

CMS Snapshot Analysis - Run Analysis for Technology - Error Free Logs - CAST AIP 8

Purpose

This page provides a description of different logs created while running the analysis.

In this page, the different logs lines corresponding to the task **Run Analysis for <Technology>** is listed with functional and technical explanation of the logs that it generates.

There could be one or many analysis units for each Application.

During this step the process of source code analysis of all Analysis Units in the Application takes place.

For more information on this refer to the below documentation links -

For 8.0.x : CAST Management Studio - Help > Configuration > Preferences > CAST General

For official documentation 8.0.x : [CMS - Run analysis only](#)

In this page we have considered an example of a Mainframe analysis.

Select the log lines that you are interested in from the list below

- [CASTMS.log.txt](#)
 - [RUN Mainframe ANALYZER](#)
 - [COMMAND LINE TO RUN THE Analyzer](#)
- [<Application Name>-<DateTime>.castlog](#)
 - [Environment Information](#)
 - [Run Analysis Is About To Start](#)
 - [Configuration Information](#)
 - [Mainframe Analysis Started](#)
 - [Dependencies : External links loaded](#)
 - [Processing the source files](#)
 - [Saving Step](#)
 - [Execution Summary](#)

Take a snapshot of the application

Task

- ✓ Take a snapshot of the application
 - ✓ Snapshot generation
 - ✓ Synchronize Services
 - ✓ Application "J2EE Application"
 - ✓ Tools before analysis
 - ✓ My SQL Tool
 - ✓ Run CSV generation
 - ✓ My External Program
 - ✓ Run analysis for 'J2EE Application'
 - ✓ Run SQL Analyzers "My Package 2"
 - ✓ Compute Analysis Unit full content
 - ✓ Compute content for Refined Target
 - ✓ Run metrics calculation for My Package 2
 - ✓ Compute dependency dataset
 - ✓ Run J2EE Analyzer "My Source file based execution unit"
 - ✓ Clean dependency dataset
 - ✓ Compute Analysis Unit full content for BusinessHelloWorld
 - ✓ Run metrics calculation for My Source file based execution unit
 - ✓ Run reference pattern 'My Reference Pattern'
 - ✓ Create source set for My Reference Pattern
 - ✓ Create target set for My Reference Pattern
 - ✓ Run Reference Finder Analyzers "RP My Reference Pattern"
 - ✓ Delete source set for My Reference Pattern
 - ✓ Delete target set for My Reference Pattern
 - ✓ Run Extensions at application level for J2EE Application
 - ✓ Tools after analysis
 - ✓ My SQL Tool
 - ✓ My External Program
 - ✓ My Update CAST Knowledge Base
 - ✓ Run Universal Importer "My Universal Importer"
 - ✓ Run CSV generation
 - ✓ Create source set for My Reference Pattern
 - ✓ Run Reference Pattern Search String "My Reference Pattern Search String"
 - ✓ Delete source set for My Reference Pattern
 - ✓ Run Escalated Links Calculation on "J2EE Application"
 - ✓ Run Copy Paste metrics calculation for J2EE Application
 - ✓ Analyze Copy Paste code
 - ✓ Save results to database
 - ✓ Run Dynamic Link Manager
 - ✓ Update SQL XXL Table Size for "J2EE Application"
 - ✓ Run Data Flow Security Analysis on "J2EE Application"
 - ✓ Prepare snapshot in "cb802_sbo_local"
 - ✓ Generate Modules in "cb802_sbo_local"
 - ✓ Run CSV generation
 - ✓ Run Path builder on "cb802_sbo_local"
 - ✓ Update Sources in "cb802_sbo_local"
 - ✓ Finalize Data Flow Security in "cb802_sbo_local"
 - ✓ Create Architecture Model in "cb802_sbo_local"
 - ✓ Create Architecture Model in "cb802_sbo_central"
 - ✓ Synchronize Assessment Model in cb802_sbo_central
 - ✓ Create Snapshot Definition in "cb802_sbo_central"
 - ✓ Compute Snapshot in "cb802_sbo_central" with associated Analysis Services
 - ✓ Configure snapshot data into dashboard service.
 - ✓ Transfer sources, positions and bookmarks into dashboard service.
 - ✓ Synchronize Snapshot List from "cb802_sbo_central"
 - ✓ Dashboard automation in "cb802_sbo_central"
 - ✓ Execution Summary

