

Requirements for Name Resolution Service in ICN

ICNRG Interim meeting in Singapore

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Motivation of NRS (1/2)

- Heterogeneous names in ICN
 - Hierarchical name such as URLs
 - Flat name such as self-certifying IDs
 - Human readable name
 - Non-readable name
- Dynamism in ICN
 - Mobility, multi-homing, migration, replication
 - Focus more on producer mobility
 - Implemented for replication in draft-hong-icnrg-ccnx-nrs-00

Motivation of NRS (2/2)

- Routing system in ICN
 - Scalability issue in routing system even with hierarchical names
- Use cases of NRS : how name resolution is used in literatures/projects
 - Flat name routing support in PURSUIT, SAIL, MobilityFirst
 - Publisher mobility support in various projects in literatures
 - Scalable routing support in NDNS (DNS for NDN)

Requirements for NRS

- Requirements as a service, as a system, and on security aspects

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Next plan

- Requirements are too strong
- It is almost impossible to meet all the requirements in the current document
- So, we are trying to change the document direction from requirements to (architectural) Design Considerations

Questions and comments?