Microsoft.DP-420.v2022-02-25.q18

Exam Code:	DP-420
Exam Name:	Designing and Implementing Cloud-Native Applications Using Microsoft Azure Cosmos DB
Certification Provider:	Microsoft
Free Question Number:	18
Version:	v2022-02-25
# of views:	445
# of Questions views:	180
https://www.dumpsdb.com/dumps/Microsoft/DP-420/Microsoft.DP-420.v2022-02-25.q18	

NEW QUESTION: 1
You have a container named container1 in an Azure Cosmos DB Core (SQL) API account.
You need to provide a user named User1 with the ability to insert items into container1 by using role-based access control (RBAC). The solution must use the principle of least privilege.
Which roles should you assign to User1?
A. CosmosDB Operator only
B. DocumentDB Account Contributor and Cosmos DB Built-in Data Contributor
C. DocumentDB Account Contributor only
D. Cosmos DB Built-in Data Contributor only
Answer: A (LEAVE A REPLY)
Cosmos DB Operator: Can provision Azure Cosmos accounts, databases, and containers.
Cannot access any data or use Data Explorer.
Incorrect Answers:
B: DocumentDB Account Contributor can manage Azure Cosmos DB accounts. Azure Cosmos DB is formerly known as DocumentDB.
C: DocumentDB Account Contributor: Can manage Azure Cosmos DB accounts.

NEW QUESTION: 2
You need to select the partition key for con-iot1. The solution must meet the IoT telemetry requirements.
What should you select?

A. the timestamp
B. the humidity
C. the temperature
D. the device ID
Answer: (SHOW ANSWER)
The partition key is what will determine how data is routed in the various partitions by Cosmos DB and needs to make sense in the context of your specific scenario. The IoT Device ID is generally the "natural" partition key for IoT applications.
Scenario: The iotdb database will contain two containers named con-iot1 and con-iot2.
Ensure that Azure Cosmos DB costs for IoT-related processing are predictable.
Reference:
https://docs.microsoft.com/en-us/azure/architecture/solution-ideas/articles/iot-using-cosmos-db

NEW QUESTION: 3
You configure multi-region writes for account1.
You need to ensure that App1 supports the new configuration for account1. The solution must meet the business requirements and the product catalog requirements.
What should you do?
A. Set the default consistency level of accountl to bounded staleness.
B. Create a private endpoint connection.
C. Modify the connection policy of App1.
D. Increase the number of request units per second (RU/s) allocated to the con-product and con-productVendor containers.
Answer: D (LEAVE A REPLY)
App1 queries the con-product and con-productVendor containers.
Note: Request unit is a performance currency abstracting the system resources such as CPU, IOPS, and memory that are required to perform the database operations supported by Azure Cosmos DB.
Scenario:
Develop an app named App1 that will run from all locations and query the data in account1.
Once multi-region writes are configured, maximize the performance of App1 queries against the data in account1.
Whenever there are multiple solutions for a requirement, select the solution that provides the best performance, as long as there are no additional costs associated.
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/consistency-levels

NEW QUESTION: 4
You are developing an application that will use an Azure Cosmos DB Core (SQL) API account as a data source.

You need to create a report that displays the top five most ordered fruits as shown in the following table.

Name	Type	Orders
apple	fruit	1,000
orange	fruit	600
banana	fruit, exotic	400
plum	fruit	300
mango	fruit, exotic	200

A collection that contains aggregated data already exists. The following is a sample document:

{
"name": "apple",
"type": ["fruit", "exotic"],
"orders": 10000
}

Which two queries can you use to retrieve data for the report? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A)

```
SELECT TOP  i.name, i.types, i.orders
FROM items i
WHERE EXISTS(SELECT VALUE t FROM t IN i.types WHERE t.name = 'fruit')
ORDER BY i.orders,i.types
```

B)

```
SELECT TOP  i.name, i.types, i.orders
FROM items i
WHERE EXISTS(SELECT VALUE t FROM t IN i.types WHERE t.name = 'fruit')
ORDER BY i.orders DESC
```

C)

```
SELECT TOP  i.name, i.types, i.orders
FROM items i
WHERE EXISTS(SELECT VALUE t FROM t IN i.types WHERE t.name = 'fruit')
ORDER BY i.types DESC
```

D)

```
SELECT TOP  i.name, i.types, i.orders
FROM items i
WHERE ARRAY_CONTAINS(i.types, {name: 'fruit'})
ORDER BY i.orders DESC
```

A. Option A

B. Option B

C. Option C

D. Option D

Answer: B,D (LEAVE A REPLY)

ARRAY_CONTAINS returns a Boolean indicating whether the array contains the specified value. You can check for a partial or full match of an object by using a boolean expression within the command.

