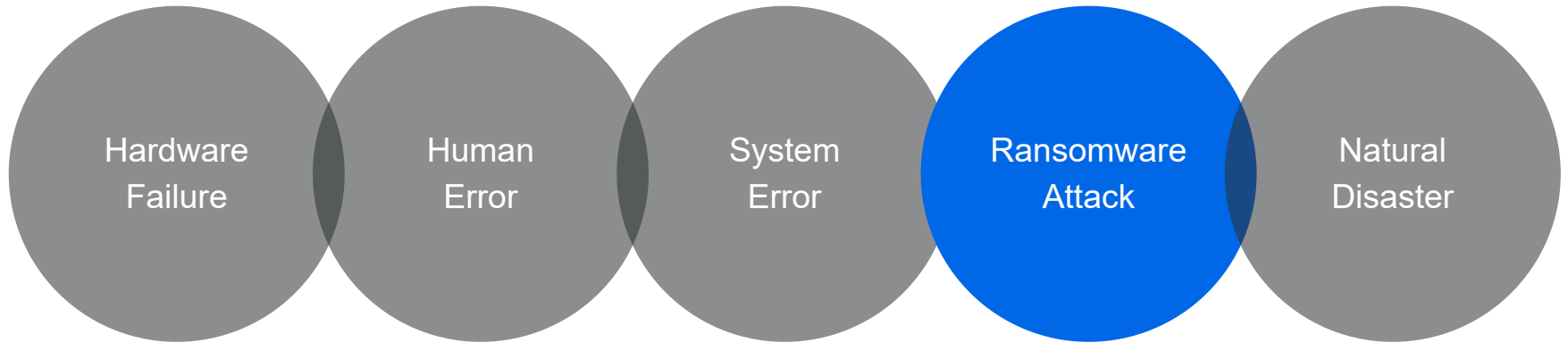


Ensuring Business Continuity with Efficient, Always- Recoverable Data Protection

Sales Manager

Chih Hsi Hu

Causes of data loss



Damage from ransomware attack

How Often

19 attacks

in a every second

How much

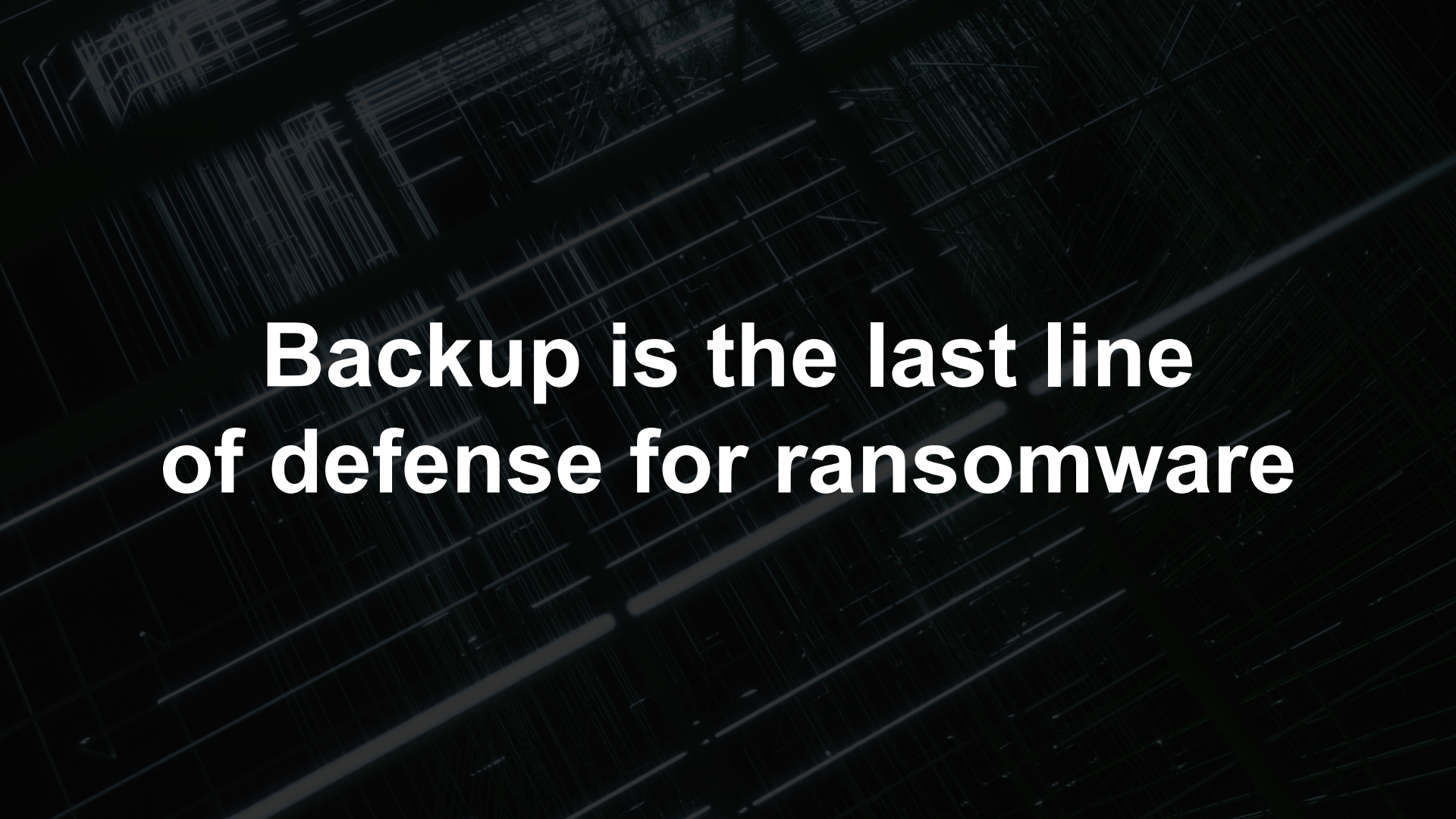
\$10 billion

from ransomware attack

How critical

75% of SMB

survive a week or less

The background is a dark, textured surface with a grid of glowing lines. The lines are primarily horizontal and vertical, with some diagonal lines intersecting them. The lines have a soft, glowing effect, giving the impression of a digital or technological environment. The overall color palette is dark, with the glowing lines providing the main source of light and contrast.

**Backup is the last line
of defense for ransomware**

~~“Better backup than sorry”~~

~~“Better backup than sorry”~~

**Master how ransomware works
for an effective backup
preparation**

The ideal backup against ransomware



Efficient

The ideal backup against ransomware

Efficient

- The data can be backed-up efficiently with multiple recovery points
- All the data must be fully preserved, including image files, configuration, documents, etc and be restored at one time

The ideal backup against ransomware

A dark, high-contrast photograph of a server rack. The rack is filled with multiple rows of server units. A white circle is drawn around a specific section of the rack, highlighting a set of drives. The word "Verifiable" is written in white text inside this circle.

