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| **Differences** | **Azure Blob Storage** | **Azure Data Lake Storage Gen 2** |
| **Purpose** | General-purpose object storage for a variety of use cases, such as storing large amounts of unstructured data, including images, videos, documents, and backups. | Optimized for big data analytics, providing file system semantics, and hierarchical namespace for organizing large volumes of data. |
| **Data Hierarchy** | Simple flat namespace with containers, blobs (objects), and directories. | Hierarchical namespace that allows for complex directory structures, file system semantics, and directory-level permissions. |
| **Access** | Accessed via the Blob Service REST API, Azure Storage client libraries, and Azure Storage Explorer. | Accessed via the Azure Data Lake Gen2 API, Azure Storage client libraries, Azure Storage Explorer, and through Hadoop-compatible file system driver (HDFS). |
| **Performance** | Optimized for high availability and scalable throughput. | Enhanced performance for analytics workloads, such as those involving large-scale, batch, and interactive data processing. |
| **Integration** | Can be integrated with other Azure services, such as Azure Virtual Machines, Azure Functions, and Azure Kubernetes Service. | Tight integration with big data analytics tools and frameworks, such as Azure Databricks, Azure Synapse Analytics, HDInsight, and Apache Spark. |
| **Namespace** | Blob Storage uses a flat namespace | Data Lake Gen2 supports a hierarchical namespace with file system semantics |

2. Blob storage Account in Azure



