



## **ExaGrid – skuteczna deduplikacja i odporność na ransomware**

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# About ExaGrid

## Company Highlights

- 100% focused on backup storage
- Shipping for over 15 years
- Largest independent vendor in the space
- Only Tiered Backup Storage approach
- High Net Promoter Score of +81
- Winner of the most industry awards

## Large customer base

- Over 4,000 customers - worldwide
- Appliances certified in over 132 countries
- Installed in 80+ countries
- In-theater customer support worldwide
- 300+ published customer success stories



# Backup Storage Requirements

## Inline Deduplication Appliances

**WAN Savings**  
Data Deduplication

**Storage Savings**  
Data Deduplication

## Standard Disk Storage HDD or SSD

**Fast as disk restores – user SLA**  
Avoid data rehydration

**Backups as Fast as Disk**  
Avoid inline data deduplication

## ExaGrid Tiered Backup Storage

**Fixed Length Backup Window**  
Scale-out architecture – linear scaling

**Ransomware Recovery**  
Non-network-facing tier storage

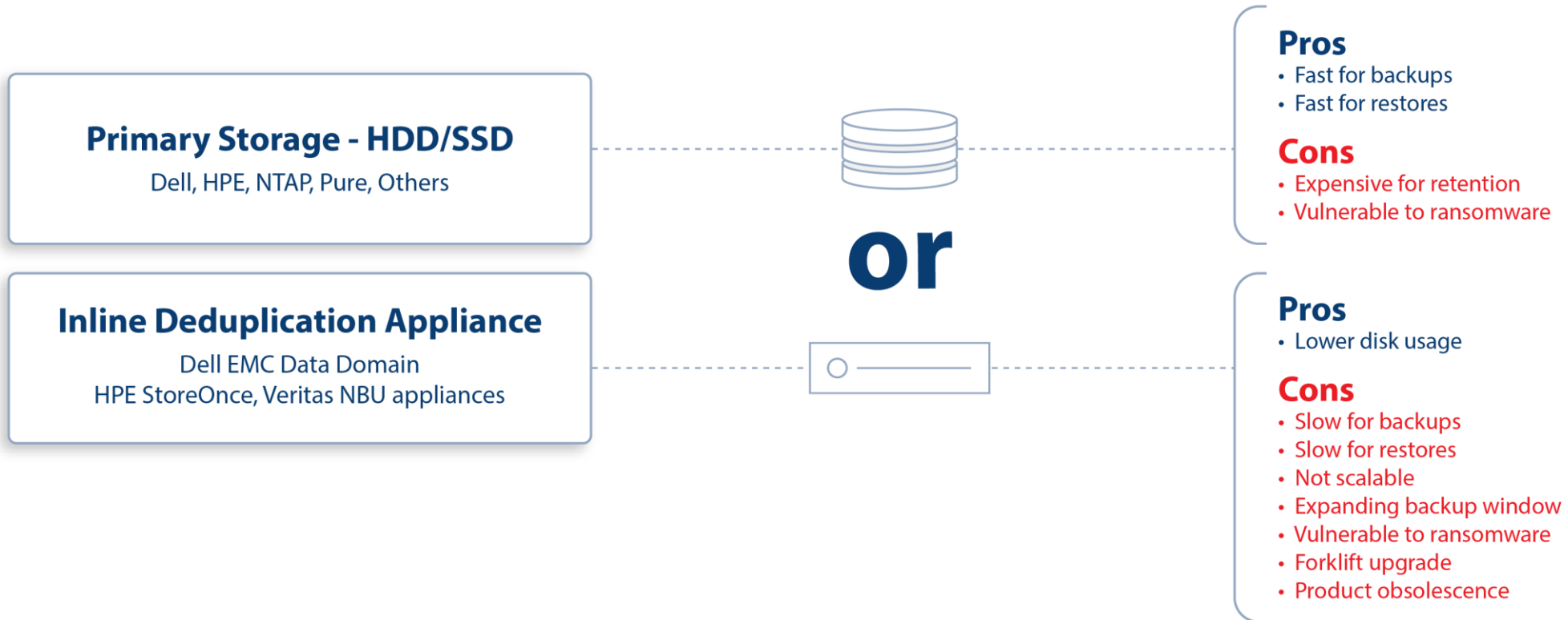
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**WAN Savings**  
Data Deduplication

