

MAHAMERU - HPC BRIN (DUKUNGAN KOMPUTASI UNTUK AI)

AI Innovation Summit 2023 - DEMOCRATIZING ARTIFICIAL
INTELLIGENCE FOR ALL

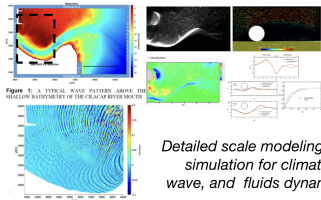
Rifki Sadikin

Pusat Riset Komputasi
Organisasi Riset Elektronika dan Informatika, Badan Riset dan Inovasi Nasional

10 Agustus 2023

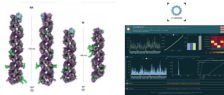


Extreme Scale



Detailed scale modeling and simulation for climate, wave, and fluids dynamics

R&I



Biodiversities, precision medicine, drugs discovery dan vaccine development



Computing for new material inventions, and basic research in quantum physics



Big Data Analytics, machine learning for artificial intelligence



Computation for Astronomy, Aeronautics, Transportation and Engineering



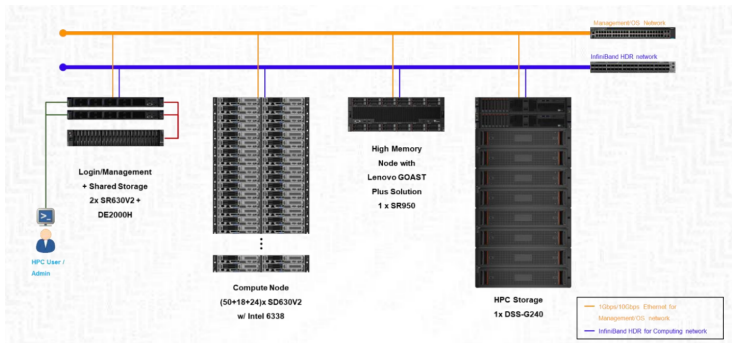
Mahameru HPC:

Sumber daya Komputasi Heterogen dan
(Hot+ Cold Storage)
Gedung Lab Pengindraan Jauh
KST Soekarno, Cibinong

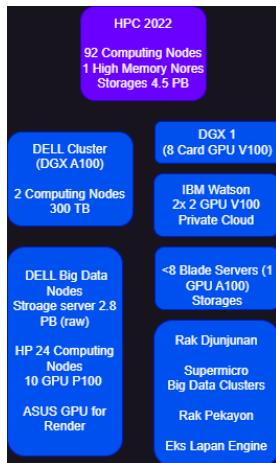
Mahameru DRC (Disaster Recovery Center):

(Cold Storages Server)
Gedung Teknologi 3
KST BJ Habibie, Serpong

- Sumber daya komputasi dikonsolidasikan agar efisien
- Disaster Recovery Center diperlukan sebagai backup data (Serpong dan Cibinong bisa saling menjadi *DRC*)



- 92 Computing Nodes (2*36 cores, 256 GB)
- 1 High Memory Node (8 * 28 cores, 1.5 TB)
- 2 Login/Management Nodes



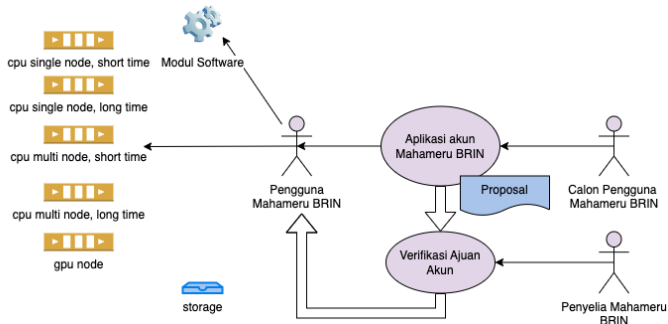
Infrastruktur Jaringan

- Skema jaringan dari eksternal ke HPC Mahameru (Bandwidth, H/W). Sudah ada dedicated koneksi metro, internet dedicated, kedepan IDREN metro 100 Mbps, internet 100 Mbps.

Mahameru HPC BRIN: Open Infrastructure



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- Open Infrastructure: multi user, shareable, open to Indonesia citizen
- Melalui Elsa BRIN
(<https://elsa.brin.go.id/subkategori/index/BRIN%20HPC/18>)
- Dapat mensupport riset yang dilakukan mahasiswa

Pengelolaan HPC BRIN



Struktur Pengelola HPC BRIN - Elsa

- 1 **Manager Lab**
- 2 **Admin Sistem (Penyelia-Pelaksana)**
- 3 **Admin Aplikasi - Penyelia**
- 4 **Komite Pengguna HPC BRIN**

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