



Taking on Challenges of
Enterprise Blockchain Infrastructure

IDEATE

INNOVATE

IMPLEMENT

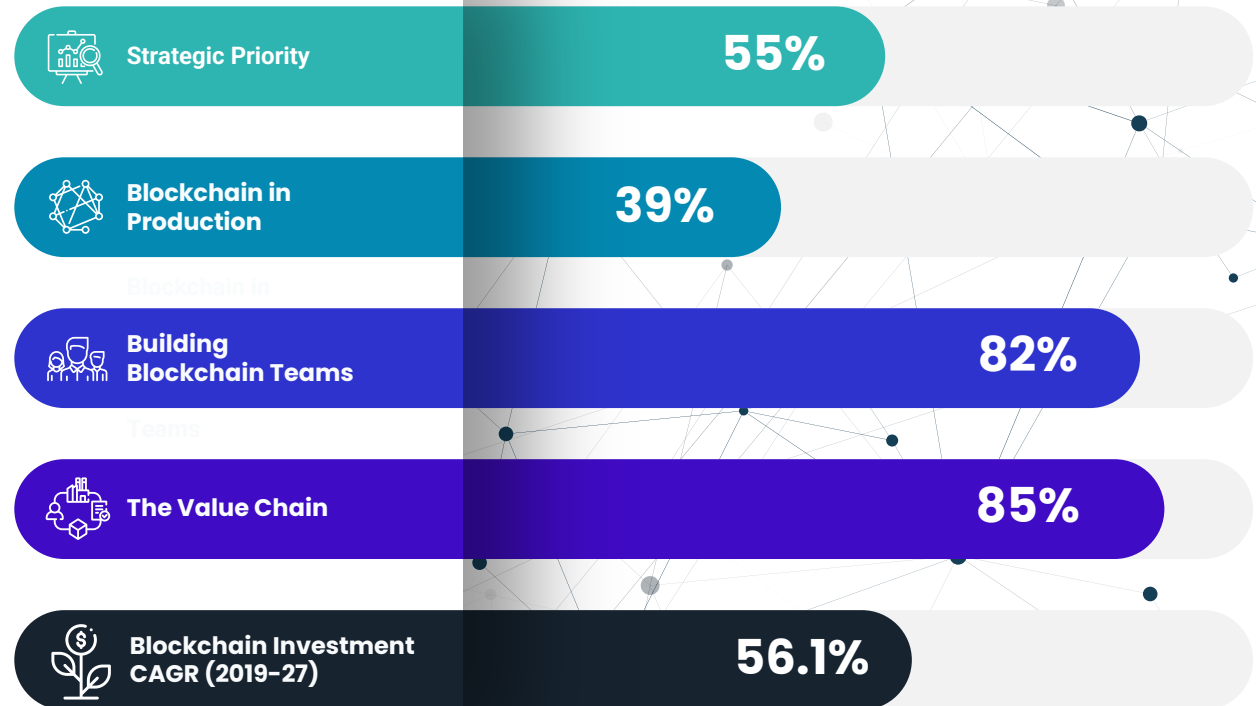
55%

of CIOs consider
**Blockchain as
their #1 priority**

Deloitte.

83% of respondents
indicated their
companies will lose
competitive
advantage if they
don't adopt
Blockchain

BLOCKCHAIN TRENDS – FROM PROMISE TO REALITY



Lets talk about challenges

- Decentralization is missing
- Time to Market.
- Cost of Setup and Ownership
- Complexity of Scaling – Consortium Networks
- Complex to understand and adopt
- Lack of know-how and expertise
- Lack of standards for security and optimization