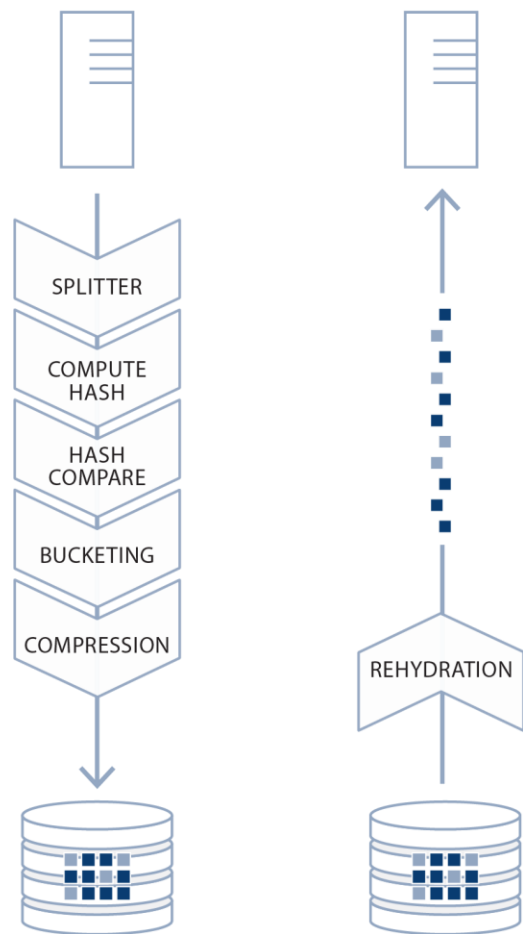
**Storage Savings**  
Data Deduplication

