



EQUINIX

Physical Infrastructure at Software Speed

February 2022



Agenda

Intro to Equinix

How digital infrastructure translates into competitive advantage

Intro to Metal

Fast-tracking your advantage with Equinix Metal

Roadmap

Ensuring success as a digital leader

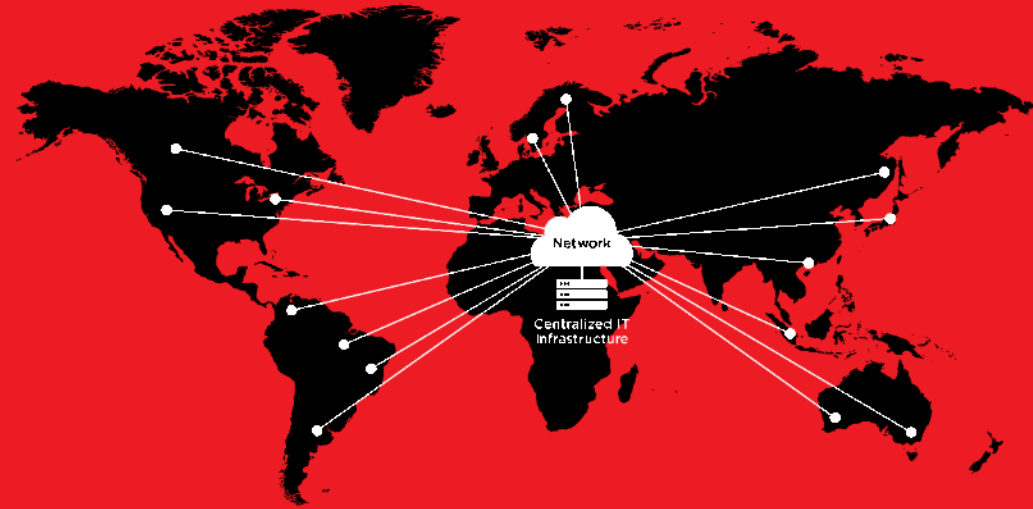


Your Digital Advantage Begins with the Best Architecture

So you can:

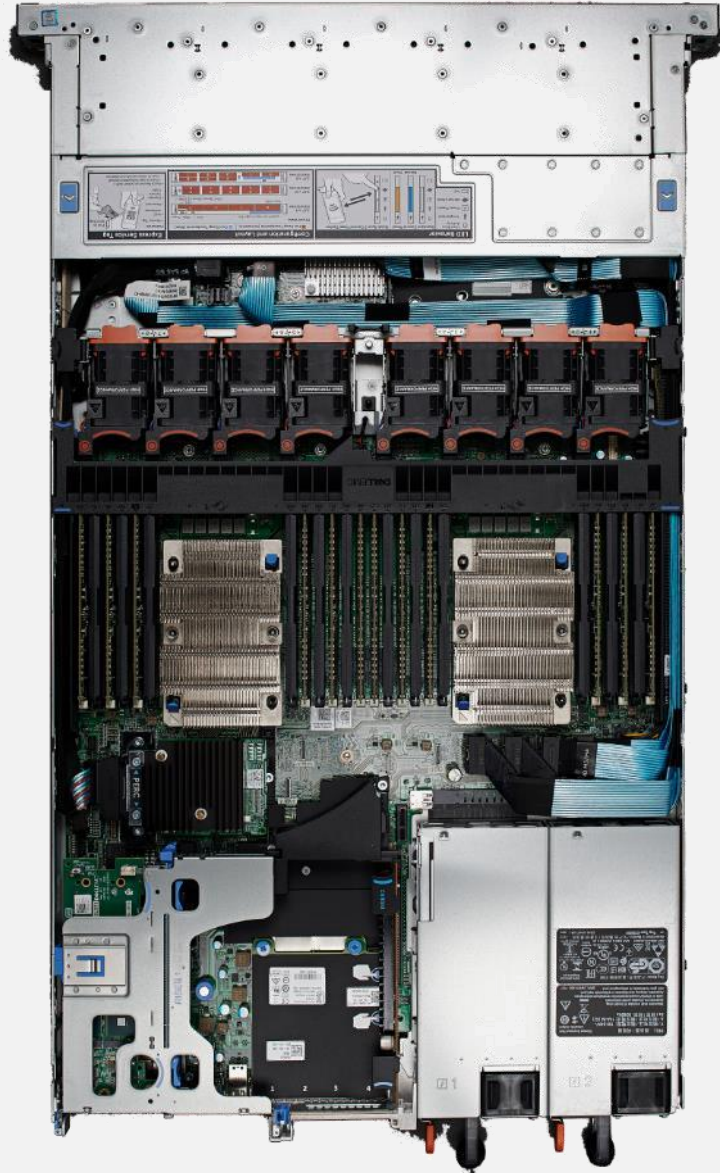
- Reach more customers
- Lower cost
- Reduce latency
- Improve performance

BEFORE INTERCONNECTION



WITH INTERCONNECTION





About Equinix Metal

Metal is designed to help cloud native SaaS companies, tech-enabled enterprises and service providers activate their digital advantage more easily.

- Foundational
- Automated
- Global
- Integrated
- Interconnected

An aerial photograph of San Francisco at sunset. The sky is a mix of deep blue, purple, and orange. The city skyline is visible in the background, with the Transamerica Pyramid being a prominent feature. The Golden Gate Bridge spans across the water on the right side of the image. In the foreground, there are several large buildings, streets, and a waterfront area with boats.

Equinix is the World's Digital Infrastructure Company

Serving the Evolving Needs of Digital Leaders

All markets are now global

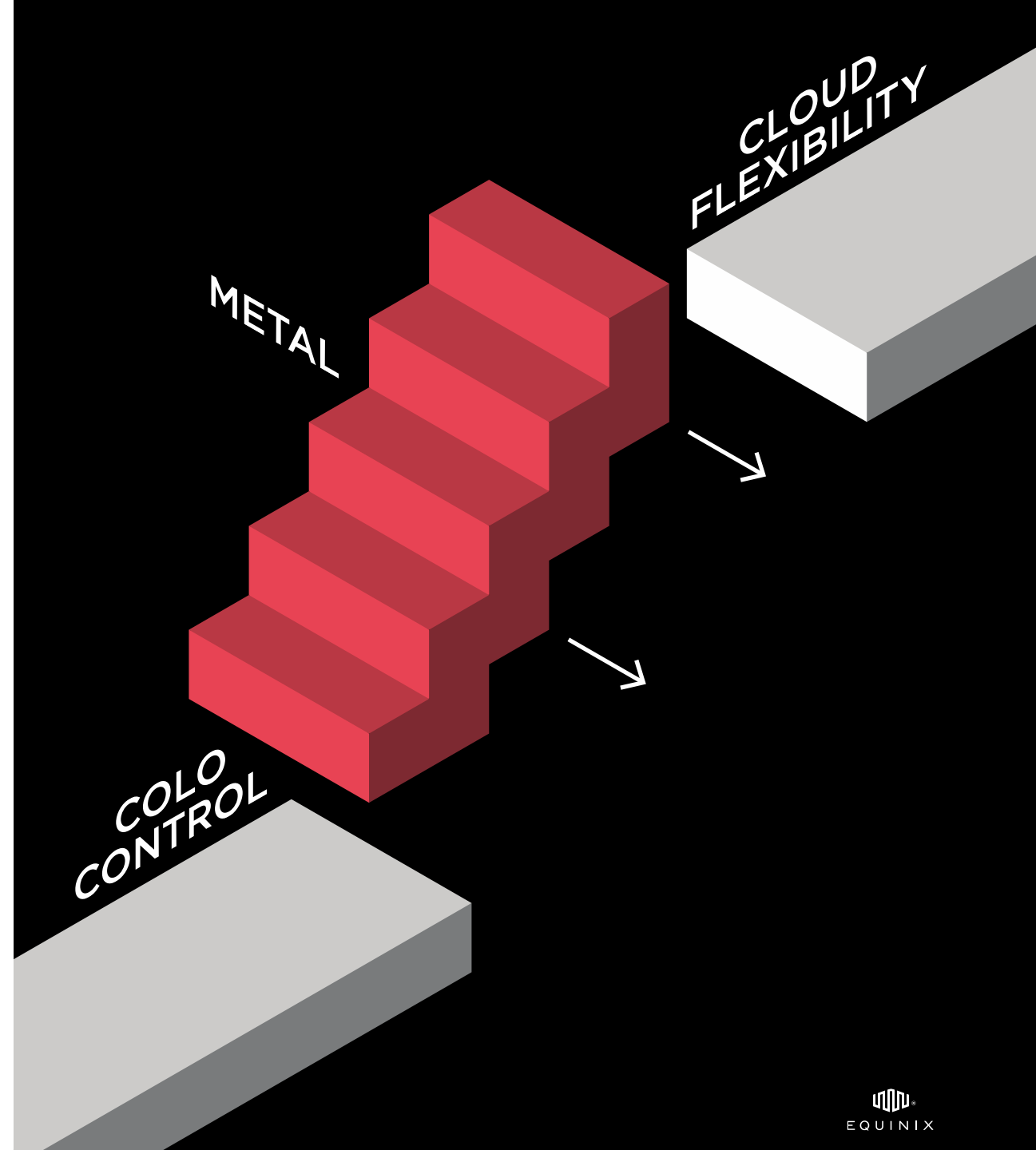
Shared economics are transforming industries

