

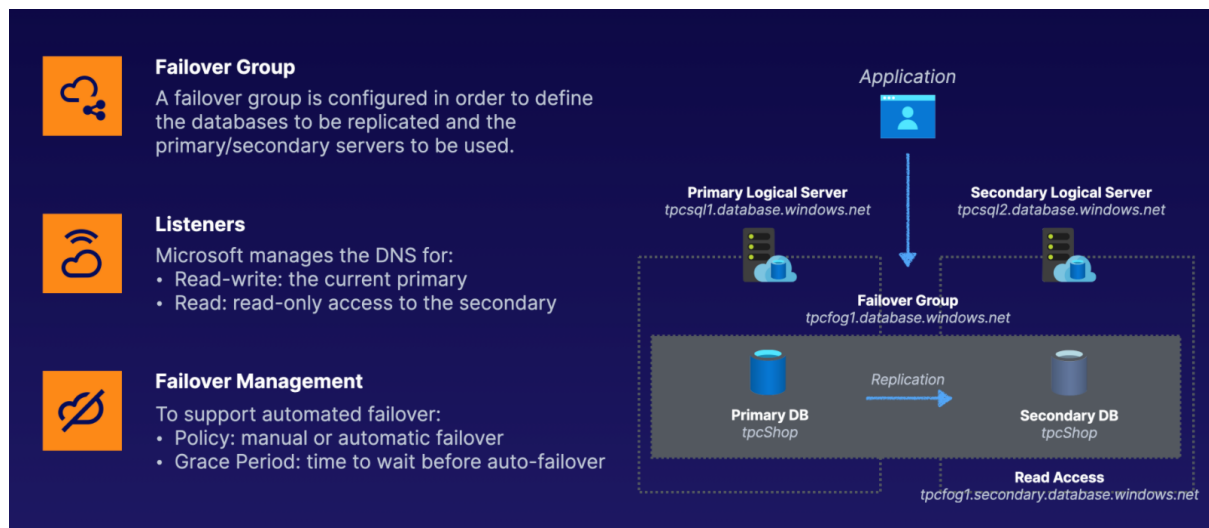
Configure Azure SQL with Failover Groups

Azure SQL includes several features which help protect against outages. Auto-failover groups provide this protection with a range of management capabilities built in to simplify failover.

In this hands-on lab, we'll use the Azure portal to configure an auto-failover group for an existing Azure SQL server.

Scenario You've recently been employed as a cloud administrator, and you have been asked to address some concerns that were raised during a business continuity audit. Following the audit, you have been asked to implement the following improvements for your Azure SQL service:

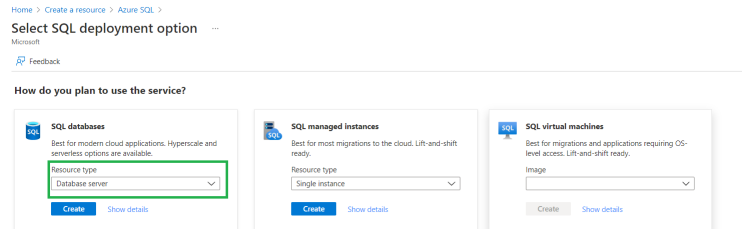
- Configure replication to improve high availability
- Ensure that you can recover promptly in the event of a region-wide disaster
- Ensure that failover is automated and includes DNS management



Create an Azure SQL Logical Server

1. In the Azure console, click on the All resources icon.
2. On the All resources page, copy the name of the existing logical server.
3. Click on + Add to create the new server.

4. In the search bar, type in "azure sql" and select Azure SQL.
5. Click on Create.
6. In the SQL databases card, in the Resource type dropdown menu, select Database server.





7. Click Create.
8. In Project details, set the following values:
 - Server name: Paste in the existing server name from your clipboard. Then make a small change to make it unique.
 - Location: Select a region that is not the existing region, such as Central US.
 - Server admin login: Anything you'd like (e.g., "sql-adm")
 - Password: Anything you'd like

Home > Create a resource > Azure SQL > Select SQL deployment option >


Create SQL Database Server


Microsoft

Resource group *  1-cddfb90a-playground-sandbox 
[Create new](#)

Server details

Enter required settings for this server, including providing a name and location.

