



# **Registration Interface Information Model and YANG Data Model**

**(draft-hyun-i2nsf-registration-interface-im-04,  
draft-hyun-i2nsf-registration-interface-dm-03)**

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# Updates from the Previous Version

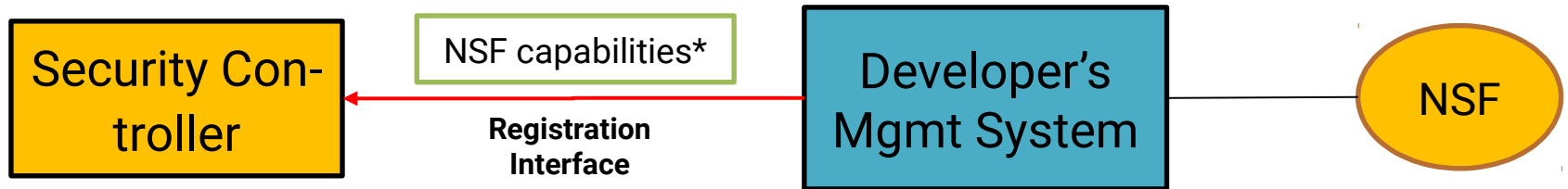
- In draft-hyun-i2nsf-registration-interface-im-04
  - We revised section.4 has been revised to discuss about destructing an NSF instance no longer required via registration
  - We changed term of NSF profile into NSF capability information
- In draft-hyun-i2nsf-registration-interface-dm-03, we updated the YANG data model accordingly in order to align with the updates in draft-i2nsf-registration-interface-im-04

# Introduction

- Information Model (IM) & YANG Data Model (DM) for the Registration Interface are required for the following functions :
  - To Register
    - To *register the capabilities of NSF* created by Developer's Management System (DMS)
  - To Query
    - To *send a general request of NSF capabilities* to DMS
  - To Interact with NFV MANO
    - To *request DMS to instantiate/de-instantiate an NSF*
- Secure the registration of distributed NSFs via Registration Interface in a centralized manner.

# Registration of NSFs

- Developer's Management System (DMS) registers the NSF to Security Controller via Registration Interface



\* The capabilities based on draft-hares-i2nsf-capability-data-model-06

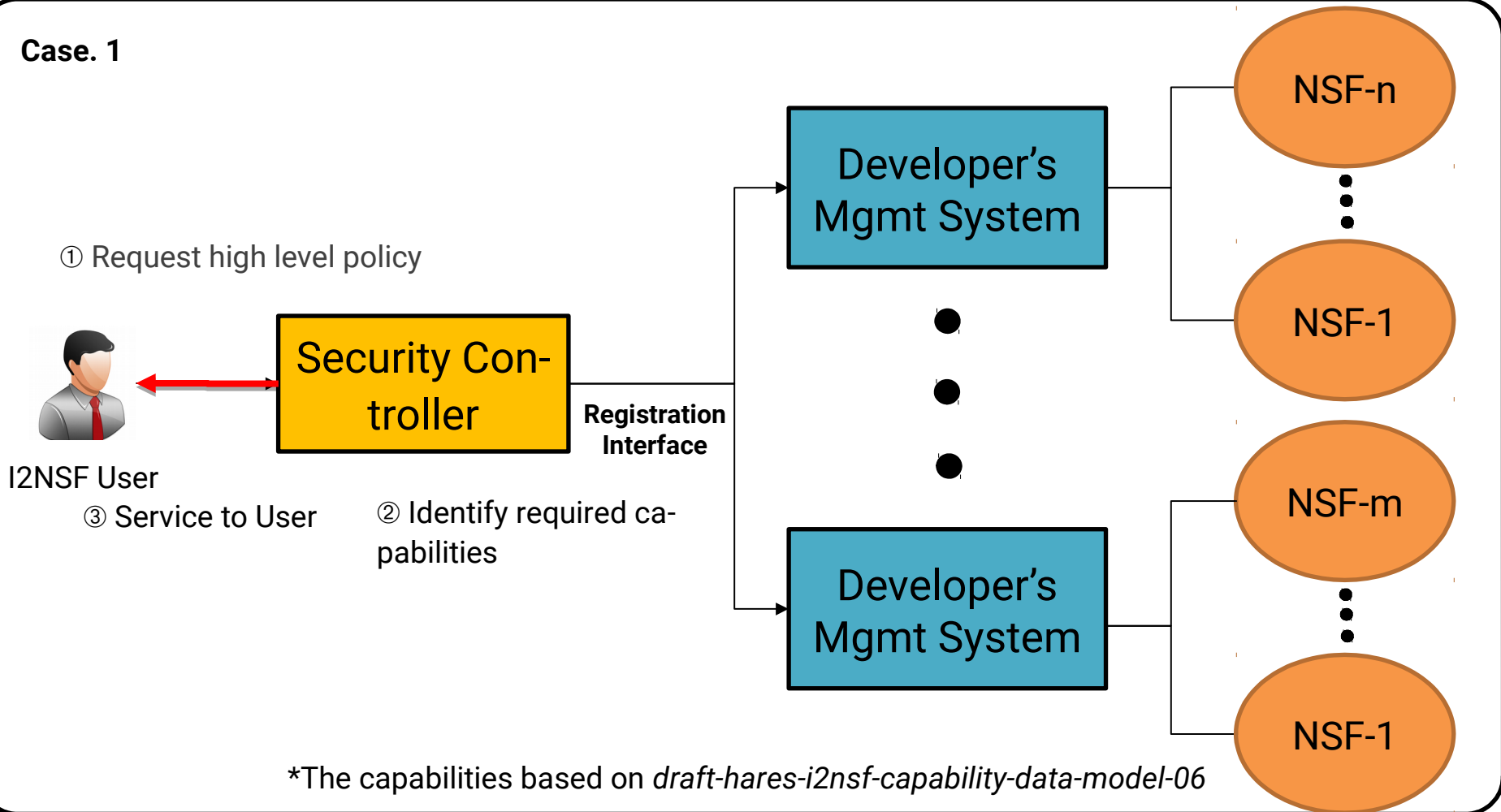
# Additional Usage of Registration Interface

