OPENCoastS

Short description	T7.5 OPENCoastS
Type of community	Thematic Services
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Interviewer	Pablo Orviz
Date of interview	2018. 3. 22
Meetings	
Supporters	

User stories

Instruction

Requirements are based on a user story, which is is an informal, natural language description of one or more features of a software system. User stories are often written from the perspective of an end user or user of a system. Depending on the community, user stories may be written by various stakeholders including clients, users, managers or development team members. They facilitate sensemaking and communication, that is, they help software teams organize their understanding of the system and its context. Please do not confuse user story with system requirements. A user story is an informal description of a feature; a requirement is a formal description of need (See section later).

User stories may follow one of several formats or templates. The most common would be:

"As a <role>, I want <capability> so that <receive benefit>"

"In order to <receive benefit> as a <role>, I want <goal/desire>"

"As <persona>, I want <what?> so that <why?>" where a persona is a fictional stakeholder (e.g. user). A persona may include a name, picture; characteristics, behaviours, attitudes, and a goal which the product should help them achieve.

Example:

“As provider of the Climate gateway I want to empower researchers from academia to interact with datasets stored in the Climate Catalogue, and bring their own applications to analyse this data on remote cloud servers offered via EGI.”

No.	User stories
US1	As a service user, I want to log into the OPENCoastS web portal through my home institution credentials
US2	As a service user, I want to download data from the simulation of the model
US3	As a service owner, I want to preserve high-quality/premium forecasts to be offered for re-analysis
US4	As a service owner, I want to publish the catalogue of high-quality/premium forecasts to be offered to the service users
US5	As a service user, I want to be able to search the forecast catalogue based on a given set of characteristics
US6	As a service owner, I want to promote the simulation data as Open Data
US7	As a service owner, I estimate 40TB per month of storage consumption
US8	As a service user, I want to run my simulations up to 72 hours
US9	As a service owner, I want to run jobs in HTC, Grid and Cloud environments
US10	As a service owner, I want to be able to deploy the service in an automated way using the Cloud

US11	As a service owner, I want to obtain monitoring and accounting information of my running service

Use cases

Instruction

A use case is a list of actions or event steps typically defining the interactions between a role (known in the Unified Modeling Language as an actor) and a system to achieve a goal.

Include in this section any diagrams that could facilitate the understanding of the use cases and their relationships.

Step	Description of action	Dependency on 3rd party services (EOSC-hub or other)
UC1	User logs in the OPENCoastS service using eduGAIN	EGI Check-in
UC2	OPENCoastS service manages the authorization/attribute provision	OPENCoastS platform
UC3	OPENCoastS service obtains a x509 certificate for Grid submission	WaTTS
UC4	User constructs a broadcast simulation	OPENCoastS platform
UC5	User submits jobs with the broadcast simulation	DIRAC4EGI
UC6	OPENCoastS service may support docker container execution	udocker
UC7	User obtains outputs from the simulation for the next (at most) 72h	DIRAC4EGI
UC8	OPENCoastS service automatically performs quality checks to identify high-quality /premium forecasts	OPENCoastS platform
UC9	OPENCoastS service stores high-quality/premium forecasts	Data preservation service EGI DataHub
UC10	User searches the catalogue of high-quality/premium forecasts for re-analysis	Data discovery Metadata and provenance service
UC11	OPENCoastS service is deployed automatically	Ansible
UC12	OPENCoastS service is deployed in the Cloud as a long-running service	PaaS orchestrator
UC13	OPENCoastS service is monitored	ARGO
UC14	User resource consumption (compute, data) is tracked and accessible	Accounting

Requirements

Technical Requirements

Requirement ID	EOSC-hub service	GAP (Yes/No) + description	Requirement description	Source Use Case	Link to JIRA ticket

RQ1	EGI Check-in	No	eduGAIN support for EOSC-hub AAI	UC1	EOSC WP10-19 - Jira .
RQ2	OPENCoastS	No	Attribute provision for OPENCoastS	UC2	EOSC WP10-19 - Jira .
RQ3	OPENCoastS	No	Forecast simulation composition	UC4	
RQ4	WaTTS /MasterPortal	No	OpenID Connect token translation to x509 certificate for Grid submission	UC3	EOSC WP10-26 - Jira .
RQ5	DIRAC4EGI	No	Multi-site job submission	UC5	EOSC WP10-18 - Jira .
RQ6	udocker	No	User-space Docker container execution	UC6	EOSC WP10-23 - Jira .
RQ7	DIRAC4EGI	No?	Job output management	UC7	EOSC WP10-18 - Jira .
RQ8	B2SAFE	No	OPENCoastS need to store high-quality/premium forecast archives in permanent storage	UC9	EOSC WP10-24 - Jira .

RQ9	EGI DataHub B2FIND B2NOTE	No	OPENCoastS need to handle metadata for user access to historical data	UC10	EOSC WP10-27 - Jira .
RQ10	B2HANDLE B2DROP B2SHARE	No	OPENCoastS need to expose historial catalogue as Open Data	UC10	EOSC WP10-27 - Jira .
RQ11	<NOT_AVAILABLE>	Yes: EOSC-hub does not provide Ansible consulting	Automated deployment using Ansible of OPENCoastS service	UC11	
RQ12	PaaS Orchestrator	No	OPENCoastS service deployment in the Cloud	UC12	
RQ13	ARGO	No	Monitoring as a service	UC13	EOSC WP10-43 - Jira .
RQ14	Accounting	No	Tracking compute and storage consumption	UC14	EOSC WP10-42 - Jira .

Capacity Requirements

See https://docs.google.com/spreadsheets/d/1C0T2oOBHqN8esfJp8q08fqYikIL8yLCSdkA8MvQSPYA/edit#gid=1266119617

EOSC-hub services	Amount of requested resources	Time period