

Non-relational database

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Steps to Create an Azure Storage Account

1. Sign In to the Azure Portal:

- Go to the [Azure Portal](#) and sign in with your Azure credentials.

2. Create a New Resource:

- On the Azure portal's homepage, click on “**+ Create a resource**” located in the upper left-hand corner.

3. Search for Storage Account:

- In the “Search the Marketplace” box, type “**Storage account**” and press **Enter**.
- Select “**Storage account**” from the search results.

4. Start the Creation Process:

- Click on the “**Create**” button to begin setting up a new storage account.

5. Configure Basic Settings:

- **Subscription:** Choose the Azure subscription you want to use.
- **Resource Group:** Select an existing resource group or create a new one by clicking “**Create new**” and entering a name.
- **Storage Account Name:** Enter a unique name for your storage account. The name must be between 3 and 24 characters long and can only contain lowercase letters and numbers.
- **Region:** Choose the region where you want the storage account to be located.
- **Performance:** Select “**Standard**” or “**Premium**” based on your performance needs. Premium is generally used for high-performance scenarios.

- **Redundancy:** Choose the redundancy option for data protection. Options include:
 - **Locally-redundant storage (LRS):** Keeps copies of your data in a single region.
 - **Geo-redundant storage (GRS):** Replicates your data to a secondary region.
 - **Read-access geo-redundant storage (RA-GRS):** Provides read access to the data in the secondary region.
 - **Zone-redundant storage (ZRS):** Keeps data available across different availability zones.

6. Advanced Settings:

- Click “**Next: Advanced >**” to configure additional settings:
 - **Hierarchical Namespace:** Enable this if you want to use Azure Data Lake Storage Gen2 features. (Enable it now or later depending on your requirements).
 - **Blob Public Access:** Configure access settings for blobs if necessary.

7. Networking:

- Click “**Next: Networking >**”:
 - **Connectivity Method:** Choose whether the storage account should have a public endpoint or private endpoint.
 - **Firewall and Virtual Networks:** Configure firewall rules and network access as needed.

8. Data Protection:

- Click “**Next: Data protection >**”:
 - **Soft Delete:** Configure options for soft delete to retain deleted data for recovery. Adjust settings as needed.

9. Tags (Optional):

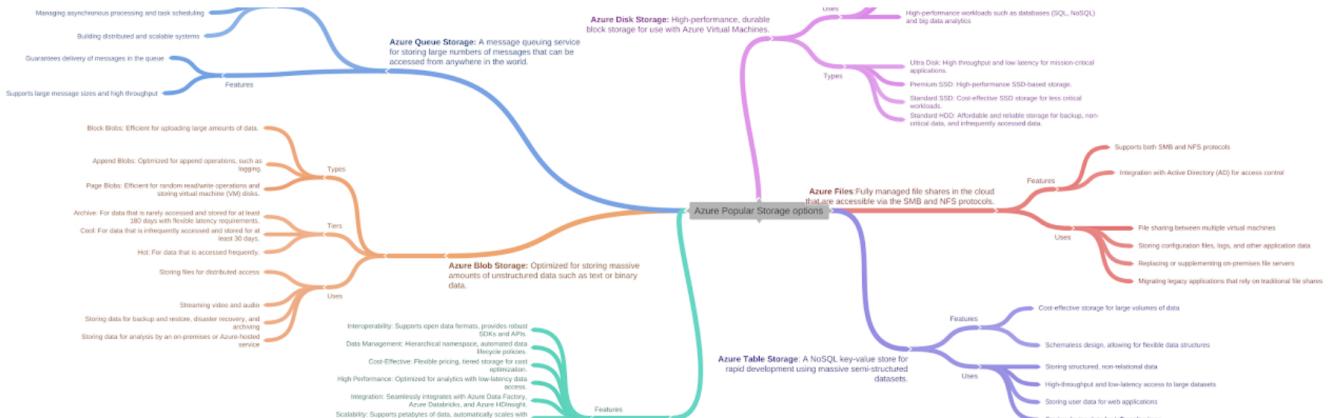
- Click “**Next: Tags >**” to add tags for resource management. Tags are key-value pairs used to categorize resources.

10. Review and Create:

- Click “**Next: Review + create >**”:
 - Review all the settings you have configured.
 - Ensure all information is correct and click “**Create**” to start the deployment.

