

Tutorial-Execute Commands cmdutils- Using RunPluginEntry_cu and Parent-Child Plugins

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Using the RunPluginEntry_cu command in Execute Commands/cmdutils.

RunPluginEntry_cu is a command defined in the plugin **cmdutils** which can be executed by the plugins **Execute Commands** and **Run Command Macros**, or it can be included in a generated Command Plugin.

It allows you to call a routine in a specially designed **Parent** plugin, bypassing its dialog. A **Parent** plugin is one designed so that its dialog settings are isolated from the rest of the code, and the main processing routine can be called either within itself or from another plugin which only depends on the settings being passed not it, not on any global settings.

At the time of writing I have 3 published plugins that can be called this way: **Filter Notes By Duration**, **Filter Notes By Positions**, **Filter Notes By Beat**, **Flip Selected Notes**, and **Filter with Deselect**. You can call the appropriate entry point (usually marked with an **API_** prefix, such as **API_ProcessSelection**) in any of these plugins with an appropriate set of dialog properties.

One of the purposes of writing **RunPluginEntry_cu** is to empower a user to write a plugin using that model, and then call into the Parent plugin with a Command Macro or Command Plugin in **Execute Commands**. No changes will need to be made to **cmdutils** or **Execute Commands** or **Run Command Macros** to handle these new commands. To all those plugins, it is just another command.

In this document I will describe the easy way to use **RunPluginEntry_cu** with these plugins. For more details and options, see the document **RunPluginEntry_cu and Parent-Child Plugins**.

RunPluginEntry_cu is effectively a universal Child Plugin for any plugin method that accepts its parameters through a Dictionary of named fields.

The format for this command is:

```
RunPluginEntry (<plugin command id>, <Entry point name>, strName1, strVal1, strName2, strVal2, ... strNamen, strValn)
```

Fields are separated by a comma, followed by zero or more spaces.

Rather than creating the command string by hand, we will use code in appropriately structured plugins to do that for us.

Here is the dialog for the plugin **Filter Notes By Position**. The dialog options currently chosen are:

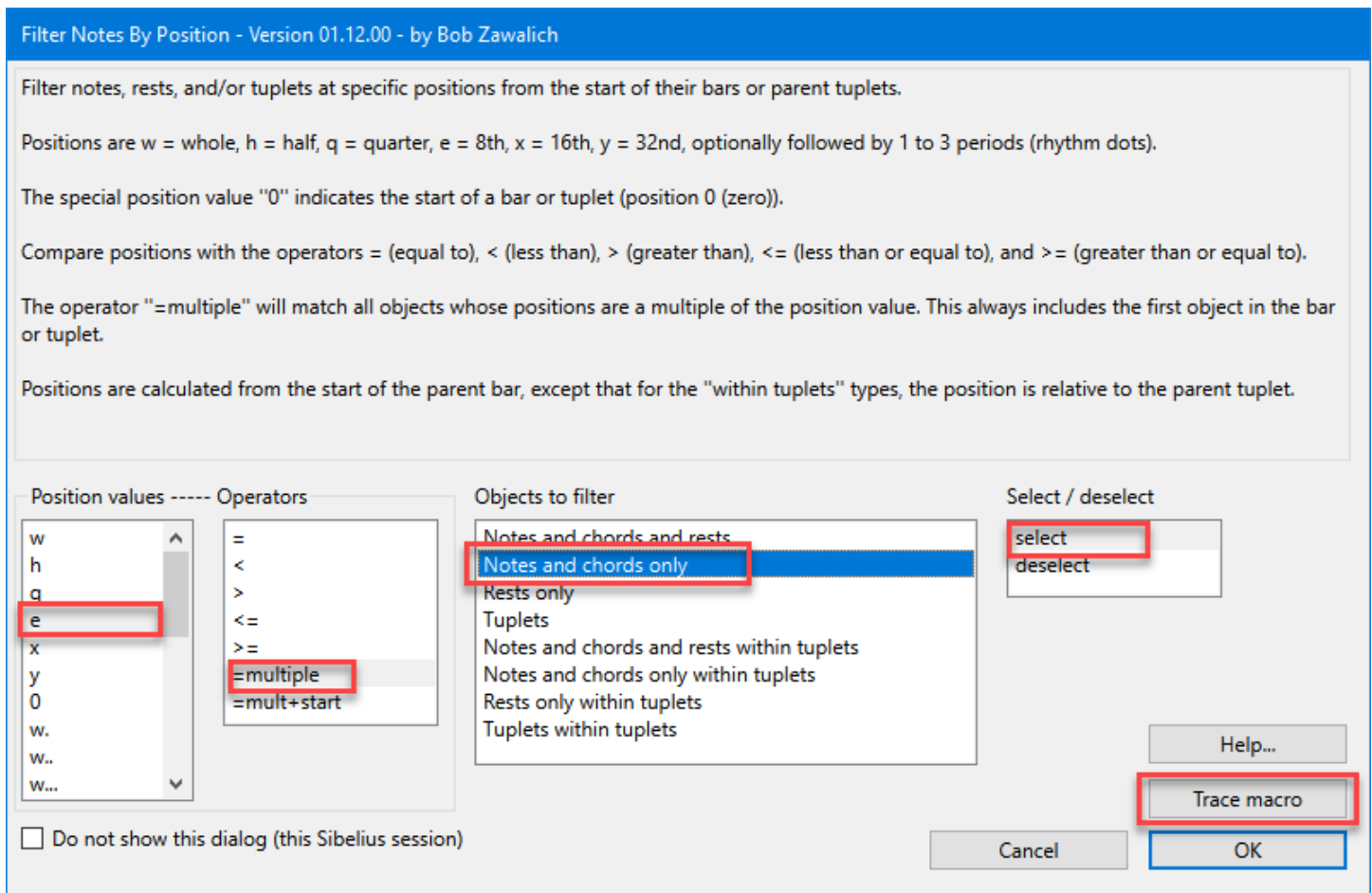
strPosition: e

strOperator: = multiple

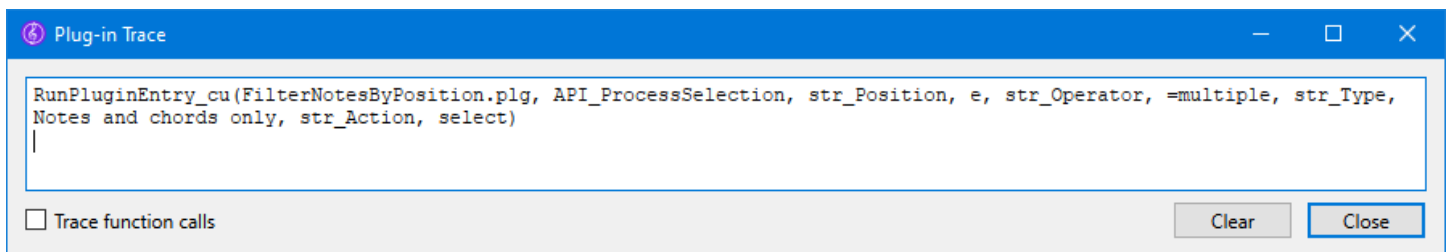
strType: Notes and chords only

strAction: select

These settings are described in the document **New Plugins for filtering notes by duration or position**.



If you press the **Trace Macro** button, you will see a trace window with a command line written in it, containing the current dialog settings, plus the plugin and entry point routine names:



Once you have the command line, perform the following steps

- Go to the trace window, and select the command line (stopping at the final closing parenthesis), and copy it with ctrl/cmd+c.
- Run **Execute Commands** and choose the **Add new command...** button, which will bring up a dialog with an edit box.
- Paste the copied command line using ctrl/cmd+v into the edit box.
- Click ok, and the command will be added to the bottom of the Command List.
- If this is the only command you need to run, press **Export List** to create a macro file, or **New Plugin** to generate a new plugin file.

- If you generate a new plugin you will need to close and restart Sibelius before using the plugin.

The command line is too wide for the list box; you can hover over it to get the full line to display, or you can click on **Edit Command**, which has a wider dialog, and examine it there.

At this point the command line is like any other command in **Execute Commands**. You can add additional commands to the Command List.

You can execute the command(s) directly using the **Execute Command List** button. You can save the List to a macro (.dat) file with **Export List**. You can create a new plugin that will run this command with **New Plugin**.

Once a .dat file is created, you can run the macro either with the **Execute Command List** button in **Execute Commands**, or you can find it in the lists in **Run Command Macros**, or if you had used **New Plugin**, once you close and restart Sibelius you can run that plugin as you would any other plugin.

If you want to use a different set of dialog options, run **Filter Notes By Position** again, change the dialog options, click on **Trace Macro** and repeat the process. You can also call **Filter Notes By Position** with its dialog showing directly from a macro if you want to have all the options available at once.

For details about writing your own Parent plugin that can be called this way, see the document **Parent-Child plugins**.