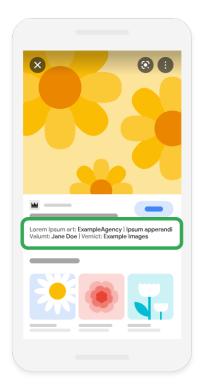
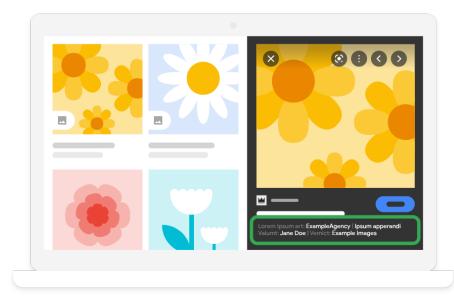
# Image metadata in Google Images

When you specify image metadata, Google Images can show more details about the image, such as who the creator is, how people can use an image, and credit information. For example, providing licensing information can make the image eligible for the Licensable badge, which provides a link to the license and more detail on how someone can use the image.





# Feature availability

This feature is available on mobile and desktop, and in all regions and languages that Google Search is available.

## Prepare your web pages and images

To make sure Google can discover and index your images:

- Make sure people can access and view your pages that contain images without needing an account or logging in.
- Make sure Googlebot can access your pages that contain images
   (meaning, your pages aren't disallowed by a robots.txt file or robots meta
   tag). You can see all pages blocked on your site in the <u>Page Indexing</u>
   <u>report</u> (https://support.google.com/webmasters/answer/7440203), or test a
   specific page using the <u>URL Inspection tool</u>
   (https://support.google.com/webmasters/answer/9012289).
- To learn more about how to use the URL Inspection tool, watch the <u>Search Console</u> <u>training video</u> (https://www.youtube.com/watch?v=Pe\_-TkdbXN0).
  - Follow the <u>Search Essentials</u> (/search/docs/essentials) to make sure Google can discover your content.
  - Follow the <u>Google Images best practices</u> (/search/docs/appearance/google-images).
  - To keep Google informed of changes, we recommend that you <u>submit a sitemap</u> (/search/docs/crawling-indexing/sitemaps/build-sitemap). You can automate this with the <u>Search Console Sitemap API</u> (/webmaster-tools/search-console-api-original/v3/sitemaps).

## Add structured data or IPTC photo metadata

To tell Google about your image metadata, add structured data or IPTC photo metadata to each image on your site. If you have the same image on multiple pages, add structured data or IPTC photo metadata to each image on each page that it appears.

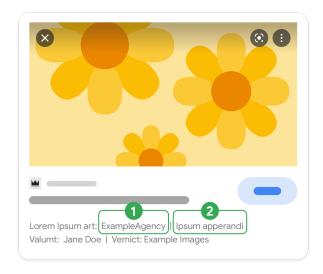
There are two ways that you can add photo metadata to your image. You only need to provide Google with one form of information to be eligible for enhancements like the Licensable badge, and any of the following methods is sufficient:

- <u>Structured data</u> (#structured-data): Structured data is an association between the image and the page where it appears with the mark up. You need to add structured data for every instance an image is used, even if it's the same image.
- <u>IPTC photo metadata</u> (#iptc-photo-metadata): IPTC photo metadata is embedded into the image itself, and the image and metadata can move from page to page while still staying intact. You only need to embed IPTC photo metadata once per image.

**Note**: If you choose to use both IPTC photo metadata and structured data, and if any information conflicts between the two, Google will use the structured data information.

The following diagram shows how license information may show up in Google Images:

- 1. A URL to a page that describes the license governing an image's use. Specify this information with the Schema.org license property or the IPTC Web Statement of Rights field.
- 2. A URL to a page that describes where the user can find information on how to license that image. Specify this information with the Schema.org acquireLicensePage property or the IPTC Licensor URL (of a <u>Licensor</u>



(https://www.iptc.org/std/photometadata/specification/IPTC-PhotoMetadata#licensor)
) field.

## Structured data

One way to tell Google about your image metadata is to add structured data fields. Structured data is a standardized format for providing information about a page and classifying the page content. If you're new to structured data, you can learn more about <a href="https://example.com/how-structured-data-works">how structured data works</a>

(/search/docs/appearance/structured-data/intro-structured-data).

Here's an overview of how to build, test, and release structured data. For a step-by-step guide on how to add structured data to a web page, check out the structured data codelab

(https://codelabs.developers.google.com/codelabs/structured-data/index.html).

