



## ***Service Automation Foundation***



**SERVICE  
AUTOMATION  
FRAMEWORK®**

**Syllabus**  
*February 2017*

# 1 Introduction

The Service Automation Framework provides advice and guidance for the design and delivery of automated services.

This syllabus is based on the 1<sup>st</sup> edition of the *Service Automation Framework* book ('the Text'), which has been published by Van Haren Publishing in 2017, and the supplementary templates ('the Templates') that have been made available on the Service Automation Framework website:

- The Text provides guidance on the design elements and processes of Service Automation and discusses seven techniques for the design and delivery of automated services.
- The Templates provide workshop exercises and forms that delegates can use to apply the seven Service Automation Framework Techniques in practice.

The primary purpose of the syllabus is to provide a basis for accreditation of people involved with the Service Automation Framework. It documents the learning outcomes related to the use of Service Automation Framework and describes the scope of the requirements a candidate is expected to meet to demonstrate that these learning outcomes have been achieved at each qualification level.

The target audience for this document is:

- Exam Board
- Exam Panel
- APMG Assessment Team
- Accredited Training Organizations.

This syllabus informs the design of the exams and provides accredited training organizations with a more detailed breakdown of what the exams will assess. Details on the exam structure and content are documented in the Service Automation Foundation Examination Design.

## 2 Service Automation Foundation Qualification

### 2.1 Purpose of the Service Automation Foundation Qualification

The purpose of the Service Automation Design Foundation qualification is to measure whether a candidate has sufficient knowledge and understanding of the Service Automation Framework Text to act as an informed member of a team designing and delivering automated services.

### 2.2 Target Audience

This qualification is aimed at individuals who require a working knowledge of the key principles of Service Automation, who need to know the terminology used and some of the theory behind the practice. The target audience of the Service Automation Foundation Qualification therefore includes:

- Service strategists;
- Process consultants;
- Business consultants;
- Strategy consultants;
- Service delivery managers;
- Service designers;
- Enterprise architects;
- Operations managers;
- Service managers;
- Developers;
- Business analysts.

There is no mandatory prerequisite to obtain the Service Automation Foundation Qualification.

### **2.3 High Level Performance Definition of a Successful SAF Candidate**

The candidate who meets criteria of the High Level Performance Definition should as a minimum be able to recall, recognize and demonstrate understanding of the theories, design elements, processes and techniques as outlined in the Service Automation Framework text.

Specifically (s)he should be able to demonstrate this understanding by being able to:

1. Understand the business drivers of technology-enabled automated services in order to explain the business case for Service Automation.
2. Discuss how Service Automation Framework enables the practice of an industry that enables their autonomous users to procure, manage and adjust services through self-service technology.
3. Explain the difference and synergy between the Users, Service Design and Technology design elements that contribute to meet and exceed the expectations of user in order to create long-lasting value.
4. Explain the difference between Automated Deployment, Service Delivery Automation and Serendipity Management and describe their underlying processes.
5. Outline the steps for completing a Service Automation Blueprint in order to visualize services in order to design and delivery automated services.
6. Discuss the processes that underpin the delivery of automated services and how they need to be integrated in self-service portals in order to provide automated delivery.
7. Explain the concept of Serendipity Management and how it impacts the User Experience (UX) of services.

## **3 Assessment Model**

Each learning outcome in the High Level Performance Definition requires the candidate to demonstrate specific knowledge and skills. For each learning outcome a number of learning outcome measures are identified which are evaluated in the examination, in accordance with the Examination Design, to confirm that the learning outcome has been achieved. These learning outcome measures are shown as syllabus topics and define the scope of the standard required to achieve the qualification.

A classification widely used when designing assessments for certification and education is the Bloom's Taxonomy of Educational Objectives. This classifies learning objectives into six ascending learning levels, each defining a higher degree of competencies and skills. (Bloom et al, 1956, Taxonomy of Educational Objectives).

