

CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide

Preface:

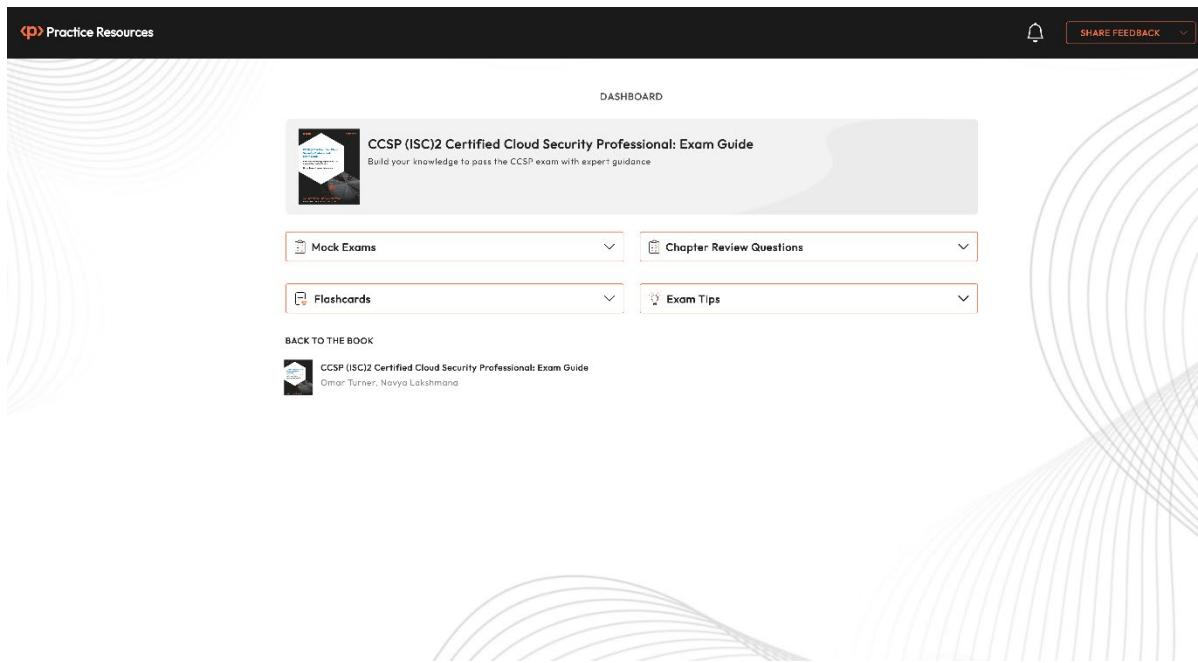


Figure 0.1 – Online exam-prep platform on a desktop device

Chapter 1: Core Cloud Concepts

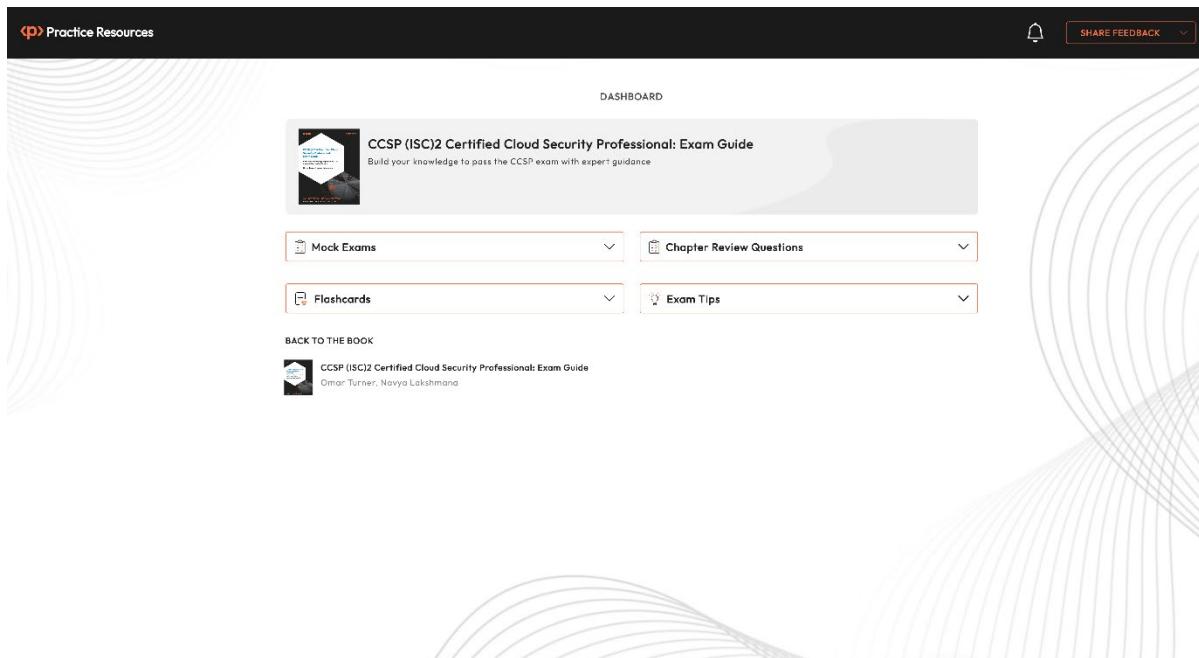


Figure 1.1 – Dashboard interface of the online practice resources

A screenshot of the 'Chapter Review Questions' interface for Chapter 1. The top navigation bar shows 'DASHBOARD > CHAPTER 1' and includes the 'Practice Resources' logo, a bell icon, and a 'SHARE FEEDBACK' button. The main content area is titled 'Core Cloud Concepts' and has a 'Summary' section. The summary text states: 'In this chapter, you learned the fundamental definitions of cloud computing, the different types of stakeholders involved, the activities, and the technology models and building blocks. These are the core CCSP exam topics.' It also notes: 'The next chapter will provide more details regarding the cloud reference architecture, the service models, and the cloud deployment models and capabilities. The chapter will also specify the shared considerations for cloud deployments and the impact of new and emerging technologies on the evolution of cloud computing.' To the right of the summary is a dark sidebar titled 'Chapter Review Questions' for 'The CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide by Omar Turner, Navya Lakshmana'. It contains a 'Select Quiz' section with a 'Quiz 1' button, a 'SHOW QUIZ DETAILS' dropdown menu, and a 'START' button.

