Synoptek®

SIMPLIFIED TECHNOLOGY. SUPERIOR RESULTS.™

Understanding Backup-as-a-Service

THE CHALLENGES OF MAINTAINING AN IN-HOUE BACKUP SYSTEM

Information Technology (IT) systems have become mission critical strategic assets throughout almost every organization. An always changing, landscape of new technologies, regulatory compliance issues, and ever increasing data storage requirements have had a profound effect on the ability of many IT organizations to deliver stable, predictable, and cost effective solutions to their company. This is particularly true of traditional backup solutions, which as a rule cannot meet the new technology and compliance requirements or scale up in size.

Some of the many challenges with maintaining a backup solution are:

- The speed of innovation and change in functionality and capabilities technology space will continue to increase. Traditional backup solutions simply can't keep pace without significant and on-going investment in new or updated software, hardware, and training. Organizations are often forced into a never ending cycle of forced upgrades and expense maintenance contracts.
- Shrinking IT budgets and low visibility make it difficult to justify maintaining the hardware, backup media, software, and staff of backup engineers. Due to budget constraints, IT departments can be forced to reallocate staff and resources from other projects to manage and react to backup incidents.
- Backups often are scheduled to run after hours, but many organizations do not staff 24/7, so any problem with a backup cycle often result in a missed backup for the organization.
- Regulatory and compliance standards are being increasingly required not only by governments, but partners and external vendors that have their own standards. Lack of expertise in navigating this complicated environment is not only time consuming, but exposes the organization to additional risk.
- Government and corporate legal frameworks have added to the burden as well, not only with maintain backup data for longer retention periods, but also to only restore data at more atomic levels – a mail message instead of the entire mailbox or even the entire mail store for example.
- Management of backup media has its own challenges and risks. Media failures (like tape), consistent media rotation, physical and logical security of storage, and timely access to backup media add to the burden of maintaining the backup solution.
- Many companies have moved, or are considering moving to a formal internal organizational service level (OLA) requirements for services like backup. This increases the pressure being placed on IT leadership to ensure that not only is data being backed up, but that it can be recovered in a timely fashion.
- The complexity and variety of devices such as servers, desktops, laptops, tablets, and mobile devices potentially across multiple sites for the enterprise. This problem can be compounded if the enterprise is in different geographic locations.
- No formalized plan to test the backups either in whole or in part. Over time, with the organic growth of backup requirements,

Organizations should evaluate the cost, effort, and risk of maintaining their in house backup infrastructure. Other solutions, such as Backup-as-a-Service offer the ability to reduce risk, lower cost, offer greater flexibility, and reduce the labor overhead.

WHAT IS BACK-UP-AS-A-SERVICE?

Backup-as-a-Service (BaaS) is an offering from service providers such as Synoptek to design, deploy, manage, maintain, and refresh the infrastructure needed to provide a backup solution to organizations. Service providers can offer BaaS to organizations who want a flexible, scalable, and predictable backup infrastructure without the overhead of having to purchase and manage a dedicated solution. BaaS is valuable to organizations who want to back up a wide array of devices such as servers, desktops, laptops, tablet and smartphones. These devices can be backed up securely and efficiently at the client premises, data centers, or into the cloud.

BaaS is a good fit if:	BaaS is not a good fit if:
Software, hardware, or process requires a new capital investment to modernize capability or functionality.	Low to no data growth combined with a stable and predictable backup solution that meets all internal and external policies
Corporate strategic direction is to move from a capital expense to an operational expense model.	Compliance includes requirements that the organization have sole ownership over the backup software, hardware, and policies.
Burdensome support contracts	
Administration of backup system is affecting staff availability for other projects.	
Possible loss of key personnel affects ability to properly manage backups.	
Growth of data has or will soon exceed your backup infrastructure's ability to backup all the required data onto the storage media	
Growth of data has or will soon exceed your backup infrastructure's ability to backup all the required data in the required time frames	
Number of sites requiring backup increases and there isn't the ability to roll into the current solution	
Current solution cannot consistently meet SLA or OLA requirements.	
Current solution cannot meet compliance requirements for data retention, RPO, or RTO.	
Inability to move backup data to offsite at all, or in a timely fashion.	
Inability to regularly test backup jobs, or constant individual job failures risk integrity of backup plan.	
Inherited or legacy environments are running disparate backup solutions.	

