

# App API Program – Data Services

Version: 4.0

## Background

Midwinter has two API programs – V1 is available in XML (not covered in this document – please refer/request document API Program - Data Service API version 3.5.pdf)

This document covers APIV2 – which is in JSON and available on swagger (URLS provided in document)

## Document control

Title	Name	Role
Head of Technology	Andrew McClelland	Approver
Senior Developer	Mark Farr	Approver
Solution Architect	Scott Munro	Reviewer

## Document history

Version	Date	Author(s)	Description
3.5	13 / 06 / 2017	Eric Xu	Various updates.
4.0	05/ 02 / 2018	Sadia Arfana	New API version with swagger document

Date	05/02/2018
Version	4.0
Author	Sadia Arfana
Status	Live version

# Contents

<b>API Program – Data Services</b> .....	<b>1</b>
Version: 4.0 .....	1
Midwinter Financial Services Pty Ltd for AdviceOS .....	<b>Error! Bookmark not defined.</b>
Document control .....	1
Document history .....	1
<b>Overview</b> .....	<b>3</b>
Intended audience .....	3
Glossary.....	3
Authorisation.....	5
Client access permissions .....	6
Partner application process .....	70
Testing and development .....	81
<b>Midwinter API - Swagger</b> .....	<b>103</b>
<b>Midwinter API – Test Postman</b> .....	<b>103</b>
Using the tool.....	114
Hints and tricks .....	147
Final warning on testing in the staging environment .....	17
<b>AdviceOS APP APIs</b> .....	<b>17</b>
List of API service .....	18
Error Result messages .....	20

# Overview

The Midwinter Data Services API is a web services based API for integrating Midwinter's AdviceOS software with 3<sup>rd</sup> party data sources. The services are written in C# and are hosted on the Amazon Web Services platform (in Sydney region). Currently the API supports Request Response and RESTful calls.

## Intended audience

This document is targeted at Development staff both Internal to Midwinter and 3rd party integrators. This documentation requires an understanding of the .Net framework and programming, API authentication, OAuth 2.0, JSON and Web Services.

## Glossary

The following terms will be used throughout the document

<b>Term</b>	<b>Description</b>
AdviceOS	The application that hosts the web API outlined in this document
Source Application	The client application (3 <sup>rd</sup> party to AdviceOS) that is making/originating the AdviceOS call
Source Application User	The user (username and password) of the source application that is prompting the call (Note the application user is not an administration user)
Source Application ID	A client ID to identify the source application in AdviceOS
Source Application URL	A URL provided to AdviceOS that is used as part of the authorisation of each web API call.
Secret Key	A code provide to the Source Application (by AdviceOS) to use as part of the authorisation of each web API.

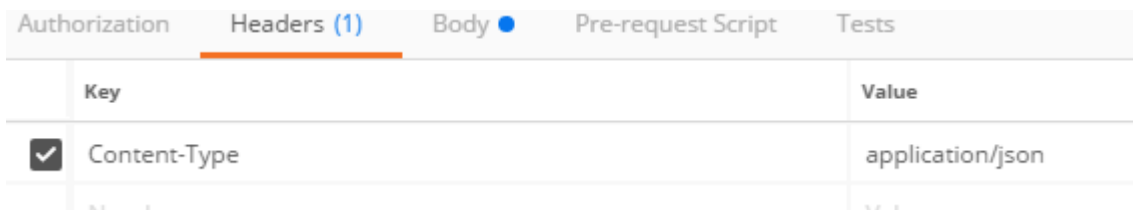
Token	<p>A value generated by AdviceOS (using the Source application – ID and Secret Key) when the Source Application calls the security API using postman. The service can be accessed via</p> <p>Production:</p> <p>Http POST</p> <p><a href="https://adviceos.com.au/appapi/v1/security/token">https://adviceos.com.au/appapi/v1/security/token</a></p> <p>Staging:</p> <p>Http POST</p> <p><a href="https://staging.adviceos.com.au/appapi/v1/security/token">https://staging.adviceos.com.au/appapi/v1/security/token</a></p>
AdviceOS user	<p>The corresponding user in AdviceOS (ie a Source Application user who has access to AdviceOS)</p>
OAuth	<p>Framework used to authenticate a web service call between AdviceOS and the Source Application</p>
Swagger	<p>An API developer tools for the OpenAPI Specification enabling development across the entire API lifecycle. Midwinter provide the AdviceOS web App API documentation and specification in swagger for more technical details of request and responses. It helps developer to integrate their application with using our API. The service can be accessed via</p> <p>Production:</p> <p><a href="https://adviceos.com.au/appapidocsui/index">https://adviceos.com.au/appapidocsui/index</a></p> <p>Staging:</p> <p><a href="https://staging.adviceos.com.au/appapidocsui/index">https://staging.adviceos.com.au/appapidocsui/index</a></p>

## Authorisation

AdviceOS uses the Microsoft Identity Framework and implemented OAuth 2.0 Authorisation framework to authenticate and authorize each web App API call based on the originating source user. AdviceOS Authorize requests from the Source application, based on following process

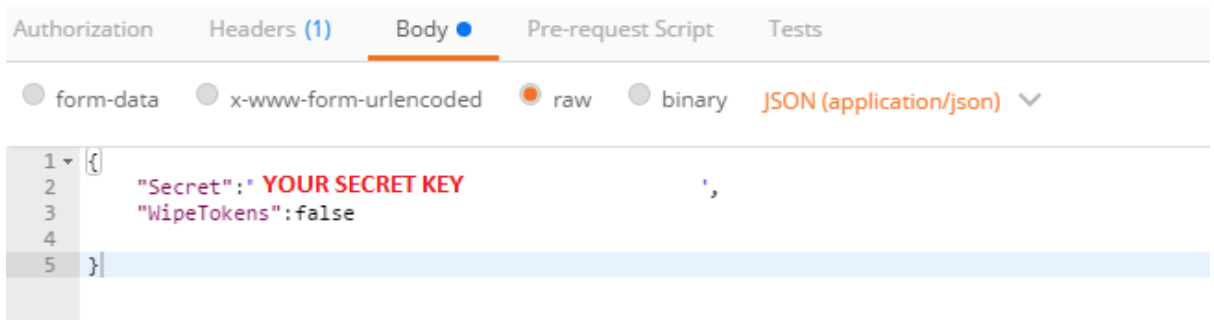
- ❄ The Source Application prepares a request for user authorisation or directly run the security API from postman. The request should contain Secret and WipeTokens (set value as false) in body as JSON format. Also need to set the header for 'Content-Type'.

