

# Picasa Web Albums Data API

### Picasa Web Albums Data API Reference Guide

This document provides detailed reference documentation for the Picasa Web Albums data API.

### **Contents**

#### **Audience**

### **Picasa Web Albums feed types**

Visibility values

**Projection values** 

Path values

Kind values

#### Picasa Web Albums query parameters reference

#### Picasa Web Albums elements reference

Media RSS namespace

GeoRSS and GML (georss and gml namespace) element reference

Exif namespace

Picasa Web Albums extension namespace

### **Audience**

This document is intended for programmers who want to write client applications that can interact with Picasa Web Albums.

It's a reference document; it assumes that you understand the concepts presented in the <u>developer's</u> <u>guide</u>, and the general ideas behind the <u>Google data APIs protocol</u>.

# Picasa Web Albums feed types

Picasa Web Albums provides a variety of representations of photo- and album-related data. There are three independent axes for specifying what you want when you request data: visibility, projection, and path/kind.

Visibility values let you request data at various levels of sharing. For example, a visibility value of public requests publicly visible data. For a list of values, see <u>Visibility values</u>, below. The default visibility depends on whether the request is authenticated or not.

Projection values let you indicate what elements and extensions should appear in the feed you're requesting. For example, a projection value of base indicates that the representation is a basic Atom feed without any extension elements, suitable for display in an Atom reader. For a list of values, see <a href="Projection values">Projection values</a>, below. You must specify a projection value.

Path and kind values let you indicate what type of items you want information about. For example, a path of user/liz and a kind value of tag requests a feed of tags associated with the user whose username is liz. Path and kind values are separate parts of the URI, but they're used together to indicate the item type(s) desired. For a list of path values, see <a href="Path values">Path values</a>, below; for a list of kind values, see <a href="Kind values">Kind values</a>, below. You must specify a path, but kind is optional; the default kind depends on the path.

To request a particular representation, you specify a visibility value, a projection value, and a path and kind in the URI that you send to Picasa Web Albums.

The URI of a representation of a Picasa Web Albums feed takes the following form:

```
http://picasaweb.google.com/data/feed/projection/path?kind=kind&access=visibi|li
```

For example, the following URI is for a feed listing a user's private albums. The projection is api, which requests a full feed with all relevant extension elements, and the visibility is private, which requests only albums that aren't publicly visible:

If you don't specify a visibility value, then the visibility depends on your authentication. For authenticated requests, the default is all. For unauthenticated requests, the default is public.

The projection value is required.

As a developer, you'll usually want to use the api projection. You'll normally use only two of the visibility levels: public or all.

For an authenticated feed, instead of specifying a user ID, you can specify the special value default, which tells Picasa Web Albums to use the user ID and password that you provided during authentication.

Some feed types are read/write (that is, you can post new data to them, and edit or delete existing data), while others are read-only. Read-only feeds don't include a <link rel="http://schemas.google.com/g/2005#post"> element (to tell you where to post new

events), and entries in read-only feeds don't include <link rel="edit"> or <link
rel="edit-media"> elements.

# Visibility values

The following table describes the supported visibility values:

Visibility	Description	Security Notes
all	Shows both public and private data.	Requires authentication. Default for authenticated users.
private	Shows only private data.	Requires authentication.
public	Shows only public data.	Does not require authentication. Default for unauthenticated users.

### **Projection values**

Although the examples in this documentation use only the api projection, Picasa Web Albums also supports a base projection for use by feed readers.

The following table describes the supported projection values:

Projection Name	Description	Updatability
--------------------	-------------	--------------

api	Feed including all relevant <u>aphoto</u> extension elements. All properties contain plain text, not HTML.	Read/write if authenticated user is owner of the content.
base	Basic Atom feed without any extension elements. Its <atom:summary>and <atom:content>properties contain entity-encoded HTML.</atom:content></atom:summary>	Always read-only.

### Path values

There are three basic types of feeds: user-based, album-based, and photo-based. You indicate which type you want by specifying a path. For each of those types, you can additionally specify which kind or kinds of associated data you want.