# Legacy Backup Storage Options



# Backup Application Inline Deduplication to Disk

## Inline Solution



## Inline deduplication in the media server

- Slower ingest
- Longer backup window
- Can only deduplicate native backup data

## All data is stored in deduplicated form

- Slow restores, VM boots, and tape copies

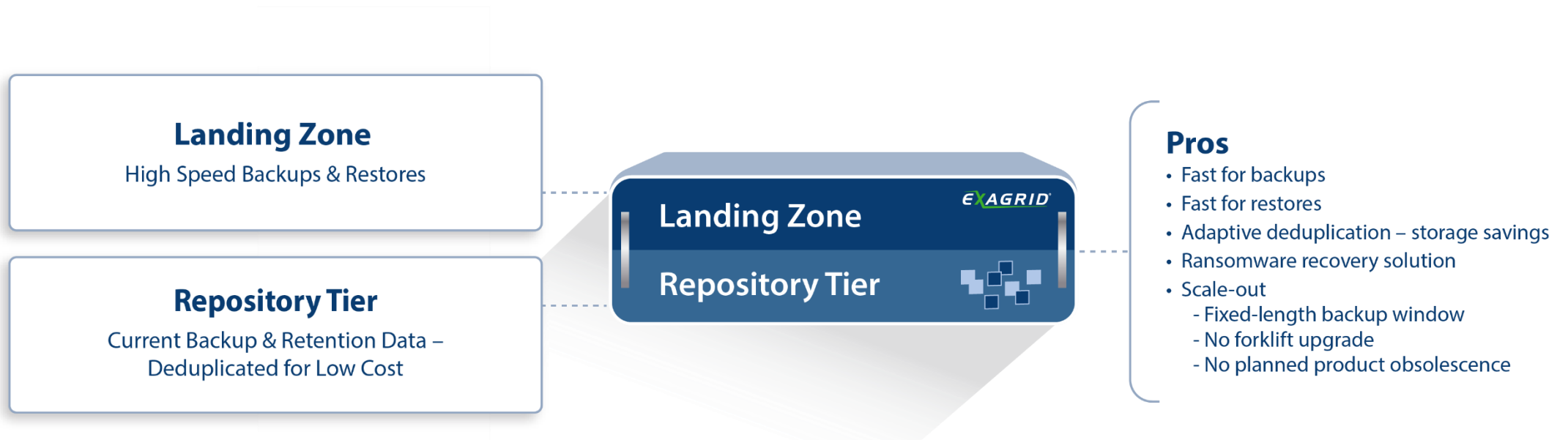
## Deduplication ratios are low

- Uses more disk than target appliances
- Uses more bandwidth to replicate

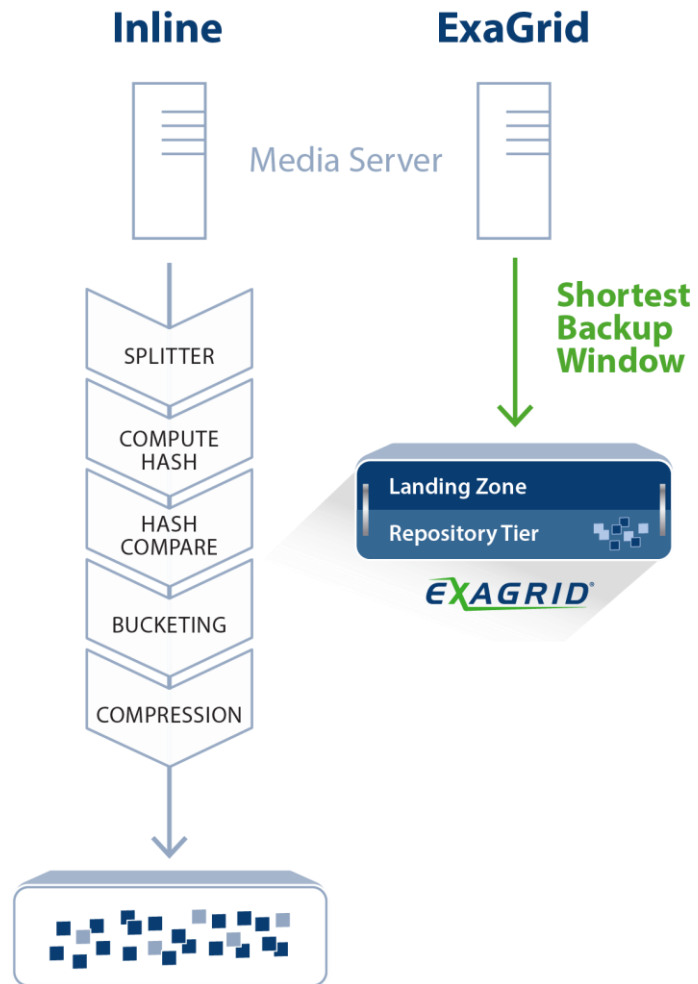
## Limited scalability

- Backup window grows as data grows

# The Best of Both Worlds: ExaGrid Tiered Backup Storage



# ExaGrid: Fastest Backups & Shortest Backup Window



## Disk-cache Landing Zone

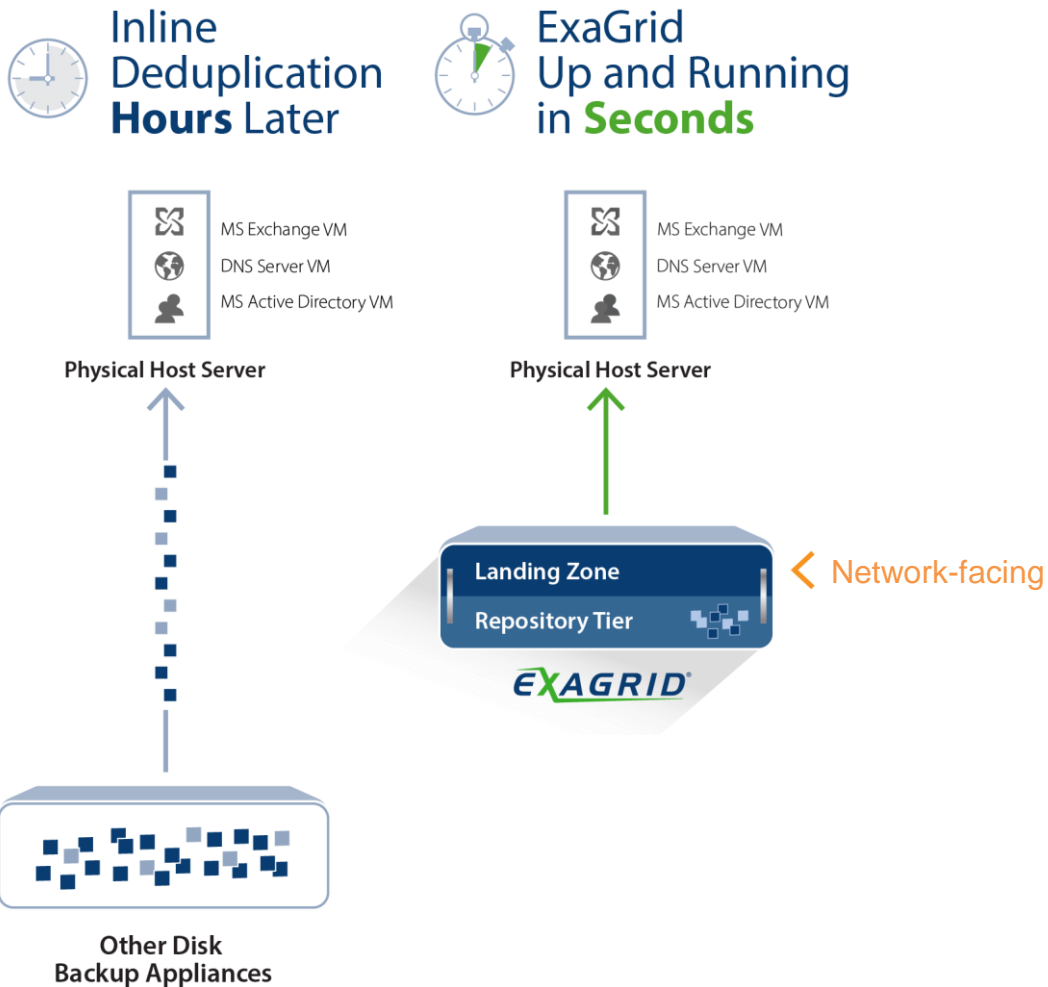
- Write backups directly to disk
- Avoid compute-intensive deduplication
- Adaptive Deduplication

