

Network attached storage (NAS) platform

DATA COLLECTION AND STORAGE

COMPACT RAID STORAGE CHASSIS



This compact RAID storage chassis combines custom and off the shelf hardware and software in a single package under one part number.

- Dual 6U form factor NAS RAID storage with dual Gigabit Ethernet ports and rear I/O via direct plug rear transition module
- Four removable, 2.5" rotating storage drives in two 6U single slot blades (solid state flash optional)
- RAID 5 distributed parity architecture across four extended duty rotating drives
- One DVD drive for software load
- 2U CPCI rackmount chassis with a horizontally mounted backplane for four 6U slots and two redundant pluggable 250 W power supplies
- Removable front panel power modules
- Shipped fully tested and ready for service

Requirements

Protect data per Information Assurance (IA) on AEGIS class cruisers, using a redundant, high availability rugged storage system. Provide multi-user access to this critical data repository through a network attached topology.

Solution

This application was required for a tech refresh. Elma provided a RAID 5 distributed parity system using the RAIDStor NAS, which uses four removable, extended duty rotating



drives in a compact, shockmounted 2U system platform with rear I/O. The system provides remote RAID array management via SNMP or web interface.

Benefits

RAID 5 provides 100 % data recovery despite the loss of one of the four drives. Each system platform can be replicated and mounted at various locations throughout the ship for redundancy at the network level.

Multiple clients using this network attached topology share critical data simultaneously for real time interaction. The shared storage model reduces overall system cost in spares, repairs and excess drive capacity.

Front panel drive removability allows for easy capacity upgrade and repair and the system also accepts solid state drives.

Mounted in a shock isolated console, the system passed the naval «barge test» (Mil-S-901D Grade A) and Mil-S-167 vibration testing without any loss of data or damage to the hard drives in the chassis.