 Add the <u>required properties</u> (#structured-data-type-definitions). Based on the format you're using, learn where to <u>insert structured data on the page</u> (/search/docs/appearance/structured-data/intro-structured-data#formatplacement)

.

★ Using a CMS? It may be easier to use a plugin that's integrated into your CMS.
Using JavaScript? Learn how to generate structured data with JavaScript
(/search/docs/appearance/structured-data/generate-structured-data-with-javascript)

.

- 2. Follow the <u>General structured data guidelines</u> (/search/docs/appearance/structured-data/sd-policies).
- 3. Validate your code using the <u>Rich Results Test</u> (https://search.google.com/test/rich-results).
- 4. Deploy a few pages that include your structured data and use the <u>URL Inspection tool</u> (https://support.google.com/webmasters/answer/9012289) to test how Google sees the page. Be sure that your page is accessible to Google and not blocked by a robots.txt file, the noindex tag, or login requirements. If the page looks okay, you can <u>ask Google to recrawl your URLs</u> (/search/docs/crawling-indexing/ask-google-to-recrawl).



**Note**: Allow time for re-crawling and re-indexing. Remember that it may take several days after publishing a page for Google to find and crawl it.

5. To keep Google informed of future changes, we recommend that you submit a sitemap (/search/docs/crawling-indexing/sitemaps/build-sitemap). You can automate this with the Search Console Sitemap API (/webmaster-tools/search-console-api-original/v3/sitemaps).

## **Examples**

### Single image

Here's an example of a page with a single image.

```
<u>JSON-LDRDFa</u> (#rdfa)<u>Microdata</u> (#microdata)
(#json-ld)
```

Try it out in the Rich Results Test

```
<html>
  <head>
    <title>Black labrador puppy</title>
    <script type="application/ld+json">
      "@context": "https://schema.org/",
      "@type": "ImageObject",
      "contentUrl": "https://example.com/photos/1x1/black-lab
      "license": "https://example.com/license",
      "acquireLicensePage": "https://example.com/how-to-use-m
      "creditText": "Labrador PhotoLab",
      "creator": {
       "@type": "Person",
       "name": "Brixton Brownstone"
       },
      "copyrightNotice": "Clara Kent"
    </script>
 </head>
  <body>
    <img alt="Black labrador puppy" src="https://example.com/</pre>
    <a href="https://example.com/license">License</a>
    <a href="https://example.com/how-to-use-my-images">How
    <b>Photographer</b>: Brixton Brownstone
    <b>Copyright</b>: Clara Kent
    <b>Credit</b>: Labrador PhotoLab
```

```
</html>
```

### Single image in a srcset tag

Here's an example of a page with a single image in a srcset tag.

```
JSON-LDRDFa (#rdfa)Microdata (#microdata)
   (#ison-ld)
      Try it out in the Rich Results Test
  <html>
     <head>
       <title>Black labrador puppy</title>
       <script type="application/ld+json">
         "@context": "https://schema.org/",
         "@type": "ImageObject",
         "contentUrl": "https://example.com/photos/320/black-lab
         "license": "https://example.com/license",
         "acquireLicensePage": "https://example.com/how-to-use-m
         "creditText": "Labrador PhotoLab".
         "creator": {
           "@type": "Person".
           "name": "Brixton Brownstone"
          },
         "copyrightNotice": "Clara Kent"
       </script>
     </head>
     <body>
       <img srcset="https://example.com/photos/320/black-labrado")</pre>
```

### Multiple image on a page

Here's an example of a page with multiple images.

```
"acquireLicensePage": "https://example.com/how-to-use-m
    "creditText": "Labrador PhotoLab",
    "creator": {
     "@type": "Person",
     "name": "Brixton Brownstone"
    },
    "copyrightNotice": "Clara Kent"
 },
 {
    "@context": "https://schema.org/",
    "@type": "ImageObject",
    "contentUrl": "https://example.com/photos/1x1/adult-bla
    "license": "https://example.com/license",
    "acquireLicensePage": "https://example.com/how-to-use-m
    "creditText": "Labrador PhotoLab",
    "creator": {
     "@type": "Person",
     "name": "Brixton Brownstone"
    }.
    "copyrightNotice": "Clara Kent"
 }]
 </script>
</head>
<body>
 <h2>Black labrador puppy</h2>
 <img alt="Black labrador puppy" src="https://example.com/</pre>
 <a href="https://example.com/license">License</a>
 <a href="https://example.com/how-to-use-my-images">How
 <b>Photographer</b>: Brixton Brownstone
 <b>Copyright</b>: Clara Kent
 <b>Credit</b>: Labrador PhotoLab
 <h2>Adult black labrador</h2>
 <img alt="Adult black labrador" src="https://example.com/</pre>
 <a href="https://example.com/license">License</a>
 <a href="https://example.com/how-to-use-my-images">How
 <b>Photographer</b>: Brixton Brownstone
 <b>Copyright</b>: Clara Kent
 <b>Credit</b>: Labrador PhotoLab
```

