



A year-long experience with Storage as-a-Service (STaaS)

Summarizing a year of experience with two STaaS solutions: Dell APEX Data Storage Services and an HPE GreenLake for Storage solution

Lower up-front investments and the flexibility to add capacity on demand make cloud and subscription models an attractive proposition for organizations navigating an ever-changing IT landscape. For those that already maintain onsite data center environments, adding storage via Storage as-a-Service (STaaS) subscriptions can deliver these benefits from anywhere. Of course, not all subscriptions provide the same level of services.

We acquired two such STaaS solutions through normal customer channels: Dell APEX Data Storage Services and an HPE GreenLake for Storage solution. In a previous report, [Get up and running faster with Dell APEX Data Storage Services](#), we showed how the APEX solution provided a simpler purchase experience, as well as faster ordering and procurement compared to the HPE GreenLake solution. In this report, we detail our experiences with delivery, support, and ongoing use of both over the course of a year.



Our experience with Dell APEX Data Storage Services

In this section, we give an overview of our experience with the APEX solution, including a summary of the activation and implementation procedure. For a closer look at this earlier process, see our previous report, [Get up and running faster with Dell APEX Data Storage Services](#).

The APEX Data Storage Services solution arrived as a complete rack of gear, and the next day Dell engineers arrived to deploy it onsite. Activation of the APEX solution took less time than with the HPE GreenLake solution: two business days of onsite visits for installation and a total activation period of two weeks, versus three weeks of troubleshooting connection issues with the HPE GreenLake solution and a three-month total activation period (see more on our experience with HPE GreenLake in the following section). The APEX solution arrived with multiple components all contained within a complete rack environment. Although the infrastructure networking requirements for the APEX solution were very specific and more complex than those for the HPE GreenLake solution, the APEX team managed the entire storage solution with little intervention from our team.

We had access to a dedicated Customer Success Manager who coordinated the implementation from the very beginning, even before hardware delivery. From proactive support to check-ins occurring at least monthly, the Customer Success Manager was key to a successful rollout. Additionally, the APEX solution leveraged several portals with varying levels of access, providing comprehensive views of subscription status, system health, storage consumption, financials, and support. We did not have to reach out to a third party for billing inquiries.

The APEX team provided us with management access to the APEX Console and tools we needed from the first day the array was active. The APEX team gave updates at least once per month, including alerts as we approached our storage capacity limits. The APEX team largely handled issues behind the scenes, with little to no interaction required from us. In cases where the systems became unreachable remotely, the APEX team requested a screen-sharing call to resolve issues blocking remote connectivity.

We received regular communication from the APEX team indicating potential issues, hardware accessibility and connectivity, capacity utilization thresholds, and recommended corrective measures. This is possible because Dell has remote access to all hardware contained in the APEX cabinet for monitoring and management (Dell cannot see customer data). This includes access to their own network as well as a small, dedicated compute environment for providing ongoing management services. The APEX solution leverages a Simple Mail Transfer Protocol (SMTP) solution, but technicians perform additional monitoring from redundant remote data centers.

The APEX team handled patching and updates with no interaction from us and no apparent downtime. The APEX team proposed a timeframe for updates, verified we were satisfied with it, and let us know the amount of time the update would take. A crucial part of APEX support was that our dedicated Customer Success Manager was proactive from the beginning to coordinate any efforts around the service offering.

During the last 12 months, the APEX team provided one major software upgrade and several patches automatically, which the APEX team coordinated and orchestrated entirely. We received the major software upgrade on March 8, 2022, which improved upon the original APEX design and experience. Initially, the APEX solution required a constant VPN connection and APEX-managed VMs that lived on the array's infrastructure to provide service alerts and a service portal. The major upgrade eliminated reliance on public NAT VPN connections and implemented the Dell Secure Connect Gateway instead. Though issues can occur with major outages, the Dell Secure Connect Gateway further decreased the need for customer hands-on intervention. During the year of our testing, the appearance of the APEX Console UI improved, providing more context and clearer information.

