
Module 13

Exam Preparation Guide

MODULE LEARNING OBJECTIVES

At the end of this module, you will be able to:

- Identify the structure of the exam.
- Indicate the key components of the exam.
- Practice the exam.

MODULE TOPICS

The following topics are covered in the module:

Qualification Learning Objectives

- Learning Level of the Syllabus

Certification

- Certification Scheme
- Certification Value

Exam Instructions

- Exam Format
- Question Formats
- Scoring System

Tips for Exam Taking

- Exam Taking Techniques
- Time Management
- Confidence

Mock Exam

QUALIFICATION LEARNING OBJECTIVES

Candidates can expect to gain competencies in the following upon successful completion of the education and examination components related to this certification:

- Manage the complexities of designing, deploying, and running cloud services.
- Be capable of embedding cloud service management into IT service management.
- Utilize the organization's strategic assets and capabilities to successfully design, deploy, and run cloud services.
- Promote the benefits of cloud.
- Drive the adoption of cloud based services within an organization.
- Propose appropriate structures for designing, deploying, and running cloud based services within traditional IT organizations.
- Identify issues and risks associated with the use of cloud technologies.
- Identify strategies to reduce risk and remove issues.

Learning Level of the Syllabus

The modern version of Bloom's taxonomy of learning is a widely used classification framework for course syllabi and assessments for certification. The taxonomy classifies learning into six ascending levels.

Level 1 – Knowledge Level: Exhibit memory of previously learned materials by recalling facts, terms, basic concepts and answers.

Level 2 – Comprehension level: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas.

Level 3 – Application level: Use new knowledge. Solve problems to new situations by applying acquired knowledge, facts, techniques and rules.

Level 4 – Analysis level: Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.

Level 5 – Evaluate level: Present and defend opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria.

Level 6 – Creation level: Compile information together by combining elements in a new pattern or proposing alternative solutions

The level of this advanced course for the Professional Cloud Solutions Architect role is level 3 and 4 (Application and Analysis).

Bloom Level and Taxonomy	Used by CCC Cloud Qualification	Intellectual Activity in Learning Outcome and Exam Proficiency
1. Knowledge 2. Comprehension	<ul style="list-style-type: none"> • Cloud Awareness • Comptia Cloud Essentials • Virtualization Essentials 	The ability to recall, recite, name, and understand the meaning of cloud terminology and basic practice fundamentals.
3. Application 4. Analysis	Cloud Professional Series: <ul style="list-style-type: none"> • PCSA • PCSM • PCD • PCS • PCA 	The ability to use the practices and concepts in a situation or unprompted use of an abstraction. Can apply what is learned in the classroom, in workplace situations. Can separate concepts into component parts to understand structure and can distinguish between facts and inferences.

The professional series is expected to provide a practical level of proficiency for a candidate. The examinations test this level. The examination format of complex multiple choice will offer a scenario and questions with a corresponding series of possible answers.

CERTIFICATION

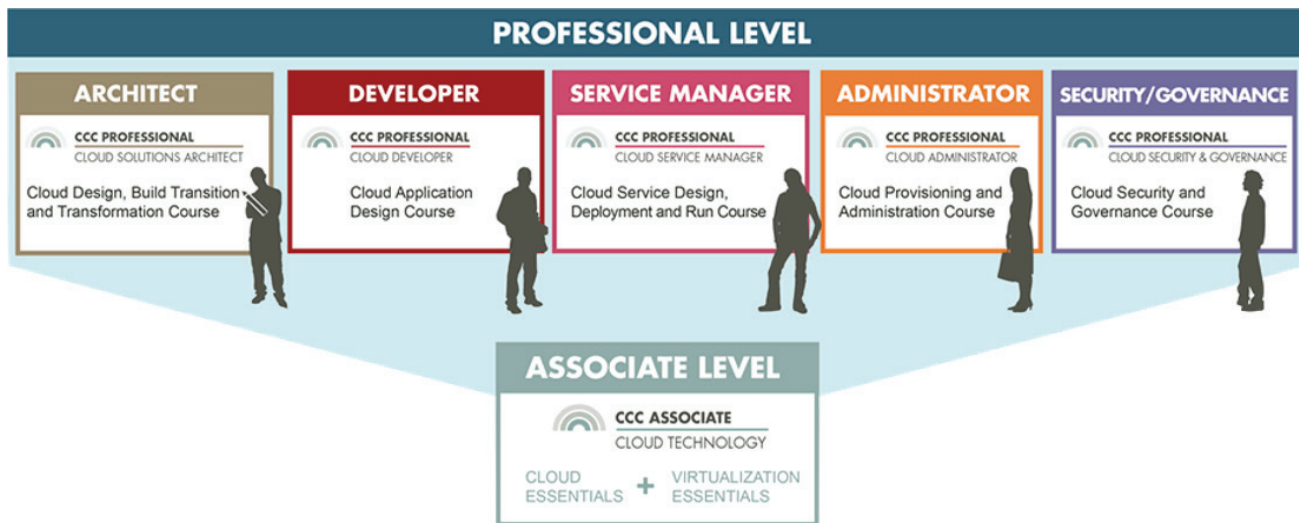
The **Cloud Credential Council® (CCC)** intends to accelerate successful cloud adoption through training and certification. In line with this, the CCC aims to provide the most comprehensive in-depth cloud training and certification program in the world.

The CCC Cloud Certification Program is a vendor-neutral certification program in the cloud computing domain. The program has been developed by cloud experts that work at leading organizations such as IBM, Microsoft, VMWare, Cisco, EMC, HP and ING, and aligns to NIST definitions and terminology.

The program was initiated based upon a request from ING Group, a global financial services conglomerate who actively participated in the development of the concept of a cloud training program oriented at achieving organizational change together with founding partner ITpreneurs. Till date, several thousand professionals have been certified worldwide.

After a successful start with the associate level certifications, the time has come to expand and deepen the offering. In the second half of 2013, the professional level certifications covering five domains such as Solutions Architect, Developer, Service Manager, Administrator, and Security/Governance will become available. The entire offering will subsequently be continuously expanded and updated.