Header:



Key	Value
<input checked="" type="checkbox"/> Content-Type	application/json

Request body:



```
1 {  
2   "Secret": "YOUR SECRET KEY",  
3   "WipeTokens": false  
4 }  
5 }
```

- ❄ Note: Client Access Controls
  - Each business or practice in the Source Application will need at least one of its users to have a token to ensure they can only access clients/Data in that business/practice in AdviceOS. I.e. the user that the token is created for dictates the client data that the source application can access in AdviceOS using that Token.
  - If the authorisation request was valid (based on the user Secret), the client will receive a token in response.

- ❄ The Source client application will use this access token to Authorize calls to AdviceOS web App APIs from this user or (possibly any other user in the business with access to the clients in AdviceOS).
- ❄ The Client Application can create multiple token for one user based on the maximum limit which is fixed by Midwinter.

## Client access permissions

The AdviceOS App APIs use the authenticated AdviceOS user to limit/restrict access (Read/write) to clients that the AdviceOS user can access. If the AdviceOS user cannot access the client via AdviceOS – then they will not be able to access the client (info) via a App API call. I.e. the same permissions that restrict access to clients in AdviceOS are used in the web service via the token that is used in the request.

This will generally mean that each adviser who has a log in to AdviceOS and a Login to the Source Application may need to authenticate and have a token generated. It is possible to have one user in the practice/business/client hierarchy be authenticated and all other user are provided that token to authenticate – however client access will always be restricted to the user that authenticated the token.

## Partner application process

To be able to use the Midwinter Data Services – you must first register your application with Midwinter. We will then provide details on how to authenticate your calls to AdviceOS.

Item	Answer
Company Name	
Application Name	
Application return URL	
Expected go live date for first web service	
Company Contact IT Person	
Company Contact IT Email	
Company Contact IT Phone	
Existing Client Id (if any):	
Existing Client secret (if any);	

Please send information to

[amcclelland@midwinter.com.au](mailto:amcclelland@midwinter.com.au)

[sarfana@midwinter.com.au](mailto:sarfana@midwinter.com.au)

## Testing and development

Midwinter provides secure testing environments that uses real data (copy of live DB during a deployment). The authentication mechanisms are the same with just different URL's for testing.

The URL for the test environment is <https://test.adviceos.com.au>

The URL for staging environment is <https://staging.adviceos.com.au>

The URL for production is... <https://adviceos.com.au>

When a secret is requested – Midwinter will provide access to this testing environment only. A second request will be required to “open up”/allow the service to work in production for a particular partner.

For approved groups the following resources are made available:

- \* Documentation (this document) that includes calls and call parameters with example JSON
- \* Test URL's to real data (copy of live data based on release cycles)
- \* Test Postman to test the web APIs request and response.
- \* Developer/BA support to assist (at call)

### Process for establishing a 3<sup>rd</sup> Party application as an approved partner to the AdviceOS web services

- \* Request Approval to become a partner of Midwinter's API program
- \* Provide Midwinter with an Application Return URL
- \* Midwinter will provide a Source Application ID
- \* Midwinter will Provide a Source Application Secret Key
- \* Midwinter will provide an authorisation service (URL) for the Partner to use – (staging environment)
- \* After the testing has been successful (for the partner application) – Midwinter will provide access to the production environment (i.e. same URL without the ':1443' at the end).

Although Midwinter provides a public (open) API – it is required that every partner has a relationship with Midwinter before access will be granted (to the 3<sup>rd</sup> party application).

When developing a 3<sup>rd</sup> Party Application to consume AdviceOS web APIs – the following should be known/analysed first...



- ❄ Is the data required from the APIs, mastered in AdviceOS (or synchronised from 3<sup>rd</sup> party)?
- ❄ Will the 3<sup>rd</sup> party require identifiers (typically client identifiers) from 3<sup>rd</sup> party system to be persisted in AdviceOS – or will it adopt AdviceOS identifiers?
- ❄ User/adviser hierarchy – will the 3<sup>rd</sup> party system force each user in a business to authenticate or have one user authenticate and other users in the business use that certificate?

To view the JSON for Midwinter services refer to this document. You can also see the details in swagger document and test using Postman.

# Midwinter API - Swagger

The Midwinter Data Services 'App API' is a web services based API for integrating Midwinter's AdviceOS software with 3rd party data sources. Swagger documentation and functionality is integrated into the public API for rapid integration. The services are hosted on the Amazon Web Services platform (in Sydney region). Currently the API supports Request, Response and RESTful calls. Methods marked with ^ are in testing and those marked with ^^ have been tested successfully.

This API documentation provides all the technical specification of APIs, request parameters and body, response body in more details. It helps other developers to integrate these App APIs to other applications. The services are accessible via –

Production:

<https://adviceos.com.au/appapidocsui/index>

Staging:

<https://staging.adviceos.com.au/appapidocsui/index>

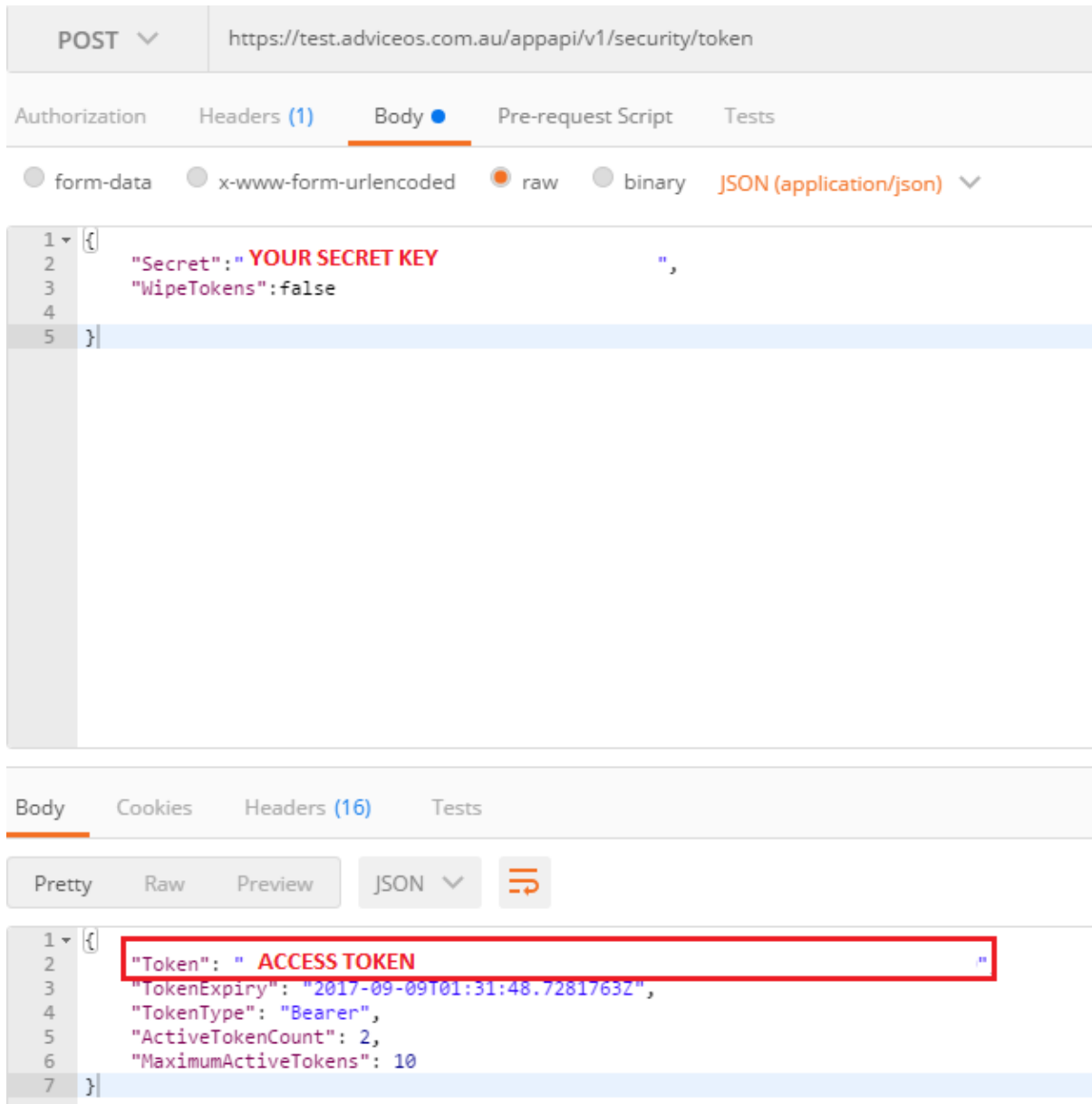
Test:

<https://test.adviceos.com.au/appapidocsui/index>

# Midwinter API - Test Postman

The google Postman is a great resource to initiate your integration work and to aid in testing.

To access App API in postman – please use the token that is received from security API response.



The screenshot shows a REST client interface. At the top, the method is set to **POST** and the URL is `https://test.adviceos.com.au/appapi/v1/security/token`. The **Body** tab is selected, and the content type is set to **JSON (application/json)**. The request body is a JSON object:

```
1 {  
2   "Secret": "YOUR SECRET KEY",  
3   "WipeTokens": false  
4 }  
5 }
```

Below the request, the **Body** tab is selected for the response. The response is also in JSON format. The **Token** field is highlighted with a red box:

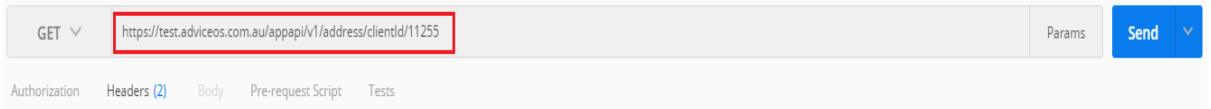
```
1 {  
2   "Token": "ACCESS TOKEN",  
3   "TokenExpiry": "2017-09-09T01:31:48.7281763Z",  
4   "TokenType": "Bearer",  
5   "ActiveTokenCount": 2,  
6   "MaximumActiveTokens": 10  
7 }
```

The tool provides authenticated access (via Oauth or Forms) to the staging environment and the production environment.

