# ONAP & External Applications

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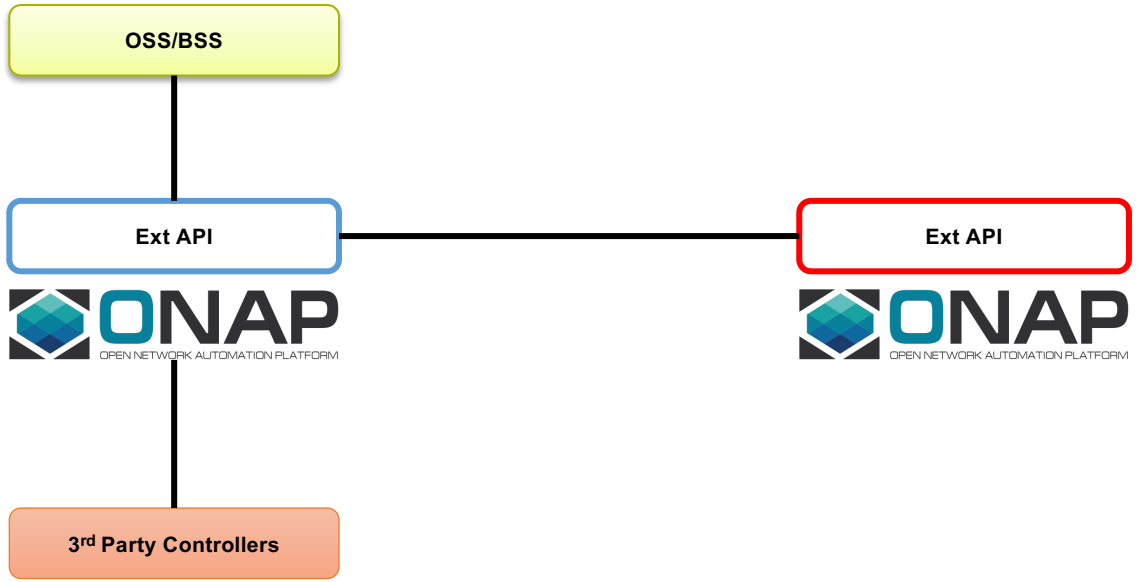
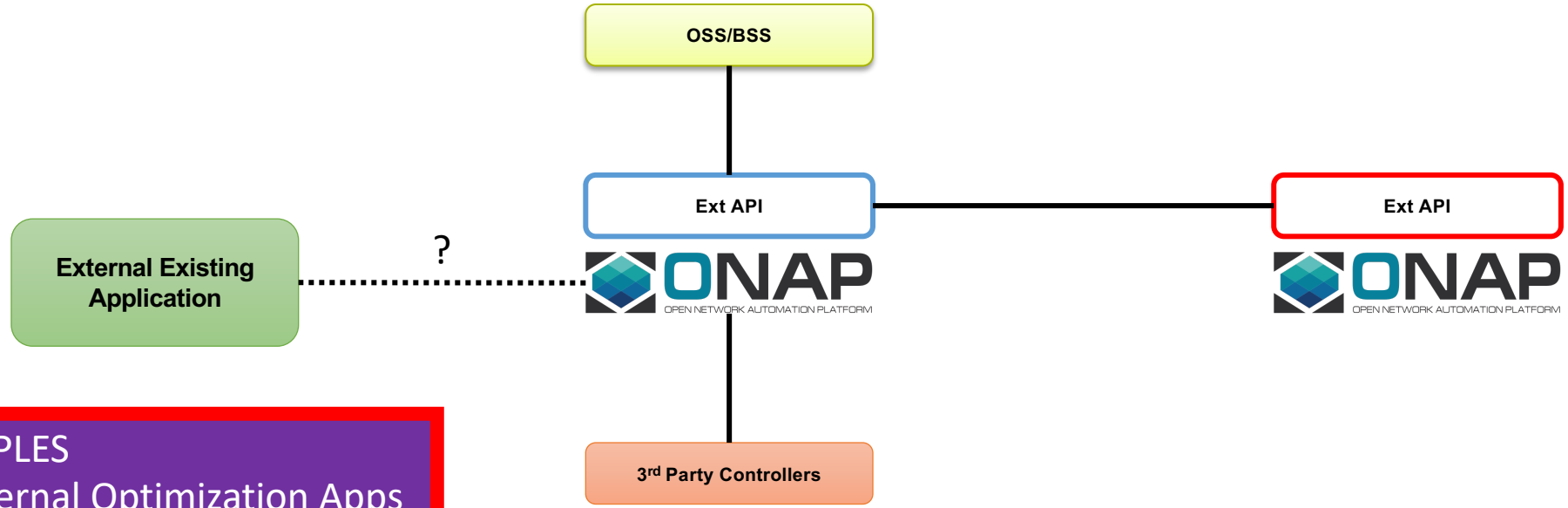
# Problem Statement

