

Create symmetric and asymmetric keys

CREATE A SYMMETRIC KEY

1. In the Google Cloud console, click the **Navigation menu** (≡).
2. Select **Security > Key Management**.
3. On the **Key Rings** tabbed page, click + **Create Key Ring**.

Now, specify the key details.

4. For **Key ring name**, enter **demo-key-ring**.
5. For the **Location type** category, select **Region**.
6. Expand the **Region** drop-down menu, and select **us-east4**.

Note: Be sure to select the specified region, otherwise you get an error. ***Note:** Be sure you select the specified region, otherwise you get an error.*


7. Click **Create**.
8. In the **Name and protection level** category, in the **Key name** field, enter **demo-key**.

The **Protection level** should be set to **Software** by default, if not, select it now.

9. Click **Continue**. The Key material category expands.
10. For **Key material**, select **Generated key**.
11. Click **Continue**. The Purpose and algorithm category expands.
12. For **Purpose**, select **Symmetric encrypt/decrypt**.
13. Click **Continue**. The Versions category expands.
14. For **Key rotation period**, select **90 days**.
15. For **Starting on**, leave as the default value.
16. Click **Continue**. No additional settings are needed.

17. Click **Create**.

CREATE A ASYMMETRIC KEY

1. In the Google Cloud console, click the **Navigation menu** ()
2. Select **Security > Key Management**. The Key Rings tabbed page opens, listing the newly-created key.
3. Under **Name**, click the link for the key you created in the previous task: **demo-key-ring**. The Key ring details page opens.
4. In the **Keys** tabbed page, click + **Create Key**.

Now, specify the key details.

5. For **Key name**, enter **demo-asymmetric-key**.
6. For **Protection Level**, select **Software**.
7. Click **Continue**. The Key material category expands.
8. For **Key Material**, select **Generated key**.
9. Click **Continue**. The Purpose and algorithm category expands.
10. For **Purpose**, select **Asymmetric decrypt**.
11. For **Algorithm**, leave as the default value.
12. Click **Continue**.
13. For **Versions**, no settings are required.
14. Click **Continue**. No additional settings are needed.
15. Click **Create**.