

MICROSOFT CERTIFIED: AZURE IOT DEVELOPER SPECIALTY (AZ-220) PRACTICE TEST (SAMPLE) STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

**VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE**

<https://mscertifiedazureiotdecspecialty.examzify.com>



Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright	1
Table of Contents	2
Introduction	3
How to Use This Guide	4
Questions	5
Answers	8
Explanations	10
Next Steps	16

SAMPLE

Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

SAMPLE

- 1. Which IoT subsystem consumes data, integrates with business processes, and places the data in storage?**
 - A. IoT devices
 - B. Cloud gateway service
 - C. Stream processors
 - D. User interface
- 2. What common feature is associated with over-the-air firmware updates for IoT devices?**
 - A. Firmware must be downloaded from user devices.
 - B. Firmware versions are uniquely identified for each device.
 - C. Devices have unlimited storage for firmware backups.
 - D. No special instructions are needed for implementation.
- 3. How is a direct method identified in the back-end app?**
 - A. By its unique ID assigned within the device
 - B. By a string that matches the device app method name
 - C. Through an automatically assigned numeric code
 - D. By the latest firmware version
- 4. What type of devices can you add to an IoT Central application?**
 - A. Only real devices
 - B. Only simulated devices
 - C. Real and simulated devices
 - D. Third-party devices only
- 5. What feature does a device template include in relation to device credentials?**
 - A. Device firmware details
 - B. A listing of all device users
 - C. Interface definitions for device capabilities
 - D. Device location tracking

- 6. What feature does Data Lake Gen 2 storage add for better data organization?**
- A. Hot and cold paths
 - B. Hierarchical namespaces
 - C. Data partitioning
 - D. Data cubes
- 7. Which of the following is not considered an action type in Azure IoT Hub?**
- A. Automation Runbook
 - B. Email Azure Resource Manager Role
 - C. Secure Webhook
 - D. Power BI
- 8. What type of identity translation is used for connecting downstream devices to IoT Hub via a gateway?**
- A. Protocol translation
 - B. Device identity verification
 - C. Secure communication protocols
 - D. Legacy data protocol translation
- 9. What type of property in a device twin reflects current values of device settings?**
- A. Desired properties
 - B. Identity properties
 - C. Reported properties
 - D. Tag properties
- 10. What type of logs can also be exported from IoT Central applications?**
- A. Only device connection logs
 - B. Telemetry logs
 - C. Audit logs
 - D. Network logs

Answers

SAMPLE

1. C
2. B
3. B
4. C
5. C
6. B
7. D
8. C
9. C
10. C

SAMPLE

Explanations

SAMPLE

1. Which IoT subsystem consumes data, integrates with business processes, and places the data in storage?

- A. IoT devices
- B. Cloud gateway service
- C. Stream processors**
- D. User interface

The correct answer is stream processors, as they play a critical role in consuming data generated by IoT devices, integrating this data with various business processes, and ultimately directing it to the appropriate storage solutions. Stream processors allow for real-time data processing and analysis, enabling businesses to derive actionable insights from incoming data streams. Stream processors work by taking continuous input from data sources, processing it using specified logic or algorithms, and then outputting the results either back to a cloud service or to a storage solution. This capability is essential for applications that require immediate responses or actions based on the incoming data, such as alerting systems or real-time dashboard updates. In contrast, IoT devices are primarily responsible for collecting and transmitting data rather than processing it. The cloud gateway service acts as an intermediary for data transmission but does not engage in data integration or large-scale processing. The user interface is focused on presenting the data to end users, rather than handling the backend processing tasks. Thus, stream processors uniquely fulfill the role of consuming, integrating, and storing data within an IoT architecture.

2. What common feature is associated with over-the-air firmware updates for IoT devices?

- A. Firmware must be downloaded from user devices.
- B. Firmware versions are uniquely identified for each device.**
- C. Devices have unlimited storage for firmware backups.
- D. No special instructions are needed for implementation.