Figure 1.3 – Chapter Review Questions for Chapter 1

Chapter 2: Cloud Reference Architecture

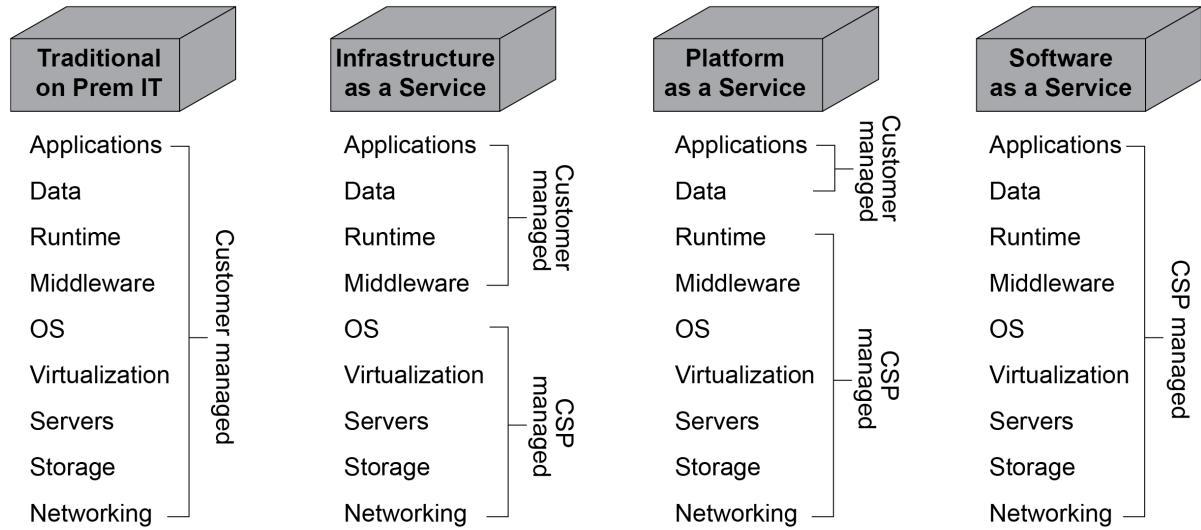


Figure 2.1 – Cloud service models with SaaS built on top of IaaS and PaaS

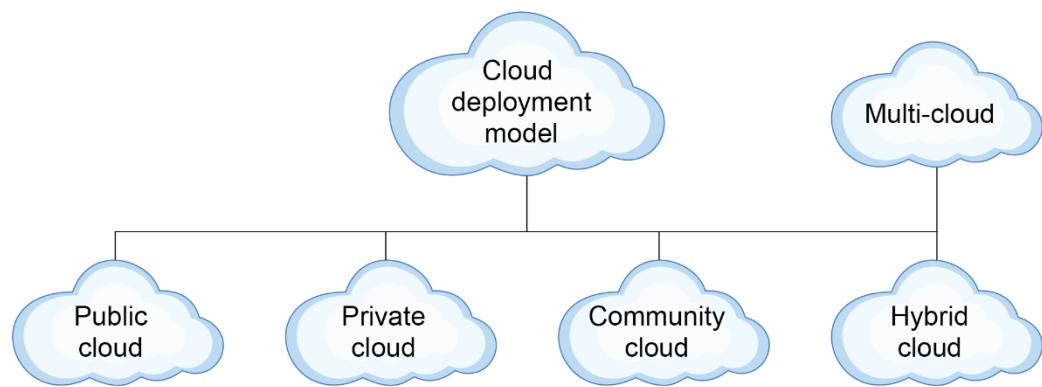


Figure 2.2 – Cloud deployment models

	Infrastructure (IaaS)	Platform (PaaS)	Software (SaaS)
People	Consumer	Consumer	Consumer
Data	<p>0 0 1 0 1 1 0 1 0 1 0 0 1 0 1 0</p>	<p>0 1 0 1 1 0 0 0 0 1 1 0</p>	<p>0 1 0 0 0 1 1 1 1 1 1 0 0 1 0 0 1 0 0 0</p>
Applications	Consumer	Consumer	CSP
Operating System	Consumer	CSP	CSP
Virtual Networks	Consumer	CSP	CSP
Hypervisors	CSP	CSP	CSP
Servers/Storage	CSP	CSP	CSP
Physical Networks	CSP	CSP	CSP
Shared responsibility model in relation to cloud service models			

Figure 2.3 – Shared responsibility model in relation to cloud service models



Cloud Reference Architecture

Summary

In this chapter, you learned about cloud service capabilities and how they relate to cloud service models. You also learned about the different types of cloud deployment models and how responsibilities change depending on the cloud deployment models and cloud service models being offered and used. Many new and emerging technologies which are related to cloud computing were also introduced.

For your CCSP exam, make sure you grasp the definitions that are introduced in this chapter. Many CCSP exam questions focus on key cloud terms and definitions. You need to be able to describe different cloud service models. It is very important that you know the differences between the three cloud service models—IaaS, PaaS, and SaaS—and the different features and characteristics associated with them. It is vitally important that you grasp the features of the five cloud deployment models—public, private, community, hybrid, and multi-cloud—as well as being able to describe their differences.

In the next chapter, you will turn your attention to the top threats that cloud deployments are facing every day. The chapter will also discuss how the application of the key cloud security concepts and controls can help mitigate risks.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

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START

Figure 2.5 – Chapter Review Questions for Chapter 2

Chapter 3: Top Threats and Essential Cloud Security Concepts and Controls

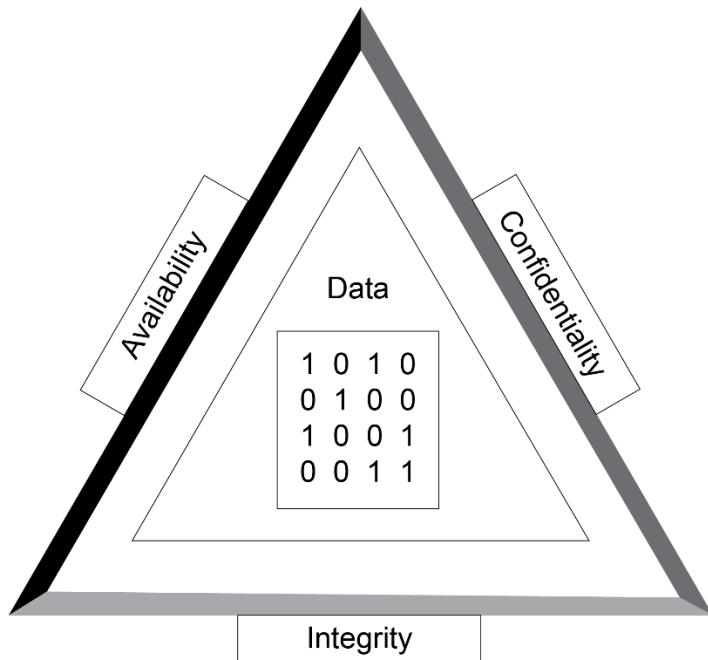


Figure 3.1 – The CIA triad showing the three information security concepts

The screenshot shows a chapter review interface. At the top, there are navigation links for "Practice Resources", "DASHBOARD > CHAPTER 3", and "SHARE FEEDBACK". Below this, the title "Top Threats and Essential Cloud Security Concepts and Controls" and a "Summary" section are displayed. The summary text discusses fundamental security concepts like confidentiality, integrity, and availability, and mentions common threats to cloud deployments. To the right, a "Chapter Review Questions" section is shown, featuring a "Select Quiz" dropdown, a "Quiz 1" button, and a "START" button.

Figure 3.3 – Chapter Review Questions for Chapter 3

Chapter 4: Design Principles for Secure Cloud Computing

The screenshot shows a web-based learning platform interface. At the top, there's a navigation bar with a logo, 'Practice Resources', a bell icon, and a 'SHARE FEEDBACK' button. Below the navigation is a breadcrumb trail: 'DASHBOARD > CHAPTER 4'. The main content area has a title 'Design Principles for Secure Cloud Computing' and a 'Summary' section. The summary text discusses the shared responsibility model between cloud providers and users for IaaS, PaaS, and SaaS. It also lists 12 key tasks for XaaS security, such as recognizing service models, implementing access controls, and ensuring data privacy. To the right of the summary is a 'Chapter Review Questions' sidebar. This sidebar includes the exam title ('The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana'), a 'Select Quiz' dropdown, and a quiz card for 'Quiz 1' with a 'START' button.

For the CCSP exam, it is essential that you comprehend cloud security concepts such as IaaS, PaaS, and SaaS. Each service model has distinct security challenges and requirements that must be learned in order for you to succeed.

When it comes to IaaS, PaaS, and SaaS, you and the cloud provider share responsibility for security. With IaaS, you must protect your applications, data, and operating systems on virtual machines while the provider takes care of the physical security of the infrastructure. With PaaS, the provider will take care of platform and middleware security so all that remains for you to focus on is keeping apps and data safe. While SaaS providers do most of the heavy lifting when it comes to security and access control, data protection always remains your responsibility.

The following is a summary of the *Core Elements of Security for IaaS*, *Core Elements of Security for PaaS*, *Core Elements of Security for SaaS* sections:

- Recognize and classify XaaS cloud service models such as public, private, hybrid, and community.
- Recognize the distinctions between cloud deployment models and their security implications.
- Acquaint yourself with the shared responsibility model in XaaS, including the roles of CSP and customers.
- Enforce secure access controls such as IAM.
- Encrypt data storage with encryption both at rest and during transit.
- Implement secure network architecture and segmentation within XaaS environments.
- Monitor and audit XaaS environments to ensure security and compliance.
- Guarantee data security and privacy by adhering to regulations such as GDPR, HIPAA, and PCI-DSS.
- Conduct vulnerability assessments and penetration testing in IaaS environments.
- Develop incident response and disaster recovery plans tailored specifically for IaaS.
- Evaluate and select suitable security controls and tools tailored towards XaaS environments.

By mastering these topics, you'll be prepared to design, set up, and manage secure cloud environments like an expert. Becoming familiar with IaaS, PaaS, and SaaS security protocols is essential for passing the exam and ensuring your company's cloud resources remain safe and secure.

Designing a secure cloud computing environment necessitates taking a proactive and ongoing approach to security. Organizations must adhere to the shared responsibility model, acknowledging their individual security responsibilities in the cloud. They must implement strong access controls, encryption, and data loss prevention techniques to safeguard their data and applications. Regular monitoring and auditing of the cloud environment are key for detecting potential security risks early on and taking appropriate measures to address them. Additionally, organizations must abide by relevant industry regulations and standards, as well as have an established incident response plan for handling security incidents. By adhering to these design principles for secure cloud computing, companies can reduce the risks associated with cloud computing while ensuring the confidentiality, integrity, and availability of their data and applications.

In the next chapter, you will learn about the key cloud service contractual documents from the perspective of cloud service consumers. You will also learn about the best practices of how to evaluate CSPs based on a set of criteria.

Figure 4.2 – Chapter Review Questions for Chapter 4

Chapter 5: How to Evaluate Your Cloud Service Provider

The screenshot shows a dark-themed user interface for 'Practice Resources'. At the top left is the 'Practice Resources' logo. On the right are a bell icon and a 'SHARE FEEDBACK' button. Below the header, a breadcrumb navigation shows 'DASHBOARD > CHAPTER 5'. The main content area has a title 'How to Evaluate Your Cloud Service Provider' and a 'Summary' section. The summary contains several paragraphs of text about evaluating CSPs, contractual documents, best practices, security management, and the next chapter's topics. To the right, a dark box titled 'Chapter Review Questions' displays the book cover for 'The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide' by Omar Turner, Navya Lakshmana. It includes a 'Select Quiz' dropdown, a 'Quiz 1' entry, a 'SHOW QUIZ DETAILS' link, and a 'START' button.

