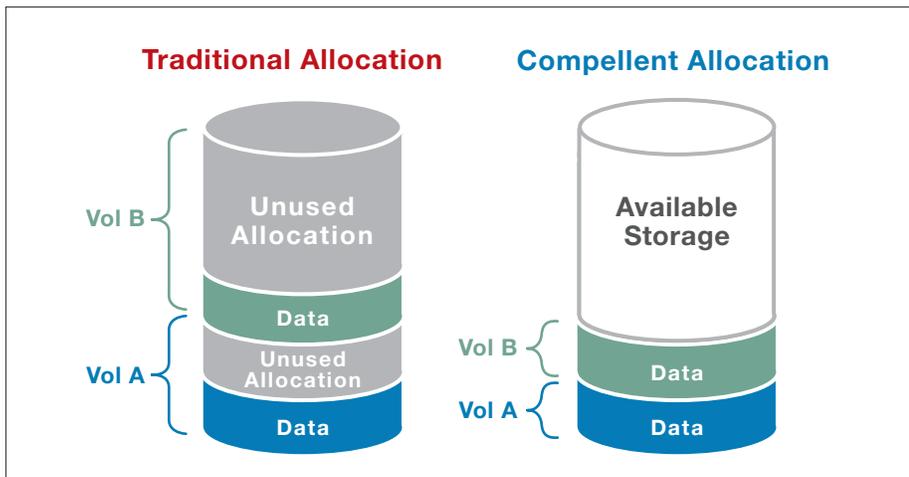


## STORAGE CENTER™ DYNAMIC CAPACITY™

### Delivering Maximum Utilization with Minimal Resources

With traditional storage systems, administrators must purchase, allocate and manage capacity upfront, speculating where to place storage resources and creating large, underutilized volumes with long term growth built in. This practice leaves the majority of disk space allocated yet unused, and only available to specific applications.

*Thin Provisioning That Delivers the Highest Utilization Rate in the Industry*



**Increased Utilization:** *Compellent's Dynamic Capacity eliminates the allocated but unused capacity that is an unfortunate by-product of traditional storage allocation methods.*

### Compellent Delivers Unprecedented Capacity Utilization

Compellent's Thin Provisioning, called Dynamic Capacity, delivers the highest storage utilization possible by eliminating allocated but unused capacity. Dynamic Capacity completely separates storage allocation from utilization, enabling users to create any size virtual volume upfront, yet only consume actual physical capacity when data is written by the application.

**Reduce Disk Spending.** Delay future storage purchases and leverage storage price declines by better utilizing disk storage upfront and adding disks incrementally as needed.

**Automate Time Intensive Capacity Planning Activities.** Spend less time provisioning storage, expanding and assigning volumes, and manually tracking volume utilization. Advanced monitoring and trending further simplifies capacity planning.

**Increase Availability and Performance.** Expand volumes online; utilizing actual instead of allocated disk space improves all volume-level operations such as copy, replication and rebuild.

#### KEY BENEFITS

- » Reduce storage costs by delaying storage purchases and eliminating the 40% to 60% of allocated but unused disk space typical for businesses
- » Save administrative time by automating common management tasks including capacity planning
- » Increase availability by eliminating downtime due to volume expansion
- » Improve performance by creating smaller volumes and writing only actual data
- » Support a greater number of servers without additional storage capacity
- » Reduce the space, power and cooling costs of maintaining allocated but unused capacity
- » Assign capacity to allow for future growth without having the physical disk in your SAN

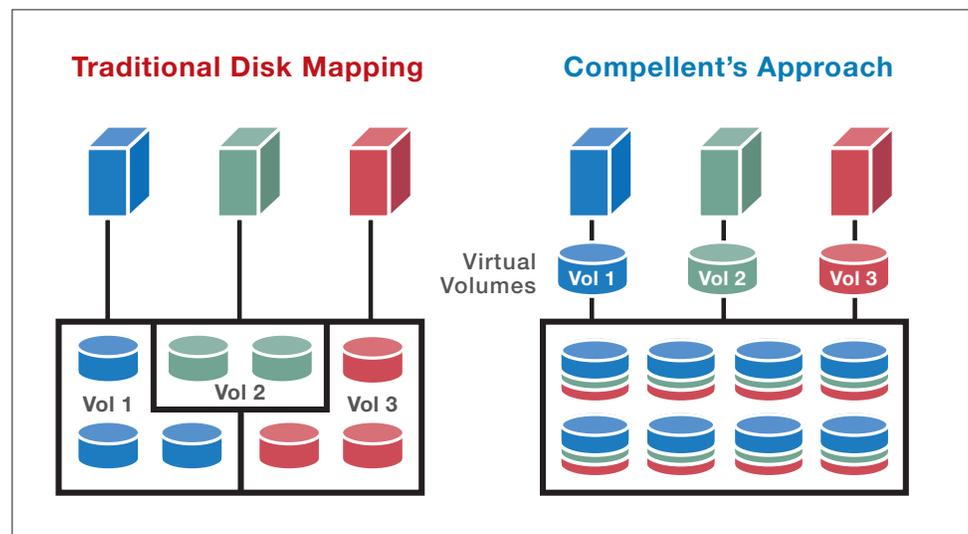
Traditional storage systems waste capacity with allocated but unused disk space. In fact, for many businesses, 40% to 60% of disk space is allocated but unused.

