

Nutanix Capacity Optimization

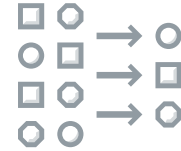
Nutanix Xtreme Computing Platform incorporates a wide range of storage optimization technologies that work in concert to make efficient use of available capacity for any workload. These technologies are intelligent and adaptive to workload characteristics, eliminating the need for manual configuration and fine-tuning.



Compression

Up to 4x increase in effective capacity for workloads with binary level redundancy: Hadoop, databases, text files, email, etc.

- Increase usable capacity across all storage tiers, including SSD and HDD
- Choice of inline and post-process compression
- Highly efficient software-based algorithm
- Sub-block compression for granularity and maximum efficiency



Deduplication

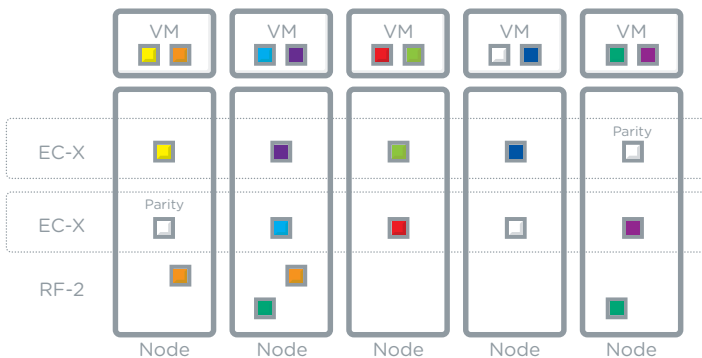
Significant savings for workloads with redundant datasets: full-clone VDI, home directories, development and testing environments, cloud storage, etc.

- Inline fingerprinting of data upon write, leveraging Intel hardware acceleration
- Efficient distributed, post-process deduplication works across the cluster and over WAN
- Adaptive algorithm deduplicates only high-potential targets to balance performance and capacity efficiency

Erasure Coding with Nutanix EC-X

Up to 70% increase in usable capacity regardless of workload

Nutanix systems use a combination of data redundancy (replication) for hot data and erasure coding for cold data to deliver resilience with capacity efficiency. Erasure coding applies a mathematical function around a data set to calculate parity blocks, which can then be used to recover data in the event of a failure.



- Capacity-efficient approach to data storage for infrastructure resilience
- Innovative, patent-pending distributed system technology that maintains data locality and speeds rebuilds using full cluster resources
- System automatically switches between data replication and EC-X based on I/O frequency to optimize performance and storage