Certification Scheme



The Cloud Credential Council certifications are vendor-neutral and provide an excellent segway into vendor-specific cloud training and certification programs. CCC certifications add value to the career development of business and technology professionals as the certifications are built with cloud experts from leading organizations.

Certification Value

Cloud computing has been around for a few years now and continues to be built on the foundations of Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). Public and private cloud implementations are now mainstream options that solution architects need to understand and consider in their role. There is a range of capabilities and issues that need to be successfully navigated to support the adoption, development and performance optimization of cloud solutions and services in the enterprise and the wider marketplace and IT ecosystem.

This syllabus examines these major issues and modern cloud-enabled systems and services and their impact on business models, software, hardware, and devices. It looks at the following emerging new trends and leading architecture solutions:

- Tablets and other smart devices and platforms and their important role today in modern internet-based service ecosystems.
- The development of private cloud solutions and hybrid cloud solutions that are complementary and alternative to public clouds and their role in business and IT portfolio management and service hosting and delivery models.
- How social enterprise and business processes are converting into new online end user experience systems, mash-ups, and services.
- Cloud computing is also creating new development, test, and delivery models that are spreading across on-premise and off-premise hosting and deployment channel models.

Solution architects need to consider how existing systems and new solution practices driven by on-demand cloud computing are impacting consumers, provider private- and public-enabled systems, and the integrated hybrid categories of IT and business that are now part of today's technology landscape.

EXAM INSTRUCTIONS

Exam Format

Prerequisites	There are no prerequisites for taking the exam. Candidates are encouraged to take the CompTIA Cloud Essential course and CCC Virtualization Essentials course prior to taking the exam, but that is not required.
Supervised	Wecam Proctored
Exam Type	Online
No. of Questions	25
Time Limit	The exam will be of 75 minutes. For non-native speakers an additional 15 minutes is available.
Pass Score	To pass the exam, an individual must attain a score of 65% or higher.
Open Book	No

Question Formats

The professional level exams use scenario based multiple-choice questions.

Question format will be as given:

1. Standard multiple-choice
2. Multiple response
3. Pull-down list
4. Knowledge matrix
5. Matching
6. Drag and drop

Scoring System

For the multiple-choice questions, the score is based on the correct answer or incorrect answer. For the other question formats, a point can be scored for each correct answer. That is, if there are many choices, multiple points can be scored.

TIPS FOR EXAM TAKING

In order to successfully take the exam, you are advised to keep the following points in mind:

- Read the questions carefully.
- If you are stuck on a question, you should guess the most likely option, mark the question, and come back to it at the end. This way, you will at least have a guess answer if you run out of time.
- Use theoretical knowledge to answer the questions and select the best option. Eliminate the distracters by using theoretical knowledge and assessment of the information provided.
- When in doubt, you should guess — there is no negative marking.

Mock Exam

The mock exam contains at least 1 question per format. There will be 25 questions with rationale.

Mock Exam

PROFESSIONAL CLOUD SOLUTIONS ARCHITECT MOCK EXAM

30 QUESTIONS

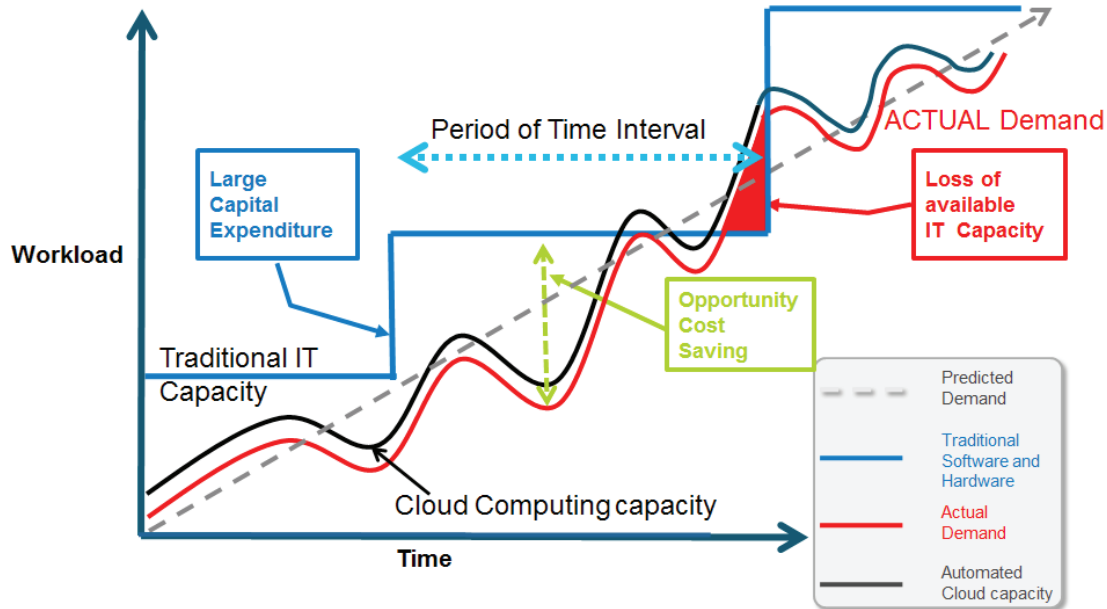
1 MARK PER QUESTION

70% PASS MARK

21 OUT OF 30

Q1. The diagram depicts a scenario where traditional IT capacity (blue line) is purchased in bulk for a fixed time period. Towards the end of this period the actual demand (black line) exceeds the available IT capacity.

Identify a statement that explains why there is a loss of available IT Capacity service.



- a) Traditional IT Capacity is purchased by an estimate of what was used 12 months ago.
- b) Traditional IT Capacity assumed it would manually purchase enough in time if actual demand capacity rose faster than expected.
- c) Traditional IT Capacity purchased did not take into account the maximum predicted peak demand for that interval of time period.
- d) Traditional IT Capacity is purchased in bulk to cover a period based on the average capacity of a period of time interval.

