

# CMS - Reference Pattern tab

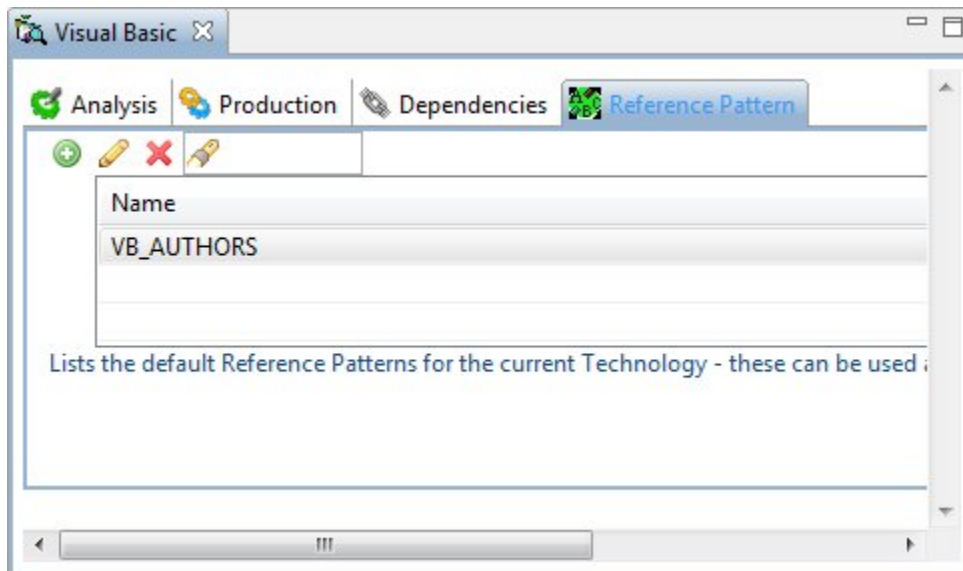
## Reference Pattern tab

The **Reference Pattern tab** enables you to create a Reference Pattern to search for links (i.e. a **word, series of words** or **string** (based on [Regular Expressions](#))) between Source and Target code. Reference Patterns are an extension of the **Dependency Rules** feature managed in the [Dependencies tab](#) in the [Application editor](#).




Reference Patterns are particularly useful when standard Dependency Rules based solely on simple word based matches between Technologies or Analysis Units are either too broad (creating too many "false" links between objects) or do not detect the links you require. Since Reference Patterns are based on Regular Expressions, you can define very specific search strings to identify the links between source code that you require.

Reference Patterns can be created at **Technology level** (in this tab) and can then be used when you create a custom Dependency Rule or modify a default or discovered Dependency Rule in the [Dependencies tab](#) in the [Application editor](#).

If you add a Reference Pattern in the [Dependencies tab](#) in the [Application editor](#) and want to ensure that the Reference Pattern is applied to ALL Analysis Units of a given technology in the current Application, you need to ensure that you select the Technology type (for which the Reference Pattern has been created) as the **Source** for the Dependency.



## Buttons

	Use this button to add a new Reference Pattern for this current Technology. The Reference Pattern can then associated to Dependency Rules (that have the current Technology as the Source) in the <a href="#">Dependencies tab</a> in the <a href="#">Application editor</a> . Please see <a href="#">Dependencies - using Reference Patterns</a> for more information about this process.
	This option enables you to <b>edit</b> an existing Reference Pattern. The <b>Reference Pattern dialog box</b> (see <a href="#">Dependencies - using Reference Patterns</a> ) will be opened allowing you to make the changes you require.
	Use this option to <b>remove</b> an existing Reference Pattern. If the Reference Pattern is associated to a Dependency Rule, it will also be removed from the rule.

## How do Reference Patterns work?

1. During an analysis, the [Regular Expression](#) defined in the Reference Pattern is searched for in the source code in the **Source** Technology or Analysis Unit (as defined in the [Dependencies tab](#) in the [Application editor](#)).
2. The **result** of this initial search is then compared with the source code in the **Target** Technology, Analysis Unit or Refined Target (as defined in the [Dependencies tab](#) in the [Application editor](#)).
3. If you chose to do so, a **replacement process** will be then be run on the results of the Regular Expression search.

Please see [Dependencies - using Reference Patterns](#) for more information

Note that the performance (i.e. time required) of a Reference Pattern search is directly linked to the number of files that are being searched. Therefore, search time can increase from analysis to analysis if additional files are added in each successive analysis.