

Flex 1.1

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Summary: This document provides information about the extension providing **Flex** support.

Extension ID

`com.castsoftware.flex`

What's new?

Please see [Flex 1.1 - Release Notes](#) for more information.

Description

This extension provides support for applications written using Flex languages.



Although this extension is officially supported by CAST, please note that it has been developed within the technical constraints of the CAST Universal Analyzer technology and to some extent adapted to meet specific customer needs. Therefore the extension may not address all of the coding techniques and patterns that exist for the target technology and may not produce the same level of analysis and precision regarding e.g. quality measurement and/or function point counts that are typically produced by other CAST AIP analyzers.

In what situation should you install this extension?

If your application contains source code written using Flex and you want to view these object types and their links with other objects, then you should install this extension.

Supported Flex versions

This version of the extension provides support for:


Version	Supported
Flex 3.x	

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

Function Points (transactions)	Quality and Sizing
✓	✓

 A Transaction definition is automatically imported when the extension is installed. This definition will be available in the CAST Transaction Configuration Center.

CAST AIP compatibility

This extension is compatible with:

CAST AIP release	Supported
8.3.x	✓
8.2.x	✓

Supported DBMS servers

This extension is compatible with the following DBMS servers:

DBMS	Supported
CSS/PostgreSQL	✓
Oracle	✓
Microsoft SQL Server	✗

Supported file types

Only files with following extensions will be analyzed:

- *.as
- *.mxml

Download and installation instructions

The extension will be automatically downloaded and installed in AIP Console when **at least one of the supported file types is delivered for analysis**. You can also **manually install** the extension using the [Application - Extensions](#) interface. When installed, follow the instructions below to run a new analysis /snapshot to generate new results:

- [Advanced onboarding - run and validate the initial analysis](#)
- [Advanced onboarding - snapshot generation and validation](#)

Source code discovery

A discoverer is provided with the extension to automatically detect Flex code: when **one of the supported file types** is found in a folder, one "Flex" project will be discovered, resulting in a corresponding **Universal Technology Analysis Unit** in AIP Console.

Tools

Flex preprocessor

Flex source code needs to be preprocessed so that CAST can understand it and analyze it correctly. This code preprocessing is **actioned automatically** when an analysis is launched or a snapshot is generated (the code is preprocessed before the analysis starts). Flex Preprocessor log file is stored in the following location:

```
%PROGRAMDATA%\CAST\CAST\Logs\
```

FlexPMD

Metrics/Rule data are generated using an external tool provided by Adobe called FlexPMD. The FlexPMD log file is stored in the following location:

```
%PROGRAMDATA%\CAST\CAST\Logs\plugin<_extension_version>_YYYYMMDDHHMMSS.log
```

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Errors and Warnings

The Flex configuration included in the extension uses external plugins. During the analysis, the Universal Analyzer or the plugin may throw errors or warnings. The table below list the most significant errors/warnings and lists a suggested remediation action:

Tool	Error or Warning	Action
Flex Plugin	UA Plugin : No property (.....) found in meta model for Flex...	No action required. The analyzer is telling you that not all the properties are considered to be injected into the Analysis Service.

What results can you expect?

Objects

Icon	Metamodel description
	FLEX Class
	FLEX Field
	FLEX Function
	FLEX Getter
	FLEX Package
	FLEX Script
	FLEX Setter

Structural rules

The following structural rules are provided:

1.1.3	https://technologies.castsoftware.com/rules?sec=srs_flex&ref= 1.1.3-funcrel
1.1.2	https://technologies.castsoftware.com/rules?sec=srs_flex&ref= 1.1.2-funcrel
1.1.1	https://technologies.castsoftware.com/rules?sec=srs_flex&ref= 1.1.1-funcrel
1.1.0	https://technologies.castsoftware.com/rules?sec=srs_flex&ref= 1.1.0-funcrel

You can also find a global list here:

https://technologies.castsoftware.com/rules?sec=t_1007000&ref=|

Limitations

Duplicate Object of type ... is detected warnings

The analysis log will contain the warning "Duplicate Object of type ... is detected" in the following situations:

- When members or functions are overloaded using "static" - this is partially a limitation inherent in the Universal Analyzer (the "engine" used for Flex analyses).
- When functions/variables are defined using different cases (for example "sort" and "Sort").

String support

Strings are not supported in:

- XMLList
- ActionScript regex for example: `var filterVal:String = aText.toLowerCase().replace(/\Vg, '/');`

In both cases, if these strings contain single/double quote marks, the file may be skipped.

Name matching links - Universal Analyzer limitation

Due to a limitation in the Universal Analyzer (the "engine" used for Flex analyses), links will be created from any name to any matching name. At a minimum the following rule may be impacted and give erroneous results:

7388	Avoid artifacts having recursive calls
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Dynamic links which require dataflow/interpretation of parameters across multiple artifacts

Because of way the Universal Analyzer (analysis engine used by the Flex extension) functions, dynamic links which require dataflow/interpretation of parameters across multiple artifacts are not supported. If links are required for these situations, a custom reference pattern can be created to manually create the links (see [CMS - Dependencies - using Reference Patterns](#) for more information).