Incorrect Answers:

A: Default sorting ordering is Ascending. Must use Descending order.

C: Order on Orders not on Type.

NEW QUESTION: 5

You have three containers in an Azure Cosmos DB Core (SQL) API account as shown in the following table.

Name	Database	Time to Live
cn1	db1	On (no default)
cn2	db1	Off
cn3	db1	On (no default)

You have the following Azure functions:

A function named Fn1 that reads the change feed of cn1

A function named Fn2 that reads the change feed of cn2

A function named Fn3 that reads the change feed of cn3

You perform the following actions:

Delete an item named item1 from cn1.

Update an item named item2 in cn2.

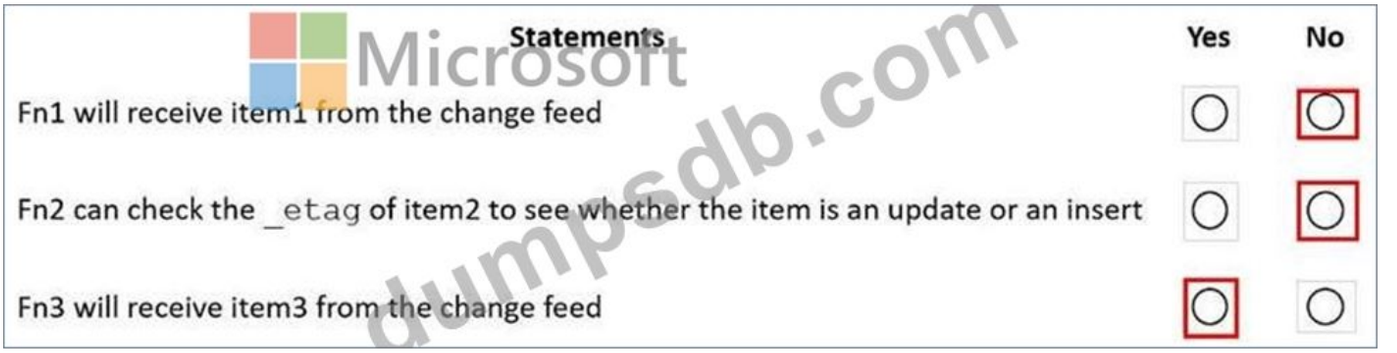
For an item named item3 in cn3, update the item time to live to 3,600 seconds.

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Statements	Yes	No
Fn1 will receive item1 from the change feed	○	○
Fn2 can check the _etag of item2 to see whether the item is an update or an insert	○	○
Fn3 will receive item3 from the change feed	○	○

Answer:



Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/sql/change-feed-design-patterns
https://docs.microsoft.com/en-us/azure/cosmos-db/change-feed

NEW QUESTION: 6
You have a database named telemetry in an Azure Cosmos DB Core (SQL) API account that stores IoT dat a. The database contains two containers named readings and devices.
Documents in readings have the following structure.
id
deviceid
timestamp
ownerid
measures (array)
- type
- value
- metricid
Documents in devices have the following structure.
id
deviceid
owner
- ownerid
- emailaddress
- name
brand
model
For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.

Statements	Yes	No
To return for all devices owned by a specific emailaddress, multiple queries must be performed	○	○
To return deviceid, ownerid, timestamp, and value for a specific metricid, a join must be performed	○	○
To return deviceid, ownerid, emailaddress, and model, a join must be performed	○	○

Answer:

Statements	Yes	No
To return for all devices owned by a specific emailaddress, multiple queries must be performed	○	○
To return deviceid, ownerid, timestamp, and value for a specific metricid, a join must be performed	○	○
To return deviceid, ownerid, emailaddress, and model, a join must be performed	○	○

NEW QUESTION: 7

You need to configure an Apache Kafka instance to ingest data from an Azure Cosmos DB Core (SQL) API account. The data from a container named telemetry must be added to a Kafka topic named iot. The solution must store the data in a compact binary format.

