



ASFALIS

Translation QAreport manual

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1. Translation QA Report

Translation QA Report is a HTML report which provides a capability to confirm quality of translation. Translation errors and difference of mass properties are detected during translation and reported in the HTML report. Generation of this report is controlled through a parameter specified on ASFALIS ENF Reader (details are described later in a separate section). Please note that this function is provided only for New Adapters of ASFALIS ENF Reader.

1.1. Supported Browsers

- Microsoft Internet Explorer 11
- Google Chrome
- Microsoft Edge
- Firefox

1.2. Parameter Setting

In order to generate the Translation QA Report, following parameter needs to be specified on ASFALIS ENF Reader (New Adapter).

```
GenerateQAReport=1
```

In addition, it is preferred to specify following parameter on ASFALIS ENF Writer. This parameter enables calculation of mass properties in source CAD, and the calculated values will be used to compare between mass properties of target CAD (translated CAD data). When this parameter is not specified, mass property calculation for source CAD data will be alternatively performed on ENF.


```
CalcMassProperty=1
```

1.3. Parameter Support of Adapters

Adapter	ENF Reader "GenerateQAreport" (New Adapter)	ENF Writer "CalcMassProperty"
CATIA V5	✓	✓
CATIA V4	-	-
NX I-deas	-	✓
Creo Parametric	✓	✓
NX	✓	✓
Parasolid	-	✓
SOLIDWORKS	✓	✓
Inventor	-	✓
Creo Elements/Direct	-	-
ACIS	-	-
IGES	-	-
STEP	-	-
STEP AP242 BOM	✓	-
JT	✓	-
PLM XML	✓	-
iCAD	-	-
CADmeister (Standalone)	-	-
CATIA V5 (Standalone)	-	-
Creo Parametric (Standalone)	-	-
NX (Standalone)	-	-
XVL	-	-
STL	-	-
3D PDF	-	-

1.4. HTML Report Functions

1. Top page

QAreport_Summary Summary - Run **1** Parts Assemblies 

Configuration

	Source	Target
System	CATIA V5	JT
CAD Version	-	Running on JTTK 7.1.6.0
Top CAD File Name	Sting1998.CATProduct	Sting1998_cl.jt

Components

Show entries

Type	Component Count
Assembly	135
Part	336
Total	471

Showing 1 to 2 of 2 entries First Previous 1 Next Last

1	Move to part summary page or assembly summary page.
2	Displays configuration of source and target CAD files.
3	Displays component count per type.

2. Part summary page

QAreport_Summary

Summary - Run 1 Parts Assemblies

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Part Difference Information (mm length unit)

Show 25 entries

Cols Print

Name	Solid Count	Sheet Count	Volume	Surface Area	Centroid	Unexp. Comment
2 Inch Guage Body	0	0	-0.00%	25.32%	0.000, 0.000, -0.001	0
5 Inch Guage Body	0	0	0.00%	23.25%	0.000, 0.000, 0.000	0
WindShield	0	0	-2.10%	-0.24%	2.090, 0.480, -0.670	0
Bearing Triangular Flange	0	0	0.74%	-0.22%	-0.116, 0.005, 0.061	0
Hood1A	0	0	25.65%	0.17%	23.990, -10.886, 34.402	0
Rear Swing Arm Upper Weldment Weld 4	0	0	-0.10%	-0.08%	0.001, 0.005, 0.001	0
Rear Swing Arm Upper Weldment Weld 3	0	0	-0.05%	-0.07%	0.001, 0.010, 0.001	0
Rear Swing Arm Upper Weldment Weld 2	0	0	-0.21%	-0.07%	-0.001, -0.000, 0.000	0
Rear Swing Arm Upper Weldment Weld 1	0	0	-0.21%	-0.07%	-0.001, -0.000, 0.000	0
Torsion Spring Adjuster Weld 2	0	0	-0.04%	-0.05%	0.001, 0.004, -0.006	0
Cross Brace Lower Rear Weldment Weld 3	0	0	-0.06%	-0.04%	-0.001, -0.001, 0.003	0
Cross Brace Lower Rear Weldment Weld 2	0	0	-0.06%	-0.04%	-0.001, -0.001, 0.003	0
Belly Pan 1A	0	0	0.00%	0.04%	0.000, 0.000, 0.000	0
Center Steering Arm Right Upper Weld	0	0	-0.17%	-0.04%	-0.001, -0.000, 0.000	0
Center Steering Arm Left Upper Weld	0	0	-0.17%	-0.04%	0.001, -0.000, 0.000	0
zone1	0	0	0.00%	0.03%	0.000, 0.000, 0.000	0
Torsion Spring Adjuster Weld 1	0	0	-0.08%	-0.03%	-0.001, 0.005, -0.003	0
Rear Swing Arm Short Link Weldment Weld 2	0	0	-0.05%	-0.03%	0.001, -0.019, -0.005	0
Front Middle Lower Shaft Weldment Weld 4	0	0	-0.05%	-0.03%	0.001, -0.019, -0.005	0
Front Middle Lower Shaft Weldment Weld 3	0	0	-0.06%	-0.03%	0.002, 0.002, 0.002	0
Front Middle Lower Shaft Weldment Weld 2	0	0	-0.10%	-0.03%	-0.002, -0.003, -0.000	0
Side Plate Spacer Middle Rear Lower Weld	0	0	-0.06%	-0.03%	0.002, -0.021, -0.004	0
Cross Brace Lower Rear Weldment Weld 6	0	0	-0.01%	-0.03%	0.001, 0.027, 0.003	0
Cross Brace Lower Rear Weldment Weld 4	0	0	-0.01%	-0.03%	0.001, 0.027, 0.003	0
Upper Cross Brace Weldment Weld 8	0	0	-0.06%	-0.03%	0.001, 0.002, 0.002	0
Total	-	-	-	-	-	0