**Note**: Each path includes a user ID, which is an ID associated with a user's Google account. The user ID can be either a username or an email address, so it may or may not include an @ sign and a domain name.

#### **User-based feed**

The user-based feed represents data associated with a particular user. A user-based feed can contain either album, or tag or photo kinds, which you can request using the kind parameter.

To retrieve a user-based feed, you can make a request to the appropriate feed URL:

http://picasaweb.google.com/data/feed/projection/user/userID/?kind=kinds

#### Album-based feed

The album-based feed represents an album and any kinds associated with the album. An album-based feed can contain either photo or tag kinds, which you can request using the kind parameter.

To retrieve an album-based feed, you can make a request to the appropriate feed URL. To retrieve an album by ID:

http://picasaweb.google.com/data/feed/projection/user/userID/albumid/albumID?ki

To retrieve an album by name:

http://picasaweb.google.com/data/feed/projection/user/userID/album/albumName?ki

#### Photo-based feed

The photo-based feed provides a list of comments or tags associated with the specified photo.

To retrieve a photo-based feed, send a request to the appropriate feed URL, specifying the photo's album either by ID or by name:

http://picasaweb.google.com/data/feed/projection/user/userID/albumid/albumID/ph

Or:

http://picasaweb.google.com/data/feed/projection/user/userID/album/albumName/ph

## Community search feed

The community search feed allows for searching all public, searchable photos. The feed is similar to that of an album-based feed.

To retrieve a community search feed, send a request to the appropriate feed URL, specifying the q query parameter and value:

http://picasaweb.google.com/data/feed/projection/all?kind=photo&q=searchTerm

### Kind values

#### The kind

parameter lets you request information about a particular kind of item. The parameter value should be a comma-separated list of requested kinds.

### If you omit the kind

parameter, Picasa Web Albums chooses a default kind depending on the level of feed you're requesting. For a user-based feed, the default kind is album; for an album-based feed, the default kind is photo; for a photo-based feed, the default kind is comment; for a community search feed, the default kind is photo.

**Note**: You can't edit comments or tags. Sending a PUT to the edit URI of a comment or tag entry has no effect.

The following table describes the supported kind values:

Kind	Description	Supported Feeds
album	Feed includes some or all of the albums the specified user has in their gallery. Which albums are returned depends on the <u>visibility</u> value specified.	User-based feed
photo	Feed includes the photos in an album (album-based), recent photos uploaded by a user (user-based) or photos uploaded by all users (community search).	Album-based, user-based and community search feeds
comment	Feed includes the comments that have been made on a photo.	Photo-based and user-based feeds
, ,		User-based, album-based, and photo-based feeds

# Picasa Web Albums query parameters reference

Picasa Web Albums supports the standard GData start-index and max-results parameters. The user-based and community search feeds support the q full-text search query parameter. Picasa Web Albums does not currently support the other standard parameters.

The Picasa Web Albums data API supports the following parameters:

Parameter	Meaning	Notes
kind	Picasa Web Albums-specific query parameter for kind queries.	See the Kind values section for valid values.
access	Visibility parameter	See the Visibility values section for valid values.
thumbsize	Thumbnail size parameter	Valid with album or photo kinds; specifies what image size to use for thumbnails. Multiple values may be specified using a comma-delimited list. If multiple values are specified, multiple media:thumbnail elements will be returned in the feed. Refer to the list of valid values below.
imgmax	Image size parameter	Valid with album or photo kinds; specifies what image size to use for the media: content. Only a single value may be specified. Refer to the list of valid values below.
tag	Tag filter parameter	Filters photos in the user-based and album-based feeds by the specified tag.
đ	Full-text query string	Searches the title, caption and tags for the specified string value. See the Google data <u>query parameter reference</u> . This parameter can only be used with the user-based and community search feeds.
max-results	Maximum number of results to be retrieved	See the Google data query parameter reference.
start-index	1-based index of the first result to be retrieved	Used to page through the result set. See the Google data query parameter reference.

