product series

scalable redundant DDP

The scalable redundant DDP series consists of DDPHead and DDPHeadF base systems and can be combined with DDP16EXR (3U), DDP24EXR (4U) and DDP60EXR (8U) base systems

The scalable redundant DDP series are modular ethernet SAN Shared Storage Servers.
For high bandwidths DDPHeadF instead DDPHead is required. These storage arrays can be filled with HDs and SSDs with various capacities. The DDP consists of one or two DDP Heads who act as the metadata controller and up to 20 units of non-redundant 16EX and 24EX or fully redundant 16EXR, 24EXR or 60EXR storage arrays.

With 20 x DDP60EXR and 10TB HDs the total capacity can be 12 PB. A setup consisting of two Heads 16EXR, 24EXR and/or DDP60EXRs is fully redundant, fully hot swappable with no single point of failure. The realistic, typical use case bandwidth when the DDP Heads are used active-active can be 12 GB/s. The storage arrays can be filled with combinations of HD and SSD packs of various capacities, configured as raid 5 or raid 6. They can be partly populated and further populated at later date.

When an SSD pack is installed SSD caching can be used thus eliminating seek time resulting in a large increase in performance. To increase bandwidth further load balancing is used. When storage is added at a later date the data will be redistributed automatically. Storage arrays such as DDP16EX, DDDP24EX and DDP60EXR base systems can be added on the fly again with automated data redistribution. DDPs can also be added on the fly as well (upcoming V5 software) resulting in both linear scaling in capacity and bandwidth to 120GB/s and 120 PB.

DDP conceptionally works with one virtual volume /filesystem which holds folders with volume properties, so called folder volumes, the metadata. Data is stored in Data Locations, the data.
Quota can be assigned to Folder Volumes to manage capacity. Also Data Locations can be assigned to Folder Volumes. When balanced is selected, incoming data is distributed. When an SSD pack is purchased also caching can be assigned to Folder Volumes.
Storage, any DDP storage or DDPs themselves, can be added without users noticing and for the administrator without having to make changes in the web interface. For administrators who wishes full control the Storage Manager page in the web interface is available.

All DDPs use hardware Raid technology with redundant power supplies. Optionally 1GbE, 10GbE and 40/100 GbE ports can be added. Additional RAID cards can be added when expanding the DDP with DDP16EX, DDP24EX or DDP60EXR JBODs. A SAS card can also be added when using the DDP with LTO tape devices. The supported operating systems are OSX, Windows and Linux. In order to guarantee the high performance for every client, an iSCSI initiator and AVFS client driver must be installed. For clients wishing to use DDP as an NAS, no drivers are required.

The DDP Dynamic Drive Pool® is manufactured by ARDIS TECHNOLOGIES
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