

Manual Webservices in ZooEasy Online

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Version history

Date	Version	Changes
January 2021	1.00	Initial version

1. Introduction

With a web service, it is possible to consult the data from ZooEasy Online on external websites. For this purpose, 3 web services are available:

- 1. Animal-Detail
- 2. Contact-Detail
- 3. Contact-Animal List

This manual explains how to invoke the web service. To be able to test the webservice with your own administration, you will first need to purchase the webservice through our <u>webshop</u> after which you will receive an API key that gives you access.

2. Webservice invocation

The invocation of the web services is as follows:

https://<end-point>.zooeasyonline.com/api/1/<API-Key>/<command>?<identifier>=<value>

The following sections indicate the variables for each web service:

2.1 Webservice Animal-Detail

Variable	Value
<command/>	retrieveAnimal
<identifier></identifier>	?reg
<value></value>	{Animal.RegistrationNumber}

This request returns in the response message the animal related information, based on the animal's registration number.

2.2 Webservice Contact-Detail

Variable	Value
<command/>	retrieveContact
<identifier></identifier>	?number
<value></value>	{ContactNumber}

This request returns in the reply message the contact's related information, based on the contact's number.

Note: It is the responsibility of the customer to display the retrieved and shown information in accordance with the applicable guidelines (GDPR, etc.). The data stored within the secure environment of ZooEasy Online is the property of the customer. Retrieval from the database and display on an external website falls under the responsibility of the customer.

2.3 Webservice Contact-Animal List

Variable	Value
<command/>	retrieveContactAnimals
<identifier></identifier>	?number
<value></value>	{ContactNumber}

This request returns in the response message animal related information of animals of which the contact is the owner, based on the number of the contact. By default the response message contains a maximum of 10 records per page.

The following parameters are available in addition to the standard request url (without the quotes and at the end of the url):

- The pagination can be disabled by adding '&pagination=0'. All found records will then be returned in 1 response message.
- It is possible to define a custom number of records x per page, by adding '&per_page={x}'. Of course {x} must be a number greater than 0.
- If pagination is used, each page can be called with '&Page=n' where 'n' is the required page number.

3. Points of attention

3.1 Available endpoints

Available <end-points> are:

- accept-services Acceptation environment
- services Production environment

It is thus possible to first test the operation on a test environment (=Acceptance environment) and to take it into use on a Production environment thereafter.

3.2 Use of test environment

We have developed a webpage with which you can see how the web services work, for this purpose a link has been made with a anonymized administration using a default API Key to test it. For this you do not need to buy the webservice first.

The link to this 'swagger' environment is: <u>https://svn.zooeasyonline.com/swagger/index.html</u>. Clicking on this link will open the following page in the web browser:

ZooEasy Web Service APIs (100) [Base URL: accept-services.zooeasyonline.com/api/1/{api_key}]

On this screen all required specifications are present with which, by using a valid API-key, you can refrieve data from your administration without having to access the ZooEasy Online application. This enables you to build a section on your website in which you can display information which is stored in the ZooEasy Online database. By clicking behind the line of the API's of a menu section, you can expand and see which API's are present.

When you click on the button "Try it out" you are able to make a call to the database by using the default API values, or you can enter your own API-key an click Execute. The retrieved data will be shown in the format in which you will receive data from your database as well. This should enable you to build your Terms of service ZooEasy API Support - Website Send email to ZooEasy API Support Apache 2.0	
schemes HTTPS	
Animal Web APIs for accessing the animal and animal related informations	Find out more: https://www.zooeasy.com/support/?cat=animals
GET /retrieveAnimal Retrieve animal details	
Contact Web APIs for accessing the contact and contact related informations	Find out more: https://www.zoceasy.com/support/?cat=contacts
GET /retrieveContact Retrieve contact details	
CET /retrieveContactAnimals Retrieve contact animals	
Models	~

There is a Parameters section and a Responses section available for each web service. Below is an example if you click on the web service RetrieveAnimal:

GET	GET /retrieveAnimal Retrieve animal details			
Used to fetch the animal details based on the animal registration number				
Parameters			Try it out	
Name		Description		
api_key * ' string (path) reg * required string(\$bina (query)	đ	API authentication key Default value : ab0298fb-d3d0-5820-b19f-ca7d9 ab0298fb-d3d0-5820-b19f-ca7d94623fd5 Animal registration number Default value : DEMO - 5899343 DEMO - 5899343	146231d5	
Responses			Response content type application/json ~	
Code	Descrip	tion		
200	Animal information in JSON format			
	Example Value Model			
	"me "da	atus": "string", de":0, ta::(RegistrationNamber: "string", Gender": "string", GivenName:: "string", GivenName:: "string",		

In the Responses section the standard / example format of a reply message is shown, in json format (Example Value). Besides Example Value you can click on Model. By clicking on the> characters in the model view, the API model of the relevant command is expanded.