Q2. Which of the following statements best explains how elasticity of cloud computing capacity works as compared to traditional IT capacity?

- a) Cloud computing available capacity is fixed in advance of many usages.
- b) Cloud computing available capacity is divided equally between all customer tenants.
- c) Cloud computing available capacity is always set at an average of the actual IT demand.
- d) Cloud computing available capacity can increase and decrease depending on the actual demand for capacity for each customer tenant need based on the policies for the cloud service.

Q3. Which of the following statements best describes the operation of a hybrid cloud deployment model?

- a) A cluster of servers that run as a dedicated service inside an enterprise.
- b) A computing infrastructure that is shared across multiple companies.
- c) A private cloud hosted online gaming platform that bursts to a public cloud at times of high workload.
- d) An online video library that can download movies to a mobile device.
- e) A set of peer-to-peer networked computers working on collaborative computation.

Q4. Identify the option that correctly describes vertical scaling.

- a) Single OS instance configured to run a large memory intensive program.
- b) Set of virtual partitioning that supports different clusters of workloads simultaneously.
- c) Many small container configuration sessions.
- d) Multiple OS instances for small workloads.

Q5. Which of the following examples best describes how cloud computing disrupts a market industry structure?

- a) The IT Infrastructure of a start-up can be hosted on IaaS cloud service, such as Amazon.
- b) Online car hire services in a public cloud enables local residents in locations to hire their cars out to public use.
- c) A new SEGA software game can be developed and deployed to market faster using a cloud PaaS platform.
- d) A movie theatre online ticket service allows tickets to be sent to a mobile smart phone.
- e) An existing set of virtualized software and hardware can be migrated to a hosted cloud environment providing rationalization and consolidation cost saving opportunities.

Q6. Which of the following examples best describes how data in cloud computing disrupts a market industry structure?

- a) Football fans can post video clips of their games on a social media website.
- b) Local residents can submit their photos to a cloud sourcing website for local history heritage.
- c) A multi-national pharmaceutical business can conduct drug research data modelling using big data analytics.
- d) Music artists can post their own demo video music recorded on their own website for share to fans and downloads.

Q7. Match the cloud-enabled business platform to the corresponding cloud services.

Cloud-Enabled Business Platforms	Types Of Cloud Service
a) Social Network Platform	1. B2B services
b) Mobile Device Management Platform	2. Building room temperature management
c) Sensor Network Platform	3. BYOD Partition Management services
d) Market Platform	4. Recommendations engine
e) Big Data Analytics Platform	5. Messaging services

Q8. In Make, Buy, or Rent decisions of IT services, which of the following statements best describes the economics of cloud computing?

- a) Cloud computing is about shared asset ownership for all consumers.
- b) Cloud computing enables a complete shift from asset ownership to subscription based economics.
- c) Cloud computing is a distributed computing model that supports IT ownership and subscription based IT funding and consumption model options.
- d) Cloud computing shifts the responsibility of the IT service performance and costs monitoring to the buyers and consumers.

Q9. Cloud computing typically has four types of pricing models, Trading, Freemium, Investment in own cloud, and Pay-Per-Usage. Match the payment mechanism to the cloud pricing model.

Pricing Model	Payment Mechanisms
a) Trading	1. Spot Cloud pricing
b) Freemium	2. Pay-per-time period (for example monthly)
c) Investment in the Cloud	3. Purchase per instance host
d) Pay per usage	4. Open source rights

Q10. Identify the situation that pose cloud computing risk to an enterprise and may originate from outside that enterprise.

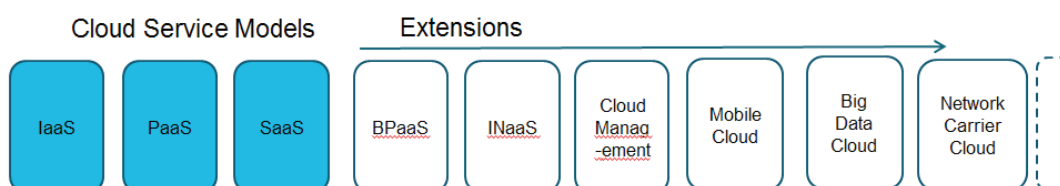
- a) Reputational fate sharing governance responsibility changes of the Corporate Security Officer (CSO)
- b) Corporate Trust groups and domain authority policy management errors
- c) Legal compliance for data recovery and audit (eDiscovery) policy management
- d) Personal data collection by third-parties

Q11. The term Traditional Data Center (TDC) and Cloud Enabled Data Center (CDC) has almost disappeared from cloud technology as it becomes common place for Enterprise IT. Which of the following statements best describes a key difference for data privacy between DC and CDC functionality?

- a) CDC use virtualization management and template workload management to partition server clusters and resources for different workloads.
- b) CDC has its own dark fiber networks and use of Software Defined Network (SDN) management.
- c) CDC has control zones for types of cloud deployment partitioning for closer data scrutiny and compliance.
- d) CDC has load balancing and hyper scaling and multiple hardware component redundancy resilience.

Q12. The given Cloud Services Continuum describes the range of cloud services. There are many types of cloud services describing conceptual services possible in a cloud environment. Which of the following statements best describes the end-user device flexibility from a mobile cloud?

