

**EXAGRID<sup>®</sup>**

*Intelligent Hyperconverged  
Storage for Backup*

## ExaGrid enables OGD to deliver innovation



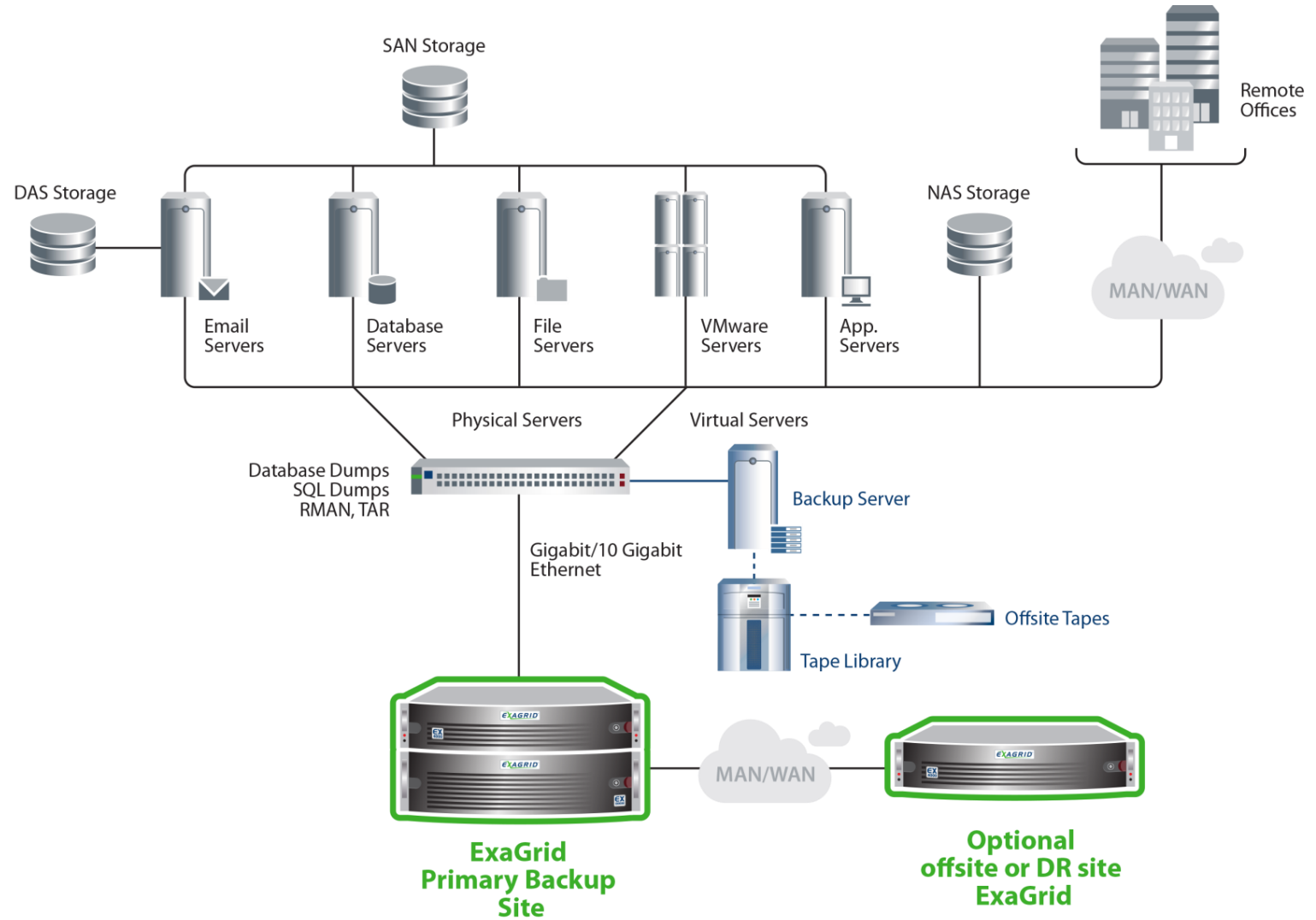
„It enables us to achieve our Gold-level SLA without any complexities”

„The fact that Veeam’s data mover is integrated with the ExaGrid appliance is a massive benefit.

