

# Extract the device list through the REST API

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You can extract the list of devices being monitored by an ExtraHop appliance through the ExtraHop REST API. If you extract the list through the REST API with a script, you can export the list in a format that can be read by third-party CMDB applications. In this topic, we will demonstrate methods for both the REST API and the REST API Explorer.

## Before you begin

- You must log into the ExtraHop appliance with an account that has unlimited privileges to generate an API key.
- You must have a valid API key to make changes through the REST API and complete the procedures below. (See [Generate an API key](#).)
- Familiarize yourself with the [ExtraHop REST API Guide](#) to learn how to navigate the ExtraHop REST API Explorer.

## Extract the device list through the REST API Explorer

1. In a browser, navigate to the REST API Explorer.  
The URL is the hostname or IP address of your ExtraHop Discover or Command appliance, followed by `/api/v1/explore/`. For example, if your hostname is `seattle-eda`, the URL is `https://seattle-eda/api/v1/explore/`.
2. Paste or type your API Key into the `api_key` field at the top of the page.
3. Click **Device** and then click **GET/devices**.
4. In the limit field, set the maximum number of devices you want to include in your list.
5. Click **Try it out!**.  
The Response Body displays the device list in JSON format.

## Python script example

The following example Python script extracts the device list from an ExtraHop appliance and writes the list to a csv file that can be read by Microsoft Excel. The script includes the following configuration variables:

- **HOST:** The IP address or hostname of the Discover appliance
- **APIKEY:** The API key
- **FILENAME:** The file that output will be written to
- **MAXDEVICES:** The maximum number of devices to extract
- **SAVEL2:** Determines whether L2 devices are included

```
import httplib
import json
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import json
import re
import csv
import datetime
import ssl

HOST = 'example.extrahop.com'
```

```
APIKEY = "f6876657888a7c1f24ac77827"
FILENAME = "devices.csv"
MAXDEVICES = 250
SAVEL2 = False

headers = {}
headers['Accept'] = 'application/json'
headers['Authorization'] = 'ExtraHop apikey='+APIKEY

conn = httplib.HTTPSConnection(HOST)
conn.request('GET', '/api/v1/devices?limit=%d&offset=
%d&search_type=any'%(MAXDEVICES,0), headers=headers)
resp = conn.getresponse()
if resp.status == 200:
    dTable = json.loads(resp.read())
    conn.close()
else:
    print "Error retrieving Device list"
    print resp.status, resp.reason
    resp.read()
    dTable = None
    conn.close()

if (dTable != None):
    print " - Saving %d devices in CSV file" % len(dTable)
    with open(FILENAME, 'w') as csvfile:
        csvwriter = csv.writer(csvfile, dialect='excel')
        csvwriter.writerow(dTable[0].keys())
        w = 0
        s = 0
        for d in dTable:
            if d['is_l3'] | SAVEL2:
                w += 1
                d['mod_time'] =
datetime.datetime.fromtimestamp(d['mod_time']/1000.0)
                d['user_mod_time'] =
datetime.datetime.fromtimestamp(d['user_mod_time']/1000.0)
                d['discover_time'] =
datetime.datetime.fromtimestamp(d['discover_time']/1000.0)
                csvwriter.writerow(d.values())
            else:
                s += 1
        print " - Wrote %d devices, skipped %d devices " % (w,s)
```