Cloud Services Continuum



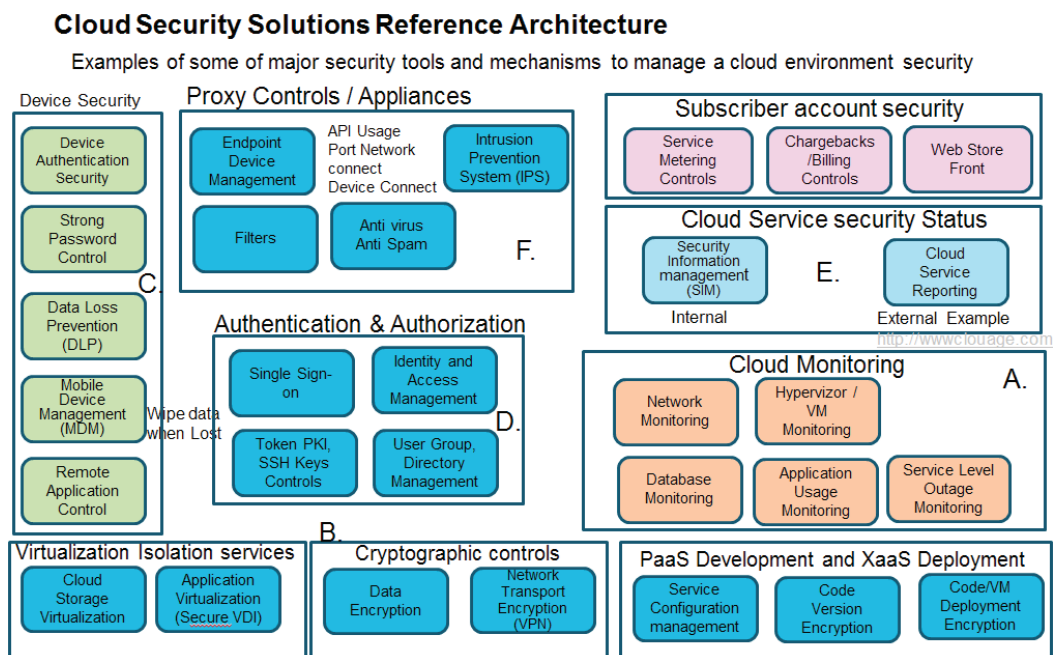
- a) A mobile cloud manages the network services connections to the edge of networks to access IT services.
- b) A mobile cloud manages content and apps that may be published to a mobile apps store.
- c) A mobile cloud can have a multiple device management platform to support Bring Your Own Device (BYOD), smart devices, and virtual desktop (VDI) technologies. This can support remote configuration and remote trouble shooting for the end user.
- d) A mobile cloud service may have the ability to remotely lock and wipe a device, which protects the data stored on the device from being stolen.

Q13. Which of the following cloud reference architecture functions is an important design mechanism for cloud environment access scaling?

- a) Auto-scaling resources in a cluster
- b) Fail-over
- c) Multiple zone partitioning
- d) High availability load balancing

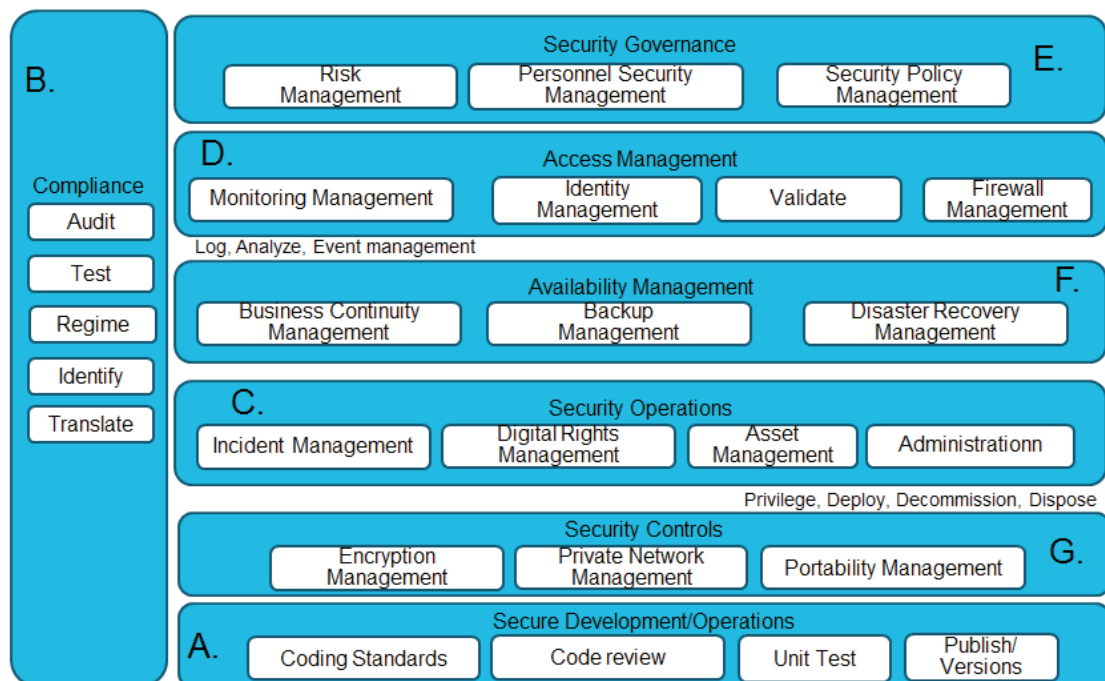
Q14. In the figure that depicts a sample cloud security solutions reference architecture, which major security tools sub-group is responsible for sign-on control?

- a) Cloud Monitoring
- b) Cryptographic Controls
- c) Device Security
- d) Authentication & Authorization
- e) Cloud Service Security Status



Q15. In the sample Security Reference Architecture diagram, which organizational domain is responsible for detecting data breaches?

- a) Secure Development Operations
- b) Compliance
- c) Security Operations
- d) Access Management
- e) Security Governance
- f) Availability Management



Q16. Match the examples of compliance and security standards with the corresponding type of regulation.

