



Tag Report Utility

Automation Professionals' Exchange Resource

Version 1.0

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The Tag Report Utility provides a Perspective Client interface to tag information, using a utility popup view that mimics the functionality of the Designer's Tag Report Tool, complete with compatible JSON import/export of tag search criteria.

This utility presents a general tag history and alarm journal query front-end as the "user" of the tag search popup view. Tag history results can be exported in Excel format, Zipped CSV format, and be plotted with Perspective's TimeSeries chart component. This front end uses an embedded utility view to guide users configuration of history timestamp boundaries with the appropriate constraints for reliable historian queries.

The tag search popup view and time range emdedded view are thoroughly parameterized for other uses within your projects.



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Overview

This project has no specific configuration requirements, except that it is totally unsecured. When dropped into a gateway, the client has read-only access to all tag configuration, all history, and all journals on the system, including via remote tag providers.

If this is a problem (and it should be considered one), add the front-end view to a suitably-secured navigation system.

Prerequisites

This module requires the installation of Automation Professionals' [Integration Toolkit](#) third party add-on module for Ignition, version 2.0.19 or later. Install this module in your gateway **before** importing the project file.

The project is tested on Ignition version 8.1.42, but may run on earlier versions.

Installation

These tasks are required:

- Install Automation Professionals' [Integration Toolkit](#) third party add-on module **first**.
- Import the supplied project file to a project name of your choice. The Automation Professionals' test and development environment uses "tag-report-utility". This project deliberately does **not** have a default tag provider, nor a default database.
- Alter security as desired, if desired. The project uses the "default" IdP unless updated.



Usage

- Launch a session of this project. You should see this:

The screenshot displays the 'Tag Report Utility' interface. On the left, the 'Time Span Options' panel is visible, containing the following settings:

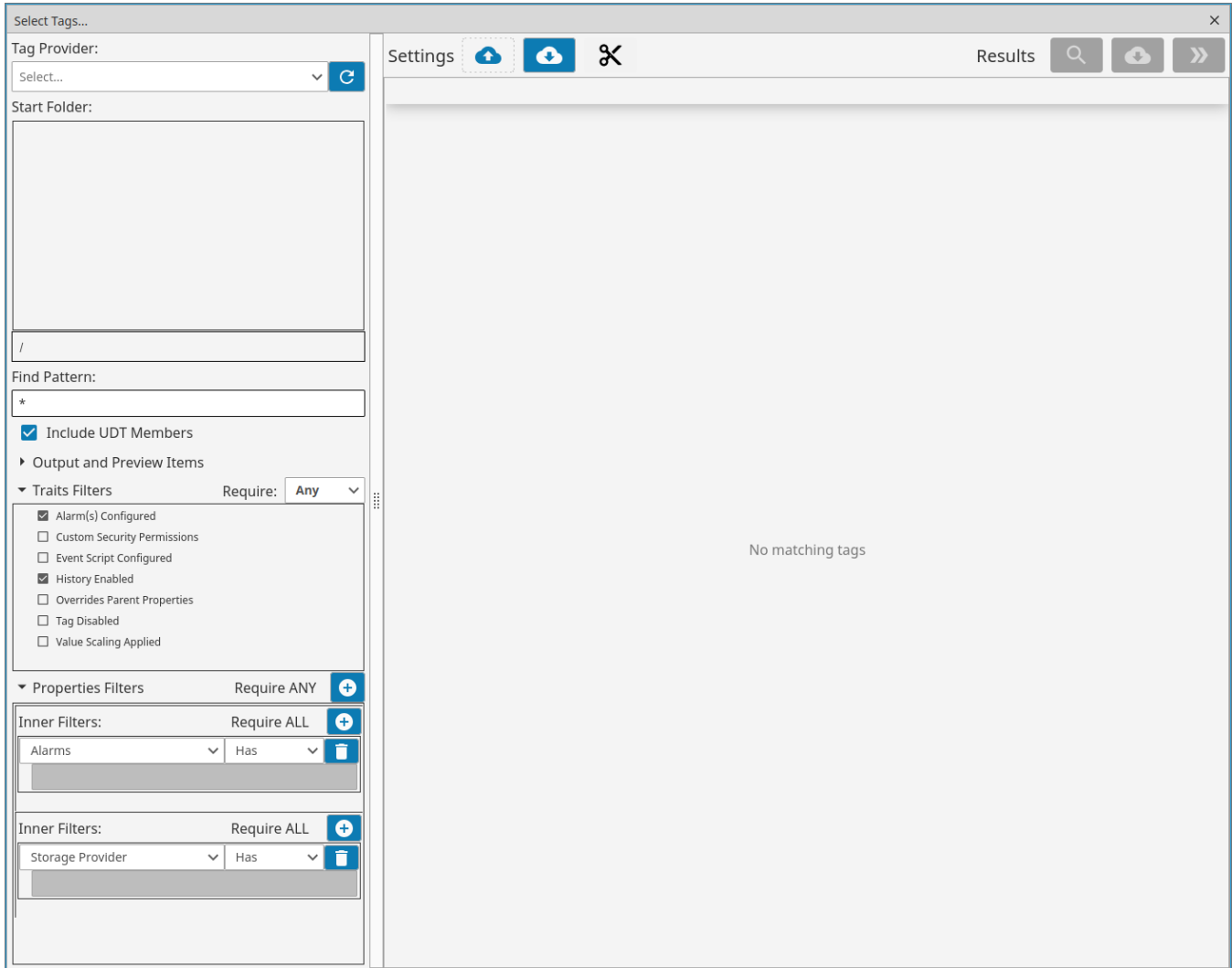
- Bounds: Automatic
- Intervals: Minutes
- Aggregation: Min/Max
- Start @ 2024-08-28 15:46:00.000-0400
- End < 2024-08-28 16:46:00.000-0400