The following values are valid for the thumbsize and imgmax query parameters:

Size	Cropped	Embeddable	Size	Cropped	Embeddable
32	Yes	Yes	576	No	Yes
48	Yes	Yes	640	No	Yes
64	Yes	Yes	720	No	Yes
72	No	Yes	800	No	Yes
144	No	Yes	912	No	No
160	Yes	Yes	1024	No	No
200	No	Yes	1152	No	No
288	No	Yes	1280	No	No
320	No	Yes	1440	No	No
400	No	Yes	1600	No	No
512	No	Yes	d	No	No

The embeddable

values above indicate whether the image can be embedded in a webpage. If not, the resulting image may only be referenced directly.

**Note**: The d size value results in the <media:content> elements referencing the original uploaded photo, including all original Exif data. It is valid only for use with the imgmax query parameter.

### Picasa Web Albums elements reference

In addition to the standard GData elements, the Picasa Web Albums data API uses the media and gphoto namespaces.

Media RSS (media namespace) element reference

GeoRSS and GML (georss and gml namespace) element reference

Exif (exif namespace) element reference

Picasa Web Albums extension (gphoto namespace) element reference

For information about the standard GData elements, see the Atom specification and the Kinds document.

# Media RSS (media namespace) element reference

Picasa Web Albums uses the media

namespace for elements defined in the Media RSS specification. For information about the media namespace, see the Media RSS specification.

**Note**: Despite the name "Media RSS," the Picasa Web Albums data API uses elements from the media namespace in both Atom and RSS feeds.

Picasa Web Albums uses the following media elements:

media:content

media:credit

media:description

media:group

media:keywords

media:thumbnail

media:title

As usual in the GData documentation, a question mark after an attribute name indicates that the attribute is optional. Almost all of the attributes we list for media elements are required.

### media:content

Contains the URL and other information about the full version of the entry's media content.

The <media:content> element appears as a child of a <media:group> element.

There can be multiple <media:content> elements for a given <media:group>. For example, a video may have a <media:content medium="image"> element that specifies a JPEG representation of the video, and a <media:content medium="video"> element that specifies the URL of the video itself.

#### **Attributes**

Attribute	Description	
url	The URL of the full version of the media for the current entry.	
type	The MIME type of the media.	
medium	Either image or video. Somewhat redundant, as type contains a more specific MIME type, but medium may be simpler for the client to interpret.	
height	The height of the image or video represented by this <media:content> element.</media:content>	
width	The width of the image or video represented by this <media:content> element.</media:content>	
fileSize?	The file size in bytes of the image or video represented by this <media:content> element.</media:content>	

### **Example**

```
<media:content url="http://lh3.google.com/image/.../MyImage.jpg"
fileSize="12216320" type="image/jpeg" medium="image"
height="1600" width="1200"><media:content>
```

#### media:credit

Contains the nickname of the user who created the content. This is a user-specified value that should be used when referring to the user by name.

The <media:credit> element appears as a child of a <media:group> element.

```
<media:credit>Liz Bennet</media:credit>
```

### media:description

Contains a description of the entry's media content. For api projections, the description is in plain text; for base projections, the description is in HTML.

The <media:description> element appears as a child of a <media:group> element.

#### **Attributes**

Attribute	Description
type	Either plain or html. Is set to plain for api projections, html for base projections.

#### Example

```
<media:description type="plain">A set of photographs I took while
  vacationing in Italy. Florence is beautiful!</media:description>
```

### media:group

Container element for all media elements.

The <media:group> element can appear as a child of an album or photo entry.

# media:keywords

Lists the tags associated with the entry. Contains a comma-separated list of tags that have been added to the photo, or all tags that have been added to photos in the album.

The <media:keywords> element appears as a child of a <media:group> element.

```
<media:keywords>italy, vacation, sunset</media:keywords>
```

### media:thumbnail

Contains the URL of a thumbnail of a photo or album cover. If the thumbsize parameter is set, this element points to thumbnails of the requested sizes; otherwise the thumbnails are the default thumbnail size.