Verifiable

The ideal backup against ransomware

Verifiable

- Ensuring the data backed up into the system is both intact and complete
- Data can be verified for retrieval, and regular restoration drills are conducted

The ideal backup against ransomware

A dark, atmospheric photograph of a server room. In the center, a server rack is visible, filled with numerous drive bays. A white circle is drawn around a specific section of the rack, and the word "Secure" is written in white text inside this circle. The background is dark, with some faint green and yellow lights visible on the server units, suggesting a secure and monitored environment.

Secure

The ideal backup against ransomware

Secure

- Isolate against any threats and ensure data immutability
- Safely stored remotely, providing multiple layers of data protection

Compliant for Data Protection



ISO 27001:2022, Control 8.13

1. Outline clear and concise restoration procedures that cover all relevant critical systems and services.
2. **Produce workable copies of any systems, data or applications** that are covered under a backup job.
3. **Meet the unique commercial and operational requirements of the organisation** (e.g. recovery time objectives, backup types, backup frequency) (see Control 5.30).
4. **Store backups in an appropriate location that is environmentally protected, physically distinct from the source data** in order to prevent total data loss, and securely accessed for maintenance purposes (see Control 8.1).
5. **Mandate for regular testing of backup jobs**, in order to guarantee data availability should the need arise to restore files, systems or applications at a moment's notice. **Backup tests should be measured against the organisation's agreed recovery times**.....
6. Encrypt data that has been backed up, in accordance with its risk level.
7. **Check for data loss before running any backup jobs.**
8.

The Best Data Protection Solution

Efficient



Verifiable



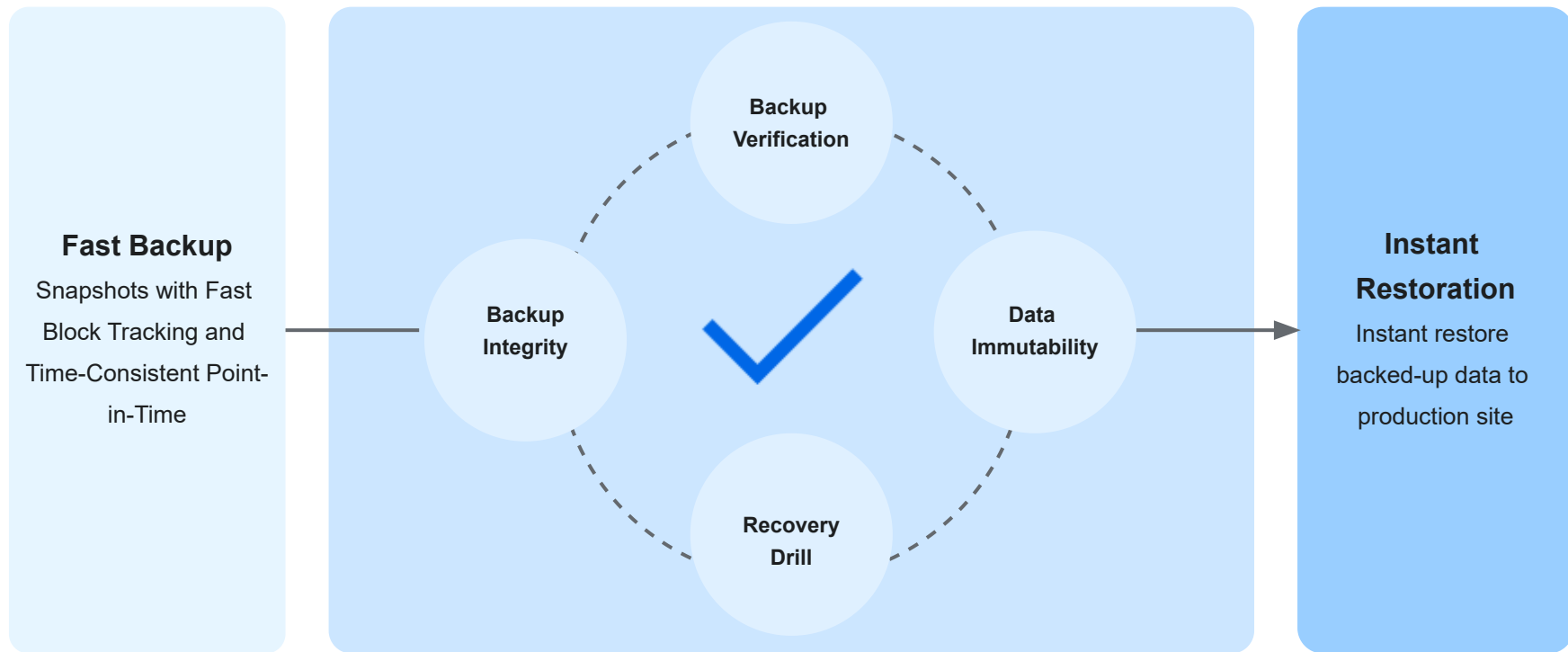
Secure





Synology helps data protection with
Efficient, Verifiable, Secure

The best practice for data protection



The best practice for data protection



Centralized & Comprehensive Data Protection

SaaS



Google Workspace

Virtual Machine



vmware®

Physical Server



Synology®

PC/Mac



File Server/NAS

NUTANIX™

NetApp

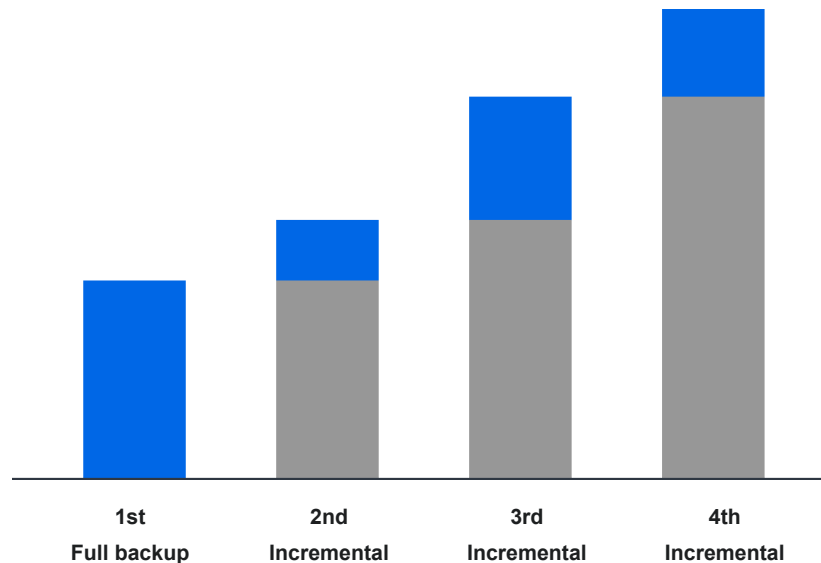
Generic
File server
(SMB, rSync)