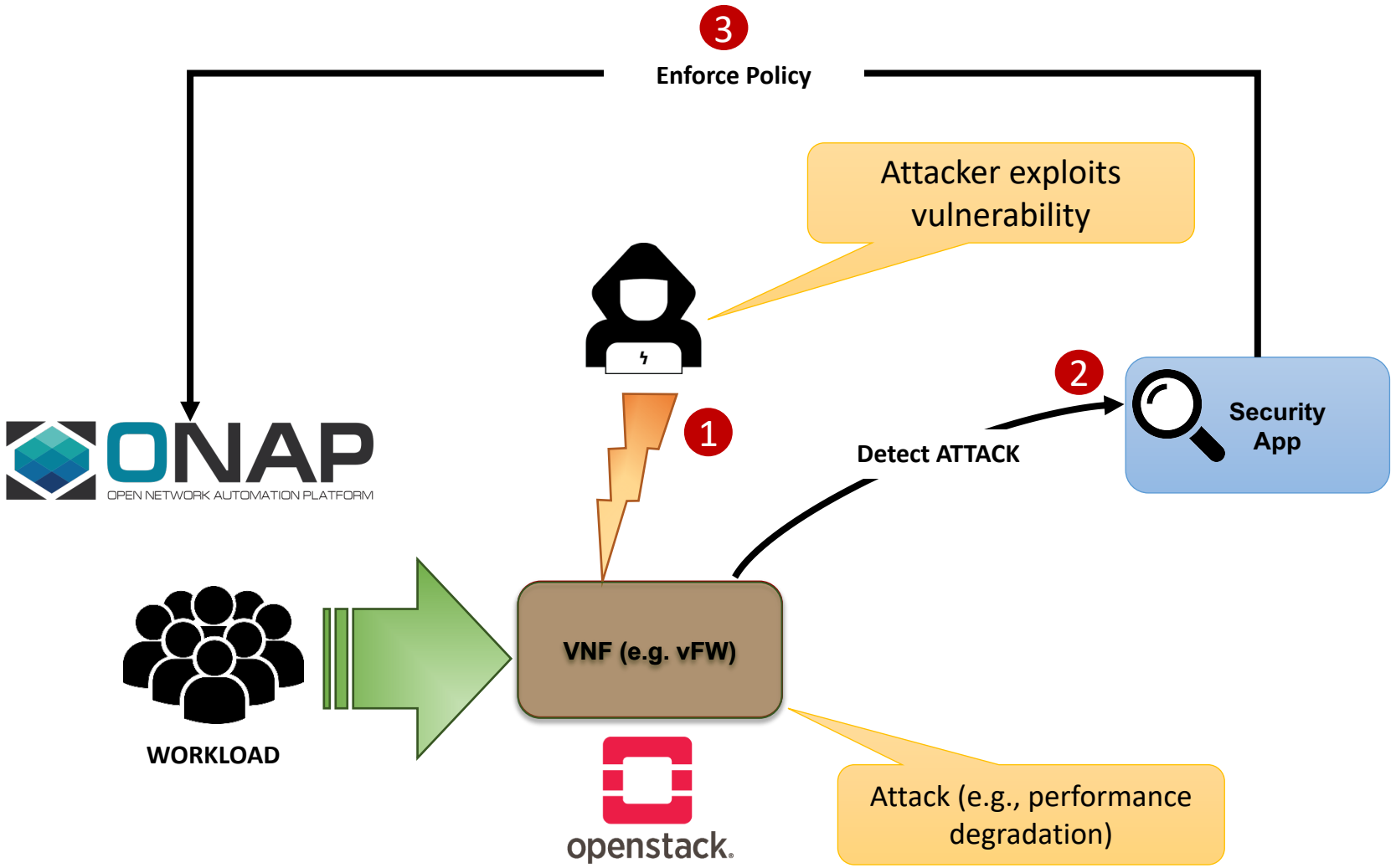


# Problem Statement

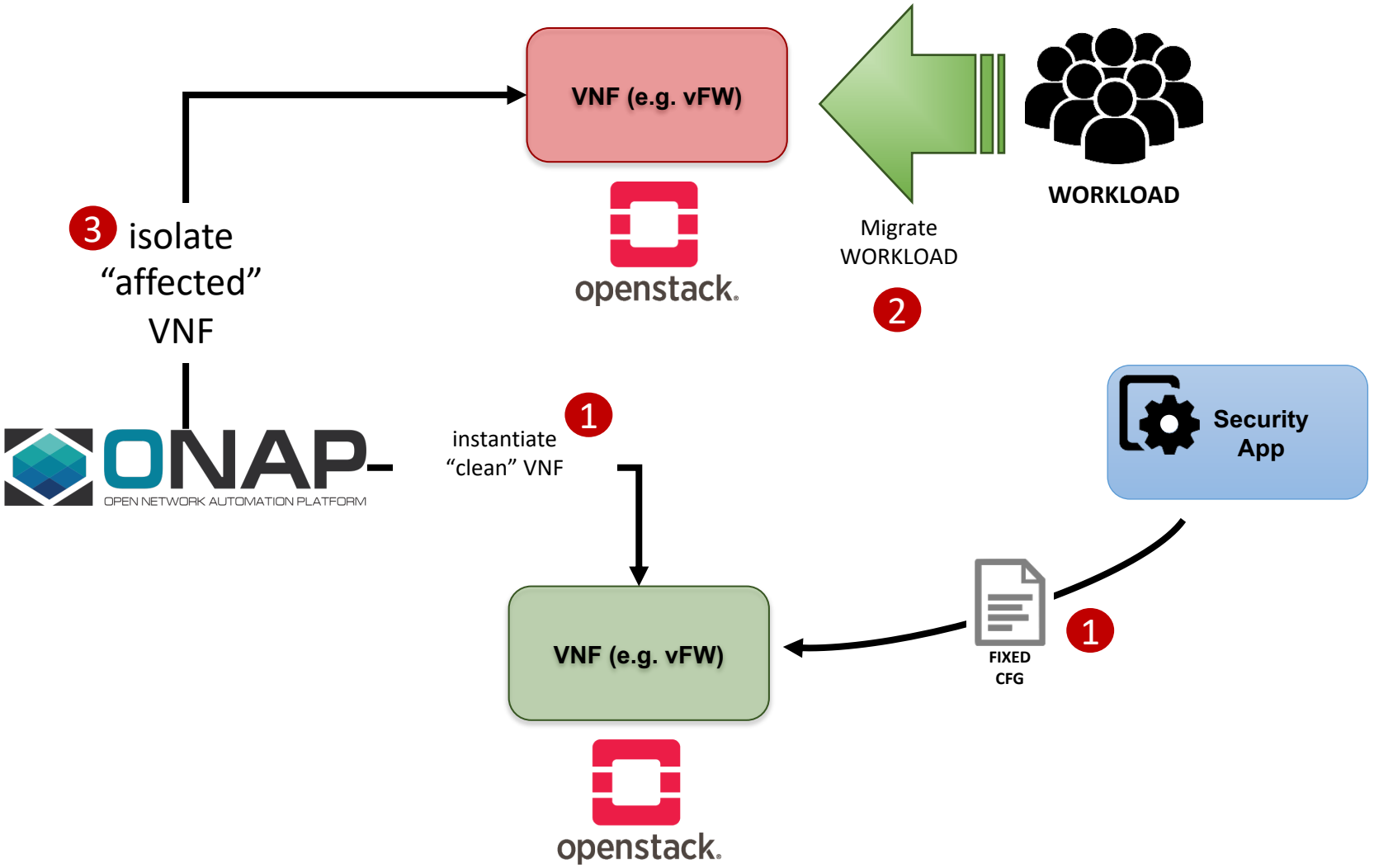



EXAMPLES
- External Optimization Apps
