

# **Nautilus-Actions Configuration Tool User's Manual**

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### Abstract

Nautilus-Actions is a Nautilus extension whose principal function is to allow the user to add arbitrary actions to the file manager context menus. These actions may be organized in menus and submenus, exported and shared with other desktop environments.

This manual describes the Nautilus-Actions Configuration Tool user interface, and explains how you may configure your menus and actions, making them be displayed and applied depending on specific conditions.

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## 1 Introduction

Nautilus-Actions is a Nautilus extension whose principal function is to allow the user to add arbitrary actions to the file manager context menus. These actions may be organized in menus and submenus, exported and shared with other desktop environments.

The Nautilus-Actions Configuration Tool application is the user interface which lets you precisely configure how, where and when your actions should appear in Nautilus context menus, and how they will be executed.

Nautilus-Actions Configuration Tool provides the following features:

- Define and configure actions from scratch.
- Organize actions into menus, submenus and so on.
- Import and export actions and menus from and to outside world.

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### Note

Nautilus-Actions also comes with additional features such as:

- A Nautilus plugin which exports in real time to D-Bus the currently selected files.
- A command-line program which is able to run any action.  
Associated with the D-Bus interface, this program lets the user run any action from a keyboard shortcut, applying this action to the item(s) currently selected in the file manager.
- A command-line program which is able to create a new action.

All these features are more thoroughly described in the global Nautilus-Actions documentation.

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## 2 Getting Started

### 2.1 Starting Nautilus-Actions Configuration Tool

You can start Nautilus-Actions Configuration Tool in the following ways:

**System menu** Choose Preferences → Look and Feel → Nautilus-Actions Configuration Tool.

**Command line** To start Nautilus-Actions Configuration Tool from a command line, type the following command:

```
nautilus-actions-config-tool
```

then press **Return**.

---

### Tip

To view available command line options, type:

```
nautilus-actions-config-tool --help-all
```

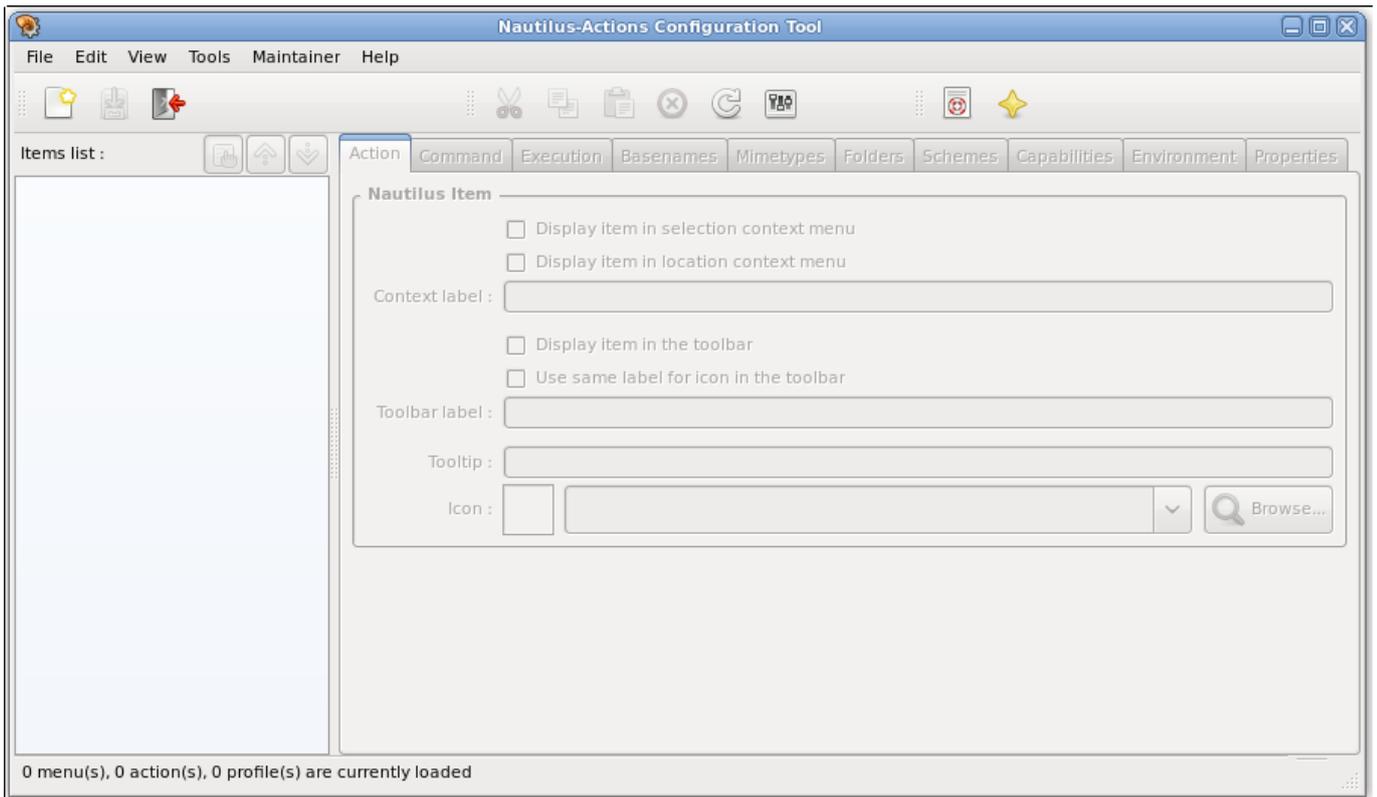
then press **Return**.

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### 2.2 The first run

When you start Nautilus-Actions Configuration Tool, the following window is displayed.

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*The empty Nautilus-Actions Configuration Tool main window*

Figure 1: Nautilus-Actions Configuration Tool Start Up Window

The Nautilus-Actions Configuration Tool main window contains the following elements:

**Menubar.** The menus on the menubar contain all of the commands you need to use in Nautilus-Actions Configuration Tool.

Shortcuts are available for some commands:

- Ctrl-N** Create a new action.
- Ctrl-S** Save modified actions and menus.
- Ctrl-Q** Quit the application.
- Ctrl-X** Cut the current selection, keeping it in the clipboard.
- Ctrl-C** Copy the current selection to the clipboard.
- Ctrl-V** Insert the content of the clipboard before the current item.
- Shift-Ctrl-V** Insert the content of the clipboard as subitem(s) of the current item.
- Delete** Delete the current selection.
- F5** Reload the actions and menus.
- F1** Display the help.

**Toolbar.** Several toolbars may be displayed below the menubar, depending of your choices in the View → Toolbars submenu.

**Items list.** The list on the left of the main window contains all items, whether they are actions or menus, currently available for edition in Nautilus-Actions Configuration Tool.

Items may be sorted in ascending or descending alphabetical order, or not sorted at all, being directly organized and managed by the user.

Invalid items are displayed in red color.

Modified items are displayed in italic characters.

**Sort buttons** Three buttons allow you to toggle between sort modes.

**Properties tabs.** The right part of the main window displays all is needed to define how, when and where actions and menus should be displayed.

**Action/Menu** Define in which Nautilus menus the item should appear, and how it will be displayed.

**Command** Specify which command to execute, and which parameters pass to it.

**Execution** Specify how the command should be executed.

**Basenames** Define the basename filters the Nautilus selection must satisfy in order the action or menu be candidate for display.

**Mimetypes** Define the mimetype filters the Nautilus selection must satisfy in order the action or menu be candidate for display.

**Folders** Define the folder filters the Nautilus selection must satisfy in order the action or menu be candidate for display.

**Schemes** Define the scheme filters the Nautilus selection must satisfy in order the action or menu be candidate for display.

**Capabilities** Define the capability filters the Nautilus selection must satisfy in order the action or menu be candidate for display.

**Environment** Define some environment conditions the Nautilus selection must satisfy in order the action or menu be candidate for display.

**Properties** Display item properties.

**Statusbar.** The statusbar displays some status informations about the currently selected row in the items list.

When no relevant information is to be displayed, the statusbar displays the count of loaded menus, actions and profiles.

The « read-only » icon  is displayed in the right of the statusbar when appropriate.

## 2.3 Creating your first action

In this example, we are going to create an action which displays some pretty informations about the current selection.

**Checking for prerequisites** This action will require Zenity.

Zenity is a program which will allow you to create a graphical user interface from a command-line.

You should check that this program is installed on your system, by example by typing the following command in a terminal:

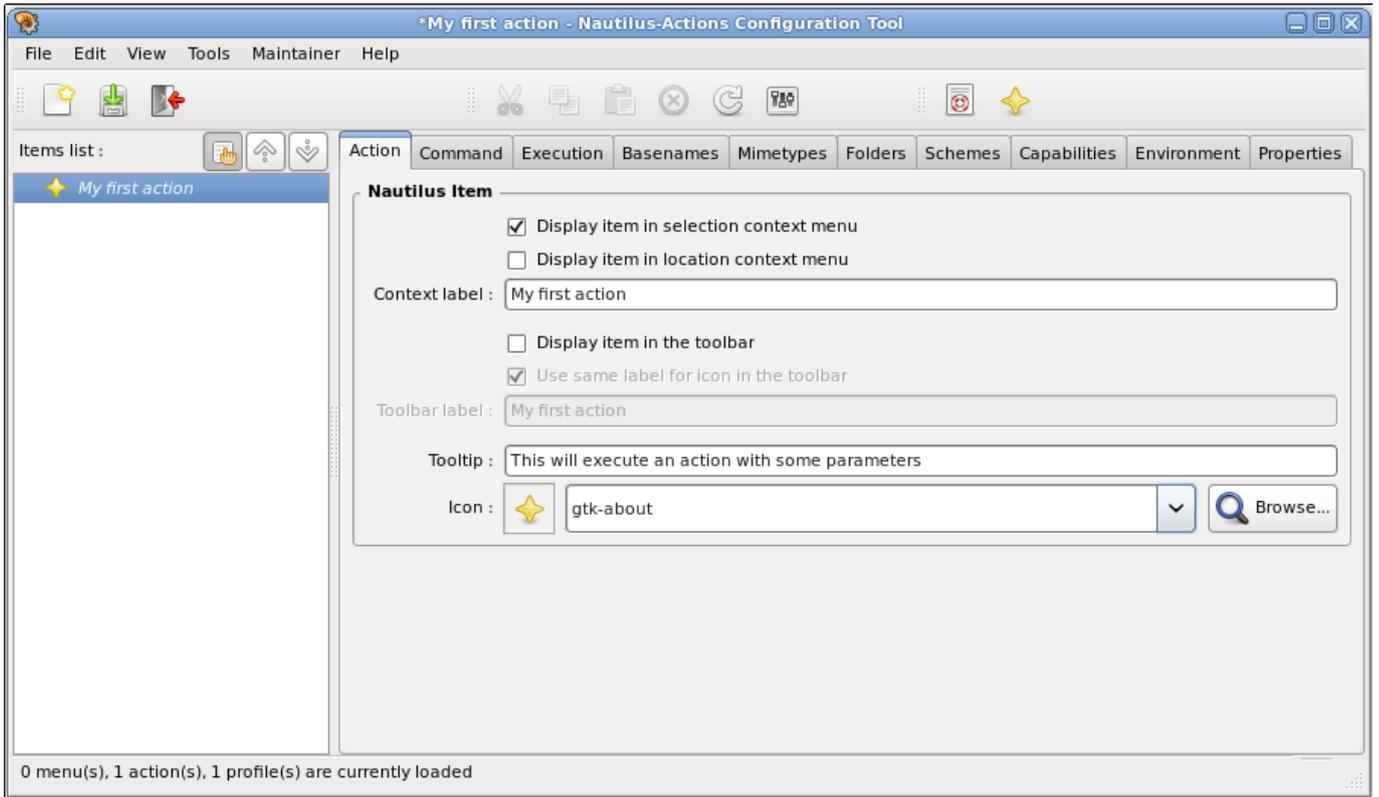
```
zenity
```

then press **Return**.

**Creating the action** To create a new action, choose File → New action (**Ctrl-N**).

A new action is inserted in the items list, and its properties are displayed in the tabs on the right pane.

The label of the currently edited action (this one) is added to the application name in the title bar.



*Default properties of a new action*

Figure 2: Default properties of a new action

In the Items list, the new action is displayed in italic characters.

Italics are used as a reminder that the item has not yet been saved.

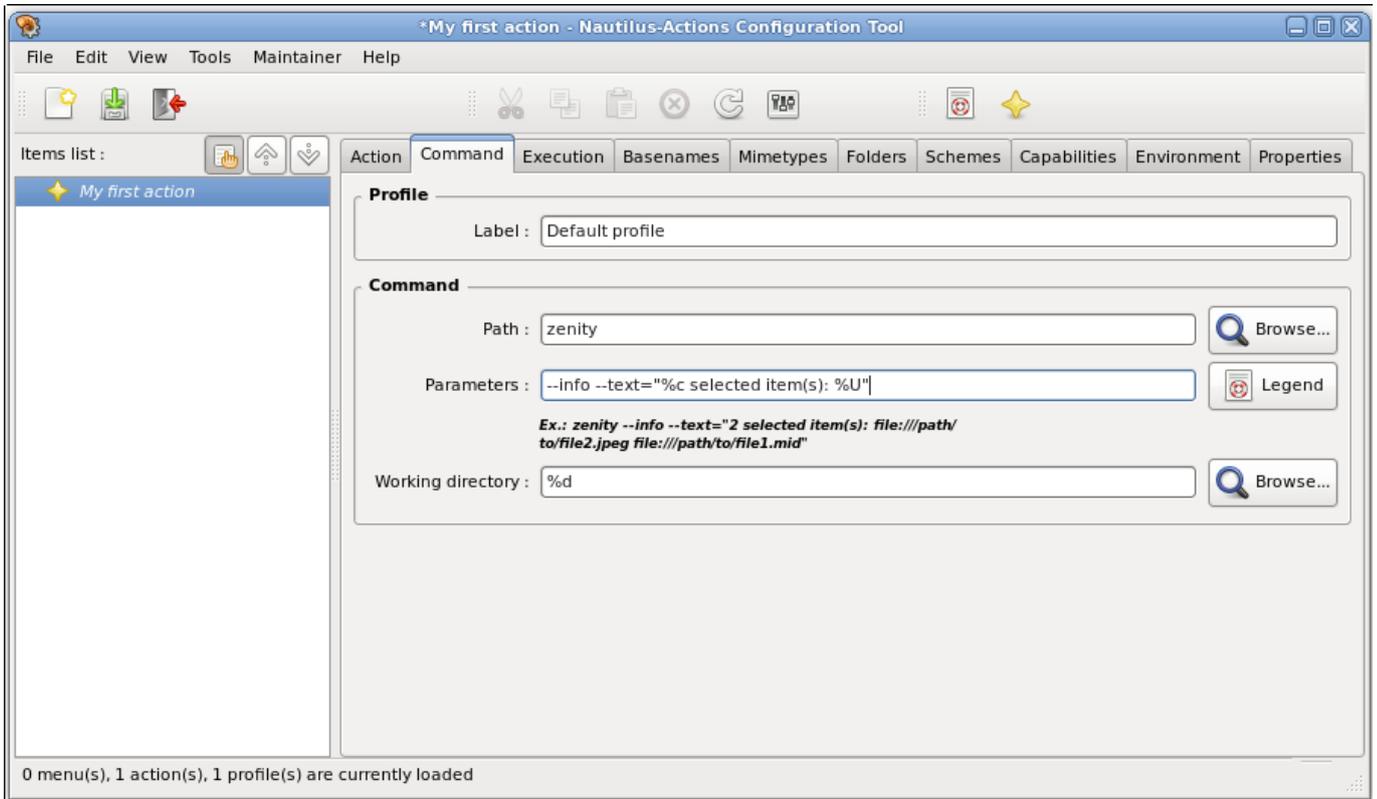
As another reminder that there is some pending modifications, an asterisk (« \* ») comes to prefix the application name in the title bar.

