

Introduction to Azure

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Azure Services

- Compute
- DATA
- Networking
- services



IDENTITY &
ACCESS



Active Directory



Multi-Factor
Authentication

MOBILE



Mobile
Services



Notification
Hubs

BACKUP



Site
Recovery



Backup

MESSAGING &
INTEGRATION



Storage
Queues



Service Bus
Queues



Service Bus
Relay



Service Bus
Topics



BizTalk Hybrid
Connections



BizTalk Services

COMPUTE
ASSISTANCE



Scheduler

PERFORMANCE



Cache



Content
Delivery
Network

BIG COMPUTE &
BIG DATA



HDInsight

High Performance
Computing (HPC)

MEDIA



Media Services

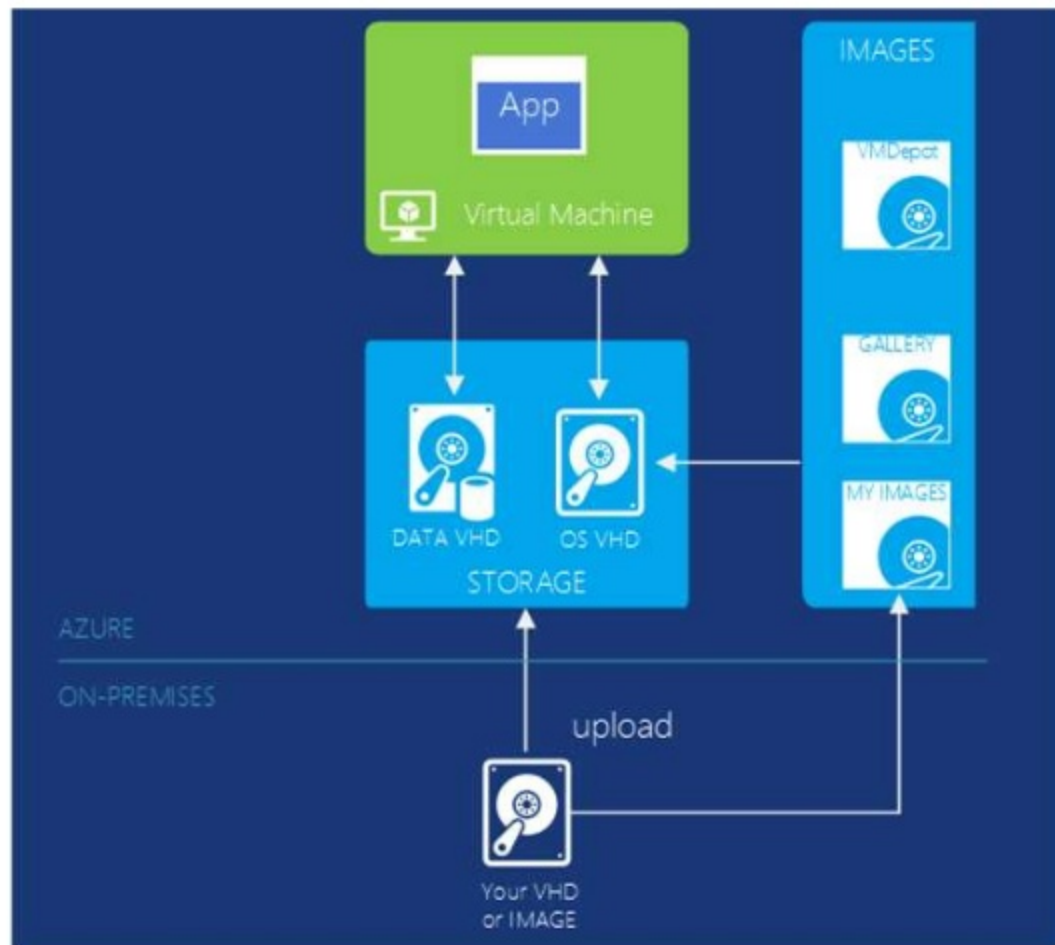
COMMERCE



Store &
Marketplace

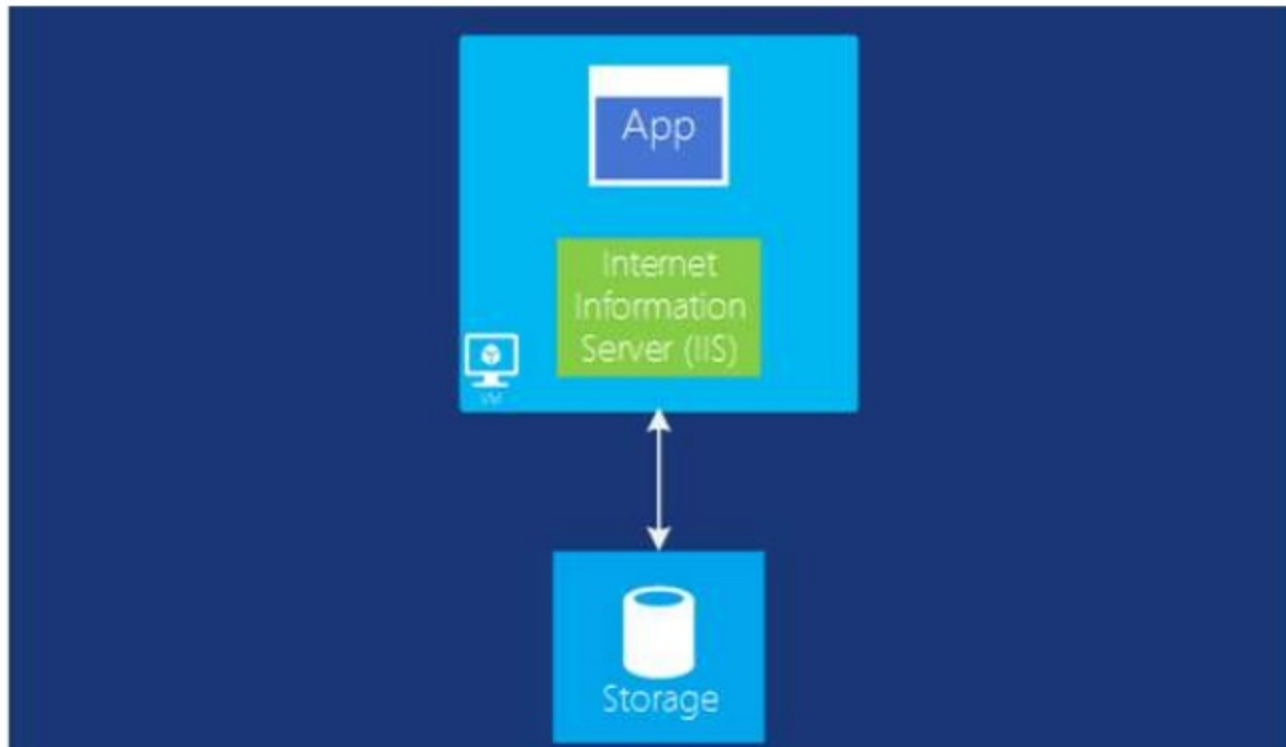
Virtual Machine

- Import your VM's to the cloud
- Use VHD




Azure Website

- it's an easy-to-manage,
- scalable,
- highly secure,
- highly available solution
- for running website
- Managed services IIS



Azure SQL

