

# **User Manual**

English



# Automation Action Datasources ASCII Export





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For Perception 6.0 or higher

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# 1 Introduction

Welcome to the Datasource Ascii Export software. This document describes how to use this software application. The software is developed for exporting internal Perception variables into separate Ascii files. These variables are also called data sources and are visible in the **Data Sources** navigator.

The application extends the Perception software program; it adds a new action to the automation.

The application is based on the Perception Custom Software Interface (CSI). This manual assumes you understand your Genesis HighSpeed Test and Measurement equipment, software and basic acquisition terminology. You can use the Perception User Manual as a reference

# 2 Getting Started

# 2.1 Installation

At the moment there is no automatic installer, you have to copy the file **Perception.CSI.AsciiExport.dll** manually into the **Actions** folder, this is a subfolder of where Perception is installed, default on an US Windows installation the complete path is: **"C:\Program Files\HBM\Perception\Actions**".

The Datasources Ascii Export software is **not** a standalone program which can be started from the Windows Start menu! It is an extension of the Perception software program. Once you start Perception you will see an extra automation action called: **"Datasources Ascii Export"**.

# 2.2 Requirements

Datasources Ascii Export software operates on any PC where Perception is running.

The Datasources Ascii Export application can only be used when the HASP® USB key CSI option has been enabled. You can check this by going to the Help About dialog and click **More...**. The "More About Perception" dialog shows which options are enabled.

The CSI option icon looks like:

# 3 Application functionality

# 3.1 General

Perception has been extended with one extra automation action. This automation action is an integrated part of the Perception application. The automation action is called "**Datasources Ascii Export**". This new automation action can be found in the "Automation" menu of Perception.

The basic purpose of the program is to export numerical or string data sources to an Ascii file. This export can be fully automated, e.g. after a recording has been done the data will automatically be exported to an Ascii file without extra operator actions. It is however also possible to call the export action as part of "Process Display" or as part of the "Recordings batch Processing".



# 3.2 Automation Action.

The new added automation actions are accessible via the "Automation" menu. There are three different ways to use the new automation action.

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- **Display Processing** Action works on active data displayed in a display.
- **Recording Batch Processing** Action works on a batch of recordings.
- Automated Recording Processing. Action works during or after the recording process.

In all these cases however the configuration of the action works the same.

# Adding "Datasources Ascii Export" action

As example we will look at how you can add the export action to the "Automated Recording Processing".

• In the Automation menu click the Automated Recording Processing command.

Recording Automat	ed Processing		×
Interval selection	Alter Description	Automation actions	
<ul> <li>Complete recording</li> <li>Triggered segments</li> </ul>	After Recording	Datasources Ascii Export	✓ <u>A</u> dd
<ul> <li>All segments</li> <li>Time</li> </ul>		Action list: Datasources Ascii Export	0
$\bigcirc \underline{F}_{\underline{v}}$ ery 2	segments		
Data source Recorder da <u>t</u> a			
O Recorder and on-line co	mp <u>u</u> ted data		<u>C</u> onfigure
✓ Enable a <u>u</u> tomation			Close

- Select the Enable automation check box.
- Select Datasources Ascii Export in the Select action box.
- Click Add to add the Datasources Ascii Export action to the Action list.
- Click **Configure** to configure the new action; the following dialog box will be shown:

Configure Action "Datasources Ascii Export"
Data Sources Filename About
Select the items you want to see in each ascii output file from the list of available data sources. Use the up and down arrow buttons to re-arrange the order within the list.
Available data sources: Active Display HVIA System System
Enable Condition
Condition — The condition will be evaluated before the ascii export starts. If true then the export starts, if not true then the condition will be reevaluated each second until it is true or it has exceeded the maximum number of retries
Datasource:
should be: Valid Valid
Number of retries when not true:
OK Cancel

- Select the datasources you want to export from the Available data sources control.
- The **Enable Condition** is optional, you do not need to enable it, but in some cases it can be very useful, see below for more information.



• Select the Filename tab.

Co	nfigure A	ction "Datasources Ascii Export"	×
ſ	Data Sources	Filename About	
	Export filena	ime	
	F <u>o</u> lder:	d:\MyDocs\Jos	
	<u>F</u> ilename:	Datasources <u>E</u> xtension: .asc	
	Add en	cording name to file name	
		rite existing file	
	Full path exam	nple:	
	d:\MyDocs\Jo	ps\Datasources.asc	
	Options-		
	Colu <u>m</u> n sep	parator: SEMICOLON	
			_
		OK Cancel	J

- Select the output destination of the ascii exported files, define how the name of the exported ascii file should look like.
- If you like another column separator then use the combobox at the bottom to select e.g. TAB.

