
GNTTP Documentation

Release 1.0.3

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March 06, 2016

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Lower level classes for those who want more control in sending messages

Exceptions

```
exception gntp.errors.AuthError
exception gntp.errors.ParseError
exception gntp.errors.UnsupportedError
```

GNTTP Messages

Classes representing each of the GNTTP message types

class `gntp.core.GNTTPRegister` (*data=None, password=None*)
Represents a GNTTP Registration Command

Parameters

- **data** (*string*) – (Optional) See decode()
- **password** (*string*) – (Optional) Password to use while encoding/decoding messages

add_notification (*name, enabled=True*)
Add new Notification to Registration message

Parameters

- **name** (*string*) – Notification Name
- **enabled** (*boolean*) – Enable this notification by default

add_resource (*data*)
Add binary resource

Parameters **data** (*string*) – Binary Data

decode (*data, password*)
Decode existing GNTTP Registration message

Parameters **data** (*string*) – Message to decode

encode ()
Encode a GNTTP Registration Message

Return string Encoded GNTTP Registration message. Returned as a byte string

set_password (*password, encryptAlgo='MD5'*)
Set a password for a GNTTP Message

Parameters

- **password** (*string*) – Null to clear password
- **encryptAlgo** (*string*) – Supports MD5, SHA1, SHA256, SHA512

validate ()
Validate required headers and validate notification headers

class `gntp.core.GNTTPNotice` (*data=None, app=None, name=None, title=None, password=None*)
Represents a GNTTP Notification Command

Parameters

- **data** (*string*) – (Optional) See decode()
- **app** (*string*) – (Optional) Set Application-Name
- **name** (*string*) – (Optional) Set Notification-Name
- **title** (*string*) – (Optional) Set Notification Title
- **password** (*string*) – (Optional) Password to use while encoding/decoding messages

add_resource (*data*)

Add binary resource

Parameters **data** (*string*) – Binary Data**decode** (*data*, *password*)

Decode existing GNTTP Notification message

Parameters **data** (*string*) – Message to decode.**encode** ()

Encode a generic GNTTP Message

Return string GNTTP Message ready to be sent. Returned as a byte string**set_password** (*password*, *encryptAlgo*='MD5')

Set a password for a GNTTP Message

Parameters

- **password** (*string*) – Null to clear password
- **encryptAlgo** (*string*) – Supports MD5, SHA1, SHA256, SHA512

validate ()

Verify required headers

class gntp.core.**GNTTPSubscribe** (*data*=None, *password*=None)

Represents a GNTTP Subscribe Command

Parameters

- **data** (*string*) – (Optional) See decode()
- **password** (*string*) – (Optional) Password to use while encoding/decoding messages

add_resource (*data*)

Add binary resource

Parameters **data** (*string*) – Binary Data**decode** (*data*, *password*=None)

Decode GNTTP Message

Parameters **data** (*string*) –**encode** ()

Encode a generic GNTTP Message

Return string GNTTP Message ready to be sent. Returned as a byte string**set_password** (*password*, *encryptAlgo*='MD5')

Set a password for a GNTTP Message

Parameters

- **password** (*string*) – Null to clear password
- **encryptAlgo** (*string*) – Supports MD5, SHA1, SHA256, SHA512

validate ()
Verify required headers

class gntp.core.**GNTPOK** (*data=None, action=None*)
Represents a GNTTP OK Response

Parameters

- **data** (*string*) – (Optional) See _GNTTPResponse.decode()
- **action** (*string*) – (Optional) Set type of action the OK Response is for

add_resource (*data*)
Add binary resource

Parameters **data** (*string*) – Binary Data

decode (*data, password=None*)
Decode GNTTP Message

Parameters **data** (*string*) –

encode ()
Encode a generic GNTTP Message

Return string GNTTP Message ready to be sent. Returned as a byte string

set_password (*password, encryptAlgo='MD5'*)
Set a password for a GNTTP Message

Parameters

- **password** (*string*) – Null to clear password
- **encryptAlgo** (*string*) – Supports MD5, SHA1, SHA256, SHA512

validate ()
Verify required headers

class gntp.core.**GNTPErrror** (*data=None, errorcode=None, errordesc=None*)
Represents a GNTTP Error response

Parameters

- **data** (*string*) – (Optional) See _GNTTPResponse.decode()
- **errorcode** (*string*) – (Optional) Error code
- **errordesc** (*string*) – (Optional) Error Description

add_resource (*data*)
Add binary resource

Parameters **data** (*string*) – Binary Data

decode (*data, password=None*)
Decode GNTTP Message

Parameters **data** (*string*) –

encode ()
Encode a generic GNTTP Message

Return string GNTTP Message ready to be sent. Returned as a byte string

set_password (*password*, *encryptAlgo*='MD5')

