Disaster recovery

Geo-replicated disaster recovery (DR) backups for IBM® Db2® Warehouse on Cloud are enabled by default and supplement daily snapshot backups. DR backups are used exclusively for system recovery purposes by IBM service operators if there is a disaster or system loss.

If a disaster event occurs at the data center where your Db2 Warehouse on Cloud instance is deployed, IBM service operators will work with you to stand up a new data warehouse in a different data center, by using the most recent disaster recovery backup. There is no additional charge for these backups.

The RPO and RTO for DR backups for each cloud provider are described in the following sections. DR backups are also geo-replicated by default. You can open a support ticket to not have your DR backups replicated to certain regions to comply with your data retention policies.

**IBM Cloud**

When deployed on IBM Cloud, a full backup of the database is taken once a week for disaster recovery. This DR backup is encrypted and stored in IBM Cloud Object Storage (COS).

IBM COS replicates each DR backup across multiple IBM Cloud regions to ensure availability if a single zone fails.

DR backups of the last 2 weeks are retained by default. The RPO for DR backups on IBM Cloud is 1 week. The RTO if a disaster occurs is dependent upon the size of the database – 1.5 hours per terabyte of data.

**Amazon Web Services**

When deployed on Amazon Web Services, a full backup of the database is taken once a week for disaster recovery. This DR backup is encrypted and stored in Amazon Web Services S3.

DR backups are also replicated to a secondary Amazon Web Services region by using Cross-Region replication. S3 keeps copies of each DR backup across 3 availability zones (AZs) in each region by default, so there are 6 copies of each DR backup in total.

DR backups of the last 2 weeks are retained by default. The RPO for DR backups on Amazon Web Services is 1 week. The RTO if a disaster occurs is dependent upon the size of the database – 1.5 hours per terabyte of data.

Secondary regions for each Amazon Web Services primary region are listed in the following table:

| **Primary region** | **Secondary region** |
| --- | --- |
| us-east-1 | us-west-2 |
| ap-southeast-1 | ap-southeast-2 |
| eu-central-1 | eu-west-2 |
| Table 1. Secondary regions for each Amazon Web Services primary region | |

**Brazil: Supplementary Rule 14 (applies to systems provisioned for the Brazilian federal government)**

At this time, the disaster recovery (DR) option for Db2 Warehouse on Cloud offerings is not available in Brazil for the federal government due to Supplementary Rule 14.