DASHBOARD > CHAPTER 5

How to Evaluate Your Cloud Service Provider

Summary

Evaluating CSPs is a crucial process that requires careful consideration of your specific business needs and security requirements. A well-informed decision will help you select the right CSP that offers scalable, reliable, and secure services.

Critical contractual documents, including the CSA, AUP, and SLA, provide important information that should be thoroughly reviewed before signing a contract with a CSP. You must be aware of their differences to be prepared for the exam.

When evaluating CSP services, best practices include knowing your business needs, assessing security and compliance, evaluating performance and uptime, checking customer references, and reviewing pricing and contract terms. In other words, you must take a holistic approach when evaluating CSP services.

Security, risk management, and compliance in the cloud rely heavily on these agreements. A solid grasp of these concepts will not only help you succeed in the CCSP exam, but also contribute to your professional expertise in managing cloud security and mitigating risks associated with cloud services.

In the next chapter, you will explore cloud data concepts, cloud data storage architectures, data security, data classification, and cloud data security technologies – all very critical to managing data governance in the cloud.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

SHOW QUIZ DETAILS ▾

START

Figure 5.2 – Chapter Review Questions for Chapter 5

Chapter 6: Cloud Data Security Concepts and Architectures

The screenshot shows a web-based learning platform interface. At the top, there's a dark header bar with the 'Practice Resources' logo on the left and a 'SHARE FEEDBACK' button with a dropdown arrow on the right. Below the header, the navigation path 'DASHBOARD > CHAPTER 6' is visible. The main content area has a title 'Cloud Data Security Concepts and Architectures' and a 'Summary' section. The summary text discusses the importance of understanding cloud data security, storage types, threats, and security policies. It also mentions the importance of data classification and governance. A note at the bottom indicates the next chapter will cover data governance. To the right, a dark sidebar titled 'Chapter Review Questions' lists the CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana. It features a 'Select Quiz' section with 'Quiz 1' and a 'START' button, along with a 'SHOW QUIZ DETAILS' link.

Figure 6.2 – Chapter Review Questions for Chapter 6

Chapter 7: Data Governance Essentials

The screenshot shows a dark-themed user interface for 'Practice Resources'. At the top, there's a navigation bar with the 'Practice Resources' logo, a bell icon for notifications, and a 'SHARE FEEDBACK' button. Below the navigation is a breadcrumb trail: DASHBOARD > CHAPTER 7. The main content area is titled 'Data Governance Essentials' and has a 'Summary' section. The summary text discusses the importance of IRM in maintaining data security and the responsibilities of CCSP candidates. It also mentions the evolution of data governance and the need for continuous learning. A callout box at the bottom right of the summary section points to the 'Chapter Review Questions' section. To the right of the summary is a sidebar titled 'Chapter Review Questions' which includes a link to the 'CCSP (ISC)2 Certified Cloud Security Professional Exam Guide' by Omar Turner and Navya Lakshmana, a 'Select Quiz' dropdown, and a 'Quiz 1' section with a 'SHOW QUIZ DETAILS' link and a 'START' button.

DASHBOARD > CHAPTER 7

Data Governance Essentials

Summary

IRM is a crucial area of cloud data governance. Its essential components work together to keep data secure and available within the cloud for CSPs, the organizations they serve, and those organizations' customers. The correct implementation of IRM in the cloud safeguards sensitive and valuable information, building the business's and the public's trust in the cloud as a secure and reliable computing environment.

CCSP candidates should have a thorough understanding of IRM, auditability, traceability, and accountability in cloud data governance. It is vital for them to know how and why IRM mechanisms, such as access controls, encryption, data classification, monitoring, and auditing, are implemented in cloud environments. To succeed in cloud data security, CCSP candidates should have a solid understanding of the tools and techniques of IRM and understand its importance in the context of their organization, their industry, the evolving cyber-threat landscape, and relevant legislative requirements. You have covered these topics at length in this chapter, so please ensure that you understand them.

Mapping out a successful cloud data governance strategy takes careful planning, knowledgeable people, and well-chosen tools and technologies. Investing in complete IRM solutions, strong traceability methods, and sophisticated audit tools will empower organizations to get a sure handle on their data. Also, creating an environment of responsibility and encouraging knowledge about best practices for data management among workers are important to achieving success. Everyone in the organization—not just cloud security professionals—must know their roles and responsibilities regarding data governance. Additionally, they need to remain updated about developments and emerging technologies related to data governance. Staying informed can empower them to change their tactics early and gain an advantage in tackling growing issues.

In the next chapter, you will pivot a bit and look at the infrastructure and platform components of a secure data center.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

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Figure 7.2 – Chapter Review Questions for Chapter 7

Chapter 8: Essential Infrastructure and Platform Components for a Secure Data Center

The screenshot shows a web-based learning platform interface. At the top, there's a dark header bar with the text "Practice Resources" and a bell icon. To the right of the bell icon is a button labeled "SHARE FEEDBACK". Below the header, the main content area has a title "Essential Infrastructure and Platform Components for a Secure Data Center" and a sub-section titled "Summary". The summary text discusses the importance of various cloud infrastructure elements like physical environment, network, storage, compute, virtualization, and management plane, and how they interconnect. It also mentions logical mechanisms for tenant partitioning and environmental design measures like aisle configuration. To the right of the summary is a sidebar titled "Chapter Review Questions" which includes a link to the "CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide" by Omar Turner and Navya Lakshmana, and a "Select Quiz" section with a "Quiz 1" button, a "SHOW QUIZ DETAILS" dropdown, and a "START" button.

DASHBOARD > CHAPTER 8

Essential Infrastructure and Platform Components for a Secure Data Center

Summary

So you made it to the end of this chapter! You reviewed how modern cloud infrastructure is heavily reliant on important elements, each critical to its functionality and efficiency. When selecting the location for a data center, organizations must decide whether to build a new facility or purchase an existing one, taking into account factors such as cost, scalability, and proximity to users. Optimizing data center operations involves managing environmental influences such as heat and humidity to ensure optimal performance and energy efficiency. Additionally, secure logical mechanisms are essential for CSPs to segregate resources among multiple tenants, ensuring proper data flow and maintaining data security and privacy across shared environments.

For the exam, make sure you know the cloud platform components: physical environment, network, storage, compute, virtualization, and management plane. More importantly, you should understand their roles and how they interconnect. Focus on specific technologies and mechanisms for each component, such as SDN for networking, reservations, limits, and shares for computing, and hypervisors for virtualization.

From a data center design perspective, you must fully grasp the logical architecture, as it focuses on core cloud mechanisms such as tenant partitioning, which are key for maintaining secure and efficient cloud operations.

The physical and environmental designs are also important. Understand the risk assessment and strategic decision-making involved in choosing a data center location, considering the susceptibility to natural disasters, proximity to threat vectors, and the balance of accessibility versus security.

Environmental design measures, such as aisle configuration to enhance cooling efficiency and multi-vendor connectivity to maximize redundancy, are also subjects you should expect to encounter on the exam.

In the next chapter, you will look at the top risks to physical, logical, and virtual environments as a cloud consumer and provider. You will discuss how to analyze, assess, and address the risk with safeguards and countermeasures—a very important topic, not only for the exam but for cloud security professionals as well.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

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Figure 8.2 – Chapter Review Questions for Chapter 8

Chapter 9: Analyzing Risk

Shared responsibility model

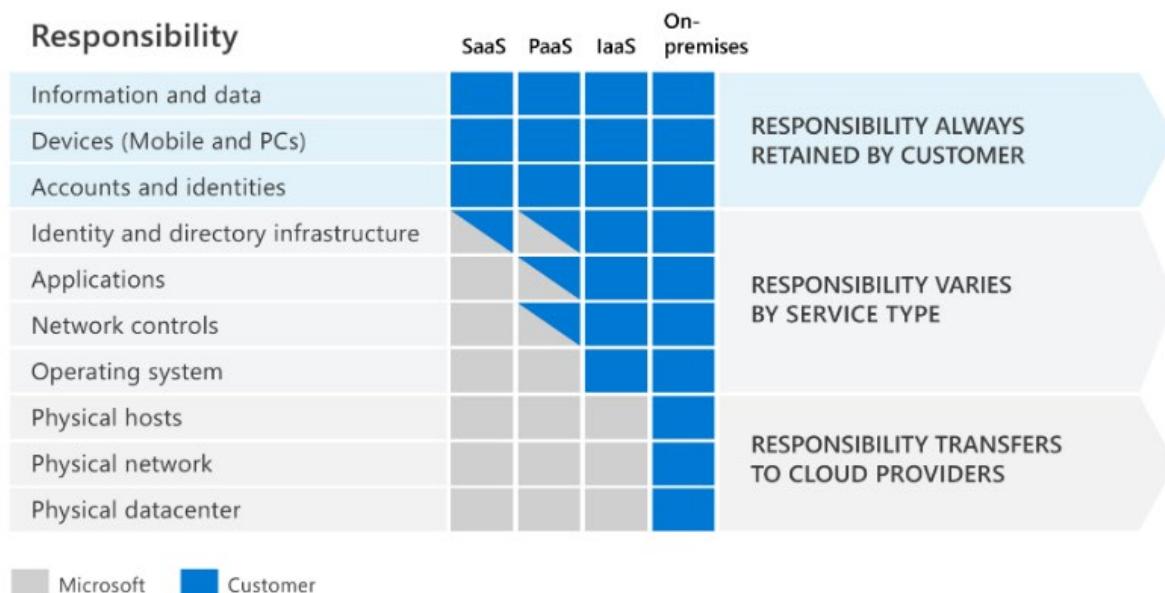


Figure 9.1 – Understanding the shared responsibility model in cloud security

Practice Resources

DASHBOARD > CHAPTER 9

Analyzing Risk

Summary

In this chapter, you covered risk management across CSPs, various cloud service and deployment models, and the methods to identify, assess, and address risks, threats, and vulnerabilities. A CCSP candidate must be able to explain and implement risk management concepts, including understanding the risks associated with different cloud service models (IaaS, PaaS, and SaaS) and deployment models (public, private, hybrid, and community). They should be familiar with the shared responsibility model, common cloud risks, and industry-standard risk frameworks such as NIST RMF and ISO 31000:2018.

