

Cloudworks API Draft

Last modified 15 June 2010

Overview

The Cloudworks API allows anybody to build their own programs using the Cloudworks data.

In this first stage, before the public release of version 1.0 of the API, there may be frequent changes to the API and we will work closely with developers using the API to support them in the use of the API as a result of this. We will also be providing sample PHP code once we have implemented the API.

Currently the API only supports methods which do not require authentication, however, we plan to expand the API in future. We also currently only support a JSON response format, but plan to extend the API to include an XML response format in future.

Methods to retrieve data from the Cloudworks API require a HTTP GET request. The Cloudworks API uses a data over HTTP approach as opposed to a strict REST approach.

Support

Currently, please report any problems or errors to cloudworks@open.ac.uk or to either Nick or Juliette directly.

Conventions

- The API currently uses a JSON response format and UTF-8 encoding. We plan to also provide an XML response format in future.
- Parameter values should use UTF-8 encoding and be URL-encoded.
- Dates in responses are in ISO 8601 format.
- Response values like `cloud.body`, `content.body`, `comment.body` and `author.description` are JSON-encoded HTML; `cloud.title`, `cloud.summary`, `author.name`, `author.institution` and `reference.text` are JSON-encoded plain text; other response values contain JSON-encoded URLs, integers (as strings), objects or arrays.
- The aim is for every object eg. `cloud`, `user`, to have an `html_url` and `api_url`. `'html_url'` points to a web page representing the object, `api_url` points to the API, with the same format as the current request.
- `'self_url'` is a special case of an API link, in the outer-most object of a response (think `<atom:link rel="self" ... />`).
- Images are referenced using `'thumbnail_url'`, which points to `32-{FILENAME}` for users and `256-{FILENAME}` for cloudscapes (32 pixels square and 256 pixels respectively).
- Streams (eg. `user/stream`) have a `'status'` item, which is a HTML formatted text with links, including attribution links.

- For 'plural' responses, eg. user/stream, cloud/followers, search/clouds, the array is nested inside an object. The array is named 'items', that is,
 - { ... , "items": [...] }
- 'Plural' responses currently return all the items, up to an arbitrary limit of 200 - we may introduce paging for these calls in future.

API Keys and Rate Limiting

To use the API, you will require an API key. At the current stage of development of the API, this will be given to you when you request access.

Please be considerate in your use of the API in terms of how many calls you make and also cache data where possible. We will log usage and reserve the right to rate-limit in future. We would also appreciate it if your requests provide an identifiable User-Agent header and a sensible Referer header.

We reserve the right to alter and if necessary reduce the execution time limit for requests to the server, in order to control server load.

Error Handling

When an error occurs the server will give the appropriate error code in the HTTP response header, with 200 indicating success. It will also give the HTTP code, with in some cases an additional suffix and an explanation in the body of the response. Note, not all errors are relevant to all API calls.

The error response takes this form:

```
{
  "stat":"fail",
  "code":"404",
  "message":"A Cloud with the ID '999999' was not found.",
  "request":"\\/api\\/clouds\\/999999.json?api_key=12345"
}
```

The error codes include:

- 403.1 - 'api_key' is a required parameter
- 403.2 - The 'api_key' is not valid
- 400 - A bad request. There are a number of variants for the error message, for example:
 - Error, the output format 'xml' is not recognised
 - Error, the parameter 'q' is required for the item type 'search'
 - Error, there should be a numeric ID following the item type 'cloudscapes'
 - Error, there should be a tag name following the item type 'tags'
 - Error, the object 'users' does not support the related item 'favourited'

- 404 - A [cloud/cloudscape/user] with the ID 'NNN' was not found
- 500 - Internal Server Error
- 501 - Not Implemented
- 503 - Service Temporarily Unavailable

Cloud Methods

cloud/view

Description

Returns extended information about a cloud specified by the ID of the cloud.

URL

http://cloudworks.ac.uk/api/clouds/cloud_id.format?api_key=api_key

Example

With optional format:

http://cloudworks.ac.uk/api/clouds/2884.json?api_key=12345

Without 'format' parameter - the output remains as JSON:

http://cloudworks.ac.uk/api/clouds/2884?api_key=12345

Parameters

- api_key (required) A Cloudworks API key
- cloud_id (required) An integer identifier for a cloud
- format (optional) The type of the response; defaults to 'json'