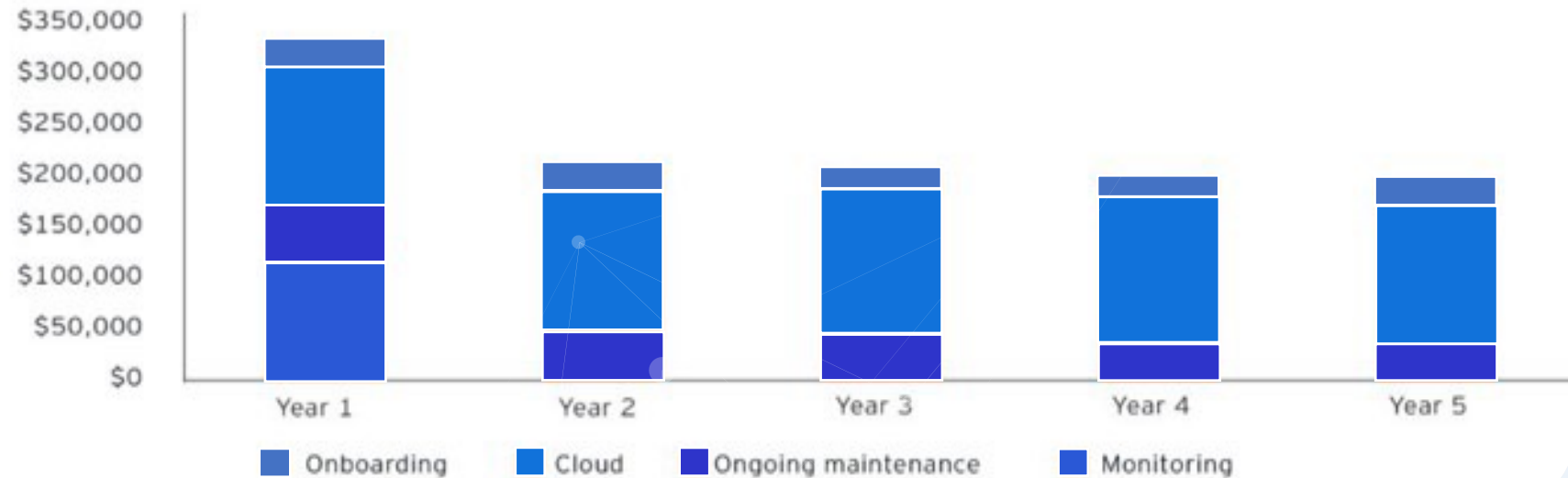


... and again, never underestimate the costs

Production Use-case Example

	Year 1	Year 2	Year 3	Year 4	Year 5
Onboarding costs	\$115,146	\$3,880	\$3,688	\$3,506	\$3,335
Cloud costs	\$50,006	\$42,756	\$36,557	\$31,257	\$26,725
Ongoing maintenance costs	\$142,280	\$142,014	\$141,755	\$141,505	\$141,263
Monitoring costs	\$19,663	\$18,773	\$17,928	\$17,125	\$16,362
Total costs	\$327,095	\$207,423	\$199,928	\$193,393	\$187,685

Five-year costs



What's needed – Blockchain Infra Automation

- The automation should be for, – in-depth configurations of protocols, monitoring of node and chain health, easy smart-contract design and management tools etc.
- Creating your consortium in few button clicks, without losing the decentralisation.
- Decide your infrastructure with no compromise, your cloud or on-premise. Every stakeholder in your consortium gets to make their own decision.
- Best in class security practices standard across all deployments.
- Analytics and Monitoring which can scale with your decentralised deployments.
- Control on costs with auto optimisations and scaling of the networks.



A LOW CODE
BLOCKCHAIN AS A SERVICE
ENTERPRISE PLATFORM



Supports Multiple Blockchain Protocols

100% Automated and No Code



Heterogenous Cloud Deployments

Supports all major cloud providers including Private Cloud and On-Premise



Blockchain Analytic and Real time Monitoring

Advance Analytics and Monitoring Alerts and Notifications



Web Services for Faster DApp Development

CI/CD Integrations to Services like IoT, Governance, Storage, Secure Vault etc

>60%

Cost Savings

>90%

Faster Time to Market

>15,000

Developers on Board





A structured platform approach to deliver operational excellence across Blockchain Networks and Decentralized Applications.

Network and Security

One Platform for all your needs



Multiple Cloud Provisioning

One Click Node Deployment

Unified Dashboard

Node Security inbuilt

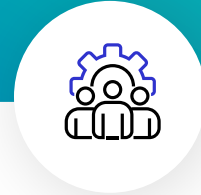
Blockchain Integration

TEE as a Service

Decentralized Storage

Ops and Management

100% Automation and DevOps



Resource Monitoring

Resource Optimization

Auto-scaling and healing

Unified Dashboard

Intelligent Analytics

Network Visualizer

CI/CD Automation

Apps and Services

A complete toolkit



GIT Integration

IoT as a Service

dApp Marketplace

Decentralized Governance







Key Secure Vault

Asset Tokenization

Federated Learning



A Stack with Decentralization at Core

-  Decentralized Storage
-  Secure Data Sharing
-  Distributed KYC
-  Trusted Execution
-  Decentralized IoT
-  Asset Tokenization



Distributed Apps and Smart Contracts
Blockchain & Other Peer to Peer Applications