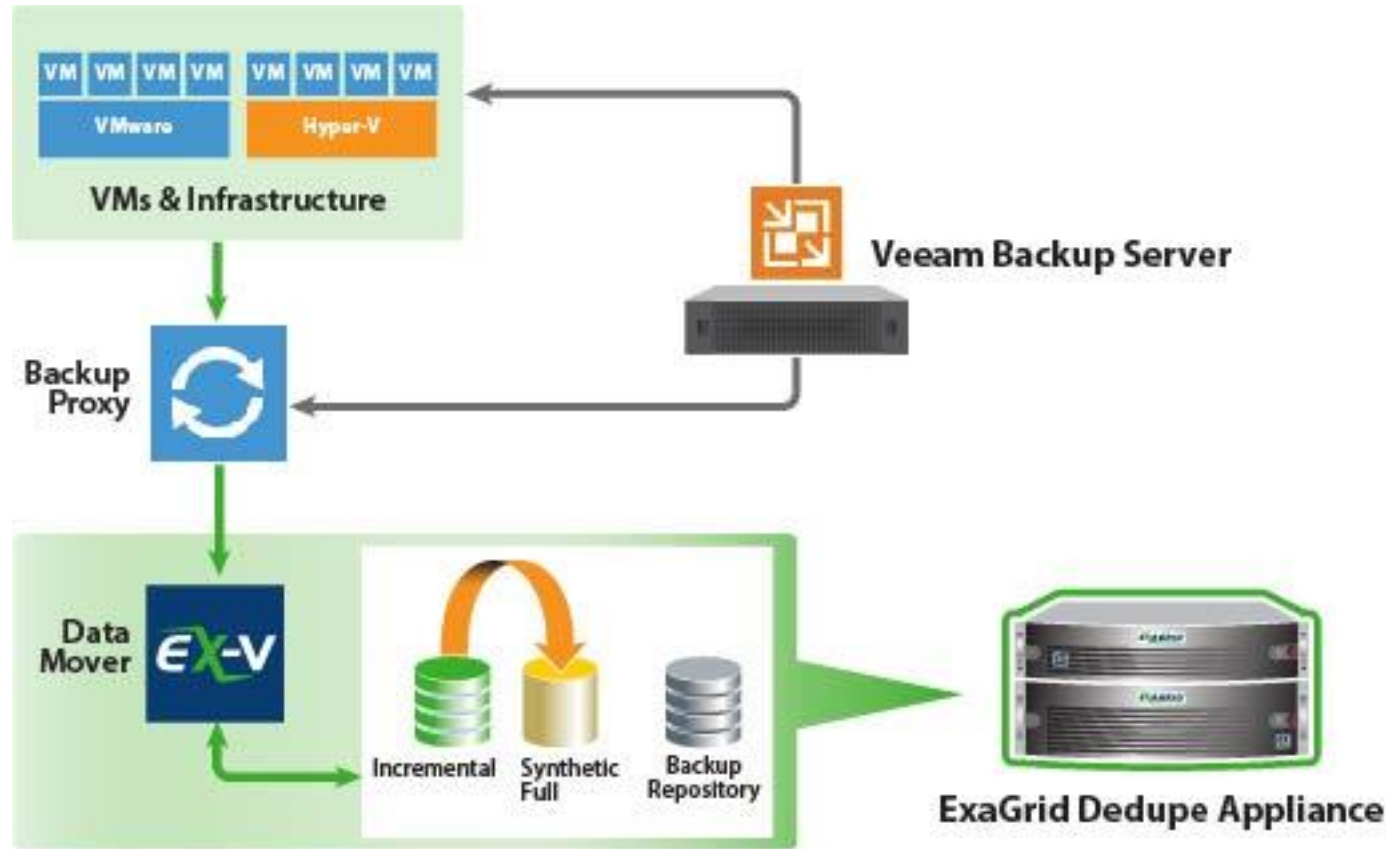
„ Veeam and ExaGrid working together in this way really inspires confidence.”

**Joep Piscaer**  
**CTO Operator Groep Delft**

# ExaGrid – Simple and Flexible



# Integrated Veeam Data Mover – Faster Synthetic Fulls



# About ExaGrid

## ExaGrid

- Largest independent vendor in the space
- Gartner Magic Quadrant “Visionary”
- Net Promoter Score of +73

## 100% focused on disk-based backup

- Highly differentiated architecture
- Winner of the most industry awards

## Large customer base

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



Gartner



2019 SVC AWARDS



# Achievements of Distinction

## Gartner Magic Quadrant

ExaGrid named sole **“Visionary”** in Magic Quadrant for Deduplication Backup Target Appliances

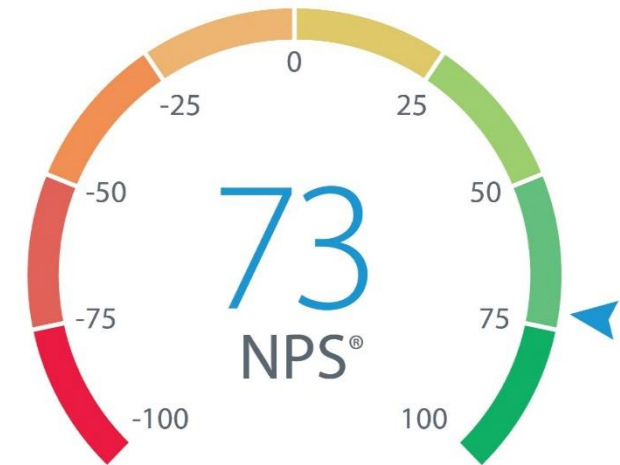
Figure 1. Magic Quadrant for Deduplication Backup Target Appliances



Source: Gartner (September 2015)

