SUSE signs a tier one storage partner in HPE, refreshes Ceph-based software

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01 JUL 2016

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Open Source specialist SUSE has announced the latest version of its Ceph-based storage software, adding functionality for early-access users such as native file system access, meaning the platform now supports unified block, file and object access in a single SUSE Enterprise Storage cluster. The new edition comes as the company unveiled a partnership with Hewlett Packard Enterprise, which it believes will open a new chapter in the market adoption and acceptance of its storage software. Under the deal, SUSE says it and HPE will deliver a Scalable Object Storage Solution running SUSE Enterprise Storage on a range of HPE servers.

THE 451 TAKE

The object storage market continues to grow in stature as more organizations seek to store large volumes of content and other bulk data more effectively. While the market for on-premises object storage is still not mainstream, the growing popularity of cloud-based services for a range of bulk storage use cases indicates that organizations are willing to adopt new approaches, if the economics are compelling enough. SUSE believes it can make such a case with SUSE Enterprise Storage (SES), while at the same time demonstrating that Ceph is an increasingly capable software platform for building a growing range of storage services. With HPE now an ally, the market awareness of SES – which remains SUSE's single biggest challenge – should begin to grow, at least for object-centric use cases.

CONTEXT

We have been following SUSE's storage efforts since the company announced its intention in late 2014 to enter the market with an offering based on the open source Ceph platform. SUSE Enterprise Storage started shipping in early 2015, and has provided the company with an entry point into what it believes can be a heavily disruptive play in the overall storage sector. The initial focus is on tier two storage workloads where the emphasis is on storing ever-growing volumes of content (such as for backup/archive purposes and bulk storage applications, including big-data and audio/video functions like surveillance) at a cost point that is vastly lower than for typical on-premises storage, thus providing organizations with a compelling alternative to the public cloud. Core development is focused on improved manageability, interoperability (such as unified file/block/object support), efficiency (e.g., tiering, de-duplication and compression) and availability (including replication.)

This development focus emphasizes that SUSE's storage play is about more than just offering the 'vanilla' flavor of Ceph also promoted by other open source vendors (most notably Red Hat, which acquired Inktank, the commercial entity initially created to bring commercial Ceph projects to market, in 2014). The company says it is committing substantial resources to Ceph, making material contributions to the platform's functionality in the process. Examples of this in the previous SES release included support for multi-path iSCSI – which provided the basis for heterogeneous OS block-level access – and data encryption. Additionally, earlier this year SUSE began a collaboration with Germany-based software specialist it-novum to add Ceph-specific support for openATTIC, an open source storage management platform.

PRODUCTS

SUSE has now announced the third version of its storage service: SUSE Enterprise Storage 3 is based on the Jewel release of Ceph, and includes new functionality in a couple of important areas. The first is early access support for POSIX file system capabilities, focused on allowing customers to have unified block, object and native file access in their SES cluster. The initial focus is on clustered metadata server support, as well as Linux client support; NFS (via Ganesha) and CIFS (via Samba) support will follow. SES 3 also includes early-access interoperability with ARM 64-bit processor technology, as well as support for a couple of long-distance availability features: asynchronous block-level mirroring and multisite object replication.

PARTNERS

With SUSE reporting that it is making substantial progress on the product side, the company's efforts are now turning to building go-to-market partnerships that can make a real difference to its level of penetration in storage. To this end, it has announced what potentially is its most significant partnership to date, with HPE. Under the deal, HPE will sell a SES-based product for object storage, running on a range of HPE servers. The offering, which is fully validated and supported by both SUSE and HPE, will be aimed at petabyte-scale environments. SUSE has been training both the HPE sales team and its global partners on the service.

The two already claim a customer in the Orchard Park Police Department in New York, which is deploying the offering to lower the cost of data captured via a new body camera initiative. SES software will be available running on HPE Apollo 4000 high-density servers, HPE ProLiant DL380 servers and the latest CloudLineCL-5200 servers. It is also integrated and certified to work with HPE Data Protector software for backup and recovery use cases.

COMPETITION

The object storage market continues to grow in stature as more organizations seek to store large volumes of content and other bulk data more effectively. The stand-alone object storage segment is still not mainstream for several reasons – one big reason is that it's often easier and cheaper to get up and running on public cloud-based offerings such as Amazon S3, at least initially. Another barrier for object storage is that many potential buyers are put off by the idea of introducing another storage architecture into their environment.

SUSE is seeking to address both of these barriers with SES: it claims that it can make a compelling economic case for building an on-premises storage offering, with base configuration subscriptions (covering 10 nodes) starting at $10,000. Meanwhile, the addition of file system functionality into SES begins to position it as a unified storage platform spanning multiple use cases, the idea being that it can become a common storage pool supporting a range of applications utilizing block, file and object access interfaces.

From a competitive point of view, SUSE's closest rival is probably Red Hat, with its own Ceph-based offering. Ceph is not the only option in open source object storage, with OpenStack Swift the most visible alternative. Here, partner HPE appears to be hedging its bets: it provides object storage based on Swift, and has partnered with Scality, a proprietary object storage specialist that also has a partnership with Dell.

Other major players in the commercial object storage space include EMC (with its Elastic Cloud Storage platform), Hitachi Data Systems (Hitachi Content Platform), NetApp (StorageGRID), Western Digital (Amplidata) and IBM with Cleversafe, although this latter offering is mostly being positioned in the context of supporting cloud-based services. Aside from Scality, other smaller specialists focused on object storage include Cloudian, Caringo, SwiftStack, DataDirect Networks and Nexenta.

SWOT ANALYSIS

STRENGTHS
SUSE's investments in storage continue to grow, Ceph and SES continue to mature, and the addition of HPE as a go-to-market partner is a potentially significant development that could materially improve the company's exposure and awareness in the market.

WEAKNESSES
Overall, it's still early days for SUSE in storage, and its customer base remains small. The company's greatest challenge is to increase market awareness of its capabilities in this field.

OPPORTUNITIES
The HPE relationship opens up a major opportunity, while SUSE itself has a sizeable installed customer base, many of which are open to considering new approaches to storage infrastructure.

THREATS
The storage sector remains intensely competitive, and although open-source-based approaches are gaining momentum, some storage decision-makers still need to be convinced of the benefits of making the open source switch in storage.