Additionally, candidates should know how to evaluate CSPs using tools such as CSA STAR and ISO 27001, differentiate between threats, vulnerabilities, and risks, and outline risk identification and assessment techniques. Best practices in risk countermeasures, understanding common cloud attack vectors and mitigation strategies, identifying threat actors, and IR in cloud computing are also crucial areas. Finally, they must be able to explain risk response strategies and name cloud security governance frameworks. This domain is essential, especially for those not regularly working with risk concepts, and further resources are provided for deeper exploration. The next chapter will focus on selecting, planning, and implementing security controls in cloud environments.

Chapter Review Questions

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Select Quiz

Quiz 1 SHOW QUIZ DETAILS ▾ START

Figure 9.3 – Chapter Review Questions for Chapter 9

Chapter 10: Proper Security Control Implementation

The screenshot shows a web-based learning platform interface. At the top, there's a navigation bar with a logo, 'Practice Resources', a bell icon, and a 'SHARE FEEDBACK' button. Below the navigation is a breadcrumb trail: 'DASHBOARD > CHAPTER 10'. The main content area has a title 'Proper Security Control Implementation' and a 'Summary' section. The summary text encourages users to review learned concepts for the CCSP exam, mentioning physical and environmental controls, system and data protection, IAM, and comprehensive audit mechanisms. It also discusses the importance of distinguishing between identification, authentication, and authorization. A note about auditing and cloud environments follows, along with a statement about business continuity and disaster recovery. To the right, a sidebar titled 'Chapter Review Questions' provides information about the CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner and Navya Lakshmana. It includes a 'Select Quiz' section with a 'Quiz 1' entry, a 'SHOW QUIZ DETAILS' link, and a 'START' button.

DASHBOARD > CHAPTER 10

Proper Security Control Implementation

Summary

Good job on getting to the end of this chapter! You learned about some very important concepts that will prepare you for the CCSP exam. A lot was covered, so let's recap some of the main points to ensure that they're well ingrained in your memory:

- **Physical and environmental controls:** The critical need to secure the physical infrastructure of data centers, including protective measures such as surveillance, access restrictions, and environmental controls to maintain the integrity and availability of services, was discussed.
- **System and data protection:** Emphasizing the importance of safeguarding data across all states – whether at rest, in transit, or in use – encryption techniques, secure API implementations, and the necessity for strict access controls were covered. Here, you also learned how to secure networks within cloud environments through the use of virtual firewalls, IDSs/IPSs, and the strategic segmentation of network trust zones to enhance security postures.
- **IAM:** You explored the roles of OpenID and OAuth in managing identities and accesses effectively across multiple platforms, thereby reducing complexity and improving security in cloud-based systems.
- **Comprehensive audit mechanisms:** You learned about the importance of audit mechanisms such as log collection, correlation analysis, and packet capture to detect, prevent, and respond to potential security threats efficiently.

Some of the key areas you should remember from this chapter are related to distinguishing between identification, authentication, and authorization. Identification involves verifying a user's identity, authentication confirms it, and authorization determines the user's access rights to resources. Get familiar with the key mechanisms and technologies used in implementing these processes, such as MFA, RBAC, and OAuth protocols.

Understanding comprehensive audit mechanisms in cloud environments is crucial for the CCSP exam. Auditing encompasses log collection, correlation, and packet capture to ensure compliance and monitor security. You should have a solid grasp of how audits can be scoped based on the cloud model (IaaS, PaaS, and SaaS) and contractual agreements. Additionally, make sure you understand the specific security controls to protect data, systems, and communication. This includes protecting data at all stages (at rest, transit, and in use) through appropriate encryption protocols, access controls, and monitoring practices.

In the next chapter, you will dive into how organizations can prepare to withstand disasters and business disruptions so they can continue the delivery of products and services within acceptable time frames. The use of cloud services can be seen as a key element in supporting critical business functions if there is a major disruption, so understanding business continuity and disaster recovery as it relates to the use of the cloud is very important.

Chapter Review Questions

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Select Quiz

Quiz 1 [SHOW QUIZ DETAILS](#) [START](#)

Figure 10.2 – Chapter Review Questions for Chapter 10

Chapter 11: Planning for the Worst-Case Scenario – Business Continuity and Disaster Recovery

The screenshot shows a web-based learning platform. At the top, there's a dark header bar with the "Practice Resources" logo on the left, a bell icon with a notification count of "1" in the center, and a "SHARE FEEDBACK" button with a dropdown arrow on the right. Below the header, the URL "DASHBOARD > CHAPTER 11" is visible. The main content area has a light gray background. On the left, a large white box contains the "Summary" section for Chapter 11. It includes several paragraphs of text about Business Continuity and Disaster Recovery (BCDR), its importance, implementation steps, and future topics. On the right, a dark sidebar titled "Chapter Review Questions" lists "Quiz 1" and provides a "START" button. Above the quiz, it mentions the book "The CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide" by Omar Turner, Navya Lakshmana.

DASHBOARD > CHAPTER 11

Planning for the Worst-Case Scenario – Business Continuity and Disaster Recovery

Summary

Good job on making it to the end of this chapter! The information you covered will be highly actionable both in the CCSP exam and in your career as a cloud professional. You covered a lot, so let's recap some of the main ideas:

BCDR is a set of practices that support an organization's ability to remain operational and recover from adverse events.

BCDR in the cloud is important because it provides clear guidelines for employees to follow in the event of a disaster. It also supports operational stability and ensures that critical business functions can continue with minimal disruption.

To develop a BCDR plan, you first need to understand and analyze the organization's specific business requirements and risks, along with relevant compliance standards.

BCDR implementation includes steps to synchronize the primary and secondary systems to ensure data consistency and quick recovery in the event of a disaster.

Ongoing testing and refinement are necessary to ensure that objectives (including RTO and RPO) are being met.

In our next chapter, you will look at the critically important topic of application security. You will review the development basics, the challenges organizations face, and the common cloud vulnerabilities of web applications.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

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START

Figure 11.2 – Chapter Review Questions for Chapter 11

Chapter 12: Application Security

The screenshot shows a dark-themed web interface for 'Practice Resources'. At the top left is the 'Practice Resources' logo. On the right are a bell icon, a 'SHARE FEEDBACK' button, and a dropdown menu. Below the header, a breadcrumb navigation shows 'DASHBOARD > CHAPTER 12'. The main content area has a title 'Application Security' and a 'Summary' section. The summary text discusses the benefits of cloud computing (flexibility, efficiency, scalability) and the associated security risks (vulnerability to malicious actors). It also mentions the OWASP Top 10 list and the importance of threat modeling. To the right, a 'Chapter Review Questions' sidebar lists the CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner and Navya Lakshmanan. It includes a 'Select Quiz' section with a 'Quiz 1' button, a 'SHOW QUIZ DETAILS' dropdown, and a 'START' button.

DASHBOARD > CHAPTER 12

Application Security

Summary

The cloud has transformed the way businesses operate. Moving to the cloud enables organizations to increase workforce flexibility, improve process efficiencies, and enhance their long-term scalability and resilience.

At the same time, the cloud also creates serious security risks. Cloud applications are vulnerable to malicious actors because they are often open to the internet and carry sensitive data. Organizations must secure their cloud-based applications to minimize the threat of serious cyberattacks and business-crippling data breaches. The consequences of not doing so can be fatal.

Since most of the web applications are internet-facing, they enable threat actors to slip past enterprise security defenses and engineer all kinds of dangerous cyberattacks. To protect their applications, organizations must take application security seriously.

The OWASP Top 10 list provides a good starting point to identify vulnerabilities in web applications. By following its guidelines, organizations can write more secure code, strengthen their application testing processes, and act early to fix security gaps. The payoff of these efforts is huge – more secure applications that protect the company's data, customers, and reputation from harm. A CCSP with this knowledge will be critical to these ongoing efforts.