- Azure SQL Database provides all of the key features of a relational database management system, including atomic transactions, concurrent data access by multiple users with data integrity, ANSI SQL queries, and a familiar programming model.
 - can be accessed using Entity Framework, ADO.NET, JDBC, and other familiar data access technologies.
 - It also supports most of the T-SQL language, along with SQL Server tools such as SQL Server Management Studio. But SQL Database isn't just a DBMS in the cloud-it's a PaaS service.
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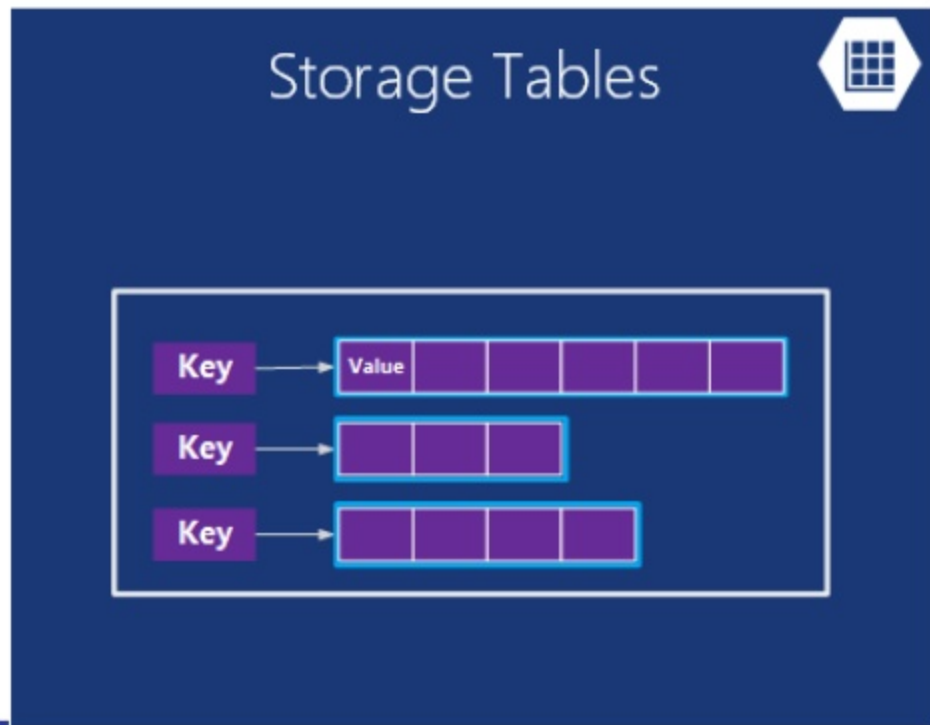
Azure SQL

- You still control your data and who can access it, but SQL Database takes care of the administrative grunt work, such as managing the hardware infrastructure and automatically keeping the database and operating system software up to date.
- SQL Database also provides high availability, automatic backups, point-in-time restore capabilities, and can replicate copies across geographical regions. there are always 3 copies of your data kept in sync across an Azure datacenter . 6 if you allow Azure to use geo-redundancy



