



# **Datrium Proposal City of New Port Richey**

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# Datrium's Founding Team



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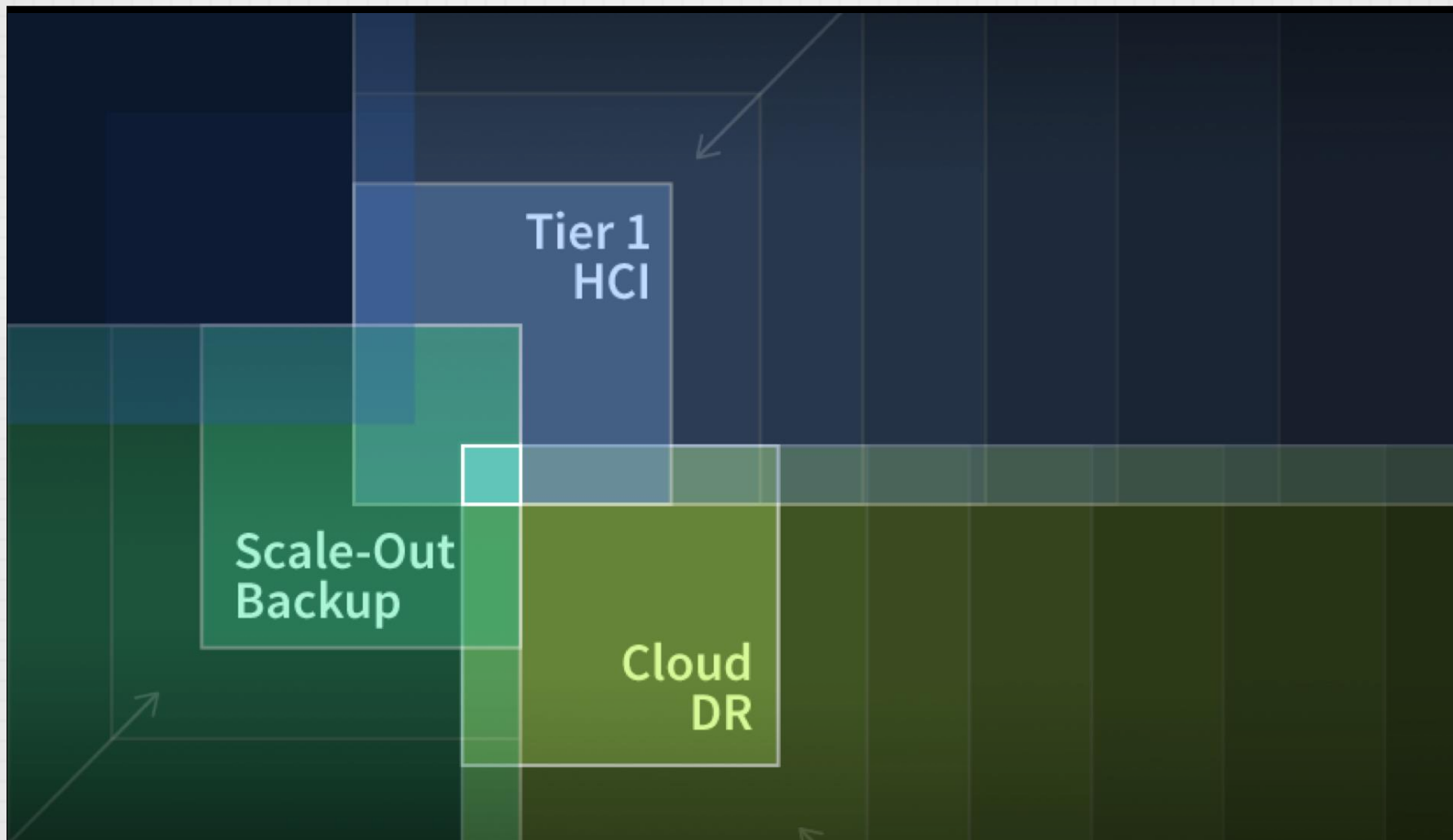
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**data**domain  
Founders, CTOs  
Developers of Disk Backup

