

# Mainframe Analyzer - 1.0 - Release Notes

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## 1.0.19-funcrel

### Resolved Issues

Customer Ticket Id	Details
36662	Fixes an issue causing missing links between Cobol Data objects for COMPUTE, ADD, SUBTRACT, MULTIPLY, DIVIDE instructions.
37211	Fixes an issue caused by incorrect Dataset resolution.

### Other Updates

Details
Fixes an internal exception causing missing links and occasional analysis crashes.
The analyzer has been updated to use AMT optimized saving mode to improve analysis performance.

### New Support

Summary	Details
MAINFRAME-767	The analyzer now supports code using the Co:Z SFTP transfer protocol for transferring datasets via put and get commands.

## 1.0.18-funcrel

### Other Updates

Details
Improved support for COBOL V6 including the following statements: initialize (better parsing), allocate, free, json parse and json generate.
The Mainframe Transaction Configuration has been updated, 1) to correctly override the built-in configuration provided by AIP Core and 2) to expand the list of "DataSet" items that should not be considered as Data Entities. This list is now as follows: %JOB LIB%, %PROCLIB%, %STEPLIB%, %LOADLIB%, %CARDPLIB%, %MAPLIB%, %MACLIB%, %LINKLIB%, %SERVLIB%, %ISPMLIB%, %ISPPLIB%, %ISPSLIB%, %ISPTLIB%, %PGMLIB%, %ISPTLIB%, %RENTLIB%, %WORKLIB%, %EQQJBLIB%.
New data properties have been added to the Cp (Call Program) Link (only for known Cobol Programs) between Cobol Programs and Division Procedures. Properties added include: the used parameters (all the data structures and levels) in the USING statement, together with the mode (BY REFERENCE, BY CONTENT, BY VALUE...) of the Calling Program.

## 1.0.17-funcrel

### Resolved Issues

Customer Ticket Id	Details
35582	Mainframe analysis error: Unknown error executing actions.

### Other Updates

Details
IBM utilities improvement.
MOVE an alphanumeric variable to a redefine (from numeric to alpha numeric) variable.

WHEN OTHERS by default impact on MA rules.

## 1.0.16-funcrel

### Resolved Issues

Customer Ticket Id	Details
34108	Fixed an issue causing false positive violations for the rule 7290: "Avoid unreferenced Sections and Paragraphs".
35302	Fixed an issue that was causing an error "Internal exception occurred during processing listener ResolveData:: createUnknownData on instance xxx".
32961	Fixed an issue causing the creation of an incorrect "accessread" link from a Cobol Program object to itself.

### Other Updates

Details
Categorization of Mainframe utilities has been improved in this release: type/role has been added to utilities resolved as external JCL programs.
A correct has been implemented to change the link type to "Use" between Cobol Programs and SQL Synonyms.
An improvement has been implemented to create "prototype" links between CICS Datasets and JCL Datasets.

### Rules

Rule Id	New Rule	Details
7290	FALSE	Fixed an issue causing false positive violations for the rule 7290: "Avoid unreferenced Sections and Paragraphs".

## 1.0.15-funcrel

### Resolved Issues

Customer Ticket Id	Details
34521	Fixed an issue causing an incorrect write link between Cobol data objects and Cobol programs.
34779	Fixed an issue causing VSAM RRDS object properties to not be set correctly on the JCL Dataset object.
33229	Fixed an issue where "Unknown JCL Procedure" objects created by the Mainframe Analyzer were not available in CAST Imaging after export/import.

### Other Updates

Details
Improve IBM MQSeries to correctly resolve missing unknown publisher/subscriber objects.
Fixed an issue causing an analysis crash due to COPY statements breaking COBOL data definitions.

### New Support

Summary	Details
Create link between COBOL data and CICS Dataset objects	Link between COBOL data and CICS Dataset objects are now supported.

JCL Symbol resolution improvement	When multi JCL Steps call the same Procedure with parameters, datasets in the procedure are now created depending on parameters.
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## 1.0.14-funcrel

### Resolved Issues

Customer Ticket Id	Details
33544	Fixed an incorrect bookmark when using COPY statement after File description declaration.
34373	Fixed a missing property in COBOL Data objects.
34071	Fixed incorrect property information.
34494	Fixed issues with the VSAM parser.
34493	Fixed issues with the VSAM parser.
34495	Fixed issues with the VSAM parser.
34446	Fixed an incorrect link between COBOL Data objects and file description.
34041	Corrected missing links to COBOL Data objects when copybooks are included in analysis.
33822	Fixed an incorrect link type (read instead of write) from REWRITE keywords to COBOL Data object variables.

### Other Updates

Details
Fixed an issue where a JCL Procedure was incorrectly recognized as a COBOL program.
Support has been added for VSAM command abbreviations.
Support has been added for the INDEX part of KSDS VSAM files.
Support has been added for LDS VSAM datasets.
VSAM types have been given a default value of KSDS VSAM.