Type of Regulation	Example compliance and security standard
a) Data Center Certifications	1. ITIL
b) IT Service Management	2. Tier 3/4
c) Data Privacy Audit compliance	3. SAS70
d) Corporate Legal Compliance	4. HIPAA

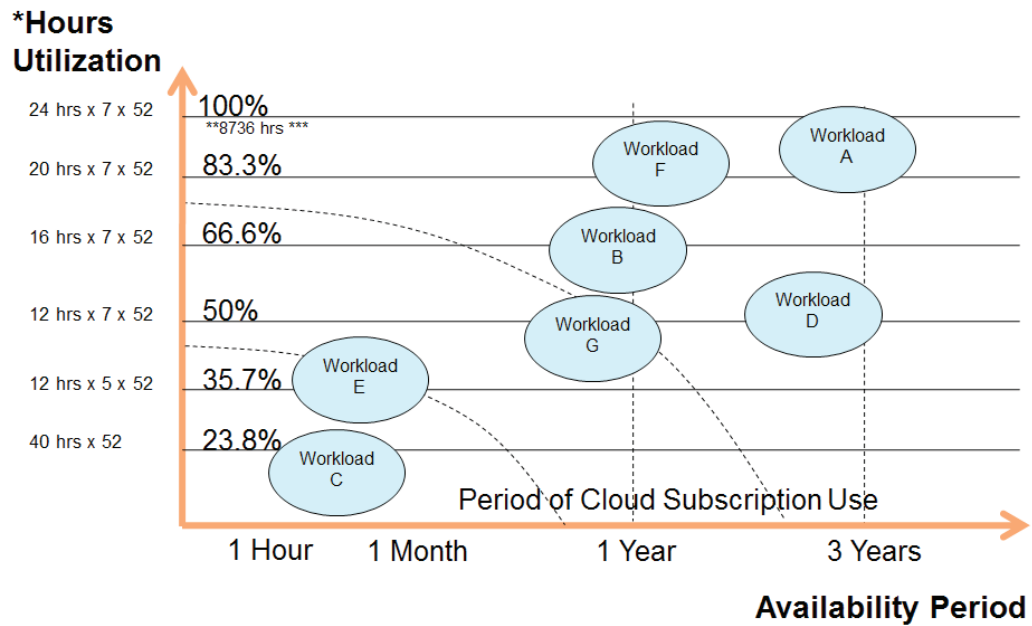
Q17. Which of the following statements is NOT true about the benefits of elastic provisioning and de-provisioning?

- a) Cloud capacity can scale up in times of high demand but remains there for a fixed period.
- b) Cloud capacity can be launched and then shut down rapidly to release capacity back to the cloud pool.
- c) Cloud bursting can create additional spare capacity in times of high peak demand.
- d) Cloud capacity can be fine grained including micro instances and micro-periods that run for minutes or an hour and then released after use.

Q18. Cloud computing can support different types of catalog and sourcing business models: Directories, Marketplace, Orchestrator/Business process Outsourcing, and Community business model. Match the type of cloud enabled procurement process to the type of cloud-enabled catalog business model.

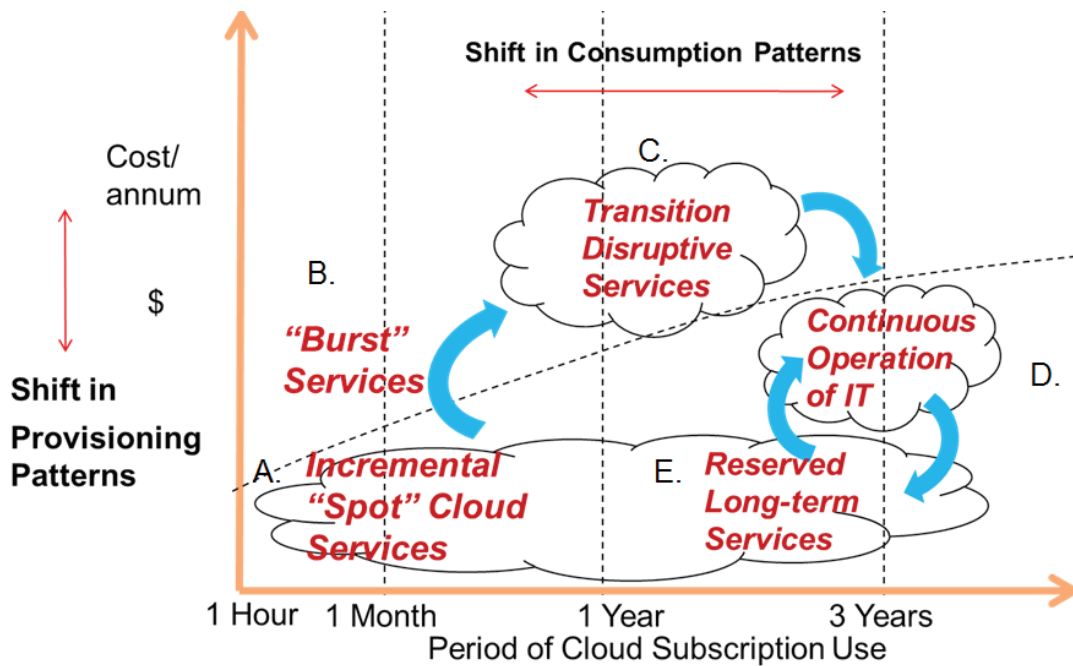
Cloud-Enabled Catalog Business Model	Cloud-Enabled Service Procurement
a) Directories Business Model	1. Online deals typically as auction
b) Marketplace Business Model	2. Online deals with website lists
c) Orchestrator/Business Process Management Outsource Model	3. Facilitated trading deals
d) Community Business Model	4. Business service intermediary manages service

Q19. In the given figure that depicts workload utilization versus period of time, the workload must be available. Which two workloads are candidates for cloud burst services?



- a) Workloads B and G
- b) Workloads A and F
- c) Workloads C and E
- d) Workloads A and D

Q20. In the figure that depicts cloud migration and transition of workloads, which workload transition service is used to support peak loads?



- a) Incremental "spot" cloud services
- b) "Burst" services
- c) Transition disruptive services
- d) Continuous operation of IT
- e) Reserved long-term services

Q21. The five cloud deployment options are managed hosting, private cloud, hybrid cloud, public cloud, and community cloud. Match the type of cloud deployment option to the cloud deployment selection criteria.

Cloud Deployment Type	Cloud Deployment Selection Criteria
a) Managed Hosting	1. Enterprise Social collaboration
b) Private Cloud	2. Commodity cloud service
c) Hybrid Cloud	3. Burst capacity cost avoidance
d) Public Cloud	4. Legacy sunseting
e) Community Cloud	5. Secure dedicated Server clusters

Q22. Cloud computing is a “purchased” service and typically has four different channel ways to purchase: Direct to Market, Indirect to Market, Reselling, and Contracted Call-off. Match the purchasing method to the type of cloud service procurement delivery channel.

