Synology®

ActiveProtect Appliance Buyer Guide

Best practices for enterprise data protection

Table of Contents

Synology data protection solutions

With data at the heart of every organization, an innovative and scalable data protection solution is what you need to back up, recover, and secure your data efficiently. Protect your data against malware attacks and other threats and recover data with speed in case of accidental deletion or system downtime with ActiveProtect appliance.

The backup performance you need

Ultra-fast backups	Accelerated data recovery	Optimize storage capacity	Maximize efficiency
7x	**2x**	**50%**	**-99%**
faster[1]	faster[1]	data reduction[1,2]	data transmission[1,3]

Build a strong data protection plan for your business

Consolidate backups of SaaS applications, virtual machines, physical servers, PCs, Macs, file servers, and databases with ActiveProtect appliance to ensure fast recovery and continued service availability.

SaaS	Virtual Machines	Physical Servers	PC/Mac	File Servers	Databases
	Microsoft Hyper-V	Windows Server	Apple	NUTANIX	ORACLE
	vmware	Linux	Windows	NetApp	Microsoft SQL Server
				SMB File Server	

ActiveProtect appliance highlights

- **Quick deployments:** Deploy your backup appliances within minutes

- **Guaranteed data backup:** Detect and restore corrupt data, verify backups, and test your disaster recovery strategy in a sandboxed environment with built-in hypervisors

- **Protect against ransomware:** Secure your data with immutability and isolate your data with air-gapped backups

- **Recover with confidence:** Leverage bare-metal or file-level restoration to restore data or perform P2V or V2V restoration to instantly recover data

- **Role-based access control:** Maintain control over data by granting access permissions such as workload restoration and data viewing rights

- **On-demand scalability:** Scale your data with ease to meet changing business requirements

Key features for enterprise IT managers

Comprehensive data protection solution

- Centralize backups of VMware, Microsoft Hyper-V, Windows, macOS, Linux, NetApp ONTAP, Nutanix Files, Microsoft 365, Microsoft SQL Server, and Oracle Database
- Create custom backup policies, specify backup scope, and select time-based, event-based, or manual backups to meet SLA requirements

Optimize your storage capacity

- Perform global deduplication as well as cross-site deduplication to maximize storage capacity and optimize costs

Secure your backups from ransomware attacks

- With immutability available everywhere, rest assured as your entire backup infrastructure and cluster cannot be maliciously deleted by anyone
- Back up copies of your data to an off-site server or to the public cloud for data redundancy and guaranteed availability of backed up data
- Implement a multi-layered air-gapped backup strategy to meet logical and physical isolation as a way to preserve a clean copy of your data
- Protect your data with WORM (Write Once, Read Many) storage technology or object lock, which prevents data deletion for a certain amount of time

Data restoration guaranteed

- Automatically check endpoints, servers, and virtual machines during backups to ensure that an accurate copy of your data is preserved
- Perform disaster recovery drills periodically in a sandboxed environment without affecting your production site to ensure efficient data recovery

Control access to your data

- Supports Active Directory, LDAP, and SAML 2.0. Set up MFA to prevent unauthorized personnel from accessing sensitive data
- Recover files, folders, and manage data autonomously, as long as permission has been granted by IT admins

Eliminate IT disruptions

- Deploy a set-and-forget data protection solution within minutes and create a multi-layered solution for ransomware resilience
- View your entire backup infrastructure, including primary backups, backup copies, and archived data, on a single console
- Create custom protection plans to manage and view thousands of workloads on one platform
- Automatically protect new workloads to your specified protection plan as your data grows
- Stay up to date on your backup tasks by receiving notifications