**Qualifying your new action** It merely consists of choosing how your action will be displayed in the file manager context menu.

- Enter **My first action** in the Context label entry box.  
The Context label entry box contains the label of the action as you want it to be displayed in the file manager context menu. The label is a mandatory property of your action. If it happens to be empty, then your action will be considered as invalid by Nautilus-Actions: it will be displayed in red in Items list and will never be candidate to be displayed in the file manager context menus.
- Enter **This will execute an action with some parameters** in the Tooltip entry box.  
The Tooltip entry box contains the text you want to be displayed as a short help to your action.
- Select  **About** in the Icon drop-down list.  
The Icon selection defines the icon which will be associated with your action in file manager context menus and in the toolbar. You have two ways of choosing the icon associated to your action:
  - Click on the Icon drop-down list to select an icon.
  - Click on Browse to search for an image in the filesystem.

**Specifying the command to be executed** When you will select your action in the file manager context menu, this command will be executed, with arguments of your choice.

Click on the Command tab to show the page which will permit you to enter the command.



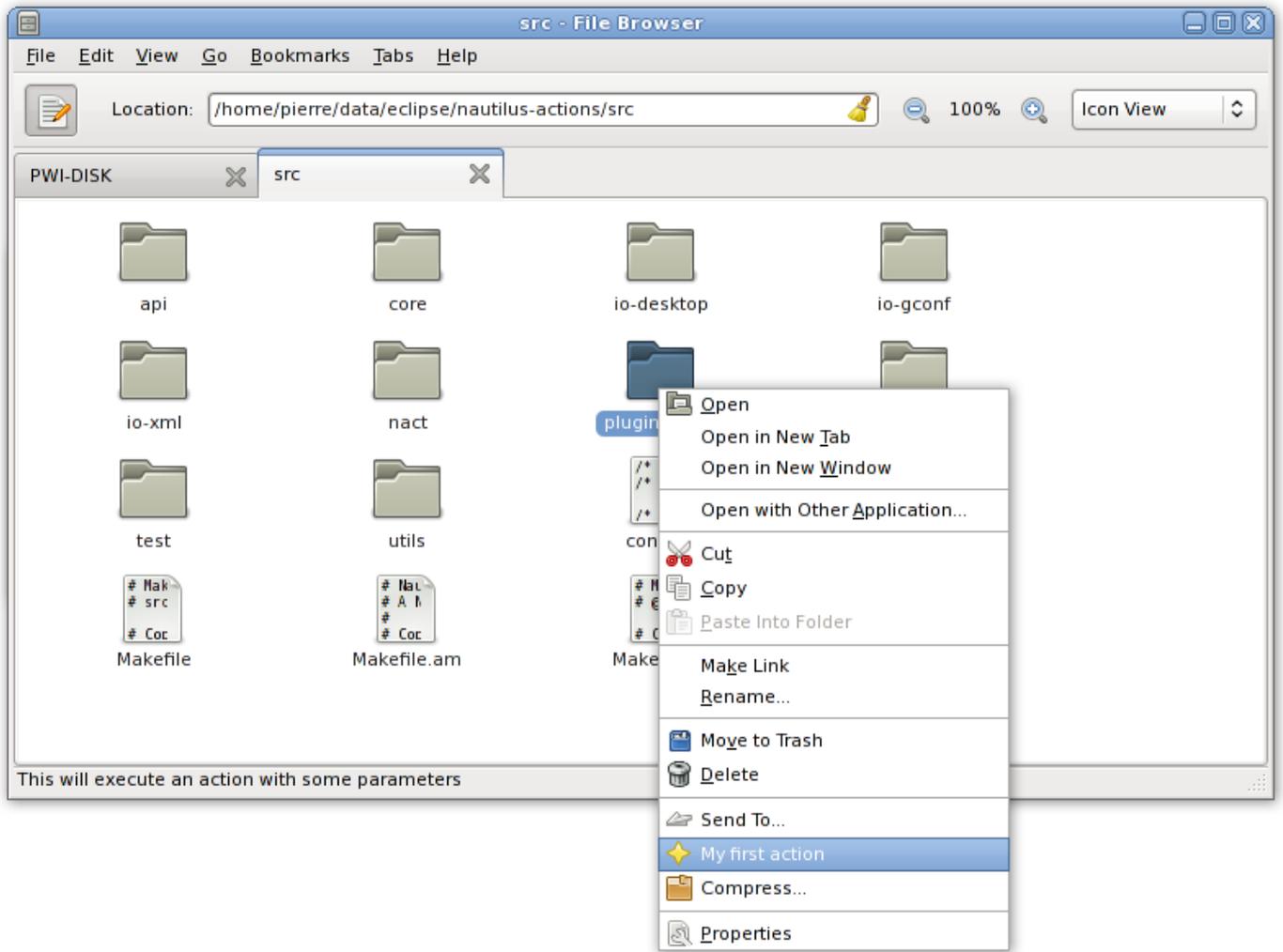
Command page

Figure 3: Command page

- Enter **zenity** in the Path entry box.  
The Path entry box defines the command which will be executed when you will select your action in the file manager context menu.  
You have two ways of defining the command to be executed:
  - Enter it in the Path entry box.
  - Click on Browse to select the executable file on the filesystem.If the command you enter does not have an absolute path, then it will be searched for in the `PATH` variable at execution time.
- Enter **--info --text='%c selected item(s): %U'** in the Parameters entry box.  
The Parameters contains the arguments which will be passed to your command when it will be executed. These arguments may embed parameters which will be expanded at runtime.  
If both Path and Parameters are empty, then this action will be considered as invalid: it will be displayed in red in Items list and will be never be candidate to be displayed in the file manager context menus.

**Saving** To save all pending modifications, choose File → Save (**Ctrl-S**).

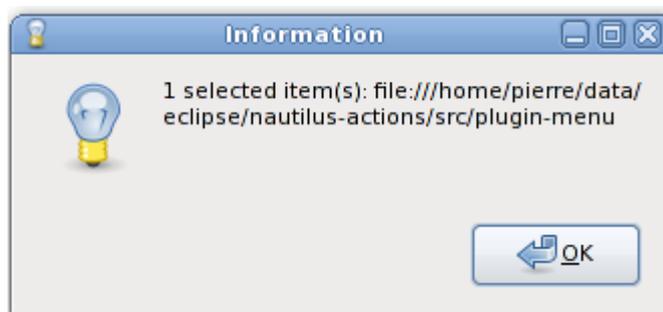
Nautilus automatically takes into account your new action, and displays it in its context menu.



*Your first action in the Nautilus context menu*

Figure 4: Your first action in the Nautilus context menu

Clicking of the item in the Nautilus context menu activates it, and executes the corresponding command.



*The result of the execution of your first action*

Figure 5: The result of the execution of your first action

## 3 Using Nautilus-Actions Configuration Tool

### 3.1 Defining the conditions

Whether your action will eventually be displayed in Nautilus file manager context menus or in its toolbar depends on the conditions you will have defined for it.

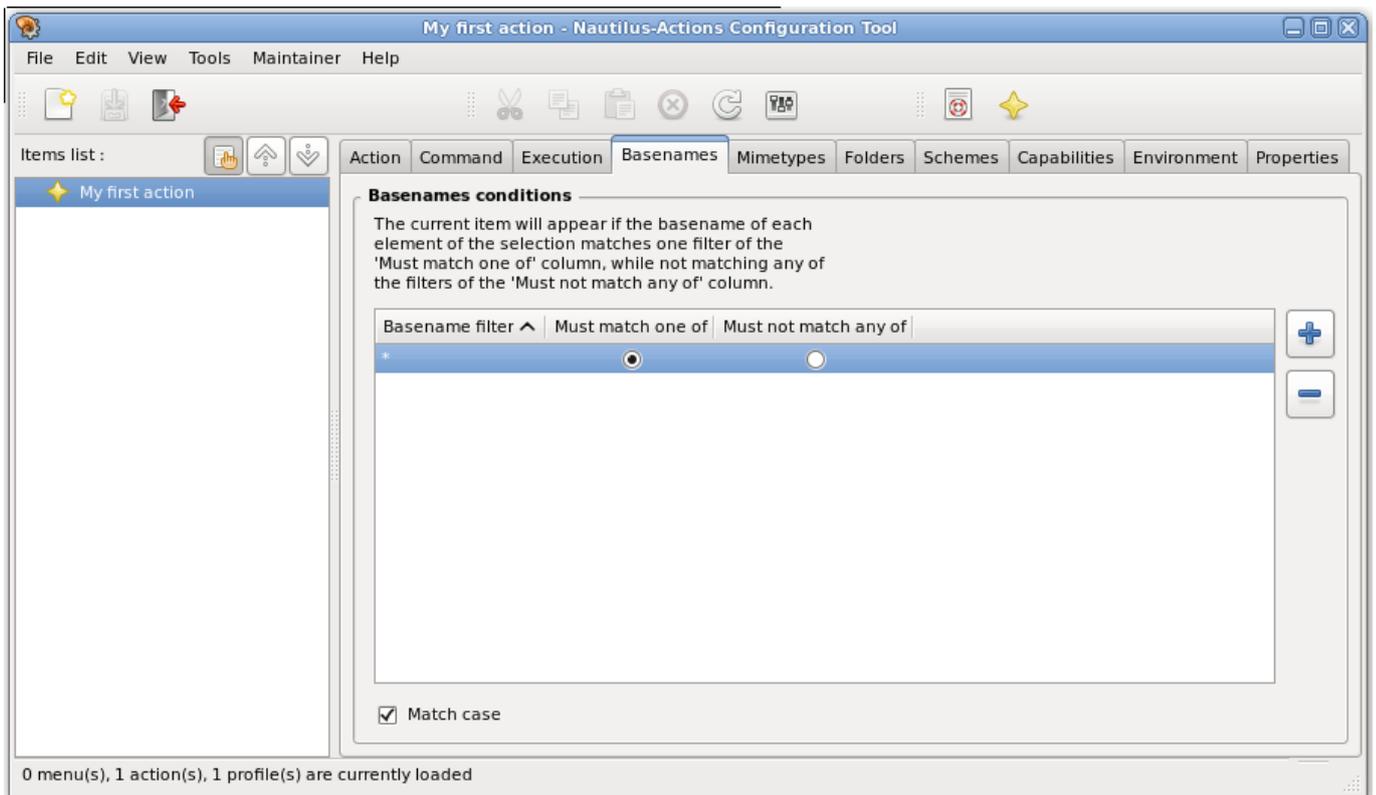
Conditions may be put against the location the file manager currently points to, or against the currently selected items in this location.

Each time the selection or the location change in the file manager, Nautilus-Actions checks all your actions, comparing the defined conditions against the new location and selection: all defined conditions must be satisfied in order your action be actually displayed.

#### 3.1.1 Basename-based conditions

You may decide that your action will appear depending on the basenames of the items currently selected in the file-manager: you may define that each item of the selection must meet some sort of basename, and you may simultaneously decide that none of the selected item(s) can have some other sort of basename.

Click on the Basenames tab to show the page which will permit you to configure your basename-based conditions.



*The basename-based conditions tab*

Figure 6: Basename-based conditions

In fact, basename-based conditions are built as a list of « must match one of » and « must not match any of » patterns. In order for your action to be a candidate regarding these basename-based conditions, each element of the selection must be valid for all the listed conditions: the basename of each element must match at least one of the defined « must match one of » patterns, and must not match any of the defined « must not match any of » patterns.

If at least one element of the selection does not match all the defined conditions, then your action will not be displayed.

When targeting the selection context menu, your basename-based conditions will be checked against the currently selected items. When targeting the location context menu or the toolbar, your basename-based conditions will be checked against the basename of the current location.

Defining a new basename-based condition involves two steps.

1. Define the new condition filter.

- Press **Insert** or click on  button to insert a new condition filter
- Edit the newly inserted condition filter to the basename you want match.

---

**Tip**

A basename-based condition may use « \* » or « ? » wildcard characters.

---

2. Indicates whether this a « must match one of » or a « must not match any of » condition.

Click on the Must match one of or Must not match any of radio button in the same row to set the corresponding condition.

Depending of your target operating system, make sure that the Match case checkbox is activated (or not).

- When activated, all filters are considered as case sensitive, which means that `/my/file` filename is considered distinct from `/My/File` one.

This is the default behavior on Unix-like systems.

- When deactivated, filters are considered as case insensitive, which means that `/my/file` and `/My/File` filenames are considered the same name.

This is most probably what you want if you target some sort of Windows system.

Removing a defined basename-based condition is as simple as selecting it, and pressing **Del** (or clicking on  button).

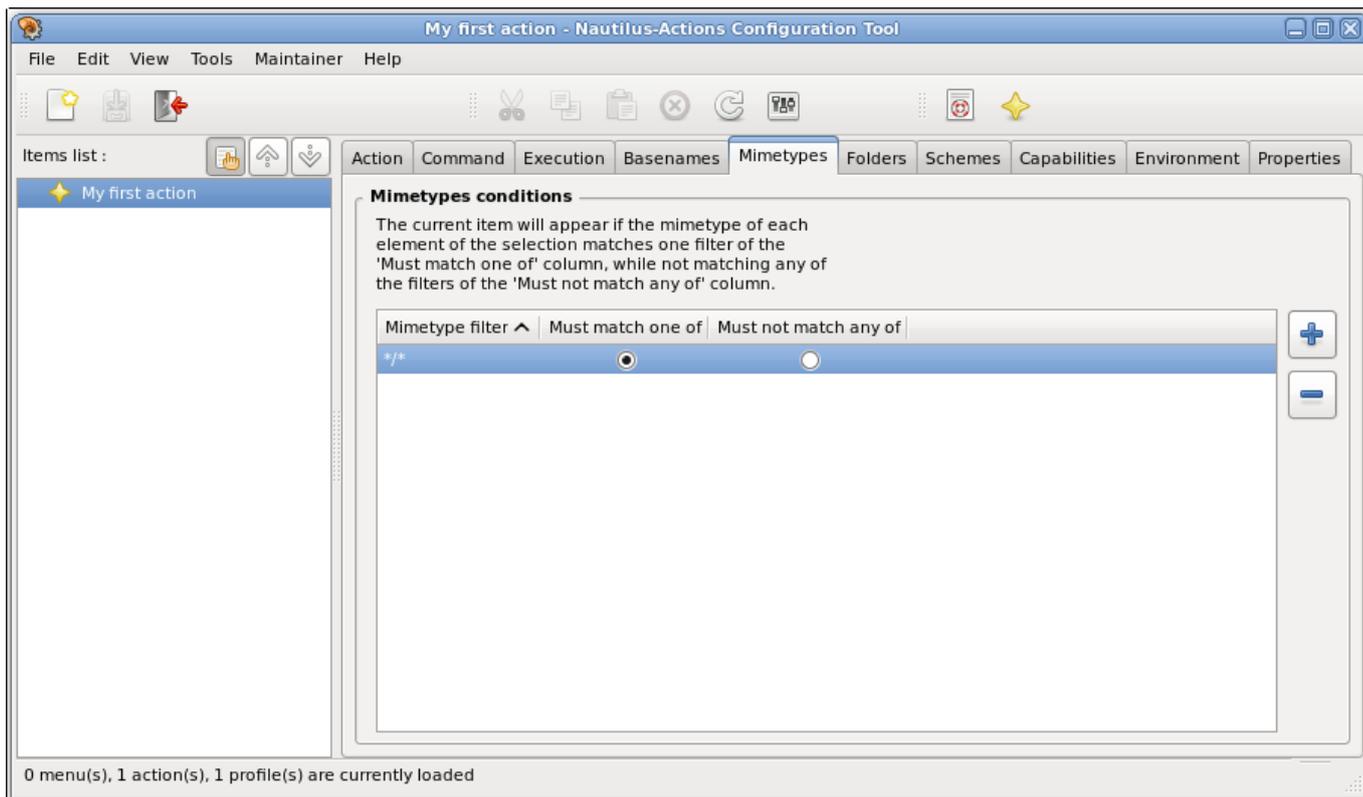
By default, the basename-based condition is just one « must match one of \* » condition. As all basenames always match the « \* » condition, this just means that basename-based conditions are not considered as relevant for the action.

