

IDC MarketScape

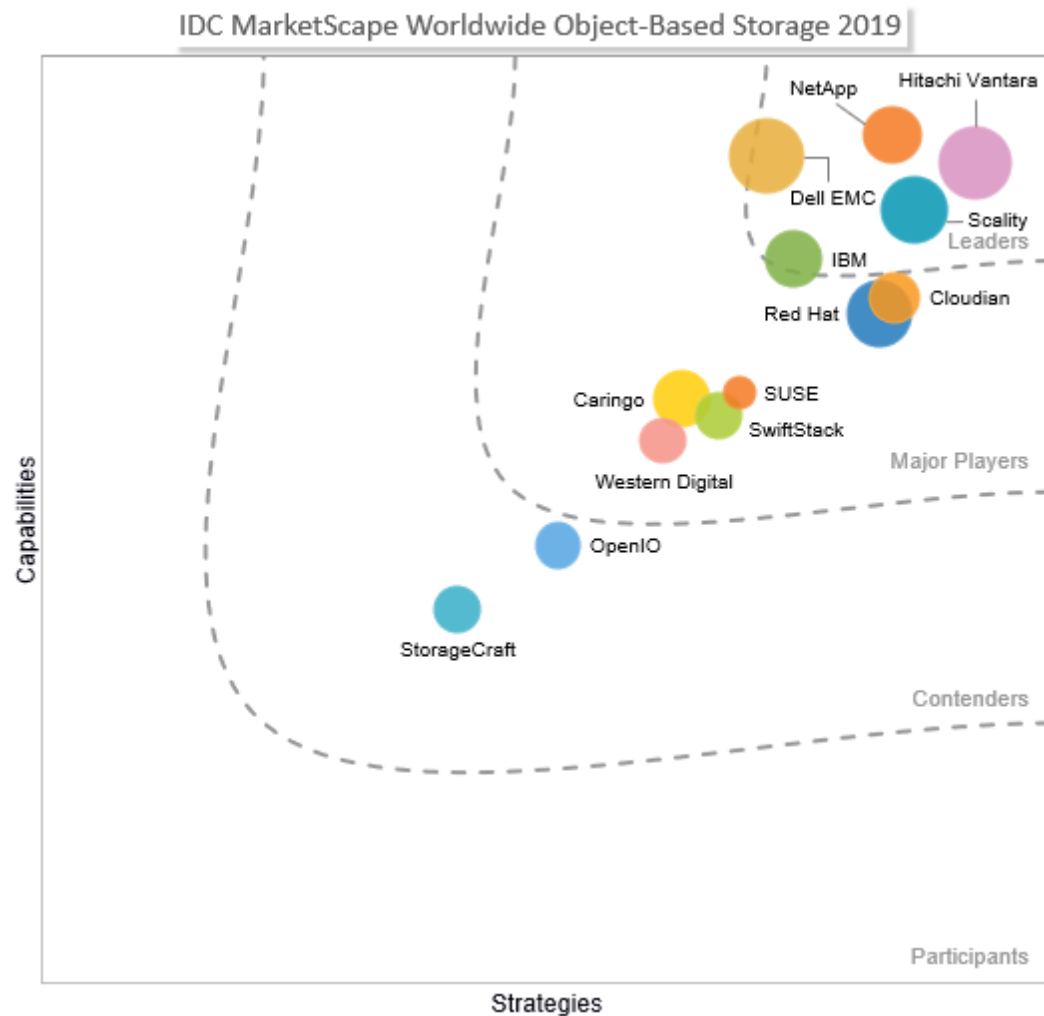
IDC MarketScape: Worldwide Object-Based Storage 2019 Vendor Assessment

Amita Potnis

THIS IDC MARKETSCAPE EXCERPT FEATURES NETAPP

IDC MARKETSCAPE FIGURE 1

IDC MarketScape Worldwide Object-Based Storage Vendor Assessment



Source: IDC, 2019

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Object-Based Storage 2019 Vendor Assessment (Doc # US45354219). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