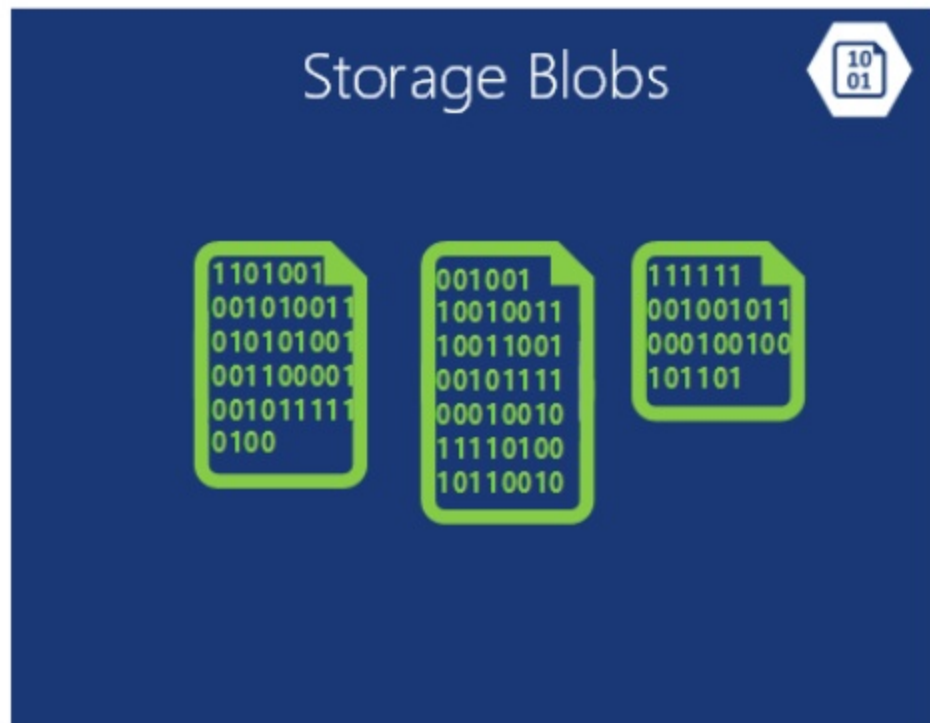
Storage tables

- inexpensive basic data structure
- No queries
- Upto 1TB table
- Used for apps, e.g profile info.



Storage blobs

- Unstructured binary data
- 1TB per file



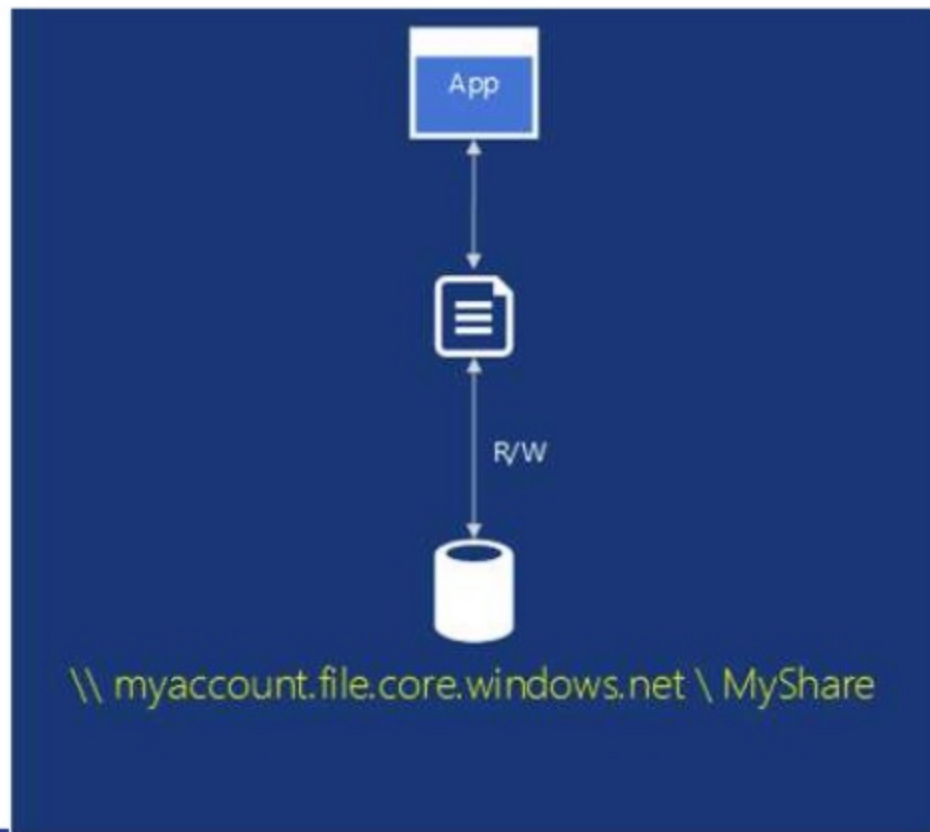
import /Export

- Import /export large data set s
- from your datacenter to Cloud
- (“fedex” like service)



