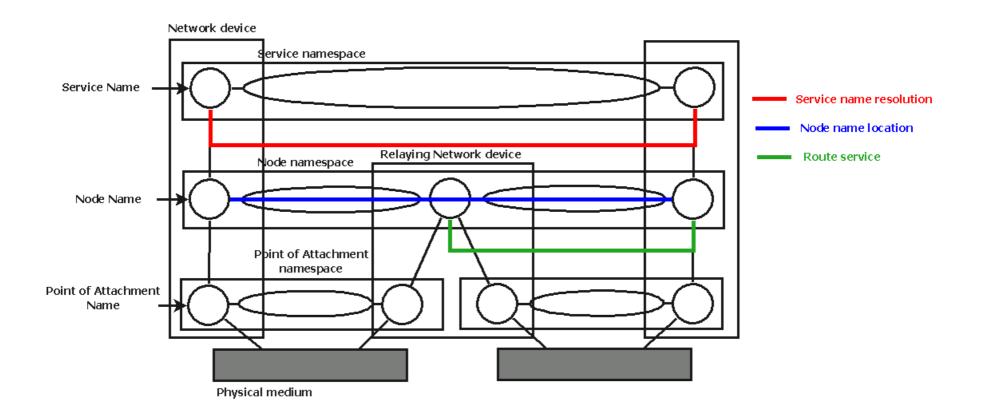
# Seamless Mobility in Data Aware Networks (DAN/ICN)

September 29, 2016 ICNRG Interim meeting

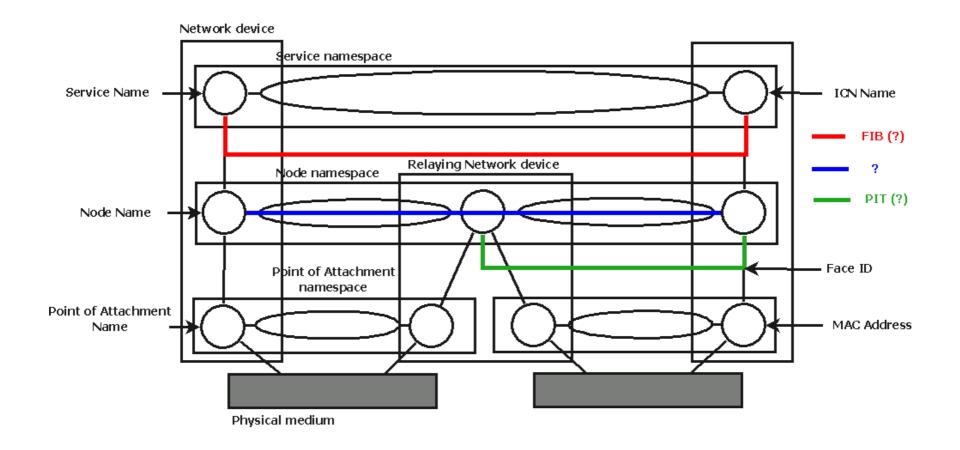
Waseda University Sato Laboratory Jairo Lopez

