**Direct Connect**

AWS Direct Connect is a cloud service solution that makes it easy to establish a dedicated network connection from your premises to AWS. Using AWS Direct Connect, you create a private connection between AWS and your data center, office, or colocation environment. This can increase bandwidth throughput and provide a more consistent network experience than internet-based connections.

AWS Direct Connect is compatible with all AWS services accessible over the internet, and is available in speeds starting at **50 Mbps and scaling up to 100 Gbps.**

1. A customer has a 10 GB AWS Direct Connect connection to an AWS region where they have a web application hosted on Amazon Elastic Computer Cloud (EC2). The application has dependencies on an on-premises mainframe database that uses a BASE (Basic Available. Sort stale Eventual consistency) rather than an ACID (Atomicity. Consistency isolation. Durability) consistency model. The application is exhibiting undesirable behavior because the database is not able to handle the volume of writes. How can you reduce the load on your on premises database resources in the most cost-effective way?

A. Use an Amazon Elastic Map Reduce (EMR) S3DistCp as a synchronization mechanism between the on-premises database and a Hadoop cluster on AWS.

B. Modify the application to write to an Amazon SQS queue and develop a worker process to flush the queue to the on-premises database.

C. Modify the application to use DynamoDB to feed an EMR cluster which uses a map function to write to the on-premises database.

D. Provision an RDS read-replica database on AWS to handle the writes and synchronize the two databases using Data Pipeline

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