- Security Apps

# Example Use Case

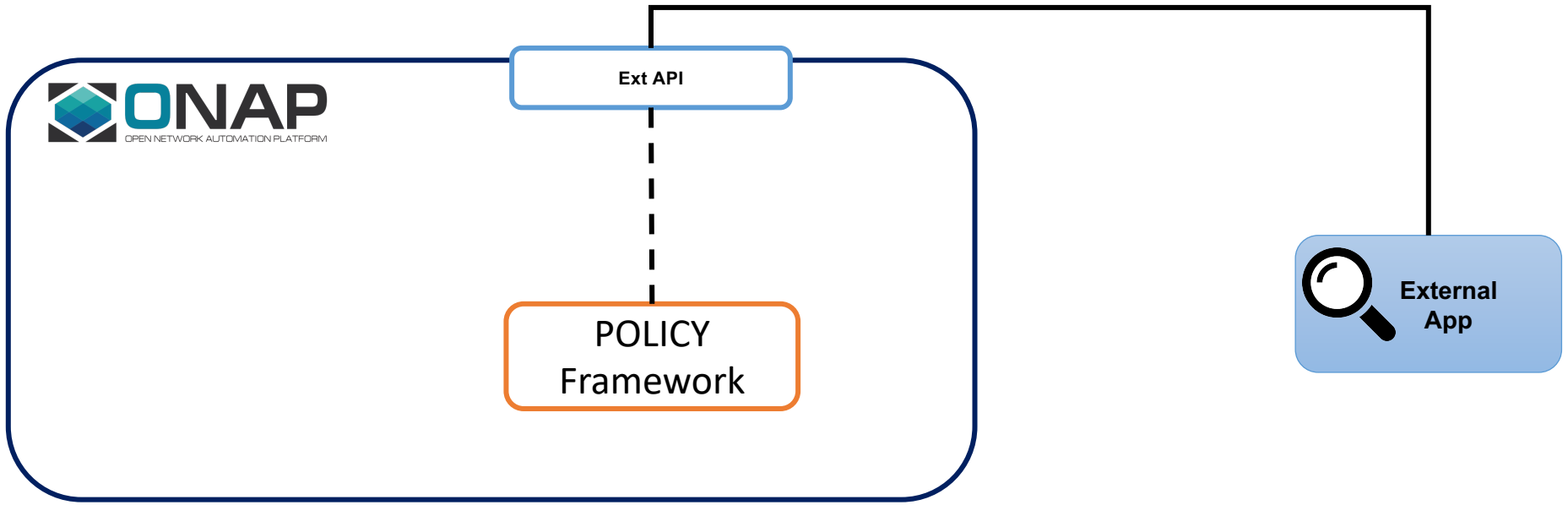


# Example Use Case



# Option 1

