# Licensing on geo-secondary

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# Self-help content presented in Azure Portal

(This content was shown to the customer during case submission. It's also visible on 'Diagnose and solve problems' blade.)

If your secondary SQL Managed Instance is used as a standby for disaster recovery (DR) and doesn't have any read-workloads or applications connected to it, you can save on licensing costs by designating the replica as *Standby*. When a secondary instance is designated as a standby instance, Microsoft provides you with a number of vCores that matches the number of vCores licensed to the primary instance, at no extra charge, under the failover rights benefit provided by the <u>product licensing terms</u> . You'll still be billed for the compute and storage used by the secondary instance.

Auto-failover groups for SQL Managed Instance support only one replica. The replica must either be a readable replica, or designated as a standby replica.

Scan and select one or more of the following sections to help resolve your issues.

## Cost breakdown

For replicas designated as standby, Microsoft does not charge you SQL Server licensing costs for the vCores used by the secondary standby replica. The instance is billed for the entire hour, even if the state is changed in the middle of the hour.

The benefit translates differently between customers using the pay-as-you-go model vs. customers using the <u>Azure Hybrid Benefit (AHB)</u> ②. Pay-as-you-go customers see the vCores discounted from their invoice, while customers using the AHB for the standby replica have an equal number of vCores as the secondary replica uses returned to their licensing pool.

## Configure standby replica

You can designate your secondary instance as standby when you create your auto-failover group, or update the configuration for an existing auto-failover group by using the Azure portal.

#### New failover group

You can designate your secondary instance as a standby replica when you create a new failover group by using the Azure portal.

When you're creating your failover group in the Azure portal, set **Failover rights** to **On**, and then select the box next to **I confirm that I will use the secondary instance as a standby replica**. Select **Create** to create your failover group.

For instructions fo creating a new failover group, see the <a href="https://example.com/how-to-guide">how-to-guide</a>  $\square$  or the detailed <a href="tutorial">tutorial</a>  $\square$ .

### **Existing failover group**

You can update the failover rights for an existing failover group by using the Azure portal.

To update the failover rights, follow these steps:

- 1. Go to your SQL Managed Instance in the Azure portal 2.
- 2. Select **Failover groups** under **Data management**.
- 3. Select **Edit configurations** from the navigation bar to open the **Edit configuration** page for your failover group.
- 4. Set Failover rights to On, and select the box next to I confirm that I will use the secondary instance as a standby replica.
- 5. Select **Apply** to save your new settings and close the configuration pane.

Alternatively, you can enable failover rights directly from the Compute + storage page for your *secondary* managed instance.

Functional capabilities of a standby secondary managed instance

Functionality	Description
Limited read- workloads	After you designate your instance as standby, you're able to run only a limited number read-workloads on the secondary instance, such as DMVs, backups, and DBCC commands.
Planned failover	All planned failover scenarios, including recovery drills, relocating databases to different regions, and returning databases to the primary are supported by the standby replica. When the secondary switches to the primary, it can then serve read and write queries, while the old primary / new secondary becomes the standby replica and shouldn't be used for read workloads.
Unplanned failover	During an unplanned failover, once the secondary switches to the primary role, it can serve both read and write queries. After the outage is mitigated and the old primary reconnects, it becomes the new secondary standby replica, and shouldn't be used for read workloads.
Backup / restore	There's no difference in backup and restore behavior between a standby replica and a readable secondary managed instance.
Monitoring	All monitoring operations that are supported by a readable secondary replica are supported by the standby replica.
RPO & RTO	The standby replica provides the same RPO and RTO as a readable secondary replica.
Removing failover group	If the failover group is removed (using something like <u>Remove-</u> <u>AzSqlDatabaseInstanceFailoverGroup</u> [2], the standby replica becomes a readwrite standalone instance, and will now be charged the license price.

The secondary instance must be used as DR-only, with no production applications connected to the replica.

Following are the only activities that are permitted on the standby replica:

- Run backups
- Perform maintenance operations, such as checkDB
- Connect monitoring applications
- Run DR drills

#### Resources

- What is the Failover rights benefit for GeoDr?
- Configure license-free standby replica for Azure SQL Managed Instance 12
- Add SQL Managed Instance to a failover group [2]

## How good have you found this content?