# **Export condition**

In the above text we already have mentioned the possibility to enable the condition used by the export action. This condition will be evaluated before the ascii export starts. If the condition is true then the export starts, is however the condition is false then the program will reevaluate it each second until it is true or it has exceeded the maximum number of retries. This number of retries can be modified, in the example below it is set to 30 seconds.

The condition will be evaluate	ed before the ascii evport	etarte		
f true then the export starts, i	f not true then the conditi	on will be reevaluate	ed each seco	ond until it is true
or it has exceeded the maxim	um number of retries			
<u>D</u> atasource:				
			should be:	Valid 🗸
HVIA.LI.CalcResult			should be.	



The export condition is useful in cases where you want to be sure if specific conditions or calculations have been done. In the example above the export will only start if the data source **HVIA.LI.CalcResult** has a valid value.

The following conditions can be selected:

<u>D</u> atasource:				
HVIA.LI.CalcResult	<b>%</b>	<u>s</u> hould be:	Valid	~
Number of retries when not true: 30			Valid Invalid Exists 0	
			1 Not 0 "True"	
			"False"	

- Valid Checks if data source is valid, it should exist and have a valid value.
- Invalid The opposite of Valid
- Exits The data source should exist; its value is of no importance
- 0 The data source value has to be 0, for string datasources the value has to be "0".
- 1 The data source value has to be 1, for string datasources the value has to be "1".
- Not 0 The data source value has to be different then 0, for string datasources the value has to be different than "0".
- "True"

For string data sources the value has to be "True", for numerical data sources the value has to be not equal to 0.

"False"

For string data sources the value has to be "False", for numerical data sources the value has to be equal to 0.

# 3.3 Automation in action

Now that the entire configuration has been done the system is ready to be used. The following section describes how this works.

- Make sure you are connected to Genesis and that all Genesis settings are ok.
- Start an acquisition.
- After the acquisition has been stopped the following dialog box will be shown:



Automation Progress	×
Active	active
Action Action to export data sources to an ascii file	
Hide Stop all Skip	

This can take a while and depends on the size of your recording and performance of your PC.

• If the action has been finished than an ascii file has been created with the wanted data.

# 3.4 Output ascii file

The output is an ascii file containing the selected datasources. An example of an output file can look like:

1	HVIA.LI.CalcResult; 1; CRDF
2	HVIA.LI.CalcResultAsString; Passed; CRDF
3	HVIA.LI.CalcWarningDescription; ; CRDF
4	HVIA.LI.ChoppedStatus;0; CRIF
5	HVIA.LI.ChoppedStatusAsString;Not Chopped; CRIF
6	HVIA.LI.Comment;; CRLF
7	HVIA.LI.f; NaN; HzCRLF
8	HVIA.LI.Ip; NaN; ACRLF
9	HVIA.LI.IpPos; NaN; s <b>CRLF</b>
10	HVIA.LI.KO;NaN; % CRLF
11	HVIA.LI.01;-2.56507340075115E-07; sCRLF
12	HVIA.LI.OvershootWidth; NaN; sCRLF
13	HVIA.LI.S; NaN; SCRLF
14	HVIA.LI.ß; NaN; % CRLF
15	HVIA.LI.T1;8.46272250934281E-07;sCRLF
16	HVIA.LI.T2;5.97754349643845E-05;sCRLF
17	HVIA.LI.TC; NaN; SCRUF
18	HVIA.LI.TestName; B3; CRLF
19	HVIA.LI.ToleranceTesting;1; CRLF
20	HVIA.LI.ToleranceTestingAsString;Yes; CRLF
21	HVIA.LI.U0;-49823.7297381592;VCRLF
22	HVIA.LI.Up;1051306.3914062;VCRLF
23	HVIA.LI.UpPos;1.56E-06;sCRIF
24	HVIA.LI.UseIEEEOvershootTest;1; CRLF
25	HVIA.LI.UseIEEEOvershootTestAsString;Yes; CRLF

Each line contains the data of one data source variable.



For example line 15 of the above example looks like:

## HVIA.LI.T1;8.46272250934281E-07;s

Per variable there are three different columns:

- 1. Variable name e.g. "HVIA.LI.T1"
- 2. Variable value e.g. 8.46272250934281E-07
- 3. Units e.g. "s"

In this case the column separator is a semicolon ":", but this is a user preference which can be set via the configuration dialog of the automation action.

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