Deployment scenarios

As large corporations tend to own large amounts of data, enterprises must deploy a backup solution that guarantees performance, scalability, as well as high availability. ActiveProtect appliance allows businesses to streamline their data backup operations and meet deployment requirements for various scenarios.
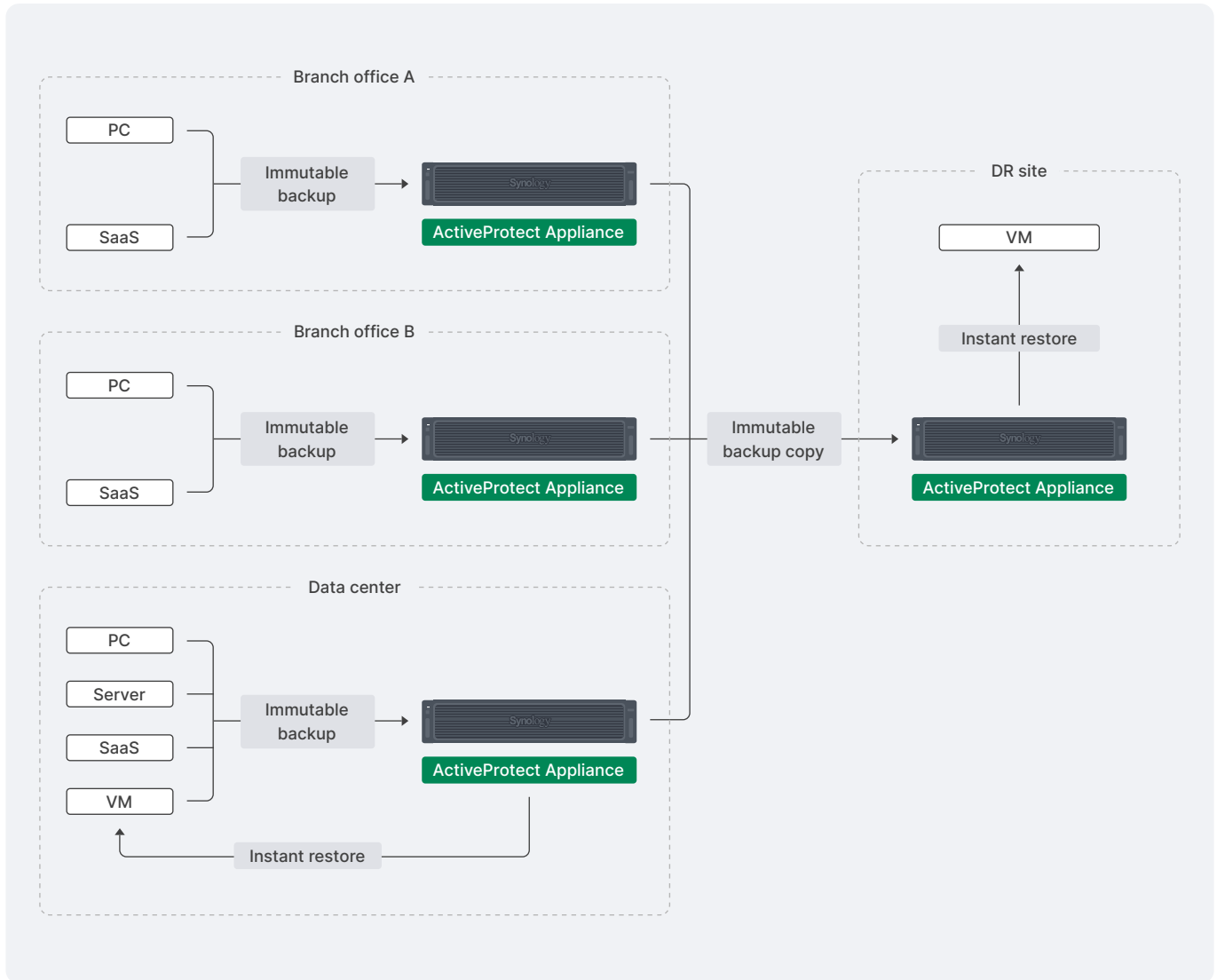
Manage and view thousands of workloads in one place and back up workloads automatically under a specified protection plan. Defend against ransomware attacks by storing all your backup copies in an isolated zone, With immutability available everywhere by default, data modification or deletion will be prevented so that companies can retain legacy data and meet regulatory compliance.