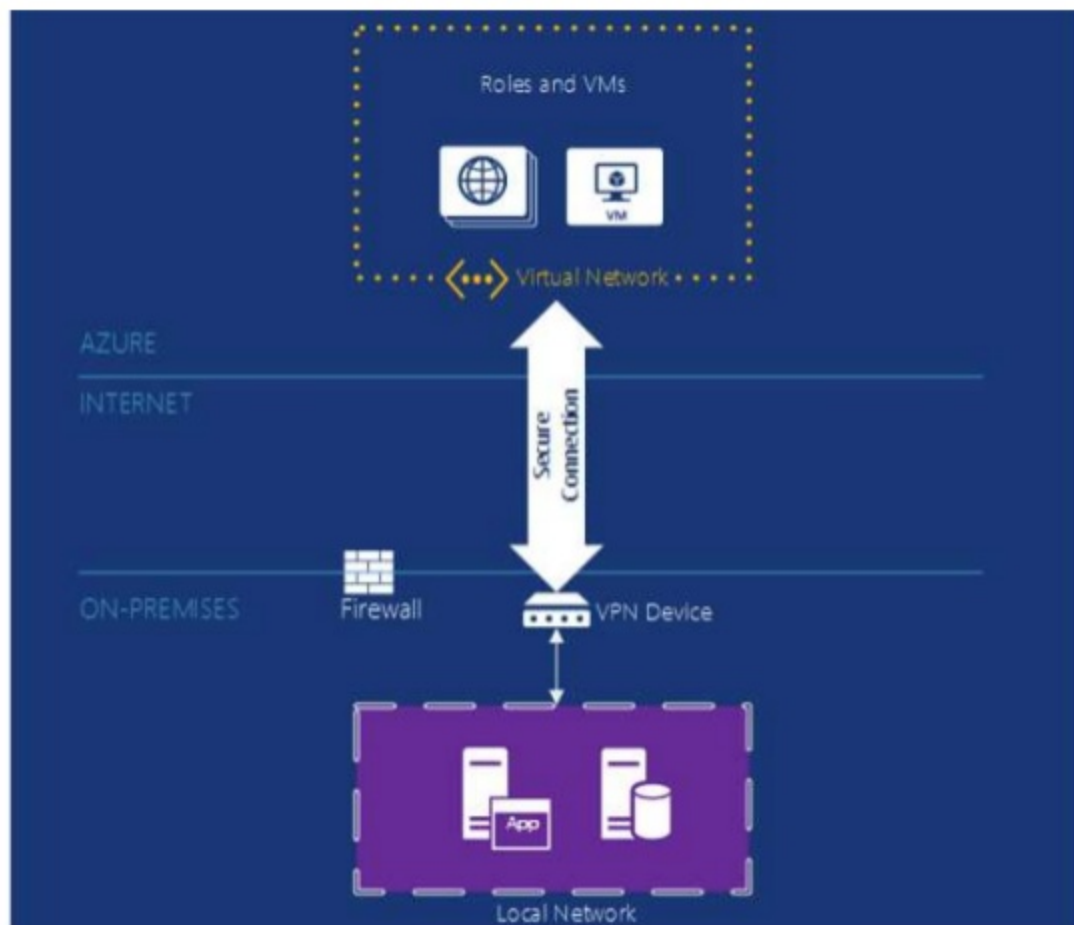
Azure File Service

- Migrating data to cloud
- Share info between apps



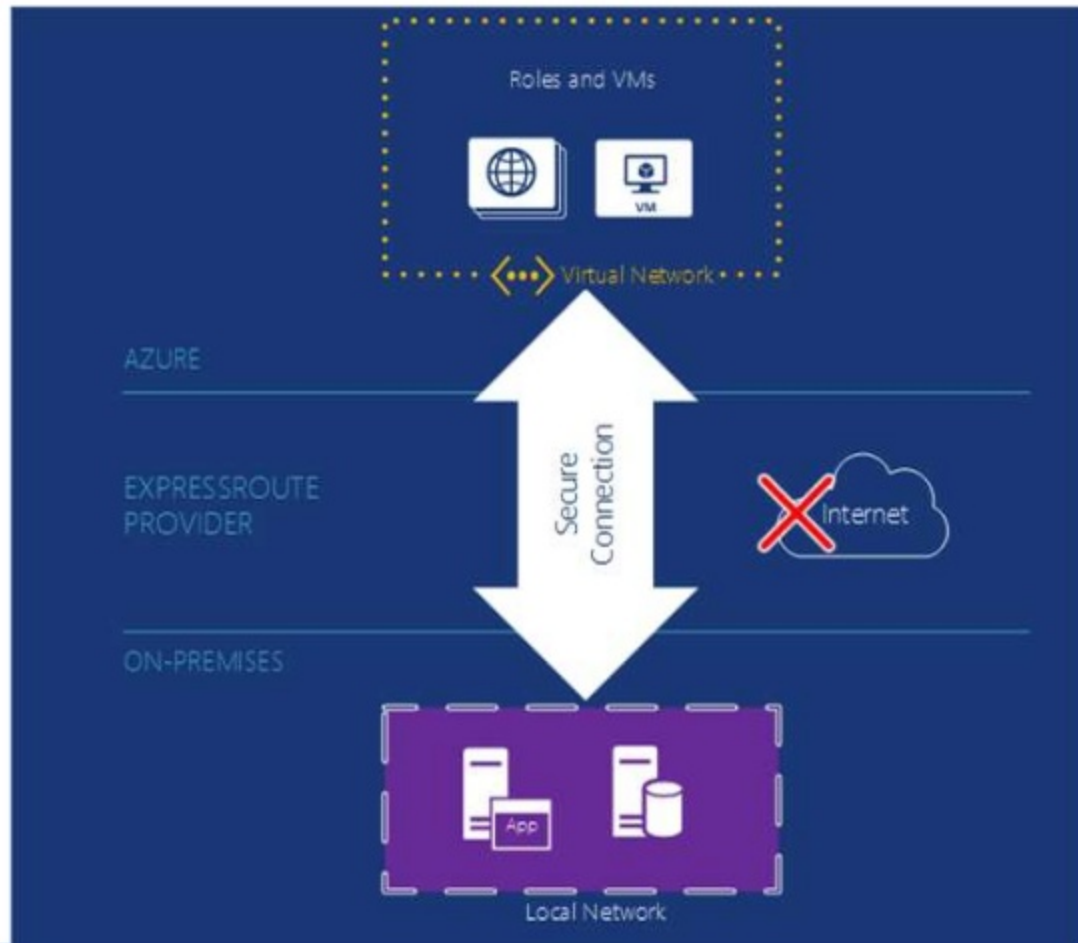
Virtual Network

- *Virtual Networks provides a private network in the cloud so different services can talk to each other, or to on-premises resources if you set up a VPN connection. a cross-premises connection.*
- treat it as an extension of your own datacenter.



