# How can I stop a route from a route

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The CamelContext provides API for managing routes at runtime. It has a stopRoute(id) and startRoute(id) methods.

Stopping a route during routing an existing message is a bit tricky. The reason for that is Camel will Graceful Shutdown the route you are stopping. And if you do that while a message is being routed the Graceful Shutdown will try to wait until that message has been processed.

The best practice for stopping a route from a route, is to either

- · signal to another thread to stop the route
- spin off a new thread to stop the route

Using another thread to stop the route is also what is normally used when stopping Camel itself, or for example when an application in a server is stopped etc. Its too tricky and hard to stop a route using the same thread that currently is processing a message from the route. This is not advised to do, and can cause unforeseen side effects.

## Using a latch to stop Camel from a route

In this example we use a CountdownLatch to signal when Camel should stop, triggered from a route.

Error formatting macro: snippet: java.lang.NullPointerException

And in the route we call the latch as shown:

Error formatting macro: snippet: java.lang.NullPointerException

## Using a thread to stop a route from a route

In this example we use a separate Thread to stop the route, triggered from the route itself.

Error formatting macro: snippet: java.lang.NullPointerException

And in the route we create the thread and call the stopRoute method as shown:

Error formatting macro: snippet: java.lang.NullPointerException

#### **Alternative solutions**

Camel provides another feature for managing routes at runtime which is RoutePolicy.

And CamelContext also provides API for suspend/resume of routes, and shutdown as well.

- suspend/resume is faster than stop/start. For example a HTTP server will still run but deny any incoming requests.
  Where as if it was stopped the HTTP listener would have been stopped.
- shutdown means the route is being removed from CamelContext and cannot be started again. Its also removed from JMX.
  A route must have been stopped prior to be shutdown.

See more details about the Lifecycle.



You can also use the ControlBus component to let it stop/start routes.

### See Also

- RoutePolicy
- Graceful Shutdown
- Lifecycle
- ControlBus