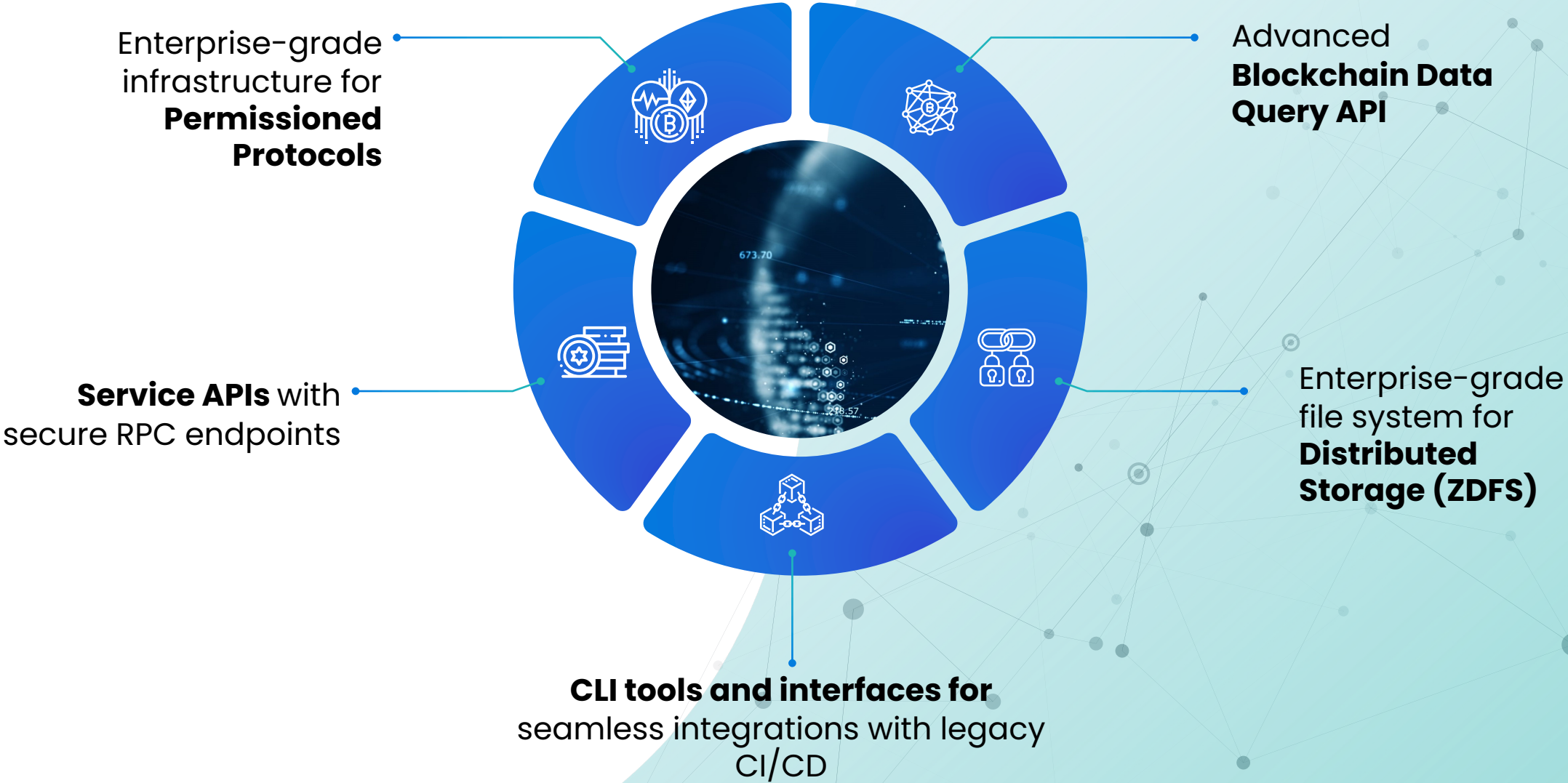
Peer to Peer Protocol Layer
Smart-contracts, Distributed Ledger, SFL

Zeeve
Secure Communication & Processing Stack

System Network Layer
TCP/IP

Hardware, Devices and Cloud
Intel, ARM
AWS, GCP, Azure, IBM, Digital Ocean

PLATFORM AND PRODUCTS



LEARNING EVERY DAY

Zeeve BaaS Platform is trusted by 15,000+ developers and 25+ Enterprises and Blockchain Consortiums

Early Traction & Customers



CASE STUDY



TradeReboot – Trade Finance Consortium

- Category – Trade Finance
- Blockchain Protocol – HyperLedger Fabric 2.2
- Cloud – AWS and GCP
- Network Size – 17 Nodes



Challenges

- Identify the most suitable Blockchain protocol to achieve the business goals.
- Enterprise grade network that has high availability, security and performance.
- Cloud agnostic deployment of nodes so that third party stakeholders are not locked to a single cloud service provider.
- Continuous monitoring of the deployed network as a service to reduce upfront and ongoing costs.
- An enterprise level support the Blockchain network.



