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# HPE GreenLake and Infrastructure as Code (IaC)

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# Agenda

- GreenLake (hpegl) Terraform Provider
- Genesis aka ”Cloud Synthesis”

# GreenLake (hpegl) Terraform Provider

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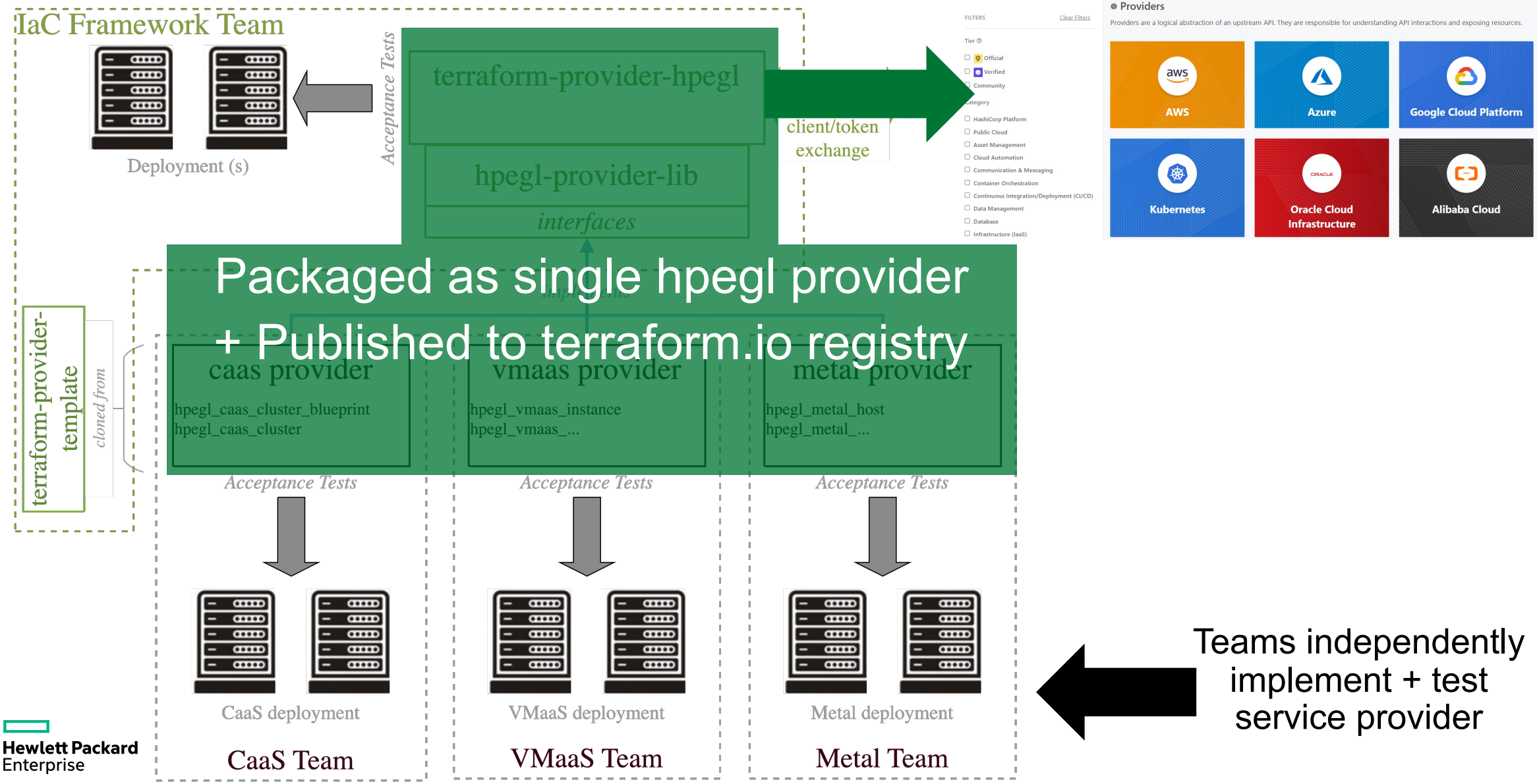
# GreenLake Terraform Provider




