AI-FIXER (Ramen)

Managing Kubernetes with AI

By Dziyana Tsetserava, Muriel Paraire et Vincent Font

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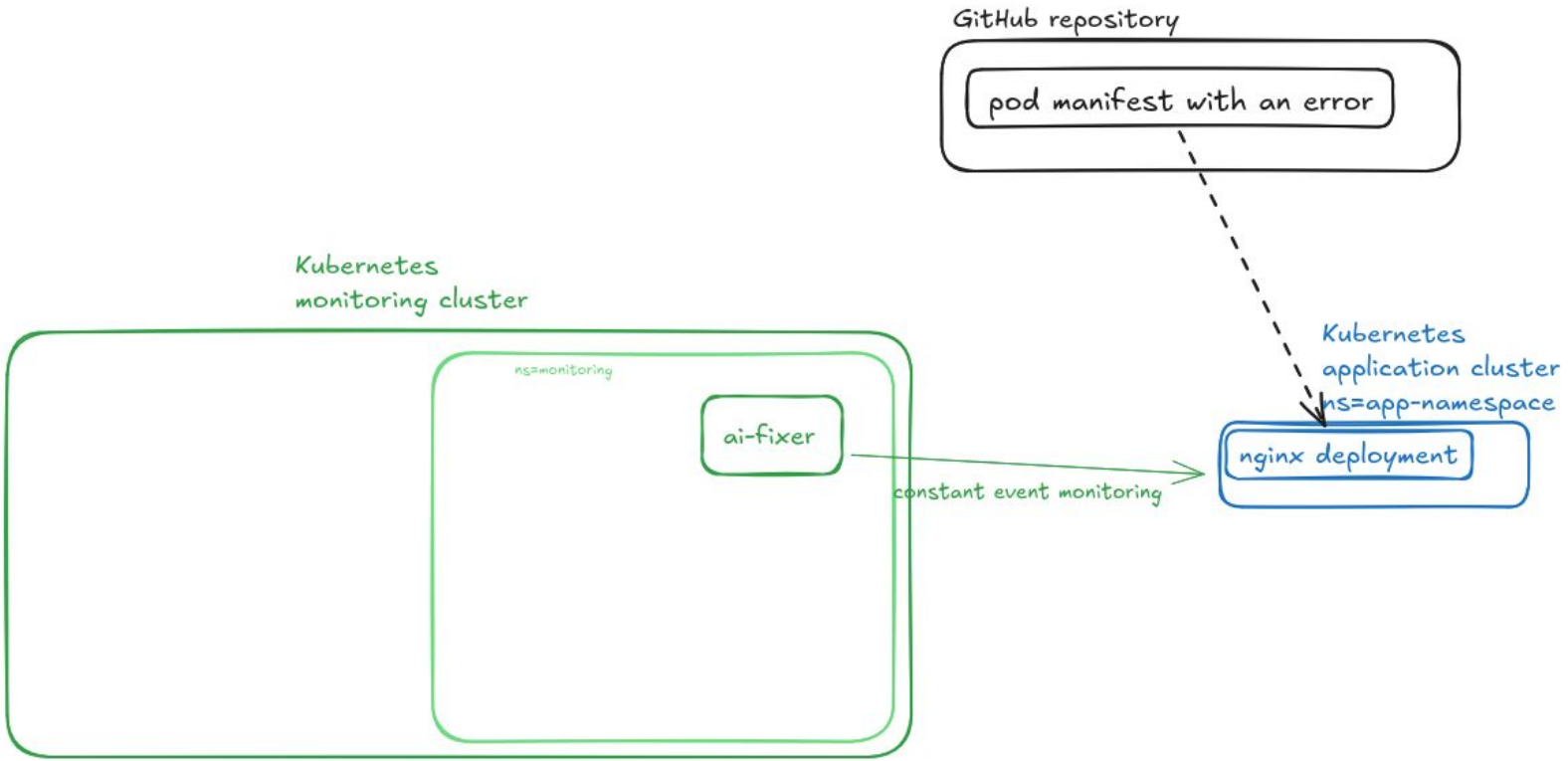
