



D6.3: Service management tools development and improvement plan

Deliverable

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Abstract

This deliverable is the next after D6.2 (Tools assessment) in progress to improve tools support of ITSM at client partners. The main goal was to identify needed improvements and plan them. Improvements may be in the areas of new tools to be introduced or existing tools to be changed, replaced, integrated or consolidated. In this deliverable we covered the tools related to 1st stage processes, but also we do preparatory plans for 2nd stage processes. The deliverable is composed of each client's functionality gap analysis in respect to tools in specific process (section 2) and concrete plans for each identified tool (section 3).

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1. Introduction

The technology related to ITSM implementation is one of three main aspects that we cover in the FedSM Project. In the previous deliverable (D6.2) the assessment of the current level of tool support to ITSM processes was presented. Based on these results, in this document we present the next step, the analysis of the gap between the tool functionality that was assessed, and the one that is required in regard of the process implementation plan described in deliverable D5.3.

The main goal in this deliverable was to identify needed improvements and plan them. Improvements may be in the areas of new tools to be introduced or existing tools to be changed, replaced, integrated or consolidated. In this deliverable we cover the tools related to 1st stage processes, but also we do preparatory plans for 2nd stage processes. At a later stage of the project, when implementation plans for those processes are ready, the tool implementation plan will be verified and updated to be compatible with them.

This deliverable is composed by two main parts:

- client's functionality gap analysis in respect to tools in specific processes (section 2); the material gathered there is the result of the identification of tools and of their missing functionality in respect to the plans for process implementation;
- concrete plans for each identified tool (section 3); the goal of this section is to prepare ready-to-use plans for each specific tool; in many cases the same tool is used for several processes, so having one plan per tool makes implementing the improvements easier; material gathered in this section comes from the previous sections, but ordered steps are proposed and milestones are described in terms of content and dates.

Each section contains client-specific subsections, as all the content is specific for each client.

In the preparation of this document the following activities were undertaken within the project consortium:

2. Based on the assessment (described in detailed in D6.2) clients decided on target tool support level; suggested level in each process was proposed in the deliverable, but clients had freedom to set the type of tool according to their needs;
3. Initial missing functionality was identified by clients
4. Next, the at least two experts discussed and reviewed the missing functionality using general requirements (D3.1), the current assessment (D6.2) and the available plan for the processes (D5.3).
5. Based on the gap analysis, clients composed plans for each tool that needs to be introduced, improved or replaced.

1.1. Contribution to the project objectives

The deliverable advances ITSM implementation at client partners by covering necessary changes in the tools each client is operating. This deliverable is complementary to D5.3. Early planning of such improvement was necessary due to potentially long development and/or customization process of tools (especially at level 2).

This document identifies clear steps for clients that should efficiently progress their work. From the project perspective this plan gives the opportunity of better monitoring the progress of ITSM implementation at clients' infrastructure.

1.2. Important terms and concepts

- SMT – Service Management Tools, any software or piece of technology that is used to facilitate operation of one or more ITSM processes.
- Tool in the context of this deliverable – service management tool (SMT)

2. Clients gap analysis

2.1. EGI.eu

General Requirements

Current Level	Minimal Req.	Target
L0/L1	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	No missing functionality is foreseen however usage needs to be evaluated according to SMP which is in production.	DocDB, wiki	GR4, GR6, GR7

PR2 Service Level Management

Current Level	Minimal Req.	Target
L1	L1	L2

Nb	Missing functionality	Existing/new tool	Remarks
1	Negotiation, signing and monitoring of new SLA type	e-grant	For new type SLAs it is needed to develop or acquire a new tool to support negotiation, signing and monitoring

PR3 Service Reporting

Current Level	Minimal Req.	Target
L1	L2	L2

Nb	Missing functionality	Existing/new tool	Remarks
1	Existing tools support service reporting however currently it is not linked to SLAs which are under construction	MyEgi, wiki page, DocDB	PR3

PR4 Service Continuity & Availability Management

Current Level	Minimal Req.	Target
L0	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	Publishing data	MyEgi	Data are gathered but it is not accessible

2	Readability	Wiki, DocDB, MyEgi	Improvement in displaying data is needed
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PR5 Capacity Management

Current Level	Minimal Req.	Target
L0	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	Planning capacity based on pools	e-Grant	

2.2. FGI

General Requirements

Current Level	Minimal Req.	Target
LO/L1	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	Assign SMS-related tasks to specific role/people	FGI Wiki & Jira	GR1 to GR7
2	Plan/procedures repository	FGI wiki & Jira	GR1 to GR7
3	Organize process-related documents	FGI wiki & Jira	GR1 to GR7

PR1 Service Portfolio Management

Current Level	Minimal Req.	Target
L0	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	Define and Organize SPM-related documents	FGI wiki	

