

The Open Group® Certification for People

**IT4IT™
Conformance Requirements
(Level 1)**

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The Open Group[®] Certification for People: IT4IT[™] Conformance Requirements (Level 1)

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1. Introduction

This document, The Open Group Certification for People IT4IT™ Conformance Requirements, is an integral part of The Open Group® Certification for People: IT4IT™ Certification Program (the Program). Defined terms herein are in addition to definitions provided in the IT4IT™ Program Configuration document.

This document defines the requirements for certification of individuals within the Program, which in turn form the learning requirements for Accredited Training Courses.

1.1 Terminology and Definitions

This table defines terms or clarifies the meaning of words used within this document. Where an acronym is also used, it is provided in parentheses.

Accredited Training Course (ATC)	A training course, operated by a training course provider, that has successfully completed the accreditation process and which is listed in the register of Accredited Training Courses on the Certification Authority's website.
Body of Knowledge (BoK)	The set of information within the subject area that a Candidate is expected to have understanding of in order to achieve certification within the Program.
Candidate	A person seeking certification.
Certification Authority	The organization that manages the day-to-day operations of the Program. The Open Group is the Certification Authority for the Program.
Examination Provider	The organization(s) contracted by The Open Group to provide and administer the certification examinations at test centers throughout the world.
Key Learning Point (KLP)	A self-contained learning objective, derived from the Body of Knowledge with a unique reference, typically ranging from 2 to 15 minutes' study time.
Learning Outcome	What the Candidate should know, understand, or be able to do on completion of learning about one or more Key Learning Points. Each Learning Outcome should have at least one Key Learning Point reference and define the depth of knowledge required for each Key Learning Point.
Learning Unit	A related set of Learning Outcomes. It is expected that a Learning Unit would equate to between 30 and 90 minutes of taught learning equivalence.

2. Conformance Terminology

The Conformance Requirements by certification level are specified as sets of Learning Units. To achieve certification for a given level, Candidates are required to complete the applicable Learning Units and successfully pass the corresponding Indicator of Compliance (see Section 4).

The definition of the Learning Units does not dictate the structure, order, or time duration that topics should be taught in an Accredited Training Course. Training organizations are free to structure their courses as they see fit, so long as Candidates have the mandatory Learning Outcomes at the end of a course for the target certification level.

2.1 Learning Unit Format

Each Learning Unit is defined in a table organized as follows:

UNIT Number	Unit Name – A descriptive name for the Learning Unit
Purpose	A succinct statement of the purpose of the Learning Unit, including a high-level Learning Outcome.
KLP Reference	A reference back to the Key Learning Point reference in the mapping to the Body of Knowledge, as detailed in Section 5. This is required for traceability.
Learning Outcome	Candidate Learning Outcome Statement A statement of what the Candidate is expected to have learned by completing the Learning Unit. A specific term is used to define the depth of learning, from low to high as follows: <ul style="list-style-type: none">• Identify – name one or more items.• List – name multiple items.• Understand – an understanding of the concept or item.• Define – provide a definition of a term.• Demonstrate – describe and explain a concept or term.• Describe/State – provide a description of or statement for a concept or item; give a factual statement.• Explain – provide a description with a rationale.• Discuss – the ability to write logically about a topic.• Justify – demonstrate the correctness of an assertion through a written discussion.

3. Level 1 Conformance Requirements

To achieve certification to Level 1 Candidates must complete all Learning Units defined in this section and successfully pass the corresponding Indicator of Compliance for Level 1 certification (see Section 4).

3.1 IT4IT Overview

UNIT 1	IT4IT Overview
Purpose	The purpose of this Learning Unit is to help the Candidate understand the IT4IT Reference Architecture at an overview level
KLP Reference	1.*, 2.*, 3.*,4.1
Learning Outcome	<p>The Candidate must be able to:</p> <ol style="list-style-type: none"> 1. Explain what The Open Group IT4IT Reference Architecture is and what approach it uses (KLP 1.2-1) 2. Identify the intended use of IT4IT Reference Architecture for organizations (KLP 4.1-1) 3. Identify the intended use of the IT4IT Reference Architecture for suppliers of IT management products and services (KLP 4.1-2) 4. List the guiding principles that the IT4IT Framework adheres to (KLP 3.1-5) 5. Demonstrate understanding of the IT Value Chain (KLP 3.1-1) 6. Briefly describe the difference between the primary activities and supporting activities in the IT Value Chain (KLP 3.1-2) 7. List the primary activities of the IT Value Chain (KLP 3.1-3) 8. List the supporting activities of the IT Value Chain (KLP 3.1-4) 9. Explain the difference between value chain and value stream (KLP 3.2-2) 10. Briefly describe how the IT value chain supports the IT service lifecycle (KLP 3.3-1) 11. Briefly describe how the four value streams manage the full service lifecycle (KLP 3.3-2)

3.2 Definitions

UNIT 2	Definitions
Purpose	The purpose of this Learning Unit is to help the Candidate understand the key terminology of the IT4IT Reference Architecture standard.
KLP Reference	2.*
Learning Outcome	The Candidate must be able to understand and explain the following definitions: <ol style="list-style-type: none">1. Service Lifecycle Data Object (Data Object) (KLP 2.1-1)2. IT Value Chain (KLP 2.2-1)3. Value Chain (KLP 2.3-1)4. Value Stream (KLP 2.4-1)5. Functional Component (KLP 2.5-1)6. Service Model Backbone Data Object (KLP 2.6-1)7. Relationship (KLP 2.7-1)8. System of Record (KLP 2.8-1) It is expected that these definitions would be covered as part of the learning in other units.

3.3 Basic Concepts

UNIT 3	Basic Concepts
Purpose	The purpose of this Learning Unit is to help the Candidate understand the Basic Concepts of IT4IT value streams and the IT4IT Reference Architecture.
KLP Reference	3.*
Learning Outcome	<p>The Candidate must be able to:</p> <ol style="list-style-type: none"> 1. Briefly describe an overview of the Strategy to Portfolio (S2P) value stream (KLP 3.2-3) 2. Briefly describe an overview of the Requirement to Deploy (R2D) value stream (KLP 3.2-4) 3. Briefly describe an overview of the Request to Fulfill (R2F) value stream (KLP 3.2-5) 4. Briefly describe an overview of the Detect to Correct (D2C) value stream (KLP 3.2-6) 5. Describe what functional components and data objects are (KLP 3.2-7) 6. Explain the relationship of functional components to data objects (KLP 3.2-8) 7. Describe the scope of S2P (KLP 3.3-3) 8. List S2P value propositions (KLP 3.3-4) 9. List S2P typical activities (KLP 3.3-5) 10. Describe the scope of R2D (KLP 3.3-6) 11. List R2D value propositions (KLP 3.3-7) 12. List R2D typical activities (KLP 3.3-8) 13. Describe the scope of R2F (KLP 3.3-9) 14. List R2F value propositions (KLP 3.3-10) 15. List R2F typical activities (KLP 3.3-11) 16. Describe the scope of D2C (KLP 3.3-12) 17. List D2C value propositions (KLP 3.3-13) 18. List D2C typical activities (KLP 3.3-14) 19. Explain the concept of the four pillars “anchoring” the IT Value Chain – the Service Model, the Information Model, the Functional Model, and the Integration Model (KLP 3.4-1) 20. Explain the IT4IT Service Model (KLP 3.4-3) 21. Describe the Service Model Backbone (KLP 3.4-4) 22. Describe the IT4IT Information Model (KLP 3.4-5) 23. State the characteristics of the service lifecycle data objects (KLP 3.4-6) 24. Explain the difference between key and auxiliary data objects (KLP 3.4-8) 25. State what the IT4IT Functional Model is (KLP 3.4-10) 26. Explain functional components and how they relate to IT capability (KLP 3.4-11) 27. Explain the difference between primary functional components and secondary functional components (KLP 3.4-12) 28. Explain interactions between functional components and data objects (KLP 3.4-13)

3.4 IT4IT Core

UNIT 4	IT4IT Core
Purpose	The purpose of this Learning Unit is to help the Candidate understand the IT4IT Reference Architecture at a high level.
KLP Reference	4.*
Learning Outcome	<p>The Candidate must be able to:</p> <ol style="list-style-type: none"> 1. List the five levels of IT4IT abstractions and identify which are vendor-agnostic and which are vendor-specific (KLP 4.2.1-1) 2. Explain why an informal notation was chosen for Levels 1 and 2 (KLP 4.2.1-2) 3. List the five core concepts introduced at Reference Architecture Level 1 (KLP 4.2.2-1) 4. Explain the Level 1 class model (KLP 4.2.2-2) 5. Explain the objective of the IT4IT Reference Architecture as it relates to Level 1 (KLP 4.2.2-3) 6. Explain how the IT4IT Reference Architecture uses the value stream concept (KLP 4.2.2-4) 7. List the three things a functional component must have (KLP 4.2.2-5) 8. Identify the OMG definition that is aligned contextually with the service lifecycle data object (artifact) (KLP 4.2.2-6) 9. Identify the constituent parts of the system of record fabric for IT management (KLP 4.2.2-7) 10. Briefly explain the Level 1 Reference Architecture diagram (KLP 4.2.3-1) 11. List the four additional concepts introduced at Reference Architecture Level 2 (KLP 4.2.4-1) 12. Explain the Level 2 class model (KLP 4.2.4-2) 13. Briefly explain an example Level 2 Reference Architecture diagram (KLP 4.2.5-1) 14. Identify the primary method for communicating the IT4IT Reference Architecture specification at Level 3 (KLP 4.2.6-1) 15. List the additional concepts introduced at Reference Architecture Level 3 (KLP 4.2.6-2) 16. Identify the notation used for the Level 3 Reference Architecture diagrams (KLP 4.2.7-1) 17. Explain who owns and controls Levels 4 and 5 of the Reference Architecture (KLP 4.2.8-1) 18. Explain what kind of content might be included in Level 4 (KLP 4.2.8-2) 19. Explain what kind of content might be included in Level 5 (KLP 4.2.8-3)