Response

Example JSON response

```
{
  "api_version": "0.1",
  "cloud_id": "2884",
  "title": "Are OERs the dictionaries of our time?",
  "summary": "This question comes out of Giota Alevizou's\u00a0interview did with David Cormier at the OpenEd09...",
  "body": "<p>This question comes out of <a href=\"\"\/user\/view\/1003\">Giota Alevizou's<\/a>...<\/p>",
  "created": "2010-02-02T15:37:43+00:00",
  "modified": "2010-02-02T15:46:08+00:00",
  "tags": [
    {
      "name": "Dave Cormier",
      "api_url": "http:\/\/cloudworks.ac.uk\/api\/tags\/Dave+Cormier\/clouds.json"
```

```

    },
    {
      "name": "flash debate",
      "api_url": "http://cloudworks.ac.uk/api/tags/flash+debate/clouds.json"
    },
    ...
  ],
  "self_url": "http://cloudworks.ac.uk/api/clouds/2884/view.json",
  "html_url": "http://cloudworks.ac.uk/cloud/view/2884",
  "primary_url": "http://olnet.org/",
  "total_views": 199,
  "total_followers": "0",
  "total_comments": "1",
  "extra_content": [ {
    "content_id": "408",
    "body": "<p>Very rough transcript of the video:</p>\n<p>Hi my name's Dave Cormier
from the University of Princ...</p>",
    "user_id": "1",
    "created": "2010-02-04T16:51:39+00:00",
    "modified": null
  }
],
  "embeds": [ {
    "embed_id": "243",
    "html_url": "http://www.youtube.com/watch?v=_rpkj7_N5OI",
    "title": "Dave Cormier interview - OLnet channel",
    "user_id": "983",
    "created": "2010-02-02T15:44:50+00:00"
  }
],
  "links": [ {
    "link_id": "2407",
    "link_url": "http://www.youtube.com/user/olnetchannel",
    "title": "OLnet's YouTube channel",
    "user_id": "983",
    "created": "2010-02-02T15:43:26+00:00"
  }
],
  "references": [ {
    "reference_id": "349",
    "text": "Hannon, J. (2008). Doing staff development:... Australasian Journal of
Educational Technology, 24(1), 15-29.",
    "user_id": "1040",
    "created": "2010-05-27T12:30:16+01:00"
  }
],
  "author": {
    "name": "Rebecca Galley",
    "html_url": "http://cloudworks.ac.uk/user/view/983",

```

```

    "api_url": "http://cloudworks.ac.uk/api/users/983.json",
    "description": "<p>I work in Open University's Institute of Educational
Technologies. I am Project Officer...</p>",
    "thumbnail_url": "http://cloudworks.ac.uk/uploads/32-RG.JPG",
    "home_url": null,
    "institution": "The Open University",
    "department": "Institute of Educational Technology",
    "twitter_name": "Rebeccagalley"
  }
}

```

cloud/followers

Description

Returns the users who are following a cloud

URL

http://cloudworks.ac.uk/api/clouds/cloud_id/followers.format?api_key=api_key

Example

http://cloudworks.ac.uk/api/clouds/390/followers.json?api_key=12345

Parameters

- api_key (required) A Cloudworks API key
- cloud_id (required) An identifier for a cloud
- format (optional) The type of the response; defaults to 'json'.

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```

{
  "api_version": "0.1",
  "total_results": 2,
  "self_url": "http://cloudworks.ac.uk/api/clouds/390/followers.json",
  "html_url": "http://cloudworks.ac.uk/cloud/view/390#followers",
  "items": [
    {
      "user_id": "1112",
      "name": "Niall Sclater",
      "html_url": "http://cloudworks.ac.uk/user/view/1112",
      "api_url": "http://cloudworks.ac.uk/api/users/1112.json",
      "description": "<p>Director of Learning Innovation at the Open University</p>",

```

```
"thumbnail_url":"http:\\\\cloudworks.ac.uk\\uploads\\32-niall_square_2.jpg",
},
...
]
}
```

cloud/favourited

Description

Returns the users who have favourited a cloud

URL

http://cloudworks.ac.uk/api/clouds/cloud_id/favourited.format?api_key=api_key

Example

http://cloudworks.ac.uk/api/clouds/2703/favourited.json?api_key=12345

Parameters

- api_key (required) A Cloudworks API key
- cloud_id (required) An identifier for a cloud
- format (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{
  "api_version":"0.1",
  "total_results":3,
  "self_url":"http:\\\\cloudworks.ac.uk\\api\\clouds\\390\\favourited.json",
  "html_url":"http:\\\\cloudworks.ac.uk\\cloud\\favourited\\390",
  "items": [
    {
      "user_id":"1112",
      "name":"Niall Sclater",
      "html_url":"http:\\\\cloudworks.ac.uk\\user\\view\\1112",
      "api_url":"http:\\\\cloudworks.ac.uk\\api\\users\\1112.json",
      "description":"<p>Director of Learning Innovation at the Open University</p>",
      "thumbnail_url":"http:\\\\cloudworks.ac.uk\\uploads\\32-niall_square_2.jpg",
    },
    ...
  ]
}
```

```
}
```