Information is the product

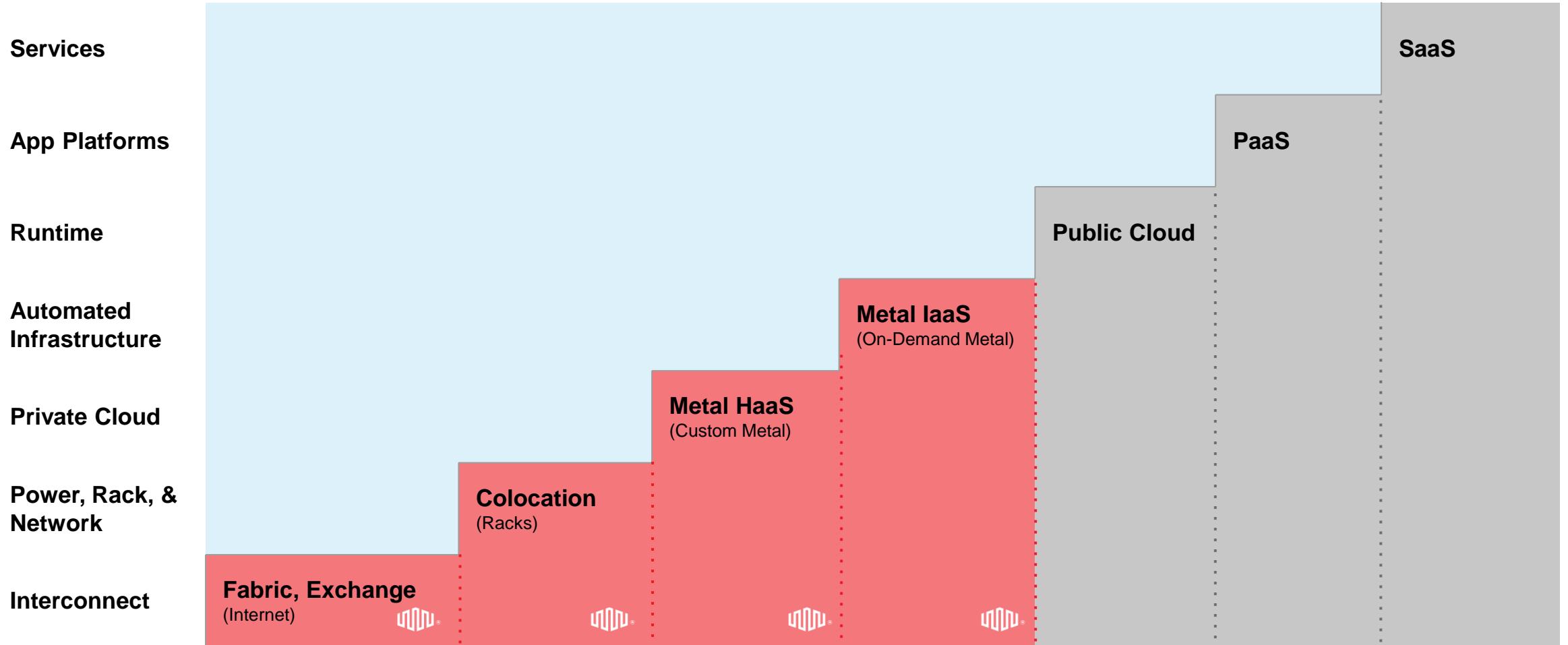


Metal fills a gap in the market between ‘do it yourself’ colocation and cloud.

- The control and efficiency of colocation
- The consumption experience of cloud
- Global, operated, and interconnected
- Access hardware & software partner solutions
- Internally we call it “automated colocation”



Where We Play in 'X-as-a-Service'



Equinix is uniquely positioned to help you succeed



Digital Infrastructure Services



Network
Edge



Equinix
Metal™



Equinix
Precision Time™



Interconnection Services



Equinix
Fabric™



Equinix Internet
Exchange®



Equinix
Connect



Cross
Connects



Data Center Services



IBX®
Data Centers



IBX
SmartView®



xScale™
Data Centers

Delivering Fast, Secure Infrastructure for a Variety of Uses



**Hybrid
Multicloud**



**Cloud-Adjacent
Storage**



**Offsite
Disaster
Recovery**



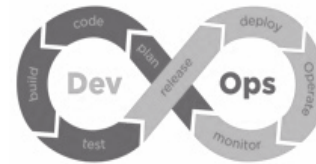
**Edge
Delivery**



**Crypto/
Blockchain
Optimization**



**Live Streaming
& Video Hosting**



**DevOps
Automation**



**Security &
Compliance**

Architected for a Hybrid, Multi-Cloud World

Multi-cloud Kubernetes



Global Edge Delivery



Hybrid Cloud



INTERCONNECTION

INTEGRATIONS

BARE METAL SERVERS

NETWORK

GLOBAL DATA CENTERS

With Market-Leading Configs in an OPEX Model

c3.small

c3.medium

C3.large

m3.large

s3.xlarge

n2.xlarge

Use Case	Cloud Native	General Compute	Cloud Native	Virtualization	Big Data / SDS	Telco
Processor	Intel E-2278G	AMD EPYC 7402P	Ampere Altra Q80-30	AMD EPYC 7502	Intel Xeon 4214	Intel Xeon 5120
Cores	8 Physical Cores @ 3.4 GHz	24 Physical Cores @ 2.8 GHz	80 Physical Cores @ 3.0 GHz	32 Physical Cores @ 2.5 GHz	24 Physical Cores @ 2.2 GHz	28 Physical Cores @ 2.2 GHz
RAM	32 GB of DDR4	64 GB of DDR4	256 GB of DDR4	256 GB of DDR4	192 GB of DDR4	384 GB of DDR4
Storage	2 x 480 GB SSD	960 GB SSD (2 x 480 GB)	1.9 TB NVMe (2 x 960 GB)	7.6 TB NVMe Flash 2 x 120GB SSD	96TB HDD + 1.9 TB SSD	3.8 TB NVMe
Network	2 x 10Gbps Bonded	2 x 10Gbps Bonded	2 x 25Gbps Bonded	2 x 25Gbps Bonded	2 x 10Gbps Bonded	4 x 10Gbps Bonded

New server configurations in 2022

m3.small

n3.large

a3.large

Use Case	Media / Cloud Native	Gaming / Edge / Network / SDN	Storage / Data Domain
Processor	Intel E-2378G	Intel 6314U	Intel 6338
Cores	8 Physical Cores @ 2.80 GHz	32 Physical Cores @ 2.0 GHz	64 Physical Cores @ 2.0 GHz
RAM	64 GB of DDR4	512 GB of DDR4	1024 GB of DDR4
Storage	2 x 480 GB SSD	2 x 3.84 TB NVMe	2 x 3.84 TB NVMe
Network	2 x 25Gbps Bonded	4 x 25Gbps Bonded	4 x 25Gbps Bonded

A Comprehensive API That is the Heart of our Platform

API

Internal and External Services

Client Portal

Device, Project, Billing, Token Management

MAGNUM IP
Multi-Tenant
IPAM

PB & J
Power and
Boot Control

TINKERBELL
iPXE Server
and Imaging

KANT
EC2 Style
Metadata

OSIE
In Memory
Installation Environ
ment

SOREN
Netflow Agg
and Analysis

NARWHAL
Physical Switch
SDN

S.O.S
Serial Console
Out of Bound
Access

CASPER
Image Building

CERBERUS
Firmware
Management

All the Right Places

16 Total Metros Live with Complete Digital Infrastructure Services Portfolio



Built for Enterprises, Loved by Developers

A growing ecosystem of software integrations enable “infrastructure at software speed”

Storage and Backup



COHESITY



LYVE™
Cloud



DevOps



Hybrid Multicloud



NUTANIX™



CANONICAL



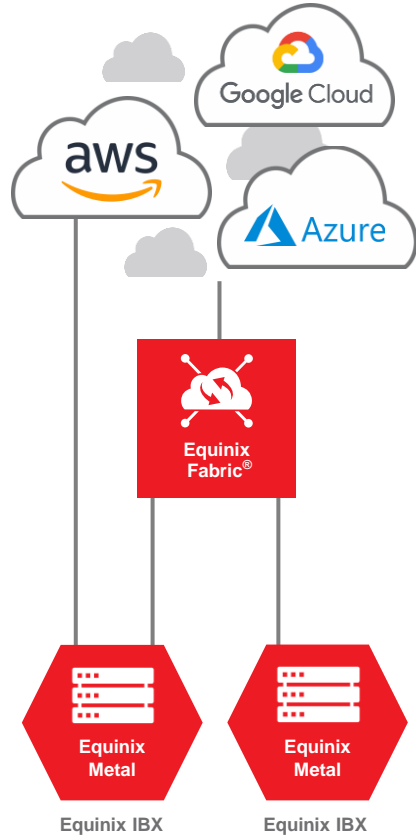
COHESITY



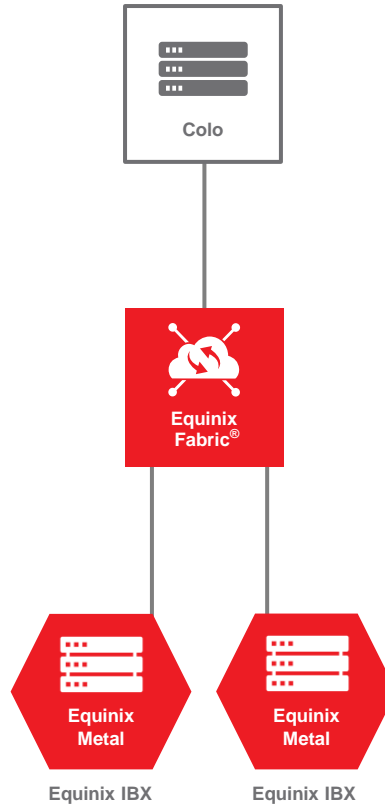
See <https://metal.equinix.com/ecosystem/partners/> for entire partner ecosystem

