

# **Overview**

- API keys are used to authenticate requests to the Resolver Core API without entering user credentials.
- API keys never expire, with no need to establish or maintain a session.
- API keys are tied to the user's org account. This means that if a user doesn't have permission to perform an action in Core, they won't be able to do it through the API.
- Only admins and super admins can create API keys. Admins can only create keys for orgs on which they're an admin.
- For security purposes, API keys are not stored. If you misplace the key, it cannot be retrieved and must be regenerated.
- It's possible to create API keys to impersonate other users; however, only super admins can enable this feature. See the **Impersonation** section of Use an API Key article for more information.
- Only active users of the same org as the API key user can be impersonated.
- Any call can be made using an API key while impersonating another user; however, only three endpoints in the Swagger user interface support this:
  - **POST** /data/file/file in the **file** resource;
  - **POST** /data/object/{objectID}/file/{fileID} in the **object** resource; and
  - **POST** /creation/import/json in the **dataImport** resource.



ile			Show/Hide List Operations Expand Operat
POST /creation/i	mport/finishUpload		Finishes uploading the data for an import, processing the o
POST /data/file			Add a file reference to the files t
POST /data/file/c	crop	Post file and crop in	nformation to the files service and add reference to the files t
POST /data/file/f	île		Post a file to the files service and add reference to the files t
Response Class (St OK Model Example Val	atus 200)		
<pre>{    "id": 0,    "displayFileName    "fileType": "str    "contentType": "    "fileUUID": "str    "fileUrl": "stri }</pre>	e": "string", ring", "string", ring", ing"		
Response Content Ty	ype application/json 🔻		
Parameter Val	lue	Description	Parameter Type Data Type
x-api-key			header string
impersonate- user-id			header double
file C	Choose File No file chosen		formData file
Try it out!			

The file endpoint.

# Impersonation

API keys can be used to authenticate requests in Core while impersonating another user; however, note the following:

- Impersonation can only be enabled by a member of Resolver Support at the time the key was created. Should you wish to enable impersonation, contact Resolver Support to create a new API key.
- Any user can be impersonated, provided you've obtained their user ID and the user is active in the org the API key was created for.
- Actions performed while impersonating using an API key are captured in the audit trail as " [API User's Name] impersonating [Impersonated User's Name]".
- If a user is impersonated using an external system (integration), the **Modified By** property on an object will show "[API User's Name]", but would still be captured in the audit trail as " [API User's Name] impersonating [Impersonated User's Name]".

To impersonate a user with an API key, open a supported endpoint in Swagger, enter the API key in the **x-api-key** field and the ID of the user to be impersonated in the **impersonate-userid** field. The user ID can be obtained from the address bar of your browser after navigating to the **Edit User** page for the user (e.g., 1732).

# Resolver

Resolver	× +						-		×
← → C ☆ ■	/	/#/admin/u	sers/ <b>1732</b> /edit			\$			:
RESOLVER			⊕ ( <b>Q</b>		000		ଡ଼	?	Ω
People	~	Users	User Groups	Roles					
Admin: Edit User: A User Profile First Name	pi Test	Name		Account Sta	<b>tus</b> nabled	Ad	min		
Api	Tes	t		All Acc	ess				
Email				Language					
				English (Unite	d States)				~
								DON	IE

The Edit User page. The user ID is displayed in the address bar.

# **Create an API Key**

# **Overview**

API keys are used to authenticate requests to the Resolver API without entering user credentials.

# **User Account Requirements**

The user must have Administrator permissions to access the **Admin Overview** screen.

# **Related Information/Setup**

Please refer to the API Key Overview article for more information on using API keys in Resolver.

# **Navigation**

1. From the *Home* screen, click the **Administration** icon.



Home	✓ My Tasks	⊕ (Q Search		•••	\$ ® 2
	My Tasks	\$ SORT Q	SEARCH		

#### Administration Icon

2. From the **Administrator Settings** menu, click **User Management**.

		Q Search		•••	0	2
Home	✓ My Tasks				Admin Overview	
					Settings	
	My Tasks	\$ S	SORT Q SEARCH		🍰 User Management	
					Panding	
					▲ 2 Languages	

Administrator Settings Menu

3. Click the **Create User** button.

	$\odot$	Q Search		)	\$ ® \$			
Settings	V User Management Branding	Languages						
	User Management			🛓 EXPORT AS CSV 🛛 + CREATE USER				
	Q. Search							
	1000 Licensed Users   2 Enabled   0 Inactive 🔞	Active/inactive users	User permissions	User groups				
		Select filters ~	Select filters ~	Select filters ~				
	Lindsey Lo lindsey.Jo@email.com Last login: Never			IMPERSONATE				
	Portal Test User portaltest@fun.com Last login: Never		PORTA	URL ACCESS IMPERSONATE				



# **Creating an API Key**

For added security, it's recommended that the **Admin** setting is not enabled for API users unless Administrator privileges are needed to complete the required API calls.



