Mainframe Analyzer - 1.0

ⓘ **Summary:** This document provides information about the extension providing **Mainframe analysis** support.

Extension ID

com.castsoftware.mainframe

What's new?

Please see **Mainframe Analyzer - 1.0 - Release Notes** for more information.

Description

This extension provides support for **Mainframe (Cobol, CICS, JCL, IMS...)**. If your application contains **Mainframe** source code and you want to view these object types and their links with other objects, then you should install this extension.

Technical information

Extension

When installed, this extension **replaces** the Mainframe Analyzer embedded in CAST AIP Core:

- The Mainframe Analyzer embedded in AIP Core will continue to exist and will be shipped "out of the box" with AIP Core.
- Critical bugs will continue to be fixed in the Mainframe Analyzer embedded in AIP Core but no new features or functionality will be added.
- The Mainframe Analyzer extension will have exactly the same features and functionality on release as the Mainframe Analyzer embedded in AIP Core, therefore analysis results will be identical.
- The Mainframe Analyzer is compatible with AIP Core 8.3.26.
- All future development of the Mainframe Analyzer (new features, functionality etc.) will be completed in the Mainframe Analyzer extension only. Critical bug fixes will be fixed in the Mainframe Analyzer extension (as well as the analyzer embedded in AIP Core).
- The behaviour is as follows:
    - Nothing is automatic - for both AIP Console and "legacy" CAST AIP deployments, the Mainframe Analyzer extension must be manually downloaded and installed in order to use it (* see note below)
    - If the extension is installed, CAST AIP Console/CAST Management Studio will automatically detect that it exists and will use the extension rather than the analyzer embedded in AIP Core.
    - Once the extension has been installed and used to produce analysis results, it is not possible to reverse this choice by removing the extension and re-analyzing the source code again.

ⓘ

ⓘ Starting **AIP Console 1.26**, if Mainframe source code is detected by AIP Console during delivery, the **Mainframe extension will automatically be downloaded and installed** replacing the Mainframe Analyzer embedded in AIP Core. If you do not want this to occur, you must **blacklist** the Mainframe extension using the `aip-node-app.properties` file on the AIP Node responsible for analyzing your application. See **Blacklisting extensions** for more information.

Features / support added in the extension

IBM MQ Series

The analyzer supports IBM MQSeries (see **Mainframe - Technical notes**), but the following support has been added in the extension:

- MQSeries objects are now supported via Batch and CICS environments (ex: CSQBOPEN, CSQCOPEN).
- MQSeries objects are now identified without the copybook CMQODV.

Function Point, Quality and Sizing support

This extension provides the following support:

Function Points (transactions)	✅	A green tick indicates that OMG Function Point counting and Transaction Risk Index are supported.
Quality and Sizing	✅	A green tick indicates that CAST can measure size and that a minimum set of Quality Rules exist.

CAST AIP Core compatibility

This extension is compatible with:

CAST AIP core release	Supported
8.3.26	✅

Supported DBMS servers

This extension is compatible with the following DBMS servers:

CAST Storage Service/PostgreSQL	✅

Prerequisites

✅	An installation of any compatible release of CAST AIP core (see table above)

Required third-party software

Please see: **Mainframe - Required third-party software**.

Dependencies with other extensions

None.

Parametrization_Cobol.xml file

The extension is shipped with a parameterization XML file called **Parametrization_Cobol.xml** file - see **Mainframe - Analysis configuration** for more information about this. This file takes priority over the same file delivered in AIP Core (in `Configuration\Parametrization\Cobol`) therefore if you are moving to using the Mainframe Analyzer, you must ensure the following:

- You must copy the file (or the rules in file) from the AIP Core installation folder `Configuration\Parametrization\Cobol` into the deployed extension on your AIP Node(s): `%PROGRAMDATA%\CAST\CAST\Extensions\com.castsoftware.mainframe.<version>-funcrel\configuration\parametrization\Cobol`
- If you upgrade to a newer release of the extension, and if you have modified the **Parametrization_Cobol.xml** file to add custom rules, you must ensure that you copy the file (or the rules) into the new extension installation location, e.g.:
    - **Current extension installation location**: `%PROGRAMDATA%\CAST\CAST\Extensions\com.castsoftware.mainframe.<version1>-funcrel\configuration\parametrization\Cobol`
    - **New extension installation location**: `%PROGRAMDATA%\CAST\CAST\Extensions\com.castsoftware.mainframe.<version2>-funcrel\configuration\parametrization\Cobol`

Download and installation instructions

Please see:

- **Download an extension**
- **Install an extension**

Application qualification information

Please see: **Mainframe - Application qualification specifics**.

Prepare and deliver the source code

Please see: **Mainframe - Prepare and deliver the source code**.

Analysis configuration and execution

Please see: **Mainframe - Analysis configuration and execution** and all child pages:

- Mainframe - Analysis configuration
- Mainframe - Run and validate analysis
  - Mainframe - Analysis messages
  - Mainframe - Analysis results

What analysis results can you expect?

Please see: **Mainframe - Analysis results**.

Structural Rules

Please see: **Mainframe - Structural rules**.