Serving Multiple Bare Metal Deployment Scenarios

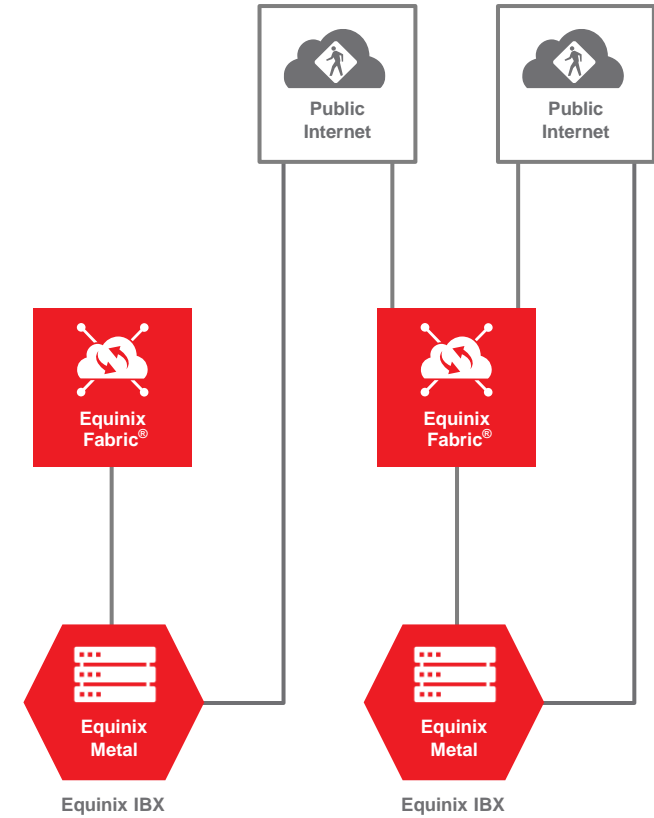
NETWORK



Bare Metal to Cloud

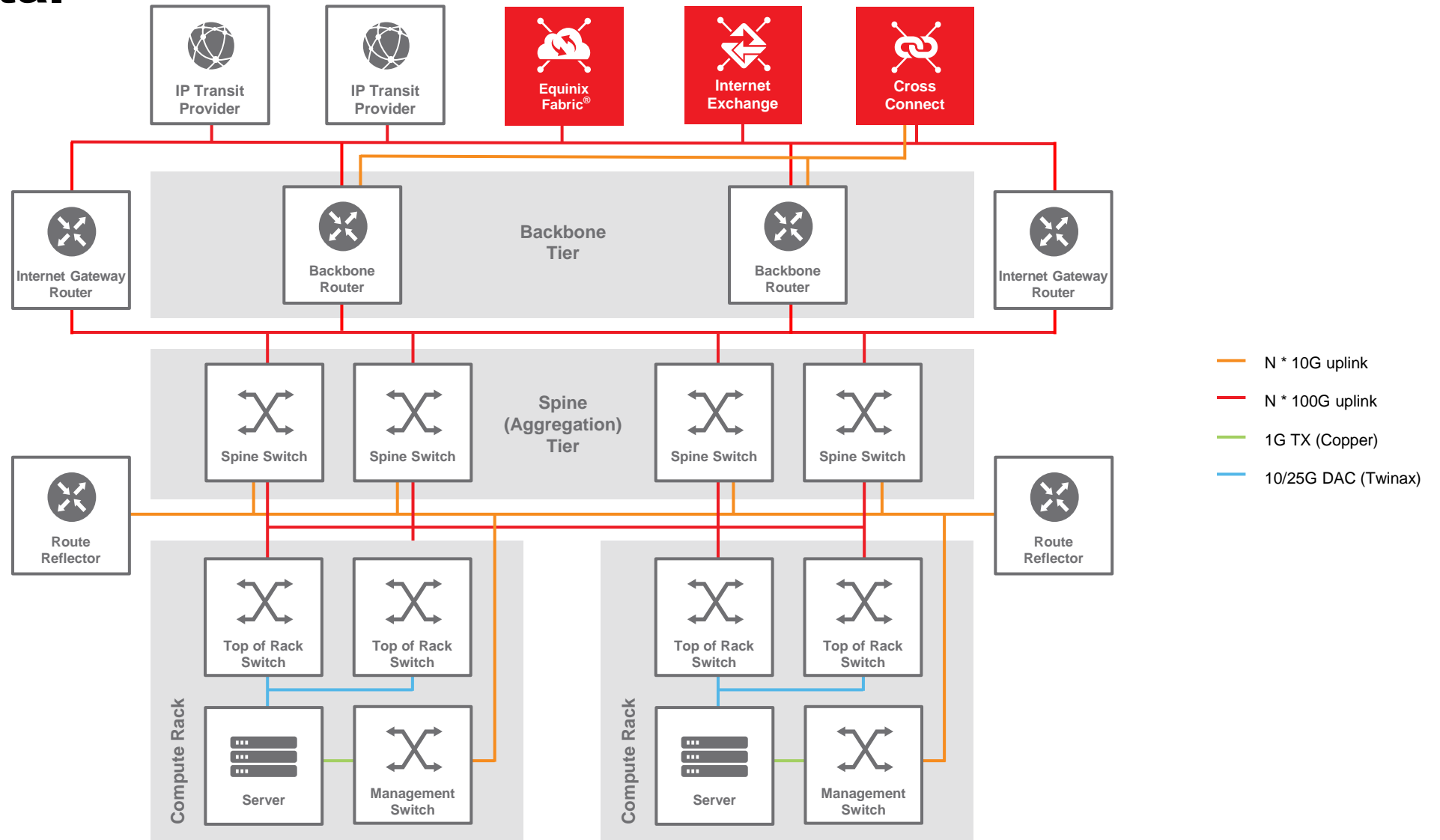


Bare Metal to Colocation



Bare Metal to Internet

Equinix Metal Network Topology



NETWORK

2022 Product Focus

Updated Gen3 Configs with Next Gen Chips from AMD, Ampere and Intel

New hardware lineup with the latest processors including 3rd Gen AMD EPYC™, Ampere Altra and 3rd Gen Intel Xeon Scalable processors with built-in AI accelerators

NVIDIA LaunchPad Program

Enterprises can then deploy and scale AI in Equinix Metal or NVIDIA DGX Foundry, also running at Equinix.

Workload Optimized Servers

A faster way to deploy infrastructure tailored for specialized workloads, such as AI training or in-memory databases, without the long lead times common for special order hardware.

Hybrid Multicloud on Demand

Now certified for [Nutanix Cloud Platform](#), to run applications on any platform with seamless deployment and improved business agility with a single, unified management plane across bare metal, public cloud and on-premises environments.

Additional Metros

Expand availability to six additional metros in 2022 across the Americas (Atlanta and Montreal); EMEA (Helsinki and Stockholm); and Asia-Pacific (Melbourne and Osaka)

Operating System Partners

Ubuntu, Debian, FreeBSD, NixOS, Talos, Alpine Linux, Alma Linux, Rocky Linux and VyOS will now certify and provide cloud images for Equinix Metal users to consume, enhancing performance, security and multicloud use cases.

Ecosystem Expansion

Fully documented and tested partner solutions from Cycle.io, Era Software, Macrometa, Mist.io, HarperDB and Kubermatic.

Additional Resources

DEVELOPER RESOURCES

[Equinix Developers Youtube](#)

[Equinix Metal Twitch](#)

[Equinix Github Repository](#)

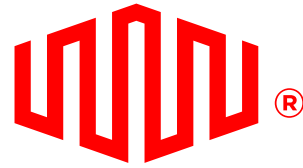
[Equinix Metal Developer Docs](#)

[Tinkerbell GitHub](#)

OTHER RESOURCES

[Equinix Metal Ecosystem & Partner Solutions](#)

[Equinix Customer Stories & Use Cases](#)



EQUINIX

WHERE OPPORTUNITY CONNECTS

Interconnecting Digital Ecosystems and Controls in Hubs



To Connect With All the Right Partners

Most-dynamic global ecosystem with
nearly 10,000 companies

On-ramps to 2,900+ cloud partners and
1,800+ networks

Worldwide reach with Equinix Fabric™ and
award-winning portfolio of physical and
virtual interconnection services



Customer Stories



“Our infrastructure is in a great place. We have access to great hardware and good support from Equinix.”

George Deglin
OneSignal CEO & Co-founder



The ability to choose our providers from the ecosystem was the real driver on why we wanted Equinix Metal as our partner for infrastructure.”

Justin Head
Director of DevOps





If we hadn't partnered with Equinix when we did, we would have had all this user explosion on Solana and no infrastructure to power it."

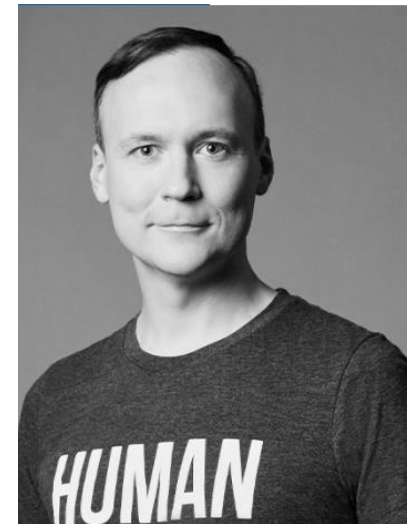
Dan Albert
Director of the Solana Foundation





Working with Equinix was a crucial part of ensuring we could scale. Few can combine massively scalable infrastructure with ultra-low latency networking in the way that Metal does.”

Michael Tiffany
D Cofounder & President, Human



“

We often need some help, and the Equinix Metal team is super helpful and active when challenges arise. They do a lot of work to make sure we have the best performance.”

Michael Tiffany
D Cofounder & President, Human

Restream





With Equinix, we're able to more quickly respond to customer needs, onboard new customers, and roll out more effective security solutions across our platform."

