MS Registry REST API Resources

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| Request Parameters | | | | | | | | | | | |
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| Resource Information $$. $$. | | | | | | | | | | | 1 |
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| Example | | | | | | | | | | | |
| Response | | | | | | | | | | | |
| | | | | | | | | | | | |
| POST /user/diary | | | | | | | | | | | 1 |
| Resource Information | | | | | | | | | | | 1 |
| Request Parameters | | | | | | | | | | | 1 |
| Response Parameters | | | | | | | | | | | |
| Resource Errors | | | | | | | | | | | |
| Example | | | | | | | | | | | |
| Response | | | | | | | | | | | |
| | | | | | | | | | | | |
| POST /user/diary/ <id></id> | | | | | | | | | | | 1 |
| Resource Information | | | | | | | | | | | 1 |
| Request Parameters | | | | | | | | | | | 1 |
| Response Parameters | | | | | | | | | | | |
| Resource Errors | | | | | | | | | | | |
| Example | | | | | | | | | | | |
| Response | | | | | | | | | | | |
| response | | | • • | | • • | • • | • • | • | | • | - |
| GET /user/survey | | | | | | | | | | | 1 |
| Resource Information | | | | | | | | | | | 1 |
| Response Parameters | | | | | | | | | | | 1 |
| Resource Errors | | | | | | | | | | | |
| Example | | | | | | | | | | | |
| Response | | | | | | | | | | | |
| | | | | | | | | | | | |
| GET /user/survey/ <id></id> | | | | | | | | | | | 1 |
| Resource Information | | | | | | | | | | | 1 |
| Request Parameters | | | | | | | | | | | 1 |
| Response Parameters | | | | | | | | | | | |
| Resource Errors | | | | | | | | | | | |
| Example | | | | | | | | | | | |
| Response | | | | | | | | | | | |
| response | | • • | • • | | • • | • • | | • | • • | • | |
| POST /user/survey | | | | | | | | | | | 1 |
| Resource Information | | | | | | | | | | | |
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Welcome to the MS Registry REST API. Below, you'll find a full listing of all the available endpoints. As we add more endpoints, they will be automatically documented here.

The endpoint's documentation section includes what query parameters the endpoint will accept, what the JSON object's parameters will be in the response, and an example query/response.

This documentation is for most recent version of the MS Registry REST API, version v0.3.3.

GET /auth/test

Test Bearer Token authentication.

Resource Information

Method GET

URL /auth/test

Requires authentication? Yes

Requires Role? Every Role can access

Resource Errors

| status | code | message |
|--------|------------------------|--------------------------------------|
| 403 | authorization_required | Authorization header is expected |
| 401 | invalid_header | Authorization header must start with |
| | | Bearer |
| 401 | $invalid_header$ | Token not found |
| 400 | $token_expired$ | Token is expired |
| 400 | invalid_audience | Incorrect audience |
| 400 | $invalid_signature$ | Token signature is invalid |

```
curl \
  -H 'authorization: Bearer YOUR_API_TOKEN' \
  'https://ws.msregistry.s3it.uzh.ch/auth/test'
```

Response

```
{
   "status": 200,
   "code": "authorization_success",
   "description": "All good. You only get this message if you're authenticated."
}
```

GET /user

Get metadata about the current user.

Resource Information

Method GET

URL /api/v1.0/user

Requires authentication? Yes

Requires Role? Every Role can access

Response Parameters

| Parameter | Type | Description |
|---------------------------|--|---|
| uniqueID | (string) | That's the unique ID of the user, received from OAuth server |
| member_since last_seen | (iso 8601 datetime) (iso 8601 datetime) | Datetime the user joined Datetime last seen user. This field is updated on every user interaction |

