Module 5: Integrating resources into EOSC: What, why, and how?

Part 2: Integrating resources into EOSC

First, a couple of words about the distinction between service or a resource. This used to be an important distinction when - for example - a dataset was usually tied to a physical object: hard drive, storage tape or something similar. Making sure they were Findable, Accessible, Interoperable and Reusable (FAIR) was at least to a degree similar to making sure a library book could be found, accessed and used. Managing a physical copy of a dataset was seen as fundamentally different from managing a service (for example, a service providing weather predictions by crunching weather station data more or less directly). However, this distinction matters much less now, as datasets have - for the most part - become accessible online and services become more and more dependent on large datasets.

Practically everyone considering integrating a service or a resource into EOSC is breaking new ground by dramatically extending the potential user community. The challenge is documenting the new resource that it works in a predictable manner in a completely new platform, supporting completely new use cases.

EOSC IT Service Management System (SMS) provides a common framework that helps achieve this goal. It is based on an open standard called FitSM that provides common concepts, requirements and other support components that can be used to improve the perceived quality of services.

In practice, it is not necessary to read the whole standard: the EOSC integration process focuses on two things:

- Describing the function of a service or a resource in such a way that potential users can find and understand it.
- Identifying key roles and processes - such as helpdesk or security contact points - that are specific to the new service. These are the key interfaces between the SMS and the newly integrated resource that make it possible to benefit from the common quality assurance framework.

This process may be difficult to grasp as the management of the resource before EOSC integration has relied on tacit knowledge. Everyone just knows who to ask for help, who to report errors to and who to call in case it seems there are security issues that need attention. It may not have been necessary to document contact points for helpdesk, service owner - or develop resource descriptions that wouldn't rely on shared historical knowledge among the developers.

So, IT Service (Resource) Management documents the complexity, creates standardised installation instructions, collects knowledge about recurring problems and workaround. It will also encourage standardisation of the ways the new service deals with problems while also bringing in dedicated staff to provide support and do troubleshooting.

This is one of the primary mechanisms that allows EOSC integration to act as a vaccine against the phone calls.

“The resource centric view”

As noted earlier, services and resources need to be dealt with in a very similar way. However, historically there are two schools of thought when it comes to describing EOSC:

1. Everything is FAIR data (meaning “Findable, Accessible, Interoperable and Reusable”)
2. Everything is a service

Even though - as we noted before - this distinction matters less today, the origins will influence the way the resources are usually described and what are the most relevant data items for them. However, the high-level process should be similar.

In the end, the most pragmatic approach is to make distinction between publications, software, and training resources.

In general, the common sub-categories discussed are services, research products or training resources. But if we abstract them into resources and differentiate only where and when necessary, we can use a high level process for connecting resources.