

CMS Snapshot Analysis - Run Analyzer - Performance issue

*Purpose

This page will help you to troubleshoot the performance problems, you may face while running the analysis. Performance issue during analysis means one of the following:

- the analysis is taking longer than expected to finish.
- the analysis is stuck and never ends

For more information, refer to:

Official documentation :

- Official 8.3 Documentation - [Run and validate the analysis](#)
- Official 8.2 Documentation - [Run the Analysis](#)
- Official 8.1 Documentation - [Run the Analysis](#)
- Official 8.0 Documentation - [Run the Analysis](#)
- Official 7.3 Documentation - [Run the Analysis](#)

Online-help : CAST Management Studio - Help > How To > Regular audience > Run analysis only

Information Guides > Information Guides by CAST AIP Component > [CMS Snapshot Analysis](#)

Error Free Logs - [CMS Snapshot Analysis - Run Analysis for Technology - Error Free Logs - CAST AIP 8](#)

*Observed in CAST AIP

Release	Yes/No
8.3.x	✓
8.2.x	✓
8.1.x	✓
8.0.x	✓
7.3.x	✓

*Observed on RDBMS

RDBMS	Yes/No
Oracle Server	✓
Microsoft SQL Server	✓
CSS3	✓
CSS2	✓
CSS1	✓

Step by Step scenario

1. Package and Deliver the application.
2. Set as current version.
3. Run the analysis (Application level or Analysis Unit Level).
4. Analysis is stuck or is taking longer then expected to finish.

Action Plan

Perform the following steps:

1. Open the analysis log in a text editor(like NotePad++) and search for the keyword "**Execution duration**".
 - a. If the above search returns a result, then the analysis has finished. In this case you will have to identify the analysis step(s) responsible for the performance issue

- i. Observe the delta in the timestamps for each information message in the analysis log. For the following example:

```
2015-12-21 16:56:45.594 Information Parsing file : [REDACTED]
2015-12-21 16:56:45.594 Information Parsing file : [REDACTED]
2015-12-21 16:56:45.944 Information Parsing file : H:\Sources\ [REDACTED] \ache.java
2015-12-21 16:57:46.294 Information Parsing file : H:\Sources\ [REDACTED] \DemandeTache.java
2015-12-21 16:57:46.294 Information Parsing file : [REDACTED]
```

The delta for the 2 parsing messages is 1m1s

- ii. Compare the above with the timestamps of reference for the particular technology, this can be found under [CMS Snapshot Analysis - Run Analysis for Technology - Error Free Logs - CAST AIP 8](#)
 - iii. Identify the step(s) responsible for the performance issue. Note that some steps are specific to the analyzed technology.
 - b. If there is no result in the analysis log, then the analysis is stuck and the performance issue is happening during the action logged in, found in the last information message or the next expected action since the analyzer may not have logged the last current action.
 - i. Identify the step for the analyzed technology in analysis log reference which can be found in [CMS Snapshot Analysis - Run Analysis for Technology - Error Free Logs - CAST AIP 8](#)

Example : For J2EE analysis, if the last line is:

```
2016-11-04 10:01:36.218 Information MODULMSG ; Job execution Ending External Link
processing
```

Then the issue can happen during Resolving External Links OR during the next step, aka Saving Step. You have to consider both situations.

2. According to the identified steps:

a. If the issue occurs before the "About to run <Execution Unit>" information message:

```

2018-07-09 09:56:23.301390 Information Text Replacement
2018-07-09 09:56:23.301390 Information Default Scripting Language for the client side : JavaScript
2018-07-09 09:56:23.301390 Information Exclude standard JavaScript libraries? : Yes
2018-07-09 09:56:23.301390 Information .NET framework version : 4.6
2018-07-09 09:56:23.301390 Information Allow extensions : 1
2018-07-09 09:56:23.301390 Information Add called files to selected files list : 0
2018-07-09 09:56:23.301390 Information Enable Html / Javascript analysis : 1
2018-07-09 09:56:23.301390 Information Create accurate client / server links : 1
2018-07-09 09:56:23.301390 Information Add included files to selected files list : 0
2018-07-09 09:56:23.301390 Information String Concatenation : 15000
2018-07-09 09:56:23.301390 Information Procedure Call Depth : 3000
2018-07-09 09:56:23.301390 Information Maximal complexity (E) : 100
2018-07-09 09:56:23.301390 Information Resolve virtual function calls : 1
2018-07-09 09:56:23.301390 Information SESSION CONTEXT details(...)
2018-07-09 09:56:23.302396 Information About to run CAST_DotNet_Job_NewAnalyzer job 'My Source file based execution unit_70761'.
2018-07-09 09:56:23.337179 Information Total physical memory: 16383 MB.
    
```

then it is happening during the analysis configuration. Navigate to [CMS Snapshot Analysis - Run Analyzer - Performance issue - Configuration Step](#)