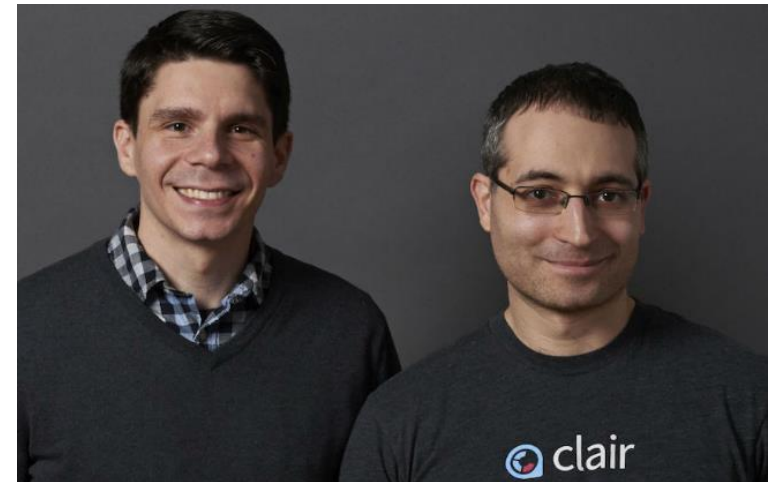
Rob Christensen
Head of DevOps, Bison Trails



“

Because Equinix is giving us the actual bare metal machines, we still have that first layer of virtualization extensions that we can use to isolate our guest machines from one another. None of the other cloud providers provide that.”

Jake Moshenko
Co-founder



Quay co-founders Jake Moshenko and Joey Schorr

“

We run a mission-critical service, and it's really important for us to have a reliable and consistent platform with great performance, that can scale with our customers' growth.”

Raj Dutt
CEO & Co-founder



Co-founders Anthony Woods, Raj Dutt, and Torkel Ödegaard



The addition of Equinix Metal will enable Equinix to deliver even more customer choice, accelerating their digital transformations while connecting workloads seamlessly from on-prem to cloud using technologies such as Google Anthos.”

Kevin Ichhpurani
Corporate Vice President





With Equinix Metal, we can respond faster to customer needs, delivering nearly instantly once we get the request.”

Robert Green
CTO & Co-founder



Co-founders Manny Landis and Robert Green



Our infrastructure is in a great place. We have access to great hardware and good support from Equinix.”

George Deglin
CEO & Co-founder



The team at OneSignal

“

The old adage is, 'you can pick two of three when it comes to speed, reliability or cost.' Equinix Metal delivers all three. You can get infrastructure in a click or an API call; it's incredibly reliable, and it is cost competitive with the biggest players out there.”

Jonathan Sullivan
Co-founder & Chief Product Officer

NS1.



Co-founders Jonathan Sullivan and Kris Beevers

Pure Storage on Equinix Meal

Why Pure Storage on Equinix Metal?

Single-tenant, high-performance storage from Pure, offered as-a-service by Equinix Metal, delivers:

- Global platform with 18 locations
- Best ecosystem of clouds and networks
- Interconnection for hybrid cloud
- Gives customers Pure OpEx model
- Equinix manages hardware and network
- Faster time to market
- Flexibility to expand



METAL

Solution Overview

High-performance interconnected storage at the edge of cloud with:

- Fully managed service
- 100% dedicated single tenancy security
- High performance
- Resilient, validated architecture
- Persistent data
- Seamless support
- Priced as \$ / GiB / month, minimum 50 TiB capacity, 1 year term commitment



Use Cases: Pure Storage on Equinix Metal

Single-tenant, high-performance storage from Pure, offered as-a-service by Equinix Metal

FlashArray 

**Optimize
Latency**

Block Storage

All-flash storage optimized for corporate and enterprise environments.

FlashBlade 

**Optimize
Bandwidth**

**File & Object
Storage**

Simplicity and agility with consistent high performance and control.

FlashArray 

**Optimize
Capacity**

Block storage

Consistent single-millisecond latency for demanding environments.

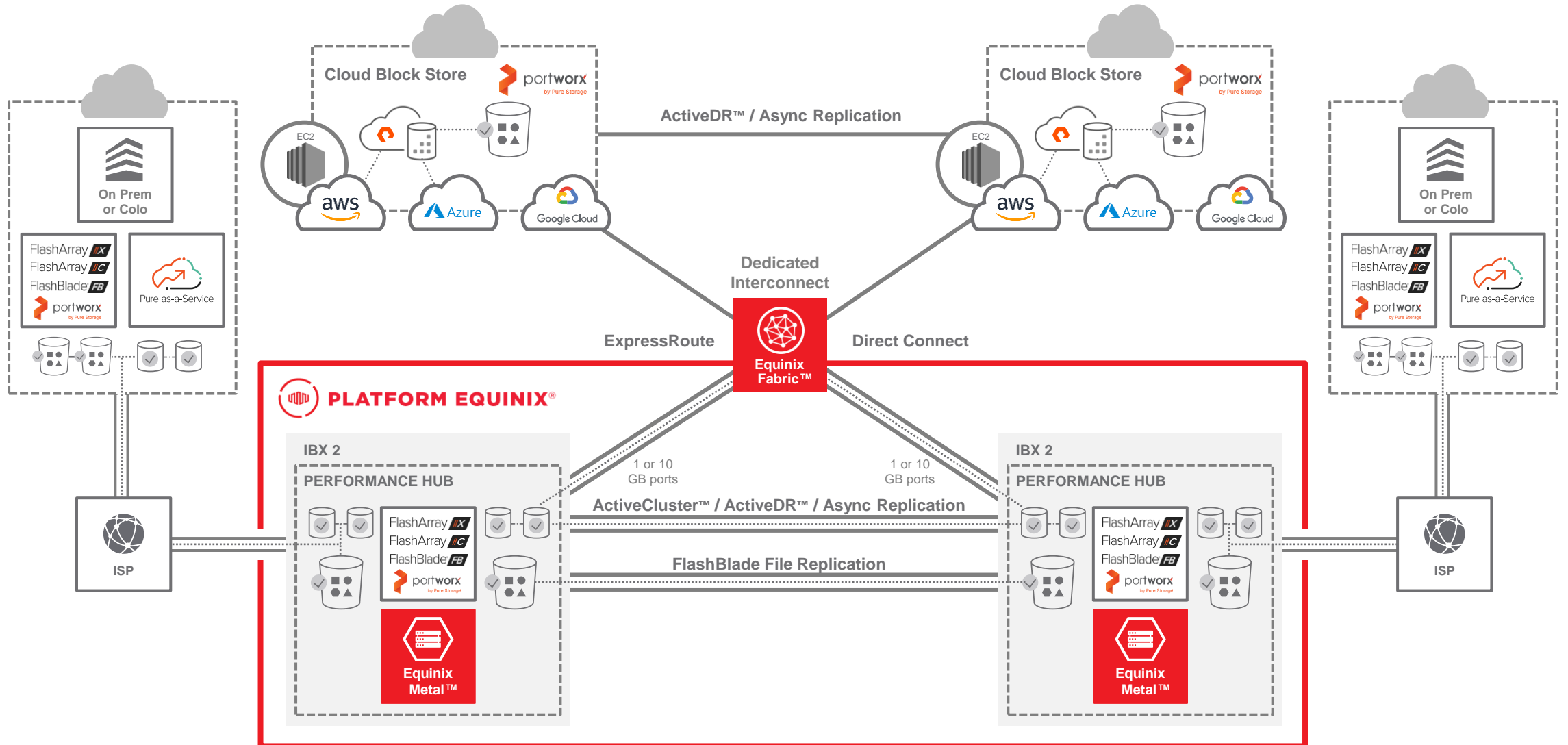


**Kubernetes Data
Services**

**Kubernetes
Storage**

Build, automate, protect, and secure Cloud Native applications.

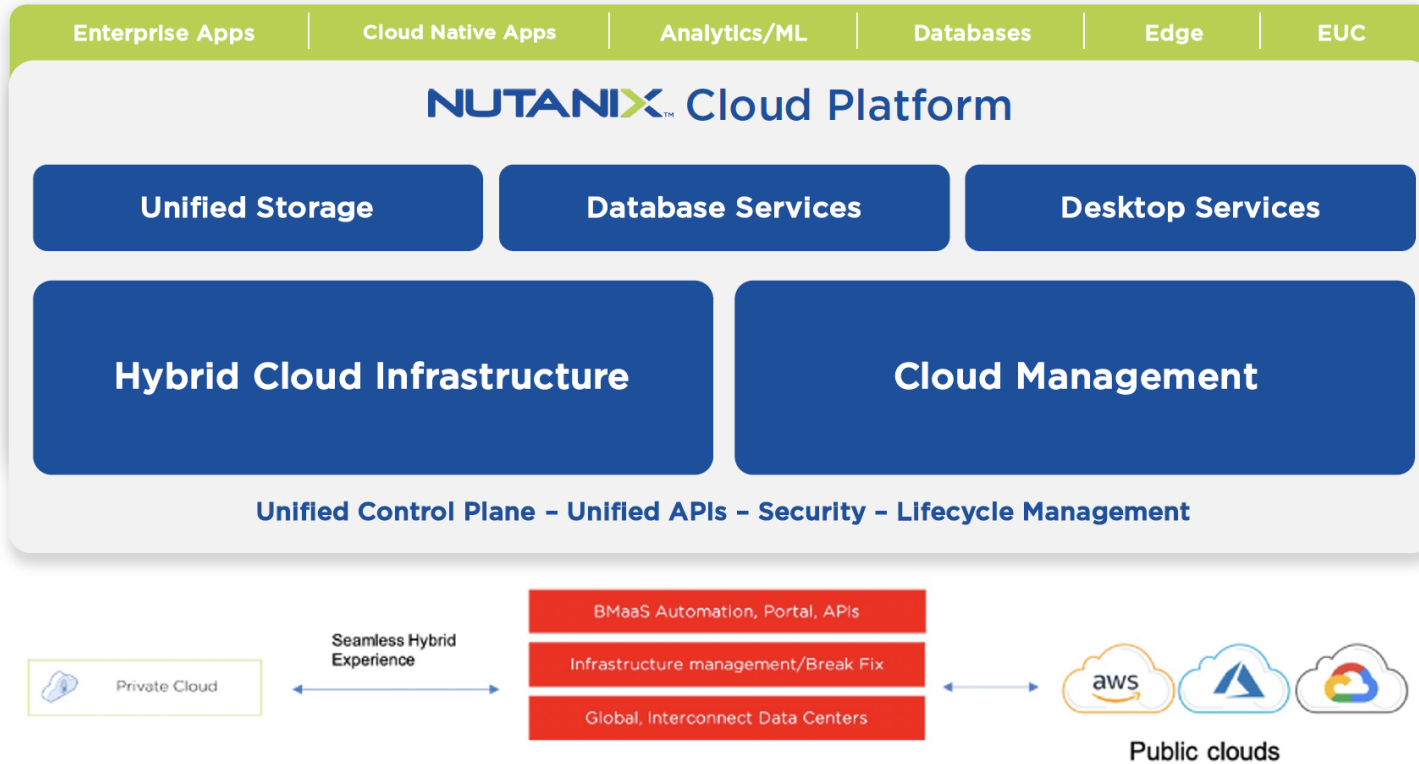
Pure Storage on Platform Equinix



Nutanix Cloud Platform on Equinix Metal

Nutanix Cloud Platform on Equinix Metal

Intelligent workload placement for hybrid multi-cloud environments



Combines the benefits of Nutanix HCI with the low latency, performance benefits of Equinix Metal

- Gain business agility
- Eliminate Capex outflow
- Achieve operational consistency
- Support predictable and elastic workloads
- Cloud adjacent applications can significantly reduce cost per IOPS as much as 80%.

