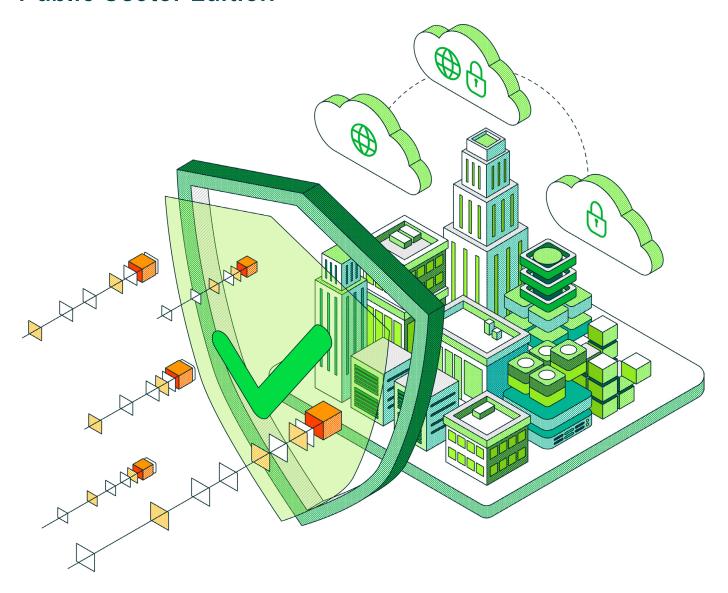


# 2023 Data Protection Trends

**Public Sector Edition** 





In late 2022, an independent research firm completed their survey of 4,200 unbiased IT leaders and implementers on a variety of data protection drivers, challenges and strategies — including 217 in US Public Sector organizations. This broad-based market study on unbiased organizations is conducted annually on Veeam's behalf to understand how the data protection market continues to evolve, so that Veeam can ensure product strategies and market initiatives align with where the market is going.

While Gartner predicts a 5.1% increase in overall IT budgets and the IDC predicted a 5.2% increase in overall IT spending, this survey revealed that data protection budgets are expected to increase by 6.5% globally in 2023. However this trend is not true for US Public Sector organizations, which expect to slightly reduce backup spending in the year ahead. We will explore ramifications of this forecast later in this brief. You can find the full 2023 Data Protection Trends Report at <a href="https://vee.am/DPR23">https://vee.am/DPR23</a>.

# **Hybrid Infrastructure 2020 to 2025**

Each year the survey asks organizations to estimate the on-premises servers (physical and virtual) as well as those that are cloud-hosted; for the current year, as well what they expect two years later. **Check out the full report** to see a summary of the **12,000** responses across four annual surveys covering 2020 to 2025, but for 2023, the actual distribution of server instances across **4,200** organizations' Hybrid IT is as follows:

Actual 2023 Hybrid IT Landscape (global)



Overall, **physical** servers and **virtual** machines have both stabilized at around **50%** of an organization's overall IT plan, while the rest is **cloud-hosted** — with continued, albeit gradual, shift to cloud-hosted, predominantly due to organizations' cloud-first strategy of new workloads starting up in clouds at faster rates than legacy workloads are being decommissioned in the datacenter, thereby diluting the datacenter within an overall hybrid IT strategy. Note that for US Public Sector organizations, the findings were quite close to the global sample with **46%** of workloads hosted in the cloud. However, the proportion of physical servers slightly higher at **31%** and the virtual machines slightly lower at **23%** when compared to global findings.

The key takeaway is that modern data protection solutions must provide equitable capabilities across all three architectures (physical, virtual and cloud). In addition, one should plan for workloads moving across clouds and even back on premises; and again, the data protection strategy should accommodate that fluidity.



Organizations in Public Sector expect to decrease their data protection budget for 2023 by

0.5%



## What does 'enterprise backup' mean?

For the second year in a row, the most important attribute of an "enterprise backup" solution is the **protection of laaS and SaaS**. This should not be a surprise when considering how infrastructures are shifting to the cloud.

What might surprise some is that assuring **reliability** is the second most important criterion. But when considering that many organizations may be running legacy backup solutions that were designed for the physical data center era, those solutions likely run agent-based approaches for protecting cloud workloads. Legacy backup mechanisms rarely yield good outcomes when protecting modern workloads.

As such, it makes sense that cloud-hosted protection and reliability would be adjacent and top of mind.