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**vmware**<sup>®</sup>  
Early Principal Engineers  
Developers of ESX Hypervisor

# A Different Kind of Convergence





# Distributed Virtual

Compute  
Primary storage  
Secondary storage  
Data management  
Data protection  
WAN optimization  
Security and encryption  
Scale-out filesystem  
Cluster management  
Disaster recovery  
Cache management  
Cloud software



# DVX Components

Software and hardware infrastructure  
for virtual applications



## Virtualized Compute

A global storage pool for **vSphere**, **KVM**, or **containers** with any mix of server hardware



## Primary Data Management

**Flash** performance and always-on dedupe, compression, double failure protection, and continuous integrity verification.



## Data Protection

**Always-on** distributed erasure coding. Choice of high density disk or high throughput flash copy data storage.



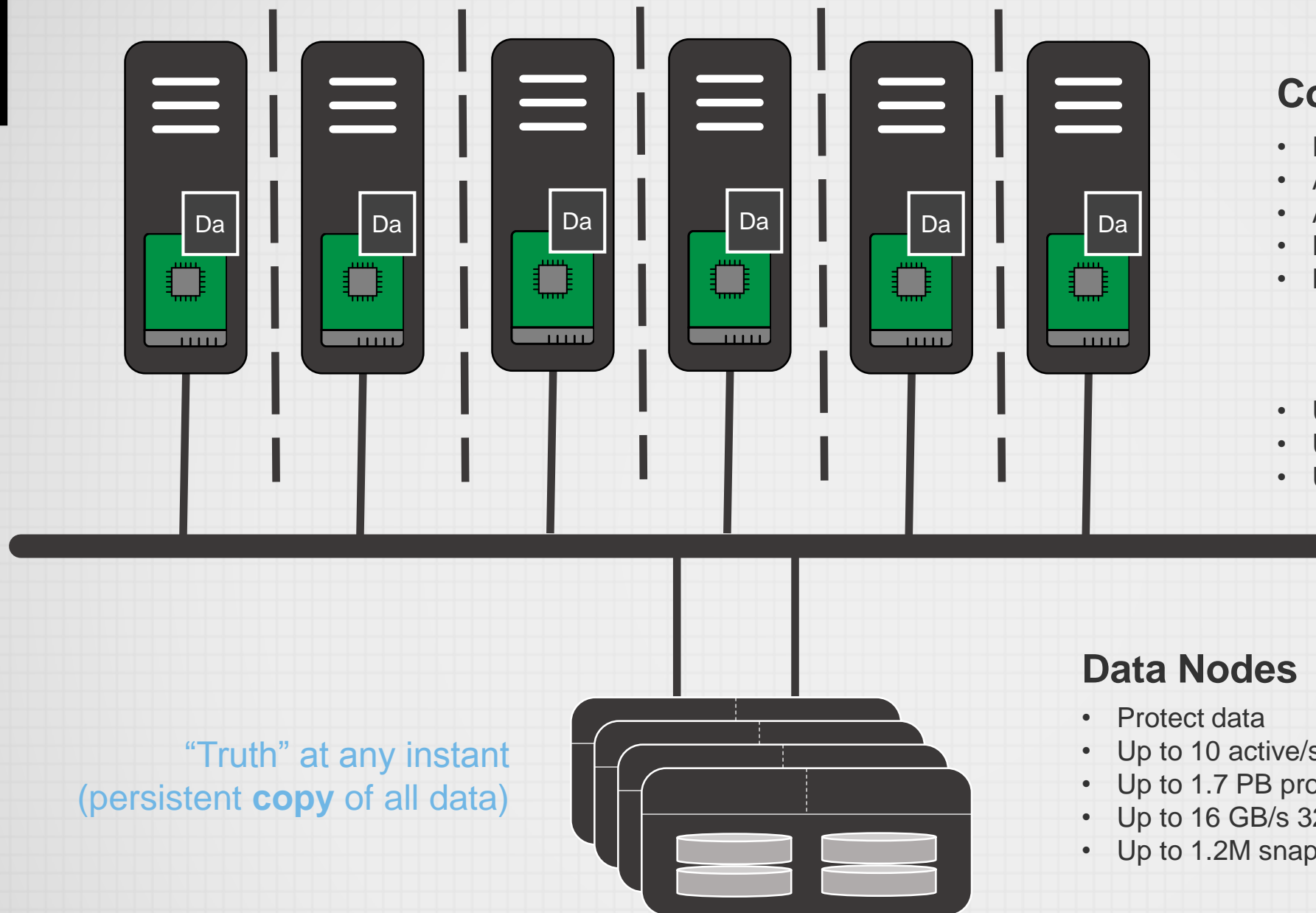
