

CAST Report Generator - Release Notes - 1.8.x

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Summary: this page describes the new features and bugs that have been fixed in the CAST Report Generator 1.8.x.

Content matrix

Version	Summary of content	Comments
1.8.0	<ul style="list-style-type: none">• New templates• Generate reports as PDF files• New components added for templates	Can be used with: <ul style="list-style-type: none">• CAST-RESTAPI 1.8.x

The following templates are new in v. 1.8.0:

- [CISQ Compliance Report](#)

The following Chinese language templates are new in v 1.8.0:

- [CISQ](#)
- [OWASP-2017-Top10 -](#)
- [CWE -Top 25](#)

The following templates have been updated in v. 1.8.0:

- [OWASP 2017 Top 10 Summary](#)
- [OWASP 2017 Top 10 Detailed](#)
- [OWASP 2013 Top 10 Summary](#)
- [OWASP 2013 Top 10 Detailed](#)
- [CWE Top 25 Summary](#)
- [CISQ 22 Security Summary](#)



See also [CAST Report Generator - Templates and output options](#).

New features

REPORTGEN-395 - Generate reports as PDF files

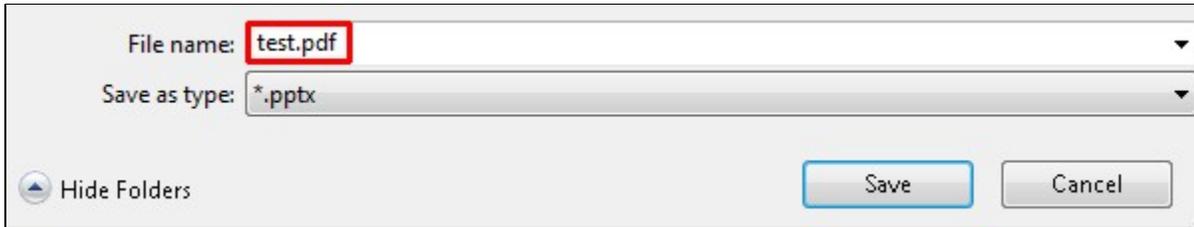
It is now possible to save a report as a PDF file, rather than having to use the same file format as the chosen template. You should ensure that **Microsoft Office** is installed on the machine if you choose this output type.

 Note that this feature is not supported for outputting reports based on **Microsoft Excel** templates.

To do so:

GUI

Change the file extension to .PDF in the save dialog box:



CLI

Use a .PDF extension in the **-file** command line option, for example:

```
CastReporting.Console.exe -webservice http://<server>:8080/<APIWAR>/rest -username cast -password cast -application eCommerce -template "1 - Powerpoint-components-library.pptx" -file "output_report.pdf"
```

File name prompt in GUI

When generating a report in the GUI, a name for the resulting report will be suggested for you. The default suggested name will be the same as the template file name selected to generate the report.

REPORTGEN-445 - CLI should return error codes

It is now possible to view the error code for a CLI action. Use the following command after the action has completed:

```
echo %ERRORLEVEL%
```

See [Return codes](#) for more information.

REPORTGEN-446 - CLI should accept language as an argument

It is now possible to specify a locale in the CLI - the resulting report will then use the chosen language for certain aspects of the report. The command line option is called **-culture** and takes the following arguments (the first two characters are also accepted):

- fr-FR
- en-US
- es-ES
- IT-it
- DE-de
- zh-CN

See [Command line interface](#) for more information.

New components added for templates

REPORTGEN-425 - RULES_LIST_STATISTICS_RATIO

This component allows you to view violation statistics (total, added, removed) and the compliance ratio of a selection of rules, which can be sorted by Total Violations from max to min or compliance report:

- Block Name = **RULES_LIST_STATISTICS_RATIO**
- Options:
 - **METRICS**= List of metric ids (Business Criterion, Technical Criterion or rule) or quality standards tags separated by '|'.

- **COMPLIANCE= true** or **false** or **not set**. If true, displays a supplementary column containing the compliance ratio in percentage.
- **SORTED= TOTAL** or **COMPLIANCE** or **not set**. If TOTAL or not set, table is sorted by number of violations from max to min; if compliance, table is sorted by compliance from worst to best.
- **CRITICAL=true** or **false** or **not set**. If this option is true and if you have selected BC or TC, only critical rules will be displayed, any other value (or option not set) will display all rules
- **LBL= violations** or **vulnerabilities** (vulnerabilities by default or when not set). This changes the header title of the column from Vulnerabilities to Violations.

Notes:

- To use the quality standard tags selection with this component, the [Quality Standards Mapping](#) extension should be installed on the Dashboard Service schema where the application resides.
- When you select the metric id for a Business Criterion or Technical Criterion, all the rules belonging to this Business Criterion or Technical Criterion are added for displaying violations, except if you add the CRITICAL=true option and in this case only the critical rules will be displayed.
- The id of the metric is added to the metric name. You can refer to <https://technologies.castsoftware.com/rules> to view the details of the rule.

REPORTGEN-411 - QUALITY_STANDARDS_EVOLUTION

This component allows you to view violation statistics (total, added, removed) based on quality standards such as CWE, CISQ, OWASP etc.

