

REST API Documentation

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Introduction

The Trust.med API Allows you to gather and edit multiple different facets of data within your Trust.med account.

As a manufacturer, you will be able to gather information about your recalls and the notifications sent for those recalls. You will also be able to add a GTIN/NDC to your account, assign resolvers to those GTIN/NDCs and create/edit Resolver Links tied to those resolvers.

As a Distributor or Dispenser, you will be able to gather the notifications sent to you and acknowledge those recall notifications.

As a Third Party, you will be able to do the above for the appropriate type of account that you are responsible for.

Overview of the API

The API uses token based authentication.

Other forms of authentication, ATP for example, may be added later and this document will be updated accordingly.

This document will show all API calls with examples in both Python and CURL. The Python version is expected to use the latest version of the Python library.

Using The API

Authentication

The Trust.med API uses Token based Authentication. In order to use the API, you will need to be provided with a username and password by your Trust.med Representative.

Sandbox Testing

In order to test the Trust.med API within a Sandbox environment, there are a few extra steps:

1. You will need to have your Trust.med representative provision a *TESTING* API username and password for the system. This is a different set of credentials than those mentioned in the “Before You Begin” section.
2. You will need to provide the IP addresses for all of the test machines to your Trust.med representative.
3. **⚠ All endpoints in this document will need to have the “https://atp.med” replaced with “https://staging.atp.med” ⚠**

Generating A Token

POST /token

The Trust.med API uses the Authorization token sent in the Header of a request to authenticate a user.

Accepted Methods: POST

The header will look like the following:

```
"Authorization: Bearer 123abc...987zyx"
```

In order to generate the access token, follow these steps:

1. Gather your username and password.
2. Send a request to the Access Token Generation endpoint.
3. You will send the username, password, scope, grant_type and client_id as Post Body elements.

BETA: Trust.Med reserves the right to add, delete, or alter the endpoints, parameters, and capabilities of the API at any time.

Example Body

```
{
  "client_id": "dotmed",
  "grant_type": "password",
  "scope": "openid",
  "username": "your-username",
  "password": "your-password",
}
```

```
import requests
```

```
payload = {
  'client_id': 'dotmed',
  'grant_type': 'password',
  'scope': 'openid',
  'username': 'your-username',
  'password': 'your-password',
}
```

```
r = requests.post("https://atp.med/api/v1.0/token", data=payload)
```

cURL

```
curl --request POST \
--url 'http://api.med/api/v1.0/token' \
--header 'content-type: application/json' \
--data '{"client_id": "dotmed", "grant_type": "password", "scope": "openid", "username": "your-username", "password": "your-password"}'
```

Response Data

The response to this endpoint will return with the following schema:

| Item | Format | Description |
|--------------|---------|--------------------------------------|
| access_token | String | The access token value |
| expires_in | Integer | How long the token lives, in seconds |
| token_type | String | Bearer |

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Recall Endpoints

List Manufacturer Recalls

GET /recall

This endpoint provides a list of active recalls.

Manufacturers engaging with this endpoint will receive a list of their active recalls. Dispensers and Wholesalers engaging with this endpoint will receive a list of active recalls initiated by manufacturers.

Example Request

Python

```
import requests

token = getAccessToken() # Defined by GenerateAccessToken endpoint
url = f'https://atp.med/api/v1.0/recall/'
headers = {'Authorization': f'Bearer {token}'}

r = requests.get(url, headers=headers)
```

cURL

```
curl --request GET \
--url 'http://atp.med/api/v1.0/recall/' \
--header 'Authorization: Bearer abc123...x_yz'
```

Response Data

The response to this endpoint will return with the following schema:

| Item | Format | Description |
|---------------------|---------|---|
| id | Integer | The numerical ID for the Notification |
| recall_id | Integer | The numerical ID for the Recall |
| acknowledge | Boolean | If the notification has been acknowledged |
| acknowledge_details | String | The reason given for the acknowledgement |

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| | | |
|---------------|----------|--|
| ack_date | DateTime | When the notification was first acknowledged |
| created_at | DateTime | When the notification was created |
| last_notified | DateTime | Date Time of last notification |
| company | Object | The Company info the notification was sent to |
| location | Object | The Location info the notification was sent to |

List Recall Notifications

`GET /recall/{id([0-9]+)}/notification`

This endpoint uses an “id” that corresponds to the identifier for the recall that you wish to gather the notifications for.

This endpoint is used to generate a list of all of the notifications distributed for a particular recall.