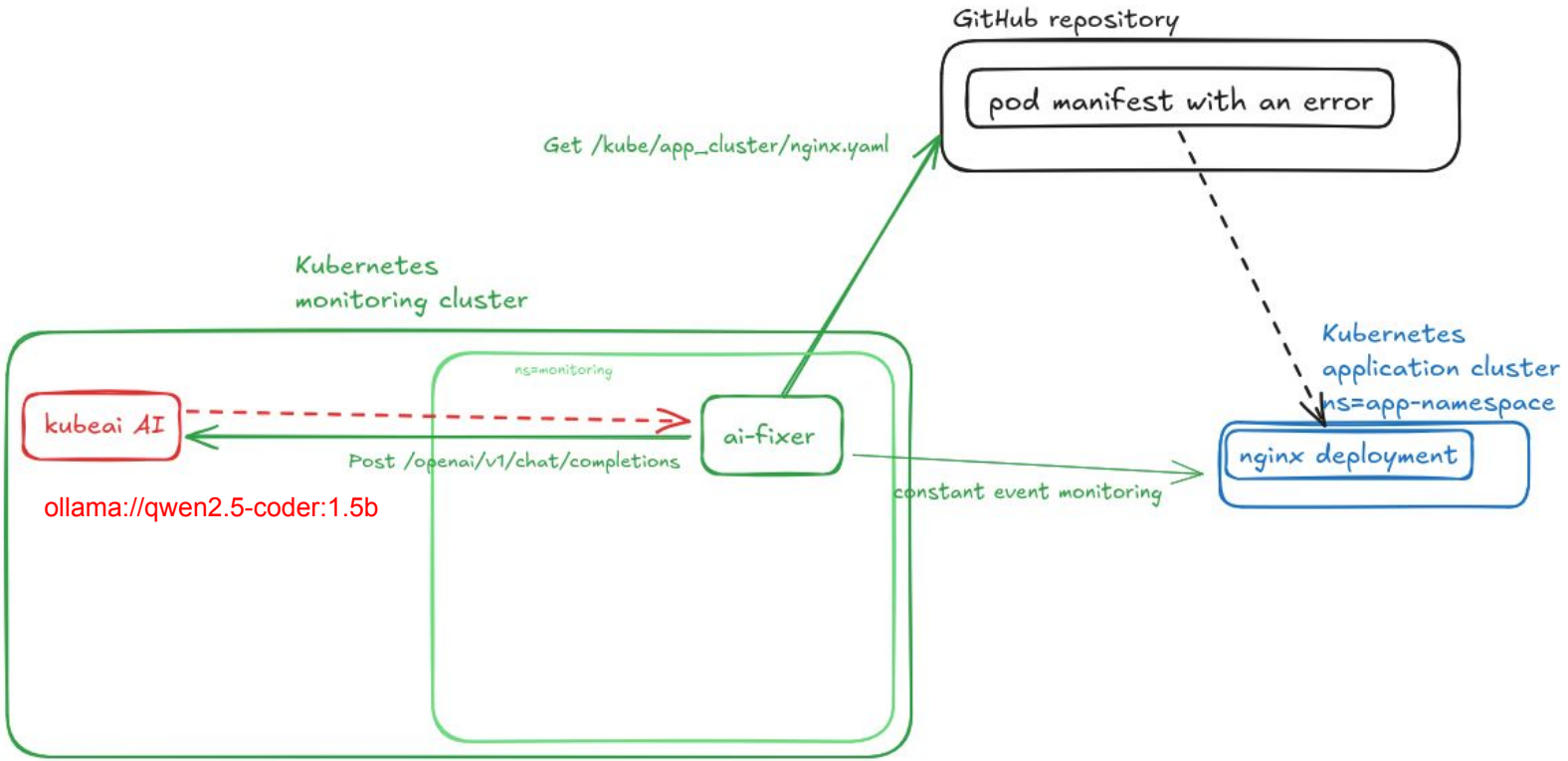
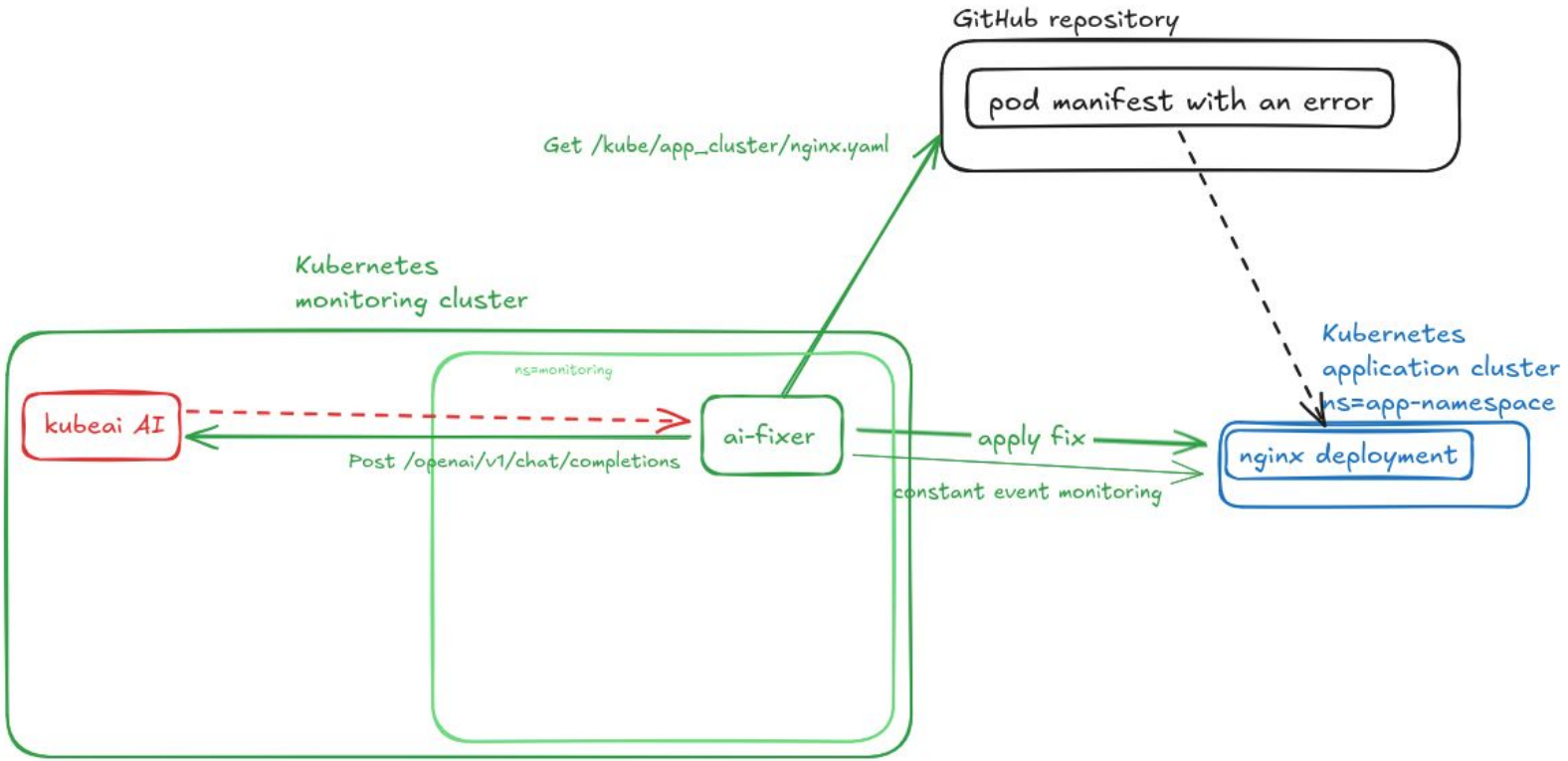
Final Architecture