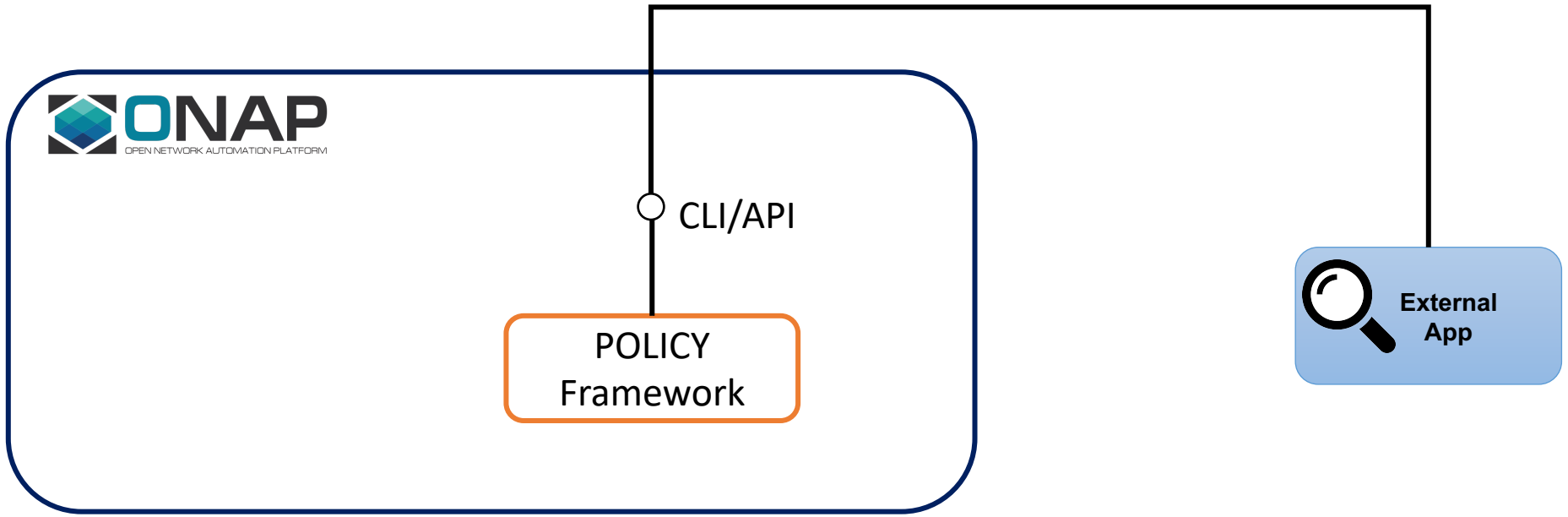
## Expose internal projects to ExtAPI




- Add Internal API
- Beyond ExtAPI scope?

