Changes or new features - 8.3.22

ⓘ **Summary:** CAST AIP 8.3.22 introduces a number of features and changes as listed below.

Mainframe Analyzer
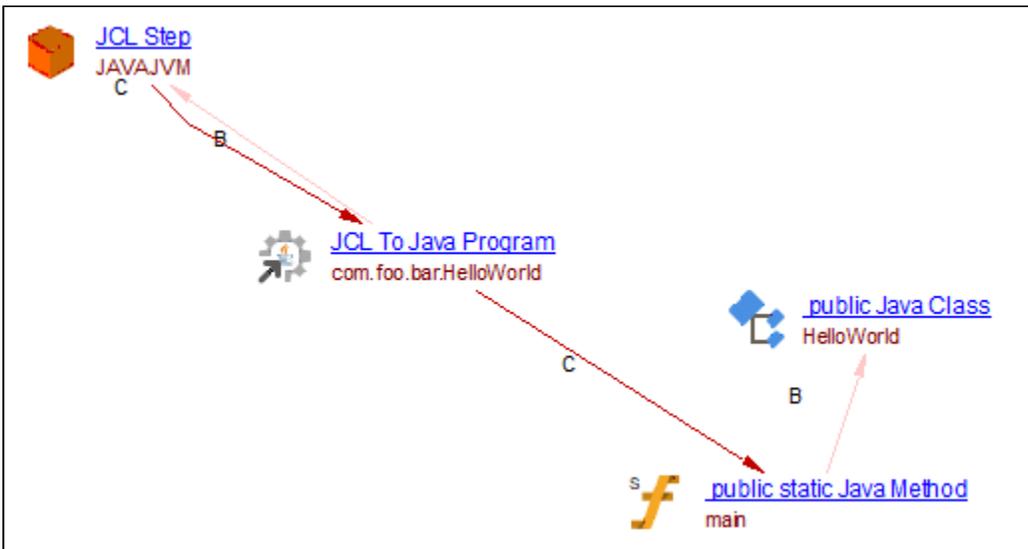
Support for links from JCL to Java

Support has been introduced for situations where JCL batches are executing Java. A new Mainframe object has been added for this situation:

Example code that is now taken into account:

```
//LMGHWRLD JOB (MY,ACCOUNTING,INFO),'HELLO WORLD',
//   CLASS=A,MSGCLASS=H,REGION=0M,NOTIFY=&SYSUID
//STEP1    EXEC PGM=JVMLDM60,
//   PARM='com.foo.bar.HelloWorld'
//STEPLIB  DD DSN=<MY.LIBRARY.PATH>,DISP=SHR
//SYSPRINT DD SYSOUT=*
//SYSOUT   DD SYSOUT=*
//STDOUT   DD SYSOUT=*
//STDERR   DD SYSOUT=*
//STDENV   DD *
. /etc/profile
. ~/.profile
export CLASSPATH=~/HelloWorld
for i in ~/HelloWorld/*.jar; do
    export CLASSPATH=$i:$CLASSPATH
    done
//
```

For example:

ⓘ Note that this support requires the use of the **Web Services Linker** extension **1.6.10** (note that **1.6.9** is delivered with **CAST AIP 8.3.22**).
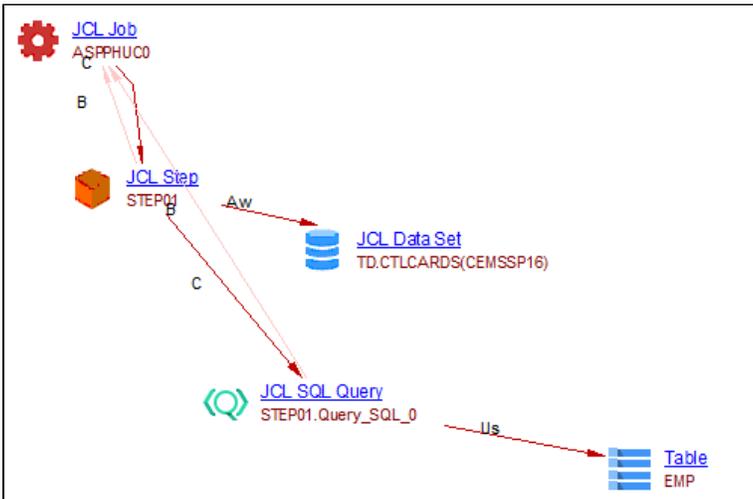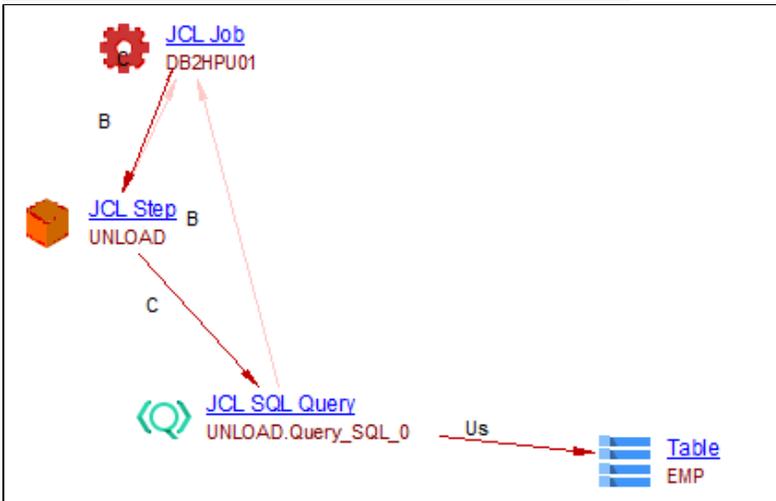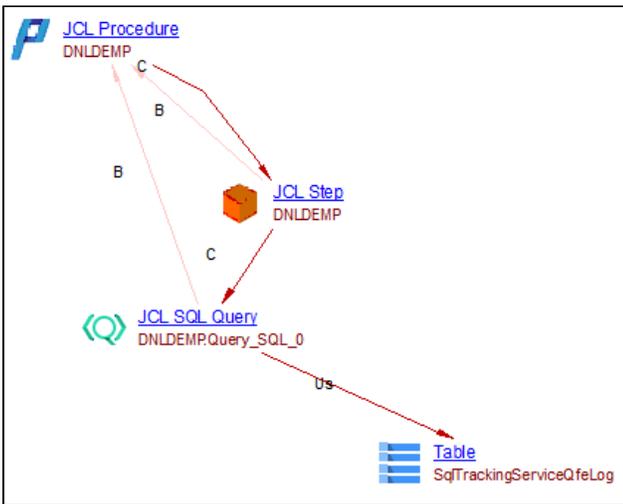
Support for links from JCL to SQL

The following methods that can be used to process SQL/access database within JCL are now supported:

- **INZUTILB utility**
- **DSNTIAUL utility**
- **Control Card file (.ctr)**

A new Mainframe object has been added for this situation:

For example:

JCL Procedure
DNLDEMP
C
B
B
JCL Step
DNLDEMP
C
JCL SQL Query
DNLDEMP.Query_SQL_0
Us
Table
SqlTrackingServiceQfeLog

JCL Job
DB2HPU01
C
B
JCL Step B
UNLOAD
C
JCL SQL Query
UNLOAD.Query_SQL_0
Us
Table
EMP

JCL Job
ASPPHUC0
C
B
JCL Step
STEP01
Aw
JCL Data Set
TD.CTLCARDS(CEMSSP16)
B
C
JCL SQL Query
STEP01.Query_SQL_0
Us
Table
EMP

JCL Symbol resolution

JCL symbolic parameter values are now correctly propagated from JCL to procedures in the call chain.

User Input Security

The **User Input Security** feature has been updated and improved as follows:

- **AIPCORE-1925** - User Input Security is now able to detect security violations in **Spring JDBC framework** applications.

Architecture Models

Architecture Models attached to an application are now saved in the Dashboard schema during the snapshot computation, this is so that the graphical representation of the model can be reproduced in the **CAST Engineering Dashboard** along with the results of the associated rules (metrics). This is in preparation for a future release of the **CAST Engineering Dashboard** where this feature will be implemented.

Extension installation - more stringent checks applied

When an extension is installed (on its own, as part of a schema installation or as part of a schema upgrade), more stringent consistency checks are now run on the metamodel XML file included in the extension:

- for all **numeric fields**: when starting with "0", a number is now considered as decimal and no longer as octal
- for the **file_no** field : value should be between 0 and (INT_MAX / 1000) - 1 = 214748

These checks should not cause any issues with the installation of official CAST AIP extensions however, if you are using custom extensions that do not conform to the metamodel syntax, the extension installation process may fail (schema installation/schema upgrade may also fail).