

Ainkaboot Octimod

Introducing Octimod

The new Ainkaboot Octimod clustering architecture offers a revolutionary approach to high density, cost effective data centre management. Coupled with appropriate modules and the powerful KlustOS operating system, Ainkaboot has the ultimate systems solution for high performance and high availability computing. This revolutionary approach provides a simple to manage, highly cost effective and scalable architecture to build the next generation of data centre systems.

Octimod provides a modular approach to system integration, 4U high and 300mm deep it provides a means of arranging hardware simply and efficiently ideal for clustering. Clustering originated as a means of providing supercomputing performance using commodity hardware. It provides large numbers of low cost computing cycles, hardware redundancy and hence ultimate reliability.

The Octimod hardware concept aims to address a number of issues faced in cluster design and simplify the process to allow more mainstream use. When building clusters and Grids considerations of the individual machines become less important. What is important is the overall structure of the cluster; the networking and latency; ease of management; facility issues: space, power, cooling, noise and balancing the cost.

Octimod was designed specifically to address these issues.

The design utilises a number of efficiency features to provide an Eco-friendly system. The modules run from a distributed DC power supply and does away with unnecessary peripherals like DVD drives. In order to provide power efficiency Processor selection is important and will generally relate to the specific application, however the clusters are designed to take a wide range of processors, including low-power embedded processors which in addition to being smaller, consuming less power and producing less heat are generally far cheaper to produce.

Through using compact hardware configurations Octimod achieves a truly high density approach to system integration. Each unit can take 8 modules and the units are half the depth of a standard cabinet hence a 4U Octimod system mounted front and rear of the cabinet can take 16 modules. The modules can be either Processing or Storage modules with a selection of modules available to suit all requirements.

KlustOS the Ainkaboot clustering operating system provides the backbone for running clusters, with a host of clustering utilities, management software and parallel processing environments. KlustOS is Linux based consisting almost exclusively of open source software. The baselayout is Gentoo Linux and all software is compiled to take maximum advantage of the hardware. Portage the advanced Gentoo software distribution and installation system provides a simple way to install programs, upgrade individual programs and the entire system.

Octimod in Brief:

- Cluster and Grid ready
- Easy to integrate, rack mountable and modular
- Multi-level redundancy
- High Performance, Density, Availability
- Easy to manage and scale
- Cost effective and efficient design lowers setup and running costs
- Eco-friendly
- Powerful Open Source OS
- Custom software is simple to roll out across the cluster using Portage