Resource Errors

| status | code | message |
|------------|---------------------------------------|--|
| 403 401 | authorization_required invalid_header | Authorization header is expected Authorization header must start with Bearer |

| status | code | message |
|--------|-----------------------------|--|
| 401 | invalid_header | Token not found |
| 400 | $token_expired$ | Token is expired |
| 400 | invalid_audience | Incorrect audience |
| 400 | $invalid_signature$ | Token signature is invalid |
| 404 | not _found | $\label{eq:couldn't found a User with UniqueID={}} \\$ |

```
curl \
  -H 'authorization: Bearer YOUR_API_TOKEN' \
  'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user'

Response
{
    "uniqueID": "auth0|569cf82bfc02d8a0339beef4",
    "member_since": "2016-03-04T17:03:37",
    "last_seen": "2016-03-04T17:05:12"
}
```

$\operatorname{GET} / \operatorname{user/consent/info}$

Get detailed informations about user acceptance of Informed Consent.

Resource Information

Method GET
URL /api/v1.0/user/consent/info
Requires authentication? Yes
Requires Role? Patient, Relative

Response Parameters

Relative Role

| Parameter | Type | Description |
|-----------|----------|--|
| birthdate | (string) | Birthdate in this form %DD.%MM.%YYYY |
| sex | (string) | Sex. Possibly values are 'male' and 'female' |
| signature | (string) | Signature by Initials, max 3 digits |

Patient Role

| Parameter | Type | Description |
|--------------------------------|----------|--|
| birthdate | (string) | Birthdate in this form %DD.%MM.%YYYY |
| sex | (string) | Sex. Possibly values are 'male' and 'female' |
| signature | (string) | Signature by Initials, max 3 digits |
| physician_contact_permitted | (bool) | Physician contact permitted |
| data_exchange_cohort | (bool) | Data exchange cohort |
| $medical_record_abstraction$ | (bool) | Medical record abstraction |
| | | |

Resource Errors

These are the possible errors returned by this endpoint.

| status | code | message |
|--------|-----------------------------|--|
| 403 | authorization_required | Authorization header is expected |
| 401 | invalid_header | Authorization header must start with |
| | | Bearer |
| 401 | $invalid_header$ | Token not found |
| 400 | $token_expired$ | Token is expired |
| 400 | invalid_audience | Incorrect audience |
| 400 | $invalid_signature$ | Token signature is invalid |
| 401 | unauthorized | Insufficient Roles |
| 404 | $\operatorname{not_found}$ | Couldn't found a User with UniqueID={} |

Example

```
curl \
  -H 'authorization: Bearer YOUR_API_TOKEN' \
  'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/consent/info'

Response
{
    "birthdate": "18.09.1974",
    "sex": "M",
    "signature": "FP",
    "data_exchange_cohort": true,
    "date_signed": "2016-03-30T14:33:48.011000",
    "medical_record_abstraction": true,
    "data_exchange_cohort": true,
```

```
"physician_contact_permitted": true
}
```

GET /user/consent

Get brief information about user acceptance of Informed Consent.

Resource Information

Method GET

URL /api/v1.0/user/consent

Requires authentication? Yes

Requires Role? Patient, Relative

Response Parameters

| Parameter | Type | Description |
|-----------|--------|------------------------------------|
| accepted | (bool) | Return True if Consent Information |
| | | was accepted, False otherwise |

Resource Errors

These are the possible errors returned by this endpoint.

| status | code | message |
|--------|-----------------------------|--|
| 403 | authorization_required | Authorization header is expected |
| 401 | $invalid_header$ | Authorization header must start with |
| | | Bearer |
| 401 | $invalid_header$ | Token not found |
| 400 | $token_expired$ | Token is expired |
| 400 | invalid_audience | Incorrect audience |
| 400 | invalid_signature | Token signature is invalid |
| 401 | unauthorized | Insufficient Roles |
| 404 | not _found | Couldn't found a User with Unique ID={} |

Example

```
curl \
```

-H 'authorization: Bearer YOUR_API_TOKEN' \

^{&#}x27;https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/consent'

Response

```
{
    "accepted": true
}
```

POST /user/consent

Set user acceptance of Informed Consent.

