THE GROWING ADOPTION OF CLOUD STORAGE – 2019 SURVEY FINDINGS

INTRODUCTION

For the fifth year in a row, Unitrends conducted a survey on the state of data backup, recovery, DRaaS, and the increasing use of the cloud in data protection. More than 400 respondents from organizations of all sizes and industries took part.

The results highlight that data loss and downtime continue to plague organizations of all sizes. At the same time, the cloud is playing an increasing role in data protection with a majority of organizations now using the cloud as a critical part of their data protection strategy. Cloud-based technologies such as archiving, DRaaS, and backing up SaaS applications are becoming mainstream.

This report will focus on the recognition that the many forms of cloud storage are not just a nice-to-have, but an essential part of an enterprise data protection strategy. Cloud storage very quickly went from a “bleeding edge” technology to one that is widely deployed by organizations of all sizes and technical maturity.

To learn more about the different aspects of cloud storage, at the end of each section will be a link to follow for a deeper dive on the topic. But first let us look at what may be driving the rapid adoption of new data protection technologies.

THE EFFECTIVENESS OF CURRENT DATA PROTECTION PROGRAMS

Organizations are still suffering unacceptably high rates of data loss and downtime.

Unitrends has been conducting this survey over five years and found that consistently, 30% of responding organizations reported losing data as the result of a data center outage. This remains stubbornly high even as new data protection tools such as cloud workloads, Disaster-Recovery-as-a-Service (DRaaS), and greatly improved data backup and recovery appliances have emerged over the same period of time. As these enhanced tools are more widely and effectively deployed across all industries and organizations of all sizes, this rate of data loss will begin to subside.
Additionally, over 40% of respondents reported having a period of downtime in 2019.

The same time as the new technologies have emerged, the complexity of computing infrastructures has grown as well. Where there was once only an on-premise corporate data center, there is now the use of cloud-based SaaS applications, cloud workloads, remote workers with little connection to enterprise networks, mobile phones, and still emerging new technology that needs its data protected. Each computing technology has its own vulnerabilities and each needs its own form of data protection, woven together so there are no gaps in protection. For more information on managing protection of complex compute environments read [4 Best Practices for Protecting a Multicloud Enterprise](#).

**THE USE OF CLOUD FOR DATA PROTECTION**

Today, 60% of responding organizations report using cloud features such as short term data storage, archiving, DRaaS, and/or as a direct backup location for PCs / servers. This growth in usage calculates to about a 10% CAGR from 2016 to 2019. Cloud usage is similar across organizations of all sizes. The survey found 61% of small (1 – 50 employees), 58% of mid-sized (51 – 1000) and 60% of large organizations use the cloud as part of their data protection. Of the 40% of respondents that currently do not use the cloud as part of their data protection strategy, a full 53% plan to add that capability in the next year.
Of the top five uses for the cloud in data protection, four are primarily using the cloud for data or backup file storage. For the first time in the five year survey, protecting SaaS applications with cloud-based backup and direct-to-cloud backup of PCs / servers made the list of the top 5 cloud-based data protection technologies deployed by the survey respondents. SaaS application and remote worker’s PC protection are now an established part of IT data protection strategies.

Disaster Recovery-as-a-Service (DRaaS) uses the cloud primarily as a host for emergency computing capacity but includes a storage element as the data and applications have to be present prior to an emergency to ensure speedy recoveries.

It is important to remember that these are current cloud users reporting what they believe the most important features of what cloud is providing to support their data protection strategies. The advantage of lower costs was selected by almost two thirds of respondents (62%). This is a major change as earlier surveys found...
WHAT ADVICE WOULD YOU GIVE TO SOMEONE JUST STARTING TO USE THE CLOUD FOR BACKUP AND RECOVERY?

“Know your service provider and carefully plan your Service Level Agreements (performance guarantees).”

IT Administrator, Large Technology Company, US East Coast

potential users citing the cost of cloud as a primary reason not to use it. Two of the top five reasons are security focused – this too was a former major impediment to cloud adoption. There have been no reports of major security breaches of cloud providers as they understand their entire reputation rests on their ability to protect their client’s data from loss or theft of your data.

The future continues to look bright for the cloud. Of the 40% of organizations not currently using the cloud for data protection, 53% of them plan to adopt it within the next year. If these plans hold true, by 2020 80% of all organizations, regardless of size will be using the cloud for some form of data protection.

For more information on the use of cloud as part of your data protection strategy read the DCIG Cloud Data Protection Buyers Guide. Let’s look more closely at these cloud use cases.

FOCUS ON CLOUD STORAGE

By far the most widely used capability of the cloud for data protection is off-site data and file storage. Overall 84% of organizations using the cloud reported using it to store data or backups. Fewer than 10% of respondents don’t use the cloud for file and data storage or have no plans to add it this year.

