# tellbot usage

### 2018-04-10

**@TellBot** has reached all of its intended functionality, and development is restricted to maintenance. The command set may change upon popular demand or developer decision.

# Commands

Aside from the mandatory commands from the "botrulez", <code>@TellBot</code> implements the following concrete commands:

- !inbox Check own mailbox.
- !tell Send messages.
- !reply / !reply-all Reply to a message.
- !tgroup / !tungroup Manage groups of users.
- !tgrouplist List the members of a group.
- !tlistgroups List groups (filtering by name).
- !tgroupsof List groups a user is in.
- !alias Manage aliases of a user.
- !seen Report when a user was last seen.

### !inbox

```
!inbox [--stale]
```

Deliver the pending notifies to yourself. If --stale is passed, also post messages again that were delivered to you (this can be tried as a last effort of error recovery).

To immediately comment on the messages, you can also (after a -- separator) post comments in the same message as the command; this is discouraged and may change in the future.

If a user has been away for a long time (i.e. more than two days),  ${\tt @TellBot}$  does not deliver notifies immediately upon any message of the recipient (as some other bots do), but instead shows a notification, which advises to use this command.

#### Examples

```
!inbox
  No mail.
!inbox
  [You, 2d 5m ago] message
!inbox --stale
  [You, 2d 5m 13s ago] message
```

# !tell a.k.a. !tnotify

```
!tell [--ping] [--priority=<level>] <user-list> [--] <message>
!tnotify [--ping] [--priority=<level>] <user-list> [--] <message>
```

Schedule message to be delivered to all users in the given user-list. A -- separator may be used to separate the recipients from the message body (such as when the message starts with an @-mention); it is not included in the delivered message. (To send a message starting with a double dash, duplicate the separator.)

@TellBot displays a breakdown of the users the message will actually be delivered to as a reply to the command. Unless --ping is passed, users on the list are not @-mentioned to allow sending messages of low importance without disturbing the recipients.

Each message has an associated priority that determines whether and with how much effort the recipient will be notified of it (*i.e.*, currently, whether an email notification will be sent if the user has opted in). Matching is case-insensitive. The priority levels are: - LOW: A notification will never be sent. - NORMAL: A notification will be sent if the user had been away for some time (the default is a week) and has not received another notification in some time (the default is a week as well). - URGENT: A notification will be dispatched immediately and unconditionally. To prevent abuse, this level is only available to room hosts (and/or site staff).

If the message is empty (or consists of only whitespace), it is dropped (and the potential recipients are not notified), but the list of recipients is still displayed; this may be useful to observe the effects of different user list operations (see the corresponding section). Leading or trailing whitespace is stripped from the message; whitespace "inside" the message is unaltered.

If you submit a message to a group you are a member of and do not explicitly include yourself as a recipient, you will be dropped from the recipient list; this aids messaging groups without redundantly showing you the text you presumably already read while composing it. Explicit mention of yourself is interpreted as the explicit intent of delivering the message to yourself.

!tell and !tnotify are exactly equivalent; the latter is provided for closeness to the corresponding @NotBot command.

#### Examples

!tell @person1 something

```
!tnotify @person2 @person3 something else
!tell *group -- @somebot stopped working, can you check?
!notify
!notify [--ping] [--priority=<level>] <user-list> [--] <message>
```

Depending on the configuration, @TellBot may respond to a !notify command in the same way as to a !tell, either immediately, or after a delay (and unless something else does), or not at all. This (if enabled) renders @TellBot a failsafe for a @NotBot instance running in the same room, in case the latter goes down.

# !reply and !reply-all

```
!reply <message>
!reply-all <message>
```

If (and only if) used as direct replies to delivered messages that are not older than some implementation-defined time (*i.e.* two days), these commands will send a message back to the sender of the received message (!reply) or the group the message was sent to (!reply-all). If the message was not sent to a group, both behave equivalently.

The message starts immediately after the command (and can in particular start with any character). Implicit self exclusion happens in the case of !reply-all, and does not happen for !reply.

