

## High Availability Scale Out DDPs

**The High Availability scale out DDP is an Ethernet SAN system consisting of a dual DDP Head and DDP storage arrays with iSCSI dual raid controllers.**

The HA DDPs provide storage for MAM, ingest and playout situations where down time is critical and economics and ease of operation is valued.

### General description

The dual DDP Head, DDP storage arrays, switches and desktops communicate over standard Ethernet from 1 to 100 GbE.

The Dual Head DDP controls the metadata via the in-house developed Ardis Virtual File system called AVFS. Desktops use iSCSI and have simultaneous parallel access to each storage array.

The DDP system can be delivered with spindles only, with SSDs, or with SSD and spindle groups combined. Ingesting, recording, copying, playback can then for example to/from an SSD group designated as cache. The SSD cache algorithm keeps the data in cache, which is currently needed the most. When a file is accessed which is not in the SSD cache, the system automatically gets it from the spindle group(s). The cache modes can be controlled per folder.

### High Availability

The DDP Head designated as master controls the metadata. Each DDP Head communicates with the desktops using AVFS.

The desktops use multi path and iSCSI to get or push data directly from to the active/active storage arrays.

Both data and metadata failover are adjustable depending on the application and can be 30 seconds as standard or ne tuned to shorter values depending on the requirements.

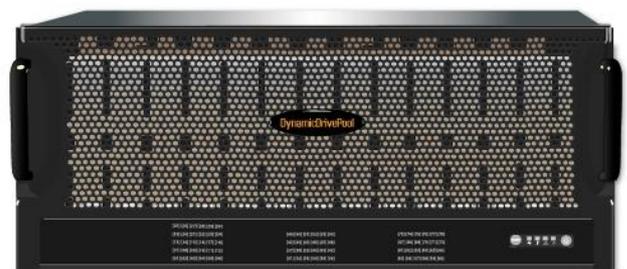
*HA modular storage servers for MAM, ingest and playout management systems. And companies with many seats.*



Dual Head DDP



EXRaid



DDP78EXR



## High Availability Scale Out DDPs

### Scaling in capacity

The HA DDP can be expanded with SSD and HD packs of different sizes. iSCSI DDP storage arrays can be added without DDP down time. The integrated Archiware P5 can be used for backup, archiving, replication and cloud access.

### Scaling in bandwidth

Because desktops have simultaneous parallel access to all storage arrays the bandwidth can increase with 5GB/s on reading and 3GB/s on writing while adding DDP storage arrays.

**High Availability  
Scale Out DDP:**

**integrating  
3rd party  
storage arrays**



*miniDDP24EXR*



*3rd party Raid Array*

### Remarks

1. There may be a situation that already existing FC, FCoE or Infiniband storage arrays must be part of an installation. The cost of integrating these can be part of a quotation.
2. To increase high availability further a redundant Ethernet switch setup can be added.

Ardis Technologies can advise how to set that up.