akash

Past, Present, and Future

DevOps: The Company Killer

- Everyone wants global deployments.
- Not everyone should should roll their own.
- DevOps is a huge distraction for companies trying to build actual products.

What if Heroku, but also Edge?

- CDNs have been distributing assets globally for years.
- Docker images look and smell like static assets.
- "Dynamic Delivery Network" – **how hard could it be?**

Platform: vCentralized

- ✅Flexible hosting: Cloud, On-Prem, Colo.
- ✅ "Push to Deploy", logging, billing, etc.
- ❌ **Sign on thousands of hosting providers.**
- 🤔 On second thought, what if it's a marketplace...
- 😎 ... *Yeah, that's the ticket.*

Marketplace: vDEX

- Trustless (pros and cons).
- Transparent pricing (with history).
- Simple payments (in principle).
- **UNSTOPPABLE**.

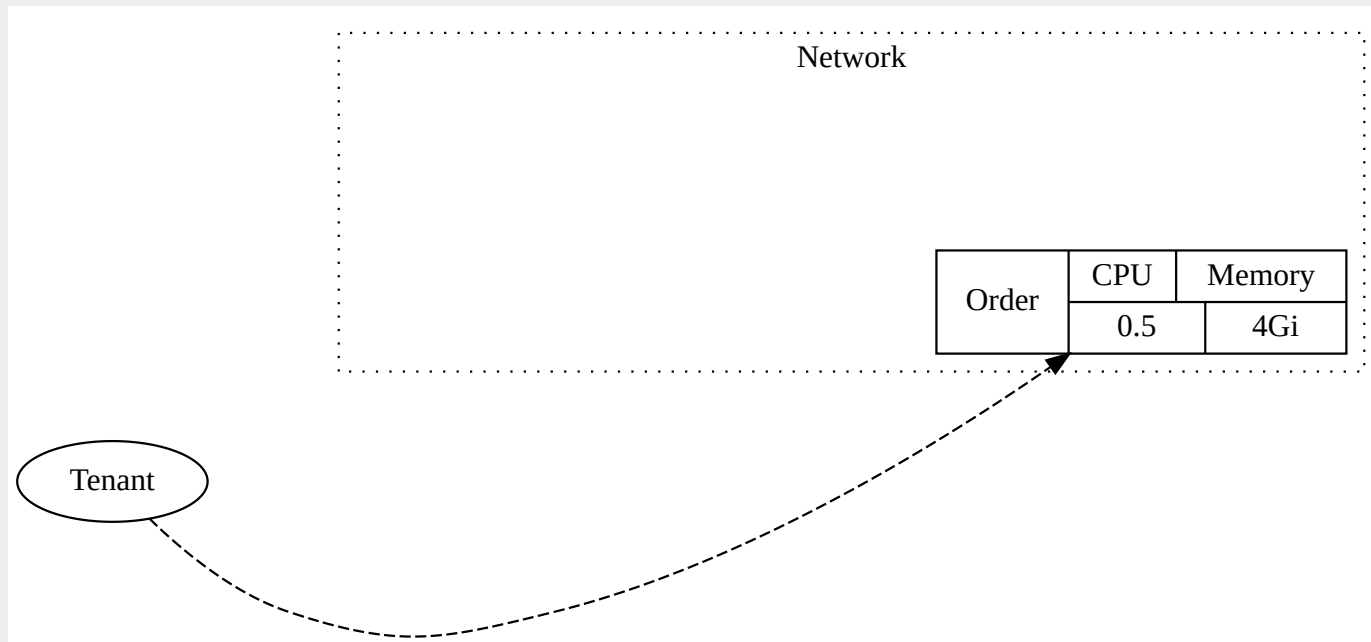" *The revolution will not be centralized!* "

The Akash Cloud

- **The Network**: marketplace, payments.
- **The Platform**: hosting, management.