Final Architecture



Final Architecture



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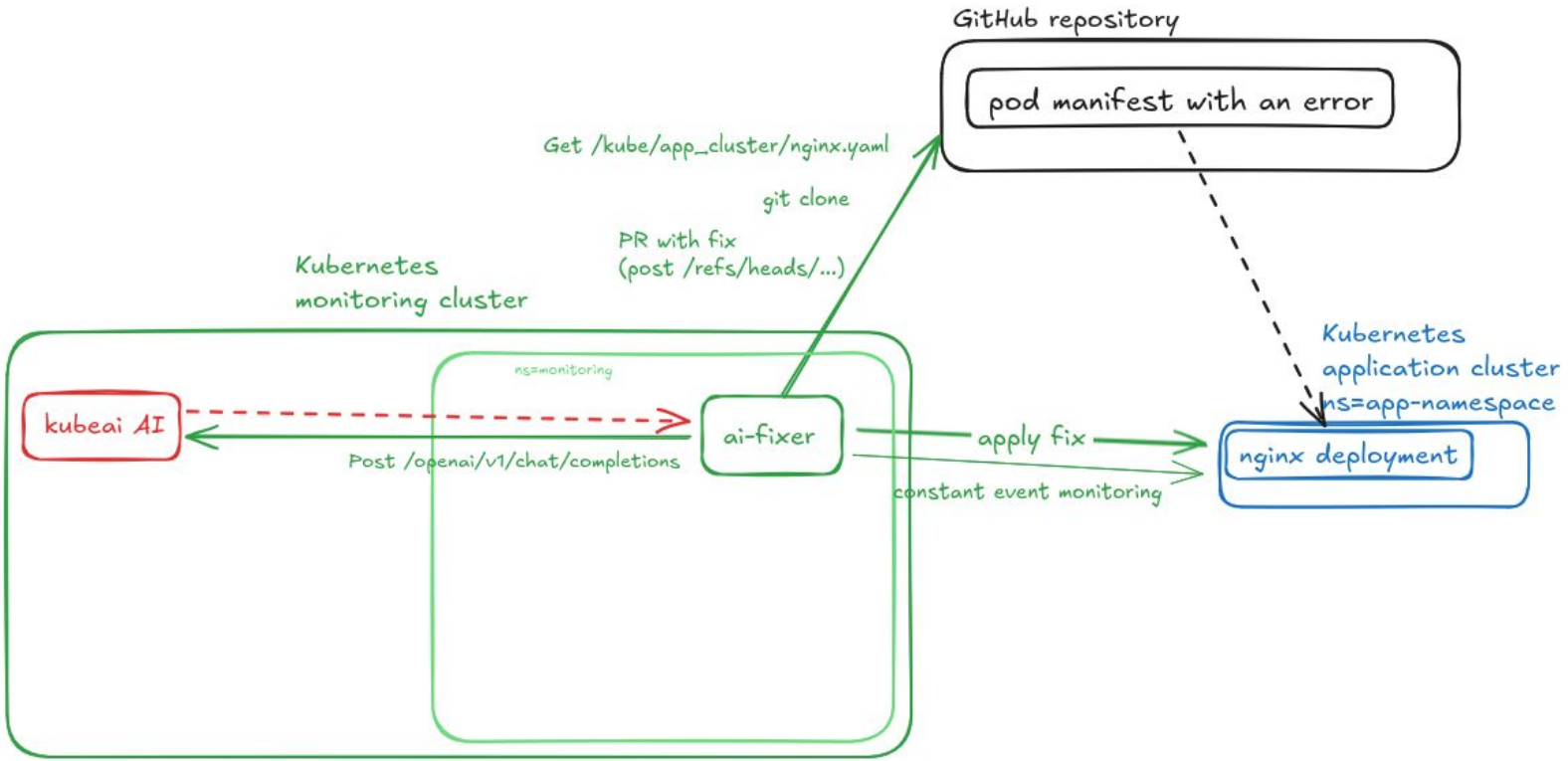

