Realogy API Vendor Guide

Introduction

Document Purpose

This guide help the consumers of Realogy APIs to perform basic runtime testing of calling Realogy APIs using SOAP UI/Postman tool and basic walk through of the APIM Developer Portal.

Target Audience

This guide targets the Application Development team who are the consumers of the Realogy APIs.

Terms, Abbreviations & Definitions

Term/Abbreviation	Definition
CORS	Cross-Origin Resource Sharing
CRUD	Create, Read, Update and Delete
HTTP	Hypertext Transfer Protocol
JSON	JavaScript Object Notation
JWT	JSON Web Token
RFG	Realogy Franchise Group
REST	Representational State Transfer
SSL	Secure Sockets Layer

Supported Browsers

Chrome 72 and above IE 11 and above Firefox 68 and above Safari 12 and above

New to Realogy Developer Portal?

Please check our blog - <u>https://developers.realogy.com/blog/new-developer-portal-what-you-should-know</u>

Developing Applications Consuming Realogy APIs

Working with Developer Portal

To access the Realogy APIM Developer Portal, click https://developers.realogy.com/home and use **Sign Up** option to register as a new user (external to Realogy network) to the Developer portal.



Figure 1 - APIM Developer Portal - Home Page

REALOGY REAL ESTATE SERVICES		ΑΡΙ Ι	Products	Use Cases	How It Works	Support	Sign Up	Login
	Login	Create New Account	Reset Yo	ur Password				
	* First Name							
	* Last Name							
	* Username					Activate \ Go to Setting	Vindows 15 to activate W	/indows.

Figure 2 - New User Registration

In the **Create New Account** section, after filling the required details and other profile preferences, the user can log in using the **Login** option.

	API Products	Use Cases	How It Works	Support	Sign Up	Login
Login Create New A	ccount Reset	Your Password	1			
 Login by username or email addre user1@gmail.com 	288					
			Continue			



Once logged in to the portal, click on **API Products** to go through the list of available APIs and its associated products.

REALOGY REAL ESTATE SERVICES		API Products	Use Cases	How It Works	Support	Sign Up Login	
API Products	5						
Meet our API Products and ex documentation.	plore our			l	How It Works	View OAuth	
					((B)	

Figure 4 - Explore option - Catalog of all Products and APIs available

This will show the different APIs grouped under different products on the left pane.

Once an API is selected under the specific product, documentation for that API shows all the methods available under it which are grouped under entities. For example, Listings, Offices and many more. Once a specific method is selected by expanding the entity, the details of the method including the business rules and other documentation will be available on the main screen.

API Products

Meet our API Products and explore our documentation.

All			How It Works View OAuth
QSearch		, Bi	(B) (B) (B) (B) (B) (B) (B) (B) (B) (B)
Real Estate ^	Relocation Relocation	Franchise, Brokerage	Consumer Journey

Figure 5 - API grouping by products



Click the **Specification** tab to know the details of the APIs of that product.



Figure 7-Details of API methods grouped by a sample few entities shown here under Dash API

To access the APIs on a specific environment from an Application (App) or a test client in runtime, an App needs to be registered on the <u>Realogy Developers Portal</u> by the logged in user by selecting the appropriate product and the environment to which the APIs are associated.

To Create an App, Click icon on the Menu bar and Select **ADD APP** button.

	API Products	Use Cases	How It Works	Support	88	÷	€→
My Apps							
Suiteb Company							
DevTest_Com_Sept27_21_ST ADD APP							

Figure 8- My Apps

Enter the **User Name and Email** and then select the product that the APIs are associated with under a particular environment – starting with Sandbox environment.

	API Products	Use Cases	How It Works	Support	8	÷	€÷	
Get API Cre	edent	ails						
Request access and ge • All fields are mandatory unless in	et API creder	ntials by ad	ding an App.					
* User name User1								
* Email User1@gmail.com								



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- Select -

Provide your **Company/Group/Team** name and type the required **Prefix App Name** and then, click the **Request API Credentials** button.

