

# API for Asset Management

Sep 29, 2025

API provided by the HappyFox helpdesk is a RESTful web service. It supports operations like creating a ticket, adding updates to a ticket, listing tickets and users of the Helpdesk. It supports JSON, Form Url encoded and Multipart Form Data formats as payload.

## **Requirements:**

The API requires following skills in any programming language.

- Making HTTP requests (using GET and POST HTTP methods as a minimum requirement).
- Doing HTTP Basic Authentication.
- Generating and reading data in the JSON format.
- Optionally making HTTP POST requests using content type of "multipart/form-data" (needed for ticket attachments)

## **Documentation Conventions:**

The documentation indicates parameters that need to be replaced with actual values using the format . The entire string including the enclosing < and > should be replaced.

For example, if the parameter *email* is it should be replaced with the required email address

**Endpoint url format:**

Eg. <https://customersuppport.happyfox.com/> (<https://customersuppport.happyfox.com/>)api/1.1/

*Note: If you are using a custom domain, please use the custom domain url*

*API key and auth code are to be passed in Basic HTTP authentication format only.*

A full constructed example url is shown below.

<https://customersuppport.happyfox.com/> (<https://customersuppport.happyfox.com/>)api/1.1/json/assets/

This knowledge base article consists of all operations that can be done via the tickets endpoint.



If your HappyFox account is hosted in EU, please use `.happyfox.net`

API endpoints that are used to edit/delete assets use **asset id**. This is not same as the **display ID** or the **asset name**. This **asset id** is a non-zero integer and is a backend identifier of the asset. It can be obtained from the `/assets/` endpoint

```
1  {
2      "page_info": {
3          "count": 10,
4          "last_index": 156,
5          "page_count": 16,
6          "start_index": 1,
7          "end_index": 10
8      },
9      "data": [
10         {
11             "display_id": "2",
12             "name": "21",
13             "contacts": [],
14             "created_by": 1,
15             "id": 659, 659
16             "asset_type": {}
17         }
18     ]
19 }
```

1. Read all assets
2. Read one asset by asset ID
3. Create asset
4. Update asset
5. Delete asset
6. Read all asset custom fields
7. Read one asset custom field by id
8. Read all asset types
9. Asset type details

## 1. Read all assets

This returns a paginated list of all assets in your HappyFox account.

**API Endpoint url:** /api/1.1/json/assets/?asset\_type=<asset\_type\_ID>&size=<size value>&page=<page number>

**HTTP Method:** GET

| Parameter  | Required | Description  |
|------------|----------|--|
| size       | No       | Number of assets to return per page.<br>Default page size is 10.<br>Maximum allowed page size is 50                                      |
| page       | No       | Page Number  |
| asset_type | Yes      | ID of the asset type which is required. If this query parameter is not passed, assets belonging to the first asset type will be returned |

