K8s Adoption

Key

1. Build and deploy Kubernetes clusters to multiple clouds or on-prem with the click of a button or declaratively using Kubernetes resources via the CLI.

2. Authentication is federated via a federated identity provider (e.g., Dex).

3. Other Platform Components (e.g., Custom ingress controller, storage controller, load balancer controller, etc.).

4. Federated resource access using a GUI or declaratively using Kubernetes resources via the CLI. Federated clusters are ensured to have all clusters with the same security and operational standards, e.g.,
   - No namespace or RBAC for a team.
   - Secret/Key/Configuration stored by any app.
   - Platform Services via a federated catalog items.
   - GitOps projects by federating Flux objects.

5. Centralized Monitoring and Alerting using Thanos and Karma.

6. Federate resources (using GitOps) to attached Kubernetes clusters to ensure all clusters have the same building blocks, e.g.,
   - Namespace and RBAC for a tenant.
   - Secrets & ConfigMaps used by apps.
   - Platform Services via federated catalog items.
   - GitOps projects by federating Flux objects.

7. Other Platform Components (e.g., Prometheus, Grafana, Fluentbit, Velero, Traefik, etc.).

Diagram:
- **Pre-Provisioned Konvoy**
  - AWS Cloud Konvoy
  - Azure Cloud Konvoy
  - Other Platform Components

- **Konveyor**
  - Command Center
  - Centralized Monitoring
  - Resource Federation
  - Authority Federation
  - Federated KGs

- **Repositories**
  - Git Repos
  - Helm Repos
  - Image Repos

- **Kubernetes Clusters**
  - AWS, Azure, and pre-provisioned clusters are currently supported.