



D4.2: Professional qualification and certification scheme

Public Deliverable

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Abstract

The scheme describes which training courses related to the FedSM-approved processes and requirements (also found in the FitSM standard family). It lists the courses that need to be provided to ensure effective development of role-based personnel skills and how different courses relate to each other. The qualification and certification scheme defined in this Deliverable includes training modules on three different levels: foundation, advanced and expert level. For each training module the duration of the training, goals, target group(s), prerequisites and core topics are explained. Also, duration and format of the exams, with which participants can achieve a personal certification, are outlined.

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1. Introduction

Introducing IT Service Management typically starts with creating awareness and empowering the people involved to act on the goals related to ITSM. Thus, professional development through adequate education and training is a critical success factor for making ITSM initiatives successful.

The professional qualification and certification scheme outlined in this Deliverable sets the framework for the training needed to motivate, activate and enable people to contribute to the introduction and improvement of ITSM processes in federated infrastructures.

The scheme defines a series of training courses, along with corresponding exams and achievable certifications for persons. Each course and certification is aimed at achieve the competencies required to fulfil specific roles in the context of an IT service management system. The design of this scheme is based on experience from training and certification systems for well-known ITSM standards like ISO/IEC 20000 and frameworks such as ITIL.

This Deliverable defines a federated ITSM qualification and certification scheme and the objectives, scopes and requirements of the trainings contained therein. It is therefore the basis for *D4.3 Professional training material – foundation level* and *D4.4 Professional training material – advanced level* (see Figure 1 below).

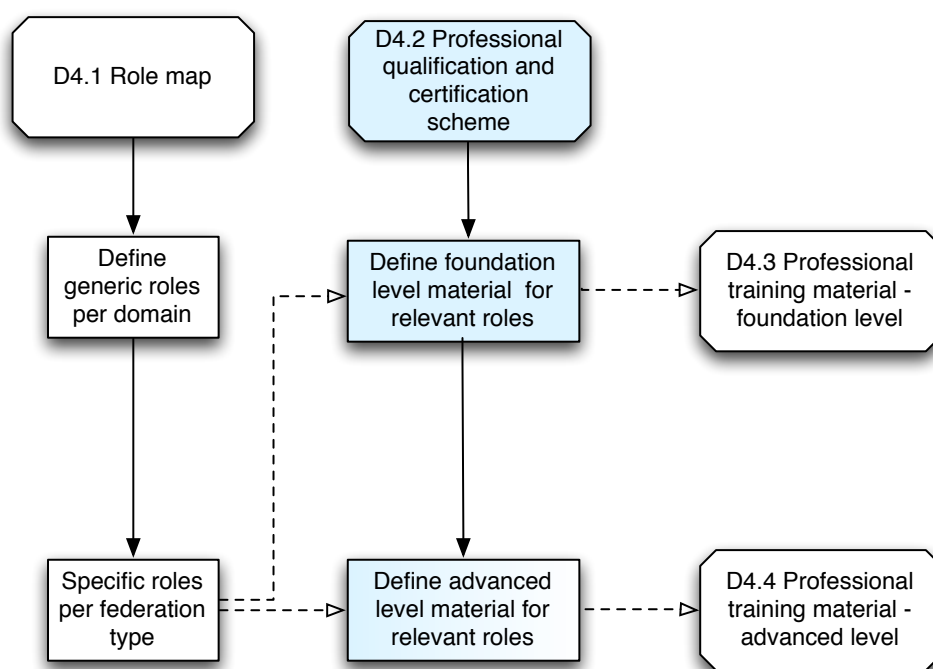


Figure 1: Relationships between this Deliverable and other Deliverables

2. Important terms and concepts

In the context of the FedSM training and qualification scheme the following terms will be used

FitSM

The brand name for a set of to-be-published documents, which include the minimum requirements from D3.2 and additional guidance for federated ITSM.

Contact hours

45 minutes of classroom instruction with a trainer.

Simple multiple choice

A multiple-choice test, in which for every question exactly one answer option is correct. Usually 1 point is awarded for every question answered correctly.

Complex multiple choice

A multiple-choice test, in which multiple answer options can be correct.

Rules and scoring methods vary. In the FedSM qualification scheme, questions in complex multiple-choice tests can have none, one or multiple answers and every answer option marked (i.e. checked or left unchecked) correctly is awarded 1 point.

