

# Appendix B: SFMTA Open Authorization (OAuth) 2.0 Authentication Instructions

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The SFMTA APIs uses the Open Authorization (OAuth) 2.0 protocol to authorize your app for a user and generate an access token.

Configured with OAuth 2.0 client credentials, your client application requests an access token from the SFMTA Authorization Server, extracts a token from the response, and sends the token to the SFMTA API that you want to access.

## OAuth 2.0 Client Credentials and Scope

SFMTA will provide you with the following OAuth 2.0 client credentials:

- Client Id
- Client Secret
- Scope

## Get an Access Token

Your service must make a service-to-service HTTP request to SFMTA Authorization Services to generate an access token. The token is valid for 60 minutes. Before token expires, a new token can be generated.

### URL – Generate Token

#### *Production*

```
POST https://services.sfmta.com/oauth/token
```

#### *Test*

```
POST https://stageservices.sfmta.com/oauth/token
```

### HTTP Request Headers

Header	Value
Content-Type	application/x-www-form-urlencoded

### HTTP Request Body (URL Encoded)

Key	Value
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grant_type	client_credentials
client_id	Client Id Provided By SFMTA
client_secret	Client Secret Provided by SFMTA
scope	Scope Provided by SFMTA

## Example Request

```
POST /oauth2/token HTTP/1.1
Host: stageservices.sfmta.com
Content-Type: application/x-www-form-urlencoded
Content-Length: 185

grant_type=client_credentials&client_id=ab3a2de6-f6e8-46f7-8b47-7853e3b0e757&client_secret=sGX8z~jZtd_ubOYw43Zj7KvVlSe6bYu-QdVe-XXX&scope=9506d688-a330-43e1-ba0d-106abaa99123%2F.default
```

## Example Response

```
{
  "token_type": "Bearer",
  "expires_in": 3599,
  "ext_expires_in": 3599,
  "access_token":
  "eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsImtpZCI6ImpTMVhvMU9XRGpfNTJ2YndHTmd2UU8yVnpNYyJ9.eyJhdWQiOiI5NTA2ZDY4OC1hMzMwLTQzZTEtYmEwZC0xMDZhYmFhNDYzNDgiLCJpc3MiOiJodHRwczovL2xvZ2luLm1pY3Jvc29mdG9ubGluZS5jb20vZjA3OVMzMtUtZmFjYy00ZDkwLTlhMWETMDBlYTlzMjU4YTY4L3YyLjAiLCJpYXQiOiJlNTM0MzYwMDQsIm5iZiI6MTY1MzQzNjAwNCwiZXhwIjoxNjUzNDM5OTA0LCJhaW8iOiJFm1pnWURCY0ZmZmVWt0aEl3a0s5VWY1cXpsQUE9PSIsImF6cCI6ImFiM2EyZGU2LWY2ZTgtNDZmNy04YjQ3Ltc4NTNlM2IwZTclNyIsImF6cGFjcii6IjEiLCJvaWQiOiJiYzhlYWYwZi03NzA5LTRhOGQtOWZlMS0zNTM3ZTczZjQ3Y2YiLCJyaCI6IjAuQVE0QUZjTjU4TXo2a0UyS0dnRHFJeVdLYUlqV0JwVXZvLUZEdWcwUWFycWtZMGdPQUFBLiIsInJvbGVzIjpbIlRheGkuUHJvdmlkZXIiXSwic3ViIjoiYmM4ZWZmMGYtNzcwOS00YThkLTlmZTEtMzUzN2U3M2Y0N2NmIiwidGllIjoiZjA3OVMzMtUtZmFjYy00ZDkwLTlhMWETMDBlYTlzMjU4YTY4IiwidXRpIjoiQXpFZk8xMnRERVdicFA2ZDRRcEJBUSIsInZlciI6IjUuMCJ9.YTbks4pRPROfrUzOK6Cfk37DVmjYgg5o4_OeGTAPU9frpp6zOZszmQIivkRDBJo5K3HcCr0zy-Kn0I28HcqtYAaiyuIS3DNcv2uHUNugJSyAYG4oy00JHlp70tgVLXQJh6FrGodSMKI-b_jmpkauG0zyEJT7O3ohJVihWwAZeWoVexC0bFC1yM02b8SF20LoibblieDkyNwexsj-Vrak_SX8EsrhgHRJFvrZgxWj4pECKQbejWfL0uRiDa_Jh6ZA1PG0iKEba-pK_pgzk2aGcQwxpnUAF4hQOm5v0lef_cF3GM_kAyrnCWNxVBIyqhWlgjfWw2DTfOfPgQKer6ixDw"
```

## Sending Request with Token

Extract access token from the response and include it in the Authorization field of the header.