Learn about sitemaps

Sitemaps in Search Console ...

[▶]

What is a sitemap?

A *sitemap* is a file where you provide information about the pages, videos, and other files on your site, and the relationships between them. Search engines like Google read this file to more intelligently crawl your site. A sitemap tells Google which pages and files you think are important in your site, and also provides valuable information about these files: for example, for pages, when the page was last updated, how often the page is changed, and any alternate language versions of a page.

You can use a sitemap to provide information about specific types of content on your pages, including video (/search/docs/advanced/sitemaps/video-sitemaps) and image (/search/docs/advanced/sitemaps/image-sitemaps) content. For example:

- A sitemap *video entry* can specify the video running time, category, and age-appropriateness rating.

- A sitemap *image entry* can include the image subject matter, type, and license.

Do I need a sitemap?

If your site's pages are properly linked, Google can usually discover most of your site. Even so, a sitemap can improve the crawling of larger or more complex sites, or more specialized files.

a sitemap doesn't guarantee that all the items in your sitemap will be crawled and indexed, as Google process complex algorithms to schedule crawling. However, in most cases, your site will benefit from having a sitem

ou'll never be penalized for having one.

You might need a sitemap if:

- **Your site is really large.** As a result, it's more likely Google web crawlers might overlook crawling some of your new or recently updated pages.

- **Your site has a large archive of content pages that are isolated or not well linked to each other.** If your site pages do not naturally reference each other, you can list them in a sitemap to ensure that Google does not overlook some of your pages.

- **Your site is new and has few external links to it.** Googlebot and other web crawlers crawl the web by following links from one page to another. As a result, Google might not discover your pages if no other sites link to them.

- **Your site has a lot of rich media content (video, images) or is shown in Google News.** If provided, Google can take additional information from sitemaps into account for search, where appropriate.

You might *not* need a sitemap if:

- **Your site is "small".** By small, we mean about 500 pages or less on your site. (Only pages that you think need to be in search results count toward this total.)

- **You're on a simple site hosting service** like Blogger or Wix. If your site is on a service that helps you set up a site quickly with pre-formatted pages and navigation elements, your service might create a sitemap for your automatically, and you don't need to do anything. Search your service's documentation for the word "sitemap" to see if a sitemap is generated automatically, or if they recommend creating your own (and if so, how to submit a sitemap on your hosting service).

- **Your site is comprehensively linked internally.** This means that Google can find all the important pages on your site by following links starting from the homepage.

- **You don't have many media files** (video, image) **or news pages** that you need to appear in the index. Sitemaps can help Google find and understand video and image files, or news articles, on your site, if you want them to appear in Google Search results. If you don't need these results to appear in Image, Video, or News results, you might not need a sitemap.

Build and submit a sitemap

This page describes how to build a sitemap and make it available to Google. Learn more about sitemaps here. (/search/docs/advanced/sitemaps/overview)

1. Decide which pages on your site should be crawled by Google, and determine the canonical version (/search/docs/advanced/crawling/consolidate-duplicate-urls) of each page.

2. Decide which sitemap format (#sitemapformat) you want to use. You can create your sitemap manually or choose from a number of third-party tools (http://code.google.com/p/sitemap-generators/wiki/SitemapGenerators) to generate your sitemap for you.

3. Make your sitemap available to Google (#addsitemap) by adding it to your robots.txt file or directly submitting it to Search Console.

Sitemap formats

Google supports several sitemap formats, described here. Google expects the standard sitemap protocol (http://www.sitemaps.org/) in all formats. Google does not currently consume the `<priority>` attribute in sitemaps.

All formats limit a single sitemap to 50MB (uncompressed) and 50,000 URLs. If you have a larger file or more URLs, you will have to break your list into multiple sitemaps. You can optionally create a sitemap index (/search/docs/advanced/sitemaps/large-sitemaps) file (a file that points to a list of sitemaps) and submit that single index file to Google. You can submit multiple sitemaps and/or sitemap index files to Google.

⊕ **XML**

Here is a very basic XML sitemap that includes the location of a single URL:

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
<url>
<loc>http://www.example.com/foo.html</loc>
<lastmod>2018-06-04</lastmod>
```

```
</url>
</urlset>
```

You can find more complex examples and full documentation at sitemaps.org (https://www.sitemaps.org/protocol.html).

You can see examples of sitemaps that specify alternate language pages (/search/docs/advanced/crawling/localized-versions#sitemap) and sitemaps for news, image, or video files (#extensions).

⊕ **RSS, mRSS, and Atom 1.0**

If you have a blog with an RSS or Atom feed, you can submit the feed's URL as a sitemap. Most blog software is able to create a feed for you, but recognize that this feed only provides information on recent URLs.

- Google accepts RSS 2.0 and Atom 1.0 feeds.

- You can use an mRSS (media RSS) feed (/search/docs/advanced/sitemaps/video-sitemaps) to provide Google details about video content on your site.

⊕ **Text**

If your sitemap includes only web page URLs, you can provide Google with a simple text file that contains one URL per line. For example:

```
http://www.example.com/file1.html
http://www.example.com/file2.html
```

Guidelines for text file sitemaps:

- Encode your file using UTF-8 encoding.

- Don't put anything other than URLs in the sitemap file.

- You can name the text file anything you wish, provided it has a .txt extension (for instance, sitemap.txt).

⊕ Google Sites

If you've used Google Sites to create and verify a site, Google Sites will automatically generate a sitemap for you. You cannot modify the sitemap, but you can submit it to Google (https://support.google.com/webmasters/answer/7451001) if you want to read the sitemap report data. Note that your sitemap might not be displayed properly if you have more than 1,000 pages in a single sub-directory.

- If your site is hosted at Google Sites (//sites.google.com), your sitemap URL is
  `http://sites.google.com/site/yoursitename/system/feeds/sitemap`.

- If you created your site using Google Workspace (https://workspace.google.com/), your sitemap URL is
  `https://sites.google.com/yourdomain/yoursitename/system/feeds/sitemap`.

Sitemap extensions for additional media types

Google supports extended sitemap syntax for the following media types. Use these extensions to describe video files, images, and other hard-to-parse content on your site to improve indexing.

- Video (/search/docs/advanced/sitemaps/video-sitemaps)

- Images (/search/docs/advanced/sitemaps/image-sitemaps)

- News (/search/docs/advanced/sitemaps/news-sitemap)

General sitemap guidelines

- **Use consistent, fully-qualified URLs.** Google will crawl your URLs exactly as listed. For instance, if your site is at `https://www.example.com/`, don't specify a URL as `https://example.com/` (missing `www`) or `./mypage.html` (a relative URL).

- **A sitemap can be posted anywhere on your site, but a sitemap affects only descendants of the parent directory**. Therefore, a sitemap posted at the site root can affect all files on the site, which is where we recommend posting your sitemaps.

- **Don't include session IDs from URLs** in your sitemap to reduce duplicate crawling of those URLs.

- **Tell Google about alternate language versions of a URL** using hreflang annotations (/search/docs/advanced/crawling/localized-versions).

- **Sitemap files must be UTF-8 encoded, and URLs escaped** (/search/docs/advanced/sitemaps/build-sitemap) **appropriately**.

- **Break up large sitemaps** into smaller sitemaps: a sitemap can contain up to 50,000 URLs and must not exceed 50MB uncompressed. Use a sitemap index file (/search/docs/advanced/sitemaps/large-sitemaps) to list all the individual sitemaps and submit this single file to Google rather than submitting individual sitemaps.

- **List only** canonical URLs (/search/docs/advanced/crawling/consolidate-duplicate-urls) in your sitemaps. If you have two versions of a page, list in the sitemap only the one you prefer to appear in search results. If you have two versions of your site (for example, www and non-www), decide which is your preferred site, and put the sitemap there, and add `rel=canonical` or redirects on the other site.

- **If you have different URLs for mobile and desktop versions** of a page, we recommend pointing to only one version in a sitemap. However, want to point to both URLs, annotate (/search/mobile-sites/mobile-seo/separate-urls#annotation-in-sitemaps) your URLs to indicate the desktop and mobile versions.

- Use sitemap extensions (#extensions) for pointing to **additional media types** such as video, images, and news.

- **If you have alternate pages for different languages or regions**, you can use hreflang in either a sitemap or html tags (/search/docs/advanced/crawling/localized-versions) to indicate the alternate URLs.

- **Non-alphanumeric and non-latin characters.** We require your sitemap file to be UTF-8 encoded (you can generally do this when you save the file). As with all XML files, any data values (including URLs) must use entity escape codes for the characters listed in the table below. A sitemap can contain only ASCII characters; it can't contain upper ASCII characters or certain control codes or special characters such as `*` and `{}`. If your sitemap URL contains these characters, you'll receive an error when you try to add it.

Character		Escape Code
Ampersand	&	&
Single Quote	'	'
Double Quote	"	"

Greater Than	>	>
Less Than	<	<

In addition, all URLs (including the URL of your sitemap) must be encoded for readability by the web server on which they are located and URL-escaped. However, if you are using any sort of script, tool, or log file to generate your URLs (anything except typing them in by hand), this is usually already done for you. If you submit your sitemap and you receive an error that Google is unable to find some of your URLs, check to make sure that your URLs follow the RFC-3986 (http://www.ietf.org/rfc/rfc3986.txt) standard for URIs, the RFC-3987 (http://www.ietf.org/rfc/rfc3987.txt) standard for IRIs, and the XML standard (http://www.w3.org/TR/REC-xml/).

Here is an example of a URL that uses a non-ASCII character (ü), as well as a character that requires entity escaping (&):

`http://www.example.com/ümlat.html&q=name`

Here is that same URL, ISO-8859-1 encoded (for hosting on a server that uses that encoding) and URL escaped:

`http://www.example.com/%FCmlat.html&q=name`

Here is that same URL, UTF-8 encoded (for hosting on a server that uses that encoding) and URL escaped:

`http://www.example.com/%C3%BCmlat.html&q=name`

Here is that same URL, entity escaped:

`http://www.example.com/%C3%BCmlat.html&q=name`

- Remember that sitemaps are a *recommendation* to Google about which pages you think are important; Google does not pledge to crawl every URL in a sitemap.

- Google ignores `<priority>` and `<changefreq>` values.

- Google uses the `<lastmod>` value if it's consistently and verifiably (for example by comparing to the last modification of the page) accurate.

- Position of a URL in a sitemap is not important; Google does not crawl URLs in the order in which they appear in your sitemap.

Make your sitemap available to Google (Submit your sitemap to Google)

Google doesn't check a sitemap every time a site is crawled; a sitemap is checked only the first time that we notice it, and thereafter only when you ping us to let us know that it's changed. You should alert Google about a sitemap only when it's new or updated; do not submit or ping unchanged sitemaps multiple times.

There are a few different ways to make your sitemap available to Google:

- Submit it to Google using the Search Console Sitemaps report
  (https://support.google.com/webmasters/answer/7451001)

- Insert the following line anywhere in your `robots.txt` file, specifying the path to your sitemap:
  `Sitemap: http://example.com/sitemap_location.xml`

- Use the "ping" service to request Google to crawl the sitemap. Send an HTTP GET request like this:
  `http://www.google.com/ping?sitemap=<complete_url_of_sitemap>`
  for example:
  `http://www.google.com/ping?sitemap=https://example.com/sitemap.xml`

Troubleshooting sitemaps

See the sitemaps troubleshooting guide
 (https://support.google.com/webmasters/answer/7451001#errors).

Split up your large sitemaps

If you have many sitemaps, you can use a sitemaps index file as a way to submit them at once. The XML format of a sitemap index file is very similar to the XML format of a sitemap file. The sitemap index file uses the following XML tags:

- `sitemapindex` - the parent tag surrounds the file.

- `sitemap` - the parent tag for each sitemap listed in the file (a child of the `sitemapindex` tag)

- `loc` - the location of the sitemap (a child of the `sitemap` tag)

You can see the Sitemap Protocol (http://www.sitemaps.org/protocol.html) page for more information on syntax.

The following example shows a sitemap index in XML format that lists two sitemaps:

```
<?xml version="1.0" encoding="UTF-8"?>
  <sitemapindex xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
    <sitemap>
      <loc>http://www.example.com/sitemap1.xml.gz</loc>
    </sitemap>
    <sitemap>
      <loc>http://www.example.com/sitemap2.xml.gz</loc>
    </sitemap>
  </sitemapindex>
```

Once you've made and saved your index file, you can submit your index file to Google (https://support.google.com/webmasters/answer/7451001) as long as you upload and save all your sitemaps to the same location on your host server. You can submit up to 500 sitemap index files for each site in your account.

Manage sitemaps for multiple sites

If you have multiple websites, you can simplify the process of creating and submitting sitemaps by creating one or more sitemaps that include URLs for all your verified sites, and

saving the sitemap(s) to a single location. All sites must be verified in Search Console. You can choose to use:

- A single sitemap that includes URLs for multiple websites, including sites from different domains. For example, the sitemap located at `http://host1.example.com/sitemap.xml` can include the following URLs.

  - `http://host1.example.com`

  - `http://host2.example.com`

  - `http://host3.example.com`

  - `http://host1.example1.com`

  - `http://host1.example.ch`

- Individual sitemaps (one for each site) that all reside in a single location.

  - `http://host1.example.com/host1-example-sitemap.xml`

  - `http://host1.example.com/host2-example-sitemap.xml`

  - `http://host1.example.com/host3-example-sitemap.xml`

  - `http://host1.example.com/host1-example1-sitemap.xml`

  - `http://host1.example.com/host1-example-ch-sitemap.xml`

Note that cross-site submissions work only if all sites have been verified in Search Console.

To host cross-site sitemaps in a single location, follow the steps below:

1. Make sure that you have verified ownership of all the sites (https://support.google.com/webmasters/answer/35181).

2. Create a sitemap (/search/docs/advanced/sitemaps/overview) that includes URLs from all the sites that you want to cover. You can create a single sitemap that includes URLs from all sites or you can create one or more separate sitemaps for each site.

3. Using Google Search Console, submit your sitemap(s) (https://support.google.com/webmasters/answer/34575).

Last updated 2021-01-12 UTC.

Video sitemaps and video sitemap alternatives

A video sitemap is a <u>sitemap</u> (/search/docs/advanced/sitemaps/overview) with additional information about video hosted on your pages. Creating a video sitemap is an excellent way to help Google find and understand the video content on your site, especially content that was recently added or that we might not otherwise discover with our usual crawling mechanisms. Google Video Sitemap is an extension to the <u>Sitemap standard</u> (http://www.sitemaps.org).

While Google recommends using video sitemaps, we also support <u>mRSS feeds</u> (#mrss).

the best results in Google Search, follow the <u>video best practices</u> (/search/docs/advanced/guidelines/video)

Guidelines for video sitemaps

Here are basic guidelines for video sitemaps:

- You can create a separate sitemap just for video, or you can embed a video sitemap within an existing sitemap, whichever is more convenient for you.

- You can host multiple videos in one web page.

- Each sitemap entry is the URL of a page that hosts one or more videos. The structure of each sitemap entry is as follows:

```
<url>
  <loc>https://example.com/mypage</loc>      <!-- URL of host page -->
  <video> ... information about video 1 ... </video>
  ... as many additional <video> entries as you need ...
</url>
```

- Don't list videos that are unrelated to the host page. For example, if the video is a small addendum to the page, or unrelated to the main text content.

- Each entry in a video sitemap includes a set of required, recommended, or optional values that you supply. Recommended and optional values provide useful metadata that

can enhance your video results and improve Google's ability to include your video in search results. Refer to the list of sitemap elements (#schema_tags).

- Google might use text on the video landing page rather than the text you supply in your sitemap, if the page text is deemed more useful than the information in the sitemap.

- Google can't guarantee when or if your videos will be indexed, as Google relies on complex indexing algorithms.

- If Google can't discover video content at the URL you provide, the sitemap entry is ignored.

- Each sitemap file that you provide must have **no more than 50,000 URL elements**. If you have more than 50,000 videos, you can submit multiple sitemaps (/search/docs/advanced/sitemaps/large-sitemaps) and a sitemap index file (https://support.google.com/webmasters/answer/7451001). You can't nest sitemap index files. Keep in mind that if you are adding optional tags, you may hit the 50MB uncompressed limit before you hit the 50,000 video limit.

- Google must be able to access the source file or player (that is, the file or player can't be blocked by robots.txt (/search/docs/advanced/robots/intro), require a login, or be otherwise inaccessible to Googlebot). Metafiles that require a download of the source via streaming protocols are not supported.

- All files must be accessible to Googlebot. If you want to prevent spammers from accessing your video content at the `<player_loc>` or `<content_loc>` URLs, verify that any bots accessing your server are really Googlebot (/search/docs/advanced/crawling/verifying-googlebot).

- Make sure that your robots.txt file isn't blocking any of the items (including the host page URL, the video URL, and the thumbnail URL) included in each sitemap entry. More information about robots.txt. (/search/docs/advanced/robots/intro)

- Google verifies that the information you provide for each video matches what is on the site. If not, your video might not be indexed.

- You can specify pages from different sites in one sitemap. All sites, including the one containing your sitemap, must be verified in Search Console. More information about managing sitemaps for multiple sites. (/search/docs/advanced/sitemaps/large-sitemaps)

- Learn how to submit your sitemap to Google. (/search/docs/advanced/sitemaps/build-sitemap#addsitemap) For large sites, we recommend

using the Search Console API (/webmaster-tools/search-console-api-original/v3/sitemaps) to
submit your sitemaps.

Example sitemap

Here is a sample video sitemap with one page hosting one video. This example includes all of
the tags that Google uses.

```
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9"
        xmlns:video="http://www.google.com/schemas/sitemap-video/1.1">
   <url>
     <loc>http://www.example.com/videos/some_video_landing_page.html</loc>
     <video:video>
       <video:thumbnail_loc>http://www.example.com/thumbs/123.jpg</video:thumbna
       <video:title>Grilling steaks for summer</video:title>
       <video:description>Alkis shows you how to get perfectly done steaks every
         time</video:description>
       <video:content_loc>
          http://streamserver.example.com/video123.mp4</video:content_loc>
       <video:player_loc>
          http://www.example.com/videoplayer.php?video=123</video:player_loc>
       <video:duration>600</video:duration>
       <video:expiration_date>2021-11-05T19:20:30+08:00</video:expiration_date>
       <video:rating>4.2</video:rating>
       <video:view_count>12345</video:view_count>
       <video:publication_date>2007-11-05T19:20:30+08:00</video:publication_date
       <video:family_friendly>yes</video:family_friendly>
       <video:restriction relationship="allow">IE GB US CA</video:restriction>
       <video:price currency="EUR">1.99</video:price>
       <video:requires_subscription>yes</video:requires_subscription>
       <video:uploader
         info="http://www.example.com/users/grillymcgrillerson">GrillyMcGrillers
       </video:uploader>
       <video:live>no</video:live>
     </video:video>
   </url>
</urlset>
```

XML namespace

The Video Sitemap tags are defined in the following namespace:

```
xmlns:video="http://www.google.com/schemas/sitemap-video/1.1"
```

Video sitemap tag definitions

You can find more documentation on media sitemaps at rssboard.org
 (http://www.rssboard.org/media-rss).

Tag	Required?	Description
`<url>`	Required	Parent tag for a single host page on your sit basic sitemaps format. (https://www.sitemaps.org/protocol.html)
`<loc>`	Required	Specifies the host page where one or more When a user clicks on a video result in Goog sent to this page. This URL must be a uniqu Defined by the basic Sitemaps format. (https://www.sitemaps.org/protocol.html) **For multiple videos on a single page,** create for the page, with a child `<video>` element that page.
`<video:video>`	Required	Parent element for all information about a s page specified by `<loc>`.
`<video:thumbnail_loc>`	Required	A URL pointing to the video thumbnail imag requirements. (/search/docs/advanced/guidelines/video-
`<video:title>`	Required	The title of the video. All HTML entities shou wrapped in a CDATA block (http://wikipedia We recommend that this match the video tit web page.

Tag	Required?	Description
`<video:description>`	**Required**	A description of the video. Maximum 2048 entities should be escaped or wrapped in a (http://wikipedia.org/wiki/CDATA). It must description displayed on the web page (it d word-for-word match).
`<video:content_loc>`	**Required**: either `<video:content_loc>` *or* `<video:player_loc>`	A URL pointing to the actual video media fil the supported formats. (/search/docs/advanced/guidelines/video **Additional guidelines** • HTML and Flash aren't supported forma • Must not be the same as the `<loc>` URL • This is the equivalent of **VideoObject.** (/search/docs/data-types/video) in stru • **Best practice:** If you want to restrict acc but still have it crawled, ensure that Goo your content by using a reverse DNS look (/search/docs/advanced/crawling/verif
`<video:player_loc>`	**Required**: either `<video:content_loc>` *or* `<video:player_loc>`	A URL pointing to a player for a **specific** vid information in the `src` element of an `<embe` **Additional guidelines** • Must not be the same as the `<loc>` URL • For YouTube videos, this value is used ra `video:content_loc`. This is the equiv **VideoObject.embedUrl** (/search/do in structured data. • **Best practice:** If you want to restrict acc but still have it crawled, ensure that Goo your content by using a reverse DNS look (/search/docs/advanced/crawling/verif **Attributes:** • `allow_embed` [*Optional*] Whether Googl video in search results. Allowed values a

Tag	Required?	Description
`<video:duration>`	Recommended	The duration of the video, in seconds. Value 28800 (8 hours) inclusive.
`<video:expiration_date>`	Recommended when applicable	The date after which the video is no longer format (http://www.w3.org/TR/NOTE-datet your video does not expire. If present, Goog your video after this date. Supported values are complete date (YYYY date plus hours, minutes and seconds, and DDThh:mm:ss+TZD). Example: 2012-07-16T19:20:30+08:00
`<video:rating>`	Optional	The rating of the video. Supported values a the range 0.0 (low) to 5.0 (high), inclusive.
`<video:view_count>`	Optional	The number of times the video has been vie
`<video:publication_date>`	Optional	The date the video was first published, in W (http://www.w3.org/TR/NOTE-datetime). S complete date (YYYY-MM-DD) or complete minutes and seconds, and timezone (YYYY DDThh:mm:ss+TZD). Example: 2007-07-16T19:20:30+08:00
`<video:family_friendly>`	Optional	Whether the video is available with SafeSea tag, the video is available when SafeSearch **Supported values**: • **yes**: The video is available when SafeSe • **no**: The video is only available when Saf

Tag	Required?	Description

`<video:restriction>`	Optional	Whether to show or hide your video in searc specific countries.
		
		Specify a space-delimited list of country co format (http://wikipedia.org/wiki/ISO_3166 `<video:restriction>` tag can be used f is no `<video:restriction>` tag, Google video can be played in all locations. *Note th search results; it doesn't prevent a user from your video in a restricted location though oth* more about applying country restrictions. (/search/docs/advanced/guidelines/video-
		
		Attributes:
		