### 3.1.2 Mimetype-based conditions

You may decide that your action will appear depending on the mimetypes of the items currently selected in the file-manager: you may define that each item of the selection must meet some sort of mimetype; and you may simultaneously decide that none of the selected item(s) can have some other sort of mimetype.

Click on the Mimetypes tab to show the page which will permit you to configure your mimetype-based conditions.

---



*The mimetype-based conditions tab*

Figure 7: Mimetype-based conditions

In fact, mimetype-based conditions are built as a list of « must match one of » and « must not match any of » patterns. In order for your action to be a candidate regarding these mimetype-based conditions, each element of the selection must be valid for all the listed conditions: the mimetype of each element must match at least one of the defined « must match one of » patterns, and must not match any of the defined « must not match any of » patterns.

If at least one element of the selection does not match all the defined conditions, then your action will not be displayed.

When targeting the selection context menu, your mimetype-based conditions will be checked against the currently selected items. When targeting the location context menu or the toolbar, your mimetype-based conditions will be checked against the mimetype of the current location, which happens to be the well known « inode/directory » mimetype.

Defining a new mimetype-based condition involves two steps.

1. Define the new condition filter.

- Press **Insert** or click on  button to insert a new condition filter
- Edit the newly inserted condition filter to the mimetype you want match. A mimetype must be defined as a `group/subgroup` expression.

---

**Tip**

The « \* » wildcard is supported only in some situations:

- The « \*/\* » expression matches all mimetypes. As a convenient shortcut, the « \* » literal is also accepted for this same purpose.
  - A `group/*` string matches all subgroups of `group` mimetype.
  - The `*/subgroup` string is not accepted as a valid wildcard.
-

- Indicates whether this a « must match one of » or a « must not match any of » condition.

Click on the Must match one of or Must not match any of radio button in the same row to set the corresponding condition.

Removing a defined mimetype-based condition is as simple as selecting it, and pressing **Del** (or clicking on  button).

By default, the mimetype-based condition is just one « must match one of \*/\* » condition. As all mimetypes always match the « \*/\* », this just means that mimetypes are not considered as relevant for the action.

---

**Example 3.1** Example of usual mimetypes

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**all/all** Matches all items.

**all/allfiles** Matches all regular files.

**inode/directory** Matches only directories.

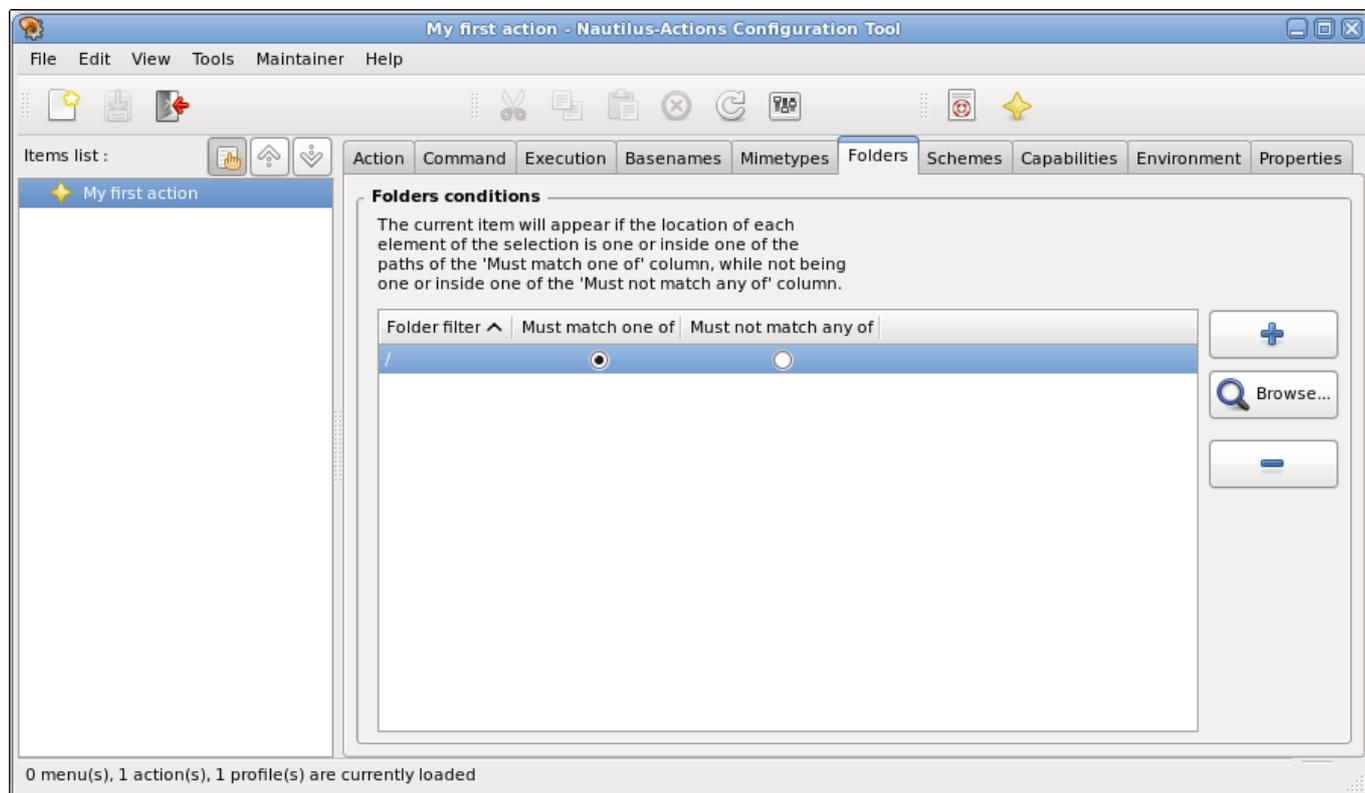
---

### 3.1.3 Folder-based conditions

You may decide that your action will appear depending on the directory the items currently selected in the file-manager are located in: you may define that each item of the selection must be located in one hierarchy or in another; and you may simultaneously decide that none of the selected item(s) can be located in some other hierarchy.

A folder-based condition must be understood as the specification of the hierarchy in which the currently examined item should (or should not) stay: this is a pattern on the dirname of the element.

Click on the Folders tab to show the page which will permit you to configure your folder-based conditions.



*The folder-based conditions tab*

Figure 8: Folder-based conditions

---

In fact, folder-based conditions are built as a list of « must match one of » and « must not match any of » patterns. In order for your action to be a candidate regarding these folder-based conditions, each element of the selection must be valid for all the listed conditions: each element must be located in one of the defined « must match one of » folders, and must not match any of the defined « must not match any of » folders.

If at least one element of the selection does not match all the defined conditions, then your action will not be displayed.

When targeting the selection context menu, your folder-based conditions will be checked against the dirname of each currently selected items. When targeting the location context menu or the toolbar, your folder-based conditions will be checked against the current location.

Defining a new folder-based condition involves two steps.

1. Define the new condition filter.

- Press **Insert** or click on  button to insert a new condition filter
- Edit the newly inserted condition filter to the folder you want match.

---

**Tip**

The « \* » and « ? » characters are accepted as wildcards at any level of the defined folder filter.

---

- Or click on Browse to select a folder on the file system.

2. Indicates whether this a « must match one of » or a « must not match any of » condition.

Click on the Must match one of or Must not match any of radio button in the same row to set the corresponding condition.

Removing a defined folder-based condition is as simple as selecting it, and pressing **Del** (or clicking on  button).

By default, the folder-based condition is just one « must match one of / » condition. As / is always the top of an Unix-like file system, then all selected items always match this condition.

---

**Note**

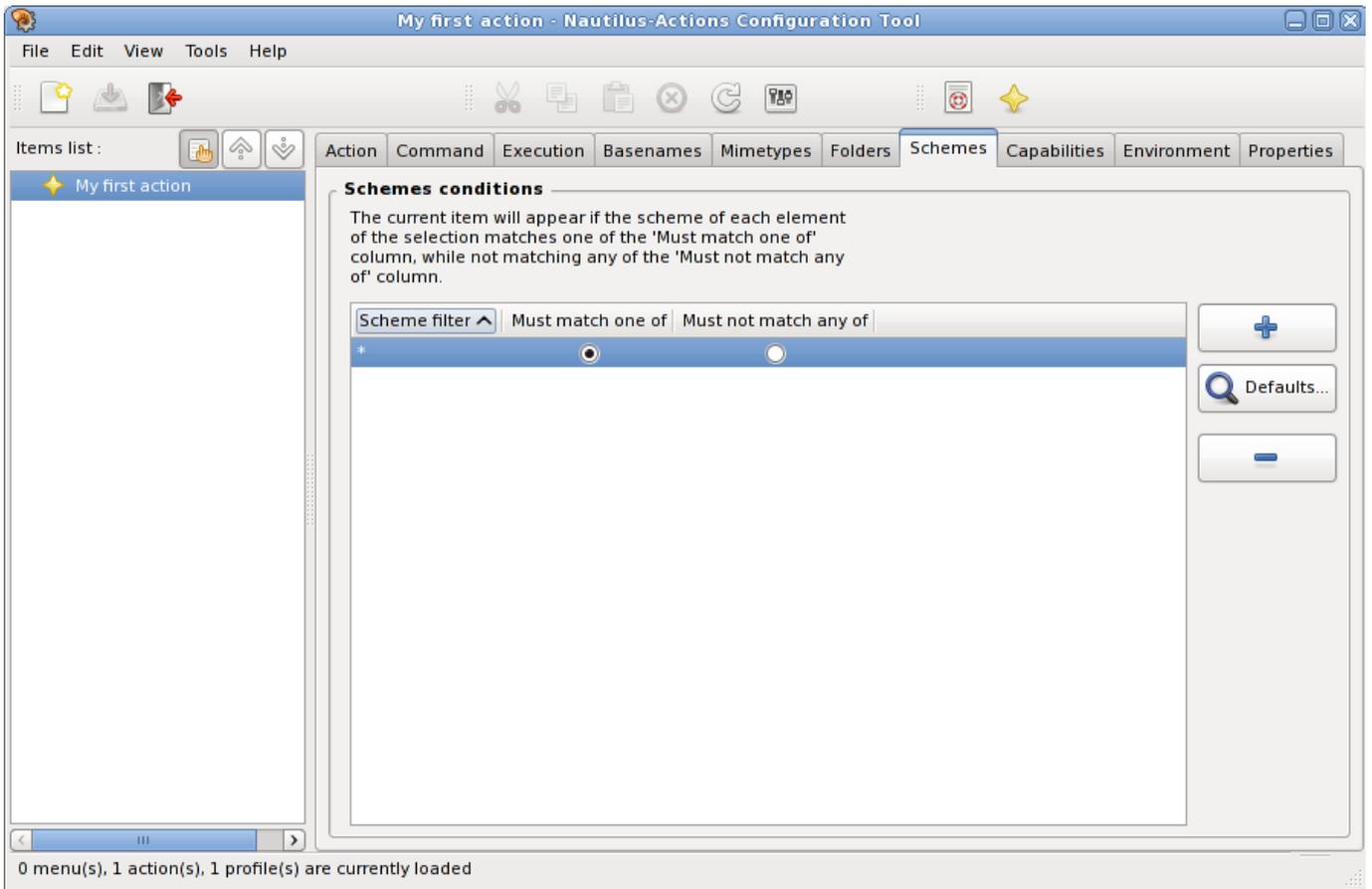
If you target a Windows system, then this default value may not be what you actually want.

---

### 3.1.4 Scheme-base-conditions

You may decide that your action will appear depending on the schemes of the URIs of the items currently selected in the file-manager: you may define that each item of the selection must have some scheme; and you may simultaneously decide that none of the selected item(s) may have some other scheme.

Click on the Schemes tab to show the page which will permit you to configure your scheme-based conditions.



*The scheme-based conditions tab*

Figure 9: Scheme-based conditions

In fact, scheme-based conditions are built as a list of « must match one of » and « must not match any of » patterns. In order for your action to be a candidate regarding these scheme-based conditions, each element of the selection must be valid for all the listed conditions: the scheme of each element must match at least one of the defined « must match one of » patterns, and must not match any of the defined « must not match any of » patterns.

If at least one element of the selection does not match all the defined conditions, then your action will not be displayed.

When targeting the selection context menu, your scheme-based conditions will be checked against the currently selected items. When targeting the location context menu or the toolbar, your scheme-based conditions will be checked against the scheme of the current location.

Defining a new scheme-based condition involves two steps.

1. Define the new condition filter.

- Press **Insert** or click on  button to insert a new condition filter
- Edit the newly inserted condition filter to the scheme you want match.

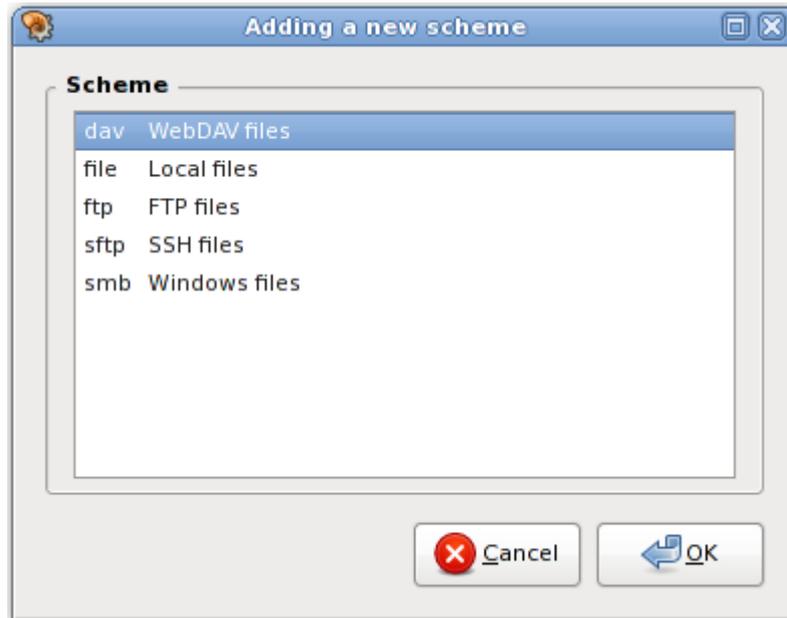
---

**Tip**

Scheme-based conditions only accept « \* » wildcard, which stands for « any scheme ».

---

- Or click on Common to select a scheme among those predefined in Edit → Preferences.



*Selecting a scheme among predefined defaults*

Figure 10: Selecting a scheme among predefined defaults

A new scheme may only be selected here if it is not already defined as a scheme filter.  
To select a new scheme, click OK, or double-click on the desired row.

2. Indicates whether this a « must match one of » or a « must not match any of » condition.

Click on the Must match one of or Must not match any of radio button in the same row to set the corresponding condition.

Removing a defined scheme-based condition is as simple as selecting it, and pressing **Del** (or clicking on  button).

By default, the scheme-based condition is just one « must match one of \* » condition, which means that schemes are not relevant for this action.