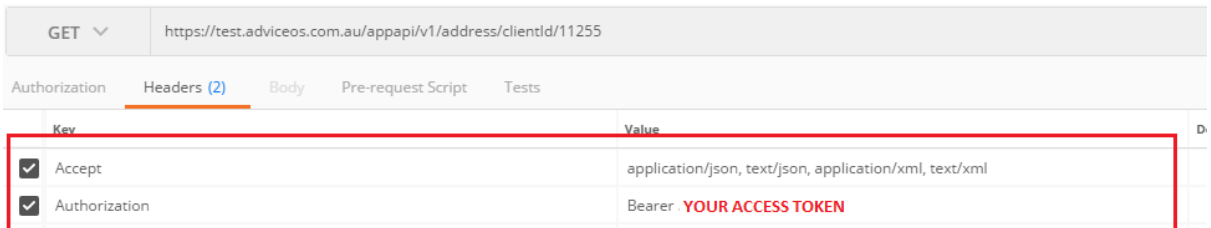
## Using the tool

Follow these steps to use the tool -

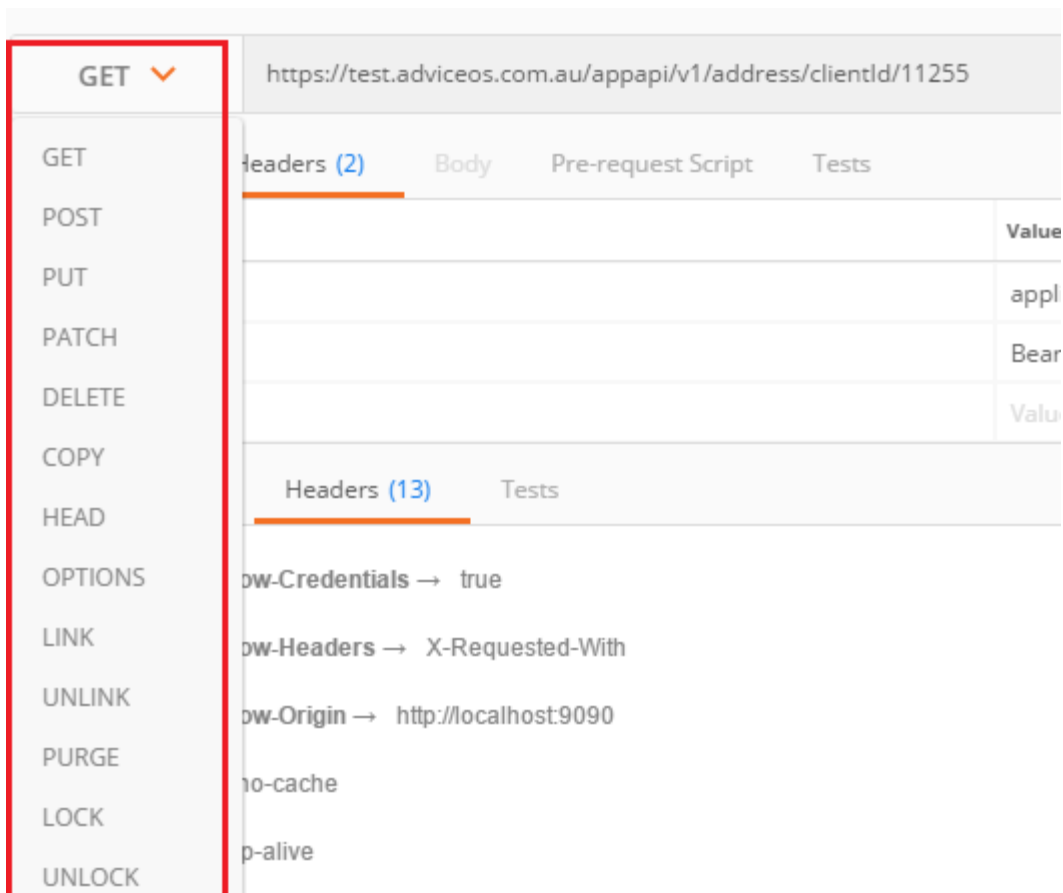
- \* Select the environment (Production – <https://adviceos.com.au>) or (Staging <https://staging.adviceos.com.au> )



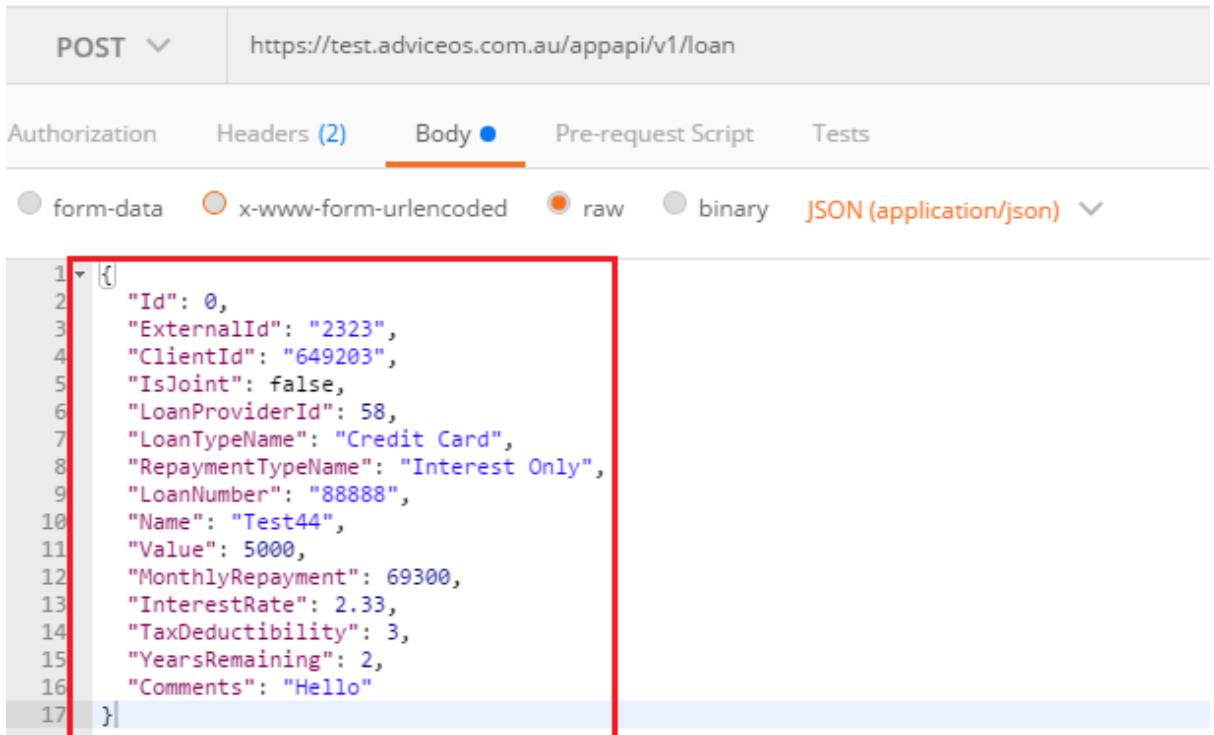
❄ Use authentication details in header for all API (using Token that mentioned above)



❄ Select the HTTP request type – refer to the CRUD services section for more info on each call



❄ If you are testing a post (i.e. create or update) – enter the JSON in request body of Postman.



