

# Chargify Bulk

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SAP Cloud Platform Open Connectors Bulk API calls provide an option to upload a large number of resources, such as contacts, into a Cloud Service all at once. The Bulk APIs require the name of the object identified within the cloud service and a .csv file with populated data included in each request. SAP Cloud Platform Open Connectors provides discovery services to get a list of available objects.

If you configured the **Callback Notification Signature Key** ( `event.notification.signature.key` ) when you authenticated a connector instance, the bulk APIs will use the signature key to provide hash verification in the header of bulk jobs. For more information, see [Hash Verification](#).

First we will make the GET /objects call to retrieve a list of available objects

```
curl -X GET
-H 'Authorization: Element , User '
'https://api.openconnectors.us2.ext.hana.ondemand.com/elements/api-v2/hubs/marketing/objects'
```

Example of Successful Response:

```
[
  "activities",
  "contact",
  "campaign",
  "list",
  "account"
]
```

The “contact” object is available. We will use contact in our bulk upload. It will be placed in our request URL.

A csv file with populated data is required in our request, like the one seen below.

Example data will be used in this demonstration.

| C_EmailAddress                      | C_FirstName | C_LastName | C_Title                    | C_BusPhone     | C_Company           | C_Website1                        |
|-------------------------------------|-------------|------------|----------------------------|----------------|---------------------|-----------------------------------|
| norm.smith@acme.com                 | Norm        | Smith      | Design Engineer            | (333) 333-1234 | Acme                | http://www.acme.com               |
| john@acmepublishing.com             | John        | Doe        |                            |                | Acme Publishing     | https://www.acmepublishing.com    |
| ann@acmedata.com                    | Ann         | Smith      | Director                   | 444) 444-1234  | Acme Data           | http://www.acmedata.com           |
| doug.smith@acmemarketing.com        | Doug        | Smith      | Director of Marketing      | (555) 555-1234 | Acme Marketing      | http://www.acmemarketing.com      |
| chuck@acmefinance.com               | Chuck       | Taylor     | Chief Financial Officer    | (656) 656-1234 | Acme Finance        | http://www.acmebilling.com        |
| frank@acmebilling.com               | Frank       | Ricard     |                            |                | Acme Billing        | http://www.acmeresources.com      |
| melissa@acmeresources.com           | Melissa     | Jones      | Human Resources Manager    | (202) 222-1234 | Acme Resources      |                                   |
| shooter@acmetechnology.com          | Shooter     | McGavin    | IT Technology Professional | (303) 928-2134 | Acme Technology     | http://acmetechnology.com         |
| penny@acmeeducation.com             | Penny       | Smith      | Director of Curriculum     | (868) 888-1234 | Acme Education      | http://www.acmeeducation.com      |
| ron.bergandy@acmecommunications.com | Ron         | Burgandy   | New Anchor                 | (227) 299-1234 | Acme Communications | http://www.acmecommunications.com |

An Example request can be seen below.:

```
curl -X POST
-H 'Authorization: Element , User '
-F file=@sample.csv
'https://api.openconnectors.us2.ext.hana.ondemand.com/elements/api-v2/hubs/marketing/bulk/contact?path=/sample.csv'
```

Example of Successful Response:

```
{
  "id": "1234",
  "status": "CREATED"
}
```

An id is assigned to job. This can be used to check the status of a bulk job.

The id “1234” will be used in the request URL in the next example.

```
curl -X GET
-H 'Authorization: Element , User '
'https://api.openconnectors.us2.ext.hana.ondemand.com/elements/api-v2/hubs/marketing/bulk/1234/status'
```

Example of Successful Response:

```
{
  "id": "1234",
  "status": "COMPLETE"
}
```

Once the job is completed, login to the cloud service and find your newly created contacts.