Server Console

Karaf shell

OpenNaaS server uses a Karaf shell to manage Fuse and the OSGi container.

The shell is local to the server (although it can be configured to be acceded remotely) and is the primary interface to administer OpenNaaS.

It supports scripting, among many other interesting features you would like to take advantage of, for sure

To get more information about karaf itself:

- Karaf shell http://karaf.apache.org/
- Karaf user's guide http://karaf.apache.org/manual/latest-2.2.x/users-guide/index.html
- Karaf complete list commands: https://cwiki.apache.org/KARAF/41-console-and-commands.html#4.1.ConsoleandCommands-OSGishell

CLI commands

Karaf command line console offers a set of pre-defined commands to manage osgi bundles and features, but it has been extended by exporting other customized commands required to operate OpenNaaS.

Each command has a namespace and a command name. The way to invoke them is as follows:

```
>namespace:commandname [options] arguments
```

As a quick reference, each OpenNaaS module exports commands required to interact with it. Namespaces are used to identify the context of a command or, more precisely, the component it comes from. In this manner, ResourceManager defines the "resources" namespace, ProtocolSessionManager the "protocols" one, and so on. Each capability defines a namespace that identifies its functionality, too.

The list of all available commands (and its namespaces) is accessible by pressing "tab" key twice form a clean prompt:

```
>[tab tab]
>Display all 341 possibilities? (y or n)
```

For a description of the commands, each one has a "--help" option that describes the command syntax, its semantics and how to invoke it, enumerating required arguments and available options. An example of this option output is shown just below:

If you are having problems using the shell, please refer to Getting Support section.