Command Line Operation

Suppose you wish to run Crystal C/C++ as part of an overnight batch run, so that the HTML documentation is up to date with all the code modifications the team members did during the previous day,
 or you wish to run Crystal C/C++ as part of your PC's startup so that it parses all the files in your project while you get your cup of coffee, you will need the command-line operation mode.

With the Command Line Add-on, you can run Crystal C/C++ in the command-line mode. This mode is useful for performing any of the following operations:

i. Generate HTML Documentation

ii. Batch Export of Flowcharts to Visio and JPEG/BMP images; Batch Export of Call/Caller/#include Trees in HTML/JPEG/BMP/Text format

iii. Publish your Source Code in HTML

iv. Source Code Formatting

v. Generate Static Checking Report

vi. Parse Project Files

A) The Command Line Format:

```
CrystalCREVS.exe  [/operation] [projectfile.sur]  [/OPTN optionsfilename.xml]  [/OUT
     outputfilename.txt] [/HIDE]
```

where

`operation` can be one of the following:

> `DOC` for HTML Documentation;

> `BATCH` for batch output of flowcharts and trees;

> `PUBCODE` for publishing source code in HTML format;

> `RULES` for static checking of source code;

> `FORMAT` for formatting files and saving formatted files to disk in the specified format;

> `PARSE` for parsing project files as per given format.

`Projectfile.sur –` is the name of the project file with full path. The project file create by Crystal C have the default type .sur   and the project file create by Crystal C++ have the default type .pur

`Optionsfilename.xml` – is the name with full path of the file that contains the option settings

`Outputfilename.txt -` is the name of the output file with full path. The operation's results will be output to this file.

`HIDE –` it hides the operation progress meter.

B) To create the Options Settings File:

1. For generating HTML Documentation:

An example of the Command Line:

```
CrystalREVS.exe /DOC projectfile.sur /OPTN optionsfile.xml
```

To create the file **optionsfile.xml**:

In the Crystal Menu bar, click **Tools→Generate Command-Line Files→Documenter Options**. The HTML Documenter Settings Dialog will be displayed.

After changing the Documenter Settings as per your preference, Click OK. The "Choose a File to Save Documenter Settings" dialog will be displayed.

Browse and select the folder and enter the filename. Click Save. A confirmation message will be displayed. Click "OK"

2. For Batch Output

An example of the Command Line:

```
CrystalREVS.exe /BATCH projectfile.sur /OPTN optionsfile.xml /HIDE
```

To create the file optionsfile.xml:

In the Crystal Menu bar, click **Tools→Generate Command-Line Files→Batch Output Options**. The Batch Output Dialog will be displayed.

In the Batch Output Dialog, select the items to be "bulk output" and the format in which the output will be performed. "Path" refers to the folder where the exported files will be created.

Click OK. The "Save Batch Output Settings" dialog will be displayed.

Browse and select the folder and enter the filename. Click Save. A confirmation message will be displayed. Click "OK"

3. To publish Source Code in HTML

An example of the Command Line:

```
CrystalREVS.exe /PUBCODE projectfile.sur /OUT outputfolder /HIDE
```

The outputfolder is the folder where the HTML files will be generated.

This operation does not need an options settings file.

4. Static Check

An example of the Command Line:

```
CrystalREVS.exe  /RULES  projectfile.sur  /OPTN  ruleselectionfile.cfg  /OUT
outputfile.txt /HIDE
```

To create the file ruleselectionfile.cfg:

Click **Tools→Generate <u>C</u>ommand-Line Files→Static Checker Options**. The Static Checker Dialog will be displayed. Turn those rules ON for which the static checker should generate the report.

Click Check. The "Save Static Checker Report Settings" dialog will be displayed.

Browse and select the folder and enter the filename. Click Save. A confirmation message will be displayed. Click "OK"

5. Format Files

An example of the Command Line:

```
CrystalREVS.exe /FORMAT projectfile.sur [/OPTN formatoptions.fmt] /HIDE
```

To create the file formatoptions.fmt:

The file "formatoptions.fmt" is basically a format-scheme file. The formatting parameters are contained in the format-scheme. As such the formatting scheme is an integral part of all project files. You need to specify a formatting scheme only if you want to format the project files in a way that is different from the scheme adopted while formatting the current project source files.

You can generate a format scheme with the following sequence:
a.   Click Tools→Options and go to the Options Dialog
b.   In the Format Settings node of the options tree, change the settings as per your preference
c.   Click OK and close the Options dialog
d.   Click Tools→Format Options→Export and export the current settings to a file – say formatoptions.fmt.
e.   Now the file formatoptions.fmt. can be used to format any project's source files.

6. Parse Files

An example of the Command Line:

```
CrystalREVS.exe /PARSE projectfile.sur /HIDE
```

This operation does not need an options settings file.

C) Create a Batch File that contains the command-line

Entering a command-line with long folder and file names can be quite tedious. In Crystal C/C++, you can create a batch file that contains the command line.

To create a batch file:

Click **Tools→Generate Command-Line Files→Generate Batch Files**. The Generate Command Line Batch file dialog will be displayed.

In the **Command** drop-down list, select the operation you wish to perform.

In the **Project** combo box, provide the path+name of the project file.

In the **Setting File** box, provide the path+name of the Options Settings file. If you have not created it yet, click the <Generate> button to create the Options Settings file as described above.

In the **Output** box, provide the path+name of the output file.

If you wish to hide the operation progress-display during execution, select the "**Suppress Progress bar**" box.

Click **Save**. The "Save command line batch file" dialog will be displayed.

Browse and select the folder and enter your choice of batch file name. Click Save. A confirmation message will be displayed. Click "OK"

D) Running a Batch File from Crystal C/C++:

To run any batch file from Crystal C/C++, click **Tools→Run User Batch Files**.

In the Specify Batch file dialog, browse to the folder and select the desired batch file. Then click Proceed. The selected batch file will be executed. Also, you can run the batch file from outside the Crystal environment.

E) Task bar indication, abort operation:

When Crystal C/C++ is working in the Command line mode, a notification icon is displayed in the notification area (bottom right corner) of the TaskBar. You can Show/Hide the progress bar or exit the Command line mode operation using this icon.

F) Help on he Command Line Format:

Help on command line format is available by typing /? after the Crystal executable name on the command line as follows:

```
CrystalCREVS /?  and press enter.
```