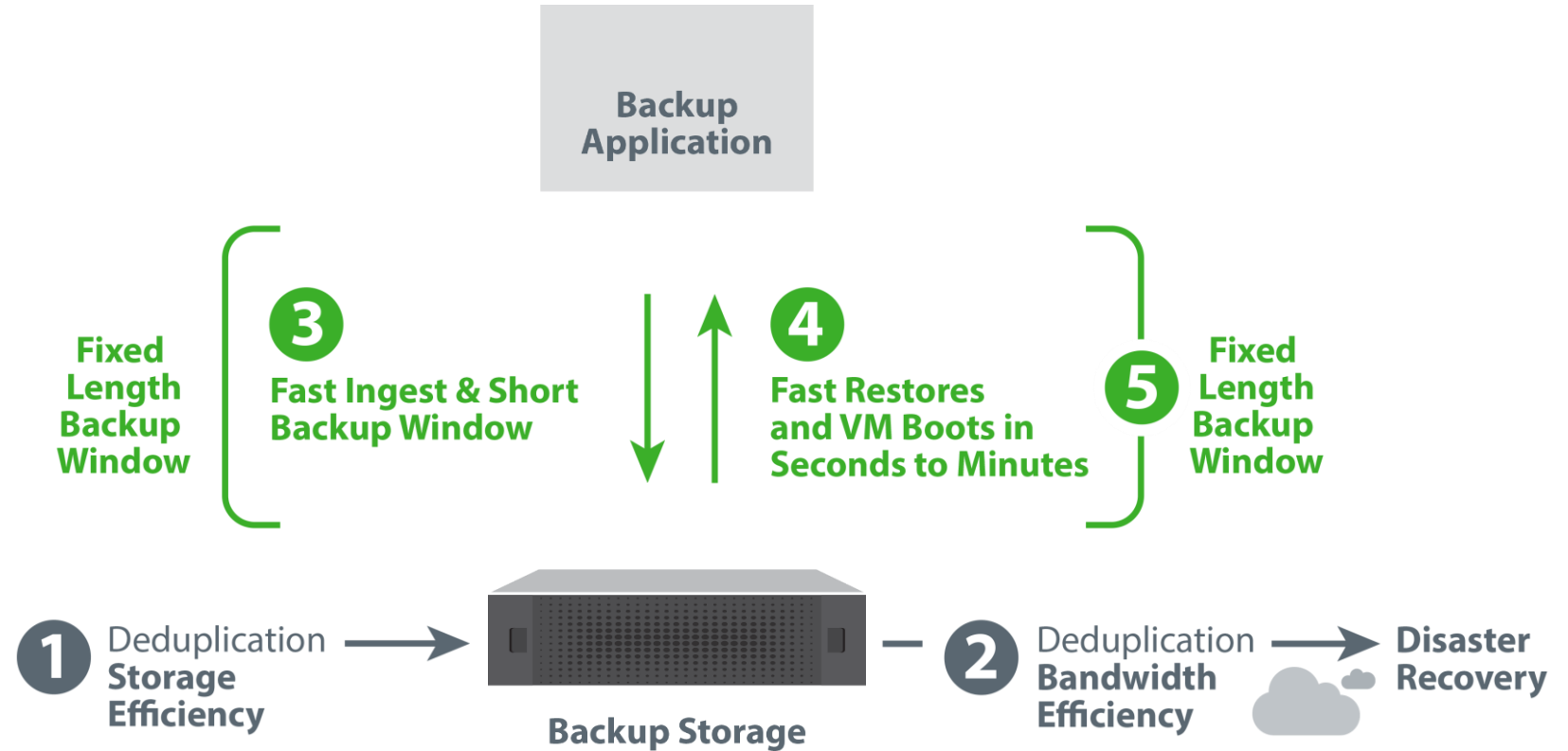
## Net Promoter Score +73

ExaGrid earned Net Promoter Score of **+73** on scale of -100 to +100; Categorized by NPS as **“Excellent”**



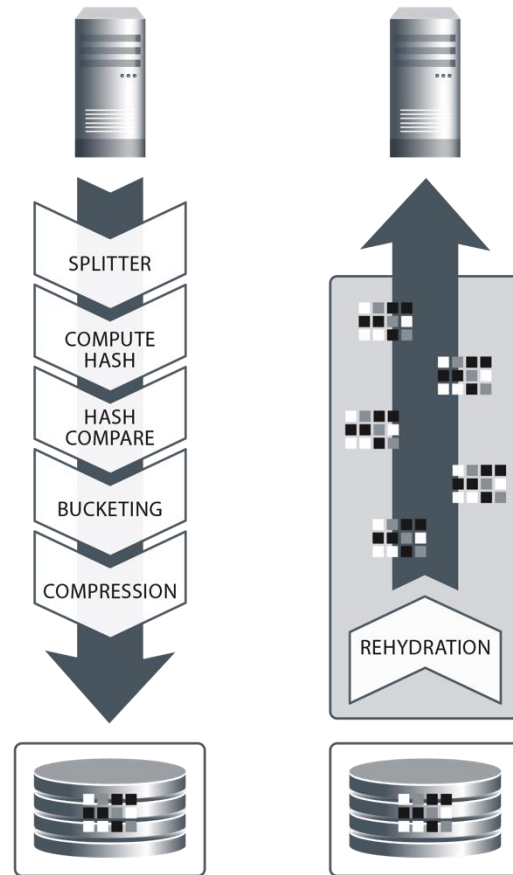
Customers give ExaGrid NPS score of **+73**

# 5 Considerations for Intelligent Hyperconverged Storage for Backup with Deduplication



# 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

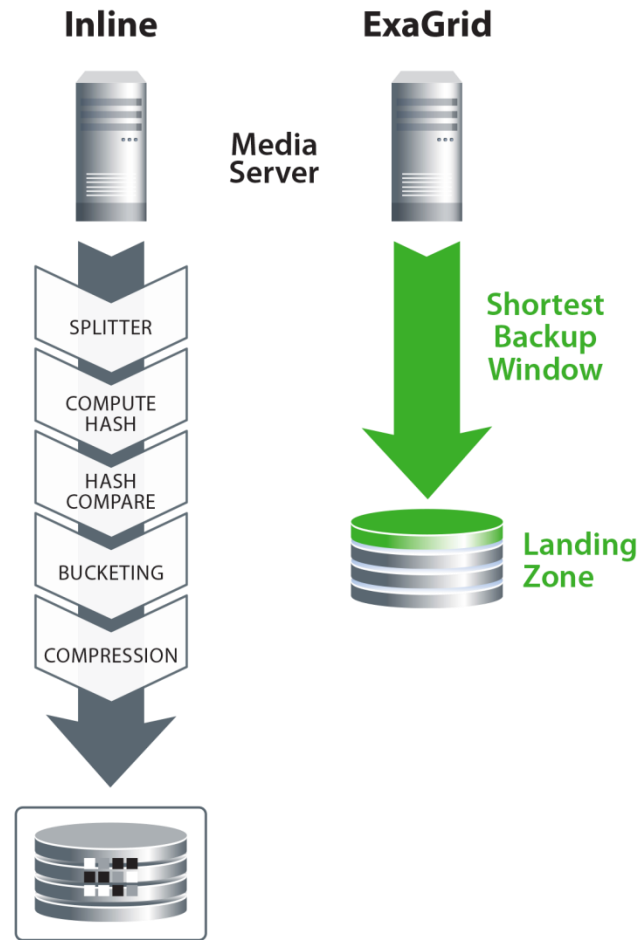
- Slow restores, VM boots, and tape copies