The <media:thumbnail> element appears as a child of a <media:group> element. There can be multiple <media:content> elements for a given <media:group>; for example, a given item may have multiple thumbnails at different sizes. Photos generally have two thumbnails at different sizes; albums generally have one cropped thumbnail.

#### **Attributes**

Attribute	Description
url	The URL of the thumbnail image.
height	The height of the thumbnail image.
width	The width of the thumbnail image.

### Example

```
<media:thumbnail
  url="http://picasaweb.google.com/image/liz/.../Wonderful.jpg?imgmax=160&crop=
height='160' width='160'></media:thumbnail>
```

### media:title

Contains the title of the entry's media content, in plain text.

The <media:title> element appears as a child of a <media:group> element.

#### **Attributes**

Attribute	Description
type	Always set to plain.

#### **Example**

```
<media:title type="plain">My Album</media:title>
```

### GeoRSS and GML (georss and gml namespace) element reference

Picasa Web Albums uses the georss and gml namespaces for elements defined in the <u>GeoRSS</u> and <u>Geography Markup Language</u> specifications.

**Note**: Despite the name "GeoRSS," the Picasa Web Albums data API uses elements from these namespaces in both Atom and RSS feeds.

Specifically, Picasa Web Albums uses the following elements:

georss:where gml:Point gml:pos

Picasa Web Albums also accepts geographic-location data in two other formats: <u>W3C</u> format and plain-GeoRSS (without GML) format. But those formats are beyond the scope of this document. All geo data that appears in feeds generated by Picasa Web Albums uses the GeoRSS-plus-GML format documented here.

As usual in the GData documentation, a question mark after an attribute name indicates that the attribute is optional. Almost all of the attributes we list for these elements are required.

### georss:where

Specifies a geographical location or region. (Not to be confused with <gd:where>.) A container element, containing a single <gml:Point> element.

Appears as a child of a photo or album entry.

#### **Attributes**

None.

### Example

```
<georss:where>
  <gml:Point>
       <gml:pos>35.669998 139.770004</gml:pos>
       </gml:Point>
</georss:where>
```

# gml:Point

Specifies a particular geographical point, by means of a <gml:pos> element.

Appears as a child of a <georss:where> element.

#### **Attributes**

None.

#### Example

```
<gml:Point>
  <gml:pos>35.669998 139.770004/gml:pos>
```

### gml:pos

Specifies a latitude and longitude, separated by a space.

Appears as a child of a <gml:Point> element.

### **Attributes**

None.

# **Example**

```
<gml:pos>35.669998 139.770004
```

# Exif (exif namespace) element reference

Picasa Web Albums uses the exif namespace to represent Exif data encoded in a photo. The schema URL for the exif namespace is http://schemas.google.com/photos/exif/2007.

The exif elements all appear inside the container element called <exif:tags>.

Picasa Web Albums uses the following exif elements:

```
exif:distance
exif:exposure
exif:flash
exif:focallength
exif:fstop
exif:imageUniqueID
exif:iso
exif:make
exif:model
exif:tags
exif:time
```

#### exif:distance

The distance to the subject.

The <exif:distance> element can appear as a child of <exif:tags>.

### **Example**

```
<exif:distance>0.0</exif:distance>
```

#### Schema

```
namespace exif = "http://schemas.google.com/photos/exif/2007"
start = distance

distance =    element exif:distance {
    xsd:float
    }
```

### exif:exposure

The exposure time used.

The <exif:exposure> element can appear as a child of <exif:tags>.

### **Examples**

```
<exif:exposure>8.0E4</exif:exposure>
```

```
<exif:exposure>0.025</exif:exposure>
```

### Schema

```
namespace exif = "http://schemas.google.com/photos/exif/2007"
start = exposure

exposure =    element exif:exposure {
    xsd:float
    }
```

# exif:flash

Boolean value indicating whether the flash was used.

The <exif:flash> element can appear as a child of <exif:tags>.