## Benefits

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



# Fast Restores, VM Boots in Seconds to Minutes



## Disk-cache Landing Zone

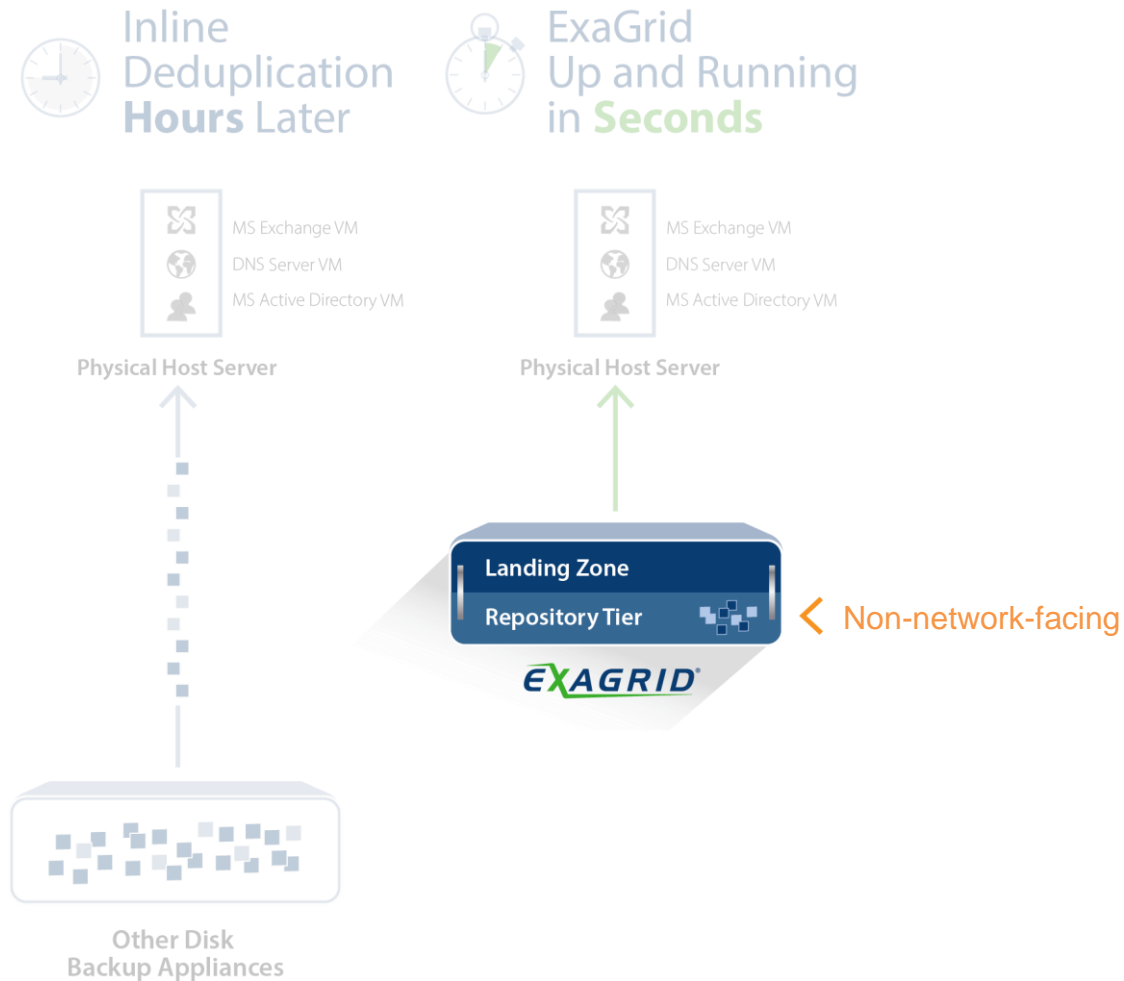
- Most recent backups are in unduplicated form
- Eliminates data rehydration
- ExaGrid's unique approach resynthesizes Veeam Fast Clone synthetic fulls for the fastest restores