## 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



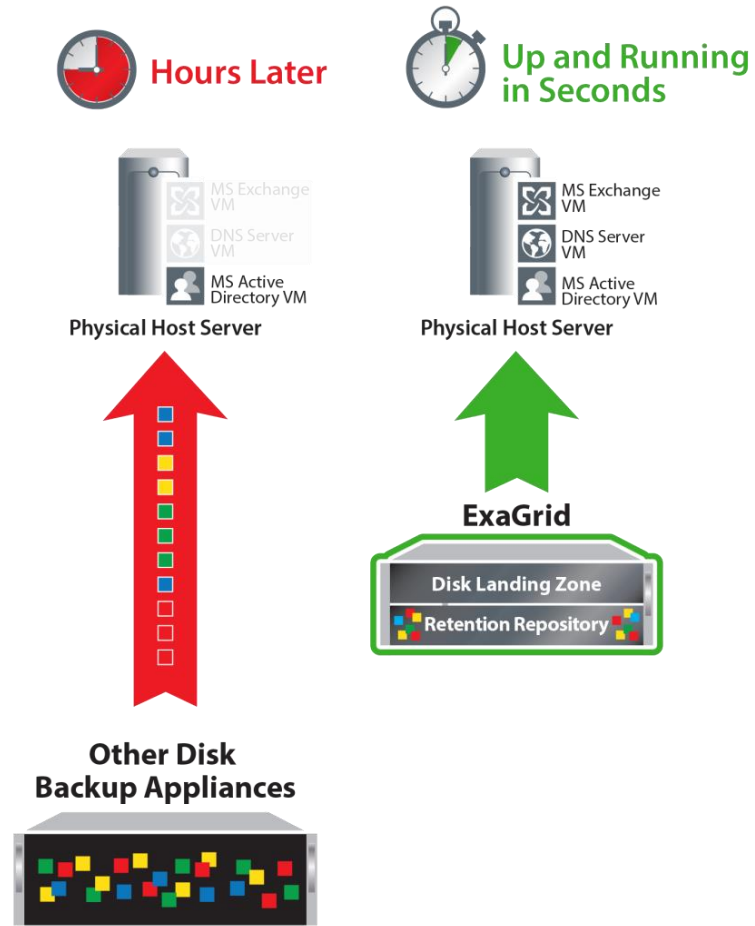
## Unique / integrated landing zone

- 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

# Fast Restores, VM Boots in Seconds to Minutes



## Unique / integrated landing zone

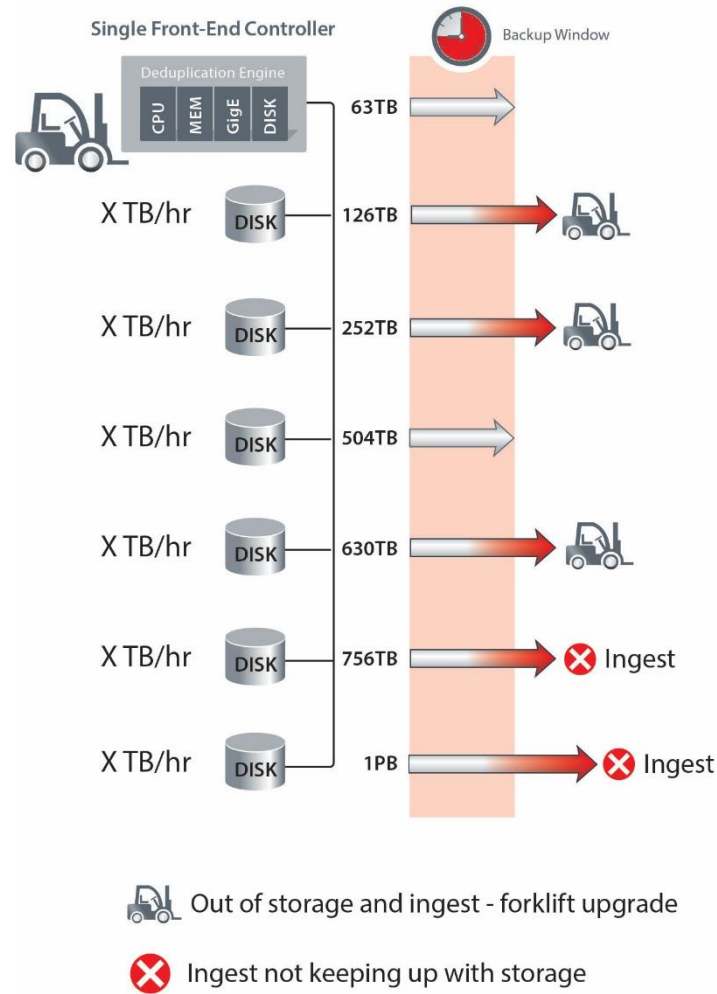
- Most recent backups are in unduplicated form
- Eliminates data rehydration

