About ExaGrid

ExaGrid

- Largest independent vendor in the space
- Only "Visionary" in the 2015 Gartner Magic Quadrant

100% Focused on Disk-based Backup

- Highly differentiated architecture
- Winner of the most industry awards

Large Customer Base

- 10,000+ systems installed — worldwide
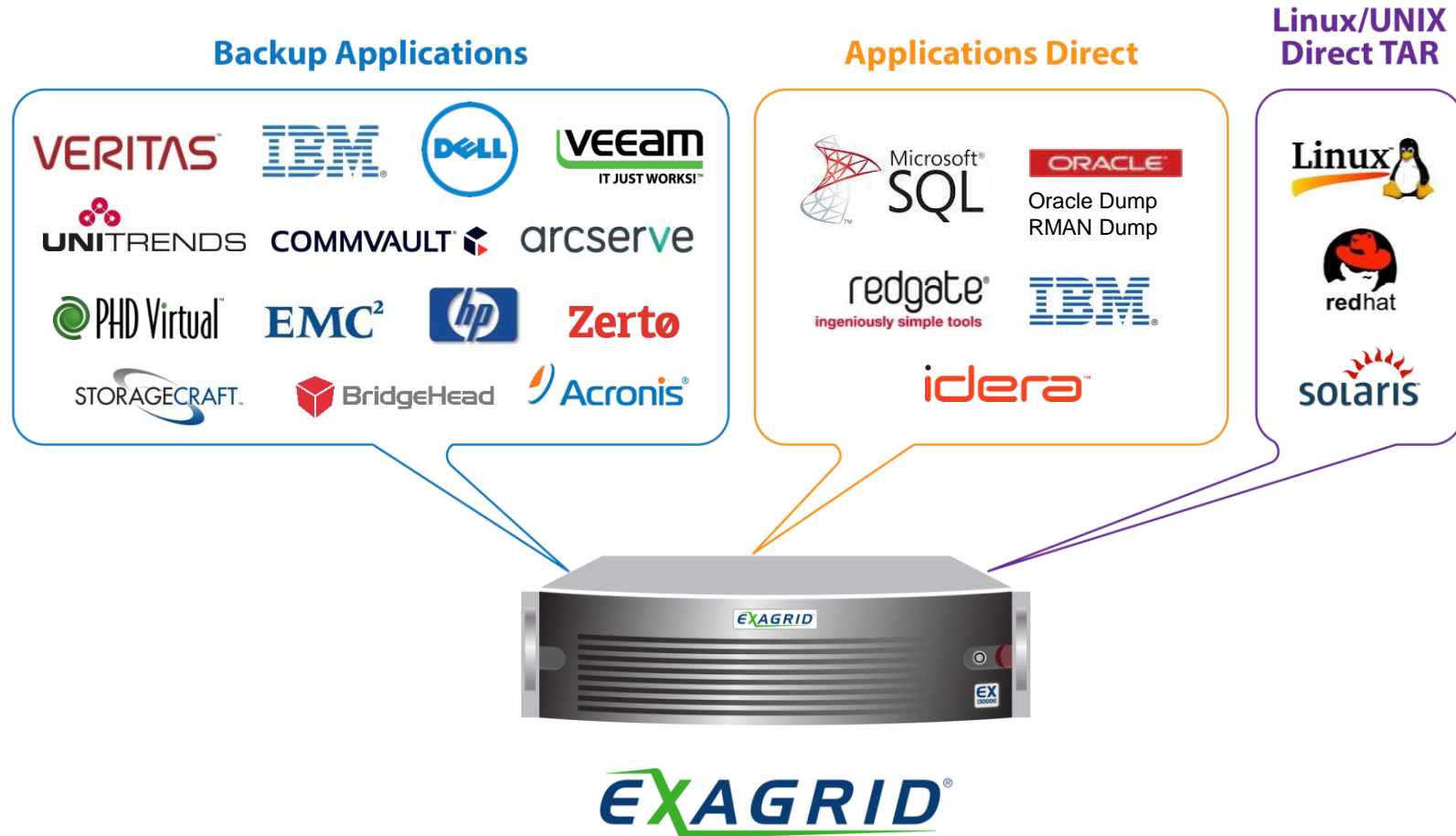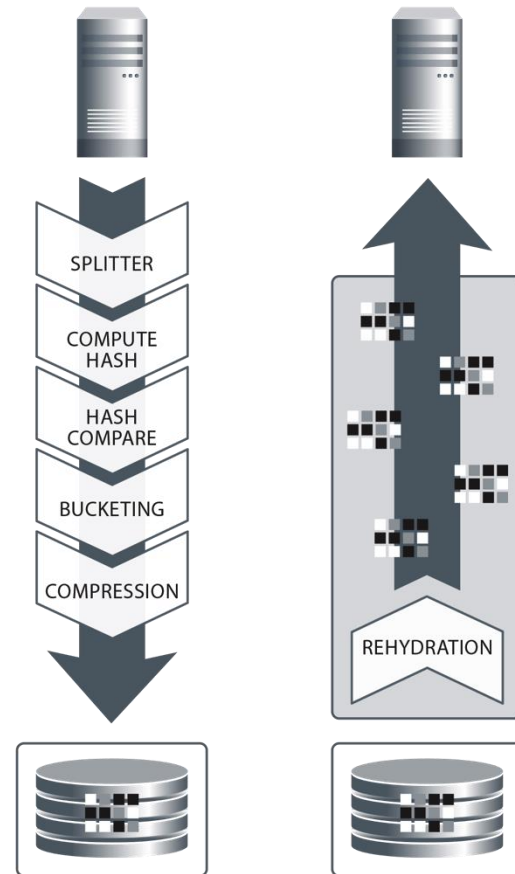- 300+ published customer success stories