* Product	
- Select -	-
* Environment	
SANDBOX	•]
* Company/Group/Team 🚯	
DevTest_Com_Sept27_21_ST	•
* Prefix App name	
	Request API Credentials

Figure 10- Request Access

Once the credentials are filled, the below popup message is displayed.



This consumer key needs to be sent as an API Key header in each request to the API from the Test client.

KEYS PRODUCTS D	ETAILS	₀Q [°] View Analytic
piKey	Okta	Key Issued
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	View Okta Details	Tue, 07/16/2019 - 07:06

The portal also has a **Tryit** functionality (Test client available in the portal) using which the API methods can be tested, which is explained below.

Request Response	×							
Security ~								
Bearer Token:								
(without 'Bearer')								
apiKey:								
<b>Note:</b> Your credentials will be saved until the browser session	e end of the							
Body >	8							
Target server:								
https:// .api.realogy.com/v1.0;	^							
POST /Submit	Send							

Figure 12 - Try IT

Try it feature is available at an API method level. It can call the API method on the sandbox environment right from the Portal

1. API Key to be set with consumer key value for the app registered in the developer portal.

2. {access_token} value next to Bearer tag to be retrieved using Oauth credentials for the app registered on the portal and use Postman/SOAP UI tool shown below.

#### Generate Access Token for Try It feature in the Portal

The Authorization header needs to be populated with **Bearer** {access_token} where the {access_token} must be generated either using postman or soap UI as given in the below sections.

## Access API using SOAP UI

Open SOAP UI (version 5.2.1 or above) and create a new **REST** Project and give the URL as https://{apiurl} (this URL will be communicated separately for each environment).

S So	apUI 5	2.1										-
<u>F</u> ile	Proje	ct S	Suite	Case	Step	<u>T</u> oo	ls <u>D</u> es	ktop <u>H</u> elp				
	*	SD:	1	RE*	+		Ð	Ģ	3	•	•	
Er	mpty	SOA	٨P	REST	Impo	ort	Save Al	Forum	Trial	Preferences	Proxy	
b.	==											
liga Ig	rojects											
S Soapl	JI 5.2.1									-		
<u>F</u> ile Pr	oject Suite	Case	Step	Tools Desk	top <u>H</u> elp							
Empty	SOAP	REST	Impor	t Save All	ىپ Forum	Trial	Preferences	©⊒ Proxy				Search Forum
Proje	cts REST Proje REST Proje REST Proje	ct1 ct2 ct2 ct3					S N Nev Crr URE	ew REST Project v REST Project tates a new REST Projec http://example.com/r	ct in this workspa resource/path/sea	ce arch?parameter=value OK Cancel Im	port WADL	

Once the URL is provided, enter the resource name that is being looked up and enter the query string parameters and then select the HTTP method type for the operation.

RI	Re	que	st 1							o ^r (	ď	×
	Method Endpoint					Resou	ırce	Parameters	- 72	1.7	<u> </u>	
	2	~	GET 🔻	https://{dashapiurl}		✓ /listin	ngs/residentialsales			1 Kall	τ (	9
tect	+	×		× ^		0	\$ TW					
Reg			Name	Value	Style	Level						
194												
â							UL I					
							É					
							NUL					

Now, add a header with the name **API Key**. The value for this header will be the consumer key which was generated during the app creation. This key will be used to authenticate the user.

To generate a new access token set OAuth 2.0 flow and scope can be seen in the **Specifications** page under **Prerequisites** section.



## Non-prod Access Token URL

https://realogy.oktapreview.com/oauth2/ausdtpyw647fbrcPi0h7/v1/token

If the request for access token is valid, then the Authorization server will generate access_token. This is the access token {access_token} to be used in Try IT section.

Optionally, to test the final method from this Test client, Click **Send** to access the final method using SOAP UI.

RE ST	Request 1				
	Method	Endpoint			Resource
Ľ.,	POST	https://{apiuri}			/resource
uest	+ 🗙 🖷 🖸			0	N IV
Req	Name	Value	Style	Level	
5					
Rav					
	~~				비   도
	Required:	Sets if parameter is rec	quired	<b>^</b>	Raw
	Type			<b>_</b>	

## Access API using PostMan Tool

Open Postman and add a new Tab. Select the HTTP method type, URL with the API base URL and the resource names (the API base URL will be provided separately for each environment).