# Option 2

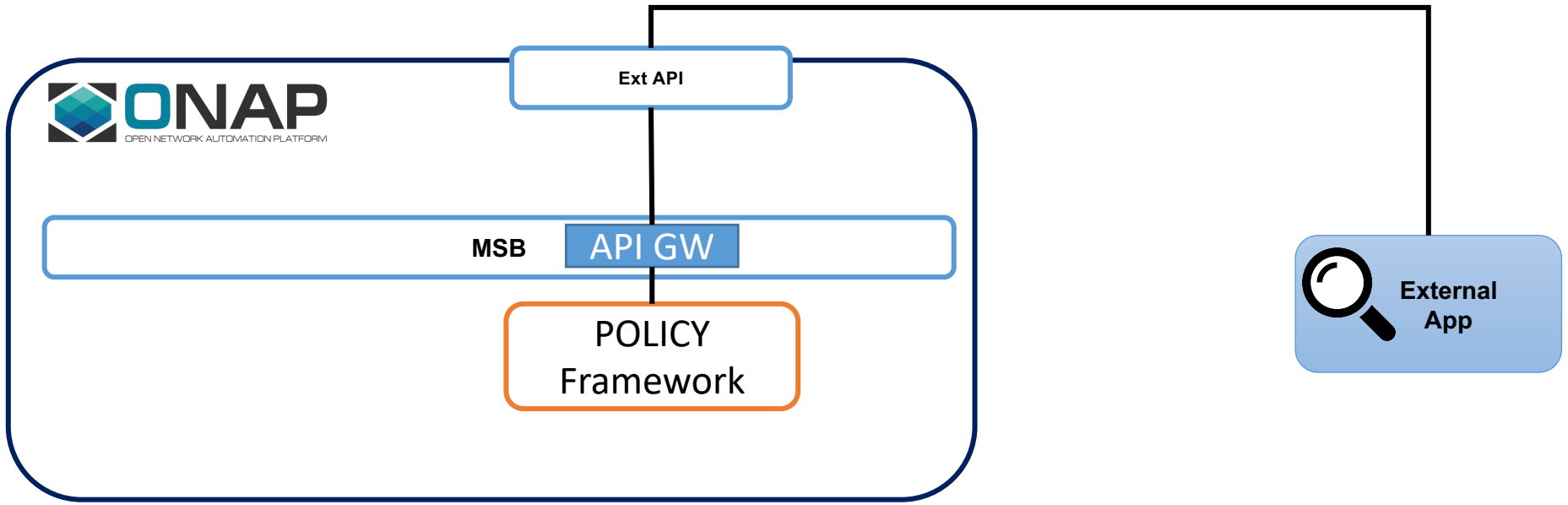
## Exploit ONAP CLI or internal API




- Sec App must “speak” ONAP CLI
- How about Security?

