Scalability is a hallmark of SIXNET's value to you.
- Continued support for SIXNET-supplied function blocks – Growth without obsolescence!

Advanced Features

- Added features save you programming time and simplify ongoing maintenance
- Run multiple ISaGRAF programs (or "projects") in one IPm controller
- Supports 128 character program names
- Support 64 character tag names allowing you to assign functionally organized tag names and follow conventions
- User-defined cycle time – on-line or off-line – to optimize system performance

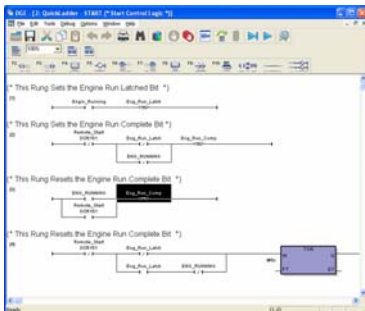


IEC 61131-3 and IEC 61499 Languages

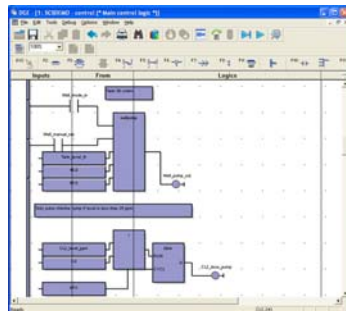
SIXNET's ISaGRAF Open Workbench is the world's first automation software to be compliant with both IEC 61131-3 and IEC 61499 industrial standards. This leading-edge software is comprised of a powerful set of new features that promise to change the way you build your control systems.

IEC 61131-3 – PLC Programming Standards

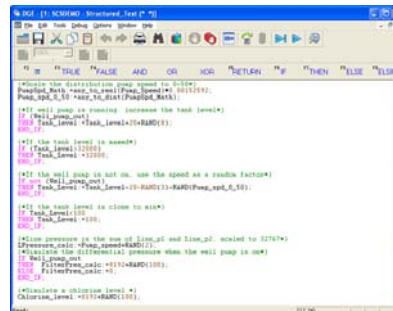
ISaGRAF Open Workbench is your complete tool kit for creating IEC 61131-3 programs. Its Windows interface will guide you through development of your project. Use the Workbench Simulator to test your program before startup. Then use the Workbench to dynamically view ISaGRAF programs as they run in real time and make changes on-the-fly.



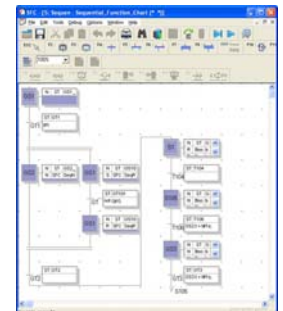
Quick ladder editor for fast machine logic.



Function blocks mix with ladder logic for process control



Statement programming for powerful computer performance

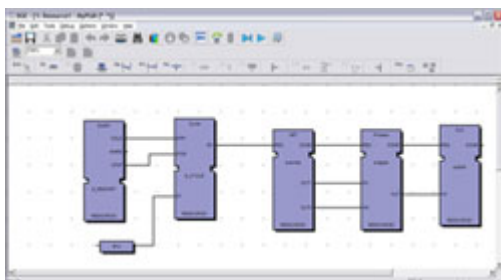


Sequential charts for batch and sequential operations

IEC 61499 – Function Blocks for Distributed Control

Developed by the International Electrotechnical Commission, the IEC 61499 presents guidelines for the use of function blocks in distributed control systems. It gives the ability to see the overall behavior of your control system. This emerging standard provides a number of remarkable benefits including:

- Regulation of control decision flow for an interacting distributed control system
- Consistency of data
- A means to ensure synchronous operation between devices
- Elimination of the need to have separate synchronization schemes
- Easy development and maintenance of robust control systems



The IEC 61499 function block diagrams provide a high-level management tool over a control system.