Active Backup Suite

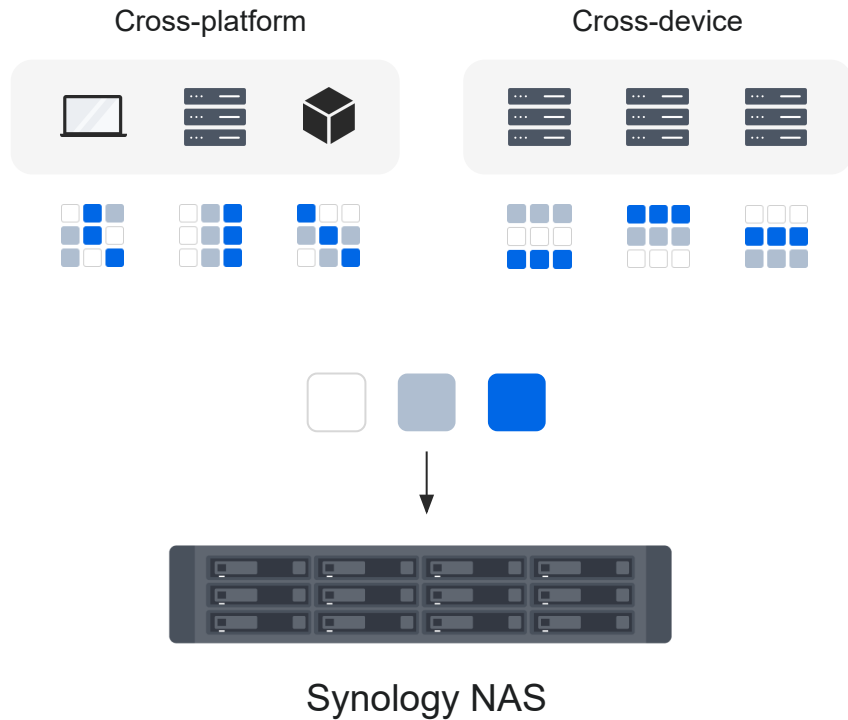
Fast Backup

- Full system/Service Backup
- Incremental backup
 - Rapidly detect and backup only modified data
 - Reduced data transfer size leads to faster backup completion



Maximize Backup Storage Usage

- Save backup storage usage
 - Globally data deduplication
 - Compression of data and files

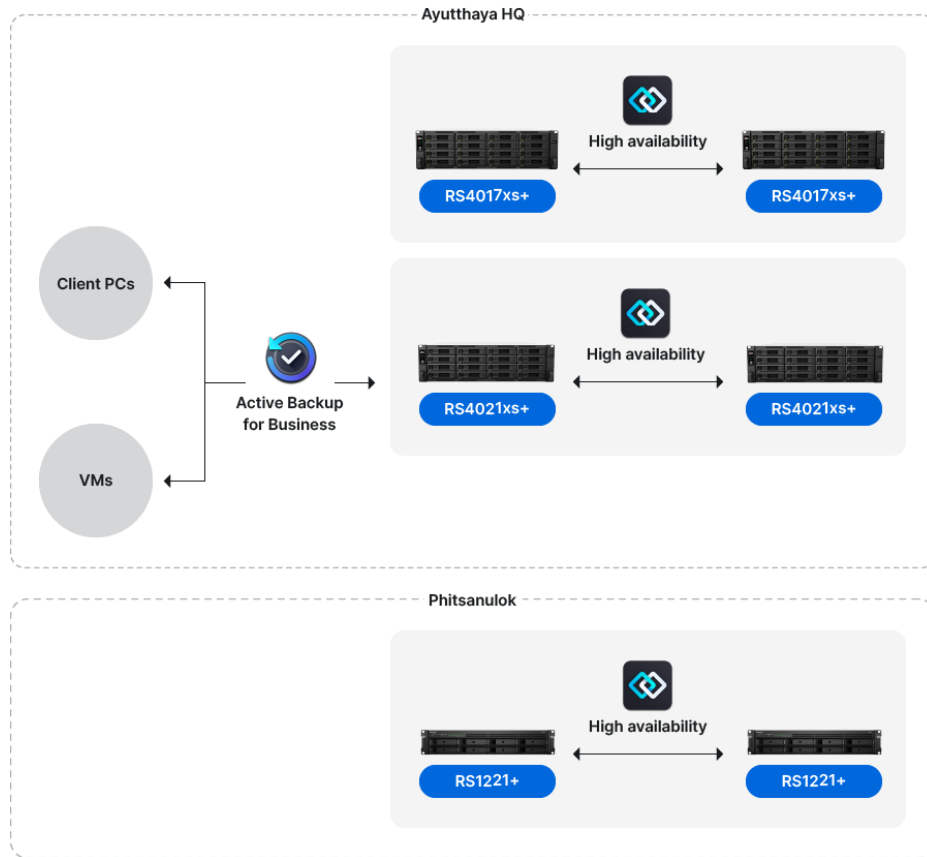




Subsidiary to NH Foods Japan, Thai Nippon Foods specializes in production, logistics, and distribution of fresh meats, processed foods, and marine products for both the export and domestic markets.

Challenge

- Previously attacked by ransomware which led to server failure and disrupted plant operations.
- Seeking a secure, reliable server to minimize downtime and swiftly restore PCs/VMs for seamless business continuity.





"Synology's data protection suite supports fast local backup and recovery, while Synology High Availability ensures our business and production systems can keep running uninterrupted in case of unexpected events."

Overall

backup speed improvement

20%

for data deduplication



*“Synology solutions have helped us **save €21,000 annually and our backup speeds have improved 15 times**. The reliable units are all we need to safely back up all 3,000 of our Microsoft 365 accounts,.....”*