### **Examples**

```
<exif:flash>true</exif:flash>
```

### **Schema**

```
namespace exif = "http://schemas.google.com/photos/exif/2007"
start = flash

flash =
  element exif:flash {
    xsd:boolean
  }
```

# exif:focallength

The focal length used.

The <exif:focallength> element can appear as a child of <exif:tags>.

### **Examples**

```
<exif:focallength>23.7</exif:focallength>
```

#### **Schema**

```
namespace exif = "http://schemas.google.com/photos/exif/2007"
start = focallength
```

```
focallength =
  element exif:focallength {
    xsd:float
  }
```

# exif:fstop

The fstop value used.

The <exif:fstop> element can appear as a child of <exif:tags>.

# **Examples**

```
<exif:fstop>5.0</exif:fstop>
```

#### **Schema**

```
namespace exif = "http://schemas.google.com/photos/exif/2007"
start = fstop

fstop =    element exif:fstop {
    xsd:float
    }
```

# exif:imageUniqueID

The unique image ID for the photo.

The <exif:imageUniqueID> element can appear as a child of <exif:tags>.

# **Examples**

```
<exif:imageUniqueID>5.0</exif:imageUniqueID>
```

### Schema

```
namespace exif = "http://schemas.google.com/photos/exif/2007"
start = imageUniqueID

imageUniqueID =
  element exif:imageUniqueID{
    xsd:string
  }
```

#### exif:iso

The iso equivalent value used.

The <exif:iso> element can appear as a child of <exif:tags>.

# **Examples**

```
<exif:iso>200</exif:iso>
```

#### Schema

```
namespace exif = "http://schemas.google.com/photos/exif/2007"
start = iso

iso =
  element exif:iso {
    xsd:unsignedInt
  }
```

#### exif:make

The make of the camera used.

The <exif:make> element can appear as a child of <exif:tags>.

# **Examples**

```
<exif:make>Fictitious Camera Company</exif:make>
```

#### Schema

```
namespace exif = "http://schemas.google.com/photos/exif/2007"
start = make

make =
  element exif:make {
    xsd:string
  }
```

#### exif:model

The model of the camera used.

The <exif:model> element can appear as a child of <exif:tags>.

#### **Examples**

```
<exif:model>AMAZING-100D</exif:model>
```

#### **Schema**

```
namespace exif = "http://schemas.google.com/photos/exif/2007"
start = model

model =    element exif:model {
    xsd:string
}
```

### exif:tags

The container for all exif elements.

The <exif:tags> element can appear as a child of a photo entry.

### **Examples**

```
<exif:tags>
    <exif:fstop>4.0</exif:fstop>
    <exif:make>Fictitious Camera Company</exif:make>
    <exif:model>AMAZING-100D</exif:model>
    <exif:distance>0.0</exif:distance>
    <exif:exposure>0.016667</exif:exposure>
    <exif:flash>true</exif:flash>
        <exif:focallength>25.0</exif:focallength>
        <exif:iso>400</exif:iso>
        <exif:time>1180294337000</exif:time>
        <exif:imageUniqueID>246244a35234432f20efb832d8ea3c28</exif:imageUniqueID>
        </exif:tags>
```

### exif:time

The date/time the photo was taken, represented as the number of milliseconds since January 1st, 1970.

The <exif:time> element can appear as a child of <exif:tags>.

### **Examples**

```
<exif:time>1180294337000</exif:time>
```

#### **Schema**

```
namespace exif = "http://schemas.google.com/photos/exif/2007"
start = time

time =    element exif:time {
    xsd:unsignedInt
    }
```

**Note**: The value of this element should always be identical to the value of the <gphoto:timestamp>.

# Picasa Web Albums extension (gphoto namespace) element reference

The Picasa Web Albums data API uses the <code>gphoto</code> namespace for extension elements. The schema URL for the <code>gphoto</code> namespace is <code>http://schemas.google.com/photos/2007</code>.

Most of the gphoto elements can appear only with a particular kind. A few elements can appear with multiple different kinds.