## Benefits

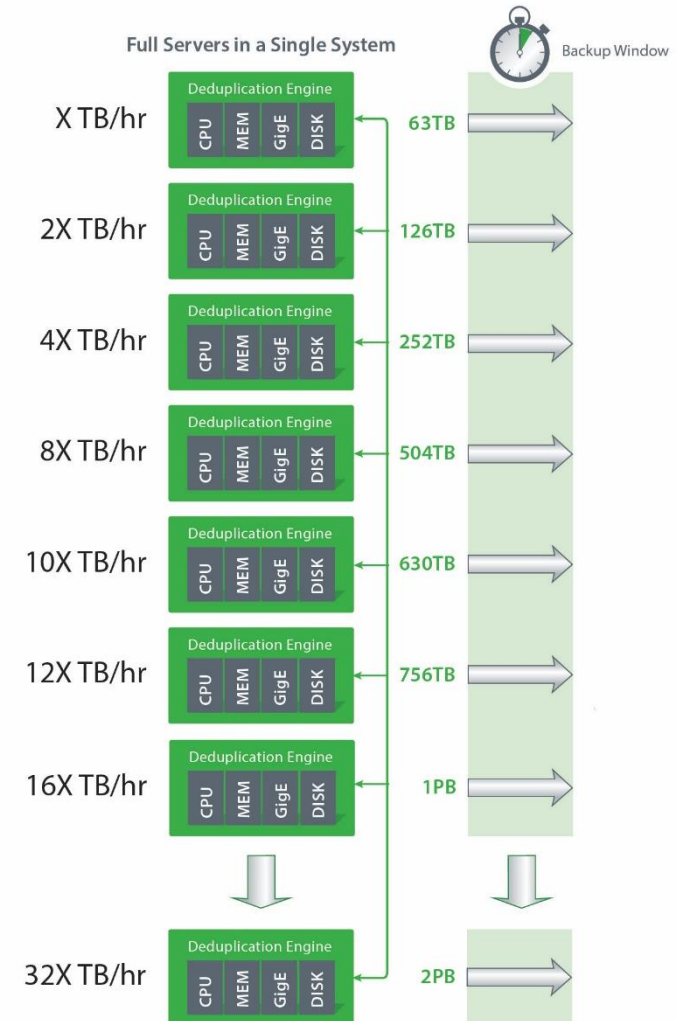
- Restores as fast as disk
- Tape copies as fast as disk
- VM boots in seconds to minutes

