

Under Pressure

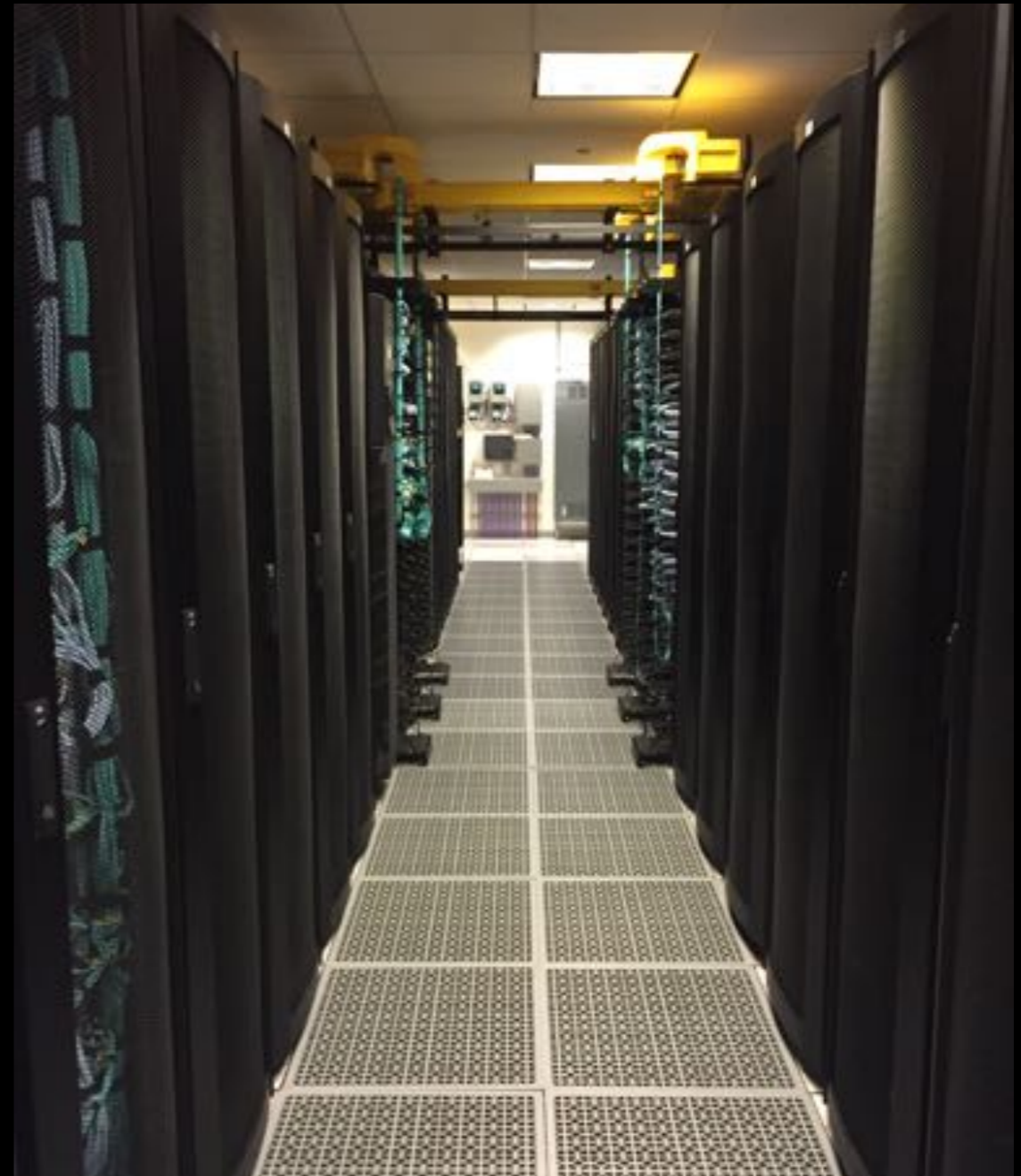
Expanding from Bare Metal Infrastructure to the
Cloud

Overview

- Definitions
- What Drives Expansion to the Cloud?
- Challenges Expanding to the Cloud
- Easing Expansion Pressure

Working Definitions

- Bare Metal: dedicated physical infrastructure
- Private Cloud: self service deployment on your own Bare Metal
- Public Cloud: self service deployment on shared provider
- $\{ \text{CLOUD} \}$: cloud type/vendor of your choice



Quick Poll: Hands up if you're on...