Resource Information

Method POST

URL /api/v1.0/user/consent

Requires authentication? Yes

Requires Role? Patient, Relative

Request Parameters

Relative Role

| Parameter | Type | Description |
|-----------|----------|--|
| birthdate | (string) | Birthdate in this form %DD.%MM.%YYYY |
| sex | (string) | Sex. Possibly values are 'male' and 'female' |
| signature | (string) | Signature by Initials, max 3 digits |

Patient Role

| Parameter | Type | Description |
|--|------------------|--|
| birthdate | (string) | Birthdate in this form %DD.%MM.%YYYY |
| sex | (string) | Sex. Possibly values are 'male' and 'female' |
| signature physician_contact_permitted | (string) (bool) | Signature by Initials, max 3 digits Physician contact permitted |
| data_exchange_cohort medical_record_abstraction | (bool) (bool) | Data exchange cohort Medical record abstraction |

Response Parameters

| Parameter | Type | Description |
|-----------|--------|---|
| success | (bool) | Return True if content was accepted and registered, False otherwise |

Resource Errors

These are the possible errors returned by this endpoint.

| status | code | message |
|--------|------------------------|---------------------------------------|
| 403 | authorization_required | Authorization header is expected |
| 401 | invalid_header | Authorization header must start with |
| | | Bearer |
| 401 | invalid_header | Token not found |
| 401 | invalid_header | Authorization header must be Bearer + |
| | | token |
| 400 | token_expired | Token is expired |
| 400 | invalid audience | Incorrect audience |
| 400 | invalid_signature | Token signature is invalid |
| 401 | unauthorized | Insufficient Roles |
| 405 | $method_not_allowed$ | |

Example

Response

```
{
   "success": true
}
```

GET /user/diary

Get All Diary entries compiled by User.

Resource Information

Method GET

URL /api/v1.0/user/diary

Requires authentication? YES

Requires Role? Patient, Relative

Request Parameters

| Parameter | Type | Description |
|-------------|------------------------|---|
| from | (iso 8601 datetime) | If used, query returns Diary entries starting from this datetime. It could be used in combination with <i>until</i> |
| ${f until}$ | (iso 8601 datetime) | parameter If used, query returns Diary entries starting from this datetime. It could be used in combination with from parameter |

Response Parameters

| Parameter | Type | Description |
|---------------------|---------------------|---|
| diaries | (array) | Return list of all Diaries compiled by User as JSON array |
| id | (string) | Return Diary ID |
| diary | (json file) | Return User's Diary. Returned value is a RAW JSON file |
| timestamp | (iso 8601 datetime) | Datetime the diary was inserted or updated |

Resource Errors

| status | code | message |
|------------|--|--|
| 403 401 | ${authorization_required}\\invalid_header$ | Authorization header is expected Authorization header must start with Bearer |

| status | code | message |
|--------|-----------------------|---|
| 401 | invalid_header | Token not found |
| 401 | $invalid_header$ | Authorization header must be Bearer + token |
| 400 | token_expired | Token is expired |
| 400 | invalid_audience | Incorrect audience |
| 400 | $invalid_signature$ | Token signature is invalid |
| 401 | unauthorized | Insufficient Roles |

```
curl \
  -H 'authorization: Bearer YOUR_API_TOKEN' \
  'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/diary?from=2016-04-01T00:00:00.000000&until=201

Response
{
    ""diarios": [
```

GET / user / diary / < id >

Get User's Diary by Diary ID.

Resource Information

```
Method GET
URL /api/v1.0/user/diary/<id>
Requires authentication? YES
Requires Role? Patient, Relative
```

Request Parameters

| Parameter | Type | Description |
|-----------|----------|-------------|
| id | (string) | Diary ID |

Response Parameters

| Parameter | Type | Description |
|--------------------------|---------------------|--|
| $\overline{\mathrm{id}}$ | (string) | Return Diary ID |
| diary | (json file) | Return user's Diary. Returned value is a RAW JSON file |
| timestamp | (iso 8601 datetime) | Datetime the diary was inserted or updated |

Resource Errors

These are the possible errors returned by this endpoint.

