

# Creating a new SimpleCmd

Creating a SimpleCmd and adding it to the QubeGUI is a relatively straight-forward process. Since the QubeGUI will scan the simplecmds directory for any Python files, it will pick up any newly developed files. These files will contain a create() command that returns a list of SimpleCmd objects.

1. Open the simplecmds directory ([SimpleCmds Location](#)).
2. Create a text file with a Python (.py) extension and open it in your preferred text editor.
3. Add an import SimpleCmd to the top of the file. Then write a create() function that returns an array of SimpleCmd instances.
4. For testing purposes, add an if `__name__ == '__main__':` so the submission dialog can be launched directly by running `Python _script.py`.  
Here is a simple example:

## Example

```

import sys

# You will need to have your PYTHONPATH, PATH, or modify sys.path
# in such a way that this import is possible. The path should be
# $QBDIR/api/python/qb/gui
from simplecmd import SimpleCmd

# user defined simpleCmds *must* define a create method.
def create():
    # This creates a simpleCmd called "Example Echo"
    # hasRange=False means that this will be a cmdline job - only one
    # command for the job
    # canChunk=False means that there is no chunking option. This is
    # implied by hasRange=False.
    # help='...' provides the mouse-over tool tip and auto-generated
    # documentation.
    cmdjob = SimpleCmd('Example Echo', hasRange=False,
                       canChunk=False, help='basic echo test')

    # Adding an option group creates a collapsable, named section in
    # the submission UI. It is purely cosmetic.
    cmdjob.add_optionGroup('Main options', collapsed=False)

    # add_option is the way to add parameters to the submission UI.
    # This one is of type 'string' which means a text field will be displayed
    # and associated with a variable called, in this case, 'message'.
    # The 'default' parameter pre-populates the field with the given text. If
    # the text is not changed, the value will be ignored. Had we used 'value'
    # instead of 'default', the given value will always be used, regardless of
    # whether or not it was changed by the user.
    # The 'required' parameter tells the submission UI that this field must be
    # populated with a non-default value in order for the submission to happen.
    # it will also color the field red.
    cmdjob.add_option('message', 'string', 'Message to echo',
                     default="Default message goes here", required=True)

    # This is the command template. '%(message)s' will be replaced with
    # a parameter called 'message'. We defined that parameter just above.
    cmdjob.command = 'echo %(message)s'

    # The create method *must* return a list of the SimpleCmd(s) it creates.
    return [cmdjob]

if __name__ == '__main__':
    import wx
    import submit
    import logging
    import simplecmd logging.basicConfig(level=logging.DEBUG)
    app = submit.TestApp(redirect=False)
    cmds = create()

    for cmd in cmds:
        simplecmd.createSubmitDialog(cmd)

    app.MainLoop()

```

5. Launch the QubeGUI. The new SimpleCmd should show up under the **Submit** menu.