## PRODUCT FEATURES

### Advanced Virtualization Creates Common Pool of Storage

Dynamic Capacity works in combination with Storage Center's advanced virtualization technology to make all physical disk space available to all volumes from a single shared storage pool. Storage Center allows the creation of volumes without the need to pre-allocate disk space.

- » Virtualization spreads read/write operations across all of the disk drives rather than limiting availability to a single drive or group of drives dedicated to a volume
- » Create volumes from a common pool of storage space without the typical restrictions of RAID grouping or space pre-allocation
- » Any volume can simultaneously utilize all of the disk drives in the shared storage pool for improved data access rates
- » Expired snapshots are automatically coalesced into the free pool of storage

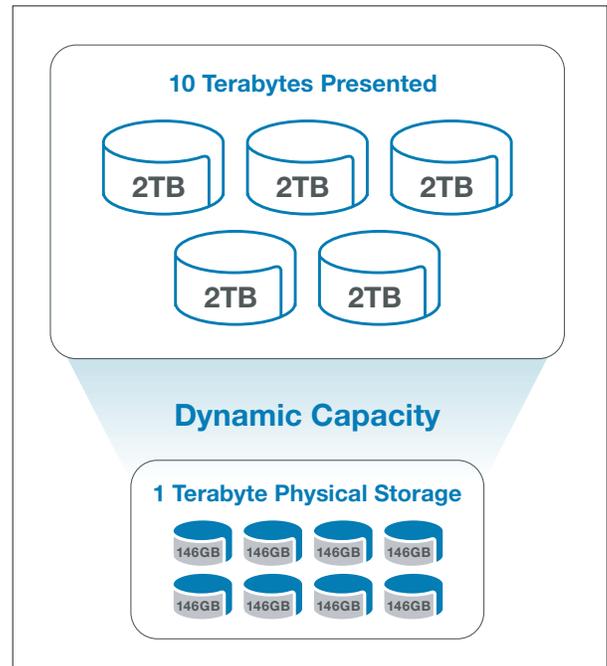


Advanced Virtualization: *Compellent's virtualization manages all the disks as a single pool of storage, allowing any volume to utilize all the disk drives simultaneously to access data.*

## Unlimited Capacity Creation Within User-defined Thresholds Ensures Maximum Utilization

With Dynamic Capacity, you can allocate significantly more capacity than the physical disk you have available, enabling maximum utilization of storage resources. User-defined thresholds and automated alerts ensure the appropriate physical storage space will be available.

- » Capacity does not have to be fixed on a per-volume basis; volumes can easily be expanded over time
- » Volumes can be set to any size within the limits of the operating system
- » Administrators receive notification when free space remaining reaches customizable thresholds
- » Having a flexible pool of storage allows you to create more volumes for different applications, enables more servers to share a single storage system
- » Continual monitoring of allocated, used, and physical storage allows optimum thresholds to be determined

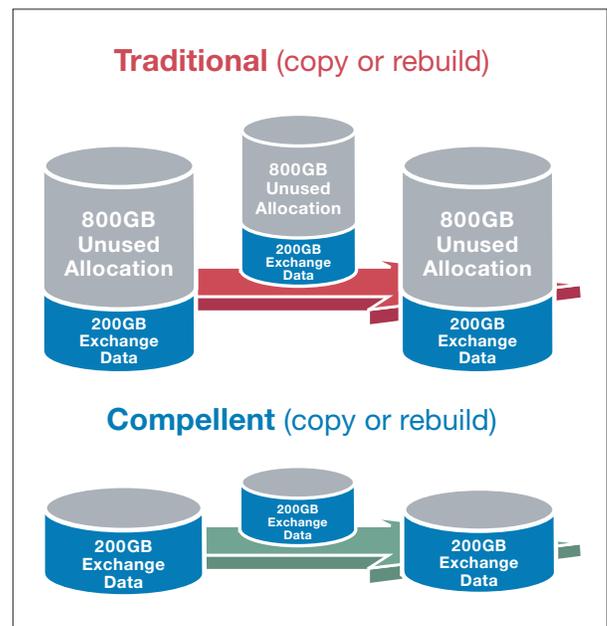


**Over Allocation:** Easily allocate multi-terabyte volumes where the capacity presented to servers is significantly larger than the physically available storage.

## Increase Performance by Only Consuming Physical Space When Data is Written

Dynamic Capacity only consumes physical capacity when data is written by the application. This creates smaller, more efficient volumes, increasing the performance of volume-based operations. Because Dynamic Capacity allocates on write, there is less data to write overall and the system can easily manage where the data is placed on the disk, reducing seek time and improving the performance of repetitive disk operations.