When notifications are gathered via this endpoint by a third-party, the notification is auto-acknowledged for the user. The expectation is that the third-party is sending the information to the distributor or dispenser and is taking responsibility for the delivery of the notification downstream.

Example Request

Python

```
import requests

token = getAccessToken() # Defined by GenerateAccessToken endpoint
recall_id = 123
url = f'https://atp.med/api/v1.0/recall/{recall_id}/notification/'
headers = {'Authorization': f'Bearer {token}'}

r = requests.get(url, headers=headers)
```

cURL

```
curl --request GET \
--url 'http://atp.med/api/v1.0/recall/:recall_id/notification/' \
--header 'Authorization: Bearer abc123...x_yz'
```

BETA: Trust.Med reserves the right to add, delete, or alter the endpoints, parameters, and capabilities of the API at any time.

Response Data

The response to this endpoint will return with the following schema:

| Item | Format | Description |
|---------------------|----------|--|
| id | Integer | The numerical ID for the Notification |
| recall_id | Integer | The numerical ID for the Recall |
| acknowledge | Boolean | If the notification has been acknowledged |
| acknowledge_details | String | The reason given for the acknowledgement |
| ack_date | DateTime | When the notification was first acknowledged |
| created_at | DateTime | When the notification was created |
| last_notified | DateTime | Date Time of last notification |
| company | Object | The Company info the notification was sent to |
| location | Object | The Location info the notification was sent to |

List New Recall Notifications

[GET /recall-notifications](#)

Utilize this endpoint to gather all new recall notifications tied to an account. This can be used to gather the new recall notifications in bulk without the need to gather each recall identifier and hit the recall notification endpoint multiple times.

Once a notification is returned via this endpoint, it will not be part of the data returned if the endpoint is hit a second time since it only returns “fresh” data.

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Example Request

Python

```
import requests

token = getAccessToken() # Defined by GenerateAccessToken endpoint
url = f'https://atp.med/api/v1.0/recall-notifications/'
headers = {'Authorization': f'Bearer {token}'}

r = requests.get(url, headers=headers)
```

cURL

```
curl --request GET \
--url 'http://atp.med/api/v1.0/recall-notifications/' \
--header 'Authorization: Bearer abc123...x_yz'
```

Response Data

The response to this endpoint will return with the following schema:

| Item | Format | Description |
|---------------------------|----------|---|
| id | Integer | The numerical ID for the Recall |
| identifier | String | The manufacturer provided name for the Recall |
| manufacturer | String | The Manufacturer's name |
| manufacturer_event_number | String | The Manufacturer's event number |
| manufacturer_phone | String | The contact number for the manufacturer |
| initiation_date | DateTime | The initiation date of the Recall |
| root_cause | String | URL for Root Cause document |
| reason | String | The reason for the Recall |
| recall_class | String | The class of the Recall |
| recall_level | String | The level of the Recall |
| stop_immediately | Boolean | Stop Immediately status |
| letter_wholesale | String | The URL for the Wholesale Letter if available |

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| | | |
|-----------------|---------|---|
| letter_pharmacy | String | The URL for the Pharmacy Letter if available |
| letter_patient | String | The URL for the Patient Letter if available |
| products | Array | A list of products, NDCs, Lots included in the Recall |
| company | Integer | The Company ID for the Recall |
| created_by | Integer | The User ID for the created Recall |
| creator_email | String | The email for the Recall Initiator |

Resolver Endpoints

List/Create Resolver Objects

```
GET /company/{company_id}([0-9])/resolver
POST /company/{company_id}([0-9])/resolver
```

This endpoint can accept both a GET or a POST request. The GET request will return all resolvers tied to the specified company identifier. The POST request will create a new Resolver with the provided name for the company tied to the identifier.

