



Vendor: Microsoft

Exam Code: 70-768

Exam Name: Developing SQL Data Models

Version: DEMO

Case Study #1 (QUESTION 1 - QUESTION 3)

Background

Wide World Importers imports and sells clothing. The company has a multidimensional Microsoft SQL Server Analysis Services instance. The server has 80 gigabytes (GB) of available physical memory. The following installed services are running on the server:

Case Study #2 (QUESTION 4 - QUESTION 6)

Background

Wide World Importers has multidimensional cubes named SalesAnalysis and ProductSales. The SalesAnalysis cube is refreshed from a relational data warehouse. You have a Microsoft SQL Server Analysis Services instance that is configured to use tabular mode. You have a tabular data model named CustomerAnalysis.

Case Study #3 (QUESTION 7 - QUESTION 9)

Background

You are a developer for a Seattle-based company. The company is expanding globally. Many company employees speak fluent Mandarin and read Simplified Chinese. You have six tabular data models that are deployed to two instances of Microsoft SQL Server Analysis Services (SSAS).

QUESTION 1

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution. Determine whether the solution meets the stated goals.

You deploy a tabular data model to an instance of Microsoft SQL Server Analysis Services (SSAS).

The model uses an in-memory cache to store and query data.

The data set is already the same size as the available RAM on the server.

Data volumes are likely to continue to increase rapidly.

Your data model contains multiple calculated tables.

The data model must begin processing each day at 2:00 and processing should be complete by 4:00 the same day.

You observe that the data processing operation often does not complete before 7:00.

This is adversely affecting team members.

You need to improve the performance.

Solution: Install solid-state disk drives to store the tabular data model.

Does the solution meet the goal?

A. Yes

B. No

Answer: B

Explanation:

By default, tabular models use an in-memory cache to store and query data. When tabular models query data residing in-memory, even complex queries can be incredibly fast. However, there are some limitations to using cached data. Namely, large data sets can exceed available memory, and data freshness requirements can be difficult if not impossible to achieve on a regular processing schedule.

DirectQuery overcomes these limitations while also leveraging RDBMS features making query execution more efficient.

With DirectQuery: +

<https://docs.microsoft.com/en-us/sql/analysis-services/tabular-models/directquery-mode-ssas-tabular>

QUESTION 2

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution. Determine whether the solution meets the stated goals.

A company has an e-commerce website. When a customer places an order, information about the transaction is inserted into tables in a Microsoft SQL Server relational database named OLTP1. The company has a SQL Server Analysis Services (SSAS) instance that is configured to use Tabular mode. SSAS uses data from OLTP1 to populate a data model.

Sales analysts build reports based on the SSAS model. Reports must be able to access data as soon as it is available in the relational database.

You need to configure and deploy an Analysis Services project to the Analysis Services instance that allows near real-time data source access.

Solution: In the Deployment Option property for the report, you set the Query Mode to InMemory. Does the solution meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

With InMemory the queries can use the cache only.

[https://msdn.microsoft.com/en-us/library/hh230898\(v=sql.120\).aspx](https://msdn.microsoft.com/en-us/library/hh230898(v=sql.120).aspx)

QUESTION 3

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution. Determine whether the solution meets the stated goals.

You have a Microsoft SQL Server Analysis Services (SSAS) multidimensional database that stores customer and order data for customers in the United States only. The database contains the following objects:

Type	Name	Content
Measure	Reseller Average Unit Price	the average unit price of sales
Dimension	Geography	the location of resellers
Hierarchy	Geography.State-Province	the state or province where the reseller is located
Member	Geography.State-Province.&[WA]&[US], Geography.State-Province.&[GA]&[US]	a specific state and country/region

You must create a KPI named Large Sales Target that uses the Traffic Light indicator to display status. The KPI must contain:

Expression type	Description
Value	the reseller average unit price
Goal	the average reseller average unit price for US states other than Colorado (CO)
Status	a green indicator if the value is at least 10 percent above the goal, a red indicator if the value is 15 percent or more below the goal, and a yellow indicator for other values
Trend	the value for trend is always 0

You need to create the KPI.

Solution: You set the value of the Status expression to:

```

Case
  When KpiValue("Large Sales Target")/KpiGoal("Large Sales Target") >= 1.1
    Then 1
  When KpiValue("Large Sales Target")/KpiGoal("Large Sales Target") < 1.1
    And
      KpiValue("Large Sales Target")/KpiGoal("Large Sales Target") > .85
    Then 0
  Else-1
End
  
```

Does the solution meet the goal?

- A. Yes
- B. No

Answer: B

QUESTION 4

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution. Determine whether the solution meets the stated goals.

You have a Microsoft SQL Server Analysis Services (SSAS) multidimensional database that stores customer and order data for customers in the United States only. The database contains the following objects:

Type	Name	Content
Measure	Reseller Average Unit Price	the average unit price of sales
Dimension	Geography	the location of resellers
Hierarchy	Geography.State-Province	the state or province where the reseller is located
Member	Geography.State-Province.&[WA]&[US], Geography.State-Province.&[GA]&[US]	a specific state and country/region

You must create a KPI named Large Sales Target that uses the Traffic Light indicator to display status. The KPI must contain:

Expression type	Description
Value	the reseller average unit price
Goal	the average reseller average unit price for US states other than Colorado (CO)
Status	a green indicator if the value is at least 10 percent above the goal, a red indicator if the value is 15 percent or more below the goal, and a yellow indicator for other values
Trend	the value for trend is always 0

You need to create the KPI.

Solution: You set the value of the Status expression to:

```
AVG({
    COUSIN(
        [Geography].[State-Province].[CO]&[US],
        [Geography].[State-Province].[CO]
    )
})
[Measures].[Reseller Average Unit Price])
```

Does the solution meet the goal?

- A. Yes
- B. No

Answer: B

QUESTION 5

You are responsible for installing new database server instances.

You must install Microsoft SQL Server Analysis Services (SSAS) to support deployment of the following projects.

You develop both projects by using SQL Server Data Tools.

You need to install the appropriate services to support both projects.

Which two actions should you perform? Each correct answer presents part of the solution.

- A. Install one tabular instance of SSAS and enable the Data Mining Extensions.
- B. Install one multidimensional instance of SSAS.
- C. Install one tabular instance of SSAS.
- D. Install a multidimensional instance and a Power Pivot instance of SSAS on the same server.
- E. Install two separate tabular instances of SSAS.

Answer: BC

Explanation:

Analysis Services can be installed in one of three server modes: Multidimensional and Data Mining (default), Power Pivot for SharePoint, and Tabular.

<https://docs.microsoft.com/en-us/sql/analysis-services/comparing-tabular-and-multidimensional-solutions-ssas>