PR2 Service Level Management

Current Level	Minimal Req.	Target
L0	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	Organize SLM-related documents	FGI wiki	
2	Corporate level SLA repository, information to users,	FGI wiki	
3	Traceability of SLA versions	FGI wiki	

PR3 Service Reporting

Current Level	Minimal Req.	Target
L0	L2	L1



Nb	Missing functionality	Existing/new tool	Remarks
1	"Manual" way of reporting and publishing	scripts or manual SGAS report extraction with web publishing on wiki/web-site	SGAS for data aggregation is in place

PR4 Service Continuity & Availability Management

Current Level	Minimal Req.	Target
L1	L1	L1

PR5 Capacity Management

Current Level	Minimal Req.	Target
L0	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	Structure and template for periodic capacity plans based on offer & demand	FGI wiki	

PR6 Information Security Management

Current Level	Minimal Req.	Target
L0	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	Information about database with users accounts, authentication certificates and rights is defined	FGI wiki	Apply CSC solution and policies

PR7: Customer Relationship Management

Current Level	Minimal Req.	Target
L1	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	List of customers' contacts and information	VOMS	Existing
2	History of Supplier interactions (CRM records)	FGI Wiki & Jira	
3	CRM reports	FGI Wiki & Jira	

PR8: Supplier Relationship Management

Current Level	Minimal Req.	Target
L0	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	History of Supplier interactions (SRM records)	FGI wiki & Jira	



2	SRM reports	FGI wiki & Jira	
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PR9: Incident & Service Request Management

Current Level	Minimal Req.	Target
L2	L2	L2

Nb	Missing functionality	Existing/new tool	Remarks
1	ISRM statistics	Ticketing system	
2	ISRM reports	FGI wiki & Jira	

PR10: Problem Management

Current Level	Minimal Req.	Target
L2	L1	L2

Nb	Missing functionality	Existing/new tool	Remarks
1	PM records	FGI wiki & Jira	

PR11: Configuration Management

Current Level	Minimal Req.	Target
L0	L2	L2

Nb	Missing functionality	Existing/new tool	Remarks
1	Integrate the tools with SMS	GOCDDB	GOCDDB is already in use, but was not consider in the assessment as CMDB.

PR12: Change Management

Current Level	Minimal Req.	Target
L0	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	CM records and reports	FGI wiki & Jira	

PR13: Release & Deployment Management

Current Level	Minimal Req.	Target
L0	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	Planning, testing, feedback, announcement	FGI wiki & Jira, mailing lists	
2	Version repository	Repository	
3	RDM reports	FGI wiki & Jira	

PR14: Continual Service Improvement Management

Current Level	Minimal Req.	Target
L1	L1	L1

Nb	Missing functionality	Existing/new tool	Remarks
1	CSIM records and reports	FGI wiki & Jira	

2.3. PLGrid

General Requirements

Current Level	Minimal Req.	Target
L1	L1	L1

Nb	Missing functionality	existing/new tool which it relates	Remarks
1	A documentation structure where a Service Management Plan can be stored and accessed by PL-Grid staff. Linking SMP plans with tickets representing planned actions.	Confluence/Jira	GR4
2	A documentation structure where templates and documents for monitoring and reviewing SMS.	Confluence/Jira	GR6
3	Ability to create and assign corrective actions related to SM nonconformities.	Confluence/Jira	GR7

PR2: Service Level Management

Current Level	Minimal Req.	Target
L2	L2	L2

Nb	Missing functionality	existing/new tool which it relates	Remarks
1	SLA-aware monitoring	Operations Portal	PR2.4

PR7: Customer Relationship Management

Current Level	Minimal Req.	Target
L1	L1	L2

Nb	Missing functionality	existing/new tool which it relates to	Remarks
1	Ability for users to express their level of	Operations Portal	PR7.6

	satisfaction regarding different areas of cooperation with PL-Grid		
2	Ability for users to propose improvements regarding cooperation with PL-Grid	Operations Portal	PR7.6
3	Ability for PL-Grid staff to review the history of each customer containing his assessments of cooperation and Helpdesk communication connected with his SLA. This requires integration with Helpdesk and adding a SLA-ID field in HD.	Operations Portal, Helpdesk	PR7.6

PR11: Configuration Management

Current Level	Minimal Req.	Target
L1	L2	L2

Nb	Missing functionality	existing/new tool which it relates to	Remarks
1	Recording configuration for scientific applications (localization, licensing, versions)	CMDB	
2	Interface to other operations tools (sites, roles shall be taken from CMDB)	Operations Portal	

PR12: Change Management

Current Level	Minimal Req.	Target
L0	L1	L1

Nb	Missing functionality	existing/new tool which it relates to	Remarks
1	Documentation structure where templates for change planning could be stored.	Confluence	

