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# ringplus Documentation

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## Getting Started

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### 1.1 Introduction

The goal of this tutorial is to get you started with the python wrapper for the [RingPlus API](#).

### 1.2 Installation

Using pip and pypi:

```
pip install ringplus
```

You can also install via:

```
pip install git+https://github.com/Shatnerz/ringplus.git
```

If you plan on making changes to the source, You can install with editable mode in pip via:

```
git clone https://github.com/Shatnerz/ringplus.git
cd ringplus
pip install -e .
```

### 1.3 Checking Voicemail

```
import ringplus

auth = ringplus.OAuthHandler(client_id, client_secret, redirect_uri)
auth.login(my_username, my_password)

api = ringplus.API(auth)

# Get a list of my accounts
my_accounts = api.accounts()

# To get the voicemail box id of an account, we need a more
# detailed account object.
# Let's examine the first account
detailed_account = api.get_account(account_id=my_accounts[0].id)
```

```
# Now we can get the voicemail box id and access the voicemail
mailbox_id = detailed_account.voicemail_box.id
voicemail = api.voicemail(mailbox_id)

# Print the transcriptions from the first 3 voicemail.
for msg in voicemail[0:3]:
    print(msg.transcription)
```

This example prints the transcriptions of the first three voicemail messages left on the first account belonging to the given user. RingPlus utilizes the OAuth2 protocol to receive permission from each user. See the [Authentication Tutorial](#) for more details about authentication.

## 1.4 API

The API class provides access to the entire RingPlus REST API. Each method can accept various parameters and return responses. For more information about these methods, please refer to the [API Reference](#).

## 1.5 Models

Most API calls will return an instance of a RingPlus model. These models contain the data returned by RingPlus. For example, the following will return an Account model:

```
# Get a specific account object
account = api.get_account(account_id=1234)
```

To access the data attached to a model, simply use:

```
print(account.phone_number)
print(account.balance)
```



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## Authentication Tutorial

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### 2.1 Introduction

RingPlus supports OAuth2 authentication. Authentication is handled by the `ringplus.OAuthHandler` class.

### 2.2 OAuth Authentication

To get started, we need to register our application with RingPlus. Navigate to “Your Settings > Applications”. Here you can Create a new application and RingPlus will give you a Client ID and Client Secret. Keep these at hand. Additionally, remember the exact Redirect URI you give to RingPlus, as this is used in the authentication process. Note that “<https://www.ringplus.net>” is not equivalent to “[www.ringplus.net](http://www.ringplus.net)” when authenticating.

Next, we must create an OAuthHandler instance using the Client ID, Client Secret, and Redirect URI associated with the application.:

```
auth = ringplus.OAuthHandler(client_id, client_secret, redirect_uri)
```

In order to start using the API, the following steps to retrieve an access token must be performed.

1. Direct the user to request RingPlus access.
2. **RingPlus redirects the user to our Redirect URI and attached an** authorization code.
3. Exchange the authorization code for an access token.

To get the authorization URL which to direct our user:

```
auth_url = auth.get_authorization_url()
```

This returns the URL where the user must go to grant our app permission to access the account.

Once permission has been granted, RingPlus will redirect the user to the Redirect URI with the authorization code attached as a query. Using this URL, we can fetch the token simply by:

```
auth.fetch_token(final_redirected_url)
print(auth.token)
```

The OAuthHandler instance should then be ready to go for API Calls.

## 2.3 Token Expiration and Refreshing

At this time, all tokens last for 24 hours. Tokens can be refreshed via:

```
auth.refresh_token()
```

## 2.4 Login Hack

If one already knows the username and password to an account, and access token can be grabbed programmatically without having to explicitly login each time.:

```
auth = ringplus.OAuthHandler(client_id, client_secret, redirect_uri)
auth.login(username, password)
```

This method is a little hackish, and may be unreliable if RingPlus makes changes to their site. There may also be an issue if the user didn't previously grant access to the app.

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## API Reference

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### 3.1 API

```
class ringplus.api.API (auth_handler=None, host='api.ringplus.net', cache=None, parser=None, version='1', retry_count=0, retry_delay=0, retry_errors=None, timeout=60, wait_on_rate_limit=False, wait_on_rate_limit_notify=False, proxy='')
```

A python wrapper for the RingPlus API.

**Reference** <https://docs.ringplus.net/>

```
__init__ (auth_handler=None, host='api.ringplus.net', cache=None, parser=None, version='1', retry_count=0, retry_delay=0, retry_errors=None, timeout=60, wait_on_rate_limit=False, wait_on_rate_limit_notify=False, proxy='')
```

API instance constructor.