**Sample results:**



```
"contacts": [
    {
        "email": "dwayne.wade@gmail.com",
        "name": "Dwyane Wade",
        "id": 27662
    }
],
"created_by": 1,
"id": 6748,
"asset_type": {
    "id": 1,
    "name": "General"
},
"custom_fields": [
    {
        "name": "Serial Number",
        "type": "text",
        "order": 1,
        "value": "GCJ1353",
        "id": 45
    },
    {
        "name": "Manufacturer",
        "type": "text",
        "order": 2,
        "value": "Dell",
        "id": 46
    },
    {
        "name": "Model",
        "type": "text",
        "order": 3,
        "value": "Latitude 5500",
        "id": 47
    }
],
"updated_by": 1
},
{
    "display_id": "ALEXANDRAS-W10P",
    "name": "ALEXANDRAS-W10P",
    "contacts": [],
    "created_by": 1,
    "id": 6749,
    "asset_type": {
        "id": 1,
        "name": "General"
    }
},
```

```
"custom_fields": [
    {
        "name": "Serial Number",
        "type": "text",
        "order": 1,
        "value": "CB62BT2",
        "id": 45
    },
    {
        "name": "Manufacturer",
        "type": "text",
        "order": 2,
        "value": "Dell",
        "id": 46
    },
    {
        "name": "Model",
        "type": "text",
        "order": 3,
        "value": "OptiPlex 3060",
        "id": 47
    }
],
"updated_by": 1
},
{
    "display_id": "ALEXS-W10PC",
    "name": "ALEXS-W10PC",
    "contacts": [],
    "created_by": 1,
    "id": 6750,
    "asset_type": {
        "id": 1,
        "name": "General"
    },
    "custom_fields": [
        {
            "name": "Serial Number",
            "type": "text",
            "order": 1,
            "value": "JYG42B3",
            "id": 45
        },
        {
            "name": "Manufacturer",
            "type": "text",
            "order": 2,
            "value": "Dell",
            "id": 46
        }
    ]
}
```

```
        "id": 46
    },
    {
        "name": "Model",
        "type": "text",
        "order": 3,
        "value": "Latitude 5520",
        "id": 47
    }
],
"updated_by": 1
},
{
    "display_id": "AMANDAO-W10PC",
    "name": "AMANDAO-W10PC",
    "contacts": [],
    "created_by": 1,
    "id": 6751,
    "asset_type": {
        "id": 1,
        "name": "General"
    },
    "custom_fields": [
        {
            "name": "Serial Number",
            "type": "text",
            "order": 1,
            "value": "4V2W433",
            "id": 45
        },
        {
            "name": "Manufacturer",
            "type": "text",
            "order": 2,
            "value": "Dell",
            "id": 46
        },
        {
            "name": "Model",
            "type": "text",
            "order": 3,
            "value": "Latitude 5500",
            "id": 47
        }
],
"updated_by": 1
},
{
```

```
"display_id": "AMANDAZ-W10PC",
"name": "AMANDAZ-W10PC",
"contacts": [],
"created_by": 1,
"id": 6752,
"asset_type": {
    "id": 1,
    "name": "General"
},
"custom_fields": [
    {
        "name": "Serial Number",
        "type": "text",
        "order": 1,
        "value": "2ZG42B3",
        "id": 45
    },
    {
        "name": "Manufacturer",
        "type": "text",
        "order": 2,
        "value": "Dell",
        "id": 46
    },
    {
        "name": "Model",
        "type": "text",
        "order": 3,
        "value": "Latitude 5520",
        "id": 47
    }
],
"updated_by": 1
},
{
"display_id": "AMYK-VDI",
"name": "AMYK-VDI",
"contacts": [],
"created_by": 1,
"id": 6753,
"asset_type": {
    "id": 1,
    "name": "General"
},
"custom_fields": [
    {
        "name": "Serial Number",
        "type": "text",
        "order": 1,
        "value": "2ZG42B3",
        "id": 45
    }
]
```

```
        "order": 1,
        "value": "CBB8BT2",
        "id": 45
    },
    {
        "name": "Manufacturer",
        "type": "text",
        "order": 2,
        "value": "Dell",
        "id": 46
    },
    {
        "name": "Model",
        "type": "text",
        "order": 3,
        "value": "OptiPlex 3060",
        "id": 47
    }
],
"updated_by": 1
},
{
    "display_id": "AMYM-W10PC",
    "name": "AMYM-W10PC",
    "contacts": [],
    "created_by": 1,
    "id": 6754,
    "asset_type": {
        "id": 1,
        "name": "General"
    },
    "custom_fields": [
        {
            "name": "Serial Number",
            "type": "text",
            "order": 1,
            "value": "9L66Y93",
            "id": 45
        },
        {
            "name": "Manufacturer",
            "type": "text",
            "order": 2,
            "value": "Dell",
            "id": 46
        },
        {
            "name": "Model",
            "type": "text",
            "order": 3,
            "value": "OptiPlex 3060",
            "id": 47
        }
    ]
}
```

```
        "type": "text",
        "order": 3,
        "value": "LATITUDE 5520",
        "id": 47
    }
],
"updated_by": 1
},
{
"display_id": "ANITAM-W10PC",
"name": "ANITAM-W10PC",
"contacts": [],
"created_by": 1,
"id": 6755,
"asset_type": {
    "id": 1,
    "name": "General"
},
"custom_fields": [
    {
        "name": "Serial Number",
        "type": "text",
        "order": 1,
        "value": "613X9G3",
        "id": 45
    },
    {
        "name": "Manufacturer",
        "type": "text",
        "order": 2,
        "value": "Dell",
        "id": 46
    },
    {
        "name": "Model",
        "type": "text",
        "order": 3,
        "value": "Latitude 5520",
        "id": 47
    }
],
"updated_by": 1
},
{
"display_id": "ANTONIOV-W10PC",
"name": "ANTONIOV-W10PC",
"contacts": [],
"created_by": 1,
```

```
"id": 6756,
"asset_type": {
    "id": 1,
    "name": "General"
},
"custom_fields": [
    {
        "name": "Serial Number",
        "type": "text",
        "order": 1,
        "value": "HWG42B3",
        "id": 45
    },
    {
        "name": "Manufacturer",
        "type": "text",
        "order": 2,
        "value": "Dell",
        "id": 46
    },
    {
        "name": "Model",
        "type": "text",
        "order": 3,
        "value": "Latitude 5520",
        "id": 47
    }
],
"updated_by": 1
}
]
```