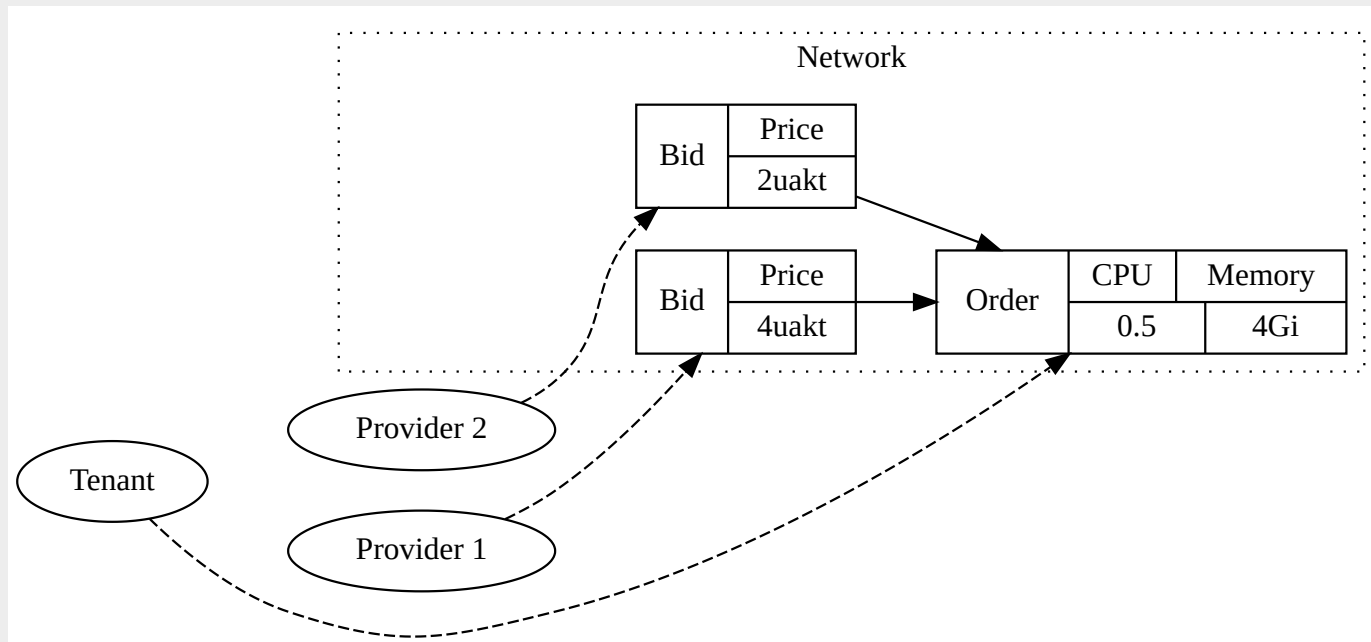# The Network

Resource Acquisition

The Network

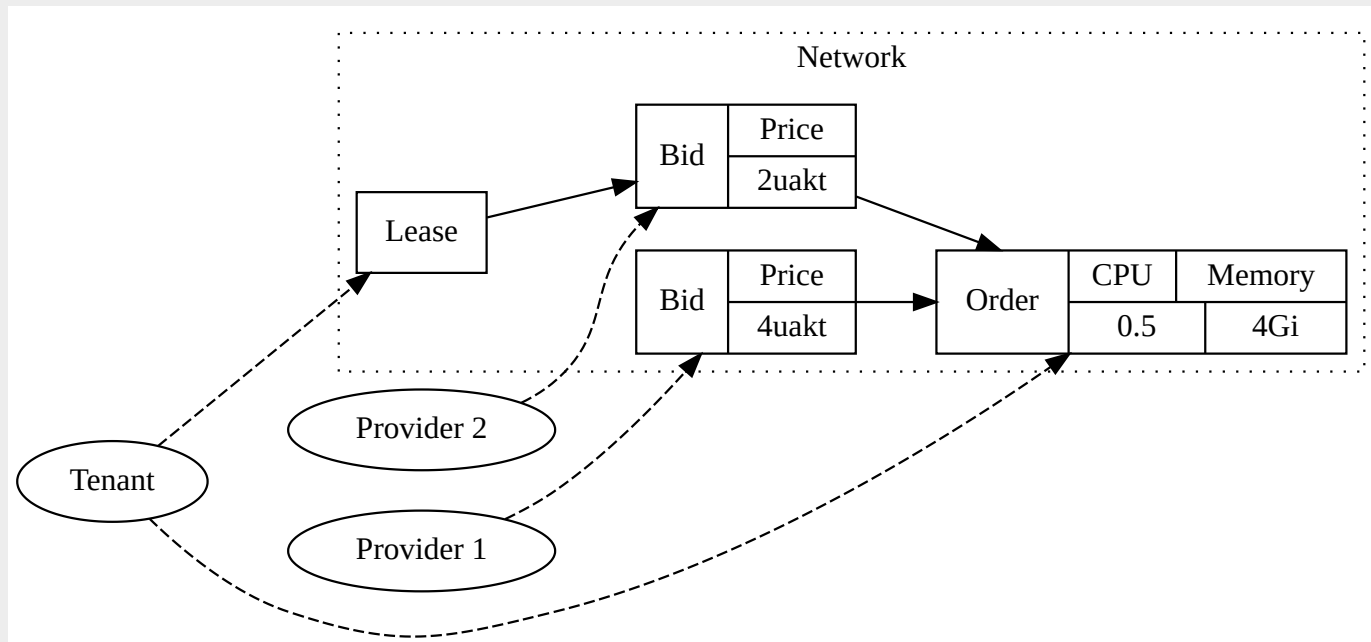## Resource Acquisition

The Network

Resource Acquisition