## Benefits

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



# Non-network-facing Repository Tier



## Second Repository Tier

- Long-term retention
- Deduplicated data

## Benefits

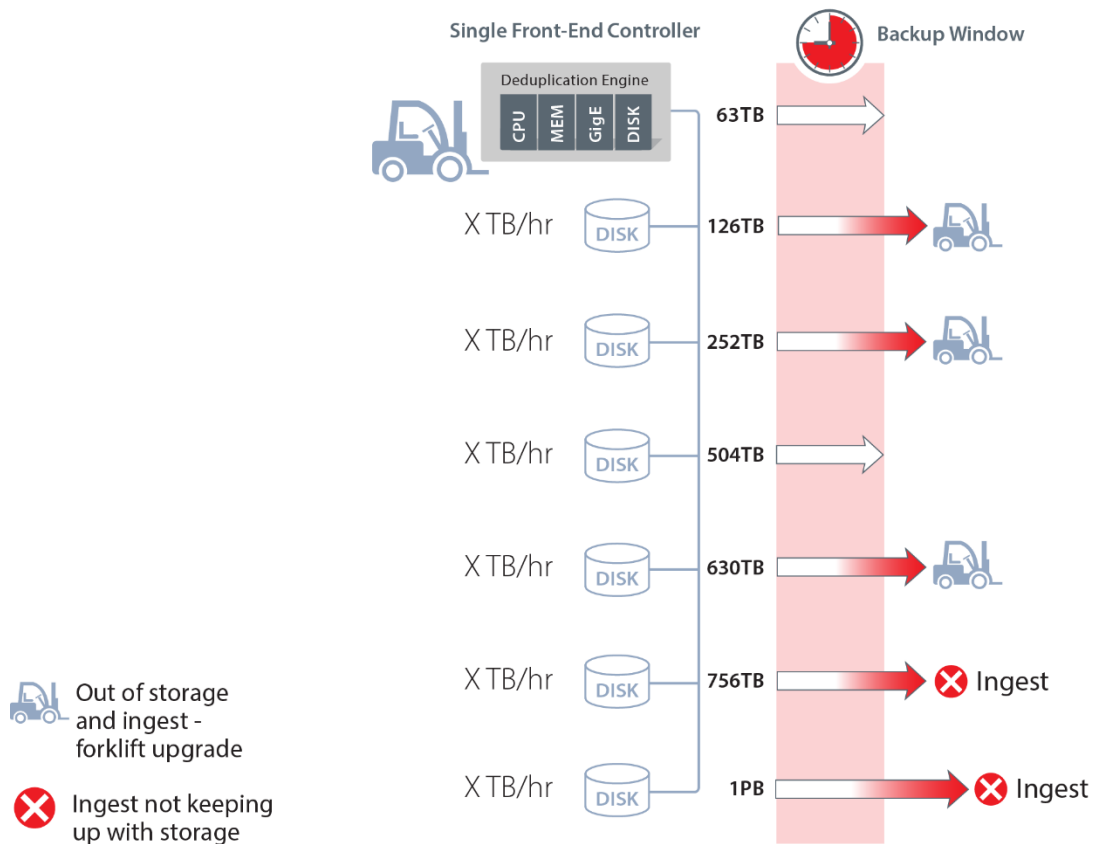
- Low-cost long-term storage
- Ready for ransomware recovery
  - Non-network-facing tier
  - Immutable objects
  - Delayed deletes
  - Alert on deletes over set threshold

