

Data Layer API

Devices Management

Description	Create a device
Method	POST
URI	/czb/devices
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	<pre>{ "device_ID": <device_ID> (string) "device_name" : <device_name> (string), "description": <device_description> (string), "vertical": <vertical> (string), "mobile": <is_mobile> (boolean), "provider" : <provider-name> (string), "municipality": <municipality> (string) }</pre>
Body Response	Content-type: application/json <pre>{ "status": "Creation successful", "device_ID": <device_ID>, "device_name": <device_name>, "created_at": <timestamp>, "mobile": <mobile> }</pre>
HTTP Status Code	<ul style="list-style-type: none">● 201 Successfully created device● 400 Bad request● 401 Unauthorized● 409 Conflict with already existent● 500 Internal Server Error
Attributes	<p>Obligatory:</p> <ul style="list-style-type: none">● device_name - Name of the device● device_ID - Device ID● vertical - vertical of the device● mobile - if the device is mobile or not <p>Optional:</p>

	<ul style="list-style-type: none"> description - brief description about the stream
Notes	

Description	Get all devices
Method	GET
URI	/czb/devices?interval_start=<begin_mark>&interval_end=<end_mark>
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	
Body Response	<pre>{ "total_devices": <total_devices>, "start": <start_time_mark> (string), "end": <end_time_mark> (string), "user_devices": ["device_id": <device_ID> (string), "device_name": <device_name> (string), "created_at": <creation_time_mark> (string), "vertical": <device_vertical> (string), "mobile": <mobile> (boolean), "description": <description> (string), "latitude": <latitude> (double), "longitude": <longitude> (double), "streams": [<stream_1>,...]], ... }</pre>
HTTP Status Code	<ul style="list-style-type: none"> 200 Success 401 Unauthorized 400 Bad Request 500 Internal Server Error
Attributes	
Notes	

Description	Get device by ID
Method	GET
URI	/czb/devices/:device_id
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	
Body Response	<pre>{ "device_id": <device_ID> (string), "device_name": <device_name> (string), "created_at": <creation_time_mark> (string), "vertical": <device_vertical> (string), "mobile": <mobile> (boolean), "description": <description> (string), "locations": [{ timestamp: 12312321, latitude: 40.1231, longitude: -8.232 }, ...], "streams": [<stream_1>, ...] }</pre>
HTTP Status Code	<ul style="list-style-type: none"> • 200 Success • 401 Unauthorized • 404 Not Found • 409 Conflict with already existent • 500 Internal Server Error
Attributes	
Notes	

Description	Delete device by ID
Method	DELETE
URI	/czb/devices/:device_id
Headers	Content-type: application/json

	"TOKEN": <account_token>
Body Request	
Body Response	
HTTP Status Code	<ul style="list-style-type: none"> • 204 No Content • 400 Bad request • 401 Unauthorized • 409 Conflict with already existent • 500 Internal Server Error
Attributes	
Notes	

Description	Get device values
Method	GET
URI	/czb/devices/:id/values
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	
Body Response	<pre>{ "co2": [{lat:...,long:...,value:99}], "ozone": [{lat:...,long:...,value:99}] }</pre>
HTTP Status Code	<ul style="list-style-type: none"> • 200 Success • 401 Unauthorized • 400 Bad Request • 500 Internal Server Error
Attributes	

Streams Management

Description	Create a data stream
Method	POST
URI	/czb/streams
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	<pre>{ "stream_ID": <stream_ID> (string), "stream_name" : <stream_name> (string), "description": <stream_description> (string), "device_ID": <device_id> (String), "type": <type> (string) }</pre>
Body Response	Content-type: application/json <pre>{ "status": "Creation successful", "stream_ID": <stream_ID>, "stream_name": <stream_name>, "created_at": <timestamp> }</pre>
HTTP Status Code	<ul style="list-style-type: none">● 201 Successfully created stream● 400 Bad request● 401 Unauthorized● 409 Conflict with already existent● 500 Internal Server Error
Attributes	<p>Obligatory:</p> <ul style="list-style-type: none">● stream_name - Name of the stream● stream_ID - ID of the stream● type - type of the stream (percentage, wtv)● device_id - ID of the device from where this stream is originating <p>Optional:</p> <ul style="list-style-type: none">● description - brief description about the stream