APMG have incorporated this into a Learning Outcomes Assessment Model that is then used to develop each qualification's Assessment Model. The model provides a simple and systematic means for assessing and classifying the learning outcome measures. .

This structured approach helps to ensure:

- The appropriate level is identified for a qualification
- A clear delineation in learning level content between different qualifications
- Wording is standardized and syllabi are presented consistently across APMG's qualification portfolio
- Exam questions and papers are consistent in their design.

The Foundation qualification examines at levels 1 (recall) and 2 (understand).

<b>Service Automation Framework Assessment Model</b>		
	<b>1. Recall</b>	<b>2. Understand</b>
<b>APMG Learning Level Definition</b>	<i>Remember previously learned information</i>	<i>Grasp the meaning and make sense of information</i>
<b>Generic APMG Headers</b>  <i>For introducing the learning outcome measures (topics) in the Syllabus</i>	Recall terms and key facts about concepts, principles and procedures from the reference material	Understand key facts, concepts, principles and procedures from the reference material
<b>Qualification Example</b>	Recall terms and key facts about concepts, techniques, design elements and processes relating to the syllabus area	Understand the concepts, techniques, design elements and processes relating to the syllabus area

#### 4 Qualification Scope

The definition of scope for each qualification is presented in the syllabus tables at the end of this document. Each syllabus area is a unit of learning that relates to the reference material or training course module.

The following syllabus areas are identified.

<b>Syllabus Area Code</b>	<b>Syllabus Area Title</b>
CD	Service Automation Concepts and Key Drivers
FR	The Structure of the Service Automation Framework
DE	Service Automation Design Elements
PR	Service Automation Processes
TQ	The 7 Service Automation Framework Techniques
BP	The Service Automation Blueprint

## 5 Syllabus Presentation

For each syllabus area the learning outcome measures are presented in order of learning level and are introduced by a standard header. There is only one header at each learning level for each syllabus area. The wording in this header is derived from the Assessment Model. Each measure is specific to a learning level.

Each of the syllabus areas is presented in a similar format as follows:

Syllabus Area Code		Syllabus Area:	Foundation	Primary References
LC [2]		<b>SAF Syllabus Area (XX) Theme [1]</b>		
Level	Topic			
		<b>Recall terms and key facts about the concepts, principles and procedures relating to Service Automation Concepts and Key Drivers [3]</b> <b>Specifically to recall:</b>		
01 [4]	01 [5]	[6] The definition of the practice Service Automation and the main elements that are part of this definition.	[7] ✓	[8] 3.6
01	02			

### Key to the Syllabus Area table

1	Syllabus Area	Unit of learning, e.g. course module, key activity area or section of the reference guide.
2	Syllabus Area Code	A unique 2-character code identifying the syllabus area.
3	Learning Level Header	Header introducing the syllabus topics ( <i>learning outcome measures</i> ) for a given learning level.
4	Level	Learning level of the learning outcome measure..
5	Topic Reference	Number of the topic within the learning level.
6	Topic Description ( <i>Learning Outcome Measure</i> )	Precise and specific description of what is required of the candidate to demonstrate that a learning outcome has been achieved.
7	Foundation	Shows at which qualification level <b>the learning outcome measure is assessed</b> . Note: Other columns are added when there are other qualifications in the qualification scheme.
8	Primary Reference	The main section reference supporting the learning outcome measure.

## 6 Important Points

The following points about the use of the syllabus should be noted.

### 6.1 Service Automation Framework Guide References

The SAF guide references provided should be considered to be indicative rather than comprehensive, i.e. there may be other valid references within the guidance.