Implement purpose-built backup appliances across your business so that you can thoroughly protect your enterprise data.

- **One management server:** Safeguard all your workloads and keep track of your backups, no matter its location. View your entire backup infrastructure with a single console, thanks to Synology ActiveProtect appliance

- **One or more managed backup servers:** Set up multiple managed backup servers and back up specific workloads automatically, with a simple and easy-to-use interface, allowing you to scale at any time to meet evolving data needs

- **One or more backup copy targets:** Implement a multi-layered air-gapped backup strategy to meet logical and physical isolation. Preserve a clean copy of your backup with at least one backup appliance so that your data can be recovered, in case of sudden data loss

For uninterrupted data availability, we recommend using a secondary backup appliance as a failover server. The failover server will take over management tasks if the main backup appliance fails.

Synology ActiveProtect appliance specs

Meet your organizational needs with Synology ActiveProtect appliance.

|	DP320	DP340	DP7400
Model name			
Form factor	Desktop	Desktop	2U (RU)
Suggested backup source[4]	5 TB	14.5 TB	83.5 TB
Storage configuration	2 × 8 TB HDD (RAID 1)	• 4 × 8 TB HDD (RAID 5) • 2 × 400G SSD (RAID 1)	• 10 × 20 TB HDD (RAID 6 + 1 Spare) • 2 × 3840G SSD (RAID 1)
Suggested cluster size	Managed in a cluster that supports up to 2,500 servers	Managed in a cluster that supports up to 2,500 servers	• Manage up to 2,500 servers or 150,000 workloads in a cluster[5] • Can also function as a managed server
Built-in virtual machines for instant restoration	1	2	9[6]
CPU	AMD R1600 (2 cores)	AMD R1600 (2 cores)	AMD EPYC 7272 (12 cores)
Memory	8 GB	16 GB	64 GB (Max. 512 GB)
Network interface	• 1 × 1GbE RJ-45 Port (Management) • 1 × 1GbE RJ-45 Port (Data transfer)	• 1 x 1GbE RJ-45 Port (Management) • 1 x 10GbE RJ-45 Port (Data transfer)	• 1 x 1GbE RJ-45 Port (Management) • 2 x 10GbE RJ-45 Port (Data transfer) • (Optional) 2 x 10GbE RJ-45 / 25GbE SFP28 (Data transfer)

Notes:

1. Performance figures have been obtained through internal testing by Synology Inc.

2. Maximize storage capacity with cross-site deduplication and global deduplication.

3. Eliminate redundant data with source-side deduplication to enable fast data transmission.

4. Synology ActiveProtect appliance is a pre-configured backup solution that comes with an estimated backup capacity that has been obtained via internal testing to ensure optimal backup efficiency.