- 1. Follow the steps to create a new user.
- 2. From the *Edit User* page, record the account's internal ID from the address bar of your browser (e.g., 247595).

← C (: /#/admin/settings/use	Managemen <mark>t</mark> 247595, <mark>e</mark> dit	A* \$2	
	€ Q Search		\$ 3 \$
Settings v User Management Brand	ng Languages		
User Management:Edit User:Lindse	y Lo		
User Profile		Account Status	
* First Name	* Last Name	Enable User Access	JRL Access 😏
Lindsey	Lo	Admin All Data	Access
* Email		RESET MFA FOR THIS USER	
lindsey.lo@email.com			
		Language English (United States)	~
User Memberships			
User Groups Roles		Advanced Permissions	
Select which User Group(s) this user is a member of		User Management 0	
Select one	✓ + ADD	Create, manage, and assign users	
No usor a	roune added		
No user g	roups added		

Account Internal ID

3. From the *Home* screen, click the **Administration** icon.

		⊕ (Q Search			••• • • • • • • • • • • • • • • • • • •			2 2	
Home	~	My Tasks							
	My Ta	sks	\$ SORT	Q, SEARCH					

Administration Icon

4. From the Administrator Settings menu, click Admin Overview.



		Q Search		 0	2
Home	V My Tasks			Admin Overview	
				Settings	
	My Tasks	\$ SORT Q SEAL	RCH	20 User Management	
				<b>Q</b> Branding	
				Languages	

Administrator Settings Menu

5. From the *Admin Overview* screen, click the **Swagger Docs** tile in the **Tools** section.

		€ Q Search		\$ 0 £
Admin Overview ~				
	Data Access		Application Management	
	User Groups Roles	E	Org Manager Applications	
	Tools		Communications	
	Swagger Docs	port Data Audit Trail	Construction of the second sec	
	User Audit Trail	rdit Export Image Upload	Portal URL Settings	
	Document Management		Custom Login Statement Settings	

Swagger Docs Tile

 From the *Admin: Help* screen, enter the keyword **user** in the search text box, then click the **User** topic from the results.

			+	Q Search		•••		\$ 2			
Tools	~	Swagger Docs	Data Import	Data Management Audit Trail	User Management Audit Trail	Data Audit Archive Export	Image Upload				
	Admi	n : Help									
	Swagger API Documentation										
	Swagger	provides documenta	tion for the various	API services available.							
	use	d									
	us	er					~				



7. Click the **GET** /user/users/me (who am I?) endpoint to open the parameters.



				⊕ Q Search		••	•			© ©
Tools	~	Swagger Docs	Data Import	Data Management Audit Trail	User Management Audit Trail	Data Audit Archive Export	Image Upload	Document	Management	
		user						^		
		GET	/user/users	retrieve a set of users by id				$\sim$		
		POST	/user/users	add a new user				$\sim$		
		GET	/user/users	AddedToRole Retrieve users	that have been added to the given ro	ie		$\sim$		
		GET	GET /User/users/admins/{orgId} Allow super admin to retrieve admin users of an org and non admin with advanced permissions					$\sim$		
		DELETE	/user/users	/deleteFromAllOrgs/{em	nail} Deletes a user, by email, from orgids the user was removed	n every org, whether they are active I from.	or inactive. Returns I	a list of 🗸		
		POST	/user/users	/enail load User By Email with	out org			$\sim$		
		POST	/user/users	/email/confirmChange	Confirm an email change using a toker	provided in the confirmation email.		$\sim$		
		POST	/user/users	/email/resendChangeCor	firmation Resend an email ch	ange confirmation link to a user		$\sim$		
		GET	/user/users	/enail/{enail} CheckHus	ers exists by email address.			$\sim$		
		POST	/user/users	/insert/{orgId} Allow aut	horized Support Resovierites (superar	imins) to add themselves to custom	er orgs	$\sim$		
		GET	/user/users	/me who am i?				~		

API Endpoint

### 8. Click the **Execute** button.

			ළ ා වං				
Tools	Swagger Docs Data Import Data Management Audit Trail User Management Audit Trail Data Audit Archive Export	Image Upload ***					
	GET /user/users/me who am i?	^					
	Parameters	Cancel					
	No parameters						

Execute Button

9. Record or copy the **id** number to your clipboard from the **currentOrg** section. This is the current org's internal ID.