Over-the-air (OTA) firmware updates for IoT devices enable the seamless deployment of firmware improvements and bug fixes without the need for physical access to the device. The key feature associated with this process is that firmware versions are uniquely identified for each device. This unique identification ensures that the correct firmware is applied to the appropriate device version, accounting for variations in hardware or prior updates. Having unique identifiers for firmware versions is crucial in maintaining compatibility and functionality, as it allows the IoT device to determine which firmware version is valid and necessary. This practice minimizes the risk of installation errors and ensures that devices operate as intended, especially within diverse environments where various models and their respective firmware may exist. The other options do not accurately describe the core function of OTA updates. For instance, firmware is typically pushed from a centralized server rather than downloaded directly from user devices, and devices commonly have storage limits that require considerations for backups. Additionally, some implementation steps are often necessary to ensure secure and successful firmware updates, which contradicts the notion that no special instructions are needed.

3. How is a direct method identified in the back-end app?

- A. By its unique ID assigned within the device
- B. By a string that matches the device app method name**
- C. Through an automatically assigned numeric code
- D. By the latest firmware version

A direct method in Azure IoT is identified by a string that matches the name of the method defined in the device application. When a back-end application invokes a direct method on an IoT device, it does so by calling the method using its name, which should correspond exactly to the method implemented on the device side. This string-based identification is crucial for ensuring that the correct function is executed on the device, enabling specific commands or operations to be carried out remotely. This design allows for ease of integration and communication between the device and its managing application, promoting clarity and consistency in how commands are structured. Consequently, any method invoked must match the naming conventions established in the device application, reinforcing the importance of maintaining cohesive naming across devices for effective method handling.

4. What type of devices can you add to an IoT Central application?

- A. Only real devices
- B. Only simulated devices
- C. Real and simulated devices**
- D. Third-party devices only

The correct choice encompasses both real and simulated devices, highlighting the flexibility of Azure IoT Central in accommodating various device types. In an IoT Central application, users have the ability to connect actual physical devices that are deployed in real-world environments for collecting and transmitting data. This allows for the monitoring and management of devices in real-time. Additionally, Azure IoT Central supports simulated devices, which are virtual representations of physical devices. These simulated devices enable developers to test and validate various aspects of their applications without needing to deploy physical hardware. This capacity is particularly useful for prototyping and testing scenarios, allowing users to experiment with different configurations and settings before moving to a production environment. A combination of both real and simulated devices provides a comprehensive framework that supports the development and management of IoT applications, catering to different use cases in the IoT lifecycle. This dual capability enhances development efficiency and reduces timelines by allowing for simultaneous work on both device types.

5. What feature does a device template include in relation to device credentials?

- A. Device firmware details
- B. A listing of all device users
- C. Interface definitions for device capabilities**
- D. Device location tracking

The correct answer is that a device template includes interface definitions for device capabilities. In the context of Azure IoT, a device template serves as a blueprint for defining the properties, capabilities, and behaviors of a device. This includes specifying the interface through which the device communicates with the IoT solution and the functionalities it offers. By having clear definitions of the interface in a device template, developers can ensure that the device interacts seamlessly with the Azure IoT Hub and adheres to the expected protocols, data formats, and methods for sending and receiving data. This structured approach allows for consistent device integration, management, and communication within an IoT solution. While device firmware details, a listing of device users, and device location tracking can be relevant aspects of a device's overall management and functionality, they do not directly pertain to the primary role of a device template in defining capabilities through interfaces. Thus, they are not included as core features of a device template.

6. What feature does Data Lake Gen 2 storage add for better data organization?

- A. Hot and cold paths
- B. Hierarchical namespaces**
- C. Data partitioning
- D. Data cubes

Data Lake Gen 2 storage enhances data organization through the implementation of hierarchical namespaces. This feature enables users to create a file system structure similar to traditional file systems, where files and folders can be organized in a tree structure. This allows for more efficient data management, making it easier to navigate through large datasets by organizing them logically. Hierarchical namespaces also improve performance as they enable operations such as file and folder renaming, moving, and deleting to be performed more efficiently, akin to file operations found in conventional operating systems. This structured approach to data storage helps in better access control management and makes data operations more intuitive. Using hierarchical namespaces is particularly beneficial in scenarios where there is a large volume of data, as it reduces the complexity of managing files at scale. This contrasts with other methods such as flat storage, where all files reside in a single directory, making it challenging to organize and retrieve data effectively. Additionally, the other options, while relevant to data handling concepts, do not specifically pertain to the specific organizational capabilities introduced with Azure Data Lake Gen 2.