</body> </html>

## Structured data type definitions

The full definition of ImageObject is provided on <a href="mageObject">schema.org/ImageObject</a> (https://schema.org/ImageObject). The Google-supported properties are the following:

### Required properties

#### contentUr1 URL (https://schema.org/URL)

A URL to the actual image content. Google uses contentUrl to determine which image the photo metadata applies to.



Google also supports the **url** property to specify the image URL if you don't include contentUrl. While the url property is not as precise and we recommend you use **contentUrl** instead, existing markup may still use url.

Either creator In addition to contentUr1, you must include one of the following or creditText properties:

or

ce or license

- copyrightNoti creator (#creator-sd)
  - creditText (#credit-sd)
  - copyrightNotice (#copyright-sd)
  - license (#license-sd)



Note: Once you include one of these properties, the other three

### Required properties

properties become recommended in the Rich Results Test.

### Recommended properties

# acquireLicens URL (https://schema.org/URL) ePage

A URL to a page where the user can find information on how to license that image. Here are some examples:

- A check-out page for that image where the user can select specific resolutions or usage rights
- A general page that explains how to contact you

#### creator

<u>Organization</u> (https://schema.org/Organization) or <u>Person</u> (https://schema.org/Person)

The creator of the image. This is usually the photographer, but it may be a company or organization (if appropriate).

## creator.name Text (https://schema.org/Text)

The name of the creator.

#### 

The name of the person and/or organization that is credited for the image when it's published.

# copyrightNoti <u>Text</u> (https://schema.org/Text) ce

The copyright notice for claiming the intellectual property for this photograph. This identifies the current owner of the copyright for the photograph.

### Recommended properties

### license

URL (https://schema.org/URL)

A URL to a page that describes the license governing an image's use. For example, it could be the terms and conditions that you have on your website. Where applicable, it could also be a Creative Commons License (for example, <u>BY-NC 4.0</u>

(https://creativecommons.org/licenses/by-nc/4.0/)).

If you're using structured data to specify image, you must include the **license** property for your image to be eligible to be shown with the Licensable badge. We recommend that you also add the **acquireLicensePage** property if you have that information.

## IPTC photo metadata

Alternatively, you can embed IPTC photo metadata

(https://iptc.org/standards/photo-metadata/iptc-standard/) directly inside an image. We recommend using metadata management software to manage your image metadata (https://iptc.org/standards/photo-metadata/software-support/). The following table contains the properties that Google extracts:

## Recommended properties

<u>Copyright Notice</u> The copyright notice for claiming the intellectual property for this (https://iptc.org/ photograph. This identifies the current owner of the copyright for the std/photometada photograph.

ta/specification/l

PTC-

PhotoMetadata#

copyright-notice)

### Recommended properties

### Creator

The creator of the image. This is usually the name of the photographer, (https://iptc.org/ but it may be the name of a company or organization (if appropriate).

std/photometada ta/specification/l

PTC-

PhotoMetadata#

creator)

### **Credit Line**

The name of the person and/or organization that is credited for the (https://iptc.org/ image when it's published.

std/photometada ta/specification/l

PTC-

PhotoMetadata# credit-line)

### **Digital Source**

<u>Type</u>

(https://iptc.org/ std/photometada \* ta/specification/l PTC-

PhotoMetadata# digital-sourcetype)

The type of digital source that was used to create the image. Use one of the following IPTC NewsCodes:

### <u>trainedAlgorithmicMedia</u>

(https://cv.iptc.org/newscodes/digitalsourcetype/trainedAlgorithmic Media)

: The image was created using a model derived from sampled content.

### • compositeSynthetic

(https://cv.iptc.org/newscodes/digitalsourcetype/compositeSynthet

: The image is a composite that includes synthetic elements.

### • <u>algorithmicMedia</u>

(https://cv.iptc.org/newscodes/digitalsourcetype/algorithmicMedia) : The image was created purely by an algorithm not based on any sampled training data (for example, an image created by software using a mathematical formula).

### Recommended properties



Beta: Currently, this property is in beta and only available for IPTC photo metadata. Adding this property makes your image eligible for display with an Al-generated label, but you may not see the label in Google Images right away, as we're still actively developing it.