Purchasing Method	Cloud service procurement delivery channel
a) Direct to Market	1. VAR and broker markets; value added selling through one or more 3rd party/ parties. In cloud computing, these are constructed, composite services delivered as a service.
b) Indirect to market	2. Sales networks are connected directly to end consumers and buyers of products and services. In cloud computing, these are direct services.
c) Reselling	3. Designated suppliers and providers of products and services based on pre-agreed capacity and demand. In cloud computing, these are certified capacity services.
d) Contracted call off	4. Access to end consumers and buyers is through selling internally to other organizational divisions who sell on or bundle the product and service. In cloud computing, these are facilitated service environments or bundled services.

Q23. The development of data management and the Semantic Web has seen the evolution of Web 1.0, Web 2.0, and Web 3.0.

- Web 1.0 was the early creation of Webpages that formed the early Internet and enables by common syntax and schemas of URLs and HTTP.
- Web 2.0 was the second stage of development of the Internet, characterized especially by the change from static web pages to dynamic or user-generated content and the growth of social media.
- Web 3.0 or described by Tim Bernes-Lee, as the Semantic Web, provides a common framework that allows data to be shared and reused across application, enterprise, and community boundaries. It enables the meaning of data to interpreted and understood by machines to be shared as a “web of data”.

Which of the following options best describes the term semantics.

- a) The objects that exist in a physical or virtual world.
- b) The attributes of the objects.
- c) The meaning of information of objects and its meaning of relations and situations of the object to other objects.
- d) The metadata describing the purpose of objects in an environment.

Q24. Cloud integration and data synchronization has different solution architectures to achieve cloud service integration.

Match the type of Cloud Integration Management method to the Cloud Integration Solution Architecture.

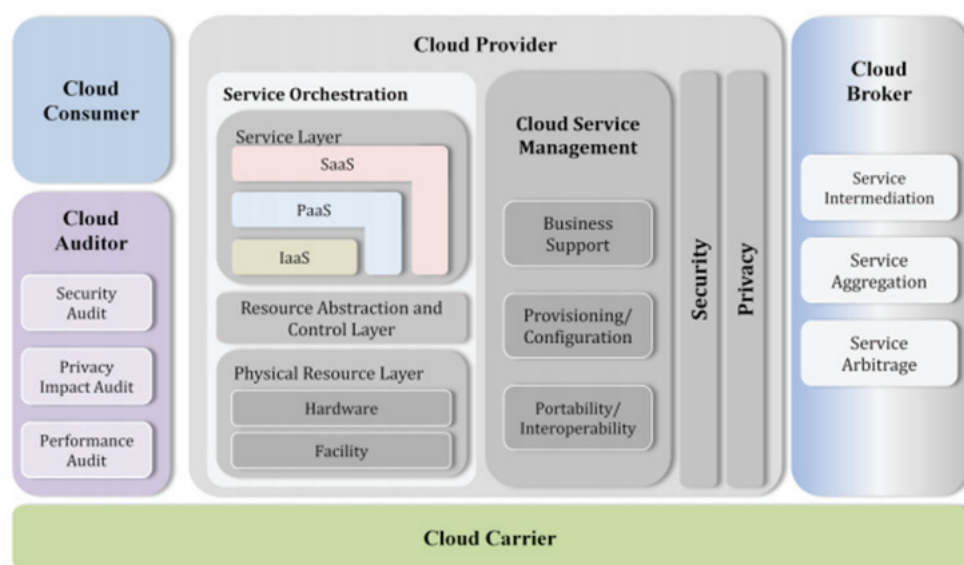
Cloud Integration Solution Architecture	Cloud Integration Management Method
a) Device / BYOD Integration	1. Data Feed collection and aggregation
b) Apps Integration	2. Multiple supplier management demand and supply planning
c) Network Integration	3. Device App Partition
d) Data Integration	4. Converged Infrastructure CI
e) Vendor ITSM Integration	5. API Broker

Q25. In the Conceptual Cloud Reference Architecture shown in the figure, which two cloud roles in the NIST model and their component functions are responsible for cloud service integration?

- a) Cloud Broker: Service Aggregation
- b) Cloud Provider: Service Orchestration – Service Layer SAAS
- c) Cloud Provider: Cloud Management – Business Support
- d) Cloud Provider: Resource Abstraction and Control layer

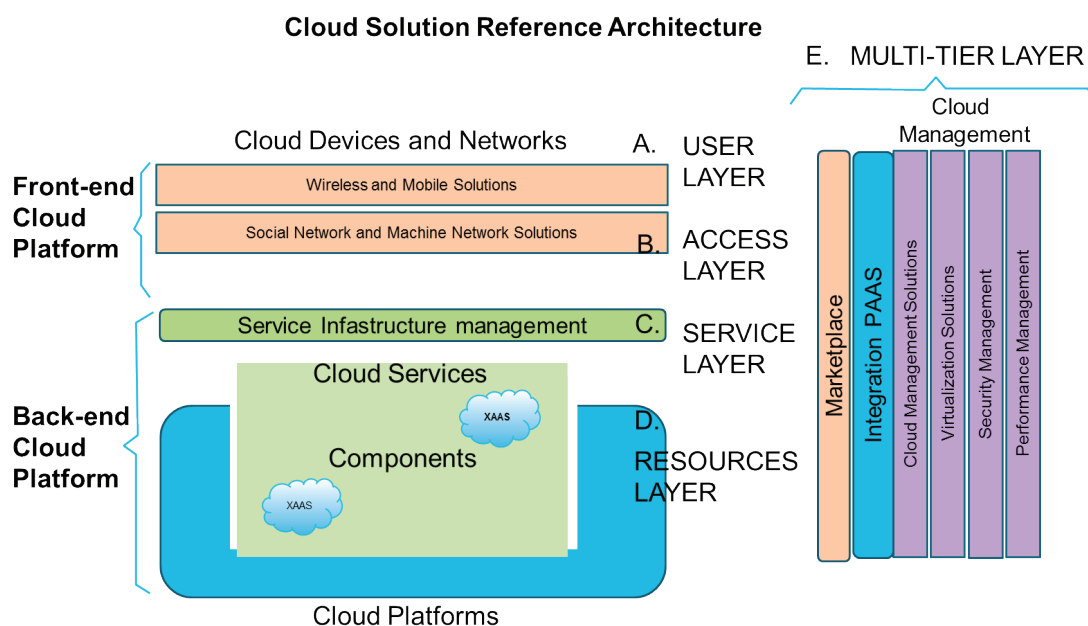
NIST Cloud Computing Reference Architecture (Source: NIST)