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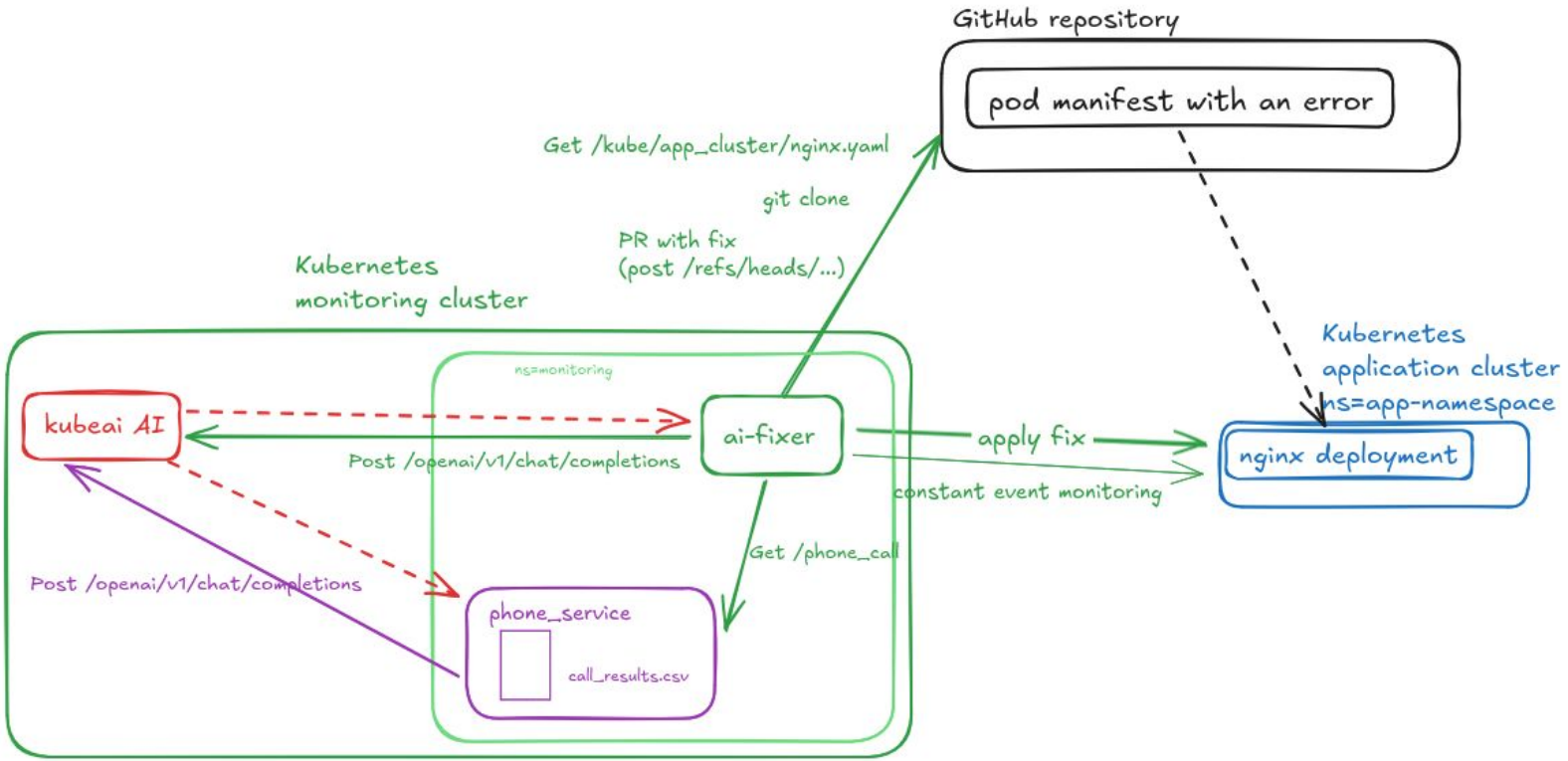