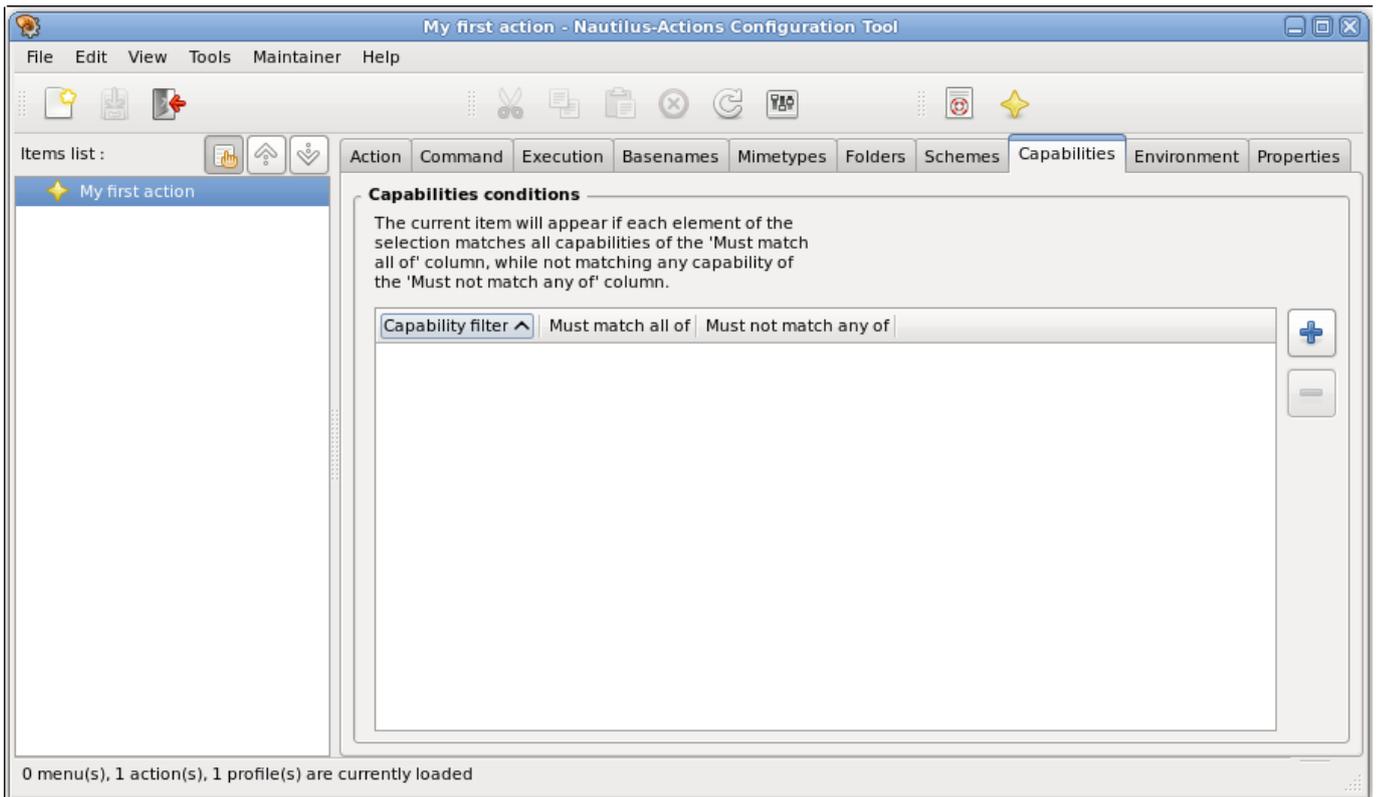
### 3.1.5 Capability-based conditions

Capabilities are some properties that a file may exhibit to the user.

But except for the `Local` capability, all others depend on the user who executes the command.

You may so decide that your action will appear, or not, depending on the capabilities of the selected item(s) vs. the current user.

Click on the Capabilities tab to show the page which will permit you to configure your capability-based conditions.



*The capability-based conditions tab*

Figure 11: Capability-based conditions

In fact, capability-based conditions are built as a list of « must match all of » and « must not match any of » patterns. In order for your action to be a candidate regarding these capability-based conditions, each element of the selection must be valid for all the listed conditions: the capability of each element must match each of the defined « must match all of » capabilities, and must not match any of the defined « must not match any of » ones.

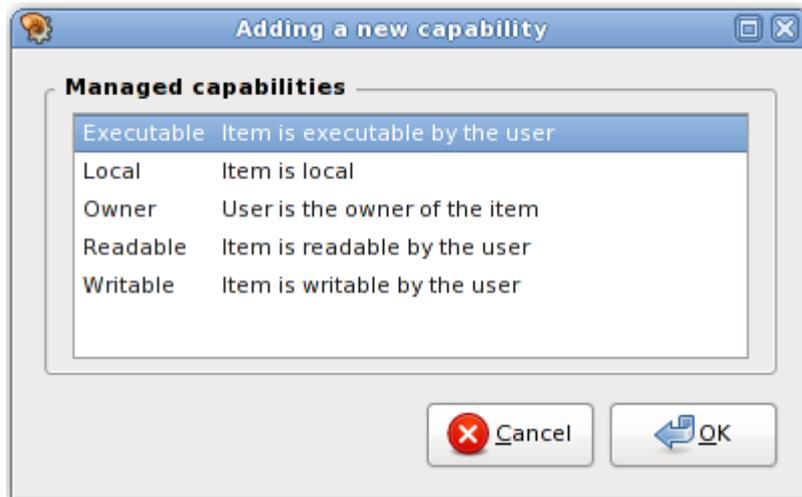
If at least one element of the selection does not match all the defined conditions, then your action will not be displayed.

When targeting the selection context menu, your capability-based conditions will be checked against the currently selected items. When targeting the location context menu or the toolbar, your capability-based conditions will be checked against those of the current location.

Defining a new capability-based condition involves two steps.

1. Define the new condition filter.

- Press **Insert** to insert a new condition filter
- Edit the newly inserted condition filter to the capability you want match.
- Or click on  to open the Adding a new capability dialog box.



*The list of managed capabilities*

Figure 12: Managed capabilities

A new capability may only be selected here if it is not already defined as a capability filter.  
To select a new capability, click OK, or double-click on the desired row.

2. Indicates whether this a « must match all of » or a « must not match any of » condition.

Click on the Must match all of or Must not match any of radio button in the same row to set the corresponding condition.

Removing a defined capability-based condition is as simple as selecting it, and pressing **Del** (or clicking on  button).  
By default, the capability-based condition list is empty. This means that capabilities are not relevant for this action.

### 3.1.6 Selection count condition

You may define that your action will only appear if the current selection in the file manager has some precise count, or some precise relation with a given count.

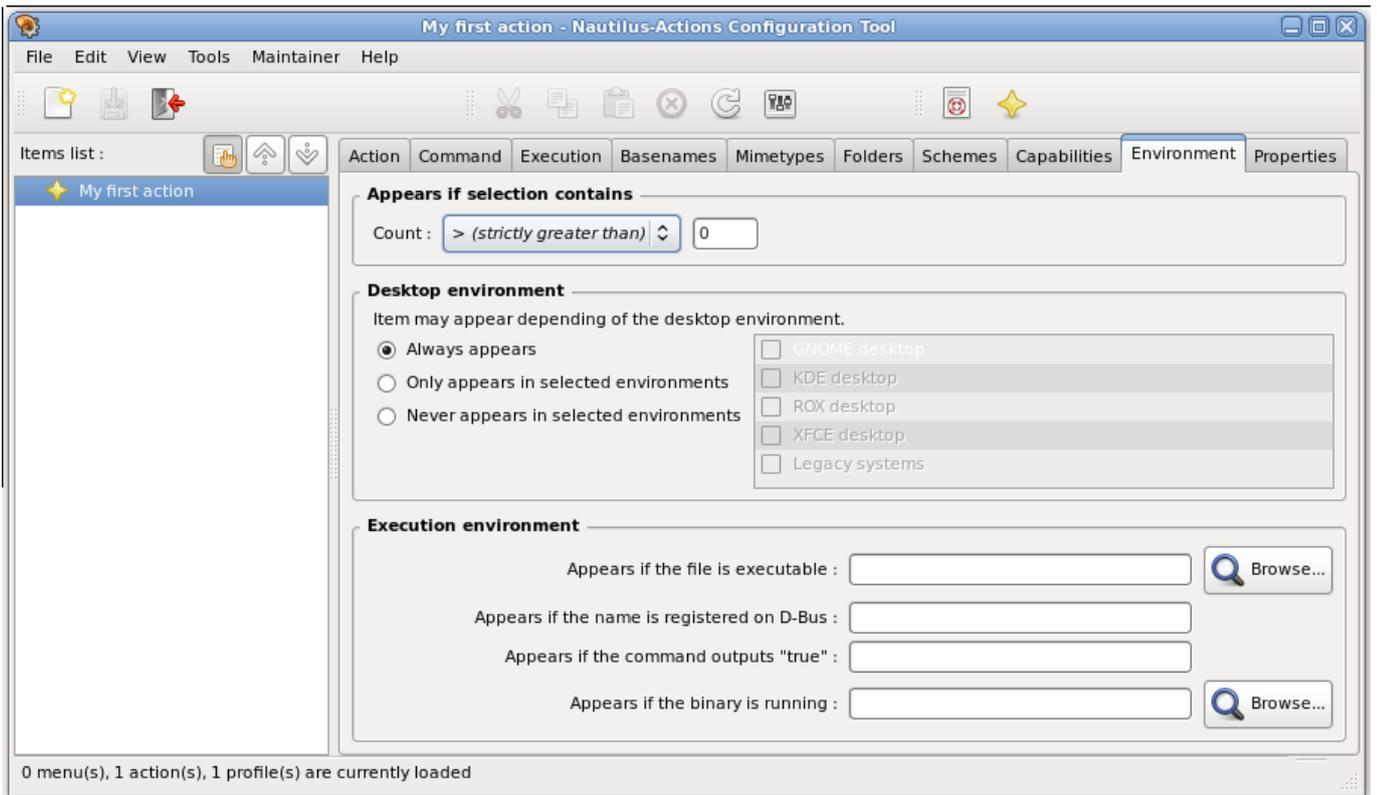
---

#### **Example 3.2** A selection count use case

If your action consists in displaying the differences between two files, you may define here « Count = (equal to) 2 ».

---

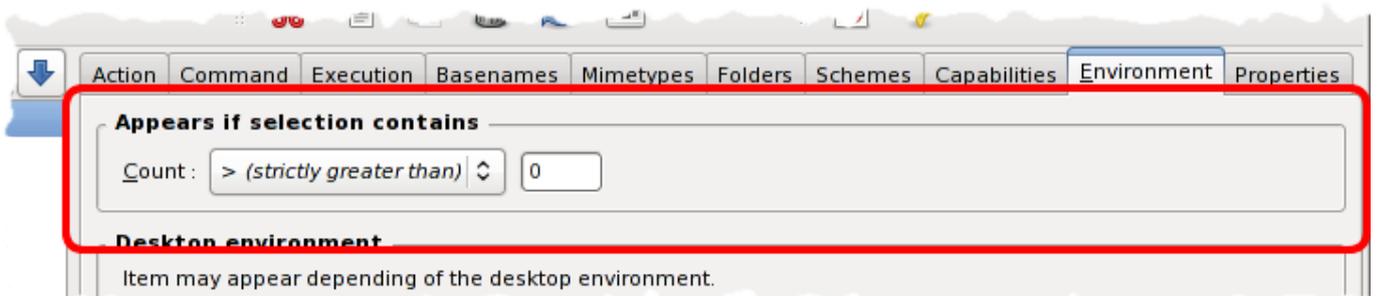
Click on the Environment tab to show the page which will permit you to configure your environment-based conditions.



*The environment-based conditions tab*

Figure 13: Environment-based conditions

The selection count condition is defined in the Appears if selection contains frame.



*Selection count condition frame*

Figure 14: Selection count condition frame

When targeting the selection context menu, the count condition defined here will be checked against the count of currently selected items. When targeting the location context menu or the toolbar, the count condition will be checked against zero because there is no selected item in this case.

To define a selection count condition:

- Select in the Count drop-down list the operator you want apply to the selection count:

- < (strictly less than)
- = (equal to)
- > (strictly greater than)

- Enter the reference count you wish.

The selection count defaults to « Count > (strictly greater than) 0 », which means that the action will be a candidate to be displayed as soon as at least one item is selected in the file manager.

### 3.1.7 Desktop selection

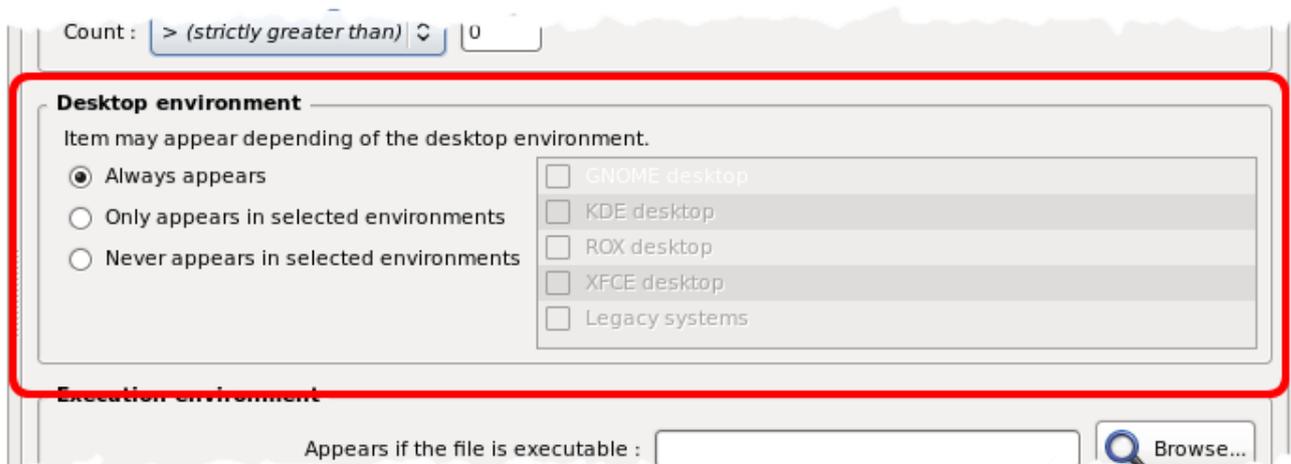
You may define that your action:

- will always appear,
- or will only appear in some given desktop environments,
- or will not appear in some given desktop environments.

Only one choice between these three items is possible.

Click on the Environment tab to show the page which will permit you to configure your environment-based conditions.

The desktop selection is defined in the Desktop environment frame.



*Desktop selection frame*

Figure 15: Desktop selection frame

To define the desktop environment condition:

1. First select the type of filter:
  - should your action always appear, regardless of the desktop environment ?
  - should your action only appear in some desktop environment(s) ?
  - should your action never appear in some desktop environment(s) ?
2. If your action should not always appear, then select the relevant desktop environment(s) in the listbox in the right side.