# ExaGrid Scalability – Scale-out

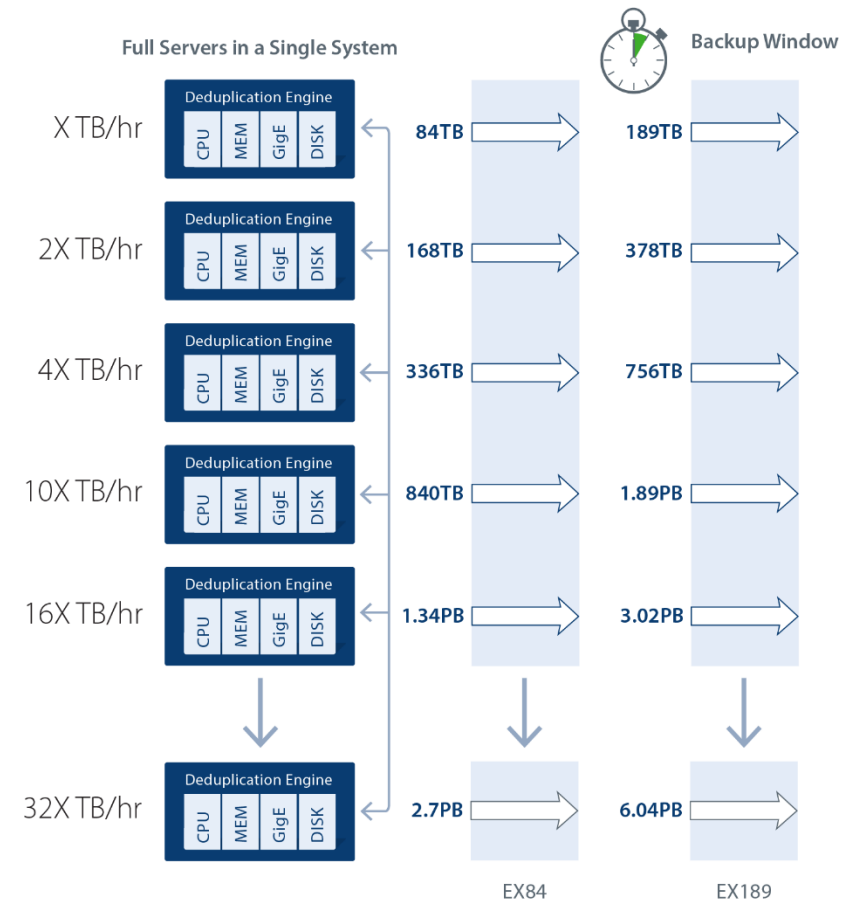


# Fixed-Length Backup Window

## Scale-Up Architecture



## ExaGrid Scale-Out Architecture



# ExaGrid Appliances in a Scale-out System

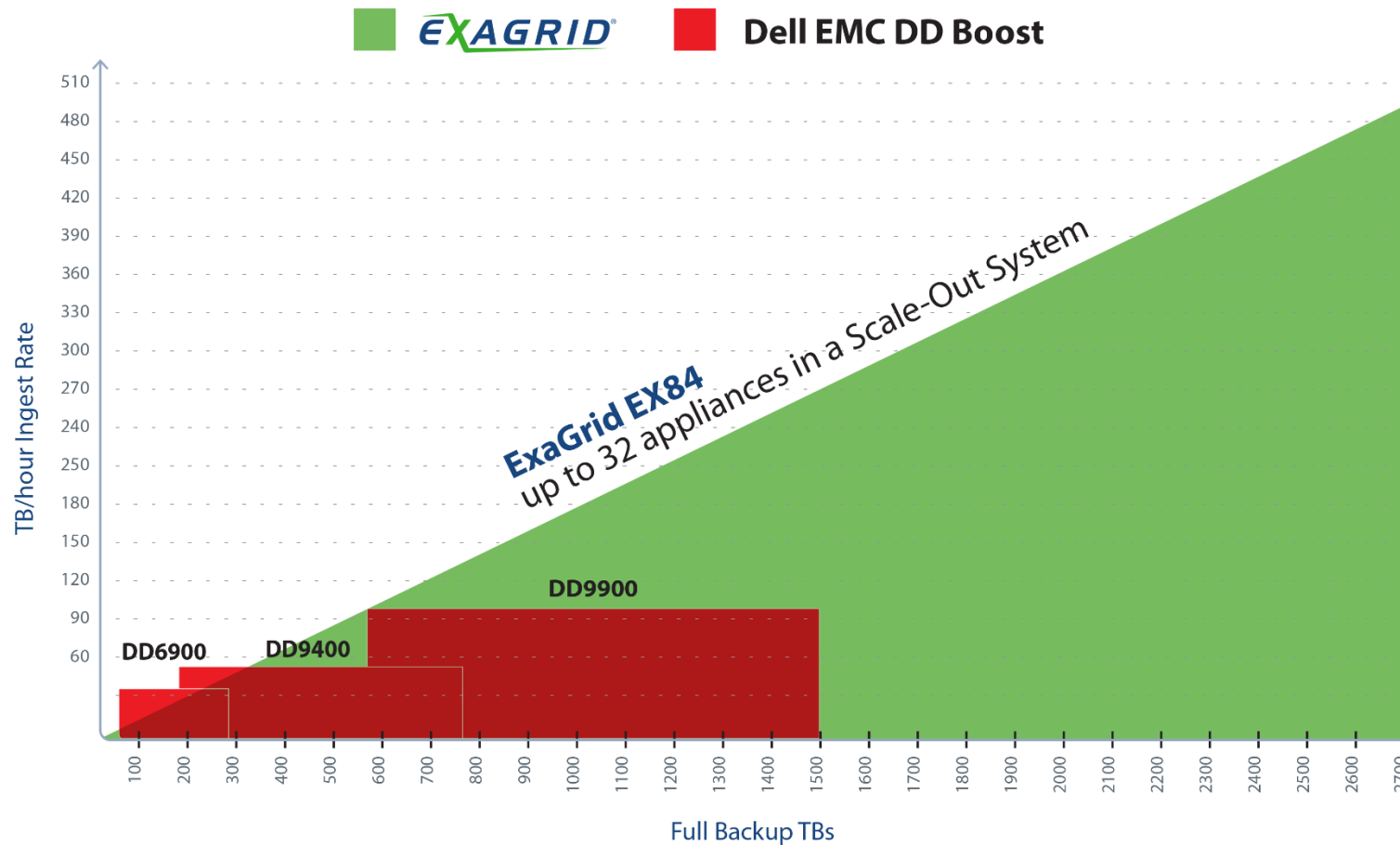
## 32 Appliances in a Single System – 6PB Full Backup

ExaGrid Model	Raw Capacity (TB)	Usable Capacity (TB)	Capacity for Weekly Full (TB)	Max Backup Thruput (TB/hr)	Form Factor	Optional Encryption At Rest SEC
ExaGrid Appliances						
EX27	72	54	27	6.09	2U	√
EX36	96	72	36	7.78	2U	√
EX54	162	108	54	10.87	2U	√
EX84	192	168	84	15.25	2U	√
EX189	432	378	189	16.14	2U	√