## 1.0.13-funcrel

### Resolved Issues

Customer Ticket Id	Details
33213	Fixed an issue causing an unexpected call from Cobol Paragraph to Cobol section.
32855	Fixed an issue causing a missing Object Property pointing to Copybook.
33111	Fixed an issue causing a missing link from a Cobol Program to a Copybook.

### Other Updates

Details
Better parser in condition expression.
JCL Job should not be entry point, when it is called from others objects.

## 1.0.12-funcrel

## Resolved Issues

Customer Ticket Id	Details
32501	Missing link between Cobol Data when using STRING xxx INTO syntax.
33042	JCL Dataset is missing Dataset Type property as VSAM.
32324	Missing links between Cobol Paragraphs after GO TO call.
31754	Incorrect links representation for Cobol Data.

## Other Updates

Details
Changes have been made to Mainframe transaction configuration. The following are now classed as Data Entities: GDC, CICS, VSAM and GSAM files, IMS Segment objects, Cobol File Link objects (when not calling any Dataset objects), IMS PC Block type Database objects (when not calling any IMS Segments) and all DataSets except the following: PDS DataSet, Temporary DataSet and DataSet with names matching %JOBLIB%, %PROCLIB% and %STEPLIB%. In addition, all External Files/Programs are no longer classed as End Points. As a result of these changes, impacts to existing analysis results are likely when re-analyzing unchanged source code with this release.
A change has been implemented in this release to migrate all legacy "CAST_JCL_Dataset" object types to the object type "CAST_JCL_ResolvedDataset". The change is transparent and only changes the object property (from the old to the new object type).
Custom sensitive data are not considered by Mainframe Analyzer.

## 1.0.11-funcrel

### Note

This extension now requires version 0.9.4 of com.castsoftware.internal.platform. When using AIP Console or ExtensioDownloader, this dependent extension should be downloaded automatically.

## Other Updates

Details
Improve AST for function call
.datasensitive files specifically for GDPR and PCI-DSS are now handled by AIP Console (when using 1.26).
"JCL Dataset" are now no longer handled as unknown objects

## Rules

Rule Id	New Rule	Details
7288	FALSE	Avoid cyclic calls with PERFORM statements

## 1.0.10-funcrel

### Note

The two new rules provided in this release require AIP Core 8.3.38. If you use this extension release with an older release of AIP Core, the new rules will be triggered but no results will be visible in the CAST Dashboard.

## Resolved Issues

Customer Ticket Id	Details
31251	IMS Field objects are displaying with character ")".

## Other Updates

Details
Fix bug on replace statement: when the replaced pattern was located at the end of line, the replacement did not function.

## Rules

Rule Id	New Rule	Details
8556	TRUE	'XML GENERATE' should be used with 'WITH ENCODING'.
8558	TRUE	Avoid using XML PARSE without 'VALIDATING'.

## New Support

Summary	Details
Support for IBM Enterprise COBOL for z/OS v6	This release of the extension provides support for analyzing IBM Enterprise COBOL for z/OS v6. Requires the use of AIP Core 8.3.38.

## 1.0.9-funcrel

### Other Updates

Details
Improve parser to better handle complex logical expression conditions.

## 1.0.8-funcrel

### Resolved Issues

Customer Ticket Id	Details
29955	False positives discovered in "Avoid unchecked return code (SQLCODE) after EXEC SQL query".
30227	Object contains carriage return in its name and fullname.
30258	Missing links between Cobol data objects when using MOVE FUNCTION().
30294	JCL Symbolic parameter not resolved.

## New Support

Summary	Details
Support the detection of sensitive data using the new "Mainframe Sensitive Data (com.castsoftware.mainframe.sensitivedata) extension.	When the com.castsoftware.mainframe.sensitivedata dependent extension is installed, the Mainframe Analyzer will be able to flag certain objects as containing sensitive data. See <a href="https://doc.castsoftware.com/display/TECHNOS/Mainframe+Sensitive+Data">https://doc.castsoftware.com/display/TECHNOS/Mainframe+Sensitive+Data</a> .

## 1.0.7-funcrel

### Resolved Issues

Customer Ticket Id	Details
29420	Invalid links between Cobol Data objects

## Other Updates

Details
Update extension SDK.

## Rules

Rule Id	New Rule	Details
7288	FALSE	Fix missing violation for the rule "Avoid cyclic calls with PERFORM statements".

## New Support

Summary	Details
Support REPLACE statement	The Replace statement is now supported for better resolution.