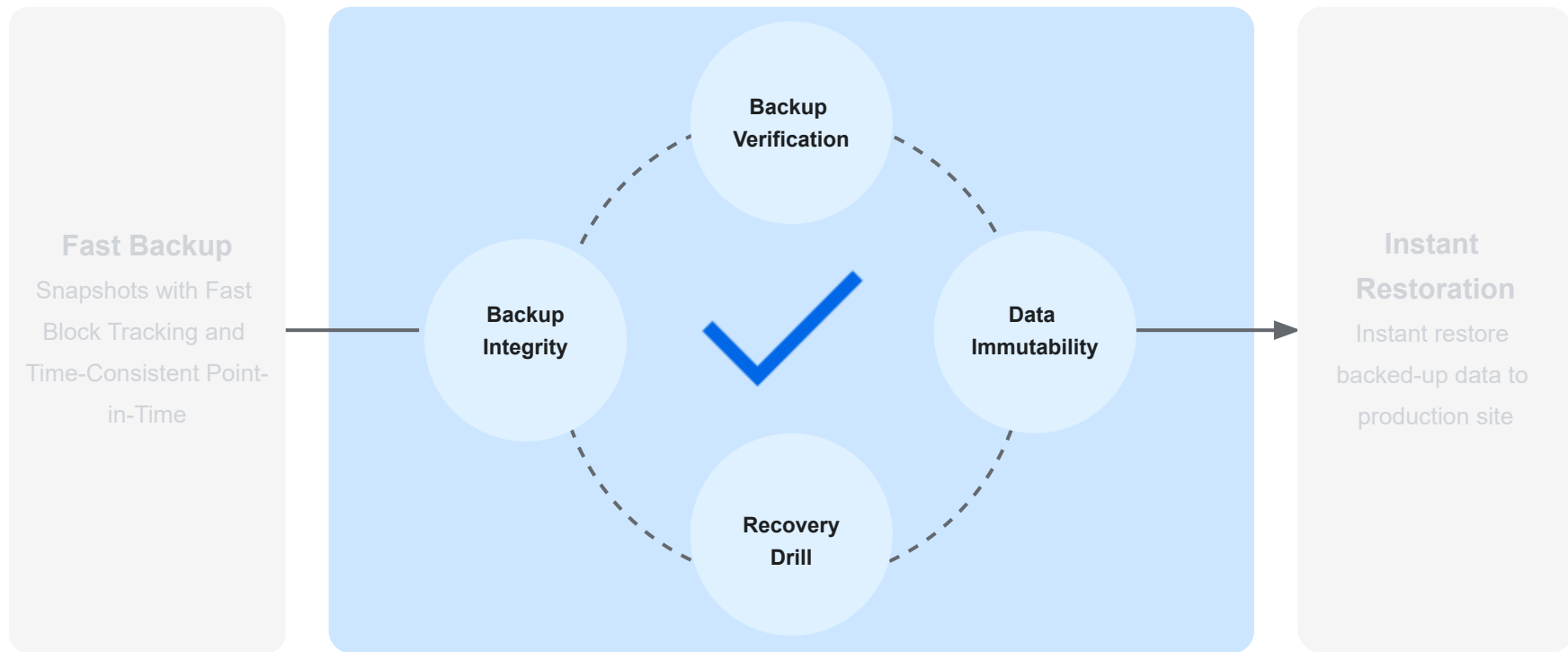
16x

backup speed improvement

€21,000

cost saving annually

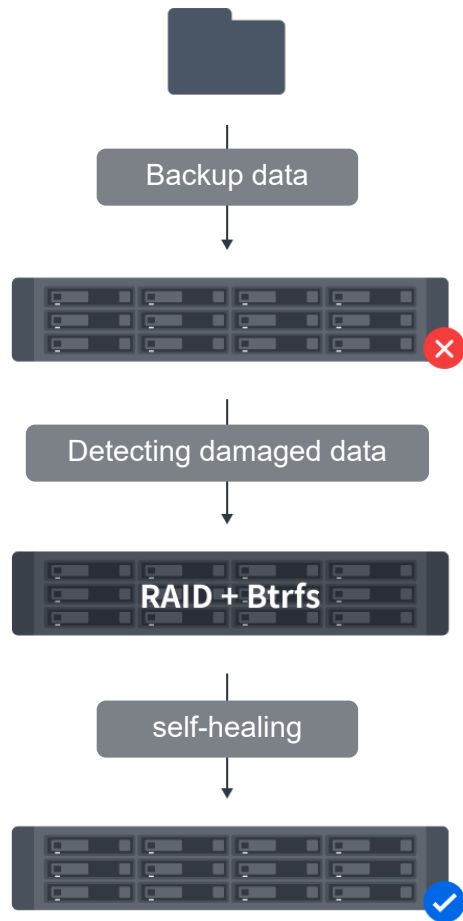
The best practice for data protection



Backup Integrity

Self-healing

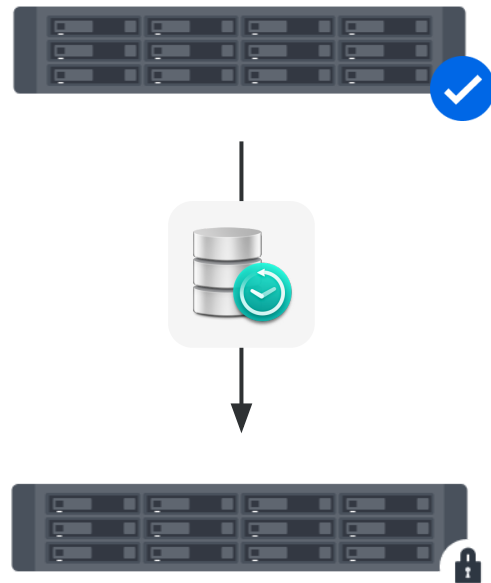
- Btrfs checksum with RAID
- Restore damaged files through self-healing functionality



Data Immutability

Non-erasable format

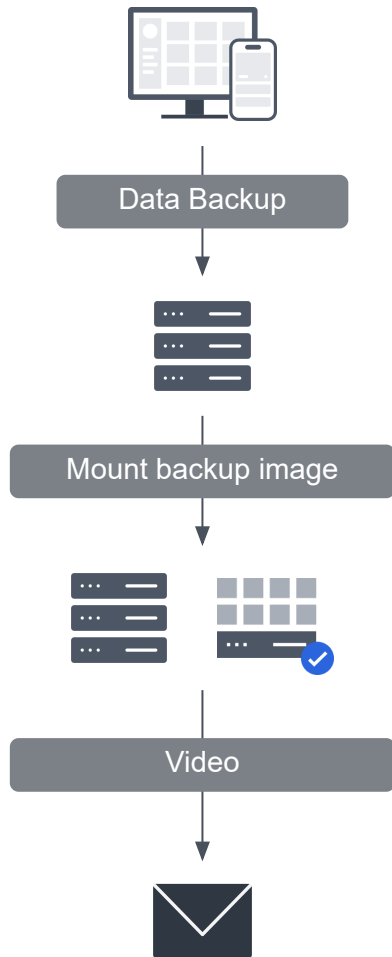
By Snapshot Replication, the "Immutable Snapshots" feature allows for the secure storage of immutable copies of data.



Backup Verification

Automatic Verification

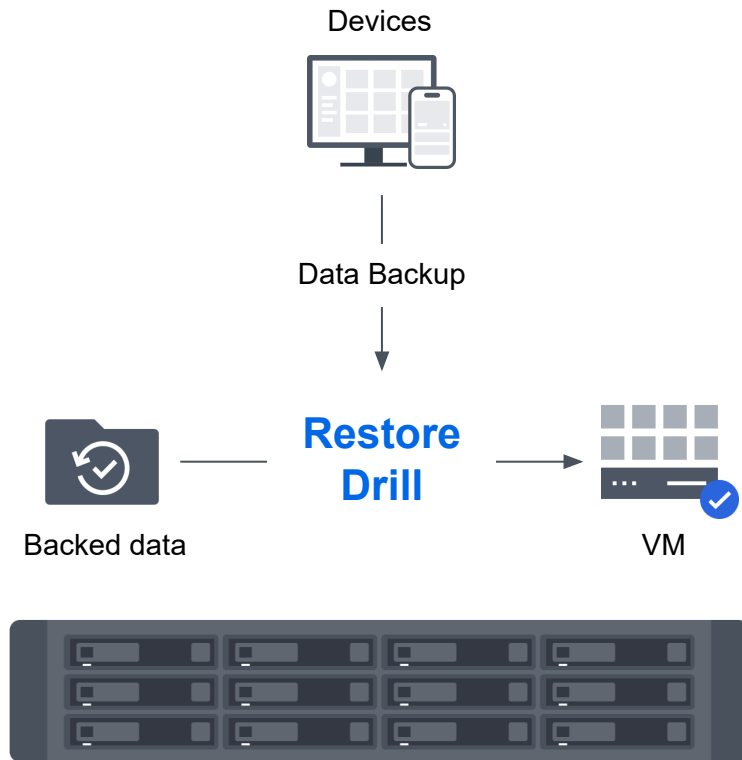
- Through built-in virtual machine (VMM)
- Take video when backup image imported



