Changes in results post upgrade - 8.2.15

On this page:

Target audience:

CAST AI Administrator

ⓘ **Summary:** this page lists:

- impacts of changes made in CAST AIP 8.2.15 on Quality Model results
- other impacts of changes made in CAST AIP 8.2.15

The changes listed assume that an upgrade from CAST AIP 8.2.14 to CAST AIP 8.2.15 has taken place.

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 8.2.15 on Quality Model results post upgrade

All technologies

SCRAIP-33952 - Avoid Artifacts with high Commented-out Code Lines/Code Lines ratio - 7126

A bug has been discovered which is causing erroneous results for the rule "Avoid Artifacts with high Commented-out Code Lines/Code Lines ratio - 7126": when there is no change in source code or configuration between successive analyses, the violation status for random objects will change (i.e. some objects that previously were not listed as violating the rule in the first analysis are now violating the rule in the second analysis). This bug has been fixed by altering the rule's algorithm, therefore, after an upgrade to CAST AIP 8.2.15 and the generation of a post-upgrade consistency snapshot on the same source code, results will differ for this rule.

Mainframe Cobol

SCRAIP-33545 - Avoid using COMPUTE statement for elementary arithmetic operation - 7754

A bug has been discovered which is causing false violations to be reported for objects containing the syntax "COMPUTE A = FUNCTION NUMVAL(B)" - this is valid and should not raise a violation. This bug is now fixed therefore, after an upgrade to CAST AIP 8.2.15 and the generation of a post-upgrade consistency snapshot on the same source code, results may differ: no false violations for this specific situation.

Other impacts of changes made in CAST AIP 8.2.15

Oracle PL/SQL

SCRAIP-33735 - Missing links between Oracle PL/SQL stored procedures

A bug has been discovered which is causing CAST AIP not to resolve some links between Oracle PL/SQL stored procedures. This bug is now fixed therefore, after an upgrade to CAST AIP 8.2.15 and the generation of a post-upgrade consistency snapshot on the same source code, results may differ: the missing links will be visible.

TWRI values

SCRAIP-33934 - Transactions are not contributing to TWRI in the current snapshot

A bug has been discovered which is causing transactions not to contribute to TWRI values in the current snapshot, whereas the same transactions were correctly contributing to TWRI values in the previous snapshot. This bug is now fixed therefore, after an upgrade to CAST AIP 8.2.15 and the generation of a post-upgrade consistency snapshot on the same source code, results may differ: TWRI values will now be correct in the current snapshot.