notify2 Documentation

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Contents

notify2 is - or was - a package to display desktop notifications on Linux. Those are the little bubbles which tell a user about e.g. new emails.

notify2 is *deprecated*. Here are some alternatives:

- desktop_notify is a newer module doing essentially the same thing.
- If you're writing a GTK application, you may want to use GNotification (intro, Python API).
- For simple cases, you can run `notify-send` as a subprocess. The py-notifier package provides a simple Python API around this, and can also display notifications on Windows.

notify2 is a replacement for pynotify which can be used from different GUI toolkits and from programs without a GUI. The API is largely the same as that of pynotify, but some less important parts are left out.

Notifications are sent to a notification daemon over D-Bus, according to the Desktop notifications spec, and the server is responsible for displaying them to the user. So your application has limited control over when and how a notification appears.

CHAPTER 1

License and Contributors

notify2 is under the BSD 2-Clause License.

Some of the examples (icon.py, default-action.py, multi-actions.py and qt-app.py) are derived from pynotify examples, and are therefore LGPL-2.1, © 2006 Christian Hammond <chipx86@chipx86.com>.

1.1 Contributors

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1.2 License text

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notify2.**init**(*app_name*, *mainloop=None*)

Initialise the D-Bus connection. Must be called before you send any notifications, or retrieve server info or capabilities.

To get callbacks from notifications, DBus must be integrated with a mainloop. There are three ways to achieve this:

- Set a default mainloop (dbus.set_default_main_loop) before calling init()
- Pass the mainloop parameter as a string 'glib' or 'qt' to integrate with those mainloops. (N.B. passing 'qt' currently makes that the default dbus mainloop, because that's the only way it seems to work.)
- Pass the mainloop parameter a DBus compatible mainloop instance, such as dbus.mainloop.glib.DBusGMainLoop().

If you only want to display notifications, without receiving information back from them, you can safely omit mainloop.

notify2.**get_server_caps**()

Get a list of server capabilities.

These are short strings, listed in the spec. Vendors may also list extra capabilities with an 'x-' prefix, e.g. 'x-canonical-append'.

notify2.**get_server_info**()

Get basic information about the server.

CHAPTER 2

Creating and showing notifications

class notify2.**Notification**(*summary*, *message=''*, *icon=''*)

A notification object.

summary [str] The title text

message [str] The body text, if the server has the 'body' capability.

icon [str] Path to an icon image, or the name of a stock icon. Stock icons available in Ubuntu are listed here. You can also set an icon from data in your application - see *set_icon_from_pixbuf()*.

show()

Ask the server to show the notification.

Call this after you have finished setting any parameters of the notification that you want.

update(*summary*, *message=''*, *icon=None*)

Replace the summary and body of the notification, and optionally its icon. You should call *show()* again after this to display the updated notification.

close()

Ask the server to close this notification.

CHAPTER 3

Extra parameters

class notify2.**Notification**

set_urgency(*level*)
Set the urgency level to one of URGENCY_LOW, URGENCY_NORMAL or URGENCY_CRITICAL.

set_timeout(*timeout*)
Set the display duration in milliseconds, or one of the special values EXPIRES_DEFAULT or EXPIRES_NEVER. This is a request, which the server might ignore.

Only exists for compatibility with pynotify; you can simply set:

```
n.timeout = 5000
```

set_category(*category*)
Set the 'category' hint for this notification.

See categories in the spec.

set_location(*x*, *y*)
Set the notification location as (x, y), if the server supports it.

set_icon_from_pixbuf(*icon*)
Set a custom icon from a GdkPixbuf.

set_hint(*key*, *value*)
n.set_hint(key, value) <–> n.hints[key] = value

See hints in the spec.

Only exists for compatibility with pynotify.

set_hint_byte(*key*, *value*)
Set a hint with a dbus byte value. The input value can be an integer or a bytes string of length 1.

CHAPTER 4

Callbacks

To receive callbacks, you must have set a D-Bus event loop when you called *init()*.

class notify2.**Notification**

connect(*event*, *callback*)
Set the callback for the notification closing; the only valid value for event is 'closed' (the parameter is kept for compatibility with pynotify).

The callback will be called with the *Notification* instance.

add_action(*action*, *label*, *callback*, *user_data=None*)
Add an action to the notification.

Check for the 'actions' server capability before using this.

action [str] A brief key.

label [str] The text displayed on the action button

callback [callable] A function taking at 2-3 parameters: the Notification object, the action key and (if specified) the user_data.

user_data : An extra argument to pass to the callback.

CHAPTER 5

Constants

notify2.**URGENCY_LOW**
notify2.**URGENCY_NORMAL**
notify2.**URGENCY_CRITICAL**
: Urgency levels to pass to *Notification.set_urgency()*.

notify2.**EXPIRES_DEFAULT**
notify2.**EXPIRES_NEVER**
: Special expiration times to pass to *Notification.set_timeout()*.

CHAPTER 6

Indices and tables

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