3.5 Strategy to Portfolio Value Stream

UNIT 5	Strategy to Portfolio Value Stream
Purpose	The purpose of this Learning Unit is to help the Candidate understand the objectives and functional components of the Strategy to Portfolio value stream.
KLP Reference	5.*
Learning Outcome	<p>The Candidate must be able to:</p> <ol style="list-style-type: none"> 1. Describe the objectives of the Strategy to Portfolio (S2P) value stream (KLP 5.1-1, KLP 5.1-2, KLP 5.1-3) 2. Explain the benefits of implementing the S2P value stream for the business (KLP 5.2-1) 3. List the KPIs (KLP 5.3-1) 4. Explain the purpose of the Enterprise Architecture functional component (KLP 5.4.1-1) 5. Briefly describe the key data object(s) associated with the Enterprise Architecture functional component (KLP 5.4.1-2) 6. Explain the purpose of the Policy functional component (KLP 5.4.2-1) 7. Briefly describe the key data object(s) associated with the Policy functional component (KLP 5.4.2-2) 8. Explain the purpose of the Proposal functional component (KLP 5.4.3-1) 9. Briefly describe the key data object(s) associated with the Proposal functional component (KLP 5.4.3-2) 10. Explain the purpose of the Portfolio Demand functional component (KLP 5.4.4-1) 11. Briefly describe the key data object(s) associated with the Portfolio Demand functional component (KLP 5.4.4-2) 12. Explain the purpose of the Service Portfolio functional component (KLP 5.4.5-1) 13. Briefly describe the key data object(s) associated with the Service Portfolio functional component (KLP 5.4.5-2) 14. Explain the purpose of the IT Investment Portfolio auxiliary functional component (KLP 5.4.6-1) 15. Briefly describe the key data object(s) associated with the IT Investment Portfolio auxiliary functional component (KLP 5.4.6-2)

3.6 Requirement to Deploy Value Stream

UNIT 6	Requirement to Deploy Value Stream
Purpose	The purpose of this Learning Unit is to help the Candidate understand the objectives and functional components of the Requirement to Deploy value stream.
KLP Reference	6.*
Learning Outcome	<p>The Candidate must be able to:</p> <ol style="list-style-type: none"> 1. Describe the goals and key objectives of the Requirement to Deploy (R2D) value stream (KLP 6.1-1, KLP 6.1-2) 2. Explain the benefits of implementing the R2D value stream for the business (KLP 6.2-1) 3. List the KPIs (KLP 6.3-1) 4. Explain the purpose of the Project functional component (KLP 6.4.1-1) 5. Briefly describe the key data object(s) associated with the Project functional component (KLP 6.4.1-2) 6. Explain the purpose of the Requirement functional component (KLP 6.4.2-1) 7. Briefly describe the key data object(s) associated with the Requirement functional component (KLP 6.4.2-2) 8. Explain the purpose of the Service Design functional component (KLP 6.4.3-1) 9. Briefly describe the key data object(s) associated with the Service Design functional component (KLP 6.4.3-2) 10. Explain the purpose of the Source Control functional component (KLP 6.4.4-1) 11. Briefly describe the key data object(s) associated with the Source Control functional component (KLP 6.4.4-2) 12. Explain the purpose of the Build functional component (KLP 6.4.5-1) 13. Briefly describe the key data object(s) associated with the Build functional component (KLP 6.4.5-2) 14. Explain the purpose of the Build Package functional component (KLP 6.4.6-1) 15. Briefly describe the key data object(s) associated with the Build Package functional component (KLP 6.4.6-2) 16. Explain the purpose of the Release Composition functional component (KLP 6.4.7-1) 17. Briefly describe the key data object(s) associated with the Release Composition functional component (KLP 6.4.7-2) 18. Explain the purpose of the Test functional component (KLP 6.4.8-1) 19. Briefly describe the key data object(s) associated with the Test functional component (KLP 6.4.8-2) 20. Explain the purpose of the Defect functional component (KLP 6.4.9-1) 21. Briefly describe the key data object(s) associated with the Defect functional component (KLP 6.4.9-2)

3.7 Request to Fulfill Value Stream

UNIT 7	Request to Fulfill Value Stream
Purpose	The purpose of this Learning Unit is to help the Candidate understand the objectives and functional components of the Request to Fulfill value stream.
KLP Reference	7.*
Learning Outcome	<p>The Candidate must be able to:</p> <ol style="list-style-type: none"> 1. Describe the objectives of the Request to Fulfill (R2F) value stream (KLP 7.1-1, KLP 7.1-2, KLP 7.1-3) 2. Explain the benefits of implementing the R2F value stream for the business (KLP 7.2-1) 3. List the KPIs (KLP 7.3-1) 4. Explain the distinction between the purpose of primary and secondary functional components within the R2F value stream (KLP 7.4-1) 5. Explain the objectives of the Engagement Experience Portal (KLP 7.4-2) 6. Explain the purpose of the Engagement Experience Portal secondary functional component (KLP 7.4.1-1) 7. Briefly describe the key data object(s) associated with the Engagement Experience Portal secondary functional component (KLP 7.4.1-2) 8. Explain the purpose of the Offer Consumption functional component (KLP 7.4.4-1) 9. Briefly describe the key data object(s) associated with the Offer Consumption functional component (KLP 7.4.2-2) 10. Explain the purpose of the Offer Management functional component (KLP 7.4.3-1) 11. Briefly describe the key data object(s) associated with the Offer Management functional component (KLP 7.4.3-2) 12. Explain the purpose of the Catalog Composition functional component (KLP 7.4.4-1) 13. Briefly describe the key data object(s) associated with the Catalog Composition functional component (KLP 7.4.4-2) 14. Explain the purpose of the Request Rationalization functional component (KLP 7.4.5-1) 15. Briefly describe the key data object(s) associated with the Request Rationalization functional component (KLP 7.4.5-2) 16. Explain the purpose of the Fulfillment Execution functional component (KLP 7.4.6-1) 17. Briefly describe the key data object(s) associated with the Fulfillment Execution functional component (KLP 7.4.6-2) 18. Explain the purpose of the Usage functional component (KLP 7.4.7-1) 19. Briefly describe the key data object(s) associated with the Usage functional component (KLP 7.4.7-2) 20. Explain the purpose of the Chargeback/Showback functional component (KLP 7.4.8-1) 21. Briefly describe the key data object(s) associated with the Chargeback/Showback functional component (KLP 7.4.8-2) 22. Explain the purpose of the Knowledge & Collaboration supporting function (KLP 7.4.9-1) 23. Briefly describe the key data object(s) associated with the Knowledge & Collaboration supporting function (KLP 7.4.9-2)

3.8 Detect to Correct Value Stream

UNIT 8	Detect to Correct Value Stream
Purpose	The purpose of this Learning Unit is to help the Candidate understand the objectives and functional components model of the Detect to Correct value stream.
KLP Reference	8.*
Learning Outcome	<p>The Candidate must be able to:</p> <ol style="list-style-type: none"> 1. Describe the objectives of the Detect to Correct (D2C) value stream (KLP 8.1-1, KLP 8.1-2) 2. Explain the benefits of implementing the D2C value stream for the business (KLP 8.2-1) 3. List the KPIs (KLP 8.3-1) 4. Explain the interactions with other value streams (KLP 8.4-1, 8.4-2) 5. Explain the purpose of the Service Monitoring functional component (KLP 8.4.1-1) 6. Briefly describe the key data object(s) associated with the Service Monitoring functional component (KLP 8.4.1-2) 7. Explain the purpose of the Event functional component (KLP 8.4.2-1) 8. Briefly describe the key data object(s) associated with the Event functional component (KLP 8.4.2-2) 9. Explain the purpose of the Incident functional component (KLP 8.4.3-1) 10. Briefly describe the key data object(s) associated with the Incident functional component (KLP 8.4.3-2) 11. Explain the purpose of the Problem Control functional component (KLP 8.4.4-1) 12. Briefly describe the key data object(s) associated with the Problem Control functional component (KLP 8.4.4-2) 13. Explain the purpose of the Change Control functional component (KLP 8.4.5-1) 14. Briefly describe the key data object(s) associated with the Change Control functional component (KLP 8.4.5-2) 15. Explain the purpose of the Configuration Management functional component (KLP 8.4.6-1) 16. Briefly describe the key data object(s) associated with the Configuration Management functional component (KLP 8.4.6-2) 17. Explain the purpose of the Diagnostic & Remediation functional component (KLP 8.4.7-1) 18. Briefly describe the key data object(s) associated with the Diagnostic & Remediation functional component (KLP 8.4.7-2) 19. Explain the purpose of the Service Level functional component (KLP 8.4.8-1) 20. Briefly describe the key data object(s) associated with the Service Level functional component (KLP 8.4.8-2) 21. List other IT operations capabilities that are not part of the D2C value stream (KLP 8.4.9-1)

3.9 IT4IT Certification Program

UNIT 9	IT4IT Certification Program
Purpose	The purpose of this Learning Unit is to help the Candidate understand the IT4IT Certification Program.
KLP Reference	None.
Learning Outcome	The Candidate must be able to: <ol style="list-style-type: none">1. Explain the IT4IT Certification Program, and distinguish between the levels of certification.

4. Indicators of Compliance

The Indicators of Compliance for the Program are The Open Group examinations.

The descriptions of the examinations for each level are maintained by the Certification Authority and displayed on The Open Group website. This includes a description of the examination type (for example, simple multiple choice, complex scenario, etc.), the number of questions, the duration, supervision requirements, whether an examination is open book, the pass score, the language(s) the examination is offered in, and the pre-requisites for taking the examination.

5. Key Learning Point Mapping to the Body of Knowledge

Key Learning Points that are excluded from Level 1 are denoted by “(X)”. A future revision of this document is expected to include additional certification levels.