Teams independently implement + test service provider

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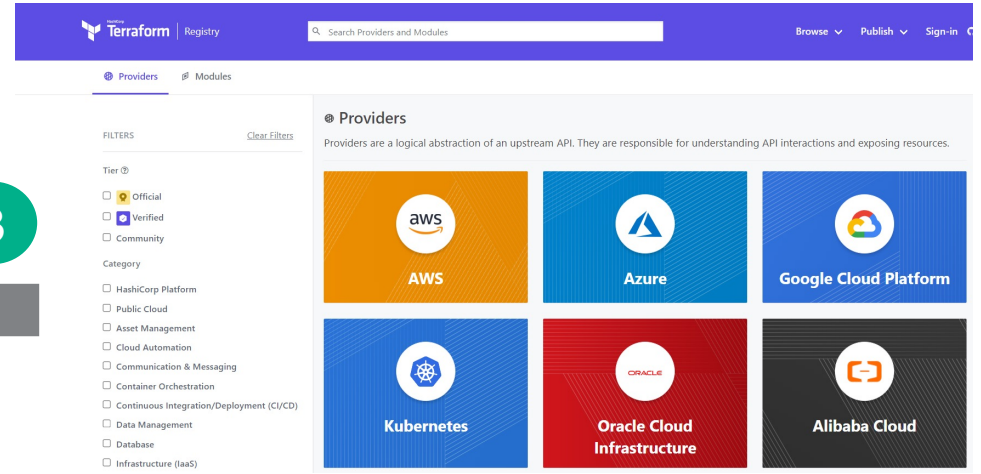
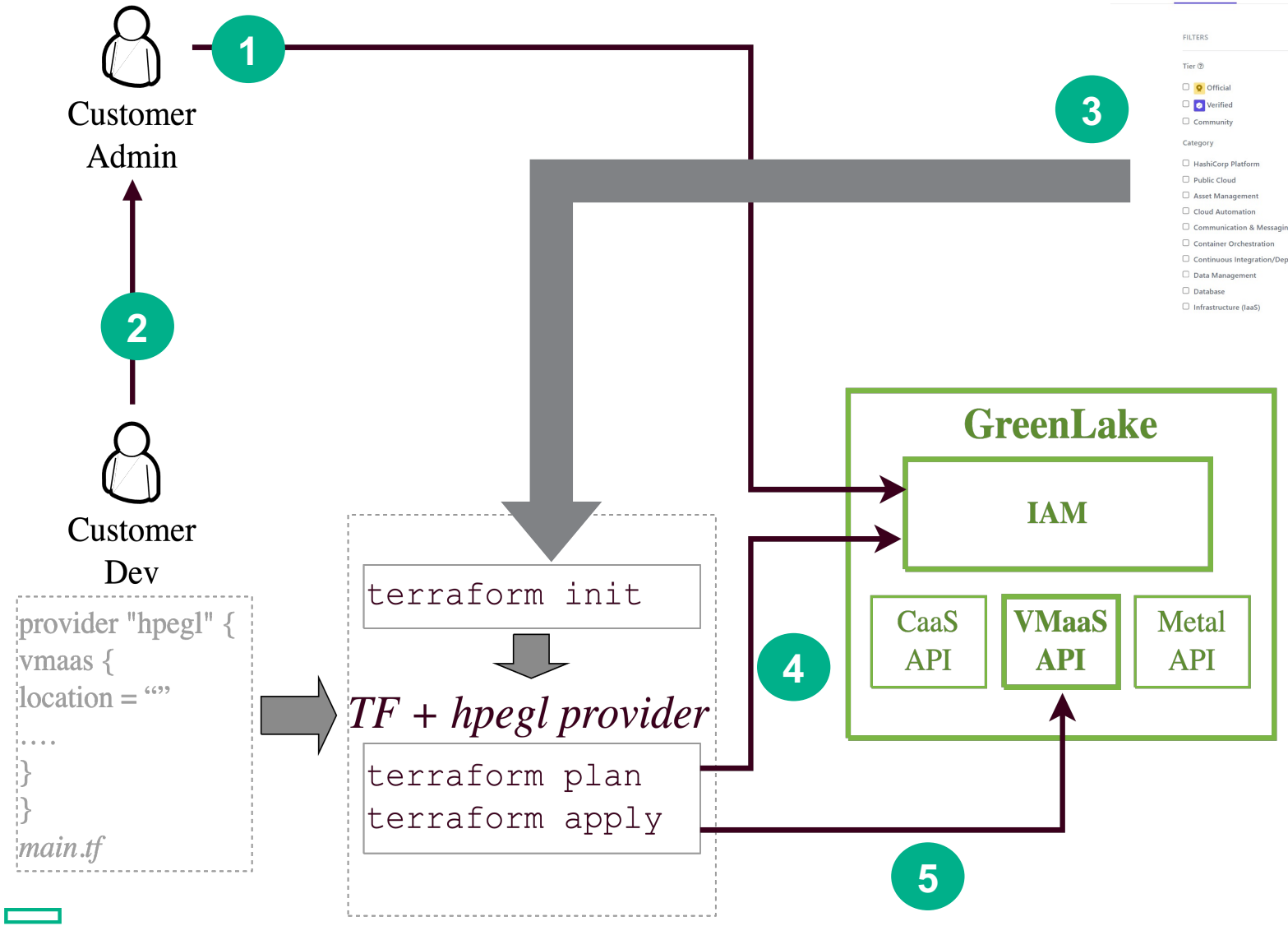
# GL Terraform Provider flow