CASTMS.log.txt

RUN Mainframe ANALYZER

INF: 2016-07-25 13:15:05: starting Task Run analysis for 'Cobol'
 INF: 2016-07-25 13:15:05: starting Task Run Mainframe Analyzers "Cobol_13745"

COMMAND LINE TO RUN THE Analyzer

INF: 2016-07-25 13:15:05: C:\Program Files\CAST8.0\anarun.exe -CONNECT_PROFILE('localhost:2280 on CastStorageService.cb800_test_sup_local') -RUN_AU(301,303,'C:\CASTMS\LargeStorage\LISA\fa2bf93950654bd18c85e79eb2c358bf\Scr13745\JobSettings.xml') -MANAGED(301) -SESSION_ID(303) -LOG('C:\CASTMS\Log\fa2bf93950654bd18c85e79eb2c358bf\Cobol_13745-20160725131505.castlog', TRUNCATE) -LARGESTORAGE('C:\CASTMS\LargeStorage','C:\CASTMS\LargeStorage','fa2bf93950654bd18c85e79eb2c358bf\Scr13745') -LOGIN(CASTCORPVRT,) -APP(-NOGUI) -FINAL_UPDATE -NOPROGRESS -EXIT

INF: 2016-07-25 13:15:09: Initializing logging context in a new thread. Logging.runInNewThreadContext should be used instead
 INF: 2016-07-25 13:15:09: About to run JOB_MAINFRAME_ANALYZER job 'Cobol_13745'.
 INF: 2016-07-25 13:15:11: Initializing logging context in a new thread. Logging.runInNewThreadContext should be used instead
 INF: 2016-07-25 13:15:15: Initializing logging context in a new thread. Logging.runInNewThreadContext should be used instead
 INF: 2016-07-25 13:15:16: Initializing logging context in a new thread. Logging.runInNewThreadContext should be used instead
 INF: 2016-07-25 13:15:18: Initializing logging context in a new thread. Logging.runInNewThreadContext should be used instead
 INF: 2016-07-25 13:15:20: Initializing logging context in a new thread. Logging.runInNewThreadContext should be used instead
 INF: 2016-07-25 13:15:20: Initializing logging context in a new thread. Logging.runInNewThreadContext should be used instead
 INF: 2016-07-25 13:15:22: Initializing logging context in a new thread. Logging.runInNewThreadContext should be used instead
 INF: 2016-07-25 13:15:25: Execution date=2016/07/25 07:45
 INF: 2016-07-25 13:15:25: Execution duration=0 days, 00 hours, 00 mins, 15 secs
 INF: 2016-07-25 13:15:25: Execution result=success
 INF: 2016-07-25 13:15:25: Initializing logging context in a new thread. Logging.runInNewThreadContext should be used instead
 INF: 2016-07-25 13:15:26: Loading ini file: C:\Users\PRT\AppData\Local\Temp\CAST\CAST8.0\AMRunResult303.INI
 INF: 2016-07-25 13:15:26: Loading ini file: C:\Users\PRT\AppData\Local\Temp\CAST\CAST8.0\AMRunResult303.INI
 INF: 2016-07-25 13:15:26: Task message: No Task message
 INF: 2016-07-25 13:15:26: Log file: C:\CASTMS\Log\fa2bf93950654bd18c85e79eb2c358bf\Cobol_13745-20160725131505.castlog
INF: 2016-07-25 13:15:26: ending Task Run Mainframe Analyzers "Cobol_13745"

<Application Name>-<DateTime>.castlog

Environment Information

This section provides information on the environment in which analysis is about to run, the location of LISA, LTSA, LSA folder and the local/knowledge base being used for analysis.

Timestamp	Level	Topic	Body	Who	Error	Number	Runtime	File	Line	Module	Source	Line	Source	Column	Runtime	Context	Source
2016-07-12 16:49:43.983	Information	INTERNAL ; Body	64-bit environment														
2016-07-12 16:49:43.983	Information	INTERNAL ; Body	LISA folder: C:\CASTMS\LargeStorage														
2016-07-12 16:49:43.984	Information	INTERNAL ; Body	LTSA folder: C:\CASTMS\LargeStorage														
2016-07-12 16:49:43.984	Information	INTERNAL ; Body	LSA relative folder: dc4f68ca85d34c0e92c90d33ec8ed633/Scr13728														
2016-07-12 16:49:50.673	Information	INTERNAL ; Body	Using Knowledge Base on schema cb801_test_prt_local.														