Works in Heterogeneous Environments

Inline Scale-up Appliances Fall Short

Inline Solution

Inline deduplication on the way to disk
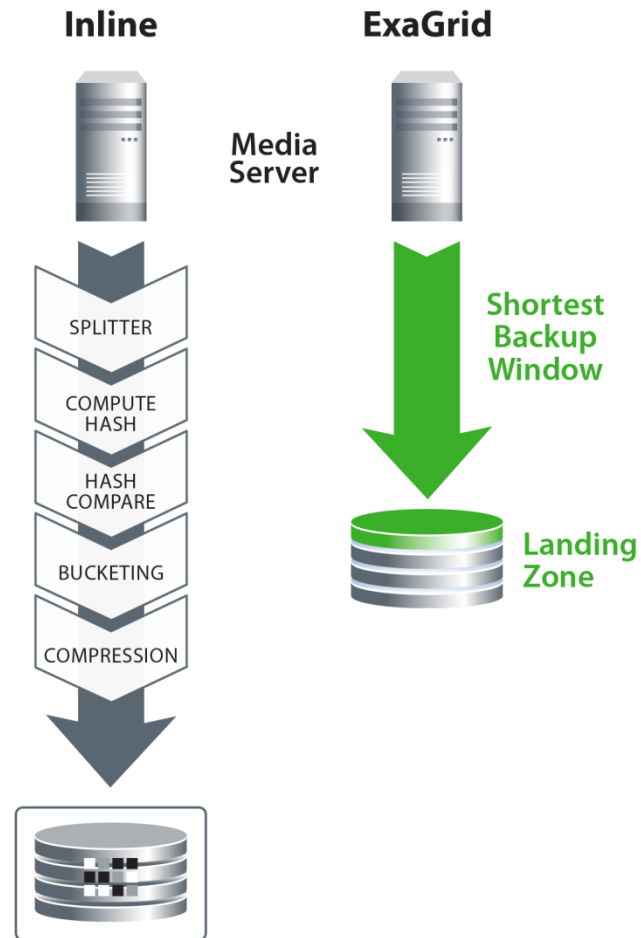- Slower ingest
- Longer backup window

All data is stored in deduplicated form
- Slow restores, VM boots, and tape copies

As data grows, only disk is added
- Backup window grows as data grows
- Ultimately forces a costly forklift upgrade