CurrentORG ID Value

10. Enter the keyword **org** in the search text box, then click the **Org** topic from the results.



Swagger Docs     Swagger Docs     Swagger Docs     Swagger prov	Data Import Help API Document	Data Management Audit Trail	User Management Audit Trail	Data Audit Archive Export	Image Upload	Document Manageme	ent	
Admin: Swagger Swagger prov	Help API Document	ation						
Swagger prov	API Document	ation						
Swagger prov								
	ides documentation to	r the various API services available	э.					
org								
org						~		
orgir	nportExport					~		
orgN	anagement/	Audit				~		
orgN	anagement	Data				~		
orgN	anagement	Object				~		
orgN	anagementl	Jser				~		
	org orgin orgM orgM orgM	org orgInportExport orgManagement/ orgManagement( orgManagement(	org orgImportExport orgManagementAudit orgManagementData orgManagementObject orgManagementUser	org orgImportExport orgManagementAudit orgManagementData orgManagementUser	org orgImportExport orgManagementAudit orgManagementData orgManagementUser	org orgImportExport orgManagementAudit orgManagementData orgManagementUser	org     ✓       orgImportExport     ✓       orgManagementAudit     ✓       orgManagementData     ✓       orgManagementUser     ✓	org     ~       orgImportExport     ~       orgManagementAudit     ~       orgManagementData     ~       orgManagementUser     ~

Org API Topic

# 11. Click the **GET /user/org/{orgld}/user/{userId} (load a user org**

	④ (Q Search	愈 ② 益
Tools	V Swagger Docs Data Import Data Management Audit Trail User Management Audit Trail Data Audit Archive Export Image Upload	
	GET /user/org/retrieveOrgsToBeDeleted retrieves orgs to be defeted	
	POST /user/org/uploadLogo Upload a new logo for the current org	
	GET /user/org/{id} load an org	
	DELETE /user/org/{orgId} delete an org	
	PUT /user/org/{orgId} update an org	
	POST /user/org/{orgId}/email/user/{email} add a user to an org by email address	
	POST /user/org/{orgId}/enableBiConnector enable or distable BI Connector for an org	
	DELETE /user/org/{orgId}/user/{userId} remove a user from an org	
	GET /user/org/{orgId}/user/{userId} toad a user org membership	
	POST /user/org/{orgId}/user/{userId} add a user to an org	
	PUT /user/org/{orgId}/user/{userId}/acknowledge PUT acknowledge	

membership) endpoint to open the parameters.

API Endpoint

12. Enter the Org ID number copied during step 9 in the **orgId** field.

			\$ ® \$
Tools	Swagger Docs Data Import Data Management Audit Trail User Management Audit Trail Data Audit Archive Export	Image Upload	
	GET /user/orgId}/user/{userId} load a user org membership	~ 🖻	
	Parameters	Cancel	
	Name Description		
	orgid * meand integer (path)		
	userid * repired integer (path)		
	Execute		

OrgID Field

13. Enter the user ID, copied during step 2 from the *Edit User* page, in the **userId** field.



			(+)	Q Search		)		3	?	) 8
Tools	~	Swagger Docs	Data Import	Data Management Audit Trail	User Management Audit Trail	Data Audit Archive Export	Image Upload			
		GET /user/	org/{orgId}/us	er/{userId} load a user org m	embership		~ 🖻			
	Pa	rameters				(	Cancel			
	Na	me De	escription							
	or in (p	teger ath)	orgld							
	us in (p	serid * required teger ath)	userld							
				Exi	cute					

UserID Field

14. Click the **Execute** button.

				€ Q Search			)		\$ ? <u>2</u>
Tools	~	Swagger Docs	Data Import	Data Management Audit Trail	User Management Audit Trail	Data Audit Archive Export	Image Upload	Document Management	
		GET	/user/org/	[orgId}/user/{userId} los	ad a user org membership			^	
		Paramet	ers				Canc	el	
		Name	Descriptio	m					
		orgid * integer (path)	required 4947						
		userid integer (path)	required 247595						
					Execute				

Execute Button

15. From the **Response Body**, record or copy the **id** number to your clipboard. This is the user's org membership ID number.