cloud/cloudscapes

Description

Returns the cloudscapes to which the specified cloud belongs

URL

`http://cloudworks.ac.uk/api/clouds/cloud_id/cloudscapes.format?api_key=api_key`

Example

`http://cloudworks.ac.uk/api/clouds/2884/cloudscapes.json?api_key=12345`

Parameters

- `api_key` (required) A Cloudworks API key
- `cloud_id` (required) An identifier for a cloud
- `format` (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{
  "api_version": "0.1",
  "cloud_id": "2884",
  "self_url": "http://cloudworks.ac.uk/api/clouds/2884/cloudscapes.json",
  "html_url": "http://cloudworks.ac.uk/cloud/view/2884",
  "total_results": 2,
  "items": [
    {
      "cloudscape_id": "1896",
      "api_url": "http://cloudworks.ac.uk/api/cloudscapes/1896.json",
      "html_url": "http://cloudworks.ac.uk/cloudscape/view/1896",
      "title": "Flash debates",
      "summary": "Clouds designed to stimulate debate",
      "user": { "user_id": "983",
        "api_url": "http://cloudworks.ac.uk/api/users/983.json",
        "html_url": "http://cloudworks.ac.uk/user/view/983"
      }
    }
  ],
}
```

```
"cloudscape_id":"1963",
"api_url":"http:\\\\cloudworks.ac.uk\\api\\cloudscapes\\1963.json",
"html_url":"http:\\\\cloudworks.ac.uk\\cloudscape\\view\\1963",
"title":"Learn About Fair 2010",
  ...
}
]
}
```

clouds/active

Description

Returns the clouds with the most activity

URL

http://cloudworks.ac.uk/api/clouds/active.format?api_key=api_key

Example

http://cloudworks.ac.uk/api/clouds/active.json?api_key=12345

Parameters

- api_key (required) A Cloudworks API key
- format (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{
"api_version":"0.1",
"item_type":"cloud",
"self_url":"http:\\\\cloudworks.ac.uk\\api\\clouds\\active.json",
"html_url":"http:\\\\cloudworks.ac.uk\\#active-clouds",
"total_results":2538,
"items": [
  {
    "cloud_id":"3327",
    "api_url":"http:\\\\cloudworks.ac.uk\\api\\clouds\\3327.json",
    "html_url":"http:\\\\cloudworks.ac.uk\\cloud\\view\\3327",
    "title":"IBLC -session. Peter Bullen's Keynote",
    "total_comments":"15",
  },
  {
```



```

"cloud_id":"3788",
"api_url":"http://cloudworks.ac.uk/api/clouds/3788.json",
"html_url":"http://cloudworks.ac.uk/cloud/view/3788",
"title":"Learners' Experience of VLEs",
"total_comments":"13",
},
...
]
}

```

Cloudscape Methods

cloudscape/view

Description

Returns extended information for a cloudscape specified by the ID of the cloudscape

URL

http://cloudworks.ac.uk/api/cloudscapes/**cloudscape_id.format**?api_key=**api_key**

Example

http://cloudworks.ac.uk/api/cloudscapes/**2012.json**?api_key=**12345**

Parameters

- api_key (required) A Cloudworks API key
- cloudscape_id (required) An identifier for a cloudscape
- format (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response

```

{
"api_version":"0.1",
"title":"Open University annual Learning and Technology conference: Learning in an open world",
"summary":"The OU's annual learning and technology conference, this year all online and open to all",
"body":"<p>The OU has an internal conference every year to share practice and research around learning and technology...</p>\n",
"created":"2010-03-02T10:30:47+00:00",

```

```

"modified":"2010-05-21T11:23:34+01:00",
"tags": [
  {
    "name":"conference",
    "api_url":"http://cloudworks.ac.uk/api/tags/conference/cloudscapes.json"
  },
  {
    "name":"OER",
    "api_url":"http://cloudworks.ac.uk/api/tags/OER/cloudscapes.json"
  },
  {
    "name":"open",
    ...
  }
],
"self_url":"http://cloudworks.ac.uk/api/cloudscapes/2012.json",
"html_url":"http://cloudworks.ac.uk/cloudscape/view/2012",
"cloudscape_id":"2012",
"twitter_tag":"#OUConf10",
"image": {
  "thumbnail_url":"http://cloudworks.ac.uk/uploads/cloudscape/256-4480661989_96abea9054.jpg",
  "attribution_name":"Open by Mag3737",
  "attribution_url":"http://www.flickr.com/photos/mag3737/1914076277/"
},
"event": {
  "location":"Online in elluminate",
  "start_date":"2010-06-21T00:00:00+01:00",
  "end_date":"2010-06-23T00:00:00+01:00"
},
"total_views":1308,
"total_clouds":"13",
"total_followers":"93",
"total_attendees":172,
"author": {
  "user_id":"5",
  "name":"Martin Weller",
  "html_url":"http://cloudworks.ac.uk/user/view/5",
  "api_url":"http://cloudworks.ac.uk/api/users/5.json",
  "description":"",
  "home_url":"http://edtechie.net",
  "institution":"The Open University",
  "department":"",
  "twitter_name":"mweller",
  "thumbnail_url":"http://cloudworks.ac.uk/uploads/32-avatar2.jpg"
}
}

