ICSF & CSF Intro Course Glossary of Terms

Glossary of Terms & Acronyms

Backend Node - Dedicated node for performing computational tasks.

Batch System - Compute system that works through a queue or batch of separate jobs without manual intervention

CIR - Computational Intensive Research

Core - Dedicated processing unit found within a CPUS/GPUS - Modern CPU/GPUs contain multiple cores

CPU - Central Processing Unit - Component for interpreting and executing most of the commands from the computer's other hardware and software.

CSF - Computational Shared Facility - High Performance Compute cluster primarily designed for batch computing

Firewall - Security mechanism for controlling connections in and out of various systems - Can be hardware or software based.

GUI - Graphical User Interface - Interface that uses icons or other visual indicators to interact with electronic devices, rather than via a command line

GPU - Graphics Processing Unit - Their highly parallel structure makes them more efficient than general-purpose central processing units (CPUs) for processing large chunks of data data in parallel.

iCSF - Interactive Computational Shared Facility - High Performance Compute cluster designed for interactive computing. Also referred to as incline

Login Node - Dedicated node for accepting requests and routing them to a backend node or job queue.

Parallel Job - Multiple processors executing multiple tasks simultaneously

RDS - Research Data Storage - Centrally-hosted and administered data storage for use by research staff and research students also referred to as isilon.

RVDS - Research Virtual Desktop Service - Provides access to various UoM Research IT provided platforms from anywhere in the world.

RVMS - Research Virtual Machine Service - Centrally hosted virtual machines.

SCP - Secure Copy Protocol - File Transfer protocol/program which utilises SSH in order to transfer files in a secure manner.

Serial Job - Single processor completes one task at a time one after the other.

SSH - Secure Shell - Provides a secure (encrypted) connection between a client and a server.

VM - Virtual Machine - A self-contained computer running on the hardware of another functional computer.