3. Tool-specific improvement implementation plan

3.1. EGI.eu

Wiki (documentation tools) and DocDB

Related processes	GR, PR3
Type of tool development	Existing tool modification
Target functionality	Supporting of SMP

Identification of needed actions	Finalize SMP and re-evaluate current content of wiki page and its organisation and modify as necessary
Milestones	Jan 2014: finalize SMP Feb 2014: revise wikipage organization
Additional remarks	

MyEGI

Related processes	PR3, PR4
Type of tool development	New tool development
Target functionality	Publishing recorded data and calculated reports
Identification of needed actions	Reporting tool developed and integrated with Operations Portal
Milestones	May 2014: MyEGI in place, (within ongoing EGI-InSPIRE mini-project)
Additional remarks	

e-grant

Related processes	PR5
Type of tool development	New tool development
Target functionality	Tool for negotiation, signing and monitoring of new SLA type
Identification of needed actions	Reporting tool developed and integrated with Operations Portal
Milestones	March 2014: e-grant in place (within ongoing EGI-InSPIRE mini-project)
Additional remarks	

3.2. FGI

GOADB

Related processes	CM, SAM
Type of tool development	One of: new tool acquisition, new tool development, existing tool change, replaced, integrated or consolidated
Target functionality	Configuration covers: roles, services element,... Web interface for editing the data. REST interface for reading.
Identification of needed actions	1. Investigate possible solutions, 2. Add FGI specific extensions
Milestones	Jan 2014: Solution decided
	March 2014: Customization started



	Oct 2014: Tool in the production
Additional remarks	

FGI wiki & Project tracking tool (jira)

Related processes	GR 1 to 7, CRM, SRM, PM, CM, RDM, CSIM
Type of tool development	Tools are in place but needs some extra configuration in order to meet Project's needs.
Target functionality	Documented SMS.
Identyfication of needed actions	<ul style="list-style-type: none"> Identify and create more fine grained roles/groups of wiki users Assign SMS-related tasks to specific role/people Plan/procedures repository Organize process-related documents (for all the processes) Corporate level SLA repository, information to users, Introduce traceability of SLA versions Structure and template for periodic capacity plans based on offer & demand Add information about database with users accounts, authentication certificates and rights is defined History of Supplier interactions should be recorded (CRM records) CRM reports space should be structured ISRM reports space should be structured PM working space should be structured CM records and reports space should be structured RDM Planning, testing, reporting, feedback, announcement space should be structured CSIM records and reports
Milestones	Jan 2014: Functional groups shall be identified
	Feb 2014: Functional Groups shall be created
	June 2014: Jira and FGI Wiki shall be fully configured to meet the project's needs at 1 st stage processes
	March 2015: Jira and FGI Wiki shall be fully configured to meet the project's needs at 2 nd stage processes
Additional remarks	

Ticketing tool

Related processes	ISRM
Type of tool development	Tool is in place. Reports extensions.
Target functionality	ISRM statistics available
Identyfication of needed actions	Reconfigure tool reporting according the needs from the process.



Milestones	June 2014: ISRM statistics available
Additional remarks	None

Accounting Portal/Reporting tool

Related processes	SR
Type of tool development	Scripts that can extract information from SGAS
Target functionality	Report generation
Identification of needed actions	Develop scripts
Milestones	Feb 2014: Reports templates shall be designed and all the required information shall be identified
	Mar 2014: Development shall begin
	Jun 2014: Development shall be concluded and testing phase shall begin
	Sept 2014: Testing phase shall be concluded
Additional remarks	None

Repository

Related processes	RDM
Type of tool development	Tool is in place. New usage pattern.
Target functionality	Versioning enabled.
Identification of needed actions	Versioning of releases should be introduced.
Milestones	June 2014: Versioning of releases in place.
Additional remarks	None

VOMS

Related processes	CRM
Type of tool development	Extension of tool use case.
Target functionality	List of customers' contacts and information
Identification of needed actions	Check how list of contact can be obtained.
Milestones	Jan 2014: Solution known
Additional remarks	None



3.3. PL-Grid

Internal wiki (confluence)

Related processes	Continual Service Improvement Management, Change Management
Type of tool development	Existing tool customization.
Target functionality	A place where a Service Management Plan can be stored and accessed by PL-Grid staff. Ability to link SMP items with tickets representing concrete actions. Templates and documentation structure for monitoring and reviewing SMS. Ability to create and assign corrective actions related to SM nonconformities. Templates and structure for change planning.
Identification of needed actions	Create a structure where SMP and reviews and related templates can be stored. Create structure for Change Management documentation and templates.
Milestones	Jan 2014: SMP-related documentation structure created. Jul 2014: Change Mgmt structure created.
Additional remarks	

Project tracking tool (jira)