Section		Key Learning Point(s)
Part I: Introduction		
1	Introduction	None
1.1	Objective	None
1.2	Overview	KLP 1.2-1 (1) The Open Group IT4IT Reference Architecture and its approach
1.3	Conformance	None
1.4	Normative References	None
1.5	Terminology	None
1.6	Future Directions	KLP 1.6-1 (1) Scenarios coming in future releases of standard
2	Definitions	KLP 2.1-1 (1) Service Lifecycle Data Object (Data Object) KLP 2.2-1 (1) IT Value Chain KLP 2.3-1 (1) Value Chain KLP 2.4-1 (1) Value Stream KLP 2.5-1 (1) Functional Component KLP 2.6-1 (1) Service Model Backbone Data Object KLP 2.7-1 (1) Relationship KLP 2.8-1 (1) System of Record
3	Overview	None
3.1	What is the IT Value Chain?	KLP 3.1-1 (1) The IT Value Chain KLP 3.1-2 (1) Primary activities and supporting activities KLP 3.1-3 (1) The primary activities of the IT Value Chain KLP 3.1-4 (1) The supporting activities of the IT Value Chain KLP 3.1-5 (1) The guiding principles that the IT4IT framework adheres to
3.2	IT Value Chain and IT4IT Reference Architecture	KLP 3.2-1 (1) The four key pillars of IT (Service Model, Functional Model, Information Model, Integration Model) and relationship to IT value streams KLP 3.2-2 (1) The difference between value chain and value stream KLP 3.2-3 (1) Strategy to Portfolio (S2P) value stream overview KLP 3.2-4 (1) Requirement to Deploy (R2D) value stream overview KLP 3.2-5 (1) Request to Fulfill (R2F) value stream overview KLP 3.2-6 (1) Detect to Correct (D2C) value stream overview KLP 3.2-7 (1) The properties of functional components and data objects KLP 3.2-8 (1) The relationships between functional components and data objects KLP 3.2-9 (X) The importance of System of Record integrations KLP 3.2-10 (X) How the IT4IT Reference Architecture is used in relation to improving IT processes, IT capabilities, or existing industry standard best practice

Section		Key Learning Point(s)
		models
3.3	IT Value Streams	<p>KLP 3.3-1 (1) The relationship of the IT Value Chain to the IT service lifecycle</p> <p>KLP 3.3-2 (1) The relationship of the four value streams to the IT service lifecycle</p> <p>KLP 3.3-3 (1) The scope of S2P</p> <p>KLP 3.3-4 (1) S2P value propositions</p> <p>KLP 3.3-5 (1) S2P typical activities</p> <p>KLP 3.3-6 (1) The scope of R2D</p> <p>KLP 3.3-7 (1) R2D value propositions</p> <p>KLP 3.3-8 (1) R2D typical activities</p> <p>KLP 3.3-9 (1) The scope of R2F</p> <p>KLP 3.3-10 (1) R2F value propositions</p> <p>KLP 3.3-11 (1) R2F typical activities</p> <p>KLP 3.3-12 (1) The scope of D2C</p> <p>KLP 3.3-13 (1) D2C value propositions</p> <p>KLP 3.3-14 (1) D2C typical activities</p>
3.4	IT4IT Reference Architecture	<p>KLP 3.4-1 (1) The four pillars anchoring the IT Value Chain – the Service Model, the Information Model, the Functional Model, and the Integration Model</p> <p>KLP 3.4-2 (1) The difference between traditional IT lifecycles and the new lifecycle prescribed by IT4IT</p> <p>KLP 3.4-3 (1) The IT4IT Service Model</p> <p>KLP 3.4-4 (1) The IT4IT Service Model Backbone</p> <p>KLP 3.4-5 (1) The IT4IT Information Model</p> <p>KLP 3.4-6 (1) Service lifecycle data objects</p> <p>KLP 3.4-7 (X) Characteristics of data objects</p> <p>KLP 3.4-8 (1) The difference between key and auxiliary data objects</p> <p>KLP 3.4-9 (X) The notation for data object relationships</p> <p>KLP 3.4-10 (1) The IT4IT Functional Model</p> <p>KLP 3.4-11 (1) Functional components and how they relate to IT capability</p> <p>KLP 3.4-12 (1) The difference between primary functional components and secondary functional components</p> <p>KLP 3.4-13 (1) The interactions between functional components and data objects</p> <p>KLP 3.4-14 (X) The IT4IT Integration Model</p> <p>KLP 3.4-15 (X) The three types of integration (sor, soe, soi)</p> <p>KLP 3.4-16 (X) System of Record integration</p> <p>KLP 3.4-17 (X) System of Engagement integration</p> <p>KLP 3.4-18 (X) System of Insight integration</p>
Part II: IT4IT Core		
4	IT4IT Core	None
4.1	Introduction	<p>KLP 4.1-1 (1) The intended use of IT4IT Reference Architecture for organizations</p> <p>KLP 4.1-2 (1) The intended use of IT4IT Reference Architecture for suppliers of IT management products and services</p>
4.2	IT4IT Abstraction Levels and Class	None

Section		Key Learning Point(s)
	Structure	
4.2.1	IT4IT Abstractions	KLP 4.2.1-1 (1) The five levels of IT4IT abstractions and identification of which are vendor-agnostic and which are vendor-specific KLP 4.2.1-2 (1) The informal notation chosen for Levels 1 and 2
4.2.2	Concepts at Level 1: End-to-End Overview	KLP 4.2.2-1 (1) The core concepts introduced at Level 1: <ul style="list-style-type: none"> • Value Streams • Functional Components • Service Lifecycle Data Objects (key data objects) • Service Model Backbone Data Objects (service backbone data objects) • Relationships KLP 4.2.2-2 (1) The Level 1 class model KLP 4.2.2-3 (1) The objective of the IT4IT Reference Architecture as it relates to Level 1 KLP 4.2.2-4 (1) The IT4IT Reference Architecture uses the value stream concept KLP 4.2.2-5 (1) The things a functional component must have: <ul style="list-style-type: none"> • It must have defined input(s) and output(s) that are data objects and must have an impact on a key data object; for example, create, update, delete. KLP 4.2.2-6 (1) The OMG definition that is aligned contextually with the service lifecycle data object (artifact) KLP 4.2.2-7 (1) The system of record fabric for IT management
4.2.3	Level 1 Reference Architecture Diagram	KLP 4.2.3-1 (1) The Level 1 Reference Architecture diagram
4.2.4	Concepts at Level 2: Value Stream Documentation	KLP 4.2.4-1 (1) The additional concepts introduced at Level 2: <ul style="list-style-type: none"> • Relationships between data objects are updated with multiplicity/cardinality attributes (e.g., one-to-one, one to many, many-to-many). • The concept of data flow between functional components is introduced. • The data flows are refined to depict integrations to build out the system of record fabric. • The relationships between capability disciplines and functional components are introduced but they are not part of the normative reference and are presented as guidance. KLP 4.2.4-2 (1) The Level 2 class model KLP 4.2.4-3 (X) The concept of multiplicity KLP 4.2.4-4 (X) The concept of data flow KLP 4.2.4-5 (X) The concept of System of Record integration KLP 4.2.4-6 (X) The concept of System of Engagement integration
4.2.5	Level 2 Reference Architecture Diagram	KLP 4.2.5-1 (1) The Level 2 Reference Architecture Diagram
4.2.6	Concepts at Level 3: Vendor-Independent Architecture	KLP 4.2.6-1 (1) The primary method for communicating the IT4IT Reference Architecture specification at Level 3 KLP 4.2.6-2 (1) The additional concepts introduced at Level 3: <ul style="list-style-type: none"> • Scenarios • Essential attributes • Essential services

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> • Capability Discipline <p>KLP 4.2.6-3 (X) The concept of scenarios</p> <p>KLP 4.2.6-4 (X) The elements included in scenario master document content:</p> <ul style="list-style-type: none"> • Requirements • Process flow • Automation specification using the reference architecture • Essential services supporting the scenario • Data objects and essential attributes <p>KLP 4.2.6-5 (X) The concept of essential attributes</p> <p>KLP 4.2.6-6 (X) The most basic essential attributes:</p> <ul style="list-style-type: none"> • Unique identifier • Data object lifecycle status <p>KLP 4.2.6-7 (X) The concept of essential services</p>
4.2.7	Level 3 Reference Architecture Diagram	<p>KLP 4.2.7-1 (1) The Level 3 Reference Architecture Diagram Notation</p> <p>KLP 4.2.7-2 (X) The Level 3 Reference Architecture Diagram</p>
4.2.8	Concepts at Levels 4 and 5: Vendor Extensions	<p>KLP 4.2.8-1 (1) Ownership and control of Levels 4 and 5</p> <p>KLP 4.2.8-2 (1) The kind of content included in Level 4</p> <p>KLP 4.2.8-3 (1) The kind of content included in Level 5</p>
Part III: IT4IT Value Streams		
5	Strategy to Portfolio (S2P) Value Stream	None
5.1	Objectives	<p>KLP 5.1-1 (1) The goal of the S2P value stream</p> <p>KLP 5.1-2 (1) Overview of the primary functional components</p> <p>KLP 5.1-3 (1) Common limitations for current S2P practices</p>
5.2	Business Value Proposition	<p>KLP 5.2-1 (1) The key value propositions:</p> <ul style="list-style-type: none"> • Provides holistic IT portfolio view across the IT PMO and the Enterprise Architecture and Service Portfolio functional components • Enables IT portfolio decisions based on business priorities • Provides accurate visibility of business and IT demand • Enables IT portfolio data consistency • Provides service lifecycle tracking through conceptual, logical, and physical domains • Enables prioritized IT investment based on all IT portfolio facets including cost/value analysis, impacts on architecture, service roadmap, business priorities, etc. • Enables re-balanced IT investments between strategic and operational demand • Enables solid communication with business stakeholders through roadmaps
5.3	Key Performance Indicators	<p>KLP 5.3-1 (1) The Critical Success Factors and their related KPI metric types:</p> <ul style="list-style-type: none"> • Business and IT alignment: ratio of new <i>versus</i> maintenance service • Accurate visibility into overall demands from the business: demand requests, types, and delivery per service % of overall IT budget that can be traced back to formal requests • Service Portfolio rationalization: Service Portfolio functional component,