The storage market has come a long way in terms of understanding object-based storage (OBS) technology and actively adopting it. It is a common practice for OBS to be adopted for secondary and cold storage needs at scale. Over the recent years, OBS has proven its ability to scale to tens and hundreds of petabytes and is now maturing to support newer workloads such as unstructured data analytics, IoT, AI/ML/DL, and so forth. As the price of flash declines and the data sets continue to grow, the need for analyzing the data is on the rise. Moving data sets from an object store to a high-performance tier for analysis is a thing of the past. Many vendors are enhancing their object offerings to include a flash tier or are bringing all-flash array object storage offerings to the market today.

In this IDC MarketScape, IDC assesses the present commercial OBS supplier (suppliers that deliver software-defined OBS solutions as software or appliances much like other storage platforms) landscape. Cloud-based storage services based on OBS are not included in this IDC MarketScape. This IDC MarketScape assesses 13 OBS suppliers that are "owners of intellectual property (IP)." IDC analyzed the capabilities and business strategies of OBS suppliers that it considers to be representative of the market. Key findings include:

- **All-flash array OBS solutions.** End users and suppliers are exploring the idea of all-flash array OBS solutions that will cater to not just capacity needs but also performance requirements for environments like Big Data and analytics, rich media, and technical computing
- **Data management.** Many solutions offer data visibility and management controls across on-premises datacenters as well as private and public cloud. These metadata-based capabilities enable customers to project application resource consumption and capacity growth and implement policy-based data retention on appropriate tier.

IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

This IDC study assesses the capabilities and business strategies of leading suppliers in the (scale out) OBS market segment. This evaluation is based on a comprehensive framework and a set of parameters that gauge the success of a supplier in delivering an OBS solution in the market. This study includes an analysis of the most notable players in the commercial OBS market, with broad portfolios and global scale.

To make this list, the suppliers need to have an OBS platform:

- **Conforms to IDC's taxonomy.** According to *IDC's Worldwide SBS, SDS, and FOBS Storage Solutions Taxonomy, 2018* (IDC #US43579118, March 2018), participating object storage solutions leverage an OBS data organization scheme. **Distributed file systems with object interfaces are not included.**
- **Supplier the owner of IP.** The participating supplier has developed the OBS solution in-house or owned by the way of an acquisition and is the owner of intellectual property of that platform.
- **Deployment model.** The OBS solution is primarily sold as software, hardware (appliance or gateway), and may, additionally, be available as a service.
- **Generally available (GA) in 2019.** The OBS solution was generally available as a current offering at the time IDC undertook this study in 3Q19.
- **Revenue.** The product generated \$10+ million in revenue in 2018.
- **Capacity deployed.** If revenue requirements were not met, the participant must have proven customer deployments of 4PB or greater.

ADVICE FOR TECHNOLOGY BUYERS

It is imperative that OBS suppliers consider the following in developing their product road map and addressing customer demand. In detail:

- **Hybrid cloud strategy.** It is imperative that OBS suppliers have a strategic offering in place to enable customers to implement a hybrid and multicloud storage offering. Policy-based data tiering to public cloud of choice and deployments on-premises or as a private cloud are essential to a successful hybrid cloud strategy.
- **Data management.** Lack of data visibility and control are concerns for any organization with petabyte-scale data sets. These concerns are aggravated with unaccounted data stored across storage silos. Many OBS suppliers are addressing this immediate concern with integrated or added solutions that allow end users to gain access to data sets across deployment locations through a single pane of glass.
- **Newer workloads.** OBS use cases are no longer simply an archival play. Increasingly, customers are looking at OBS as a dense, performant, and cost-effective alternative for newer high-growth (in terms of revenue and capacity) workloads such as unstructured data analytics, IoT, and artificial intelligence/machine learning (AI/ML)/DL.

VENDOR SUMMARY PROFILE

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of the vendor's strengths and challenges.

List of Participating Vendors

Table 1 shows the list of vendors and their classifications.

