Hepsiburada DEVops Case

Software Development

Using golang or python programming language you are comfortable with, develop an `envoy controller plane` just for EDS, CDS and LDS. You can serve resources as static. Your api endpoints should be ("/v3/discovery:endpoints", “/v3/discovery:clusters”, “/v3/discovery:listeners”) and you should only send updates to the Envoy client when the resources are changed.

Run an Envoy proxy with dynamic configuration

Run an envoy service (you can use func-e) with dynamic endpoint discovery configuration from your developed `envoy controller plane`

Build and Deploy Your Application

Design a CI/CD pipeline for your application(`envoy controller plane`). Make sure, your Docker images are as small as possible in size and as secure as possible. Feel free to use any CI/CD tool (Jenkins, GitLab, gocd, etc.) for your pipeline. Visualize your design on a flowchart (we like to use Excalidraw for such purposes).

Resources & Tools

- https://www.envoyproxy.io/docs/envoy/latest/configuration/overview/xds_api#rest-endpoints
- https://www.envoyproxy.io/docs/envoy/latest/start/quick-start/configuration-dynamic-control-plane
- https://www.envoyproxy.io/docs/envoy/latest/api-docs/xds_protocol#when-to-send-an-update
- https://excalidraw.com/
- https://func-e.io/