		- `relationship` [*Required*] Whether the denied in search results in the specified values are `allow` or `deny`. If `allow`, list allowed, unlisted countries are denied; if countries are denied, unlisted countries
		
		Example: This example allows the video se shown only in Canada and Mexico:
		
		`<video:restriction relationship=`
		`MX</video:restriction>`

Tag	Required?	Description
`<video:platform>`	Optional	Whether to show or hide your video in searc platform types. This is a list of space-delimi *Note that this only affects search results on types; it does not prevent a user from playing restricted platform.*
		Only one `<video:platform>` tag can app there is no `<video:platform>` tag, Googl video can be played on all platforms. Learn platform restrictions. (/search/docs/advanced/guidelines/video=
		Supported values:
		• `web` - Traditional computer browsers on laptops.
		• `mobile` - Mobile browsers, such as thos or tablets.
		• `tv` - TV browsers, such as those availabl devices and game consoles.
		Attributes:
		• `relationship` [*Required*] specifies wh restricted or permitted for the specified values are `allow` or `deny`. If the `allow` omitted platforms will be denied; if the `d` any omitted platforms will be allowed.
		Example: The following example allows use not mobile devices: `<video:platform relationship="al` `tv</video:platform>`

Tag	Required?	Description
`<video:price>`	Optional	The price to download or view the video. On videos. More than one `<video:price>` ele (for example, in order to specify various cur options, or resolutions). **Attributes:** • `currency` [*Required*] Specifies the curre <u>format</u> (http://en.wikipedia.org/wiki/ISC • `type` [*Optional*] Specifies the purchase c values are `rent` and `own`. If this isn't spe value is `own`. • `resolution` [*Optional*] Specifies the res purchased version. Supported values are
`<video:requires_subscription>`	Optional	Indicates whether a subscription (either pai to view the video. Allowed values are `yes` o
`<video:uploader>`	Optional	The video uploader's name. Only one `<vide` allowed per video. String value, max 255 ch **Attributes:** • `info` [*Optional*] Specifies the URL of a w additional information about this upload in the same domain as the `<loc>` tag.
`<video:live>`	Optional	Indicates whether the video is a live stream are `yes` or `no`.
`<video:tag>`	Optional	An arbitrary string tag describing the video. very short descriptions of key concepts ass or piece of content. A single video could ha although it might belong to only one catego video about grilling food may belong in the could be tagged "steak", "meat", "summer", a a new `<video:tag>` element for each tag video. A maximum of 32 tags is permitted.

Tag	Required?	Description
`<video:category>`	Optional	A short description of the broad category th to. This is a string no longer than 256 chara categories are broad groupings of content b video belongs to a single category. For exar cooking could have categories for broiling, l and the video could belong to one of those
`<video:gallery_loc>`	*Not used*	Currently not used.

Sitemap alternative

While Google recommends using video sitemaps and schema.org's VideoObject
(/search/docs/advanced/guidelines/video#videoobject) to mark up your videos, we also support
mRSS feeds.

➕ **mRSS**

Google supports mRSS (http://www.rssboard.org/media-rss), an RSS module that supplements the
element capabilities of RSS 2.0 (http://cyber.law.harvard.edu/rss/rss.html). mRSS feeds are very
similar to video sitemaps and can be tested, submitted, and updated just like sitemaps.

Each mRSS feed must be under 50MB in size when uncompressed, and can contain no more
than 50,000 video items. If your uncompressed file is larger than 50MB, or you have more than
50,000 videos, you can submit multiple mRSS feeds and a sitemap index file
(/search/docs/advanced/sitemaps/large-sitemaps). Sitemap indexes can contain mRSS feeds.

RSS vs mRSS – mRSS is a RSS extension used for syndicating multimedia files. It allows for a
much more detailed description of the content than the RSS standard.

mRSS Example

Here's an example of an mRSS entry that provides *all* the key tags that Google uses. This
includes `<dcterms:type>live-video</dcterms:type>`, which you can use to identify live,
streaming videos.