Syllabus Area Code		Syllabus Area: <i>Service Automation Concepts and Key Drivers</i>	Foundation	Primary References
Level	Topic			
<b>Recall terms and key facts about concepts relating to Service Automation</b>				
<b>Specifically to recall:</b>				
01	01	The concept of automation and the feedback loop as its defining characteristic	✓	2.1
01	02	The definition of the practice Service Automation and the main elements that are part of this definition: <ul style="list-style-type: none"> <li>• Service Automation as a practice</li> <li>• Enabled by self-service technology</li> <li>• Based on the autonomy of users</li> </ul>	✓	3.6
01	03	The definition of a service and the four key criteria of a service, according to Service Management: <ul style="list-style-type: none"> <li>• Delivering value</li> <li>• Facilitating outcomes</li> <li>• Without ownership of costs</li> <li>• Without ownership of risk</li> </ul>	✓	3.4
01	04	The holistic dimensions of the Service Concept and how stakeholders perceive the value of services: <ol style="list-style-type: none"> <li>1. Value</li> <li>2. User Experience</li> <li>3. Service Operation</li> <li>4. Service Outcome</li> </ol>	✓	3.5
<b>Understand the key concepts relating to Service Automation</b>				
<b>Specifically to understand:</b>				
02	01	The five business drivers for Service Automation: <ul style="list-style-type: none"> <li>• Scalable Business Model</li> <li>• Data-Driven Decision Making</li> <li>• User Centric Approach</li> <li>• Cost-Effective Service Delivery</li> <li>• Exceeding User Expectations</li> </ul>	✓	3.3

Syllabus Area Code		Syllabus Area:	Foundation	Primary References
CD		<b><i>Service Automation Concepts and Key Drivers</i></b>		
02	02	The purpose of the Service Concept and how it serves as an overarching directive to all other services	✓	3.5
02	03	The difference between a 'Service Push' and a 'Service Pull' approach and the preferred approach for Service Automation	✓	3.6

Syllabus Area Code		Syllabus Area:	Foundation	Primary References
FR		<b><i>The Structure of the Service Automation Framework</i></b>		
Level	Topic			
<b>Recall terms and key facts about concepts relating to the Structure of the Service Automation Framework</b>				
<b>Specifically to recall:</b>				
01	01	The names of the three building blocks of the 'heart' dimension of the Service Automation Framework and what each of these building blocks defines: <ol style="list-style-type: none"> <li>1. User</li> <li>2. Service Design</li> <li>3. Technology</li> </ol>	✓	3.7
01	02	The names of the three building blocks of the 'brain' dimension of the Service Automation Framework and what each of these building blocks defines: <ol style="list-style-type: none"> <li>1. Automated Deployment</li> <li>2. Service Delivery Automation</li> <li>3. Serendipity Management</li> </ol>	✓	3.7
01	03	The structure and elements of the Service Automation Implementation Approach: <ul style="list-style-type: none"> <li>• Service Automation Strategy</li> <li>• Inputs / Outputs</li> <li>• The Service Automation Framework</li> <li>• Measurements</li> <li>• The Service Concept</li> </ul>	✓	3.9
<b>Understand the concepts relating to the Structure of the Service Automation Framework</b>				
<b>Specifically to understand:</b>				
02	01	How each of the six building block of the Service Automation Framework is equally important in determining User Experience	✓	3.7

Syllabus Area Code <b>FR</b>		Syllabus Area: <b><i>The Structure of the Service Automation Framework</i></b>	Foundation	Primary References
02	02	The relationship and differences between the Service Automation Framework and the Service Automation Framework Techniques (SAFTs)	✓	3.9
02	03	How teams should be organized for successful implementation of Service Automation.	✓	3.10