In the next chapter, you will delve further into the Secure SDLC, its implementation in software development, and the essential task of threat modeling.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmanan

Select Quiz

Quiz 1

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Figure 12.2 – Chapter Review Questions for Chapter 12

Chapter 13: Secure Software Development Life Cycle

The screenshot shows a web-based learning platform interface. At the top, there's a navigation bar with a bell icon and a "SHARE FEEDBACK" button. Below the navigation, a breadcrumb trail reads "DASHBOARD > CHAPTER 13". The main content area has a title "Secure Software Development Life Cycle" and a "Summary" section. The summary text discusses methodologies for writing secure code, mentioning SSDLC, threat modeling (PASTA, STRIDE), DevSecOps, access control, encryption, secrets management, monitoring, and automated security testing. It emphasizes the importance of integrating security across the development process. Below the summary, a note about the next chapter's focus on assurance, validation, and verification is present. To the right, a dark sidebar titled "Chapter Review Questions" contains the text "The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana" and a "Select Quiz" section. This section includes a "Quiz 1" link, a "SHOW QUIZ DETAILS" dropdown, and an orange "START" button.

Figure 13.2 – Chapter Review Questions for Chapter 13

Chapter 14: Assurance, Validation, and Verification in Security

The screenshot shows a web-based learning platform. At the top, there's a navigation bar with a logo, 'Practice Resources', a bell icon, and a 'SHARE FEEDBACK' button. Below the navigation is a breadcrumb trail: 'DASHBOARD > CHAPTER 14'. The main content area has a title 'Assurance, Validation, and Verification in Security' and a 'Summary' section. The summary text discusses the importance of security forms like assurance, validation, and verification, and mentions the CCSP certification requirements. It also previewed the next chapter on traditional cloud application architecture. To the right, a 'Chapter Review Questions' sidebar is visible, featuring a book icon and the title 'The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana'. It includes a 'Select Quiz' section with 'Quiz 1' and a 'START' button, along with a 'SHOW QUIZ DETAILS' link.

DASHBOARD > CHAPTER 14

Assurance, Validation, and Verification in Security

Summary

Regardless of the software, component, or interface being brought into your organization's cloud environment, it is imperative that the three primary forms of security – assurance, validation, and verification – need to be checked and completed every time. While different organizations have different opinions on how much security is necessary for various components that link together to make a company operate efficiently, it is imperative that any cloud security professional employed by an organization running its own cloud-native environment always be on the lookout for warning signs of improper access or unchecked code coming into the said environment. The smallest change can result in easy avenues for bad actors to gain entry to the cloud environment, wreaking havoc on your organization.

The CCSP certification covers essential API security and software validation and assurance topics. To pass the CCSP exam, a candidate must be familiar with the various types of APIs, API security controls, and API security testing methodologies, as well as the **Software Development Life Cycle (SDLC)** fundamentals (covered in *Chapter 17, Secure Software Development Life Cycle*), software testing methodologies, software security testing methodologies, software security best practices, and software security compliance requirements.

The next chapter will cover the important specifics of traditional cloud application architecture, with a focus on essential security components such as WAF, DAM, and API gateways, as well as cryptography, sandboxing, and securing virtualized applications.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

SHOW QUIZ DETAILS

START

Figure 14.2 – Chapter Review Questions for Chapter 14

Chapter 15: Application-Centric Cloud Architecture

The screenshot shows a web-based application interface for reviewing chapter content. At the top, there's a navigation bar with a bell icon and a 'SHARE FEEDBACK' button. Below the navigation, a breadcrumb trail reads 'DASHBOARD > CHAPTER 15'. The main content area is titled 'Application-Centric Cloud Architecture' and has a 'Summary' section. The summary contains several paragraphs of text describing various security concepts like WAF, DAM, XML firewalls, and API gateways. To the right of the summary is a 'Chapter Review Questions' sidebar. This sidebar includes the title 'Chapter Review Questions', a subtitle 'The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana', and a 'Select Quiz' section. Within the quiz section, there's a 'Quiz 1' button, a 'SHOW QUIZ DETAILS' dropdown menu, and an orange 'START' button.

DASHBOARD > CHAPTER 15

Application-Centric Cloud Architecture

Summary

In this chapter, you learned about the critical aspects of securing cloud application architecture within the cloud computing's dynamic landscape. You explored multifaceted dimensions, including confidentiality, integrity, and availability. The chapter emphasized the importance of a defense-in-depth approach.

The chapter discussed supplemental security components as layers fortifying cloud applications. It detailed the functions of WAF, DAM, XML firewalls, and API gateways. These components worked synergistically to enhance system resilience and protect against various threats, from application-layer attacks to unauthorized database activities.

The chapter highlighted cryptography's role in maintaining data security at rest and in transit. It emphasized the integration of encryption across all phases of the software development life cycle, encompassing encryption of data at rest and data in motion. Key management was underscored as a frontline defense against data breaches, focusing on secure key generation, distribution, rotation, and disposal.

The chapter provided insights into sandboxing, a security mechanism confining and executing untrusted code within controlled environments. It elucidated sandboxing's applications in security testing, development, malware analysis, and email security. The chapter emphasized virtualization's role in simplifying and enhancing sandboxing in cloud environments, including hardware-based and software-based approaches.

The chapter explored application virtualization and orchestration as integral concepts reshaping the cloud computing landscape. It explained how application virtualization enabled the creation of isolated environments for portable and independent application execution, enhancing security through controlled permissions and access. The chapter clarified that application orchestration automated the deployment and scaling of applications, ensuring efficiency, reliability, and adherence to policies.

The chapter discussed practical applications of application virtualization and orchestration, such as containers and microservices. It highlighted container technologies such as Docker for their portability, consistency, and efficient resource utilization. The chapter portrayed microservices architecture, enabled by application virtualization, as a paradigm fostering agility, scalability, and independent service deployment.

The next chapter will discuss how **Identity and Access Management (IAM)** solutions play a pivotal role in securing organizations. You will cover key areas such as identity providers, federated identities, secret management, and other crucial IAM solutions.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

SHOW QUIZ DETAILS ▾

START

Figure 15.2 – Chapter Review Questions for Chapter 15

Chapter 16: IAM Design

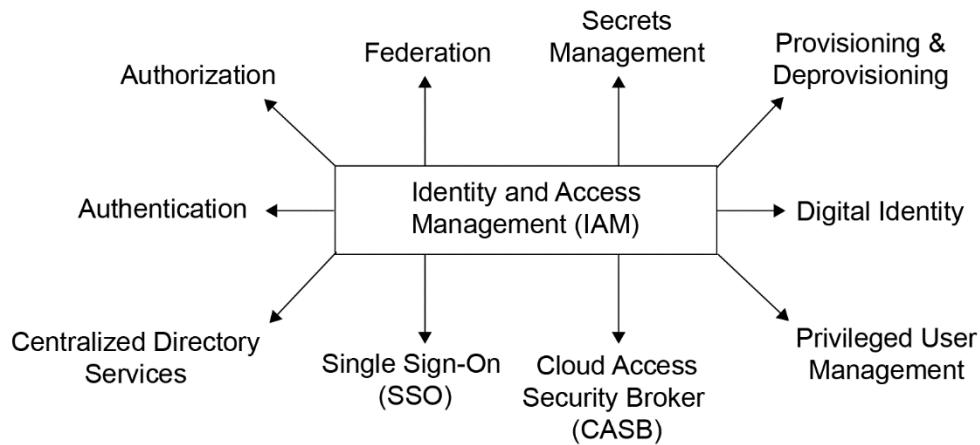


Figure 16.1 – Objectives of IAM

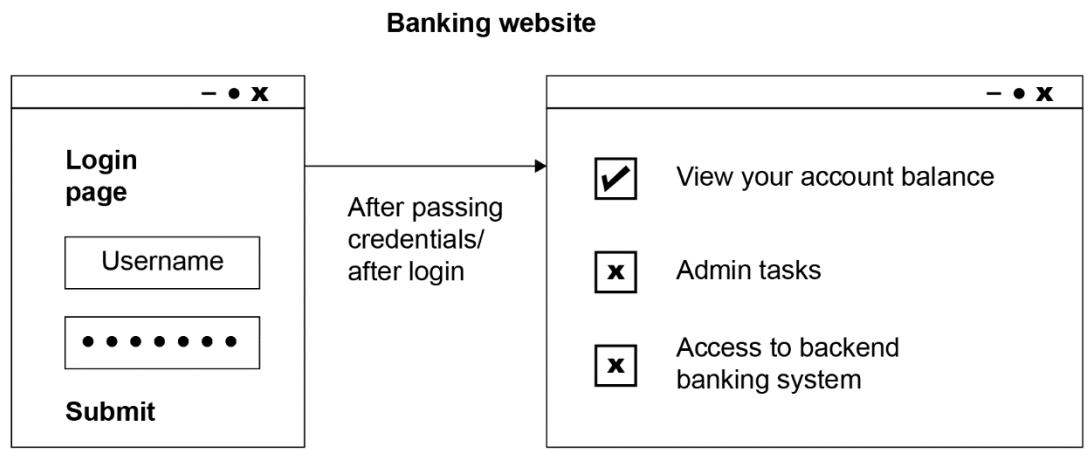


Figure 16.2 – Authentication and authorization at a banking website



IAM Design

Summary

In this chapter, you learned about the intricate processes, policies, and technologies that have been designed to ensure the appropriate access of resources to individuals or systems within an organization.