```
<?xml version="1.0" encoding="UTF-8"?>
<rss version="2.0" xmlns:media="http://search.yahoo.com/mrss/" xmlns:dcterms="ht
<channel>
<title>Example MRSS</title>
<link>http://www.example.com/examples/mrss/</link>
<description>MRSS Example</description>
  <item xmlns:media="http://search.yahoo.com/mrss/" xmlns:dcterms="http://purl.o
    <link>http://www.example.com/examples/mrss/example.html</link>
    <media:content url="http://www.example.com/examples/mrss/example.flv" fileSi
      type="video/x-flv" height="240" width="320" duration="120" medium="video"
      <media:player url="http://www.example.com/shows/example/video.swf?flash_pa
      <media:title>Grilling Steaks for Summer</media:title>
      <media:description>Get perfectly done steaks every time</media:description
      <media:thumbnail url="http://www.example.com/examples/mrss/example.png" he
      <media:price price="19.99" currency="EUR" />
      <media:price type="subscription" />
    </media:content>
    <media:restriction relationship="allow" type="country">us ca</media:restrict
    <dcterms:valid xmlns:dcterms="http://purl.org/dc/terms/">end=2020-10-15T00:0
    <dcterms:type>live-video</dcterms:type>
  </item>
</channel>
</rss>
```

mRSS Tags

Tag	Required?	Description

Tag	Required?	Description
`<media:content>`	Required	Encloses information about the video. Attributes: • `medium` [*Required*] Type of content. This should be set to `video`. • `url` [*Required*] The direct URL to the raw video content. **If this isn't specified, you must specify the `<media:player>` tag.** • `duration` [*Optional but recommended*] Length of the video in seconds. For all of the other optional attributes and child fields of the `<media:content>` tag, see the <u>mRSS specification</u> (http://www.rssboard.org/media-rss).
`<media:player>`	Depends	**You must specify at least one of `<media:player>` or the `url` attribute in `<media:content>`.** A URL pointing to a player for a **specific** video. Usually this is the information in the `src` element of an `<embed>` tag and should not be the same as the content of the `<loc>` tag. Can't be the same URL as the `<link>` tag. `<link>` should point to the URL of the page hosting the video, while this tag should point to a player.
`<media:title>`	Required	The title of the video. Maximum 100 characters. All HTML entities should be escaped or wrapped in a <u>CDATA bock</u> (http://wikipedia.org/wiki/CDATA).
`<media:description>`	Required	The description of the video. Maximum 2048 characters. All HTML entities should be escaped or wrapped in a <u>CDATA block</u> (http://wikipedia.org/wiki/CDATA).
`<media:thumbnail>`	Required	A URL pointing to a preview thumbnail. <u>See thumbnail requirements.</u> (/search/docs/advanced/guidelines/video#thumbnails)

Tag	Required?	Description

`<dcterms:valid>`	Optional	The publication and expiration date of the video. <u>Full specification of `dcterms:valid`</u> (https://www.dublincore.org/specifications/dublin-core/dcmi-terms/terms/valid/) .
		
		Example:
		
		``
		<dcterms:valid>
		  start=2002-10-13T09:00+01:00;
		  end=2002-10-17T17:00+01:00;
		  scheme=W3C-DTF
		<dcterms:valid>
		``

`<media:restriction>`	Optional	A space-delimited list of countries where the video may or may not be played. Allowed values are country codes in <u>ISO 3166 format</u> (http://wikipedia.org/wiki/ISO_3166). If there is no `<media:restriction>` tag, Google assumes that the video can be played in all territories. The **required attribute `type`** should be set to `country`. Only country restrictions are supported. The **required attribute `relationship`** specifies whether the video is restricted or permitted for the specified countries. Allowed values are `allow` or `deny`. <u>Learn more about using country restrictions.</u> (/search/docs/advanced/guidelines/video#restrict_by_country)
`<media:price>`	Optional	The price to download or view the video. Don't use this tag for free videos. More than one `<media:price>` element can be listed (for example, in order to specify various currencies or purchasing options). **Attributes:** • `currency` [*Required*] The currency in <u>ISO 4217 format</u> (http://en.wikipedia.org/wiki/ISO_4217). • `type` [*Required*] The purchase option. Allowed values are `rent`, `purchase`, `package`, and `subscription`.

The <u>full mRSS specification</u>　(http://www.rssboard.org/media-rss) contains many more optional tags, best practices, and examples. Once you have an mRSS feed, you can <u>test and submit</u> (/search/docs/advanced/sitemaps/overview) it just like any other sitemap.

Image sitemaps

Add images to an existing sitemap, or create a separate sitemap just for your images. Adding images to a sitemap helps Google discover images that we might not otherwise find (such as images your site reaches with JavaScript code).

Best practices

- Follow underline best practices for publishing images (/search/docs/advanced/guidelines/google-images) and the Webmaster Guidelines (/search/docs/advanced/guidelines/webmaster-guidelines).

- You can add image metadata (/search/docs/advanced/appearance/image-rights-metadata), such as contact information and licensing information, which will appear in image search results.

Example sitemap

The following example shows a sitemap entry for the page `http://example.com/sample.html`, which contains two images.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9"
        xmlns:image="http://www.google.com/schemas/sitemap-image/1.1">
  <url>
    <loc>http://example.com/sample.html</loc>
    <image:image>
      <image:loc>http://example.com/image.jpg</image:loc>
    </image:image>
    <image:image>
      <image:loc>http://example.com/photo.jpg</image:loc>
    </image:image>
  </url>
</urlset>
```