The Platform

Workload Distribution
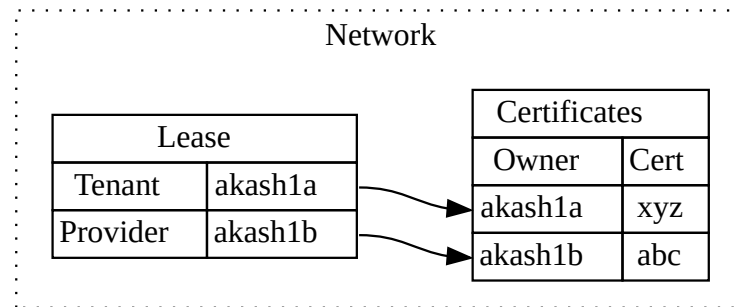
The Platform

Workload Distribution
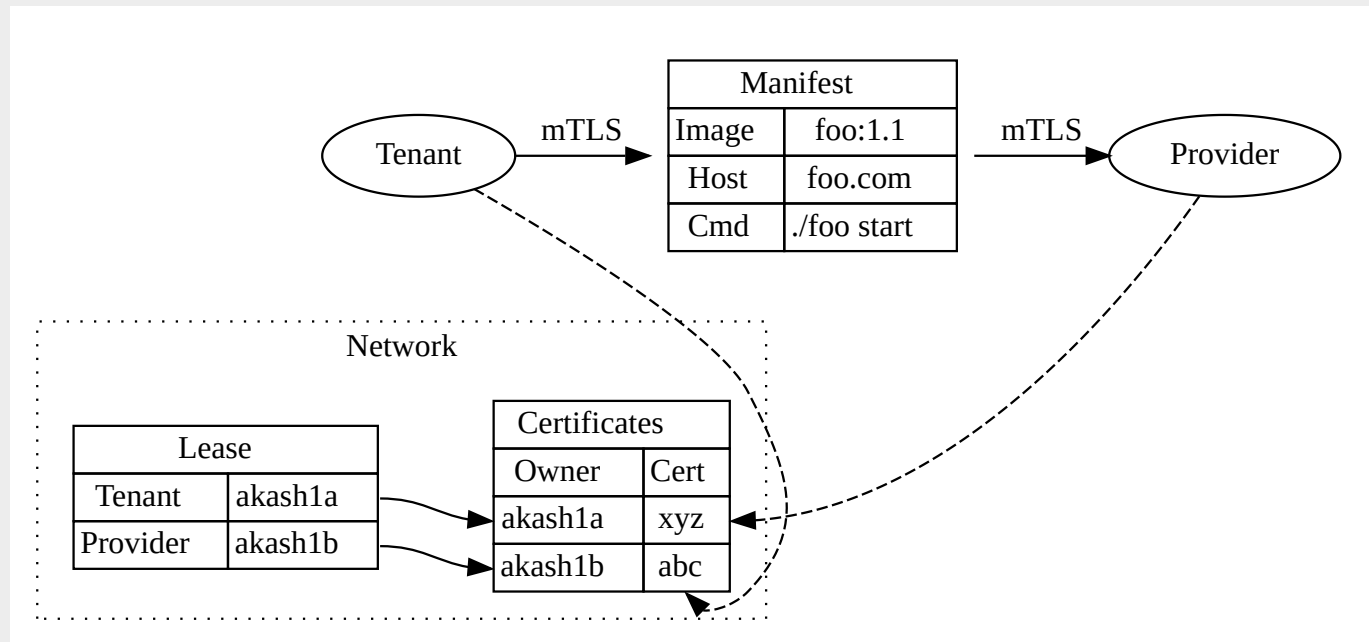
Ten Months In

All-time lease count

77,806　▲ 0.25%　+195