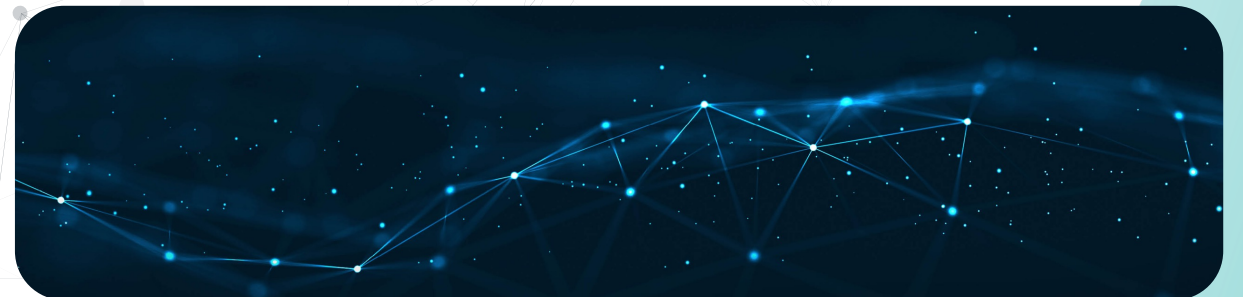
Zeeve Approach

- AWS cloud architecture including node application instances, RDS for off-chain database, security rules, load balancers and the backup plan.
- Build the Trade Finance DaApp and Smart Contracts
- Governance smart contract to govern the rules of the consortium
- Deployment of HyperLedger Fabric 2.2 on Kubernetes cluster on AWS..
- Enabled the invitation module to on-board the initial users on the platform.



Results

- Seamless Onboarding – Zeeve helped quick and hassle-free onboarding of users who wanted to host their own nodes.
- Cost Saving of ~45% – Zeeve helped optimized setting up of the nodes and network instances.
- Faster time to market by ~80% – Zeeve accomplished the complex deployment of trade finance network of Hyperledger Fabric on AWS in less than 30 minutes.
- Proactive Monitoring – Zeeve features advance analytics and proactive monitoring of Blockchain and cloud resources..
- 24/7 Support – Zeeve provided DevOps experts and Blockchain engineers for initial deployment architecture and ongoing management of the network.



CREATE AND SCALE NETWORKS

Network Configurations - BYOC-AWS Available Peers: 10

Home / Network / My Network / Add Organisation

● Organisation Details

org3 ⓘ

Certificate Authority (CA)

Admin Username *
org3ca

Admin Password *

Enable CA Persistent Volume

[+ Add Orderer](#) [+ Add Peer](#)

Peer 1


Level DB Couch DB

Enable Peer Persistent Volume

Volume Size: 10 GB

CSR Details (Optional)

Organisation Zeeve	Organisation Unit Blockchain	Country India
State UK	Locality Dehradun	Validity in year 15

 Create

Home / Network / My Network - BYOC

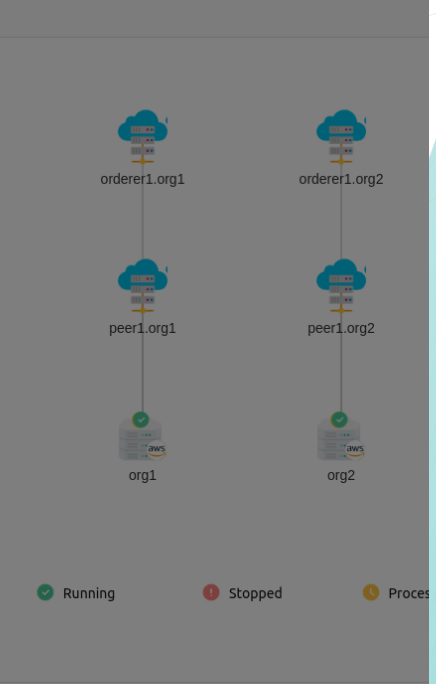
Nodes Artifacts Logs

- 1. Crypto Artifact [Download](#)
- 2. Connection Profile [Download](#)

Blockchain Data

Network-Id	82973e2b-1 ...
Name	mychannel
Consensus	etcdraft
AbsMaxBytes	3
joinChannel	true
MaxMsgCount	2
BatchTimeout	1
PrefMaxBytes	1

[Download](#)