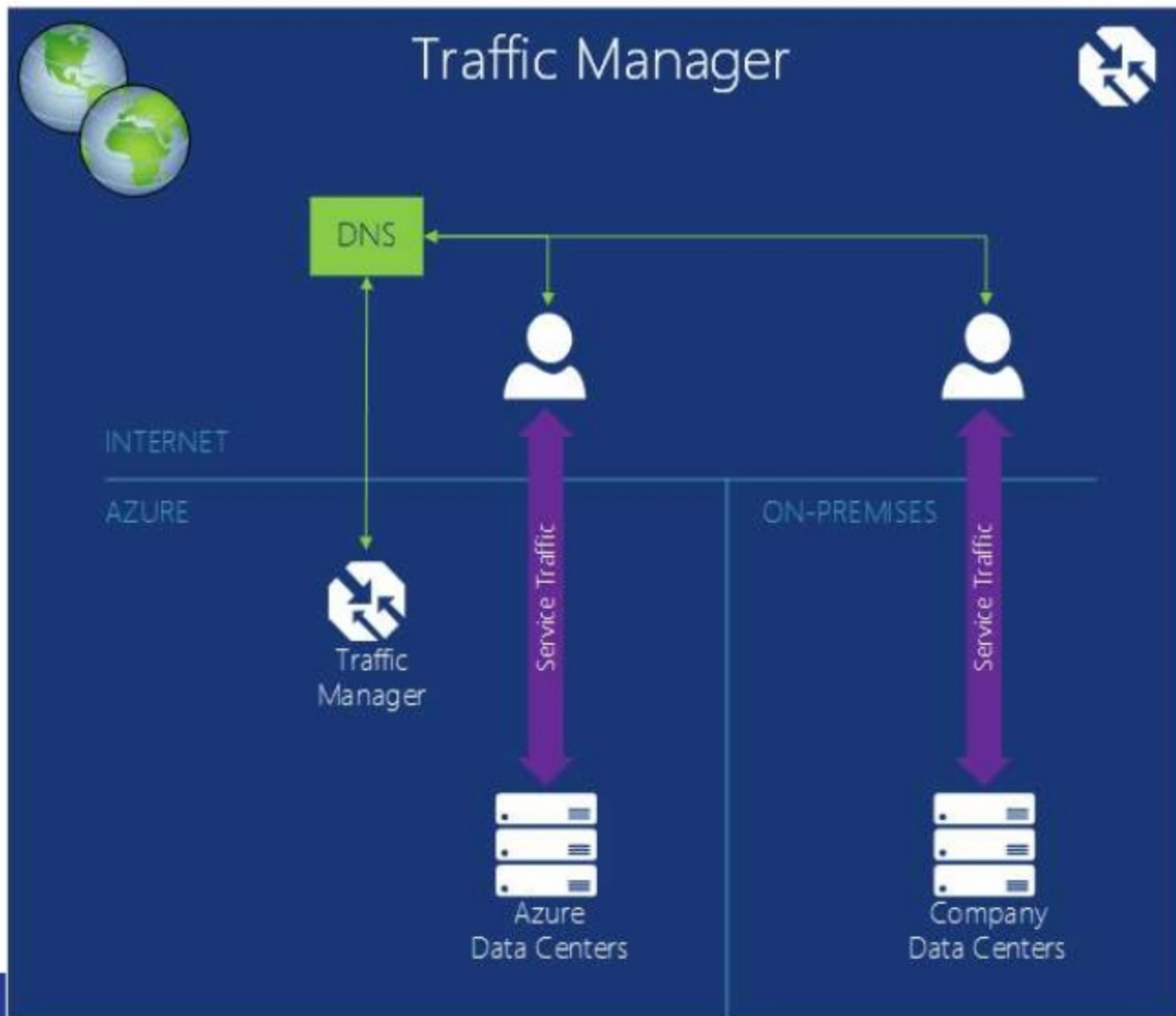
Express Route

- *faster dedicated lines instead of the public Internet.*



Traffic Manager

- *allows you to route global traffic to your service based on intelligent rules.*



Automation

- Azure Automation provides a way for you to create, monitor, manage, and deploy resources in your Azure environment.
- Automation uses "runbooks", which uses Windows PowerShell workflows (vs. just regular PowerShell) under the covers.
- Runbooks are meant to be executed without user interaction.
- PowerShell workflows allows the state of a script to be saved at checkpoints along the way. Then if a failure occurs, you don't have to start a script from the beginning. You can restart it at the last checkpoint. This saves you a lot of work trying to make the script handle every possible failure.