| status | code | message |
|--------|------------------------|---------------------------------------|
| 403 | authorization_required | Authorization header is expected |
| 401 | invalid_header | Authorization header must start with |
| | | Bearer |
| 401 | invalid_header | Token not found |
| 401 | invalid_header | Authorization header must be Bearer + |
| | | token |
| 400 | token_expired | Token is expired |
| 400 | invalid_audience | Incorrect audience |
| 400 | invalid_signature | Token signature is invalid |
| 401 | unauthorized | Insufficient Roles |
| 404 | not _found | Couldn't found a Diary with id={} |

Example

```
curl \
  -H 'authorization: Bearer YOUR_API_TOKEN' \
  'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/diary/56f2c662ec71bc2c6b001040'
```

Response

```
{
    "id": "5707ba42ec71bc038226c84b",
    "diary": {
         "value": "any"
},
```

```
"timestamp": "2016-04-08T11:36:37.177000" }
```

POST /user/diary

Insert new User's Diary entry.

Resource Information

Method POST

URL /api/v1.0/user/diary

Requires authentication? Yes

Requires Role? Patient, Relative

Requires IC Accepted? Yes

Request Parameters

| Parameter | Type | Description |
|-----------|-------------|---------------|
| diary | (json file) | RAW JSON file |

Response Parameters

| Parameter | Type | Description |
|-----------|--------|---|
| success | (bool) | Return True if diary was accepted, False if JSON File is not well formatted |

Resource Errors

| status | code | message |
|--------|------------------------|---------------------------------------|
| 403 | authorization_required | Authorization header is expected |
| 401 | $invalid_header$ | Authorization header must start with |
| | | Bearer |
| 401 | invalid_header | Token not found |
| 401 | invalid_header | Authorization header must be Bearer + |
| | | token |
| 400 | $token_expired$ | Token is expired |
| 400 | invalid_audience | Incorrect audience |
| 400 | invalid_signature | Token signature is invalid |
| 401 | unauthorized | Insufficient Roles |

| status | code | message |
|------------|------------------------------------|----------------------------------|
| 401 405 | unauthorized method_not_allowed | Consent Information not accepted |

```
curl \
  -H 'authorization: Bearer YOUR_API_TOKEN' \
  -X POST -d "{'value': 'any'}" \
  'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/diary'

Response
{
    "success": true
}
```

POST /user/diary/<id>

Update User's Diary by Diary ID.

Resource Information

Method POST
URL /api/v1.0/user/diary/<id>
Requires authentication? YES
Requires Role? Patient, Relative

Request Parameters

| Parameter | Type | Description |
|-----------|-------------|---------------|
| id | (string) | Diary ID |
| diary | (json file) | RAW JSON file |

Response Parameters

| Parameter | Type | Description |
|-----------|--------|---|
| success | (bool) | Return True if diary was accepted, False if JSON File is not well formatted |

Resource Errors

These are the possible errors returned by this endpoint.

| status | code | message |
|--------|-----------------------------|---------------------------------------|
| 403 | authorization_required | Authorization header is expected |
| 401 | invalid_header | Authorization header must start with |
| | | Bearer |
| 401 | $invalid_header$ | Token not found |
| 401 | $invalid_header$ | Authorization header must be Bearer + |
| | | token |
| 400 | $token_expired$ | Token is expired |
| 400 | invalid_audience | Incorrect audience |
| 400 | invalid_signature | Token signature is invalid |
| 401 | unauthorized | Insufficient Roles |
| 404 | not _found | Couldn't found a Diary with $id=\{\}$ |

Example

```
curl \
  -H 'authorization: Bearer YOUR_API_TOKEN' \
  -X POST -d "{'value': 'any'}" \
  'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/diary/56f2c662ec71bc2c6b001040'
```

Response

```
{
   "success": true
}
```

GET /user/survey

Get All Survey entries compiled by User.

