Test SLATE Features - Integrated Productivity Tools

Integrated Productivity Tools

Test SLATE is easy to use and its interface will be familiar to users of Microsoft Windows-based applications. Sophisticated, almost intelligent, automated test sequences can be developed and executed easily. Data can be visually presented in the style and format you prefer with the display format and content being modifiable on-the-fly using simple drag-and-drop graphics. And, lastly, the modular and layered architecture allow us to efficiently modify and add new functionality to this base software package to keep it continually on the cutting edge of data acquisition and supervisory control capabilities.

Test SLATE's integrated productivity tools enable the user to quickly configure utilities and perform end-to-end calibrations for any I/O channel as well as easily store and share test data with their project team. A customizable workspace using dockable windows enables you to organize Test SLATE any way you like. It includes a tree-and-branches format for configuration of measurement and control tags, resembling the interface used by Microsoft for Windows Explorer and its folders and subfolders mode of navigation.

Across the top of the workspace is the Main Menu that provides access to commonly used functions such as opening files and accessing on-line help. The Main Menu is dynamic in that the options available will vary depending on what tasks are being performed. In addition to the Main Menu, an icon-based button toolbar is available for quick access to the most often used functions such as save, print, add, or delete.

Test SLATE Tag Configuration

Tag Configuration utilities for each measurement or control device enable you to configure each tag name. The capability to add, delete, modify, copy, or print any I/O channel information allows complete test configuration control. Information associated with I/O channels includes channel name, units, sensor name, display precision, and more.
Test SLATE Calculated Tag Configuration

Test SLATE has several calculated tag configuration utilities. A flexible Calculated Tag Equation Builder is used to create custom formulas using any tag in the system in conjunction with standard mathematical operators, trigonometric functions, Boolean operators, and logarithmic functions with no programming required. Calculations are performed in real-time with the values available for display, storage, and additional calculations. A Statistics Builder is available to calculate the mean, standard deviation, minimum, maximum, and variance, etc. of any tag in the system. Timer and counter routines are also included.

User Coded Tags

User-coded tags enable you to develop calculations or manipulate other tags in software code that you develop. This code, external to Test SLATE, can be called or linked into Test SLATE, providing additional real-time data manipulation power. The code can be developed in C/C++/C#, Visual Basic, LabVIEW, or other similar languages, as long as LabVIEW supports calling this language.

Test SLATE Reports and Plots

Test SLATE supplies standard plots and reports that have been included for post-test analysis. These plots and reports may be printed any time after the test. In addition, automated reports or plots can be generated during test sequencing or at the end of test and exported as a spreadsheet. The data starting and ending times may be selected to provide you with further control over which data is reported and/or plotted to hard-copy output. Conversion of stored data to a spreadsheet readable file is also available.
Test SLATE Calibrations

Calibration functions include the capability to perform end-to-end calibrations on any analog input or frequency input I/O channel. In-place sensor calibration with up to 50 stimulus points can be used to generate up to a 14th order polynomial curve fit for low-level to engineering unit data conversions. User definable groupings are allowed so like sensors can be calibrated simultaneously. As-found calibration polynomial evaluations are provided to determine if sensors are experiencing abnormal drift. Optional reports and plots can be generated with a newly accepted calibration, and the Sensor Database is automatically updated. Test SLATE’s calibration also includes the ability to initiate I/O subsystem specific self-calibrations, if available. These may include millivolt insertion calibrations or system pressure calibrations.
Test SLATE Security

Test SLATE has the capability to define unique user roles. Each role can contain any number of combinations of allowable functions, which enables the fine tuning of the user capabilities.

Each role is defined as having certain capabilities within the application; for example, Role1 might have privileges including running a test, while Role2 might have privileges to only view data. The security information is accessed and assigned through the Test SLATE application by anyone who is assigned an Administration Role.