## 2. Read one asset by asset ID

Each asset and its details can be accessed using this API endpoint

**API Endpoint:** /api/1.1/json/asset/<id>/

**HTTP Method:** GET

**Sample result:**

```
{
  "display_id": "2",
  "name": "21",
  "contacts": [],
  "created_by": 1,
  "id": 659,
  "asset_type": {
    "id": 1,
    "name": "General"
  },
  "custom_fields": [
    {
      "name": "Serial Number",
      "type": "text",
      "order": 1,
      "value": null,
      "id": 45
    },
    {
      "name": "Manufacturer",
      "type": "text",
      "order": 2,
      "value": null,
      "id": 46
    },
    {
      "name": "Model",
      "type": "text",
      "order": 3,
      "value": null,
      "id": 47
    }
  ],
  "updated_by": 1
}
```

### 3. Create asset

**API Endpoint:** /api/1.1/json/assets/?asset\_type=<asset\_type\_id>

**Query Parameter:**

asset\_type is the only mandatory parameter here. Please pass ID of the asset type in which

this asset should be created. If this query parameter is not passed, asset will be created in the first asset type.

**HTTP Method:** POST

**Payload fields:**

| Field         | Type    | Is Required? | Description   |
|---------------|---------|--------------|---|
| name          | String  | Yes          | Name of the asset. Allows upto 200 characters   |
| display_id    | String  | Yes          | Display ID of the asset for the UI  |
| contact_ids   | List    | No           | IDs of existing contacts to be linked to this asset. Refer this doc ( <a href="https://support.happyfox.com/kb/article/1092-contacts-and-contact-groups-api-endpoints/#ListContacts">https://support.happyfox.com/kb/article/1092-contacts-and-contact-groups-api-endpoints/#ListContacts</a> ) to fetch IDs of contacts  |
| contacts      | List    | No           | This has to be a JSON array with the details of new contacts to be linked created, along with asset creation. Required fields for each element in the JSON array are name and email/phone number.<br>For an agent to create contacts when creating or updating an asset, the agent should have <b>Manage all Contacts</b> permission  |
| custom_fields | JSON    | No           | JSON array of custom field and their values for this asset  |
| created_by    | Integer | Yes          | ID of the agent that who is creating this asset. Refer this article ( <a href="https://support.happyfox.com/kb/article/360-api-for-happyfox/#:~:text=https%3A//%3Caccount_name%3E.happyfox.com/api/1.1/json/staff/">https://support.happyfox.com/kb/article/360-api-for-happyfox/#:~:text=https%3A//%3Caccount_name%3E.happyfox.com/api/1.1/json/staff/</a> ) to see agents list in your HappyFox account |

Only an active agent who has Manage Assets permission can create an asset.

**Rules for specifying custom field values in request data for the above option:**

| <b>Custom Field Type</b> | <b>Value format</b>          | <b>Example</b>   |
|--------------------------|------------------------------|--|
| Text                     | String                       | "Lorem ipsum"  |
| Textarea                 | String                       | "Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor" |
| Number                   | integer                      | 12   |
| Dropdown                 | ID of the option to be set   | 1  |
| Multiple options         | ID of options to be selected | [1,2,3]  |
| Date                     | YYYY-MM-DD                   | 2020-12-25   |