Section		Key Learning Point(s)
		<p>taxonomy and processes are implemented</p> <ul style="list-style-type: none"> • Service Portfolio financial analysis: accounting record produced and compared with business outcomes and financial objectives achieved • Service Portfolio reporting and analysis: a service portfolio exists and is used for decisions on service offerings • Improve customer satisfaction: satisfied customers per service/application • Stewardship of IT investment: CapEx <i>versus</i> OpEx, software license percentage in use, planned <i>versus</i> actual service costs, average cost of IT delivery per customer • Enterprise security alignment: frequency of security assessment against latest standards and guidelines, noted deficiencies against security standards and policies
5.4	Value Stream Definition	<p>KLP 5.4-1 (1) S2P key functional components KLP 5.4-2 (X) S2P Level 2 value stream diagram</p>
5.4.1	Enterprise Architecture Functional Component	<p>KLP 5.4.1-1 (1) The purpose of the Enterprise Architecture functional component KLP 5.4.1-2 (1) The Service Architecture data object KLP 5.4.1-3 (X) The Service Architecture data object key attributes KLP 5.4.1-4 (X) The key data object relationships of the Enterprise Architecture functional component:</p> <ul style="list-style-type: none"> • Service Architecture to Conceptual Service (n:m) <p>KLP 5.4.1-5 (X) The main functions of the Enterprise Architecture functional component:</p> <ul style="list-style-type: none"> • Identify strategic IT architectural components based on current business vision, strategy, goals, and requirements. • Develop target state business, information, application, technology, and security blueprints based on strategies, principles, and policies. • Develop IT roadmaps based on business roadmap and input. • Develop and maintain enterprise guiding principles. • Manage IT architecture guideline and standards.
5.4.2	Policy Functional Component	<p>KLP 5.4.2-1 (1) The purpose of the Policy functional component KLP 5.4.2-2 (1) The Policy data object KLP 5.4.2-3 (X) The key attributes of the Policy data object KLP 5.4.2-4 (X) The key data object relationships of the Policy functional component:</p> <ul style="list-style-type: none"> • The Policy to Conceptual Service (n:m) relationship • The Policy to Requirement functional component (n:m) relationship <p>KLP 5.4.2-5 (X) The main functions of the Policy functional component:</p> <ul style="list-style-type: none"> • Align and map IT Policies to Service Architectures. • Review and approve IT Policies based on roles and responsibilities. It shall manage Policy distribution and acceptance based on predefined templates and schedules for designated IT stakeholders. • Maintain complete Policy revision history, and review period or obsolescence rules set for all Policies. • Optionally log and track IT Policy exceptions through an issue management mechanism. It may provide a consistent tracking feature for exception identification, evaluation, and status report leading to corrective action. • Provide visibility into IT Policy attributes such as types, status, non-compliance, audit history, and issues.

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> • Manage overall IT governance Policies, and Policies applied to or associated with the particular services that may be managed downstream during service design. • Manage IT security and regulatory Policies by incorporating external and internal security and regulatory compliances. • Define pricing/costing Policies and capture information related to Service Contracts. • If a Service Portfolio functional component exists, the Policy functional component associates one or more Policies to one or more Conceptual Services.
5.4.3	Proposal Functional Component	<p>KLP 5.4.3-1 (1) The purpose of the Proposal functional component</p> <p>KLP 5.4.3-2 (1) The Scope Agreement data object</p> <p>KLP 5.4.3-3 (X) The key attributes of the Scope Agreement data object</p> <p>KLP 5.4.3-4 (X) The key data object relationships of the Proposal functional component:</p> <ul style="list-style-type: none"> • The Scope Agreement to Portfolio Backlog Item (n:m) • The Scope Agreement to IT Budget (n:1) • The Scope Agreement to IT Initiative (1:n) <p>KLP 5.4.3-5 (X) The main functions of the Proposal functional component:</p> <ul style="list-style-type: none"> • Create a Scope Agreement from rationalized Portfolio Backlog Items in the data object repository. • Manage activities for Scope Agreements requiring an expedited analysis and approval. • Manage activities for proposals requiring structured analysis and approval. • Review the Scope Agreement change request from the R2D value stream. • Create project portfolio views for specific organizations like line of business portfolio or functions like financial views. • Identify security controls necessary for protecting the various classifications of data.
5.4.4	Portfolio Demand Functional Component	<p>KLP 5.4.4-1 (1) The purpose of the Portfolio Demand functional component</p> <p>KLP 5.4.4-2 (1) The Portfolio Backlog Item data object</p> <p>KLP 5.4.4-3 (X) The key attributes of the Portfolio Backlog Item data object</p> <p>KLP 5.4.4-4 (X) The Portfolio Backlog Item data object relationships:</p> <ul style="list-style-type: none"> • Portfolio Backlog Item to Conceptual Service (n:1) relationship • Portfolio Backlog Item to Requirement (1:n) relationship <p>KLP 5.4.4-5 (X) The main functions of the Portfolio Demand functional component:</p> <ul style="list-style-type: none"> • Capture Portfolio Backlog Items from business. • Capture Portfolio Backlog Items from Problem Management activities. • Capture Portfolio Backlog Items from the Service Portfolio functional component activities. • If a Proposal functional component exists, the Portfolio Demand functional component categorizes and groups the demands and then pushes the demands to the Proposal functional component. • If a Requirement functional component exists, the Portfolio Demand functional component associates one or more Requirements (user stories, use-cases, business rules, etc.) to a Portfolio Backlog Item. • The Portfolio Demand functional component may support backlog item data object backlog ranking, trending, and analysis based on requested services,

Section		Key Learning Point(s)
		timeline, business unit origination, etc.
5.4.5	Service Portfolio Functional Component	<p>KLP 5.4.5-1 (1) The purpose of the Service Portfolio functional component</p> <p>KLP 5.4.5-2 (1) The Service Portfolio functional component data objects:</p> <ul style="list-style-type: none"> • The Conceptual Service data object • The Conceptual Service Blueprint data object <p>KLP 5.4.5-3 (X) The key attributes of the Service Portfolio functional component data objects</p> <p>KLP 5.4.5-4 (X) The Service Portfolio functional component data objects relationships:</p> <p>The Conceptual Service data object relationships:</p> <ul style="list-style-type: none"> • Service Architecture to Conceptual Service (n:m) • Conceptual Service to Portfolio Backlog Item (1:n) • Conceptual Service to IT Budget (n:m) • Conceptual Service to Policy (n:m) <p>The Conceptual Service Blueprint data object relationships:</p> <ul style="list-style-type: none"> • Conceptual Service to Conceptual Service Blueprint (1:n) • IT Cost Model to Conceptual Service Blueprint (1:n) • Conceptual Service Blueprint to Logical Service Blueprint (1:n) <p>KLP 5.4.5-5 (X) The main functions of the Service Portfolio functional component:</p> <ul style="list-style-type: none"> • Assess the effectiveness and efficiency of current services delivered to business. • Manage all inventory information about services or applications; including business benefits, risk, quality, fitness-for-purpose, etc. • Compare similar services or applications to identify rationalization opportunities. • Evaluate the portfolio with regard to value/cost performance and risk/criticality. These methods are used to maximize portfolio value, align and prioritize resource allocations, and balance supply and demand. • Review proposed portfolio changes; decide whether to keep, retire, or modernize services or applications. • Create, review, and update service roadmaps. • Determine and track service budgets/actuals information. • Create and maintain service blueprints and endpoints. A service blueprint is a set of service endpoints that support business processes. A service blueprint provides service process and delivery visualization from the customer's point of view. A service blueprint also maintains traceability of Logical and Physical (realized) Service Models. • If a Portfolio Backlog Item exists, the Service Portfolio functional component associates a Conceptual Service to one or more Portfolio Backlog Items. • If a Policy exists, the Service Portfolio functional component should comply with one or more applicable Policies.
5.4.6	IT Investment Portfolio Auxiliary Functional Component	<p>KLP 5.4.6-1 (1) The purpose of the IT Investment Portfolio auxiliary functional component</p> <p>KLP 5.4.6-2 (1) The IT Budget data object</p> <p>KLP 5.4.6-3 (X) The key attributes of the IT Budget data object</p> <p>KLP 5.4.6-4 (X) The IT Investment Portfolio auxiliary functional component data</p>

Section		Key Learning Point(s)
		<p>object relationships:</p> <ul style="list-style-type: none"> IT Budget to Conceptual Service (n:m) IT Budget to Scope Agreement (1:n) <p>KLP 5.4.6-5 (X) The main functions of the IT Investment Portfolio auxiliary functional component:</p> <ul style="list-style-type: none"> Be the system of records for all IT investments. Manage the entire IT investment lifecycle. Provide labor and non-labor cost estimates and other guidelines to the Proposal functional component. Proposal managers send the information on proposed IT investments to this functional component, which manages them as follows: <ul style="list-style-type: none"> Accept inputs from the Service Portfolio functional component to include OpEx (Operating Expenditure) budget requests for keeping live services operational. Route these proposals/budget requests for necessary approvals with the respective governing committee. Communicate the status of the final investment decisions back to the respective stakeholders.
6	Requirement to Deploy (R2D) Value Stream	None
6.1	Objectives	<p>KLP 6.1-1 (1) The goal of the R2D value stream</p> <p>KLP 6.1-2 (1) Key objectives of the R2D value stream:</p> <ul style="list-style-type: none"> Make service delivery predictable, even across geographically dispersed teams, multiple suppliers, and multiple development methodologies. Ensure that each Service Release is high quality, fit-for-purpose, and meets customer expectations. Understand the evolving relationship between planning and building. Standardize service development and delivery to the point where re-use of service components is the norm. Build a culture of collaboration between IT operations and IT development to support Service Release success. Put rigorous information management controls in place to lessen the impact of the IT reality – high staff turnover. Drive predictable outcomes without driving out innovation.
6.2	Business Value Proposition	<p>KLP 6.2-1 (1) The key value propositions:</p> <ul style="list-style-type: none"> Maximize the pipeline of projects and smaller grained demand requests for faster time-to-market in service realization. Predictable outcomes that ensure that the application or service delivered actually performs as requested. Establish control points to manage the quality, utility, security, and cost of services, independent of development method or delivery source. Increased management information for traceability and benchmarking of internal and external service developers and suppliers. Ensure that all services are designed in accordance with standards and policies. Improved inputs to IT Financial Management on service cost. Relate applications and services with business value by creating and maintaining the service blueprint.