Showing 1 to 25 of 336 entries

First Previous 1 2 3 4 5 Next Last

1	Move to top page or assembly summary page.
2	Displays part name. Click and move to part detail page.
3	Displays difference of solid and sheet count.
4	Displays difference of volume and surface area by percentage. Displays difference of centroid by coordinate deviation (mm).
5	Displays comment count. *) A comment is an error message which indicates noteworthy situations such as missing part/assembly/instance and failure in mass property calculation.
6	Cell with difference is highlighted in red, while comment count is highlighted in yellow.

3. Assembly summary page

QAreport_Summary

Summary - Run Parts **1** Assemblies 

Assembly Difference Information (mm length unit)

Show **25** entries

Name	Solid Count	Sheet Count	Volume	Surface Area	Centroid	Unexp. Comment
2_inch_guage	0	1	16.00%	16.90%	-0.000, -0.000, -0.000	0
2_inch_guage_1	0	0	16.00%	16.90%	-0.000, -0.000, -0.000	0
5_inch_guage	0	0	-0.00%	0.00%	0.000, 0.000, -0.001	0
5_inch_guage_1	0	0	-0.00%	0.00%	0.000, 0.000, -0.001	0
adjusting_block	0	0	0.02%	0.00%	-0.001, 0.000, -0.008	0
adjusting_block_2	0	0	0.02%	0.00%	-0.001, 0.000, -0.008	0
assy_cross_steering_link	0	0	0.01%	-0.01%	-0.001, 0.000, 0.000	0
assy_front_suspension	0	0	0.00%	0.00%	0.000, 0.001, -0.003	0
assy_hhb_0.4375_w_wlv	0	0	0.02%	0.01%	0.000, 0.003, 0.000	0
assy_hhb_0.4375_w_wlv_1	0	0	0.02%	0.01%	0.000, 0.003, 0.000	0
assy_hhb_0.4375_w_wlv_2	0	0	0.02%	0.01%	0.000, 0.003, 0.000	0
assy_hhb_0.4375_w_wlv_3	0	0	0.02%	0.01%	0.000, 0.003, 0.000	0
assy_lower_a_frame_left	0	3	-0.01%	-0.00%	-0.030, 0.001, 0.002	5
assy_lower_a_frame_right	0	0	-0.01%	-0.00%	0.030, -0.001, 0.002	0
assy_lower_a_frame_weld_1	0	0	-0.02%	-0.01%	-0.049, 0.002, 0.002	0
assy_lower_a_frame_weldmen	0	0	-0.02%	-0.01%	-0.049, 0.002, 0.002	0
assy_main_steering_link	0	0	0.01%	-0.00%	0.003, 0.000, 0.000	0
assy_rec_dyn_system	0	0	-0.00%	0.00%	0.001, -0.003, 0.002	0
assy_rec_dyn_system_1	0	0	-0.00%	0.00%	0.001, -0.003, 0.002	0
assy_shock_link	0	0	0.00%	-0.00%	0.004, 0.000, 0.000	0
assy_shock_link_1	0	0	0.00%	-0.00%	0.004, 0.000, 0.000	0
assy_steering_link	0	0	0.01%	-0.00%	-0.003, 0.000, 0.000	0
assy_steering_link_1	0	0	0.01%	-0.00%	-0.003, 0.000, 0.000	0
assy_steering_main_pillow_	0	0	0.01%	0.00%	0.000, -0.003, 0.000	0
assy_steering_pillow_bl_1	0	0	0.00%	0.00%	0.000, 0.000, -0.000	0
Total	-	-	-	-	-	0

Showing 1 to 25 of 128 entries

First Previous 1 2 3 4 5 Next Last

1	Move to top page or assembly summary page.
2	Displays assembly name. Click and move to assembly detail page. *) Top assembly is displayed in bold font.
3	Displays difference of solid and sheet count.
4	Displays difference of volume and surface area by percentage. Displays difference of centroid by coordinate deviation (mm).
5	Displays comment count. *) A comment is an error message which indicates noteworthy situations such as missing part/assembly/instance and failure in mass property calculation.
6	Cell with difference is highlighted in red, while comment count is highlighted in yellow.