# Fixed Length Backup Window

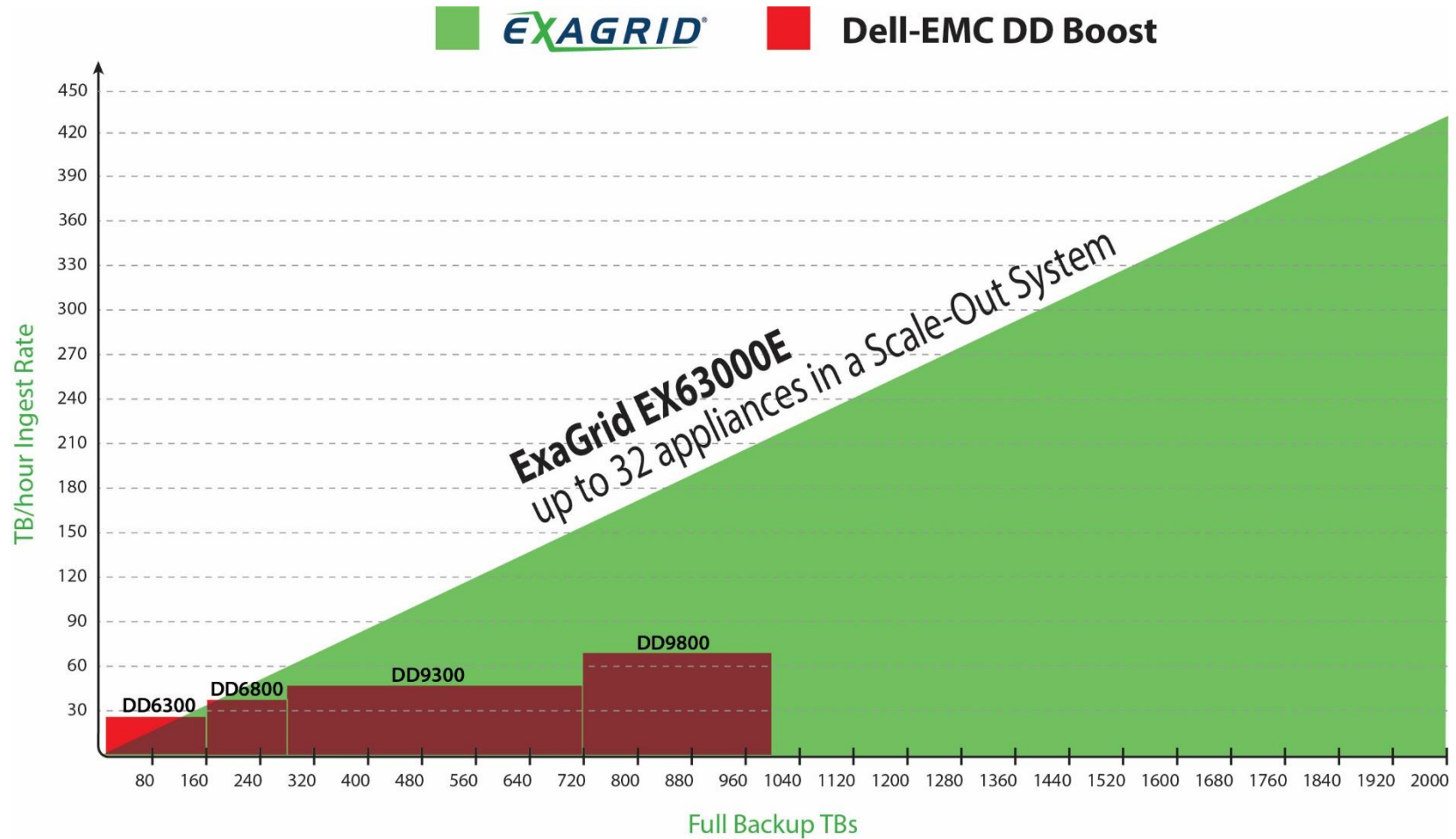
## Scale-Up Architecture



## ExaGrid Scale-Out Architecture



# Ingest Performance of Scale-Out vs. Scale-Up



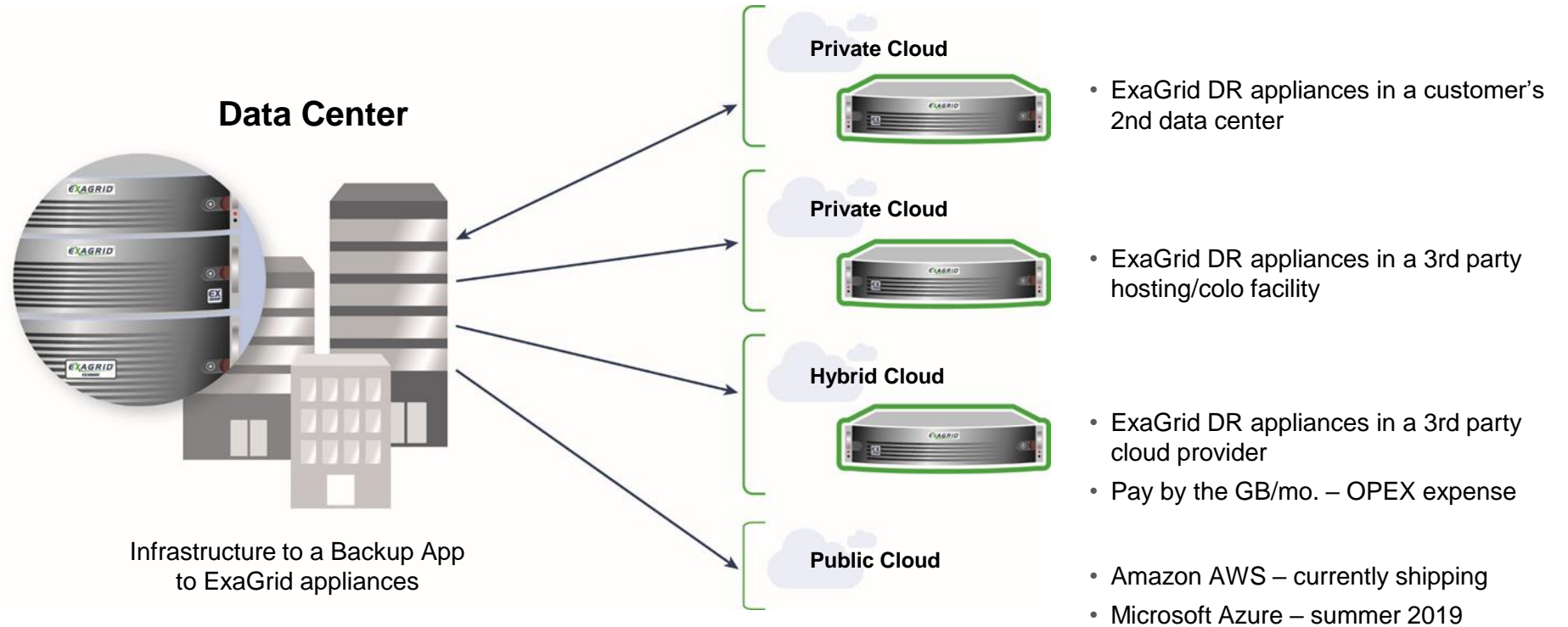
Capacity is based on a full backup with 12 copies of retention (combination of weekly, monthly, and yearly)

# ExaGrid Appliances in a Scale-out System

32 Appliances in a Single System – 2PB Full Backup

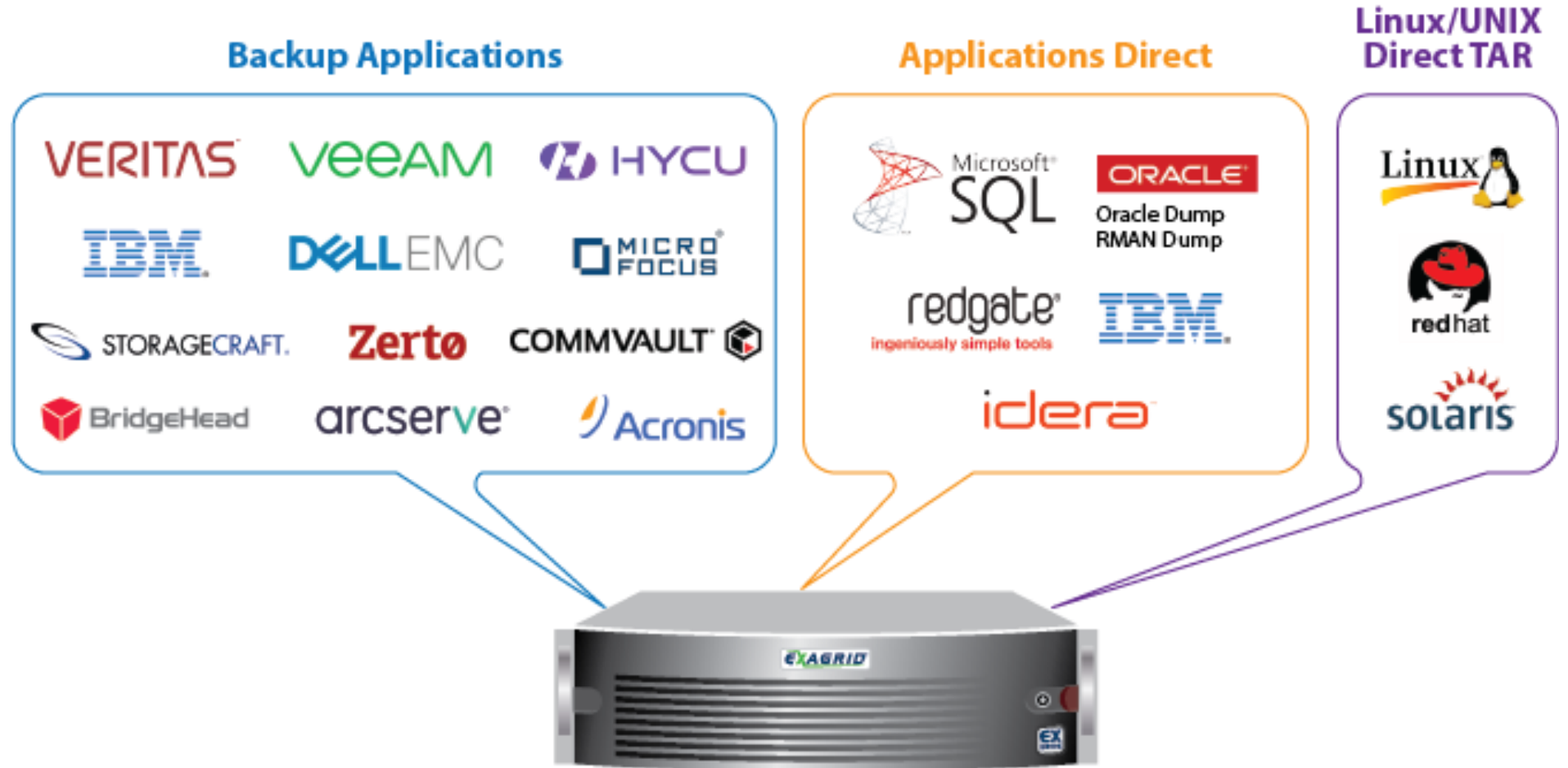
ExaGrid Model	Usable Capacity (TB)	Capacity for Weekly Full (TB)	Max Backup Thruput (TB/hr)
EX3000	6	3	0.72
EX5000	10	5	1.08
EX7000	14	7	2.40
EX10000E	20	10	2.40
EX13000E	28	13	2.40
EX21000E	42	21	4.32
EX32000E	66	32	7.56
EX40000E	78	40	8.00
EX63000E	126	63	13.50