# Option 3

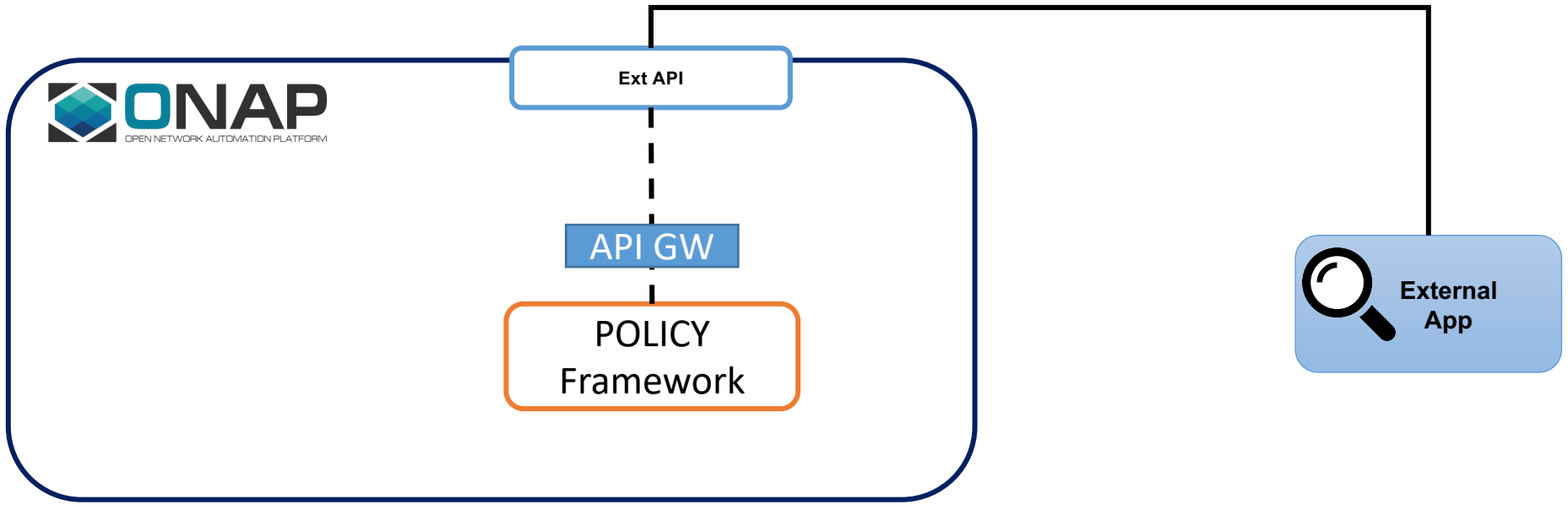
## MSB API GW via Ext API




- Additional Plug-ins
- Routing logic
- How about Security?