## Off-Site Data Protection

**Global** dedupe and end-to-end integrity verification makes retrieval equally efficient and safe.



# DVX Architecture

*Foundations*



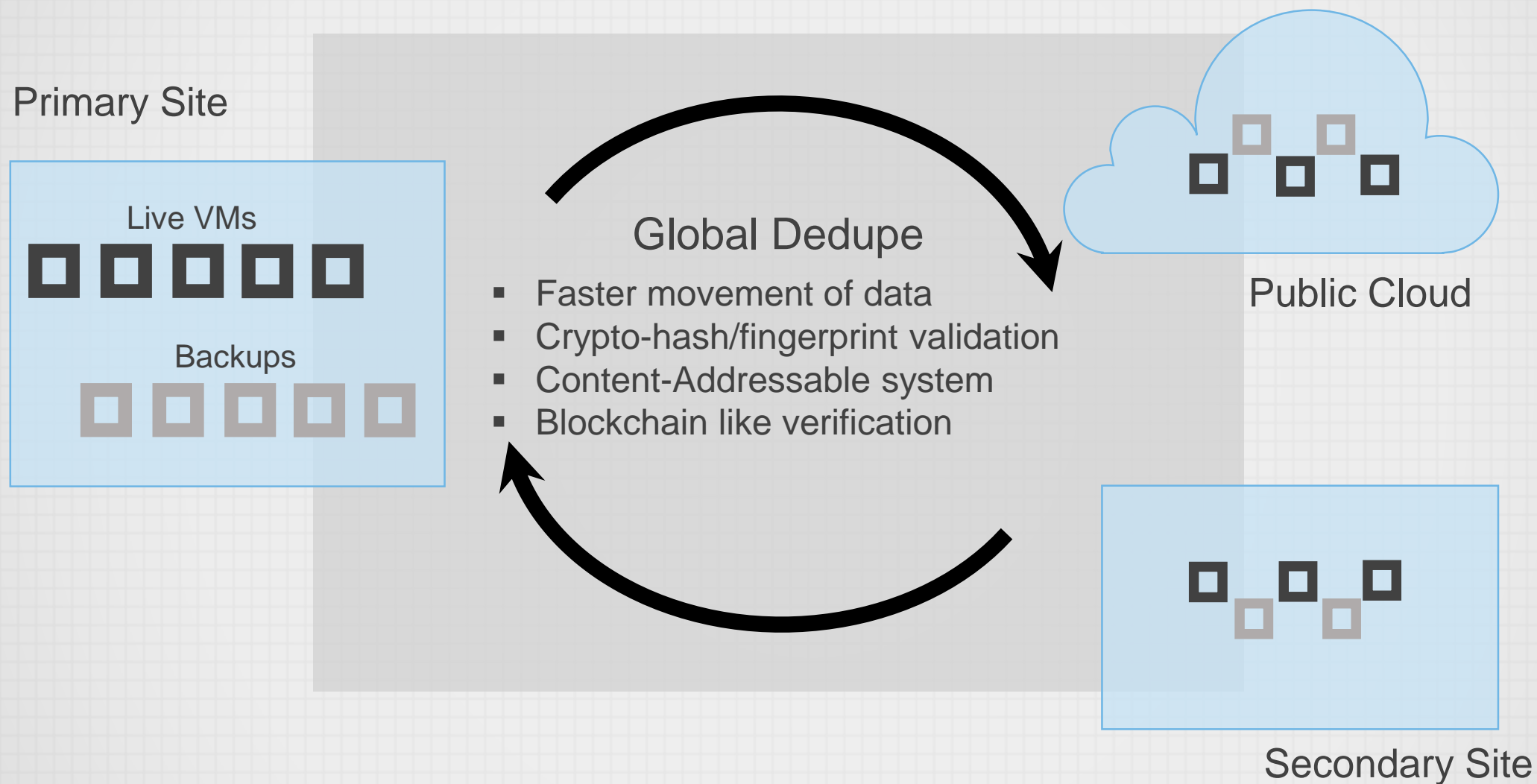
## Compute Nodes

- Provide performance
- Any mix: vendor, model, rack/blade
- Any mix: vSphere, KVM, Docker
- DVX Host Software for IO Processing
- Local SSD cache
  - Any vendor/type (SATA, NVMe)
  - Inline dedupe/compression
  - No RAID or EC overhead
- Up to 128 stateless, isolated hosts
- Up to 200 GB/s 32K random reads
- Up to 18M 4K random read IOPS

## Data Nodes

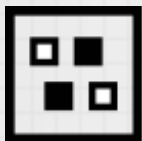
- Protect data
- Up to 10 active/standby pairs
- Up to 1.7 PB protected capacity
- Up to 16 GB/s 32K random writes
- Up to 1.2M snapshots

# Global Deduplication



# Searchable Backups

## Up to 1.2M snapshots in one DVX

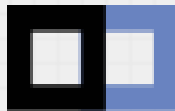


### Easy VM Policies

Always consistent

Automated membership

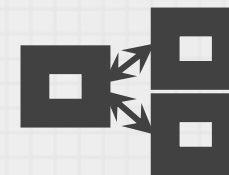
History retained even  
through replication/recovery