Example of Industry Cloud Reference Architecture



Q26. In the given Cloud Computing Reference Architecture (CCRA), there are five major architecture tiers: User Layer, Access layer, Service layer, Resource Layer, and Multi-Tier Layer. Which layer manages the connection between devices and cloud resources?

- a) User Layer
- b) Access Layer
- c) Service Layer
- d) Resource Layer
- e) Multi-Tier Layer

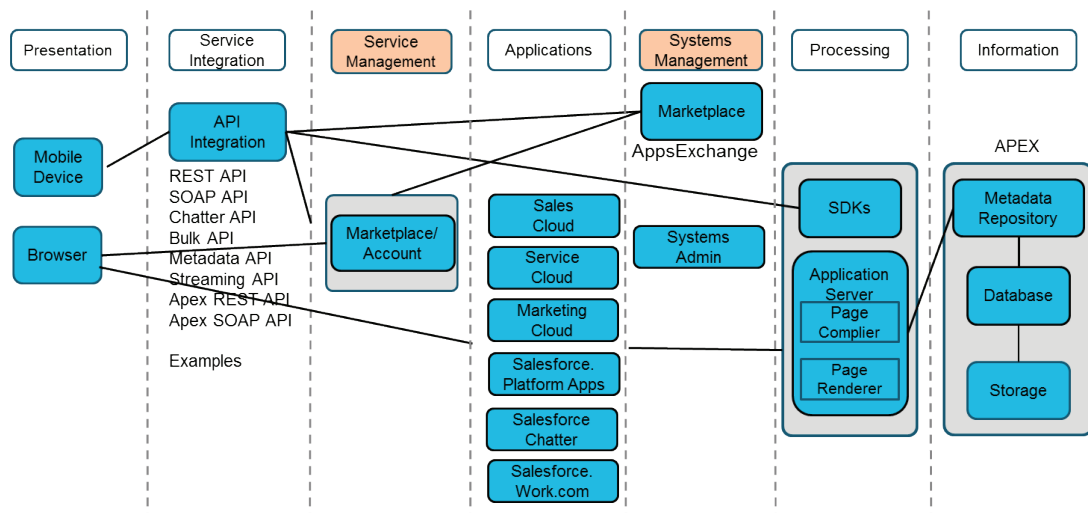


Q27. The multi-tier layer provides functional components that interact with the functional components of the other 4 tiers. Match the multi-tier functions with example functionality of each capability.

Multi-Tier Layer	Example: Multi-Tier Functional Component
a) Operational Support systems capabilities	1. Product catalogue, billing, and financial management.
b) Business Support systems capabilities	2. Software development, testing, and lifecycle management.
c) Security systems capabilities	3. Runtime administration, monitoring, provisioning, and maintenance.
d) Integration capabilities	4. Authentication, authorization, auditing, validation, encryption
e) Development support capabilities	5. API integration and data and service state synchronization management.

Q28. The SaaS conceptual cloud solution architecture, as shown in the figure, illustrates the basic Salesforce.com functions. Which of the following options best explains the purpose of the metadata repository in the information tier?

- a) To provide capabilities in marketplace management
- b) To provide capabilities in data mapping of each tenant data view to a master data model
- c) To provide capabilities in systems administration of the service accounts
- d) To provide capabilities in API integration

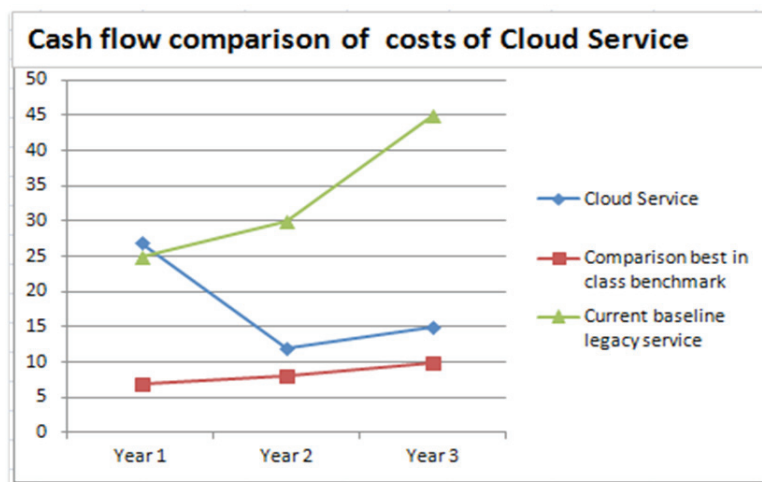


Q29. Which of the following statements best explains the key shift in roles and responsibilities moving from a private cloud to a public cloud for a cloud service provider?

- a) Service security becomes the accountability and responsibility of the cloud service provider.
- b) End user experience becomes the responsibility of the cloud service consumer.
- c) SLA availability performance of the cloud service becomes the responsibility to the cloud service provider.
- d) Technical specification of the cloud service becomes the responsibility of the cloud service consumer.

Q30. The sample cash flow graph shows the accumulative cash flow payments for the same IT service over 3 years comparing a cloud computing service (blue diamond line), a tradition IT legacy hosted service (Green triangle line), and a best in class cloud service (Red square line).

Which of the following statements best describes a reason why the best in class cloud service cash flow payments is lower in the first year from an enterprise customer adoption perspective?



