Introduction

Project Syn

Remember Virtual Machines?

- Automated provisioning
- Many Virtual Machines
- Configuration Management!

Remember Kubernetes Clusters?

- Automated provisioning
- Many Kubernetes Cluster
- Configuration Management?

Project Syn

Project Syn is a set of tools helping to securely manage a fleet of Kubernetes clusters. It brings a hierarchical configuration management based on GitOps principles, reusable components and an inventory of information about all Kubernetes clusters.

Comparison to the Known

Let's compare Project Syn to Puppet:

- Puppet Server → **Commodore**: Catalog compilation
- PuppetDB → **Lieutenant**: Inventory and facts
- Puppet Agent → **Steward** and Argo CD: In-cluster agent
- Hiera → Kapitan Reclass: Hierarchical configuration structure
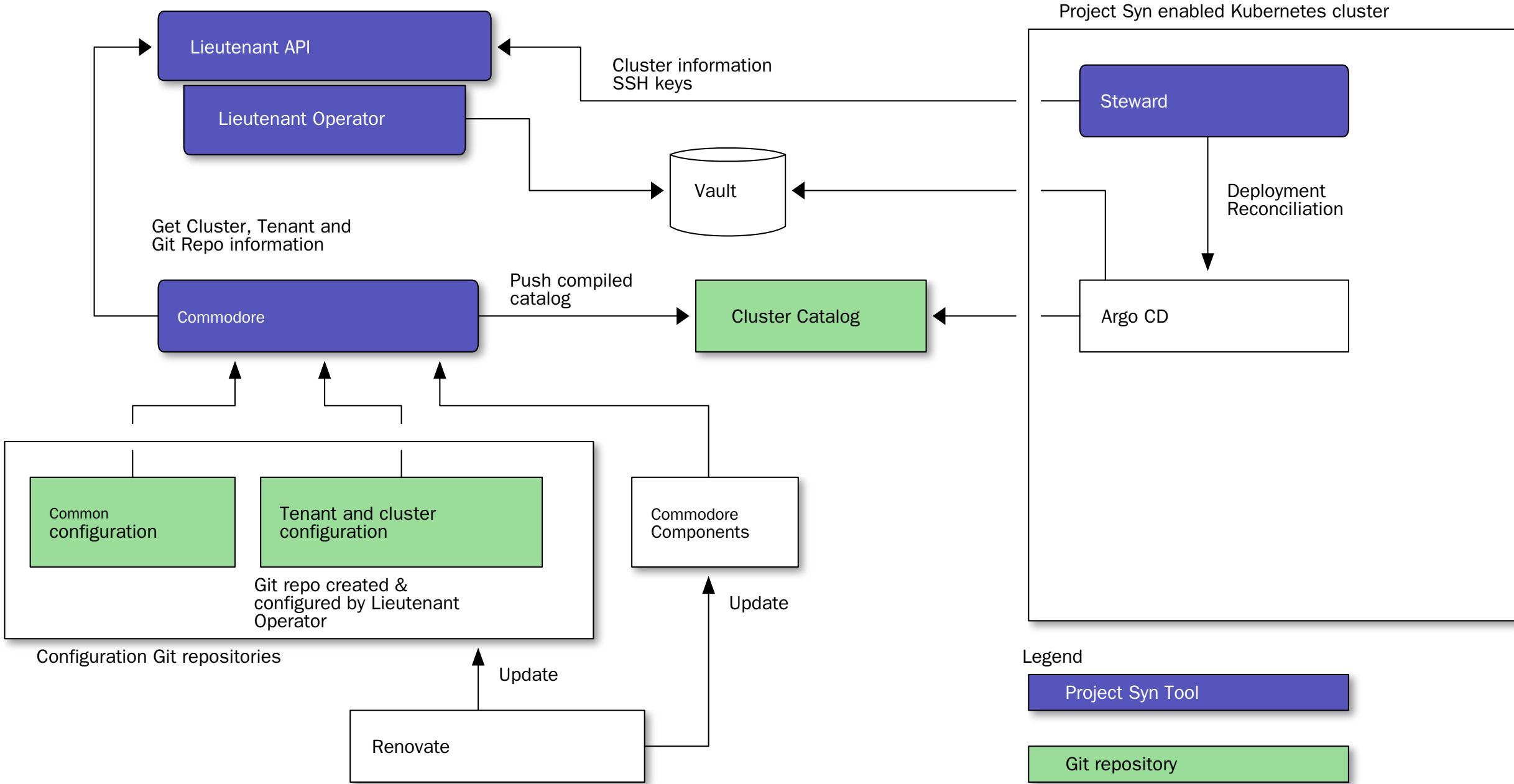- Puppet Module → Commodore Component

Third-party Tooling

On the shoulders of giants:

- Kapitan
- Argo CD
- Renovate
- HashiCorp Vault
- GitLab

And more ...

Architecture

Features Conclusion

- Configuration Management for Kubernetes
- Full GitOps Operations and Automation
- Reusable Configuration Management Components
  - Component Hub federates documentation of available components
- Secrets Management
- Multi-Cluster and Multi-Tenant Management (Inventory)
- GitLab CI pipeline for catalog generation

What's coming

Development is ongoing, we're working on:

- Improved catalog generation
- API replacement by plain Kubernetes API
- User experience improvements
- Syn CLI

Roadmap: syn.tools/syn/about/roadmap.html

Do It Yourself

Browse to

syn.fan/start

and try it out for yourself

Further resources

- Project site: syn.tools
- Commodore Component Tutorial: syn.tools/tuto/index.html
- Commodore Component Hub: hub.syn.tools
- GitHub: github.com/projectsyn

Thanks!

Project Syn

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