### SnapStore

Searchable backup catalog

Search & operate



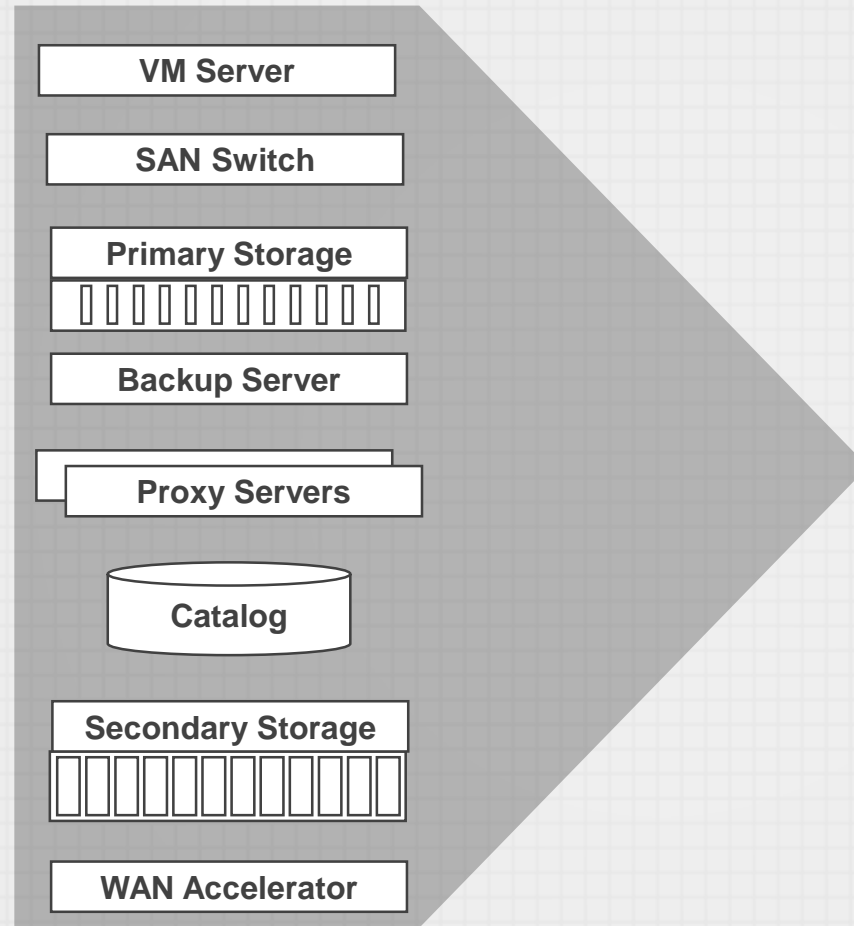
### Granular Operations

Snap, clone, revert, replicate

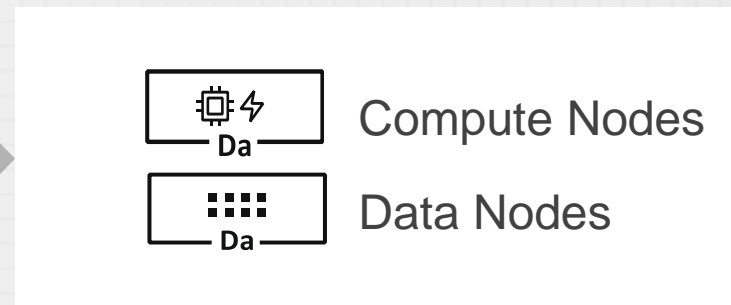
VMs, vDisks, Files, Containers

# Physical Convergence with DVX

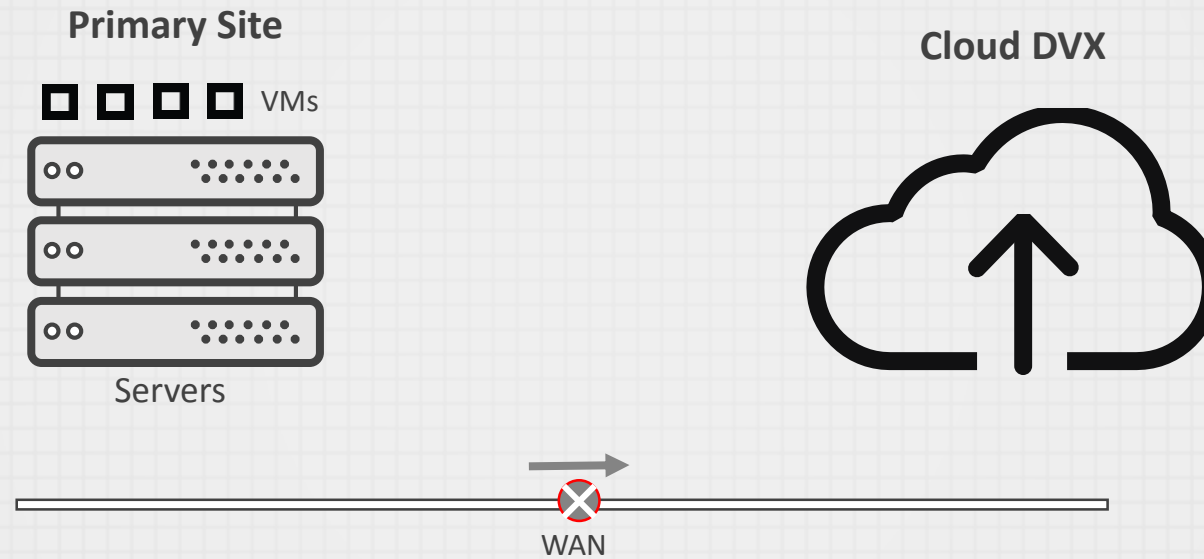
## Legacy



## DVX



# Backup with Cloud DVX



# Logical Convergence with DVX



VMs



Disaster  
Relief



Encryption



Backup



Archiving



Dedupe



Cloud  
Sync

**Datrium DVX**

# DVX Configuration

# New Port Richey DVX

- Refuse to Lose Program
  - (2) Datrium Compute Licenses
  - (1) Datrium Data Node
  - 1 Year 24x7x4HR Support