```

cloudscape/clouds

Description

Returns the clouds in a cloudscape specified by the ID of the cloudscape

URL

`http://cloudworks.ac.uk/api/cloudscapes/cloudscape_id/clouds.format?api_key=api_key`

Example

`http://cloudworks.ac.uk/api/cloudscapes/1896/clouds.json?api_key=12345`

Parameters

- `api_key` (required) A Cloudworks API key
- `cloudscape_id` (required) An identifier for a cloudscape
- `format` (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{
  "api_version": "0.1",
  "total_results": 10,
  "self_url": "http://cloudworks.ac.uk/api/cloudscapes/1896/clouds.json",
  "html_url": "http://cloudworks.ac.uk/cloudscape/view/1896#clouds",
  "items": [
    {
      "cloud_id": "2884",
      "title": "Are OERs the dictionaries of our time?",
      "summary": "This question comes out of Giota Alevizou's interview with...",
      "total_comments": "1",
      "created": "2010-02-02T15:37:43+00:00",
      "modified": "2010-05-27T12:53:19+01:00",
      "api_url": "http://cloudworks.ac.uk/api/clouds/2884/view.json",
      "html_url": "http://cloudworks.ac.uk/cloud/view/2884"
    },
    {
      "cloud_id": "2703",
      "title": "Backchannels ",
      "summary": "Backchannels at conferences, in the classroom: good thing? bad...",
      "total_comments": "24"
    },
    ...
  ]
}
```

```
}  
]  
}
```

cloudscape/followers

Description

Returns the users following a cloudscape specified by the ID of the cloudscape.

URL

`http://cloudworks.ac.uk/api/cloudscapes/cloudscape_id/followers.format?api_key=api_key`

Example

`http://cloudworks.ac.uk/api/cloudscapes/1896/followers.json?api_key=12345`

Parameters

- `api_key` (required) A Cloudworks API key
- `cloudscape_id` (required) An identifier for a cloudscape
- `format` (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{  
  "api_version": "0.1",  
  "total_results": 10,  
  "self_url": "http://cloudworks.ac.uk/api/cloudscapes/1896/followers.json",  
  "html_url": "http://cloudworks.ac.uk/cloudscape/followers/1896",  
  "items": [  
    {  
      "user_id": "1",  
      "name": "Juliette Culver",  
      "html_url": "http://cloudworks.ac.uk/user/view/1",  
      "api_url": "http://cloudworks.ac.uk/api/users/1/view.json",  
      "description": "<p>Cloudworks Lead Developer</p>",  
      "thumbnail_url": "http://cloudworks.ac.uk/uploads/32-bluehorse2.jpg",  
    },  
    {  
      "user_id": "3",  
      "name": "Gr\u00e9linne Conole",  
      ...  
    }  
  ]  
}
```

```
}  
]  
}
```

cloudscape/favourited

Description

Returns the users who have favourited a cloudscape specified by the ID of the cloudscape

URL

http://cloudworks.ac.uk/api/cloudscapes/cloudscape_id/favourited.format?api_key=api_key

Example

http://cloudworks.ac.uk/api/cloudscapes/1963/favourited.json?api_key=12345

Parameters

- api_key (required) A Cloudworks API key
- cloudscape_id (required) An identifier for a cloudscape
- format (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{  
  "api_version": "0.1",  
  "total_results": 4,  
  "self_url": "http://cloudworks.ac.uk/api/cloudscapes/1896/favourited.json",  
  "html_url": "http://cloudworks.ac.uk/cloudscape/favourited/1896",  
  "items": [  
    {  
      "user_id": "3",  
      "name": "Gr\u00e9linne Conole",  
      "html_url": "http://cloudworks.ac.uk/user/view/3",  
      "user_url": "http://cloudworks.ac.uk/api/users/3/view.json",  
      "description": "<p>Professor of e-learning: Learning Design ...</ul>",  
      "thumbnail_url": "http://cloudworks.ac.uk/uploads/32-grainne_gdansk1_small.jpg",  
    },  
    ...  
  ]  
}
```

```
}
```

cloudscape/attendees

Description

Where the specified cloudscape is for an event, returns the users attending the event

URL

http://cloudworks.ac.uk/api/cloudscapes/cloudscape_id/attendees.format?api_key=api_key

Example

http://cloudworks.ac.uk/api/cloudscapes/1963/attendees.json?api_key=12345

Parameters

- api_key (required) A Cloudworks API key
- cloudscape_id (required) An identifier for a cloudscape
- format (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

- 400 - Error, this cloudscape is not for an event

Response

Example JSON response (truncated)

