SDN-R Development

Directory structure

In the gerrit *ccsdk/feature* repository in the path *sdnr/wt* the sources for all feature bundles are located.

In the following directory tree there are two sdnr services *northbound* and *wt*:

```
sdnr/
 northbound
     features
     helloworld
     goodbyeworld
     energysavings
     oofpcipoc
 wt
     featureaggregator
     apigateway
     helpserver
     devicemodel
     devicemanager
     websocketmanager2
     odlux
     pom.xml
     README.md
```

In *sdnr/wt* the features *apigateway, helpserver, devicemodel, devicemanager, websocketmanager2, odlux* are providing the functionality.

In *sdnr/northbound* there are the "development examples" *helloworld* and *goodbyworld* and the services *energysavings* and *oofpcipoc.*

Each feature contains a substructure

The sdnr/wt/*featureaggregator and sdnr/northbound/features*

- is packaging all the above sdnr wt feature bundles (*apigateway, .. ,odlux*) into one ZIP installer to integrate them into a distribution image
- providing a single karaf feature that can be used to install the complete service "sdnr-wt-feature-aggregator", but also provides the sub-features and its repositories

Template structure for feature

The SDN-R template structure for one feature has the elements:

name	content
feature	(mandatory) OSGi xml feature and dependency
installer	(mandatory) ZIP file containg mavenrepository content of helloworld feature for delivery to distribution ODL Karaf container.
model	(optional) OSGi bundles export interface source files as java or yang source
provider	(optional) OSGi bundles implementation source files as java or yang source

A functional implementation should normally provide all elements, but it could be a subset only.

- feature aggregator: Feature xml and installer are required.
- model provider: feature, installer, model

Subsequent descriptions

The decriptions for creating a feature are:

1. Creating and Installing a New Feature into SDN-R
2. Creating a "Component Meta-Feature"
3. Creating SDNC/oam image with SDN-R functionality

The descriptions are provided with ONAP Casablance release. So the version numbers are related to Casablanca.