

Capacity terminology

For improved consistency across all storage products, the following terms and definitions that relate to capacity in the management GUI were updated.

Table 1. Capacity terminology changes

Previous term or new term description	New term	Definition
free capacity or free space	available capacity	The amount of usable capacity that is not yet used in a system, pool, array, or MDisk.
(definition updated)	capacity	The amount of data that can be contained on a storage medium.
(definition updated)	data reduction	A set of techniques that can be used to reduce the amount of usable capacity that is required to store data. Examples of data reduction include data deduplication and compression.
(new term)	data reduction savings	The total amount of usable capacity that is saved in a system, pool, or volume through the application of an algorithm such as compression or deduplication on the written data. This saved capacity is the difference between the written capacity and the used capacity.
projected capacity	effective capacity	The amount of provisioned capacity that can be created in a system or pool without running out of usable capacity given the current data reduction savings being achieved. This capacity equals the usable capacity divided by the data reduction savings percentage.
reserved capacity	overhead capacity	An amount of usable capacity that is occupied by metadata in a system or pool and other data that is used for system operations.
(new term)	overprovisioned ratio	The ratio of provisioned capacity to usable capacity in a system or pool.
(new term)	overprovisioning	The result of creating more provisioned capacity in a storage system or pool than there is usable capacity. Overprovisioning occurs when thin provisioning or data reduction techniques ensure that the used capacity of the provisioned volumes is less than their provisioned capacity.
virtual capacity or allocated capacity (term refers to capacity of volume)	provisioned capacity	The total capacity of all volumes and volume copies in a system or pool.
physical capacity (when term refers to individual drives)	raw capacity	The reported capacity of the drives in the system before formatting or RAID (Redundant Array of Independent Disks) is applied.
physical capacity	usable capacity	The amount of capacity that is provided for storing data on a system, pool, array, or MDisk after formatting and RAID techniques are applied.
fully allocated volume	standard-provisioned volume	A volume that completely uses storage at creation.

Previous term or new term description	New term	Definition
(new term)	standard provisioning	The ability to completely use a volume's capacity for that specific volume.
(new term)	thin-provisioning savings	The total amount of usable capacity that is saved in a system, pool, or volume by consuming usable capacity only when needed as a result of write operations. The capacity that is saved is the difference between the provisioned capacity minus the written capacity.
(new term)	total capacity savings	The total amount of usable capacity that is saved in a system, pool, or volume through thin provisioning and data reduction techniques. This saved capacity is the difference between the used usable capacity and the provisioned capacity.
(new term)	used capacity	The amount of usable capacity that is taken up by data or overhead capacity in a system, pool, array, or MDisk after data reduction techniques have been applied.
(definition updated)	written capacity	The amount of usable capacity that would have been used to store written data in a system or pool if data reduction was not applied.
(new term)	written capacity limit	The largest amount of capacity that can be written to a drive, array, or MDisk. The limit can be reached even when usable capacity is still available.