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> Accelerate the sourcing and delivery of applications and services through best practices such as re-use, automation, and collaboration.
6.3	Key Performance Indicators	<p>KLP 6.3-1 (1) The Critical Success Factors and their related KPI metric types:</p> <ul style="list-style-type: none"> Improve quality: defects, tests Improve project and feature execution: projects, hours, issues, risks, backlogs, work rate Improve stewardship of IT investment: project cost, budget Increase automation adoption: tests Achieve development process excellence: requirements, builds, incidents, defects Improve early life success of releases: incidents, project deployments, emergency change requests, requirements Operations and development collaboration: support/UAT metrics, rework Improve financial visibility: cost Maintain a linkage between business services and IT initiatives: service development cost High quality service design specifications at the outset: rework cost Integration test success: installation errors, application/service exceptions Design-review to ensure application design complies with all policies, including security: application design review Early testing of applications for security vulnerabilities: security defects
6.4	Value Stream Definition	<p>KLP 6.4-1 (1) R2D key data objects and service entities</p> <p>KLP 6.4-2 (1) R2D functional components</p> <p>KLP 6.4-3 (X) R2D Level 2 value stream diagram</p>
6.4.1	Project Functional Component	<p>KLP 6.4.1-1 (1) The purpose of the Project functional component</p> <p>KLP 6.4.1-2 (1) The IT Initiative data object</p> <p>KLP 6.4.1-3 (X) The IT Initiative data object key attributes</p> <p>KLP 6.4.1-4 (X) The key data object relationships of the Project functional component:</p> <ul style="list-style-type: none"> Scope Agreement to IT Initiative (1:n) IT Initiative to Service Release (1:n) IT Initiative to Request for Change (RFC) (1:n) <p>KLP 6.4.1-5 (X) The main functions of the Project functional component:</p> <ul style="list-style-type: none"> Be the system of record (authoritative source) for all IT Initiatives. Manage the lifecycle of the IT Initiative. Manage the status of the IT Initiative. Allow recursive relationships between IT Initiatives. Associate an IT Initiative to a service. Optionally associate an IT Initiative with IT budget in the IT Financial Management supporting function. If a Change Control functional component exists, the Project functional component associates an IT Initiative to one or more RFCs, and can submit one or more RFCs required for the IT Initiative. If a Fulfillment Execution functional component exists, the Project functional component can manage the Fulfillment Request data flow to the Fulfillment Execution functional component, and can send a request to the Fulfillment Execution functional component when resources are required for the IT Initiative.

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> • If a Proposal functional component exists, the Project functional component associates a Scope Agreement to one or more IT Initiatives, and is able to receive the Scope Agreement from the Proposal functional component. • If a Service Design functional component exists, the Project functional component can provide IT Initiative information required for Service Design to the Service Design functional component.
6.4.2	Requirement Functional Component	<p>KLP 6.4.2-1 (1) The purpose of the Requirement functional component</p> <p>KLP 6.4.2-2 (1) The Requirement data object</p> <p>KLP 6.4.2-3 (X) The Requirement data object key attributes</p> <p>KLP 6.4.2-4 (X) The key data object relationships of the Requirement functional component:</p> <ul style="list-style-type: none"> • Logical Service Blueprint to Requirement (1:n) • Service Release to Requirement (1:n) • Requirement to Test Case (1:n) • Portfolio Backlog Item to Requirement (1:n) • Policy to Requirement (n:m) <p>KLP 6.4.2-5 (X) The main functions of the Requirement functional component:</p> <ul style="list-style-type: none"> • Be the system of record (authoritative source) for all Requirements. • Manage the lifecycle of the Requirement. • Manage the state of a Requirement. • Allow recursive relationships between Requirements. • Allow hierarchical relationships between Requirements. • Associate a Requirement to a service. • If a Portfolio Demand functional component exists, the Requirement functional component associates one or more Requirements to a Portfolio Backlog Item from which these Requirements originate. • If a Service Design functional component exists, the Requirement functional component can manage the data flow to provide Requirement information to the Service Design functional component and can associate one or more Requirements to a single Logical Service Model. • If a Release Composition functional component exists, the Requirement functional component associates one or more Requirements to a Service Release that will fulfill these Requirements. • If a Test functional component exists, the Requirement functional component allows a Requirement to be traced to one or more Test Cases designed to test this Requirement. • If a Policy functional component exists, the Requirement functional component allows one or more Requirements to be associated to one or more policies from which these Requirements originate. • If a Source data object exists, the Requirement functional component allows one or more Requirements to be traced to one or more Sources.
6.4.3	Service Design Functional Component	<p>KLP 6.4.3-1 (1) The purpose of the Service Design functional component</p> <p>KLP 6.4.3-2 (1) The Logical Service Blueprint data object</p> <p>KLP 6.4.3-3 (X) The Logical Service Blueprint data object key attributes</p> <p>KLP 6.4.3-4 (X) The key data object relationships of the Service Design functional component:</p> <ul style="list-style-type: none"> • Conceptual Service Blueprint to Logical Service Blueprint (1:n) • Logical Service Blueprint to Requirement (1:n) • Logical Service Blueprint to Service Release (1:n)

Section		Key Learning Point(s)
		<p>KLP 6.4.3-5 (X) The main functions of the Service Design functional component:</p> <ul style="list-style-type: none"> • The Service Design functional component is the system of record (authoritative source) for all Logical Service Blueprints. It associates a Logical Service Blueprint to a service. It can also associate a Logical Service Blueprint to a Service Design Package. • If a Service Portfolio functional component exists, the Service Design functional component associates one or more Logical Service Blueprints to a Conceptual Service Blueprint, and can receive the Conceptual Service specification and design several Logical Service Blueprints that represent it. • If a Project functional component exists, the Service Design functional component can receive IT Initiative information, which includes the scope and some content based on which the service is designed. • If a Requirement functional component exists, the Service Design functional component associates one or more Requirements to the Logical Service Blueprint, and can receive Requirement information from the Requirement functional component used to design the Logical Service Blueprint and create design specifications. • If a Release Composition functional component exists, the Service Design functional component associates a Logical Service Blueprint to one or more Service Releases which are detailed and designed to deliver the Logical Service Blueprint.
6.4.4	Source Control Functional Component	<p>KLP 6.4.4-1 (1) The purpose of the Source Control functional component</p> <p>KLP 6.4.4-2 (1) The Source data object</p> <p>KLP 6.4.4-3 (X) The Source data object key attributes</p> <p>KLP 6.4.4-4 (X) The key data object relationships of the Source Control functional component:</p> <ul style="list-style-type: none"> • Source to Requirement (n:m) • Source to Build (1:n) <p>KLP 6.4.4-5 (X) The main functions of the Source Control functional component:</p> <ul style="list-style-type: none"> • Be the system of record (authoritative source) for all Source. • Manage the lifecycle of the Source. • Allow recursive relationships between Source. • Allow hierarchical relationships between Source. • Associate Source to a service. • If a Requirement functional component exists, the Source Control functional component associates one or many Requirements to one or many Sources, which includes the content that fulfills these Requirements. • If a Build functional component exists, the Source Control functional component associates one or many Builds to the related Source. • If a Defect functional component exists, the Source Control functional component can receive Defect information from the Defect functional component so Defects can be fixed in future versions of that Source.
6.4.5	Build Functional Component	<p>KLP 6.4.5-1 (1) The purpose of the Build functional component</p> <p>KLP 6.4.5-2 (1) The Build data object</p> <p>KLP 6.4.5-3 (X) The Build data object key attributes</p> <p>KLP 6.4.5-4 (X) The key data object relationships of the Build functional component:</p> <ul style="list-style-type: none"> • Source to Build (1:n) • Build to Test Case (n:m)

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> Build Package to Build (1:n) <p>KLP 6.4.5-5 (X) The main functions of the Build functional component:</p> <ul style="list-style-type: none"> Be the system of record (authoritative source) for all Builds. Manage the version of each individual Build. Associate a Build to a service. If a Source Control functional component exists, the Build functional component associates Source to one or many Builds. If a Test functional component exists, the Build functional component associates one or many Builds to one or many Test Cases that are executed as part of the Build creation. If a Build Package functional component exists, the Build functional component associates one or many Builds to a Build Package.
6.4.6	Build Package Functional Component	<p>KLP 6.4.6-1 (1) The purpose of the Build Package functional component</p> <p>KLP 6.4.6-2 (1) The Build Package data object</p> <p>KLP 6.4.6-3 (X) The Build Package data object key attributes</p> <p>KLP 6.4.6-4 (X) The key data object relationships of the Build Package functional component:</p> <ul style="list-style-type: none"> Build Package to Build (1:n) Build Package to Service Release Blueprint (n:m) <p>KLP 6.4.6-5 (X) The main functions of the Build Package functional component:</p> <ul style="list-style-type: none"> Be the system of record (authoritative source) for all Build Packages. Associate a Build Package to a service. If a Build functional component exists, the Build Package functional component associates one or more Builds to a Build Package. If a Release Composition functional component exists, the Build Package functional component associates one or more Service Release Blueprints to one or more Build Packages.
6.4.7	Release Composition Functional Component	<p>KLP 6.4.7-1 (1) The purpose of the Release Composition functional component</p> <p>KLP 6.4.7-2 (1) The Service Release and Service Release Blueprint data objects</p> <p>KLP 6.4.7-3 (X) The key attributes for the:</p> <ul style="list-style-type: none"> Service Release data object Service Release Blueprint data object <p>KLP 6.4.7-4 (X) The key data object relationships of the Release Composition functional component:</p> <p>The Service Release data object:</p> <ul style="list-style-type: none"> Logical Service Blueprint to Service Release (1:n) IT Initiative to Service Release (1:n) Service Release to Service Release Blueprint (1:n) Service Release to Requirement (1:n) Service Release to Test Case (1:n) <p>The Service Release Blueprint data object:</p> <ul style="list-style-type: none"> Service Release to Service Release Blueprint (1:n) Service Release Blueprint to Build Package (n:m) Service Release Blueprint to Desired Service Model (1:n) Service Release Blueprint to Fulfillment Request (1:n) Service Release Blueprint to Service Contract (n:m) Service Catalog Entry to Service Release Blueprint (1:n) Service Release Blueprint to Defect (n:m)

