User-Group-based Security Policy for Capability Layer

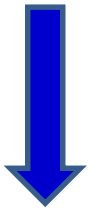
draft-you-i2nsf-user-group-policy-capability-00

Presenter: John Strassner

Jianjie You (youjianjie@huawei.com)
John Strassner (john.sc.strassner@huawei.com)
Myo Zarny (myo.zarny@gmail.com)
Christian Jacquenet (christian.jacquenet@orange.com)
Sumandra Majee (S.Majee@f5.com)

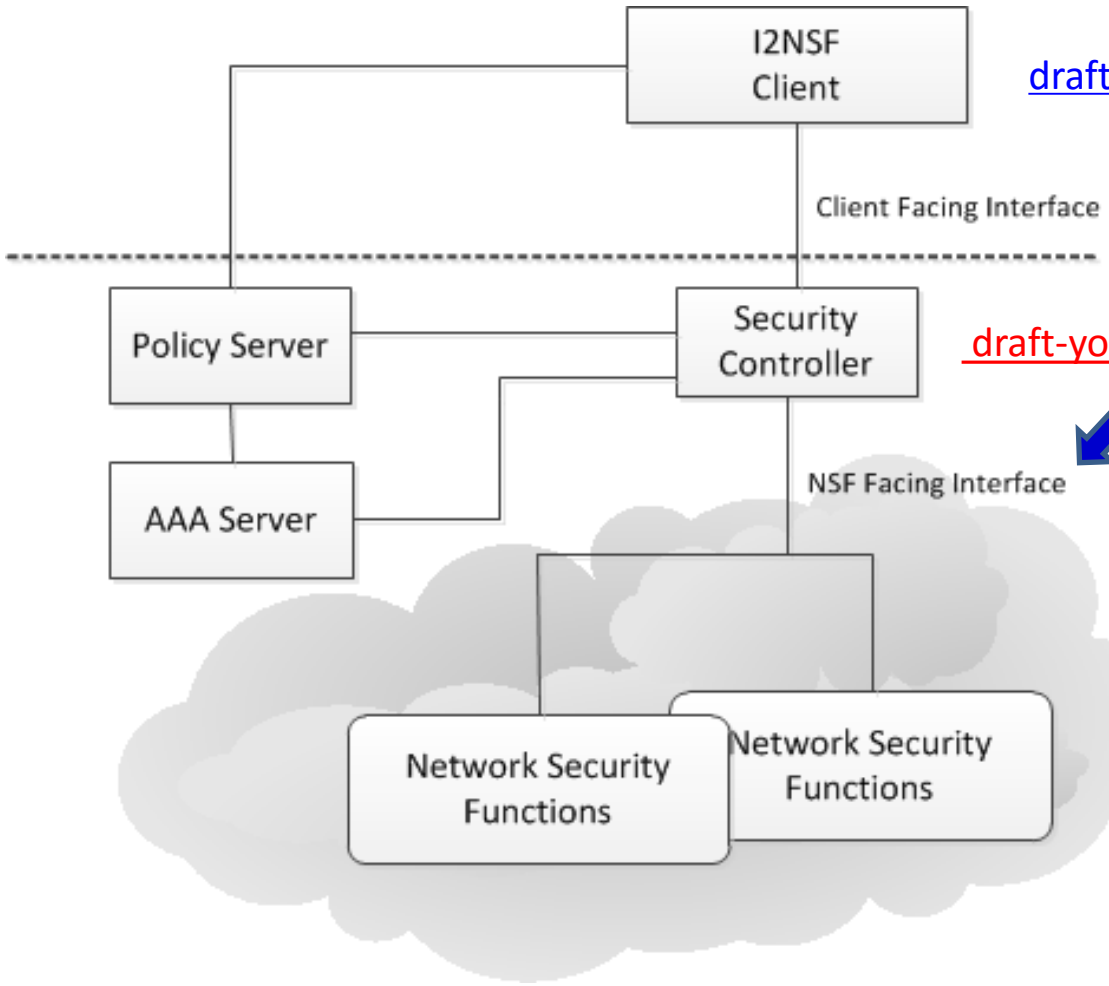
Capability Interface

- Recall that a Capability
  - "Defines a set of features that are available from a managed entity" (from draft-ietf-i2nsf-terminology-01)
  - Therefore, there should be no difference in defining consumer vs provider Capabilities
  - There IS a difference in how they are used