# DR Scenarios



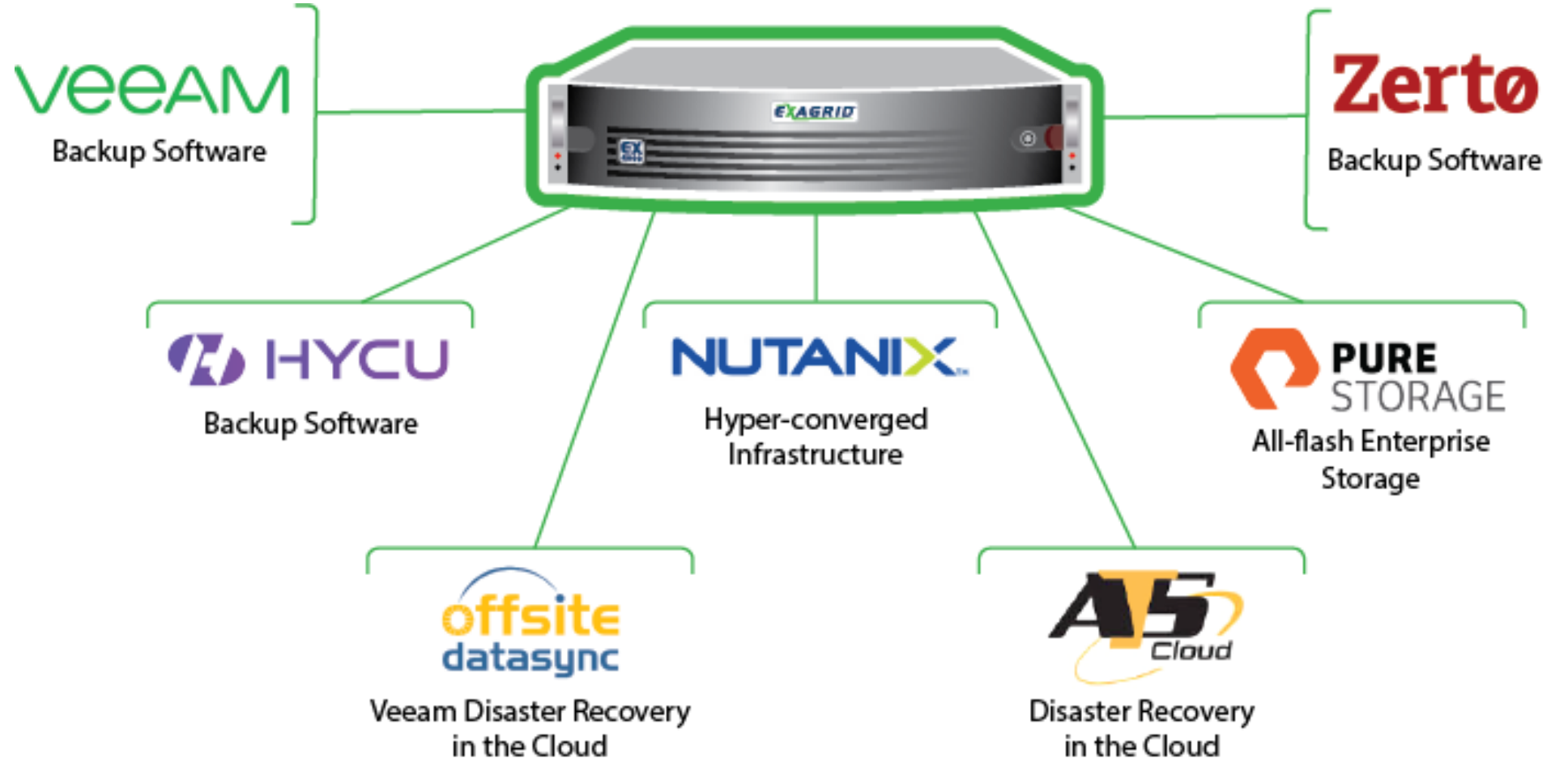
- Adaptive deduplication deduplicates and replicates in parallel
- 50:1 WAN bandwidth efficiency
- Bandwidth throttle and WAN encryption for data replication
- Configure the disaster recovery site to all repository to save cost