Section	Key Learning Point(s)
	<p>KLP 6.4.7-5 (X) The main functions of the Release Composition functional component:</p> <ul style="list-style-type: none"> • Be the system of record (authoritative source) for all Service Releases. • Associate a Service Release to a service. • Allow a recursive relationship between Service Releases. • Associate a Service Release to one or more Service Release Blueprints. • Be the system of record for all Service Release Blueprints. • Associate a Service Release Blueprint to a service. • Associate a Service Release Blueprint to a Release Package. • If a Project functional component exists, the Release Composition functional component associates one IT Initiative to one or more Service Releases that are defined to deliver this IT Initiative. • If a Service Design functional component exists, the Release Composition functional component associates one Logical Service Blueprint to one or more Service Releases that are designed to deliver this Logical Service. • If a Requirement functional component exists, the Release Composition functional component associates one Service Release with one or more Requirements that are fulfilled in this release. • If a Test functional component exists, the Release Composition functional component associates one Service Release with one or more Test Cases, and can receive test-related information that should be included in the Release Package from Test Management. • If a Build Package functional component exists, the Release Composition functional component associates one or more Service Release Blueprints to one or more Build Packages, and can receive one or more Build Packages that should be included in the Service Release Blueprint. • If a Service Level functional component exists, the Release Composition functional component can provide service contract information for creating a Service Contract, and associate one or more Service Release Blueprints to one or more Service Contracts. • If a Fulfillment Execution functional component exists, the Release Composition functional component can provide information required for service instantiation to the Fulfillment Execution functional component, associate a Service Release Blueprint to one or more Desired Service Models, and associate a Service Release Blueprint to one or more Fulfillment Requests. • If a Catalog Composition functional component exists, the Release Composition functional component can provide information required for creating a Service Catalog Entry to the Catalog Composition functional component, and associate a Service Release Blueprint to one or more Service Catalog Entry(ies). • If a Defect functional component exists, the Release Composition functional component associates one or more Service Release Blueprints to one or more Defects, and can receive Defect-related information that should be included in the Release Package.
6.4.8	<p>Test Functional Component</p> <p>KLP 6.4.8-1 (1) The purpose of the Test functional component</p> <p>KLP 6.4.8-2 (1) The Test Case data object</p> <p>KLP 6.4.8-3 (X) The Test Case data object key attributes</p> <p>KLP 6.4.8-4 (X) The key data object relationships of the Test functional component:</p> <ul style="list-style-type: none"> • Requirement to Test Case (1:n)

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> • Service Release to Test Case (1:n) • Test Case to Build (n:m) • Test Case to Defect (1:n) <p>KLP 6.4.1-5 (X) The main functions of the Test functional component:</p> <ul style="list-style-type: none"> • Be the system of record (authoritative source) for all Test Cases. • Manage the lifecycle of the Test Case. • Allow recursive relationships between Test Cases. • Associate a Test Case to a service. • If a Build functional component exists, the Test functional component associates one or more Test Cases to one or more Builds that uses this Test Case as part of the Build creation. • If a Requirement functional component exists, the Test functional component associates a Requirement to one or more Test Cases that validates this Requirement. • If a Defect functional component exists, the Test functional component associates a Test Case to one or more Defects that result from this test and provides Defect information to the Defect functional component.
6.4.9	Defect Functional Component	<p>KLP 6.4.9-1 (1) The purpose of the Defect functional component</p> <p>KLP 6.4.9-2 (1) The Defect data object</p> <p>KLP 6.4.9-3 (X) The Defect data object key attributes</p> <p>KLP 6.4.9-4 (X) The key data object relationships of the Defect functional component:</p> <ul style="list-style-type: none"> • Test Case to Defect (1:n) • Defect to Service Release Blueprint (n:m) • Known Error to Defect (1:1) <p>KLP 6.4.9-5 (X) The main functions of the Defect functional component:</p> <ul style="list-style-type: none"> • Be the system of record (authoritative source) for all Defects. • Manage the lifecycle of the Defect. • Associate a Defect to a service. • If a Release Composition functional component exists, the Defect functional component associates one or more Service Release Blueprints to one or more Defects, which reflects Defects that should be published as Problems/Known Errors. • If a Source Control functional component exists, the Defect functional component can provide Defect information to the Source Control functional component. • If a Test functional component exists, the Defect functional component receives Defect information from the Test functional component, and associates a Test Case to one or more Defects. • If a Problem functional component exists, the Defect functional component associates a Known Error to a Defect and receives Defect information from a Known Error.
7	Request to Fulfill (R2F) Value Stream	None
7.1	Objectives	<p>KLP 7.1-1 (1) The goal of the R2F value stream</p> <p>KLP 7.1-2 (1) Overview of the primary functional components</p> <p>KLP 7.1-3 (1) Common limitations for current R2F practices</p>

Section		Key Learning Point(s)
7.2	Business Value Proposition	<p>KLP 7.2-1 (1) The key value propositions:</p> <ul style="list-style-type: none"> • Provides a blueprint for increasing business innovation velocity • Provides a functional framework for reducing complexity in the IT shopping experience • Provides an architectural foundation for the service brokerage model. • Promotes standard change deployment and automation. • Improves IT Financial Management with a Service-based traceability and accounting • Enables increased cost optimization
7.3	Key Performance Indicators	<p>KLP 7.3-1 (1) The Critical Success Factors and their related KPI metric types:</p> <ul style="list-style-type: none"> • Ability to meet customer expectations: subscription, incident, request • Reduce costs: cost, fulfillment, request • External service provider compliance: order, incident • Increase speed/agility/flexibility (operational performance): request, delivery, SLA • Enterprise security alignment: time
7.4	Value Stream Definition	<p>KLP 7.4-1 (1) The distinction between R2F primary and secondary functional components</p> <p>KLP 7.4-2 (1) The main objectives of the Engagement Experience Portal</p> <p>KLP 7.4-3 (X) R2F Level 2 value stream diagram</p>
7.4.1	Engagement Experience Portal (Secondary Functional Component)	<p>KLP 7.4.1-1 (1) The purpose of the Engagement Experience Portal</p> <p>KLP 7.4.1-2 (1) The User Profile data object</p> <p>KLP 7.4.1-3 (X) The User Profile data object key attributes</p> <p>KLP 7.4.1-4 (X) The User Profile data object relationships:</p> <ul style="list-style-type: none"> • User Profile to Offer Catalog (n:m) • User Profile to Shopping Cart (1:1) • User Profile to Subscription (1:n) <p>KLP 7.4.1-5 (X) The main functions of the Engagement Experience Portal:</p> <ul style="list-style-type: none"> • Shall be available to all users that desire to consume IT services. • Shall expose various IT functions and capabilities in a single place with different type of devices, unifying the experience. • May allow consumers to manage their User Profile. <p>KLP 7.4.1-6 (1) The Experience Engagement Portal sub-components:</p> <ul style="list-style-type: none"> • Service Catalog functional sub-component • Collaboration functional sub-component • Knowledge functional sub-component • Self-Service Support functional sub-component
7.4.2	Offer Consumption Functional Component	<p>KLP 7.4.2-1 (1) The purpose of the Offer Consumption functional component</p> <p>KLP 7.4.2-2 (1) The Shopping Cart data object</p> <p>KLP 7.4.2-3 (X) The Shopping Cart data object key attributes</p> <p>KLP 7.4.2-4 (X) The Shopping Cart data object relationships:</p> <ul style="list-style-type: none"> • Shopping Cart to User Profile (1:1) • Shopping Cart to Offer (n:m) • Shopping Cart to Request (1:n) <p>KLP 7.4.2-5 (X) The main functions of the Offer Consumption functional component:</p>

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> • Can provide information on the existing Subscription. • Shall provide information to guarantee the fulfillment. • Can provide functionality of multi-ordering. • Enable consumers to order services on behalf of another. • Provide visibility about the user's services consumption.
7.4.3	Offer Management Functional Component	<p>KLP 7.4.3-1 (1) The purpose of the Offer Management functional component</p> <p>KLP 7.4.3-2 (1) The key data objects of the Offer Management functional component:</p> <ul style="list-style-type: none"> • Offer data object • Offer Catalog data object <p>KLP 7.4.3-3 (X) The key attributes of the Offer Management functional component data objects:</p> <ul style="list-style-type: none"> • Offer data object key attributes • Offer Catalog data object key attributes <p>KLP 7.4.3-4 (X) The key data object relationships of the Offer Management functional component:</p> <ul style="list-style-type: none"> • Offer to Service Catalog Entry (n:m) • Offer Catalog to Offer (n:m) • Offer Catalog to User Profile (n:m) <p>KLP 7.4.3-5 (X) The main functions of the Offer Management functional component:</p> <ul style="list-style-type: none"> • Shall contain all of the Offers available to consumers. • Can group services from multiple providers into a single Offer (bundle). • May create the Service Contract template.
7.4.4	Catalog Composition Functional Component	<p>KLP 7.4.4-1 (1) The purpose of the Catalog Composition functional component</p> <p>KLP 7.4.4-2 (1) The Service Catalog Entry data object</p> <p>KLP 7.4.4-3 (X) The Service Catalog Entry data object key attributes</p> <p>KLP 7.4.4-4 (X) The key data object relationships of the Catalog Composition functional component:</p> <ul style="list-style-type: none"> • Service Catalog Entry to Service Release Blueprint (1:n) • Service Catalog Entry to Offer (n:m) <p>KLP 7.4.4-5 (X) The main functions of the Catalog Composition functional component:</p> <ul style="list-style-type: none"> • Manage inter-dependencies within the services.
7.4.5	Request Rationalization Functional Component	<p>KLP 7.4.5-1 (1) The purpose of the Request Rationalization functional component</p> <p>KLP 7.4.5-2 (1) The key data objects of the Request Rationalization functional component:</p> <ul style="list-style-type: none"> • Request data object • Subscription data object <p>KLP 7.4.5-3 (X) The key attributes of the Request Rationalization functional component data objects:</p> <ul style="list-style-type: none"> • Request data object key attributes • Subscription data object key attributes <p>KLP 7.4.5-4 (X) The key data object relationships of the Request Rationalization functional component:</p> <ul style="list-style-type: none"> • Request to Shopping Cart (1:n)

