Cloud Native Mauritius

A Certified CNCF Community Group

Organisers

- Alex Bissessur

- Kubernetes person @ LSL

- "I have co-organisers?"

- Arwin Neil

- Software Engineer @ Livestorm

- "I'm never in Mauritius"

- Ish Sookun

- Web Dev @ LSL

- "I make ugly websites"

- Delphine Bissessur

- Happily unemployed

- "I'm the responsible one"

What's a CNCG

- CNCG – Cloud Native Community Group

- A fancy term for a community focused on Kubernetes and Cloud Native technologies

- Affiliated with the CNCF

Kubernetes

- Created by Google to solve their infrastructure demands

- No single server can effectively run Google's services

- Introducing: clustering several servers together (and by several, I mean thousands)

Companies Using Kubernetes

What is the CNCF?

- Cloud Native Computing Foundation

- A branch of the Linux Foundation

- An organisation providing structure to the new era of infrastructure

- Provide a platform for cloud native projects to be developed and adopted

App Definition and Development

Application Definition & Image Build

- **dapr** — CNCF GRADUATED
- **HELM** — CNCF GRADUATED
- **ArtifactHUB** — CNCF INCUBATING
- **Backstage** — CNCF INCUBATING
- **Buildpacks.io** — CNCF INCUBATING
- **KubeVela** — CNCF INCUBATING
- **KubeVirt** — CNCF INCUBATING
- **OPERATOR FRAMEWORK** — CNCF INCUBATING
- CARVEL
- Devfile.io
- DevSpace
- ko
- KONVEYOR
- KEPTEN
- KUDO
- MICROCKS
- Nocalhost
- Porter
- radius
- score
- sealer
- SHIPWRIGHT
- Kubernetes Extension for VS Code
- XR

Streaming & Messaging

- **cloudevents** — CNCF GRADUATED
- **NATS** — CNCF INCUBATING
- **STRIMZI** — CNCF INCUBATING
- drasi
- Tremor

Continuous Integration & Delivery

- **argo** — CNCF GRADUATED
- **flux** — CNCF GRADUATED
- **OpenKruise** — CNCF INCUBATING
- BRIGADE
- keptn
- OpenGitOps
- PipeCD
- werf
- kube-burner

Database

- **TiKV** — CNCF GRADUATED
- **Vitess** — CNCF GRADUATED
- CloudNativePG
- openGemini
- SCHEMAHERO

Orchestration & Management

Scheduling & Orchestration

- **KEDA** — CNCF GRADUATED
- **Knative** — CNCF GRADUATED
- **kubernetes** — CNCF GRADUATED
- **Crossplane** — CNCF INCUBATING
- **KARMADA** — CNCF INCUBATING
- **Kubeflow** — CNCF INCUBATING
- **VOLCANO** — CNCF INCUBATING
- **wasmcloud** — CNCF INCUBATING
- ARMADA
- capsule
- Clusternet
- Clusterpedia
- ERASER
- fluid
- HAMi
- KCP
- k0s
- koordinator
- kube-rs
- KubeSlice
- KUBESTELLAR
- Kured
- Open Cluster Management
- OPEN FUNCTION
- SERVER\LESS DEVS

Service Proxy

- **envoy** — CNCF GRADUATED
- **CONTOUR** — CNCF INCUBATING
- BFE
- LoxiLB
- MetalLB
- OpenELB

API Gateway

- **EMISSARY INGRESS** — CNCF INCUBATING
- Easegress
- kgateway
- Kuadrant

Service Mesh

- **Istio** — CNCF GRADUATED
- **LINKERD** — CNCF GRADUATED
- Aeraki Mesh
- KMESH
- Kuma
- Kuterugy
- Open Service Mesh
- Semant
- SMP
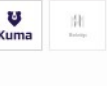
Coordination & Service Discovery

- **CoreDNS** — CNCF GRADUATED
- **etcd** — CNCF GRADUATED
- KBGB
- Xline

Remote Procedure Call

- **gRPC** — CNCF INCUBATING
- Connect

Runtime

Container Runtime

- containerd — CNCF GRADUATED
- cri-o — CNCF GRADUATED
- podman
- rkt
- Hyperlight
- INCLAVARE
- KUASAR
- Lima
- urunc
- Vired Kubelet
- interLink
- youki