5. ActiveProtect license is required.

6. When equipped with 128 GB of memory (additional memory modules required), the maximum number of virtual machines can be expanded to 17.
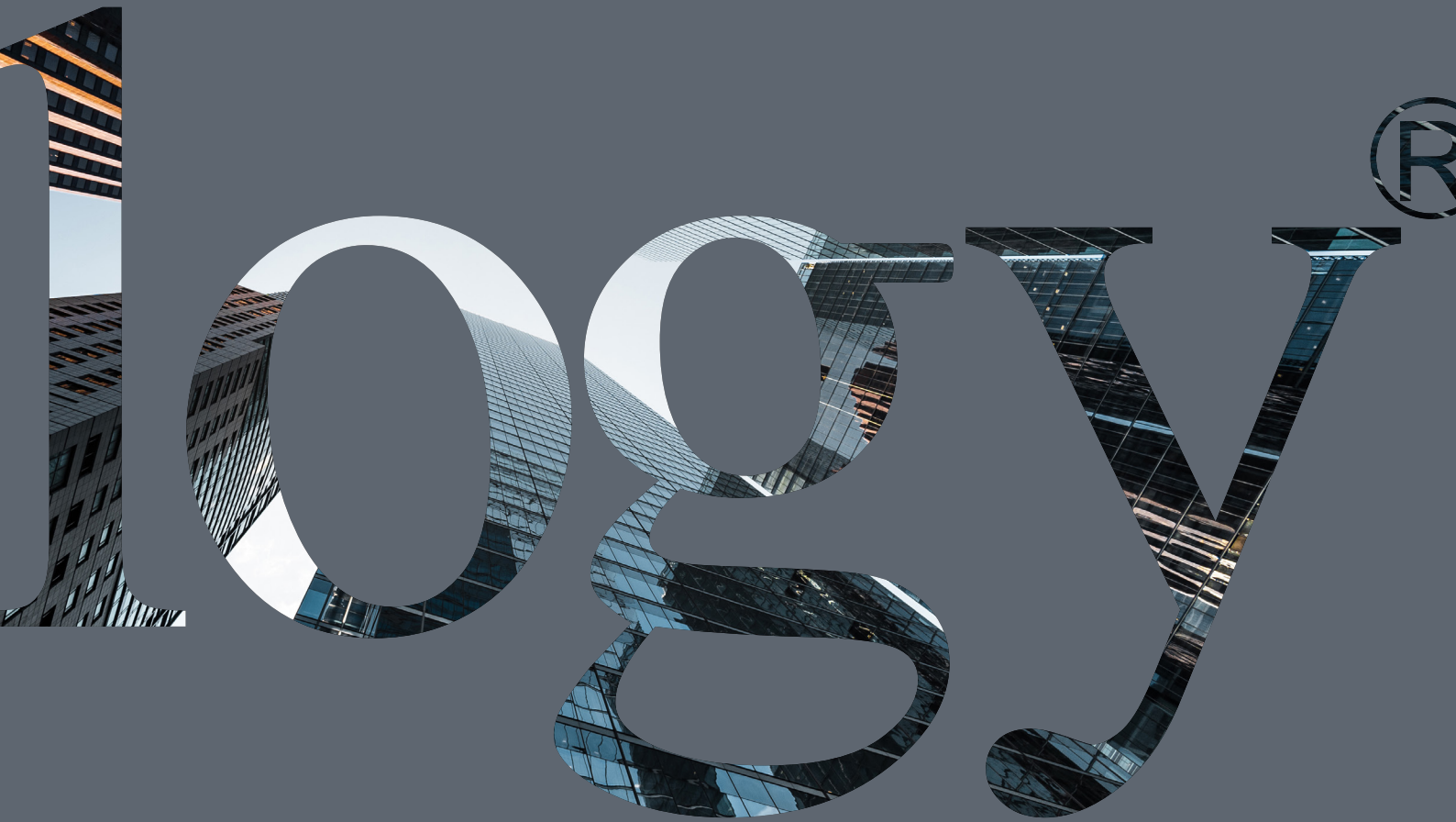
SYNOLOGY INC.
9F., No.1, Yuandong Rd.
New Taipei City 22063
Taiwan

**SYNOLOGY
AMERICA CORP.**
3535 Factoria Blvd SE,
Suite #200, Bellevue,
WA 98006
USA

**SYNOLOGY
FRANCE**
102 Terrasse Boieldieu
(TOUR W) 92800 Puteaux
France

**SYNOLOGY
GMBH**
Grafenberger Allee 295
40237 Düsseldorf
Deutschland

**SYNOLOGY
JAPAN CO., LTD.**
4F, No. 3-1-2,
Higashikanda,
Chiyoda-ku, Tokyo, 101-0031

**SYNOLOGY
SHANGHAI**
200070, Room 201,
No. 511 Tianmu W. Rd.,
Jingan Dist. Shanghai,
China

**SYNOLOGY
UK LTD.**
Unit 5 Danbury Court,
Linford Wood,
Milton Keynes, MK14 6PL,
United Kingdom

synology.com