



API Guide

Assure Customer API

User Guide: Update Equipment Register data via API

Evotix Ltd. Revision 2.0 (September 2024)



The Assure Customer API is the means by which Evotix provides integration capability to Assure for customers.

The Customer API is available to customers via the public internet and takes the form of a RESTful API. Using the Customer API you can automate processes such as managing users, org unit structure and exporting data for analysis. Making use of the Customer API requires a level of technical expertise so this is typically something that a company's IT function would handle.

This guide focusses on how to set up the Customer API to update data in Equipment Register in Assure. A separate guide is available for setting up the Customer API.



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Managing Equipment Register Records via the Customer API

Another of the interactive methods available via the Customer API is the ability to manage Equipment Register Records in Assure.

This allows you to create, update and delete records within the Equipment Register module.

Limitations

The following lists the current limitations of the API for editing and deleting Equipment Register records. It is expected that these will be addressed in future Assure releases:

- The Equipment Register reference field cannot be changed via the API. You can only create new records with a unique reference, or update records where there is an existing record for the reference provided. If there are multiple records with the same reference, the API cannot identify which record is trying to be updated and it will error.
- The Equipment Register reference field cannot be automatically assigned by the system when creating or updating records, it must be provided in the requests.
- Supporting items cannot be added via the API. This includes actions, attachments, notes, reviews, and links to policies and guidance. If there are default reviewers and approvers set up they will be automatically used on the creation of the record.
- Any default values set within the caption maintenance area are not taken into consideration by the API.

Pre-configuration for Equipment Register Records

Organisational Unit External IDs

Where Organisational Units have been manually created in Assure (i.e. not via the Customer API) there is some pre-configuration required in order to be able then use the Customer API methods. This is required for the API methods to be able to correctly assign Organisational Units to Equipment Register records.

This pre-configuration is only needed for Organisational Units which have been manually added and which do not have an External ID set.

The Assure Organisational Unit hierarchy has a new attribute for each unit called 'External ID'. You will find this in the 'Edit' page of an Organisational Unit and its purpose is to allow a unique external identifier to be associated with each unit. This is necessary because:

1. The existing Organisational Unit names are not unique and therefore cannot be used with an API method to target a specific Organisational Unit.
2. Organisational Unit names can be changed by Assure administrative users so they are not guaranteed to align with the customers IT systems (where user details are being obtained from by the customers integration workflow).
3. Integration workflows should use the immutable unique identifier for Organisational Units so that changes to names (whether in Assure or the source system) do not break the integration workflow. This means Assure needs to be able to configure the unique identifier against each Organisational Unit which is what the External ID field does.

It is strongly recommended that a customer uses their own identifier external ID of an Organisational Unit i.e. the identifier that their IT systems / source data uses for the Organisational Unit (e.g. for a retailer this might be the Shop ID). This removes the need for the customer to maintain a mapping between their Org Unit identifiers and the Assure internal identifier for an Org Unit.

The external IDs for the Organisational Units can be configured manually using the Assure UI (screenshot below shows an example setting the Organisational Unit external ID for the "North West region" to be REGION_NW). This is fine for testing but for ensuring that the Organisational Unit hierarchy is in sync with the customers user management system we have a bulk import/update tool which can be used.

The screenshot shows the 'Edit' page for an Organisational Unit in the Assure UI. The 'Details' tab is selected. The 'Name' field is populated with 'North West region'. The 'External ID' field is populated with 'REGION_NW'. A green message box at the bottom left of the form area contains the text 'The External ID must be unique'.



Picklist Values

For any of the fields in a Module record that has values that come from the 'Picklist Data Dictionary' in Assure then the value provided in the API request must match a value in the 'Picklist Data Dictionary' for that field and can be in the customer's default language or base system language (English-UK). For example, the 'Locality' field is a picklist value for Modules. If you locate this value in the Assure UI you will see the values that exist for the field (see example in the screenshot below).

Order Index	Text
0	Container
0	Office
0	Production
0	Reference Materials
0	Stores

If you have translations for the picklist value and the language is the same as the default customer language this can also be supplied via API. Example, in the screenshot below, if the customer's default language is in Croatian, then the value 'OfficeCroatian' can be supplied via API. Validation is performed in the request to ensure that the 'Locality' field takes only one of these values or no value. This is then the case for all picklist values.