- Bare Metal
- Private Cloud
- Public Cloud



<https://www.piqsels.com/en/public-domain-photo-zbevn>

\$ whoami

- Chris Read
- Generalist
- Bare Metal DevOps Advocate





<https://www.piqsels.com/en/public-domain-photo-stilk>

What Drives Expansion?

Organizational Directive

“Everyone else is doing it...”

Skunkworks

“Our current infrastructure is \$ {EXPLETIVE}!”

Pilot Project

“Can we try solving \$ { PROBLEM } with \$ { CLOUD } ?”



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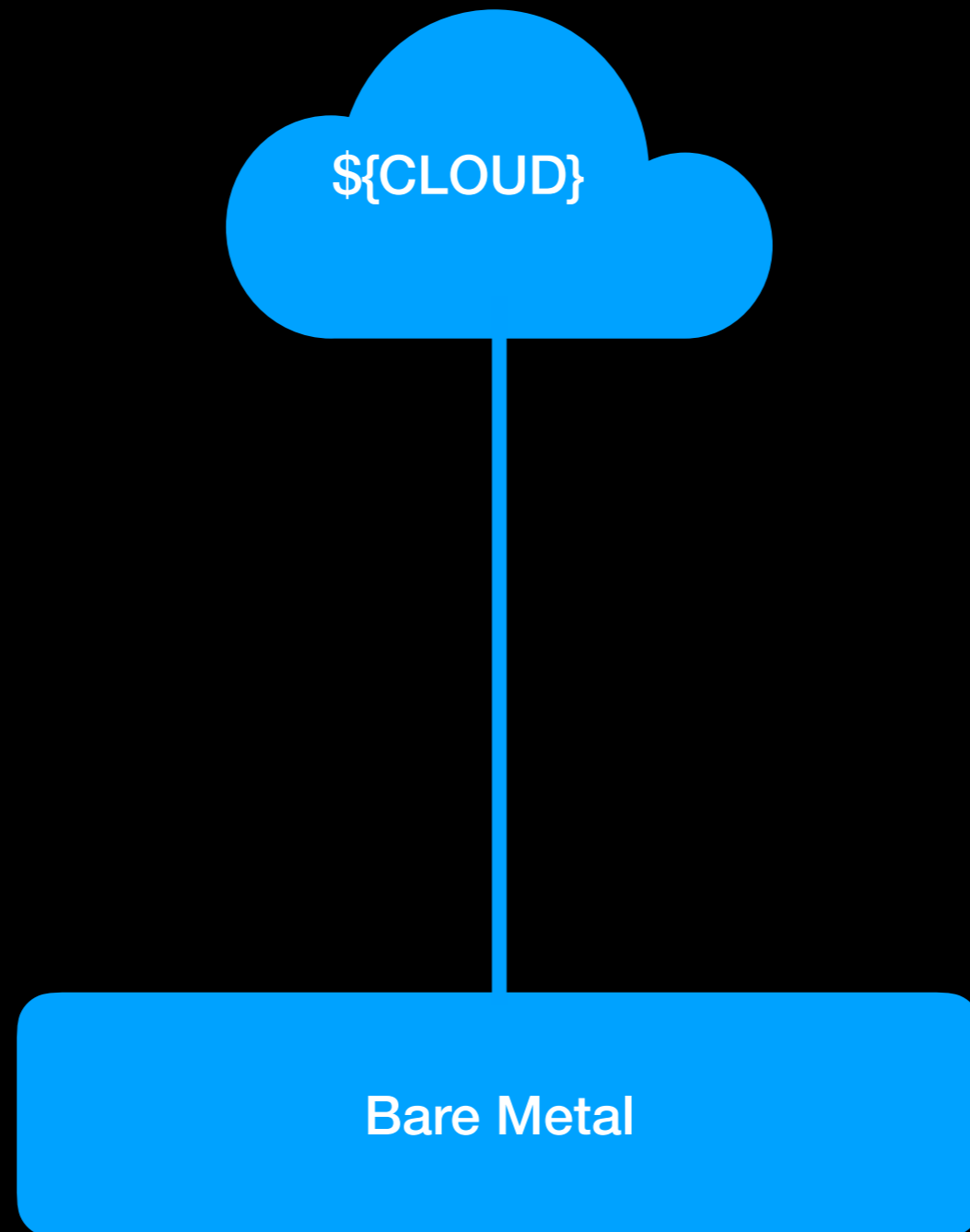
Expansion Challenges

