

Role of AEI Hannover as a data exchange center

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Storage

- Compute nodes (non-redundant): $1342 \cdot 450 \text{ GB} = 604 \text{ TB}$
- **Storage servers (RAID): $31 \cdot (16-2) \cdot 750 \text{ GB} = 325 \text{ TB}$**
- Sun Fire X4500 (RAID + ZFS): $13 \cdot 17.5 \text{ TB} = 227 \text{ TB}$

Network Connectivity

Right now 1 Gb/s. We have observed up to 80 MB/s average sustained transfer rates. Note that this is 80% of the available bandwidth (about 800 Mb/s).



ATLAS Data Center Statistics

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LDR Replication Status

Collection	Number of files	Replicated
brst1_s5_r3	30,406	100.0%
brst1_s5_r3	30,406	100.0%
brst3_s5_r3	30,406	100.0%
hsg7_s5_r3	30,207	100.0%
lho_s5_xx_1800sft_c03hoft	70,588	100.0%
s4_strain_lx	50,977	100.0%
s5_burst_mdc_01	62,814	100.0%
s5_burst_mdc_02	62,814	100.0%
s5_burst_mdc_03	62,814	100.0%
s5_burst_mdc_04	62,814	100.0%
s5_burst_mdc_05	62,814	100.0%
s5_burst_mdc_06	30,406	100.0%
s5_burst_mdc_07	30,406	100.0%
s5_burst_mdc_08	30,207	100.0%
s5_burst_mdc_09	605	100.0%
s5_burst_mdc_10	605	100.0%
s5_burst_mdc_11	605	100.0%
s5_rds_l1	1,999,184	76.9%
s5_strain_ligo_l2	1,123,364	100.0%
virgo_hrecv2_16384hz	1,243	100.0%
virgo_hrecv2_20000hz	1,243	100.0%
virgo_hrecv2_4096hz	758	100.0%
virgo_vsr1	3,258	100.0%

Table: Available Collections at AEI (as of 09/23/08)



Mission Statement

The AEI Hannover is committed to act as a data staging point for transatlantic distribution of LIGO/Virgo S6 data.

If necessary we have the option to increase network bandwidth by an additional 1 Gb/s for about 80,000 EUR/year. We also plan to add additional data storage capacity in the coming three months.



Thanks for your attention!

Any questions?

