

Module shtask

[shtask](#) (shell task) module is a [Calamares](#) module that allows to perform a shell command or script selected by user.

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About

Module [shtask](#) (shell task) is a [Calamares](#) module.

Calamares is a distribution-independent installer framework which has several modules.

‘shtask’ module is a simple Qt C++ GUI application, that allows to perform a shell command or script selected by user.

Shell command list can be edit in the module configuration file *shtask.conf*.

‘shtask’ module interface looks as shown in ‘Module interface’ figure.

The interface is almost fully customizable by editing *shtask.conf*.

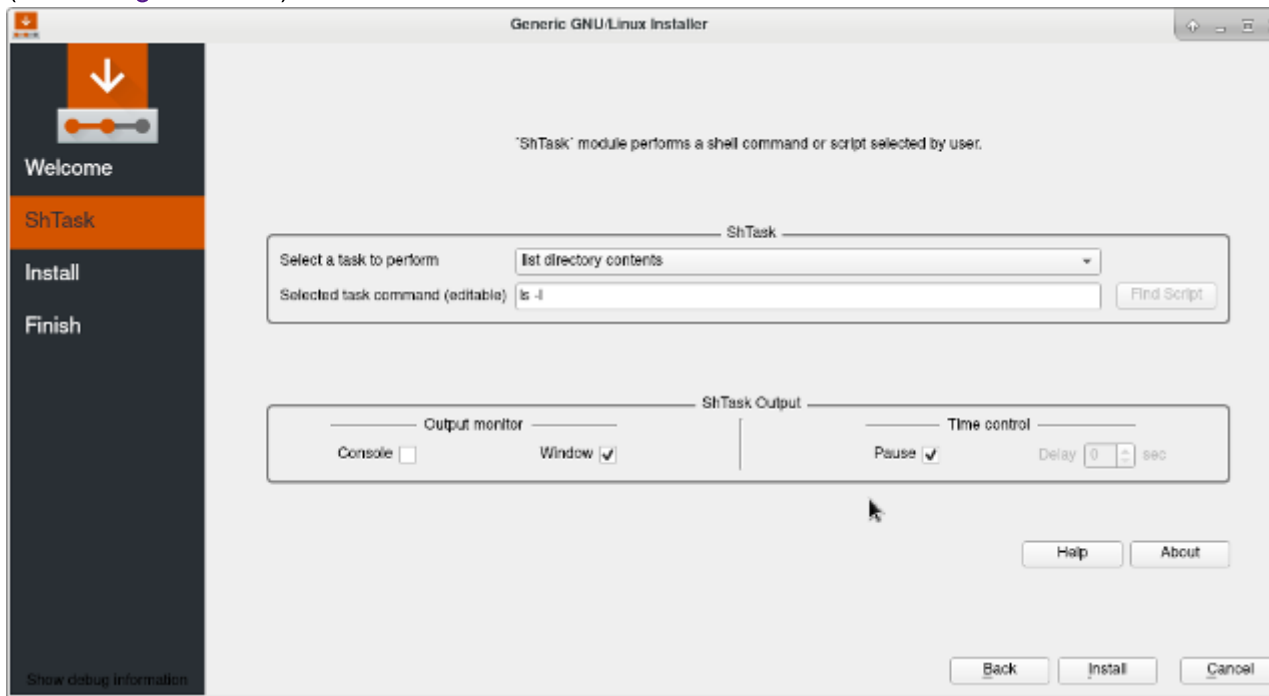
Thus, for example, the ‘moduleLabel’ parameter in *shtask.conf* defines the user-visible module name, which is ‘ShTask’ by default.

The whole ‘ShTask Output’ groupbox can be hidden by setting ‘taskOutputBox’ to false. ‘Help’ and ‘About’ texts are also editable.

All the interface customization parameters are listed in [Customize interface](#) section.

Module interface.

