



# **I2NSF Capability YANG Data Model** **(draft-hares-i2nsf-capability-data-model-06)**

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# Updates from the Previous Version

- **The Previous Draft:**
  - draft-hares-i2nsf-capability-data-model-05
- This draft defines a YANG Data Model (DM) **corresponding** to the Information Model (IM) for **NSF-Facing Interface** and **Registration Interface**.
  - draft-ietf-i2nsf-capabilities-00
  - draft-ietf-i2nsf-nsf-facing-interface-dm-00
  - draft-hyun-i2nsf-registration-interface-im-04

# List of Changes

- Modification of **Time Zone**
- Addition of **Port Number** to Condition Clause
- Object-Oriented Features (**Ongoing**)

# Modification of Time Zone

- We added not only an **absolute time zone** but also a **periodic time zone** to net-sec-capabilities.

```
+--rw i2nsf-net-sec-caps
  +--rw net-sec-capabilities* [nsc-capabilities-name]
    +--rw nsc-capabilities-name    string
    +--rw time-zone
      | +--rw time?    boolean
      | +--rw date?    boolean
```



```
+--rw i2nsf-net-sec-caps
  +--rw net-sec-capabilities* [nsc-capabilities-name]
    +--rw nsc-capabilities-name    string
    +--rw rule-description?        boolean
    +--rw rule-rev?                boolean
    +--rw rule-priority?           boolean
    +--rw time-zone
      | +--rw absolute-time-zone
      | | +--rw time?    boolean
      | | +--rw date?    boolean
      | +--rw periodic-time-zone
      |   +--rw day?      boolean
      |   +--rw month?    boolean
```

# Addition of Port Number to Condition Clause

- We added a **port number** to a **condition clause**.

```
| | +--rw packet-security-tcp-condition
| | | +--rw pkt-sec-cond-tcp-seq-num?    boolean
| | | +--rw pkt-sec-cond-tcp-ack-num?    boolean
| | | +--rw pkt-sec-cond-tcp-window-size? boolean
| | | +--rw pkt-sec-cond-tcp-flags?      boolean
| | +--rw packet-security-udp-condition
| | | +--rw pkt-sec-cond-udp-length?    boolean
```



```
| | +--rw packet-security-tcp-condition
| | | +--rw pkt-sec-cond-tcp-src-port?    boolean
| | | +--rw pkt-sec-cond-tcp-dest-port?   boolean
| | | +--rw pkt-sec-cond-tcp-seq-num?    boolean
| | | +--rw pkt-sec-cond-tcp-ack-num?    boolean
| | | +--rw pkt-sec-cond-tcp-window-size? boolean
| | | +--rw pkt-sec-cond-tcp-flags?      boolean
| | +--rw packet-security-udp-condition
| | | +--rw pkt-sec-cond-udp-src-port?    boolean
| | | +--rw pkt-sec-cond-udp-dest-port?   boolean
| | | +--rw pkt-sec-cond-udp-length?    boolean
```

# Next Steps

- We will change the current YANG data model to the YANG data model of **Object-Oriented (OO) Style**.
- We will verify the OO YANG data model by implementing a prototype in the next Hackathon.