Which three configuration items should you include in the solution? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A. "connector.class": "com.azure.cosmos.kafka.connect.source.CosmosDBSourceConnector"

B. "key.converter": "org.apache.kafka.connect.json.JsonConverter"

C. "key.converter": "io.confluent.connect.avro.AvroConverter"

D. "connect.cosmos.containers.topicmap": "iot#telemetry"

E. "connect.cosmos.containers.topicmap": "iot"

F. "connector.class": "com.azure.cosmos.kafka.connect.source.CosmosDBSinkConnector"

Answer: C,D,F (LEAVE A REPLY)

C: Avro is binary format, while JSON is text.

F: Kafka Connect for Azure Cosmos DB is a connector to read from and write data to Azure Cosmos DB. The Azure Cosmos DB sink connector allows you to export data from Apache Kafka topics to an Azure Cosmos DB database. The connector polls data from Kafka to write to containers in the database based on the topics subscription.

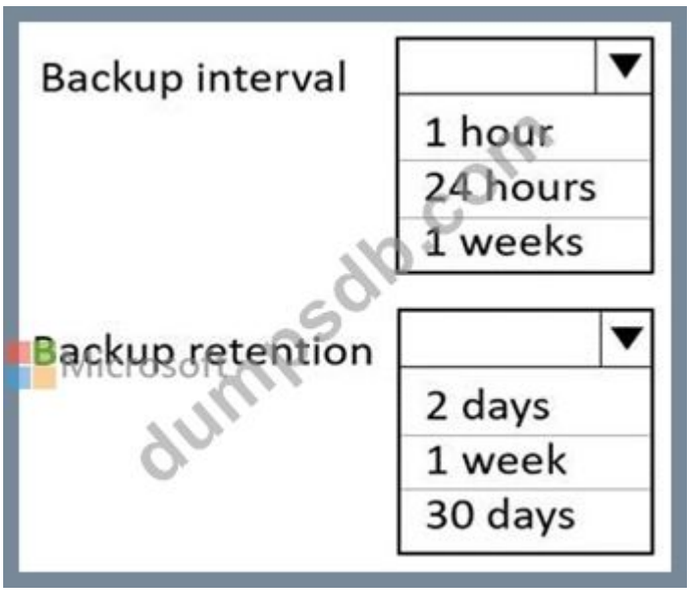
D: Create the Azure Cosmos DB sink connector in Kafka Connect. The following JSON body defines config for the sink connector.

Extract:

"connector.class": "com.azure.cosmos.kafka.connect.sink.CosmosDBSinkConnector",

"key.converter": "org.apache.kafka.connect.json.AvroConverter"
"connect.cosmos.containers.topicmap": "hotels#kafka"
Incorrect Answers:
B: JSON is plain text.
Note, full example:
{
"name": "cosmosdb-sink-connector",
"config": {
"connector.class": "com.azure.cosmos.kafka.connect.sink.CosmosDBSinkConnector",
"tasks.max": "1",
"topics": [
"hotels"
],
"value.converter": "org.apache.kafka.connect.json.AvroConverter",
"value.converter.schemas.enable": "false",
"key.converter": "org.apache.kafka.connect.json.AvroConverter",
"key.converter.schemas.enable": "false",
"connect.cosmos.connection.endpoint": "Error! Hyperlink reference not valid.",
"connect.cosmos.master.key": "<cosmosdbprimarykey>",
"connect.cosmos.databasename": "kafkaconnect",
"connect.cosmos.containers.topicmap": "hotels#kafka"
}
}
Reference:
https://docs.microsoft.com/en-us/azure/cosmos-db/sql/kafka-connector-sink
https://www.confluent.io/blog/kafka-connect-deep-dive-converters-serialization-explained/

NEW QUESTION: 8
You have a database in an Azure Cosmos DB SQL API Core (SQL) account that is used for development.
The database is modified once per day in a batch process.
You need to ensure that you can restore the database if the last batch process fails. The solution must minimize costs.
How should you configure the backup settings? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.