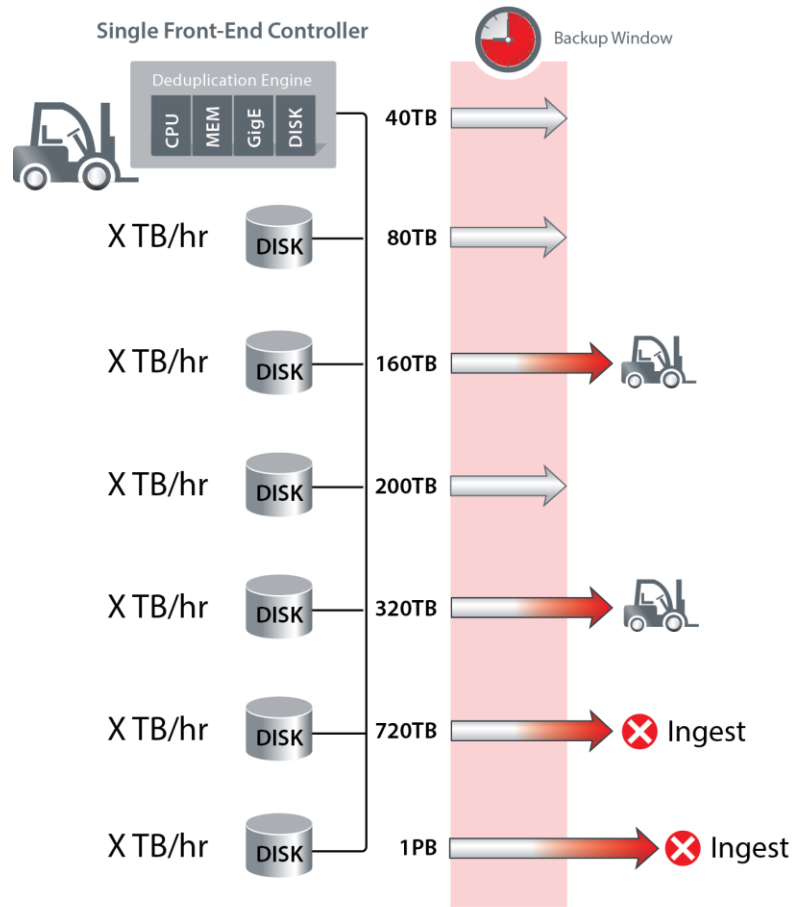# Fastest Backups and Shortest Backup Window

Unique landing zone

- Write backups directly to disk
- Avoid compute-intensive deduplication
- Adaptive deduplication

Benefits

- No inline processes to slow backups
- Fastest backups
- Shortest possible backup window
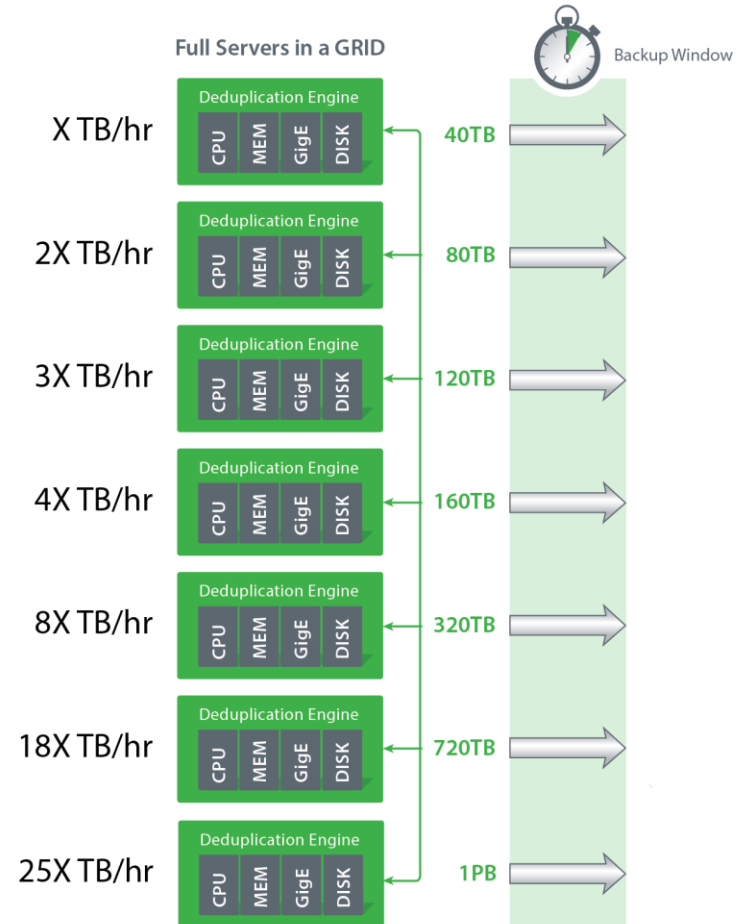- Strong offsite RPO