New Tab	+					No Environr	ment	$\sim$	′ ©	\$
Get $\vee$	Enter request URL					Params	Send	~	Save	~
Authorization	Headers Body	Pre-request Script	Tests					(	Cookies	Code
Туре		No Auth	~							
Response										

Click on **Params** to enter the query string parameters required for the API. Also, add a header by selecting the Headers link. The header should be with the name **API Key**. The value for this header will be the consumer key which was generated during the app creation. This key will be used to authenticate the user.

Set Authorization Type to OAuth 2.0 and get new access token using specific grant type as shown below.

If request for access token is valid, then Authorization server will generate access_token that will automatically add to the request as Authorization header containing the Bearer token. This is the access token {access token} to be used in Try IT section.



#### Non-prod access token URL

#### https://realogy.oktapreview.com/oauth2/ausdtpyw647fbrcPi0h7/v1/token

Optionally, to test the final method from this Test client, click **Send** to call the final method with the access token in Postman.

GET	Т	Ŧ	https://	′api.realogy.com/v	1.0/dash/b	atches/10055			Send	•	Save	*
Para	ims	Author	ization	Headers (8)	Body	Pre-request Script	Tests 🛛		Cookies	Code	Comme	nts (0)
	Header	rs (1)										
	KEY				VALUE			DESCRIPTION	Bu	ılk Edit	Preset	s 🔻
$\checkmark$	apike	:y										

## Register Access from the App to Successive Environments

To request access for subsequent environments beyond sandbox one after the other, use the **Add App** option and choose the corresponding product under the respective environment for which the app needs to be registered. For example, after testing the calls to Realogy APIs on

the sandbox environment, request the access to the corresponding product under trial environment as shown below.

	API Products	Use Cases	How It Works	Support	•	€→
* Product - Select -			•	]		
* Environment			•	]		
SANDBOX TRIAL STAGING PRODUCTION				ĺ		
* Prefix App name 🕐				1		

# Invite a Company Developer

Company admin can send an invite to the company developer to create/manage its apps. Login with the registered company admin user and navigate to **My Companies/Teams** page.

€ RE/		API Products Use Cases How It Works	Support   🔡 🚢 [→
Му Аррз			
Get API Credentials			
Manage Company/Team			
Publish API Swagger - Specifications	My Apps	Get Api Credentials	Manage Companies/Teams
Communicate with your consumers	View your existing API Credentalis by APP. APP will provide you with API Key and Okta	Get API Credentails for API products by adding an APP. App will provide you apikey and okta	You can share API credentials with your team members using this, create company/team and
App Report	Credentiais to access API Product.	credentials to access API product.	manage users for a specific company/team.
Company Report	View Credentials	Add App	My Companies/Teams

Click on the Company under which you want to send the invite to a developer.

REALOGY

API Products Use Cases How It Works Support □ 문 🕹 [→

My Companies/Teams CREATE COMPANY/TEAM Below is a list of companies/teams owned by / associated with you. Search Company/Team*-Company/Team Role(s) Status Action(s) uat-test-mindtree77 Active LEAVE DevTest_Companysept Active LEAVE VWAHFDVDVP Active LEAVE 8ptoelg54 Active I FAVE

Enter developer's email and send the invite. Developer will receive an email with an invitation link. By clicking the link, the user will be prompted to either Accept or Reject the invitation.



## Company Developer Accept/Reject the Company Invitation

When the Developer click the invite link, it navigates to the below screen.

		API Products	Use Cases
	Login Create N	aw Account Reset Your Password	1
	First Name     Last Name     E-mail address     Username		
	Company Name     Industry     - Select a value -     Country     - Select a value -		The second secon
		ie and I have read the Privacy Policy	Account
My Companies/Teams		CREATE COMPAN	NY/TEAM
Below is a list of companies/teams owned by / associated v	vith you.		
Search Company/Team*			

On accepting the invitation, developer get registered added to the company (after email verification by the developer for their login and setting a valid password). Once successful registration under the company, the features of Exploring, Registering an app for the access to APIs can be done by the developer.