
gs.group.list.command Documentation

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GroupServer.org

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1	gs.group.list.command API Reference	3
1.1	Processing commands	3
1.2	Command Abstract Base Class	4
1.3	The Result Enumeration	4
2	Changelog	5
2.1	1.0.3 (2015-12-11)	5
2.2	1.0.2 (2015-01-26)	5
2.3	1.0.1 (2014-11-13)	5
2.4	1.0.0 (2014-10-01)	5
3	Introduction	7
4	Register command processors	9
4.1	Example	9
5	Indices and tables	11

Contents:

gs.group.list.command API Reference

The API for email-commands is in two parts: *processing commands*, and *the result enumeration*.

1.1 Processing commands

The `gs.group.list.command.process_command()` function is used to process the commands in an email message.

`gs.group.list.command.process_command(group, email, request)`

Process a command in an email message

Parameters

- **group** (*obj*) – The group that recieved the email message.
- **email** (str or `email.message.Message`) – The email message that was recieved (which may or may not contain a command).
- **request** (*obj*) – The current browser request object.

Returns If a command was processed, and if email processing should continue.

Return type `CommandResult`

When an email is recieved it needs to checked to see if its `Subject` header is command, and the command executed if necessary. The `process_command()` function performs both of these tasks. The result will be either

- `CommandResut.notACommand` if the email is a normal message,
- `CommandResut.commandStop` if the email contained a command and processing should stop, or
- `CommandResut.commandContinue` if the email contained a command and processing should continue.

1.1.1 Example

```
r = process_command(self.group, email, request)
if r == gs.group.list.command.CommandResult.commandStop:
    return
```

1.2 Command Abstract Base Class

The `CommandABC` abstract base-class provides some useful functionality

class `gs.group.list.command.CommandABC (group)`

Abstract base-class for command-adaptors

Parameters `group` (*object*) – The group that is adapted.

static `get_command_components (email)`

Get the components of the command in the Subject

Parameters `email` (`email.message.Message`) – The email message that contains the command.

Returns The Subject of the email, split into components and lower-cased.

Return type list of strings

The `get_command_components()` method splits the command in the Subject into parts using the `shlex.split()` function. The components of the command are in lower-case, with all `re:` parts discarded.

process (`email, request`)

Process the command in the email

Parameters

- **email** (`email.message.Message`) – The email message that contains the command.
- **request** – The HTTP request made to process the email.

Returns If a command was processed, and if email processing should continue.

Return type `CommandResult`

Concrete classes must implement this method.

Sub-classes of `CommandABC` will need to provide the `process()` method. The browser-request is passed in so the command can issue email-notifications.

1.3 The Result Enumeration

The result enumeration is returned by the `gs.group.list.command.process_command()` function, and the command that are registered.

class `gs.group.list.command.CommandResult`

An enumeration of the different results from processing a command.

commandContinue = `<CommandResult.commandContinue: 2>`

The command was processed, and processing of this email should continue.

commandStop = `<CommandResult.commandStop: 1>`

The command was processed, and processing of this email should stop.

notACommand = `<CommandResult.notACommand: 0>`

The Subject did not contain a command

Changelog

2.1 1.0.3 (2015-12-11)

- Fixing the unit tests (possibly an issue with Zope2 2.13.23)

2.2 1.0.2 (2015-01-26)

- Tweaking the MANIFEST

2.3 1.0.1 (2014-11-13)

- Dealing with subject lines that only have one quote
- Dealing with subject lines that are missing, empty, or blank

2.4 1.0.0 (2014-10-01)

- Initial release

Prior to the creation of this product the command processing was carried out in the `Products.XWFMailListManager.XWFMailList` class.

Introduction

This product provides support for email-commands. It does this by providing a function for processing commands (to check for a command in an email message), a way to *register command processors*, and the result enumeration for returning the result of a command.

Register command processors

The commands are named *adaptors* that implement the `gs.group.list.command.interfaces.IEmailCommand` interface. The *name* is the command-name in **lower case**. So the command to unsubscribe someone from a group will have the adaptor name `unsubscribe`. The adaptor must

- Take the group in the `__init__()` method (it adapts the group),
- Provide a `process()` method that takes the email and browser-request as an argument.

4.1 Example

I prefer to declare adaptors using ZCML. This will declare a command named `example`. This command will be executed by `process_command()` whenever the subject line of an email message contains starts with `example` (in upper or lower case). The command itself is implemented by the `ExampleCommand` class in the `example` module in the local directory:

```
<adapter
  name="example"
  for="gs.group.base.interfaces.IGSGroupMarker"
  provides="gs.group.list.command.interfaces.IEmailCommand"
  factory=".example.ExampleCommand" />
```

The `example` module would contain the `ExampleCommand` class, which inherits from the abstract base-class for commands.

```
from gs.group.list.command import CommandABC, CommandResult
class ExampleCommand(CommandABC):
    def process(email, request):
        # TODO: Stuff
        return CommandResult.commandStop
```

The `request` is passed in to the `process()` method so the class can issue email-notifications.

Indices and tables

- `genindex`
- `modindex`
- `search`

C

CommandABC (class in `gs.group.list.command`), 4
commandContinue (`gs.group.list.command.CommandResult`
attribute), 4
CommandResult (class in `gs.group.list.command`), 4
commandStop (`gs.group.list.command.CommandResult`
attribute), 4

G

get_command_components()
(`gs.group.list.command.CommandABC` static
method), 4

N

notACommand (`gs.group.list.command.CommandResult`
attribute), 4

P

process() (`gs.group.list.command.CommandABC`
method), 4
process_command() (in module `gs.group.list.command`),
3