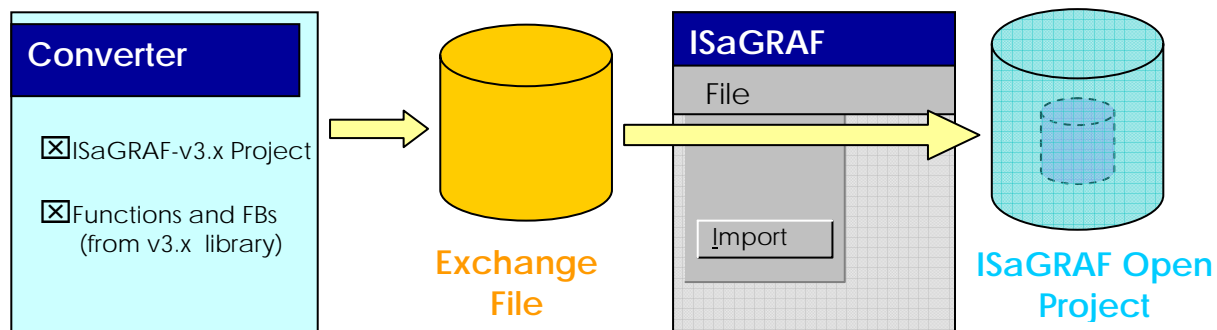
Create you own Libraries!

Libraries are special projects which you define that support functions and function blocks for reuse throughout ISaGRAF projects. Libraries also enable you to modularize projects and to isolate functions and function blocks so that these can be validated separately.

- Saves you time and money!
- Simplifies project implementation.

Application Migration Tool

- Converts ISaGRAF 3.x projects to an ISaGRAF Open Workbench project
- Reports possible non-compatible features (tstart, tstop...)
- Creates one exchange file for easy importation (into the Workbench)



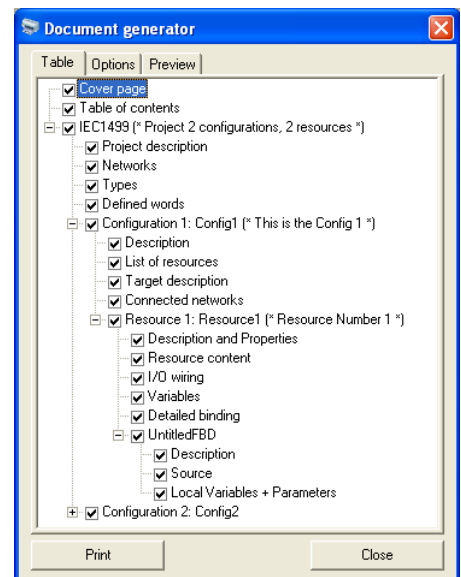
New and Improved Documentation

- Online accessible documentation from application interface
- Multiple tools to access the 'Help' documentation
 - Table of Contents
 - Index
 - Search Engine
- IEC 61499 Tutorial
- Miscellaneous tech notes
- Getting Started (pdf)

Let the Project Document Generator Do the Work!

You can print or save to file the complete or partial documentation for the current project from within the Document Generator.

You can access the Document Generator from the hardware architecture view, link architecture view, dictionary view, or any of the language editors.



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Ordering Information

SIXNET ISaGRAF Open Workbench Licenses

For **Single Controller** applications (Supports development of any ISaGRAF-RTU or ISaGRAF-SCS application running in a single controller. Of course, applications can be developed in any number of IPms as independent single controller applications.)

SX-1131- S -32	Limited to 32 externally referenced I/O
SX-1131- S -256	Limited to 256 externally referenced I/O
SX-1131- S -1K	Limited to 1024 externally referenced I/O
SX-1131- S -BIG	Unlimited number of externally referenced I/O

For **Multiple Controller / Distributed** applications (For advanced or larger applications that will be partitioned into more than one synchronized controller – true distributed control – or be developed by multiple developers simultaneously)

SX-1131- M -1K	Limited to 1024 externally referenced I/O
SX-1131- M -BIG	Unlimited number of externally referenced I/O

Note: Any physical or virtual I/O point that can be accessed from outside of the ISaGRAF program will add to the total point count. Any I/O point that is not referenced in the program does not add to the count. Internal variables (not accessible from outside the program) defined within ISaGRAF are not counted.

ISaGRAF Runtime Licenses

SX-1131-RTU-RT	ISaGRAF-RTU runtime – Pre-installed and fully licensed in all IPm products for Single controller applications. No separate license is required.
SX-1131-SCS-RT	ISaGRAF-SCS runtime – Required for Distributed Multiple controller applications or any application that will benefit from the ISaGRAF-SCS features.

Special!!

Workbench Upgrade Program

SIXNET has a special offer to encourage all SIXNET users to benefit from the many performance enhancements and time saving features of the new IPm Workbench. SIXNET will offer a 50% credit off the price of all IPm Workbench licenses with the trade-in of existing Workbench-IPm keys. This offer is valid regardless of the age of your Workbench-v3 license.

This offer is valid only until December 19, 2008.



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