▼ Translations

Language	Text	
Croatian	OfficeCroatian	 Edit  Remove

 + Add

▼ Org Units

Picklist values can also be restricted by Org-Unit. Using the same example above in the first screenshot the value 'Office' exists for the 'Locality' picklist dictionary value. Here you can restrict 'Office' to only be allowed as a value for a specific org unit. This validation will then work via API as it would in Assure. Meaning that if you then try to create a Module record with 'Office' as the 'Locality' but the org unit supplied in the request is not for the org unit 'Office' was restricted to and so the request would fail. See the second screenshot to see how this restriction can be set up.

The screenshot below shows how this restriction can be set up.

▼ Details

Text*	<input type="text" value="Office"/>
Priority*	<input type="text" value="Not Set"/>
Order*	<input type="text" value="0"/>
Export Code	<input type="text"/>

► Translations

▼ Org Units

Name	Parent	Assigned	Approver	Reviewer	Notification Recipient	Portal Reminders Recipient	Automatic Action Recipient	
Auckland	New Zealand	User 100245	User 100245	User 100245	User 100245	User 100245		 View  Remove



Custom Mandatory Values

In Assure you can set up custom mandatory values for each module, which are then validated on creation and update of records in those modules. This validation is also honoured by the API.

Any field that has been set to mandatory in Equipment Register records must be provided in the API request even if the schema does have it as a required field.

These fields are managed via caption maintenance in Assure. The example below shows the set up to make 'Location' a mandatory field. The field must also have the 'Display in Interface' selected for the mandatory validation to occur in the API.

▼ Details

Language	English (UK)
Property Name	Location
Display Text*	Location
Guidance Text	<input type="text"/>
Guidance Text Display*	<input checked="" type="radio"/> Popup <input type="radio"/> Static
Default Value	<input type="text"/>
Is Mandatory	<input checked="" type="checkbox"/>
Display in Interface	<input checked="" type="checkbox"/>

If a default value is set in caption maintenance, the API does not currently take that into consideration.



Equipment Register JSON POST object

When creating/updating an Equipment Register record the record's details need to be provided in the form of a JSON object. JSON is the most commonly used syntax for describing data objects in RESTful APIs, for an introduction to JSON [see this guide](#). The OpenAPI schema for the Customer API contains the formal definition of the JSON structure i.e. the EquipmentPOSTRequest object. The OpenAPI schema is the master definition of the API methods and data objects, it should always be consulted to understand the required fields, field types, max data lengths and string patterns, plus descriptions of the behaviour associated with the use of each field (or its omission). Some software tools and platforms can consume the OpenAPI schema to automate the process of generating the correct JSON and if this is available it should be used. To aid understanding of how the JSON fields in the Equipment Register JSON object relate to the resulting Equipment Register record setup in Assure the following sections contain some worked examples.

The text encoding to be used for all interactions with the Customer API is UTF-8. This is pretty much the standard today for software tools and platforms however it is important to check that you are using UTF-8 as if not then when you get foreign characters in the data or other symbols like emoticons these will not appear correctly in Assure.

As JSON objects are described using plain text it is possible to hand craft these objects for initial testing. However, it is VERY IMPORTANT to ensure that when generating JSON objects to send to the Customer API you use a proper JSON library or a tool with native JSON support. This is because JSON relies on 'escaping' for certain data values, if this escaping is not done correctly it will lead to API errors and can also be a source of security vulnerabilities.

Minimum Equipment Register data

This example shows the minimum possible Equipment Register data which can be used to create or update an Equipment Register record.

```
{  
  "reference": "exampleReference",  
  "orgUnitExternalId": "example.OrgUnit",  
  "equipmentName": "exampleEquipmentName",  
  "description": "exampleDescription"  
}
```

▼ Details

Org Unit	<input type="text" value="example.OrgUnit"/> 
Reference*	<input type="text" value="exampleReference"/>  System Assigned
Is This Confidential	<input type="checkbox"/>
Equipment Name*	<input type="text" value="exampleEquipmentName"/>
Equipment Model	<input type="text"/>
Description*	<input type="text" value="exampleDescription"/>
Serial Number	<input type="text"/>
Asset Number	<input type="text"/>

Equipment Register with everything defined

This example shows the same Equipment Register record with everything defined.

```
{
  "reference": "exampleReference",
  "orgUnitExternalId": "example.OrgUnit",
  "isConfidential": false,
  "equipmentName": "exampleEquipmentName",
  "model": "007",
  "description": "exampleDescription",
  "serialNumber": "2222",
  "assetNumber": "5555",
  "equipmentType": "exampleEquipmentType",
  "isCEMarked": false,
  "purchaseDate": "2024-03-18",
  "location": "Grenada",
  "locality": "exampleLocality",
  "equipmentValue": 88.88,
  "equipmentNotes": "exampleEquipmentNotes",
  "informationLog": "exampleInformationLog"
}
```