Recovery Drill

Regular restoration test

- Through built-in virtual machine (VMM)
- Make sure backed-up data restorability

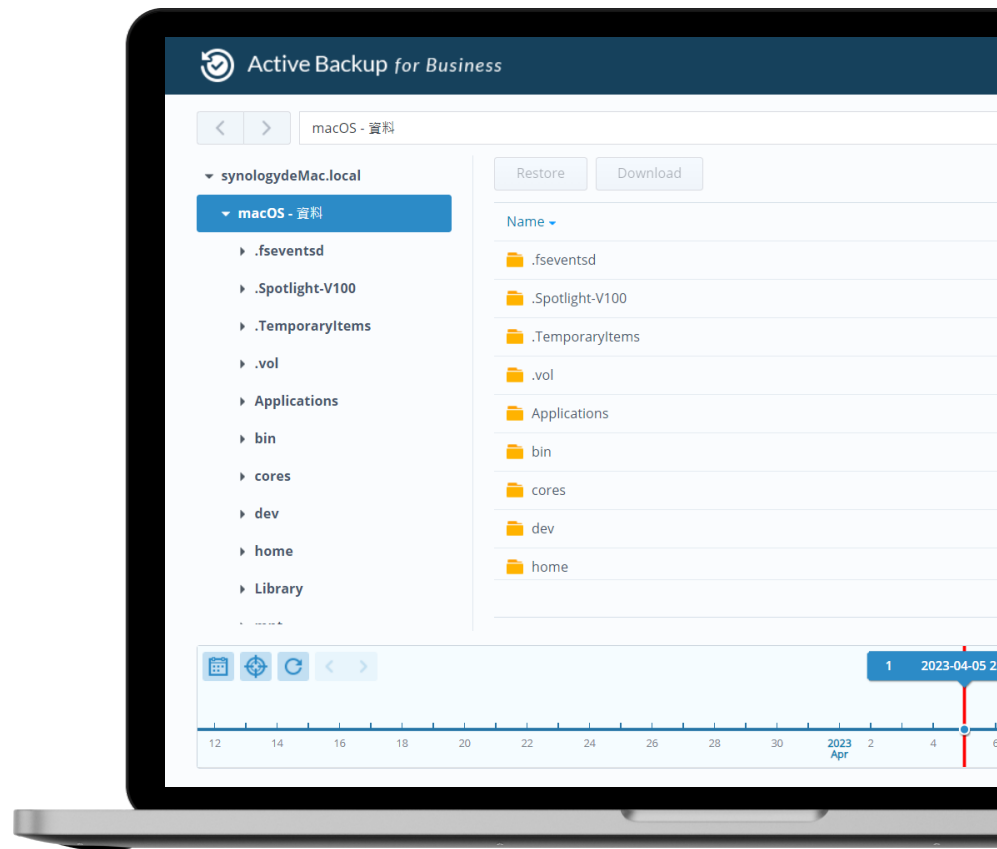


The best practice for data protection



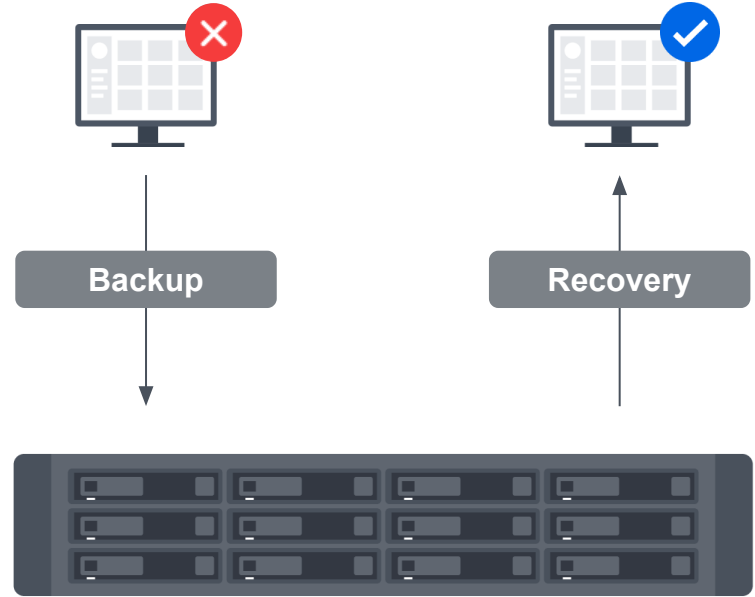
Restore data by requesting

File level restoration



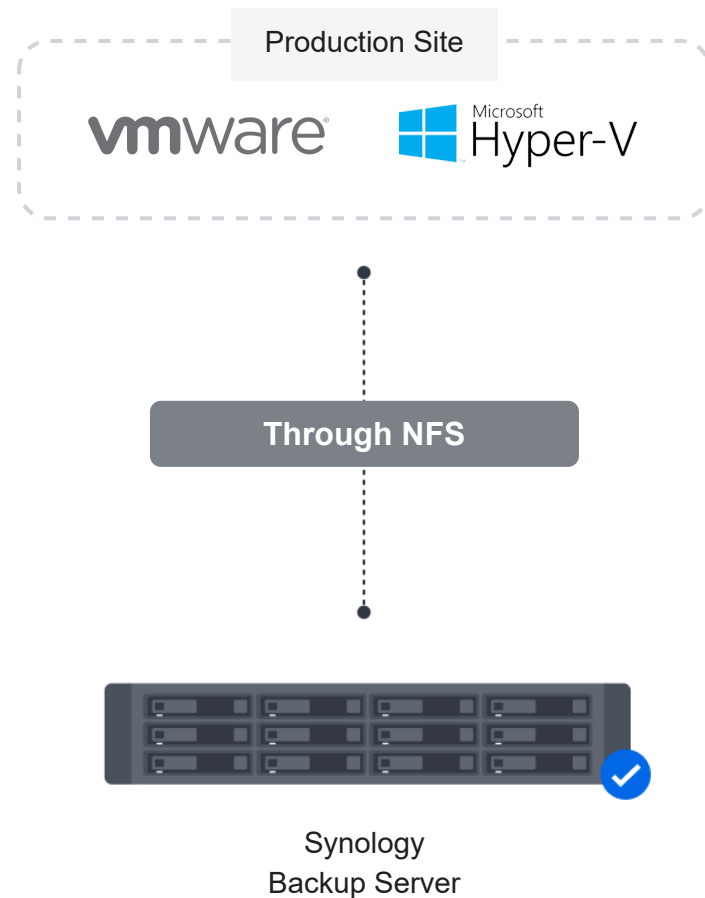
Restore data by requesting

- File level restoration
- Bare-metal restoration



Restore data by requesting

- File level restoration
- Bare-metal restoration
- Restoration by crossing Hypervisors
 - Instant restore to VMware or Hyper-V