You can list up to 1,000 images for each page, using the syntax outline in the example above!

Image sitemap reference

XML namespace

The image tags are defined in the following namespace:

```
image:xmlns="http://www.google.com/schemas/sitemap-image/1.1"
```

Image tag definitions

The following sitemap tags apply specifically to images. You must use the required tags; we recommend using the optional tags to provide more information and a better user experience.

Tag	Required	Description
`<image:image>`	Yes	Encloses all information about a single image. Each `<url>` tag can contain up to 1,000 `<image:image>` tags.
`<image:loc>`	Yes	The URL of the image. In some cases, the image URL may not be on the same domain as your main site. This is fine, as long as both domains are verified in Search Console. If, for example, you use a content delivery network such as Google Sites to host your images, make sure that the hosting site is verified in Search Console. In addition, make sure that your robots.txt (/search/docs/advanced/sitemaps/large-sitemaps) file doesn't disallow the crawling of any content you want indexed.
`<image:caption>`	Optional	A caption for the image.
`<image:geo_location>`	Optional	The geographic location of the image. For example, `<image:geo_location>Limerick, Ireland</image:geo_location>`.
`<image:title>`	Optional	The title of the image.
`<image:license>`	Optional	A URL to the license of the image. You can use image metadata instead (/search/docs/advanced/appearance/image-rights-metadata), if you like.

Google News sitemaps

When you create a Google News sitemap, follow these requirements:

- Include URLs for articles that were published in the last two days. You can remove articles after two days from the News sitemap, but they remain in the index for the regular 30-day period.

- Update your News sitemap with new articles as they're published. Google News crawls News sitemaps as often as it crawls the rest of your site.

- You can add up to 1,000 URLs in a sitemap. If there are more than 1,000 URLs in a sitemap, break your sitemap into several smaller sitemaps, and use a sitemap index file to manage them. Use the XML format provided in the sitemap protocol (https://sitemaps.org). Don't list more than 50,000 sitemaps in a single sitemap file. These limits help ensure that your web server isn't using large files.

- Update your current sitemap with your new article URLs. Don't create a new sitemap with each update.

- Don't use the Google sitemap generator to create a News sitemap. The generator includes URLs that don't correspond to specific news articles.

Example sitemap entry

A Google News sitemap uses the sitemap protocol. Here's an example of a News sitemap entry:

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9"
        xmlns:news="http://www.google.com/schemas/sitemap-news/0.9">
  <url>
   <loc>http://www.example.org/business/article55.html</loc>
   <news:news>
   <news:publication>
     <news:name>The Example Times</news:name>
     <news:language>en</news:language>
   </news:publication>
   <news:publication_date>2008-12-23</news:publication_date>
     <news:title>Companies A, B in Merger Talks</news:title>
```

```
      </news:news>
    </url>
</urlset>
```

Sites with a News sitemap aren't favored in ranking results. Google News uses normal crawl methods to search and label the homepages and sections of all news sites, regardless of the availability of a News sitemap.

Submit your sitemap

After you've created your News sitemap, submit it through Search Console (https://support.google.com/webmasters/answer/7451001). We recommend that you upload your sitemap to the highest level directory that contains your news articles. For more information, learn how to manage sitemaps (/search/docs/advanced/sitemaps/overview).

News-specific tag definitions

Review the following Google News tags for sitemaps:

Tag	Required?	Description
`<publication>`	Yes	The publication where the article appears. It has two required child tags: `<name>` and `<language>`. The `<name>` tag is the name of the news publication. It must exactly match the name as it appears on your articles on news.google.com (http://news.google.com/), except for anything in parentheses. The `<language>` tag is the language of your publication. Use an ISO 639 language code (http://www.loc.gov/standards/iso639-2/php/code_list.php) (two or three letters). **Exception**: For Simplified Chinese, use `zh-cn` and for Traditional Chinese, use `zh-tw`.

Tag	Required?	Description
`<publication_date>`	Yes	The article publication date in <u>W3C format</u> (http://www.w3.org/TR/NOTE-datetime). Use either the "complete date" format (`YYYY-MM-DD`) or the "complete date plus hours, minutes, and seconds" format with time zone designator format (`YYYY-MM-DDThh:mm:ssTZD`). Specify the original date and time when the article was published on your site. Don't specify the time when you added the article to your sitemap. The Google News crawler accepts any of the following formats: • Complete date: `YYYY-MM-DD` (`1997-07-16`) • Complete date plus hours and minutes: `YYYY-MM-DDThh:mmTZD` (`1997-07-16T19:20+01:00`) • Complete date plus hours, minutes, and seconds: `YYYY-MM-DDThh:mm:ssTZD` (`1997-07-16T19:20:30+01:00`) • Complete date plus hours, minutes, seconds, and a decimal fraction of a second: `YYYY-MM-DDThh:mm:ss.sTZD` (`1997-07-16T19:20:30.45+01:00`)
`<title>`	Yes	The title of the news article. ★ **Tip:** Google may shorten the title of the news article for space reasons when displaying the article on Google News. Include the title of the article as it appears on your site. Don't include the author name, publication name, or publication date in the `<title>` tag.