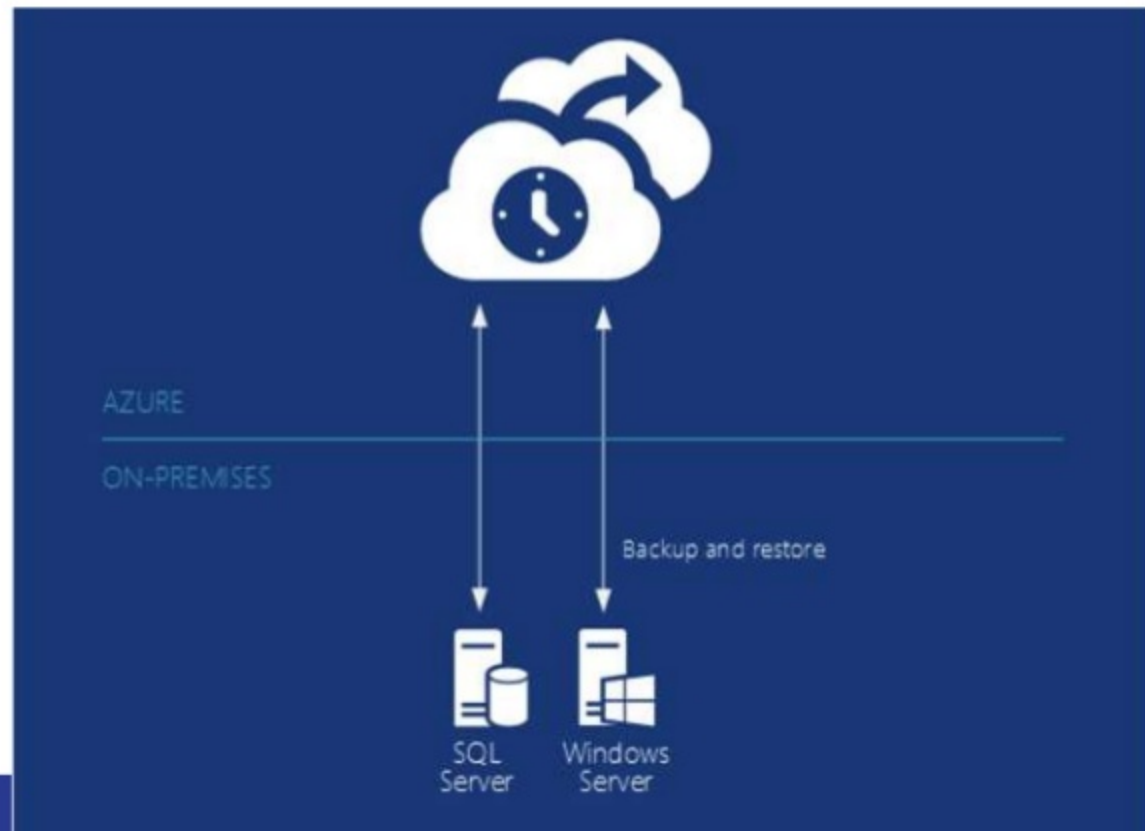
API management

- Azure API Management makes it easy for organizations to publish APIs to partners, employees and third-party developers securely and at scale.
- It provides a different API endpoint and acts as a proxy to call the actual endpoint while providing services like caching, transformation, throttling, access control, and analytics aggregation.



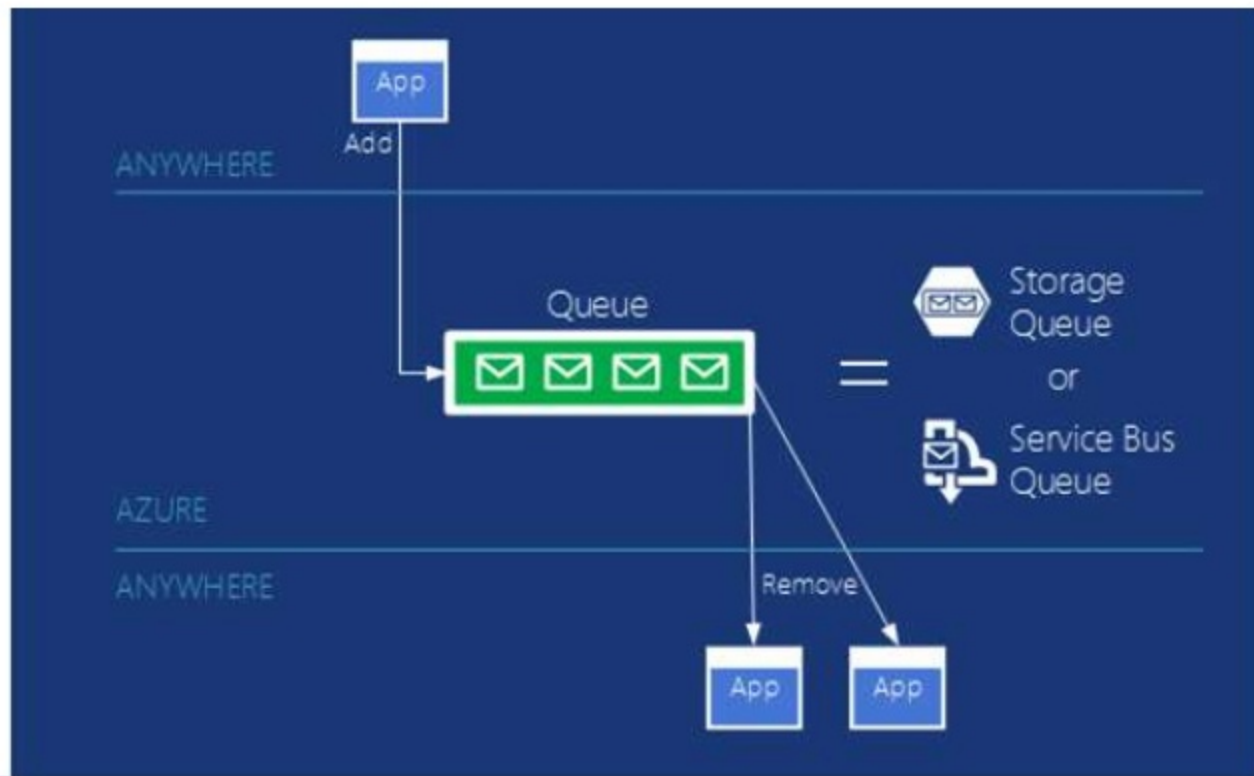
backup

- Backup your onsite windows server to the cloud.