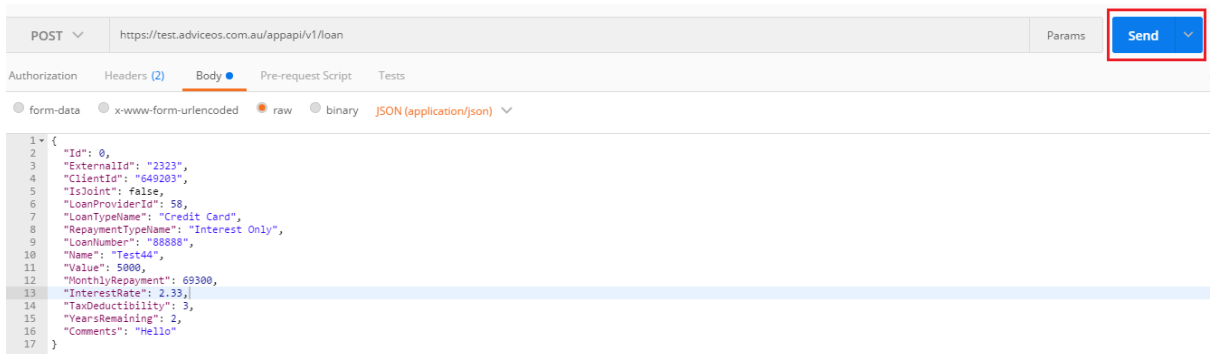
POST ▼ https://test.adviceos.com.au/appapi/v1/loan

Authorization Headers (2) **Body** ● Pre-request Script Tests

form-data  x-www-form-urlencoded  raw  binary **JSON (application/json)** ▼

```
1 {  
2   "Id": 0,  
3   "ExternalId": "2323",  
4   "ClientId": "649203",  
5   "IsJoint": false,  
6   "LoanProviderId": 58,  
7   "LoanTypeName": "Credit Card",  
8   "RepaymentTypeName": "Interest Only",  
9   "LoanNumber": "88888",  
10  "Name": "Test44",  
11  "Value": 5000,  
12  "MonthlyRepayment": 69300,  
13  "InterestRate": 2.33,  
14  "TaxDeductibility": 3,  
15  "YearsRemaining": 2,  
16  "Comments": "Hello"  
17 }
```

❄ Press the **Send** button to the right



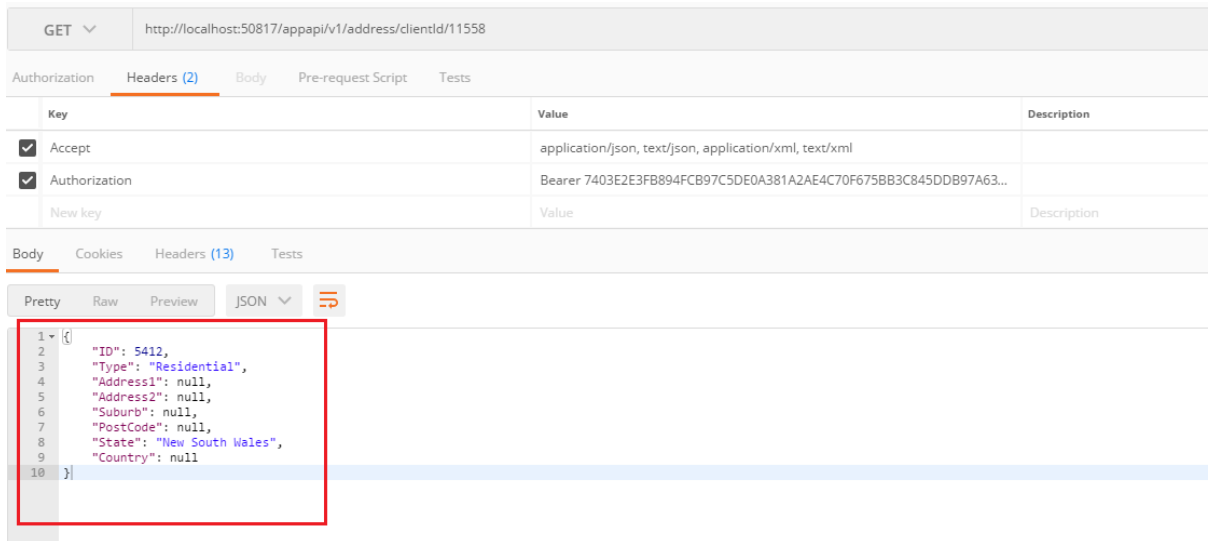
POST ▼ https://test.adviceos.com.au/appapi/v1/loan Params **Send** ▼

Authorization Headers (2) **Body** ● Pre-request Script Tests

form-data  x-www-form-urlencoded  raw  binary **JSON (application/json)** ▼

```
1 {  
2   "Id": 0,  
3   "ExternalId": "2323",  
4   "ClientId": "649203",  
5   "IsJoint": false,  
6   "LoanProviderId": 58,  
7   "LoanTypeName": "Credit Card",  
8   "RepaymentTypeName": "Interest Only",  
9   "LoanNumber": "88888",  
10  "Name": "Test44",  
11  "Value": 5000,  
12  "MonthlyRepayment": 69300,  
13  "InterestRate": 2.33,  
14  "TaxDeductibility": 3,  
15  "YearsRemaining": 2,  
16  "Comments": "Hello"  
17 }
```

❄ It will show the outcomes at the bottom section of postman called response body.



## Hints and tricks

The test App API is used internally for testing all our API services and response messages.

- ❄ If you are new ask for your SECRET key and then run security API to get the token. Then use that token for authorisation for all API in header that mentioned above.
- ❄ We will recommend using postman for API testing.
- ❄ To get started the best way to do it is to call a Get method.

## Final warning on testing in the staging environment

The data in the test environment is reset (back to the production state) every day. If you create clients or make any changes to data in this test environment – IT WILL BE LOST in the next day.

- ❄ This may cause some confusion around testing – so please be on the look at for it.
- ❄ if you have created or changed data in test environment today, and you go back in tomorrow to do a “GET” and the data is no longer there - it maybe because a production release has gone out overnight (which automatically resets the data in the test environment).

