

EGI Workload Manager Service

Wednesday, 24 March 2021 10:55 (25 minutes)

The EGI Workload Manager Service (WMS) is based on the DIRAC Interware and is part of the EOSC Project service catalog. The service provides access to various computing resources of the EGI infrastructure to various scientific communities in Europe and in the world. Different kinds of computing resources can be connected to the Manager: HTC/grid resources, cloud resources or standalone computing clusters including HPC centers. The DIRAC WMS provides tools for submitting jobs with a detailed description of their requirements, job execution on the matching resources, monitoring and accounting of the consumed computing power. It assists users in construction and execution of complex workflows consisting of very large numbers of jobs automatically submitted as soon as all the necessary prerequisites are available.

The EGI WMS ensures user support helping to adapt their applications for the efficient use on the currently available resources. This required multiple developments to meet user's needs in accessing new computing technologies, e.g. GPUs, containers, cloud clusters, etc. New developments were also needed for managing user communities using Authentication/Authorization systems based on OAuth2/OIDC technologies and SSO Federated Identity Provides solutions.

In this contribution we will present the experience with setting up and running the EGI Workload Manager Service and we will describe the new developments carried out to fulfill requirements of the EOSC users.

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Session Classification: Network, Security, Infrastructure & Operations Session

Track Classification: Network, Security, Infrastructure & Operations