# Option 4

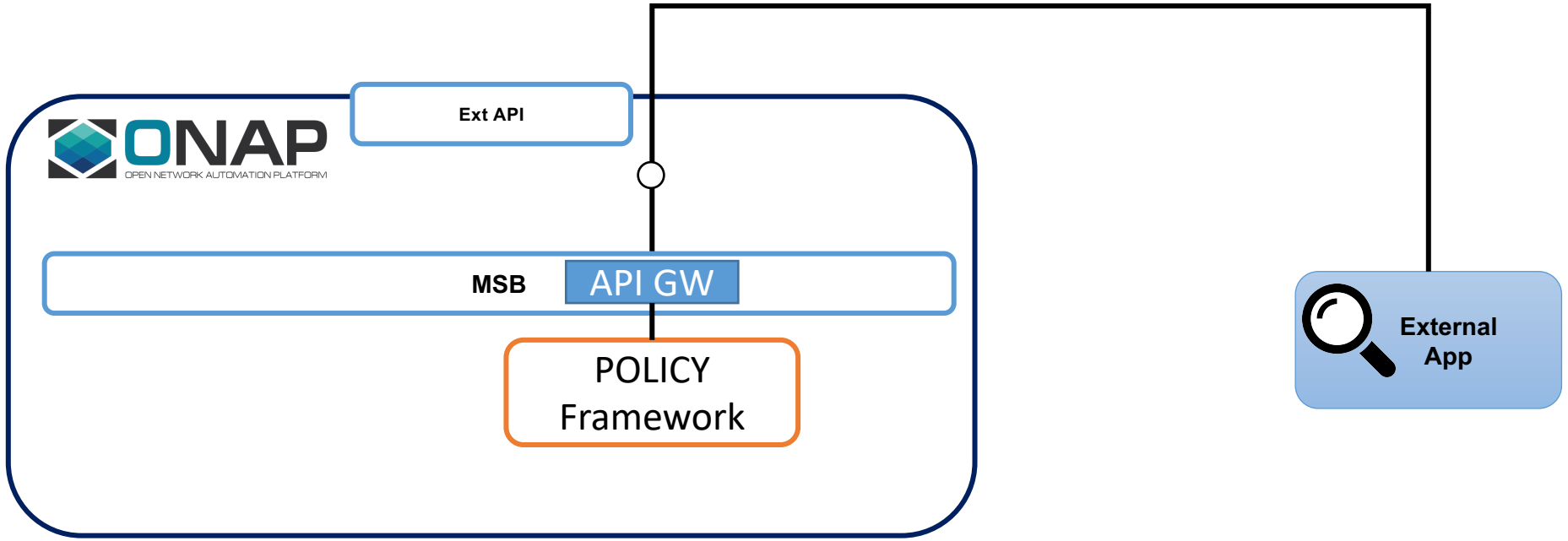
## Dedicated API GW via Ext API




- Additional ONAP Project
- Beyond ExtAPI scope?