The decommissioning process was as simple for us as the delivery and implementation process. As we purged project data and destroyed all the volumes we had created, the APEX Customer Success Manager handled all the back-end requests.



Our experience with the HPE GreenLake solution

Below, we summarize our experiences with the HPE GreenLake solution, including the process of activation and implementation. To read more about the details of these events, see [Get up and running faster with Dell APEX Data Storage Services](#).

HPE partnered with a third-party vendor to order and deliver the hardware, while HPE field services performed primary installation and support. After a two-month delay beyond the target delivery date, the HPE GreenLake solution arrived in several boxes on a pallet. The HPE field services team arrived one week later and installed the equipment in our existing racks. We provided all required network and FC connections. The HPE field services team provided us with a quick overview of the array manager, and then departed.

On the same day, a remote support engineer contacted us to begin the activation procedure. We immediately experienced issues with activating the array in the various portals required to implement the solution. Before the first attempt had concluded, we'd lost all access to the portal components, except for the ability to log in, which led to a page indicating no tenancy.

Over the course of the next several weeks, HPE elevated the issues to support engineers. These engineers determined what had happened on the back-end and were able to correct the underlying issue, which enabled us to restart the activation process. However, because we already had a compute account, and the process created a storage account, we had to wait for a specific support group within HPE to merge the accounts and complete the process.

To enable metering and communicate with HPE using Windows-based job scheduling, we had to create our own VM and customize it with HPE scripts. We were entirely responsible for maintaining this VM and addressing any issues, as HPE had no direct access to it. This approach differs from that of the APEX solution, which utilizes VMs administered by the APEX team. From the day the HPE field services team installed the HPE GreenLake solution, it took three months and multiple email threads with engineers, delivery managers, and technical staff for our VM to connect to their upstream collector. It was not until this resolution that we gained access to the cloud-based portals so we could monitor and manage the solution.

Throughout the subscription period for the HPE GreenLake solution, we discovered we lacked proper access to view certain cloud components that should have been included with the cloud portal offering. Approximately four months after receiving the HPE GreenLake solution, the delivery manager introduced us to our customer satisfaction manager, who was able to streamline the resolution to many of the issues we experienced.

Our Customer Success Manager also uncovered an anomaly that seemed to suggest the unit had shipped with less storage than intended. However, we never achieved a satisfactory resolution on that open question. Otherwise, we ultimately gained full access to the tools and interfaces that we needed and to which our subscription entitled us. Some of the data displayed in these interfaces was confusing, with some charts containing multiple data types on the same two axes.

At the conclusion of the subscription, the decommissioning process was simple. HPE let us know when their team would remove the unit. To prepare, we took a day to purge all project data, destroy all volumes, and remove personalization data such as email addresses, network pointers, and configurations specific to our environment. Finally, we disconnected the unit from our infrastructure. HPE field services arrived as scheduled and within two hours, removed the system from the rack, re-boxed it in the original packaging, and shipped out the unit.

Unfortunately, due to delays in the implementation phases and issues during initial operations, we were never able to experience how software upgrades of the physical unit were performed. However, we did experience multiple changes to the cloud-based user interfaces over time, which were generally improvements.



In conclusion

We found that the Dell APEX Data Storage Services solution was a fully managed agile solution that arrived at our data center nearly ready to go. The APEX team handled the initial configuration onsite and required about two days to get their solution fully configured and ready for handover. Dell consistently provided strong customer service, with support teams handling virtually all issues within a day or two. While the HPE GreenLake offering is also a fully managed solution, we experienced significant delays and complications during delivery and implementation. HPE teams tried to address the issues, but the challenges were significant, with the solution requiring months to fully activate and monitor. In our experience over the course of the year, APEX Data Storage Services provided the superior STaaS experience in the areas of activation, implementation, and support.

For more information on APEX Data Storage Services, visit www.dell.com/APEX-Storage.

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