#### Elements appearing with multiple kinds

gphoto:albumid
gphoto:commentCount
gphoto:commentingEnabled
gphoto:id

#### Elements appearing only with the user kind

gphoto:maxPhotosPerAlbum gphoto:nickname gphoto:quotacurrent gphoto:quotalimit gphoto:thumbnail

# gphoto:user

### Elements appearing only with the album kind

```
gphoto:access
```

gphoto:bytesUsed

gphoto:location

gphoto:name

gphoto:numphotos

gphoto:numphotosremaining

### Elements appearing only with the photo kind

```
gphoto:checksum
```

gphoto:client

gphoto:height

gphoto:position

gphoto:rotation

gphoto:size

gphoto:timestamp

gphoto:version

gphoto:width

# Elements appearing only with the comment kind

gphoto:photoid

### Elements appearing only with the tag kind

gphoto:weight

# Elements appearing with multiple kinds

The following elements appear in feeds of multiple kinds.

# gphoto:albumid

The album's ID.

#### **Example**

```
<gphoto:albumid>5024425138/gphoto:albumid>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = albumid

albumid =    element gphoto:albumid {
    xsd:string
    }
```

# gphoto:commentCount

The number of comments on an element.

The commentCount> element can appear as a child of <atom:entry> or <atom:feed>. The
commentCount> element is valid with the album and photo kinds.

# **Example**

```
<gphoto:commentCount>11/gphoto:commentCount>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = commentCount

commentCount = element gphoto:commentCount {
    xsd:unsignedInt
}
```

# gphoto:commentingEnabled

Boolean value indicating whether commenting is enabled for the element.

The <gphoto:commentingEnabled> element can appear as a child of <atom:entry> or <atom:feed>.

The <gphoto:commentingEnabled> element is valid with the album and photo kinds.

### **Example**

```
<gphoto:commentingEnabled>true</gphoto:commentingEnabled>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = commentingEnabled

commentingEnabled = element gphoto:commentingEnabled {
    xsd:boolean
}
```

#### gphoto:id

The ID of the current element.

The caphoto:id> element can appear as a child of <atom:entry> or <atom:feed>. The caphoto:id> element is valid with the album, photo, and comment kinds.

#### **Example**

```
<gphoto:id>512131187/gphoto:id>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = id

id =
  element gphoto:id {
```

```
xsd:string
}
```

# Elements appearing with the user kind

The following elements appear only in feeds of the user kind.

## gphoto:maxPhotosPerAlbum

The maximum number of photos allowed in an album.

The <gphoto:maxPhotosPerAlbum> element can appear as a child of <atom:entry> or <atom:feed>. The <gphoto:maxPhotosPerAlbum> element is valid with the user kind.

Note: This element appears only if the authenticated user is the owner of the feed.

### **Example**

```
<gphoto:maxPhotosPerAlbum>1000/gphoto:maxPhotosPerAlbum>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = maxPhotosPerAlbum

maxPhotosPerAlbum =
  element gphoto:maxPhotosPerAlbum {
    xsd:unsignedInt
  }
```

# gphoto:nickname

The user's nickname. This is a user-specified value that should be used when referring to the user by name.

The cphoto:nickname> element can appear as a child of <atom:entry> or <atom:feed>. The
cphoto:nickname> element is valid with the user kind.

#### **Example**

```
<gphoto:nickname>Liz Bennett</gphoto:nickname>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = nickname

nickname = element gphoto:nickname {
    xsd:string
}
```

# gphoto:quotacurrent

The number of bytes of storage currently in use by the user.

Note: This element appears only if the authenticated user is the owner of the feed.

# **Example**

```
<gphoto:quotacurrent>312459331</gphoto:quotacurrent>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = quotacurrent

quotacurrent =
  element gphoto:quotacurrent {
    xsd:unsignedLong
  }
```

# gphoto:quotalimit

The total amount of space allotted to the user.

Note: This element appears only if the authenticated user is the owner of the feed.

#### **Example**

```
<gphoto:quotalimit>1385222385</gphoto:quotalimit>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = quotalimit

quotalimit =
  element gphoto:quotalimit {
    xsd:unsignedLong
  }
```

#### gphoto:thumbnail

The URL of a thumbnail-sized portrait of the user. Not to be confused with the <media:thumbnail>element.

