

Simplify™

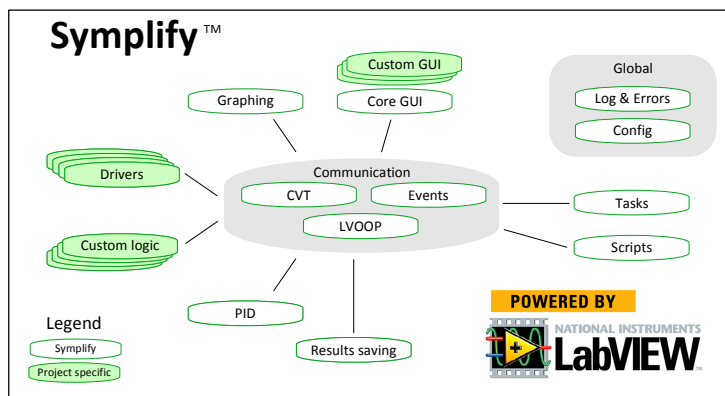
Synovus Solutions Creates Better ATEs With LabVIEW

How can you Simplify™ your automated tests?

Simplify™ is a robust framework for creating test automation applications in **LabVIEW**. It enables us to create complex application efficiently and make your tests and results analysis easier and faster.

Some of the key features include:

- Advanced graphing features
- Automation with flexible scripts
- Support for Real Time targets
- Ability to test parallel channels
- Synchronization of distributed systems



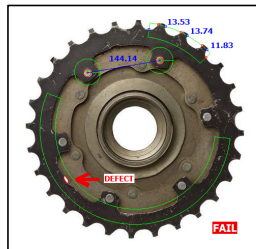
Architecture and relationships

Applications

If it can be done in **LabVIEW**, it is likely that your test system could benefit from our tools and expertise. For many simple applications, the robust foundation offered by **Simplify™** could represent more than 50% of the development work required.

Complex projects can also benefit including:

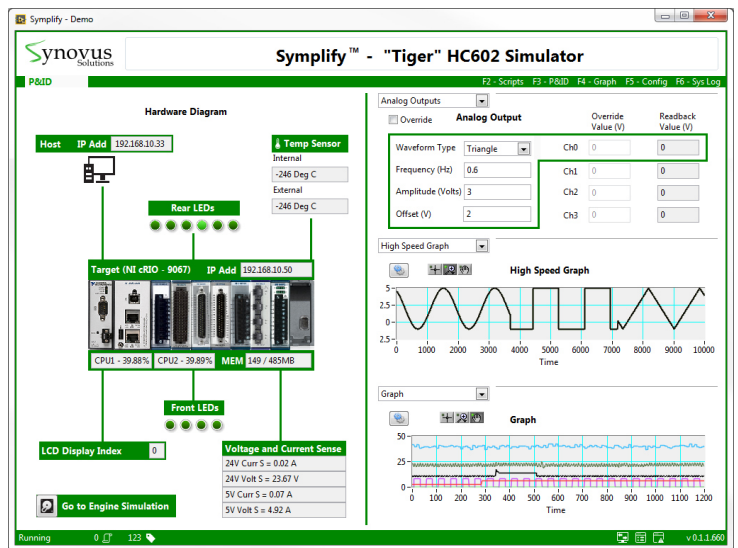
- Manual test stations with instruments
- Multi-channel automated tests
- Real-Time simulator
- Vision system projects
- Standalone data loggers



Machine vision example

Smart Fact

A recent research at Cambridge University estimates that debugging software often takes longer than the initial development time. By relying on **Simplify™** proven modules and industries' best practices, **Synovus Solutions** reduces the development time and the total cost of ownership of their systems for its clients.



Sample screenshot of an application built with Simplify™

Scalability

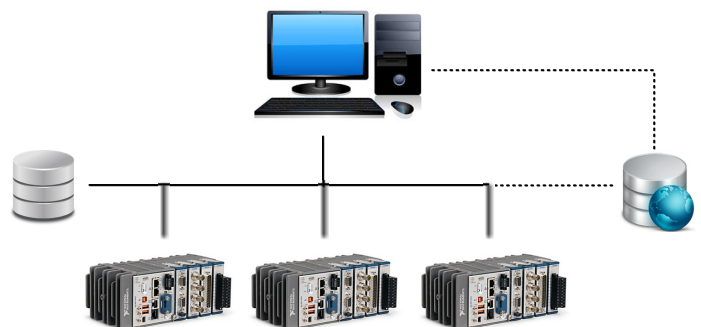
Most test projects evolve during their useful life. Those upgrades often create challenges such as collaboration with new developers, introducing new bugs to the system and making code maintenance more complex. **Simplify™** helps reduce these challenges to a minimum by offering:

- Templates forcing modular programming
- Scalable messaging mechanism
- Powerful debugging tools

Distributed Controls and Real-Time OS Support

All the code in **Simplify™** has been architected to support real time OS and remote access. Each module can support its Graphical User Interface (GUI) running on a separate computer. The greatest benefits of this are:

- Reduced CPU overhead
- Flexible troubleshooting on live systems
- Compatible with the cRIO and PXI out of the box



