



Edge Advanced

Shared Flows / Flow Hooks

Shared Flows

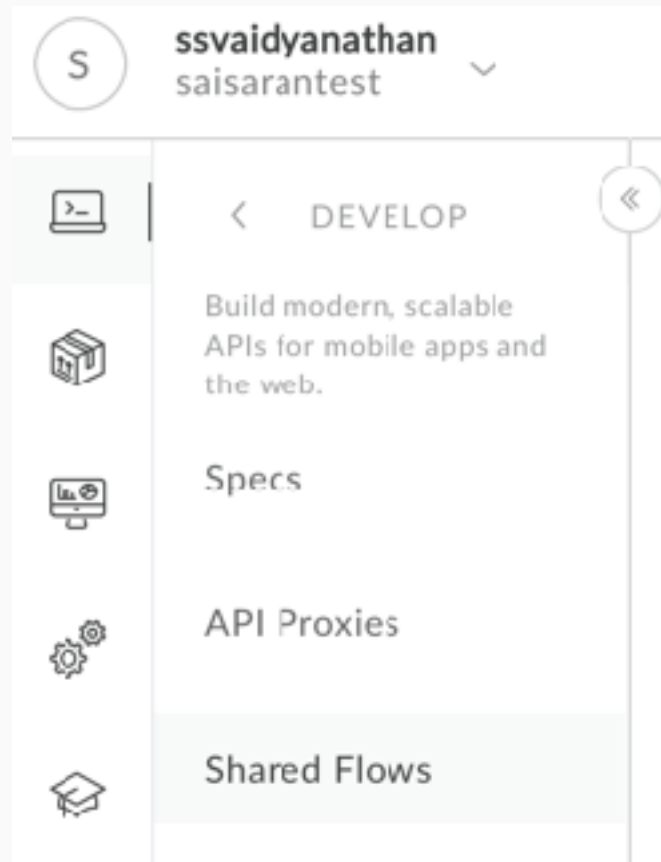
- What is a shared flow?
 - Collection of policies and resources that can be re-used across API proxies
 - Can also be used by other shared flows
- A shared flow :
 - Does not have an endpoint and cannot be invoked directly
 - It can only be used by an API proxy (or other shared flow) that is in the same organization, and deployed to the same environment as itself
- Shared flows help code reuse and management, code consistency, shorten development time
- Can be used for common operational flows such as authentication, logging, etc.
- Two ways to invoke a shared flow from an API proxy:
 - using the Flow Callout policy
 - using a Flow hook

Developing a Shared Flow

Steps to develop a shared flow:

- Determine what type of policies will make up the shared flow
- Develop the flow , policies and resources
 - Optionally wrap the policies with conditions if needed
- Deploy the shared flow to the environment before the API proxies (or other shared flows) that use it
 - Deploying a shared flow is the same as deploying an API proxy

```
<SharedFlow name="default">
  <Step>
    <Name>Verify-API-Key-1</Name>
  </Step>
  <Step>
    <Name>Spike-Arrest-1</Name>
  </Step>
  <Step>
    <Name>Quota-1</Name>
  </Step>
</SharedFlow>
```