Related processes	CSI
Type of tool development	Existing tool customization
Target functionality	Ability to link SMP items with tickets representing concrete actions. Ability to create and assign corrective actions related to SM nonconformities.
Identification of needed actions	Establish projects covering: SMP related actions, SMS monitoring and reviewing, SM nonconformities related actions. Link SMP Documentation with tickets regarding SMP actions. Link Documentation for SMS monitoring and reviewing with tickets regarding related actions. Link SM nonconformities Documentation with tickets related. Create a map of connections between Documentation items and tickets.
Milestones	Jan 2014: required JIRA projects created/adapted Feb 2014: documentation linked with JIRA tickets
Additional remarks	

Operations Portal

Related processes	SLM, CRM, Change Mgmt, Configuration Mgmt
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Type of tool development	new tool development (replacement), existing tools integration
Target functionality	Interfaces to other operations tools (sites, roles shall be taken from CMDB) SLA-aware monitoring Ability for user to assess the level of user's satisfaction regarding different areas of cooperation Opportunity to propose improvements in regard to cooperation Ability to review the history of each customer containing his assessments of cooperation and HD cases connected with his SLA (integrated with Helpdesk)
Identification of needed actions	Develop a functionality enabling users to assess the level of user's satisfaction regarding different areas of cooperation (functionality within existing „grant reporting“) Create interfaces to other operations tools Develop a functionality enabling reviewing the history of each customer (assessments of cooperation and HD cases connected with his SLA) Integrate with Helpdesk Develop a functionality enabling SLA-aware monitoring
Milestones	March 2014: draft of SLA-aware monitoring policy Jul 2014: first prototype of SLA-aware monitoring tool ready Aug 2014: first prototype of User Portal integrated with other tools Nov 2014: improved version of SLA-aware monitoring tool ready (integrated with Helpdesk) Dec 2014: improved version of User Portal ready
Additional remarks	

CMDB

Related processes	Configuration Mgmt
Type of tool development	New tool development
Target functionality	Recording configuration for scientific applications (localization, licensing, versions)
Identification of needed actions	Create a database (AppDB) containing configuration for all scientific applications available (localization, licensing, versions) Maintain a history of applications available and their configuration.
Milestones	Jan 2014: AppDB requirements approved June 2014: AppDB implemented in beta version September 2014: AppDB available for users and tools in production environment
Additional remarks	

Helpdesk tool

Related processes	Service Level Management
Type of tool development	Existing tool modification
Target functionality	Ability to (optionally) identify to which SLA the ticket relates.
Identification of needed actions	Create a new input field which can be filled by the user or PL-Grid staff representing an SLA in context of which the ticket is submitted.
Milestones	Jan 2014: Specification of the functionality ready. June 2014: New functionality implemented. September 2014: The new version of Helpdesk tool deployed.
Additional remarks	

4. Summary

The plans contain concrete actions for clients in order to supply themselves with appropriate tools for running ITSM processes. All of the clients identified several tools for which improvement or development is needed. In each case, concrete actions were identified, so clients can proceed with the necessary implementation.

The level of both detail and confidence in planning is different depending on if the process is included in the 1st or 2nd stage of the process. In case of the 2nd stage processes, a revision of the tool development plan will likely be necessary after the actual implementation plan for the process is ready. However, due to the relatively long development cycles of tools, an identification of core needs is beneficial for clients as a preliminary orientation.

Execution of the plan will be subject to regular reporting and verification in the further course of the project. Further consultation with experts, likely to be necessary in the further course of the project, will be organized based on requests from clients.

5. References

- [1] FedSM Deliverable D3.1. Business models for Federated e-Infrastructures
- [2] FitSM-1:2013: Standard requirements for lightweight service management in federated IT infrastructures <http://fedsm.eu/fitsm>
- [3] FedSM Deliverable D5.1. Process Implementation and Maturity Baseline Assessment Framework
- [4] FedSM Deliverable D5.2. Clients' process implementation and maturity baseline
- [5] FedSM Deliverable D6.1 Service management tools implementation and maturity baseline assessment framework
- [6] FedSM Deliverable D5.3. Process development and improvement plan

[7] FedSM Deliverable D6.2 Service management tools implementation and maturity baseline

Version History

Version	Date	Author	Change record
0.1	10.10.2013	T.Szepieniec,	Initial draft, structure
0.2	4.12.2013	M.Radecki, R.Róžańska, T.Szepieniec	PLGrid contribution
0.3	6.12.2013	L.Alves	FGI contribution
0.4	12.12.2013	S.Holsinger,M.Krakowian	EGI contribution
0.7	19.12.2013	T.Szepieniec	General sections added, version for internal review
0.8	28.12.2013	J. Rubio-Loyola, M. Brenner, T.Szepieniec	Applying internal review comment
1.0	30.12.2013	T.Szepieniec	Preparing final version
1.1	24.09.2014	T. Schaaf	Final QA prior to periodic project review