Small businesses are adopting cloud storage at a much higher rate than either mid-sized or large enterprises. The best-in-class practice of getting a copy of your backups to a remote location, disconnected from the production environment, makes using the cloud ideal. Many small organizations do business in a single location so the cloud offers a low-cost alternative for data protection. Mid-sized and large enterprises are very likely to have suitable secondary locations to store their data files and backups.
It is no coincidence that the use of the cloud has increased at the same time that the volume of data needing to be stored has risen dramatically.

Data volumes requiring protection have been rising continuously over the last 4 years, forcing organizations to look for new strategies to control storage costs and reduce the capital expense of purchasing new storage devices.

Organizations reporting they are required to protect over 100TB of data has risen from 11% in 2016 to 31% in 2019 with no real change in the mix of small / mid-sized / large enterprises across the years of the survey.

Accidents happen and data can be destroyed, overwritten, or inadvertently deleted. A large majority (62%) of respondents reported that they had to recover some of their data from the cloud at least once last year. Over 10% reported recovering data from the cloud five times or more last year. Followers of the 3-2-1 data storage strategy (3 copies of your data, in 2 different formats, with 1 remote and disconnected from your production infrastructure) know the cloud is ideal to meet the requirement for remote protection, particularly for SMBs who may be doing business from a single location.
WHAT ADVICE WOULD YOU GIVE TO SOMEONE JUST STARTING TO USE THE CLOUD FOR BACKUP AND RECOVERY?

“Make sure you have enough bandwidth for the transfer of backup data to the cloud.”

IT Manager, Mid-sized Medical Provider, US West Coast

Cloud is rapidly becoming the leading storage location for backups. Backing up from disk to cloud rose 39% between 2016 and 2019, a 15% CAGR over that period. Pure disk storage rose only 8%. The rise of both these technologies came at the expense of tape and other physical media. Their share of the backup market fell 35% over the last three years to just a combined 25%. It is no coincidence that the use of the cloud has increased at the same time that the volume of data needing to be stored has risen dramatically.

Growth in using the cloud for long-term storage, or archiving also increased greatly over the last four years. Compliance mandates and state and federal regulations have risen over the last four years and many require certain data records to be kept for periods between 5 years and perpetuity. Today a majority of organizations have chosen to store data in the cloud to protect it from inadvertent destruction and to lower their storage capital and operational costs. The change in the reported rate of archiving in the cloud equates to over a 30% CAGR for the last four years.

For more information on the types of data requiring long term storage, and the role of backups in a data management program, read Backups Can Drive a Successful Data Management Program.
FUTURE OF CLOUD STORAGE

We also asked survey respondents where they currently store their enterprise data and how that will shift.

Survey respondents report planning to shift the location of their enterprise data out of on-premises data centers. Unitrends asked survey respondents to tell us where their production data resides today (SaaS apps, on-premises, or in the cloud) and how they see that mix changing over the next year.

The responses to this question should be taken as directional guidance and not literally. Shifting these volumes of data into and out of the cloud will take many years to execute. However you see the growing importance cloud-based storage will play in the near future. On-premise data storage will still be primary but sizable percentages will be shifted to the cloud. Expect to see this trend well into the future as the economics and flexibility of cloud storage are very compelling.

The requirement for SaaS data protection will grow greatly over the coming years. Respondents saw a 30% increase in the amount of data stored in their SaaS apps over the coming year. They recognize that much corporate data is actually created in SaaS applications by not just mobile workers, but all employees as enterprises recognize the financial and operational advantages of SaaS apps. To drill down more on the growing importance of SaaS data backup read this White Paper of the same name.
CONCLUSIONS

We see several points in the survey responses:

1. Currently a majority of enterprises use the cloud as part of their data protection. With the rate of cloud adoption growing about 10% per year it is easily predicable that all enterprises will use the cloud in one form or the other in the next decade.

2. Almost all organizations that use the cloud employ it for cloud data and backup file storage. Remember that 40% of survey respondents reported not using the cloud at all, so it is likely that their introduction to the cloud will be as a remote storage platform.

3. Data gets lost, stolen, over-written or corrupted all the time. The cloud offers low cost storage and easy recovery whether the applications are deployed in the corporate data center, in the cloud itself, or as SaaS applications.

It is inevitable that you will, if not now, store some all of your data backups in the cloud. Best-in-Class organizations have embraced this technology to ensure that data is not lost, and easily restored. For more on cloud data storage learn about Unitrends Forever Cloud.

READY TO PROTECT YOUR CLOUD?
WATCH A UNITRENDS DEMO NOW.

Unitrends increases uptime and confidence in a world in which IT professionals must do more with less. Unitrends leverages high-availability hardware and software engineering, cloud economics, enterprise power with consumer-grade design, and customer-obsessed support to natively provide all-in-one enterprise backup and continuity. The result is a “one throat to choke” set of offerings that allow customers to focus on their business rather than backup. Learn more by visiting unitrends.com or follow us on LinkedIn and Twitter @Unitrends.