Use Cases: Nutanix Cloud Platform on Equinix Metal

Gain adjacency to the public clouds and networks you need for best of breed infrastructure



Datacenter Consolidation

Lift & shift workloads to cloud

Decommission and consolidate datacenters without refactoring



On Demand Elasticity

Dev & test applications

Scale SaaS workloads and gain proximity to customers



Disaster Recovery

Secondary datacenter

Eliminate need to procure, maintain, and manage an outside DR site



Cloud Adoption and Migration

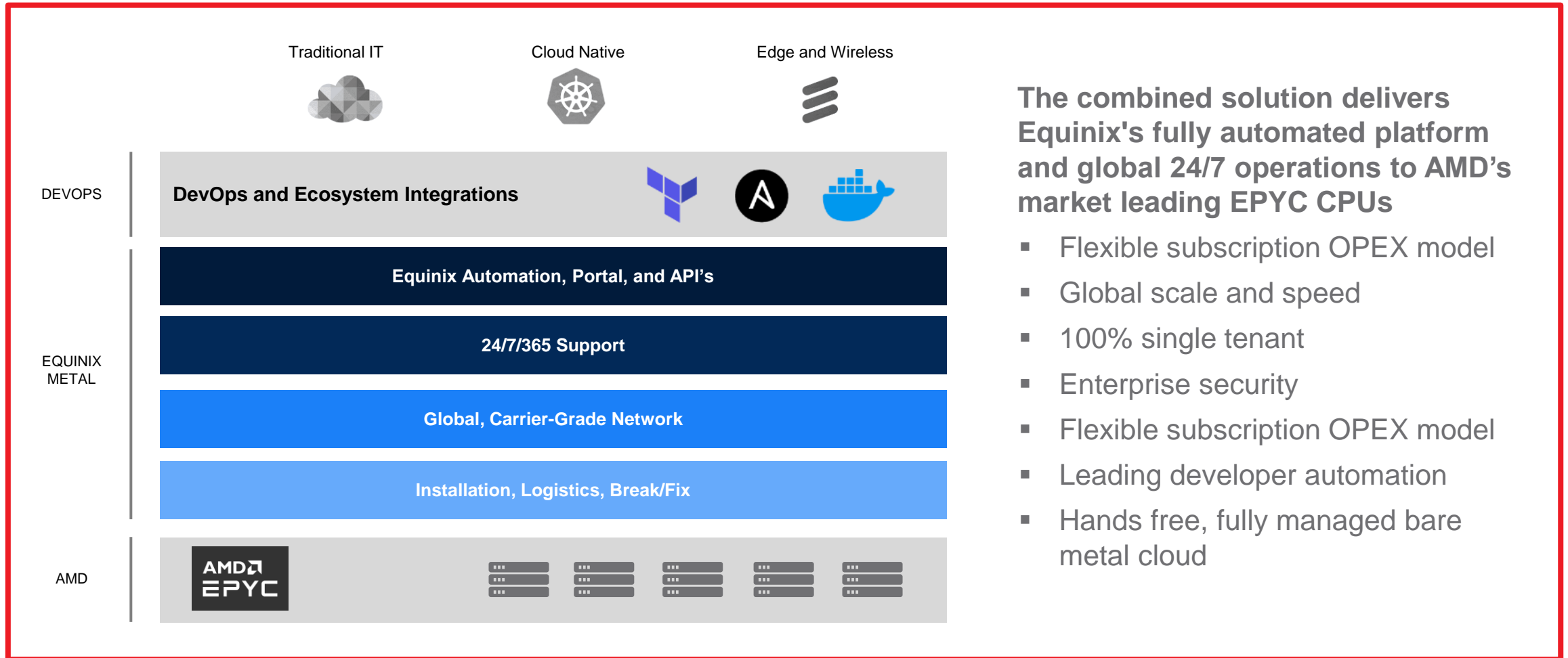
Geographic expansion

Extend IT presence into regions with no physical datacenter footprint

Partner Solutions and Integrations

Equinix Metal, Powered by AMD

Leverage AMD technology globally as an automated, managed service

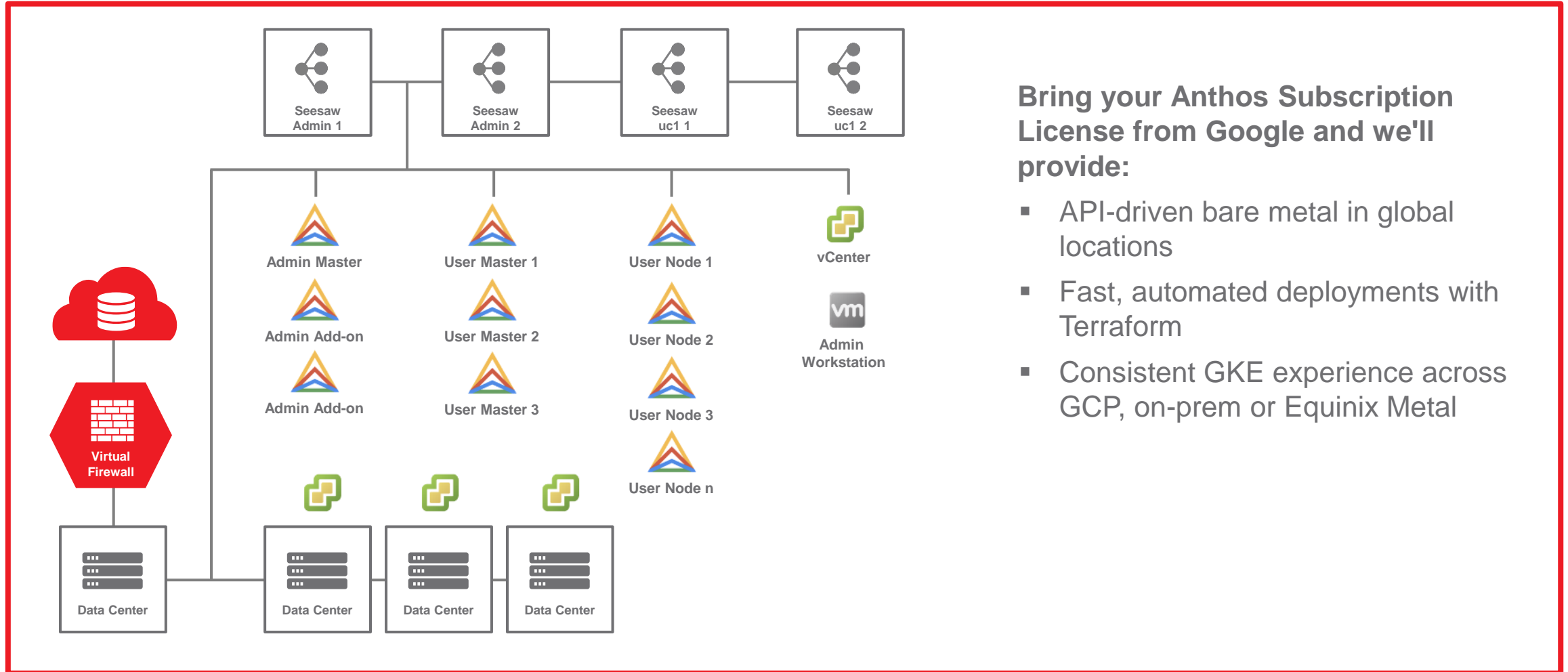


The combined solution delivers Equinix's fully automated platform and global 24/7 operations to AMD's market leading EPYC CPUs

- Flexible subscription OPEX model
- Global scale and speed
- 100% single tenant
- Enterprise security
- Flexible subscription OPEX model
- Leading developer automation
- Hands free, fully managed bare metal cloud