- a) The cloud service is a hyper scale cloud data center will ultra-low IT service asset (compute, storage, application services) prices.
- b) The cloud service has benchmarking services to provide estimated of projected savings which may be representative of similar enterprise environment usage.
- c) The cloud service has a close fit to the enterprise requirements with tools and services to accelerate the adoption of the company data migration and setup into the new cloud service rapidly.
- d) The cloud service has a wide range of workloads that can be customized to meet specific needs of the enterprise.

Mock Exam Answer

Q1. Answer:

- b) Traditional IT Capacity assumed it would manually purchase enough in time if actual demand capacity rose faster than expected.

Q2. Answer:

- d) cloud computing available capacity can increase and decrease depending on the actual demand for capacity for each customer tenant need based on the policies for the cloud service.

Q3. Answer:

- c) A private cloud hosted online gaming platform that bursts to a public cloud at times of high workload.

Q4. Answer:

- a) Single OS instance configured to run a large memory intensive program.

Q5. Answer:

- b) Online car hire services in a public cloud enables local residents in locations to hire their cars out to public use.

Q6. Answer:

- c) A multi-national pharmaceutical business can conduct drug research data modelling using big data analytics.

Q7. Answer:

Cloud-Enabled Business Platforms	Types Of Cloud Service
a) Social Network Platform	5. Messaging services
b) Mobile Device Management Platform	3. BYOD Partition Management services
c) Sensor Network Platform	2. Building room temperature management
d) Market Platform	1. B2B services
e) Big Data Analytics Platform	4. Recommendations engine

Q8. Answer:

- c) Cloud computing is a distributed computing model that supports IT ownership and subscription based IT funding and consumption model options.

Q9. Answer:

Pricing Model	Payment Mechanisms
a) Trading	1. Spot Cloud pricing
b) Freemium	4. Open source rights
c) Investment in the Cloud	3. Purchase per instance host
d) Pay per usage	2. Pay-per-time period (for example monthly)

Q10. Answer:

- d) Personal data collection by third-parties

Q11. Answer:

- c) CDC has control zones for types of cloud deployment partitioning for closer data scrutiny and compliance.

Q12. Answer:

- c) A mobile cloud can have a multiple device management platform to support Bring Your Own Device (BYOD), smart devices, and virtual desktop (VDI) technologies. This can support remote configuration and remote trouble shooting for the end user.

Q13. Answer:

- c) Multiple zone partitioning

Q14. Answer:

- d) Authentication & Authorization

Q15. Answer:

- d) Access Management

Q16.Answer:

Type of Regulation	Example compliance and security standard
a) Data Center Certifications	2. Tier 3/4
b) IT Service Management	1. ITIL
c) Data Privacy Audit compliance	4. HIPAA
d) Corporate Legal Compliance	3. SAS70

Q17.Answer:

- a) Cloud capacity can scale up in times of high demand but remains there for a fixed period.

Q18.Answer:

Cloud-Enabled Catalog Business Model	Cloud-Enabled Service Procurement
a) Directories Business Model	2. Online deals with website lists
b) Marketplace Business Model	3. Facilitated trading deals
c) Orchestrator/Business Process Management Outsource Model	4. Business service intermediary manages service
d) Community Business Model	1. Online deals typically as auction

Q19.Answer:

- c) Workloads C and E

Q20.Answer:

- b) "Burst" services

Q21.Answer:

Cloud Deployment Type	Cloud Deployment Selection Criteria
a) Managed Hosting	4. Legacy sunsetting
b) Private Cloud	5. Secure dedicated Server clusters;
c) Hybrid Cloud	3. Burst capacity cost avoidance;
d) Public Cloud	2. Commodity cloud service;
e) Community Cloud	1. Enterprise Social collaboration

Q22.Answer:

Purchasing Method	Cloud service procurement delivery channel
<ul style="list-style-type: none"> a) Direct to Market b) Indirect to market c) Reselling d) Contracted call off 	<ul style="list-style-type: none"> 2. Sales networks are connected directly to end consumers and buyers of products and services. In cloud computing, these are direct services. 4. Access to end consumers and buyers is through selling internally to other organizational divisions who sell on or bundle the product and service. In cloud computing, these are facilitated service environments or bundled services. 1. VAR and broker markets; value added selling through one or more 3rd party/parties. In cloud computing, these are constructed, composite services delivered as a service. 3. Designated suppliers and providers of products and services based on pre-agreed capacity and demand. In cloud computing, these are certified capacity services.

Q23.Answer:

- C) The meaning of information of objects and its meaning of relations and situations of the object to other objects.

Q24.Answer:

Cloud Integration Solution Architecture	Cloud Integration Management Method
<ul style="list-style-type: none"> a) Device / BYOD Integration b) Apps Integration c) Network Integration d) Data Integration e) Vendor ITSM Integration 	<ul style="list-style-type: none"> 3. Device App Partition; 5. API Broker; 4. Converged Infrastructure CI 1. Data Feed collection and aggregation 2. Multiple supplier management demand and supply planning

Q25.Answer:

- a) Cloud Broker: Service Aggregation
- and
- b) Cloud Provider: Service Orchestration – Service Layer SAAS

Q26.Answer:

- c) Service Layer

Q27.Answer:

Multi-Tier Layer	Example: Multi-Tier Functional Component
a) Operational Support systems capabilities	3. Runtime administration, monitoring, provisioning, and maintenance.
b) Business Support systems capabilities	1. Product catalogue, billing, and financial management.;
c) Security systems capabilities	4. Authentication, authorization, auditing, validation, encryption;
d) Integration capabilities	5. API integration and data and service state synchronization management.
e) Development support capabilities	2. Software development, testing, and lifecycle management

Q28. Answer:

- b) To provide capabilities in data mapping of each tenant data view to a master data model

Q29.Answer:

- c) SLA availability performance of the cloud service becomes the responsibility to the cloud service provider.

Q30.Answer:

- b) The cloud service has benchmarking services to provide estimated of projected savings which may be representative of similar enterprise environment usage.

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