

EOSC Technical Specification

Marketplace

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DELIVERY SLIP

Date	Name	Partner/Activity
From:	Roksana Wilk	CYFRONET
Moderated by:	Marcin Plociennik	PSNC
Reviewed by:	Pavel Weber, Giacinto Donvito	KIT, INFN
Approved by:		

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1	10.06.2019	Initial version of the specification	Roksana Wilk
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5	20.04.2020	Update of the specification	Roksana Wilk, Bartosz Wilk, Lidia Minina
6	13.05.2020	Adjusting to the official template	Marcin Plociennik

TERMINOLOGY

<https://wiki.eosc-hub.eu/display/EOSC/EOSC-hub+Glossary>

Terminology/Acronym	Definition
SPMT	Service Portfolio Management Tool
AAI	Authorisation and Authentication Infrastructure
IAM	Identity Access Manager
MP	Marketplace
SP	Service Provider

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Introduction

Marketplace is a dedicated platform where services are presented to the users and made available to get access to. Is a place where the Service Organisations can define and present to the users dedicated service offers, users can issue an order for those offers and handle different phases of the ordering process. Along with SPMT it is meant to support Service Management, and along with Service Order Management Back Office it provides Service Order Management.

Adopted standards

Standard	Short description	References
eInfraCentral based EOSC-hub STD	Service model. Unified approach to present services in the Marketplace, based on the MP-relevant subset of EOSC-hub STD.	https://github.com/eInfraCentral/docs https://wiki.eosc-hub.eu/display/EOSC/EOSC+hub+service+template
AAI user and group information attributes	User and group attributes served by the EOSC AAI (gathering EGI CheckIn, B2ACCESS, IAM) are recognised and processed in the MP.	https://documents.egi.eu/public/RetrieveFile?docid=3344&version=2&filename=EOSC-hub%20D5.1%20final.pdf#%5B%7B%22num%22%3A46%2C%22gen%22%3A0%7D%2C%7B%22name%22%3A%22XYZ%22%7D%2C69%2C630%2C0%5D

Protocol/API	Short description	References
ARGO Messaging System - HTTP API	(Implements the Google PubSub protocol). MP uses this message oriented service to retrieve list of EOSC-hub services along with their	https://argoeu.github.io/guides/messaging/

	metadata (part of STD) relevant in the MP scope.	
eInfraCentral API - REST API	Used to retrieve information about services registered in eInfraCentral Catalogue	https://github.com/eInfraCentral/docs/blob/master/eInfraCentral_APIs_v1.0.pdf
JIRA webhooks	User-defined callback over HTTP. Used to retrieve information from JIRA in the scope of MP Projects (represented by JIRA Epic) and MP Orders (JIRA tasks)	https://developer.atlassian.com/server/jira/platform/webhooks/
JIRA REST API	Used to create and synchronise representation of MP Projects and Orders in JIRA. Data representing Projects and Orders on the MP end is available in JSON format.	https://developer.atlassian.com/server/jira/platform/rest-apis/

High-level Service Architecture

The EOSC Marketplace, as part of the Order Management System should support efficient order management and facilitate the interactions of users with e- infrastructures and other EOSC service providers.

