

EFT V2.2 Release Notes

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Operator Interface

New Features

- **Add TestStand OI Interface StepTypes**
- **Add ability to embed VIs from client sequences into UI subpanels (over top of execution image location)**
 - Updated TED Example shipping sequence to use this feature for serial number entry and pass/fail banner
- OI Configuration
 - Added “Other Options”:
 - Startup OI maximized
 - Enable/Disable variable and callstack views in debug mode
 - Show EntryPoint1 ActiveX Button
 - Due to a TestStand bug, in some situations, the “Start Test” button can cause the Preparing to Preload Modules dialog to hang. Enabling this checkbox will resolve that issue (but will bypass ITA ID checks)
- Improved hooks for adding plugin sequence loader to override default sequence loader methods

Bug Fixes

- Fix “Standard Test Options” so they pull from the TestStand Station Options (rather than overwriting the Station options each time the OI is launched)
- **Fix issue where OI would disable breakpoints even in TS Sequence Editor**
- Fix TestStand UI Message reference leak that could cause tests to slow down over time.

Hardware Access Framework

General Updates

- **Linked HAF Configuration interface**
 - Add ability to link HAF configurations (eg. system file and UUT file)
 - Updates to HAF_CORE for loading linked configurations
 - Updates to HAF Manager for defining and representing linked configurations
 - Configure → manage linked files
 - Configuration file objects for future addition of other configuration file formats
- **HAF Initialization Dialog with progress bars**
 - Shows the current state of HAF initialization and instrument initialization as a progress bar
- Improved handling of HAF Initialization “Disconnect All” steps

- Improved error reporting
- Fix bug where HAF Initialization would hang if the EFT License was invalid
- Added recent files list to HAF Manager
- Added signal-type specific configurations to HAF Manager/abstractions
 - DIO: ability to invert signal
 - AIO: Set scaling, units
 - Multi AIO/DIO: Add names to each IO point
 - Removed unused fields from other step types
- UI improvements to HAF Manager
 - Checkbox enable/disable of rows
 - Remove the referenced name change dialog resulting from disabling rows
 - Italics/grey out disabled rows
 - Italics/blue text for linked configurations
 - improved handling of blank rows/blank aliases

Step Type/Signal Updates

- **Added TestStand step type to get instrument references**
 - Allows access to instruments for custom configuration and implementation
- **Added TestStand step type to implement a “Custom Instrument Action”**
 - For manually controlling an instrument with custom actions not supported by existing HAF step types
- Multi IO step types (AI, AO, DI, DO)
 - For acquiring from multiple channels on an instrument in a single step
- Added checkbox for setting DC Load Mode type from TestStand
- Added AC Power Supply Step Type
- Added Counter Output Step Type
- Updated Waveform Output type to also send waveform parameters (freq, amplitude, etc)
 - Useful for FGEN drivers
- Comms Write/Read message
 - Fix bug where sometimes TS dialog would get stuck on the wrong tab
 - Add ability to allow/disallow writing or reading from the configuration file
 - Update configuration interface so that plugin drivers can directly modify the write/read data definitions
 - Updated to log actual read/write data
- Added “Comms – Close Config File” step type to close reference to Comms configuration file and remove from memory
- **Added “Initial state” to connections to allow each connection to start up in the enabled state if desired**
- Removed individual connection setting on Disconnect All
 - This could cause initialization to run substantially slower due to individually setting each connection
 - Now each driver responds appropriately to the Disconnect All method
 - Disconnect all now sends all physical connections associated with each instrument

New Debugging Tools

- **Added ability to launch HAF Manager in the currently running TestStand application instance**
 - allows debugging and soft-panel control/viewing of last values for all HAF Abstractions while TestStand sequence is running
- **Added ability to launch HAF Library viewer with the ability to launch each library in the currently running application instance**
 - Allows easier probing into drivers and step types for advanced debugging

Driver Updates

- NI_SWITCH
 - Added relay and connection list abilities
 - Added links to help files for formulating connection lists and determining available connections based on driver and topology
- NI_SCOPE
 - Added ability to configure multiple channels with different settings
 - Add ability to only set channel or timing parameters individually
- New NI_FGEN
 - Implements Waveform Output signal type
- NI_DAQmx
 - Added counter output implementation
 - Added multi-io step type (AIO, DIO) implementations
- Plugin Template
 - Updates for new step type definitions
 - Updates to clean up event registrations
- Updated all shipping drivers to allow getting references from the Get Reference Step Type
- Optimizations to reduce execution time and memory usage for all drivers and calls
- Other 3rd party drivers available on support site

Licensing

- Add ability to access customer license portal for remote activation
- Add ability to extend trial versions with expiring license files
- Add ability to activate and deactivate from computers with no internet access
- Show installation ID on licensing page
- Added “Check In” to licensing server to log installed EFT Versions
- Added ability to push notifications for new EFT Versions
- Speed up licensing checks in all applications
- Added web service interfaces for pulling custom license fields from license server

Database Result Processing

New Features

- **Added Single UUT Report feature to DB Viewer Application**
 - **Detailed report where each line is a test step and each column is data for that step**
- Improved storage of waveforms in database
- Improved exit code interface for logging exit codes to database
 - Auto-generate exit code based on error code
 - Standard exit codes for pass, fail, terminated, skipped
- Updated EFT Build Script.sql to reduce custom modifications for different database names
- **Updated result storage to format measurement numerics using TestStand format string**
- Update Database Uploader to pop to front of screen if closing but results are still being processed
- Increased the length of step name, description, and notes strings
- Added new table to store DB Versions and updates
 - Added script to update old versions of database to newer version
- Added ability to export on all tabs
 - Added tab delimited text export ability