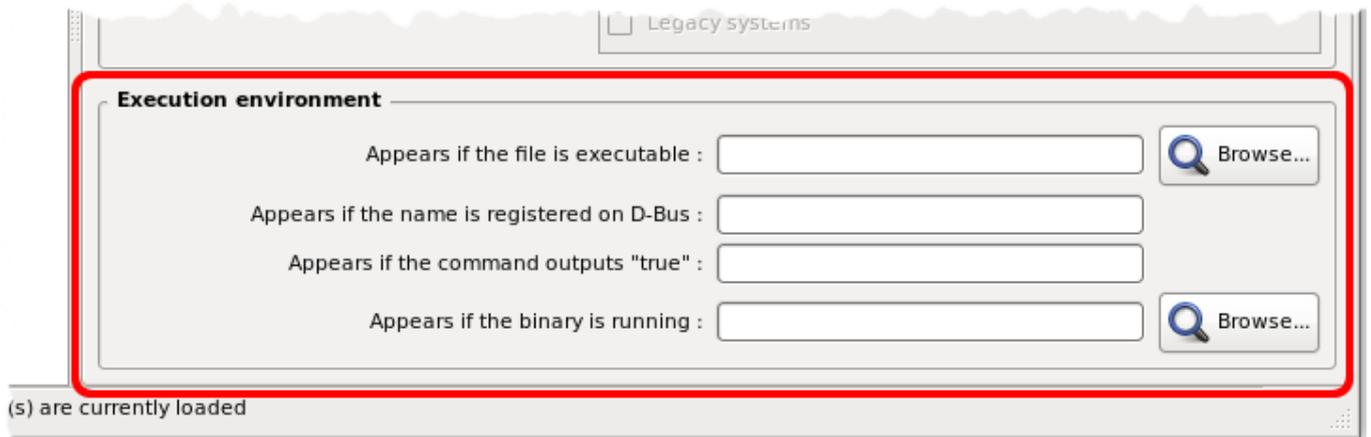
The targeted desktop environment condition defaults to « Always appear », which means that the action will be a candidate to be displayed regardless of the current desktop environment.

### 3.1.8 Executable found condition

You may define that your action will only appear if some prerequisite package is installed on your system. This is checked here by specifying that a specific file, known or at least supposed to be provided by the package, must be present on the file system, and executable.

Click on the Environment tab to show the page which will permit you to configure your environment-based conditions.

The executable found condition is defined in the Execution environment frame.



*Execution environment frame*

Figure 16: Execution environment frame

To define the relevant file, enter its full filename in the *Appears if the file is executable* entry box, or click on *Browse* to select a file on the file system.

Leave the field empty if this condition is not relevant for your action.

---

**Tip**

You may embed some parameters in the searched filename. These parameters will be dynamically substituted at runtime with values which will depend on currently selected item(s).

---

### 3.1.9 D-Bus registration condition

You may define that your action will only appear if some given name is registered on the D-Bus system at runtime.

Click on the Environment tab to show the page which will permit you to configure your environment-based conditions, and focus on Execution environment frame.

To define the relevant name, enter it in the *Appears if the name is registered on D-Bus* entry box.

Leave the field empty if this condition is not relevant for your action.

---

**Tip**

You may embed some parameters in the searched name. These parameters will be dynamically substituted at runtime with values which will depend on currently selected item(s).

---

---

### 3.1.10 Customized condition

You may define that your action will only appear if some given command outputs a `true` string on its standard output.

Click on the Environment tab to show the page which will permit you to configure your environment-based conditions, and focus on Execution environment frame.

This lets you define your own customized condition filter, by writing a small script which outputs, or not, the `true` string on stdout when it is ran.

To define the command, enter it in the Appears if the command outputs "true" entry box.

Leave the field empty if this condition is not relevant for your action.

---

#### Tip

You may embed some parameters in the executed filename or its options. These parameters will be dynamically substituted at runtime with values which will depend on currently selected item(s).

---

### 3.1.11 Running process condition

You may define that your action will only appear if some given binary is currently running.

Click on the Environment tab to show the page which will permit you to configure your environment-based conditions, and focus on Execution environment frame.

To define the binary, enter its name in the Appears if the binary is running entry box, or click on Browse to select a file on the file system.

---

#### Note

Even if you enter here the full filename of a binary, only its basename will be searched for in the processes list at runtime.

---

Leave the field empty if this condition is not relevant for your action.

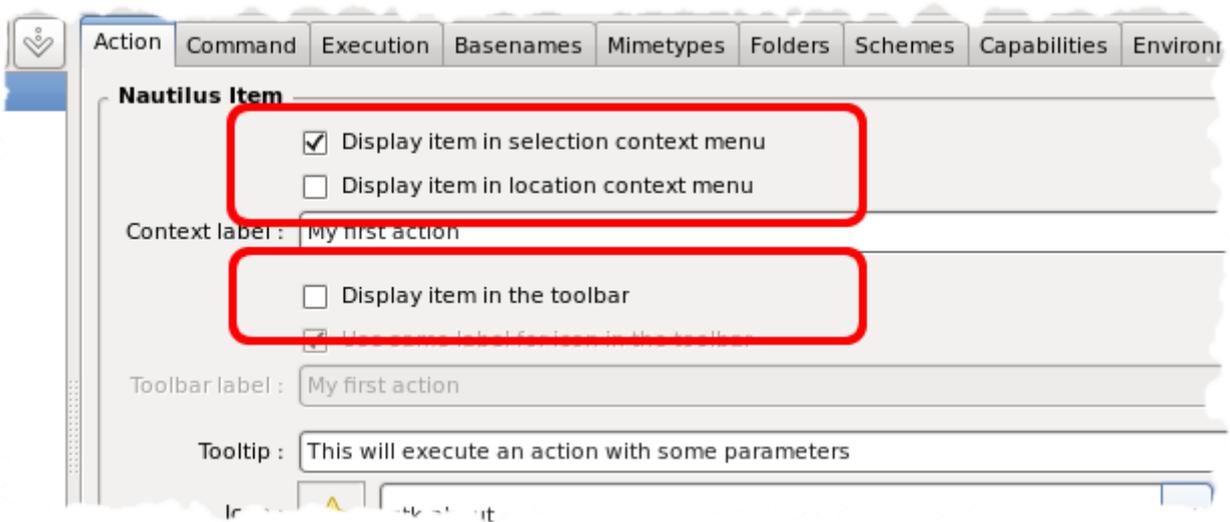
---

#### Tip

You may embed some parameters in the searched name. These parameters will be dynamically substituted at runtime with values which will depend on currently selected item(s).

---

## 3.2 Locating the action



*Target configuration*

Figure 17: Target configuration

Nautilus file manager may display your action in different places, depending on what you will request here, and if some item is currently selected (or not).

Click on the Action tab to show the page which will permit you to configure the locations your action targets.

### 3.2.1 Targeting the selection context menu

When Display item in selection context menu is checked, then your action will be a candidate to be displayed in Nautilus' context menu as soon as at least one item is selected in the file manager. Your action will so deal with currently selected item(s). In order to be actually displayed, all the conditions defined in your candidate action must be met by each item currently selected in the Nautilus file manager.

---

**Tip**

When an action targets the selection context menu, and is actually displayed in Nautilus' context menu, then it is also displayed in Nautilus' Edit menu.

---

This target is checked by default.

### 3.2.2 Targeting the location context menu

When Display item in location context menu checkbox is activated, then your action will be a candidate to be displayed in Nautilus' context menu when the file manager selection is empty. Your action will so deal with currently displayed location. In order to be actually displayed, all the conditions defined in your candidate action must be met by the location currently displayed in the Nautilus file manager.

---

**Tip**

When an action targets the location context menu, and is actually displayed in Nautilus' context menu, then it is also displayed in Nautilus' File menu.

---

### 3.2.3 Targeting the toolbar

When Display item in the toolbar checkbox is activated, then your action will be a candidate to be displayed in Nautilus' toolbar. Actions displayed in the toolbar only deal with the location which is currently displayed in the file-manager, not with the items which may be currently selected (or not). In order to be displayed, all the conditions defined in your candidate action must so be met by the current location.

### 3.2.4 Notes

**If your action is to be displayed in a context menu** Whether it is the selection context menu or the location context menu, and both in Nautilus' context menus and in File or Edit menus, it will be displayed as

- the Context label as a label,
- the Icon,
- these two properties being associated with the Tooltip.

---

#### Note

Depending of the exact configuration of your desktop environment, the icon may or may not be displayed in front of the label in the menu.

---

---

#### Tip

You may embed some parameters in the label, the icon name or the tooltip. These parameters will be dynamically substituted at runtime with values which will depend on currently selected item(s).

---

**If your action is to be displayed in the toolbar** It will be displayed as

- the Toolbar label as a label,
- the Icon,
- these two properties being associated with the Tooltip.

---

#### Note

Depending of the exact configuration of your desktop environment, the toolbar label may or may not be displayed in front of the icon in the toolbar.

---

---

#### Tip

The toolbar label defaults to the same label as those used in menus. By unchecking the Use same label for icon in the toolbar checkbox you can define a label specific to the toolbar, which is usually shorter than those defined for the menus.

---

---

#### Tip

You may embed some parameters in the toolbar label, the icon name or the tooltip. These parameters will be dynamically substituted at runtime with values which will depend on currently selected item(s).

---

**Defining several targets** An action may target the selection context menu, the location context menu and the toolbar, or one or more of these.

**Defining no target at all** If no target is defined, i.e. if the three checkboxes are unchecked, then your action will never be displayed.

---

### 3.3 What action should be executed ?

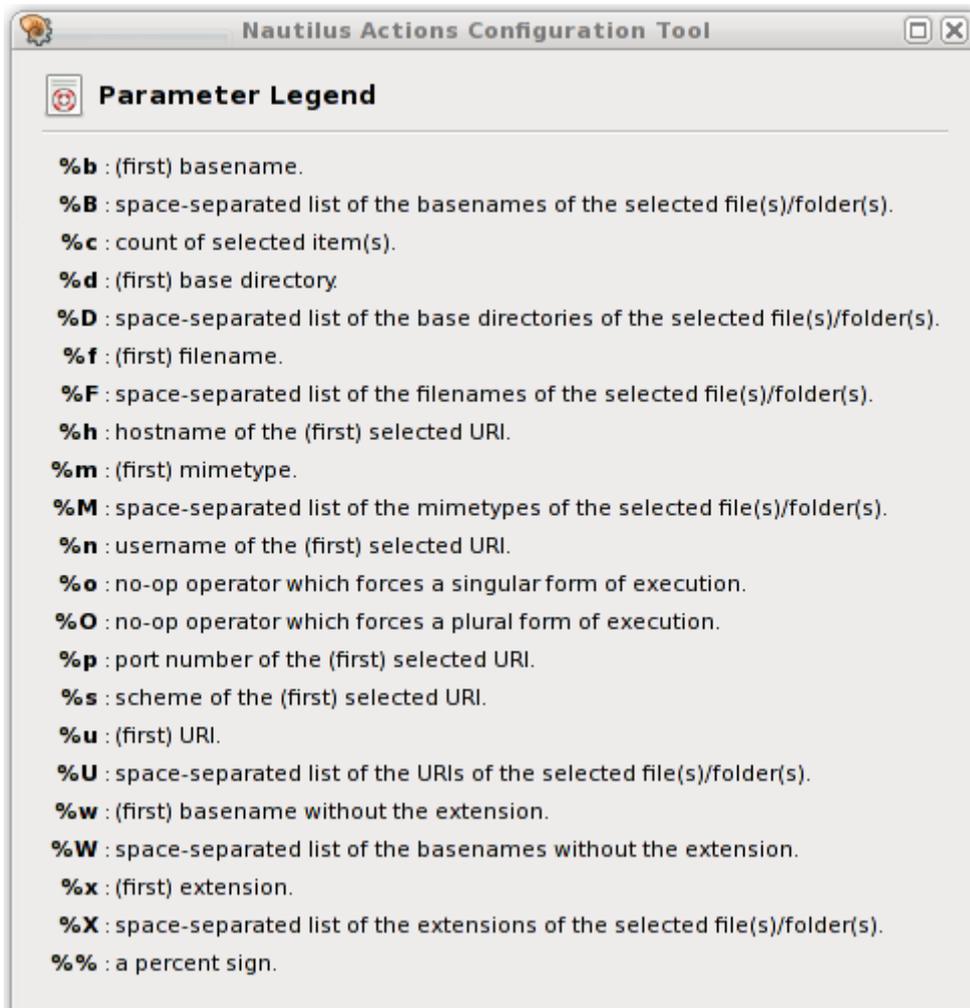
You most probably want that your action eventually ends up in executing something. And, as a matter of fact, having something to execute is one of the few conditions which are required for an action to be considered as valid.

As we have already seen, the command to be executed is configured in the Command page.

This command may take arguments, which themselves may embed parameters. These parameters will be expanded at runtime, with values which will depend on currently selected item(s).

#### 3.3.1 Available parameters

In the Command page, click on Legend button to see the list of available parameters.



*The available parameters*

Figure 18: List of available parameters

---

#### Tip

The Legend button has a toggling action: click once to display the Parameter Legend dialog box; click a second time to hide it.

---

---

**Note**

The word « first » may be misleading as it only refers to the list of selected items internally provided by the file manager to the Nautilus-Actions plugin.

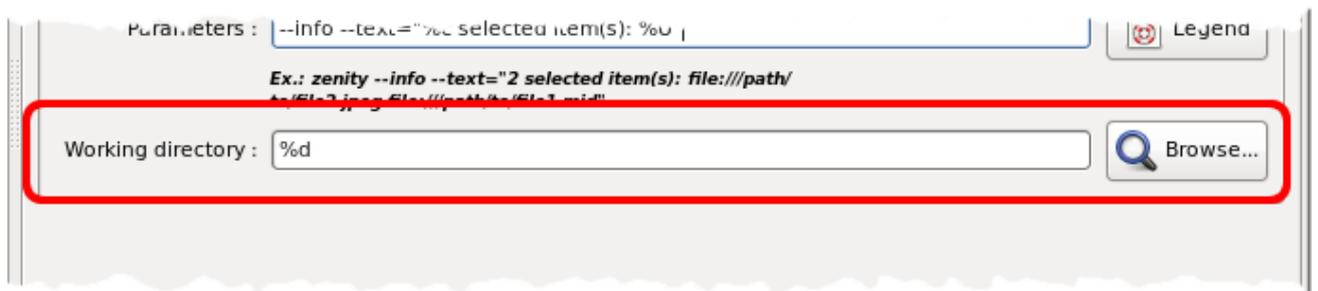
In particular, it has *nothing to do* with the visual selection you may have done in the file manager window. And, in fact, which is the « first » selected item in a multiple selection is absolutely undefined and rather unpredictable.

---

### 3.3.2 Where the action should it be executed ?

Your action may be executed in a particular working directory.

You may specify it in the Command tab, in the Working directory entry box, or by clicking on Browse to select a folder on the filesystem.