Licensor URL A URL to a page where the user can find information on how to license (http://ns.useplu that image. The Licensor URL

(http://ns.useplus.org/LDF/ldf-XMPSpecification#LicensorURL) must s.org/LDF/ldf-XMPSpecification be a property of a Licensor object

#LicensorURL) (https://www.iptc.org/std/photometadata/specification/IPTC-PhotoMetadata#licensor)

, not a property of the image object. Here are some examples:

- A check-out page for that image where the user can select specific resolutions
- A general page that explains how to contact you

Web Statement of A URL to a page that describes the license governing an image's use, and optionally other rights information. For example, it could be the Rights (https://www.iptcterms and conditions that you have on your website. Where applicable, it .org/std/photomecould also be a Creative Commons License (for example, BY-NC 4.0 tadata/specificati (https://creativecommons.org/licenses/by-nc/4.0/)). on/IPTC-

web-statementof-rights)

PhotoMetadata# You must include the Web Statement of Rights field for your image to be eligible to be shown with the licensable badge. We recommend that you also add the Licensor URL field if you have that information.

# Troubleshooting

**Important**: Google does not guarantee that structured data or IPTC photo metadata will show up in search results. For a list of common reasons why Google may not show structured data in search results, see the <u>General Structured Data Guidelines</u> (/search/docs/appearance/structured-data/sd-policies).

If you're having trouble implementing image metadata for Google Images, here are some resources that may help you.

If you're using a content management system (CMS) or someone else is taking care of your site, ask them to help you. Make sure to forward any Search Console message that details the issue to them.

- For questions about the feature, review the <u>FAQ for Image License in</u> <u>Google Images</u> (https://support.google.com/webmasters/thread/31516792).
- You might have an error in your structured data. Check the <u>list of</u> <u>structured data errors</u>

(https://support.google.com/webmasters/answer/7552505#error\_list).

- If you received a structured data manual action against your page, the structured data on the page will be ignored (although the page can still appear in Google Search results). To fix <u>structured data issues</u> (https://support.google.com/webmasters/answer/9044175#zippy=%2Cstructured-data-issue)
  - , use the <u>Manual Actions report</u> (https://support.google.com/webmasters/answer/9044175).
- Review the <u>guidelines</u> (#guidelines) again to identify if your content isn't compliant with the guidelines.



The problem can be caused by either spammy content or spammy markup usage. However, the issue may not be a syntax issue, and so the Rich Results Test won't be able to identify these issues.

- <u>Troubleshoot missing rich results / drop in total rich results</u> (https://support.google.com/webmasters/answer/7552505#missing-jobs).
- For general questions about crawling and indexing, check the <u>Google Search crawling and indexing FAQ</u> (/search/help/crawling-index-faq).
- Note: Allow time for re-crawling and re-indexing. Remember that it may take several days after publishing a page for Google to find and crawl it.
  - Ask a question in the <u>Google Search Central office hours</u> (/search/help/office-hours).
  - Post a question in the <u>Google Search Central forum</u>
     (https://support.google.com/webmasters/community). For help with IPTC photo metadata, you can <u>post in their forum</u>
     (https://groups.io/g/iptc-photometadata/).

## Is it okay to remove image metadata?

Removing image metadata can reduce image file size, which helps web pages load faster. However, be careful, since removing metadata may be illegal in certain jurisdictions. Image metadata provide image copyright and licensing information online. Google recommends that, at the very least, you retain critical metadata related to image rights information and identification. For example, whenever possible try to keep the IPTC fields <u>creator</u>

(https://iptc.org/std/photometadata/specification/IPTC-PhotoMetadata#creator), <a href="mailto:credit-line">credit</a> line (https://iptc.org/std/photometadata/specification/IPTC-PhotoMetadata#credit-line), and <a href="mailto:copyright notice">copyright notice</a>

(https://iptc.org/std/photometadata/specification/IPTC-PhotoMetadata#copyright-notice)

to provide proper attribution.

Except as otherwise noted, the content of this page is licensed under the <u>Creative Commons</u>

<u>Attribution 4.0 License</u> (https://creativecommons.org/licenses/by/4.0/), and code samples are licensed under the <u>Apache 2.0 License</u> (https://www.apache.org/licenses/LICENSE-2.0). For details, see the <u>Google Developers Site Policies</u>

(https://developers.google.com/site-policies). Java is a registered trademark of Oracle and/or its affiliates.

Last updated 2023-11-17 UTC.