Syllabus Area Code		Syllabus Area: <i>Service Automation Design Elements</i>	Foundation	Primary References
DE				
Level	Topic			
<b>Recall terms and key facts about concepts and design elements relating to Service Automation Design</b>				
<b>Specifically to recall:</b>				
01	01	The definitions of: <ul style="list-style-type: none"> <li>1. User Experience</li> <li>2. User Groups</li> <li>3. User Characteristics</li> <li>4. User Actions</li> </ul>	✓	4.5 4.6 4.6 4.6
01	02	The difference between a user and a customer and how this impacts the delivery of automated services	✓	4.2
01	03	The three types of information User Experience metrics typically provides information on: <ul style="list-style-type: none"> <li>1. Internal: do users recommend a service?</li> <li>2. External: how does the service perform compared to competitors?</li> <li>3. Portfolio: how does the service fit in the complete service portfolio?</li> </ul>	✓	4.5
01	04	The characteristics of the two classes of User Characteristics used for categorizing User Groups and know how these impact Customer Satisfaction and User Experience: <ul style="list-style-type: none"> <li>1. Demographic</li> <li>2. Psychographic</li> </ul>	✓	4.6
01	05	The definition of Service Design in the Service Automation Framework versus other forms of Service Design	✓	5.3
01	06	The definition of Self-Service Portals	✓	6.4
<b>Understand the concepts and design elements relating to Service Automation Design Elements</b>				
<b>Specifically to understand:</b>				
02	01	How the rise of the self-service generation is contributing to the request for automated services	✓	4.4
02	02	The relationship between Interactions and the Technology Interface	✓	5.3
02	03	The structure and composition of the Service Automation Blueprint	✓	5.4
02	04	The five key characteristics of cloud computing: <ul style="list-style-type: none"> <li>1. On demand usage</li> <li>2. Ubiquitous access</li> <li>3. Multi-tenancy</li> <li>4. Elasticity</li> <li>5. Measured usage</li> </ul>	✓	6.3

Syllabus Area Code  DE		Syllabus Area:  <i>Service Automation Design Elements</i>	Foundation	Primary References
02	05	The key characteristics of mobile technology that have influenced Service Automation <ul style="list-style-type: none"> <li>• Mobile Interface</li> <li>• Mobile Networks</li> </ul>	✓	6.3
02	06	The four different types of self-service portals and their primary objective: <ol style="list-style-type: none"> <li>1. Customer Self Service Portal</li> <li>2. Transaction Oriented Self Service Portal</li> <li>3. Self-Help Self Service Portal</li> <li>4. Information Exchange Self Service Portal</li> </ol>	✓	6.5

Syllabus Area Code		Syllabus Area: <i>Service Automation Processes</i>	Foundation	Primary References
PR				
Level	Topic			
		<b>Recall terms and key facts about concepts and techniques relating to Service Automation Processes</b> <b>Specifically to recall:</b>		
01	01	The three key touch points of service experience: <ul style="list-style-type: none"> <li>• First encounter with the service provider</li> <li>• Experience during service consumption</li> <li>• Methodically outperform user expectations</li> </ul>	✓	7.1
01	02	The different clustering of the Process Domains: <ol style="list-style-type: none"> <li>1. Automated Deployment: before the 1<sup>st</sup> service encounter</li> <li>2. Service Delivery Automation: experience during service consumption</li> <li>3. Serendipity Management: outperforming expectations</li> </ol>	✓	7.1
01	03	The process oriented nature of services	✓	7.2
01	04	The purpose of each of the Automated Deployment Processes: <ol style="list-style-type: none"> <li>1. The Provisioning Process</li> <li>2. The Familiarization Process</li> <li>3. The Fulfilment Process</li> </ol>	✓	7.5 7.6 7.7 7.9
01	05	The purpose of each of the Service Delivery Automation Processes: <ol style="list-style-type: none"> <li>1. The Request Process</li> <li>2. The Inquiry Process</li> <li>3. The Resolution Process</li> <li>4. The Upgrade Process</li> <li>5. The Feedback Process</li> </ol>	✓	8.10 8.4 8.5 8.6 8.7 8.8
		<b>Understand the concepts and techniques relating to Service Automation Processes</b> <b>Specifically to understand:</b>		
02	01	The four characteristics that indicate a process is generally eligible for automation: <ol style="list-style-type: none"> <li>1. Sensory automation</li> <li>2. Analysis automation</li> <li>3. Decision automation</li> <li>4. Action automation</li> </ol>	✓	7.3
02	02	The supporting processes typically associated with each of the Automated Deployment Processes: <ol style="list-style-type: none"> <li>1. The Provisioning Process</li> <li>2. The Familiarization Process</li> <li>3. The Fulfilment Process</li> </ol>	✓	7.5 7.6 7.7 7.9

