

[Cloud Vision API Product Search](#)

REST Resource: projects.locations.products.referenceImages

Resource: ReferenceImage

A **ReferenceImage** represents a product image and its associated metadata, such as bounding boxes.

JSON representation

```
{
  "name": string,
  "uri": string,
  "boundingPolys": [
    {
      object(BoundingPoly (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p3beta1/projects.locations.products.referenceImages/boundingPoly))
    }
  ]
}
```

Fields

name	string
	The resource name of the reference image.
	Format is:
	projects/PROJECT_ID/locations/LOC_ID/products/PRODUCT_ID/referenceImages/IMAGE_ID.
	This field is ignored when creating a reference image.

Fields	
uri	string The Google Cloud Storage URI of the reference image. The URI must start with gs:// . Required.
boundingPolys[]	object(<u>BoundingPoly</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p3beta1/projects.locations.products.referenceImages#BoundingPoly)) Bounding polygons around the areas of interest in the reference image. Optional. If this field is empty, the system will try to detect regions of interest. At most 10 bounding polygons will be used. The provided shape is converted into a non-rotated rectangle. Once converted, the small edge of the rectangle must be greater than or equal to 300 pixels. The aspect ratio must be 1:4 or less (i.e. 1:3 is ok; 1:5 is not).

BoundingPoly

A bounding polygon for the detected image annotation.

JSON representation

JSON representation

```
{
  "vertices": [
    {
      object(Vertex (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p3beta1/projects.locations.products.referenceImages#Vertex))
    }
  ],
  "normalizedVertices": [
    {
      object(NormalizedVertex (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p3beta1/projects.locations.products.referenceImages#NormalizedVertex))
    }
  ]
}
```

Fields

vertices[]	object(<u>Vertex</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p3beta1/projects.locations.products.referenceImages#Vertex)) The bounding polygon vertices.
normalizedVertices[]	object(<u>NormalizedVertex</u> (https://cloud.google.com/vision/product-search/docs/reference/rest/v1p3beta1/projects.locations.products.referenceImages#NormalizedVertex)) The bounding polygon normalized vertices.

Vertex

A vertex represents a 2D point in the image. NOTE: the vertex coordinates are in the same scale as the original image.

JSON representation

JSON representation

```
{
  "x": number,
  "y": number
}
```

Fields

x	number
	X coordinate.
y	number
	Y coordinate.

Zero coordinate values

The general format for bounding polys in the JSON response when detected is an array of 4 vertex objects:

- [{"x": 63, "y": 18}, {"x": 123, "y": 18}, {"x": 123, "y": 38}, {"x": 63, "y": 38}]

When the API detects a coordinate ("x" or "y") value of 0, **that coordinate is omitted in the JSON response**. For example, a response could take the following form: [{"x": 28}, {"x": 28, "y": 43}, {"y": 43}]. This response shows all three representation possibilities:

- {} - an empty object when both "x":0 and "y":0.
- {"x": 28} and {"y": 43} - an object with a single key-value pair when one coordinate is 0 but the other is a non-zero value.
- {"x": 28, "y": 43} - an object with both key-value pairs when both coordinates have a non-zero value.

NormalizedVertex

A vertex represents a 2D point in the image. NOTE: the normalized vertex coordinates are relative to the original image and range from 0 to 1.

JSON representation

```
{
  "x": number,
  "y": number
}
```

Fields

x	number
	X coordinate.
y	number
	Y coordinate.

Zero coordinate values

The general format for bounding polys in the JSON response when detected is an array of 4 vertex objects:

- [{"x": 0.063, "y": 0.018}, {"x": 0.123, "y": 0.018}, {"x": 0.123, "y": 0.038}, {"x": 0.063, "y": 0.038}]

When the API detects a coordinate ("x" or "y") value of 0.0, **that coordinate is omitted in the JSON response**. For example, a response could take the following form: [{"x": 0.028}, {"x": 0.028, "y": 0.043}, {"y": 0.043}]. This response shows all three representation possibilities:

- {} - an empty object when both "x":0.0 and "y":0.0.
- {"x": 0.028} and {"y": 0.043} - an object with a single key-value pair when one coordinate is 0.0 but the other is a non-zero value.
- {"x": 0.028, "y": 0.043} - an object with both key-value pairs when both coordinates have a non-zero value.

Methods

Methods

create

(<https://cloud.google.com/vision/product-search/docs/reference/rest/v1p3beta1/projects.locations.products.referenceImages/create>)

Creates and returns a new ReferenceImage resource.

delete

(<https://cloud.google.com/vision/product-search/docs/reference/rest/v1p3beta1/projects.locations.products.referenceImages/delete>)

Permanently deletes a reference image.

get

(<https://cloud.google.com/vision/product-search/docs/reference/rest/v1p3beta1/projects.locations.products.referenceImages/get>)

Gets information associated with a ReferenceImage.

list

(<https://cloud.google.com/vision/product-search/docs/reference/rest/v1p3beta1/projects.locations.products.referenceImages/list>)

Lists reference images.

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