- Motivation
  - Security Controller sends a query to DMS to search NSFs with required capabilities via Registration Interface
  - Security Controller requests the instantiation/deinstantiation of NSFs to DMS

The existing information model (draft-ietf-i2nsf-capability-00) & YANG data model (draft-hares-i2nsf-capability-data-model-06) are used to describe the security capability of an NSF.

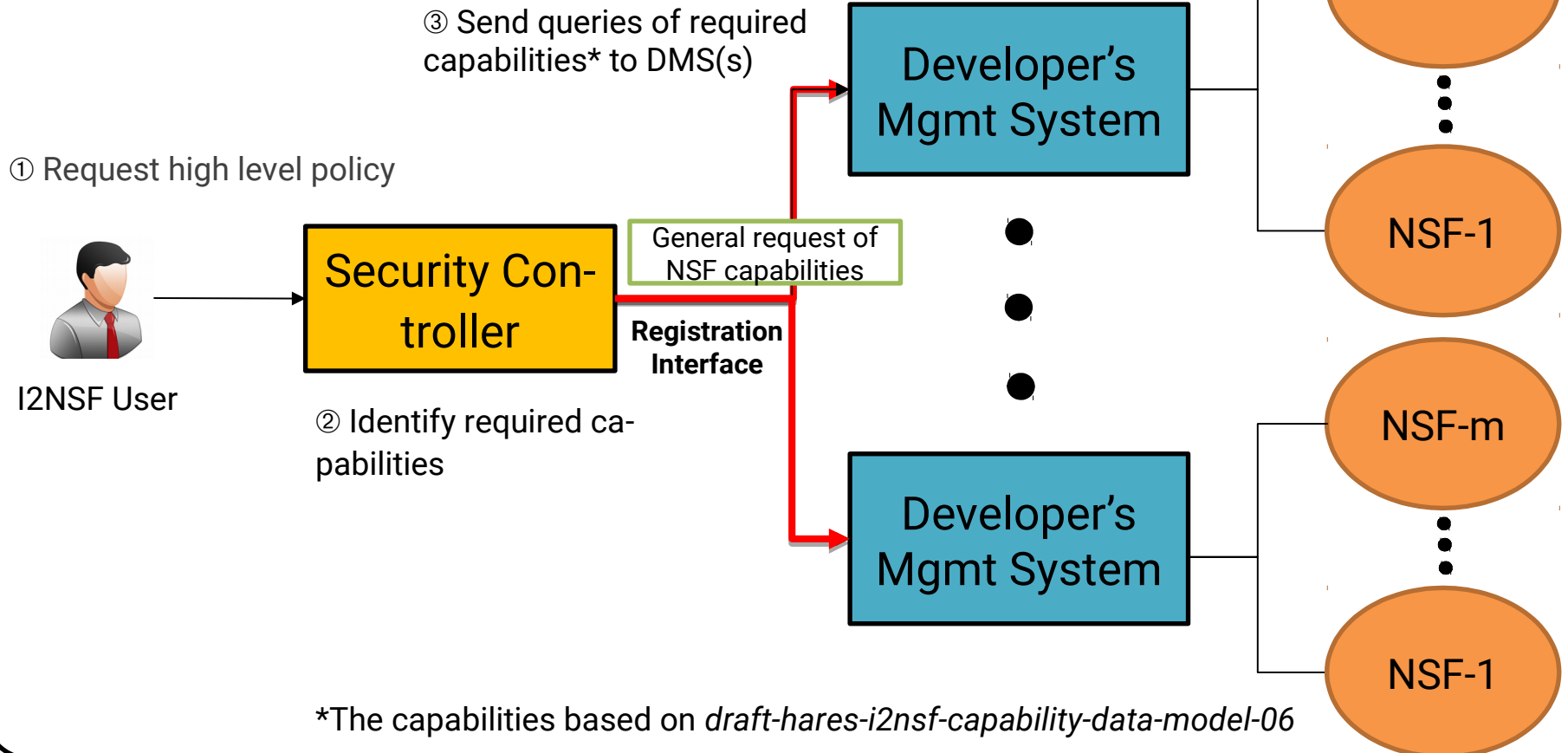
# Capability-based NSF Search (1/3)