7. Which of the following is not considered an action type in Azure IoT Hub?

- A. Automation Runbook
- B. Email Azure Resource Manager Role
- C. Secure Webhook
- D. Power BI**

The reason "Power BI" is identified as not being an action type in Azure IoT Hub is that, within the context of Azure IoT Hub, action types refer to mechanisms for responding to events and alerts generated by the IoT devices and their associated data streams. Azure IoT Hub offers a range of actions, such as sending messages to an Automation Runbook, assigning Azure Resource Manager roles through email, and invoking secure webhooks to interact with other services. Power BI, while an important tool for data visualization and analytics, does not serve as a direct action type for processing events in the context of Azure IoT Hub. Instead, Power BI can be used to visualize and analyze data coming from IoT Hub, but it is not designed to act based on events generated directly within the IoT Hub's functionality. This focus on event management and response mechanisms clearly distinguishes action types defined within Azure IoT Hub, which do not include Power BI.

8. What type of identity translation is used for connecting downstream devices to IoT Hub via a gateway?

- A. Protocol translation
- B. Device identity verification
- C. Secure communication protocols**
- D. Legacy data protocol translation

When connecting downstream devices to IoT Hub via a gateway, secure communication protocols are essential for ensuring that data transmitted between devices and the IoT Hub is protected. This approach involves the use of encryption and secure channels, which help safeguard the integrity and confidentiality of the data being sent. Using secure communication protocols allows the gateway to manage device identities and facilitate communication without compromising security. This is crucial in IoT environments, where devices may operate in potentially hostile conditions or be exposed to various threats. Other options focus on different aspects of device communication and management but do not directly relate to the fundamental requirement of ensuring secure connections necessary for downstream devices communicating with an IoT Hub via a gateway. For instance, protocol translation refers to the ability to convert communication formats between different devices, which is important but does not inherently guarantee the security of the communication. Similarly, device identity verification emphasizes the process of confirming device identities but does not specifically address how secure and reliable communication is established. Legacy data protocol translation highlights the compatibility of older communication methods but may not align with the modern security needs that secure communication protocols provide.

9. What type of property in a device twin reflects current values of device settings?

- A. Desired properties
- B. Identity properties
- C. Reported properties**
- D. Tag properties

The property that reflects the current values of device settings in a device twin is the reported properties. Device twins are Azure IoT Hub representations of your devices that store various information about them. Reported properties are used by the device to report its current state or configuration back to the cloud. This means that whenever the device changes its internal state or settings, these values can be updated in the reported properties section of the device twin. This allows the cloud to be aware of the current status of each device, which is critical for monitoring and management. In contrast, desired properties are used to define the configuration that the cloud wants the device to achieve. Identity properties contain information such as the device ID, and tag properties are used to group devices or categorize them, but they do not reflect the current settings.

10. What type of logs can also be exported from IoT Central applications?

- A. Only device connection logs
- B. Telemetry logs
- C. Audit logs**
- D. Network logs

In Azure IoT Central applications, audit logs provide a comprehensive way to track changes and events that occur within the application. These logs capture information about user actions and changes in the configuration of the application, including who made a change, what the change was, and when it occurred. This is critical for maintaining security and compliance, as it offers visibility into administrative actions and helps organizations to monitor for unauthorized changes or activity. The ability to export audit logs is particularly beneficial for organizations that require detailed tracking of user activities for auditing purposes. This feature supports better governance and accountability within IoT environments, making it easier to identify trends over time or respond to incidents. While other types of logs may have their own importance, the capability to export audit logs stands out as essential for administrative monitoring and ensuring the security of the IoT application. Telemetry logs, device connection logs, and network logs primarily focus on operational data and performance metrics rather than administrative activities and changes, which is why audit logs are the most relevant choice for tracking changes within IoT Central applications.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

<https://mscertifiedasureiotdecspecialty.examzify.com>

We wish you the very best on your exam journey. You've got this!

SAMPLE