Networking

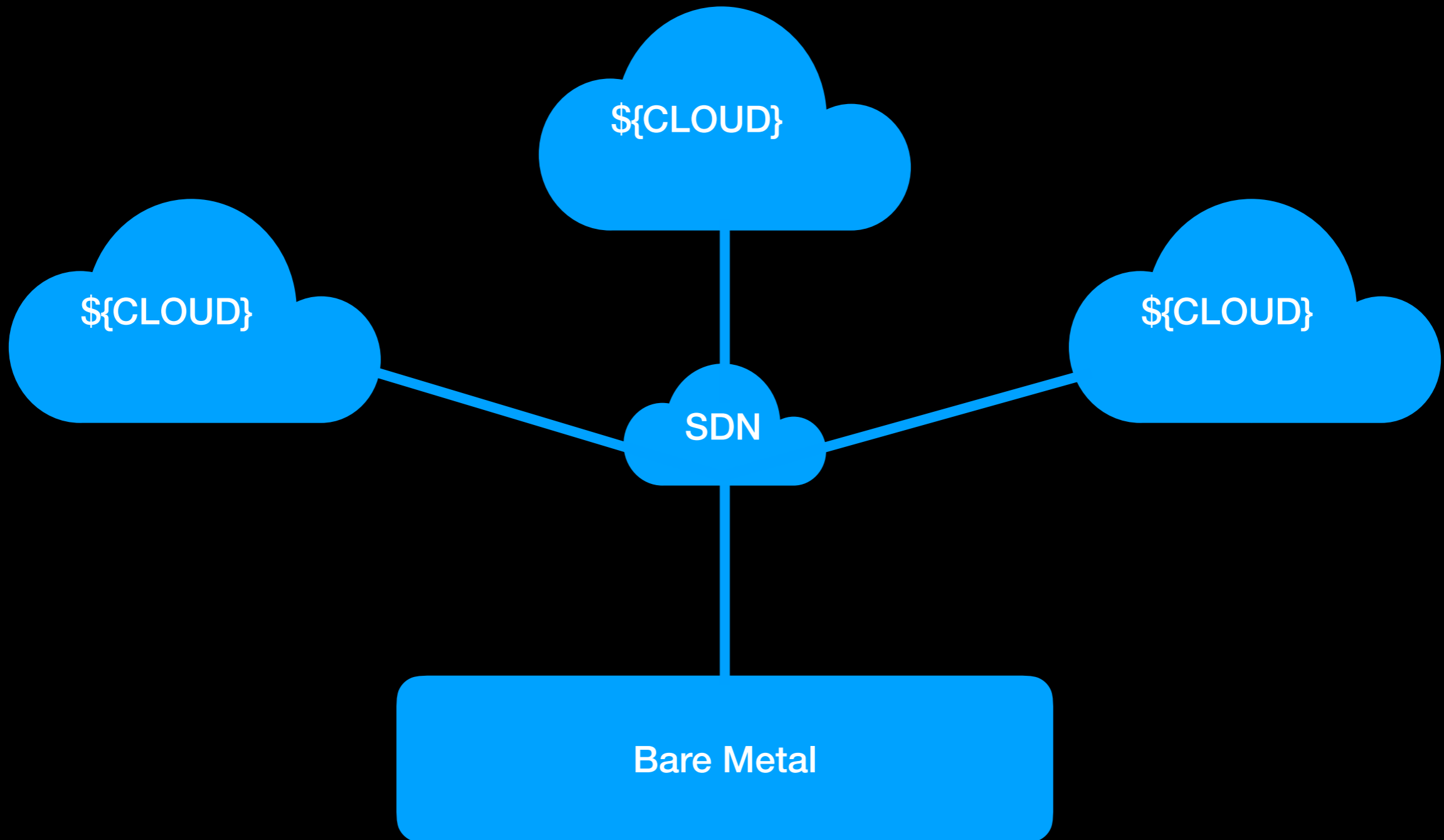
- Connecting $\{ \text{CLOUD} \}$ to existing infrastructure
- Mental Models
- Troubleshooting