Details

Org Unit	example.OrgUnit	
Reference*	exampleReference	<input checked="" type="checkbox"/> System Assigned
Is This Confidential	<input type="checkbox"/>	
Equipment Name*	exampleEquipmentName	
Equipment Model	007	
Description*	exampleDescription	
Serial Number	2222	
Asset Number	5555	
Equipment Type	exampleEquipmentType	
CE Mark	<input type="checkbox"/>	
Purchase Date	18/03/2024	

Location	<input type="text" value="Grenada"/>
Locality	<input type="text" value="exampleLocality"/>
Value	<input type="text" value="88.88"/>
Notes	<input type="text" value="exampleEquipmentNotes"/>
Information Log	<input type="text" value="exampleInformationLog"/>

Equipment Register JSON PATCH Object

When sending a patch request to update equipment register record's details they need to be provided in the form of a JSON object. JSON is the most commonly used syntax for describing data objects in RESTful APIs, for an introduction to JSON [see this guide](#). The OpenAPI schema for the Customer API contains the formal definition of the JSON structure i.e. the equipmentPATCHRequestobject. The OpenAPI schema is the master definition of the API methods and data objects, it should always be consulted to understand the required fields, field types, max data lengths and string patterns, plus descriptions of the behaviour associated with the use of each field (or its omission). Some software tools and platforms can consume the OpenAPI schema to automate the process of generating the correct JSON and if this is available it should be used. The below section of JSON shows all the fields in the Equipment JSON PATCH Object. The object contains almost all the same fields as the JSON POST object but it does not contain the reference field, which is only present in the URL request itself.

```
{
  "orgUnitExternalId": "example.orgUnitExternalId",
  "isConfidential": true,
  "equipmentName": "example.equipmentName",
  "model": "example.model",
  "description": "example.description",
  "serialNumber": "0123456",
  "assetNumber": "987654",
  "equipmentType": "example.equipmentType",
  "isCEMarked": true,
  "purchaseDate": "YYYY-MM-DD",
  "location": "example.",
  "locality": "example.locality",
  "equipmentValue": 1000000000000000,
  "equipmentNotes": "example.equipmentNotes",
  "informationLog": "example.informationLog"
}
```

The text encoding required for all interactions with the Customer API is UTF-8. Although UTF-8 is widely recognized as the standard for contemporary software tools and platforms, it is imperative to verify its usage. Failure to do so may result in the incorrect display of foreign characters or symbols, such as emoticons, within Assure.

As JSON objects are described using plain text it is possible to hand craft these objects for initial testing. However, it is VERY IMPORTANT to ensure that when generating JSON objects to send to the Customer API you use a proper JSON library or a tool with native JSON support. This is because JSON relies on 'escaping' for certain data values, if this escaping is not done correctly it will lead to API errors and can also be a source of security vulnerabilities.

Creating an Equipment Register Record

The Customer API allows the creation of Equipment Register records in Assure using the /v1/equipment API method with the POST verb. The Equipment Register record's details are supplied in the body of the API request using the Equipment Register JSON object (see section above). Records are uniquely identified by their reference which is the value in the reference field of the Equipment Register JSON object. If there are no Equipment Register records for the reference provided in the request then the /v1/equipment API method will create the record using the details in the Equipment Register JSON object.

If there is an existing Equipment Register record for the external ID then the /v1/equipment API method will update the existing Equipment Register record to match the supplied details (see the 'Update an Equipment Register' section below for details on the behaviour when updating an existing Equipment Register record). Note: If there are multiple



Equipment Register records with the same reference that is provided in the request this will result in an error response (HTTP error 409).

Before attempting to use the /v1/equipment API method make sure you understand the Equipment Register JSON object (see the section above) and that you have the required details to access the API (i.e. the URL prefix, API key, etc), follow the Getting Started guide if you don't have these details already. The following table sections show how to create a Equipment Register record using the /v1/equipment API method in a variety of software tools / platforms:

Any HTTP response code in the range 200–299 should be treated as success (do not use the contents of the response body for identifying success or failure as these may change). Implement effective error handling as per the guide for error handling.