#### **Example**

```
<gphoto:thumbnail>http://picasaweb.google.com/image/.../Hello.jpg</gphoto:thumk</pre>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = thumbnail
thumbnail =
  element gphoto:thumbnail {
    xsd:string
}
```

# gphoto:user

The user's username. This is the name that is used in all feed URLs.

### **Example**

```
<gphoto:user>liz</gphoto:user>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = user

user =    element gphoto:user {
    xsd:string
}
```

# Elements appearing with the album kind

The following elements appear only in feeds of the album kind.

#### gphoto:access

The album's access level. In this document, access level is also referred to as "visibility." Valid values are public or private.

The caphoto:access> element can appear as a child of <atom:entry> or <atom:feed>. The
caphoto:access> element is valid with the album kind.

#### **Example**

```
<gphoto:access>public</gphoto:access>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = access

access =
  element gphoto:access {
    xsd:string
  }
```

## gphoto:bytesUsed

The number of bytes of storage that this album uses.

The <gphoto:bytesUsed> element can appear as a child of <atom:entry> or <atom:feed>. The <gphoto:bytesUsed> element is valid with the album kind.

**Note**: This element appears only if the authenticated user is the owner of the feed.

### **Example**

```
<gphoto:bytesUsed>11876307</gphoto:bytesUsed>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = bytesUsed

bytesUsed = element gphoto:bytesUsed {
    xsd:unsignedInt
  }
```

### gphoto:location

The user-specified location associated with the album.

The <gphoto:location> element can appear as a child of <atom:entry> or <atom:feed>. The <gphoto:location> element is valid with the album kind.

#### **Example**

```
<gphoto:location>Tokyo, Japan</gphoto:location>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = location

location =
  element gphoto:location {
    xsd:string
  }
```

### gphoto:name

The name of the album, which is the URL-usable name derived from the title. This is the name that should be used in all URLs involving the album.

The can appear as a child of <atom:entry> or <atom:feed>. The catom:entry> or <atom:feed>. The

# **Example**

```
<gphoto:name>mytrip</gphoto:name>
```

#### Schema

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = name

name =    element gphoto:name {
    xsd:string
}
```

# gphoto:numphotos

The number of photos in the album.

### **Example**

```
<gphoto:numphotos>237</gphoto:numphotos>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = numphotos

numphotos = element gphoto:numphotos {
    xsd:unsignedInt
  }
```

#### gphoto:numphotosremaining

The number of remaining photo uploads allowed in this album. This is equivalent to the user's maximum number of photos per album (<gphoto:maxPhotosPerAlbum>) minus the number of photos currently in the album (<gphoto:numphotos>).

The <gphoto:numphotosremaining> element can appear as a child of <atom:entry> or <atom:feed>. The <gphoto:numphotosremaining> element is valid with the album kind.

**Note**: This element appears only if the authenticated user is the owner of the feed.

#### **Example**

```
<gphoto:numphotosremaining>763</gphoto:numphotosremaining>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = numphotosremaining
numphotosremaining =
  element gphoto:numphotosremaining {
    xsd:unsignedInt
  }
```

# Elements appearing with the photo kind

The following elements appear only in feeds of the photo kind.

## gphoto:checksum

The checksum on the photo. This optional field can be used by uploaders to associate a checksum with a photo to ease duplicate detection.

The checksum> element can appear as a child of <atom:entry> or <atom:feed>. The checksum> element is valid with the photo kind.

### **Example**

```
<gphoto:checksum>23512309abbs298/gphoto:checksum>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = checksum

checksum =
  element gphoto:checksum {
    xsd:string
  }
```

## gphoto:client

The client application that created the photo. (Optional element.)

The client> element can appear as a child of <atom:entry> or <atom:feed>. The
cphoto:client> element is valid with the photo kind.

# **Example**

