Encryption at rest

Redis Cloud databases write their data to disk whenever persistence is enabled.

On Google Cloud Platform (GCP) and Microsoft Azure, Redis Cloud deployments are always encrypted at rest.

For Amazon Web Services (AWS), Redis Cloud Flexible (and Annual) subscriptions can be encrypted at rest when you create the subscription.

Encryption at rest on AWS

When encrypted, persistent data is written to encrypted EBS volumes.

When Redis on Flash is enabled, the flash memory data is written to encrypted NVMe SSD volumes.

Encryption can only be enabled when a subscription is created.

Enable encryption when creating Flexible plans

To enable encryption when creating a Flexible plan on AWS:

1. Create a new AWS subscription.

2. In the Flexible plan section, select the Create button.

<table>
<thead>
<tr>
<th>Shard Type</th>
<th>Capacity</th>
<th>Price</th>
<th>Min Subscription Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>1GB / 1.0K ops/sec</td>
<td>$x.xx/hr</td>
<td></td>
</tr>
<tr>
<td>High-Throughput</td>
<td>2.5GB / 25.0K ops/sec</td>
<td>$x.xx/hr</td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>12.5GB / 12.5K ops/sec</td>
<td>$x.xx/hr</td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>25GB / 25.0K ops/sec</td>
<td>$x.xx/hr</td>
<td></td>
</tr>
<tr>
<td>Very Large</td>
<td>50GB / 5.0K ops/sec</td>
<td>$x.xx/hr</td>
<td>$x.xx/hr</td>
</tr>
</tbody>
</table>

(1) Subscription price is determined by the type and number of shards actually used, subject to the minimum subscription price indicated.
(2) Prices do not include network costs, which will be charged back-to-back to the cloud provider’s charge.

This takes you to the Create Custom Subscription screen:
3. Expand the **Advanced Options** and then verify that **Persistent Storage Encryption** is set to **Yes**.

When you create the subscription, all databases will be encrypted at rest.

**Disk encryption on GCP**

All data written to disk on GCP-based Redis Cloud deployments is encrypted by default. When deploying a Redis Cloud database on GCP, you don’t need to take any actions to enable this encryption.

To learn more, see the [GCP encryption at rest documentation](#).

**Disk encryption on Azure**

All data written to disk on Azure-based Redis Cloud deployments is encrypted by default. When deploying a Redis Cloud database on Azure, you don’t need to take any actions to enable this encryption.

To learn more, see the [Azure encryption at rest documentation](#).

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