<u>Security & Identity Products</u> (https://cloud.google.com/products/security/) <u>Resource Manager</u> (https://cloud.google.com/resource-manager/) <u>Documentation</u> (https://cloud.google.com/resource-manager/docs/) <u>Guides</u>

Quickstart enforcing organization policy

This guide describes how to set an organization policy

(https://cloud.google.com/resource-manager/docs/organization-policy/overview) that includes the resource locations

(https://cloud.google.com/resource-manager/docs/organization-policy/defining-locations) constraint, and how to test that constraint after it is applied in the <u>Google Cloud Console</u> (https://console.cloud.google.com/).

Before you begin

You need the following Cloud Identity and Access Management (Cloud IAM) role assigned at the Organization resource level:

 roles/orgpolicy.policyAdmin (https://cloud.google.com/iam/docs/understanding-roles#organization-policy-roles)

To create Compute Engine resources, you need an <u>active billing account</u> (https://cloud.google.com/billing/docs/how-to/manage-billing-account).

Create new Project

To create a Project resource, follow the steps below:

1. Go to the Manage resources page in the Cloud Console.

GO TO THE MANAGE RESOURCES PAGE (HTTPS://CONSOLE.CLOUD.GOOGLE.COM/CLOUD-RESOUR

- 2. On the **Select organization** drop-down list at the top of the page, select the organization in which you want to create a project. If you are a free trial user, skip this step, as this list does not appear.
- 3. Click Create Project.

- 4. In the **New Project** window that appears, enter a project name and select a billing account as applicable.
- 5. If you want to add the project to a folder, enter the folder name in the Location box.
- 6. When you're finished entering new project details, click Create.

After you create the Project, the **Owner** role is assigned to you. This role includes all of the permissions you need for the following quickstart. For more information about permissions, see <u>Granting, changing, and revoking access to resources</u>

(https://cloud.google.com/iam/docs/granting-changing-revoking-access).

Create a Compute Engine disk

To test the functionality of the resource locations constraint, set up Compute Engine regional persistent disks. When you create a regional persistent disk, you must specify the location where it will reside. For more information about creating Compute Engine regional persistent disks, see <u>Adding or Resizing Regional Persistent Disks</u>

(https://cloud.google.com/compute/docs/disks/regional-persistent-disk#repd_create_disk).

1. Go to the **Disks** in the Google Cloud Console.

GO TO THE DISKS PAGE (HTTPS://CONSOLE.CLOUD.GOOGLE.COM/COMPUTE/DISKS)

- 2. Select the Project you created previously.
 - a. If you are prompted to link a billing account to your Project, do so now. For more information about enabling billing, see <u>Modify a Project's Billing Settings</u> (https://cloud.google.com/billing/docs/how-to/modify-project#enable_billing_for_a_project).
- 3. Click Create Disk.
- 4. Specify a Name for your disk.
- 5. Select Replicate this disk within region.
- 6. Under **Region**, select europe-north1 (Finland).
- 7. Under **Zones**, select europe-north1-a and europe-north1-b.
- 8. Click Create.

When the disk is successfully created, a green check mark appears next to the name.

Set the organization policy

To set an organization policy on the Project you created:

1. Go to the **Organization policies** page in the Cloud Console.

GO TO THE ORGANIZATION POLICIES PAGE (HTTPS://CONSOLE.CLOUD.GOOGLE.COM/IAM-ADMIN/

- 2. Click Select.
- 3. Select the Project you created.
- 4. Click Google Cloud Platform Define Resource Locations, and then click Edit.
- 5. Under Applies to, select Customize.
- 6. Under Policy values, select Custom.
- 7. Under Policy type, select Allow.
- 8. In the **Policy value** box, enter in:asia-locations.
- 9. Click Save. A notification appears to confirm the policy update.

asia-locations is a <u>value group</u>

(https://cloud.google.com/resource-manager/docs/organization-policy/defining-locations#value_groups) that is curated by Google to include every location in a particular geographic region. In this case, every region in Asia is defined as an allowed location for any resources created after this point. Note that the regional persistent disk you created above is not affected by this new policy, because the policy is not retroactive.

Testing the organization policy

Now that the organization policy is in effect, you cannot create resources in regions that were not specified as part of the organization policy. To test this, try to create a regional persistent disk in an invalid location:

1. Go to the **Disks** page in the Cloud Console.

<u>GO TO THE DISKS PAGE</u> (HTTPS://CONSOLE.CLOUD.GOOGLE.COM/COMPUTE/DISKS)

- 2. Select the Project you created above.
- 3. Click Create Disk.

- 4. Specify a **Name** for your disk.
- 5. Select Replicate this disk within region.
- 6. Under Region, select europe-north1 (Finland).
- 7. Under **Zones**, select europe-north1-a and europe-north1-b.
- 8. Click Create.

A red exclamation point appears next to the name, and an error notification displays:

Location ZONE:europe-north1-a violates constraint constraints/gcp.resourceLocations on the resource **RESOURCE_ID**

Where **RESOURCE_ID** is the full resource path of your Project and disk. The disk is not created.

Create regional persistent disk in valid location

The organization policy constraint blocks the creation of resources unless you specify a valid location:

1. Go to the **Disks** page in the Cloud Console.

<u>GO TO THE DISKS PAGE</u> (HTTPS://CONSOLE.CLOUD.GOOGLE.COM/COMPUTE/DISKS)

- 2. Select the Project you created previously.
- 3. Click Create Disk.
- 4. Specify a Name for your disk.
- 5. Select Replicate this disk within region.
- 6. Under **Region**, select asia-east2 (Hong Kong).
- 7. Under **Zones**, select asia-east2-a and asia-east2-b.
- 8. Click Create.

The resource is created successfully because all zones under asia-east2 are within the asialocations value group.

Clean up

To avoid incurring charges to your Google Cloud account for the resources used in this quickstart, follow these steps.

Delete regional persistent disks

Delete the regional persistent disks you created for this quickstart:

1. Go to the **Disks** page in the Cloud Console.

<u>GO TO THE DISKS PAGE</u> (HTTPS://CONSOLE.CLOUD.GOOGLE.COM/COMPUTE/DISKS)

- 2. In the list that appears, select both of the disks that you created.
- 3. To the right of the **Create Disk** button, click **Delete**.
- 4. In the confirmation dialog that appears, click **Delete**.

A notification dialog appears to confirm the disks were deleted.

Delete the Project

Delete the Project you created for this quickstart:

- 1. Go to the **Manage resources** page in the Cloud Console. <u>GO TO THE MANAGE RESOURCES PAGE</u> (HTTPS://CONSOLE.CLOUD.GOOGLE.COM/CLOUD-RESOUR
- 2. In the drop-down at the top of the page, select the Organization in which you created the quickstart Project.
- 3. In the list of Project resources that appears, select the Project that you created, then click **Delete**.
- 4. On the **Shut down project** dialog that appears, enter the Project ID, and then click **Shut down**.

What's next

 Learn more about implementing organization policy <u>implementing organization policy</u> <u>constraints</u>

(https://cloud.google.com/resource-manager/docs/organization-policy/understanding-constraints).

• Review the <u>services that support the resource locations constraint</u> (https://cloud.google.com/resource-manager/docs/organization-policy/defining-locationssupported-services)

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