Karaf

Karaf Support

Apache Camel is designed to work nicely inside Apache Karaf OSGi container.

It includes:

- Camel features descriptor allowing to easily and quickly install Camel in Karaf.
- Karaf commands allowing you to view, start, stop, get info, about the Camel contexts and routes running in the Karaf instance.

It is recommended to use at least Apache Karaf 4.x with current Camel versions.

Install Camel in Karaf

Assuming that you have a running Karaf instance, you can register the Camel features descriptor:

```
karaf@root> feature:repo-add camel 2.18.4
```

Now, we have all Camel features available:

```
karaf@root> features:list|grep -i camel
[uninstalled] [2.8.0          ] camel                      repo-0
[uninstalled] [2.8.0          ] camel-core                 repo-0
[uninstalled] [2.8.0          ] camel-spring               repo-0
[uninstalled] [2.8.0          ] camel-blueprint            repo-0
[uninstalled] [2.8.0          ] camel-test                 repo-0
[uninstalled] [2.8.0          ] camel-cxf                  repo-0
...
```

It is a good start to at least install camel-blueprint

```
karaf@root> features:install camel-blueprint
```

You might need other features depending on what components you use in your routes. So for example if you use stream:out then you need the camel-stream feature.

```
karaf@root> features:install camel-stream
```

Karaf commands

The camel commands below help managing your integrations. In many cases the commands support tab completion for context and route names.

Command	Description
camel:context-list	Lists the camel contexts available in the current Karaf instance
camel:context-info	Displays detail information about a given Camel context
camel:context-start	Starts the given Camel context
camel:context-stop	Stops the given Camel context (it becomes unavailable and it can't be started afterwards)
camel:route-list	Displays the list of Camel routes available in the current Karaf instance
camel:route-info	Provides detail information about a Camel route
camel:route-show	Renders the route in XML
camel:route-start	Starts the given route. From Camel **2.10** onwards you can use * as wildcard to match multiple routes.
camel:route-stop	Stops the given route. From Camel **2.10** onwards you can use * as wildcard to match multiple routes.

camel:route-suspend	Suspends the given route. From Camel **2.10** onwards you can use * as wildcard to match multiple routes.
camel:route-resume	Resumes the given route. From Camel **2.10** onwards you can use * as wildcard to match multiple routes.
camel:endpoint-list	Lists endpoints fromm all camel contexts available in the current Karaf instance
camel:route-profile	To profile route(s)
camel:route-reset-stats	To reset performance stats on the given route(s)
camel:context-suspend	Suspends the given Camel context
camel:context-resume	Resumes the given Camel context

camel:route-list

```
karaf@root> camel:route-list
[route1              ]
```

You can also filter the routes by CamelContext:

```
karaf@root> camel:route-list 66-camel-3
[route1              ]
```

Tip: use the TAB key to completion on the CamelContext ID.

camel:context-info

Displays detailed information about a given CamelContext:

add the *--verbose* option (following the context name) to also list the endpoints

```
karaf@root> camel:context-info 66-camel-3
Camel Context 66-camel-3
        Name: 66-camel-3
        Version: 2.8.0
        Status: Started
        Uptime: 1 minute

Advanced
        Auto Startup: true
        Starting Routes: false
        Suspended: false
        Tracing: false

Properties

Components
        timer
        properties
        log

Endpoints
        timer://test
        log://test

Routes
        route1

Used Languages
```

You can see the current Camel version used by the CamelContext, some context attributes, the components involved in the context, and the endpoints defined.

Tip: use TAB key for completion on the CamelContext name.

camel:route-info

The *__camel:route-info__* command provides detail information about a Camel route:

```
karaf@root> camel:route-info route1
Camel Route route1
        Camel Context: 66-camel-3

Properties
                id = route1
                parent = 2e7aacc1

Statistics
        Exchanges Total: 98
        Exchanges Completed: 98
        Exchanges Failed: 0
        Min Processing Time: 1ms
        Max Processing Time: 2ms
        Mean Processing Time: 1ms
        Total Processing Time: 134ms
        Last Processing Time: 1ms
        First Exchange Date: 2011-06-29 07:21:57
        Last Exchange Completed Date: 2011-06-29 07:23:34

Definition
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<route id="route1" xmlns="http://camel.apache.org/schema/spring">
    <from uri="timer:test"/>
    <to uri="log:test" id="to1"/>
</route>
```

You can see some statistics (the number of processed exchanges, the processing time, etc) and a XML rendering of your route (whatever DSL used to define the route).

Tip: use TAB key for completion on the route name.

camel:route-show

The *__camel:route-show__* command renders the route in XML. It's independent from the DSL used to define the route:

```
karaf@root> camel:route-show route1
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<route id="route1" xmlns="http://camel.apache.org/schema/spring">
    <from uri="timer:test"/>
    <to uri="log:test" id="to1"/>
</route>
```

Tip: use TAB key for completion on the route name.

camel:route-suspend

The *__camel:route-suspend__* command suspends a Camel route:

```
karaf@root> camel:route-suspend route1
```

Tip: use TAB key for completion on the route name.

camel:route-resume

The *__camel:route-resume__* command resume a Camel route:

```
karaf@root> camel:route-resume route1
```

Tip: use TAB key for completion on the route name.

camel:endpoint-list

The *****camel:endpoint-list***** command displays the list of the endpoints available in all camel contexts of the current Karaf instance:

```
karaf@root> camel:endpoint-list
camel-id            uri              Status
[test            ] [timer://test    ] [Started          ]
[test            ] [direct://A       ] [Started          ]
```

It displays the context name/ID (used in others commands), the URI of the endpoint and the current status (started/stopped).