Demonstrate Interoperability using Hyperledger Bevel and Cactus

Project Title	Demonstrate Interoperability using Hyperledger Bevel and Cactus
Status	COMPLETED
Difficulty	HIGH

Description

Hyperledger Cactus support ledger Interoperability but use a local deployment for testing; Hyperledger Bevel supports production-worthy deployments. This project aims to support Cactus deployment using Bevel to demonstrate production-like usage of Hyperledger Cactus. The steps will be following:

1. Deploy a Hyperledger Fabric network using Bevel on a Managed Kubernetes cluster
2. Deploy a GoQuorum network using Bevel on a Managed Kubernetes cluster (can be the same cluster for simplicity).
3. Make changes in Hyperledger Bevel code to deploy the Cactus connectors in both the above networks.
4. Run Cactus test cases.

Additional Information

For a discussion of Hyperledger Bevel and Bevel GitHub Issue #1827.

Learning Objectives

You will learn production cloud deployments, working with multiple DLT platforms, security, and scripting, as well as key Hyperledger platforms such as Bevel, Fabric, and Cactus.

Expected Outcome

At the end of the project, we are looking for:

- Successful Interoperability testing using Cactus on production like DLT networks.
- Update to Hyperledger Bevel code to automatically deploy the Cactus plugins.
- Update to Documentation of Bevel and Cactus.
- Detailed tutorials and learning materials which would benefit Bevel and Cactus communities.

Relation to Hyperledger

Hyperledger Bevel

Hyperledger Cactus

Hyperledger Fabric

Education Level

Undergraduate is okay.

Skills

Knowledge of Hyperledger Fabric, GoQuorum, Ansible, Helm, Kubernetes.

Future plans

Demonstration of interoperability between other DLT platforms like Fabric and Corda.

Preferred Hours and Length of Internship

Part-time (20 hours a week for 24 weeks)

Mentor(s) Names and Contact Info

Kamlesh Nagware : Kamlesh Nagware, CTO, Snapper Future Tech kamlesh.nagware@snapperfuturetech.com Discord - knagware#6976

Sownak Roy: Sownak Roy, Technical Architect and Product Owner, Accenture

Jagpreet Singh Sasan: Jagpreet Singh Sasan, Lead Developer, Cactus, Accenture