## 1.0.6-funcrel

## Resolved Issues

Customer Ticket Id	Details
27289	Invalid Read link from Cobol Paragraph to Cobol Program
28886	Mainframe analysis error: Unknown error executing actions.
27290	Commented code identified as missing artifact and the objects are saved in KB with full name 'Unknown'
26798	JCL Data set object name has symbol that is not resolved by value
29154	JCL Dataset override from JCL to JCL Catalogued procedure is not processed correctly
29004	Incorrect link from cobol paragraph to cobol program
29169	Never truncate data in MOVE statements missing violations not more detected with 8.3.29+1.0.5
29143	False positive "Never truncate data in MOVE statements" with 8.3.29/1.0.5

## Other Updates

Details
Invalid Cobol programs created from the IMS MFS file
Cobol Lexer return a PROGRAM_SATE when PROGRAM-ID is used in variable.
Start Column is incorrectly detected
Internal exception occurred during processing listener
JCL Symbolic variable not replaced
Improve IBM MQSeries

## Performance Improvements



Summary
MAINFRAME-597: Correct memory issue form API Mainframe (Python)
MAINFRAME-600: Unplug SDK Mainframe action when there is no extension Mainframe Python

## 1.0.5-funcrel

### Other Updates

Details
Update extension SDK.
Add new system utilities to avoid confusing them with Unknown Objects.

### Rules

Rule Id	New Rule	Details
7366	FALSE	File descriptor block must be defined with 0 record - rule updated to fix false positive and missing violations.

## 1.0.4-funcrel

### Other Updates

Details
Corrects metamodel issue

## 1.0.3-funcrel

### Resolved Issues

Customer Ticket Id	Details
28000	Mainframe analysis error: input buffer overflow, can't enlarge buffer because scanner uses REJECT.
28225	MainframeCmd.xml fatal error while parsing .psb file.

### Performance Improvements

Summary
MAINFRAME-568: Performance issue from QRs.

## 1.0.2-funcrel

### Resolved Issues

Customer Ticket Id	Details
28188	False positive in rule "Never truncate data in MOVE statement" (7688) after upgrade from 8.3.3 to 8.3.29.
27485	False positives in rule: "Variables defined in Working-Storage section must be initialized before to be read" (8034).

## Other Updates

Details
The rules don't function correctly when the SaveParagraph option is deactivated.

## 1.0.1-funcrel

### Resolved Issues

Customer Ticket Id	Details
27285	Mainframe Utilities wrongly identified as Unknown Programs

## Other Updates

Details
Update extension SDK

## Rules

Rule Id	New Rule	Details
8160	FALSE	Check PCB status code after DLI queries - false positive violations have been corrected.
8034	FALSE	Variables defined in Working-Storage section must be initialized before to be read - false positive violations in case of EXEC SQL Whenever have been corrected.

## 1.0.0-funcrel

### Resolved Issues

Customer Ticket Id	Details
27062	Missing link between Cobol objects through compute statement
27285	Mainframe Utilities wrongly view as unknown program instead of utilities
2575	"Check PCB status code after DLI queries" does not work correctly
26308	Missing links from JCL to Cobol Program
27063	Missing links between cobol data references (position length destination)

## 1.0.0-alpha3

### Resolved Issues

Customer Ticket Id	Details
26909	Better links in case of data to data links option
26875	Better links in case of data to data links option
26489	Removed false positive of the rule "Avoid Procedure Paragraphs that contains no statements in case of ENTRY statement"
26772	Missing link from JCL Step to SQL table due to missing JCL SQL Query objects

## Other Updates

Details
Extension SDK for Mainframe enhancements

## 1.0.0-alpha2

### Resolved Issues

Customer Ticket Id	Details
24871	Data function names have brackets enclosing them
24698	Remove Internal exception occurred during processing listener warnings encountered during parsing of MFS files
25366	False positive - Using SEARCH ALL only with sorted data
25866	False positive violations in the rule 'Never truncate data in MOVE statements
25906	False positive violations in the rule 'Never truncate data in MOVE statements
26072	False violation "Never truncate data in MOVE statements
18364	False positive for QR "Avoid Programs with lines of more than 80 characters"
25367	The Rule "Avoid unchecked return code (SQLCODE) after EXEC SQL query" has False positive violations shown in the AED
24971	Data function names have brackets enclosing them
24841	Remove Internal exception occurred during processing listener warnings encountered during parsing of MFS files
24877	Invalid object created for COBOL program

## Other Updates

Details
Analysis crashed with error
Analysis failed
Improvements on extension SDK

## New Support

Summary	Details
Support new API for MQSeries	MQSeries objects are now supported via Batch and CICS environments (ex: CSQBOPEN, CSQCOPEN).
MQSeries: Automatically resolve copybook CMQODV	MQSeries objects are now identified without the copybook CMQODV.

## 1.0.0-alpha1

### Note

Initial release of the extension.

## Other Updates

**Details**

Extension SDK for Mainframe