

## TEMP URL OPERATIONS

To allow temporary access (for eg for *GET* requests) to objects without the need to share credentials, temp url functionality is supported by swift endpoint of radosgw. For this functionality, initially the value of *X-Account-Meta-Temp-URL-Key* and optionally *X-Account-Meta-Temp-URL-Key-2* should be set. The Temp URL functionality relies on a HMAC-SHA1 signature against these secret keys.

### POST TEMP-URL KEYS

A POST request to the swift account with the required Key will set the secret temp url key for the account against which temporary url access can be provided to accounts. Up to two keys are supported, and signatures are checked against both the keys, if present, so that keys can be rotated without invalidating the temporary urls.

#### SYNTAX

```
POST /{api version}/{account} HTTP/1.1
Host: {fqdn}
X-Auth-Token: {auth-token}
```

#### REQUEST HEADERS

##### X-Account-Meta-Temp-URL-Key

**Description:** A user-defined key that takes an arbitrary string value.  
**Type:** String  
**Required:** Yes

##### X-Account-Meta-Temp-URL-Key-2

**Description:** A user-defined key that takes an arbitrary string value.  
**Type:** String  
**Required:** No

### GET TEMP-URL OBJECTS

Temporary URL uses a cryptographic HMAC-SHA1 signature, which includes the following elements:

1. The value of the Request method, "GET" for instance
2. The expiry time, in format of seconds since the epoch, ie Unix time
3. The request path starting from "v1" onwards

The above items are normalized with newlines appended between them, and a HMAC is generated using the SHA-1 hashing algorithm against one of the Temp URL Keys posted earlier.

A sample python script to demonstrate the above is given below:

```
import hmac
from hashlib import sha1
from time import time

method = 'GET'
host = 'https://objectstore.example.com/swift'
duration_in_seconds = 300 # Duration for which the url is valid
expires = int(time() + duration_in_seconds)
path = '/v1/your-bucket/your-object'
key = 'secret'
hmac_body = '%s\n%s\n%s' % (method, expires, path)
sig = hmac.new(key, hmac_body, sha1).hexdigest()
rest_uri = "{host}{path}?temp_url_sig={sig}&temp_url_expires={expires}".format(
    host=host, path=path, sig=sig, expires=expires)
```

```
print rest_uri
```

```
# Example Output
```

```
# https://objectstore.example.com/swift/v1/your-bucket/your-object?temp_url_sig=ff4657876227f
```

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