Capability Info Model will be MERGED, but Capability DATA Model will be needed

Motivation

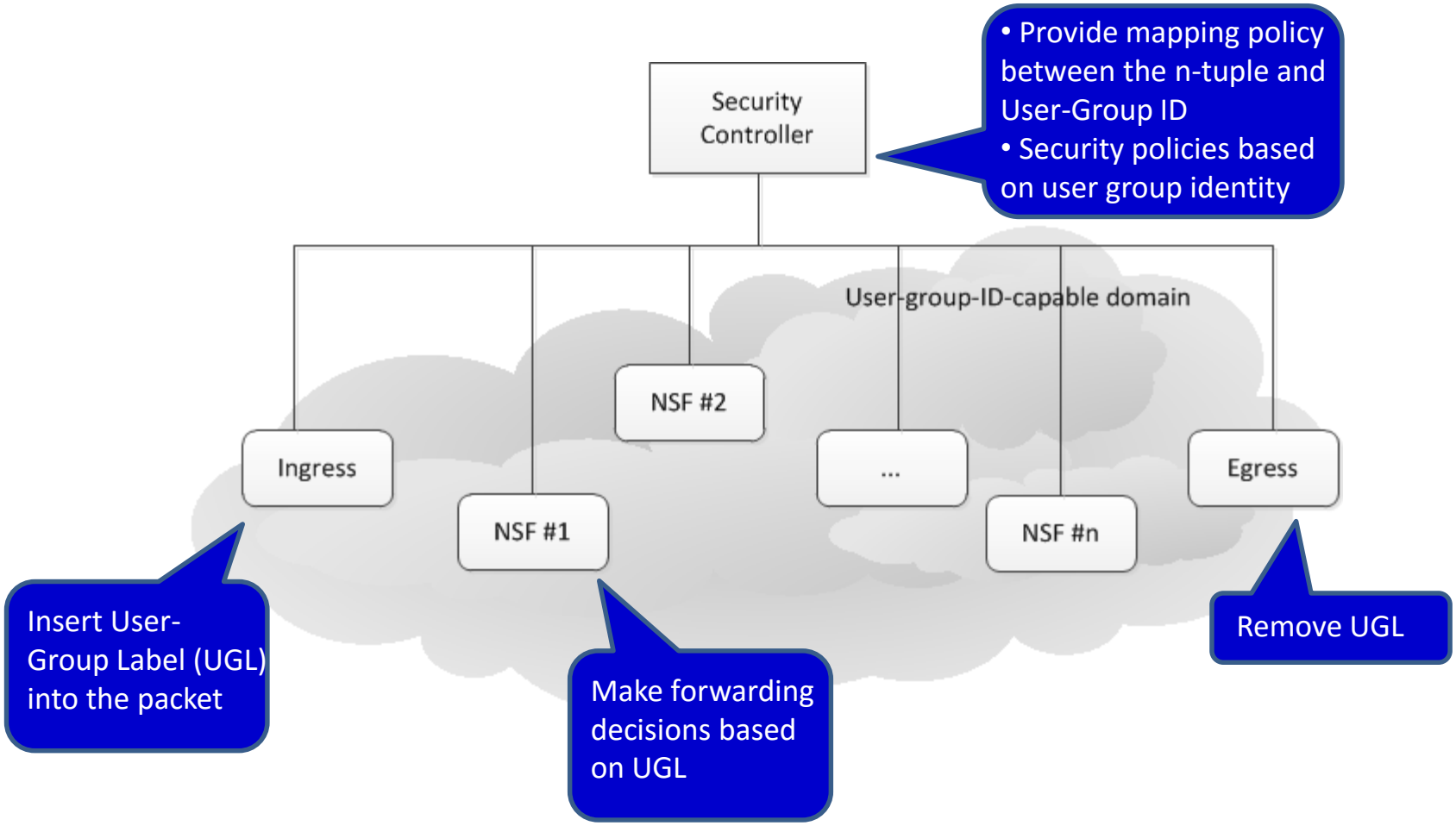


draft-you-i2nsf-user-group-based-policy-02

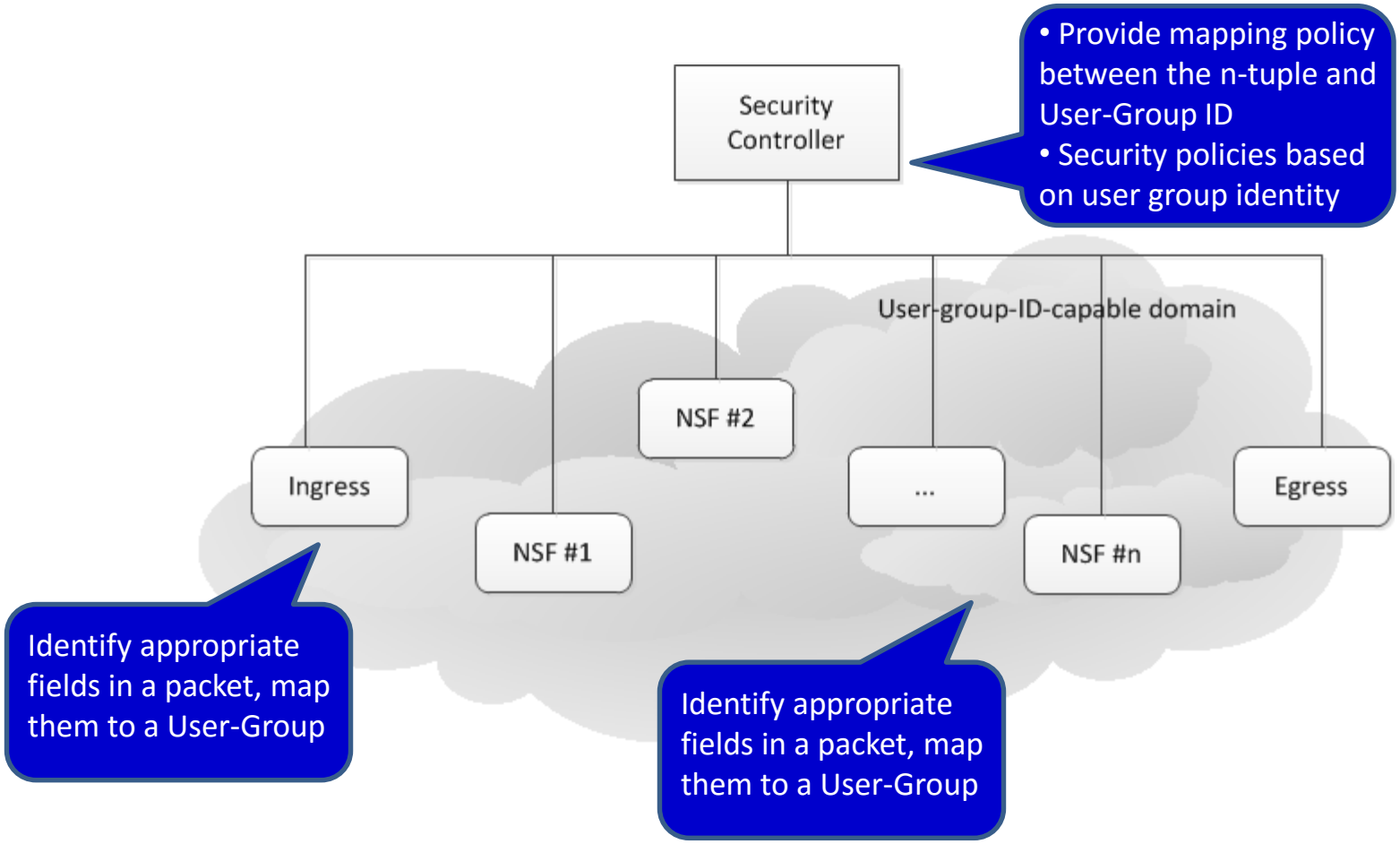
draft-you-i2nsf-user-group-policy-capability-00

Defines the I2NSF Capability APIs for implementing User-Group-based Security Policies using the Event-Condition-Action Policy Rule paradigm.