### Examples

```
[You, 5s ago] some message
  !reply some reply

[person to *group, 5s ago] another message
  !reply Can you clarify that a bit?

[person to *group, 5s ago] yet another message
  !reply-all another reply
```

### !tgroup and !tungroup

```
!tgroup [--ping] *<group> [<user-list>] [-- <description>]
!tungroup [--ping] *<group> <user-list>
```

!tgroup updates the given group with the result of building user-list basing upon it. If user-list is empty, the members of the group are displayed without mutating it.

!tungroup removes all members of user-list (starting with an empty set) from the group. Note that the user-list must be nonempty; otherwise, the command has no effect.

Unless --ping is passed, user names are not @-mentioned to avoid unnecessary alerting.

If description is passed, subsequent queries of that group will display it until it is replaced.

### Examples

```
!tgroup *group @person1 @person2
  Group: *group
 Members before: -none-
 Members after (2): person1, person2
!tgroup --ping *group
 Group: *group
 Members (2): @person1, @person2
!tgroup *group -*group -- A demonstration group.
  Group: *group
 New description: A demonstration group.
 Members before (2): person1, person2
 Members after: -none-
!tgroup *group
  Group: *group
 Description: A demonstration group.
 Members: -none-
!tgrouplist
!tgrouplist [--ping] *<group>
```

!tgrouplist is an alias for !tgroup that only allows listing a group.

# !tlistgroups

```
!tlistgroups [pattern]
```

Enumerate all groups (or those whose name without the \* sigil match a globbing pattern) known to @TellBot. The output is alphabetically sorted.

Pattern syntax: pattern may not contain whitespace, and can include the following metacharacters:

• ? matches an arbitrary single character.

To match a literal question mark, enclose it in a character class (*i.e.* use [?]; see below).

- \* matches an arbitrary amount of arbitrary characters (including none).
   To match a literal asterisk, enclose it similarly to the question mark in a character class (i.e. use [\*]).
- [initiates a character class that matches one character of any such mentioned in it; it is closed by a ], and the [may be immediately followed by! denoting a negative match; character ranges (separated by dashes -) are allowed.

To include a closing bracket (]), place it immediately after the opening bracket ([) or the negation sign (!); to include a dash, place it at the beginning (similarly to ]) or end (immediately before the closing ]) of the character class. Nested opening brackets are not treated specially.

Thus, [] [] matches a closing or an opening bracket; [!]] matches anything but a closing bracket; [?-] matches a question mark or a hyphen; [a-z] matches a letter of (see below) any case.

The pattern must match the entire group name (ignoring case); to "de-anchor" it from an end, use leading or trailing asterisks \*.

### Examples

```
!tlistgroups
  *anyquestions?
  *botdevs
  *groupA, *groupB, *groupC, *groupD
  *test, *testing
!tlistgroups group?
  *groupA, *groupB, *groupC, *groupD
!tlistgroups *st*
  *anyquestions?
 *test, *testing
!tlistgroups [gt]*
  *groupA, *groupB, *groupC, *groupD
  *test, *testing
!tlistgroups *[c-g]
  *groupC, *groupD
  *testing
!tlistgroups *[?]
  *anyquestions?
```

### !tgroupsof

```
!tgroupsof [--ping] <user-list>
```

Reply with the groups the users in user-list are members of.

Unless --ping is specified, users are not pinged.

### Examples

```
!tgroupsof @user1
   Groups of user1: -none-
!tgroupsof --ping @user2
   Groups of @user2 (1): *group1
!tgroupsof *group1
   Groups of user2 (1): *group1
   Groups of user3 (3): *group1, *group2, and *group3
```

### !alias and !unalias

```
!alias [--ping] @<user> [<user-list>]
!unalias [--ping] @<user> <user-list>
```

Alias together multiple users (along with all their former aliases) and/or remove some aliases of a user.

!alias builds the given user-list — which may not contain groups — starting from the current set of aliases of user, extends the list by all other aliases of users contained in the list (except user), and installs the result as a new alias list instead of the former one of user (and any added members).