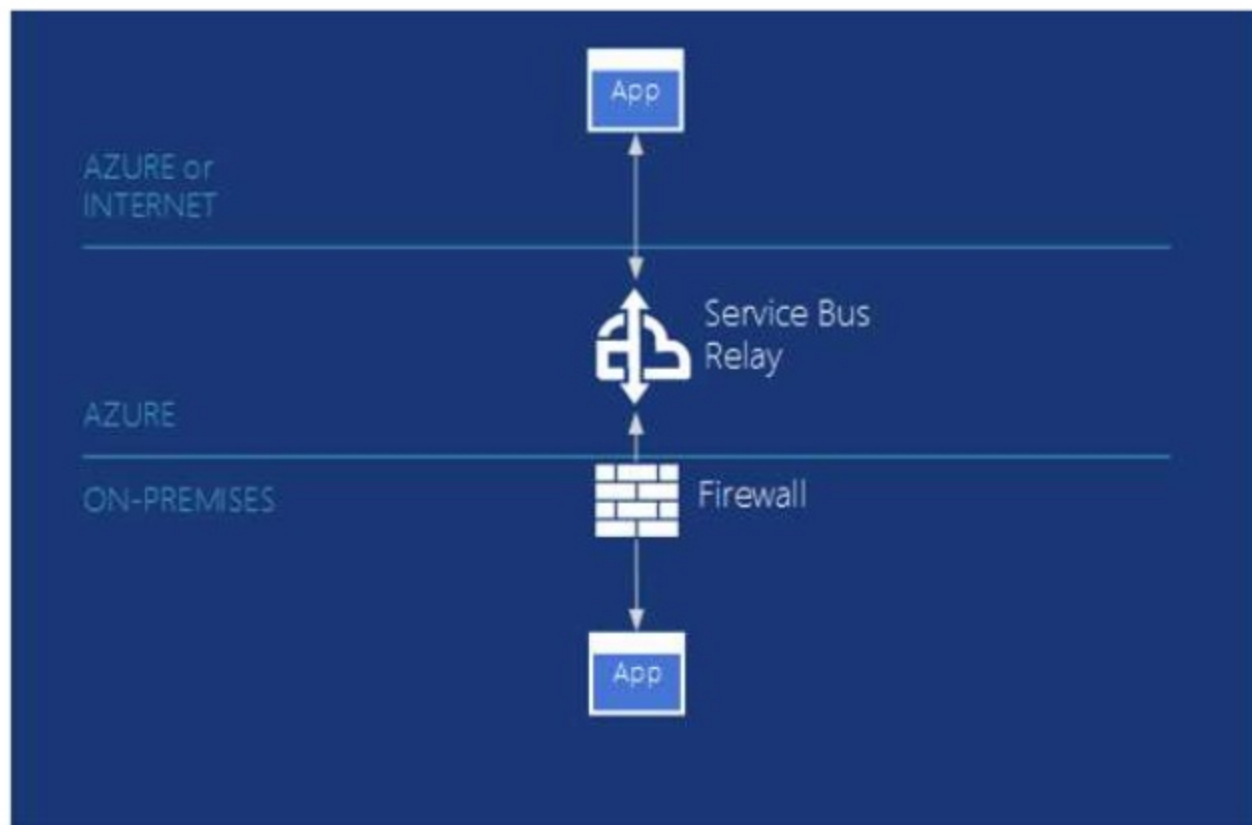
Message Queues

- *Queues allow loose coupling between parts of an application and facilitate scaling.*