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> • Request to Subscription (n:m) • Request to Fulfillment Request (1:n) • Subscription to User Profile (n:1) • Subscription to Offer (1:n) • Subscription to Chargeback Contract (1:n) • Subscription to Desired Service Model (1:n) <p>KLP 7.4.5-5 (X) The main functions of the Request Rationalization functional component:</p> <ul style="list-style-type: none"> • Provide information to the consumer on the fulfillment status. • Provide Subscription information for the creation of the associated Chargeback Contract. • Provide information on Request delivery times for SLA measurements. • Break down the composite request (described by the Shopping Cart and consumer-selected values) into the individual Requests that need to be fulfilled. • Send the bound Service Catalog Entry to the Fulfillment Execution functional component in order for it to create the Fulfillment Requests needed to satisfy the order.
7.4.6	Fulfillment Execution Functional Component	<p>KLP 7.4.6-1 (1) The purpose of the Fulfillment Execution functional component</p> <p>KLP 7.4.6-2 (1) The two paradigms in which the Fulfillment Execution functional component can be used:</p> <ul style="list-style-type: none"> • Consumer-driven • Direct access (without a Service Catalog Entry) <p>KLP 7.4.6-3 (X) The key data objects of the Fulfillment Execution functional component:</p> <ul style="list-style-type: none"> • Fulfillment Request data object • Desired Service Model data object <p>KLP 7.4.6-4 (X) The key attributes of the Fulfillment Execution functional component data objects:</p> <ul style="list-style-type: none"> • Fulfillment Request data object key attributes • Desired Service Model data object key attributes <p>KLP 7.4.6-5 (X) The key data object relationships of the Fulfillment Execution functional component:</p> <ul style="list-style-type: none"> • Fulfillment Request to Request (n:1) • Fulfillment Request to Service Release Blueprint (n:1) • Fulfillment Request to Desired Service Model (n:1) • Fulfillment Request to RFC (1:1) • Desired Service Model to Subscription (n:1) • Desired Service Model to Service Release Blueprint (n:1) • Desired Service Model to Actual Service CI (1:1) <p>KLP 7.4.6-6 (X) The main functions of the Fulfillment Execution functional component:</p> <ul style="list-style-type: none"> • Select the appropriate fulfillment mechanism. • Coordinate if multiple fulfillment mechanisms are needed and manage the dependencies required to fulfill the IT service request. • Provide the Subscription status to the Request Rationalization functional component. • Create the Actual Service CIs within the Configuration Management functional component.

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> • Create an RFC associated with the service instantiation that is created within the Change Control functional component (D2C value stream). The RFC type, standard or normal, is determined within the Change Control functional component. • Create a new service monitor or modify an existing one for the service provided in the Request as part of fulfillment. • Create/route a Request to an external service provider to fulfill part or all of the service. • Request IT assets necessary for fulfillment (such as licenses). This also enables the tracking of assets being requested or procured and links them with the services that require them. • Trigger deployment engines to enable fulfillment of the service.
7.4.7	Usage Functional Component	<p>KLP 7.4.7-1 (1) The purpose of the Usage functional component</p> <p>KLP 7.4.7-2 (1) The Usage data object</p> <p>KLP 7.4.7-3 (X) The key attributes of the Usage data object</p> <p>KLP 7.4.7-4 (X) The Usage Record to Chargeback Contract relationship</p> <p>KLP 7.4.7-5 (X) The main functions of the Usage functional component:</p> <ul style="list-style-type: none"> • Generate service usage history and activity reports. • Provide usage information enabling usage-based showback or chargeback.
7.4.8	Chargeback/Showback Functional Component	<p>KLP 7.4.8-1 (1) The purpose of the Chargeback/Showback functional component</p> <p>KLP 7.4.8-2 (1) The Chargeback Contract data object</p> <p>KLP 7.4.8-3 (X) The key attributes of the Chargeback Contract data object</p> <p>KLP 7.4.8-4 (X) The Chargeback Contract to Subscription relationship</p> <p>KLP 7.4.8-5 (X) The main functions of the Chargeback/Showback functional component:</p> <ul style="list-style-type: none"> • Provide the price of consuming/subscribing to a service. • Can take actual usage into consideration when calculating the price of consuming a service. • Can provide the necessary information in order for the IT Financial Management supporting function to produce invoices or bills for services rendered, if an IT Financial Management component exists.
7.4.9	Knowledge & Collaboration Supporting Function	<p>KLP 7.4.9-1 (1) The purpose of the Knowledge & Collaboration supporting function</p> <p>KLP 7.4.9-2 (1) The Knowledge & Collaboration supporting function data objects:</p> <ul style="list-style-type: none"> • Knowledge data object • Conversation data object <p>KLP 7.4.9-3 (X) The key attributes of the Knowledge and Conversation data objects</p> <p>KLP 7.4.9-4 (X) The Knowledge and Conversation data objects relationships:</p> <ul style="list-style-type: none"> • Knowledge to Problem relationship • Knowledge to Conversation relationship <p>KLP 7.4.9-5 (X) The main functions of the Knowledge & Collaboration supporting function:</p> <ul style="list-style-type: none"> • Enable SMEs to submit and/or approve Knowledge data objects. • Enable the IT service consumers and IT staff to rank Knowledge data objects and Conversations. • Enable IT service consumers to participate in Conversations relating to the

Section		Key Learning Point(s)
		IT services they consume.
8	Detect to Correct (D2C) Value Stream	None
8.1	Objectives	KLP 8.1-1 (1) The purpose and objectives of the D2C value stream. KLP 8.1-2 (1) The typical limitations IT organizations may have in detecting and resolving operational issues.
8.2	Business Value Proposition	KLP 8.2-1 (1) The three types of improvements enabled by the D2C value stream to IT organizations: <ul style="list-style-type: none"> • Increase efficiency and reduce cost • Reduce risk • Continuous service improvement
8.3	Key Performance Indicators	KLP 8.3-1 (1) The Critical Success Factors and their related KPI metric types: <ul style="list-style-type: none"> • Achieve operational excellence: events, incidents, problems, changes, knowledge • Improve customer satisfaction: OLA/SLA, availability of critical business systems, performance (user experience) of critical business systems, incidents, self-service • Improve staff effectiveness: events, incidents, changes • Alignment with business strategy: cost, services, SLA/SLO, security
8.4	Value Stream Definition	KLP 8.4-1 (1) Initiators of the D2C value stream KLP 8.4-2 (1) Interactions with other value streams KLP 8.4-3 (X) D2C Level 2 value stream diagram
8.4.1	Service Monitoring Functional Component	KLP 8.4.1-1 (1) The purpose of the Service Monitoring functional component KLP 8.4.1-2 (1) The Service Monitor data object KLP 8.4.1-3 (X) The key attributes of the Service Monitor data object KLP 8.4.1-4 (X) The Service Monitor data object relationships: <ul style="list-style-type: none"> • Service Monitor to Event • Service Monitor to Actual Service CIs KLP 8.4.1-5 (X) The main functions of the Service Monitoring functional component: <ul style="list-style-type: none"> • Shall be the system of record for all Service Monitors. • Shall manage the lifecycle of the Service Monitor. • Shall perform monitoring of all aspects of an IT service. • Shall store all of the results of the measurements being done on the IT service. • Shall calculate the results of the measurements being done on the IT service. • Shall create an association between the Service Monitor data object and the related Actual Service CI(s). • If an Event functional component exists, the Service Monitoring functional component initiates the creation of an Event or alert that is passed to the Event functional component. • If an Offer Consumption functional component exists, the Service Monitoring functional component can provide service monitoring status. • If a Usage functional component exists, the Service Monitoring functional component can provide service usage measurements. • If a Service Level component exists, the Service Monitoring functional

Section		Key Learning Point(s)
		<p>component can provide business/IT measurements.</p> <ul style="list-style-type: none"> If a Fulfillment Execution functional component exists, the Service Monitoring functional component can receive Service Monitor definitions.
8.4.2	Event Functional Component	<p>KLP 8.4.2-1 (1) The purpose of the Event functional component</p> <p>KLP 8.4.2-2 (1) The Event data object</p> <p>KLP 8.4.2-3 (X) The key attributes of the Event data object</p> <p>KLP 8.4.2-4 (X) The Event data object relationships:</p> <ul style="list-style-type: none"> Event to Incident Event to RFC Event to Actual Service CIs Service Monitor to Event <p>KLP 8.4.2-5 (X) The main functions of the Event functional component:</p> <ul style="list-style-type: none"> Shall be the system of records of all Events. Shall manage the state and lifecycle of the Events. Shall manage the correlation between Events. Shall categorize Event data. Shall forward Events categorized as Incidents to the Incident functional component. May initiate a change request (RFC) based on Event data to the Change Control functional component. Shall create an association between the Event data object and the related Actual Service CI(s). If a Diagnostics & Remediation functional component exists, the Event functional component may send Events for diagnostics and remediation processing.
8.4.3	Incident Functional Component	<p>KLP 8.4.3-1 (1) The purpose of the Incident functional component</p> <p>KLP 8.4.3-2 (1) The key data objects of the Incident functional component:</p> <ul style="list-style-type: none"> Incident data object Interaction data object <p>KLP 8.4.3-3 (X) The key attributes of the Incident functional component data objects:</p> <ul style="list-style-type: none"> Incident data object key attributes Interaction data object key attributes <p>KLP 8.4.3-4 (X) The key data object relationships of the Incident functional component:</p> <ul style="list-style-type: none"> Incident to Problem, Known Error (n:m) Incident to RFC (1:n) Incident to Defect (1:1) Incident to Actual Service CIs (n:m) Event to Incident (n:m) <p>KLP 8.4.3-5 (X) The main functions of the Incident functional component:</p> <ul style="list-style-type: none"> Shall be the system of record for all Incidents. Shall manage the state escalation paths and general lifecycle of the Incident. Shall allow an Incident to be initiated from an Event. Shall create an Incident when an Interaction cannot be associated with an existing one. Shall create an association between the Incident data object and the related Actual Service.