Run Analysis Is About To Start

This section provides information that environment information has been taken into account, metamodel is loaded and analysis is about to start.

2016-07-12 16:50:02.018 Information MODULMSG ; Body Loading meta model from repository . . .
 2016-07-12 16:50:06.997 Information MODULMSG ; Body Meta model loaded.
 2016-07-12 16:50:06.997 Information INTERNAL ; Body RunAnalysis started

Configuration Information

This section shows all the configuration messages. All the options configured in CAST- MS like the extensions included in analysis, column of indicator area, tabular length, any custom environment profiles, source file path, include file path, etc that are required to run a perfect analysis are shown in the log message during the beginning.

2016-07-12 16:50:07.814 Information INTERNAL ; Body CICS File Extensions : *.csd;*.cics;*.bms

2016-07-12 16:50:13.367 Information INTERNAL ; Body Cobol File Extensions : *.cob;*.cbl;*.pco;*.sqb;*.cpy;*.cop;*.cpb
2016-07-12 16:50:13.367 Information INTERNAL ; Body Source Code in Free-Form Format : 1
2016-07-12 16:50:13.367 Information INTERNAL ; Body Source code can be placed beyond column 72 : 0
2016-07-12 16:50:13.367 Information INTERNAL ; Body Column of Indicator Area : 7
2016-07-12 16:50:13.367 Information INTERNAL ; Body Use source file name for programs : 0
2016-07-12 16:50:13.367 Information INTERNAL ; Body Column for Indicator Area : 1
2016-07-12 16:50:13.367 Information INTERNAL ; Body Analysis Unit description :
2016-07-12 16:50:13.367 Information INTERNAL ; Body Platform: IBM z/OS : 1
2016-07-12 16:50:13.367 Information INTERNAL ; Body IMS File Extensions : *.dbd;*.psb
2016-07-12 16:50:13.367 Information INTERNAL ; Body JCL File Extensions : *.jcl;*.prc;*.mbr;*.inc
2016-07-12 16:50:13.367 Information INTERNAL ; Body Name : COB
2016-07-12 16:50:13.367 Information INTERNAL ; Body Tabular Length : 8
2016-07-12 16:50:13.367 Information INTERNAL ; Body Working Folders
2016-07-12 16:50:13.367 Information INTERNAL ; Body Custom Environment Profiles
2016-07-12 16:50:13.367 Information INTERNAL ; Body Source files
2016-07-12 16:50:13.367 Information INTERNAL ; Body File Path : C:\CASTMS\Deploy\Mainframe_CICS\My Package
2016-07-12 16:50:13.367 Information INTERNAL ; Body Permission : Include
2016-07-12 16:50:13.367 Information INTERNAL ; Body Use custom configuration
2016-07-12 16:50:13.367 Information INTERNAL ; Body Paragraph Cyclic Call Detection - String Concatenation : 20
2016-07-12 16:50:13.367 Information INTERNAL ; Body Paragraph Cyclic Call Detection - Procedure Call Depth : 20
2016-07-12 16:50:13.367 Information INTERNAL ; Body Paragraph Cyclic Call Detection - Local Procedure Complexity : 20
2016-07-12 16:50:13.367 Information INTERNAL ; Body Dynamic Call Resolution and Paragraph Call Graph - String Concatenation : 1000
2016-07-12 16:50:13.367 Information INTERNAL ; Body Dynamic Call Resolution and Paragraph Call Graph - Procedure Call Depth : 500
2016-07-12 16:50:13.367 Information INTERNAL ; Body Number of Instances : 200000
2016-07-12 16:50:13.367 Information INTERNAL ; Body Open in Loop Detection - Procedure Call Depth : 10
2016-07-12 16:50:13.367 Information INTERNAL ; Body Open in Loop Detection - String Concatenation : 10
2016-07-12 16:50:13.367 Information INTERNAL ; Body Save Data found in copy books : 0
2016-07-12 16:50:13.367 Information INTERNAL ; Body Save Sections and Paragraphs : 1
2016-07-12 16:50:13.367 Information INTERNAL ; Body Un-initialized Variable Detection - Local Procedure Complexity : 20
2016-07-12 16:50:13.368 Information INTERNAL ; Body Un-initialized Variable Detection - Procedure Call Depth : 20
2016-07-12 16:50:13.368 Information INTERNAL ; Body Use Inference Engine : 1
2016-07-12 16:50:13.368 Information INTERNAL ; Body Data Structures : Do not save data
2016-07-12 16:50:13.368 Information INTERNAL ; Body SESSION CONTEXT details:
301 ; 1002 = "Mainframe_CICS"."COB_13728"
[2016-07-12 16:50:13.368 1 ; Job execution](#)

Mainframe Analysis Started

This section shows that the analysis step has started.