Answer:

NEW QUESTION: 9

You plan to create an Azure Cosmos DB Core (SQL) API account that will use customer-managed keys stored in Azure Key Vault.

You need to configure an access policy in Key Vault to allow Azure Cosmos DB access to the keys.

Which three permissions should you enable in the access policy? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A. Unwrap Key

B. Update

C. Sign

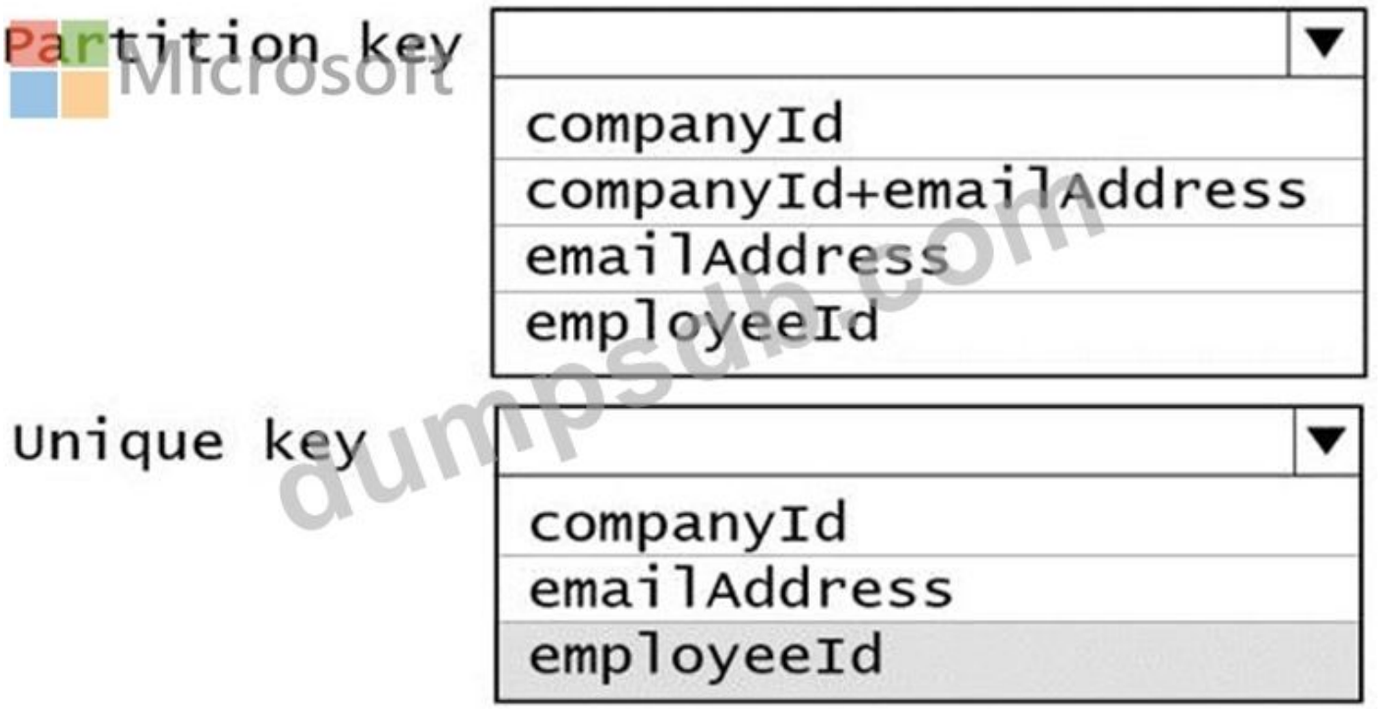
D. List

E. Wrap Key

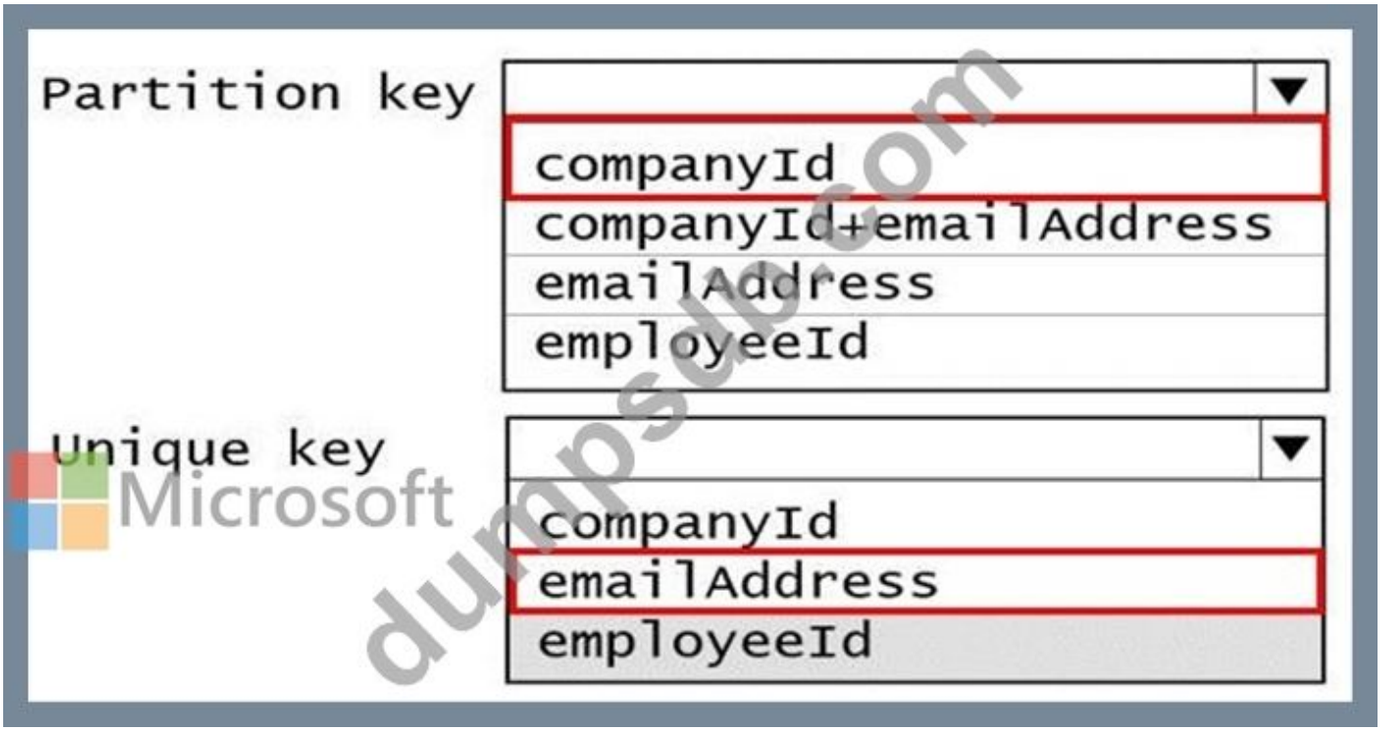
F. Get
G. Verify
Answer: A,E,F (LEAVE A REPLY)

NEW QUESTION: 10
You have a container named container1 in an Azure Cosmos DB Core (SQL) API account.
Upserts of items in container1 occur every three seconds.
You have an Azure Functions app named function1 that is supposed to run whenever items are inserted or replaced in container1.
You discover that function1 runs, but not on every upsert.
You need to ensure that function1 processes each upsert within one second of the upsert.
Which property should you change in the Function.json file of function1?
A. checkpointInterval
B. leaseCollectionsThroughput
C. maxItemsPerInvocation
D. feedPollDelay
Answer: D (LEAVE A REPLY)
With an upsert operation we can either insert or update an existing record at the same time.
FeedPollDelay: The time (in milliseconds) for the delay between polling a partition for new changes on the feed, after all current changes are drained. Default is 5,000 milliseconds, or 5 seconds.
Incorrect Answers:
A: checkpointInterval: When set, it defines, in milliseconds, the interval between lease checkpoints. Default is always after each Function call.
C: maxItemsPerInvocation: When set, this property sets the maximum number of items received per Function call. If operations in the monitored collection are performed through stored procedures, transaction scope is preserved when reading items from the change feed. As a result, the number of items received could be higher than the specified value so that the items changed by the same transaction are returned as part of one atomic batch.

