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# **ButtleOFX Documentation**

***Release 1.0***

**ButtleOFX Team**

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**buttleofx.core.undo\_redo.commands.node.cmdSetCoord module**

**class buttleofx.core.undo\_redo.commands.node.cmdSetCoord**(*graphTarget*,  
                  *nodeTargetName*,  
                  *newCoord*)

Bases: *buttleofx.core.undo\_redo.manageTools.undoableCommand.UndoableCommand*

Command that moves a node. Attributes : - graphTarget - nodeTargetName : the name of the target node which will be changed by the movement - newCoord : the coordinate which will be modified in the target - coordOld : the old coordinate of the target node, which will be used for reset the

target in case of undo command

**doCmd()**

Executes the movement of the node.

**getLabel()**

**redoCmd()**  
Redoes the movement of the node. Just calls the doCmd() function.

**undoCmd()**  
Undoes the movement of the node. The target node is reset with the old coordinates.

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**class buttleofx.core.undo\_redo.manageTools.commandManager.CommandManager**  
Bases: quickmamba.patterns.singleton.Singleton

Manages a list of commands.

**active = False**

**canRedo()**

Retrieves a Boolean indicating whether a command can be redone.

**canUndo()**

Retrieves a Boolean indicating whether a command can be undone.

**clean()**

Clears this command manager by emptying its list of commands.

```

cleanIndex = 0
commands = []
count ()
    Gets the number of commands in the CommandManager.

countRedo ()
    Gets the number of redo commands in the CommandManager.

countUndo ()
    Gets the number of undo commands in the CommandManager.

getCleanIndex ()
    Gets the clean index of the CommandManager.

getCommands ()
    Gets the list of commands of the CommandManager.

getIndex ()
    Gets the index of the lastest command in the CommandManager.

getRedoLimit ()
    Gets the redo limit of the CommandManager.

getUndoLimit ()
    Gets the undo limit of the CommandManager.

graphHadChanged ()
    Indicates to ButtleData that a command just had been done. This function will update the property graph-
    CanBeSaved of ButtleData and will change the display of the “Save Graph” icon.

index = 0
isActive ()
    Tests if the CommandManager is active.

isClean ()
    Tests if the list of commands is empty.

push (newCommand)
    Executes a new undoable command (add command to the stack ?)

redo ()
    Redoes the last undone command.

redoLimit = 10
savedGraphIndex = 0
setActive (active=True)
    Sets the CommandManager activity (true to false, or false to true).

setRedoLimit (limit)
    Sets the redo limit of the CommandManager.

setSavedGraphIndex (index)
    Sets the index where the graph was when last saved, and indicates to buttleData that something changed
    (useful for the display of the “Save Graph” icon)

setUndoLimit (limit)
    Sets the undo limit of the CommandManager.

undo ()
    Undoes the last command.

```

**undoLimit = 10**

**buttleofx.core.undo\_redo.manageTools.groupUndoableCommands module**

**class buttleofx.core.undo\_redo.manageTools.groupUndoableCommands** (*commandLabel*)

Bases: `object`

Group of objects saved in the Command Manager.

**doCmd()**

Executes the user request (the group of functions). Returns nothing, maybe need to be improved in the future (list of return value of each command?).

**getLabel()**

Return what does the command undo/redo

**groupUndoableCommands = []**

**redoCmd()**

Undoes the operations performed by undoCmd method.

**undoCmd()**

Executes the user request (Ctrl Z) (undo a group of commands).

**buttleofx.core.undo\_redo.manageTools.undoableCommand module**

**class buttleofx.core.undo\_redo.manageTools.undoableCommand** (**UndoableCommand**)

Bases: `object`

Object saved in the Command Manager.

**doCmd()**

Executes the user request (the true function)

**getLabel()**

Return what does the command undo/redo

**redoCmd()**

Undoes the operation performed by undoCmd method (Ctrl Y)

**undoCmd()**

Executes the user request (Ctrl Z)

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##### buttleofx.core.undo\_redo.tests.Vec2d package

#### Subpackages

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### **buttleofx.core.undo\_redo.tests.Vec2d.commands.cmdAdditionVec2d module**

#### **buttleofx.core.undo\_redo.tests.Vec2d.commands.cmdChangeVec2d module**

```
class buttleofx.core.undo_redo.tests.Vec2d.commands.cmdChangeVec2d.CmdChangeVec2d(vec2d_target,  
                                 new_x,  
                                 new_y)
```

Bases: `object`

Command which enable us to change the coordinates of a Vector2d

**doCmd()**

Executes the vector's change

**redoCmd()**

Redoes the vector's change

**undoCmd()**

Undoes the vector's change

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## Submodules

### **buttleofx.core.undo\_redo.tests.Vec2d.vec2d module**

```
class buttleofx.core.undo_redo.tests.Vec2d.vec2d.Vec2d(x, y)
```

Bases: `object`

Vector with 2 dimensions : x y

**getX()**

Gets the x coordinate

**getY()**

Gets the y coordinate

**setX(new\_x)**

Sets the x coordinate

**setY(new\_y)**

Sets the y coordinate

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Bases: `threading.Thread`

Specific class for ActionManager. Can't be used somewhere else. It's not generic. Object used to execute actions with multi-threading.

```
static destroy()  
executeTask()  
getIndexFromList(list, idItem)  
isDestroyed = False  
isWaiting = False  
lockInProgress = <_thread.lock object>  
static lockWhileWaiting()  
run()  
static wait()  
static work()
```

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