[2016-07-12 16:50:13.368 Information INTERNAL ; Job execution About to run JOB_MAINFRAME_ANALYZER job 'COB_13728'.](#)
[016-07-12 16:50:13.368 Information MODULMSG ; Job execution Total physical memory: 6143 MB.](#)

Dependencies : External links loaded

It shows the number of external link components loaded(the client server components being loaded) and validation results and the files that are being analyzed.

[2016-07-12 16:51:14.453 Information MODULMSG ; Job execution External link component has loaded 0 objects](#)
[2016-07-12 16:51:15.306 Information INTERNAL ; Job execution Validation successful.](#)

Processing the source files

This section shows the files that are being processed during the analysis.

[2016-07-12 16:51:16.534 PARSING ; Job execution Analyzing Cobol Program PG1004. C:\CASTMS\Deploy\Mainframe_CICS\My Package\PG1004.cob](#)
2016-07-12 16:51:25.941 Information INFENG ; Job execution Inference Engine Options infeng50\infengmanager.cpp 702 infeng50\infengmanager.cpp
2016-07-12 16:51:25.941 Information INFENG ; Job execution Use Inference Engine=Yes infeng50\infengmanager.cpp 704 infeng50\infengmanager.cpp
2016-07-12 16:51:25.941 Information INFENG ; Job execution Procedure Call Depth=500 infeng50\infengmanager.cpp 709 infeng50\infengmanager.cpp
2016-07-12 16:51:25.941 Information INFENG ; Job execution String Concatenation=1000 infeng50\infengmanager.cpp 712 infeng50\infengmanager.cpp
2016-07-12 16:51:25.941 Information INFENG ; Job execution Local Procedure Complexity=100000 infeng50\infengmanager.cpp 715 infeng50\infengmanager.cpp
[2016-07-12 16:51:25.941 Information INFENG ; Job execution ACTIVATE_TRACE_INFENG=No infeng50\infengmanager.cpp 718 infeng50\infengmanager.cpp](#)

Saving Step

The saving step occurs at the end of the run analyzer step, when the analysis process compares and flushes the results in the Knowledge base.

2016-07-12 16:51:29.866 MODULMSG ; Job execution Comparing objects on server . . .

2016-07-12 16:51:35.661 MODULMSG ; Job execution Comparison completed.

2016-07-12 16:51:35.715 MODULMSG ; Job execution Merging objects on server . . .

2016-07-12 16:51:44.061 MODULMSG ; Job execution Merge completed.

2016-07-12 16:51:44.983 RESOLVE ; Job execution Inference Engine resolution statistics

- COBOL dynamic call resolution and paragraph call graph :

- 100% on string concatenation

- 100% on procedure call depth

- Paragraph cyclic calls detection :

- 73% on string concatenation

- 100% on procedure call depth

- 81% on local procedure complexity

- Uninitialized COBOL variables detection :

- 100% on string concatenation

- 92% on procedure call depth

- 99% on local procedure complexity

- OPEN in loop detection :

- 100% on string concatenation

- **100% on procedure call depth 0 ; 0 0 0 0 0**

Execution Summary

It shows the execution date and time, the time taken for the entire analysis to get completed, the number of fatal errors/errors/warnings/information messages.

2016-07-12 16:51:47.868 Information INTERNAL ; Job execution New Job status

2016-07-12 16:51:47.868 Information INTERNAL ; Job execution Execution date=2016/07/12 11:21

2016-07-12 16:51:47.868 Information INTERNAL ; Job execution Execution duration=0 days, 00 hours, 01 mins, 40 secs

2016-07-12 16:51:47.869 Information INTERNAL ; Job execution Execution result=success

2016-07-12 16:51:47.869 MSGACCOUNT ; Summary 0 fatal error(s); 0 error(s); 0 warning(s); 18 information message(s).

2016-07-12 16:51:47.877 1048575 ; Job execution

2016-07-12 16:51:48.190 Information INTERNAL ; Body Analysis completed