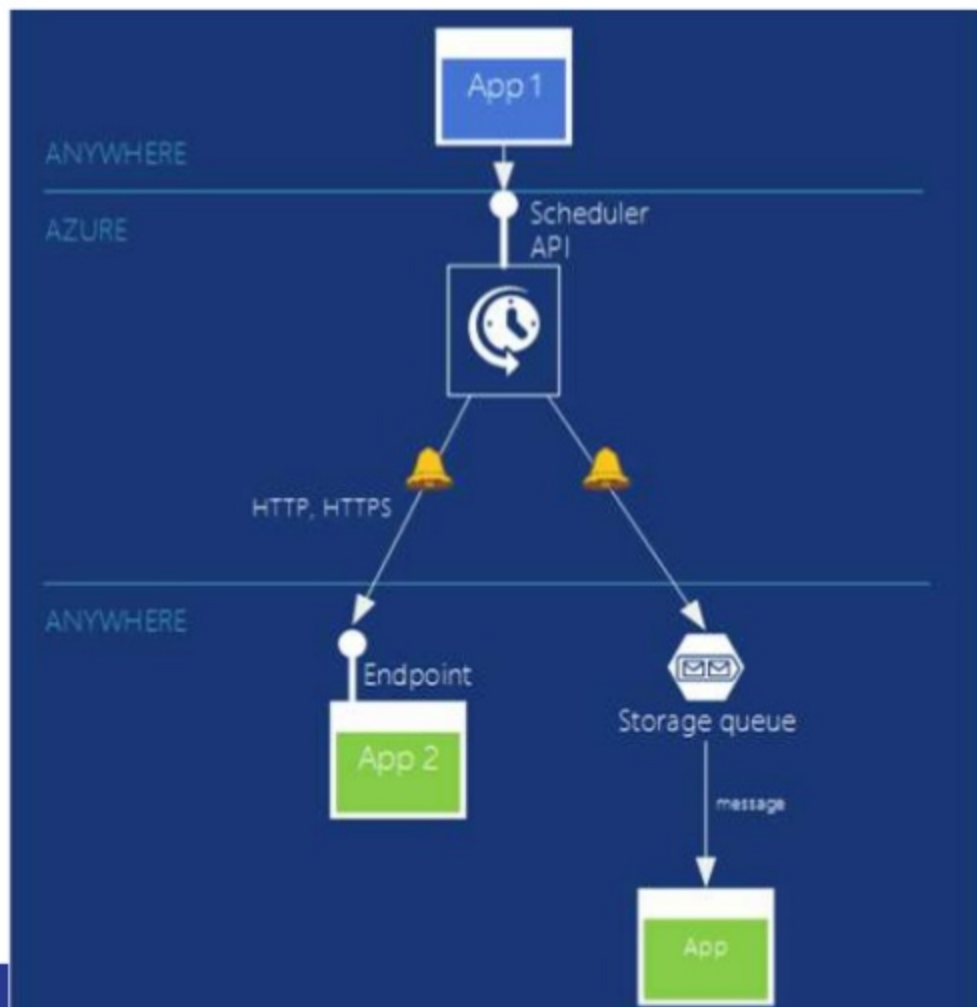
Service Bus Relay

- *Service Bus Relay allows communication between applications on different sides of a firewall.*



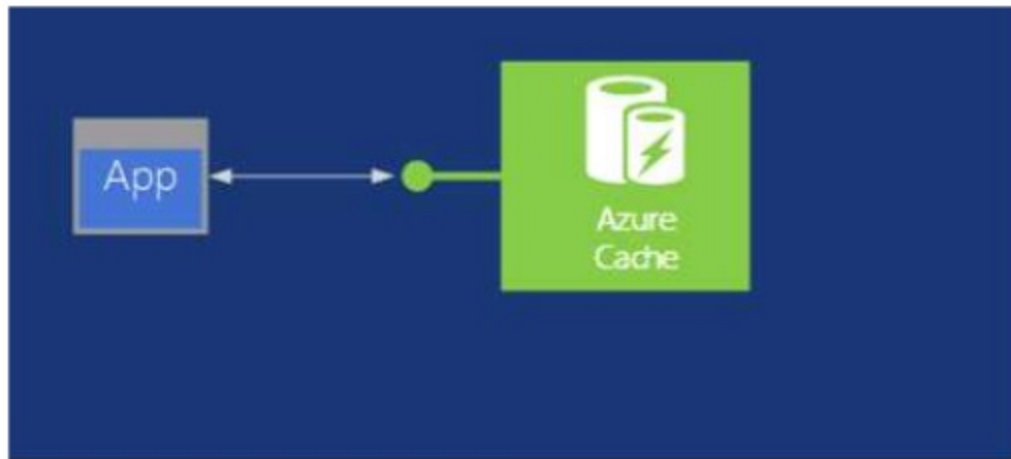
Scheduler

- *Azure Scheduler provides a way to schedule jobs at a specific time for a specific duration.*



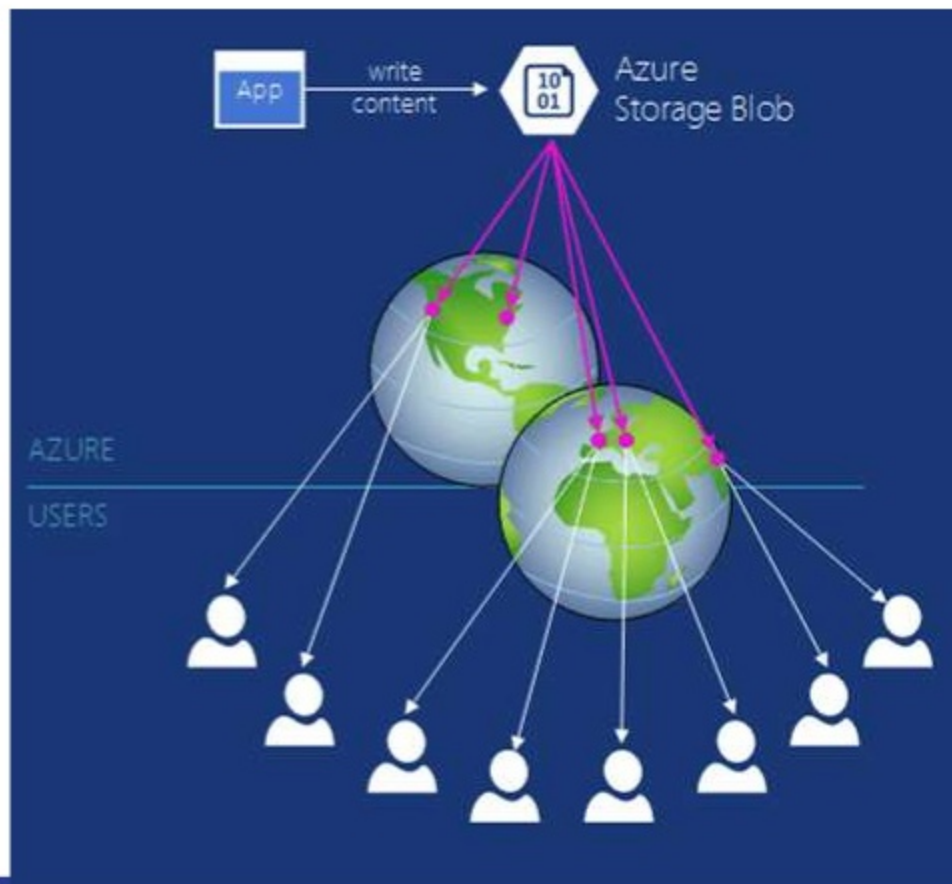
Azure Cache

- An Azure application can cache data in memory and even split it up across many worker roles



Content Delivery Network

- Copies of a blob can be cached at sites around the world.
- Suppose you need to store blob data that will be accessed by users around the world.



HDInsight (hadoop)

- Hadoop cluster :)