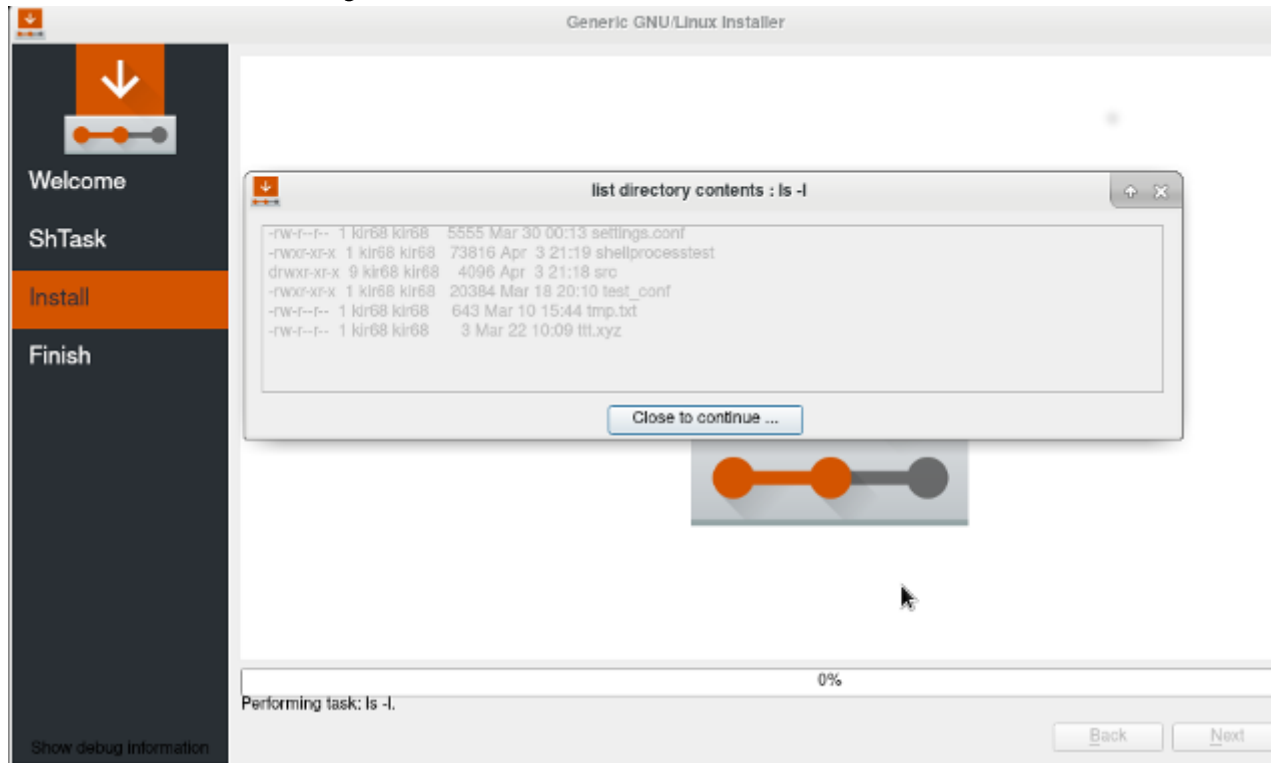
Module interface supports shell command selection and, if necessary, correction.
The shell command output can be directed to console or a graphical window
(see [Usage](#) section).



Module output.

Here the shell command output is directed to a graphical window.
The output is displayed and module wait for 'Close to continue...' button press.

It can be useful to debug the module.



Installation

If `.../calamares/src/modules/shtask` directory does not exist after loading the [Calamares](#), please create the directory and copy in it *shtask* module-related files and folders.

The following installation step is optional and can be skipped.
There is a directory named *branding* in *shtask* module directory.
It contains files that can be placed in Calamares branding directory usually located at `.../calamares/src/branding/default/` before Calamares installation and at `/usr/share/calamares/branding/default/` after Calamares installation.
These files, excluding *shtask.sh*, are responsible for a [slideshow](#) displayed during execution steps. Script *shtask.sh* is an example that can be modified. It is placed here to facilitate its finding.

Usage

If *shtask* module is properly listed in the Calamares configuration file *settings.conf* (see [Test module](#) section), it will prompt user to select a task from the combobox list.

Select a shell command using 'Select a task to perform' combobox (see 'Module interface' figure). The selected command can be corrected in 'Selected task command' line edit. 'ShTask' Output' groupbox allows to direct shell command output to console or a graphical window. Output window closing delay and pause are also under control of 'ShTask' Output' groupbox items. Task name list 'taskLabels' and command list 'taskCommands', as well as other parameters, are defined in *shtask.conf* [configuration](#) file.

Shell command may also contain the name of the [script](#) to execute.

Configuration

Module *shtask* reads *shtask.conf* , the module configuration file. File *shtask.conf* contains parameters that control *shtask* module. 'taskLabels' and 'taskCommands' parameters define task selection list. Some of the parameters like 'moduleLabel' and 'moduleInfoLine' allow to [customize](#) module interface. If a parameter value is a string with special characters use quotes (YAML rules).