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> • If a Defect functional component exists, the Incident functional component may initiate the creation of a Defect when Incident diagnostics determines that an emergency fix is required from development for resolution. The Defect is created and forwarded to the Defect functional component in the R2D value stream. • If a Diagnostics & Remediation functional component exists, the Incident functional component can trigger the execution of a Run Book (either automated or manual) to provide diagnostic information or remediation steps. • If a Problem functional component exists, the Incident functional component may create a Problem record when the Incident is severe, requires further deep investigation, or is repeating. • If a Change Control functional component exists, the Incident functional component can trigger the creation of an RFC in order to implement a fix to the Incident fault. • If a Self-Service Support functional component (R2F value stream) exists, the Incident functional component can allow the initiation of an Interaction or an Incident. • If a Service Level functional component exists, the Incident functional component can provide business measurements of Incident data.
8.4.4	Problem Functional Component	<p>KLP 8.4.4-1 (1) The purpose of the Problem functional component</p> <p>KLP 8.4.4-2 (1) The Problem, Known Error data object</p> <p>KLP 8.4.4-3 (X) The key attributes of the Problem, Known Error data object</p> <p>KLP 8.4.4-4 (X) The Problem, Known Error data object relationships:</p> <ul style="list-style-type: none"> • Problem, Known Error to RFC (1:n) • Problem, Known Error to Portfolio Backlog Item (1:1) • Problem, Known Error to Defect (1:1) • Incident to Problem, Known Error (n:m) • Problem, Known Error to Actual Service CI (n:m) • Problem, Known Error to Knowledge (n:m) <p>KLP 8.4.4-5 (X) The main functions of the Problem functional component:</p> <ul style="list-style-type: none"> • Be the system of record for all Problem records. • Manage the state and lifecycle of the Problem. • Associate Problem(s) to CI(s). • Create Known Error data object instances from unsolved Problems. • If a Diagnostics & Remediation functional component exists, the Problem functional component can push Problem data to trigger the execution of a Run Book data object to provide diagnostics information or remediation steps. • If a Change Control functional component exists, the Problem functional component creates an RFC associated to a Problem in order to implement a fix to the issue that is documented by the Problem. • If a Knowledge & Collaboration functional component exists, the Problem functional component uses existing Knowledge data to solve a Problem and can create a new Knowledge data object based on Problem Management activities. • If an Incident functional component exists, the Problem functional component associates Incident data to the corresponding Problem record and continues the investigation around the Incident reported fault within the Problem lifecycle.

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> • If a Defect functional component exists, the Problem functional component pushes Problem data requiring emergency/specific development to the Defect functional component (R2D value stream). • If a Portfolio Demand functional component exists, the Problem functional component may push a Portfolio Backlog Item to the Portfolio Demand functional component for backlog processing.
8.4.5	Change Control Functional Component	<p>KLP 8.4.5-1 (1) The purpose of the Change Control functional component</p> <p>KLP 8.4.5-2 (1) The RFC data object</p> <p>KLP 8.4.5-3 (X) The key attributes of the RFC data object</p> <p>KLP 8.4.5-4 (X) The RFC data object relationships:</p> <ul style="list-style-type: none"> • Fulfilment Request to RFC • RFC to Actual Service CIs • Problem, Known Error to RFC • Incident to RFC • RFC to Event <p>KLP 8.4.5-5 (X) The main functions of the Change Control functional component:</p> <ul style="list-style-type: none"> • Act as an authoritative system of record. • Manage the state and lifecycle of the change. • Associate change(s) to CI(s). • Provide change data in the context of change impact analysis. • If an Incident functional component exists, the Change Control functional component associates changes with Incidents bi-directionally. • If an Event functional component exists, the Change Control functional component may associate changes with Events when a change triggers an Event or an Event occurs during a change period. • If a Fulfillment Execution functional component exists, the Change Control functional component associates the Fulfillment Request with the RFC record as the overall framework that facilitates the IT service implementation/instantiation. • If a Problem functional component exists, the Change Control functional component associates RFCs to the Problem in order to implement a fix to the issue that is documented by the Problem.
8.4.6	Configuration Management Functional Component	<p>KLP 8.4.6-1 (1) The purpose of the Configuration Management functional component</p> <p>KLP 8.4.6-2 (1) The Actual Service CI data object</p> <p>KLP 8.4.6-3 (X) The key attributes of the Actual Service CI data object</p> <p>KLP 8.4.6-4 (X) The Actual Service CI data object relationships:</p> <ul style="list-style-type: none"> • RFC to Actual Service CIs • Problem, Known Error to Actual Service CI • Run Book to Actual Service CI • Incident to Actual Service CIs • Event to Actual Service CIs • Actual Service CIs to Service Contract • Service Monitor to Actual Service CIs <p>KLP 8.4.6-5 (X) The main functions of the Configuration Management functional component:</p> <ul style="list-style-type: none"> • Be a system of record for all Actual Service CIs and their associated relationships.

Section		Key Learning Point(s)
		<ul style="list-style-type: none"> • Manage the lifecycle of the CI. • If a Diagnostics & Remediation functional component exists, the Configuration Management functional component associates a Run Book with the CI against which the Run Book is associated. • If a Change Control functional component exists, the Configuration Management functional component associates a CI with an RFC with which the change is associated. It also calculates and provides the change impact based on the proposed change and the CI relationships. • If a Problem functional component exists, the Configuration Management functional component associates the CI with the Problem record against which the Problem is associated. • If an Incident functional component exists, the Configuration Management functional component associates the CI with the Incident with which the Incident is associated. It also calculates and provides the business impact of the Incident to help in the prioritization process. • If an Event functional component exists, the Configuration Management functional component associates the CI with the Event with which the change is associated. It also calculates and provides the business impact of the Event to help in the prioritization process. • If a Service Monitoring functional component exists, the Configuration Management functional component associates the CI with the Service Monitor with which the change is associated.
8.4.7	Diagnostics & Remediation Functional Component	<p>KLP 8.4.7-1 (1) The purpose of the Diagnostic & Remediation functional component</p> <p>KLP 8.4.7-2 (1) The Run Book data object</p> <p>KLP 8.4.7-3 (X) The key attributes of the Run Book data object</p> <p>KLP 8.4.7-4 (X) The Run Book data object relationship:</p> <ul style="list-style-type: none"> • CI to Run Book (n:m) <p>KLP 8.4.7-5 (X) The main functions of the Diagnostic & Remediation functional component:</p> <ul style="list-style-type: none"> • Shall be the system of record for all Run Books. • Shall manage the Run Book lifecycle. • Shall allow hierarchical relationships between Run Books. • Shall associate a Run Book with a CI. • If an Event functional component exists, the Diagnostics & Remediation functional component can allow an Event to trigger a Run Book mainly for diagnostics purposes. • If an Incident functional component exists, the Diagnostics & Remediation functional component can allow an Incident to trigger a Run Book for diagnostics or remediation purposes (remediation that does not require RFCs). • If a Problem functional component exists, the Diagnostics & Remediation functional component can allow a Problem to trigger a Run Book for remediation purposes (after an RFC has been opened).
8.4.8	Service Level Functional Component	<p>KLP 8.4.8-1 (1) The purpose of the Service Level functional component</p> <p>KLP 8.4.8-2 (1) The key data objects of the Service Level functional component:</p> <ul style="list-style-type: none"> • Service Contract data object • Key Performance Indicator data object <p>KLP 8.4.8-3 (X) The key attributes of the Service Level functional component data</p>

Section		Key Learning Point(s)
		<p>objects:</p> <ul style="list-style-type: none"> • Service Contract data object key attribute • Key Performance Indicator data object key attribute <p>KLP 8.4.8-4 (X) The key data object relationships of the Service Level functional component:</p> <ul style="list-style-type: none"> • Service Release Blueprint to Service Contract (n:m) • Actual Service CIs to Service Contract (1:n) • Service Contract to KPI (n:m) • Subscription to Service Contract (1:1) <p>KLP 8.4.8-5 (X) The main functions of the Service Level functional component:</p> <ul style="list-style-type: none"> • Be the system of record for the Service Contract. • Manage the Service Contract lifecycle (create, store, and maintain). • Manage the lifecycle (create, store, and maintain) of KPIs. • Manage the state of the Service Contract. • Allow hierarchical relationships between Service Contracts. • Manage the relations between the Service Contract data object and the KPI data object throughout their lifecycle. • Receive measurements such as Incident data as well as other information that may be covered by the Service Contract and used for calculating the KPI measurements. • Create reports on the Service Contracts to show the quality of service per SLO. • If a Service Monitoring functional component exists, the Service Level functional component can receive business/IT measurements from Service Monitoring. • If a Release Composition functional component exists, the Service Level functional component can instantiate a Service Contract from a Service Release Blueprint using the Service Contract (template). • If an Offer Management functional component exists, the Service Level functional component may instantiate a Service Contract from a Service Contract (template) originating from the Offer Management functional component (R2F value stream). • If a Request Rationalization functional component exists, the Service Level functional component creates a Service Contract (instance) and starts measuring it once a Subscription is instantiated. • If an Incident functional component exists, the Service Level functional component may receive Incident business measurements from the Incident functional component. • If an Offer Consumption functional component exists, the Service Level functional component can send reporting data on the Service Level status.
8.4.9	Other IT Operations Areas	<p>KLP 8.4.9-1 (1) IT operations capabilities that are not part of the D2C value stream:</p> <ul style="list-style-type: none"> • Capacity planning • Availability Management • Intelligence, trending, proactive alerting
Part IV: Rationale		
A.1	Introduction	KLP 3.1-1 (1) Demonstrate understanding of related IT industry standards and IT4IT relationship to standards.

Section		Key Learning Point(s)
A.2	Definitions	None
A.3	Overview	None
A.3.1	Business Drivers for an Improved IT Operating Model	None
A.3.2	The IT Value Chain	None
A.4	IT4IT Core	None
A.4.1	Value Streams	None
A.4.2	Functional Components	None
A.5	Strategy to Portfolio Value Stream	None
A.5.1	Related Standards, Frameworks, and Guidance	None
A.6	Requirement to Deploy Value Stream	None
A.6.1	Related Standards, Frameworks, and Guidance	None
A.7	Request to Fulfill Value Stream	None
A.7.1	Related Standards, Frameworks, and Guidance	None
A.8	Detect to Correct Value Stream	None
A.8.1	Related Standards, Frameworks, and Guidance	None

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