



Azure SQL – Geo-restore from Backup

Geo-restore backup in Azure SQL Database is a disaster recovery feature that lets you restore a database from a backup stored in a different Azure region. Azure automatically creates geo-redundant backups by copying your database backups to a paired region.

If your primary region goes down due to an outage or failure, you can use geo-restore to recover your database in another region with minimal data loss (up to the last backup, typically within 1 hour).

Key Benefits:

- **Disaster Recovery:** Protect against regional outages.
- **Global Resilience:** Quickly restore services in another region.
- **Cost-Effective:** Included with geo-redundant backup storage.



To begin with the Lab

1. In this lab we will perform a geo-restore using the backup in our SQL Database. But first, we need to change the current redundancy of our database into Geo-redundant.

Service and compute tier

Select from the available tiers based on the needs of your workload. The vCore model provides a wide range of configuration controls and offers Hyperscale and Serverless to automatically scale your database based on your workload needs. Alternately, the DTU model provides set price/performance packages to choose from for easy configuration. [Learn more](#)

SQL Database Hyperscale: Low price, high scalability, and best feature set. [Learn more](#)

Service tier

Standard (Budget friendly)

[Compare service tiers](#)

DTUs [Compare DTU options](#)

10

Data max size (GB)

2

Backup storage redundancy ⓘ

☐ Locally-redundant backup storage

☐ Zone-redundant backup storage

☒ Geo-redundant backup storage

☐ Geo-Zone-redundant backup storage [Preview]

2. So, open the Portal and go to the creation page for the SQL database. Choose your resource group and give a name to your database then create a new server.

Subscription * ⓘ

Resource group * ⓘ

[Create new](#)

Database details

Enter required settings for this database, including picking a logical server and configuring the compute and storage resources

Database name *

Server * ⓘ

[Create new](#)

3. Give a name to your Server and choose location as West Europe then choose SQL Authentication and give username and password to your Server.

Create SQL Database Server ...

Microsoft

Server details

Enter required settings for this server, including providing a name and location. This server will be created in the same subscription and resource group as your database.

Server name *

[.database.windows.net](#)

Location *

4. Then for the compute and storage capacity choose Standard as shown below. Also, choose Geo Redundancy backup storage.

Compute + storage * ⓘ

Standard S0

10 DTUs, 20 GB storage



[Configure database](#)

Backup storage redundancy

Choose how your PITR and LTR backups are replicated. Geo restore or ability to recover from regional outage is only available when geo-redundant storage is selected.


Backup storage redundancy ⓘ

- ☐ Locally-redundant backup storage
- ☐ Zone-redundant backup storage
- ☒ Geo-redundant backup storage
- ☐ Geo-Zone-redundant backup storage [Preview]


 Selected value for backup storage redundancy is Geo-redundant backup storage. Database backups will be geo-replicated which might impact your data residency requirements. [Learn more](#) 

- Then in the networking choose the same option as shown below to make your database public.

Basics **Networking** Security Additional settings Tags Review + create

Configure network access and connectivity for your server. The configuration selected below will apply to the selected server 'georestore' and all databases it manages. [Learn more](#) 


Network connectivity

Choose an option for configuring connectivity to your server via public endpoint or private endpoint. Choosing no access creates with defaults and you can configure connection method after server creation. [Learn more](#) 

Connectivity method * ⓘ

- ☐ No access
- ☒ Public endpoint
- ☐ Private endpoint

Firewall rules

Setting 'Allow Azure services and resources to access this server' to Yes allows communications from all resources inside the Azure boundary, that may or may not be part of your subscription. [Learn more](#) 

Setting 'Add current client IP address' to Yes will add an entry for your client IP address to the server firewall.

Allow Azure services and resources to access this server *

No Yes

Add current client IP address *

No Yes

- On the additional settings page you need to choose backup and here you will see that we have a backup ready

Create SQL Database ...

Microsoft

Start with a blank database, restore from a backup or select sample data to populate your new database.

Use existing data *

None Backup Sample

Backup *

appdb (2023-06-30 05:24:17 UTC)



This option allows you to restore a database on any server in any Azure region from the most recent geo-replicated backups. [Learn more](#)

7. Then just create your database. Also, remember it will take time to create a backup in a new location.
8. It might take around 8-10 hours for it to be replicated totally. But once it is created then you can have the database with the tables.