- Block Name = **QUALITY_STANDARDS_EVOLUTION**
- Options:
 - **STD=** Name of the parent quality standard you want the details for (available standards - also known as "tags" - are listed in [Quality Standards Mapping](#)), for example, choosing "CWE-2011-Top25" will list total, added and removed violations for the following standards:
 - CWE-22
 - CWE-78
 - CWE-79
 - CWE-89
 - CWE-134
 - CWE-327
 - CWE-434
 - CWE-798
 - **LBL= violations** or **vulnerabilities** (vulnerabilities by default or when not set). This changes the header title of the column from Vulnerabilities to Violations.

Notes:

- To use this component, the [Quality Standards Mapping](#) extension should be installed on the Dashboard Service schema where the application resides, with a minimum version of 20181030.
- A list of available quality standard tags (to input as the value for STD=) is available in the [Quality Standards Mapping](#) extension.

REPORTGEN-455 - TOP_COMPONENTS_BY_PROPERTIES

This component allows you to generate reports that were available in the **legacy CAST Engineering Dashboard**: Top Complexity x High Fan-Out, Top Complexity x Low Documentation, and more, with all available properties.

- Block Name = **TOP_COMPONENTS_BY_PROPERTIES**
- Options:
 - **PROP1=** name of first property, **cyclomaticComplexity** will be used if this option does not exist
 - **PROP2=** name of second property, **fanOut** will be used if this option does not exist
 - **ORDER1= ASC** or **DESC** for PROP1, DESC by default
 - **ORDER2= ASC** or **DESC** for PROP2, DESC by default
 - **COUNT=** the number of lines to display, 50 by default (-1 or all is forbidden due to performance issues)
- For **PROP1** and **PROP2**, the available values are as follows (if PROP1 and/or PROP2 are not correctly set, a list of available values is displayed instead):
 - codeLines
 - commentedCodeLines
 - commentLines
 - coupling
 - fanIn
 - fanOut
 - cyclomaticComplexity
 - ratioCommentLinesCodeLines
 - halsteadProgramLength
 - halsteadProgramVocabulary
 - halsteadVolume
 - distinctOperators
 - distinctOperands
 - integrationComplexity
 - essentialComplexity

Notes:

- This component is only relevant for a CAST Dashboard Service schema. When used against a Measurement Service schema it will not return anything.
- Note that comparisons between reports generated with the **legacy CAST Engineering Dashboard** and this component will show differences. This is because the legacy CAST Engineering Dashboard employs specific rules to filter objects and calculate ratios that are not used in the

RestAPI (where the CAST Report Generator retrieves its data). The values produced by the CAST Report Generator will therefore be more accurate.

REPORTGEN-454 - RULES_LIST_LARGEST_VARIATION

This component provides data for generating the following reports that were previously available in the legacy CAST Engineering Dashboard:

- List of 50 rules with the largest decrease in the number of violations,
- List of 50 rules with the largest decrease in the percentage of violations
- List of 50 rules with largest Increase in the number of violations
- List of 50 rules with largest increase in percentage of violations

Block description:

- Block Name = **RULES_LIST_LARGEST_VARIATION**
- Options :
 - **BCID**= Business Criterion to filter the list of rules, 60017 by default
 - **VARIATION**= INCREASE or DECREASE, DECREASE by default
 - **DATA**= NUMBER or PERCENTAGE, NUMBER by default
 - **COUNT**= the number of lines to display, 50 by default (-1 to list all rules)

Notes:

- The weight will not be similar to that displayed in the legacy CAST Engineering Dashboard since the value displayed in CED was incorrect.
- CompoundedWeight is now displayed with regard to the Business Criterion selected. In the legacy CAST Engineering Dashboard, aggregate weight was used but without specifying the technical criterion - as such this value was not accurate.
- The formula are taken from those used in the legacy CAST Engineering Dashboard:

Configuration	Formula
Decrease number	previous failed checks - current failed checks
Decrease percent	current failed checks / current total checks - previous failed checks / previous total checks , display in percentage (*100)
Increase number	current failed checks - previous failed checks
Increase percent	previous failed checks / previous total checks - current failed checks / current total checks , display in percentage (*100)

- Some values will differ from those displayed in the legacy CAST Engineering Dashboard, because in the CAST Report Generator/RestAPI we do not count duplicate violations (same object violating the same rule several times, or shared objects).

REPORTGEN-456 - REMOVED_VIOLATIONS_LIST

This component provides data for generating the Removed Violations report that was previously available in the legacy CAST Engineering Dashboard:

- Block Name = **REMOVED_VIOLATIONS_LIST**
- Options :
 - **BCID**= Business Criterion to filter the list of rules, 60017 by default
 - **COUNT**= the number of lines to display, 50 by default (-1 if you want all removed violations, however this is not recommended for performance reasons)

Notes:

- This component is only relevant when used with a CAST Dashboard Service schema. When used against a Measurement Service schema it will not return anything.

New documentation

All components are now documented. See [CAST Report Generator - Components documentation -1.8.0.](#)

Resolved issues

The following bugs have been fixed in this release:

Internal ID	Call ID	Description	Affects Version	Notes
REPORTG EN-407	13890	Error while generating reports if password is set as null when registering the WS	1.6.x	As a result of this bug fix, it is now possible to change the user name and password for an existing active web service entry when in the "Home" page (rather than having to update the credentials in the web service configuration page). The new user name and password will be applied to the existing saved web service configuration and used for all future actions.

REPORTG EN-501	15536	Number of function points is empty in IFPUG_FUNCTIONS component	1.7.x	-
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