



## Not all STaaS subscriptions are created equal

### A year-long experience with Storage as-a-Service

As cloud and subscription models have transformed the IT landscape, many organizations are looking for ways to apply these concepts to more traditional IT setups in their own data center environments. Leveraging pay-as-you-go subscription models for servers and storage may mean a smaller up-front investment with the ability to incrementally expand instead of potentially over-purchasing based on inaccurate capacity forecasts.

Additionally, the ability to add and manage new storage capacity without having to add more IT resources and staff can be an attractive proposal. Storage as-a-Service (STaaS) subscriptions enable organizations to consume on-demand storage capacity without having to actively manage those solutions themselves. And while many traditional storage vendors now offer STaaS subscriptions, not all subscriptions provide the same level of or maturity of services.

To study what those STaaS services looked like over the course of a year, we procured two solutions through normal customer channels: Dell APEX Data Storage Services, and a similar solution from a key competitor (which we refer to as "Vendor C" in this report). We compared our experiences with purchasing, delivery, installation, and ongoing use of both. In a previous report, [Get data center Storage as-a-Service with Dell APEX Data Storage Services](#), we show how APEX Data Storage Services provided a simpler purchase experience as well as faster ordering and procurement compared to the Vendor C solution. In this report, we focus on the value of the subscription services the vendors provided.

## White glove service from a managed service provider

Managed service providers (MSPs) have become increasingly vital to technology consumers. According to Gartner, "A managed service provider (MSP) delivers services, such as network, application, infrastructure and security, via ongoing and regular support and active administration on customers' premises, in their MSP's data center (hosting), or in a third-party data center."<sup>1</sup> One of the greatest benefits that MSPs offer is proactive administration, because that task requires minimal input from the user/consumer.

With STaaS and Gartner's definition of an MSP in mind, we compared how APEX Data Storage Services and a competitive STaaS offering (Vendor C) achieved some common MSP goals over the course of a year. Specifically, we assessed how the vendors

- deployed storage solutions,
- delivered services,
- offered consistent and proactive support, and
- provided active administration of on-premises hardware.

Based on our experiences, Vendor C's offering did not fully meet the Gartner definition of an MSP, while APEX Data Storage Services fully actualized that concept.

	APEX Data Storage Services	Vendor C solution
Delivers hardware?	YES	YES
Delivers services?	YES	MIXED
Consistent proactive support?	YES	MIXED
Active administration of on-premises hardware?	YES	NO



## Our experience with APEX Data Storage Services

### Deployment of the solution

The APEX Data Storage Services solution arrived as a complete rack of gear, and the APEX team arrived to deploy it onsite. Activation took longer than with Vendor C (two business days of onsite visits vs. four hours with Vendor C), but involved multiple components all contained within a turnkey rack environment. The networking requirements for APEX Data Storage Services were very specific and more complex than those for Vendor C, but this original solution let Dell manage the entire storage solution with little intervention from our team.

### Delivery of services

We had access to a dedicated Customer Success Manager who coordinated the implementation of the APEX solution from the very beginning. From proactive support to periodic check-ins, the Customer Success Manager was key to a successful roll-out. Additionally, the APEX solution leveraged the APEX Console, which included varying levels of access and provided 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.

Dell provided us with management access to the APEX Console and other management tools from the first day the array was active. APEX Data Storage Services also gave regular, informative updates when we approached our storage capacity limits.

The APEX team largely handled issues behind the scenes, with little to no interaction required from us. In the case where the systems became unreachable remotely, Dell requested a screen-sharing call to resolve issues blocking remote connectivity.

## Support

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 the APEX team monitors the gear within the APEX cabinet for the purpose of hardware management. The APEX team cannot see user data, nor do they have access to upstream connections such as Fibre Channel switches or core network switches. APEX Data Storage Services leverages a Simple Mail Transfer Protocol (SMTP) solution, but technicians perform additional monitoring from redundant remote data centers.

## Active administration of on-premises hardware

Dell 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, Dell provided one major software upgrade and several patches automatically, which they coordinated and orchestrated entirely.

The major software upgrade improved upon the original APEX design. The APEX solution initially 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 decreases the need for customer hands-on intervention. During the year of our testing, APEX improved the appearance of the APEX Console UI, providing more context and clearer information.



## Our experience with the Vendor C solution

### Deployment of the solution

From the beginning of using Vendor C's service, we found the process was more like a traditional storage lease than a subscription-based STaaS model. Similar to other storage arrays we've received from Vendor C in times past, Vendor C sent field services to physically install and activate the equipment. At hand-over, we had access only to the local array manager, not the cloud-based management console—though the Vendor C team provided us access once we requested it several days later. Additionally, we had ongoing issues with out-of-date primary contacts within Vendor C's records, residual from other arrays we've owned in the past, which slowed our ability to respond to any issues efficiently. While Vendor C did eventually resolve our issue, it took multiple contacts before the problem was fixed.