Example Request

Python

```
import requests
token = getAccessToken() # Defined by GenerateAccessToken endpoint
url = f'https://atp.med/api/v1.0/company/1/resolver/'
headers = {'Authorization': f'Bearer {token}'}

# Example GET
r = requests.get(url, headers=headers)

# Example POST
payload= { 'name': 'My New Resolver' }
r2 = requests.post(url, headers=headers, data=payload)
```

BETA: Trust.Med reserves the right to add, delete, or alter the endpoints, parameters, and capabilities of the API at any time.

cURL

```
curl --request GET \  
--url 'http://atp.med/api/v1.0/company/1/resolver' \  
--header 'Authorization: Bearer abc123...x_ym'
```

```
curl --request POST \  
--url 'http://atp.med/api/v1.0/company/1/resolver' \  
--header 'Authorization: Bearer abc123...x_ym' \  
--data '{"name": "My New Resolver"}'
```

Response Data

The response to this endpoint will return either a list of resolvers or a single resolver with the following schema:

| Item | Format | Description |
|----------------|---------------------|---|
| id | ([a-zA-Z0-9-]+) | The UUID4 id for the Resolver |
| name | String | The name of the Resolver |
| company_id | Integer | The identifier for the Company |
| created_at | DateTime | When the Resolver was created |
| resolver_links | List: Resolver Link | List of the Resolver Link objects tied to this Resolver |

List/Create Resolver Links

```
GET /company/{company_id}([0-9])/resolver/{resolver_id}([a-zA-z0-9-]+)/links  
POST /company/{company_id}([0-9])/resolver/{resolver_id}([a-zA-z0-9-]+)/links
```

This endpoint will allow a company to gather the Resolver Links or create a brand new Resolver Link tied to a resolver. This link is the actual URL that will show within the Linkset for the specific GS1 Linktype (Appendix A).

BETA: Trust.Med reserves the right to add, delete, or alter the endpoints, parameters, and capabilities of the API at any time.

Example Request

Python

```
import requests
token = getAccessToken() # Defined by GenerateAccessToken endpoint
url =
f'https://atp.med/api/v1.0/company/1/resolver/b0c8cc3f-deeb-4333-8874-2d7480334455/links/'
headers = {'Authorization': f'Bearer {token}'}

# Example GET
r = requests.get(url, headers=headers)

# Example POST
payload = {
    'title': 'Master Data',
    'href': 'https://my.masterdata.endpoint/',
    'hreflang': 'en',
    'link_type': 'gs1:masterData'
}
r2 = requests.post(url, headers=headers, data=payload)
```

cURL

```
curl --request GET \
--url
'http://atp.med/api/v1.0/company/1/resolver/b0c8cc3f-deeb-4333-8874-2d7480334455/links/' \
--header 'Authorization: Bearer abc123...x_yz'

curl --request POST \
--url
'http://atp.med/api/v1.0/company/1/resolver/b0c8cc3f-deeb-4333-8874-2d7480334455/links/' \
--header 'Authorization: Bearer abc123...x_yz' \
--data '{"title": "Master Data", "href":
"https://my.masterdata.endpoint/", "hreflang": "en", "link_type": "gs1:masterData" }'
```

Response Data

The following is the response data schema:

Note: The GET request returns a paginated result with a total result count as “count” and the following schema as a list under the “results” item.

| Item | Format | Description |
|------|-----------------|------------------------------------|
| id | ([a-zA-Z0-9-]+) | The UUID4 id for the Resolver Link |

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| | | |
|------------|----------|--|
| title | String | The title of the Resolver Link |
| href | String | The URL for the data endpoint |
| hreflang | String | The language the data endpoint is in (default: en) |
| link_type | String | The GS1 Link Type for this Resolver Link |
| created_at | DateTime | When the Resolver Link was created |

Update Resolver Link Data URL

PATCH

`/company/{company_id}([0-9])/resolver/{resolver_id}([a-zA-z0-9-]+)/links/{link_id}([a-zA-z0-9-]+)`

Use this endpoint to update the Data URL for the Resolver Link.

Example Request

Python

```
import requests
token = getAccessToken() # Defined by GenerateAccessToken endpoint
url =
f'https://atp.med/api/v1.0/company/1/resolver/b0c8cc3f-deeb-4333-8874-2d7480334455/links/b0c8cc3f-deeb-4333-8874-2d7480445566/'
headers = {'Authorization': f'Bearer {token}'}

# Example PATCH
payload= { 'href': 'https://my.new.url/' }
r2 = requests.patch(url, headers=headers, data=payload)
```

cURL

```
curl --request PATCH \
--url
'http://atp.med/api/v1.0/company/1/resolver/b0c8cc3f-deeb-4333-8874-2d7480334455/links/b0c8cc3f-deeb-4333-8874-2d7480445566/' \
--header 'Authorization: Bearer abc123...x_yz' \
--data '{"href": "https://my.new.url/"}'
```

BETA: Trust.Med reserves the right to add, delete, or alter the endpoints, parameters, and capabilities of the API at any time.

