Changes in results post upgrade - 8.3.0

On this page:

Target audience:

CAST AI Administrator

ⓘ **Summary:** this page lists:

- Impacts of changes made to CAST AIP 8.3.0 on Quality Model results post upgrade
- Other impacts of changes made in CAST AIP 8.3.0

⚠ All changes in results related to the **JEE Analyzer** are now listed in the JEE Analyzer extension and will not appear in this page.

Introduction

Each CAST AIP release provides new features which improve the value of the platform and justify an upgrade. However, there are a number of changes or improvements which can impact the measurement results/grades:

- New or improved Quality Rules to perform deeper analysis
- Updates to the Assessment Model, e.g. changes to rule weights, severity or thresholds. This can be mitigated by using the "Preserve assessment model" option during the upgrade.
- Improvements of the language analysis, e.g. more fine-grained detection of objects or links
- Extended automatic discovery of files included in the analysis

- Bug fixes to improve the precision of results
- And, unfortunately, a new release may also introduce new bugs which may impact the results until they are discovered and removed

Below is a list of changes made to the current release of CAST AIP that are known to cause impacts to results. You can also consult Case Study - Measurement changes after upgrade for selected customer applications which provides a more detailed analysis based on a few sample applications.

Analyzing the root causes of impacts to measurement results/grades

The following is a general description of the steps that should be taken in order to compare pre and post upgrade results:

- **Step 1**: Take a snapshot (including a source code analysis) with the previous release of CAST AIP before upgrading to the new release of CAST AIP
  - Check the list of applications to be analyzed, the list of files per application and list of SQL objects from the Analysis Service.
- **Step 2**: Compare the source code in version 1 (before upgrade) with the source code in the new version 2 (after upgrade)
  - Compare the list of analyzed files, list of files per application and list of SQL objects between the two Analysis Services
- **Step 3**: Compare the results of the application analysis and snapshot post upgrade. This can be done by comparing the snapshots available in the Dashboard Service to find the differences in:
  - Quality rules
  - Violations
  - Grades at Business Criteria level
  - Function Points
  - Transactions
  - Lines of code
- **Step 4**: Compare the data functions and transactions across the source Analysis Service and the target Analysis Service post upgrade.

Impacts of changes made in CAST AIP 8.3.0 on Quality Model results post upgrade

Removal of "non-unified" Quality Rules

In CAST AIP 8.3.x, all Quality Rules flagged as "non-unified" have been removed from the standard CAST AIP Assessment Model delivered with CAST AIP 8.3.x. These Quality Rules were not triggered by default, had to be manually enabled using a SQL query and all had "unified" (i.e. multi technology) equivalent Quality Rules. The impacts of this change are listed below:

- If you choose to retain your previous Assessment Model during the upgrade process, then any "non-unified" Quality Rules will be marked as deprecated and set to "Detached".
- When generating a snapshot with an Assessment Model that contains active "non-unified" Quality Rules (i.e. you have chosen to retain your previous Assessment Model during the upgrade process), these Quality Rules will not be executed, even if you have used the SQL query to specifically enable them.

Other impacts of changes made in CAST AIP 8.3.0

Removal of web technology analysis capabilities

The ability to analyze "Web technologies" such as:

- **Image files** (.gif, .jpg etc.)
- **HTML files** (.htm, .html, .htc etc.)
- **Script files** (.js, .vbs etc.)
- **Style sheets** (.css)

has been removed from the **.NET Analyzer**, therefore after an upgrade to CAST AIP 8.3.x and the generation of a new snapshot on existing source code, you will find that analysis results will change:

- All web technology files will no longer be visible. These objects will be recorded as "deleted" in the post upgrade snapshot (this example is from a JEE analysis):

Before upgrade	After upgrade

WebJSP_c50ac41
  JEE
    Scripts
    WEB-INF
    pageart
    Connect.jsp
    ErrorPage.jsp
    Index.html
    ListAuthors.jsp
    ListTitles.jsp
    NewSales.jsp
    SalesCreated.html
    cwstyles.css
  applicationScope
  conversationScope
  dependentScope
  pageScope
  requestScope
  sessionScope
  singletonScope
	WebJSP_c50ac41
	  JEE
	    META-INF
	    WEB-INF
	    Connect.jsp
	    ErrorPage.jsp
	    ListAuthors.jsp
	    ListTitles.jsp
	    NewSales.jsp
	  applicationScope
	  conversationScope
	  dependentScope
	  pageScope
	  requestScope
	  sessionScope
	  singletonScope

- Line of Code (LOC) Quality Measures will be impacted - there will be a decrease in the LOC count.
- Some Quality Rule grades may change.
- Intra-web technology links (i.e. between .HTML and .JS files for example) will be removed
- Any links between .NET objects and web technology objects will be removed
- Transactions and Function Point data may be impacted by this change.

ⓘ Note that:

- when a "classic" **ASP (Active Server Pages)** application is delivered via the CAST Delivery Manager Tool, this will be discovered as an ASP application and will be analyzed exactly as in previous releases of CAST AIP by the .NET Analyzer - i.e there will be no change to results.
- Ability to analyze web technologies has also been removed from the **JEE Analyzer extension**, see http://doc.castsoftware.com/display/DOCEXT/JEE+Analyzer+-+1.0 for details.