

`threaded_call/2`

Description

```
threaded_call(Goal, Options)
threaded_call((Goal1, Goal2, ...), Options)
threaded_call((Goal1; Goal2; ...), Options)
```

Prove `Goal` using a new thread. By default, the proof is done asynchronously. The argument can be a message sending. The result (success, failure, or exception) is sent back to the thread of the object containing the call (*this*). The option `noreply` may be used when no reply with the proof results is necessary. The option `atomic` may be used if the goal has side-effects such as dynamic database updates or input-output operations; this option is only safe if the side-effects are confined to the object where the goal is proved (or to the object receiving the asynchronous message).

When the argument is a *conjunction* of goals, the call is equivalent the conjunction of calls of the individual goals. However, when the argument is a *disjunction* of goals, the call is equivalent to the *competing* calls of the individual goals: when one of the goals complete, the other ones are aborted (i.e. their threads are terminated). In this case, the corresponding `threaded_exit/1-2` goal **must** match all the goals in the disjunction. This is useful when you have a set of different methods to solve a problem without knowing a priori which one will lead to the fastest result.

Template and modes

```
threaded_call(+callable, +list)
```

Examples

Prove `Goal` asynchronously in a new thread:

```
threaded_call(Goal, Options)
```

Send an asynchronous message to *self*:

```
threaded_call(::Message, Options)
```

Send an asynchronous message to an object:

```
threaded_call(Object::Message, Options)
```