No unified backup across all types of devices forces a piecemeal solution.
Inability to backup certain devices or operating systems at all

If BaaS is a good fit for your organization, the next step is to evaluate partners and the solutions they offer.

The IT professionals at Synoptek know how to architect a plan than isn't overkill, but provides a comprehensive approach to keep you operating under most scenarios. Store and backup data in the most secure ways possible, manage risk and possibly eliminate the need for less secure on premises servers.

HOSTED BACK-UP-AS-A-SERVICE

Synoptek offers a scalable, predictable, customizable, and mature BaaS solution. Synoptek's solution is a secure, predictable, and scalable service that removes the workload, administrative overhead, and capital expense cost required to maintain an in-house solution. Alignment and compliance to organizational security standards, data isolation, governance, verification, and reporting standards are all part of the flexibility of the Synoptek's solution.

Synoptek's solution allows your organization to move to a stable, predictable, and scalable circumstance that is monitored and managed 24/7/365. Synoptek's solution can grow with your organization – data size, sites, recovery times, security requirements, etc.

Synoptek can work with you to define a comprehensive backup solution tailored to meet your compliance, SLA, OLA, RPO, and RTO requirements. Having Synoptek manage your backups will allow you to re-allocate IT staff and spend to mission critical projects.

Synoptek's solution leverages a single piece of technology that supports Windows, UNIX, Linux, and Apple operating systems. Backup data can be encrypted on the device being backed up, across data links, and when stored. Restores can be done at the server, operating system, file, or record level (for Exchange Server and data bases). Deduplication and decompression technology decrease the size of backups at the source and on the target, reducing the time and bandwidth required to complete backups.

Synoptek's solution is designed to accommodate diverse requirements to back up data across multiple customer locations with the backups being stored at the customer premises, customer off site data centers, or in the cloud. These backups can then be replicated to secondary destinations.

HOW CAN THE SYNOPTEK BAAS SOLUTION BE CUSTOMIZED FOR MY ORGANIZATION'S NEEDS?
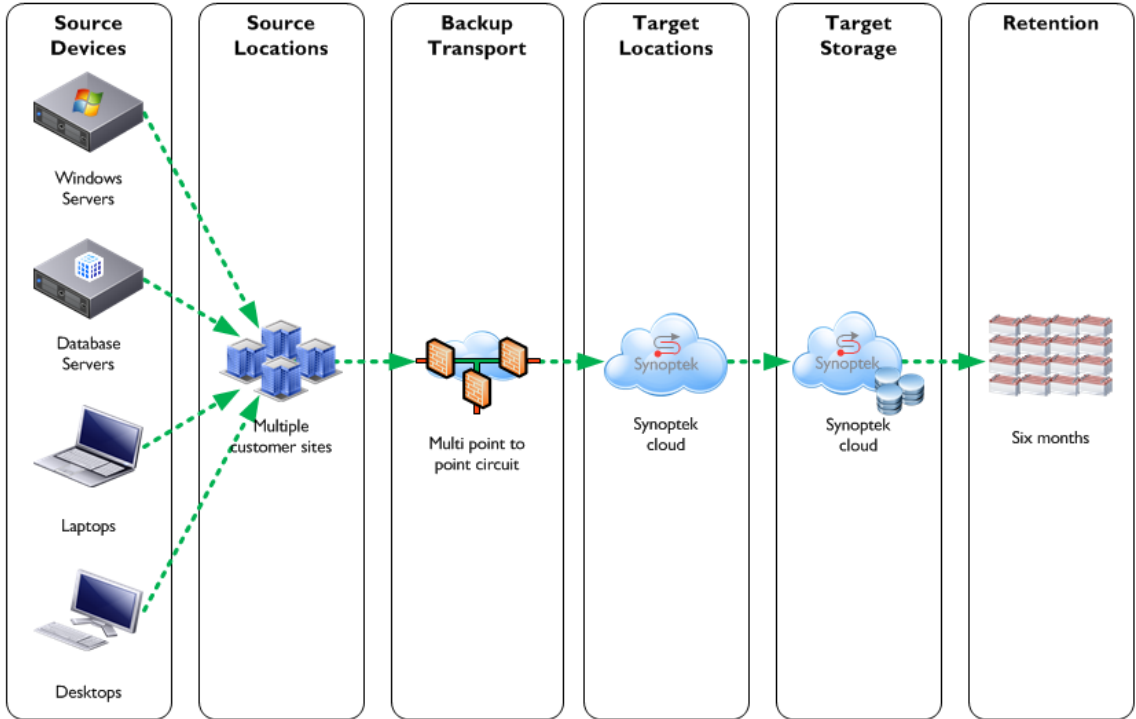
Synoptek's solution takes each key point of the backup infrastructure and aligns it to the following verticals:

- Source devices
- Source locations
- Backup transport
- Target locations
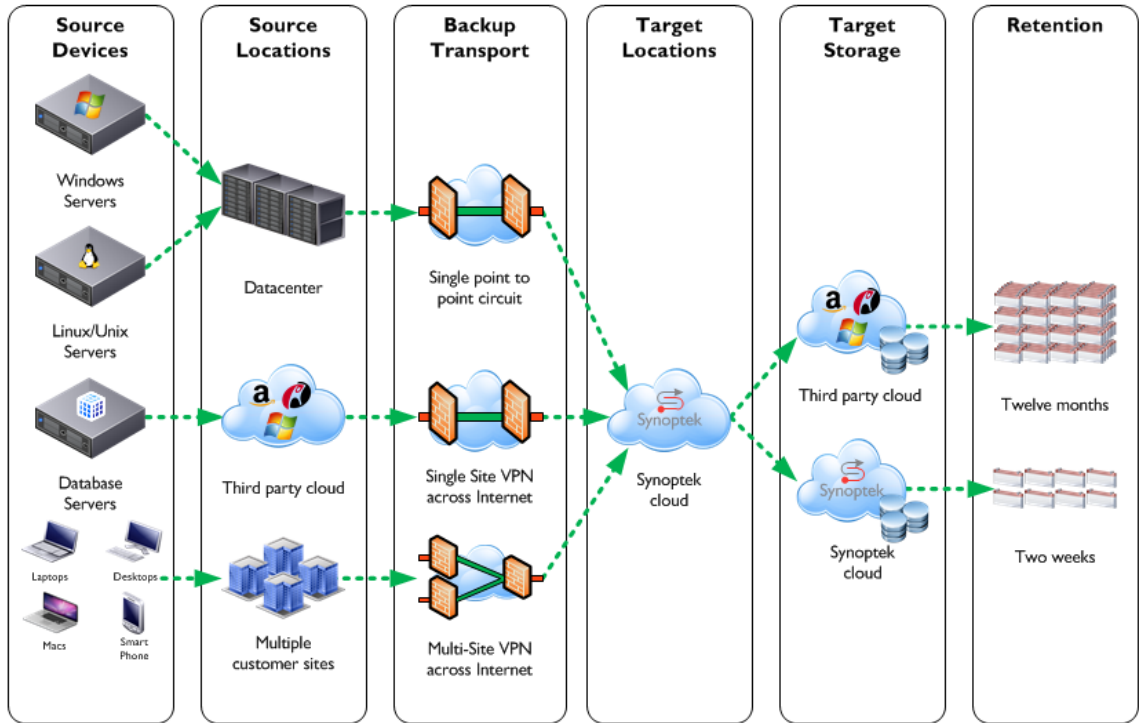- Target storage
- Retention policies

