**EC2**

1. After you recommend Amazon Redshift to a client as an alternative solution to paying data warehouses to analyze his data, your client asks you to explain why you are recommending Redshift. Which of the following would be a reasonable response to his request?

A. It has high performance at scale as data and query complexity grows.

B. It prevents reporting and analytic processing from interfering with the performance of OLTP workloads.

C. You don't have the administrative burden of running your own data warehouse and dealing with setup, durability, monitoring, scaling, and patching.

D. All answers listed are a reasonable response to his QUESTION

1. Your supervisor has asked you to build a simple file synchronization service for your department. He doesn't want to spend too much money and he wants to be notified of any changes to files by email. What do you think would be the best Amazon service to use for the email solution?

A. Amazon SES

B. Amazon CIoudSearch

C. Amazon SWF

D. Amazon AppStream

1. You have been asked to build a database warehouse using Amazon Redshift. You know a little about it, including that it is a SQL data warehouse solution, and uses industry standard ODBC and JDBC connections and PostgreSQL drivers. However you are not sure about what sort of storage it uses for database tables.

What sort of storage does Amazon Redshift use for database tables?

A. InnoDB Tables

B. NDB data storage

C. Columnar data storage

D. NDB CLUSTER Storage

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| 1 | D | Amazon Redshift delivers fast query performance by using columnar storage technology to improve I/O efficiency and parallelizing queries across multiple nodes. Redshift uses standard PostgreSQL JDBC and ODBC drivers, allowing you to use a wide range of familiar SQL clients. Data load speed scales  linearly with cluster size, with integrations to Amazon S3, Amazon DynamoDB, Amazon Elastic MapReduce, Amazon Kinesis or any SSH-enabled host.  AWS recommends Amazon Redshift for customers who have a combination of needs, such as: High performance at scale as data and query complexity grows Desire to prevent reporting and analytic processing from interfering with the performance of OLTP workloads  Large volumes of structured data to persist and query using standard SQL and existing BI tools Desire to the administrative burden of running one's own data warehouse and dealing with setup, durability, monitoring, scaling and patching |
| 2 | A | File change notifications can be sent via email to users following the resource with Amazon Simple Email Service (Amazon SES), an easy-to-use,cost-effective email solution |
| 3 | C | Amazon Redshift achieves efficient storage and optimum query performance through a combination of massively parallel processing, columnar data storage, and very efficient, targeted data compression encoding schemes.  Columnar storage for database tables is an important factor in optimizing analytic query performance because it drastically reduces the overall disk I/O requirements and reduces the amount of data you need to load from disk. |