Postman API platform	<p>The screenshot below shows a successful 'create Equipment Register record' request for a customer. The API key is supplied via the 'Authorization' tab (see the Getting Started guide for how to setup the API key). The response section at the bottom shows the result Status: 200 OK which indicates that the record's creation was successful (also displayed is the response message from the Customer API confirming the successful creation).</p> <p>NB: With tools like this where the Equipment Register JSON object is manually entered you must ensure the contents of any string values are properly escaped.</p> <pre> 1 2 "reference": "exampleReference", 3 "orgUnitExternalId": "example.OrgUnit", 4 "isConfidential": false, 5 "equipmentName": "exampleEquipmentName", 6 "model": "007", 7 "description": "exampleDescription", 8 "serialNumber": "2222", 9 "assetNumber": "5555", 10 "equipmentType": "exampleEquipmentType", 11 "isCEMarked": false, 12 "purchaseDate": "2024-03-18", 13 "location": "Grenada", 14 "locality": "exampleLocality", 15 "equipmentValue": 88.88, 16 "equipmentNotes": "exampleEquipmentNotes", 17 "informationLog": "exampleInformationLog" 18 </pre> <p>Body Cookies Headers (10) Test Results 200 OK</p> <p>Pretty Raw Preview Visualize JSON</p> <pre> 1 { 2 "message": [3 "Equipment Register record successfully created." 4] 5 } </pre>
-----------------------------	---

Windows Powershell

The code block below shows the few lines of PowerShell script required to setup the Equipment Register Object JSON and to make the 'create equipment register record' request to the Customer API for a customer. The XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX is where the API key needs to be placed.

```
$EquipmentObjectJSON = @{
    "reference"      = "example.Reference",
    "orgUnitExternalId" = "example.orgUnitExternalId",
    "equipmentName"   = "exampleEquipmentName",
    "description"     = "exampleDescription",
    "assetNumber"      = "5555"
} | ConvertTo-Json
Invoke-WebRequest `

-Headers @{'x-api-key' = 'XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX'}
-Uri https://api.elephant.sheassure.net/v1/equipment
-Method Post
-ContentType 'application/json'
-Body $EquipmentObjectJSON
```

The following shows the output from the above PowerShell script code being run where a successful response is generated. The StatusCode: 200 indicates that the create Equipment Register request was successful. Some response lines have been removed for brevity.

```
StatusCode      : 200
StatusDescription : OK
Content        : {"message":"Equipment Register record successfully created."}
```



Python

The code block below shows the few lines of Python code required to setup the Equipment Register Object JSON and to make the 'create equipment register' request to the Customer API for a customer. The XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX is where the API key needs to be placed.

```
# pip install requests
import requests
equipment_object = {
    "reference": "example.Reference",
    "orgUnitExternalId": "example.orgUnitExternalId",
    "equipmentName": "exampleEquipmentName",
    "description": "exampleDescription",
    "assetNumber": "5555"
}
headers = { "x-api-key": "XXXXXXXXXXXXXXXXXXXXXXXXXXXX" }
r = requests.post("https://api.elephant.sheassure.net/v1/equipment", headers=headers, json = equipment_object)
r.raise_for_status()
print(f"StatusCode={r.status_code}")

print(f"Body={r.content}")
```

The following shows the output from the above Python code being run where a successful response is generated. The StatusCode=200 indicates that the equipment register record creation was successful.

```
StatusCode=200
Body=b'{"message": "Equipment Register record successfully created."}'
```



Updating an Equipment Register Record with POST request

The Customer API allows the updating of Equipment Register records in Assure using the /v1/equipment API method with the POST verb. The Equipment Register record details are supplied in the body of the API request using the Equipment Register JSON object (see section above). Equipment Register records are identified by their reference, which is the value in the reference field of the Equipment Register JSON object. If there is an existing Equipment Register record for the reference provided then the /v1/equipment API method will update the existing Equipment Register record to match the supplied details (see the 'Update an Equipment Register record' section below for details on the behaviour when updating an existing Equipment Register record). Note: If there are multiple Equipment Register records with the same reference that is provided in the request this will result in an error response (HTTP error 409).

If there are no Equipment Register records for the reference then the /v1/equipment API method will create the Equipment Register record using the details in the Equipment Register JSON object (see the 'Create an Equipment Register record' section above for details on the behaviour when creating an Equipment Register record).

