Simplifying TestStand Step Settings Panels with AutoProps

Abstract

Custom step types offer a powerful way to extend the functionality of TestStand. While many aspects of creating custom step types are straightforward, implementing custom step settings panels for use with the TestStand Sequence Editor is challenging. Though the available API for customization offers nearly unlimited flexibility for advanced applications, its steep learning curve presents a large barrier to entry and discourages its use for otherwise less complex applications. Introduced in TestStand 2020, AutoPropsPanel is an undocumented feature that streamlines custom step settings panel implementation to better enable rapid prototyping and even provide a production solution for simple applications. In this presentation, we demonstrate custom step type creation using AutoPropsPanel.

Session Details

This session was a live demonstrations of the "TestStand AutoPropsPanel Whitepaper and Tutorial" recently published to the ni.com forums: <u>https://forums.ni.com/t5/Example-</u> <u>Code/TestStand-AutoPropsPanel-Whitepaper-and-Tutorial/tac-p/4232812</u>. The linked example includes:

- CreatingAnAutoPropsPanelStepType.pdf -- A tutorial about creating AutoPropsPanel step types in TestStand. (The session at NI Connect 2022 was a live, streamlined version of this tutorial.)
- AutoPropsPanelWhitePaper.pdf -- A whitepaper explaining the AutoPropsPanel feature in more detail.
- AutoPropsPanel.seq A sequence file containing template AutoPropsPanel step types. Copy these to create your own AutoPropsPanel step types.