```
{
  "api_version": "0.1",
  "cloudscape_id": "2012",
  "item_type": "cloudscape",
  "item_id": "2012",
  "self_url": "http://cloudworks.ac.uk/api/cloudscapes/2012/attendees.json",
  "html_url": "http://cloudworks.ac.uk/cloudscape/attendees/2012",
  "total_results": 172,
  "items": [
    {
      "user_id": "1",
      "name": "Juliette Culver",
      "api_url": "http://cloudworks.ac.uk/api/users/1.json",
      "html_url": "http://cloudworks.ac.uk/user/view/1"
    },
    {
      "user_id": "3",
```

```

"name": "Gr\u00e9linne Conole",
"api_url": "http://cloudworks.ac.uk/api/users/3.json",
"html_url": "http://cloudworks.ac.uk/user/view/3"
},
...
]
}

```

User Methods

user/view

Description

Returns extended information for a user specified by the ID of the user.

URL

[http://cloudworks.ac.uk/api/users/*user_id.format*?api_key=*api_key*](http://cloudworks.ac.uk/api/users/<i>user_id.format</i>?api_key=<i>api_key</i>)

Example

http://cloudworks.ac.uk/api/users/3.json?api_key=12345

Parameters

- `api_key` (required) A Cloudworks API key
- `user_id` (required) An identifier for a Cloudworks user
- `format` (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```

{
  "api_version": "0.1",
  "user_id": "3",
  "name": "Gr\u00e9linne Conole",
  "html_url": "http://cloudworks.ac.uk/user/view/3",
  "api_url": "http://cloudworks.ac.uk/api/users/3/view.json",
  "description": "<p>Professor of e-learning: Learning Design, learner experience ...",
  "home_url": "http://www.e4innovation.com",
  "institution": "The Open University",
  "department": "Institute of Educational Technology",
  "twitter_name": "gconole",
  "last_visit": "2010-06-01T17:25:26+01:00",
  "thumbnail_url": "http://cloudworks.ac.uk/uploads/32-grainne_gdansk1_small.jpg",

```

```

"tags": [
  {
    "name": "cloudworks",
    "api_url": "http://cloudworks.ac.uk/api/tags/cloudworks/users.json"
  }, {
    "name": "e-learning",
    "api_url": "http://cloudworks.ac.uk/api/tags/e-learning/users.json"
  }, {
    "name": "IET",
    "api_url": "http://cloudworks.ac.uk/api/tags/IET/users.json"
  },
  ...
],
"total_clouds": "581",
"total_cloudscapes": "93"
}

```

user/followers

Description

Returns the people who follow a specified user.

URL

http://cloudworks.ac.uk/api/users/3/followers.json?api_key=12345

Parameters

- `api_key` (required) A Cloudworks API key
- `user_id` (required) An identifier for a Cloudworks user
- `format` (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```

{
  "api_version": "0.1",
  "user_id": "3",
  "item_type": "user",
  "item_id": "3",
  "self_url": "http://cloudworks.ac.uk/api/users/3/followers.json",
  "html_url": "http://cloudworks.ac.uk/user/followers/3",

```



```

"user": {
  "html_url": "http://cloudworks.ac.uk/user/view/3",
  "api_url": "http://cloudworks.ac.uk/api/users/3.json"
},
"items": [
  {
    "user_id": "1",
    "name": "Juliette Culver",
    "html_url": "http://cloudworks.ac.uk/user/view/1",
    "api_url": "http://cloudworks.ac.uk/api/users/1/view.json",
    "description": "<p>Cloudworks Lead Developer</p>",
    "thumbnail_url": "http://cloudworks.ac.uk/uploads/32-bluehorse2.jpg",
  },
  {
    "user_id": "6",
    "name": "Andrew Brasher", ...
  } ...
]
}

```

user/favourites

Description

Returns the clouds and cloudscapes that the specified user has favoured.

URL

http://cloudworks.ac.uk/api/users/3/favourites.json?api_key=12345

Parameters

- `api_key` (required) A Cloudworks API key
- `user_id` (required) An identifier for a Cloudworks user
- `format` (optional) The type of the response; defaults to 'json'

Notes

This API call is currently not implemented. Also, currently the array "items" in the response is null and instead there are arrays named 'clouds', 'cloudscapes', 'users'. This is subject to change.

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{
  "api_version": "0.1",
  "user_id": "3",
  "self_url": "http://cloudworks.ac.uk/api/users/3/favourites.json",
  "html_url": "http://cloudworks.ac.uk/user/favourites/3",
  "user": {
    "html_url": "http://cloudworks.ac.uk/user/view/3",
    "api_url": "http://cloudworks.ac.uk/api/users/3.json"
  },
  "items": null,
  "clouds": [
    {
      "user_id": "1943",
      "item_type": "cloud",
      "cloud_id": "3031",
      "title": "Academic writing",
      "summary": "Research Skills required by PhD students E1: Write clearly and in a style appropriate to purpose,..."
    },
    {
      "user_id": "1126",
      "item_type": "cloud",
      "cloud_id": "3072",
      "title": "Learning relationships as a dimension of learning power",
      ...
    }
  ],
  "cloudscapes": [
    ...
  ],
  "users": [
    ...
  ]
}
```

user/cloudscapes

Description

Returns the cloudscapes created by a user specified by the ID of the user.