Resource Information

```
Method GET
URL /api/v1.0/user/survey
Requires authentication? YES
Requires Role? Patient, Relative
```

Response Parameters

| Parameter | Type | Description |
|---------------------|---------------------|---|
| surveys | (array) | Return list of all Surveys compiled by User as JSON array |
| id | (string) | Return Survey ID |
| survey | (json file) | Return User's Survey. Returned value is a RAW JSON file |
| timestamp | (iso 8601 datetime) | Datetime the survey was inserted |

Resource Errors

These are the possible errors returned by this endpoint.

| status | code | message |
|--------|------------------------|---|
| 403 | authorization_required | Authorization header is expected |
| 401 | $invalid_header$ | Authorization header must start with |
| | | Bearer |
| 401 | invalid_header | Token not found |
| 401 | $invalid_header$ | Authorization header must be Bearer $+$ |
| | | token |
| 400 | $token_expired$ | Token is expired |
| 400 | invalid_audience | Incorrect audience |
| 400 | invalid_signature | Token signature is invalid |
| 401 | unauthorized | Insufficient Roles |

Example

```
curl \
  -H 'authorization: Bearer YOUR_API_TOKEN' \
  'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/survey'
Response
```

```
},
    "timestamp": "2016-03-23T16:43:57.800000"
}

}
```

GET /user/survey/<id>

Get User's Survey by Survey ID.

Resource Information

Method GET

URL /api/v1.0/user/survey/<id>

Requires authentication? YE

Requires Role? Patient, Relative

Request Parameters

| Parameter | Type | Description |
|-----------|----------|-------------|
| id | (string) | Survey ID |

Response Parameters

| Parameter | Type | Description |
|-----------|---------------------|---|
| id | (string) | Return Survey ID |
| survey | (json file) | Return user's Survey. Returned value is a RAW JSON file |
| timestamp | (iso 8601 datetime) | Datetime the survey was inserted or updated |

Resource Errors

| status | code | message |
|--------|------------------------|--------------------------------------|
| 403 | authorization_required | Authorization header is expected |
| 401 | $invalid_header$ | Authorization header must start with |
| | | Bearer |
| 401 | $invalid_header$ | Token not found |

| status | code | message |
|--------|-----------------------------|---|
| 401 | invalid_header | Authorization header must be Bearer + token |
| 400 | $token_expired$ | Token is expired |
| 400 | invalid_audience | Incorrect audience |
| 400 | invalid_signature | Token signature is invalid |
| 401 | unauthorized | Insufficient Roles |
| 404 | $\operatorname{not_found}$ | Couldn't found a Survey with id= $\{\}$ |

```
curl \
-H 'authorization: Bearer YOUR_API_TOKEN' \
  'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/survey/56f2c662ec71bc2c6b001040'
```

Response

```
{
    "id": "56f2c662ec71bc2c6b001040",
    "survey": {
        "value": "any"
    },
    "timestamp": "2016-03-23T16:37:54.765000"
}
```

POST /user/survey

Insert a new User's Survey.

Resource Information

Method POST

URL /api/v1.0/user/survey

Requires authentication? Yes

Requires Role? Patient, Relative

Requires IC Accepted? Yes

Request Parameters

| Parameter | Type | Description |
|-----------|-------------|---------------|
| survey | (json file) | RAW JSON file |

Response Parameters

| Parameter | Type | Description |
|-----------|--------|--|
| success | (bool) | Return True if survey was accepted, False if JSON File is not well formatted |

Resource Errors

These are the possible errors returned by this endpoint.

| status | code | message |
|--------|------------------------|---------------------------------------|
| 403 | authorization_required | Authorization header is expected |
| 401 | invalid_header | Authorization header must start with |
| | | Bearer |
| 401 | invalid_header | Token not found |
| 401 | invalid_header | Authorization header must be Bearer + |
| | | token |
| 400 | token_expired | Token is expired |
| 400 | invalid_audience | Incorrect audience |
| 400 | invalid_signature | Token signature is invalid |
| 401 | unauthorized | Insufficient Roles |
| 401 | unauthorized | Consent Information not accepted |
| 405 | $method_not_allowed$ | |

Example

```
curl \
  -H 'authorization: Bearer YOUR_API_TOKEN' \
  -X POST -d "{'value': 'any'}" \
  'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/survey'
```

Response

```
{
   "success": true
}
```