*Working directory frame*

Figure 19: Working directory frame

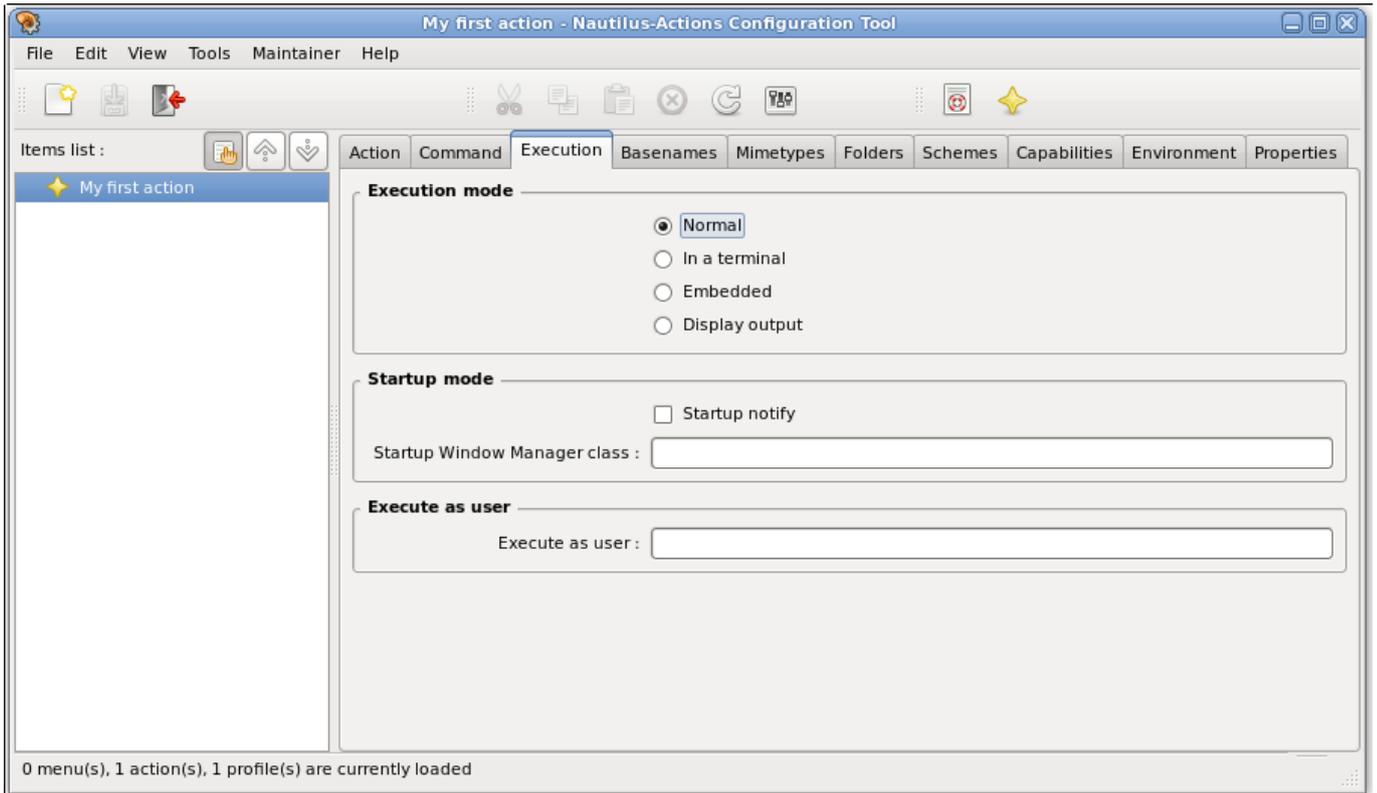
The working directory defaults to `%d`, which runs the command in the base directory of the (first) selected item.

In the particular case of the `%d` parameter, the « first » selected item is not very important because it is very likely that all selected items are located in the same base directory.

### 3.3.3 How should the action be executed ?

Apart from configuring the conditions, the selection must be met in order your action be displayed in file manager menus, Nautilus-Actions allows you to configure how exactly your command will be executed.

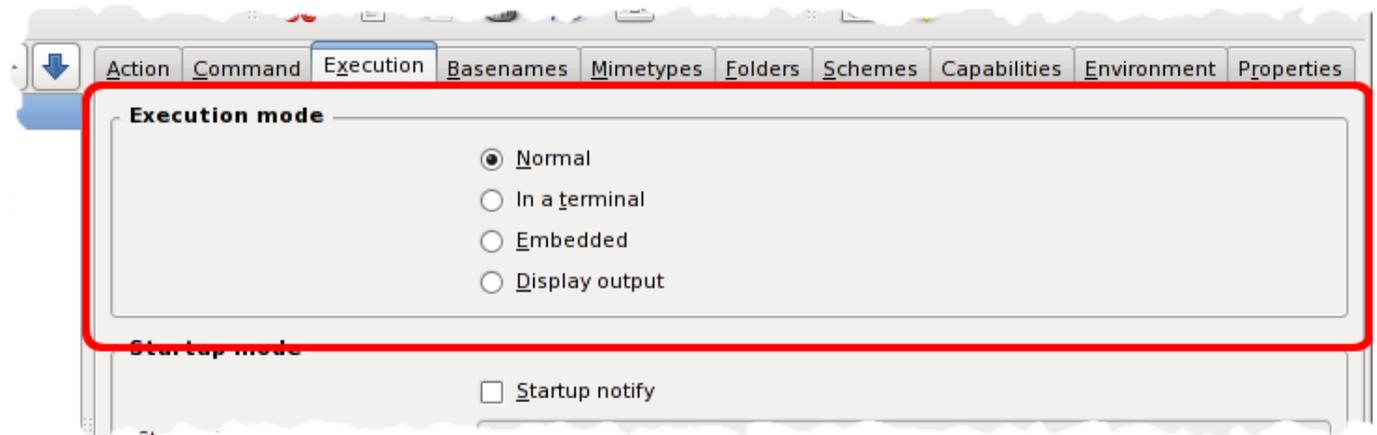
Click on the Execution tab to show the page which configures the execution of your command.



*Configuration of the execution modes*

Figure 20: Configuration of the execution modes

### 3.3.3.1 Execution mode



*Configuration of the execution mode*

Figure 21: Configuration of the execution mode

The execution mode of your command may be chosen between following values:

**Normal** Starts the command as a standard graphical user interface.

**Terminal** Starts the preferred terminal of the desktop environment, and runs the command in it.

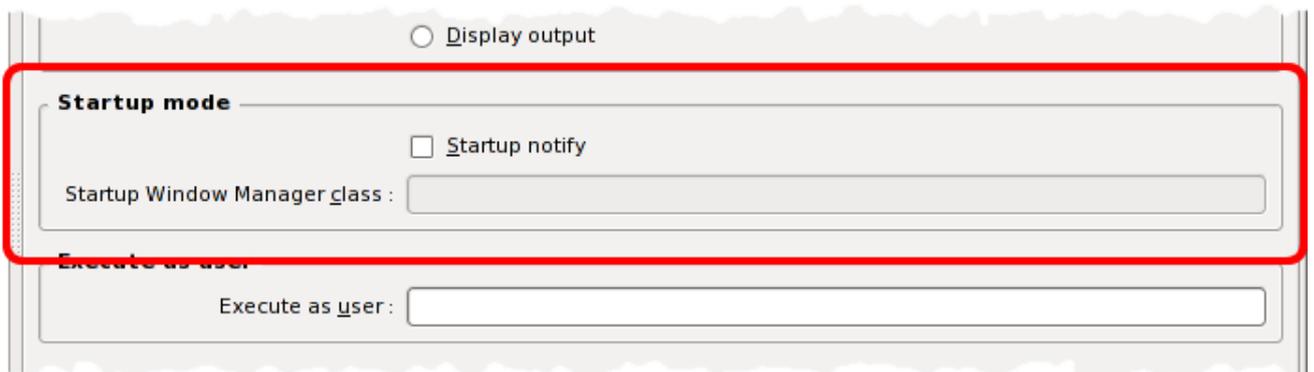
**Embedded** Makes use of a special feature of the file manager which may allow a terminal to be ran in it.

As Nautilus does not have this feature, this option is strictly equivalent to `Terminal` option.

**Display output** Starts the preferred terminal of the desktop environment, and runs the command in it. At end, standard streams (stdout, stderr) are collected and displayed.

The execution mode of a command defaults to `Normal`. That is, the command is executed without any particular pre- or post-work.

### 3.3.3.2 Startup notification



*Configuration of the startup modes*

Figure 22: Configuration of the startup modes

If the execution mode of the command is `Normal`, and if you know that the application will send a `remove` message with the `DESKTOP_STARTUP_ID` environment variable set, then check the `Startup notify` checkbox.

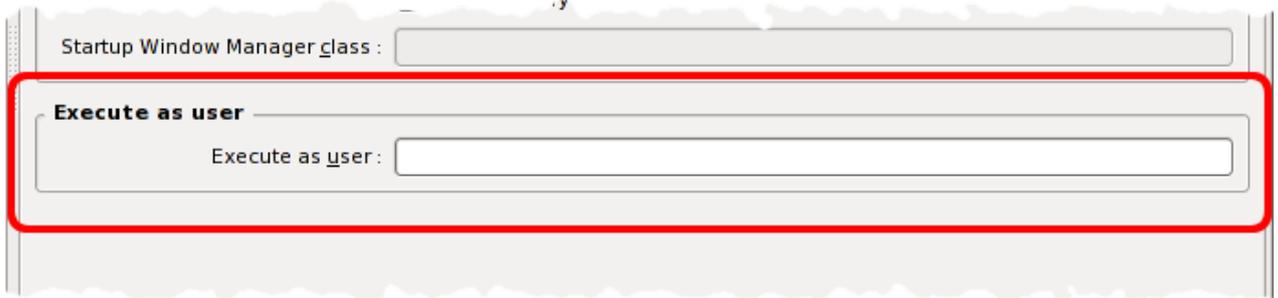
See the [Startup Notification Protocol Specification](#) for more details.

### 3.3.3.3 Window class

If the execution mode of the command is `Normal`, and if you know that the application will map at least one window with a given class name, then enter that name into the `Startup Window Manager class` entry box.

See the [Startup Notification Protocol Specification](#) for more details.

### 3.3.3.4 Owner of the execution



*Configuration of the owner of the run*

Figure 23: Configuration of the owner of the run

Enter in the Execute as user entry box the username or the UID of the user your command will be run as.

If you do not enter anything in this field, then the command will be executed as the current user.

### 3.3.3.5 Multiple executions

You may want your command to be executed once, providing it the list of selected items as argument.

Or you may prefer your command to be repeated for each selected item, providing a different item as argument for each execution.

Actually, Nautilus-Actions automatically handles these two behaviors, depending of the form and the order of the parameters in the command arguments.

Though some parameters are not depending on the count of the selection (e.g. « %C », the selection count itself), most have two declensions:

- a « singular » one, e.g. « %b », the basename of the selected item;
- a « plural » one, e.g. « %B », the space-separated list of the basenames of selected items.

When the selection is empty or contains only one element, and from this topic point of view, these two forms are exactly equivalent.

When the selection contains more than one item:

- if the first relevant parameter is of a singular form, then Nautilus-Actions will consider that the command is only able to deal with one item at a time, and thus that it has to be ran one time for each selected item;
- contrarily, if the first relevant parameter found is of the plural form, then Nautilus-Actions will consider that the command is able to deal with a list of items, and thus the command will be executed only once;
- if all found parameters are irrelevant, then Nautilus-Actions defaults to consider that the command should be executed only once.

Parameter	Description	Repetition		
%b	(first) basename	singular		
%B	space-separated list of basenames			plural
%c	count of selected items		irrelevant	
%d	(first) base directory	singular		
%D	space-separated list of base directory of each selected items			plural
%f	(first) filename	singular		
%F	space-separated list of selected filenames			plural
%h	hostname of the (first) URI		irrelevant	
%m	mimetype of the (first) selected item	singular		
%M	space-separated list of the mimetypes of the selected items			plural
%n	username of the (first) URI		irrelevant	
%o	no-op operator which forces a singular form of execution	singular		
%O	no-op operator which forces a plural form of execution			plural
%p	port number of the (first) URI		irrelevant	
%s	scheme of the (first) URI		irrelevant	
%u	(first) URI	singular		
%U	space-separated list of selected URIs			plural
%w	(first) basename without the extension	singular		
%W	space-separated list of basenames without their extension			plural
%x	(first) extension	singular		
%X	space-separated list of extensions			plural
%%	the « % » character		irrelevant	

Table 1: Characterization of the parameters vs. multiple execution

---

### Example 3.3 Usage of singular vs. plural forms

Say the current folder is `/data`, and the current selection contains the three files `pierre`, `paul` and `jacques`.

**If we have requested `echo %b`**, then the following commands will be successively run:

```
echo pierre
echo paul
echo jacques
```

This is because `%b` marks a *singular* parameter. The command is then run once for each of the selected items.

**Contrarily, if we have requested `echo %B`**, then the following command will be run:

```
echo pierre paul jacques
```

This is because `%B` marks a *plural* parameter. The command is then run only once, with the list of selected items as arguments.

**If we have requested `echo %b %B`**, then the following commands will be successively run:

```
echo pierre pierre paul jacques
echo paul pierre paul jacques
echo jacques pierre paul jacques
```

This is because the first *relevant* parameter is `%b`, and so the command is run once for each selected item, replacing at each occurrence the `%b` parameter with the corresponding item. The second parameter is computed and added as arguments to the executed command.

**And if we have requested `echo %B %b`**, then the following commands will be run:

```
echo pierre paul jacques pierre
```

This is because the first *relevant* parameter here is `%B`. The command is then run only once, replacing `%B` with the space-separated list of basenames. As the command is only run once, the `%b` is substituted only once with the (first) basename.

---

## 3.4 Using profiles to extend your action

There are some situations where you will want a given action behave slightly differently depending on the currently selected items or the current runtime environment.

---

---

**Example 3.4** Open a terminal here

---

Say you have an action which opens a terminal in the current location.

You have configured it to open your preferred terminal in the location your file manager currently points to.

But what if you want to select a directory in your file manager, and directly open your terminal in this directory ? If you keep based on the current file manager location, your terminal will open in the parent of the targeted directory.

One solution is to define a new profile to your action, configuring this profile to open the terminal in the targeted directory.

At runtime, Nautilus-Actions will successively examine each profile attached to your action. If the first profile targets a file while you have selected a directory, then Nautilus-Actions will just try with your second profile.

---

To create a new profile, first select the action in the items list, then choose File → New profile.

A new profile is created in your action.

You can now define the conditions which must be met in order this profile be selected, and the command which will be executed.

### 3.4.1 Ordering the profiles inside an action

At runtime, Nautilus-Actions will begin with examining the conditions set on your action.

If these conditions (the action-conditions) are met, then Nautilus-Actions will examine in order each profile.

If the conditions defined in a profile are met, then this profile will be validated, and the review of other profiles will stop.

If no profile is found valid at runtime, then the action will be itself considered invalid, and will not be displayed in the file manager context menu.

Profiles of an action are ordered, and they are examined in that order at runtime. The first profile whose conditions are met will be validated, and made selectable in the Nautilus context menu.

So, ordering of the profiles may be important for your action: the first valid profile found is the only one selected.

You may order your profiles inside an action in two ways.

1. Cut the profile to be moved, select the profile before which you want your cut profile to be inserted, and paste it.
2. Click on the profile to be moved, and drag it to its right place.

## 3.5 Organizing actions in menus

As your list of actions will grow, you most probably will want to organize them into menus, submenus, and so on.

In order to create a new menu, choose File → New menu.

A menu may be created anywhere in the list of your actions, but inside of an action (i.e. not between two profiles of an action).

As an action, the exact place where a new menu will be inserted depends on the current sort order:

**Manual order:** The new menu is inserted just before the current action or menu.

This place will not change when you later modify the label of the menu.

**Ascending (resp. descending) alphabetical order:** The new menu is inserted at the correct place, regarding the default « New Nautilus menu » label.

This place will be automatically changed, each time you modify the label of the menu.

As an action, too, a menu requires a label, and may have an icon and a tooltip. Also, you may define some conditions in order your menu be candidate to be displayed in Nautilus context menu. If the defined conditions are not met at runtime, then your whole menu, including its submenus, its actions and so on, will not be displayed.

---

### 3.6 Sorting the items list

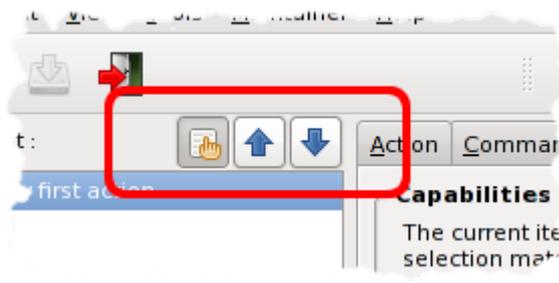
Your actions and menus will be displayed in file manager context menus in the same order that they are listed in the Items list, on the left pane of the main Nautilus-Actions Configuration Tool window.

You may decide to:

- sort your actions and menus in ascending or descending alphabetical order of their label,
- or do not sort, and manually organize your actions and menus in your own order.

