

# MS Registry REST API Resources

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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 **v0.4.2**.

## 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

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

## Example

```
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	(iso 8601 datetime)	Datetime the user joined
last_seen	(iso 8601 datetime)	Datetime last seen user. This field is updated on every user interaction

## 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
404	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'
```

## Response

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

## GET /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
<b>birthdate</b>	(string)	Birthdate in this form %DD.%MM.%YYYY
<b>sex</b>	(string)	Sex. Possibly values are 'male' and 'female'
<b>signature</b>	(string)	Signature by Initials, max 3 digits

#### Patient Role

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

status	code	message
404	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'
```

## 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



Parameter	Type	Description
<b>sex</b>	(string)	Sex. Possibly values are 'male' and 'female'
<b>signature</b>	(string)	Signature by Initials, max 3 digits
<b>physician_contact_permitted</b>	(bool)	Physician contact permitted
<b>data_exchange_cohort</b>	(bool)	Data exchange cohort
<b>medical_record_abstraction</b>	(bool)	Medical record abstraction

## Response Parameters

Parameter	Type	Description
<b>success</b>	(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

```
curl \
-H 'authorization: Bearer YOUR_API_TOKEN' \
-X POST -d '{"physician_contact_permitted": true, \
  "data_exchange_cohort": true, \
  "medical_record_abstraction": true, \
  "sex": "male", \
  "signature": "FP", \
  "birthdate": "18.09.1974"}' \
```

```
'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/consent'
```

## 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
<b>from</b>	(iso 8601 datetime)	If used, query returns Diary entries starting from this datetime. It could be used in combination with <i>until</i> parameter
<b>until</b>	(iso 8601 datetime)	If used, query returns Diary entries starting from this datetime. It could be used in combination with <i>from</i> parameter

## Response Parameters

Parameter	Type	Description
<b>diaries</b>	(array)	Return list of all Diaries compiled by User as JSON array
<b>id</b>	(string)	Return Diary ID
<b>diary</b>	(json object)	Return User's Diary. Returned value is a JSON object
<b>timestamp</b>	(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

## Example

```
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=2016-04-08T11:36:37.177000'
```

## Response

```
{
  "diaries": [
    {
      "diary": {
        "value": "any"
      },
      "id": "5707ba42ec71bc038226c84b",
      "timestamp": "2016-04-08T11:36:37.177000"
    }
  ]
}
```

## 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
id	(string)	Return Diary ID
diary	(json object)	Return user's Diary. Returned value is a JSON object
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 object)	Any JSON object

## Response Parameters

Parameter	Type	Description
success	(bool)	Return True if diary is accepted

## 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

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
401	unauthorized	Consent Information not accepted
405	method_not_allowed	

## Example

```
curl \
-H 'authorization: Bearer YOUR_API_TOKEN' \
-X POST -d '{"diary": {"any": "value"}}' \
'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 object)	Any JSON object

## Response Parameters

Parameter	Type	Description
success	(bool)	Return True if diary is accepted

## 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 '{"diary": {"any": "value"}}' \
'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

## Request Parameters

Parameter	Type	Description
<b>from</b>	(iso 8601 datetime)	If used, query returns Survey entries starting from this datetime. It could be used in combination with <i>until</i> , <i>tags</i> and <i>ongoing</i> parameters
<b>until</b>	(iso 8601 datetime)	If used, query returns Survey entries starting from this datetime. It could be used in combination with <i>from</i> , <i>tags</i> and <i>ongoing</i> parameters
<b>tags</b>	(array)	If used, query returns all entries with declared TAGs. It could be used in combination with <i>from</i> , <i>until</i> and <i>ongoing</i> parameters
<b>ongoing</b>	(bool)	If used, query returns all entries with ongoing value requested. It could be used in combination with <i>from</i> , <i>until</i> and <i>tags</i> parameters

## Response Parameters

Parameter	Type	Description
<b>surveys</b>	(array)	Return list of all Surveys compiled by User as JSON array
<b>id</b>	(string)	Return Survey ID
<b>survey</b>	(json object)	Return User's Survey. Returned value is a JSON object
<b>timestamp</b>	(iso 8601 datetime)	Datetime the survey was inserted
<b>tags</b>	(array)	Return list of all TAGs assigned to a Survey entry
<b>ongoing</b>	(bool)	Ongoing value is a boolean flag that refer to completed Surveys

## Resource Errors

These are the possible errors returned by this endpoint.

status	code	message
403	authorization_required	Authorization header is expected



status	code	message
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?from=2016-03-01T00:00:00.000000&until=2016-03-12T17:01:57.800000'
```

## Response

```
{
  "surveys": [
    {
      "id": "56f2c662ec71bc2c6b001040",
      "survey": {
        "value": "any"
      },
      "tags": ["layer2", "other_tag"],
      "ongoing": true,
      "timestamp": "2016-03-03T16:37:54.765000"
    },
    {
      "id": "56f2c7cdec71bc2c6b001041",
      "survey": {
        "value": "any"
      },
      "tags": ["layer3"],
      "ongoing": false,
      "timestamp": "2016-03-12T17:01:57.800000"
    }
  ]
}
```

## GET /user/survey/<id>

Get User's Survey by Survey ID.

## Resource Information

Method	GET
URL	/api/v1.0/user/survey/<id>
Requires authentication?	YES
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 object)	Return user's Survey. Returned value is a JSON object
timestamp	(iso 8601 datetime)	Datetime the survey was inserted or updated
tags	(array)	Return list of all TAGs assigned to a Survey entry
ongoing	(bool)	Ongoing value is a boolean flag that refer to completed Surveys

## 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 Survey with id={}

## Example

```
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"
  },
  "tags": ["layer2", "other_tag"],
  "ongoing": false,
  "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
<b>survey</b>	(json object)	Any JSON object
<b>tags</b>	(array)	List of all TAGs assigned to this Survey entry. It cannot be null
<b>ongoing</b>	(bool)	Ongoing value is a boolean flag that refer to completed Surveys. It cannot be null

## Response Parameters

Parameter	Type	Description
success	(bool)	Return True if Survey is accepted

## 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 '{"survey": {"value": "any"}, "tags": ["layer2"], "ongoing": true}' \
'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/survey'
```

## Response

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

## POST /user/survey/<id>

Update User's Survey by Survey ID.

## Resource Information

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

Requires authentication? YES  
Requires Role? Patient, Relative

## Request Parameters

Parameter	Type	Description
<b>id</b>	(string)	Survey ID
<b>survey</b>	(json object)	Any JSON object
<b>tags</b>	(array)	List of all TAGs assigned to this Survey entry. If null, TAGs are not updated
<b>ongoing</b>	(bool)	Ongoing value is a boolean flag that refer to completed Surveys. It cannot be null

## Response Parameters

Parameter	Type	Description
<b>success</b>	(bool)	Return True if Survey is accepted

## 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 Survey with id={}

## Example

```
curl \
-H 'authorization: Bearer YOUR_API_TOKEN' \
-X POST -d '{"survey": {"value": "any"}, "tags": ["layer2", "othertag"], "ongoing": true}' \
'https://ws.msregistry.s3it.uzh.ch/api/v1.0/user/survey/56f2c662ec71bc2c6b001040'
```

## Response

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