Syllabus Area Code  PR		Syllabus Area:  <i>Service Automation Processes</i>	Foundation	Primary References
02	03	Understand how scenario analysis is used to determine likely scenarios in service delivery	✓	8.2
02	04	The supporting processes typically associated with each of the Service Delivery Automation Processes: <ol style="list-style-type: none"> <li>1. The Request Process</li> <li>2. The Inquiry Process</li> <li>3. The Resolution Process</li> <li>4. The Upgrade Process</li> <li>5. The Feedback Process</li> </ol>	✓	8.10 8.4 8.5 8.6 8.7 8.8
02	05	Key benefits of Serendipity Management: <ul style="list-style-type: none"> <li>• Defines competitive advantage</li> <li>• Embeds competitive advantage structurally into the organization</li> <li>• Realizes long-term benefits through loyal customers</li> </ul>	✓	9.3
02	06	The four important actions when adopting Serendipity Management: <ol style="list-style-type: none"> <li>1. Determine the customer journey</li> <li>2. Select the appropriate User Action</li> <li>3. Improve the appropriate User Action in a surprising way</li> <li>4. Automate the new User actions into a process</li> </ol>	✓	9.4
02	07	The key characteristics of the Serendipity Process	✓	9.5

Syllabus Area Code		Syllabus Area: <i>The 7 Service Automation Framework Techniques</i>	Foundation	Primary References
TQ				
Level	Topic			
<b>Recall terms and key facts about <i>The 7 Service Automation Framework Techniques</i></b> <b>Specifically to recall:</b>				
		There are no level 1 topics for this syllabus area		
<b>Understand the goals, concepts and steps relating to <i>The 7 Service Automation Framework Techniques</i></b> <b>Specifically to understand:</b>				
02	01	The five psychographic criteria that determine User Experience: <ul style="list-style-type: none"> <li>1. Information Availability and Content</li> <li>2. Ease of Use</li> <li>3. Privacy and Security</li> <li>4. Graphic Style</li> <li>5. Fulfilment and Reliability</li> </ul>	✓	4.6
02	02	The main goal of the technique Building User Groups and Characteristics (SAFT1) and how this technique is used	✓	4.6
02	03	The process-oriented nature of services: how a service is built out of several User actions (SAFT2)	✓	4.7
02	04	The recommended steps for completing a Service Automation Blueprint (SAFT3) and their sequence	✓	5.5
02	05	The main goal of the technique Technology Interface Modelling (SAFT 4) and how this technique is used	✓	6.6

Syllabus Area Code		Syllabus Area:	Foundation	Primary References
BP		<i>The Service Automation Blueprint</i>		
Level	Topic			
<b>Recall terms and key facts about concepts, techniques, design elements and processes relating to Service Automation Concepts and Key Drivers.</b> <b>Specifically to recall:</b>				
01		There are no level 1 topics for this syllabus area		4.6
<b>Understand the benefits and composition of the Service Automation Blueprint</b> <b>Specifically to understand:</b>				
02	01	Key benefits of using a Service Automation Blueprint	✓	5.4, 5.6
02	02	The characteristics of the five layers of the Service Automation Blueprint <ul style="list-style-type: none"> <li>1. User Actions</li> <li>2. Physical Evidence</li> <li>3. Technology Interface</li> <li>4. Support Processes</li> <li>5. Company Functions</li> </ul>	✓	5.4
02	03	The characteristics of the three Design Lines of the Service Automation Blueprint <ul style="list-style-type: none"> <li>1. Line of Trust</li> <li>2. Line of Interaction</li> <li>3. Line of Automation</li> </ul>	✓	5.4