You delved into IDM, concentrating on the creation, maintenance, and lifecycle management of digital identities. The chapter discussed key components of IDM, including user provisioning and password management, to underscore the importance of a well-organized and controlled identity ecosystem. It also emphasized the critical role of IDM in uniquely identifying and authenticating individuals, devices, or systems, thus establishing a secure foundation for AM.

Collaborating seamlessly with IDM, AM has emerged as the guardian of authenticated access rights. Through the definition of access control policies and resource permissions and the implementation of SSO, AM ensures that the principle of least privilege is upheld. The discussion on provisioning and deprovisioning highlighted the foundational processes that dictate the granting and revoking of access rights, emphasizing the need to mitigate authorization creep—a phenomenon where individuals accumulate unnecessary access privileges over time.

The chapter also delved into privileged user management, focusing on the oversight of users with elevated access. It stressed the importance of MFA, audit items, and SoD to fortify security measures. The significance of centralized directory services in streamlining user provisioning and deprovisioning processes was underscored, emphasizing their role as a consolidated repository for managing user identities.

The chapter further discussed Federated Identity, illuminating the interconnectedness of user identities across multiple systems or organizations. You also explored SSO and learned its efficiency in streamlining user access within a specific security domain, acknowledging its vulnerabilities and the paramount importance of trust in the IdP. The chapter provided a holistic perspective on MFA and IAM, emphasizing proactive digital IAM to enhance overall organizational security.

In the next chapter, you will learn about crucial configuration needs for both physical and logical infrastructure in cloud environments, along with common controls for operational and maintenance tasks.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

[SHOW QUIZ DETAILS ▾](#)

START

Figure 16.4 – Chapter Review Questions for Chapter 16

Chapter 17: Cloud Physical and Logical Infrastructure (Operationalization and Maintenance)

The screenshot shows a web-based learning platform interface. At the top, there's a navigation bar with a logo, 'Practice Resources', a bell icon, and a 'SHARE FEEDBACK' button. Below the navigation is a breadcrumb trail: 'DASHBOARD > CHAPTER 17'. The main content area has a title 'Cloud Physical and Logical Infrastructure (Operationalization and Maintenance)' and a 'Summary' section. The summary text discusses the robust security provided by HSMs and TPMs, the intricacies of IaC strategy, patch management processes, and techniques for hardening both host and guest OSs. It also highlights the significance of network security controls and examines various network configurations like VLAN, DNS, DHCP, and TLS. The chapter delves into management tools and their role in overseeing and optimizing cloud environments, mentioning hardening techniques and resilience against threats. A note at the end indicates the next chapter covers operational controls and measures in cloud environments. To the right, a 'Chapter Review Questions' sidebar lists the 'CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide' by Omar Turner and Navya Lakshmana. It features a 'Select Quiz' section with a 'Quiz 1' entry, a 'SHOW QUIZ DETAILS' link, and a 'START' button.

DASHBOARD > CHAPTER 17

Cloud Physical and Logical Infrastructure (Operationalization and Maintenance)

Summary

Throughout this chapter, you gained insights into the robust security provided by HSMs and TPMs, ensuring a high level of data protection. Operational and maintenance aspects were thoroughly explored, encompassing the intricate details of the IaC strategy, patch management processes, and techniques for hardening both host and guest OSs. The significance of network security controls was highlighted, emphasizing their critical role in safeguarding data integrity. Various network configurations, including VLAN, DNS, DHCP, and TLS, were examined in detail, offering a comprehensive understanding of how these elements contribute to a secure and efficient network infrastructure. The chapter also delved into the importance of management tools, shedding light on their crucial role in overseeing and optimizing cloud environments. Techniques for hardening these tools were discussed, ensuring their resilience against potential security threats. Overall, you've acquired a comprehensive understanding of key elements, strategies, and best practices in building and maintaining a secure and efficient cloud infrastructure.

The next chapter sheds light on operational controls and measures in cloud environments. You will go through the standards governing these operations in detail.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

[SHOW QUIZ DETAILS](#) ▾

[START](#)

Figure 17.2 – Chapter Review Questions for Chapter 17

Chapter 18: International Operational Controls and Standards

The screenshot shows a dark-themed user interface for 'Practice Resources'. At the top left is the 'Practice Resources' logo. On the right are a bell icon and a 'SHARE FEEDBACK' button with a dropdown arrow. Below the header, a navigation bar shows 'DASHBOARD > CHAPTER 18'. The main content area has a title 'International Operational Controls and Standards' and a 'Summary' section. The summary text discusses operational controls and standards, mentioning ITIL, ISO/IEC 20000-1, change management, continuity management, information security management, continual service improvement, incident management, release management, and capacity management. It also hints at the next chapter on forensic data collection, evidence management, and digital evidence preservation in the cloud. To the right, a 'Chapter Review Questions' sidebar is visible, featuring the title, a brief description of the CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner and Navya Lakshmana, a 'Select Quiz' section with 'Quiz 1' and a 'SHOW QUIZ DETAILS' link, and a prominent orange 'START' button.

DASHBOARD > CHAPTER 18

International Operational Controls and Standards

Summary

In this chapter, you gained insights into the vital role of operational controls and standards, discovering how they ensure effective, secure, and reliable IT service operations in both traditional and cloud environments.

The chapter emphasized the significance of frameworks such as ITIL and ISO/IEC 20000-1, providing a structured approach to IT service delivery and support.

You studied change management focusing on the structured process of planning, implementing, and controlling changes within the IT environment while minimizing risks. Continuity management emerged as a strategic approach to ensure the ongoing availability of critical business functions, particularly in the face of disruptive events.

Information security management, a critical aspect of business governance, focuses on safeguarding information assets. Continual service improvement management, a fundamental phase in the IT service management life cycle, and its role in enhancing the efficiency, effectiveness, and quality of IT services were also discussed.

Incident management was portrayed as a process dedicated to the swift resolution of disruptions to IT services, with the primary goal of restoring normal service operations promptly. Problem management, taking a strategic approach, aims to proactively identify and eliminate root causes of recurring incidents, preventing future disruptions.

You also understood release management's critical role in planning, coordinating, and controlling the release of software and hardware changes into the live environment. The chapter then shed light on deployment management's complementary role in overseeing the execution phase of releasing software into the live environment. You must ensure changes are effectively deployed and configured. Finally, you studied capacity management as a strategic process for optimizing the use of resources to meet varying workloads and ensuring efficient service delivery, incorporating auto-scaling features and collaboration between stakeholders.

In the next chapter, you will learn about forensic data collection methodologies, evidence management, and other key concepts for the collection, acquisition, and preservation of digital evidence in the cloud.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

SHOW QUIZ DETAILS ▾

START

Figure 18.2 – Chapter Review Questions for Chapter 18

Chapter 19: Digital Forensics

The screenshot shows a dark-themed user interface for 'Practice Resources'. At the top left is the 'Practice Resources' logo. On the right are a bell icon and a 'SHARE FEEDBACK' button with a dropdown arrow. Below the header, a navigation bar shows 'DASHBOARD > CHAPTER 19'. The main content area has a title 'Digital Forensics' and a 'Summary' section. The summary text discusses the overview of digital forensics, mentioning ISO/IEC 27050:2016 and ISO/IEC 27037:2012 standards, and the challenges in cloud forensics. It also highlights evidence preservation best practices and the use of Faraday cages. A note at the bottom indicates the next chapter will cover communication resilience. To the right, a 'Chapter Review Questions' sidebar displays the title, author information (CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana), and a 'Select Quiz' section with 'Quiz 1' and a 'START' button.

DASHBOARD > CHAPTER 19

Digital Forensics

Summary

This chapter provided an overview of digital forensics. You understood its multidisciplinary nature and critical role in investigating cybercrimes. Standards such as ISO/IEC 27050:2016 and ISO/IEC 27037:2012 were explored, shedding light on e-discovery and guidelines for digital evidence collection.

You went through the digital evidence lifecycle stages and understood the importance of technical readiness, forensic tools, logging systems, baselines, and collaboration with CSPs. Challenges in cloud forensics were discussed, emphasizing the need for adaptability to dynamic environments, legal considerations, and collaboration with diverse stakeholders.

You discovered evidence preservation best practices, chain of custody, forensic imaging, secure storage, and collaboration with legal teams. The chapter concluded by addressing interference prevention through Faraday cages and highlighting the unique challenges presented by cloud forensics, reinforcing the significance of adaptability and interoperability in that field.