Cloud Native Storage

- CubeFS — CNCF GRADUATED
- ROOK — CNCF GRADUATED
- LONGHORN — CNCF INCUBATING
- Carina
- Curve
- HwameiStor
- kBup
- KANISTER
- OpenEBS
- ORAS
- Piraeus
- Vineyard

Cloud Native Network

- cilium — CNCF GRADUATED
- CNI — CNCF INCUBATING
- ANTREA
- CNI-Genie
- FabEdge
- Kube OVN
- Network Service Mesh
- spiderpool
- SUBMARINER

Provisioning

Security & Compliance

- cert-manager — CNCF GRADUATED
- Falco — CNCF GRADUATED
- in-toto — CNCF GRADUATED
- Open Policy Agent — CNCF GRADUATED
- TUF — CNCF GRADUATED
- KEYCLOAK — CNCF INCUBATING
- Kubescape — CNCF INCUBATING
- Kyverno — CNCF INCUBATING
- Notary Project — CNCF INCUBATING
- bank-vaults
- bpfman
- Cartography
- CONFIDENTIAL CONTAINERS
- Containerssh
- COPA
- Curiefense
- dex
- Hexa
- Keylime
- kubearmor
- KUBEWARDEN
- opcr
- OpenFGA
- OSCAL Compass
- PARALUS
- PARSEC
- Slim
- SOPS

Container Registry

- HARBOR — CNCF GRADUATED
- Dragonfly — CNCF INCUBATING
- DISTRIBUTION
- zot

Automation & Configuration

- KubeEdge — CNCF GRADUATED
- Cloud Custodian — CNCF INCUBATING
- Microcks — CNCF INCUBATING
- OpenYurt — CNCF INCUBATING
- Akri
- Atlantis
- CDK8s
- DevStream
- kagent
- Kairos
- kcl
- KITOPS
- kudoo
- KubeDL
- KUSION STACK
- MESHERY
- OpenTofu
- SuperEdge
- Cyberdell

Key Management

- spiffe — CNCF GRADUATED
- SPIRE — CNCF GRADUATED
- Athenz
- teller

Observability and Analysis

Observability

- fluentd — CNCF GRADUATED
- JAEGER — CNCF GRADUATED
- Prometheus — CNCF GRADUATED
- cortex — CNCF INCUBATING
- OpenTelemetry — CNCF INCUBATING
- Thanos — CNCF INCUBATING
- FONIO
- INSPEKTOR GADGET
- Kspan
- KEPLER
- kuberhealthy
- LOGGING OPERATOR
- OpenMetrics
- OpenTracing
- PERSES
- PIXIE
- Skooner
- trickster

Feature Flagging

- OpenFeature — CNCF INCUBATING

Chaos Engineering

- Chaos Mesh — CNCF INCUBATING
- Litmus — CNCF INCUBATING
- ChaosBlade
- krkn

Continuous Optimization

- OpenCost — CNCF INCUBATING

New Era of Infrastructure

- Ish is an old-school Linux sysadmin.

- Ish now does web development because traditional infrastructure is "meh".

- Ish has left production infrastructure to a 21 year old because he has realised he is obsolete.

New Era of Infrastructure

Nowadays we talk a different language

- 5+ nines of uptime

- Scalability

- Zero downtime

- Agile

- Rolling Deployment

- Move fast

- EKS, GKE, AKS and a hundred platforms

- We even created a new job title: DevOps

What does the Community Do?

- Meetups
  - occasionally involving food and beer

- Projects

- A lot of talking on Telegram
  - sometimes related to cloud native
  - occasionally about new technologies

- Discussions around our extravagant homelabs

Projects We Have Worked On

Bruno Bernard

Integrating Bitwarden or Vaultwarden with Kubernetes to manage secrets securely and efficiently.

Bruno Bernard

Lightweight Docker Registry UI to navigate and manage registries

Alex Bissessur

KRaft (not the cheese) – a cloud platform built entirely on top of Kubernetes, allowing me to be a CSP for my friends

Who Are We For?