11. Deployment:

- Wait for the deployment to complete. This may take a few minutes.
 - Once the deployment is finished, you can navigate to the resource by selecting “**Go to resource**”.



Azure Data Lake Storage (DLS): A scalable and secure data lake service built on top of Azure Blob Storage designed to handle large volumes of data from various sources and supporting data analytics workloads.

Create a storage account

Basics

Azure Storage is a Microsoft-managed service providing cloud storage that is highly available, secure, durable, scalable, and redundant. Azure Storage includes Azure Blobs (objects), Azure Data Lake Storage Gen2, Azure Files, Azure Queues, and Azure Tables. The cost of your storage account depends on the usage and the options you choose below. [Learn more about Azure storage accounts](#).

Project details

Select the subscription in which to create the new storage account. Choose a new or existing resource group to organize and manage your storage account together with other resources.

Subscription: MOC Subscription-Id:049475160
Resource group: (New) habitworks
Create new

Instance details

Storage account name: habitworks
Region: (US) East US
Performance: Standard (Recommended for most scenarios)
Redundancy: Locally-redundant storage (LRS)

Security

Configure security settings that impact your storage account.

Require secure transfer for REST API operations (checked)
Allow enabling anonymous access on individual containers (unchecked)
Enable storage account key access (checked)
Default to Microsoft Entra authorization in the Azure portal (unchecked)

Minimum TLS version: Version 1.2

Networking

Permitted scope for copy operations (preview): From any storage account

Hierarchical Namespace

Hierarchical namespace, complemented by Data Lake Storage Gen2 endpoint, enables file and directory semantics, accelerates big data analytics workloads, and enables access control lists (ACLs). [Learn more](#).

Enable hierarchical namespace (unchecked)

Access protocols

Blob and Data Lake Gen2 endpoints are provisioned by default. [Learn more](#).

Advanced

Network connectivity

You can connect to your storage account either publicly, via public IP addresses or service endpoints, or privately, using a private endpoint.

Network access: Enable public access from all networks (checked)
Enable public access from selected virtual networks and IP addresses
Disable public access and use private access

Data protection

Recovery

Protect your data from accidental or erroneous deletion or modification.

Enable point-in-time restore for containers
Enable soft delete for blobs
Enable soft delete for containers

IP Addresses

Allow select public internet IP addresses to access your resource.

Add your client IP address ("185.254.59.125")
IP address or CIDR

Network routing

Determine how to route your traffic as it travels from the source to its Azure endpoint. Microsoft network routing is recommended for most customers.

Routing preference *

- Microsoft network routing
- Internet routing

Soft delete

Soft delete enables you to recover containers that were previously marked for deletion. [Learn more](#)

Enable soft delete for file shares

Soft delete enables you to recover file shares that were previously marked for deletion. [Learn more](#)

Name	Value	Resource
<input type="text"/>	<input type="text"/>	All resources selected <input type="button" value="▼"/>

Basics

Subscription: MOC Subscription-ld49475160
Resource group: habitstorage
Location: East US
Storage account name: habitworks
Performance: Standard
Replication: Locally-redundant storage (LRS)

Advanced

Enable hierarchical namespace: Disabled
Enable SFTP: Disabled

Review + create

[View automation template](#)

Deployment

habitworks_1722267647607 | Overview

Your deployment is complete

Deployment name: habitworks_1722267647607
Subscription: MOC Subscription-ld49475160
Resource group: habitstorage
Start time: 7/29/2024, 8:41:53 AM
Correlation ID: 78dcfd12-3b58-49c5-92d6-dd16c9053a1d

Deployment details

Next steps

[Go to resource](#)

[Give feedback](#)
[Tell us about your experience with deployment](#)

habitworks | Storage account

Overview

Essentials

Resource group (move): habitstorage
Location: eastus
Subscription (move): MOC Subscription-ld49475160
Subscription ID: 8c92a910-aa48-42e7-bd4f-eecdad7c63f2e
Disk state: Available
Performance: Standard
Replication: Locally-redundant storage (LRS)
Account kind: StorageV2 (general purpose v2)
Provisioning state: Succeeded
Created: 7/29/2024, 8:41:55 AM
Tags (edit): Add tags

Properties **Monitoring** **Capabilities (7)** **Recommendations (0)**

Blob Storage

habitworks | Storage browser

Storage account

Storage account metrics

The data provided is regularly updated about 2-4 times a day and published hourly. If your account has extremely large objects, it may be over a day between updates.