			€ Q Search		•••	)		\$ @ L
Tools ~	Swagger Docs	Data Import	Data Management Audit Trail	User Management Audit Trail	Data Audit Archive Export	Image Upload	Document Management	
Tools ~	Swager Docs Server resp Code 200	Data import onse Details  Response body  "id": 15118 "identification": "reason": additionEnail "al.Uacess" "created": "delted": "orglastLodeFro "created": "delted": "delted": "reglastLodeFro	Data Management Audit Trail "idd"; i03, 07, 103, 103, 104,	User Management Audit Trail : 1511803, ', 2 <sup>*</sup> ,	Data Audit Archive Export	Image Upload	Document Management	
		"expiryDate "mfaOptOut" "sentWelcom "hasAdvance	": null, ": false, meEmail": null, edPermissions": false,			Downlo	ad	

ID Value

16. Enter the keyword **apiKey** in the search text box, then click the **apiKey** topic from the results.

				G Search		•••	)		\$ ? L
Tools	~	Swagger Docs	Data Import	Data Management Audit Trail	User Management Audit Trail	Data Audit Archive Export	Image Upload	Document Management	
		Admin: H	lelp						
		Swagger A	.PI Document	ation					
		Swagger provide	es documentation fo	r the various API services available					
		api							
		apiKe	/					~	



APIKey Topic

17. Click the **POST /user/apiKey (create an api key)** endpoint to open the parameters.

			⊕ Q Search		••	•		\$ O 2
Tools ~	Swagger	Docs Data Import	Data Management Audit Trail	User Management Audit Trail	Data Audit Archive Export	Image Upload	Document Management	
	Adm	n:Help						
	Swag	ger API Docume	ntation					
	Swagge	r provides documentation	for the various API services availab	le.				
	api							
	ap	oiKey					^	
		OST /user/api	Key create an api key				$\sim$	
		GET /user/api	Key/user/{userId} retrieve a	in api key by userid			~	
	D	LETE /user/api	Key/{id} delete an api key				~	
		GET /user/api	Key/{id} retrieve an api key by id				~	

API Endpoint

18. In the **Parameters** section, click the **Click to Populate Example** box to populate the template in the **body** text box.

				G Search		•••	)			\$ @ L
Tools	~	Swagger Docs	Data Import	Data Management Audit Trail	User Management Audit Trail	Data Audit Archive Export	Image Upload	Document	Management	
		apiKey	,					^		
		POST	/user/apiKe	y create an api key				^		
		Paramete	rs				Can	cel		
		Name	Description							
		body object	Edit Value   Mode	4						
		(body)	{ "orgUserId "name": "s "canImpers }	": 0, tring", onate": false						
			Click to Populate	Example						
			{ "orgUser: "name": ' "canImper }	Id": 0, 'string", rsonate": false						
			Cancel							

Click to Populate Example Box

 In the **body** text box, delete the **0** in the **orgUserId** attribute, then enter the user's org membership ID number, obtained in step 15. Enter a descriptive name for the API key in the **name** attribute.



				€ Q Search					0	0 2
Tools	~	Swagger Docs	Data Import	Data Management Audit Trail	User Management Audit Trail	Data Audit Archive Export	Image Upload	Document Manaj	gement	
		apiKey						^		
		POST	/user/apiKe	ey create an api key				^		
		Paramete	rs				Cano	el		
		Name	Description					_		
		body object	Edit Value   Mod	H				_		
		(1009)	{     "orgUserIc     "name": "1     "canImpers }	": 1511803, "est", conate": false						
			Click to Populate	• Example						
			{ "orgUser "name": "canImpe	Id": 0, "string", rsonate": false						
			Cancel							

Body Text Box

#### 20. Click the **Execute** button.

		G Search					\$ @ L
Tools ~	Swagger Docs	Data Import Data Management Audit Trail	User Management Audit Trail	Data Audit Archive Export	Image Upload	Document Management	
	Name body øbject (body)	Description Edit Value   Model					
						_	
			Execute				



21. Copy the **apiKey** from the **Response Body** and store it for safekeeping. For security purposes, once an API key is generated, it cannot be retrieved. If you misplace an API key, a new key must be generated.