#### Parameters

- **auth\_handler** – The OAuthHandler from to use to retrieve the authorization token.
- **host** – url of the server of the rest api. default:'api.ringplus.net'
- **cache** – Cache to query if a GET method is used. default:None
- **parser** – ModelParser instance to parse the responses. default:None
- **version** – Major version number to include in header. default 1
- **retry\_count** – number of allowed retries, default:0
- **retry\_errors** – default:None
- **timeout** – delay before to consider the request as timed out in seconds. default:60
- **wait\_on\_rate\_limit** – If the api wait when it hits the rate limit. default:False
- **wait\_on\_rate\_limit\_notify** – If the api print a notification when the rate limit is hit. default:False
- **proxy** – Url to use as proxy during the HTTP request. default:''

### 3.2 Accounts

#### API.**accounts**

List all accounts the user has access to.

scope: public

### Parameters

- **name** (*optional*) – The name of the account to filter by. Currently does not partial or full text search.
- **email\_address** (*optional*) – The email\_address of the account to filter by. Currently does not partial or full text search.
- **phone\_number** (*optional*) – The phone\_number of the account to filter by. Currently does not partial or full text search.
- **ddevice\_esn** (*optional*) – The active device\_esn of the account to filter by. Currently does not partial or full text search.
- **device\_iccid** (*optional*) – The active device\_iccid of the account to filter by. Currently does not partial or full text search.
- **page** (*optional*) – Which page of the paged results to return. Default to 1.
- **per\_page** (*optional*) – How many results to return per page. Defaults to 25.

**Returns** list: List of Account objects

### API .user\_accounts

A list of accounts belonging to a specific user.

scope: public

### Parameters

- **user\_id** – User ID
- **name** (*optional*) – The name of the account to filter by. Currently does not partial or full text search.
- **email\_address** (*optional*) – The email\_address of the account to filter by. Currently does not partial or full text search.
- **phone\_number** (*optional*) – The phone\_number of the account to filter by. Currently does not partial or full text search.
- **device\_esn** (*optional*) – The active device\_esn of the account to filter by. Currently does not partial or full text search.
- **device\_iccid** (*optional*) – The active device\_iccid of the account to filter by. Currently does not partial or full text search.
- **page** (*optional*) – Which page of the paged results to return. Default to 1.
- **per\_page** (*optional*) – How many results to return per page. Defaults to 25.

**Returns** list: List of Account objects

### API .get\_account

Get a specific account.

This returns a more detailed account object than those returned in API.user\_accounts and API.accounts.

scope: public

**Parameters** **account\_id** – Account ID

**Returns** Detailed Account object.

**API.update\_account**

Update an accounts information.

scope: manage

**Parameters**

- **account\_id** – Account ID
- **name** (*optional*) – Update the name of an account.

## 3.3 Users

**API.users**

Return all Users you have access to.

scope: public

**Parameters**

- **email\_address** (*optional*) – The email\_address of the account to filter by. Currently does not partial or full text search.
- **per\_page** (*optional*) – How many results to return per page. Defaults to 25.
- **page** (*optional*) – Which page of the paged results to return. Default to 1.

**Returns** List of User objects.

**Return type** list

**API.get\_user**

Return a specific user's details.

scope: public

**Parameters** **user\_id** – User ID

**Returns** User object.

**API.update\_user**

Update a User's account.

scope: manage

**Parameters**

- **user\_id** – User ID
- **email** (*optional*) – New email.
- **password** (*optional*) – New password.

## 3.4 Phone Calls, Text, and Data

**API.calls**

Returns an account's paged phone call details.

scope: public

**Parameters**

- **account\_id** – Account ID

- **start\_date** (*datetime, optional*) – Return only records occurring after this date.
- **end\_date** (*datetime, optional*) – Return only records occurring before this date.
- **per\_page** (*optional*) – How many results to return per page. Defaults to 25.
- **page** (*optional*) – Which page of the paged results to return. Default to 1.

**Returns** List of Call objects.

**Return type** list

#### API.**texts**

Returns an account's paged phone text details.

scope: public

##### **Parameters**

- **account\_id** – Account ID
- **start\_date** (*datetime, optional*) – Return only records occurring after this date.
- **end\_date** (*datetime, optional*) – Return only records occurring before this date.
- **per\_page** (*optional*) – How many results to return per page. Defaults to 25.
- **page** (*optional*) – Which page of the paged results to return. Default to 1.