NEW QUESTION: 11
You have a database in an Azure Cosmos DB Core (SQL) API account.
You plan to create a container that will store employee data for 5,000 small businesses. Each business will have up to 25 employees. Each employee item will have an emailAddress value.
You need to ensure that the emailAddress value for each employee within the same company is unique.
To what should you set the partition key and the unique key? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.



Answer:



NEW QUESTION: 12

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

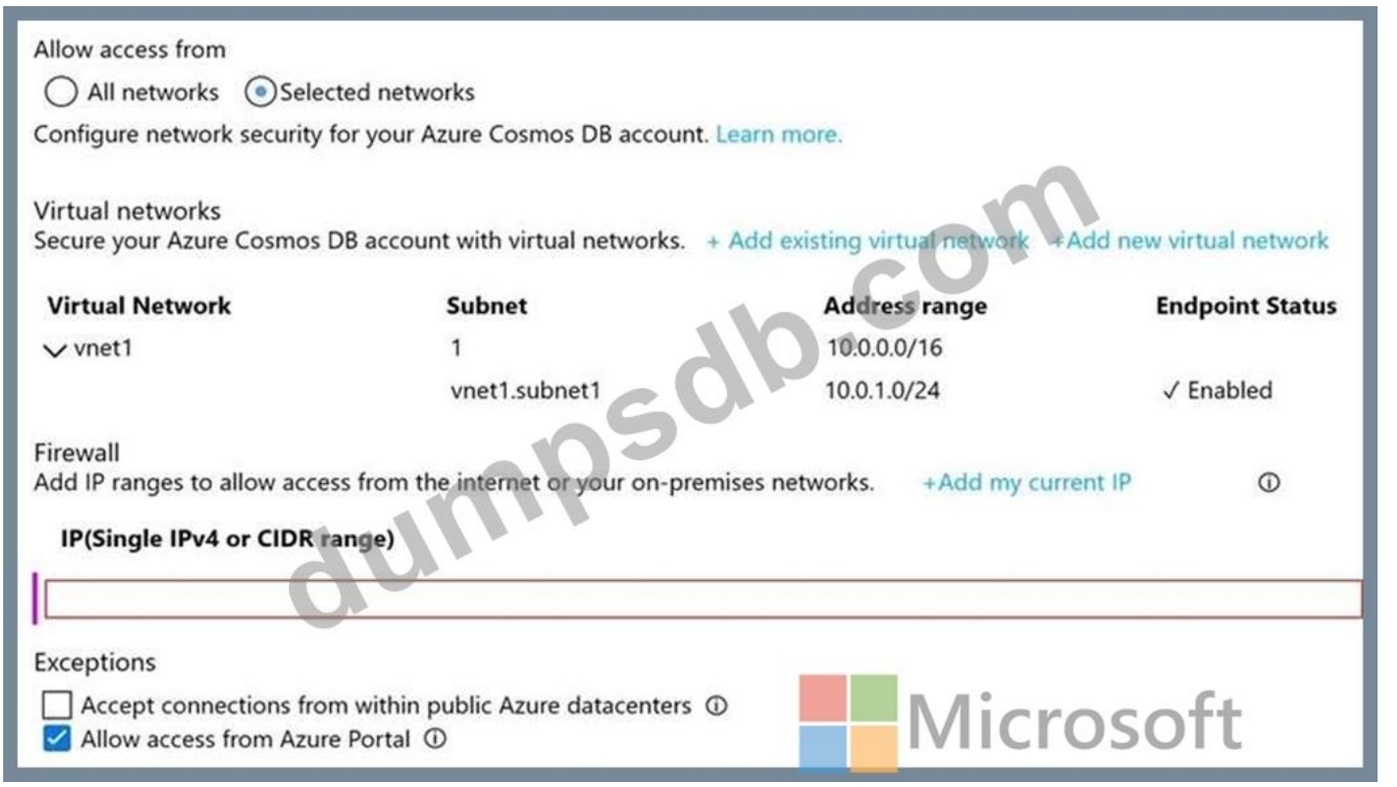
You have a container named container1 in an Azure Cosmos DB Core (SQL) API account.