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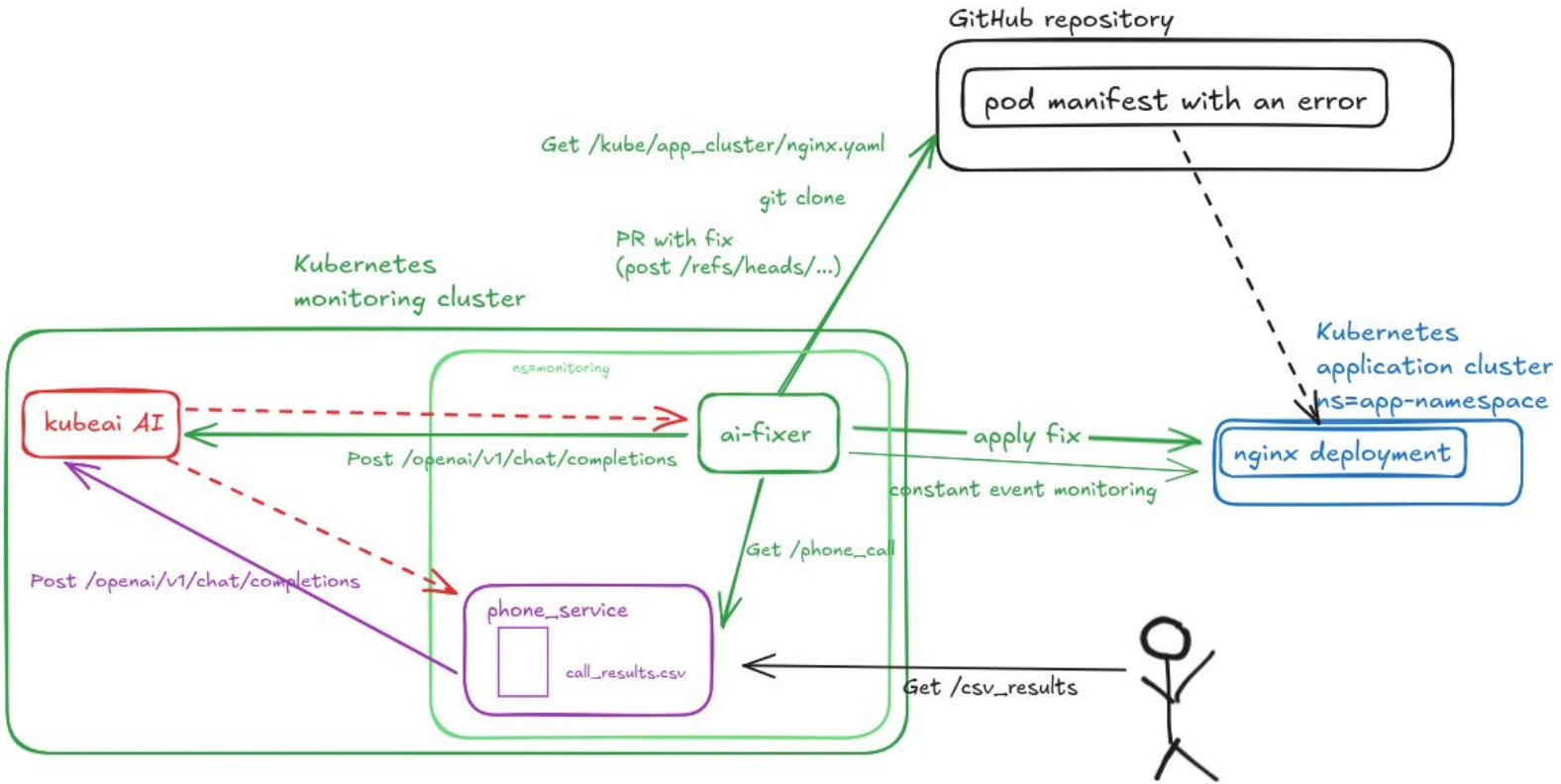


Phone Service (python)