**Returns** List of Text objects.

**Return type** list

#### API.**data**

Return an account's paged phone data details.

scope: public

##### **Parameters**

- **account\_id** – Account ID
- **start\_date** (*datetime, optional*) – Return only records occurring after this date.
- **end\_date** (*datetime, optional*) – Return only records occurring before this date.
- **per\_page** (*optional*) – How many results to return per page. Defaults to 25.
- **page** (*optional*) – Which page of the paged results to return. Default to 1.

**Returns** List of Data objects.

**Return type** list

## 3.5 Voicemail

#### API.**voicemail**

Return an Account's paged voicemail messages.

scope: voicemail

##### **Parameters**

- **voicemail\_box\_id** – ID of the voicemail box.
- **only\_new** (*optional*) –

- **per\_page** (*optional*) – How many results to return per page. Defaults to 25.
- **page** (*optional*) – Which page of the paged results to return. Default to 1.

**Returns** Paged list of voicemail message objects.

**Return type** list

#### API. **delete\_voicemail**

Deletes a voicemail message.

scope: voicemail

**Parameters** **voicemail\_message\_id** –

## 3.6 Account Registration

#### API. **register\_account**

Create a registration request to associate a user with a device.

scope: request

##### **Parameters**

- **user\_id** – User ID
- **name** – A name for this account.
- **billing\_plan\_id** – The ID of the billing plan to use for this account.
- **device\_esn** – The mobile device's ESN numbers, usually an alphanumeric string.
- **credit\_card\_id** – An ID of a credit card already associated with the User.
- **device\_iccid** (*optional*) – The mobile device's ICCID, or SIM card serial number.

**Returns** Account Registration Request Status object.

#### API. **register\_account\_status**

Get the status on an account registration request.

scope: public

**Parameters** **request\_id** – The ID of the register account request.

**Returns** List of Account Registration Status objects.

**Return type** list

## 3.7 Change Device

#### API. **change\_device**

Create a change device request to change physical device.

Registering new devices can take time depending on the device and network conditions. The request route provide a non-blocking way of sending the request. Requests that pass initial validation will return with with a request ID which can be queried to find out the status of the request. The status of the request will display whether the request has been completed and whether it was successful.

scope: request

##### **Parameters**

- **account\_id** – Account ID
- **device\_esn** – ESN of new device.
- **device\_iccid** (*optional*) – The mobile device’s ICCID, or SIM card serial number. This is optional, only if the device does not have an ICCID. If the device has an ICCID and it is not included in the request, the request will likely fail.

**Returns** Change Device Request Status object.

API. **change\_device\_status**

Get the status of a device change request.

scope: public

**Parameters** **request\_id** – The ID of the change device request.

**Returns** List of Device Request Status objects.

**Return type** list

## 3.8 Change Phone Number

API. **change\_phone\_number**

Creates a request to change the phone number of an Account.

Change phone number requests allow you to change the phone number on an account. Change Phone Number requests do not allow you choose your new phone number, you will be assigned an available number.

The request route provide a non-blocking way of sending the request. Requests that pass initial validation will return with with a request ID which can be queried to find out the status of the request. The status of the request will display whether the request has been completed and whether it was successful.

scope: request

**Parameters** **account\_id** – Account ID

**Returns** Change Phone Number Request Status object.

API. **change\_phone\_number\_status**

Get the status of a phone number change request.

scope: public

**Parameters** **request\_id** –

**Returns** List of Change Phone Number Request Status objects.

**Return type** list

## 3.9 Enforced Carrier Services

API. **enforced\_carrier\_services**

List the applied enforced carrier services of an Account.

Enforced Carrier Services are services offered at the carrier level that have been enforced on an account. These are not the only services that may be active on a given account, but are sure to override any other policies.

scope: public

**Parameters**



- **account\_id** – Account ID
- **page** (*optional*) – Which page of the paged results to return. Default to 1.
- **per\_page** (*optional*) – How many results to return per page. Defaults to 25.

**Returns** List of Carrier Service objects.

**Return type** list

## 3.10 Fluid Calls

### API. **fluid\_call\_credentials**

Get the list of FluidCall credentials.

FluidCall allows any VoIP phone to act as an additional handset attached to an account. Currently, any number of additional FluidCall connections can be made to a single account. Those connections will be rung along with the primary handset, and can make calls using standard SIP/RTP VoIP protocols.

scope: public

#### **Parameters**

- **account\_id** – Account ID
- **page** (*optional*) – Which page of the paged results to return. Default to 1.
- **per\_page** (*optional*) – How many results to return per page. Defaults to 25.

**Returns** List of Fluid Call objects.

**Return type** list



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