### **Example payload:**

```
{  
  "name": "Macbook pro v1",  
  "display_id": "macbook_pro_v1",  
  "contact_ids": ["1"],  
  "contacts": [  
    {"email": "donald@example.com"}  
,  
  ],  
  "created_by": 1,  
  "custom_fields": {  
    "1": "1",  
    "2": "Macbook Pro - 2020",  
    "3": "This is the most recent version of the available Macbook Pro",  
    "4": "C034234ZHY", // number custom field  
    "5": 4, // dropdown custom field  
    "6": [3, 4], //multiple option custom field  
    "7": "2020-11-15" // date custom field  
  }  
}
```

### **Example Successful Response (status code - 200)**

```
{  
  "id": 13,  
  "name": "Macbook Pro",  
  "display_id": "mac_d11pro",  
  "created_by": 1,  
  "created_at": "2019-11-15T07:49:40Z",  
  "updated_by": null,  
  "updated_at": "2019-11-15T07:49:40Z",  
  "contacts": [  
    {  
      "email": "john@example.com",  
      "id": 1,  
      "name": "John"  
    },  
    {  
      "email": "donald@example.com",  
      "id": 2,  
      "name": "Donald"  
    }  
,  
  "custom_fields": [  
    {  
      "id": 1,  
      "name": "Asset Category",  
      "type": "dropdown",  
      "value": 1,  
      "order": 1  
    },  
    {  
      "id": 2,
```

```

    "name": "Description",
    "type": "textarea",
    "value": null,
    "order": 2
  }
]
}

```

### **Example failure response in case of validation errors (status code - 400)**

```

{
  "error": {
    "display_id": [
      "This field is required."
    ],
    "contact_ids": "Enter a list of values.",
    "custom_fields": {
      "1": "Provide a valid choice. 5 is not one of the available choices."
    }
  }
}

```

## **4. Update asset**

**API Endpoint:** /api/1.1/json/asset/<id>/

**HTTP Method:** PUT

**Payload fields:**

| Field | Type | Is Required? | Description |
|-------|------|--------------|-------------|
|       |      |              |             |

|               |         |     |   |
|---------------|---------|-----|---|
| name          | String  | yes | Name of the asset   |
| display_id    | string  | Yes | Display ID of the asset for the UI  |
| contact_ids   | List    | No  | IDs of existing contacts to be linked to this asset. Refer this doc ( <a href="https://support.happyfox.com/kb/article/1092-contacts-and-contact-groups-api-endpoints/#ListContacts">https://support.happyfox.com/kb/article/1092-contacts-and-contact-groups-api-endpoints/#ListContacts</a> ) to fetch IDs of contacts  |
| contacts      | List    | No  | <p>This has to be a JSON array with the details of new contacts to be linked, along with asset updating process.</p> <p>Required fields for each element in the JSON array are name and email/phone number.</p> <p>For an agent to create contacts when creating or updating an asset, the agent should have <b>Manage all Contacts</b> permission</p>  |
| custom fields | JSON    | No  | JSON array of custom field and their values for this asset  |
| updated_by    | Integer | Yes | ID of the agent that who is updating this asset. Refer this article ( <a href="https://support.happyfox.com/kb/article/360-api-for-happyfox/#:~:text=https%3A//%3Caccount_name%3E.happyfox.com/api/1.1/json/staff/">https://support.happyfox.com/kb/article/360-api-for-happyfox/#:~:text=https%3A//%3Caccount_name%3E.happyfox.com/api/1.1/json/staff/</a> ) to see agents list in your HappyFox account |

## Example Request

```
{
  "name": "Macbook pro 2019 15' inch Retina",
  "updated_by": 1,
  "contact_ids": [2]
}
```

## Example Successful Response (status code - 200)

```
{  
  "id": 2,  
  "name": "Macbook pro 2019 15' inch Retina",  
  "display_id": "mac_Ipro",  
  "created_by": 1,  
  "created_at": "2019-11-15T06:43:51Z",  
  "updated_by": 1,  
  "updated_at": "2019-11-15T08:00:14Z",  
  "contacts": [  
    {  
      "email": "john@example.com",  
      "id": 2,  
      "name": "John"  
    }  
  ],  
  "asset_type": [  
    { "id": 1, "name": "General" },  
  "custom_fields": [  
    {  
      "id": 1,  
      "name": "Asset Category",  
      "type": "dropdown",  
      "value": 1,  
      "order": 1  
    },  
    {  
      "id": 2,  
      "name": "Description",  
      "type": "textarea",  
      "value": null,  
      "order": 2  
    }  
  ]  
}
```

```
        }
    ]
}
```