Running Stopped Process

NETWORK TOPOLOGY



DZ demo@zeeve.io
Username: Demo Zeeve



Dashboard

Workspace

Marketplace

Networks

Node Analytics
Coming Soon

Cloud

RECENT

- Fabric Networks
- Corda Networks

+ New Workspace

OTHER

Settings

CONTACT US

support@zeeve.io

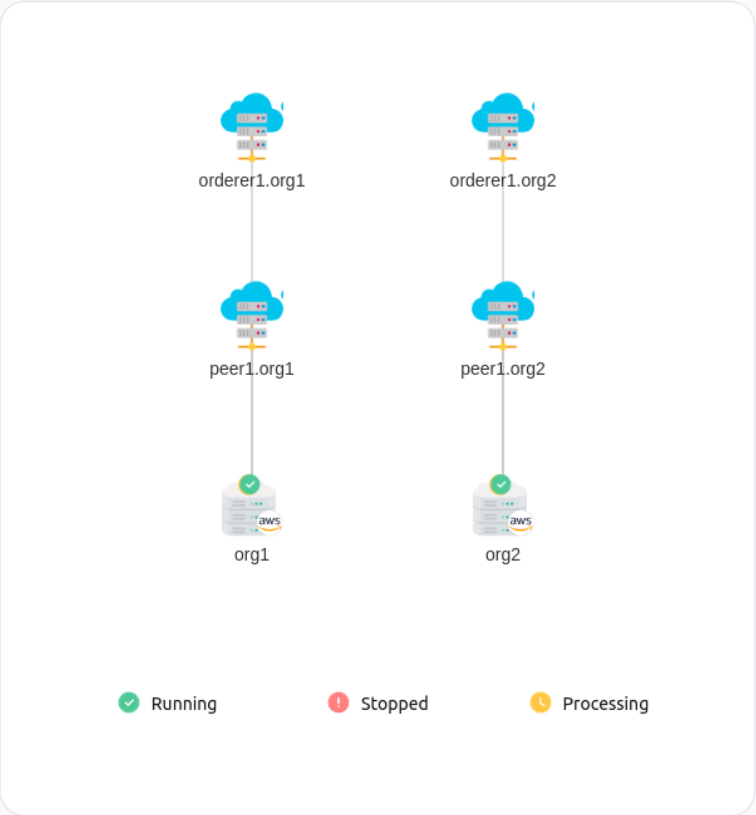
Home / Network / SCnet - BYOC

Analytics & Monitoring

Pipeline

Actions

Nodes	Artifacts	Logs			
d39263b5...	org1	peer	eu-west-2		
4ba8ab8c...	org2	peer	eu-west-2		
8edf5b94...	org1	ca	eu-west-2		
4d36d407...	org2	ca	eu-west-2		
386db657...	org1	orderer	eu-west-2		
7db1bd7f...	org2	orderer	eu-west-2		



