

Workshop: ARC installation and configuration for HPC and Cloud Part I

Wednesday, 29 May 2024 13:00 (1h 30m)

The ARC Compute Element (CE) is a distributed compute front-end on top of a conventional computing resource (e.g. a Linux cluster or a standalone workstation). It enables remote batch system job submission, and seamlessly handles data staging of any remote input files. ARC-CE's can work in a grid of compute resources, removing the need for the end-user to specify what resource they want their job to run on. Direct submission to a specific HPC resource is also possible.

ARC has been one of several recommended compute element technologies of the World Wide LHC Computing grid since 2002, and is now one of the two remaining recommended ones together with HT-Condor CE.

The tutorial demonstrates the installation and configuration of an ARC-CE front-end for use in a distributed grid infrastructure, such as WLCG. Particular focus will be on supporting high-performance systems, using experience from Vega EuroHPC, Nordic WLCG Tier1 and other HPC centres. The tutorial addresses primarily system administrators, but also serves as a demonstrator of a seamless access to HPC resources to extended user communities, such as Life Sciences, Climate and Biodiversity, Astrophysics, Materials science and others. The tutorial will demonstrate the installation of ARC 7, and focusing on an ARC-CE set up for token support. A handful of test-clusters will be set up to allow attendees to type along.

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Session Classification: Afternoon Workshops Part I