- » Incremental allocation places data on outer edges of disk platters minimizing seek times
- » Dynamic Capacity volumes only contain actual data enabling faster rebuild, copy, replication and backup operations
- » Smaller, more efficient volumes enhance application performance
- » Replicating smaller volumes takes less time, reduces the amount of bandwidth required and increases replication performance



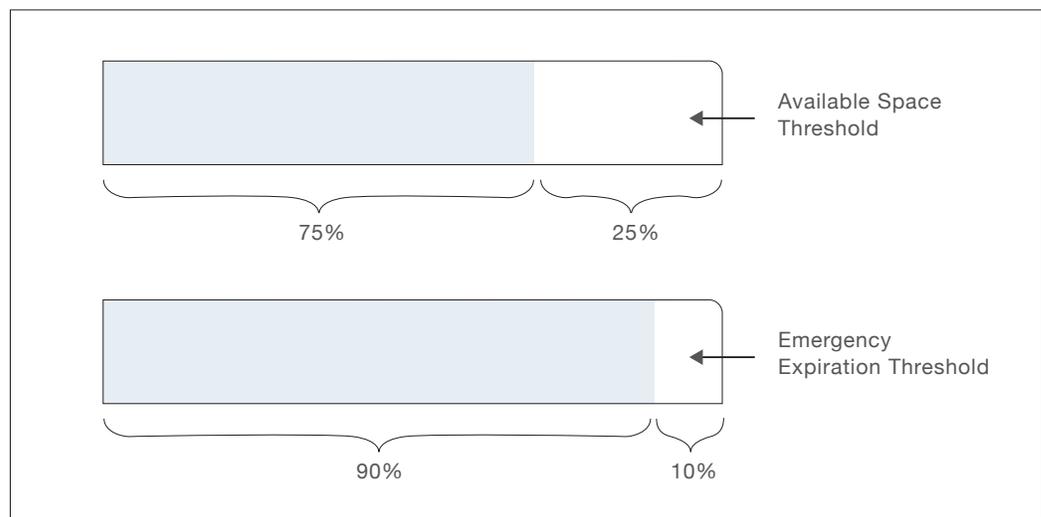
**Improved Performance:** Dynamic Capacity volumes only contain real data, accelerating SAN operations across a wide range of activities.

Thin Provisioning eliminates allocated but unused disk space and automates time-intensive management and capacity planning activities.

### Automating Capacity Planning Saves Time and Increases Availability

Storage Center's intuitive user interface automates routine administrative tasks such as LUN mapping and volume creation, saving valuable administrative time. With Dynamic Capacity you can easily resize volumes online without any downtime. Add disks, change RAID levels and expand volumes on the fly without disrupting data availability. Automated monitoring of configurable thresholds eliminates the need for time-consuming manual tracking of volume utilization.

- » Allocate large virtual volumes upfront that don't need constant checking and resizing
- » Create new multi-terabyte volumes in minutes, not hours
- » Eliminate downtime associated with volume expansion and resizing
- » Eliminate the manual tracking of physical disks to volumes (i.e. Excel spreadsheets)
- » Automated monitoring and notification when configurable thresholds are reached simplifies capacity planning



**Automated Notification:** *Storage Center automatically notifies administrators when configurable capacity thresholds are approaching so disk drives can be added to the system before thresholds are reached.*

### Thin Provisioning Delivers the Highest Storage Utilization Rate

Dynamic Capacity reduces disk expenditures by completely separating storage allocation from utilization, enabling users to allocate any size virtual volume upfront yet only consume actual physical capacity when data is written by the application. Dynamic Capacity ensures the highest storage utilization and delays future storage purchases by eliminating over allocation, streamlining volume expansion and automating capacity planning.

## DYNAMIC CAPACITY SPECIFICATIONS

ARCHITECTURE	
Allocate on Write Technology	Yes
Pre-allocation Required	No
Define Volumes Larger than Physical Storage	Yes
Single Pool of Storage for All Volumes	Yes
Automated Page-based Allocation	Yes
Allocation Page Size	2 MB
Optimized Allocation using Dynamic Block Architecture	Yes
Dynamic RAID Level Conversion	Yes
SCALING	
Maximum Size of Volumes	Unlimited
Maximum Number of Volumes	Unlimited
Maximum Provisioned Capacity	Unlimited
PERFORMANCE	
Disk Operations on Written Data Only (Including Copy, Replication and Rebuilds)	Yes
Volume Creation Time	Instantaneous
Volume Recovery Time from Replays	Less than 5 seconds
MANAGEMENT	
Unified User Interface	Yes
Continual Storage Usage Monitoring	Yes
User-defined Thresholds for Capacity Utilization	Yes
Threshold Warning Notification Methods	E-mail, Pager, Alerts, Phonehome
Storage Added Online without Disruption	Yes
SERVER ENVIRONMENT	
Server Agent Required	No
Server Operating System Support	Microsoft Windows, Sun Solaris, HP-UX, Linux, IBM AIX, Novell NetWare, Apple, Tru64, VMware

### COMPELLENT

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### ABOUT COMPELLENT

Compellent delivers affordable, modular storage solutions exclusively through business partners that provide companies of all sizes enterprise storage capabilities without big system costs or complexities. Designed by network storage and virtualization pioneers, Compellent enables any business to cut storage expenditures in half, recover from data hazards within minutes, scale to any capacity across any technology and easily manage its storage without adding staff.