- This page is not created for single part models.

4. Assembly detail page

hood

Summary - Run **1** Parts Assemblies ELYSIUM

Assembly Information (mm length unit)

Show 500 entries

Side	File Name	Solid Count	Sheet Count	Volume	Surface Area	Centroid
ENF 2	hood.prt	20	0	3 3.20841e+006	5.08743e+006	0.146, 201.568, 499.307
Targ	hood.prt	20	0	3.26309e+006	5.08654e+006	0.605, 197.900, 506.354
Diff	-	0	0	1.70%	-0.02%	0.459, -3.668, 7.047

Showing 1 to 2 of 2 entries

Assembly Related Components

Show 500 entries

Name	Solid Count	Sheet Count	Volume	Surface Area	Centroid	Sub Type
2_inch_guage	0	0	0.00%	0.00%	-0.000, -0.000, -0.000	Assembly
2_inch_guage_1	0	0	0.00%	0.00%	-0.000, -0.000, -0.000	Assembly
5_inch_guage	0	0	-0.00%	0.00%	0.000, 0.000, -0.001	Assembly
5_inch_guage_1	0	0	-0.00%	0.00%	0.000, 0.000, -0.001	Assembly
bumber 4	0	0	5 3.04%	-0.05%	-0.165, -0.359, -6.258	Part
center_light	0	0	0.00%	0.00%	0.000, 0.000, 0.001	Part
hood1a	0	0	8.69%	-0.02%	-3.669, -4.299, -14.513	Part
lens2	0	0	0.16%	0.01%	-0.013, -0.096, -0.030	Part
lensr	0	0	0.17%	0.01%	0.049, -0.109, 0.029	Part
side_light	0	0	0.01%	0.01%	-0.000, 0.000, -0.001	Part
windshield	0	0	-2.44%	0.03%	-0.445, -0.211, -0.423	Part

Showing 1 to 11 of 11 entries

Assembly Comments


Show 500 entries **6**

Ref Name	Ref Type	Process	Problem	Effect	Comment
Component	Component	Reader	Critical	Geometry	コンポーネントの変換に失敗しました。

Showing 1 to 1 of 1 entries

1	Move to top page, part summary page or assembly summary page.
2	Notation changes based on how mass property calculation was performed on source CAD. - Calculated on CAD: Source - Calculated on ENF: ENF *) Specify parameter "CalcMassProperty" on ASFALIS ENF Writer in order to enable mass property calculation in source CAD.
3	Displays filename, volume, surface area and centroid of the assembly. Cell color represents whether the difference is within tolerance. - Green: Difference is within tolerance - Red: Difference exceeds tolerance
4	Displays child component names. Click and move to part/assembly detail page.
5	Displays information of child components.
6	Displays comments assigned to the assembly.

5. Part detail page

Part_1 Summary - Run 1 Parts Assemblies 

Part Information (mm length unit)

Show 500 entries Cols Print

Side	File Name	Solid Count	Sheet Count	Volume	Surface Area	Centroid
Source	Part1.CATPart	1	0	97336.3	14825.5	32.500, -0.243, 10.004
Target	Part_1.jt	0	0	0	0	0.000, 0.000, 0.000
Diff	-	-1	0	100.00%	100.00%	-32.500, 0.243, -10.004

Showing 1 to 2 of 2 entries First Previous 1 Next Last

Part Comments

Show 500 entries Cols Print

Ref Name	Ref Type	Process	Problem	Effect	Comment
Component	Component	Reader	Critical	Geometry	コンポーネントの変換に失敗しました。

Showing 1 to 1 of 1 entries First Previous 1 Next Last

1	Move to top page, part summary page or assembly summary page.
2	<p>Notation changes based on how mass property calculation was performed on source CAD.</p> <ul style="list-style-type: none"> - Calculated on CAD: Source - Calculated on ENF: ENF <p>*) Specify parameter “CalcMassProperty” on ASFALIS ENF Writer in order to enable mass property calculation in source CAD.</p>
3	<p>Displays filename, volume, surface area and centroid of the assembly.</p> <p>Cell color represents whether the difference is within tolerance.</p> <ul style="list-style-type: none"> - Green: Difference is within tolerance - Red: Difference exceeds tolerance
4	Displays comments assigned to the part.