#### 3.6.1 Alphabetically sorting your actions and menus

In these modes, actions and menus are sorted depending of their label, inside of their parent.



*Sort buttons in the main window*

Figure 24: Sort buttons in the main window

You may sort your actions by:

- Click on  (resp. ) button to sort your actions in ascending (resp. descending) order.
- Or edit the corresponding preference.

#### 3.6.2 Manually organizing your actions and menus

When items are manually sorted in the list, new items are usually inserted just at the current position.

There is nonetheless the case where an action is selected, and not expanded (or has currently only one profile). Inserting a new profile will not insert it before the action, but inside of the action.

To choose this mode:

- Click on  button.
- Or edit the corresponding preference.

### 3.7 Editing

With Nautilus-Actions Configuration Tool, you may safely cut, copy, paste to and from the clipboard.

### 3.7.1 Cut/Delete

Deletion applies to current selection.

Be warned that selecting and deleting all profiles of an action leaves it without any profile, so in an invalid state. The name of the action will be written in red (because it is invalid) italic (because it has been modified) characters.

### 3.7.2 Multiple selection

Multiple selection is possible in Nautilus-Actions Configuration Tool. You can extend the current selection by pressing **Ctrl** or **Shift** while selecting an item to add to the selection.

Nautilus-Actions Configuration Tool only accepts homogeneous multiple selections. That is, you may select one or more profiles, or one or more actions or menus. A multiple selection containing both profiles and actions or menus is not allowed. This is because Nautilus-Actions Configuration Tool would not know where to paste such a selection.

Note that selecting any row means also selecting children of this row. These children are said « implicitly selected »: they will be part of next edition operations, but are not considered when verifying if selection is homogeneous. Also, they cannot be explicitly selected (nor unselected).

## 3.8 Saving your modifications

To save your modifications, choose File → Save (**Ctrl-S**).

All your pending modifications will be saved. New items will be created by the first available writable I/O provider.

Nautilus-Actions also has an Auto-save feature which is configurable in Preferences dialog box.

## 3.9 Exporting your actions

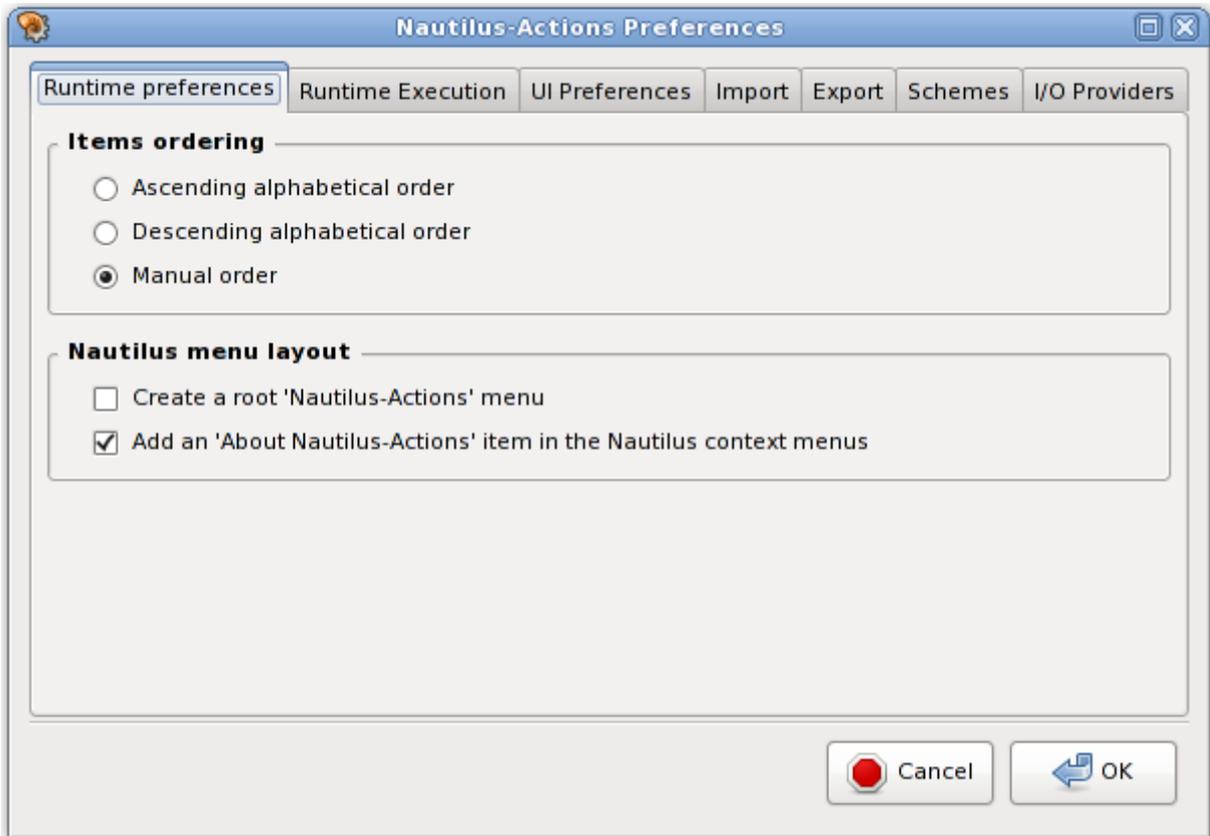
### 3.10 Importing actions

### 3.11 Setting your own preferences

Choose Edit → Preferences to access to the configuration of your preferences.

---

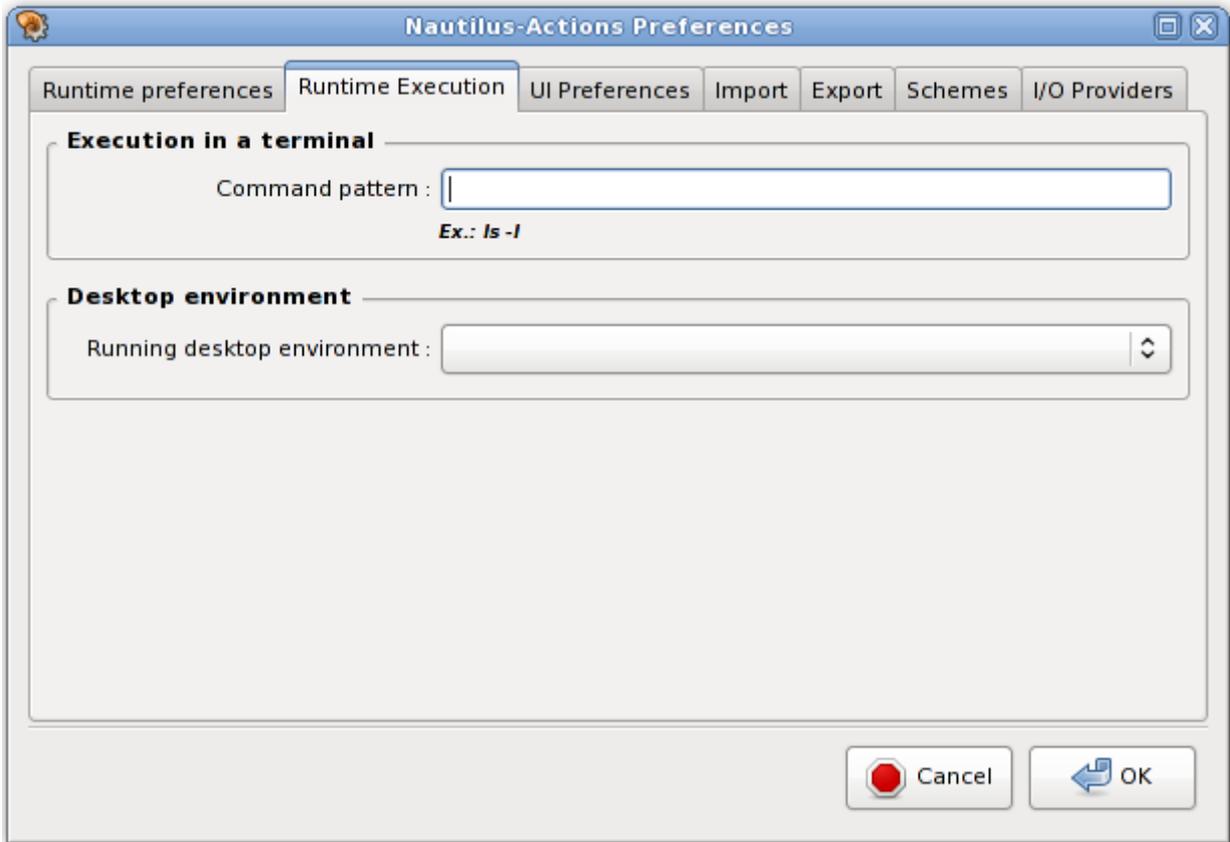
### 3.11.1 Runtime preferences



*Runtime preferences*

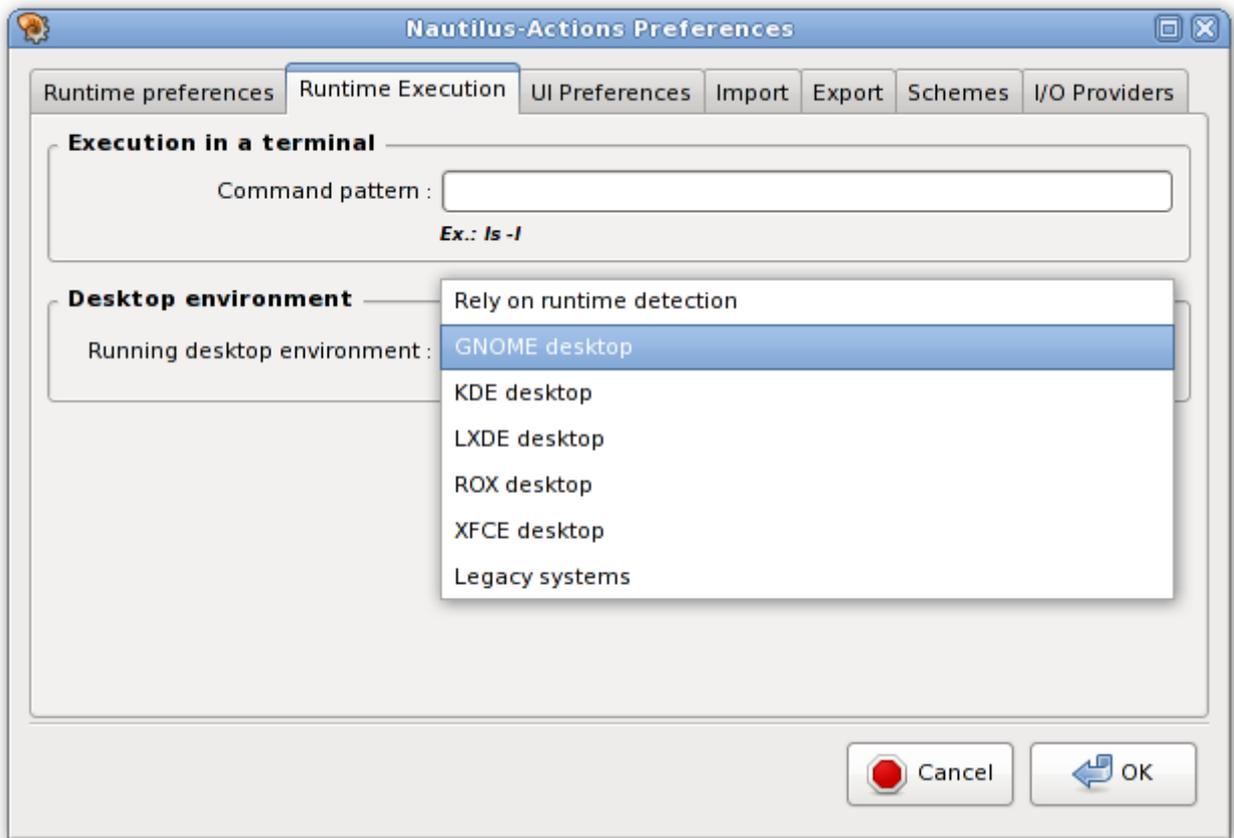
Figure 25: Runtime preferences

### 3.11.2 Runtime execution preferences



*Runtime execution preferences*

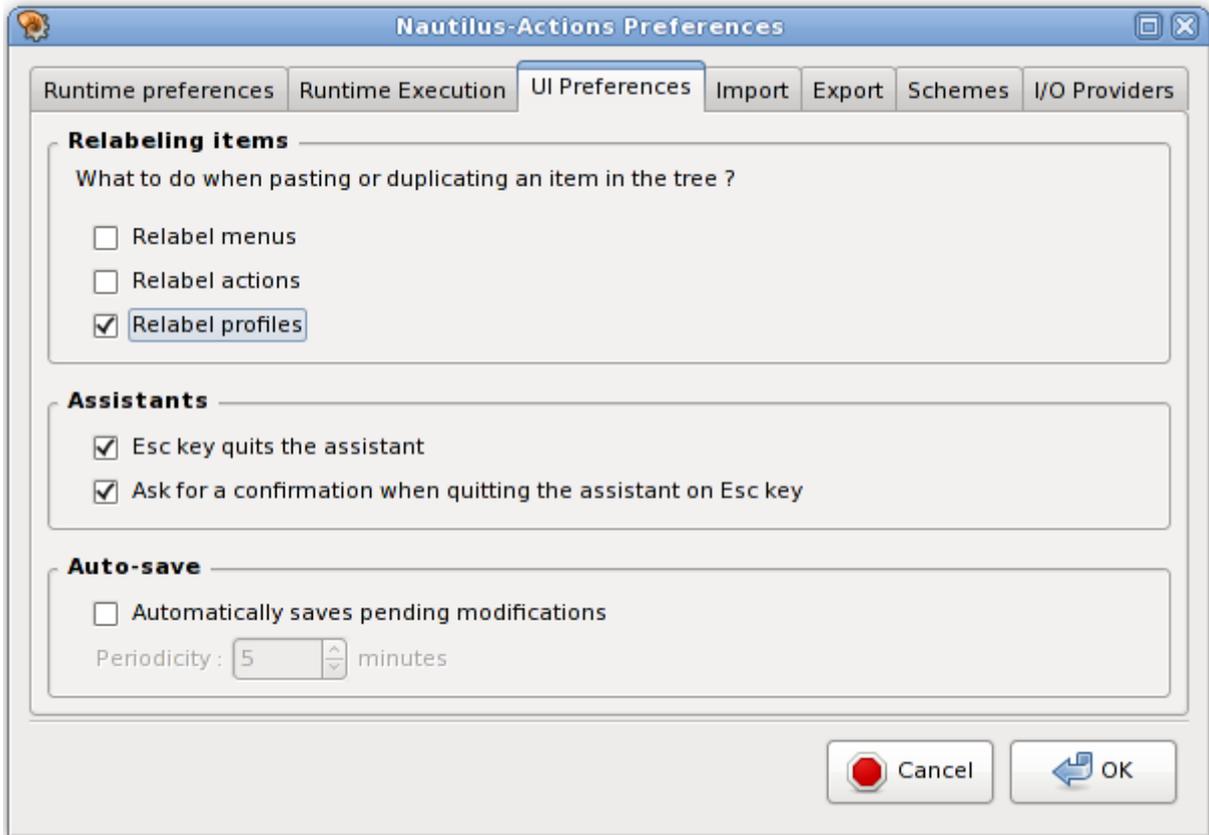
Figure 26: Runtime execution preferences



