

For storage systems with drives that use inline data compression technology, the Compression Savings does not include the capacity savings that are achieved at the drive level. Drive level compression occurs after striping across MDisk and the RAID distribution on the disks/FCM level. There is no information available about which volume a block of data belongs to that was just compressed, so the information about compression within the drives is only available at the array level

The following formula is used to calculate the amount of storage space that is saved:

$(\text{written space} \cdot \text{compressed size})$

The following formula is used to calculate the percentage of capacity that is saved:

$((\text{written space} \cdot \text{compressed size}) \div \text{written space}) \times 100$

For example, the written space, which is the amount of data that is written to the volumes before compression, is 40 GiB. The compressed size, which reflects the size of compressed data that is written to disk, is just 10 GiB. Therefore, the compression savings percentage across all compressed volumes is 75%.

### **Deduplication Savings (%)**

The estimated amount and percentage of capacity that is saved by using data deduplication, across all data reduction pools on the storage system. The percentage is calculated across all deduplicated volumes in the pools and does not include the capacity of volumes that are not deduplicated.

The following formula is used to calculate the amount of storage space that is saved:

$(\text{written space} \cdot \text{deduplicated size})$

The following formula is used to calculate the percentage of capacity that is saved:

$((\text{written space} \cdot \text{deduplicated size}) \div \text{written space}) \times 100$

For example, the written space, which is the amount of data that is written to the volumes before deduplication, is 40 GiB. The deduplicated size, which reflects the size of deduplicated data that is written to disk, is just 10 GB. Therefore, data deduplication reduced the size of the data that is written by 75%.

### **Physical Allocation (%)**

The percentage of physical capacity in the pools that is allocated to the regular volumes, the thin-provisioned volumes, and the volumes in child pools. Check the value for physical allocation to see:

- ▶ Whether the physical capacity of the pools is fully allocated. That is, the value for physical allocation is 100%.
- ▶ Whether you have sufficient capacity to provision new volumes with storage.
- ▶ Whether you have sufficient capacity to allocate to the compressed and thin-provisioned volumes.