

Enforcing Automation in Building, Testing and Deployment of Software Applications – the case of cloud-based data services -

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This presentation is part of

“ELISE Webinar: Emerging Approaches for Data-Driven Innovation in Europe”

European Commission - JRC Pool of Experts

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Problem Statement

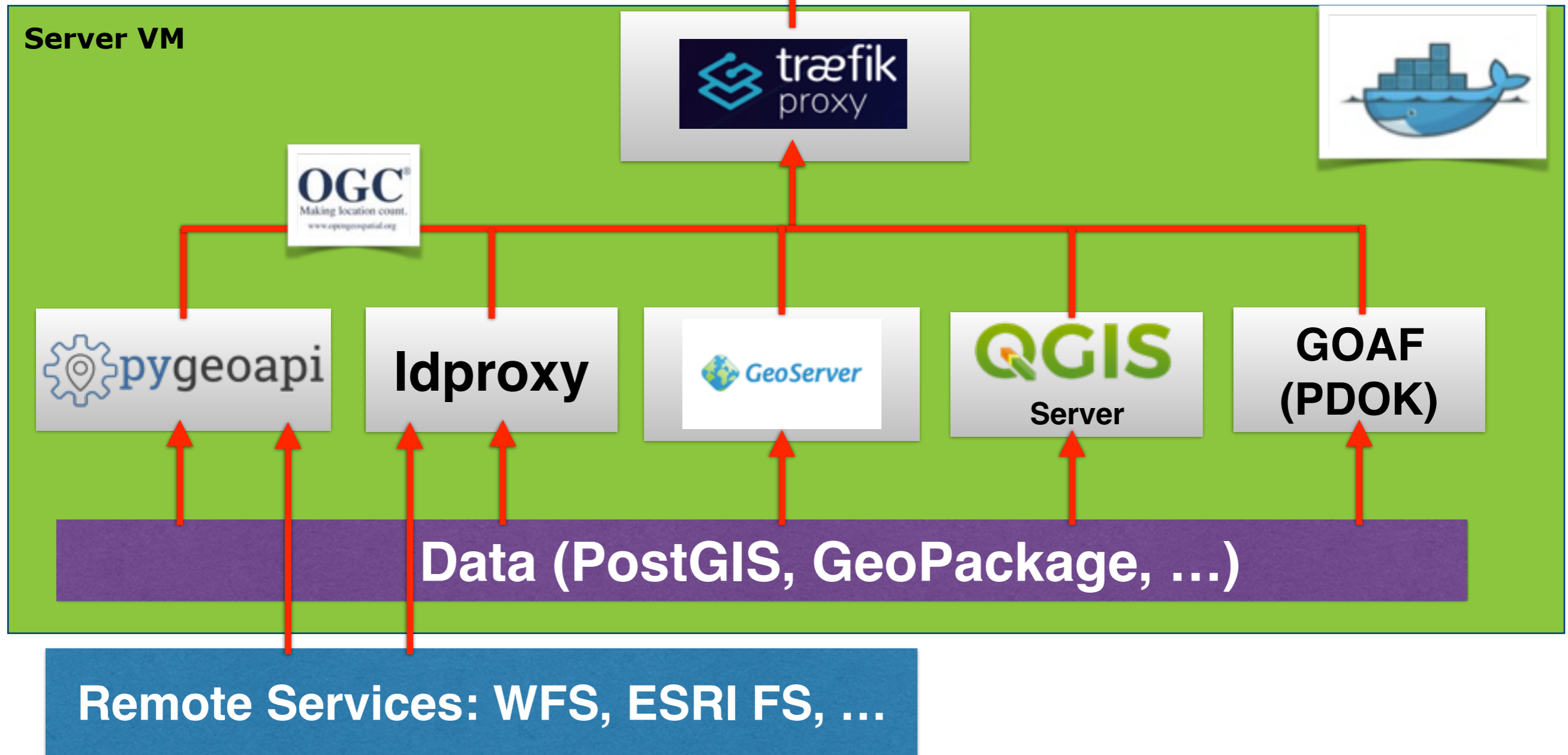
- ~~Select: suitable (API) (geo) data sharing standard(s)~~ —> new OGC APIs like Features
- Select:
software products for OAFeat data sharing stack
- How to:
realize reliable “Cloud Deployment”?