Professional certification

A certification for persons, achieved by passing an examination (and in some instances, also fulfilling additional requirements like attending a training session or demonstrating relevant work experience), where a person is certified as being able to competently complete a job or task.

Candidates successfully passing an exam at the end of one of the courses outlined in this Deliverable, will receive a third-party, internationally recognized confirmation of their knowledge in federated ITSM as per FitSM issued by Tuv Sued Academy.

3. Qualification Scheme

The qualification scheme defines a simple framework of training levels, the training modules within each level, and the exams for achieving the corresponding professional certification.

3.1. Overview

The basis of the qualification scheme is a simple three-level framework: Foundation level, advanced level and expert level. Each level addresses the competency requirements for one or several of the generic roles outlined in *D4.1 Role map*.

For creating awareness within the organization and enabling staff to discuss ITSM-related topics based on a common understanding of basic terms and concepts, the completion of the foundation level should be mandatory for all personnel involved in the provisioning of federated IT services.

The advanced level aims to provide individuals with the skills necessary to take on coordinating roles, like that of a process manager, in federated ITSM.

Trainings on the expert level provide the know-how necessary for effectively fulfilling the roles of internal ITSM consultant and internal ITSM auditor.

To keep this first version of the scheme simple and manageable with a limited amount of resources, only one module will be offered on the foundation and expert level, and the advanced level will contain two training modules.

For the purpose of scoping these two training modules on the advanced level, the 14 processes defined in FitSM will be split into two process groups as follows:

Service Planning & Delivery (P&D)

1. Service portfolio management
2. Service level management
3. Service reporting management
4. Service continuity & availability management
5. Capacity management
6. Information security management
7. Customer relationship management
8. Supplier relationship management
9. Continual service improvement



Service Operation & Support (O&S)

1. Incident & service request management
2. Problem management
3. Configuration management
4. Change management
5. Release & deployment management

The resulting training scheme is shown in Figure 2.

