



EXAM BLUEPRINT

402 — Cloud Solutions

ABOUT THE 402 – CLOUD SOLUTIONS EXAM

The *402 – Cloud Solutions* exam is required to achieve F5 Certified Solution Expert, Cloud status.

Successful completion of the 402-Cloud Solutions exam acknowledges the skills and understanding to discover business requirements regarding cloud solutions and articulate technical requirements driven by the business. Candidates can also apply F5 solutions to meet technical requirements for cloud solutions and articulate the value of the solutions.

WHAT IS THE 402 – CLOUD SOLUTIONS EXAM BLUEPRINT?

F5 Certified exam blueprints list all the objectives an exam has to measure, much like a syllabus for the exam itself. Blueprints provide a detailed breakdown of the skills and knowledge a candidate should have to pass the exam. They contain section levels, objectives and examples, and can be used to identify areas for additional study. The examples are illustrative, not exhaustive.

F5 Certification exams are designed to test the knowledge, skills, and abilities of the candidate. These exams are not designed to test version-specific TMOS features, but rather assess knowledge and understanding of F5 technology solutions for which the exam is developed. Refer to individual exam blueprints for exam publication date.

PREREQUISITE:

F5 Certified BIG-IP Administrator (F5-CA)
F5 Certified Technology Specialist, LTM (F5-CTS, BIG-IP LTM)
F5 Certified Technology Specialist, DNS (F5 CTS, BIG-IP DNS)

CREDENTIAL AWARDED:

F5 Certified Solution Expert, Cloud
(F5-CSE, Cloud)





| Section 1 : FOUNDATIONAL CLOUD CONCEPTS | | |
|---|--|-----|
| Objectives | | CC* |
| 1.01 | Compare and contrast the various cloud business models and technologies | U/A |
| 1.02 | Apply concepts related to cloud Identity Access Management technologies | U/A |
| 1.03 | Describe the terminology, modules, and technical requirements related to application bursting and mobility | R |
| 1.04 | Apply concepts related to application bursting and mobility | U/A |

| Section 2 : CLOUD INFRASTRUCTURE DESIGN | | |
|---|--|-----|
| Objectives | | CC* |
| 2.01 | Describe the F5 licensing and support characteristics for cloud deployments | R |
| 2.02 | Evaluate variables relevant to the design of a cloud solution that meets business requirement | A/E |
| 2.03 | Enumerate the available permutations and combinations of F5 virtualization technologies | U/A |
| 2.04 | Recognize the constraints imposed by various SDN technologies on F5 components | U/A |
| 2.05 | Relate technical requirements to F5 platforms and virtualization technologies | A/E |
| 2.06 | Evaluate variables relevant to architecting solutions using single and multi-tier F5 products in various cloud environments | A/E |
| 2.07 | Evaluate the variables relevant to the design of green-field data centers and application delivery architectures to function as a cloud service provider | U/A |
| 2.08 | Apply key concepts related to the design on-demand provisioning of application services | A/E |
| 2.09 | Evaluate variables relevant to the design of on-demand provisioning of application services | A/E |

| Section 3 : CLOUD MIGRATION | | |
|-----------------------------|---|-----|
| Objectives | | CC* |
| 3.01 | Evaluate variables relevant to the creation and validation of a Cloud migration plan for applications | A/E |
| 3.02 | Apply key concepts required for the implementation of a Cloud migration plan for applications | U/A |
| 3.03 | Evaluate variables relevant to the implementation of a cloud migration plan for applications | A/E |

* Cognitive Complexity Key: **R** = Remember, **A/E** = Analyze/Evaluate, **U/A** = Understand/Apply



| | | |
|-------------|---|------------|
| 3.04 | Apply key concepts required to leverage technologies to integrate with various SDN environments | U/A |
| 3.05 | Evaluate variables relevant to the leveraging of technologies to integrate with various SDN environments | A/E |

Section 4 : CLOUD DEPLOYMENT

| Objectives | | CC* |
|-------------|---|------------|
| 4.01 | Analyze cloud service provider instance sizing and location as it relates to BIG-IP requirements | A/E |
| 4.02 | Apply the key concepts required to deploy F5 instances on a cloud infrastructure | U/A |

Section 5 : CLOUD ORCHESTRATION AND AUTOMATION

| Objectives | | CC* |
|-------------|---|------------|
| 5.01 | Apply the N/E/S/W-bound API model in order to orchestrate service creation | A/E |
| 5.02 | Apply the key concepts required to automate and orchestrate using F5 RESTful APIs | U/A |
| 5.03 | Evaluate the variables relevant to automation and orchestration using F5 RESTful APIs | A/E |
| 5.04 | Apply the key concepts required to design a cloud bursting solution | U/A |
| 5.05 | Evaluate the variables relevant to design a cloud bursting solution | A/E |
| 5.06 | Determine how to utilize cloud deployment templates to create on demand provisioning of application services | U/A |
| 5.07 | Evaluate cloud deployment templates for the creation of on-demand provisioning of application services | A/E |
| 5.08 | Apply the key concepts required to create a workflow for dynamic provisioning of an F5 instance | U/A |
| 5.09 | Apply the key concepts required to create a workflow for dynamic provisioning of an F5 instance | A/E |

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Exam Details

HOW MUCH DO F5 EXAMS COST?

All F5 exams are currently priced at US\$180 (not including local taxes and fees) per exam, per attempt.

HOW LONG ARE F5 EXAMS?

This exam is 105 minutes long (not including any non-native English or other accommodations).

WHAT IS THE PASSING SCORE FOR F5 EXAMS?

F5 exams require a passing score of 245 out of a range between 100 and 350.

SCALED SCORING

Scaled scores ensure that the reported scores across exam forms and versions have the same meaning regardless of difficulty. Fair and consistent decisions can then be made about exam results regardless of the exam form or version. [More information >](#)

HOW MANY QUESTIONS ARE THERE?

This exam has 70 questions (65 items that are scored, 5 pilot/beta items).

WHAT FORMAT ARE F5 EXAMS?

F5 exams are all computer-based, multiple-choice-response exams. Some questions contain exhibits or scenarios that you will need to view in order to answer the question.

WHAT IS THE F5 RETAKE POLICY?

1st failure: Exam hold for 15 days (You cannot take the exam again for 15 days.)

2nd failure: Exam hold for 30 days

3rd failure: Exam hold for 45 days

4th failure: Exam hold for 365 days

5th and subsequent failed attempts: 90 days



Cognitive Complexity Descriptions

Lower Order Thinking Skills



Higher Order Thinking Skills

| Remember | Understand/Apply | Analyze/Evaluate | Create |
|---|---|---|---|
| Information retrieval Rote memorization | Knowledge transfer Comprehension or ability to apply knowledge to a standard process | Critical thinking and reasoning Determine how parts relate to whole or knowledge integration and application to new situations | Innovation or creative thinking Forming an original work product |
| Retrieve relevant knowledge from long-term memory | Construct meaning from information | Make judgments based on criteria | Combine or reorganize parts to form a new pattern or structure |
| E.g., recall, retrieve, recognize | E.g., interpret, classify, compare, explain, implement | E.g., troubleshoot, attribute, diagnose, critique | E.g., generate, plan, produce |

Alpine Testing Solutions’ suggested cognitive complexity levels and associated verb references consider multiple approaches to defining cognitive processing (e.g., Anderson et al., Webb, Bloom, Frisbie). Above material created with assistance from Alpine and distributed with Alpine’s permission as an attachment to certification test



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