In the next chapter, you'll learn about best practices for establishing resilient communication channels and procedures essential for managing various impacts, covering common communication methods with vendors, customers, regulators, partners, and other stakeholders.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

SHOW QUIZ DETAILS ▾

START

Figure 19.2 – Chapter Review Questions for Chapter 19

Chapter 20: Managing Communications

The screenshot shows a web-based learning platform interface. At the top, there's a navigation bar with the 'Practice Resources' logo, a bell icon for notifications, and a 'SHARE FEEDBACK' button. Below the navigation, the path 'DASHBOARD > CHAPTER 20' is displayed. The main content area has a title 'Managing Communications' and a 'Summary' section. The summary text discusses the fundamental principles of effective communication with diverse stakeholders in cloud services, emphasizing transparency, clarity, and proactive engagement. It highlights insights into identifying target audiences, crafting clear messages, determining optimal communication timing, and selecting suitable channels. The tailored communication strategies outlined for vendors, customers, partners, regulators, and additional stakeholders underscore the importance of clear expectations and collaborative efforts to navigate the dynamic landscape of cloud services successfully. Below the summary, there's a note about the next chapter covering best practices for establishing primary requirements of a Security Operations Center (SOC). The right side of the screen features a 'Chapter Review Questions' section with a sub-section for the CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner and Navya Lakshmana. It includes a 'Select Quiz' button, a 'Quiz 1' section with a 'SHOW QUIZ DETAILS' link, and an orange 'START' button.

Figure 20.2 – Chapter Review Questions for Chapter 20

Chapter 21: Security Operations Center Management

The screenshot shows a dark-themed web interface for a chapter review. At the top left is a 'Practice Resources' button with a bell icon. At the top right are 'SHARE FEEDBACK' and a dropdown menu. Below the header, a breadcrumb navigation shows 'DASHBOARD > CHAPTER 21'. The main content area has a title 'Security Operations Center Management' and a 'Summary' section. The summary text discusses the chapter's focus on cybersecurity operations, vulnerability management, and the shared responsibility model in cloud security. It also mentions the SIEM lifecycle, incident management practices, the SOC's role, and vulnerability assessments. A 'Chapter Review Questions' sidebar on the right lists the 'CCSP (ISC)2 Certified Cloud Security Professional Exam Guide' by Omar Turner and Navya Lakshmana. It features a 'Select Quiz' section with 'Quiz 1' and a 'START' button.

DASHBOARD > CHAPTER 21

Security Operations Center Management

Summary

In this chapter, you gained insights into cybersecurity operations, learning about the essential steps and various types of vulnerability management. The shared responsibility model in cloud security was explained, highlighting the collaborative efforts between CSPs and customers. Intelligent monitoring, utilizing tools such as firewalls and artificial intelligence, emerged as a proactive strategy for threat detection.

The SIEM lifecycle provides a comprehensive framework for managing security events, while incident management practices equip you with a systematic approach to dealing with security incidents. The incident handling process, as outlined in NIST SP 800-61, was explored, covering preparation, detection and analysis, containment, eradication, recovery, post-incident activities, and continuous improvement.

The significance of a SOC was underscored, emphasizing its pivotal role as a centralized hub for monitoring, analyzing, and mitigating cybersecurity threats. The SOC operates 24/7, providing continuous monitoring of an organization's IT environment, networks, and systems. It serves as the initial point of contact for reporting potential security incidents within an organization.

Vulnerability assessments, including authenticated and unauthenticated scans, as well as non-intrusive and intrusive approaches, were outlined, providing a nuanced understanding of how organizations proactively identify and address potential vulnerabilities.

This chapter deepened your knowledge of cybersecurity operations, providing valuable insights that you can apply and share. In the next chapter, you will learn about compliance with legal and contractual requirements, as well as policies, standards, guidelines, baselines, and procedures.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1 [SHOW QUIZ DETAILS](#) [START](#)

Figure 21.2 – Chapter Review Questions for Chapter 20

Chapter 22: Legal Challenges and the Cloud

The screenshot shows a web-based learning platform interface. At the top, there's a navigation bar with a bell icon and a "SHARE FEEDBACK" button. Below the navigation, a breadcrumb trail reads "DASHBOARD > CHAPTER 22". The main content area has a title "Legal Challenges and the Cloud" and a "Summary" section. The summary text discusses the comprehensive understanding of legal intricacies and risks associated with cloud computing, mentioning ISO/IEC 27036 and its role in effective cloud governance. It also hints at the next chapter's focus on privacy regulations and specific legislation for PII and PHI. To the right, a dark-themed sidebar titled "Chapter Review Questions" lists the CCSP (ISC)2 Certified Cloud Security Professional Exam Guide by Omar Turner and Navya Lakshmana. It features a "Select Quiz" section with "Quiz 1" and a "START" button, along with a "SHOW QUIZ DETAILS" link.

Practice Resources

DASHBOARD > CHAPTER 22

Legal Challenges and the Cloud

Summary

To conclude, this chapter offers a comprehensive understanding of the legal intricacies and risks associated with cloud computing. Covering conflicting international legislation, eDiscovery standards, and risk management strategies, the chapter provides a robust foundation for navigating the legal landscape of cloud environments. It emphasizes the differentiation of roles in data handling, explores regulatory transparency requirements, and outlines diverse risk treatment approaches. The chapter culminates with an in-depth exploration of outsourcing and cloud contract design, addressing business requirements, vendor management considerations, and critical aspects of contract management. The inclusion of supply-chain management principles, guided by ISO/IEC 27036, ensures a holistic view of legal and risk considerations for effective cloud governance.

In the next chapter, you'll learn about privacy regulations and country-specific legislations concerning PII and protected health information (PHI), exploring key jurisdictional variations in data privacy laws.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

SHOW QUIZ DETAILS ▾

START

Figure 22.2 – Chapter Review Questions for Chapter 22

Chapter 23: Privacy and the Cloud

The screenshot shows a web-based learning platform interface. At the top, there's a dark header bar with the text "Practice Resources" and a bell icon. To the right of the bell icon is a button labeled "SHARE FEEDBACK". Below the header, the main content area has a dark background. On the left side, under the heading "Privacy and the Cloud", there's a "Summary" section containing a block of text about privacy issues and regulations. On the right side, under the heading "Chapter Review Questions", there's a section titled "The CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide by Omar Turner, Navya Lakshmana". Below this title is a "Select Quiz" section with a "Quiz 1" entry, a "SHOW QUIZ DETAILS" dropdown menu, and a "START" button.

DASHBOARD > CHAPTER 23

Privacy and the Cloud

Summary

In this chapter, you learned about privacy issues, discussing the differences between contractual and regulated private data. Specific country legislations, such as HIPAA, the CLOUD Act, GDPR, and PIPEDA, were examined to understand their approaches to protecting private information. Jurisdictional disparities in data privacy were also addressed, along with standard privacy requirements and internationally recognized privacy frameworks such as ISO/IEC 27018 and GAPP. Additionally, the importance of PIAs in managing privacy concerns across diverse regulatory frameworks was highlighted. In the next chapter, you will learn how audits function in cloud computing.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

SHOW QUIZ DETAILS

START

Figure 23.2 – Chapter Review Questions for Chapter 23

Chapter 24: Cloud Audit Processes and Methodologies

The screenshot shows a dark-themed user interface for 'Practice Resources'. At the top left is the logo 'kp Practice Resources'. On the right are a bell icon and a 'SHARE FEEDBACK' button. Below the header, a navigation bar shows 'DASHBOARD > CHAPTER 24'. The main content area has a title 'Cloud Audit Processes and Methodologies' and a 'Summary' section. The summary text discusses the exploration of audits in cloud computing, examining internal and external audit controls, and the impact of audit requirements and challenges presented by virtualization and cloud technologies. It also mentions various types of audit reports, gap analysis, and specialized compliance requirements like NERC CIP and HIPAA. To the right, a 'Chapter Review Questions' sidebar is visible, featuring the title, a brief description of the exam guide by Omar Turner and Navya Lakshmana, and a 'Select Quiz' section with 'Quiz 1' and a 'START' button.

DASHBOARD > CHAPTER 24

Cloud Audit Processes and Methodologies

Summary

In this chapter, you explored how audits function in cloud computing. You started by examining internal and external audit controls, outlining their specific roles and applications. You gained an understanding of the impact of audit requirements and the unique challenges presented by virtualization and cloud technologies.

You also learned about various types of audit reports and their limitations in the cloud. The chapter discussed gap analysis. Furthermore, you delved into policies such as organization, functional, and cloud computing policies.

You also learned about specialized compliance requirements for highly regulated industries such as NERC CIP and HIPAA. Finally, you examined the transformative effects of distributed IT in cloud computing, uncovering both challenges and opportunities within the audit landscape.

Chapter Review Questions

The CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide by Omar Turner, Navya Lakshmana

Select Quiz

Quiz 1

[SHOW QUIZ DETAILS](#) ▾

[START](#)

Figure 24.2 – Chapter Review Questions for Chapter 24

Chapter 25: Accessing the Online Practice Resources



The screenshot shows the 'Practice Resources' section of the Packt website. At the top, there's a navigation bar with the Packt logo and a 'REPORT ISSUE' button. Below the header, a large section titled 'UNLOCK YOUR PRACTICE RESOURCES' is displayed. It features the book cover for 'CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide' by Omar Turner and Navya Lakshmana. The book cover includes the title, authors, and a note about including free online exam prep tools. To the right of the book cover, the book's details are listed: 'Book' ISBN: 9781838987664, published by Packt, May 2024, 93 pages. Below this, a question 'Do you have a Packt account?' is asked with two radio buttons: 'Yes, I have an existing Packt account' and 'No, I don't have a Packt account'. A 'PROCEED' button is located at the bottom of this section.