Fixed Length Backup Window

Scale-Up Architecture

Single Front-End Controller — Backup Window

	Deduplication Engine — CPU MEM GigE DISK	40TB
X TB/hr	DISK	80TB
X TB/hr	DISK	160TB
X TB/hr	DISK	200TB
X TB/hr	DISK	320TB
X TB/hr	DISK	720TB — ❌ Ingest
X TB/hr	DISK	1PB — ❌ Ingest

ExaGrid Scale-Out GRID Architecture

Full Servers in a GRID — Backup Window

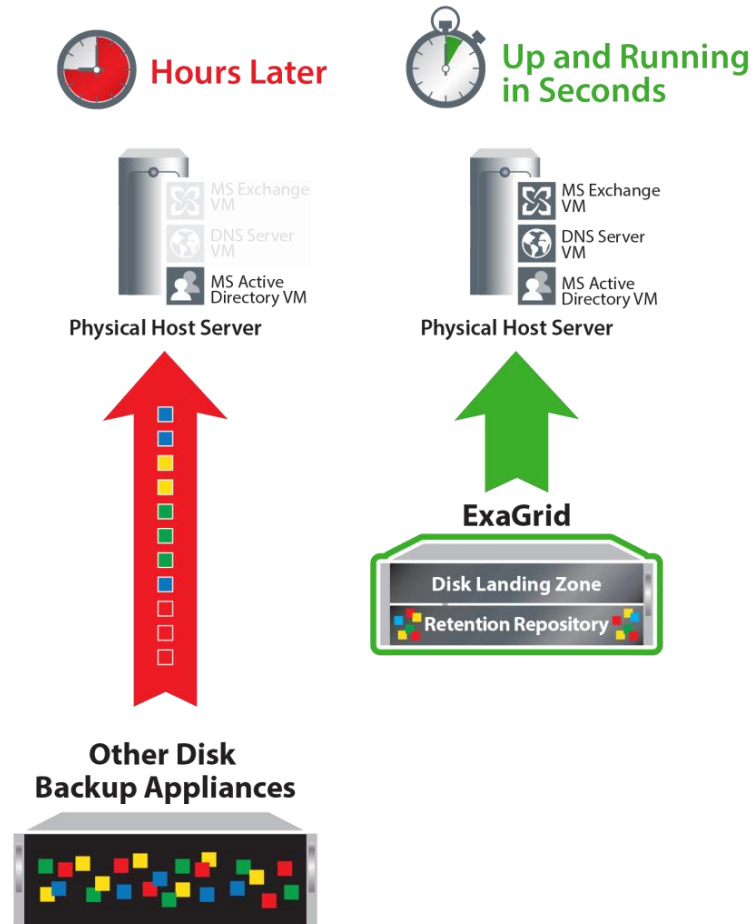|		
X TB/hr	Deduplication Engine — CPU MEM GigE DISK	40TB
2X TB/hr	Deduplication Engine — CPU MEM GigE DISK	80TB
3X TB/hr	Deduplication Engine — CPU MEM GigE DISK	120TB
4X TB/hr	Deduplication Engine — CPU MEM GigE DISK	160TB
8X TB/hr	Deduplication Engine — CPU MEM GigE DISK	320TB
18X TB/hr	Deduplication Engine — CPU MEM GigE DISK	720TB
25X TB/hr	Deduplication Engine — CPU MEM GigE DISK	1PB