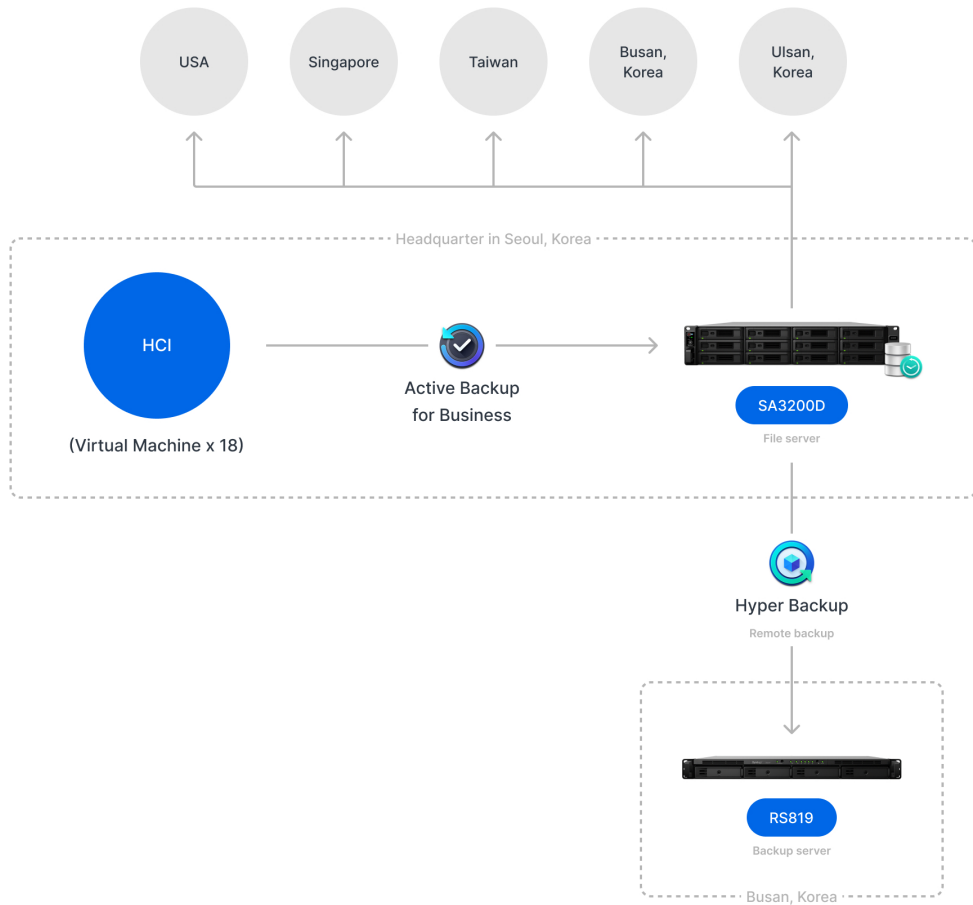




One of the top 10 companies in the world supplying crude oil, LNG, LPG, coal, iron ore, and other natural resources to all corners of the world.

Challenge

- Previous system required complex backup process with SAN and tape backups, totaling USD6,000 yearly.
- Restoring archived data from tapes for sales claims was time-consuming, inefficient, and negatively impacting work efficiency.





"Synology NAS exceed our expectation in both performance and stability. The units have greatly helped reduce human resources and maintenance costs, while streamlining management, backup, and data restoration operations."

83%

time reduction for
data restoration

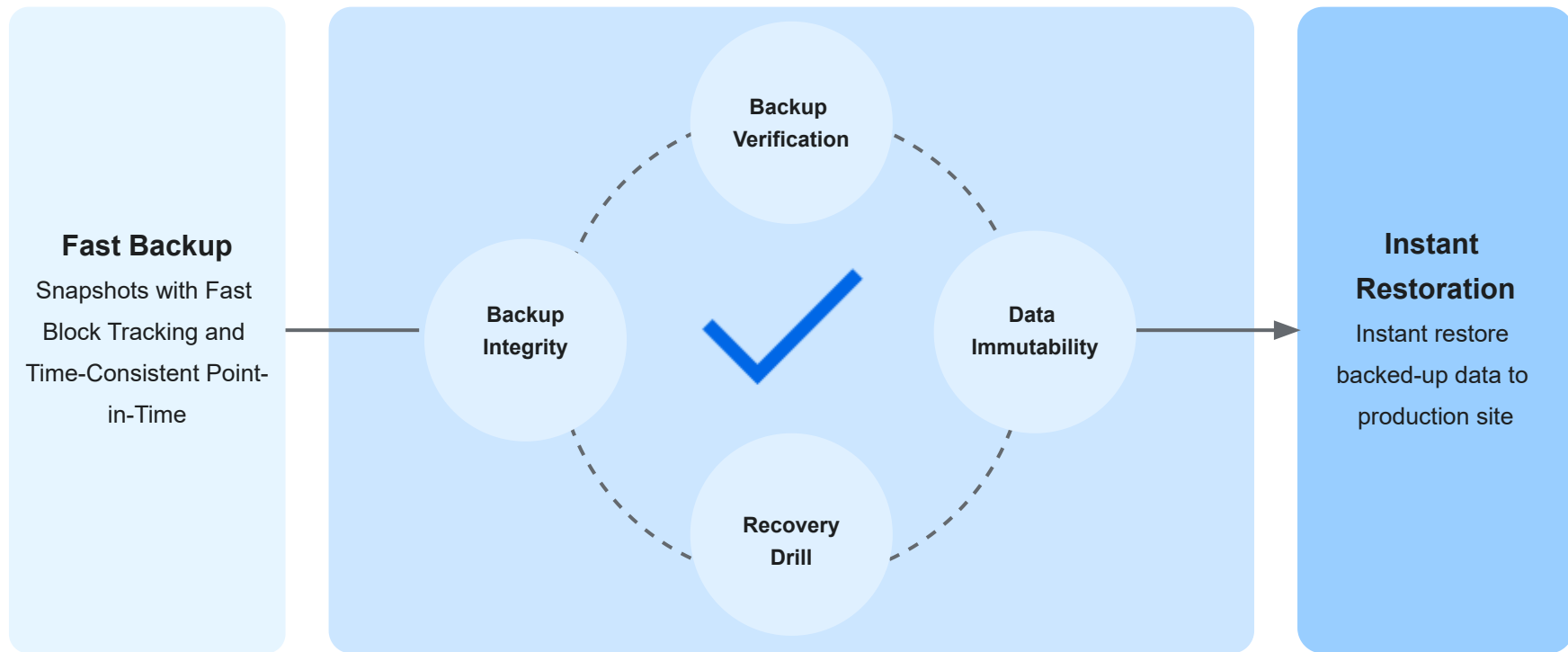
93%

for data
deduplication

73%

Manpower
saved

The best practice for data protection



The 3-2-1 backup strategy



3

copies of data

2

different medias

1

copy off site

**Protect Everything
You Need**



Comprehensive Backup System



Synology Backup Server



On-premise data protection

Protect Everything You Need



**DR, Offsite
Data Protection**



Synology Backup Server



Cloud Platform



Offsite backup replication

**Comprehensive
Backup System**



Synology Backup Server



On-premise data protection

**Protect Everything
You Need**



Lowest Cost, Highest Comprehensive Protection

	Supported	Veeam	Acronis	Veritas	Synology
Efficient	Incremental backup	V	V	V	V
	Deduplication	V	V	V	V
Secure	Immutable backup	V	V	V	V
	Backup encryption	V	V	V	V
	Secure off-site backup	V	V	V	V
	Multiple destination	V	V	V	V
Verifiable	Backup verification	V	V	V	V
	Data integrity	V	V	V	V
	Recovery drill	V	V	V	V