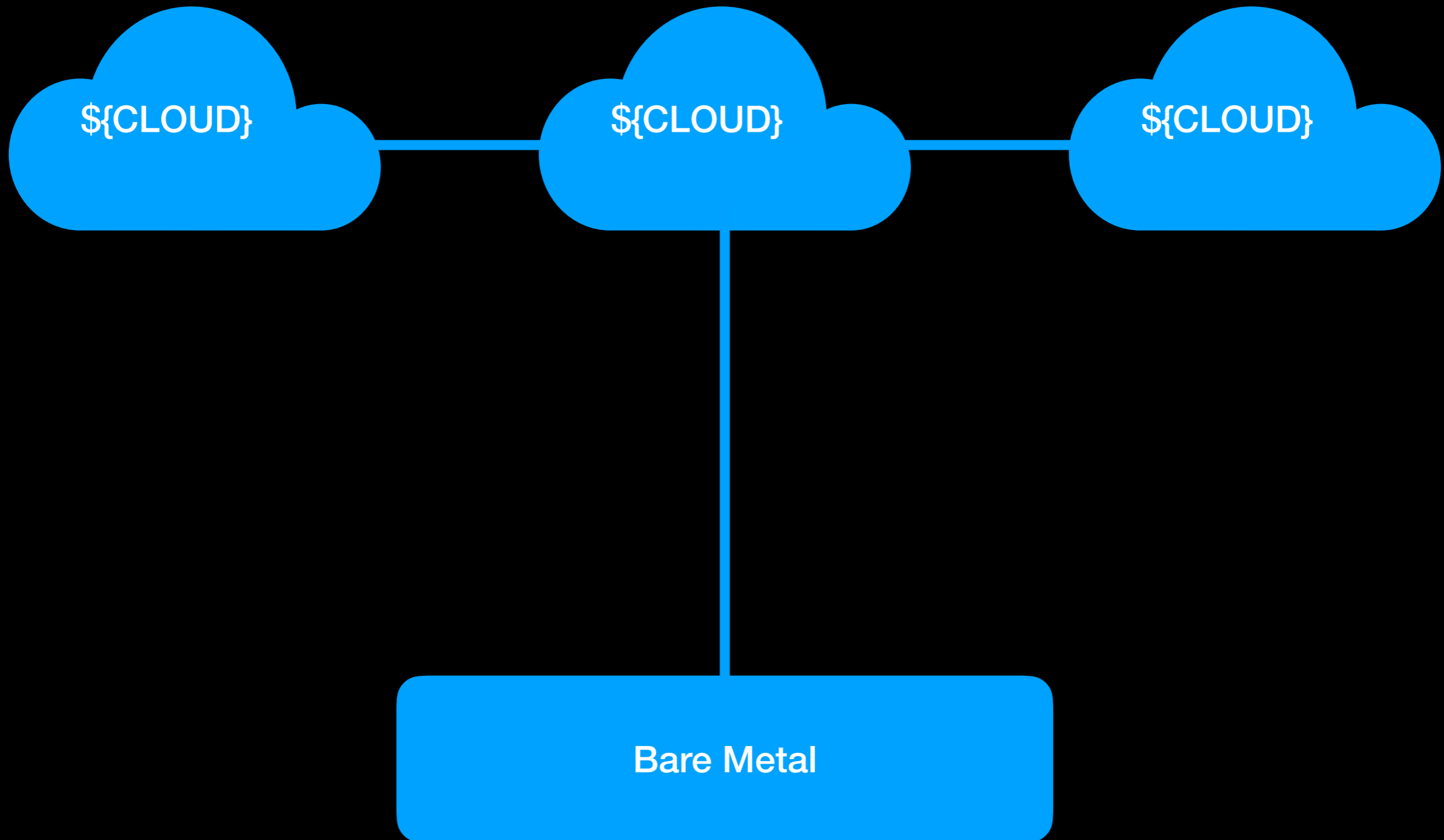
Direct Connect



SDN Provider

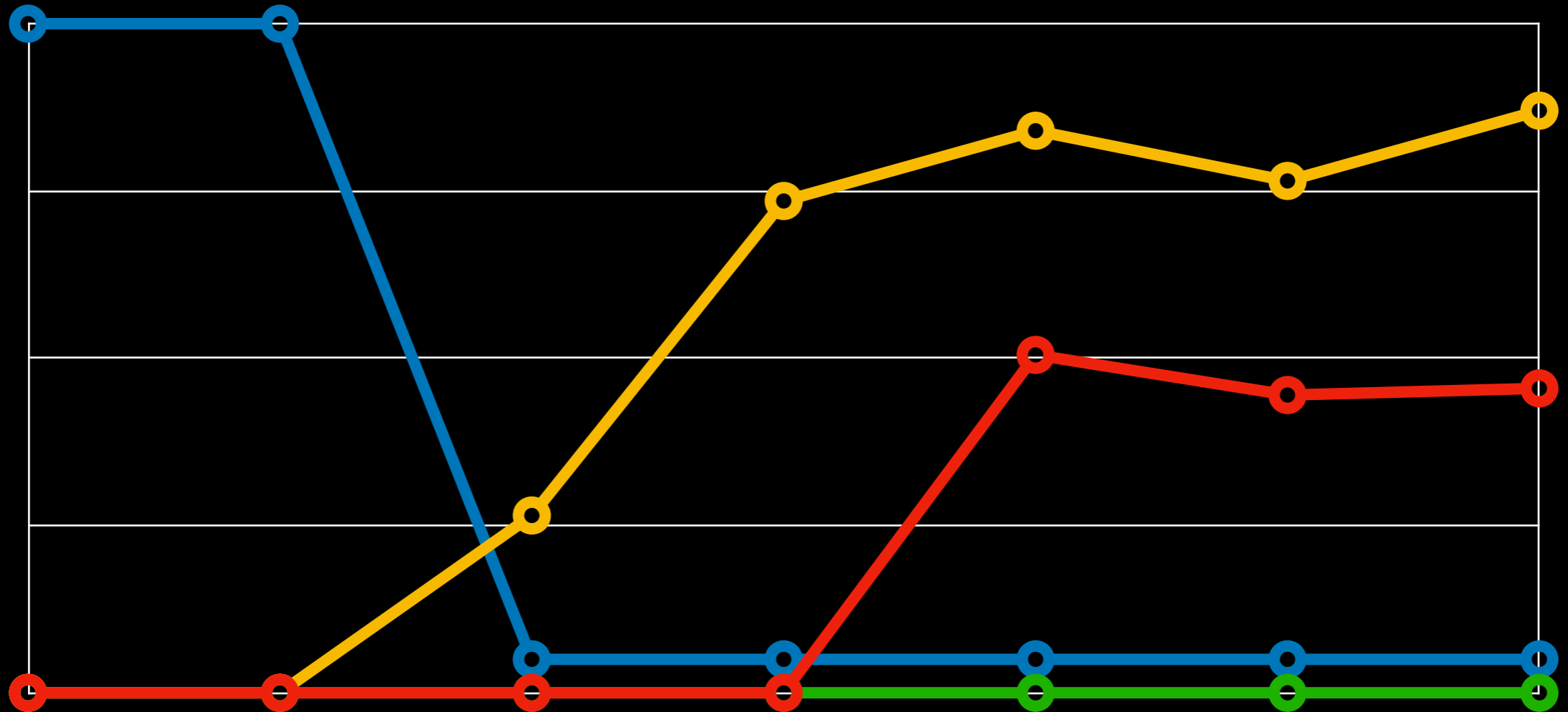


Cloud Gateway



Troubleshooting

○ Timeouts ○ Retrans ○ Errors ○ Throughput



Configuration Management

- Tool selection
- Rates of change
- Tags



Authentication & Authorization

- Managing Tokens