## Case. 1



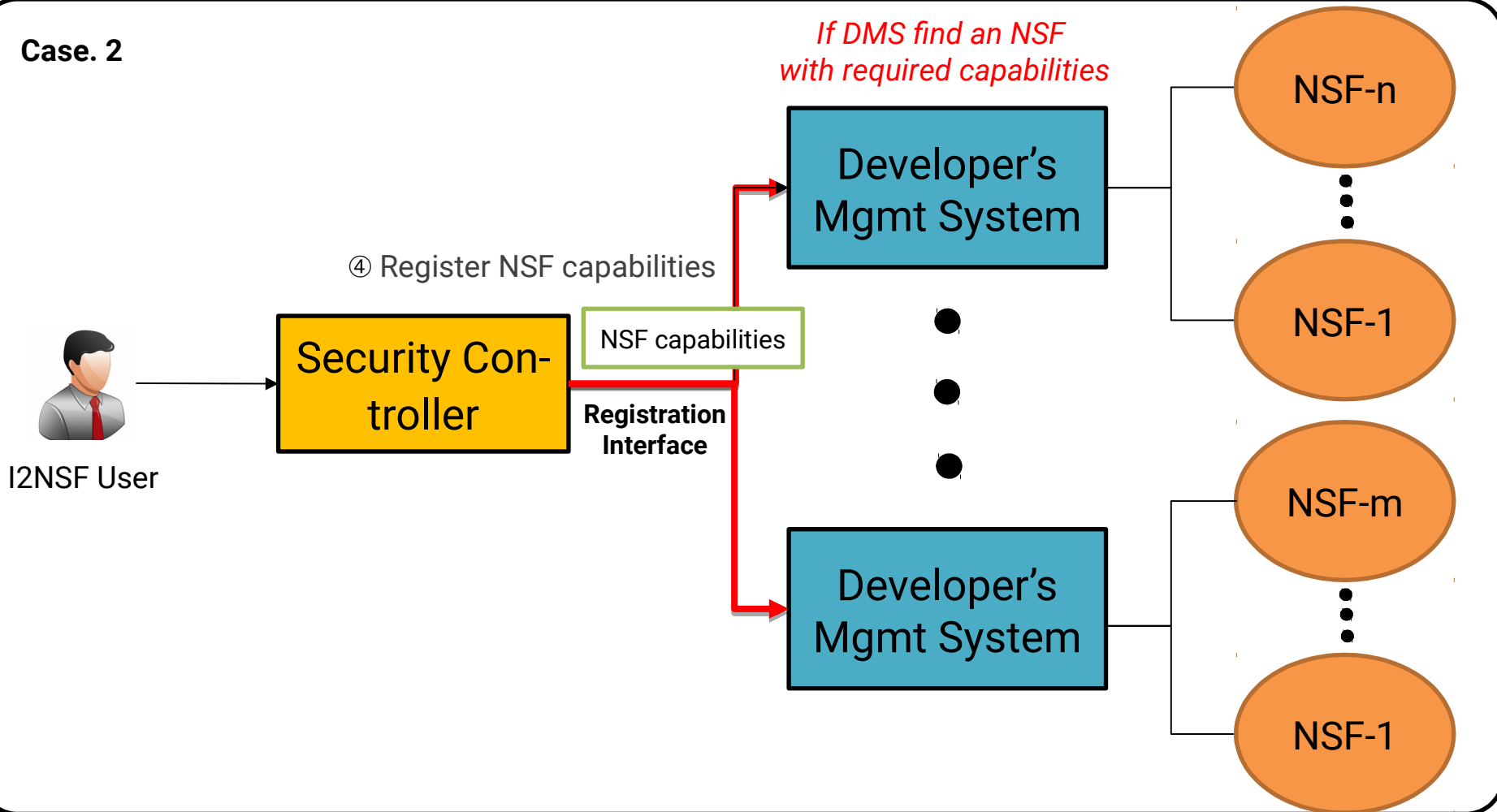
# Capability-based NSF Search (2/3)