Navigation

- Search
- Tags
- Diagnose and solve problems
- Access Control (IAM)
- Data migration
- Privacy settings
- Feedback

Add virtual directory

This will create a virtual directory. A virtual directory does not actually exist in Azure until you paste or upload blobs into it. To paste a blob into a virtual directory, copy the blob before creating the directory.

The screenshot shows the Azure Storage browser interface. On the left, a sidebar navigation includes: Events, Storage browser (selected), Storage Mover, Data storage (Containers, File shares, Queues, Tables), and Container & namespaces. The main content area displays two sections: 'Blob containers' (Number of containers, Number of blobs, Total data stored) and 'File shares' (Number of file shares, Number of files, Total data stored). A status bar at the bottom indicates 'Container & namespaces'.

This screenshot shows the Azure Storage browser interface. The left sidebar has the same navigation as the previous screenshot. The main area shows an 'Upload blob' dialog where 'product.json' has been selected. Below it, a list of blobs shows one item: 'product.json' (Last modified: 7/29/2024, 8:54:31 AM, Access tier: Hot (Inferred)). A status bar at the bottom indicates 'Container & namespaces'.

The screenshot shows the Azure Storage browser interface. The left sidebar includes: Events, Storage browser (selected), Storage Mover, Data storage (Containers, File shares, Queues, Tables), and Container & namespaces. The main area shows a 'New container' dialog with 'data' entered as the name and 'Private (no anonymous access)' selected as the anonymous access level. To the right, a list of containers shows one item: 'data' (Last modified: 7/29/2024, 8:48:41 AM, Anonymous access level: Private, Lease state: Available). A status bar at the bottom indicates 'Container & namespaces'.

Azure tables

This screenshot shows the Azure Storage browser interface. The left sidebar includes: Events, Storage browser (selected), Storage Mover, Data storage (Containers, File shares, Queues), and Container & namespaces. The main area shows a 'Tables' section with a table named 'products' and its URL. It also displays storage statistics for blob containers, tables, and queues. A status bar at the bottom indicates 'Container & namespaces'.

The screenshot shows the Azure Storage browser interface. The left sidebar includes: Events, Storage browser (selected), Storage Mover, Data storage (Containers, File shares, Queues, Tables), Security + networking, Data management, Settings (Configuration, Resource sharing (CORS)), and Container & namespaces. The main area shows a summary of storage resources: Blob containers (Number of containers, Number of blobs, Total data stored), Tables (Number of tables, Number of entities, Total data stored), and Queues (Number of queues, Number of messages, Total data stored). A status bar at the bottom indicates 'Container & namespaces'.

The screenshot shows two side-by-side views of the Azure Storage account interface. Both views have a left sidebar with navigation links like Events, Data storage, Security + networking, Data management, Settings, Configuration, and Resource sharing (CORS). The top view shows the 'Storage browser' section with a table named 'products' listed under 'Tables'. The bottom view shows the 'Tables' section with a table named 'products' listed under 'Tables'.

The screenshot shows two side-by-side 'Add entity' forms for a table. Both forms have columns for Property Name, Type, and Value. The left form has entries for PartitionKey (String, 1), RowKey (String, 1), Name (String, Widget), and Price (Double, 2.99). The right form has entries for PartitionKey (String, 1), RowKey (String, 2), Name (String, Kniknak), Price (Double, 1.99), and Discontinued (Boolean, true).

Property Name	Type	Value
PartitionKey	String	1
RowKey	String	1
Name	String	Widget
Price	Double	2.99

