## Centre for High Performance Computing 2023 National Conference



Contribution ID: 3 Type: Keynote Talk

## **KEYNOTE 3: The Software-Defined Supercomputer**

Wednesday, 6 December 2023 09:00 (45 minutes)

Two long-held aspirations, "agile supercomputing" and "performant cloud", are converging. Supercomputing performance can now be achieved in a cloud-native context. Cloud flexibility ensures different classes of workload may be targeted at the most effective resources. Innovation in Artificial Intelligence (AI) further drives the pressure for change.

Open source solutions provide a cost-effective path to achieving the software-defined supercomputer. This presentation will present the latest work on using open infrastructure to implement a high-performance Alcentric cloud.

The presentation will introduce the core components of a software-defined supercomputer, and provide technical insights into their operation. Real-world experience will be used to describe the challenges and how they are overcome.

## **Student or Postdoc?**

**Primary author:** Mr TELFER, Stig (StackHPC Ltd)

Presenter: Mr TELFER, Stig (StackHPC Ltd)

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