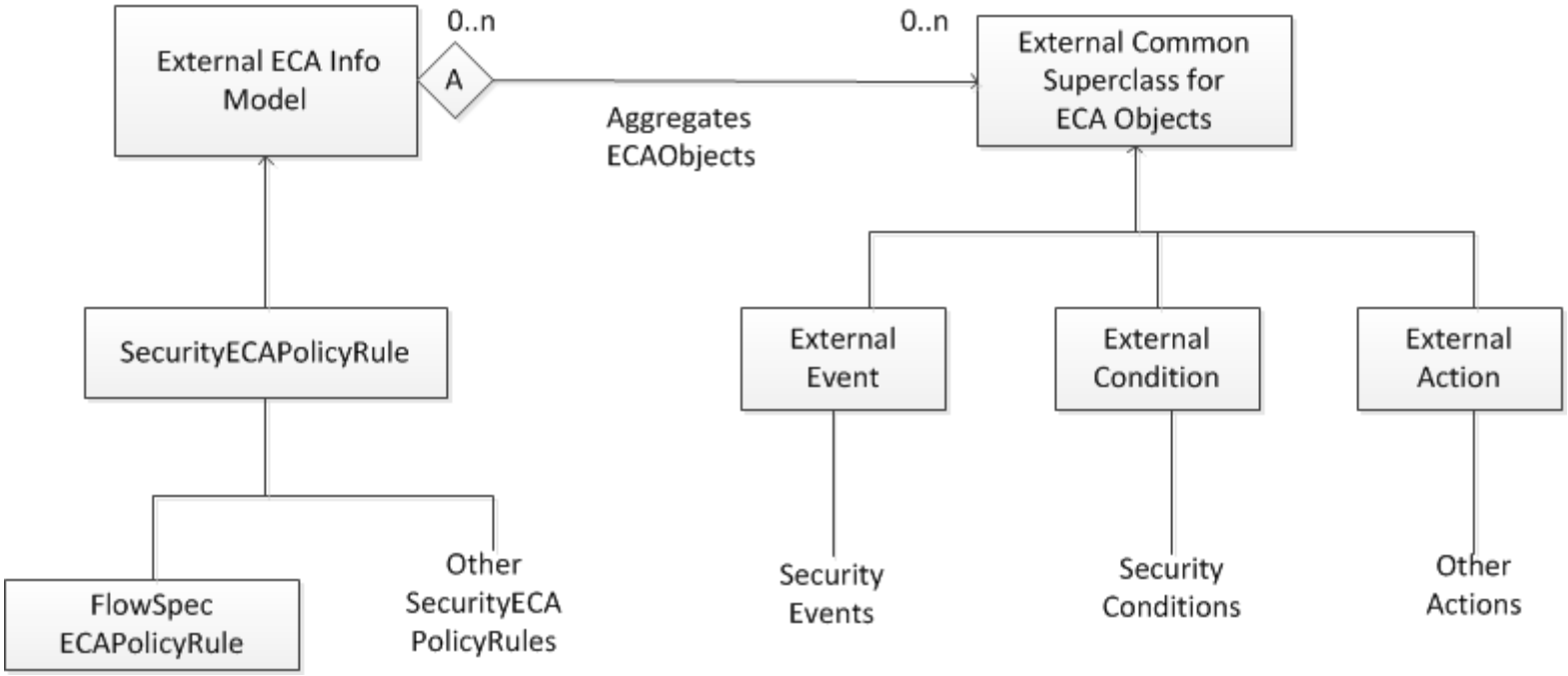
Option 1: Using Packet User-Group Labels



Option 2: Using User-Group IDs Directly



ECA for User-group-based Security Policy



ECA Policy Rule Paradigm

- Event
  - external stimuli, such as alarms, user actions (e.g., logon and logoff, or access requests), and packet arrival or departure occurrences.

- Condition
  - n-tuple of the incoming packet
  - cross checking with other data, such as correlation with packets received from different ports or past time, or
  - the current state of a flow

- Action
  - Traffic-rate Action
  - Traffic-detail Action
  - Redirect Action
  - Traffic-marking Action

Next Steps

- Solicit comments and suggestions on the mailing list

Thank you!