*Desktop selection*

Figure 27: Desktop selection

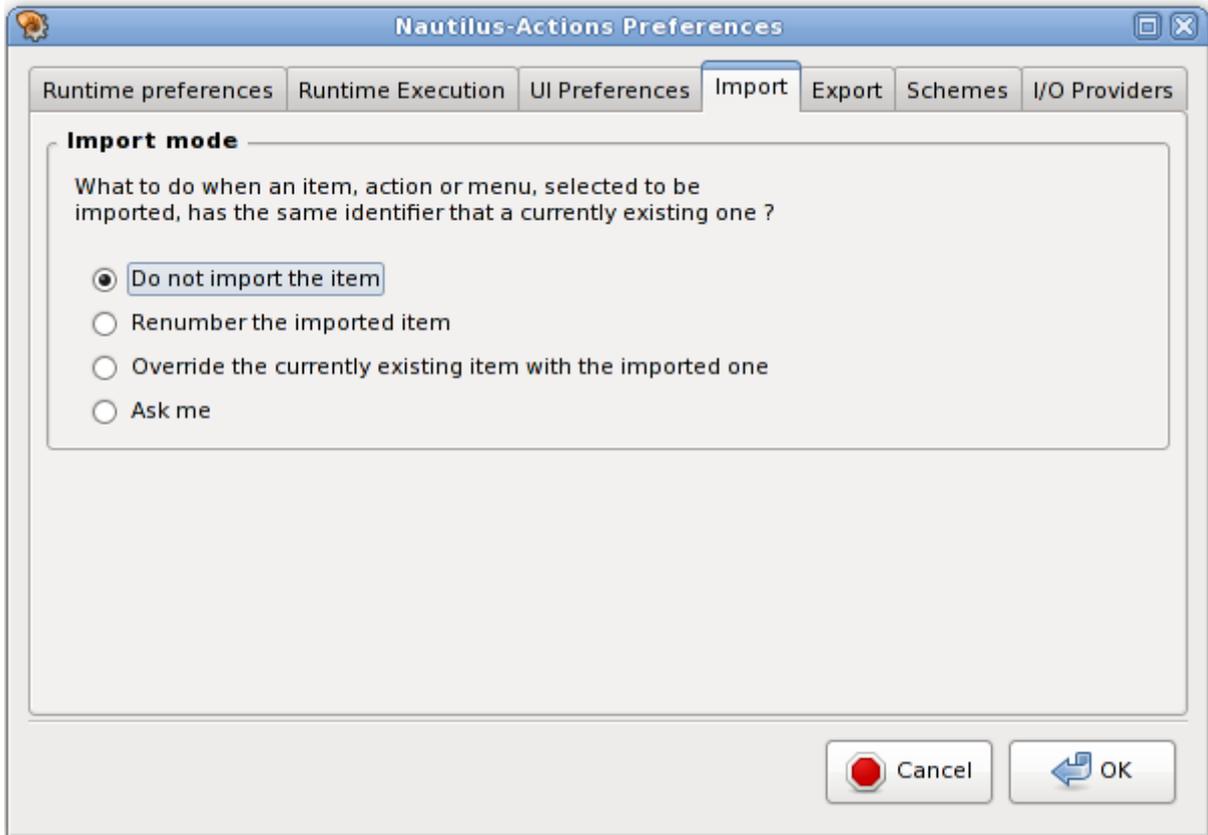
### 3.11.3 User interface preferences



*UI preferences*

Figure 28: UI preferences

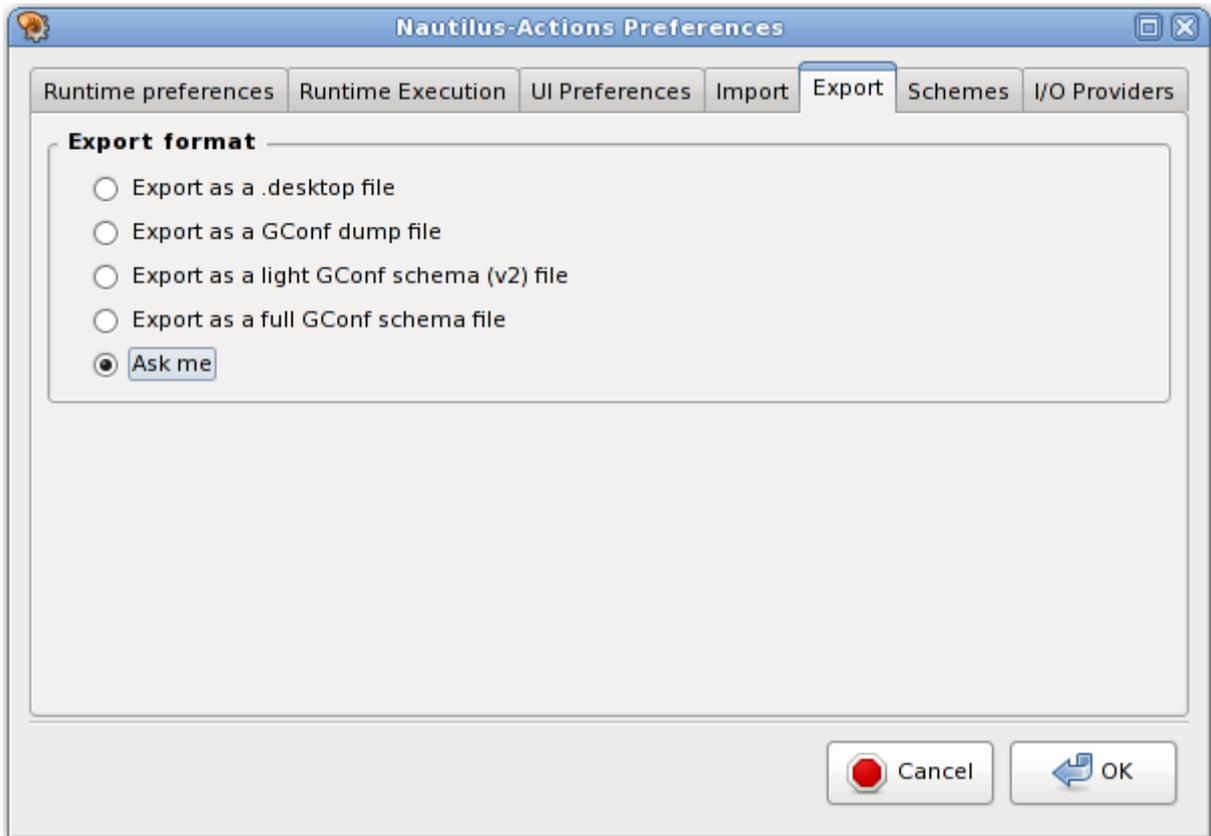
### 3.11.4 Import preferences



*Import preferences*

Figure 29: Import preferences

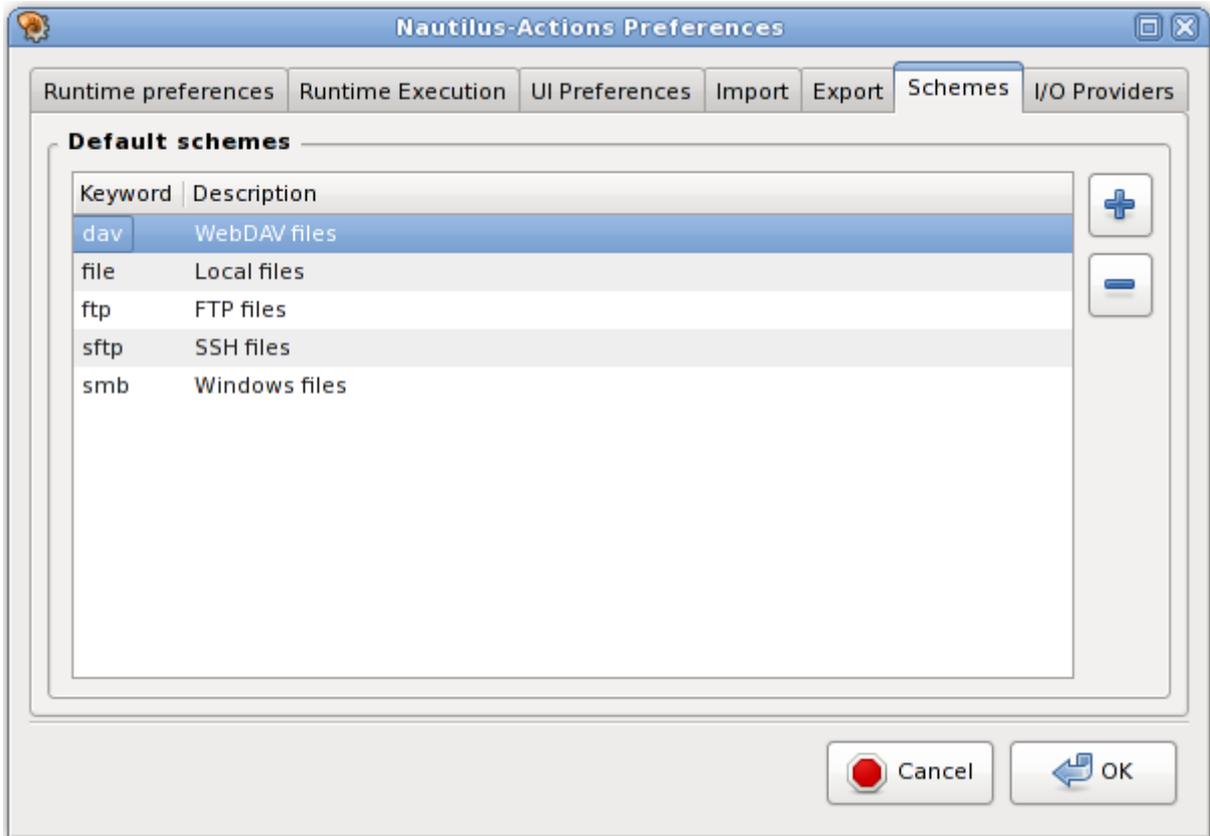
### 3.11.5 Export preferences



*Export preferences*

Figure 30: Export preferences

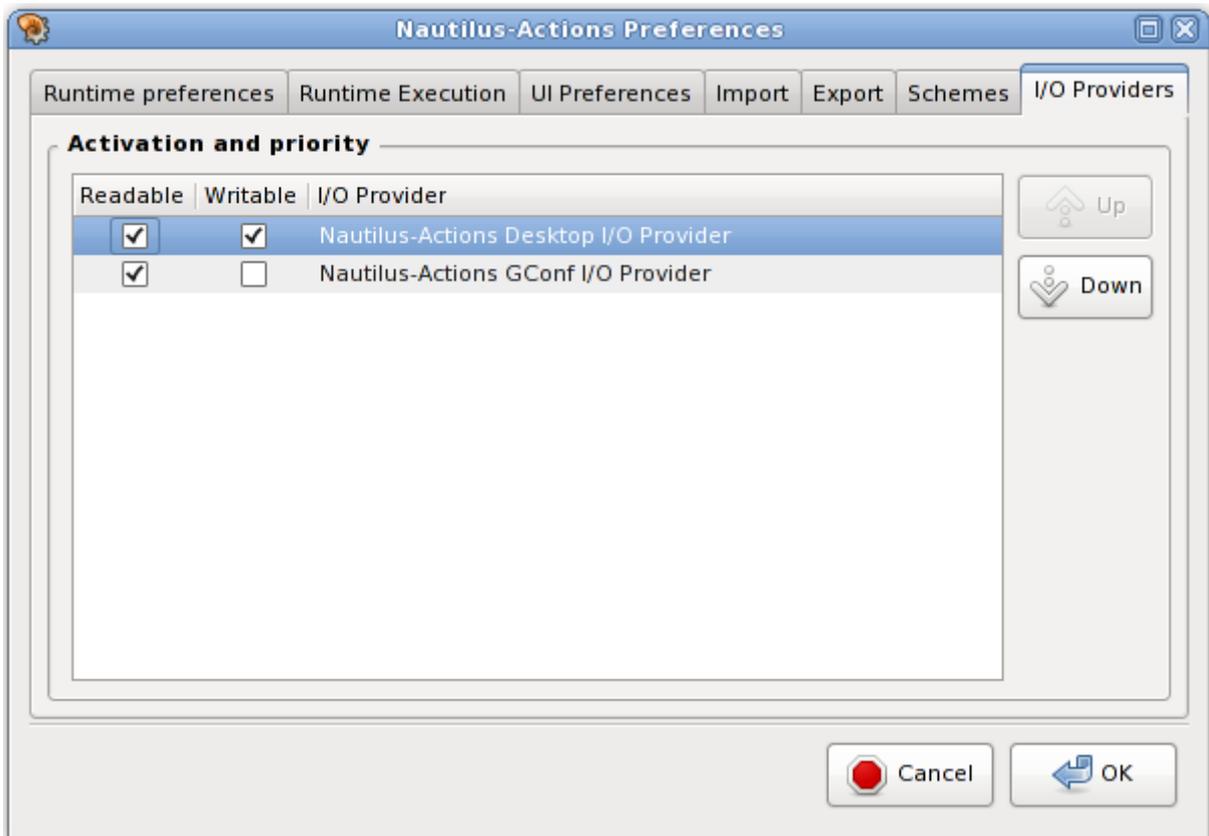
### 3.11.6 Schemes preferences



*Schemes preferences*

Figure 31: Schemes preferences

### 3.11.7 I/O providers preferences



*I/O providers preferences*

Figure 32: I/O providers preferences

## 4 Miscellaneous informations

The new action is also displayed in red color in the items list. Red color is used as an indicator that the item is invalid, that is that the item cannot be candidate to be displayed in a Nautilus context menu because some of its informations are missing or erroneous. Here, and though this newly inserted action has some suitable defaults, it lacks a command to be executed to be considered valid by Nautilus-Actions Configuration Tool

## 5 Known Bugs and Limitations

### 5.1 Known bugs

Known bugs are available on [Bugzilla summary page](#).

If you find some new bug in Nautilus-Actions, you are welcome to open it by pointing your favorite browser to [Bugzilla web site](#).

**#616532 Directory selection** When you're browsing the folder you want to export to in the Nautilus-Actions Configuration Tool's export assistant you can't select it as the directory to export to. Instead you have to go to the directory a level up and select the directory you want to export to there.

## 5.2 Known limitations

**Execution mode** As of version 3.0, execution mode may be configured in Nautilus-Actions Configuration Tool but is not yet honored by Nautilus plugin.

This concern working directory, execution mode, startup notification and execution's owner parameters.

**Suggested shortcut** As of version 3.0, suggested shortcut, as described in [DES-EMA specification](#) cannot be configured in Nautilus-Actions Configuration Tool, and is not honored by Nautilus plugin.

**Menu separator** As of version 3.0, menu separators cannot be configured in Nautilus-Actions Configuration Tool, and are not honored by Nautilus plugin.

One has to note that, for now, Nautilus file manager does not allow its plugins to define separators in the context menu.

## 6 About Nautilus-Actions Configuration Tool

The first version of Nautilus-Actions was initially written by Frederic Ruauudel ([grumz@grumz.net](mailto:grumz@grumz.net)) and Rodrigo Moya ([rodrigo@gnome-db.org](mailto:rodrigo@gnome-db.org)). It has been thoroughly improved and is currently maintained by Pierre Wieser ([pwieser@trychlos.org](mailto:pwieser@trychlos.org)).

Artwork is due to courtesy of Ulisse Perusin ([uli.peru@gmail.com](mailto:uli.peru@gmail.com)) and DragonArtz (<http://www.dragonartz.net>).

To find more information about Nautilus-Actions, please visit the <http://www.nautilus-actions.org/> Nautilus-Actions website.

To report a bug or make a suggestion regarding Nautilus-Actions, the Nautilus-Actions Configuration Tool or this manual, follow the directions in the [GNOME Feedback Page](#), or you may prefer, at your convenience, directly open a bug or a request for enhancement in [Bugzilla website](#).

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