Lowest Cost, Highest Comprehensive Protection

	Supported	Veeam	Acronis	Veritas	Synology
Efficient	Incremental backup	V	V	V	V
	Deduplication	V	V	V	V
Secure	Immutable backup	V	V	V	V
	Backup encryption	V	V	V	V
	Secure off-site backup	V	V	V	V
	Multiple destination	V	V	V	V
Verifiable	Backup verification	V	V	V	V
	Data integrity	V	V	V	V
	Recovery drill	V	V	V	V
Total Cost		\$\$\$\$\$	\$\$\$\$\$	\$\$\$\$\$	\$

One more thing...



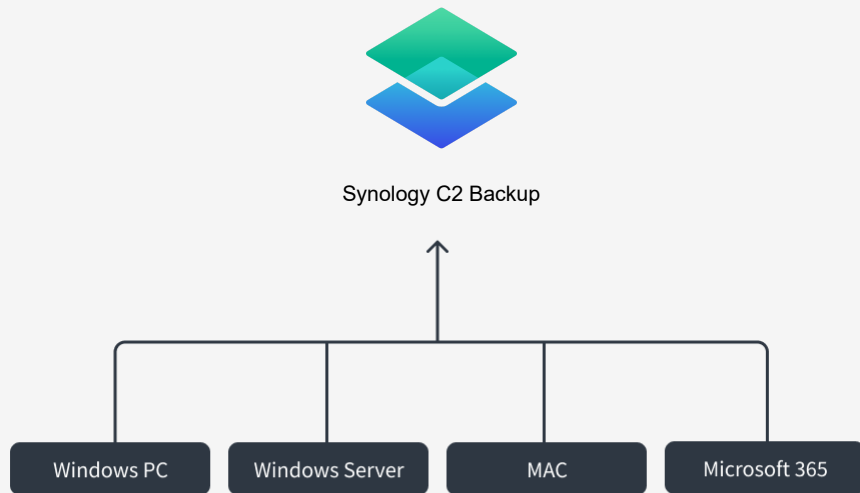
C2 Backup

Cloud Data Protection

Synology C2 Backup

- **Centralized workload protection**

- Efficient Protection: Utilizing incremental backups to minimize bandwidth usage and storage consumption
- Flexible Recovery: Granular Recovery and Bare-Metal Recovery



Cloud Data Protection

Synology C2 Backup

- **Simplified IT Management**

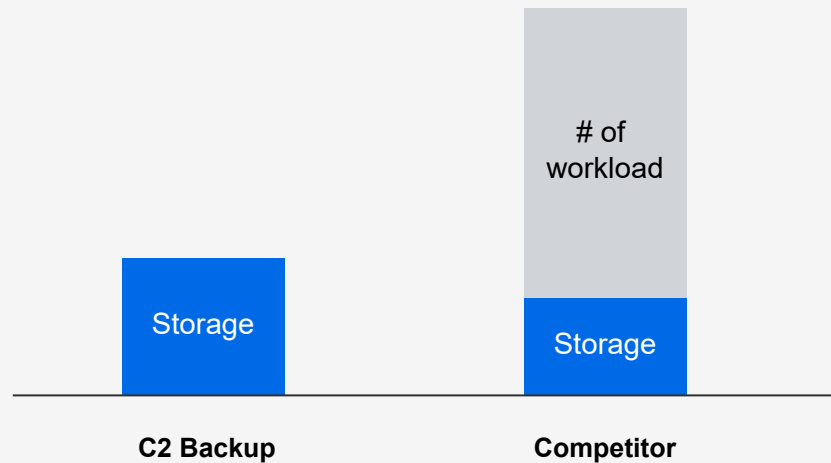
- Eliminate Hardware Maintenance and Management Costs
- Event Notifications and Regular Reports
- Delegated Permissions: Reduce IT Staff Management Burden



Cloud Data Protection

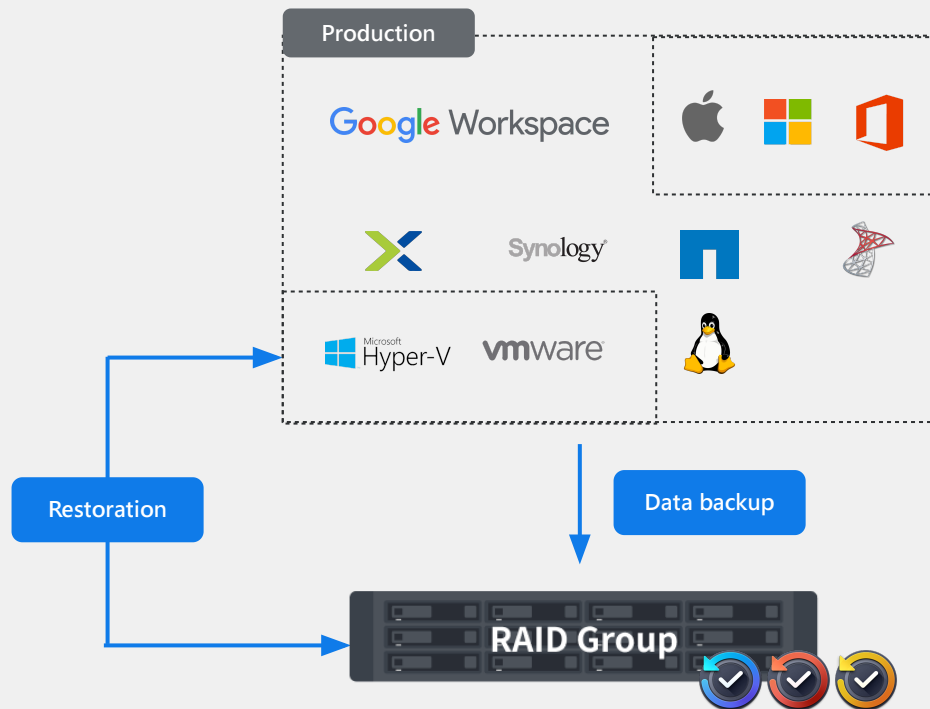
Synology C2 Backup

- Zero Hidden Costs
 - Charged by Storage usage
 - No additional charges based on workload or the number of cloud service accounts; unlimited endpoint and cloud account backups

