CONNECTING ICN „ISLANDS”

- One of deployment problems with ICN: „islands” separated by traditional network
- Manual tunnels set-up to enable communication: tedious, error-prone etc.

![Diagram showing ICN connectivity issues]

- a) Available in cache?
- b) Pending in PIT?
- c) If not, then forward
What's the nearest ICN node containing the data object of interest?

a) Forwarding entry available?
   Then just forward 😊

b) If not, then ask controller

Update forwarding entries
Perform any action to forward via legacy network (e.g., rewrite IP, push MPLS,...)

Demo:
- Non-ICN network = IPv4
- Controller = Ryu + OpenFlow 1.3
- SDN switch = CPDQ softswitch modified to handle eBPF programs to match on ICN names
- ICN node = nfd 0.4.1
- ICN app = Ryu app gathering ICN routing information