1. Get IAM API client + assign privs
2. Dev gets API client creds
3. Init pulls hpegl provider
4. Auth + Vend token w/client creds
5. hpegl (VMaaS) deploys via VMaaS API

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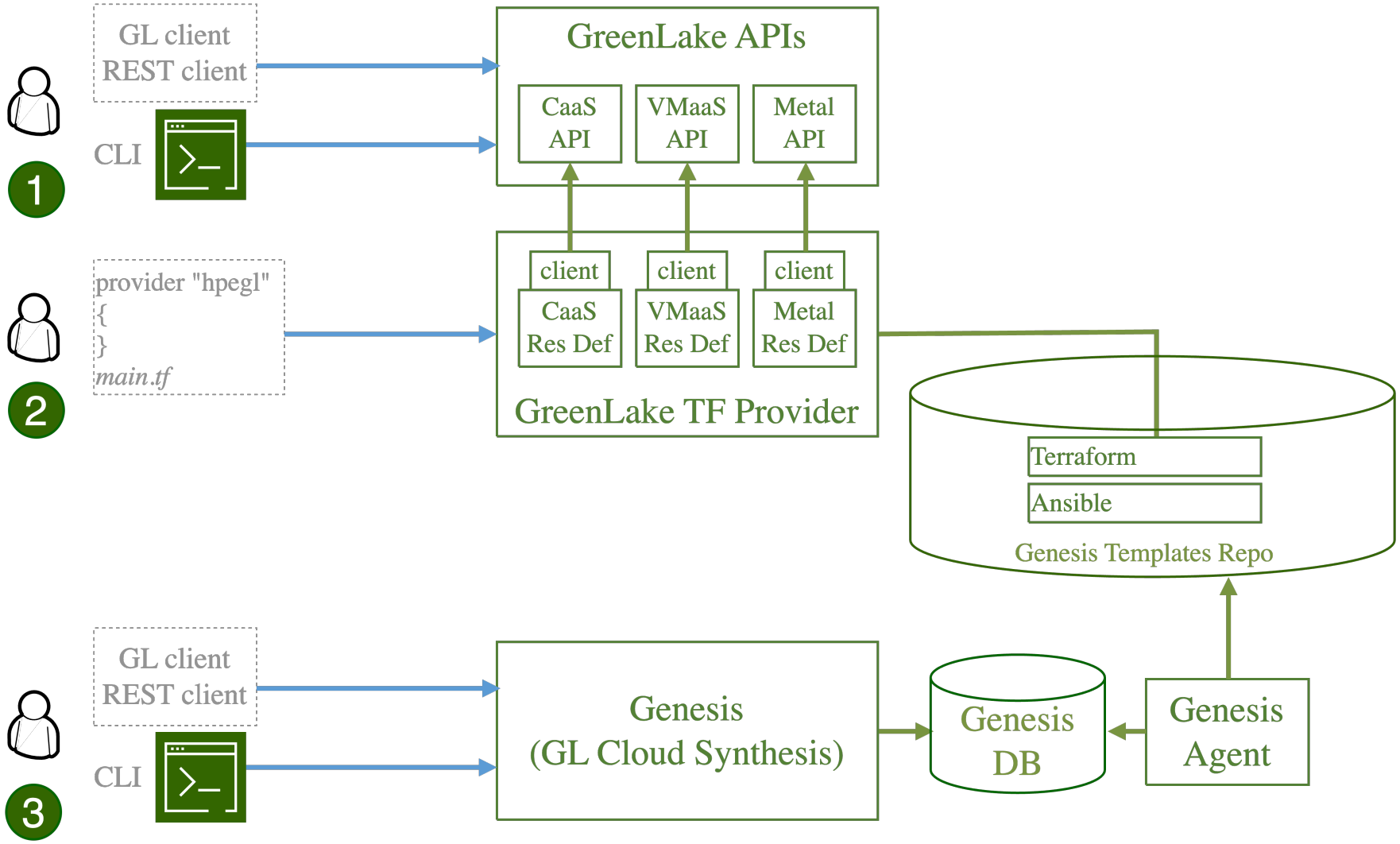
# HPEGL REPOS

- https://github.com/hpe/terraform-provider-hpegl
  - Provider ”assembled” from service team repos
  - Docs generated
  - Provider published
- https://github.com/hewlettpackard/
  - Search for “hpegl”
  - Service repos (provider code and SDKs)
  - hpegl-provider-lib: core “framework” repo
    - Interface definitions
    - Utility functions (token generation)
- https://github.com/HPE/terraform-hpegl-metal-hosts-with-logz
  - First published hpegl module