Anthos on Equinix Metal

Automated process for installing a complete Anthos GKE on-prem environment

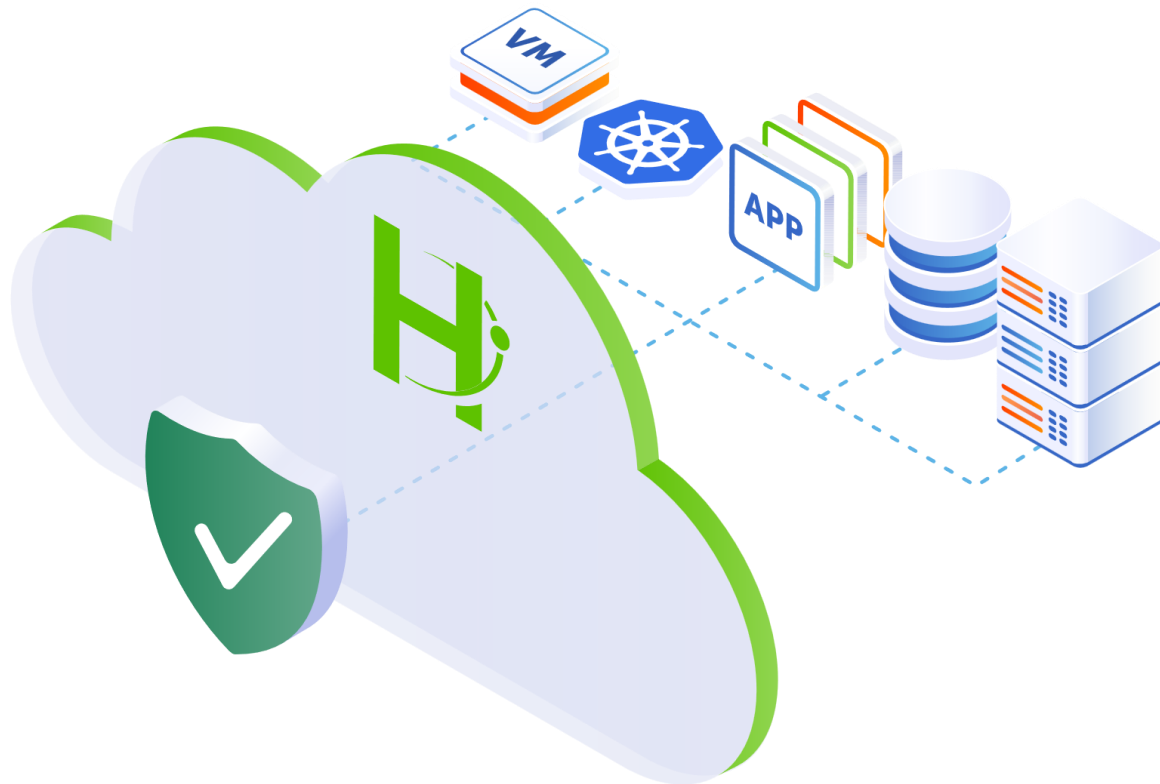


Bring your Anthos Subscription License from Google and we'll provide:

- API-driven bare metal in global locations
- Fast, automated deployments with Terraform
- Consistent GKE experience across GCP, on-prem or Equinix Metal

Cohesity Partner Solution

High-performance, software-defined backup and recovery certified on Equinix Metal

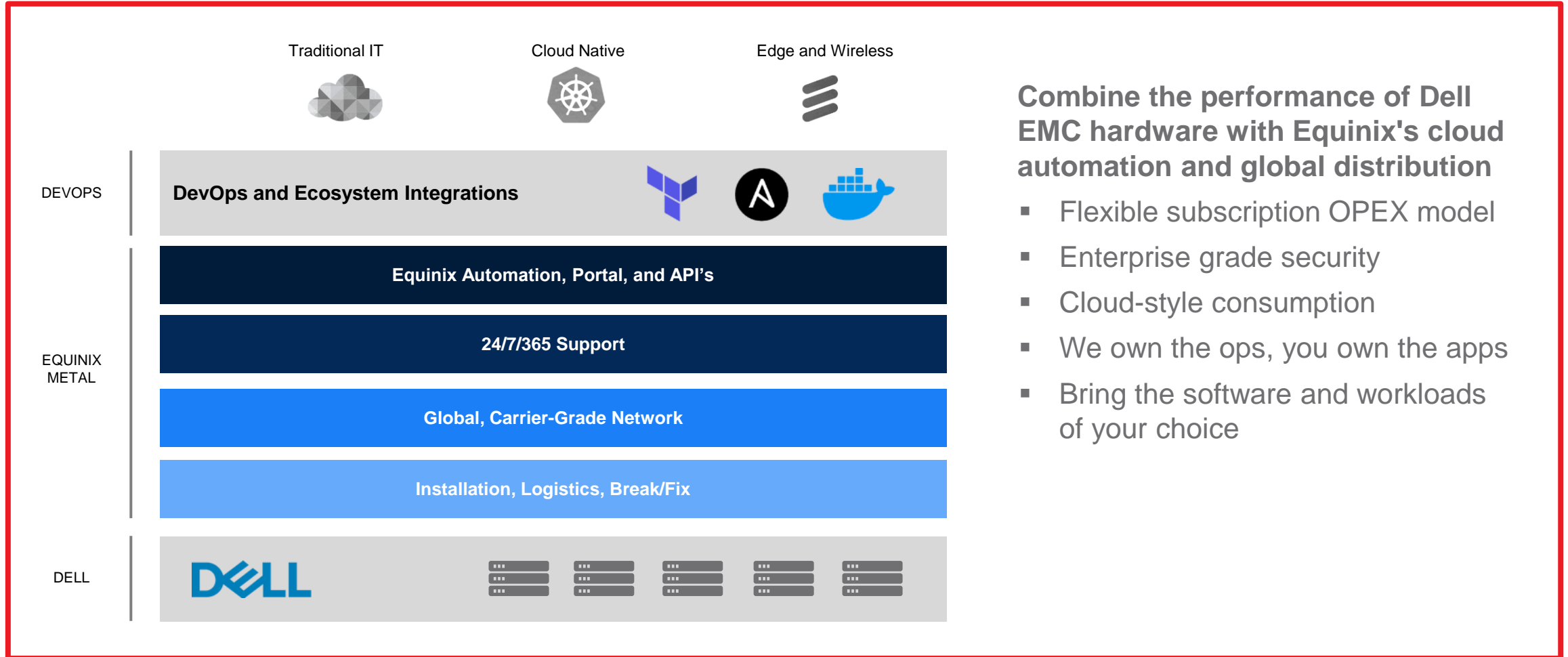


Cohesity provides comprehensive policy-based data protection for the multicloud cloud era:

- Easily back up and rapidly recover cloud adjacent and collocated data
- Reduce time to setup, deploy, and expand infrastructure
- Manage your data across cloud, on-prem, and Metal through a unified management plane
- Control your infrastructure through a single portal and robust APIs
- Meets the highest security and compliance standards
- 100% dedicated single tenancy for backups

Equinix Metal on Dell Technologies

Deploy and leverage Dell EMC hardware globally as an automated, managed service

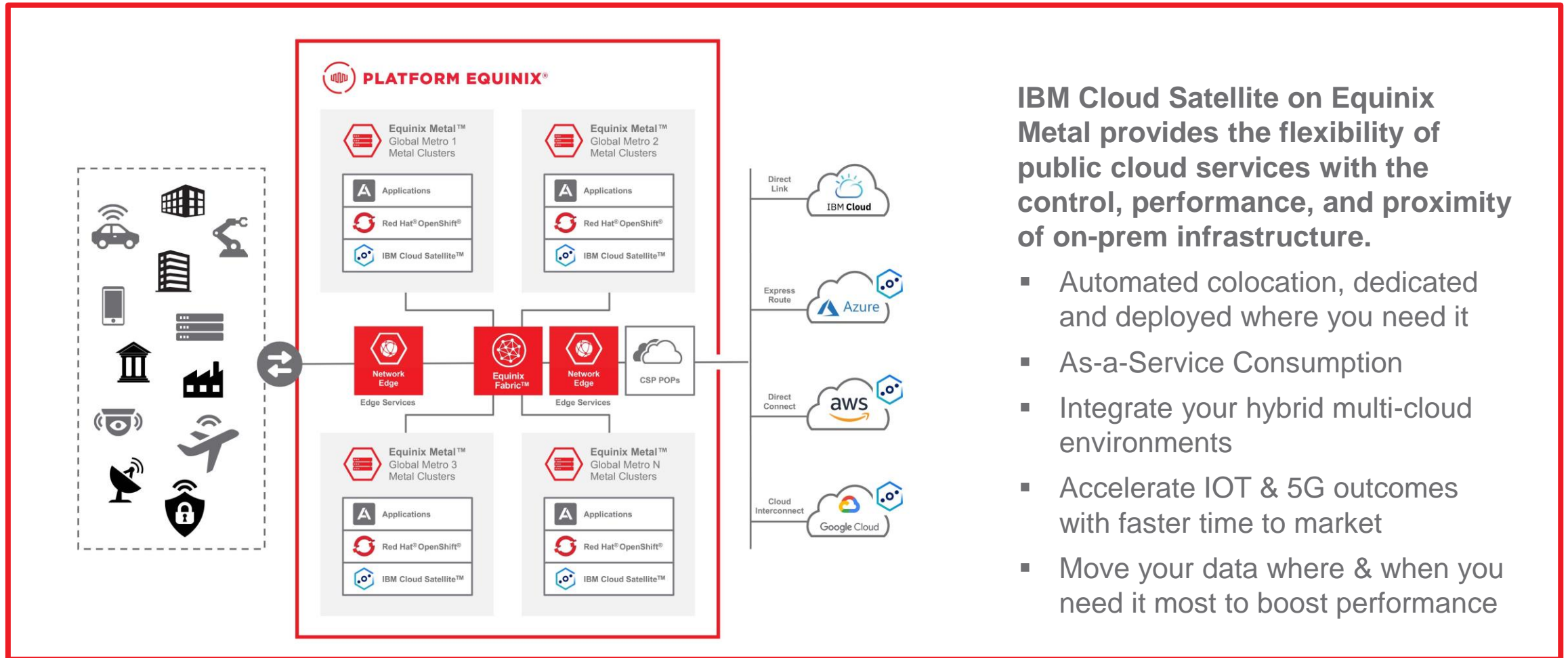


Combine the performance of Dell EMC hardware with Equinix's cloud automation and global distribution

- Flexible subscription OPEX model
- Enterprise grade security
- Cloud-style consumption
- We own the ops, you own the apps
- Bring the software and workloads of your choice

IBM Cloud Satellite on Equinix Metal

Managed, global application platform for running containers on Red Hat OpenShift across Platform Equinix