In addition, ExaGrid offers these appliances to accommodate larger organizations that have smaller data center locations worldwide:

ExaGrid Model	Raw Capacity (TB)	Usable Capacity (TB)	Capacity for Weekly Full (TB)	Max Backup Thruput (TB/hr)	Form Factor	Optional Encryption At Rest SEC
ExaGrid Appliances for larger accounts with smaller data center locations						
EX10	32	20	10	2.40	2U	√
EX18	48	36	18	3.60	2U	√

# 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)

# Works with Industry Leading Backup Applications Heterogeneous Environments

## Backup Applications



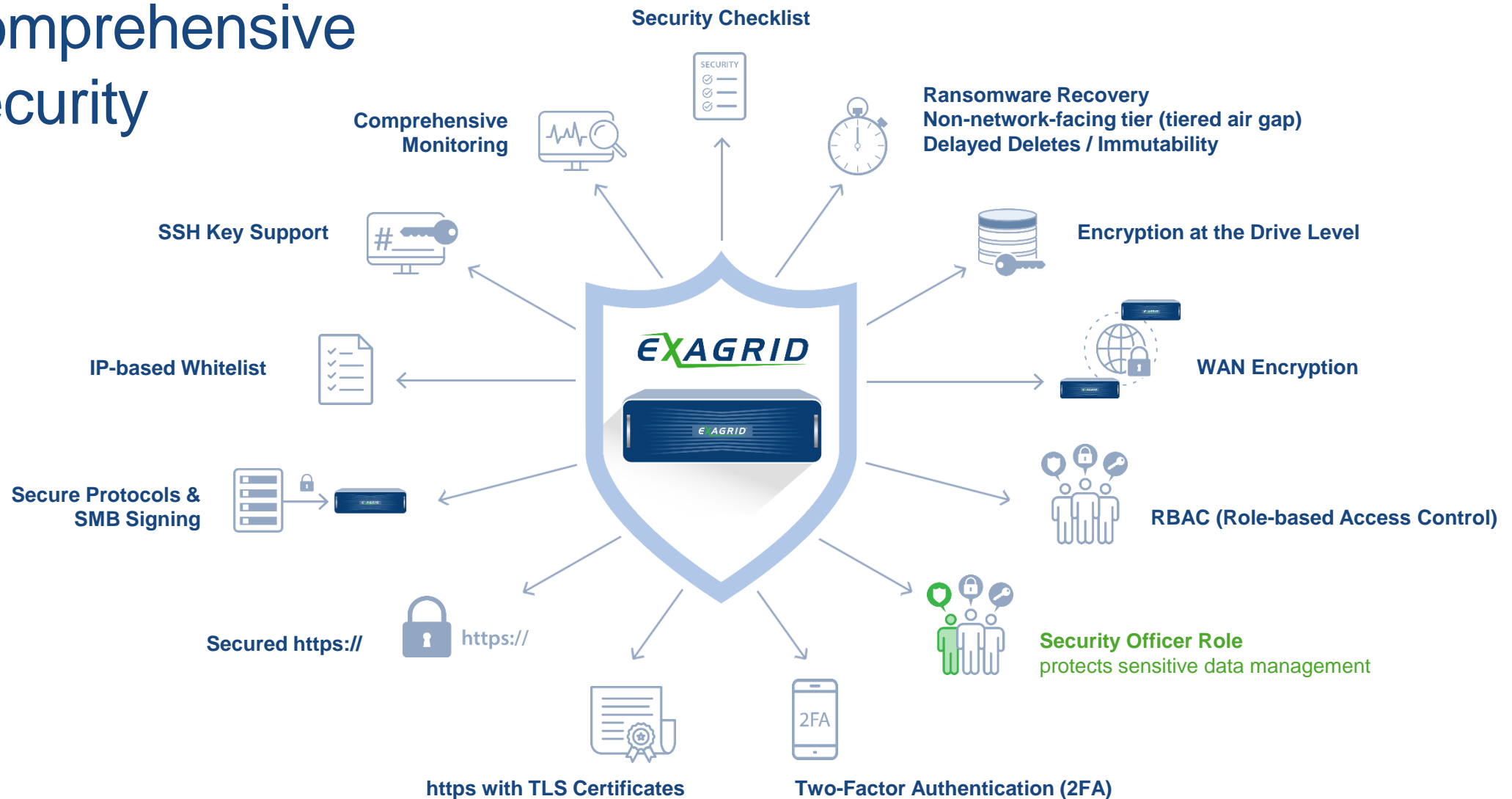
## Applications Direct



## Linux/UNIX Direct TAR



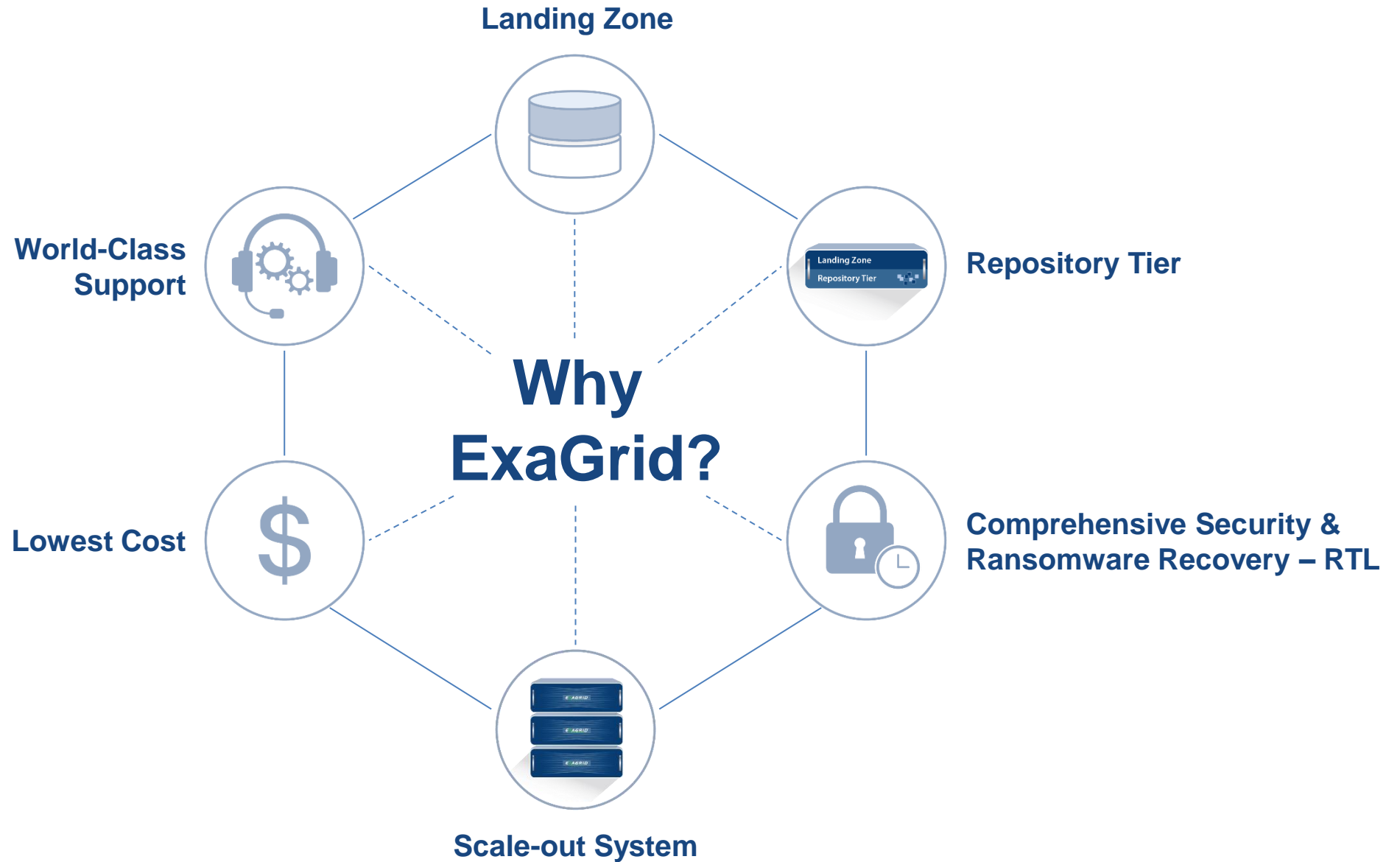
# Comprehensive Security





# Fixing the Economics of Backup

	Legacy Economics		EXAGRID®
<b>Price Protection</b>	Sell at a low price and then raise the price on future purchases		ExaGrid fixes the price for all future purchases – price protection
<b>Maintenance \$</b>	Sell one year support and then hike the price in year two and beyond		ExaGrid limits the increase to 3% per year
<b>Maintenance %</b>	Maintenance is a % of list price regardless of hardware cost		ExaGrid's maintenance is a % of the hardware price you pay
<b>Forklift Upgrades</b>	Front-end controller architecture requires replacement to grow		ExaGrid appliances have all resources, add to scale-out system and grow
<b>Guesswork</b>	Need to plan out data growth to try and buy the right front-end controller		ExaGrid allows for appliances to be added to a scale-out system
<b>Obsolescence</b>	Products constantly discontinued and high maintenance costs charged		ExaGrid allows the mix and match of any age or size model
<b>Hidden Costs</b>	Pay for installation, full versions, replication, HW replace		ExaGrid includes installation, full versions, replication, HW replace



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