# Option 5

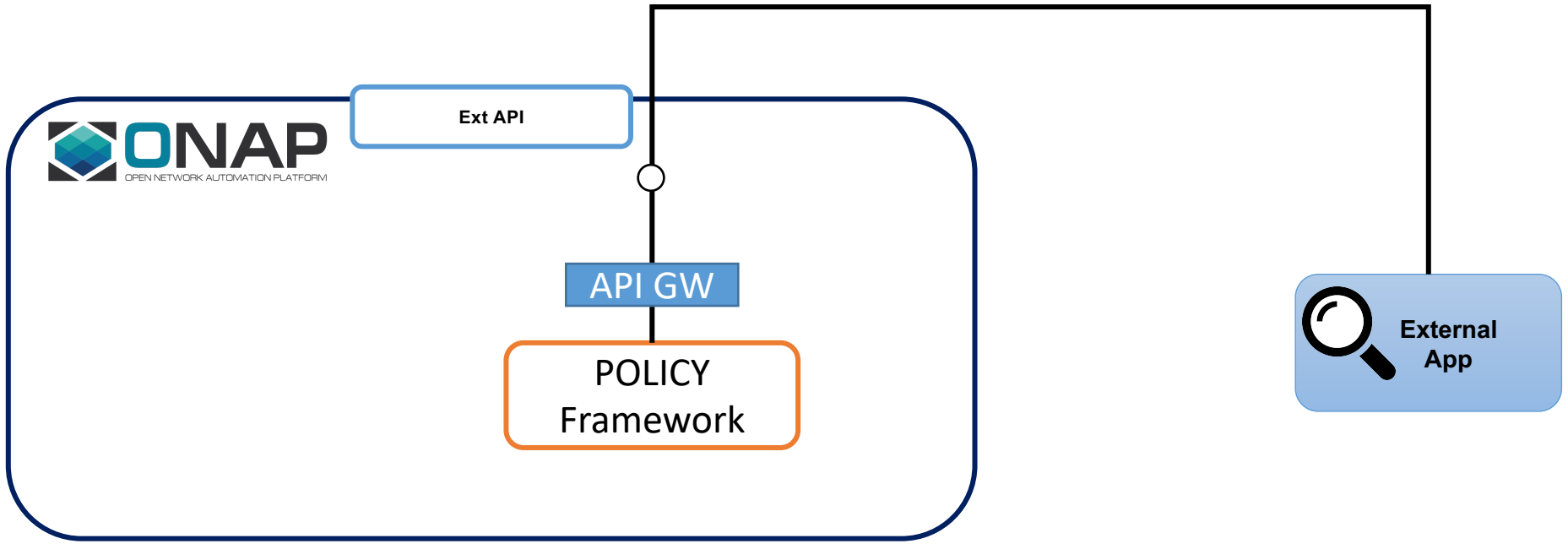
## “Exposed” MSB API GW

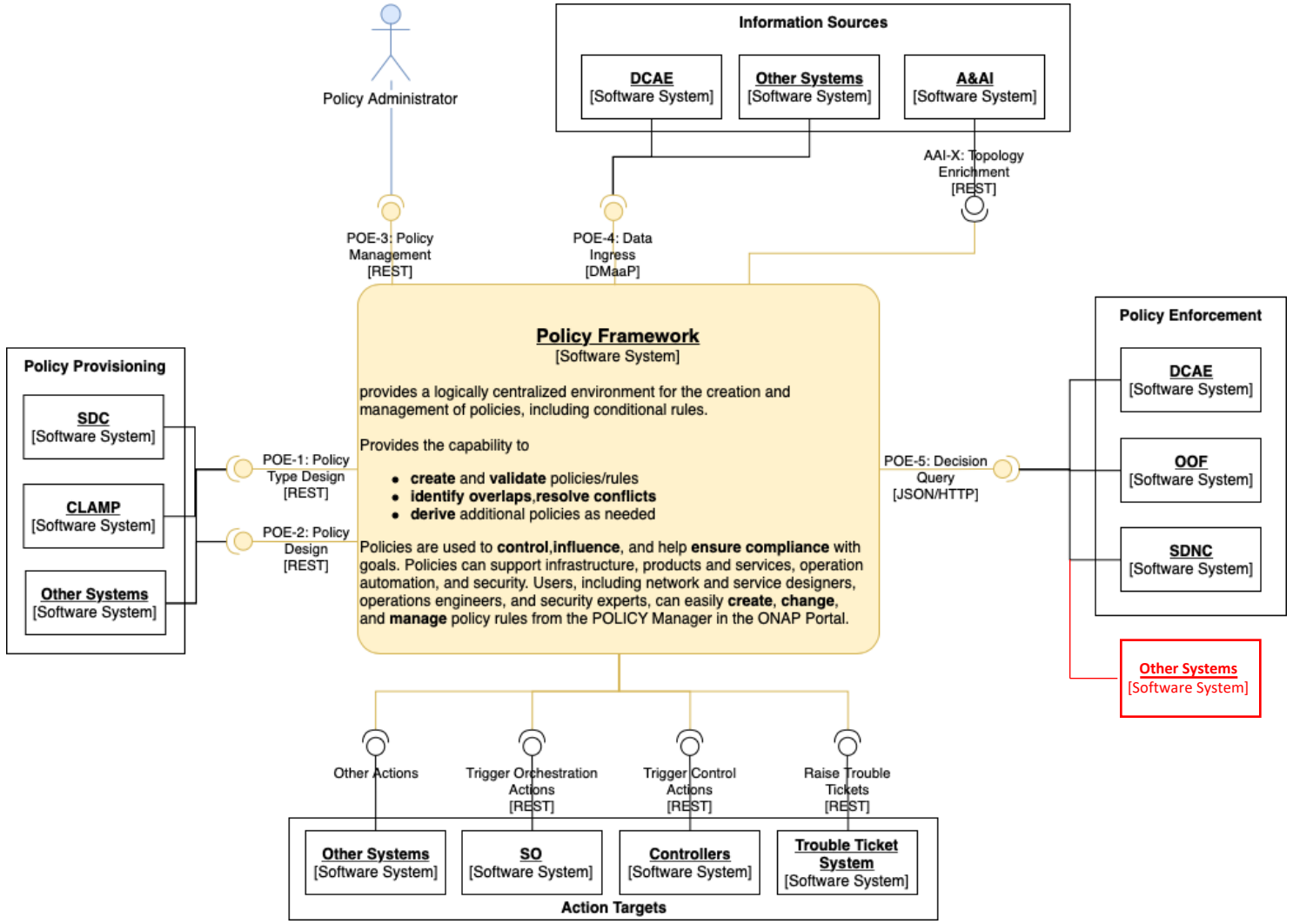



- How about Security?

# Option 6

## “Exposed” dedicated API GW




- Additional ONAP Project
- How about Security?

# Example: Option 2