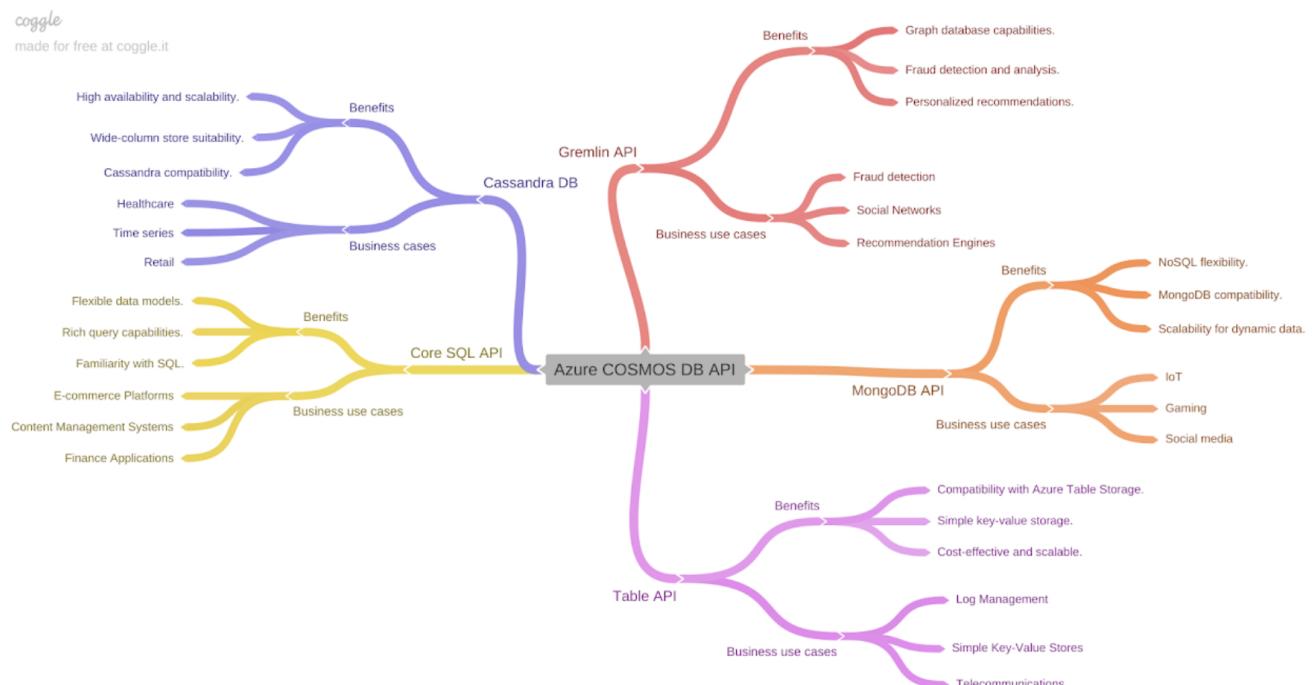
Property Name	Type	Value
PartitionKey	String	1
RowKey	String	2
Name	String	Kniknak
Price	Double	1.99
Discontinued	Boolean	true

Azure Files

The screenshot shows two side-by-side views of the Azure Storage account interface. The left view shows the 'File shares' section with a table named 'habitworks'. The right view shows a 'New file share' creation dialog with tabs for Basics, Backup, and Review + create. The Basics tab shows a 'Name' field with 'files' and an 'Access tier' dropdown set to 'Transaction optimized'. The Backup tab shows a checkbox for 'Enable backup' which is unchecked. The Review + create tab shows validation passed and the file share details: 'File share name: files', 'Access Tier: TransactionOptimized', and 'Protocol: SMB'.

The screenshot shows two side-by-side views of the Azure Storage account interface. The left view shows the 'File shares' section with a table named 'habitworks'. The right view shows a 'New file share' creation dialog with tabs for Basics, Backup, and Review + create. The Basics tab shows validation passed and the file share details: 'File share name: files', 'Access Tier: TransactionOptimized', and 'Protocol: SMB'. The Review + create tab shows a 'Create' button and a link to 'Download a template for automation'.

Azure Cosmos DB



Create an Azure Cosmos DB account

Which API best suits your workload?

Azure Cosmos DB is a fully managed NoSQL and relational database service for building scalable, high performance applications. [Learn more](#)

To start, select the API to create a new account. The API selection cannot be changed after account creation.