AS FLEXIBLE AS IT GETS

Dashboard

Workspace

Marketplace

Networks

Node Analytics
Coming Soon

Cloud

RECENT

• TRADEREBOOT

+ New Workspace

OTHER

Settings

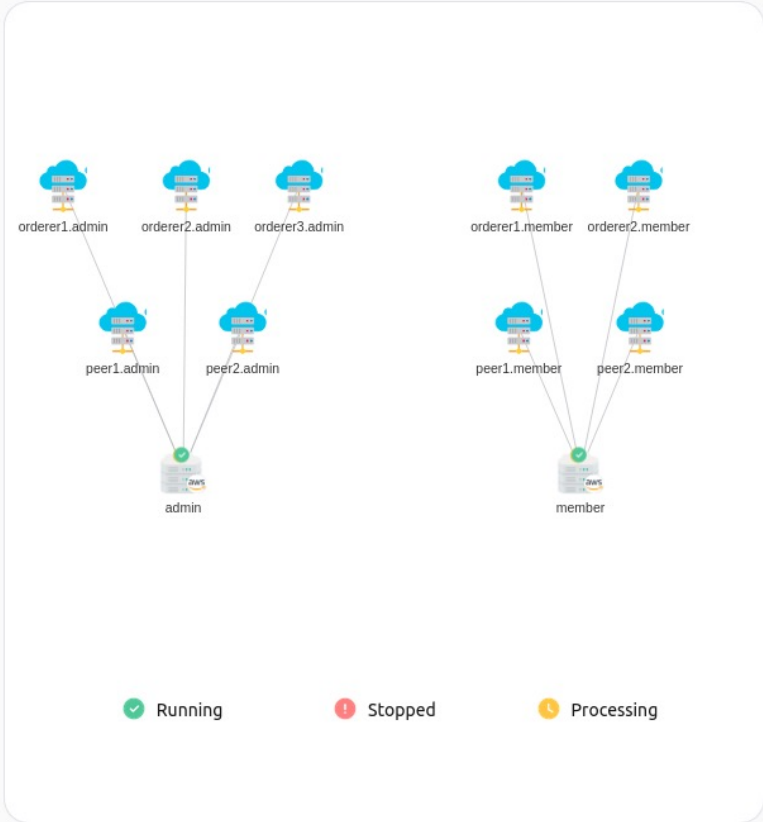
CONTACT US

support@zeeve.io

Home / Network / My Network - BYOC

