

# Changes in results post upgrade - 8.2.10

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## Target audience:

CAST AI Administrator



**Summary:** this page lists:

- impacts of changes made in CAST AIP 8.2.10 on Quality Model results
- other impacts of changes made in CAST AIP 8.2.10
- miscellaneous result changes

The changes listed assume that an upgrade from CAST AIP 8.2.9 to CAST AIP 8.2.10 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 8.2.10 on Quality Model results post upgrade

## Mainframe - Cobol

### **SCRAIP-30178 - Each file must be opened and closed - 7692**

False positive violations to this Quality Rule were being returned where a file was opened and correctly closed. This behaviour has been changed and false positive violations to the Quality Rule are no longer displayed when this situation occurs, therefore after an upgrade to CAST AIP 8.2.10 and the generation of a post upgrade snapshot, results may differ: the number of false positive results will be reduced.

## JEE

### **SCRAIP-29810 - Use lazy fetching for collection - 7488**

False positive violations to this Quality Rule were being returned even when lazy fetching was correctly defined in the source code. This behaviour has been changed and false positive violations to the Quality Rule are no longer displayed when this situation occurs, therefore after an upgrade to CAST AIP 8.2.10 and the generation of a post upgrade snapshot, results may differ: the number of false positive results will be reduced.

### **SCRAIP-29480 - Beans with normal scope must be proxyable to avoid runtime errors - 8136**

False positive violations to this Quality Rule were being returned even even though the object return is a proxy and no runtime errors are visible.. This behaviour has been changed and false positive violations to the Quality Rule are no longer displayed when this situation occurs, therefore after an upgrade to CAST AIP 8.2.10 and the generation of a post upgrade snapshot, results may differ: the number of false positive results will be reduced.

### **JFAMILY-485 - Pages should use error handling page - 2232**

The Quality Rule "Pages should use error handling page - 2232" has been modified as shown below, therefore, after an upgrade to CAST AIP 8.2.10 and the generation of a post upgrade snapshot, results may differ.

Item	Previous value	Value in CAST AIP 8.2.10
Criticality	True	False
Weight in parent Technical Criterion	7	5

## Other impacts of changes made in CAST AIP 8.2.10

### .NET - C#

#### **SCRAIP-30955 - KLOC and number of files show a decrease after an upgrade**

A bug has been discovered which is causing a discrepancy between the KLOC values and the number of files before and after an upgrade. This bug has now been fixed, therefore after an upgrade to CAST AIP 8.2.10 and the generation of a post upgrade snapshot, results may differ: KLOC and number of files values may differ.

## JEE

#### **SCRAIP-29849 - Missing Links for method passed in a lambda expression inside foreach**

A bug has been discovered which causes missing links for method parameters passed in lambda expressions in Java: only links from the lambda expression to the method parameter are identified, direct links from the method (where the lambda expression belongs) to the method parameter are not found. This bug has been fixed, therefore after an upgrade to CAST AIP 8.2.10 and the generation of a post upgrade snapshot, results may differ: the number of links between objects may increase (this may also impact Quality Rule results and Transactions).

## Miscellaneous result changes

N/A