

Tiered Storage Flexibility at Cloud Scale

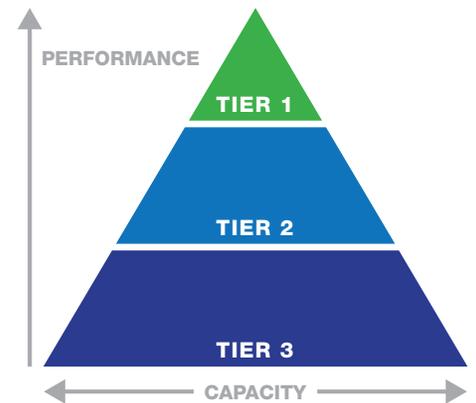
The DriveScale Composable Platform

Human and machine-generated data is driving massive growth in the amount of data companies create and store. In order to manage this growth seamlessly and cost-effectively, while maintaining performance for mission-critical applications, data-driven companies are adopting tiered storage strategies.

Tiered storage assigns different categories of applications and their data to a range of storage media types. Tiering for online data ranges from tier 0 for hot data, such as transactional databases and fraud detection, to tier 3 for cold, infrequently accessed data. Tier 4 is generally for archived or regulated data stored on tape or at a cloud service. No matter the applications or how you tier your data, finding server and storage infrastructure that adapts to your requirements is paramount.

The challenge is finding a unified way to deploy different types of storage while scaling application infrastructure easily. Storage types range from the newest high performance NVMe (non-volatile memory express) SSDs over fabric for mission critical hot data to traditional, low-speed, dense HDD storage systems for cold data. The key factor to lowering costs for tiered storage is the ability to easily and cost-effectively deploy the most appropriate type of storage media for the application.

DriveScale provides a unique approach to server and storage infrastructure for tiered storage. With DriveScale, you can easily create a storage platform that includes a broad range of SSD and HDD types, capacities and speeds while assigning data to the optimal media using a third-party storage tiering application. DriveScale enables you to mount different storage media types to compute nodes and compose only as much compute and storage as an application needs into the server platform. Instead of managing each tier separately or inside a single, fixed storage system, with DriveScale, you orchestrate and manage all storage infrastructure as part of a high-scale, multi-vendor server cluster that can be optimized to meet your requirements.



Composable Infrastructure

Composable Infrastructure is next-generation server infrastructure that provides the ability to flexibly create, adapt, deploy and later redeploy servers using pools of disaggregated, heterogeneous compute, storage and network fabric. According to IDC, the composable infrastructure market is estimated to grow from \$752 million in 2018 to \$4.7 billion in 2023.

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DriveScale Delivers Agile Server Infrastructure for Tiered Storage

The DriveScale Composable Platform is the only server infrastructure that scales and adapts compute and storage resources to meet the needs of applications on the fly. With the DriveScale platform, customers can choose their preferred vendors for dense SSD flash or HDD eBODs (Ethernet Box of Drives) and diskless servers to compose optimized server configurations. With DriveScale, users can deploy server and storage infrastructure in minutes not months, maximize resource utilization, and eliminate wasted spend with independent compute and storage upgrades.

In seconds, from the DriveScale software platform, you can add compute or storage as needed, or replace failed compute nodes or drives with an alternative from the resource pool. DriveScale allows you to maximize your resource utilization by configuring the best storage option for specific applications, based on performance and cost requirements.

With DriveScale, you eliminate server SKU proliferation and operational complexity by using low-cost compute nodes and storage building blocks that can be composed into the widest array of configurations.

Why DriveScale for Tiered Storage

The DriveScale Composable Platform quickly and easily scales compute and I/O, streamlines the process of provisioning and managing compute and storage for tiered storage applications, and significantly lowers cost by reducing overprovisioning.

The DriveScale Composable Platform for tiered storage provides:

- Flexible and adaptable server infrastructure to meet the demands of growing and changing data
- Automated infrastructure for provisioning and deployment in minutes
- The ability to carve flash and mount slices to servers or containers on the fly
- Optimized compute and storage configurations to eliminate overprovisioning
- Instant recovery from component failures from an easy-to-use software interface

Companies with data-driven applications that deploy the DriveScale platform reduce idle resources and wasted spend and increase operational efficiency, while gaining the flexibility to quickly scale compute and storage resources up or down as needed.