## Case. 2



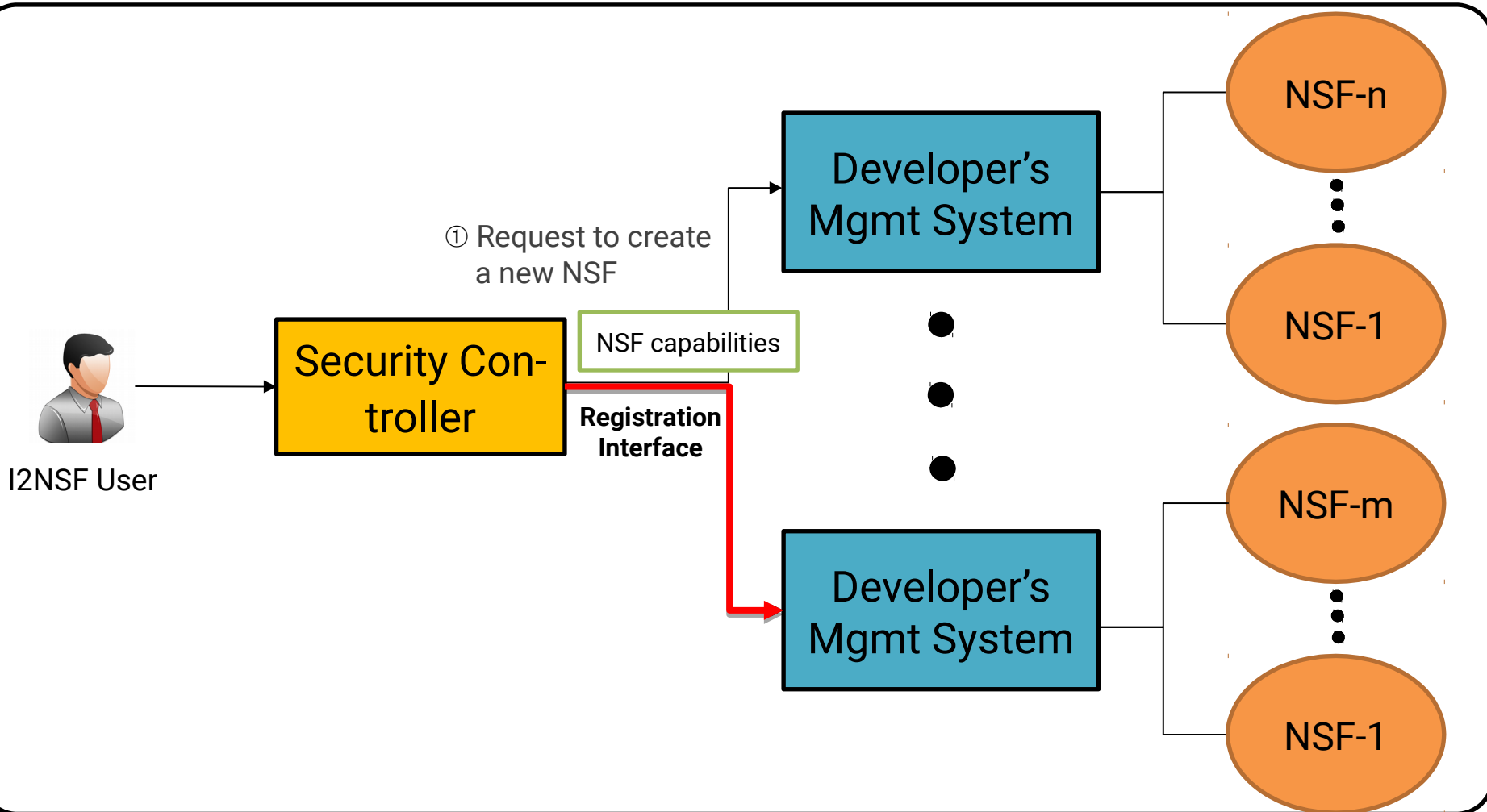
# Capability-based NSF Search (3/3)

## Case. 2





# Instantiation Request of NSF



# Next Steps

- We will implement the following functions in the 102th IETF Hackathon
  - Implement instantiation/de-instantiation functions of registration interface in Open Stack environment.