Before attempting to use the /v1/equipment API method make sure you understand the Equipment Register JSON object (see the section above) and that you have the required details to access the API (i.e. the URL, API key, etc), follow the Getting Started guide if you don't have these details already. The following table sections show how to update an Equipment Register record using the /v1/equipment API method in a variety of software tools / platforms:

Partial updates are not supported with a POST request. If you wish to perform a Partial Update please see the section Partial update of an Equipment register record with PATCH request.

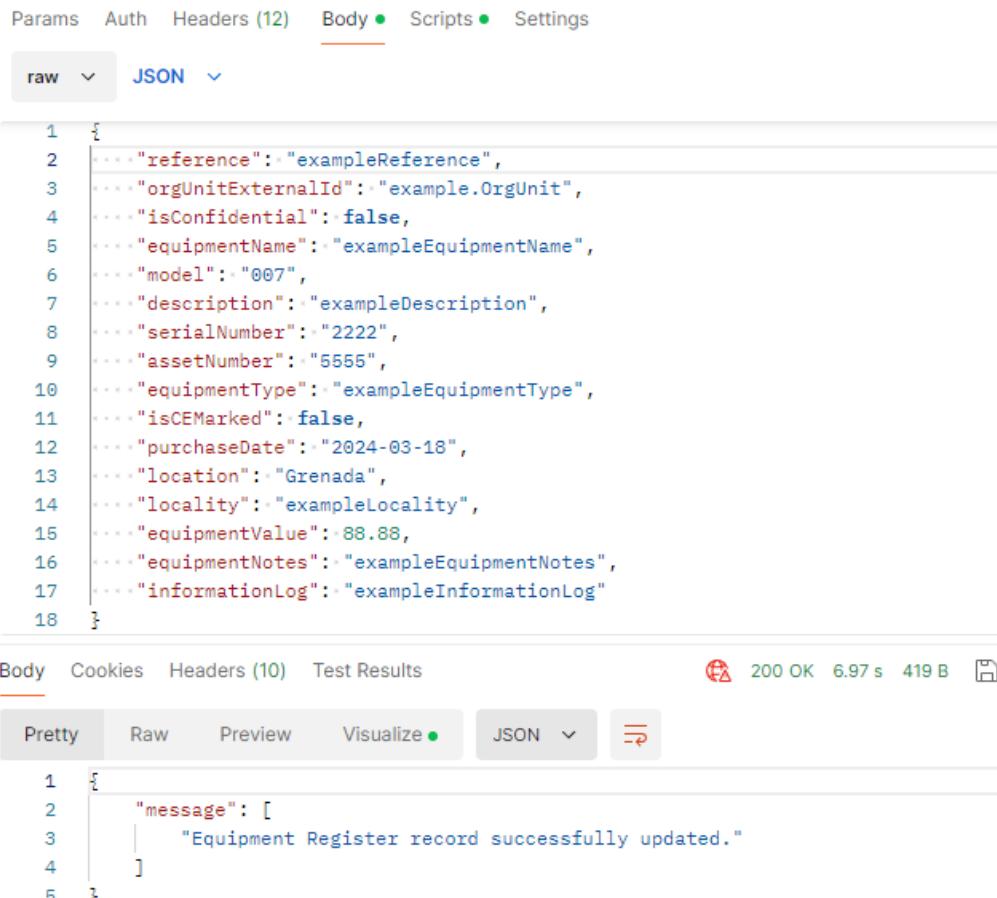
If you try to update a record with using the POST request Assure will update the equipment register record to match the details supplied, this includes applying the default values for any fields that are not provided in the equipment Register JSON POST object. See the OpenAPI schema for details of how the equipment register data will be defaulted for each field.

Any HTTP response code in the range 200–299 should be treated as success (do not use the contents of the response body for identifying success or failure as these may change). Implement effective error handling as per the guide for error handling.

Postman API platform

The screenshot below shows a successful 'update Equipment Register' request for a customer on the wolf stack (NB: the Postman setup is identical to that used for creating a Equipment Register record). The API key is supplied via the 'Authorization' tab (see the Getting Started guide for how to setup the API key). The response section at the bottom shows the result Status: 200 OK which indicates that the Equipment Register update was successful (also displayed is the response message from the Customer API confirming the successful update).

NB: With tools like this where the Equipment Register JSON object is manually entered you must ensure the contents of any string values are properly escaped.