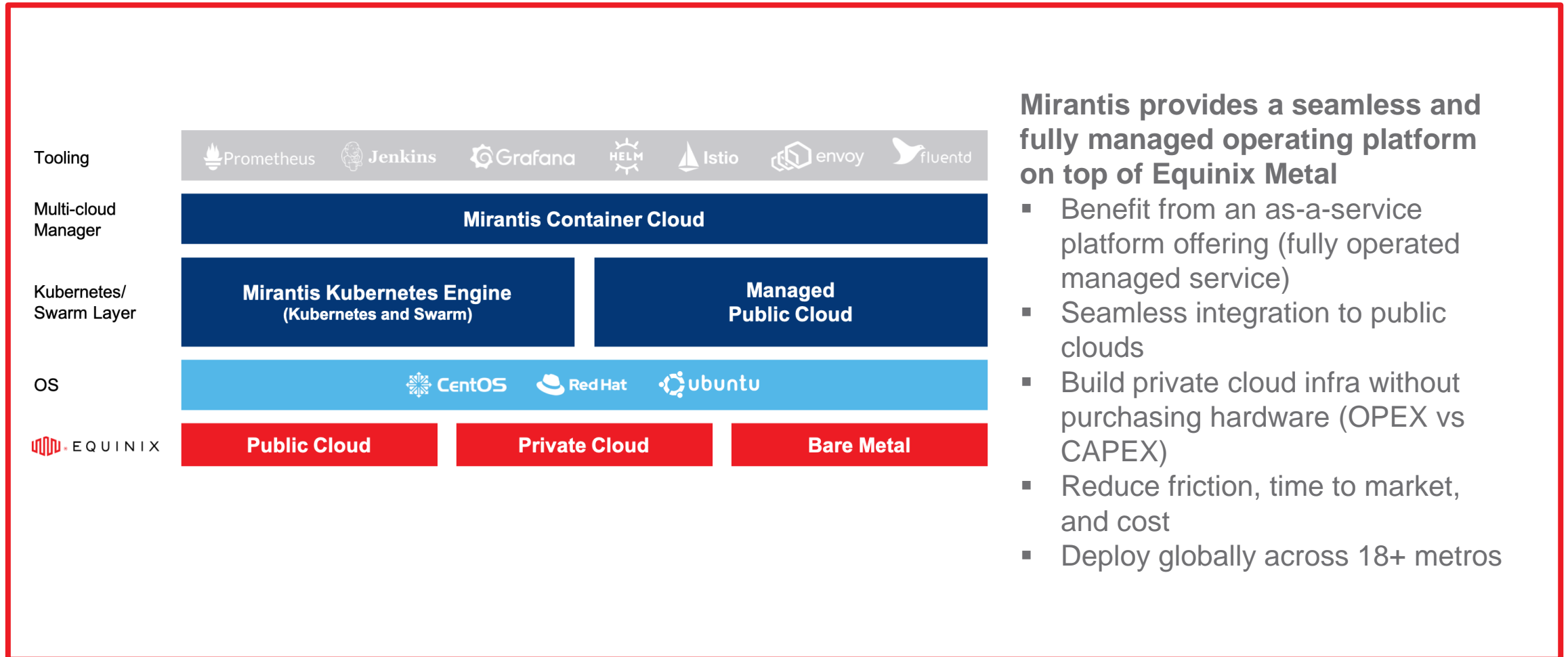


IBM Cloud Satellite on Equinix Metal provides the flexibility of public cloud services with the control, performance, and proximity of on-prem infrastructure.

- Automated colocation, dedicated and deployed where you need it
- As-a-Service Consumption
- Integrate your hybrid multi-cloud environments
- Accelerate IOT & 5G outcomes with faster time to market
- Move your data where & when you need it most to boost performance

Mirantis Partner Solution

Fully managed Containers as a Service (**Mirantis Container Cloud**) and Infrastructure as a Service (**Mirantis OpenStack**) layer on top of Equinix Metal

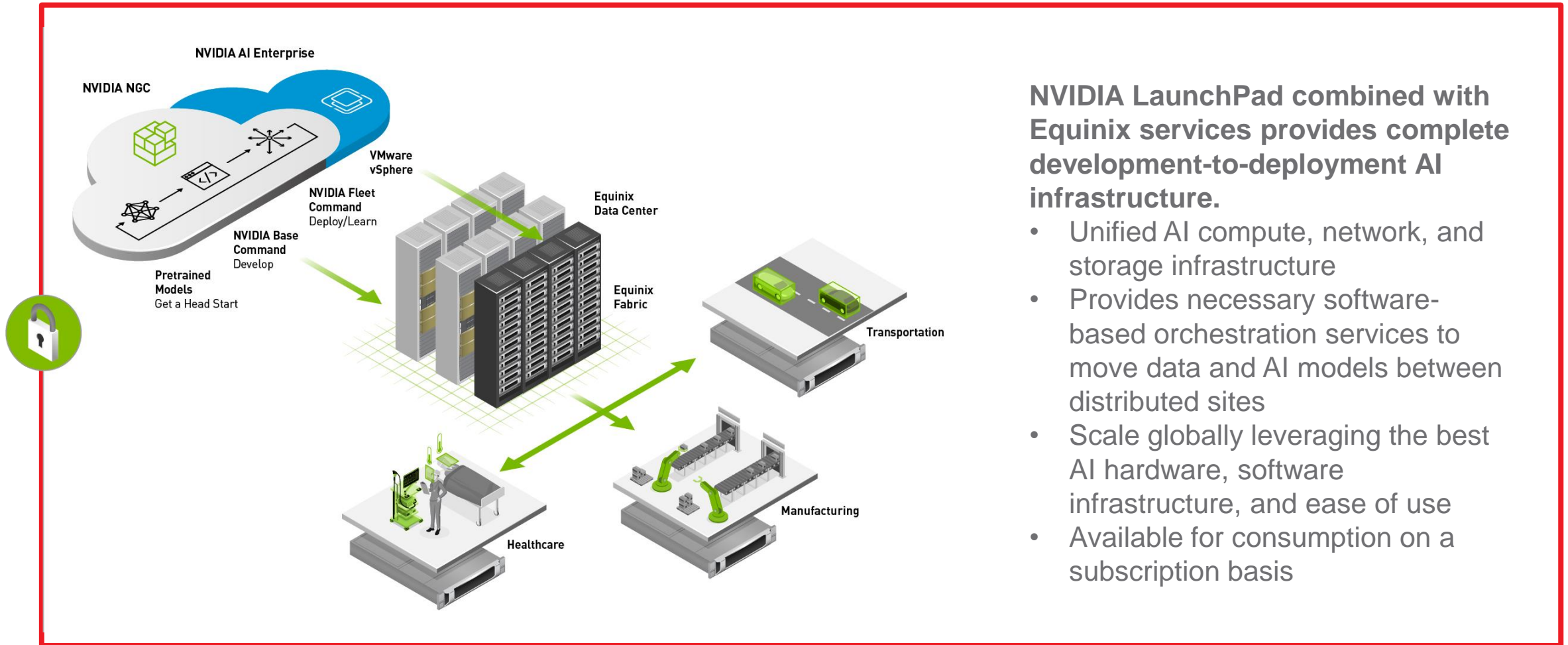


Mirantis provides a seamless and fully managed operating platform on top of Equinix Metal

- Benefit from an as-a-service platform offering (fully operated managed service)
- Seamless integration to public clouds
- Build private cloud infra without purchasing hardware (OPEX vs CAPEX)
- Reduce friction, time to market, and cost
- Deploy globally across 18+ metros

NVIDIA LaunchPad on Platform Equinix

Equinix Metal is enabling the NVIDIA LaunchPad solution to deliver instant AI infrastructure

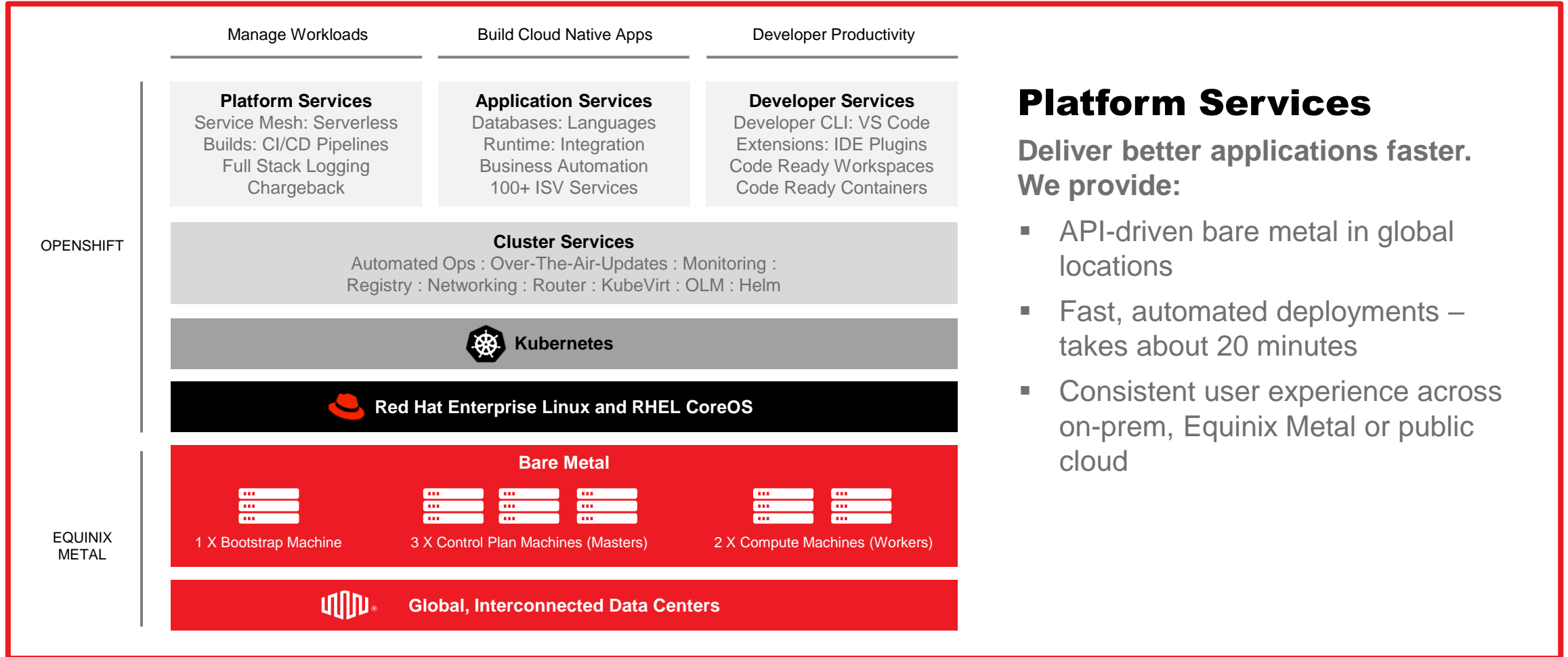


NVIDIA LaunchPad combined with Equinix services provides complete development-to-deployment AI infrastructure.