Since a real phone call costs too much, we're going to simulate one via this API

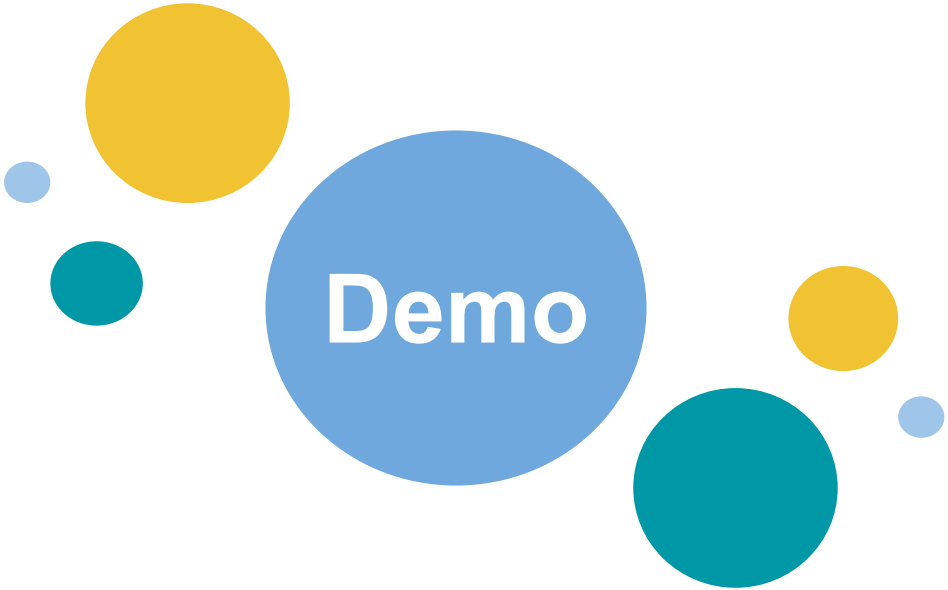
- /phone_call: simulates a phone call and saves the answer to a csv file in its container

- /tts: creates a text using ai based on the error messages received and returns the mp3 created from the ai's answer

- /phone_response: transcribes the content of a mp3 stored on disc and saves it to a file (with sentiment analysis done with the ai)

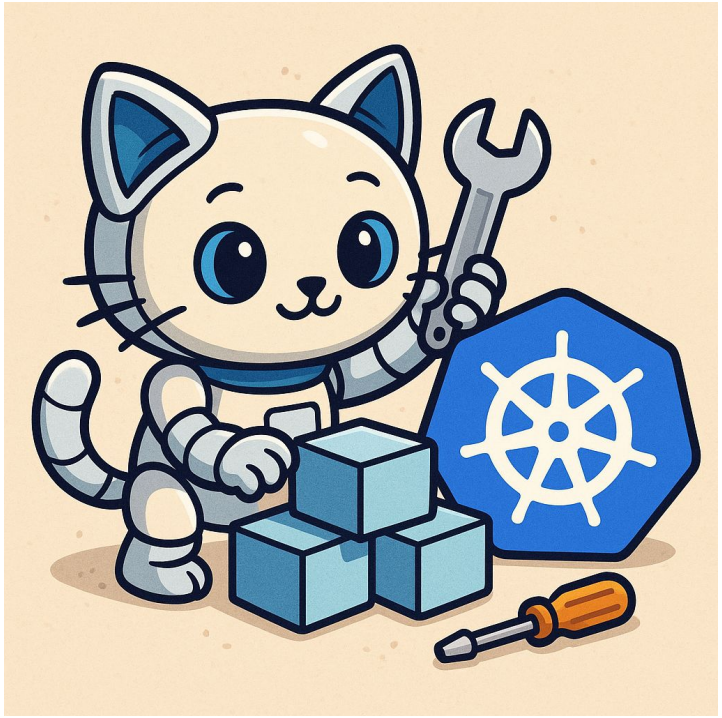
- /csv-results: returns the csv file

Using qwen2.5-coder-1.5b-cpu


Demo

Problems faced:

- AI not doing what it is told (had to use regex on response).
- Same error posted by Kubernetes and treated by AI multiple times.
- If AI doesn’t manage to solve the issue, it continues to get errors and tries to solve them again.
- Taking all / old events on startup
- VPN issues when using OpenStack.
- Couldn’t create 2nd kube cluster on OpenStack, had to do it locally.



Any questions ?