Azure Cosmos DB for NoSQL	Azure Cosmos DB for PostgreSQL	Azure Cosmos DB for MongoDB
Azure Cosmos DB's core, or native API for working with documents. Supports fast, flexible development with familiar SQL query language and client libraries for .NET, JavaScript, Python, and Java. Create Learn more	Fully-managed relational database service for PostgreSQL with distributed query execution, powered by the Citus open source extension. Build new apps on single or multi-node clusters—with support for JSONB, geospatial, rich indexing. Create Learn more	Fully managed database service for apps written for MongoDB. Recommended if you have existing MongoDB workloads that you plan to migrate to Azure Cosmos DB. Build new apps on single or multi-node clusters—with support for JSONB, geospatial, rich indexing. Create Learn more
Azure Cosmos DB for Apache Cassandra	Azure Cosmos DB for Table	Azure Cosmos DB for Apache Gremlin
Fully managed Cassandra database service for apollo	Fully managed database service for apps written for Azure Table storage. Recommended if you have	Fully managed graph database service using the Gremlin query language. Create Learn more

Create Azure Cosmos DB Account - Azure Cosmos DB for NoSQL

Basics Global distribution Networking Backup Policy Encryption Tags Review + create

Azure Cosmos DB is a fully managed NoSQL and relational database service for building scalable, high performance applications. Try it for free, for 30 days with unlimited renewals. [Get started](#)

Project Details

Select the subscription to manage deployed resources.

Subscription * [OK](#) [Cancel](#)

Resource Group *

Instance Details

Account Name *

Configure availability zone settings for your account. You cannot change these settings once the account is created.

Create Azure Cosmos DB Account - Azure Cosmos DB for NoSQL

Basics **Global distribution** Networking Backup Policy Encryption Tags Review + create

Configure global distribution and regional settings for your account. You can also change these settings after the account is created.

Geo-Redundancy Enable Disable

Multi-region Writes Enable Disable

Create Azure Cosmos DB Account - Azure Cosmos DB for NoSQL

Basics Global distribution **Networking** Backup Policy Encryption Tags Review + create

Network connectivity

You can connect to your Azure Cosmos DB account either publicly, via public IP addresses or service endpoints, or privately, using a private endpoint.

Connectivity method * All networks Public endpoint (selected networks) Private endpoint

All networks will be able to access this CosmosDB account. <http://aka.ms/network-security>

Connection Security Settings

Minimum Transport Layer Security Protocol

Create Azure Cosmos DB Account - Azure Cosmos DB for NoSQL

Basics Global distribution Networking **Backup Policy** Encryption Tags Review + create

Azure Cosmos DB provides three different backup policies. You will not be able to switch to Periodic mode once you adopt Continuous mode. [Learn more](#) about the differences of the backup policies and pricing details.

Backup policy Periodic Continuous (7 days) Continuous (30 days")

Backup interval Minute(s)

Backup retention Hours(s)

Create Azure Cosmos DB Account - Azure Cosmos DB for NoSQL

Basics Global distribution Networking Backup Policy **Encryption** Tags Review + create

Data Encryption

Azure Cosmos DB encryption protects your data at rest by seamlessly encrypting your data as it's written in our datacenters, and automatically decrypting it for you as you access it.

By default your Azure Cosmos DB account is encrypted at rest using service-managed keys. At the moment, you will not be able to switch back to service-managed key after opting into using custom-managed key while creating your account. [Learn More](#)

Data Encryption * Service-managed key Customer-managed key (CMK)

Create Azure Cosmos DB Account - Azure Cosmos DB for NoSQL

Basics Global distribution Networking Backup Policy Encryption **Tags** Review + create

Tags are name/value pairs that enable you to categorize resources and view consolidated billing by applying the same tag to multiple resources and resource groups. [Learn more](#)

Note that if you create tags and then change resource settings on other tabs, your tags will be automatically updated.

Key	Value	Resource Type
<input type="text"/>	<input type="text"/>	<input type="text" value="Azure Cosmos DB account"/>

Create Azure Cosmos DB Account - Azure Cosmos DB for NoSQL

Validation errors were found. Click here for details →

Basics Global distribution Networking Backup Policy Encryption Tags **Review + create**

Creation Time

Estimated Account Creation Time (in minutes)

The estimated creation time is calculated based on the location you have selected

Basics

Subscription	MOC Subscription-Id:49475160
Resource Group	(new) learnunice
Location	East US 2 EUAP
Account Name	(new) worlddb

Create Azure Cosmos DB Account - Azure Cosmos DB for NoSQL

Validation Success

Basics

Subscription: MOC Subscription-ld49475160
 Resource Group: (new) habitstorage2024
 Location: West US 2
 Account Name: (new) habitstoragee1234

Creation Time

Estimated Account Creation Time (in minutes): 2

The estimated creation time is calculated based on the location you have selected.