URL

http://cloudworks.ac.uk/api/users/user_id/cloudscapes.format?api_key=api_key

Example

http://cloudworks.ac.uk/api/users/3/cloudscapes.json?api_key=12345

Parameters

- `api_key` (required) A Cloudworks API key
- `user_id` (required) An identifier for a Cloudworks user
- `format` (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{
  "api_version": "0.1",
  "user_id": "3",
  "self_url": "http://cloudworks.ac.uk/api/users/3/cloudscapes.json",
  "html_url": "http://cloudworks.ac.uk/user/cloudscapes/3",
  "user": {
    "user_id": "3",
    "html_url": "http://cloudworks.ac.uk/user/view/3",
    "api_url": "http://cloudworks.ac.uk/api/users/3.json"
  },
  "items": [
    {
      "cloudscape_id": "2016",
      "api_url": "http://cloudworks.ac.uk/api/cloudscapes/2016.json",
      "html_url": "http://cloudworks.ac.uk/cloudscape/view/2016",
      "title": "8th International Conference on Education and Information Systems,
Technologies and Applications: EISTA 2010",
      "summary": ""
    },
    {
      "cloudscape_id": "1981",
      "api_url": "http://cloudworks.ac.uk/api/cloudscapes/1981.json",
      "html_url": "http://cloudworks.ac.uk/cloudscape/view/1981",
      "title": "AECT 2010: Cyber-change: learning in our connected world",
      "summary": ""
    },
    ...
  ]
}
```

user/clouds

Description

Returns the clouds created by a user specified by the ID of that user

URL

[http://cloudworks.ac.uk/api/users/*user_id*/clouds.*format*?api_key=12345](http://cloudworks.ac.uk/api/users/<i>user_id</i>/clouds.<i>format</i>?api_key=12345)

Example

http://cloudworks.ac.uk/api/users/3/clouds.json?api_key=12345

Parameters

- `api_key` (required) A Cloudworks API key
- `user_id` (required) An identifier for a Cloudworks user
- `format` (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{
  "api_version": "0.1",
  "user_id": "3",
  "self_url": "http://cloudworks.ac.uk/api/users/3/clouds.json",
  "html_url": "http://cloudworks.ac.uk/user/clouds/3",
  "user": {
    "user_id": "3",
    "html_url": "http://cloudworks.ac.uk/user/view/3",
    "api_url": "http://cloudworks.ac.uk/api/users/3.json"
  },
  "items": [
    {
      "cloud_id": "2211"
      "title": "50 things that are being killed by the internet",
      "api_url": "http://cloudworks.ac.uk/api/clouds/2211/view.json",
      "html_url": "http://cloudworks.ac.uk/cloud/view/2211"
    },
    {
      "cloud_id": "1575",
      "title": "A consideration of learning activity: towards an activity-based approach",
      ...
    }
  ]
}
```

```
}
```

user/stream

Description

Returns the stream of events for the specified user (Cloudstream)

URL

[http://cloudworks.ac.uk/api/users/*user_id*/stream.*format*?api_key=12345](http://cloudworks.ac.uk/api/users/<i>user_id</i>/stream.<i>format</i>?api_key=12345)

Example

http://cloudworks.ac.uk/api/users/3/stream.json?api_key=12345

Parameters

- `api_key` (required) A Cloudworks API key
- `user_id` (required) An identifier for a Cloudworks user
- `format` (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{
  "user_id": "03",
  "item_type": "user",
  "item_id": "03",
  "self_url": "http://cloudworks.ac.uk/api/users/stream.json?user_id=03",
  "html_url": "http://cloudworks.ac.uk/user/view/03#cloudstream",
  "user": {
    "html_url": "http://cloudworks.ac.uk/user/view/03",
    "api_url": "http://cloudworks.ac.uk/api/user.json?user_id=03"
  },
  "items": [
    {
      "title": "Learning in an open world - vision statement new link on What does 'learning in an open world' mean to you? added by Gr\u00e9linne Conole",
      "item_type": "link",
      "item_id": "2763",
      "status": "<strong>Learning in an open world - vision statement </strong><small<em>new link on <a href=\"http://cloudworks.ac.uk/cloud/view/2964\">What does 'learning in an open world' mean to you?</a> added by <a href=\"http://cloudworks.ac.uk/user/view/3\" rel=\"author\">Gr\u00e9linne
```