## 5. Delete asset

**API Endpoint:** /api/1.1/json/asset/<asset id>/?deleted\_by=<staff id>

**HTTP Method:** DELETE

**Request Query Parameters:**

| Parameter  | Is Required? | Description                               |
|------------|--------------|---|
| deleted_by | Yes          | ID of the agent who is making the request |

Only an active agent who has Manage Assets permission can delete an asset

## 6. Read all asset custom fields

**API Endpoint:** /api/1.1/json/asset\_custom\_fields/?  
asset\_type=<asset\_type\_ID>&size=<page\_size>&page=<page\_no>

**HTTP Method:** GET

**Request Query Parameters:**

| Parameter | Is Required? | Description  |
|-----------|--------------|--|
| size      | No           | Number of assets to return per page<br>Default page size is 10.<br>Maximum allowed page size is 50 |

|            |     |   |
|------------|-----|---|
| page       | No  | Page Number   |
| asset_type | Yes | ID of the asset type. If this query parameter is not passed, custom fields belonging to the first asset type will be returned |

#### **Example Response (status code - 200)**

```
{  
  "page_info": {  
    "count": 5,  
    "last_index": 5,  
    "page_count": 1,  
    "start_index": 1,  
    "end_index": 5  
  },  
  "data": [  
    {  
      "id": 45,  
      "type": "text",  
      "asset_type": {  
        "id": 1,  
        "name": "General"  
      },  
      "name": "Serial Number",  
      "choices": null  
    },  
    {  
      "id": 46,  
      "type": "text",  
      "asset_type": {  
        "id": 1,  
        "name": "General"  
      },  
      "name": "Manufacturer",  
      "choices": null  
    },  
    {  
      "id": 47,  
      "type": "text",  
      "asset_type": {  
        "id": 1,  
        "name": "General"  
      },  
      "name": "Category",  
      "choices": null  
    }  
  ]  
}
```

```
"type": "text",
"asset_type": {
    "id": 1,
    "name": "General"
},
"name": "Model",
"choices": null
},
{
"id": 56,
"type": "number",
"asset_type": {
    "id": 1,
    "name": "General"
},
"name": "Numbers acquired",
"choices": null
},
{
"id": 57,
"type": "date",
"asset_type": {
    "id": 1,
    "name": "General"
},
"name": "Warranty Date",
"choices": null
}
]
```

## 7. Read one asset custom field by id

**API Endpoint:** /api/1.1/json/asset\_custom\_fields/<id>/

**HTTP Method:** GET

**Example Response (status code - 200)**

```
{  
  "id": 45,  
  "type": "text",  
  "asset_type": {  
    "id": 1,  
    "name": "General"  
  },  
  "name": "Serial Number",  
  "choices": null  
}
```

## 8. Read all asset types

**API Endpoint:** /api/1.1/json/asset\_types/

**HTTP Method:** GET

**Sample response:**

```
{  
  "page_info": {  
    "count": 2,  
    "page_count": 1,  
    "last_index": 2,  
    "start_index": 1,  
    "end_index": 2  
  },  
  "data": [  
    {  
      "description": null,  
      "id": 1,  
      "name": "General",  
      "settings": {  
        "enable_ticket_association": true,  
        "enable_contact_association": true,  
        "enable_asset_quantity_for_ticket": true  
      }  
    },  
    {  
      "description": "",  
      "id": 2,  
      "name": "Device",  
      "settings": {  
        "enable_ticket_association": true,  
        "enable_contact_association": false,  
        "enable_asset_quantity_for_ticket": false  
      }  
    }  
  ]  
}
```

## 9. Asset type details

**API Endpoint:** /api/1.1/json/asset\_type/<asset type id>/

**HTTP Method:** GET

**Example response:**

```
{  
  "description": null,  
  "id": 1,  
  "name": "General",  
  "settings": {  
    "enable_ticket_association": true,  
    "enable_contact_association": true,  
    "enable_asset_quantity_for_ticket": true  
  }  
}
```