Notes	<p>Name and type are essential for they will help how to differentiate user streams, however it's the account token that will help the differentiation between system streams.</p> <p>Mobile will be used as a tag/filter, account token will also do something like this to separate non-certified streams from certified-streams.</p> <p>TTL will help finding out if data creator is broken or not to alert user.</p> <p>Periodicity is just to pretty things up for the user.</p>
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Description	Read stream details
Method	GET
URI	/czb/streams/:stream_ID
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	
Body Response	<pre>{ "stream_ID": <stream_ID> (string), "stream_name": <stream_name> (string), "created_at": <creation_time_mark> (string), "device_id": <device_id> (string), "type": <stream_type> (string), "description": <description> (string) }</pre>
HTTP Status Code	<ul style="list-style-type: none"> ● 200 OK ● 401 Unauthorized ● 404 Not Found ● 500 Internal Server Error
Attributes	
Notes	

Description	List all streams
Method	GET
URI	/czb/streams?interval_start=<begin_mark>&interval_end=<end_mark>

Headers	Content-Type: application/json "TOKEN": <account_token>
Body Request	
Body Response	<pre>{ "total_streams": <total_streams>, "size": <size_of_user_streams_array> (string), "start": <start_time_mark> (string), "end": <end_time_mark> (string), "user_streams": [{ "stream_id": <stream_ID> (string), "stream_name": <stream_name> (string), "created_at": <creation_time_mark> (string), "device_id": <device_id> (string), "type": <stream_type> (string), "description": <description> (string) }, ...] }</pre>
HTTP Status Code	<ul style="list-style-type: none"> • 200 OK • 400 Bad request • 401 Unauthorized • 500 Internal Server Error
Attributes	
Notes	In response size, start and end will only show up if interval is specified

Description	Delete a stream
Method	DELETE
URI	/czb/streams/:stream_ID
Headers	Content-Type: application/json "TOKEN": <account_token>
Body Request	
Body Response	

HTTP Status Code	<ul style="list-style-type: none"> • 204 No content • 401 Unauthorized • 404 Not Found • 500 Internal Server Error
Attributes	
Notes	

Description	Read stream values
Method	GET
URI	/czb/streams/:stream_id:/values?interval_start=<begin_mark>&interval_end=<end_mark>
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	
Body Response	<pre>{ [{ "value": <value> (real), "timestamp": <timestamp> (long), "latitude": <latitude> (real), "longitude": <longitude> (real) },...] }</pre>
HTTP Status Code	<ul style="list-style-type: none"> • 200 OK • 401 Unauthorized • 404 Not Found • 500 Internal Server Error
Attributes	
Notes	In response size, start and end will only show up if interval is specified

Description	Post value in stream
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Method	POST
URI	/czb/streams/:stream_ID:/values
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	{ "value": <value> (real), "latitude": <latitude> (real), "longitude": <longitude> (real) }
Body Response	
HTTP Status Code	<ul style="list-style-type: none"> • 204 No Content • 401 Unauthorized • 404 Not Found • 500 Internal Server Error
Attributes	
Notes	

Alerts Management

Description	Get all alerts
Method	GET
URI	/czb/alerts/list?interval_start=<begin_mark>&interval_end=<end_mark>
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	
Body Response	{ "total_alerts": <total_alerts>, "size": <size_of_user_alerts_array> (string), "start": <start_time_mark> (string), "end": <end_time_mark> (string), }

	<pre> “user_alerts”: [“alert_ID”: <alert_ID> (int), “alert_name”: <stream_name> (string), “created_at”: <creation_time_mark> (string), “stream”: <stream_ID> (string), “threshold”: <threshold> (string), “type”: <alert_type> (string), “level”: <alert_level> (string), “description”: <description> (string), “state”: <alert_state> (boolean)], ... } </pre>
HTTP Status Code	<ul style="list-style-type: none"> ● 201 Successfully created stream ● 401 Unauthorized ● 409 Conflict with already existent ● 500 Internal Server Error
Attributes	
Notes	

Description	Read alert details
Method	GET
URI	/czb/alerts/:alert_id
Headers	Content-type: application/json “TOKEN”: <account_token>
Body Request	
Body Response	<pre> { “alert_ID”: <alert_ID> (int) “alert_name”: <stream_name> (string), “created_at”: <creation_time_mark> (string), “stream”: <stream_ID> (string), “threshold”: <threshold> (string), “type”: <alert_type> (string), “level”: <alert_level> (string), “description”: <description> (string), “state”: <alert_state> (boolean) } </pre>

	}
HTTP Status Code	<ul style="list-style-type: none"> • 200 OK • 401 Unauthorized • 404 Not Found • 500 Internal Server Error
Attributes	
Notes	