The following parametes are available in shtask.conf:

- ***moduleLabel***

String will appear in the Calamares module name list.
The parameter is created to customize module interface.

```
moduleLabel: ShTask
```

- ***moduleInfoLine***

String will appear at the top of the task selection page.
The parameter is created to customize module interface.

```
moduleInfoLine: "'ShTask' module performs a shell command or script selected by user."
```

- ***taskChoiceLabel***

String will appear to the left of the task selection combobox.
The parameter is created to customize module interface.

```
taskChoiceLabel: Select a task to perform
```

- ***taskEditLabel***

String will appear to the left of the command line edit.
The parameter is created to customize module interface.

```
taskEditLabel: Selected task command (editable)
```

- ***taskOutputBox***

If 'taskOutputBox' is true,
the groupbox that contains 'Output monitor' and 'Time control' elements
will be shown. The parameter is created to customize module interface.

```
taskOutputBox: true
```

- ***taskLabels***

String list for the task selection combobox.
The parameter is created to customize module interface.

```
taskLabels:  
- current directory  
- list directory contents  
- "shell script shtask.sh"
```

- ***taskCommands***

String list of commands correspond to the labels in 'taskLabels' list.
For a bash script please indicate the correct script path.
If script file path is not indicated, module looks for the script
in current directory or in Calamares branding directory (see [Script](#) section).

```
taskCommands:  
- pwd  
- ls -l  
- "bash anytask.sh"
```

- ***taskScript***

If 'taskScript' string list is present,
module creates generated.sh script from the list.
A corresponding task appears in 'taskLabels'
and 'taskCommands' lists under the name 'generated script'.
File *generated.sh* is temporary file and will be deleted (see [Script](#) section).

```
taskScript:  
- pwd  
- uname-a
```

- ***taskOutputConsole***

If 'taskOutputConsole' is true,
the command output appears in Calamares console ("calamares -d").
The parameter is created to debug the module.

```
taskOutputConsole: false
```

- ***taskOutputWindow***

If 'taskOutputWindow' is true,
the command output appears in a graphical window.
The parameter is created to debug the module.

```
taskOutputWindow: false
```

- ***outputPause***

If 'outputPause' is true,
the command output window will pause and wait for a button to be pressed.
The parameter is created to debug the module.

```
outputPause: false
```

- ***outputDelaySec***

If integer is > 0,
the command output window sleeps for 'outputDelaySec' seconds.
The parameter is created to debug the module.

```
outputDelaySec: 0
```

- ***taskHelp***

If 'taskHelp' string list is present,
pressing 'Help' button displays the text created from the list.

```
taskHelp:
- "Select a shell command or script using 'Select a task to perform' combobox."
- "The selected command can be corrected in 'Selected task command' line edit."
- "Check 'Console' checkbox to send command output to Calamares console (calamares -d)."
- "Check 'Window' checkbox to send command output to a new graphical window."
- "If checkbox 'Pause' is checked, the output window stay visible until close button click."
- "If 'Pause' is unchecked, the output window will be shown for selected 'Delay' seconds."
- "The parameters that control module behavior are defined in 'shtask.conf' configuration file."
- "For more help please see README.html."
- "\n"
- "This text can be replaced in shtask.conf, the module configuration file."
```

- ***taskAbout***

If 'taskAbout' string list is present,
pressing 'About' button displays the text created from the list.

```
taskAbout:
- "'shtask' is a Calamares module."
- "It allows to select and perform a shell command or script."
- "\n"
- "This text can be replaced in shtask.conf, the module configuration file."
```

Test module

The configuration of Calamares is done in *settings.conf* .
The modules listed in *settings.conf* are loaded one by one.
To test ‘shtask’ alone comment all the modules in settings.conf except of ‘welcome’ and ‘finished’ modules:

```
sequence:
- show:
- welcome
- shtask
- exec:
- shtask
- show:
- finished
branding: default
```

set ‘taskOutputBox’ parameter in *shtask.conf* to true.
It allows to monitor ‘shtask’ output.
The output can be directed to Calamares console,
if Calamares was started with debug option ‘calamares -d’,
or to a graphical window. Please see for details the description of
‘taskOutputConsole’, ‘taskOutputWindow’, ‘outputPause’ and
‘outputDelaySec’ parameters in [Configuration](#) section.

Customize interface

Module interface can be customized using following parameters from *shtask.conf* :
‘moduleLabel’, ‘moduleInfoLine’, ‘taskChoiceLabel’, ‘taskEditLabel’,
‘taskOutputBox’, ‘taskHelp’ and ‘taskAbout’.
Please see [Configuration](#) section for details.

Script

Shell command may contain the name of the script to execute e.g.: 'bash shtask.sh'.

If script file path is not indicated, module looks for the script in current directory or in Calamares branding directory, which is usually */usr/share/calamares/branding/default*". Script file can be placed in Calamares branding directory to facilitate search (see [Installation](#) section).

For manual search please use 'Find Script' button.

If 'taskScript' string list is present in *shtask.conf*, module creates in current directory *generated.sh* script from the list. A corresponding task appears in 'taskLabels' and 'taskCommands' lists under the name 'generated script'.

File *generated.sh* is temporary file and will be deleted.

Slideshow

A slideshow is displayed during execution steps (e.g. when the installer is actually writing to disk and doing other slow things).

To customize slideshow edit file *.../branding/default/show.qml* or replace it with *show.qml* provided by shtask module

.../calamares/src/shtask/branding/show.qml and copy corresponding * *.png* files.

Please keep in mind that QML slideshow is common for all modules.

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