TABLE 1

List of Suppliers and Their Classifications

IDC MarketScape Category	Supplier Name	Product Evaluated (Older-Generation Product)
Leaders	Dell EMC	ECS
	Hitachi Vantara	Hitachi Content Platform (HCP)
	IBM	Cloud Object Storage
	NetApp	StorageGRID
	Scality	RING
Major Players	Caringo	Swarm
	Cloudian	HyperStore
	Red Hat	Red Hat Ceph Storage
	SUSE	SUSE Enterprise Storage
	SwiftStack	Multi-Cloud Data Management
Contenders	Western Digital	ActiveScale
	OpenIO	OpenIO
	StorageCraft	OneBlox

Notes:

Vendors are listed in alphabetical order per category.

Revenue from products evaluated impacts bubble size.

Revenue from other portfolio products is not evaluated and does not impact bubble size.

Source: IDC, 2019

NetApp

NetApp is positioned as a Leader in this IDC MarketScape for object-based storage.

NetApp's object storage offering, StorageGRID, is available as software-only or turnkey appliances with integrations to support a hybrid and multicloud implementation. The offering can be deployed in Docker containers or virtual machine instances. StorageGRID's customer base has significantly increased over recent months and its average deal size runs in petabytes with multiple deployments over 100PB.

NetApp can support customer requirements of hybrid and multicloud storage strategy through several inbuilt functionality and supporting product portfolio. StorageGRID supports public clouds including Microsoft Azure and AWS (or any S3 compatible cloud), archiving to tape, mirroring, and tiering to different storage tiers within a StorageGRID instance. NetApp's FabricPool feature enables cold data to be automatically tiered from a NetApp AFF all-flash storage system to StorageGRID via S3 protocol. NetApp's StorageGRID Cloud Storage Pools support policy-based data tiering to AWS S3 (and any other S3 compatible cloud or on-premises target) and Microsoft Azure. StorageGRID's Cloud Mirroring supports mirror replication of StorageGRID buckets to AWS S3.

StorageGRID continues to expand its partnerships with key partners in backup and archive such as Commvault, Veeam, and Rubrik. StorageGRID has recently seen increased adoption for analytics use cases with Splunk SmartStore. The offering targets several verticals such as healthcare, media and entertainment, and life sciences.

Strengths

NetApp's strength comes in the form of the company's core engineering strengths and the vast experience in the unstructured data space. With NetApp StorageGRID, customers can take advantage of the hybrid and multicloud integrations via using bucket replication, cloud notification, and Elasticsearch integrations for metadata. Customers with existing NetApp infrastructure can use NetApp's Data Fabric to tier inactive data onto StorageGRID, thus keeping only active data on performant storage.

Challenges

NetApp's StorageGRID challenge comes from potential customers lacking awareness of its existence and functionality. In its recent 2019 NetApp INSIGHT event, the company highlighted the success of StorageGRID and announced an all-flash offering of the product. The company's increased interest in the product, increased investments, and new customer acquisition will help build customer awareness.

Consider NetApp When

Customers in need for simplicity and speed from their IT infrastructure should consider StorageGRID. As the adoption of cloud proliferates, customers dealing with petabyte-scale data sets across various deployment locations can take advantage of StorageGRID with its hybrid/multicloud integrations.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

In the case of a supplier with multiple products in the same market segment, IDC has worked with the supplier to select the product that most closely resembles the tactical strengths (capabilities) and strategic directions (strategies) of the supplier, and the one that can be used as the lens through which the supplier's position in the market can be ascertained, provided the product meets the inclusion criteria for the IDC MarketScape. This can impact the size of the bubble, as only the revenue for the evaluated product is included and not the supplier's overall revenue for that market segment.

Therefore, while certain suppliers are at an advantage given their size and broader portfolio offerings, IDC recognizes that smaller suppliers with a single product, and whose primary focus in the object-based storage market may be limited to specific verticals, also play an important role by bringing to the market potentially disruptive technologies.