Params Auth Headers (12) Body Scripts Settings

raw JSON

```

1  {
2    "reference": "exampleReference",
3    "orgUnitExternalId": "example.OrgUnit",
4    "isConfidential": false,
5    "equipmentName": "exampleEquipmentName",
6    "model": "007",
7    "description": "exampleDescription",
8    "serialNumber": "2222",
9    "assetNumber": "5555",
10   "equipmentType": "exampleEquipmentType",
11   "isCEMarked": false,
12   "purchaseDate": "2024-03-18",
13   "location": "Grenada",
14   "locality": "exampleLocality",
15   "equipmentValue": 88.88,
16   "equipmentNotes": "exampleEquipmentNotes",
17   "informationLog": "exampleInformationLog"
18 }
```

Body Cookies Headers (10) Test Results

200 OK 6.97 s 419 B

Pretty Raw Preview Visualize JSON

```

1  {
2    "message": [
3      "Equipment Register record successfully updated."
4    ]
5 }
```

Windows Powershell

The code block below shows the few lines of PowerShell script required to setup the Equipment Register Object JSON and to make the 'update Equipment Register' request to the Customer API for a customer (NB: this is identical to the script for creating an Equipment Register record). The XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX is where the API key needs to be placed.

```
$EquipmentObjectJSON= @{
    "reference"      = "example.Reference",
    "orgUnitExternalId" = "example.orgUnitExternalId",
    "equipmentName"    = "exampleEquipmentName",
    "description"     = "exampleDescription",
    "assetNumber"      = "5555"
} | ConvertTo-Json
Invoke-WebRequest `

-Headers @{'x-api-key' = 'XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX'}
-Uri https://api.elephant.sheassure.net/v1/equipment` 
-Method Post` 
-ContentType 'application/json'` 

-Body $EquipmentObjectJSON`
```

The following shows the output from the above Powershell script code being run where a successful response is generated. The StatusCode: 200 indicates that the update an Equipment Register record request was successful. Some response lines have been removed for brevity.

```
StatusCode      : 200
StatusDescription : OK
Content        : {"message":"Equipment Register record updated."}
```

Python

The code block below shows the few lines of Python code required to setup the Equipment Register Object JSON and to make the 'update Equipment Register' request to the Customer API for a customer (NB: this is identical to the script for creating an Equipment Register record). The XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX is where the API key needs to be placed.

```
# pip install requests
import requests
equipment_object= {
    "reference": "example.Reference",
    "orgUnitExternalId": "example.orgUnitExternalId",
    "equipmentName": "exampleEquipmentName",
    "description": "exampleDescription",
    "assetNumber": "5555"
}
headers = { "x-api-key": "XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX" }
r = requests.post("https://api.elephant.sheassure.net/v1/equipment", headers=headers, json = equipment_object)
r.raise_for_status()
print(f"StatusCode={r.status_code}")

print(f"Body={r.content}")
```

The following shows the output from the above Python code being run where a successful response is generated. The StatusCode=200 indicates that the Equipment Register update was successful.

```
StatusCode=200
Body=b'{"message": "Equipment Register record updated."}'
```



Partial update of an Equipment Register Record with PATCH request

The Customer API allows the partial update of equipment register records in Assure using the `/v1/equipment/{reference}` API method with the PATCH verb. A PATCH request will only update the fields provided in the request and any other fields will remain unchanged.

The record that will be updated will be identified by its reference provided from the `{reference}` path parameter. The equipment register record details to be updated are supplied in the body of the API request using the equipment register JSON PATCH object. If there is an existing equipment register record for the reference provided then the `/v1/equipment/{reference}` API method will update the existing equipment register record with the supplied details. Note: If there are multiple equipment register records with the same reference that is provided in the request this will result in an error response (HTTP error 409). Additionally if there is no equipment register record with the reference that is provided in the request this will result in an error response (HTTP error 404).