7D　1M　ALL

akashlytics.com

70k

60k

50k

40k

30k

20k

10k

Apr 7　May 12　Jun 16　Jul 21　Aug 25　Sep 29　Nov 3　Dec 8　Jan 12　Feb 16
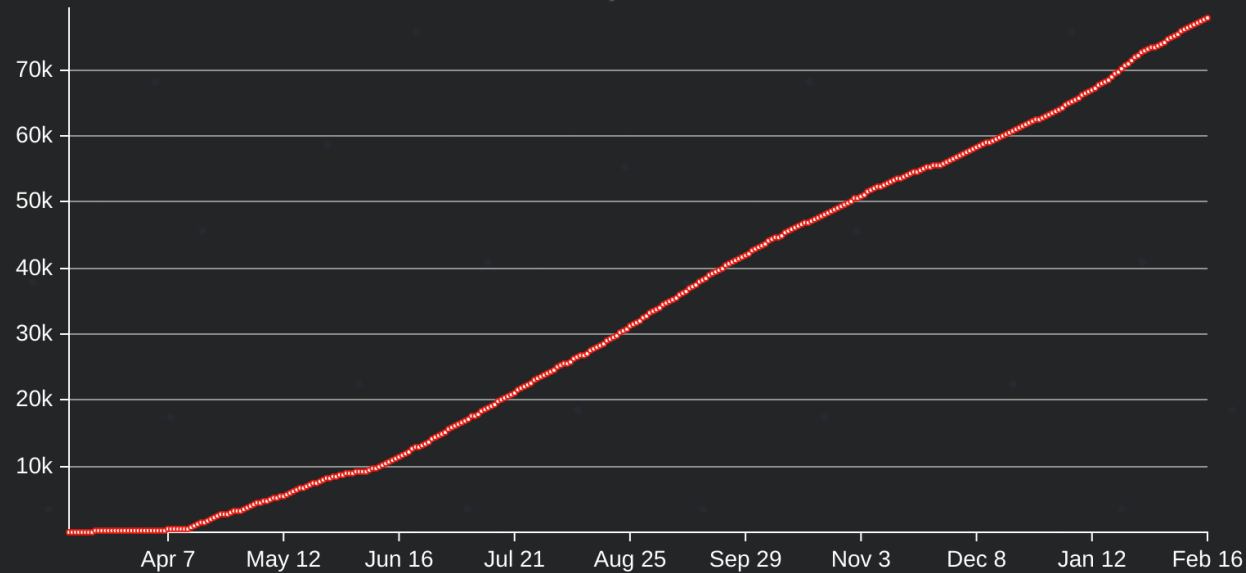
Awesome-Akash

