Become An Investor

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The Aeolus cluster is managed following an enhanced community condominium model. Investors (individual researchers or groups of affiliated researchers) purchase compute nodes (or storage) from a catalogue of nodes (and storage options). For a further in-depth description, please see the Investment Policy.

Options

At this time all investments are directly based on full systems or parts to the cluster. The VCEA HPC Governance Committee is exploring options with the university to operate under a service center and charge costs based on either resources utilized (compute, ram, storage) or simply nodes & storage needs.

We will work to keep all information open and updated for the benefit of the community. Please contact us if you become aware of an update we haven't published.

Compute

The Aeolus HPC computing environment is designed with faculty oversight to accommodate the unique computing needs of research computing. Providing a very small glimpse at the potential arrays of options configurable compute nodes in Aeolus, we compared the costs to similar compute nodes on Kamiak.

HPC Environment	Processor(s)	Memory (GB)	Budgetary Estimate
Aeolus	2 x Intel Xeon Silver 4116	192	$9,450.00
Kamiak	2 x Intel Xeon Silver 4116	192	$10,300
Aeolus	2 x Intel Xeon Gold 6138	384	$16,050.00
Kamiak	2 x Intel Xeon Gold 6138	384	$17,000

With this comparison in mind, all investors will be presented with an opportunity to optimize investments to get the best value per core, GHz, and GB of RAM.

Our systems staff have looked into the possible cost of outsourcing compute to the "cloud," however the cost per CPU Core/GHz and GB of RAM was consistently around ten (10) times the cost of hardware invested solutions.

Storage

Having looked at and tested multiple storage solutions, we've worked to provide an updated and stable environment for HPC storage. We've further analyzed the cost of purchasing storage in multiple locations on WSU Campus.

As the storage in Aeolus grows, the overall cost/TB will decrease. Based on the investment policies, the prices shown will be updated to represent the new costs for storage. To understand the storage Tiers, see the Investment Policy.

HPC Environment	Storage Type	Term in Years	Cost/TB/yr Usable	Notes
Aeolus	Tier 1	1-5	$75.00	**with** backups
Kamiak	Tier 1	1	$112.00	**no** backups
Aeolus	Tier 2	1-5	$50.00	with backups
CAHNRS	Tier 2	1	$75.78	with backups

Include Aeolus in a Grant

To be written …

Compute Nodes

GPU Nodes

Storage