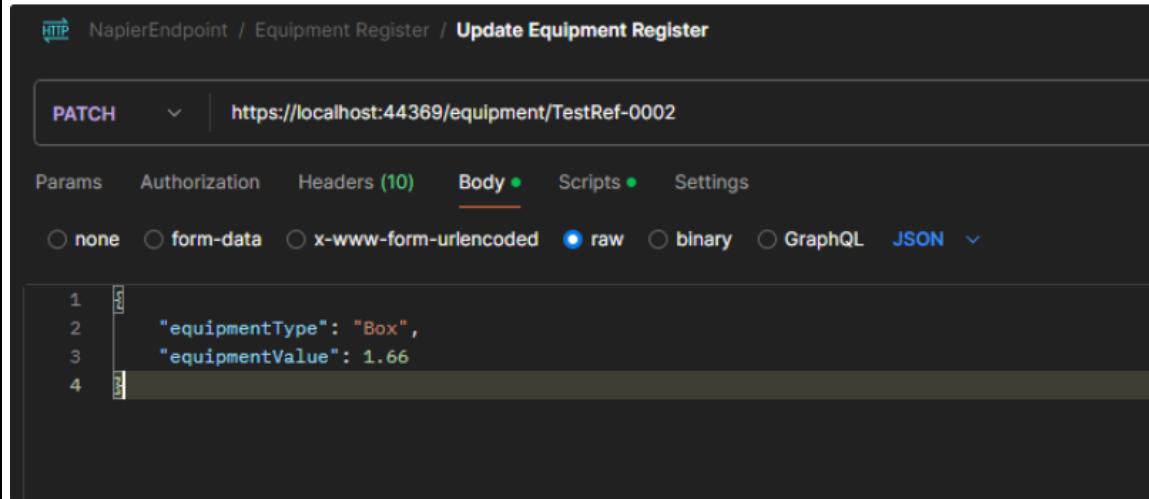
Before attempting to use the `/v1/equipment/{reference}` API method make sure you understand the equipment register JSON PATCH object (see the section above) and that you have the required details to access the API (i.e. the URL, API key, etc), follow the Getting Started guide if you don't have these details already. The following table sections show how to perform a partial update an equipment register record using the `/v1/equipment/{reference}` API method in a variety of software tools / platforms.

Note. All examples shown below are for a partial update of the 'equipmentType' and 'equipmentValue', any other field in the JSON PATCH object can also be used for a partial update.

Any HTTP response code in the range 200-299 should be treated as success (do not use the contents of the response body for identifying success or failure as these may change). Implement effective error handling as per the guide for error handling.

Postman API platform

The screenshot below shows a successful 'partial update of an equipment register record' request for a customer on the uk2 stack (NB: the Postman setup is identical to that used for creating an equipment register record). The API key is supplied via the 'Authorization' tab (see the Getting Started guide for how to setup the API key).



The screenshot shows a Postman interface for a 'Update Equipment Register' request. The method is PATCH, and the URL is <https://localhost:44369/equipment/TestRef-0002>. The 'Body' tab is selected, showing raw JSON patch data:

```
1 [ ] "equipmentType": "Box",  
2 [ ] "equipmentValue": 1.66  
3 [ ]  
4 [ ]
```

NB: With tools like this where the Equipment Register JSON Patch object is manually entered you must ensure the contents of any string values are properly escaped. Also the numbers must be correctly formatted (specially with decimals).

Windows Powershell

The code block below shows the few lines of Powershell script required to setup a partial update using the Equipment Register Object Patch JSON. It also shows how to make the Patch partial update request to the Customer API for a customer on the uk2 stack. The XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX is where the API key needs to be placed.

IMPORTANT – Note the use of [\[System.Net.WebUtility\]::UrlEncode](#) to ensure that the reference value is properly escaped for inclusion in the URL.

```
$EquipmentObjectJSON = @{
    "equipmentType"      = "example.equipmentType",
    "equipmentValue"     = "example.equipmentValue",
} | ConvertTo-Json
Invoke-WebRequest`  

-Headers @{'x-api-key' = 'XXXXXXXXXXXXXXXXXXXXXXXXXXXX'}`  

-Uri https://api.uk2.sheassure.net/v1/equipment/ + [System.Net.WebUtility]::UrlEncode("example?reference")`  

-Method Patch`  

-ContentType 'application/json'`  

-Body $EquipmentObjectJSON`
```

The following shows the output from the above Powershell script code being run where a successful response is generated. The StatusCode: 200 indicates that the update an Equipment Register record request was successful. Some response lines have been removed for brevity.

```
StatusCode      : 200
StatusDescription : OK
Content        : {"message":"Equipment Register updated."}
```