18%

of Organizations in the US Public Sector are looking for their next 'Enterprise backup solution' to protect IaaS & SaaS workloads, as well as the datacenter as the most important capability

#### Modern or innovative data protection (global)

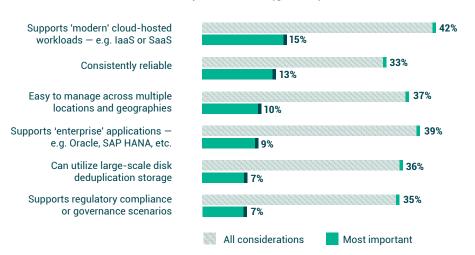




Figure 1.2

What does "enterprise backup" mean to you?

If your organization was considering a new "enterprise backup" solution today, which attribute would be most important to them?

In fact, when organizations were asked what would drive them to change their primary backup solution, the most common, as well as the most important, reason was improving reliability, which is consistent with what organizations are looking for in an enterprise backup solution.

# For 2023, 'modern' data protection means 'cyber-resilient'

When considering what modern data protection must address, it is worth noting that the full research report reveals that for the third year in a row, cyber-attacks continue to be the top reason, across all market segments, for causing the most impactful outages – with the frequency of ransomware attacks continuing to rise:

- In 2021, **76%** of organizations globally were successfully attacked by ransomware at least once.
- In 2022,  $\bf 85\%$  of organizations globally made that same declaration.

29%

of US Public Sector organizations state that 'Improving Reliability/ Success of Backups' is their motivation for changing backup solutions



While the statistics for US Public Sector organizations lined up fairly closely with overall global results, there were some notable differences. A slightly higher percentage had no ransomware attacks last year, and a markedly lower number (7% vs. 18%) had four or more. These factors may be attributable to the federal government's policy of not paying ransoms (making government a less enticing ransomware target), to improved public sector security postures, or to both.

As notable as the statistics above are, the results of those attacks are even worse. When organizations were asked about their most significant attacks suffered in 2022:

- 39% of their entire production data set was successfully encrypted or destroyed
- Only 55% of the encrypted/destroyed data was recoverable

Thus, it is no surprise that the most common, and most important aspect of a "modern data protection solution" is the integration of data protection within a cyber preparedness strategy.

#### Modern or innovative data protection (global)

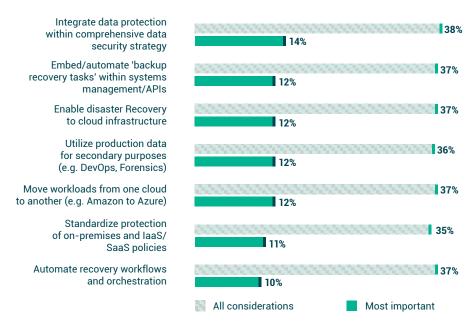


Figure 1.5

Which would you consider to be defining aspects of a "modern" or "innovative" data protection solution for your organization? Most important?

But while cyber resiliency continues to be top of mind for many IT leaders, it would be a significant strategic error to focus all your data protection planning on attacks. Systems outages, caused by networking, application failure, hardware failure, and OS issues are all still commonplace even within modern data centers. Organizations should be prepared for both the breakages that continue to occur as well as human-caused events, such as user errors and cyber criminals.

### **BC/DR methods and mechanisms**

As cloud services become increasingly more common in data protection strategies, many wonder whether to recover data back to on-premises servers or into cloud-hosted infrastructures. While the research results show relatively balanced interest between on-premises and cloud-hosted recoveries for 2023, most of the recovery data will

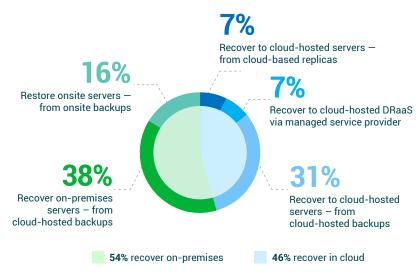
56%

of US Public Sector organizations expect to use **on-prem servers** for BC/ DR, while **44%** will leverage cloud-hosted infrastructure for BC/DR



be coming from cloud-hosted backups. This follows the practice of having less recovery points on premises as well as getting data out of the building to cloud-based storage for data retention and ransomware or BC/DR preparedness.

#### Recovery location (global)



When considering the best practice of assuming that the primary experts are no longer available during a crisis, a strong recommendation from most BC/DR planners is to utilize orchestrated workflows, whereby the expertise can be encapsulated in processes. It's also recommended to test workflows the same way that it will be executed during an actual crisis. Unfortunately, this year's survey results revealed only 18% of global respondents currently have an orchestrated workflow capability within their current data protection or failover strategy.