Originally presented at ITU Kaleidoscope 2015 Barcelona

#### RFC 1498 – John Saltzer



## Mapping RFC 1498 to ICN



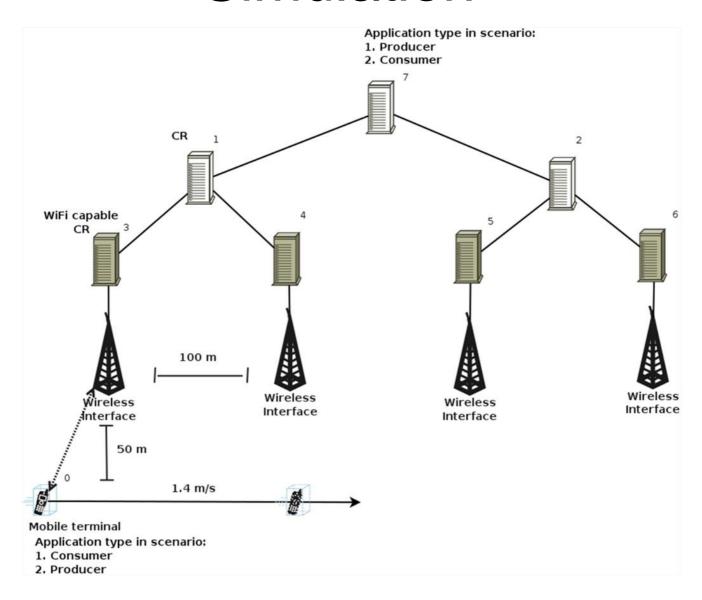
## Named node namespace for ICN

- We create an independent namespace for nodes
- The names we create are called 3N names
- Create Named Node Signature Table (NNST) and aggregating 3N names to Pending Interest Table (PIT)
  - Completes Route mapping (3N name to PoA name)
- Create Named Node Pair Table (NNPT)
- 2016-09-29 Completes Node name location mapping (3N4 name to 3N name and University

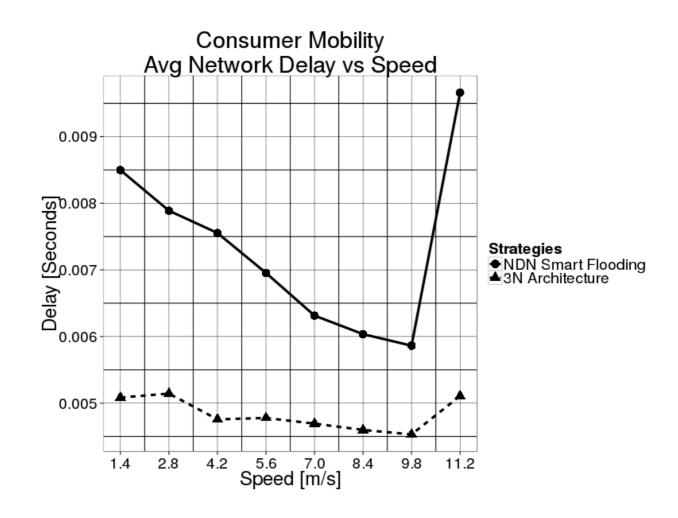
#### Simulator

- Built a simple simulator using ns3
- Completely open source
- https://bitbucket.org/nnnsimdev/nnnsim/

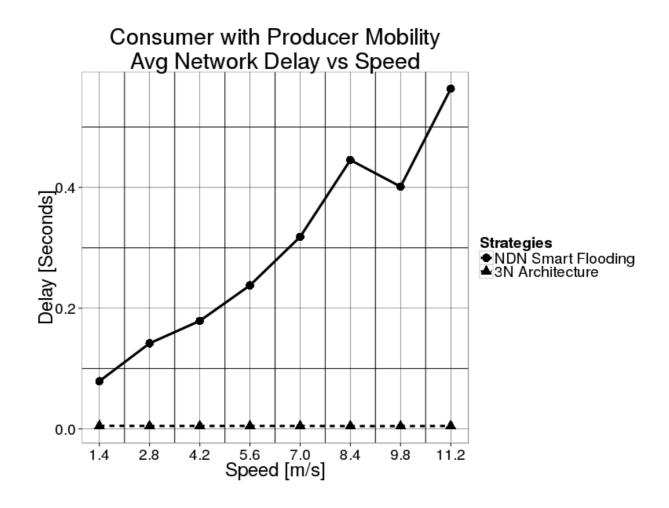
### Simulation



#### Results



#### Results



#### Results

- The use of complete a Node name location and Route mappings along with 3 independent namespaces brings us many benefits
  - Improves even cases where a normal ICN is strongest
  - Makes producer mobility completely viable
  - Improves network efficiency since it doesn't require excessive flooding
  - Leaves the current ICN namespace untouched