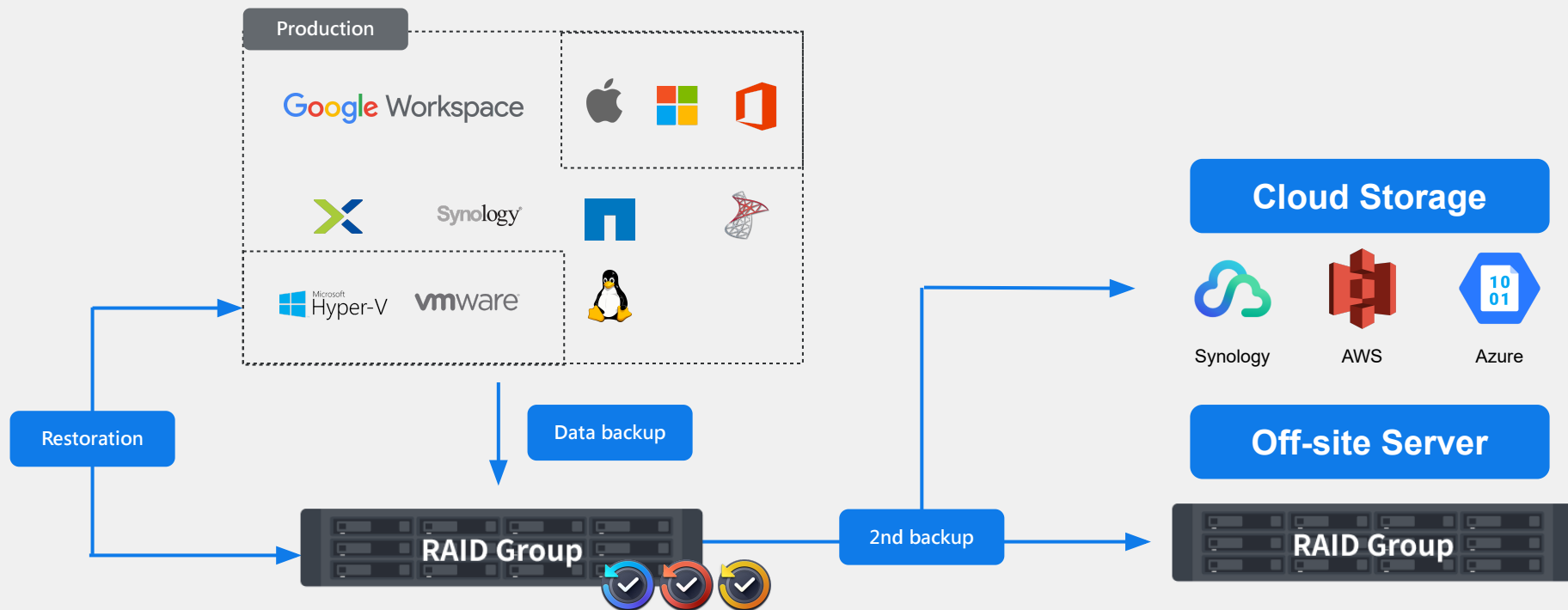


**Total Cost of
Cloud Backup Service Implementation**

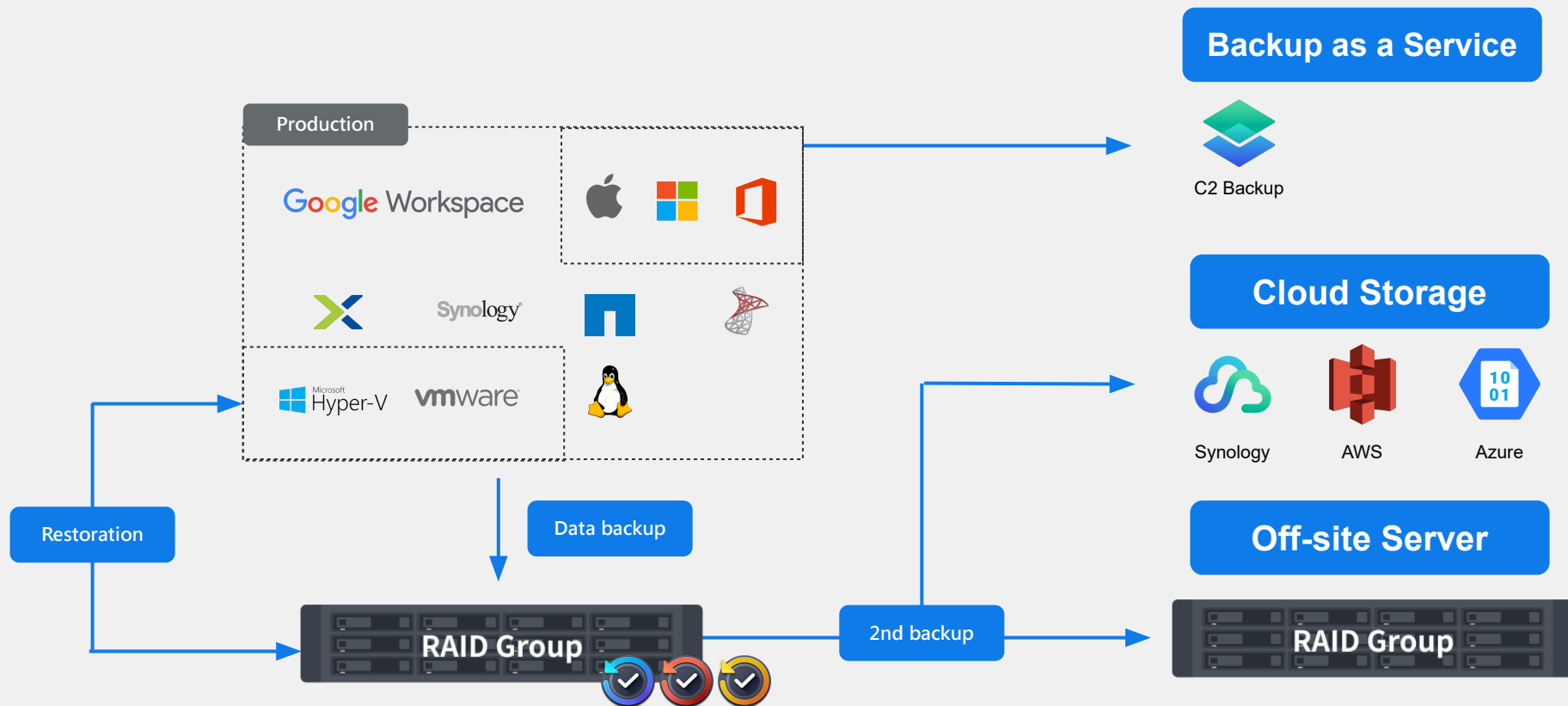
Synology Hybrid Data Protection Solution



Synology Hybrid Data Protection Solution



Synology Hybrid Data Protection Solution



Synology Data Protection Solution

Comprehensive without compromise



Efficient

Meet the best RTO/RPO
with confidence

Synology Data Protection Solution

Comprehensive without compromise

Efficient

Meet the best RTO/RPO
with confidence

Verifiable

Securely stored in
multiple destinations

Synology Data Protection Solution

Comprehensive without compromise

Efficient

Meet the best RTO/RPO
with confidence

Verifiable

Securely stored in
multiple destinations

Secure

Ensure all backups are
accessible anytime you need

Ensuring Business Continuity with Efficient, Always- Recoverable Data Protection

Sales Manager

Chih Hsi Hu