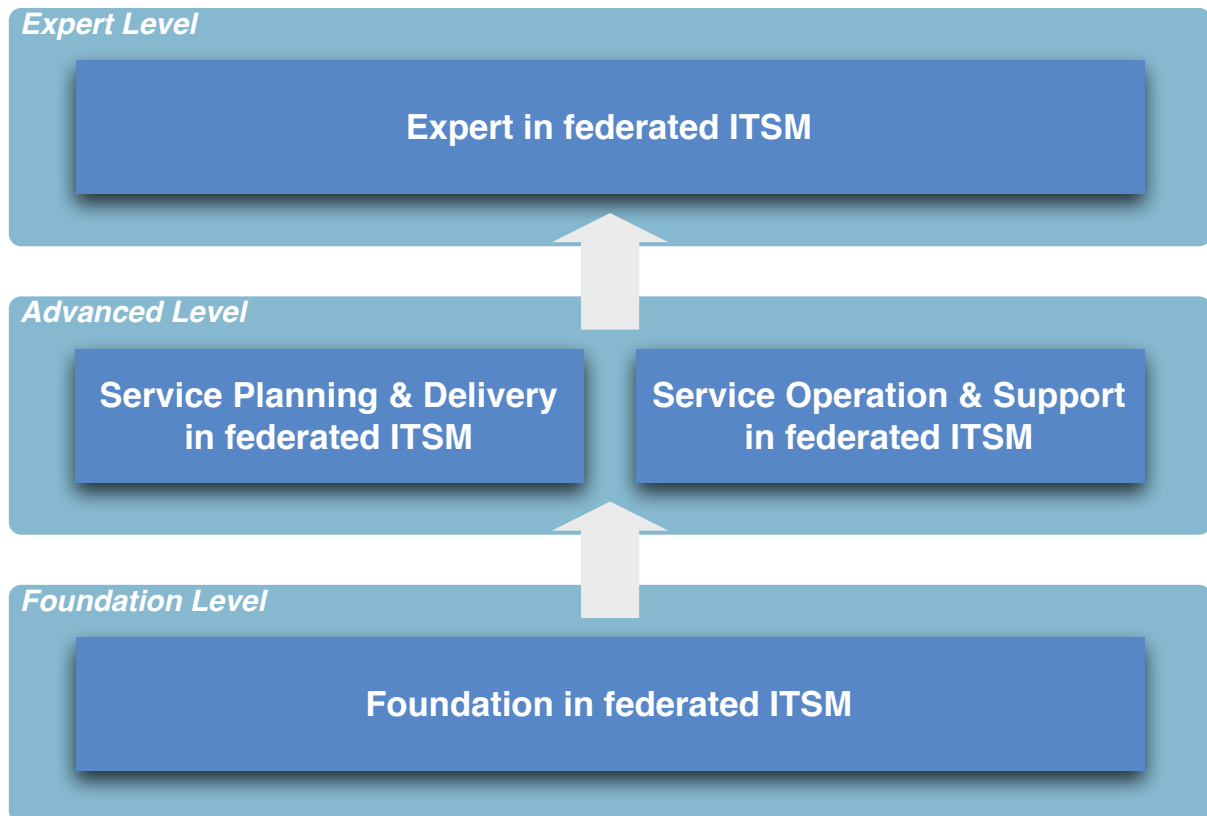


Figure 2: Qualification scheme

3.2. Exam and training course specifications

In this Section, the key specifics of the training course and corresponding exam are defined for each module in the qualification scheme.

More detailed specifications with comprehensive lists of training and exam topics are being developed in collaboration with Tuev Sued Academy.

3.2.1. Foundation Level

The foundation level contains only a single training: *Foundation in federated ITSM*.

The intended audience for this training are all Individuals involved in federated IT infrastructures who are required to work within processes that are, or might be, organized according to FitSM requirements and under the usage of IT Service Management best practices.

Passing the corresponding exam and achieving the *Foundation Certificate in Service Management for federated IT infrastructures according to FitSM* is a prerequisite for progressing to the advanced level training modules.

Foundation in federated ITSM training course	
Target audience	All individuals involved in the provisioning of federated IT services. Candidates who wish to progress to advanced level of the qualification and certification scheme.
Training objective	Participants understand the customer- and process-oriented approach of IT service management, are enabled to participate effectively in the execution of service management processes as well as in the discussions of service improvements.
Topics covered	Service and service management basics. Overview of objectives, concepts and requirements for all FitSM service management processes. Outline of specific challenges in a federated environment.
Teaching method	Lecture
Duration	8 contact hours (360 minutes), excluding exam

At the end of the training course, participants have the opportunity to take an exam to achieve the *Foundation Certificate in Service Management for federated IT infrastructures according to FitSM*:

Foundation in federated ITSM – Exam	
Full name of certification achieved	Foundation Certificate in Service Management for federated IT infrastructures according to FitSM
Prerequisites	None
Exam format	20 questions, “simple multiple-choice”, 4 answer options per question
Duration	30 minutes
Pass requirement	65% of questions answered correctly (13 of 20)

3.2.2. Advanced Level

There are two training modules on the advanced level: *Service Planning & Delivery in federated ITSM* and *Service Operation & Support in federated ITSM*.

Both modules address the competencies needed to effectively fulfil a coordinating role in the process-oriented management of federated services, specifically the role of process manager for one of the FitSM ITSM processes. These trainings are also recommended for service owners and senior responsible owners, enabling them to collaborate more effectively with the process managers.

Participants who pass the exams of both modules are eligible for expert level training.

The *Service Planning & Delivery in federated ITSM training course* prepares participants for a managing role in one of the S&P processes (cp. Section 3.1)

Service Planning & Delivery in federated ITSM training course	
Target audience	Individuals aiming to fulfil a coordinating role in the Planning & Delivery processes.
Training objective	Participants can manage a Service Planning & Delivery process. They understand all relevant FitSM requirements and have the knowledge necessary to plan, evaluate and improve the Service Planning & Delivery processes.
Topics covered	Service and service management basics. Objectives, concepts and requirements of all Planning & Delivery processes in detail.
Teaching method	Self study, lecture, case study
Duration	12 contact hours (540 minutes), excluding Exam plus ca. 1 day of self-study preparation.

At the end of the training course, participants have the opportunity to take an exam to achieve the *Certificate in Service Planning & Delivery for federated IT infrastructures according to FitSM*:

Service Planning & Delivery in federated ITSM – Advanced level exam	
Full name of certification achieved	Certificate in Service Planning & Delivery for federated IT infrastructures according to FitSM
Prerequisites	Foundation Certificate in Service Management for federated IT infrastructures according to FitSM
Exam format	30 questions, “simple multiple-choice”, 4 answer options per question
Duration	45 minutes
Pass requirement	$\frac{2}{3}$ (66%) of questions answered correctly (20 of 30)

The *Service Operation & Support in federated ITSM training course* has a similar specification and prepares participants for a managing role in one of the O&S processes (cp. Section 3.1).