# Works with Industry Leading Backup Applications Heterogeneous Environments





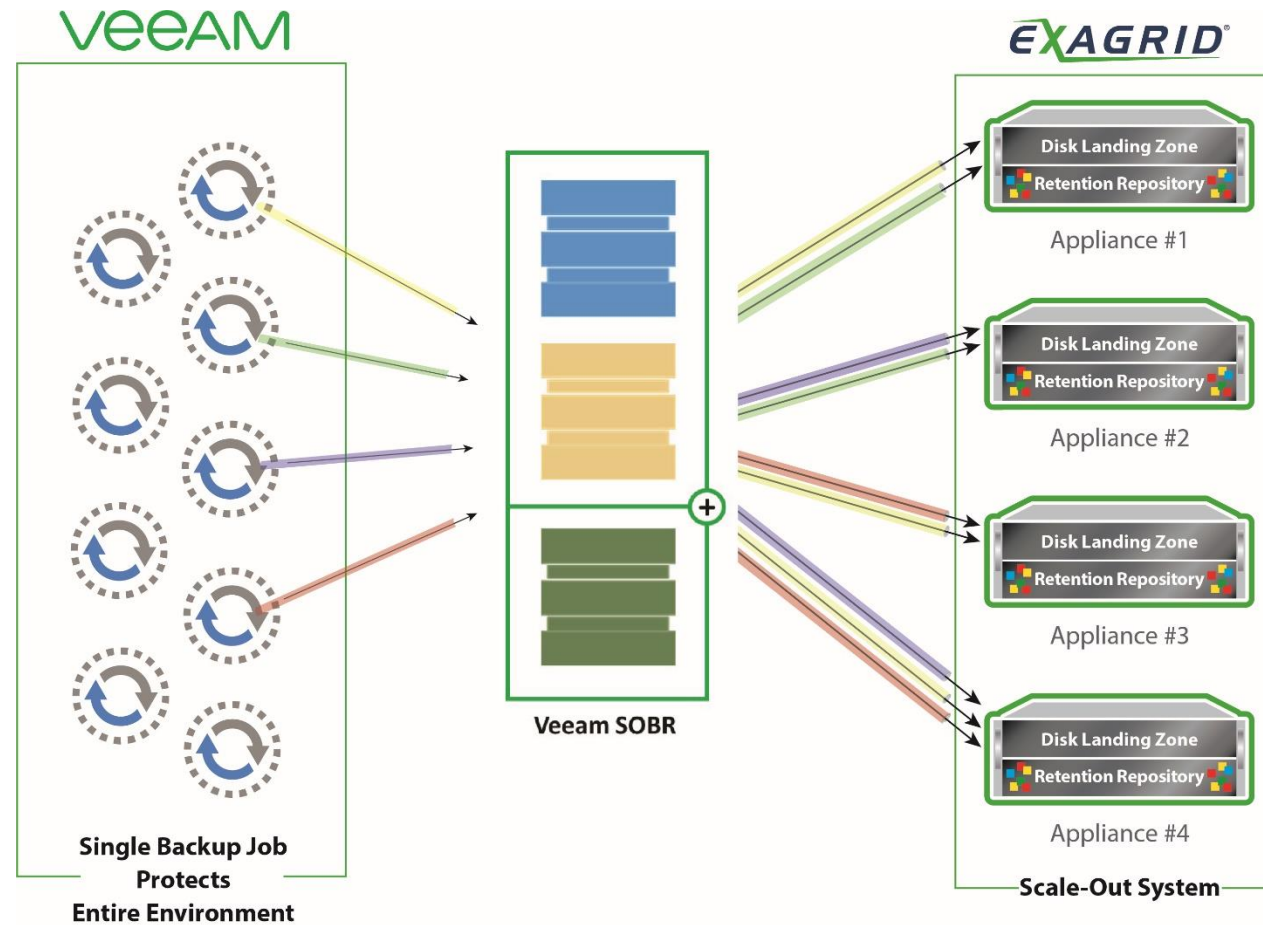
# ExaGrid – Ecosystem Partners





# End-to-End Scale-Out Backup with ExaGrid and Veeam

## Support of Veeam Unlimited Scale-Out Backup Repository (SOBR)



- Automated job management
- Future-proof scalability with data growth – simply add another appliance
- Capacity load balancing
- Superior performance – SOBR optimizes backup streams
- 2PB full backup in a single system
- Failure tolerance – automated job redirect

# Redundancy and Security

## Redundant Hardware

- RAID6 with a hot spare drive 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

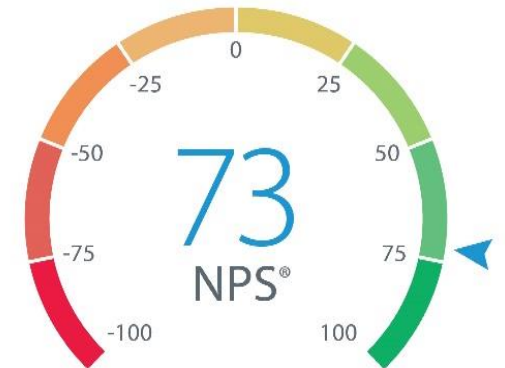
## All Releases Provided

- 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**



Customers give ExaGrid  
NPS score of +73



# EXAGRID®



*Thank You!*