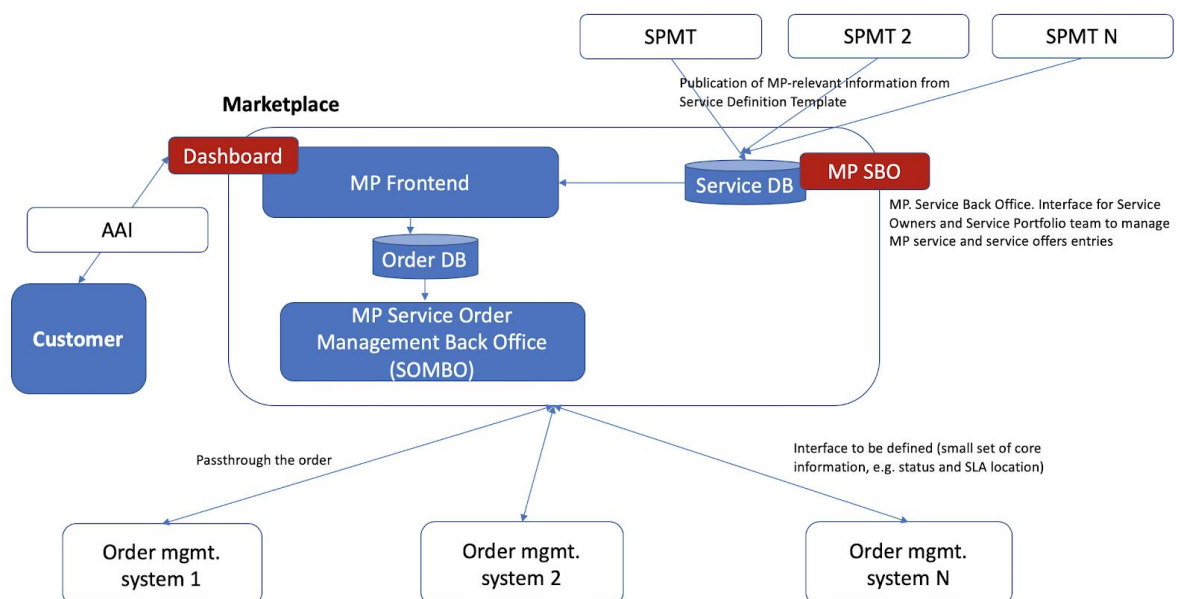


Figure 1: Marketplace in the current implementation of the Order Management System where Marketplace is a central component.

In general the EOSC-hub Order Management System (OMS) as shown in Figure 1 comprises of several components including the Service Catalogue and Marketplace (MP), Service Portfolio Management Tool (SPMT), Service Order Management Back Office (SOMBO) and integrates many other systems to facilitate promotion, discovery, access and ordering of the EOSC production services.

The Marketplace:

- With the MP Frontend and its Dashboard, allow customers to: access and discover services and resources using the intelligent search and filtering mechanism, place an order and track it until the service is delivered to the user.
- Includes Service DB which stores services available to the user. Along with a dedicated MP Service Back Office it offers functionality towards Service Owners and SP Team to manage MP service and service offer entries for the MP purposes. MP Service DB is a point of integration with SPMT.
- Includes Order DB which holds all relevant information about users' orders. It's a dedicated point of integration with the Service Order Management Back Office.
- With SOMBO creates an environment dedicated for order handling in.

Links :

1. [Helpdesk specification](#)¹
2. [EOSC hub architecture](#)²
3. [Marketplace Description](#)³

Interoperability guidelines

New MP APIs need to be designed to integrate with SPMT solutions on one end and JIRA-like solutions on the other (two APIs) with a unified approach to exploit the core service features.

There is a standard approach to integrate JIRA based Order Management solutions. It requires a dedicated JIRA instance, allowing webhook integration and information about the configuration of JIRAs objects (IDs of JIRA ticket fields, ticket statuses, workflows info etc.) in order to configure the mapping between the MP and JIRA.

Examples of solutions implementing this specification

MP solutions:

- EOSC-hub MP⁴

¹<https://confluence.egi.eu/display/EOSCDOC/Helpdesk?preview=%2F52598370%2F52598380%2FEOSC+Technical+Specification+Proposal+-+Helpdesk+-+v1.pdf>

²<https://docs.google.com/document/d/1xpKCVgu0NnLV1ZkQ7u4vHAadDWN-SC-ggD0LUcVu3ho/edit>

³<https://confluence.egi.eu/display/EOSC/Marketplace>

⁴<https://marketplace.eosc-portal.eu/>

AAI solutions:

- EGI CheckIn based EOSC AAI ⁵

SPMT solutions:

- EOSC-hub SPMT: AGORA SPMT⁶
- eInfracentral Catalogue⁷

Order Management solutions:

- JIRA based EOSC-hub Order Management System⁸

Procedure to integrate a service with the EOSC Hub Marketplace

For **SPMT** solutions:

There is no automated approach to integrate SPMT solutions with the MP service. A reference integration with EOSC-hub SPMT is in place and a similar approach can be incorporated for other SPM tools.

For **Order Management** solutions:

There is no automated approach to integrate Order Management solutions with the MP service. A reference integration with EOSC-hub JIRA is in place and a similar approach can be incorporated for other Order Management tools.

For the **AAI** integration:

MP uses a defined interface for AAI solution to integrate SPs/IdPs⁹.

⁵ <https://documents.egi.eu/public/RetrieveFile?docid=3344&version=2&filename=EOSC-hub%20D5.1%20final.pdf#%5B%7B%22num%22%3A46%2C%22gen%22%3A0%7D%2C%7B%22name%22%3A%22XYZ%22%7D%2C69%2C630%2C0%5D>

⁶ <https://grnet.github.io/agora-sp/>

⁷ <https://github.com/eInfraCentral/docs>

⁸ https://docs.google.com/document/d/1o1pu7_3tVHuYmY9AcvZL9PGS-xlZYa_bcyYCyQQQ5HU/edit#heading=h.amnmdg2nez9w

⁹ <https://wiki.eosc-hub.eu/pages/viewpage.action?pageId=30738897>