You need to make the contents of container1 available as reference data for an Azure Stream Analytics job.
Solution: You create an Azure function that uses Azure Cosmos DB Core (SQL) API change feed as a trigger and Azure event hub as the output.
Does this meet the goal?
A. Yes
B. No
Answer: A (LEAVE A REPLY)
The Azure Cosmos DB change feed is a mechanism to get a continuous and incremental feed of records from an Azure Cosmos container as those records are being created or modified. Change feed support works by listening to container for any changes. It then outputs the sorted list of documents that were changed in the order in which they were modified.
The following diagram represents the data flow and components involved in the solution:

NEW QUESTION: 13
You have an Azure Cosmos DB Core (SQL) API account named account1.
You have the Azure virtual networks and subnets shown in the following table.

Subnet	Network	IP address range	Virtual machine
subnet1	vnet1	10.0.0.0/24	VM1
subnet2	vnet1	10.0.1.0/24	VM2
subnet3	vnet2	10.1.0.0/24	VM3

The vnet1 and vnet2 networks are connected by using a virtual network peer.
The Firewall and virtual network settings for account1 are configured as shown in the exhibit.



For each of the following statements, select Yes if the statement is true. Otherwise, select No.
NOTE: Each correct selection is worth one point.

Answer:

NEW QUESTION: 14
You maintain a relational database for a book publisher. The database contains the following tables.

Name	Column
Author	authorId **(primary key)**
	fullname
	address
	contactInfo
Book	bookId **(primary key)**
	isbn
	title
	genre
BookauthorInk	authorId **(foreign key)**
	bookId **(foreign key)**

The most common query lists the books for a given authorId.

You need to develop a non-relational data model for Azure Cosmos DB Core (SQL) API that will replace the relational database. The solution must minimize latency and read operation costs.

What should you include in the solution?

A. Create a container for Author and a container for Book. In each Author document, embed bookId for each book by the author. In each Book document embed authorId of each author.

B. Create Author, Book, and BookauthorInk documents in the same container.

C. Create a container that contains a document for each Author and a document for each Book. In each Book document, embed authorId.

D. Create a container for Author and a container for Book. In each Author document and Book document embed the data from BookauthorInk.

Answer: (SHOW ANSWER)

Store multiple entity types in the same container.

NEW QUESTION: 15

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You have a container named container1 in an Azure Cosmos DB Core (SQL) API account.
You need to make the contents of container1 available as reference data for an Azure Stream Analytics job.
Solution: You create an Azure Data Factory pipeline that uses Azure Cosmos DB Core (SQL) API as the input and Azure Blob Storage as the output.
Does this meet the goal?
A. No
B. Yes
Answer: A (LEAVE A REPLY)

NEW QUESTION: 16
You have a database in an Azure Cosmos DB Core (SQL) API account. The database is backed up every two hours.
You need to implement a solution that supports point-in-time restore.
What should you do first?
A. Configure the Backup & Restore settings for the account.
B. Configure the Point In Time Restore settings for the account.
C. Enable Continuous Backup for the account.
D. Create a new account that has a periodic backup policy.
Answer: C (LEAVE A REPLY)

NEW QUESTION: 17
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure Cosmos DB Core (SQL) API account named account 1 that uses autoscale throughput.
You need to run an Azure function when the normalized request units per second for a container in account1 exceeds a specific value.
Solution: You configure an application to use the change feed processor to read the change feed and you configure the application to trigger the function.
Does this meet the goal?
A. Yes
B. No
Answer: B (LEAVE A REPLY)
Instead configure an Azure Monitor alert to trigger the function.
You can set up alerts from the Azure Cosmos DB pane or the Azure Monitor service in the Azure portal.

NEW QUESTION: 18
Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.
After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.
You have an Azure Cosmos DB Core (SQL) API account named account 1 that uses autoscale throughput.
You need to run an Azure function when the normalized request units per second for a container in account1 exceeds a specific value.
Solution: You configure the function to have an Azure CosmosDB trigger.
Does this meet the goal?
A. Yes
B. No
Answer: (SHOW ANSWER)
Instead configure an Azure Monitor alert to trigger the function.
You can set up alerts from the Azure Cosmos DB pane or the Azure Monitor service in the Azure portal.