```

Conole</a></em></small>",
  "created":"2010-03-14T11:50:13+00:00",
  "html_url":"http://cloudworks.ac.uk/#link-2763"
},
{
  "title":"Interdisciplinarity cloudscape new link on Project: Interdisciplinarity
and technology-enhanced learning added by Gr\u00e9linne Conole",
  "item_type":"link",
  ...
}
]
}

```

Tag Methods

tag/clouds

Description

Returns the clouds tagged with a specified string.

URL

http://cloudworks.ac.uk/api/tags/**tag**/clouds.**format**?api_key=**api_key**

Example

http://cloudworks.ac.uk/api/tags/**Learning+Design**/clouds.**json**?api_key=**12345**

Parameters

- api_key (required) A Cloudworks API key
- tag (required) A case-insensitive, url-encoded tag name. The API currently only supports requests with single tags.
- format (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```

{
  "api_version":"0.1",
  "query":"Learning Design",
  "total_results":15,
  "self_url":"http://cloudworks.ac.uk/api/tags/Learning+Design/clouds.json",
  "html_url":"http://cloudworks.ac.uk/tag/view/Learning+Design#clouds",
  "items": [

```

```

{
  "cloud_id": "3764",
  "api_url": "http://cloudworks.ac.uk/api/clouds/3764.json",
  "html_url": "http://cloudworks.ac.uk/cloud/view/3764",
  "title": "Design Bash 2010",
  "summary": "Cloud for the 2010 Design Bash hosted by LAMS and&nbsp; JISC CETIS on 16th July, University of...",
  "user": {
    "user_id": "108",
    "api_url": "http://cloudworks.ac.uk/api/users/108.json",
    "html_url": "http://cloudworks.ac.uk/user/view/108"
  },
  "tag": "learning design"
},
{
  "cloud_id": "3687",
  "api_url": "http://cloudworks.ac.uk/api/clouds/3687.json",
  "html_url": "http://cloudworks.ac.uk/cloud/view/3687",
  "title": "How to...sharing a CompendiumLD Learning Design on Cloudworks",
  "summary": "Support guide for sharing CompendiumLD Designs in Cloudworks",
  "user": {
    "user_id": "983",
    "api_url": "http://cloudworks.ac.uk/api/users/983.json",
    "html_url": "http://cloudworks.ac.uk/user/view/983"},
  "tag": "learning design"
},
...
]
}

```

tag/cloudscapes

Description

Returns the cloudscapes tagged with a specified string.

URL

http://cloudworks.ac.uk/api/tags/tag/cloudscapes.format?api_key=api_key

Example

http://cloudworks.ac.uk/api/tags/OULDI/cloudscapes.json?api_key=12345

Parameters

- `api_key` (required) A Cloudworks API key
- `tag` (required) A case-insensitive url-encoded tag name. The API currently only supports requests with single tags.

- format (optional) The type of the response; defaults to 'json'

Errors - see cloud/view

Response

Example JSON response (truncated)

```
{
  "api_version": "0.1",
  "query": "Learning Design",
  "total_results": 15,
  "self_url": "http://cloudworks.ac.uk/api/tags/Learning+Design/cloudscapes.json",
  "html_url": "http://cloudworks.ac.uk/tag/view/Learning+Design#cloudscapes",
  "items": [
    {
      "cloudscape_id": "387",
      "api_url": "http://cloudworks.ac.uk/api/cloudscapes/387.json",
      "html_url": "http://cloudworks.ac.uk/cloudscape/view/387",
      "title": "OULDI",
      "summary": "OU Learning Design Initiative",
      "user": {
        "user_id": "3",
        "api_url": "http://cloudworks.ac.uk/api/users/3.json",
        "html_url": "http://cloudworks.ac.uk/user/view/3"
      },
      "tag": "learning design"
    },
    {
      "cloudscape_id": "392",
      "api_url": "http://cloudworks.ac.uk/api/cloudscapes/392.json",
      ...
    }
  ]
}
```

tag/users

Description

Returns the users tagged with a specified string.

URL

http://cloudworks.ac.uk/api/tags/tag/users.format?api_key=api_key

Example

http://cloudworks.ac.uk/api/tags/Learning+Design/users.json?api_key=12345

Parameters

- `api_key` (required) A Cloudworks API key
- `tag` (required) A case-insensitive url-encoded tag name. The API currently only supports requests with single tags.
- `format` (optional) The type of the response; defaults to 'json'