This training is also recommended for staff acting as case managers in the incident & service request, problem, change or release & deployment management processes.

Service Operation & Support in federated ITSM training course	
Target audience	Individuals aiming to fulfil a coordinating role in the Operation & Support processes.
Training objective	Participants can manage a Service Operation & Support process. They understand all relevant FitSM requirements and have the knowledge necessary to plan, evaluate and improve the Service Operation & Support processes.
Topics covered	Service and service management basics. Objectives, concepts and requirements of all Planning & Support processes in detail.
Teaching method	Self study, lecture, case study
Duration	12 contact hours (540 minutes), excluding Exam plus ca. 1 day of self-study preparation.

At the end of the training course, participants have the opportunity to take an exam to achieve the *Certificate in Service Operation & Support for federated IT infrastructures according to FitSM*:

Service Operation & Support in federated ITSM – Advanced level exam	
Full name of certification achieved	Certificate in Service Operation & Support for federated IT infrastructures according to FitSM
Prerequisites	Foundation Certificate in Service Management for federated IT infrastructures according to FitSM
Exam format	30 questions, “simple multiple-choice”, 4 answer options per question
Duration	45 minutes
Pass requirement	$\frac{2}{3}$ (66%) of questions answered correctly (20 of 30)

3.2.3. Expert Level

In the expert level, the training for internal consultants and internal auditors is combined in a single module *Expert in federated ITSM*. This training is also suitable for process managers, wishing to gain a deeper understanding of continual improvement.

Expert in federated ITSM training course	
Target audience	Individuals aiming to fulfil the role of internal consultant or internal auditor.
Training objective	Participants are able to effectively consult process managers in questions of planning, establishing, monitoring and improving their processes. They are also able, to plan, establish and run an internal auditing function.
Topics covered	Continual improvement of services and service management processes. Auditing of service management processes. Managing organizational change.
Teaching method	Self study, lecture, case study
Duration	12 contact hours (540 minutes), excluding Exam plus ca. 1 day of self study preparation.

According to the more advanced nature of this module, the exam to achieve the *Expert Certificate in Service Management for federated IT infrastructures according to FitSM* has a slightly different format and will us complex multiple choice questions:

Expert in federated ITSM – Exam	
Full name of certification achieved	Expert Certificate in Service Management for federated IT infrastructures according to FitSM
Prerequisites	Certificate in Service Planning & Delivery for federated IT infrastructures according to FitSM Certificate in Service Operation & Support for federated IT infrastructures according to FitSM
Exam format	25 questions, “complex multiple-choice”, 4 answer options per question
Duration	60 minutes
Pass requirement	80% of answer options marked correctly (80 of 100)

3.3. Role-based training

Each training module addresses the competency requirements for a subset of the roles defined in D4.1. The resulting mapping of roles to trainings that should be required, and those that are recommended for fulfilling one of those roles is illustrated in the following table:

- ◊ Recommended training for role
- ◆ Required training for role

	Foundation	Advanced P&D	Advanced O&S	Expert
Senior Responsible Owner	◆	◊	◊	◊
Process Manager of P&D proc.	◆	◆	◊	◊
Process Manager of O&S proc.	◆	◊	◆	◊
Case Manager of O&S proc.	◆		◊	
Process Staff	◊			
Service Owner	◆	◊	◊	
Internal ITSM Consultant	◆	◆	◆	◆
Internal ITSM Auditor	◆	◆	◆	◆

4. Summary and outlook

This Deliverable defines the framework and the training modules of a professional qualification and certification scheme for federated ITSM. It is therefore the basis for more detailed exam specifications that will be produced in collaboration with Tuv Sued, the issuer of the professional certifications, as well as the training materials to be developed as *D4.3 Professional training material – foundation level* and *D4.4 Professional training material – advanced level* (the latter also containing material for expert level training, which was not anticipated at the time of writing of the FedSM Description of Work).

Version History

Version	Date	Author	Change record
0.1	21 Mar 2013	Michael Brenner	Skeleton
0.2	27 Mar 2013	Michael Brenner	Review version
1.0	2 Apr 2013	Michael Brenner	CSI as process added, minor corrections
1.1	30 Sept 2013	Owen Appleton	Minor formatting issues