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# OSM Hackfest

## Introduction to charms and VNF primitives

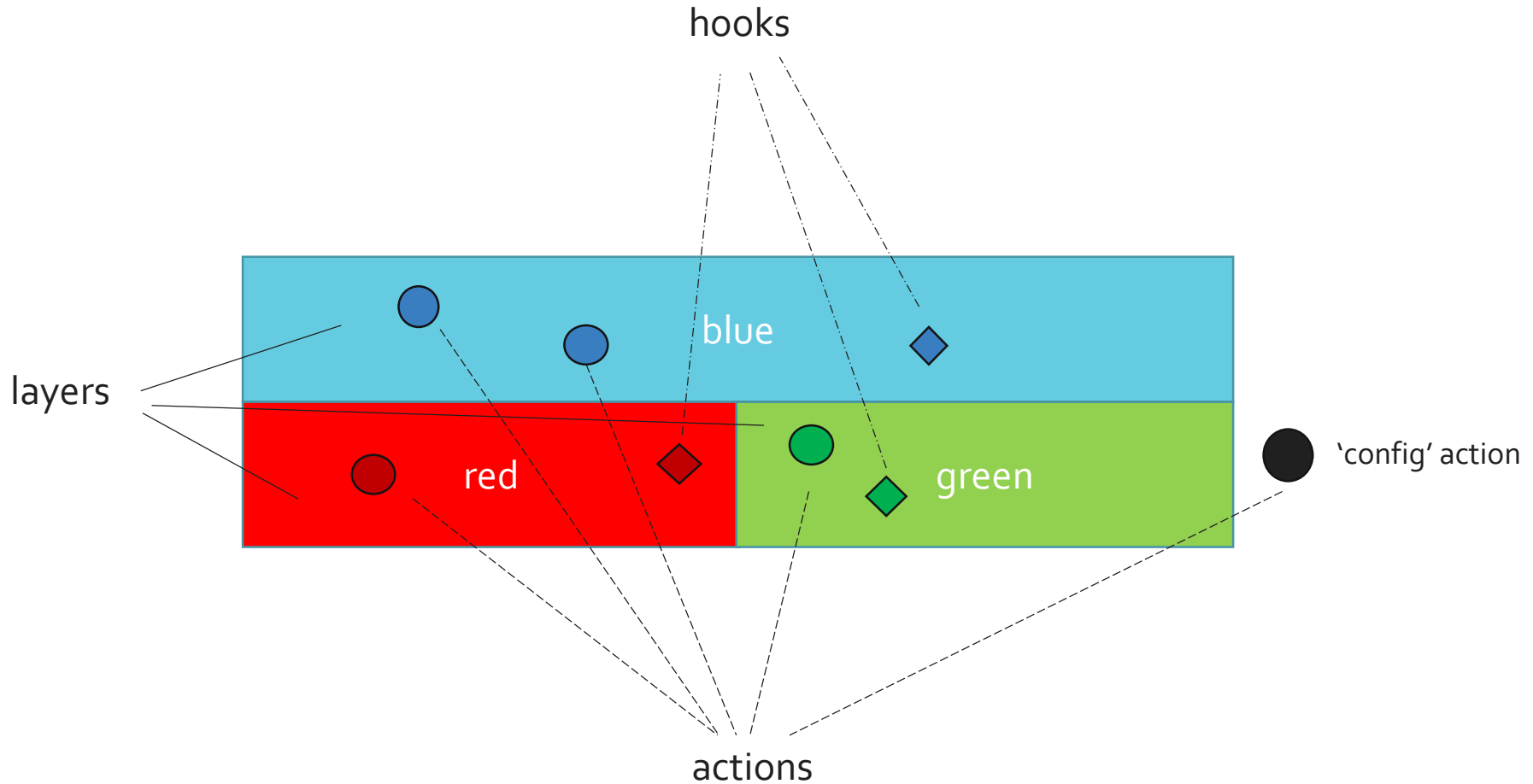
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# What is a charm?

- 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)

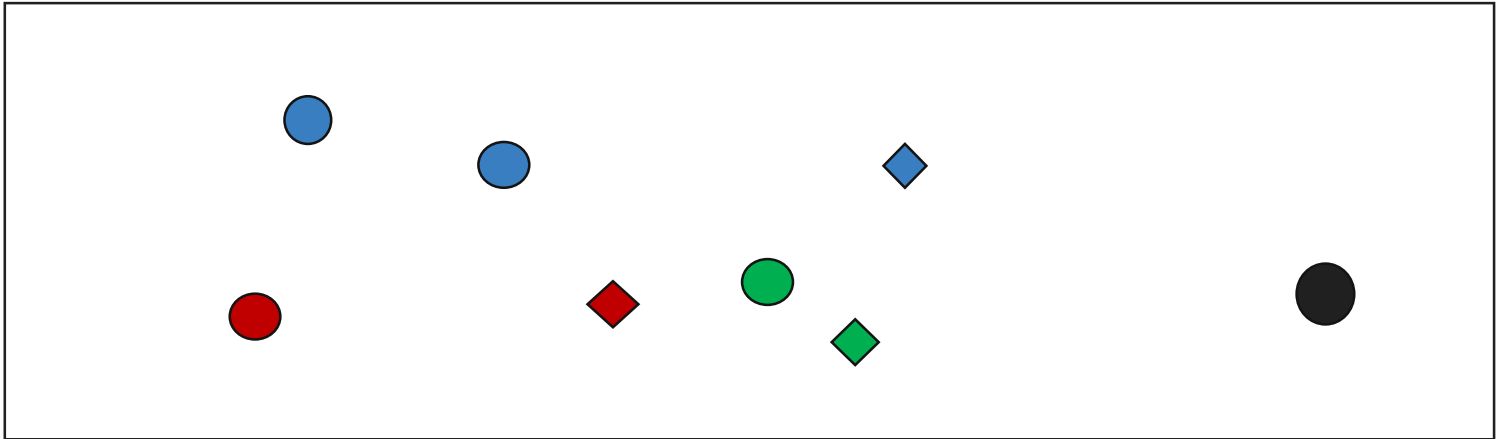
# What is a charm?

## Charm design



# What is a charm?

## Charm build

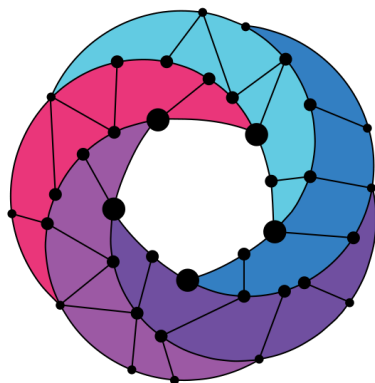


- Initial-config-primitive (day-1): invoked from the SO at instantiation time
- Config-primitives (day-2): invoked from the SO at operator demand (or demanded through the SO NB API e.g. from an OSS)
- Others out of scope (pre and post scaling primitives)

# 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



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