nSpec Version 0.22.1.1

Release Date: 11 Nov 2022

Documentation Updated: 07 Nov 2022

Major Features: Interlock Bug Fixes, Custom Exporter (JSON, KLARF, XML)

Overview

This patch build contains two main highlights:

1. Fixes for some Interlock Systems
2. Additional export file options for the Custom Exporter

As a patch build, QA testing has been limited to new feature tests, and did not include all regression tests.

Upgrading to v0.22.1.1

Library Update Not Required

If upgrading from a version more than 1 release prior, please reference all intermediate release notes for upgrade steps *for each version*.

New Features

Highlights

NSPEC-5594: New Custom Exporter Outputs (KLARF, JSON, XML)

The Custom Exporter launched in nSpec version `v0.22.1.0` with support for CSV exports. With this change the Custom Exporter now supports KLARF, JSON, and XML exports as well. For full documentation on this feature please see the page at Custom Exporter

New Features Changelog

T	Key	Release Notes Summary
	NSPEC-5594	Add KLARF support for the Custom Exporter
	NSPEC-6058	Autoloader Prealignment Speed Optimizations
	NSPEC-6180	Add JSON support for the Custom Exporter
	NSPEC-6181	Add XML support for the Custom Exporter

4 issues

Bug Fixes

Highlights

NSPEC-6267: Interlocks don’t re-engage Stage

When the interlock on an enclosure unlocks, power is killed to the stage for safety reasons. However, when the door is shut and the interlock is locked again, the stage is not re-engaged until after the first motion. This causes a few problems:

- The first scan after the interlock was touched was captured at the incorrect position
- If the first motion is for an alignment job, first alignment mark will be missed

These problems have now been fixed! After open an interlock-equipped system door and closing it, stage motion will be immediately reset.

Make sure to set the program option in the `PMD` category called `Use Interlock Recovery` to `1`

Changelog

T	Key	Release Notes Summary	Affected Releases

NSPEC-6267	Interlocks Don't Re-Engage the Stage	0.22.0.0, 0.22.1.0
NSPEC-6292	Auto light adjust does not correct to set intensity value after first scan (cassette scanning)	0.22.0.0, 0.22.1.0

2 issues

Appendices

Custom Exporter

Overview

The Custom Exporter allows users to build highly customizable exports that report on all the desired defect information collected during prior analysis. Like the custom reporter and Dislocation Analyzer, the Custom Exporter also requires an nJson file loaded with relevant SQL scripts.

Core Features

CSV column headers are now completely configurable - no matter what nSpec calls a defect attribute, we have the ability to rename them to align with the customer vernacular. For example, within nSpec databases we might refer to defect width as “W”, but in this export we can rename that to “width” or “defectWidth”, or anything else that is required for smooth integration with the customer application.

Embedding math and custom calculations

In addition to simply exporting columns directly, the custom exporter will allow us to perform any operation that is legal within SQL code. This gives us enormous flexibility for reporting exactly what customers need.

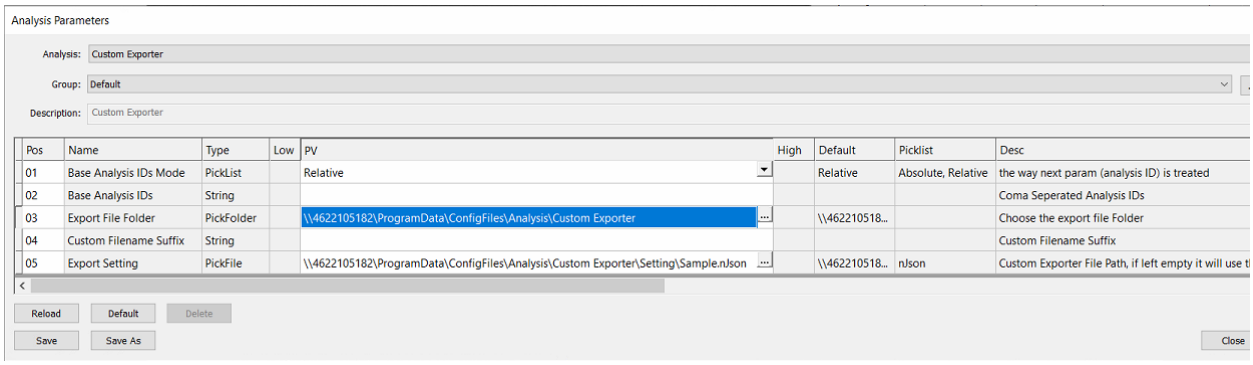
> For more information on embedded calculations via the custom exporter, please contact the applications team

Supported Exports

Export File	Expected Release
CSV	v0.22.1.0
JSON	v0.22.1.1

XML	v0.22.1.1
KLARF (Device Inspection Scans)	v0.22.1.1
KLARF (All Scans)	TBD

GUI parameters



Param Name	Options	
Base Analysis IDs Mode	Absolute, Relative	See Post-Analysis Referencing section (Link)
Base Analysis IDs		See Post-Analysis Referencing section (Link)
Export File Folder		Select a folder to save the export file
Custom Filename Suffix	Optional	If non-empty, this suffix will be directly added to filename. If using nSpec v0.23.1.0 or earlier, the suffix will be added following an underscore.
Report Setting		Select a **nJson** file of the Report setting If you have a new request for a new functionality, please request support from support@nanotronics.co

Referencing Prior Analyses

For guidance on how to set up post-analysis referencing, visit the appendix page for Post-Analysis Referencing [EXTERNAL]

Configuring the nJson File

The nJson file must be written and configured by Nanotronics Technical Service or Applications Engineers. To request a new custom reporting application that may require assistance, please contact support@nanotronics.co to request support.

For nJson formatting guidance, visit nJson Format: Custom Exporter