Server name * 
.database.windows.net

Location * 

Authentication


Select your preferred authentication methods for accessing this server. Create a server admin login and password to access your server with SQL authentication, select only Azure AD authentication [Learn more](#) using an existing Azure AD user, group, or application as Azure AD admin [Learn more](#), or select both SQL and Azure AD authentication.


Authentication method


☒ Use SQL authentication

☐ Use only Azure Active Directory (Azure AD) authentication

☐ Use both SQL and Azure AD authentication

Server admin login * 


Password * 

Confirm password * 

[Review + create](#) [Next : Networking >](#)

9. Click on Next: Networking.
10. Click on Next: Additional Settings to navigate to Additional settings.
11. Make sure Enable Azure Defender for SQL is set to Not now.
12. Click on Review + create.
13. Click on Create.

Home >

 Microsoft.SQLServer.createServer_44131e6befd94e46aa2770e68ca5126 | Overview ✕ ...

Deployment

Search (Ctrl+/) << Delete Cancel Redeploy Refresh

Overview

Inputs

Outputs

Template

We'd love your feedback! →

✓ Your deployment is complete

Deployment name: Microsoft.SQLServer.createServer_44131e6befd... Start time: 1/20/2022, 3:39:29 AM
 Subscription: [P2-Real Hands-On Labs](#) Correlation ID: 522e2975-e2af-482a-a612-b49584ac0e45
 Resource group: [1-cddfb90a-playground-sandbox](#)

Deployment details (Download)

Next steps

[Go to resource](#)

Configure Auto-Failover Groups

1. Click on the Home link in the upper left corner to navigate back to the Azure console.
2. Click on the All resources icon.
3. Select the original logical server that was already created in our existing location.
4. Under Settings, select the Failover groups option.
5. Click + Add group.
6. On the Failover group page, paste in the existing server name into the Failover group name, but add in something like "fog" for "failover group" to make it unique.
7. Click on Secondary server.
8. Click on the new server that is located in a different region from the first server. This will serve as the failover server.

i Create a failover group to automatically failover databases in it.

Failover group name *
Enter failover group name...
...database.windows.net

Server * ⓘ
ahhosnisandbox
[Create new](#)

❌ You cannot choose same server as partner
❌ You cannot choose a server from the same region.

Read/Write failover policy
Automatic

Read/Write grace period (hours)
1 hours

Database within the group ⓘ
Not configured yet
0 databases eligible
[Configure database](#)

Failover group ...

i Create a failover group to automatically failover databases in it.

Failover group name *
ahhosnisandbox2022 ✓
...database.windows.net

Server * ⓘ
ahhosnisandboxfog
[Create new](#)

Read/Write failover policy
Automatic

Read/Write grace period (hours)
1 hours

Database within the group ⓘ
Not configured yet
0 databases eligible
[Configure database](#)

9. Under Read/Write failover policy, ensure that Automatic is selected to ensure the failover process is automated.
10. Leave the Read/Write grace period (hours) as 1 hours so the system will wait one hour before the failover is enforced.
11. Click Select databases to add.
12. Check the option for testDatabase1, the pre-built database for this lab.
13. Click Select.
14. Click Create.

[Save](#) [Discard](#) [Add databases](#) [Edit configuration](#) [Remove databases](#) [Failover](#) [Forced Failover](#) [Delete](#)



Server	Role	Read/Write failover policy	Grace period
<input checked="" type="checkbox"/> ahhosnisandbox (East US)	Primary	Automatic	1 hours
<input checked="" type="checkbox"/> ahhosnisandboxfog (East US 2)	Secondary		

Read/write listener endpoint

ahhosnisandbox2022.database.windows.net

Read-only listener endpoint

ahhosnisandbox2022.secondary.database.windows.net