Note that certain suppliers (e.g., Scality, Red Hat) are pure-play software vendors, while the other suppliers sell a mix of hardware and software, mostly as hardware appliances. Pure-play software typically represents 25-50% of the total revenue, so the associated server revenue is added to compare the size of the bubbles directly to the appliance vendors.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of a review board of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

IDC classifies OBS platforms as part of the scale-out file- and OBS (FOBS) market segment. IDC uses the classification scheme to classify newer software-based file- and object-based storage platforms.

Object-based storage includes appliances and software-only delivery models. Software-only delivery models include commercial, commercialized open source, and open source software offerings. Hardware costs associated with software-only delivery models are included in this subsegment. Self-built OBS platforms that are delivered as cloud-based storage services are also included in this segment. An important (and mandatory) distinction between this and the aforementioned scale-out OBS category is the fact that self-built platforms are never sold as packaged products but only used to deliver value-added services.

The main attributes of OBS are:

- These solutions have flat tenant-account-container-object namespace designed for multipetabyte environments. Such structures are higher-level structures in which data is often organized using an "account, container, object" approach, wherein "objects" are analogous to "files" in FBS solutions.
- Accounts, containers, and objects are referenced by a metadata repository that stores and manages attributes of data stored in that structure. Many OBS solutions operate on a per-object level (i.e., allow each object to be treated independently as far as policy management is concerned), whereas others operate at a container or account level (i.e., allow policies to be applied at a container or an account level).
- Several OBS solutions also leverage NoSQL databases as metadata repositories and persistent data stores (instead of storing chunks in the file systems).
- These solutions support HTTP/REST, Amazon S3, and other object-specific interfaces.

LEARN MORE

Related Research

- *Worldwide File-Based Storage Forecast, 2018-2022: Storage by Deployment Location* (IDC #US44457018, December 2018)
- *Enterprises to Adopt Cloud-Native Applications in Next 12 Months: Drivers Include Security, Costs, Big Data AI/ML Initiatives* (IDC #US44448818, November 2018)
- *Data Management: Success with a Method to the Madness* (IDC #US44415618, November 2018)
- *Red Hat Acquires NooBaa - Makes a Shift from Storage to Hybrid Cloud Data Management* (IDC #lcUS44484218, November 2018)
- *Worldwide Composite Media Workloads (Compute and Storage) Infrastructure Forecast, 2018-2022* (IDC #US44281818, October 2018)
- *Micro Focus Sells SUSE Business to Private Equity Backer* (IDC #lcUS44101118, July 2018)
- *Growth of File Storage Services in the Public Cloud* (IDC #US44002318, June 2018)

Synopsis

This IDC study represents a vendor assessment model called the IDC MarketScape. This study is a quantitative and qualitative assessment of the characteristics that assess a vendor's current and future

success in the said market or market segment and provide a measure of the vendor's ascendancy to become a leader or maintain leadership. IDC MarketScape assessments are particularly helpful in emerging markets that are often fragmented, have several players, and lack clear leaders.

The (scale out) OBS market subsegment, which is part of the file and OBS market, is an example of a maturing and expanding market. In this IDC MarketScape, IDC attempts to assess the capabilities and strategies of key vendors of OBS solutions. IDC expects that market forces such as fierce competition and buyer demand will accelerate the metamorphosis of this market into a mature market with a few dominant vendors and some disruptive start-ups.

"A new digitized world demands an infrastructure that is extremely scalable and flexible in terms of delivery models and supports new high-performant use cases such as analytics and content delivery," said Amita Potnis, research manager in IDC's Storage team. "OBS platforms hold the promise and the potential to support end users along this path of digitization. In this competitive market, vendors offering OBS platforms with the most compelling value proposition via a long-term strategy, research and development plan, and flexible delivery models will survive."

About IDC

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Global Headquarters

5 Speen Street
Framingham, MA 01701
USA
508.872.8200
Twitter: @IDC
idc-community.com
www.idc.com

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