# AdviceOS APP APIs

The following are the list of API services available through the Midwinter APIs. Each service or resource can be consumed in different ways.

## Root URL :

Production URL: <https://adviceos.com.au>

Staging URL: <https://staging.adviceos.com.au>

## List of API services

### Address

#### GET by clientId

URL: {RootURL}/appapi/v1/address/clientId/{clientId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Address/AddressApi\\_GetByClientId](https://adviceos.com.au/appapidocsui/index#!/Address/AddressApi_GetByClientId)

#### GET by clientGroupId

URL: {RootURL}/appapi/v1/address/clientgroupId/{clientGroupId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Address/AddressApi\\_GetByClientGroupId](https://adviceos.com.au/appapidocsui/index#!/Address/AddressApi_GetByClientGroupId)

### CashFlow

#### GET by clientId and includeGroup

URL: {RootURL}/appapi/v1/address/clientgroupId/{clientGroupId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Address/AddressApi\\_GetByClientId](https://adviceos.com.au/appapidocsui/index#!/Address/AddressApi_GetByClientId)

#### POST

URL: {RootURL}/appapi/v1/cashFlow

Swagger: [https://adviceos.com.au/appapidocsui/index#!/CashFlow/CashFlowApi\\_Post](https://adviceos.com.au/appapidocsui/index#!/CashFlow/CashFlowApi_Post)

#### PUT by clientId

URL: {RootURL}/appapi/v1/cashFlow/ClientId/{clientId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/CashFlow/CashFlowApi\\_PutByld](https://adviceos.com.au/appapidocsui/index#!/CashFlow/CashFlowApi_PutByld)

### ClientEntity

#### GET by clientId

URL: {RootURL}/appapi/v1/clientEntity/ClientId/{clientId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientEntity/ClientEntityApi\\_GetByClientId](https://adviceos.com.au/appapidocsui/index#!/ClientEntity/ClientEntityApi_GetByClientId)

#### GET by clientGroupId

URL: {RootURL}/appapi/v1/clientEntity/clientGroupId/{clientGroupId}

Swagger:

[https://adviceos.com.au/appapidocsui/index#!/ClientEntity/ClientEntityApi\\_GetByClientGroupId](https://adviceos.com.au/appapidocsui/index#!/ClientEntity/ClientEntityApi_GetByClientGroupId)

#### POST

URL: {RootURL}/appapi/v1/clientEntity

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientEntity/ClientEntityApi\\_Post](https://adviceos.com.au/appapidocsui/index#!/ClientEntity/ClientEntityApi_Post)

#### PATCH by id

URL: {RootURL}/appapi/v1/clientEntity/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientEntity/ClientEntityApi\\_PatchById](https://adviceos.com.au/appapidocsui/index#!/ClientEntity/ClientEntityApi_PatchById)

#### PUT by id

URL: {RootURL}/appapi/v1/clientEntity/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientEntity/ClientEntityApi\\_PutById](https://adviceos.com.au/appapidocsui/index#!/ClientEntity/ClientEntityApi_PutById)

## ClientGroup

#### GET

URL: {RootURL}/appapi/v1/clientgroup

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi\\_GetClientGroup](https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi_GetClientGroup)

#### GET by clientId

URL: {RootURL}/appapi/v1/clientgroup/clientId/{clientId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi\\_FindByClientId](https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi_FindByClientId)

#### GET by clientGroupId

URL: {RootURL}/appapi/v1/clientgroup/clientGroupId/{clientGroupId}

Swagger:

[https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi\\_FindByClientGroupId](https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi_FindByClientGroupId)

#### POST

URL: {RootURL}/appapi/v1/clientgroup

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi\\_Post](https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi_Post)

#### PATCH by id

URL: {RootURL}/appapi/v1/clientgroup/{id}



Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi\\_PatchById](https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi_PatchById)

#### PUT by id

URL: {RootURL}/appapi/v1/clientgroup/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi\\_PutById](https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi_PutById)

#### PUT by clientGroupId

URL: {RootURL}/appapi/v1/clientgroup/SwapClient/{clientGroupId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi\\_SwapClient](https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi_SwapClient)

#### PUT by clientGroupId and newMaritalStatus

URL: {RootURL}/appapi/v1/clientgroup/splitClient/{clientGroupId}/{newMaritalStatus}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi\\_SplitClient](https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi_SplitClient)

#### DELETE by clientGroupId

URL: {RootURL}/appapi/v1/clientgroup/{clientGroupId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi\\_DeleteById](https://adviceos.com.au/appapidocsui/index#!/ClientGroup/ClientGroupApi_DeleteById)

## ClientInfo

#### GET

URL: {RootURL}/appapi/v1/clientinfo

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientInfo/ClientInfoApi\\_Get](https://adviceos.com.au/appapidocsui/index#!/ClientInfo/ClientInfoApi_Get)

#### GET by clientId

URL: {RootURL}/appapi/v1/clientinfo/clientId/{clientId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientInfo/ClientInfoApi\\_FindByClientId](https://adviceos.com.au/appapidocsui/index#!/ClientInfo/ClientInfoApi_FindByClientId)

#### GET by clientGroupId

URL: {RootURL}/appapi/v1/clientinfo/clientGroupId/{clientGroupId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientInfo/ClientInfoApi\\_GetByClientGroupId](https://adviceos.com.au/appapidocsui/index#!/ClientInfo/ClientInfoApi_GetByClientGroupId)

#### GET by adviserName

URL: {RootURL}/appapi/v1/clientinfo/adviserName/{adviserName}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientInfo/ClientInfoApi\\_GetByAdviserName](https://adviceos.com.au/appapidocsui/index#!/ClientInfo/ClientInfoApi_GetByAdviserName)

## ClientPerson

#### GET by clientId

URL: {RootURL}/appapi/v1/clientPerson/ClientId/{clientId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi\\_GetByClientId](https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi_GetByClientId)

#### GET by clientGroupId

URL: {RootURL}/appapi/v1/clientPerson/clientGroupId/{clientGroupId}

Swagger:

[https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi\\_GetByClientGroupId](https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi_GetByClientGroupId)