6. Table functionality

QAReport_Summary

Summary - Run

Parts

Assemblies

Assembly Difference Information (mm length unit)

Show 251 entries

2

3 Cols

4 Print

Name	Solid Count	Sheet Count	Volume	Surface Area	Centroid	Unexp. Comment
2_inch_guage	0	1	16.00%	16.90%	-0.000, -0.000, -0.000	0
2_inch_guage_1	0	0	16.00%	16.90%	-0.000, -0.000, -0.000	0
5_inch_guage	0	0	-0.00%	0.00%	0.000, 0.000, -0.001	0
5_inch_guage_1	0	0	-0.00%	0.00%	0.000, 0.000, -0.001	0
adjusting_block	0	0	0.02%	0.00%	-0.001, 0.000, -0.008	0
adjusting_block_2	0	0	0.02%	0.00%	-0.001, 0.000, -0.008	0
assy_cross_steering_link	0	0	0.01%	-0.01%	-0.001, 0.000, 0.000	0
assy_front_suspension	0	0	0.00%	0.00%	0.000, 0.001, -0.003	0
assy_hhb_0.4375_w_wlw	0	0	0.02%	0.01%	0.000, 0.003, 0.000	0
assy_hhb_0.4375_w_wlw_1	0	0	0.02%	0.01%	0.000, 0.003, 0.000	0
assy_hhb_0.4375_w_wlw_2	0	0	0.02%	0.01%	0.000, 0.003, 0.000	0
assy_hhb_0.4375_w_wlw_3	0	0	0.02%	0.01%	0.000, 0.003, 0.000	0
assy_lower_a_frame_left	0	0	-0.01%	-0.00%	-0.030, 0.001, 0.002	0
assy_lower_a_frame_right	0	0	-0.01%	-0.00%	0.030, -0.001, 0.002	0
assy_lower_a_frame_weld_1	0	0	-0.02%	-0.01%	-0.049, 0.002, 0.002	0
assy_lower_a_frame_weldmen	0	0	-0.02%	-0.01%	-0.049, 0.002, 0.002	0
assy_main_steering_link	0	0	0.01%	-0.00%	0.003, 0.000, 0.000	0
assy_rec_dyn_system	0	0	-0.00%	0.00%	0.001, -0.003, 0.002	0
assy_rec_dyn_system_1	0	0	-0.00%	0.00%	0.001, -0.003, 0.002	0
assy_shock_link	0	0	0.00%	-0.00%	0.004, 0.000, 0.000	0
assy_shock_link_1	0	0	0.00%	-0.00%	0.004, 0.000, 0.000	0
assy_steering_link	0	0	0.01%	-0.00%	-0.003, 0.000, 0.000	0
assy_steering_link_1	0	0	0.01%	-0.00%	-0.003, 0.000, 0.000	0
assy_steering_main_pillow_	0	0	0.01%	0.00%	0.000, -0.003, 0.000	0
assy_steering_pillow_bl_1	0	0	0.00%	0.00%	0.000, 0.000, -0.000	0
Total	-	-	-	-	-	0

Showing 1 to 25 of 128 entries

First

Previous

1

2

3

4

5

Next

Last

1	Number of entries (components) to display in a single page.
2	Search form. Data in all columns are covered by the search.
3	Controls show/hide status of columns.
4	Displays page for printing. Press Esc key in order to return back to original mode.
5	Click the label and sort entries based on the column. Ascending/descending order switches per click.
6	Move to a different set of entries.

1.5. Notices

1. Default threshold values and how to configure them are described below.

Item	Default Threshold	Configuration
Volume	1%	Control by environmental variable “ELY_QA_REPORT_VOLUME_THRESHOLD”. Example) Specify 2% threshold set ELY_QA_REPORT_VOLUME_THRESHOLD=2.0
Surface Area	1%	Control by environmental variable “ELY_QA_REPORT_SURFACEAREA_THRESHOLD”. Example) Specify 2% threshold ELY_QA_REPORT_SURFACEAREA_THRESHOLD=2.0
Centroid	1mm	Control by environmental variable “ELY_QA_REPORT_CENTROID_THRESHOLD”. Example) Specify 2mm threshold set ELY_QA_REPORT_CENTROID_THRESHOLD=2.0

2. Solid/sheet count of source CAD could be different from the values calculated in CAD. This behavior is caused when solid/sheet count changes during the ASFALIS healing process.
3. Generating a Translation QA Report may result in increase of processing time and memory consumption.
*) Amount of increase will differ among Adapters.
4. Summary report will also be exported in XML log file.
Please refer to “ASFALIS Adapter XML Log File” manual for how to use this XML log file to control the process flow. E.g., branch the process depending on the PDQ error result.

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