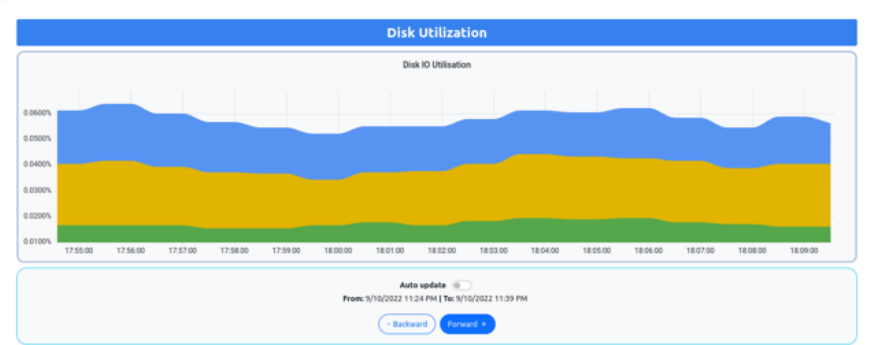
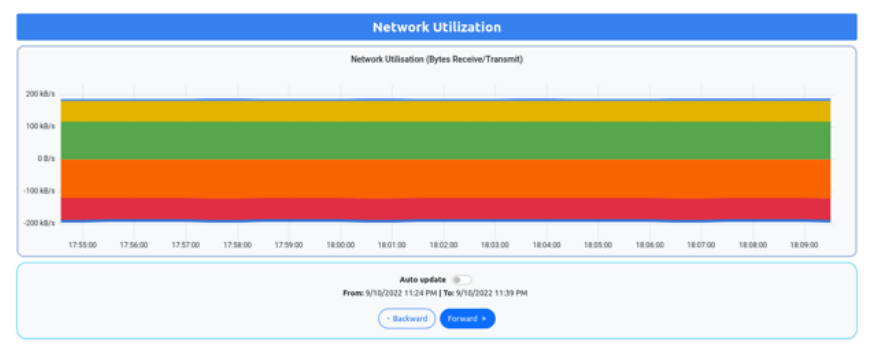
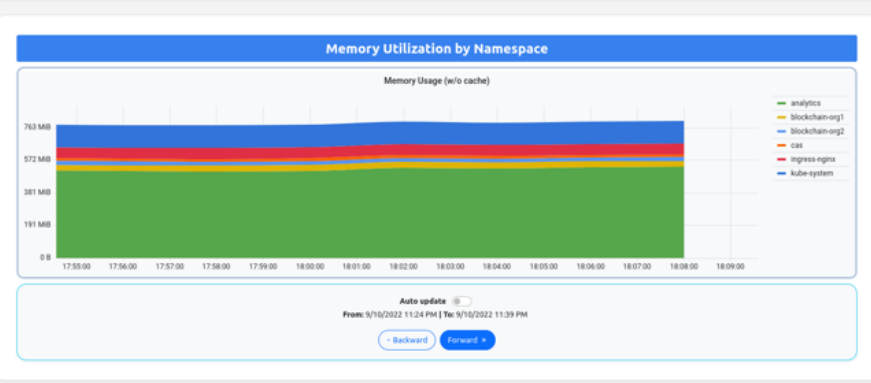
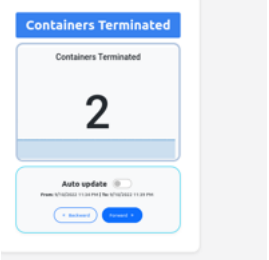
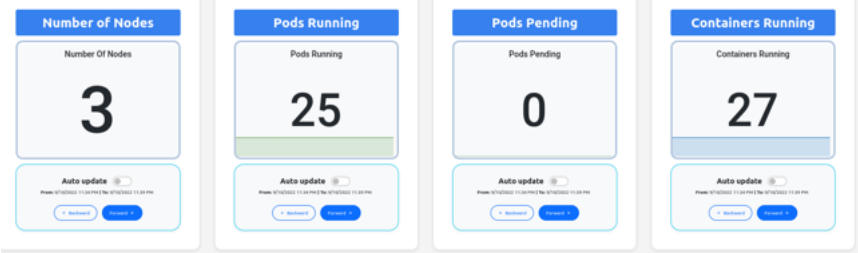
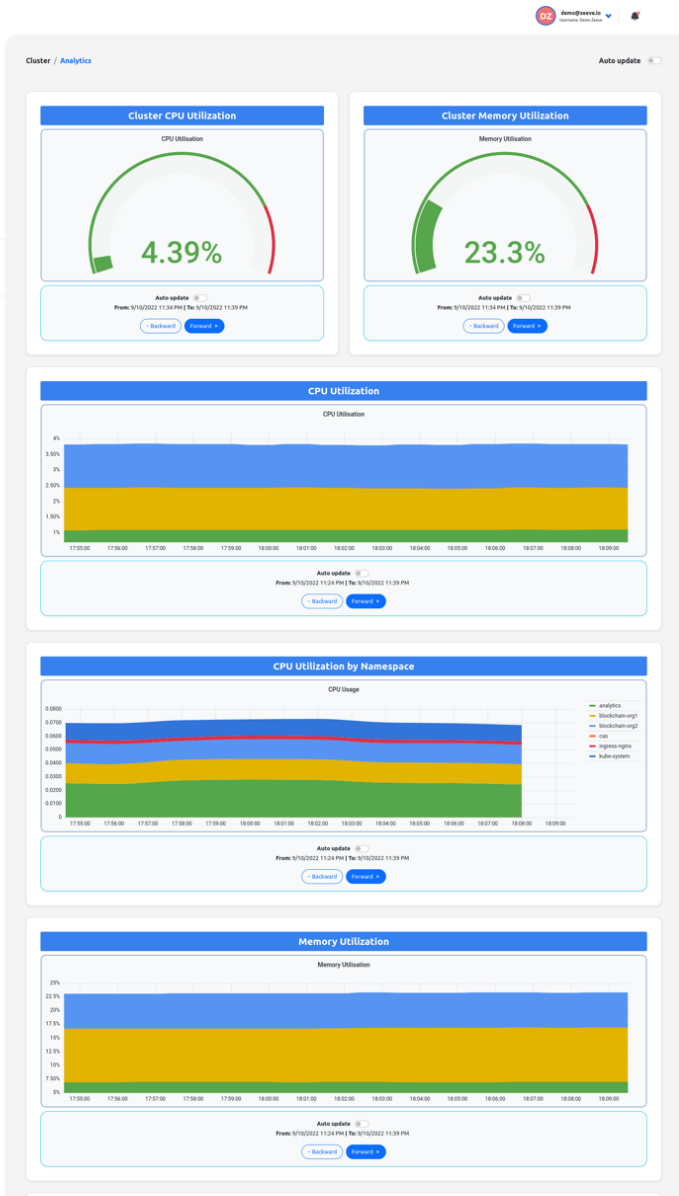
Pipeline Actions

