# Tuning Error Parsers

Error Parsers scan build output line by line looking for errors and warnings (also for certain informational messages). They generate **Problem Markers** which visually indicate those problems to a user. The problems are highlighted on the Console, populate the Problems view and shown in the editor. Problem markers are organized into Error , Warning  and Infocategories.

There are several predefined Error Parsers where each one can handle output of a specific tool. Normally a toolchain defines a set of Error Parsers to deal with output of each tool. It is possible to redefine that set on a per-project basis in project properties:

1. In the C/C++ Projects view, right-click the project, and select **Properties**.
2. Expand **C/C++ Build**.
3. Select **Settings**.
4. Click the **Error Parsers** tab.
5. In the **Error parsers** list, select error parsers.
6. Click **OK**.

Note that the order of error parsers is significant. Normally an error parser will *consume* the line where it spotted an error/warning and the others down the line won't get a chance to parse it.

CDT provides one special kind of error parser, **CDT pushd/popd CWD Locator**. This parser does not create problem markers but it is looking for output of **pushd** and **popd** commands which are commonly used in makefiles to print the Current Working Directory (CWD). CDT can use this information to associate the file names appearing in the output relative to the CWD. Note that that kind of parser needs to be the first to be able to provide the CWD to the other parsers.

Most of the error parsers are configurable via regular expression patterns and a user can:

* Adjust a pattern to detect a problem more accurately,
* Disable useless or proliferating problems (Note that it can have positive effect on performance of the console),
* Create own error parser for a custom tool. Hint: To run a custom tool you can use **Make Targets View**.

To customize error parsers do following:

1. Select **Window > Preferences** .
2. Expand **C/C++**.
3. Select **Error Parsers** tab.
4. Select error parser or **Add** a new one.
5. Follow [Error Parser Options](http://docs.google.com/reference/cdt_u_pref_build_error_parsers.htm) to define your custom patterns



[CDT Projects](http://docs.google.com/concepts/cdt_c_projects.htm)

[Project file views](http://docs.google.com/concepts/cdt_c_proj_file_views.htm)



[Tracking down compilation errors](http://docs.google.com/cdt_o_builderrors.htm)

[Tuning Error Parsers](http://docs.google.com/tasks/cdt_t_proj_error_parser.htm)



[Console View](http://docs.google.com/reference/cdt_u_console_view.htm)

[Problems View](http://docs.google.com/reference/cdt_u_problems_view.htm)

[Make Targets View](http://docs.google.com/reference/cdt_u_make_targets_view.htm)

[Error Parsers tab](http://docs.google.com/reference/cdt_u_prop_build_settings_errparser.htm)

[Error Parser Options](http://docs.google.com/reference/cdt_u_pref_build_error_parsers.htm)

