OSM Hackfest
Introduction to charms and VNF primitives
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What is a charm?

• A charm is a set of actions and hooks
  • Actions are programs
  • Hooks are events/signals

• For commodity and reusability, those actions and hooks are grouped in layers

• A charm will always have one layer:
  • That layer has some actions and hooks
  • In addition, that layer can import other layers

• The resulting charm has all the actions and hooks from all the layers joined together, plus additional default actions and hooks (e.g. ‘config’ action)
What is a charm?
Charm design

layers

blue

red

green

hooks

actions

‘config’ action
What is a charm?
Charm build
VNF primitives in OSM

• Initial-config-primitive (day-1): invoked from the SO at instantiation time

• Config-primitives (day-2): invoked from the SO at operator demand (or demanded through the SO NB API e.g. from an OSS)

• Others out of scope (pre and post scaling primitives)
Mapping between VNF primitives and charm actions and hooks in the descriptor

- VNF primitives have to be mapped to actions in the VNF descriptor

- Initial-config-primitive: maps to a sequence of actions or hooks where the first must be always ‘config’ (action)

- Config-primitives: maps 1to1 to an action

- When writing that mapping in the descriptor, actions and the parameters have to be explicitly written again