Nodes	Artifacts	Logs				
54514261...	admin	peer	ap-south-1			
a7467bf4...	admin	peer	ap-south-1			
6f8445f8...	member	peer	ap-south-1			
3431968c...	member	peer	ap-south-1			
eba282f0...	admin	ca	ap-south-1			
33d06608...	member	ca	ap-south-1			
04b20762...	admin	orderer	ap-south-1			
90002405...	admin	orderer	ap-south-1			
c18d612f...	admin	orderer	ap-south-1			
4f5bb505...	member	orderer	ap-south-1			
5b36a822...	member	orderer	ap-south-1			



STAY IN CONTROL

- Dashboard
- Workspace
- Marketplace
- Endpoints
- Networks
- ZDFS
- Node Analytics
- Clouds
- OTHERS
- Settings
- CONTACT US
- support@zeeve.io



Zeeve CLI, CD PIPELINES

Zeeve continous deployment interface

Build/deploy your pipelines. For more Information read the docs

Pipelines

Pipeline	Status	Total Jobs	Action
fb089ae-c725-409d-a935-1c20c8ed99a6	🟡	[JobID : dd664a1-9330-422b-b0df-bb8be063dd07]	🔗
a8e88312-9877-48b0-94bc-8bf9895936c5	🟡	[JobID : 30a6013c-1bb3-44b9-bb0d-5ced974bd184]	🔗
9af5f4cd-9c5e-40ba-a7c4-61c669ef2c13	🟢	[JobID : c9079b63-15ce-484e-820e-a07f05782aa2 , JobID : 5fd116ec-6dd8-415c-89b5-3802d256b887]	🔗
ccf775e9-6b97-442c-b92c-8483838eb2ad	🟢	[JobID : da521c37-eea7-40f8-82e3-eb92dd63315c]	🔗
63effbe0-ce83-411d-8e92-8bf0155e74ff	🟢	[JobID : 240cdde6-b56b-4880-9823-a67815e4e6c0]	🔗
ddaa2f32-4028-4c27-90a0-85e20e041faf	🟢	[JobID : 29322359-bb38-4525-994b-d9a8ef57d707 , JobID : 81138375-4752-4f2f-956c-b2a0588cafbе]	🔗
c7d53736-d357-4825-a447-097aebd1d580	🟢	[JobID : 4babf03a-7f78-4e1c-a780-0d9494c9b653]	🔗
ddcdab40-050c-46b8-b641-1eaca9c03068	🟢	[JobID : ef009178-e124-40db-9771-24b96af93acf]	🔗
1f4ac385-4606-463e-a377-f62b00a13ca0	🟢	[JobID : 0a955d22-1858-448a-a980-01b410d7d5bc]	🔗
736495b8-cf23-4284-b7e6-06e57c1eaa47	🟢	[JobID : 983ae0cd-9405-458c-b313-15bc7eeea0ab , JobID : 2e76cb13-81bc-48e7-9e89-04265d5e6110]	🔗
b07637ce-65b4-4a46-b1d1-485158b467a2	🟢	[JobID : f9112494-7740-4331-a846-8c39f8930967]	🔗
884e2005-c01b-49a0-b9ef-ee38118b7ee4	🟢	[JobID : 766fe4b6-23a9-4cc8-95eb-34a908f31199]	🔗
b1d4cdf6-2b2c-49ff-a785-e771fcb94198	🟢	[JobID : 8cb07e84-dae5-41ba-ab41-9f28ae78ef09]	🔗
94c45359-a4fe-4c9c-932e-e6b971393c9	🟢	[JobID : 8a3b0c44-3069-4c79-ad43-c464a23f19b8]	🔗
60726095-8fe2-4795-b39f-4f0fcea43c2f	🟢	[JobID : 8c95826b-b7f2-4ae8-aa82-98385a1c726c]	🔗
f6aa88e6-0a1e-496a-ae94-f928d2bac661	🟢	[JobID : 82fe72a4-d7a4-4cc3-909d-f40f8c02af7e]	🔗
ecd02c85-649c-410e-80b0-ee5bc32fefff	🟢	[JobID : d4582427-a214-4fb2-8a16-365384b31b35]	🔗
c096b1bd-4148-46ce-b64c-45c3501435a1	🟢	[JobID : 30f7b75d-1e22-456c-a8dc-5671a6d9f808 , JobID : dee07244-7112-4d32-989d-e2a04327c808]	🔗
d2fcd914-a3d9-4925-b4da-d675860ac2d3	🟢	[JobID : 371eff44-9244-41f0-bea8-5072929f3021 , JobID : af0ea270-79bc-4d5f-be8a-0d2b583a5dc7]	🔗
12517394-e10b-4898-be87-304ff1610c83	🟢	[JobID : a2bbaa3b-1725-4836-9576-7559bb18c6fc]	🔗
9ed48147-cd62-454e-a541-822e69173460	🟢	[JobID : 5a520b42-ca75-4c74-8c56-a4eb68469c5b]	🔗
8a020fce-a745-482d-a1c2-6e6cfa4a80cc	🟢	[JobID : ee43c976-aff9-402f-afdc-2409e16867eb]	🔗
e1234e5a-3d1f-4518-9ecc-ad802aae4741	🟢	[JobID : b3572b83-f27e-4692-a342-6e0f05e8eab0]	🔗
4336cbb4-58d2-407c-9c3d-4415f42f0016	🟢	[JobID : c305f8e5-1aa7-413b-a65a-5daecf29d838]	🔗
49f40cae-45bd-466b-a9ed-08f1f99a9cd3	🟢	[JobID : 32d07895-dcb7-42d6-8cbe-2e8a5af3f55]	🔗
366e9f3a-7582-45fa-9766-2b8c94a42795	🟢	[JobID : c3cc53f8-2223-438a-8f53-a76ef58ad8bc]	🔗
8a2a7085-83e6-42b1-9025-2773ad1eb961	🟢	[JobID : c23c5265-d94d-44b2-986b-dfab337d7b3]	🔗
c1458696-71b9-4362-b79b-dcb42107043	🟢	[JobID : 9f005b04-8cef-4d95-bc63-42cc1f286653]	🔗
26eaa64d-5acd-4a0c-807a-7c61c08a8b13	🟢	[JobID : 422858ae-6f8b-4eae-a0e2-9dc48f6b9eaa]	🔗
4ce0f34c-3401-424b-8caf-861743fd1443	🟢	[JobID : 6abfb616-0097-4ed4-93a8-2fce4c10bd4c]	🔗

```
Lakshayg@ubuntu:~$ zeeve fabric chaincode --help
Usage: zeeve fabric chaincode [options] [command]
```

```
Options:
  -h, --help                display help for command
```

```
Commands:
  package [options]
  install [options]
  approve [options]
  commit [options]
  deploy [options]
  help [command]            display help for command
```

```
Lakshayg@ubuntu:~$ zeeve fabric chaincode install --help
Usage: zeeve fabric chaincode install [options]
```

```
Options:
  -n, --network-id <network-id> Id of the Network
  -c, --chaincode <chaincode>   chaincode name
  -v, --version <version>       chaincode version
  -o, --org <org>                chaincode organisation
  -p, --peer-urls <peer-urls...> chaincode peer urls
  -h, --help                       display help for command
```

```
Lakshayg@ubuntu:~$ zeeve fabric chaincode commit --help
Usage: zeeve fabric chaincode commit [options]
```

```
Options:
  -n, --network-id <network-id> Id of the Network
  -cc, --chaincode <chaincode>   chaincode name
  -v, --version <version>         chaincode version
  -o, --orgs <org...>            chaincode organisation
  -p, --peer-urls <peer-urls...> chaincode peer urls
  -ch, --channel <channel>       channel name to approve chaincode
  -s, --sequence <sequence>     chaincode sequence
  -ia, --init-args <init-args...> Init method arguments ex; "marble1","blue","35","tom"
  -im, --init-method <init-method> Init method name i.e, "init" or "initMarbles"
  -h, --help                       display help for command
```

```
Lakshayg@ubuntu:~$
```


WHAT'S COMING

- Add Organisation on System Channel, Multi-Tenant Organisation, Auto Certificate Renewal
- Allow Channel Policy Updates
- Private Data Collections Support
- HSM Based Key Management
- **DMZ Based Security Architecture and High Availability Setup of Nodes**
- Channel Management - Add, Update, Delete, Application & Node Logs
- Scaling Resources in Clusters
- Allow Private Node Connections with AWS Backbone
- Managed Node Deployment





Address

Zeeve Deeptech Pvt Ltd
1283, ATS Greens, Sector-93A
Noida, India 201304
+91 98185 92244

Zeeve Technologies Ltd.
2001, Regal Tower, Business Bay,
Dubai, UAE
+971 50 245 7978

Zeeve Inc.
395 Santa Monica Place, Unit 308,
Santa Monica, California - 90405
+1 (702) 979 5012



Contact

- Email: success@zeeve.io
Email: ravi@zeeve.io
- <http://www.zeeve.io>



zeeve



USA



Dubai



India