b. If the issue occurs after the "About to run <Execution Unit>" information message:

```

2018-07-09 09:56:23.302396 Information About to run CAST_DotNet_Job_NewAnalyzer job 'My Source file based execution unit_70761'.
2018-07-09 09:56:23.337179 Information Total physical memory: 16383 MB.
2018-07-09 09:56:24.718710 Information Creating process "C:\ProgramData\CAST\CAST\Extensions\com.castsoftware.dotnet.1.0.1\DotNetCmd.exe" "D:\CASTMS\Log\34-LISA\LISA\Fa2a30348045eada4672a877b323a1509f5997b7db7640208953c918a05973e9\DotNetCmd.exe"
2018-07-09 09:56:26.108741 Information Using Knowledge Base on schema businessline_local.
2018-07-09 09:56:26.111788 Information Loading meta model from repository.
2018-07-09 09:56:27.329255 Information Meta model loaded.
2018-07-09 09:56:27.387118 Information Total physical memory: 16383 MB.
    
```

then it is happening during the beginning of the analysis. Navigate to [CMS Snapshot Analysis - Run Analyzer - Performance issue - Beginning of analysis](#)

c. If the issue occurs during the parsing/processing/visiting information message:

```

2020-08-21 16:46: Information DOTNET.0050:Starting analysis of S:\01-Country\UK\...Source\MyStore\Source\...Common.csproj (1 / 226)
2020-08-21 16:46: Information Initialization of a circular buffer of 2000000 elements with 1 rings
2020-08-21 16:46: Information DOTNET.0055: Visiting file S:\01-Country\UK\...Source\MyStore\Source\...SMS.Global\FileArchive\FileArchiveHelper.cs
2020-08-21 16:46: Information DOTNET.0055: Visiting file S:\01-Country\UK\...Source\MyStore\Source\...SMS.Global\POS\InterfaceDefinitions.cs
2020-08-21 16:46: Information DOTNET.0055: Visiting file S:\01-Country\UK\...Donalds\Source\MyStore\Source\...SMS.Global\Properties\GlobalAssemblyInfo.cs
2020-08-21 16:46: Information DOTNET.0055: Visiting file S:\01-Country\UK\...Donalds\Source\MyStore\Source\...SMS.Global\Logging.cs
2020-08-21 16:46: Information DOTNET.0055: Visiting file S:\01-Country\UK\...Donalds\Source\MyStore\Source\...SMS.Global\MyCrypt.cs
2020-08-21 16:46: Information DOTNET.0055: Visiting file S:\01-Country\UK\...Donalds\Source\MyStore\Source\...SMS.Global\SDMDefinitions.cs
2020-08-21 16:46: Information DOTNET.0055: Visiting file S:\01-Country\UK\...Donalds\Source\MyStore\Source\...SMS.Global\Properties\AssemblyInfo.cs
2020-08-21 16:46: Information DOTNET.0055: Visiting file S:\01-Country\UK\...Donalds\Source\MyStore\Source\...SMS.Global\SystemDefinitions.cs
2020-08-21 16:46: Information DOTNET.0053:Saving CastIL
2020-08-21 16:46: Information DOTNET.0054:Calling extensibility callbacks
2020-08-21 16:46: Information DOTNET.0131:Starting to remove references
2020-08-21 16:46: Information DOTNET.0056:End of removing references
2020-08-21 16:46: Information DOTNET.0050:Starting analysis of S:\01-Country\UK\...Source\MyStore\Source\Application\Common\...Common.csproj (2 / 226)
    
```

then it is happening during the analysis and parsing of the source code. Navigate to [CMS Snapshot Analysis - Run Analyzer - Performance issue - Analyze Source code step](#)

d. If the issue is happening after the "Comparing objects on server . . ." information message:

```

2016-01-20 10:06:11.671 Information Java project ' My Source file based execution unit_20891_...
2016-01-20 10:06:12.021 Comparing objects on server . . .
2016-01-20 10:07:15.374 Comparison completed.
2016-01-20 10:07:15.374 Merging objects on server . . . Saving Step
2016-01-20 10:11:23.899 Merge completed.
2016-01-20 10:11:25.299 Information New Dynamic Links:(...)
2016-01-20 10:11:31.599 Information New Job status
2016-01-20 10:11:31.599 Information Execution date=2016/01/20 09:11
2016-01-20 10:11:31.599 Information Execution duration=0 days, 00 hours, 05 mins, 55 secs
2016-01-20 10:11:31.599 Information Execution result=success
2016-01-20 10:11:31.599 Information 0 fatal error(s); 0 error(s); 28 warning(s); 26 information mess...
    
```

then it is happening during the saving step of the analysis. Navigate to [CMS Snapshot Analysis - Run Analyzer - Performance issue - Saving Step](#)

3. If you do not find the information you are looking for or solution for your problem, in this page, contact [CAST Technical Support](#) with [Relevant Input](#)

Relevant Input

1. Run analysis by [Enabling the memory traces](#) .
2. Provide [Sherlock \(CAST Support Tool \(CST\) - alias Sherlock\)](#) with options : Export Management+Local Databases, Export Logs, Export configuration files, Export source code.

Notes/comments

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Related Pages