- Integrating with existing corporate credentials



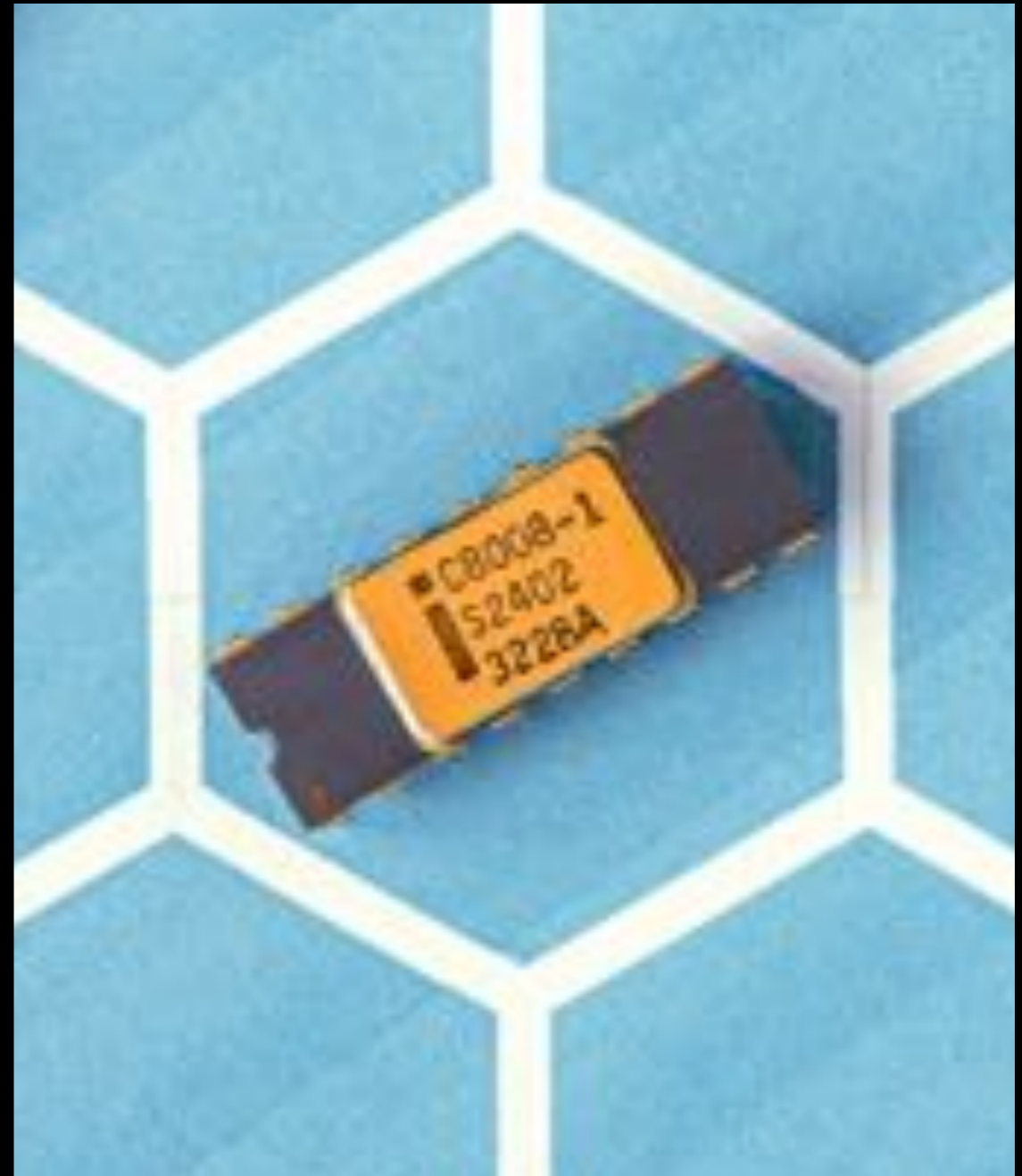
Storage

- Proliferation of Types
- Allocation and provisioning
- Data Classification
- Backups, reliability and retention



Compute

- Types and sizing
- Availability



Monitoring

- Scaling is hard
- Platform Events



Security

- Policy Languages
- Encryption and key management



Cost

- Public Cloud: There's no depreciation
- Private Cloud: It's more expensive
- Find the hidden costs
- Monitoring is vital





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Easing the Pressure

**Your \$ { CLOUD } is still
your Infrastructure!**

