# 1 threads.pl – Threads

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Implements triggers, timers and simultaneous actions.

### nxt\_goal(+Alias, +Goal)

Invokes *Goal* as a goal in a separated thread for a robot named *Alias*.

## **nxt\_goal**(+Alias, +Goal, +Description)

Invokes *Goal* as a goal in a separated thread with description for a robot named *Alias*.

#### nxt\_switch\_robot(Alias)

Switches current thread to work with another robot. It is very useful when controlling robots using a console.

#### **nxt\_start\_thread**(+*Alias*, +*Goal*)

Configures current thread to work with a robot named *Alias* and invokes *Goal* as a goal.

## **nxt\_start\_thread**(+Alias, +Goal, +Description)

Configures current thread to work with a robot named *Alias*, sets a thread description and invokes *Goal* as a goal.

#### nxt\_threads

Lists all running threads.

nxt\_threads(-List)

**nxt\_threads**(+Alias, -List)

#### nxt\_threads\_killall(+Alias)

Kills all threads of robot with specified *Alias* (except the caller thread, the main thread, registered (asserted) triggers and registered timers).

#### **trigger\_create**(-ID, +Event, +Action)

Creates trigger. *Action* will be fired once, when *Event* is true. *Action* can be both a predicate or a list of predicates.

#### **trigger\_create**(-ID, +Event, +Action, +Count)

Creates trigger. *Action* will be fired *Count* times, when *Event* is true. If *Count* is inf trigger works infinitely. *Action* can be both a predicate or a list of predicates.

## trigger\_create\_noreturn(-ID, +Event, +Action)

Creates trigger. *Action* will be fired, when *Event* is true. Trigger will not return to the thread which created it. *Action* can be both a predicate or a list of predicates.

## trigger\_exists(?ID)

Returns true if trigger exists. Fails if there is no trigger with specified *ID*.

## trigger\_kill(+ID)

Kills trigger with specified *ID*. Returns true if trigger has been deleted. Fails if there is no trigger with specified *ID*.

## trigger\_killall

Kills all triggers.

# trigger\_killall(+Alias)

Kills all triggers of robot with specified Alias.

## timer\_create(-ID, +Time, +Action)

Creates timer. *Action* will be fired after specified *Time*. *Action* can be both a predicate or a list of predicates.

## timer\_exists(?ID)

Returns true if timer exists. Fails if there is no timer with specified ID.

## timer\_kill(+ID)

Kills timer with specified *ID*. Returns true if timer has been deleted. Fails if there is no timer with specified *ID*.

## timer\_killall

Kills all timers.

## timer\_killall(+Alias)

Kills all timers of robot with specified Alias.

# wait\_till(+Event)

Waits till *Event* is true.