#### POST

URL: {RootURL}/appapi/v1/clientPerson

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi\\_Post](https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi_Post)

#### POST Join

URL: {RootURL}/appapi/v1/clientPerson/Join

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi\\_Join](https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi_Join)

#### PUT by clientId

URL: {RootURL}/appapi/v1/clientPerson/ClientId/{clientId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi\\_PutById](https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi_PutById)

#### PATCH by clientId

URL: {RootURL}/appapi/v1/clientPerson/ClientId/{clientId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi\\_PatchById](https://adviceos.com.au/appapidocsui/index#!/ClientPerson/ClientPersonApi_PatchById)

## File

#### GET by fileId

URL: {RootURL}/appapi/v1/file/{fileId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/File/FileApi\\_GetById](https://adviceos.com.au/appapidocsui/index#!/File/FileApi_GetById)

#### GET all by adviser/clientId/clientGroupId/folder

URL: {RootURL}/appapi/v1/file/GetAll/{adviser}/{clientId}/{clientGroupId}/{folder}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/File/FileApi\\_Get](https://adviceos.com.au/appapidocsui/index#!/File/FileApi_Get)

#### GET upload URL by fileName

URL: {RootURL}/appapi/v1/file/GetURL/{fileName}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/File/FileApi\\_GetURL](https://adviceos.com.au/appapidocsui/index#!/File/FileApi_GetURL)

#### POST – file upload

URL: {RootURL}/appapi/v1/file/FileUpload

Swagger: [https://adviceos.com.au/appapidocsui/index#!/File/FileApi\\_Post\\_0](https://adviceos.com.au/appapidocsui/index#!/File/FileApi_Post_0)

#### POST – file data

URL: {RootURL}/appapi/v1/file

Swagger: [https://adviceos.com.au/appapidocsui/index#!/File/FileApi\\_Post](https://adviceos.com.au/appapidocsui/index#!/File/FileApi_Post)

#### PUT by fileId

URL: {RootURL}/appapi/v1/file/{fileId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/File/FileApi\\_Put](https://adviceos.com.au/appapidocsui/index#!/File/FileApi_Put)

#### DELETE by fileId

URL: {RootURL}/appapi/v1/file/{fileId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/File/FileApi\\_DeleteById](https://adviceos.com.au/appapidocsui/index#!/File/FileApi_DeleteById)

## Holding

#### GET by id

URL: {RootURL}/appapi/v1/holding/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_FindById](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_FindById)

#### GET by externalId

URL: {RootURL}/appapi/v1/holding/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_FindByExternalId](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_FindByExternalId)

#### GET by accountNumber

URL: {RootURL}/appapi/v1/holding/accountNumber/{accountNumber}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_FindByAccountNumber](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_FindByAccountNumber)

#### GET by clientId

URL: {RootURL}/appapi/v1/holding/clientId/{clientId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_GetByClientId](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_GetByClientId)

#### GET by clientGroupId

URL: {RootURL}/appapi/v1/holding/clientgroupId/{clientGroupId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_GetByClientGroupId](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_GetByClientGroupId)

#### POST

URL: {RootURL}/appapi/v1/holding

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_Post](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_Post)

#### PUT by id

URL: {RootURL}/appapi/v1/holding/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_PutById](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_PutById)

#### PUT by externalId

URL: {RootURL}/appapi/v1/holding/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_PutByExternalId](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_PutByExternalId)

#### PATCH by id

URL: {RootURL}/appapi/v1/holding/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_PatchById](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_PatchById)

#### PATCH by externalId

URL: {RootURL}/appapi/v1/holding/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_PatchByExternalId](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_PatchByExternalId)

#### DELETE by id

URL: {RootURL}/appapi/v1/holding/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_DeleteById](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_DeleteById)

#### DELETE by externalId

URL: {RootURL}/appapi/v1/holding/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi\\_DeleteByExternalId](https://adviceos.com.au/appapidocsui/index#!/Holding/HoldingApi_DeleteByExternalId)

## Insurance

#### GET by id

URL: {RootURL}/appapi/v1/insurance/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_FindById](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_FindById)

#### GET by externalId

URL: {RootURL}/appapi/v1/insurance/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_FindByExternalId](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_FindByExternalId)

#### GET by policyNumber

URL: {RootURL}/appapi/v1/insurance/policyNumber/{policyNumber}

Swagger:

[https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_FindByPolicyNumber](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_FindByPolicyNumber)

#### GET by clientId

URL: {RootURL}/appapi/v1/insurance/clientId/{clientId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_GetByClientId](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_GetByClientId)

#### GET by clientGroupId

URL: {RootURL}/appapi/v1/insurance/clientGroupId/{clientGroupId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_GetByClientGroupId](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_GetByClientGroupId)

#### POST

URL: {RootURL}/appapi/v1/insurance

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_Post](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_Post)

#### PUT by id

URL: {RootURL}/appapi/v1/insurance/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_PutById](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_PutById)

#### PUT by externalId

URL: {RootURL}/appapi/v1/insurance/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_PutByExternalId](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_PutByExternalId)

#### PATCH by id

URL: {RootURL}/appapi/v1/insurance/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_PatchById](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_PatchById)

#### PATCH by externalId

URL: {RootURL}/appapi/v1/insurance/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_PatchByExternalId](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_PatchByExternalId)

#### DELETE by id

URL: {RootURL}/appapi/v1/insurance/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_DeleteById](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_DeleteById)

#### DELETE by externalId

URL: {RootURL}/appapi/v1/insurance/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_DeleteByExternalId](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_DeleteByExternalId)

## Loan

#### GET by id

URL: {RootURL}/appapi/v1/loan/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi\\_FindById](https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi_FindById)

#### GET by externalId

URL: {RootURL}/appapi/v1/loan/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi\\_FindByExternalId](https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi_FindByExternalId)

#### GET by loanNumber

URL: {RootURL}/appapi/v1/loan/loanNumber/{loanNumber}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi\\_FindByLoanNumber](https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi_FindByLoanNumber)

#### GET by clientId

URL: {RootURL}/appapi/v1/loan/clientId/{clientId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi\\_GetByClientId](https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi_GetByClientId)

