GDN Hardware Capacity Report
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This is a report of the current hardware inventory at LEIGH&CO available for general compute (nodes) and storage (disk arrays) as of Feb 2025. This does not include inventory of networking fabric (routers & switches & WiFi) or for cold storage, such as the 150TB us-dfy0 tape library.

All storage sizes are stated as logical storage; the actual physical storage is greater to accommodate redundancy. All large RAID arrays are RAID6. In the case of SSD, they are provided as RAID1 mirrors. System disks, which do not make up a substantial amount of storage, are RAID1 and not accounted for here.

The highlights are provided here for the GDN overall:

- 120 threads
- 310 GHz total (cores*GHz)
- 288TB of high-performance enterprise magnetic storage
- 4.4TB of enterprise SSD
- 442TB total (magnetic+ssd+tape)

A comparison analysis is made between the GDN hardware and the market rate to lease the closest corresponding configuration from AWS.

The prices quoted here reflect the "best-fit" machine & storage configurations available from AWS, and where possible, the lowest-cost machine was chosen. Due to the way Amazon buckets resources, it was not always possible to get a perfect 1:1 fit. In these cases, the next-larger machine from AWS was chosen.

Additionally, an estimate for costs related to Internet traffic is provided roughly corresponding to GDN usage. No attempt is made here to account for IP lease costs, name services, etc. No attempt is made to use any AWS features like databases or SLB; it is assumed that all such applications are still provided & maintained directly by LEIGH&CO.

Where possible, 1-yr reservation prices are stated, rather than the market spot-rates which can be substantially higher.

	CPU (Cores)	CPU (GHz)	GPU	RAM (GB)	AWS Value	Disk (GB)	AWS Value	SSD (GB)	AWS Value	Net		
n5	16	3.5		1024	$ 4,877.57	81920	$ 3,686.40	1658.88	$ 207.36	20gbit		
n2	24	2.5		448	$ 3,759.84	24166.4	$ 1,087.49	2785.28	$ 348.16	20gbit		
n6	64	2.3	Quadro P5000	128	$ 3,710.38	79872	$ 3,594.24	0	$ -	20gbit		
n9	16	2.93		192	$ 1,879.92	102400	$ 4,608.00	0	$ -	20gbit		
	120	*2.8075*		*1792*		*288358.4*		*4444.16*				
					$ 14,227.70		*$ 12,976.13*		*$ 555.52*	*$ 1,740.00*	**$ 29,499.35**	$/month
											$ 353,992.22	$/year