Each vertical contains multiple supported objects:
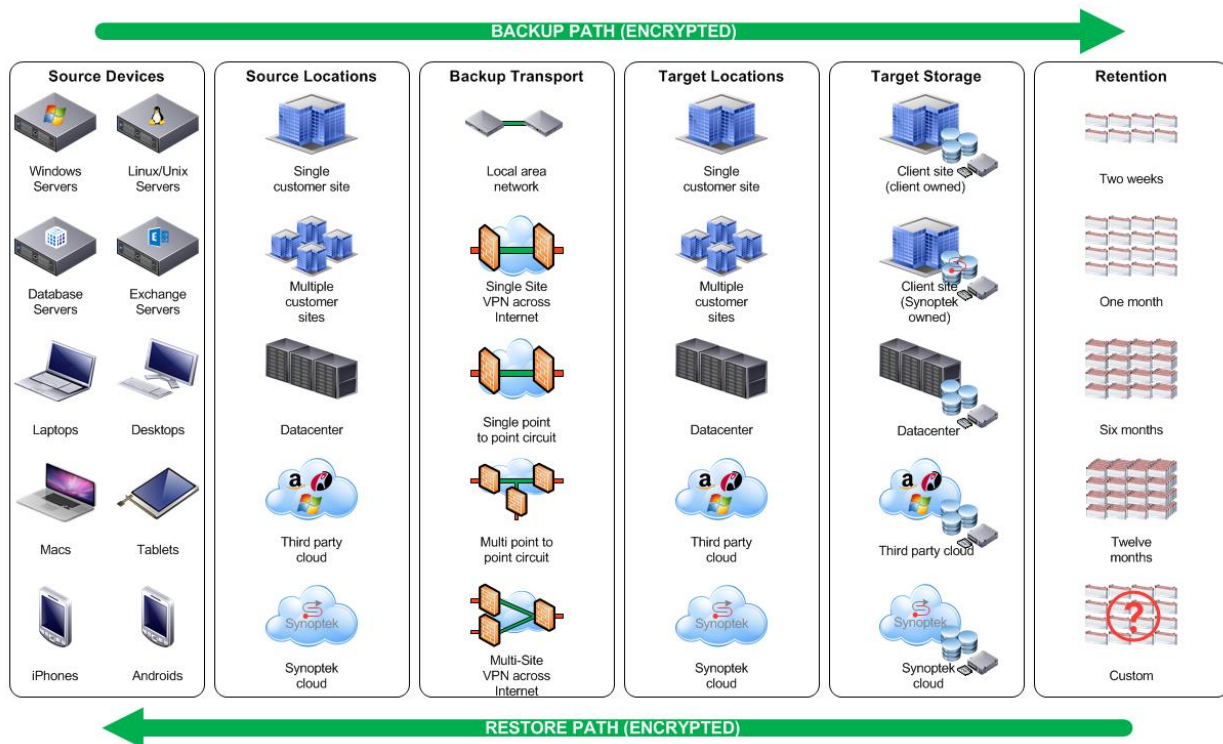
Scenario B: Requirement to back up servers and laptops across multiple sites to the Synoptek cloud with a six month retention

Source Devices	Source Locations	Backup Transport	Target Locations	Target Storage	Retention

Windows Servers

Database Servers

Laptops

Desktops

Multiple customer sites

Multi point to point circuit

Synoptek cloud

Synoptek cloud

Six months

Scenario C: Requirement to back up servers from a datacenter, third party cloud, and user workstations & phones from multiple office sites to the Synoptek cloud with a two week retention, and to a third party cloud vendor for cold storage with a twelve month retention.


Source Devices	Source Locations	Backup Transport	Target Locations	Target Storage	Retention
Windows Servers	Datacenter	Single point to point circuit	Synoptek cloud	Third party cloud	Twelve months
Linux/Unix Servers	Third party cloud	Single Site VPN across Internet		Synoptek cloud	Two weeks
Database Servers	Multiple customer sites	Multi-Site VPN across Internet			
Laptops Desktops					
Macs Smart Phone					

Contact Us

Extending Synoptek's BaaS

BaaS can be the backbone of a disaster recovery plan. Synoptek offers disaster recovery analysis, planning, documentation, and implementation (to customer sites, datacenters, Synoptek datacenters or cloud).

About the Author
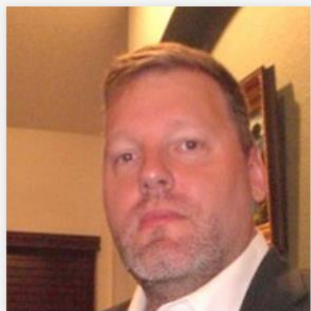
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John brings over 25 years of industry experience of management and hands on expertise in business process and IT systems to Synoptek in his role as Senior Solutions Architect.

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