Response Data

The following is the response data schema:

| Item | Format | Description |
|------------|-----------------|--|
| id | ([a-zA-Z0-9-]+) | The UUID4 id for the Resolver Link |
| title | String | The title of the Resolver Link |
| href | String | The URL for the data endpoint |
| hreflang | String | The language the data endpoint is in (default: en) |
| link_type | String | The GS1 Link Type for this Resolver Link |
| created_at | DateTime | When the Resolver Link was created |

VRS Endpoints

Add Product to VRS by GTIN

`POST /vrs/company/{company_id}([0-9])/gtin/{gtin}([0-9])`

Use this endpoint to add a product to the Trust.Med Lookup Directory, which will be synced to all working VRS partners.

★ **NOTE:** This endpoint is currently under development. More methods may become available as development continues.

Request Data

The following is the request data schema, expected as a JSON payload passed in the body:

| Item | Format | Required | Description |
|--------------|----------|----------|---|
| recordOwner | String | Y | The Global Company Prefix (GCP) of the record owner |
| ci | String | Y | The connectivity information (e.g. URL, IP address) of the responder. |
| startExpDate | DateTime | Y | Lower bound of expiration date value. |
| endExpDate | DateTime | N | Upper bound of expiration date value. |

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| | | | |
|-----------------|--------|---|---|
| status | String | Y | “active”, “inactive” or “deleted” |
| nextRecordOwner | String | N | The GCP of the next record owner if the product is being transferred. This should match recordOwner if not in transfer. |

Example Request

Python

```
import requests
token = getAccessToken() # Defined by GenerateAccessToken endpoint
url = f'https://atp.med/api/v1.0/vrs/company/1/gtin/12345678901234'
headers = {'Authorization': f'Bearer {token}'}

# Example POST
payload= {
    'recordOwner': '123456',
    'ci': 'https://vrs-endpoint.med/vrs',
    'startExpDate': '200101',
    'endExpDate': '251231',
    'status': 'active',
    'nextRecordOwner': '123456'
}
r2 = requests.post(url, headers=headers, data=payload)
```

cURL

```
curl --request POST \
--url 'http://atp.med/api/v1.0/vrs/company/1/gtin/12345678901234' \
--header 'Authorization: Bearer abc123...x_yz' \
--data '{"recordOwner": "123456", "ci": "https://vrs-endpoint.med/vrs", "startExpDate": "200101", "endExpDate": "251231", "status": "active", "nextRecordOwner": "123456" }'
```

Response Data

The following is the response data schema:

| Item | Format | Description |
|-------------|-----------------|--|
| id | ([a-zA-Z0-9-]+) | The UUID4 id for the record |
| gtin | String | The GTIN value for the product |
| recordOwner | String | The Global Company Prefix (GCP) of the record owner |
| ci | String | The connectivity information (e.g. URL, IP address) of the responder |

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| | | |
|-----------------|----------|--|
| startExpDate | DateTime | The earliest point for product expiration |
| endExpDate | DateTime | The latest point for product expiration |
| nextRecordOwner | String | The GCP of the next record owner if the product is being transferred |

Appendix

Appendix A: Accepted GS1 Link Types

| Name | Code |
|---------------------------------|---------------------------------|
| Allergy Information | gs1:allergenInfo |
| Brand Homepage Pro | gs1:brandHomepageClinical |
| Brand Homepage Patient | gs1:brandHomepagePatient |
| Consumer Handling & Storage | gs1:consumerHandlingStorageInfo |
| EPCIS | gs1:epcis |
| Patient Information Leaflet | gs1:epil |
| Frequently Asked Questions | gs1:faqs |
| Org Info Page | gs1:homepage |
| Ingredients Information | gs1:ingredientsInfo |
| Instructions | gs1:instructions |
| Location Information | gs1:locationInfo |
| Master Data | gs1:masterData |
| Product Info Page | gs1:pip |
| Recall Status | gs1:recallStatus |
| Related Video | gs1:relatedVideo |
| Reviews | gs1:review |
| Safety Information | gs1:safetyInfo |
| Smart Label Page | gs1:smartLabel |
| Summary Product Characteristics | gs1:smpc |

BETA: Trust.Med reserves the right to add, delete, or alter the endpoints, parameters, and capabilities of the API at any time.

| | |
|--------------|-------------|
| Support Page | gs1:support |
|--------------|-------------|

Contact Details

If you require assistance please contact Trust.med at:

Email: support@trust.med

Phone: 855-630-0633