

Alibaba Cloud CDN

Developer Guide

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Tools

Sample authentication code

Sample authentication code

Overview

The following Python demo provides three authentication methods and describes the composition of requested URLs and hash strings for each method.

For URL authentication rules, see [URL Authentication Document](#).

Python demo

```
import re
import time
import hashlib
import datetime

def md5sum(src):
    m = hashlib.md5()
    m.update(src)
    return m.hexdigest()

def a_auth(uri, key, exp):
    p = re.compile("^(http://|https://)?([^\?]+)/([^\?]*)(\?.*)?$")
    if not p:
        return None
    m = p.match(uri)
```

```

scheme, host, path, args = m.groups()
if not scheme: scheme = "http://"
if not path: path = "/"
if not args: args = ""
rand = "0" # "0" by default, other value is ok
uid = "0" # "0" by default, other value is ok

sstring = "%s-%s-%s-%s-%s" %(path, exp, rand, uid, key)
hashvalue = md5sum(sstring)
auth_key = "%s-%s-%s-%s-%s" %(exp, rand, uid, hashvalue)

if args:
return "%s%s%s%s&auth_key=%s" %(scheme, host, path, args, auth_key)
else:
return "%s%s%s%s?auth_key=%s" %(scheme, host, path, args, auth_key)

def b_auth(uri, key, exp):
p = re.compile("^(http://|https://)?([^\?]+)(/[^\?]*)?(\?.*)?$")
if not p:
return None
m = p.match(uri)
scheme, host, path, args = m.groups()
if not scheme: scheme = "http://"
if not path: path = "/"
if not args: args = ""

# convert unix timestamp to "YYmmDDHHMM" format
nexp = datetime.datetime.fromtimestamp(exp).strftime('%Y%m%d%H%M')
sstring = key + nexp + path
hashvalue = md5sum(sstring)

return "%s%s/%s/%s%s%s" %(scheme, host, nexp, hashvalue, path, args)

def c_auth(uri, key, exp):
p = re.compile("^(http://|https://)?([^\?]+)(/[^\?]*)?(\?.*)?$")
if not p:
return None
m = p.match(uri)
scheme, host, path, args = m.groups()
if not scheme: scheme = "http://"
if not path: path = "/"
if not args: args = ""

hexexp = "%x" %exp
sstring = key + path + hexexp
hashvalue = md5sum(sstring)

return "%s%s/%s/%s%s%s" %(scheme, host, hashvalue, hexexp, path, args)

def main():

uri = "http://xc.cdnpe.com/ping?foo=bar" # original uri
key = "<input private key>" # private key of authorization
exp = int(time.time()) + 1 * 3600 # expiration time: 1 hour after current itme

authuri = a_auth(uri, key, exp) # auth type: a_auth / b_auth / c_auth

```

```
print("URL : %s\nAUTH: %s" %(uri, authuri))

if __name__ == "__main__":
    main()
```

CLI

CDN command line interface

CDN command line interface

aliyuncli installation

aliyuncli is a tool based on Alibaba Cloud open APIs that is used to manage your Alibaba Cloud products. aliyuncli commands correspond to Alibaba Cloud open APIs in a one-to-one manner, and delivers robust flexibility and scalability at an equal capacity. Based on aliyuncli, you can encapsulate Alibaba Cloud atomic APIs to obtain your desired functions.

The pip-installed aliyuncli will automatically process various dependencies.

Install aliyuncli directly using the following command:

```
$sudo pip install aliyuncli
```

aliyuncli upgrades:

```
$sudo pip install --upgrade aliyuncli
```

For more information about aliyuncli, refer to [Alibaba Cloud CLI](#).

CDN SDK installation

The CDN SDK must be installed because CDN functions are used alongside it.

It is strongly recommended to install SDKs using **pip** because the SDK will automatically process various dependencies and upgrades.

Install the CDN SDK directly using the following command:

```
$ sudo pip install aliyun-python-sdk-cdn
```

SDK upgrades:

```
$ sudo pip install --upgrade aliyun-python-sdk-cdn
```

aliyuncli CDN command descriptions

The following section details instructions and examples of CDN commands.

Service operation commands

OpenCdnService

Command instructions:

Domain name operations can only be performed after the CDN service has been activated. A single user can only activate the service once. The account will activate only if it has been verified with real-name authentication.

Example:

```
aliyuncli cdn OpenCdnService --InternetChargeType PayByTraffic
```

DescribeCdnService

Command instructions:

Querying the CDN service status will include the current billing type, service activation time, the billing type that will take effect next, and the current service status.

Example:

```
aliyuncli cdn DescribeCdnService
```

ModifyCdnService

Command instructions:

Changes the CDN service billing type.

Example:

```
aliyuncli cdn ModifyCdnService --InternetChargeType PayByTraffic
```

For more details about APIs, refer to [API Reference](#).