Set a password for a GNTTP Message

Parameters

- **password** (*string*) – Null to clear password
- **encryptAlgo** (*string*) – Supports MD5, SHA1, SHA256, SHA512

validate ()

Verify required headers

Helper Functions

`gntp.core.parse_gntp(data, password=None)`

Attempt to parse a message as a GNTTP message

Parameters

- **data** (*string*) – Message to be parsed
- **password** (*string*) – Optional password to be used to verify the message

GNTP Basics

Python bindings for the [Growl Notification Transport Protocol](#)

Bugs can be reported at the [GitHub](#) issue tracker

4.1 Simple Message Sending

```
from gntp.notifier import mini
# Send a simple growl message with mostly default values
mini("Here's a quick message", callback="http://github.com/")
```

```
gntp.notifier.mini(description,      appName='PythonMini',    noteType='Message',    title='Mini Message',    applicationIcon=None,    hostname='localhost',    password=None,    port=23053,    sticky=False,    priority=None,    callback=None,    notificationIcon=None,    identifier=None,    notifierFactory=<class 'gntp.notifier.GrowlNotifier'>)
```

Single notification function

Simple notification function in one line. Has only one required parameter and attempts to use reasonable defaults for everything else :param string description: Notification message

Warning: For now, only URL callbacks are supported. In the future, the callback argument will also support a function

4.2 Detailed Message Sending

```
class gntp.notifier.GrowlNotifier(applicationName='Python GNTTP', notifications=[], defaultNotifications=None, applicationIcon=None, hostname='localhost', password=None, port=23053)
```

Helper class to simplify sending Growl messages

Parameters

- **applicationName** (*string*) – Sending application name
- **notification** (*list*) – List of valid notifications
- **defaultNotifications** (*list*) – List of notifications that should be enabled by default

- **applicationIcon** (*string*) – Icon URL
- **hostname** (*string*) – Remote host
- **port** (*integer*) – Remote port

The GrowlNotifier class is intended to mostly mirror the older python bindings for growl

```
GrowlNotifier.register()  
Send GNTTP Registration
```

Warning: Before sending notifications to Growl, you need to have sent a registration message at least once

```
GrowlNotifier.notify(noteType, title, description, icon=None, sticky=False, priority=None, call-  
back=None, identifier=None, custom={})  
Send a GNTTP notifications
```

Warning: Must have registered with growl beforehand or messages will be ignored

Parameters

- **noteType** (*string*) – One of the notification names registered earlier
- **title** (*string*) – Notification title (usually displayed on the notification)
- **description** (*string*) – The main content of the notification
- **icon** (*string*) – Icon URL path
- **sticky** (*boolean*) – Sticky notification
- **priority** (*integer*) – Message priority level from -2 to 2
- **callback** (*string*) – URL callback
- **custom** (*dict*) – Custom attributes. Key names should be prefixed with X- according to the spec but this is not enforced by this class

Warning: For now, only URL callbacks are supported. In the future, the callback argument will also support a function

```
GrowlNotifier.subscribe(id, name, port)  
Send a Subscribe request to a remote machine
```

4.3 Complete Example

```
import gntp.notifier  
  
# Simple "fire and forget" notification  
gntp.notifier.mini("Here's a quick message")  
  
# More complete example  
growl = gntp.notifier.GrowlNotifier(  
    applicationName = "My Application Name",  
    notifications = ["New Updates", "New Messages"],  
    defaultNotifications = ["New Messages"],  
    # hostname = "computer.example.com", # Defaults to localhost  
    # password = "abc123" # Defaults to a blank password  
)
```



```

growl.register()

# Send one message
growl.notify(
    noteType = "New Messages",
    title = "You have a new message",
    description = "A longer message description",
    icon = "http://example.com/icon.png",
    sticky = False,
    priority = 1,
)

# Try to send a different type of message
# This one may fail since it is not in our list
# of defaultNotifications
growl.notify(
    noteType = "New Updates",
    title = "There is a new update to download",
    description = "A longer message description",
    icon = "http://example.com/icon.png",
    sticky = False,
    priority = -1,
)

# Send the image with the growl notification
image = open('/path/to/icon.png', 'rb').read()
growl.notify(
    noteType = "New Messages",
    title = "Now with icons",
    description = "This time we attach the image",
    icon = image,
)

```

4.4 GNTP Configfile Example

class gntp.config.GrowlNotifier(*args, **kwargs)
 ConfigParser enhanced GrowlNotifier object

For right now, we are only interested in letting users override certain values from `~/gntp`

```

[gntp]
hostname = ?
password = ?
port = ?

```


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