Community-sourced deployment examples
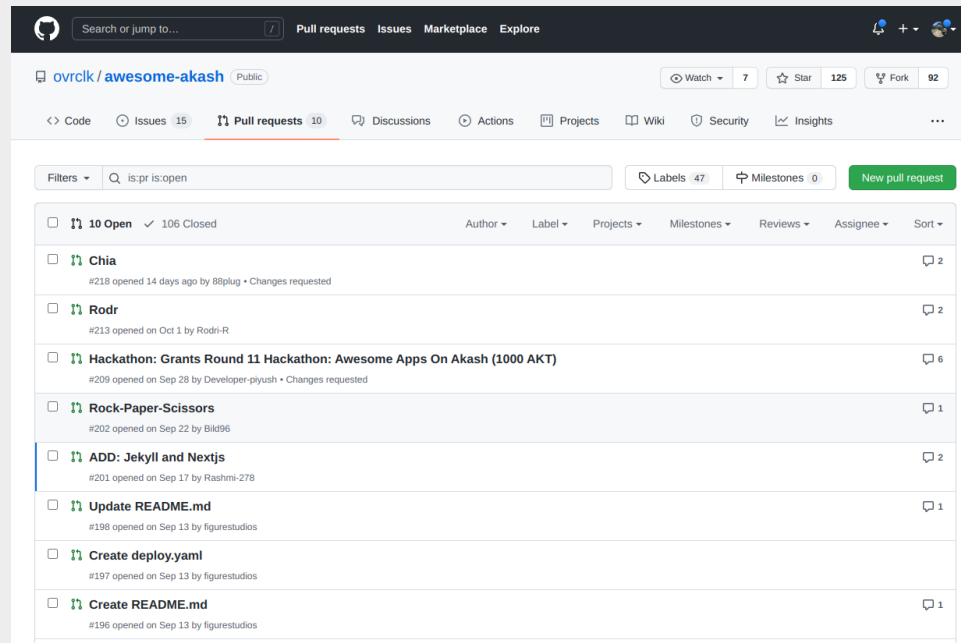
Awesome-Akash

- 80+ applications
- Databases, games, blogging platforms, crypto wallets, DEX frontends, etc...
- Ready-to-deploy configurations

Mining: pkt.cash

- Akash resources can have a broad spectrum of uptime duration, quality.
- The lower end of this spectrum represents a large amount of resources available to miners.
- Also applicable to other state-less applications (CI, machine learning, finding E.T.)

Cosmos-Omnibus

Generic SDK node hosting infrastructure.

- Publish docker images.
- Multiple bootstrap options:
  - snapshot
  - state-sync
- **New: publish daily snapshots.**

Cosmos-Omnibus

| Project	Version	Image	
akash	`v0.12.1`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-akash-v0.12.1`	[Example](#)
bitcanna	`v1.2`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-bitcanna-v1.2`	[Example](#)
emoney	`v1.1.3`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-emoney-v1.1.3`	[Example](#)
gaia	`v5.0.8`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-gaia-v5.0.8`	[Example](#)
juno	`v1.0.0`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-juno-v1.0.0`	[Example](#)
kava	`v0.15.1`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-kava-v0.15.1`	[Example](#)
osmosis	`v4.2.0`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-osmosis-v4.2.0`	[Example](#)
persistence	`v0.1.3`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-persistence-v0.1.3`	[Example](#)
regen	`v2.0.0`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-regen-v2.0.0`	[Example](#)
sentinelhub	`v0.8.3`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-sentinelhub-v0.8.3`	[Example](#)
sifchain	`betanet-0.9.12`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-sifchain-betanet-0.9.12`	[Example](#)
stargaze	`v1.0.0`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-stargaze-v1.0.0`	[Example](#)
terra	`v0.5.9`	`ghcr.io/ovrclk/cosmos-omnibus:v0.0.10-terra-v0.5.9`	[Example](#)