Out of storage and ingest - forklift upgrade

❌ Ingest not keeping up with storage

Fast Restores, VM Boots in Seconds to Minutes

Hours Later

MS Exchange VM
DNS Server VM
MS Active Directory VM

Physical Host Server

Other Disk Backup Appliances

Up and Running in Seconds

MS Exchange VM
DNS Server VM
MS Active Directory VM

Physical Host Server

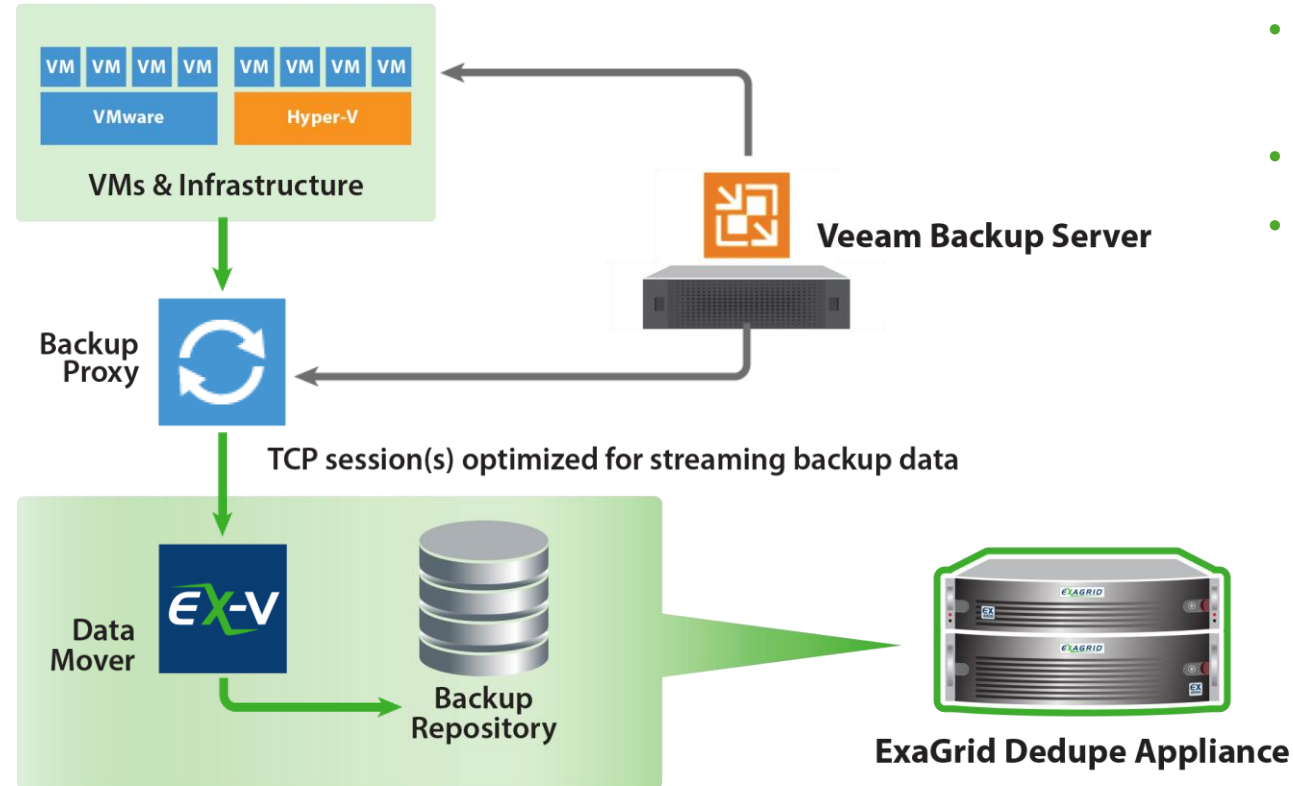**ExaGrid**

Disk Landing Zone
Retention Repository

Unique landing zone

- Most recent backups are in undeduplicated form
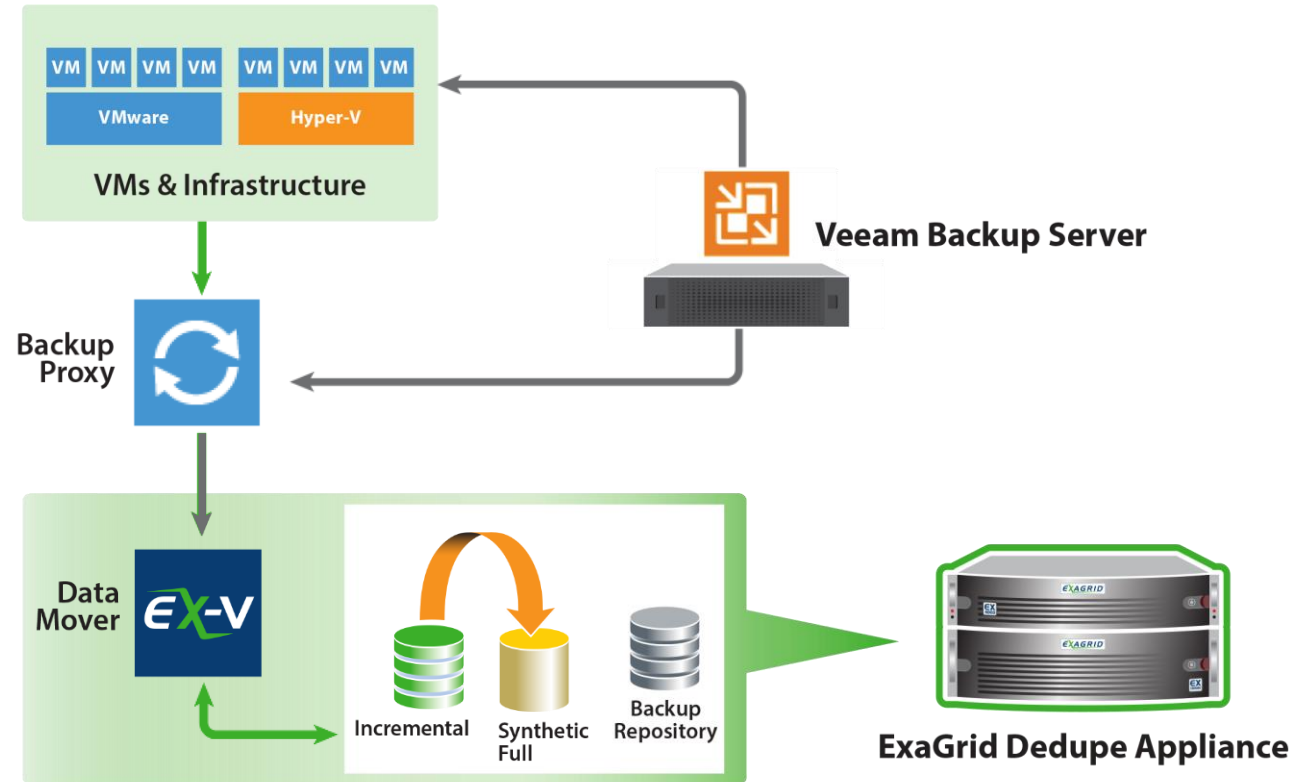- Eliminates data rehydration

Benefits

- Restores as fast as disk
- Tape copies as fast as disk
- VM boots in seconds to minutes