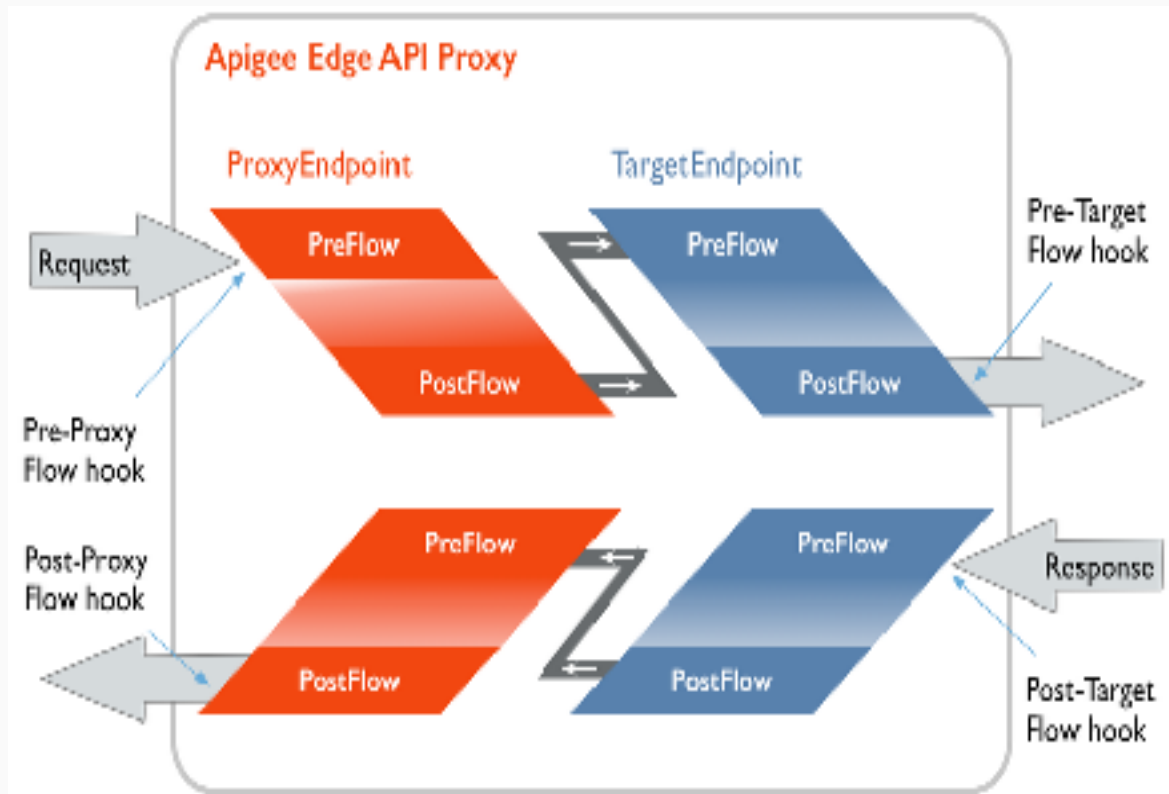
Flow Callout Policy

- Add a FlowCallout policy to the API proxy (or shared flow) that will consume the shared flow
- FlowCallout policy can be attached in Proxy or Target endpoints in request/response flows
- References the shared flow using the *SharedFlowBundle* xml element in the policy
- To test the shared flow, deploy the consuming API proxy (or shared flow) to the environment

```
<FlowCallout async="false" continueOnError="false" enabled="true"
name="Flow-Callout-1">
  <DisplayName>Flow Callout-1</DisplayName>
  <FaultRules/>
  <Properties/>
  <SharedFlowBundle>Basic_Security_Template</SharedFlowBundle>
</FlowCallout>
```

Flow Hooks

- Using a flow hook, a shared flow can be attached and executed at the same point for **all** API proxies deployed to an environment
- Administrator privileges are needed to create flow hooks
- Only **one** shared flow can be attached to a flow hook
- The same shared flow can be attached to more than one flow hook



Flow Hooks

Flow Hook Location	Description
Pre-proxy Flow Hook	BEFORE a proxy endpoint executes
Pre-target Flow Hook	BEFORE a target endpoint executes
Post-target Flow Hook	AFTER the target response executes
Post-proxy Flow Hook	AFTER the proxy endpoint and right before the response is sent out to the client

Attach a shared flow to a flow hook

- Attach shared flows to flow hook in the **Admin > Environment Configuration** page
- Identify the attachment point
- Select the shared flow from the drop-down list (list shows deployed flows from the selected *Env*)
- Save

Environment Configuration **test** -

[Caches](#) **[Flow Hooks](#)** [Key Value Maps](#) [Target Servers](#) [Virtual Hosts](#) [TLS Keystores](#)

Flow hooks let you execute shared flows for all proxies in an environment. [Learn more...](#)

FLOW HOOK	SHARED FLOW
Pre-proxy Flow Hook	-- None --
Pre-target Flow Hook	-- None --
Post-target Flow Hook	-- None --
Post-proxy Flow Hook	-- None --

[Cancel](#) [Save](#)

Lab

TBD

THANK YOU