# Genesis (Cloud Synthesis)

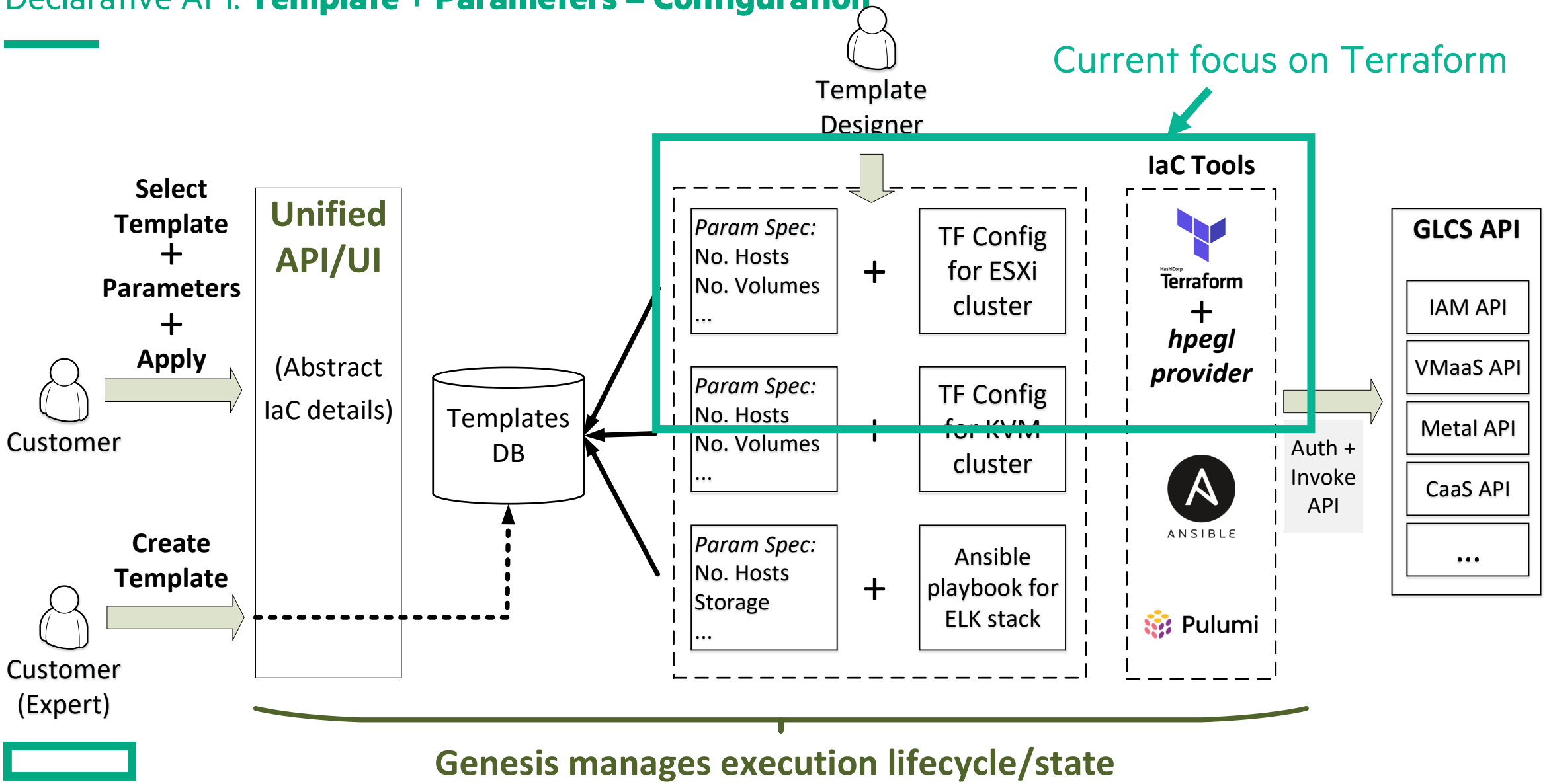
# Three Modes of IaC Interaction

1. Use **GL API** directly
2. Run TF scripts based off **GL Terraform Provider**
3. Use **GL Genesis API** to create configurations (Terraform/Ansible/ … abstracted)



# Core Idea

## Declarative API: **Template + Parameters = Configuration**



# Near-term Plans

## Add some more functionality

- Ability to run arbitrary terraform (”customer”-sourced templates)
- On-premise agents
- API compliance

## First release to customers

- Get customer feedback