

Migrate PostgreSQL Single Server to Flexible Server using Azure portal

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This article shows you how to create a migration from your Azure database for PostgreSQL single server to flexible server using our automated migration service through Azure portal.

Pre-requisites

Make sure to take care of the pre-requisites listed in this [document](#), which are necessary to get started with the automated migration service.

Portal Experience

The automated migration service comes with a simple, wizard-based portal experience to create a migration from single server to flexible server.

Sign into the Azure portal

Open your web browser and go to the [portal](#). Enter your credentials to sign into the portal. The default view is your service dashboard. If you don't have an Azure subscription, [create a free Azure account](#)

If you haven't created an Azure database for PostgreSQL flexible server, go ahead and create one using this [link](#). Else, find and navigate to your flexible server instance.

Once you are in the **Overview** tab of your flexible server, use the left navigation window and scroll down to the option of **Migration (preview)** and click on it.

flexserver12

Azure Database for PostgreSQL flexible server

«
🗑️ Delete
✎ Reset password
🔄 Restore
↺ Restart
⏏ Stop
🔄 Refresh
🗨 Feedback

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Compute + storage

Networking

Connection strings

Server parameters

Maintenance

High availability

Migration (preview)

Advisor recommendations

Locks

Monitoring

Alerts

Essentials

Subscription : Orcas PM team

Subscription ID : 5c5037e5-d3f1-4e7b-b3a9-f6bf94902b30

Resource group : Shriramm-learning-rg

Status : Available

Location : East US

Tags (Edit) : [Click here to add tags](#)

Getting started

Properties

Monitoring

Tutorials

Start your project

Connect to your database for the first time with a few simple steps.

Allow access

Configure network access to your PostgreSQL database

Configure Networking

Connect

View connection string to learn how to connect with the application driver you use (.NET, PSQL, Python, JDBC, PHP, Node.js, Ruby, PHP, C++)

View connection strings

If this is the first time you are using the migration service, you will see an empty grid with a message to click the button **Migrate from Single Server** to start a migration.

+

Migrate from Single Server

✕ Cancel

🔄 Refresh

🗨 Feedback

Status

All

<input type="checkbox"/>	Name	Status	Source DB server	Resource group	Region	Version	Databases	Star
<div> No migration configured or in progress. Click Migrate from Single Server to begin. </div>								

If you have already created migrations to your flexible server, you should see the list of migrations that were attempted to this flexible server from single servers.

Click on the **Migrate from Single Server** option. You'll be taken through a wizard-based setup to create a migration to this flexible server from any single server.

Setup Tab

Migrate from single server into this PostgreSQL flexible server ...

Microsoft - preview

Setup Source Target Networking Review + create

Pre-requisites -

- 1) Create an Azure Active Directory application. [How to do?](#)
- 2) Create a new client secret for your azure active directory application. [How to do?](#)

We will be using a Migration Resource group. This is the resource group where all the migration related components will be created. By default it is resource group of the target flexible server and all the components will be cleaned up automatically once the migration completes.

- 3) Assign contributor roles to source server, target server, migration resource group. Note in case of private access for source/target server, add Contributor privileges to the corresponding VNet. [How to do?](#)

Restrictions -

- 1) Recommended to use only for individual DBs <= 1 TB.
- 2) All logical replication [restrictions](#) in PostgreSQL apply.
- 3) You can migrate up to 8 databases from a server in a single activity. If you need to migrate more, create multiple activities.

Migration name * ⓘ

Migration Resource Group * ⓘ

Azure Active Directory App * ⓘ [Select](#)

Review + create

Next : Source >

There is a **pre-requisites** section, the details of which are documented in detail [here](#). There is also a **restriction** section that lists down the restrictions that are applicable to this migration service

- The **Migration name** field accepts only alphanumeric characters and does not accept any special characters except '-'. The name can't start with a '-' and should be unique for a target server. No 2 migrations to the same flexible server can have the same name.
- The **Migration resource group** is where all the migration-related components will be created by the migration service. By default, it's resource group of the target flexible server and all the components will be cleaned up automatically once the migration completes. If you want to create a temporary resource group for migration-related purposes, create a resource group and select the same from the dropdown.
- For the **Azure Active Directory App**, click the **select** option and pick the app that was created as a part of the pre-requisite step. Once the AAD App is chosen, paste the client secret that was generated for the AAD app to the **Azure Active Directory Client Secret** field.

Migrate from single server into this PostgreSQL flexible server ...

Microsoft - preview

Setup Source Target Networking Review + create

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Migration name *	<input type="text" value="mymigraton1"/>	✓
Migration Resource Group *	<input type="text" value="Shriramm-learning-rg"/>	▼
Azure Active Directory App *	aad-migration-demo	✎
Azure Active Directory Client Secret *	<input type="password" value="....."/>	✓

✓ This field is required.

Review + create

Next : Source >

Click on the **Next** button.

Source tab

Target tab

Migrate from single server into this PostgreSQL flexible server ...

Microsoft - preview

Setup Source **Target** Networking Review + create

Target Database server details

Subscription name ⓘ	Orcas PM team
Resource group ⓘ	Shriramm-learning-rg
Server name ⓘ	myflexserver12.postgres.database.azure.com
Location ⓘ	East US
PostgreSQL version ⓘ	12
Server admin login name ⓘ	azureuser
Password * ⓘ	<input type="password"/>
Authorize DB overwrite ⓘ	<div>No ▾</div>

Review + create

< Previous

Next : Networking >

This tab displays metadata of the flexible server like the **Subscription, Resource Group, Server name, Location**, and **PostgreSQL version**. It displays **server admin login name** which is the username that was used during the creation of the flexible server.

Enter the corresponding password for the admin user.

Choose an option **yes/no** for **Authorize DB overwrite**. If you set the option to **Yes**, you give this migration service permission to overwrite existing data in case when a database that is being migrated to flexible server is already present. If set to **No**, it goes into a waiting state and asks you for permission either to overwrite the data or to cancel the migration.

Click on the **Next** button

Networking tab

Review + Create tab

Post Migration

- Note that all the resources created by this migration solution will be automatically cleaned up irrespective of whether the migration has **succeeded/failed/cancelled**. There is no action required from your end.
- If your migration has failed and if you want to retry the migration, then you need to create a new migration with a different name and try running it again. For now, there is no option of retry on a failed migration.
- If you have more than eight databases on your single server and want to migrate all of them, it is recommended to create multiple migrations between the same single server and flexible server with each migration migrating a set of eight databases each.
- For security reasons, it is highly recommended to delete the Azure Active Directory app once the migration completes.
- Post data validations and making your application point to flexible server, you can consider deleting your single server.