- Unified AI compute, network, and storage infrastructure
- Provides necessary software-based orchestration services to move data and AI models between distributed sites
- Scale globally leveraging the best AI hardware, software infrastructure, and ease of use
- Available for consumption on a subscription basis

OpenShift, Made Simple

Automate the end-to-end install of Red Hat OpenShift on Equinix bare metal servers



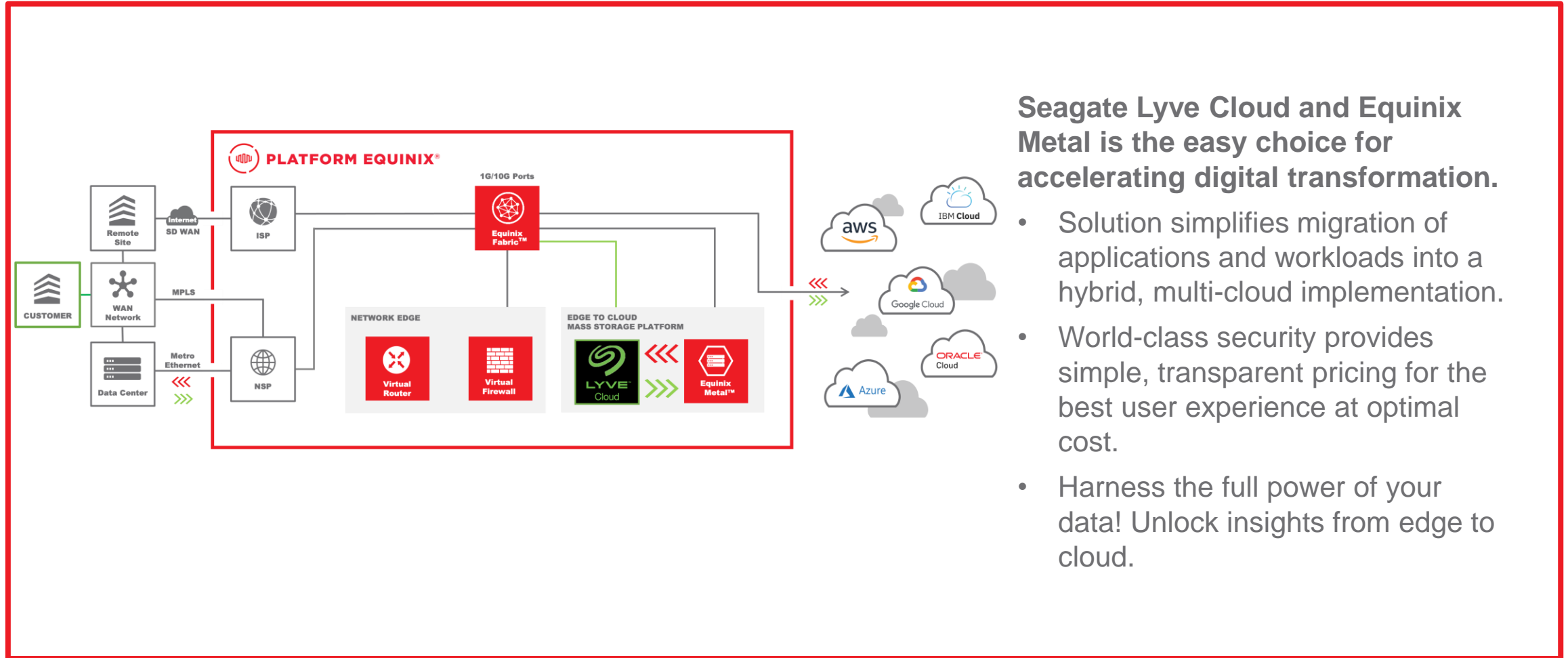
Platform Services

Deliver better applications faster.
We provide:

- API-driven bare metal in global locations
- Fast, automated deployments – takes about 20 minutes
- Consistent user experience across on-prem, Equinix Metal or public cloud

Seagate Lyve Cloud and Equinix Metal

Store, protect, connect, analyze, and act upon your data and applications no matter where they live

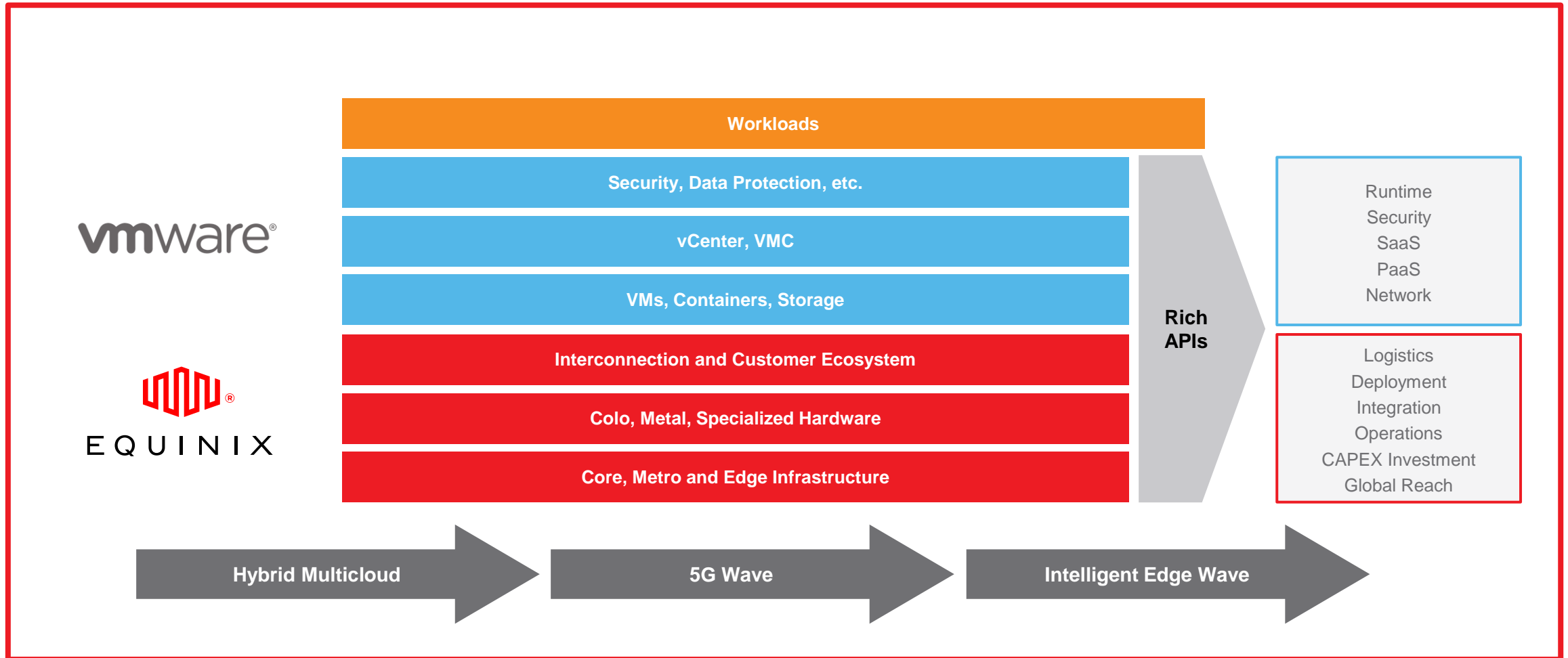


Seagate Lyve Cloud and Equinix Metal is the easy choice for accelerating digital transformation.

- Solution simplifies migration of applications and workloads into a hybrid, multi-cloud implementation.
- World-class security provides simple, transparent pricing for the best user experience at optimal cost.
- Harness the full power of your data! Unlock insights from edge to cloud.

Equinix Metal and VMware

Virtual Private (Hybrid) Cloud



VDI Solution Overview

Benefits of VDI on Equinix Metal

Maximize seasonal revenue and ensure sustainable profitability

- Highly Available, Carrier Grade Network
- High performance servers and storage with NVME
- Low-latency cloud adjacent access to Internet, Public Clouds, and SaaS providers
- Zero maintenance of hardware and racks
- Bring your own software stack and infrastructure orchestration
- Flexible, scale up & down deployment, plus the ability to commit long term for best of blend cost structure

Equinix Metal versus DIY

Equinix Metal

DIY

Servers	Included (OPEX)	BYO (CAPEX)
Switches & Routers	Included	BYO (CAPEX)
Break/Fix (24x7 Support)	Included	DIY
OS Image Control	Included	DIY
Software Licensing	BYOL	BYOL
Space/Power	Included	DIY
Server Lifecycling	Included	DIY
Instant Scalability	Yes	No
Hourly Deployment Option	Yes	No
Automation // API Integration	Yes	DIY



Additional Product Slides

tinkerbell 



Provision and manage bare metal, anywhere

Standardize infrastructure and application management using the same API-centric, declarative configuration and automation approach pioneered by the Kubernetes community. Open-sourced under an Apache 2.0 license.

Power Your Digital Infrastructure with Green Energy

More than 165 of Equinix's 210+ global data centers are powered by 100% clean and renewable energy.

- First in data center industry to commit to reaching climate-neutral by 2030
- Clean and renewable power
- 4th largest user of renewable energy in the U.S.
- EcoVadis Silver certification
- For our full sustainability report visit: Sustainability.Equinix.com



Green Energy