

Experimental Infrastructure Guide

Vertically Integrated Computer Systems (VICS)

Shoaib Akram

VICS Team Lead

shoaib.akram@anu.edu.au



Australian
National
University

Magpie (Dell R740)

Location: **N238, CSIT**

Network: **MOMA**

Purpose

- Experimental studies on memory and storage research
- Performance measurements in a non-shared environment

Compute/Memory Specs

- Dual-Socket Machine
- Intel Xeon Gold 6252N, 2.3 G
- 24C/48T (Total: 48C/96T)
- 36 M Cache
- 12 X 32 GB DRAM (384 GB)
- 12 X 128 GB Intel Optane DC PM (1.5 TB)

Storage Specs

- 1 TB SATA Hard Drive
- 8 TB SATA Hard Drive
- 1.5 TB Intel Optane
NVMMe PCIe SSD (P4800)

Rosella (Dell R740)

Location: N238, CSIT

Network: GPUnet

Purpose

- Experimental studies on memory and storage research
- Performance measurements in a non-shared environment

Compute/Memory Specs

- Dual-Socket Machine
- Intel Xeon Gold 6252N, 2.3 G
- 24C/48T (Total: 48C/96T)
- 36 M Cache
- 12 X 32 GB DRAM (384 GB)
- 12 X 128 GB Intel Optane DC PM (1.5 TB)

Storage Specs

- 1 TB SATA Hard Drive
- 16 TB SATA Hard Drive
- 960 GB SAS SSD
(Dell/Toshiba)

Finch 1 (Dell R650)

Location: **N238, CSIT**

Network: **GPUnet**

Purpose

- Computer architecture simulations (shared mode)
- Scalability studies with 100+ cores (on request)

Compute/Memory Specs

- Dual-Socket Machine
- Intel Xeon Gold 6252N, 2.2 G
- 28C/56T (Total: 56C/112T)
- 42 M Cache
- 16 X 32 GB DRAM (512 GB)

Storage Specs

- 2 TB SATA Hard Drive

Finch 2 (Dell R650)

Location: **N238, CSIT**

Network: **GPUnet**

Purpose

- Computer architecture simulations (shared mode)
- Scalability studies with 100+ cores (on request)

Compute/Memory Specs

- Dual-Socket Machine
- Intel Xeon Gold 6252N, 2.2 G
- 28C/56T (Total: 56C/112T)
- 42 M Cache
- 16 X 32 GB DRAM (512 GB)

Storage Specs

- 2 TB SATA Hard Drive

Cockatoo (Dell R640)

Location: N238, CSIT

Network: GPUnet

Purpose

- Prototyping node
- Sharing is intended unless otherwise requested

Compute/Memory Specs

- Single-Socket Machine
- Intel Xeon Gold 6252N, 3.2 G
- 8C/16T
- 11 M Cache
- 6 X 8 GB DRAM (48 GB)

Storage Specs

- 2 TB SATA Hard Drive