# Cloud-Powered Data Protection continues to gain popularity

Is cloud-based storage a "tape killer?" According to all survey participants, **50%** of data protection data is still written to tape at some point during its data lifecycle, whereas **63%** of data is now stored in the cloud at some point, though this does vary by country or region. One notable result from this year's study is that public sector organizations are ahead of the curve in making the transition from tape to cloud for long term storage. For the public sector **41%** (vs **50%** globally) is writing to tape, while **67%** (vs **63%** globally) goes to the cloud.

Many organizations have a three-tier operating model for data retention, including:

- On-premises disk for 90-120 days
- Cloud copies, including current copies and previous versions for up to two to five years
- $\bullet\,$  Tape for the minority of data that has mandates to be stored for 10 years or more



#### Figure 2.3

How are operations resumed for your organization's DR function?



As an alternative lens to '% of data using the cloud', it is worth considering '% of organizations using cloud-powered backups' – with **67%** of global respondents using cloud services as part of their data protection strategy today, with the aspiration of **74%** by 2025.

Easily one of the most powerful synergies between cloud-powered services and data protection is the advent of cloud-powered disaster recovery, whereby cloud infrastructures are leveraged instead of, or in compliment to, a secondary data center. In 2020, globally 53% of organizations had BC/DR capabilities – with 71% being BC/DR capable in 2023. More importantly is the recognition that while roughly 30% of organizations continue to leverage multiple datacenters for their BC/DR, the percentage of organizations utilizing cloud-services (laaS/DR or DRaaS) for BC/DR has more than doubled from 2020 (23%) to 2023 (47%), with 55% expected to be using cloud-powered DR by 2025.

When looking at public sector trends we see a increase in utilization of cloud-hosted DR infrastructure, although public sector remains more reliant on their own datacenters than private sector organizations. This continued relance on physical data centers maybe the result of the public sectors continued holding of buildings and physical datacenters.

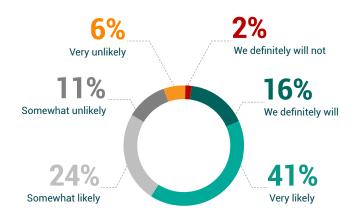
# Will 2023 be a year of 'change?'

Between the angst of ransomware, the pressures of ensuring IT services, and the challenges of protecting modern laaS and SaaS workloads, one might presume that many organizations are likely to switch backup solutions to adapt to these changing pressures and conditions. You'd be right! Ignoring the **35%** of near-neutral responses:

- Only 8% of organizations globally are unlikely to switch their primary backup solution in 2023
- Meanwhile, 57% of respondents globally expressed that they are likely or definitely will switch backup solutions

It is notable that while government agencies' budgets for backup solutions are decreasing, more than half of these organizations surveyed still expect to change their primary data protection solution this year. This suggests strongly that cost savings and flexibility, along with the capabilities noted above, will be major decision drivers for the US Public Sector in 2023.

#### Change solutions (global)





71%

of US Public Sector organizations expect to utilize cloud services as part of their data protection solution by 2025

**53%** 

of US Public Sector organizations expect to change their backup solutions in 2023



Figure 3.6

What is the likelihood that your organization will switch its primary backup solutions/services within the next twelve months?





# **!** The Veeam perspective

#### The Veeam Data Platform

As organizations continue to transform their infrastructure, ensuring support for cloud aspects such as backup, usage and mobility, there's a need for a solution that makes the complex comprehensive. The Veeam® Data Platform offers:

- · Storage cost control with an intelligent cloud storage tiering architecture
- · Purpose-built, Kubernetes-native backup and restore, disaster recovery and mobility for containerized applications
- Broad workload support across laaS/PaaS/SaaS services
- Centralized monitoring and management, coupled with extensive API coverage

New or current Veeam users should check out Veeam Backup for AWS, Azure, Google Cloud, Microsoft 365, Salesforce and Kasten for Kubernetes to see industry-leading capabilities built for the unique needs of the hybrid cloud.

For Veeam users who are looking for "as a Service," or to fill a resource gap, Veeam partners with an extensive network of BaaS and DRaaS providers, and professional services specialists, to ensure users maximize their Veeam and cloud investments.



Click here to view the Global complete research report



Questions related to this research data and insights can be directed to **StrategicResearch@veeam.com** 