### **Delete an API Key**

### To delete an API key:

- 1. Log in as an admin and select the appropriate org, if required.
- 2. Click the  $\bigcirc$  icon in the top bar > Swagger Docs in the Tools section.
- 3. Click any resource to open the Swagger interface in a new tab.
- 4. Click the **apiKey** service to display its endpoints.
- 5. Click GET /user/apiKey/{id} (retrieve an api key by id) to expand it.



apiKey	Show/Hide   List Operations   Expand Operations
Post /user/apiKey	create an api key
GET /user/apiKey/user/{userId}	retrieve an api key by userId
DELETE /user/apiKey/{id}	delete an api key
GET /USET/apiKey/{id}	retrieve an api key by id

- The apiKey service.
- Enter the user ID of the account the API key was created under in the id field. The user ID can be obtained from the address bar of your browser after navigating to the Edit

**User** page for the user.

GET	/user/ap	iKey/{id}			retrieve an api key by id
Respo OK Model	nse Class ( Example \	Status 200) /alue			
{ "ic "or "na "cr }	d": 0, rgUserId": ( ame": "strin reate": "20)	), 1g", 10-03-13"			
Respor Param	nse Content neters	Type application/json <b>v</b>			
Param	eter V	alue	Description	Parameter Type	Data Type
id	l	732		path	integer
Try it	out!				

The GET /user/apiKey/{id} (retrieve an api key by id) endpoint.

- 7. Click Try it out!
- 8. Copy the **id** from the **Response Body** to your clipboard. This is the internal ID for the API key.

Response Body		
{		
"data": [		
{ "id": 130, "orgUserId": 93768,		
"name": "API Token",		
<pre>"accessKey": "4Bmw0qSsANIrPIrrgJRh",</pre>		
"canImpersonate": false,		
"created": "2020-02-20T21:33:07.303Z"		
}		
]		
}		

The id in the Response Body.

- 9. Click DELETE /user/apiKey/{id} (delete an api key) to expand it.
- 10. Paste the internal API key ID obtained from step 8 above in the id field.



DELETE /USER/	/apiKey/{id}			delete an api			
Parameters							
Parameter	Value	Description	Parameter Type	Data Type			
id	130		path	integer			
Response Messages							
HTTP Status Co	de Reason	Response Model		Headers			
204	Delete success						
Try it out!							

The DELETE /user/apiKey/{id} (delete an api key) endpoint.

11. Click **Try it out!** to delete the API key.

# **IP Token Validation**

IP token validation protects the Core API (Swagger) from unauthorized users and can be used in conjunction with IP authorization to manage organizational access. The token validation process accomplishes this by periodically validating the IP associated with the token. If there is any change to the IP during the session, the user will be logged out and asked to log in again.

IP token validation can be used with one of the following options:

- **off:** No IP token validation is performed for any authentication requests. This is the default setting for IP token validation.
- on: IP token validation is performed for all SSO and basic API access requests.

The above options can be enabled and disabled by Resolver Support. See the IP Authorization Logins article for login functionality when this feature is enabled.

# **Make Calls**

### To use an API key in the Swagger interface:

- 1. Log in as an admin and select the appropriate org, if required.
- 2. Navigate to **Admin > Swagger Docs**.
- 3. Click the resource from the list to open the Swagger interface in a new tab.
- 4. Expand a supported endpoint.
- 5. Enter the API key in the **x-api-key** field to authenticate the call.
- Optional: If impersonation is enabled, enter the ID of the user who will be impersonated. Impersonation can only be enabled by a member of Resolver Support. See Impersonation with an API Key for more details.

# Resolver.

5	~	Swagger Docs	Data Import	Logo Upload	Data Management Aud	iit Iraii		
POST /d	ata/file/file	Post a file to the file	s service and add re	eference to the files ta	ble			
Parameters						(	Cancel	
Name	Description			_				
X-api-key string (header)	x-api-key							
impersonate- user-id number (header)	impersonate-us	er-id						
file * required file (formData)	Choose File	No file chosen						

### The POST /data/file/file endpoint in the **file** service

7. Complete the remainder of the fields as required.

### Example

curl -X POSTheader 'Content-Type: multipart/form-da	ta'header 'Accept: application/json'header 'x-api-key: YOUR_
۹ <u>]</u>	<u> </u>