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{
  "api_version": "0.1",
  "query": "Learning Design",
  "total_results": 8,
  "item_type": "user",
  "self_url": "http://cloudworks.ac.uk/api/tags/Learning+Design/users.json",
  "html_url": "http://cloudworks.ac.uk/tag/view/Learning+Design#users",
  "items": [
    {
      "user_id": "1",
      "name": "Juliette Culver",
      "api_url": "http://cloudworks.ac.uk/api/users/1.json",
      "html_url": "http://cloudworks.ac.uk/user/view/1",
      "tag": "learning design"
    },
    {
      "user_id": "3",
      "name": "Gr\u00e9linne Conole",
      ...
    },
  ]
}
```

Search Methods

search/clouds

Description

Returns the clouds that match a specified query string

URL

http://cloudworks.ac.uk/api/search/clouds.format?q=query&api_key=api_key

Example

http://cloudworks.ac.uk/api/search/clouds.json?q=OULDI&api_key=12345

Parameters

- `api_key` (required) A Cloudworks API key
- `query` (required) The url-encoded query string
- `format` (optional) The type of the response; defaults to 'json'

Usage notes

This currently returns all clouds - we may introduce paging for this call in future. Currently only simple keyword searches without operators are supported.

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{
  "api_version": "0.1",
  "query": "OER",
  "total_results": 124,
  "start_index": 0,
  "items_per_page": null,
  "self_url": "http://cloudworks.ac.uk/api/search/OER/clouds.json?q=OER",
  "html_url": "http://cloudworks.ac.uk/search/result?q=OER#clouds",
  "items": [
    {
      "item_id": "883",
      "item_type": "cloud",
      "title": "OER Visibility",
      "html_url": "http://cloudworks.ac.uk/cloud/view/883",
      "api_url": "http://cloudworks.ac.uk/api/clouds/883.json"
    },
    {
      "item_id": "1086",
      "item_type": "cloud",
      "title": "Projects for OER",
      "html_url": "http://cloudworks.ac.uk/cloud/view/1086",
      "api_url": "http://cloudworks.ac.uk/api/clouds/1086.json"
    },
    {
      "item_id": "882",
```

```

"item_type":"clouds",
"title":"OER in Africa",
"html_url":"http://cloudworks.ac.uk/cloud/view/882",
"api_url":"http://cloudworks.ac.uk/api/clouds/882.json"
},
...
]
}

```

search/cloudscapes

Description

Returns the cloudscapes that match a specified search string.

URL

[http://cloudworks.ac.uk/api/search/cloudscapes.*format*?q=*query*&api_key=*api_key*](http://cloudworks.ac.uk/api/search/cloudscapes.format?q=query&api_key=api_key)

Example

http://cloudworks.ac.uk/api/search/cloudscapes.json?q=OER&api_key=12345

Parameters

- `api_key` (required) A Cloudworks API key
- `query` (required) The URL-encoded query string
- `format` (optional) The type of the response; defaults to 'json'

Usage notes

This currently returns all cloudscapes - we may introduce paging for this call in future. Currently only simple keyword searches without operators are supported.

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```

{
  "api_version":"0.1",
  "query":"OER",
  "total_results":38,
  "start_index":0,
  "items_per_page":null,
  "self_url":"http://cloudworks.ac.uk/api/search/OER/cloudscapes.json?q=OER",
  "html_url":"http://cloudworks.ac.uk/search/result?q=OER#cloudscapes",

```

```

"items": [
  {
    "item_id": "1167",
    "item_type": "cloudscape",
    "title": "OER Evaluation and Outcomes",
    "html_url": "http://cloudworks.ac.uk/cloudscape/view/1167",
    "api_url": "http://cloudworks.ac.uk/api/cloudscapes/1167.json"
  },
  {
    "item_id": "1161",
    "item_type": "cloudscape",
    "title": "OER in K-12",
    "html_url": "http://cloudworks.ac.uk/cloudscape/view/1161",
    "api_url": "http://cloudworks.ac.uk/api/cloudscapes/1161.json"
  },
  {
    "item_id": "959",
    ...
  }
]

```

search/users

Description

Returns the users that match a specified search string.

URL

[http://cloudworks.ac.uk/api/search/users.*format*?q=*query*&api_key=*api_key*](http://cloudworks.ac.uk/api/search/users.format?q=query&api_key=api_key)

Example

[http://cloudworks.ac.uk/api/search/users.*json*?q=**OULDI**&api_key=**12345**](http://cloudworks.ac.uk/api/search/users.json?q=OULDI&api_key=12345)

Parameters

- `api_key` (required) A Cloudworks API key
- `query` (required) The URL-encoded query string
- `format` (optional) The type of the response; defaults to 'json'

Usage notes

This currently returns all cloudscapes - we may introduce paging for this call in future. Currently only simple keyword searches without operators are supported.

Errors - see 'Error Handling'

Response

Example JSON response (truncated)

```
{
  "api_version": "0.1",
  "query": "OULDI",
  "total_results": 4,
  "start_index": 0,
  "self_url": "http://cloudworks.ac.uk/api/search/users.json?q=OULDI",
  "html_url": "http://cloudworks.ac.uk/search/result?q=OULDI#users",
  "items": [
    {
      "item_id": "173",
      "item_type": "user",
      "title": "ben andrews",
      "html_url": "http://cloudworks.ac.uk/user/view/173",
      "api_url": "http://cloudworks.ac.uk/api/users/173.json"
    },
    {
      "item_id": "356",
      "item_type": "user",
      ...
    }
  ]
}
```