Microsoft.Azure.CosmosDB-20240729120344 | Overview

Your deployment is complete

Deployment name: Microsoft.Azure.CosmosDB-20240729120344
 Subscription: MOC Subscription-ld49475161
 Resource group: Habituser123
 Start time: 7/29/2024, 12:03:51 PM
 Correlation ID: c9644907-f3f2-4f37-8c31-72c433aedaf

Deployment details

Next steps

Go to resource

wonderuser123 - Microsoft Azure

Azure Cosmos DB account

Data Explorer

Access control (IAM), Tags, Diagnose and solve problems, Cost Management, Quick start, Notifications, Data Explorer, Settings, Integrations, Containers, Monitoring.

Desktop 1, New desktop, app. or tooling of your choice, Previous, Finish.

wonderuser123 - Microsoft Azure

Azure Cosmos DB account

Data Explorer

Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Cost Management, Quick start, Notifications, Data Explorer, Settings.

NOSQL API, DATA, ToDoList, Items.

quick start, Launch a quick start tutorial to get started with sample data.

habitstationuser - Microsoft Azure

Azure Cosmos DB account

New Container

To prevent query limit, To modify "RU Threshold".

Container id: SampleContainer, Partition key: /categoryid, Add hierarchical partition key, Container throughput (autoscale), Autoscale, Manual.

Share throughput across containers.

habitstationuser - Microsoft Azure

Azure Cosmos DB account

New Container

To prevent query limit, To modify "RU Threshold".

Database id: SampleDB, Create new, Use existing.

Share throughput across containers.

Container id: SampleContainer, Partition key: /categoryid.

Start with sample container.

habitstationuser - Microsoft Azure

Azure Cosmos DB account

New Container

To prevent query limit, To modify "RU Threshold".

Unique keys, Add unique key.

Analytical store, On, Off.

Azure Synapse Link is required for creating an analytical store container. Enable Synapse Link for this Cosmos DB account. Learn more.

Enable, Advanced.

Start with sample container.

habitstationuser - Microsoft Azure

Azure Cosmos DB account

New Container

To prevent queries from using excessive RU's, Data Explorer has a 5,000 RU default limit. To modify or remove the limit, go to the Settings cog on the right and find "RU Threshold". Learn More.

SampleDB, SampleContainer, Items.

SELECT * FROM c

id	categoryid	sku	name	description	price
894...	364...	88A...	FR-872-Y...	"ML Road Frame-W - Yellow, 44"	594.83,
924...	364...	924...	FR-872-Y...	"ML Road Frame-W - Yellow, 44"	594.83,

Start with sample container.

habitstationuser - Microsoft Azure

https://portal.azure.com/#@LODSPRODMCA.onmicrosoft.com

Microsoft Azure | Search resources, services, and docs (G+)

Copilot

habitstationuser | Data Explorer

Azure Cosmos DB account

API

To prevent queries from using excessive RU's, Data Explorer has a 5,000 RU default limit. To modify or remove the limit, go to the Settings cog on the right and find "RU Threshold". Learn More

SampleDB

SampleContainer

Items

Scale & Settings

Stored Procedures

User Defined Functions

Triggers

Conflicts

0 298

Sample_Items

SELECT * FROM c

Edit Filter

1 {
2 "name": "Road Helmet,45",
3 "id": "123456789",
4 "category": "Sports",
5 "SKU": "AB-1234-56",
6 "description": "The product called \\"",
7 "price": 48.74,
8 "_rid": "x0oAB0B440QAAAAAAA=",
9 "rel": "x0oAB0B440QAAAAAAA="}

habitstationuser - Microsoft Azure

https://portal.azure.com/#@LODSPRODMCA.onmicrosoft.com

Microsoft Azure | Search resources, services, and docs (G+)

Copilot

User1-42809140@LODS... LODS-PROD-MCA (LODS-PROD)

habitstationuser | Data Explorer

Azure Cosmos DB account

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Cost Management

Quick start

Data Explorer

Settings

Integrations

NOSQL API

DATA

SampleDB

SampleContainer

Items

Scale & Settings

Stored Procedures

User Defined Functions

Triggers

Conflicts

Sampl...Query

1 SELECT * FROM c

Results Query Stats

To prevent queries from using excessive RU's, Data Explorer has a 5,000 RU default limit. To modify or remove the limit, go to the Settings cog on the right