This can be done an x-number of times downwards, each time showing the values that could be returned from a level of detail deeper. See the example below:

Example Value Model				
♥ {				
status	string desription: Status flag for	the response i.e success or error		
code	integer desription: HTTP response of			
message	string			
data		sription: Success or error messages, if any		
	Animal ↓ { RegistrationNumber	string		
		Animal registration number		
	Gender	string		
		Gender of the animal		
	Name	string		
		Name of the animal		
	GivenName	string		
		Givenname of the animal		
	TitleInFrontOfName	string		
		Title front of the animal		
	TitleAfterName	string		
		Title after of the animal		
	Color	string		
		Color of the animal		
	Breed	string		
		Breed of the animal		
	Born	<pre>string(\$date)</pre>		
		Born date of the animal, format dd-mm-yyyy		
	Deceased	<pre>string(\$date)</pre>		
		Deceased date of the animal, format dd-mm-yyyy		
	InbreedingCoefficient	string		
		InbreedingCoefficient of the animal		

If you have not yet received an API key that is linked to your administration (on acceptance), with the help of the default values shown on this page, insight can still be gained into how the ZooEasy Online API functionality works.

In order to test the functionality with your own administration on the acceptance environment (<u>https://accept.zooeasyonline.com/login.php</u>), you have to order the web service and you will receive an API Key. The working method for adding your own API Key is as follows:

Animal Web A	PIs for accessing the animal and animal related informati	ions	Find out more: https://www.zooeasy.com/support/?cat=animals
GET /retr	ieveAnimal Retrieve animal details		
Used to fetch the a	nimal details based on the animal registration number		
Parameters			Try it out
Name	Description		
api_key * required string (path) reg * required string(Sbinary) (query)	API authentication key Default value : ab0298fb-d3d0-5820-b19F.ca7d9 ab0298fb-d3d0-5820-b19F.ca7d94623fd5 Animal registration number Default value : DEMO - 5899343 DEMO - 5899343	4623fd5	

Click on the button Try it out. The field for the API Key can then be filled in:

Animal Web A	PIs for accessing the animal and animal related informations	S Find out more: https://www.zooeasy.com/support/?cat=animals	~
GET /retr	ieveAnimal Retrieve animal details		
Used to fetch the ar	imal details based on the animal registration number		
Parameters		Cancel	
Name	Description		
api_key * ^{required} string (path)	API authentication key		
(pach)	ab0298fb-d3d0-5820-b19f-ca7d94623fd5		
<pre>reg * required string(\$binary) (query)</pre>	Animal registration number		
	DEMO - 5899343		
		Execute	

At API Authentication key enter your own API Key, then at Animal registration number enter an existing registration number and click Execute. By clicking on this button the actual data is retrieved from the relevant administration. The request url and CURL (<u>https://curl.haxx.se/docs/manpage.html</u>) are shown successively after which the server response follows.

After Execute is clicked this button will be split and the Clear button will be shown to the right of Execute. By clicking on this button the response message is removed from the screen and a new request can be sent. The default values shown can be changed, for example to return an error code.

3.3 Use of Extra fields

There are different ways in which data is displayed in the response message. The way in which data from standard fields are displayed in the response message differs from the extra fields.

- For the standard fields the value "null" is included if the field is empty, for the additional fields this is the value "".
- Date values from the database (Born, Deceased and Date) are included in the response message in the format dd-mm-yyyy.
- Date values that are entered as a value in an (extra) field are shown as entered; e.g. "8 April '16".

3.4 Response message processing

At the bottom of the reply message, swagger offers you the option to copy and/or download the reply message:



In a text editor (e.g. Notepad++, Helios Textpad, UltraEdit) the json file can be opened and of course the copied data can be pasted into it. Such text editors give a good impression of the layout.

3.5 Testing with web service retrieveContact

To fully understand how pagination works, it is advisable to run a few tests for this with the default API Key, the default contact number and the *retrieveContactAnimals* command.



In this case, 42 records were found, page 2 displays records 11-20, but keep in mind that on each page those ten records are numbered from 0 to 9 (or to 0 - n, in case a different number per page is defined). The actual numbers in this case are defined by 'from' (11) to 'to' (20).

The default parameters can be replaced. Try for instance '&pagination=0', or '&per_page=5' and '&Page=7'. The number of animals linked to the contact in the default API is 42. Taking this number into account you can vary the parameters.

By the way, the parameter '&pagination=0' is dominant to the other 2 parameters when used together. Applying '&pagination=0' and (&per_page=6 or &page=3) is meaningless.

If the pagination fields are not included in the query message, the default functionality is applied: '&per_page=10' together with '&page=1'.

3.6 Authorization

When extra fields and/or new extra field categories are added to the administration, these will also appear immediately in the reply message. The authorization functionality, as known in ZooEasy Online, is not applicable to this. In a general sense, the web services functionality does not know the authorizations applied by means of the role settings; everything is requested and included in the response message.