```
<gphoto:client>Picasa2.6</gphoto:client>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = client

client = element gphoto:client {
    xsd:string
  }
```

### gphoto:height

The height of the photo in pixels.

The caphoto:height> element can appear as a child of <atom:entry> or <atom:feed>. The 
caphoto:height> element is valid with the photo kind.

#### **Example**

```
<gphoto:height>1200</gphoto:height>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = height
height =
  element gphoto:height {
    xsd:unsignedLong
}
```

# gphoto:position

The ordinal position of the photo within the parent album.

The cphoto:position> element can appear as a child of <atom:entry> or <atom:feed>. The cphoto:position> element is valid with the photo kind.

# **Example**

```
<gphoto:position>10</gphoto:position>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = position

position =    element gphoto:position {
    xsd:float
    }
```

# gphoto:rotation

The rotation of the photo in degrees, used to change the rotation of the photo. Will only be shown if the rotation has not already been applied to the requested images.

The cphoto:rotation> element can appear as a child of <atom:entry> or <atom:feed>. The
cphoto:rotation> element is valid with the photo kind.

### **Example**

```
<gphoto:rotation>90</gphoto:rotation>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = rotation

rotation =    element gphoto:rotation {
    xsd:unsignedInt
}
```

http://code.google.com/apis/picasaweb/reference.html

## gphoto:size

The size of the photo in bytes.

The caphoto:size element can appear as a child of <atom:entry> or <atom:feed>. The
caphoto:size element is valid with the photo kind.

### **Example**

```
<gphoto:size>149351</gphoto:size>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = size

size =    element gphoto:size {
    xsd:unsignedLong
}
```

# gphoto:timestamp

The photo's timestamp, represented as the number of milliseconds since January 1st, 1970. Contains the date of the photo either set externally or retrieved from the Exif data.

The <gphoto:timestamp> element can appear as a child of <atom:entry> or <atom:feed>. The <gphoto:timestamp> element is valid with the photo kind.

**Note**: The value of this element should always be identical to the value of the <exif:time> value if this Exif data existed in the uploaded photo.

## **Example**

```
<gphoto:timestamp>1168640584000</gphoto:timestamp>
```

### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = timestamp

timestamp = element gphoto:timestamp {
    xsd:long
}
```

#### gphoto:version

The version number of the photo. Version numbers are based on modification time, so they don't increment linearly. Note that if you try to update a photo using a version number other than the latest one, you may receive an error; for more information, see <a href="Optimistic concurrency (versioning)">Optimistic concurrency (versioning)</a> in the GData reference document.

#### **Example**

```
<gphoto:version>22838</gphoto:version>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = version

version =
  element gphoto:version {
    xsd:string
  }
```

# gphoto:width

The width of the photo in pixels.

The <gphoto:width> element can appear as a child of <atom:entry> or <atom:feed>. The <gphoto:width> element is valid with the photo kind.

### Example

```
<gphoto:width>1600</gphoto:width>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = width

width =    element gphoto:width {
    xsd:unsignedLong
}
```

### Elements appearing with the comment kind

The following element appears only in feeds of the comment kind.

# gphoto:photoid

The ID of the photo associated with the current comment.

The caphoto:photoid> element can appear as a child of <atom:entry> or <atom:feed>. The caphoto:photoid> element is valid with the comment kind.

#### **Example**

```
<gphoto:photoid>301521187</gphoto:photoid>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = photoid
```

```
photoid =
  element gphoto:photoid {
    xsd:string
}
```

# Elements appearing with the tag kind

The following element appears only in feeds of the tag kind.

### gphoto:weight

The weight of the tag. The weight is the number of times the tag appears in photos under the current element. The default weight is 1.

The caphoto:weight> element can appear as a child of <atom:entry> or <atom:feed>. The
caphoto:weight> element is valid with the tag kind.

### **Example**

```
<gphoto:weight>3</gphoto:weight>
```

#### **Schema**

```
namespace gphoto = "http://schemas.google.com/photos/2007"
start = weight

weight =
  element gphoto:weight {
    xsd:unsignedInt
  }
```