#### GET by clientGroupId

URL: {RootURL}/appapi/v1/loan/clientgroupId/{clientGroupId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi\\_GetByClientGroupId](https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi_GetByClientGroupId)

#### POST

URL: {RootURL}/appapi/v1/loan

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi\\_Post](https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi_Post)

#### PUT by id

URL: {RootURL}/appapi/v1/loan/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi\\_PutById](https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi_PutById)

#### PUT by externalId

URL: {RootURL}/appapi/v1/loan/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi\\_PutByExternalId](https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi_PutByExternalId)

#### PATCH by id

URL: {RootURL}/appapi/v1/loan/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi\\_PatchById](https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi_PatchById)

#### PATCH by externalId

URL: {RootURL}/appapi/v1/insurance/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_PatchByExternalId](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_PatchByExternalId)

#### DELETE by id

URL: {RootURL}/appapi/v1/loan/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi\\_DeleteById](https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi_DeleteById)

#### DELETE by externalId

URL: {RootURL}/appapi/v1/loan/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi\\_DeleteByExternalId](https://adviceos.com.au/appapidocsui/index#!/Loan/LoanApi_DeleteByExternalId)

## PersonalAsset

### GET by id

URL: {RootURL}/appapi/v1/personalasset/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi\\_FindById](https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi_FindById)

### GET by externalId

URL: {RootURL}/appapi/v1/personalasset/externalId/{externalId}

Swagger:

[https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi\\_FindByExternalId](https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi_FindByExternalId)

### GET by clientId

URL: {RootURL}/appapi/v1/personalasset/clientId/{clientId}

Swagger:

[https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi\\_GetByClientId](https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi_GetByClientId)

### GET by clientGroupId

URL: {RootURL}/appapi/v1/personalasset/clientgroupId/{clientGroupId}

Swagger:

[https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi\\_GetByClientGroupId](https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi_GetByClientGroupId)

### POST

URL: {RootURL}/appapi/v1/personalasset

Swagger: [https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi\\_Post](https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi_Post)

### PUT by id

URL: {RootURL}/appapi/v1/personalasset/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi\\_PutById](https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi_PutById)

### PUT by externalId

URL: {RootURL}/appapi/v1/personalasset/externalId/{externalId}

Swagger:

[https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi\\_PutByExternalId](https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi_PutByExternalId)

### PATCH by id

URL: {RootURL}/appapi/v1/personalasset/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi\\_PatchById](https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi_PatchById)

### PATCH by externalId

URL: {RootURL}/appapi/v1/insurance/externalId/{externalId}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi\\_PatchByExternalId](https://adviceos.com.au/appapidocsui/index#!/Insurance/InsuranceApi_PatchByExternalId)

#### DELETE by id

URL: {RootURL}/appapi/v1/personalasset/{id}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi\\_DeleteById](https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi_DeleteById)

#### DELETE by externalId

URL: {RootURL}/appapi/v1/personalasset/externalId/{externalId}

Swagger:

[https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi\\_DeleteByExternalId](https://adviceos.com.au/appapidocsui/index#!/PersonalAsset/PersonalAssetApi_DeleteByExternalId)

## Security

#### POST

URL: {RootURL}/appapi/v1/security/token

Swagger: [https://adviceos.com.au/appapidocsui/index#!/Security/SecurityApi\\_Token](https://adviceos.com.au/appapidocsui/index#!/Security/SecurityApi_Token)

## UserAccount

#### GET by userName

URL: {RootURL}/appapi/v1/useraccount/userName/{userName}

Swagger: [https://adviceos.com.au/appapidocsui/index#!/UserAccount/UserAccount\\_GetByUserName](https://adviceos.com.au/appapidocsui/index#!/UserAccount/UserAccount_GetByUserName)

#### GET by crmUserName

URL: {RootURL}/appapi/v1/useraccount/crmUserName/{crmUserName}

Swagger:

[https://adviceos.com.au/appapidocsui/index#!/UserAccount/UserAccount\\_GetUserByCrmUserName](https://adviceos.com.au/appapidocsui/index#!/UserAccount/UserAccount_GetUserByCrmUserName)

#### GET by primaryOfficeName

URL: {RootURL}/appapi/v1/useraccount/primaryOffice/{primaryOfficeName}

Swagger:

[https://adviceos.com.au/appapidocsui/index#!/UserAccount/UserAccount\\_GetUsersByPrimaryOffice](https://adviceos.com.au/appapidocsui/index#!/UserAccount/UserAccount_GetUsersByPrimaryOffice)

#### POST

URL: {RootURL}/appapi/v1/useraccount/Get

Swagger: [https://adviceos.com.au/appapidocsui/index#!/UserAccount/UserAccount\\_GetAllUsers](https://adviceos.com.au/appapidocsui/index#!/UserAccount/UserAccount_GetAllUsers)



## HTTP status code summary

HTTP Code	Description
200 Ok	Everything worked as expected.
401 Unauthorized	Access token is invalid or expired.
400 Bad Request	Invalid data.
402 Not Found	No link record exists for externalId for this user.
403 Forbidden	Authentication was provided, but the authenticated user is not permitted to perform the requested operation.
500 Internal Server Error	Something wrong in API server.

## Error Result messages

If there was an error in executing services, the error description will be presented in response. The list below is the list of possible common errors in App API service.

Service Name/mehtod	Error Description	Cause
Common Errors		
Get(ID)	No link record exists for externalId { } for this user.	For Get(ID) calls the provided ID does not exist or user has not permission to access it.
Post(ID)	Entity to be updated from ID { } does not exist for this user.	For Post(ID) calls, there is no entity based on provided ID to be updated from XML or user has not permission to access it.

Delete(ID)	No Entity found for ID {}	For Delete(ID) calls, there is no entity based on provided ID or user has not permission to access it.
Put(ID)/Delete(ID)/Get(ID)	User doesn't have permission to access the client with ID .	The login user has no permission to the externalID that is provided.
Post/Put	{fieldname} data is not valid.	There are some master data fields are in payload which need to be match with Midwinter master data .The master data links are available in swagger model sample.