Integrated Veeam Data Mover – Faster Backups

- Veeam to Veeam vs Veeam to CIFS
- 30% faster ingest
- Faster VM boots

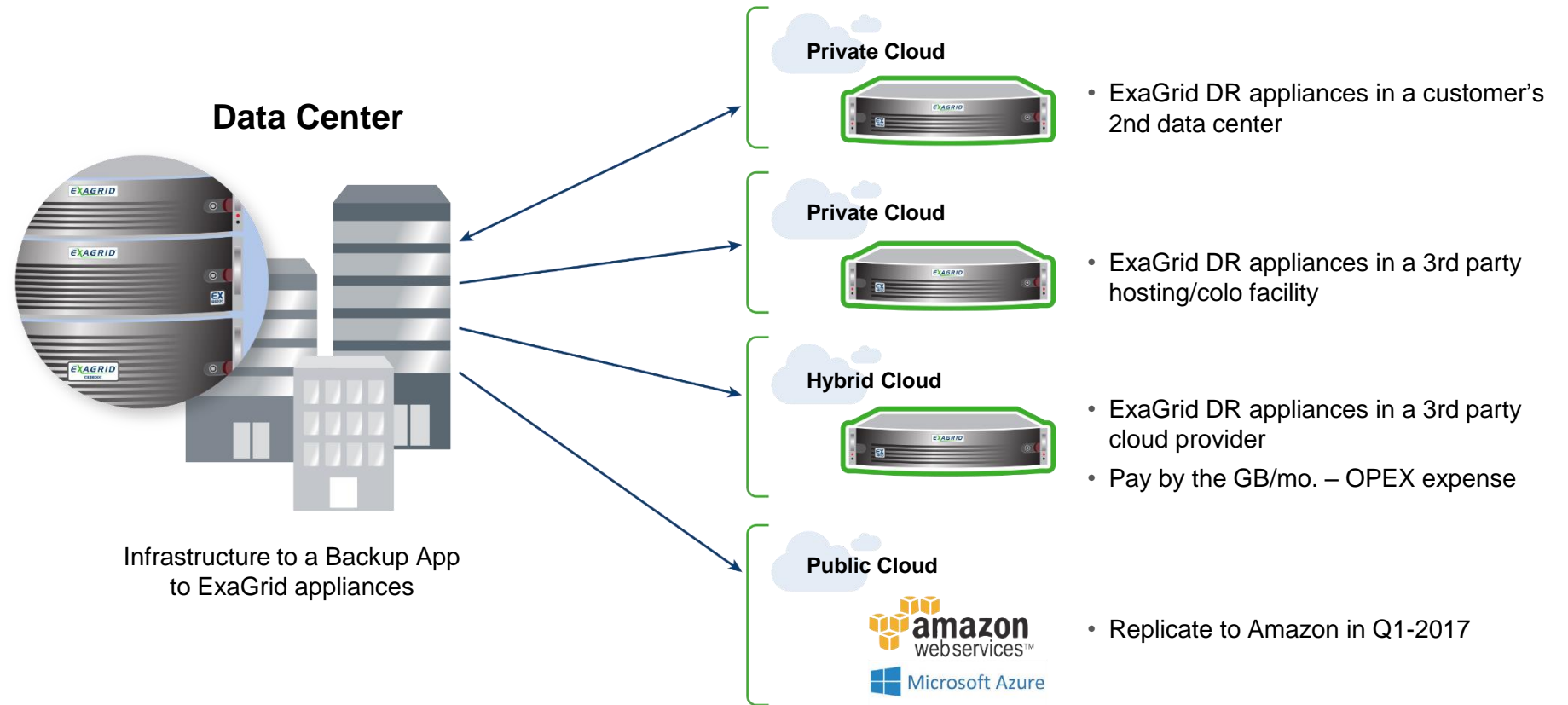# Integrated Veeam Data Mover – Faster Synthetic Fulls

- Veeam data on the landing zone
- ExaGrid compute nodes
- Create synthetic full 6X faster than Veeam to disk
- Frees up Veeam backup server resources

ExaGrid Appliances in a Scalable GRID
25 Appliances in a Scale-Out GRID (One Petabyte Full Backup)

ExaGrid Model	Usable Capacity (TB)	Capacity for Weekly Fulls (TB)	Max Backup Throughput (TB/hr)
EX3000	6	3	0.72
EX5000	10	5	1.08
EX7000	14	7	2.40
EX10000E	20	10	2.40
EX13000E	26	13	2.40
EX21000E	44	21	4.32
EX32000E	63	32	7.56
EX40000E	78	40	8.00

DR Scenarios

Data Center

Private Cloud

- ExaGrid DR appliances in a customer's 2nd data center

Private Cloud

- ExaGrid DR appliances in a 3rd party hosting/colo facility

Hybrid Cloud

- ExaGrid DR appliances in a 3rd party cloud provider
- Pay by the GB/mo. – OPEX expense

Infrastructure to a Backup App to ExaGrid appliances

Public Cloud

amazon webservices™

Microsoft Azure

- Replicate to Amazon in Q1-2017

- Adaptive deduplication deduplicates and replicates in parallel
- 50:1 WAN bandwidth efficiency
- Bandwidth throttle and WAN encryption for data replication
- Configure the disaster recovery site to all repository to save cost

Stress-free Redundancy and Security

Redundant Hardware

- RAID6 guards against simultaneous disk drive failures
- Redundant power supplies
- NIC teaming

Security

- Optional data encryption at rest
  - FIPS 140-2 compliant / 256-bit AES
  - Occurs at the drive level in nanoseconds
  - Does not impact backup performance
- WAN encryption for secure data transfer

Personal Touch - Maintenance and Support

Phone and Email Support

- Assigned level 2 customer support engineer
- Support staff are subject matter experts in backup applications

Customer Installable and Serviceable

- Self-installable with phone support and WebEx
- Self-serviceable hardware replacements, next business day delivery

All Releases Provided

- Point and full releases – includes all new features
- No license fees to track or renew

Health Status Monitoring

- ExaGrid monitors and notifies

No additional charge – All included in support program

Landing Zone

Scale-Out GRID

World-Class Support

Lowest Cost