Description	Delete a stream
Method	DELETE
URI	/czb/alert
Headers	Content-Type: application/json "TOKEN": <account_token>
Body Request	{ "alert_id": <alert_id> (string) }
Body Response	204 No content
HTTP Status Code	<ul style="list-style-type: none"> • 204 No content • 400 Bad request • 401 Unauthorized • 404 Not Found • 500 Internal Server Error

Description	Get details from alerts related to stream
Method	GET
URI	/czb/alerts/:stream_name
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	

Body Response	<pre>{ "total_alerts": <total_alerts>, "stream_alerts": ["alert_ID": <alert_ID> (int), "alert_name": <stream_name> (string), "created_at": <creation_time_mark> (string), "stream": <stream_ID> (string), "threshold": <threshold> (string), "type": <alert_type> (string), "level": <alert_level> (string), "description": <description> (string), "state": <alert_state> (boolean)], ... }</pre>
HTTP Status Code	<ul style="list-style-type: none"> • 200 OK • 401 Unauthorized • 404 Not Found • 500 Internal Server Error
Attributes	
Notes	

Method	POST
URI	/czb/alerts
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	<pre>{ "alert_name": <alert_name> (string), "threshold": <threshold_value> (string), "type": <alert_type> (string), "stream": <stream_ID> (string), "level": <alert_level> (string), "notify_mail": <mail_notification> (boolean) }</pre>
Body Response	<pre>{ "alert_ID": <alert_ID> (int), "alert_name": <alert_name> (string), "threshold": <threshold_value> (string),</pre>

	<pre> “type”: <alert_type> (string), “stream”: <stream_ID> (string), “level”: <alert_level> (string), “notify_mail”: <mail_notification> (boolean) } </pre>
HTTP Status Code	<ul style="list-style-type: none"> • 200 Successfully posted alert • 400 Bad request • 401 Unauthorized • 404 Not Found • 500 Internal Server Error
Attributes	<p>Obligatory:</p> <ul style="list-style-type: none"> • alert_name - Name of the alert • threshold - threshold of the alert • type - type of the alert (can only be MAX, MIN, MAXE, MINE) • stream - stream associated with the alert • level - severity of the alert (can only be Neutral, Serious, Extremely Serious) • notify_mail - notify of the alert via e-mail
Notes	

Method	PATCH
URI	/czb/alert/:alert_ID
Headers	Content-type: application/json “TOKEN”: <account_token>
Body Request	<pre> { “parameter”: <parameter_to_change> (string), “value”: <value> (string) } </pre>
Body Response	<pre> { “alert_ID”: <alert_ID> (int), “alert_name”: <alert_name> (string), “threshold”: <threshold_value> (string), “type”: <alert_type> (string), “stream”: <stream_ID> (string), “level”: <alert_level> (string), “notify_mail”: <mail_notification> (boolean) } </pre>

HTTP Status Code	<ul style="list-style-type: none"> • 200 Successfully posted to stream • 400 Bad request • 401 Unauthorized • 404 Not Found • 500 Internal Server Error
Attributes	Obligatory: <ul style="list-style-type: none"> • parameter - Name of the alert parameter to change • value - new value
Notes	

Method	GET
URI	/czb/alerts/triggered?interval_start=<begin_mark>&interval_end=<end_mark>
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	
Body Response	<pre> { "total_triggers": <total_triggers>, "size": <size_of_triggers_array> (string), "start": <start_time_mark> (string), "end": <end_time_mark> (string), "triggered_alerts": [{ "trigger_ID": <trigger_ID> (int), "alert_ID": <alert_ID> (int), "alert_name": <stream_name> (string), "triggers": [{ "trigger_time": <trigger_timestamp> (long), "trigger_value": <trigger_value> (string) }, ...], "stream": <stream_ID> (string), "level": <alert_level> (string), }], }</pre>

HTTP Status Code	<ul style="list-style-type: none"> • 200 Success • 401 Unauthorized • 404 Not Found • 500 Internal Server Error
Attributes	
Notes	

Method	PUT
URI	/czb/alerts/triggered/:trigger_ID/dismiss
Headers	Content-type: application/json "TOKEN": <account_token>
Body Request	
Body Response	
HTTP Status Code	<ul style="list-style-type: none"> • 200 Successfully updated • 401 Unauthorized • 404 Not Found • 500 Internal Server Error
Attributes	
Notes	