Symplify™

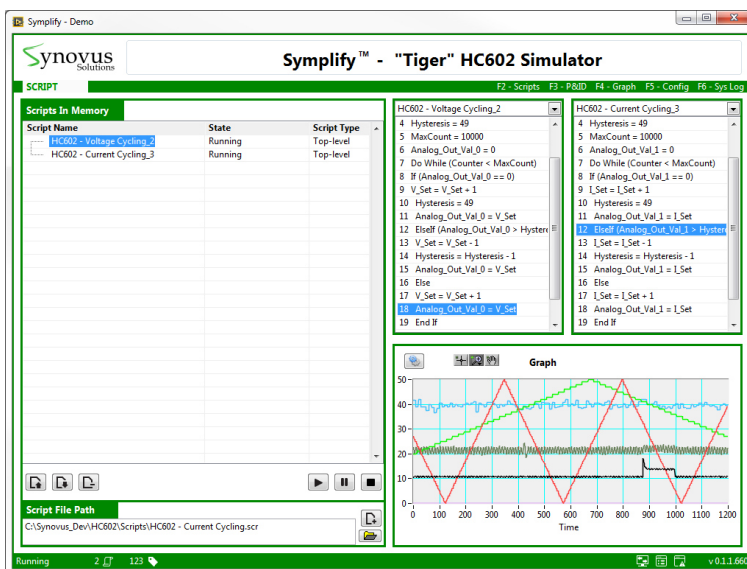
Key Features



Scripts and Automation

An incredibly useful and time saving feature of **Symplify™** is the ease with which different automation profile can be created. By creating their new text based scripts, your engineers can test different parameters and run exhaustive profiles. Our script engine offers:

- Support for standard flow control (If, For, While, ...)
- Complex test functions and equations
- Ability to call user created LabVIEW methods
- Run many scripts simultaneously
- Can be assigned to a specific test channel

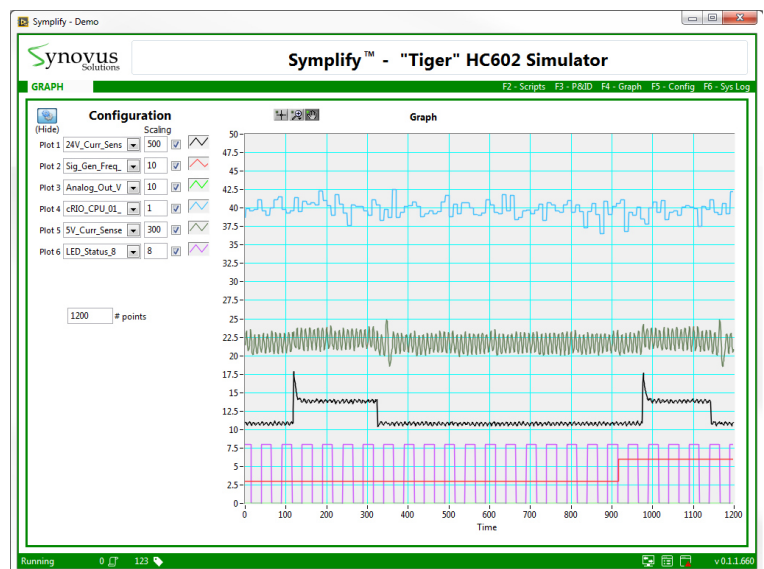


Script execution examples

Advanced Graphing Features

One of the most useful way of analyzing data for engineers and scientists is on a graph. They allow to detect trends, see erratic behaviour and visually process hours of data in just a few seconds. Our graphical library offers a range of useful features such as:

- Always-On & deep memory (>7 days)
- Display different sampling rates
- On the fly exports (image and values)
- Multiple graph windows
- Scaling, Pause and Zoom and more

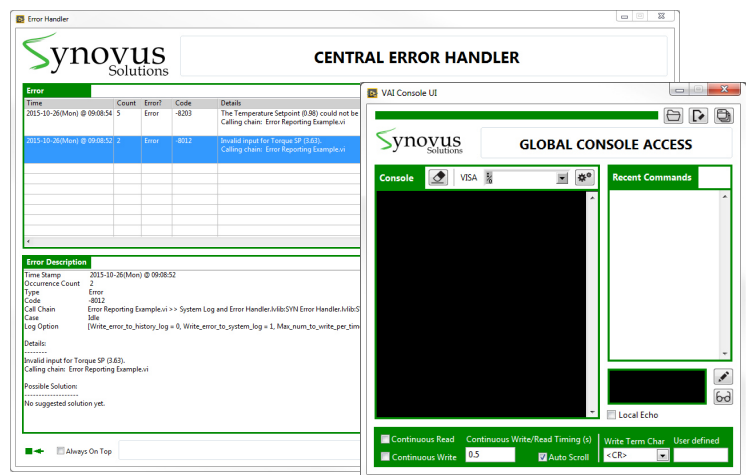


Easy to use graph interface

Powerful Debugging Tools

The original concept for **Symplify™** came from the desire to systematically incorporate best practices into our test systems development. Debugging can be a considerable task which can be reduced by using standardized templates as well as tools that offer:

- Reconfigurable error handling
- Detailed context for each error
- Multi-level tracing logged to disk
- Interactive VISA interface
- Performance and resource monitoring



Error Handler and VISA Live debugging tool

About us...

Our team of proficient engineers has a proven track record of meeting clients' expectations. **Symplify™** is at the heart of our proposition and improves the reliability and usability of your automated test systems and LabVIEW applications. Visit our website at www.synovus.ca to learn more or contact us today to discuss your application.