### Delivery of services

Vendor C works with other IT service providers and partners to deliver the contract subscription specifics and billing, which creates a shared model of responsibility for delivery. Vendor C provides support for technical issues while billing and subscription questions go through a third-party vendor partner. From a service management standpoint, we did receive some early communication from our Vendor C Customer Success Manager when we were approaching or breaching capacity thresholds, but those messages provided no guidance on how to maximize storage utilization on existing resources. They offered to send us more storage. Instead, we deleted the "runaway process." This is in contrast to Dell, whose customer support staff recommended deleting data prior to breaching the capacity threshold.

## Support

From Vendor C support, we received support engineer emails indicating potential problems in our environment if they occurred, but because Vendor C did not actively manage the environment, these emails included only data they received from the array itself. The lone hardware problem we found was a damaged cable in the shared rack environment. When we experienced outages or network downtime, support provided no indication that the environment was unreachable. Most of the alerting we received came from emails sent from the array via our own SMTP server. Many of those were marked with a statement indicating that the Support address was not a recipient.

## Administration of on-premises hardware

For array patches and management, we had to be proactive and initiate, schedule, and monitor any update or patch requests with Vendor C. In each patch or update case, we had to schedule the request well in advance and choose from a menu of available dates and times, which means picking from the times Vendor C had available instead of what worked best for us.

The Vendor C solution shipped with a software version that was over a year old, which we discovered only after searching for any available upgrades. We requested the update through Vendor C's console, and had to choose an update date no earlier than a month out. We exchanged emails to approve the process and confirmed that we had read a series of caveats and warnings about the upgrading. The day of the update, Vendor C support asked us to enable a service portal for 48 hours for pre-upgrade checks and to do the upgrade itself. We received an email after it was complete. At no time did Vendor C service managers contact us about any major or minor updates that might be available—we had to be proactive and check ourselves.

Based on publicly available data from Vendor C, the latest Vendor C upgrade supposedly allows customers to perform their own updates, but we could not find where they added that functionality anywhere in the UI console. Instead, requesting Vendor C to perform updates is still the only known method from within the UI. When we realized an update was available and reached out to Vendor C, it took approximately 30 days to complete that initial update. At the time of this writing, the latest version we just upgraded to is already obsolete and requires a new update to take advantage of some of the latest features in the web console. When we investigated how soon we could schedule the update, we discovered we're already two versions behind. The current earliest available date listed is about three weeks away.



## In conclusion

APEX Data Storage Services fully satisfies Gartner's definition for a managed service provider, providing robust, hands-on, proactive administration for their subscription platform. Vendor C misses the mark in several categories, as their support model is closer to a traditional lease/purchase. Vendor C lacks proactive support and management, instead relying on in-house admins to notice/report issues and to reach out for upgrades; this is the result of dividing responsibility for service delivery between multiple vendors.

For more information on APEX Data Storage Services, visit [www.dell.com/APEX-Storage](http://www.dell.com/APEX-Storage).

- 
1. Gartner, "Definition of a Managed Service Provider (MSP)," accessed June 14, 2022, <https://www.gartner.com/en/information-technology/glossary/msp-management-service-provider>.

This project was commissioned by Dell Technologies.



**Facts matter.®**

Principled Technologies is a registered trademark of Principled Technologies, Inc. All other product names are the trademarks of their respective owners.

#### DISCLAIMER OF WARRANTIES; LIMITATION OF LIABILITY:

Principled Technologies, Inc. has made reasonable efforts to ensure the accuracy and validity of its testing, however, Principled Technologies, Inc. specifically disclaims any warranty, expressed or implied, relating to the test results and analysis, their accuracy, completeness or quality, including any implied warranty of fitness for any particular purpose. All persons or entities relying on the results of any testing do so at their own risk, and agree that Principled Technologies, Inc., its employees and its subcontractors shall have no liability whatsoever from any claim of loss or damage on account of any alleged error or defect in any testing procedure or result.

In no event shall Principled Technologies, Inc. be liable for indirect, special, incidental, or consequential damages in connection with its testing, even if advised of the possibility of such damages. In no event shall Principled Technologies, Inc.'s liability, including for direct damages, exceed the amounts paid in connection with Principled Technologies, Inc.'s testing. Customer's sole and exclusive remedies are as set forth herein.