!unalias builds the user-list — which again may contain no groups — and removes the entries of user-list from the alias list of user; it cannot add new aliases.

Unless --ping is passed, user names are not @-mentioned to avoid unnecessary alerting.

For consistency's sake, a user is always considered to have a one-entry alias set if no other aliases are present (or the observable behavior should be equivalent to that).

Aliases interact with the other features of <code>@TellBot</code> primarily at the time of retrieval. A group some members whereof have been aliased together retains all members per se (although only one is displayed); when it is modified, however, only one of the aliases is written back. Messages are stored with the recipient originally indicated, and are delivered to which alias ever of that user appears first. Information about when a user has been seen is stored per original name, and the results for all aliases of a user are aggregated when the information is actually requested.

Hence, creating and removing an alias again would not have too many grave consequences if other information concerning that user is not accessed in the meantime.

### Examples

```
!alias @user1 @user2 @user3
   Aliases of @user1 before: user1
   Aliases of @user1 after: user1, user2, and user3
!alias --ping @userA @userB @userX
   Aliases of @userA before: @userA
   Aliases of @userA after: @userA, @userB, and @userX
!unalias @userX @userX
   Aliases of @userX before: userA, userB, and userX
   Aliases of @userA after: userA and userB
!alias @user1 @userA
   Aliases of @user1 before: user1, user2, and user3
   Aliases of @user1 after: user1, user2, user3, userA, and userB
!alias --ping @test
   Aliases of @test: @test
```

#### !seen

!seen <user-list>

Reply with time intervals since the users in user-list were last seen (*i.e.* posted something in a room observed by @TellBot whilst it was running), the rooms they were in, and counts of messages pending delivery to them.

### Examples

```
!seen @person1
  @person1 last seen here on {some date}, 5m 2s ago.
!seen @person2
  @person2 not seen (3 pending messages).
!seen *group
  @person3 last seen here on {some date}, 1d 4h 5s ago (1 pending message).
  @person4 last seen in &test on {some date}, 41d 23h 59m ago.
```

# User lists

**@TellBot** uses a moderately powerful array of incremental set operations to allow specifying sets of users.

A user list (actually an ordered set) is built starting with a *base* (that is empty where not explicitly mentioned) and changing it in accord with certain operations in the order the latters are given. These operations are:

- +@<nick>: Add the specified user to the user list (if not already present).
- +\*<group>: Add all members to the user list (for each, if not already present).
- -@<nick>: Remove the specified user from the list (if present).
- -\*<group>: Remove all members of the group from the user list (for each, if present).
- Qnick: A "bare" nickname is equivalent to adding the user.
- \*group: A "bare" group name is equivalent to adding the group.

Hence, + is equivalent to the set union operator, and - to the set difference operator; applied to the unitary set containing the specified user in one case, or to the set of the members of a group in the other. Beyond the set semantics, the operators attempt to maintain the relative order of users; the addition operators append "new" users to the end of the list. Therefore, removing a user and re-adding it will result in pushing it to the end.

The order of users does not have any effect *per se*, but is preserved upon display; it also affects the group listing shortening in the reply to !tell (*i.e.* the omitting of users already mentioned elsewhere in the reply).

Note that the operations are not commutative; -Quser +Quser will have a different effect from both +Quser -Quser and discarding both operations (respectively, the user will shifted to the end of the list, the user will be removed, the user will not be affected at all).

#### Examples

For basic examples, see the respective commands.

- !tell @person1 @person2 @person1 message Deliver a message to @person1 and @person2 (i.e., the message will not reach @person1 twice).
- !tell \*programmers -\*botdevs message Deliver a message to all programmers except the bot developers.
- !tgroup \*programmers Do not alter \*programmers (the special case mentioned in the documentation of !tgroup is equivalent to what would happen if it were not there).
- !tgroup \*programmers \*botdevs Add all bot developers to \*programmers.
- !tgroup \*programmers -\*programmers Remove all members from \*programmers (i.e. clear the group).