Geonovum - OGC API Testbed for OGC API Features

→ Dataflow

Docker container

OGC API Features (OAFeat) Endpoints



See: <https://apitestdocs.geonovum.nl>

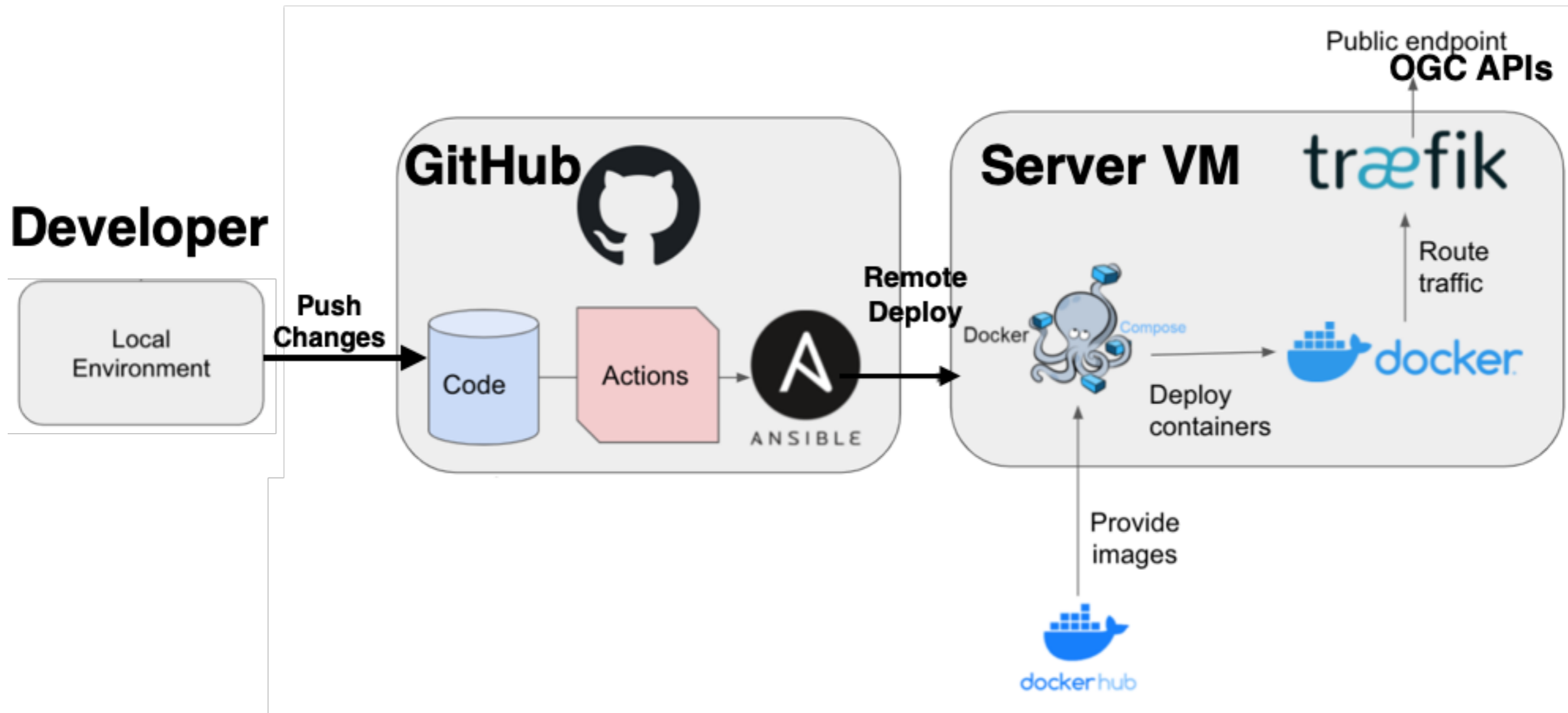
Cloud Deployment: GitOps in a Nutshell

*Push
Software &
Config
Changes*

*Build
Test
Deploy*

==> Git ==> “Cloud”

GitOps - Realization



Conclusions & Recommendations

- **GitOps:**
very viable CI/CD data services deployment strategy
- Start with **lightweight GitOps**
using GitHub+Ansible+Docker
- Ultimately go for **Kubernetes** deployment
using GitOps

Thank You for Listening!

Links

- Running service: <https://jrc.map5.nl/>
- GitHub repo: <https://github.com/justb4/ogc-api-jrc>
- Video recording of the webinar
(this pres. around minute 35):
<https://www.youtube.com/watch?v=ufYk3gar0lc>
- Full EC-JRC report:
<https://publications.jrc.ec.europa.eu/repository/handle/JRC127730>