Is the DeiC National Integration Portal a replacement for existing ways to log into national HPC systems?

No, it is not a replacement existing ways to log into HPC system. The National Integration Portal based on UCloud will provide additional features for users and a common API to access resources at HPC provider sites. Users of UCloud will still be required to log into existing systems with the same methods as before.

 What will change for the users after integration with the National Integration Portal based on UCloud?

The integration will not affect the existing workflows of the users (e.g. access, job preparation, submission, data analysis, etc).

The integration will, however, offer additional features to the both the users and service providers.

 What is required for the integration with the National Integration Portal as a service provider?

The integration requires service providers to install a component/module at their site, which will present a common API for the resources and services the provider chooses to expose.

 What services and resources are exposed by the National Integration Portal integration?

Service providers can decide themselves which of their services and resources they wish to expose via the UCloud integration module. Additionally, for each service the site owner can decide what functionalities to expose. Service providers provide this information via a "Manifest" file, containing the functionalities available at their site.

 How are the services and resources exposed by the National Portal integration module?

The integration module at each service provider site uses secure HTTPs and web socket connections to present its services via the common API.

 What is require for the integration with the National Integration Portal based on UCloud?

The integration requires the installation of the UCloud integration module, which is responsible for presenting the common API for the local services according to the provided "Manifest" file. Custom plug-ins for the integration module might be required, to interface to local systems. Plug-ins for common systems will be provided as part of Project 5.

 Why is integration with the DeiC National Integration Portal necessary?

Integration is only required for the DeiC National HPC systems and likely the future DeiC national data management systems.

However, it might also be advantageous and convenient to integrate other systems in the national portal, especially in relation to existing databases, libraries and other data sources.

 What are the advantages of having a national integrated system for HPC and data management?

The proposed integration via an high-level federation mechanism of the existing systems in Denmark will create an interoperability layer among the national Danish service providers. Such interoperability is one of the key factors in creating added values for services and enabling FAIR principles in research practice. Users will be able to access and use all the available national services and move jobs and data across them. In the longer term, metadata at each service provider could be accessed, and used, in a uniform way.

Interoperability of services is also at the core of the EOSC implementation.