Anyone who:

- wants to learn about Kubernetes/Cloud Native and even Linux

- wants a community where Windows and Mac is shamed, and Linux is supreme ruler

- wants to learn about modern sysadmin, DevOps and even development practices

CLOUD NATIVE
Mauritius

HACKTOBER
2025 FEST

Date: 11-12 Oct
Location: TBD

Upcoming Event

**CLOUD NATIVE
COMMUNITY GROUPS
MAURITIUS**

▶ **UPCOMING EVENT**

MEETUP

Cloud Native Hacktoberfest

◎ TBD

OCTOBER
11

MEETUP

#cTENcf Birthday Bash Mauritius

◎ Flying Dodo   ⧉ Open in Maps

OCTOBER
31

CLOUD NATIVE COMMUNITY GROUPS MAURITIUS

▶ **UPCOMING EVENT**

MEETUP

Cloud Native Hacktoberfest

◎ TBD
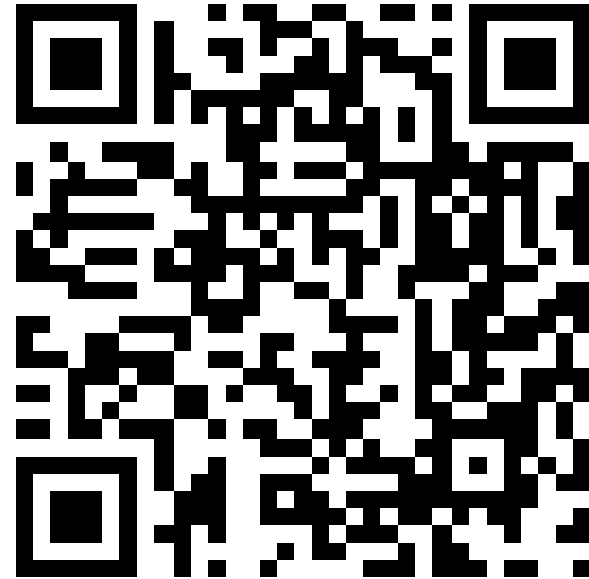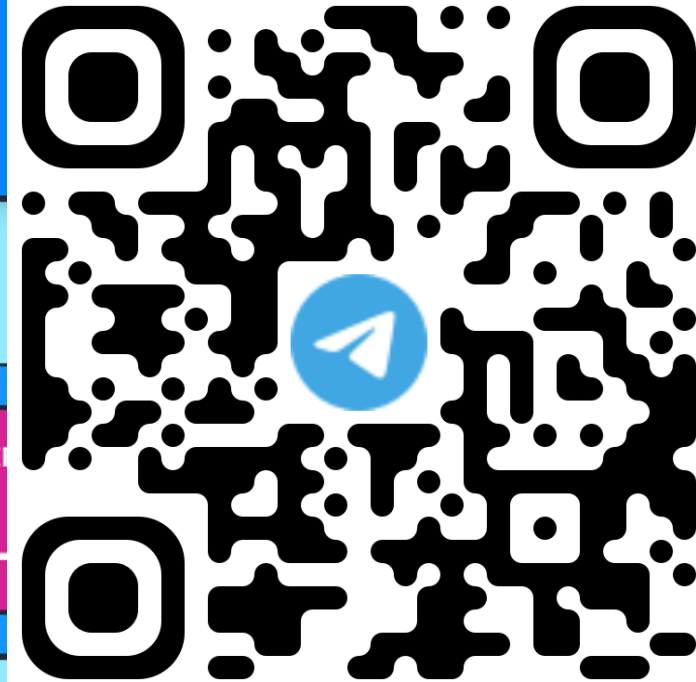
OCTOBER
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MEETUP

#cTENcf Birthday Bash Mauritius

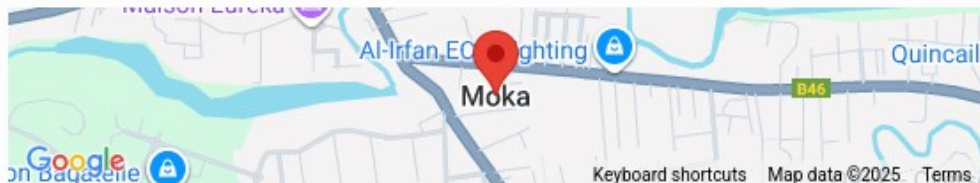◎ Flying Dodo   ↗ Open in Maps

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Africa

Cloud Native Mauritius **Joined** 61 members

Location

Moka, Moka District
Mauritius

Get directions