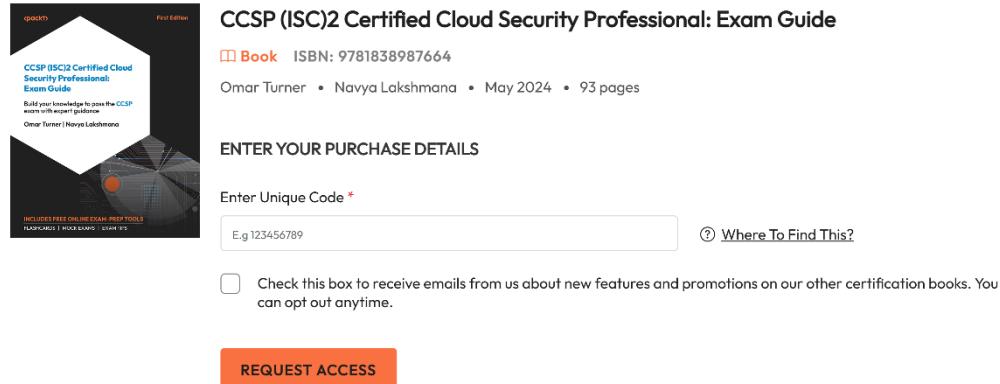
Figure 25.2 – Unlock page for the online practice resources



This screenshot shows the same 'Practice Resources' section as Figure 25.2. The book cover for 'CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide' is shown again. The book's details are identical: 'Book' ISBN: 9781838987664, published by Packt, May 2024, 93 pages. Below the book cover, the question 'Do you have a Packt account?' is present with the same two radio button options ('Yes' and 'No'). A 'PROCEED' button is at the bottom.

UNLOCK YOUR PRACTICE RESOURCES

You're about to unlock the free online content that came with your book. Make sure you have your book with you before you start, so that you can access the resources in minutes.



This screenshot shows the 'Practice Resources' section with the book cover for 'CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide'. The book's details are listed: 'Book' ISBN: 9781838987664, published by Packt, May 2024, 93 pages. Below the book cover, the question 'ENTER YOUR PURCHASE DETAILS' is displayed. A text input field labeled 'Enter Unique Code *' contains the placeholder 'E.g 123456789'. To the right of the input field is a link 'Where To Find This?'. Below the input field is a checkbox with the text 'Check this box to receive emails from us about new features and promotions on our other certification books. You can opt out anytime.' A large orange 'REQUEST ACCESS' button is at the bottom.

Figure 25.3 – Enter your unique sign-up code to unlock the resources

PACKT PRACTICE RESOURCES

You've just unlocked the free online content that came with your book.



CCSP (ISC)2 Certified Cloud Security Professional: Exam Guide

 Book ISBN: 9781838987664

Omar Turner • Navya Lakshmana • May 2024 • 93 pages

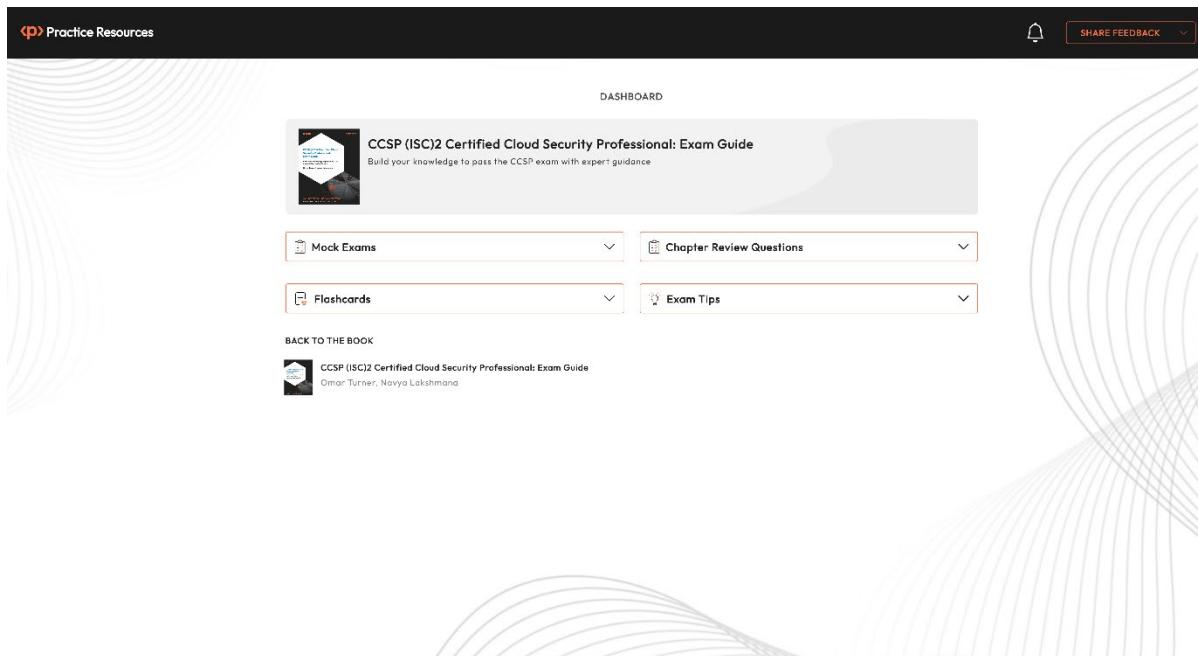
 **Unlock Successful**

Click the following link to access your practice resources at any time.

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Figure 25.4 – Page that shows up after a successful unlock



The dashboard page for CCSP (ISC)2 practice resources features a header with the Packt Practice Resources logo and a 'SHARE FEEDBACK' button. Below the header is a 'DASHBOARD' section containing a thumbnail of the book cover and its title. Underneath are four expandable dropdown menus: 'Mock Exams', 'Chapter Review Questions', 'Flashcards', and 'Exam Tips'. At the bottom left is a 'BACK TO THE BOOK' link, which also includes the book's title and authors.

Figure 25.5 – Dashboard page for CCSP (ISC)2 practice resources

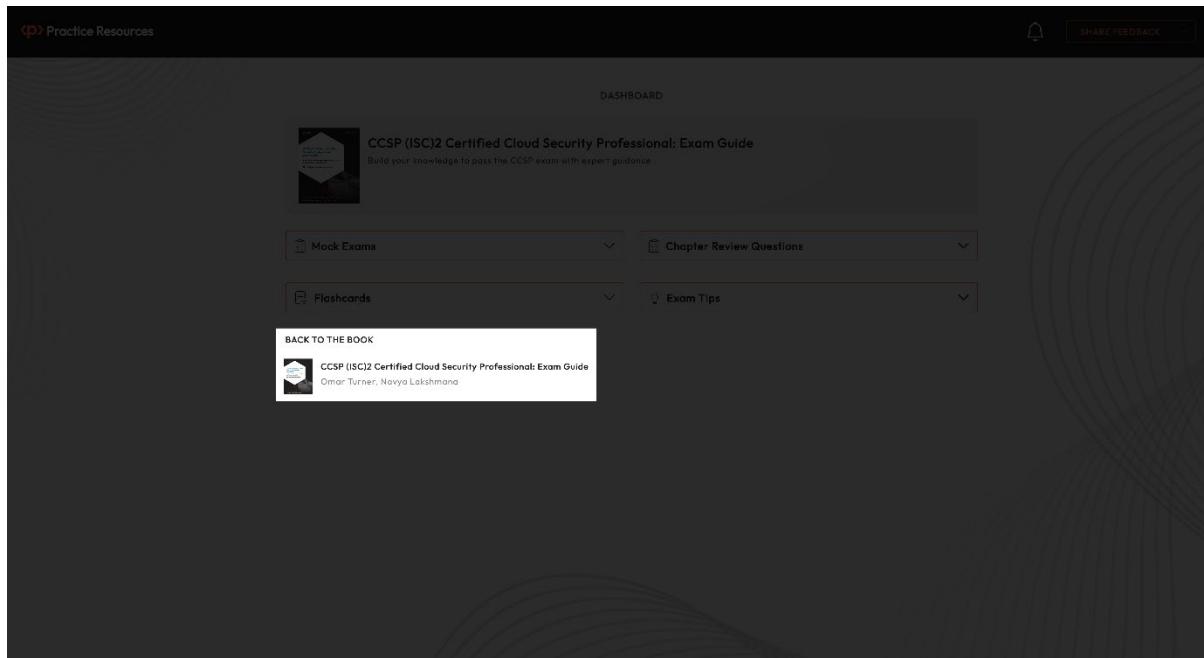


Figure 25.7 – Dashboard page for CCSP (ISC)2 practice resources