Coming Soon

- Free trials (Authz)
- JWT Authentication
- Cosmos-omnibus: relayer fleet
- Cosmos-omnibus: state-sync fleet
- Bootstrap auditor ecosystem
- More resources: IP address, GPU, storage, etc...
- New CLI

JWT Authentication

Bootstrap traditional authentication from on-chain mTLS certs.
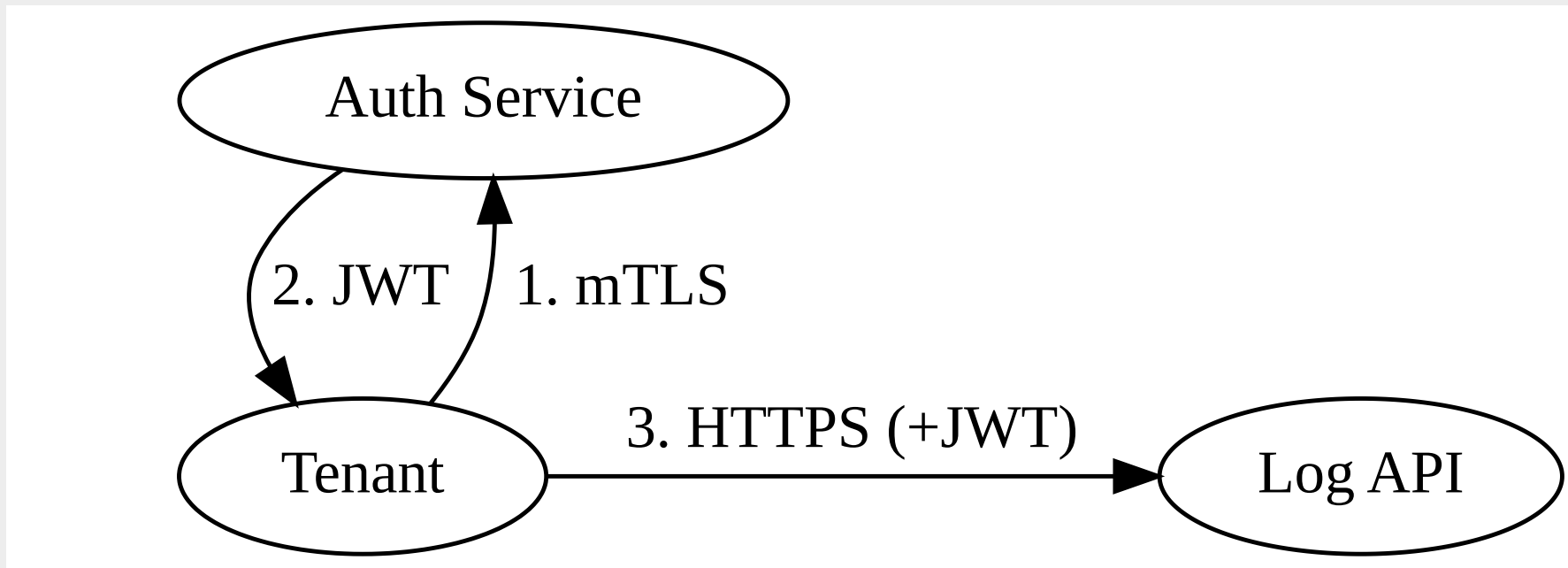
Auditor Ecosystem

> " I only want bids from providers that *chiahaus* says has premium-tier mining performance. "

- 👍 This has been supported since launch.
- 😑 The Akash team is essentially the only auditor at this time.
- Community grants is funding development of an open-source template.
- Essential for increasing and decentralizing provider supply.

Challenges

- Query performance.
- Reliable event stream.
- Database performance.
- Database size.
- Reliable state-sync.

Questions?

Thanks for your time!

- https://akash.network
- https://github.com/ovrclk/akash
- https://github.com/ovrclk/awesome-akash
- https://github.com/ovrclk/cosmos-omnibus