Python	<p>The code block below shows the few lines of Python code required to setup the Equipment Register JSON PATCH Object and to make the 'update equipment register' request to the Customer API for a customer on the uk2 stack (NB: this is identical to the script for creating a equipment register record). The XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX is where the API key needs to be placed.</p> <pre># pip install requests # pip install urllib import requests import urllib equipment_register_object = { "equipmentType" = "example.equipmentType", "equipmenValue" = "example.equipmentValue", } headers = { "x-api-key": "XXXXXXXXXXXXXXXXXXXXXXXXXXXX" } url = "https://api.uk2.sheassure.net/v1/equipment/" + urllib.parse.quote('example.reference', safe="") r = requests.patch(url, headers=headers, json = equipment_register_object) r.raise_for_status() print(f"StatusCode={r.status_code}") print(f"Body={r.content}") The following shows the output from the above Python code being run where a successful response is generated. The StatusCode=200 indicates that the Equipment Register update was successful. StatusCode=200 Body=b'{"message": "Equipment Register updated."}'</pre>
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Deleting an Equipment Register Record

The Customer API allows the deletion of Equipment Register records in Assure using the /v1/equipment /{reference} API method with the DELETE verb. The record will be identified by its reference provided from the {reference} path parameter. The Equipment Register Object is NOT required for this method.

If there is no Equipment Register record for the reference provided then the /v1/equipment/{reference} API method will still return a successful response (i.e. HTTP status code in the range 200-299).

Before attempting to use the /v1/equipment/{reference} API method make sure you have the required details to access the API (i.e. the URL, API key, etc), follow the Getting Started guide if you don't have these details already. The following table sections show how to



delete an Equipment Register record using the /v1/equipment/{reference} API method in a variety of software tools / platforms:

Any HTTP response code in the range 200–299 should be treated as success (do not use the contents of the response body for identifying success or failure as these may change). Implement effective error handling as per the guide for error handling.

IMPORTANT – The login user name value needs to have URL escaping applied before inclusion in the URL.

Postman API platform	<p>The screenshot below shows a successful 'delete Equipment Register record' request for a customer. Note the use of the 'Authorization' tab to configure the API key header. The XXXXXXXXXXXXXXXXXXXXXXXXX value is where the API key would be placed. The response section at the bottom shows the result Status: 200 OK which indicates that the record was successfully disabled (also displayed is the response message from the Customer API confirming the successful disable).</p> <p>NB: With tools like this where the Equipment Register JSON object is manually entered you must ensure the contents of any string values are properly escaped.</p> <p>The screenshot shows a Postman API client interface. The 'Body' tab is selected, showing a JSON response: <pre>1 { 2 "message": "Equipment Register record successfully deleted." 3 }</pre> The 'Headers' tab shows an 'Authorization' header with the value 'XXXXXX'. The 'Test Results' tab shows a successful 200 OK response with a 9.07s duration and 437B size. The status bar at the bottom right shows '200 OK'.</p>
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Windows Powershell	<p>The code block below shows the few lines of Powershell script required to make the 'delete Equipment Register record' request to the Customer API for a customer. The XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX is where the API key needs to be placed.</p> <p>IMPORTANT – Note the use of <u>[System.Net.WebUtility]::UrlEncode</u> to ensure that the reference value is properly escaped for inclusion in the URL.</p> <pre>\$URL = "https://api.elephant.sheassure.net/v1/equipment/" + [System.Net.WebUtility]::UrlEncode("example?reference") Invoke-WebRequest` -Headers @{'x-api-key' = 'XXXXXXXXXXXXXXXXXXXXXXXXXXXX'}` -Uri \$URL` -Method Delete`</pre> <p>The following shows the output from the above Powershell script code being run where a successful response is generated. The StatusCode: 200 indicates that the disable Equipment Register request was successful. Some response lines have been removed for brevity.</p> <pre>StatusCode : 200 StatusDescription : OK Content : {"message": "Equipment Register record successfully deleted."}</pre>
Python	<p>The code block below shows the few lines of Python code required to make the 'delete Equipment Register record' request to the Customer API for a customer. The XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX is where the API key needs to be placed.</p> <p>IMPORTANT – Note the use of <u>urllib.parse.quote</u> to ensure that the reference value is properly escaped for inclusion in the URL.</p> <pre># pip install requests # pip install urllib import requests import urllib url = "https://api.elephant.sheassure.net/v1/equipment/" + urllib.parse.quote('example.reference', safe="") headers = { "x-api-key": "XXXXXXXXXXXXXXXXXXXXXXXXXXXX" } r = requests.delete(url, headers=headers) r.raise_for_status() print(f"StatusCode={r.status_code}") print(f"Body={r.content}")</pre> <p>The following shows the output from the above Python code being run where a successful response is generated. The StatusCode=200 indicates that the Equipment Register delete was successful.</p> <pre>StatusCode=200 Body=b'{"message": "Equipment Register record successfully deleted."}'</pre>