Both the start and end date pickers show a calendar for August 2024 with the 28th selected. Below the date pickers are time selection fields: 'Start @ 15 : 46 : 00' and 'End < 16 : 46 : 00'.

The main area is titled 'Tag List' and contains a toolbar with icons for refresh, add, subtract, and upload. To the right of the toolbar are 'Export 0', search, and filter icons, along with 'xlsx' and 'csvz' export options and a 'By Path' toggle. The main content area is currently empty, displaying the text 'No Tags Selected'.



- Click the "Restart" button on the right pane, upper left next to "Tag List". You may use this at any time to discard any currently selected tags, and then open the tag selector popup. The "Plus" button also opens the tag selector, but does not discard the current list of tags. You will see this:



Notice that the Traits Filter and Properties Filters are preloaded with the criteria needed to be useful with the historian and with alarm journals. The Output and Preview Items list is also preset with the items needed by the caller. Which filters are expanded versus collapsed is also preset by the caller.

- Select a tag provider. (If the refresh button to the right of the tag provides dropdown is disabled, wait for the initial background browse of your gateway to complete. This is visible in the gateway log.) The "Start Folder" tree will be populated with the browsed folders and UDT instances. Any folder you select here will become the path prefix for the actual search operation.



- Update your search criteria as desired. The table on the right will populate immediately with the first fifty matching tags. If there are more than fifty results, the magnifying glass button will be enabled to let you retrieve the large result only when desired.

The screenshot shows the 'Select Tags...' window. On the left, the 'Tag Provider' is set to 'Ignition_edgelliot_edge'. The 'Start Folder' is '/ENIP/LabL320/EngineMath'. The 'Find Pattern' is '*'. The 'Output and Preview Items' section has checkboxes for Path, Tag Type, Alarms, and Data Type. The 'Traits Filters' section has several unchecked options. The 'Properties Filters' section is empty. On the right, the 'Settings' tab is active, showing a table with 12 results. The table has columns for Path, Tag Type, Alarms, Data Type, and Storage Provider. The '12 Results' label is highlighted in a red box. The table contains 12 rows of data, all with 'AtomicTag' as the Tag Type and 'Int4' as the Data Type.

Path	Tag Type	Alarms	Data Type	Storage Provider
ENIP/LabL320/EngineMath/_0_	AtomicTag	0	Int4	
ENIP/LabL320/EngineMath/_1_	AtomicTag	0	Int4	
ENIP/LabL320/EngineMath/_2_	AtomicTag	0	Int4	
ENIP/LabL320/EngineMath/_3_	AtomicTag	0	Int4	
ENIP/LabL320/EngineMath/_4_	AtomicTag	0	Int4	
ENIP/LabL320/EngineMath/_5_	AtomicTag	0	Int4	
ENIP/LabL320/EngineMath/_6_	AtomicTag	0	Int4	
ENIP/LabL320/EngineMath/_7_	AtomicTag	0	Int4	
ENIP/LabL320/EngineMath/_8_	AtomicTag	0	Int4	
ENIP/LabL320/EngineMath/_9_	AtomicTag	0	Int4	
ENIP/LabL320/EngineMath/_10_	AtomicTag	0	Int4	
ENIP/LabL320/EngineMath/_11_	AtomicTag	0	Int4	

- The double-right-chevron button on the far right will deliver the results to the calling window, either the rows selected in the table, or if none are selected, the entire set of results. (If a continuation result is pending, that will be completed first.)
- The upload and download buttons on the left, next to the "Settings" label, load or deliver the JSON configuration currently in use, in the same format used by the Designer's Tag Report Tool.
- The tag search popup window must be closed manually to return to the calling view.
- Adjust the time span criteria in the main view before querying history. The main view does not automatically query history when manipulating the time span while displaying the tag statistics. When displaying the time series chart for selected tags, altering the time span **will** auto-query the historian.

Future Plans

More documentation, live tag viewing, and easier JSON cut/paste.



Support

Contact Automation Professionals via our [Support Email](#) address. But note that exchange support is low priority.