

ARIS

USER MANAGEMENT API TECHNICAL INTRODUCTION

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This document applies to ARIS Version 10.0 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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1 Introduction

This document provides additional information for accessing an ARIS User Management via the ARIS REST API. It should be considered as a supplement to the official API documentation available on every running ARIS Server and ARIS Design Server under **<https://< Full Qualified Server Name or URL>/apidocs>**.

2 General principles

- This API encapsulates all functionality related to user management. Usage of the API is restricted by licenses. Please refer to the ARIS User Management API for more information on API usage and prerequisites.
- Every call to the API is atomic: either the operation succeeds or fails.
- Every call to the API requires a valid API cookie/token from ARIS User Management.
- Many calls have obligatory and/or optional URL parameters. All parameter values must be URL-encoded as they may contain special characters.
- If URL parameters are passed that are unknown or not the correct ones for the specific method or misspelled, then they are silently ignored. This may lead to an unexpected outcome of the requested operation.
- For read-requests, there is an absolute result size limit. The limit is typically 100,000 for object items and 10,000 for all other items. like models or groups (different limits may be applicable depending on the user license or server settings).
- This means that the sum of all result items from all paging requests cannot exceed the absolute result size limit.
- For write-requests, for example the creation of objects, the limit is 500 items per Request
- Date parameters must be provided and are returned in UTC in the RFC 3339 Internet format YYYY-MM-DD, and for timestamps in UTC in the RFC 3339 Internet Zulu time format is needed YYYY-MM-DD'T'HH:MM:SS'Z', for example, 2023-01-22T08:22:55Z.

3 Login/Logout

For all API calls, a valid token from ARIS User Management (also known as UMC) is required. The token must be obtained by calling a dedicated method from the UMC API. It is not allowed to use a standard UMC token obtained by logging in to the Connect portal. The token must be included in all subsequent API calls as URL parameter (umcsession) or added as cookie to the HTTP request.

3.1 Obtaining a UMC session token

The endpoint for obtaining the UMC token is:

POST

`http(s)://servername:port /umc/api/v2/tokens`

Required URL parameters are:

- tenant
- name
- password

Basic authentication is also supported (see remarks below).

EXAMPLE

POST

`https://<servername>umc/api/v2/tokens?tenant=default&name=system&password=manager`

Response:

```
{
  "csrfToken": "kZclK0V2xrD3u3M5bKy9NvzY_TriwE1KmC6k6huUWxQ", "token":
  "eyJhbGciOiJIUzI1NiIsImN1b2wiOiIyMDI0MDkxMjE1NjI1IiwiaWF0Ijoi
  20200912T11:21:15.000Z"
}
```

Remarks

- All URL parameters must be urlencoded if they contain special characters like umlauts, non-ASCII, etc.
- A successful invocation returns a UMC cookie in the HTTP session and in its JSON response body the UMC token as string. For subsequent API requests you can either provide the cookie and hand over the token as URL parameter umcsession (do not forget to urlencode the value).
- The JSON response also contains a CSRF-token. This CSRF-token must be passed as URL parameter csrfToken (urlencoded!) in subsequent requests if the REST API is called from a web browser environment (i.e. if the user-agent provided by the client indicates a browser like Chrome or Mozilla).
- As many subsequent API calls as desired can be carried out as long as the UMC maximum session duration limits are not exceeded. These limits can be viewed/edited in the User management of the ARIS Administration
- When no more API requests will be sent for some time it is strongly recommended to explicitly "logout" again in order to release the consumed ARIS license (see next chapter: Releasing a UMC session token (page 7)).

The screenshot shows the ARIS Administration interface. The top navigation bar includes 'ARIS Administration', 'Configuration', and 'AS'. Below the navigation bar, there are tabs for 'Publication set...', 'User manage...', 'ARIS documen...', 'Process Gover...', and 'More'. The 'User manage...' tab is active. On the left, a sidebar menu shows various categories like 'Infrastructure', 'Kerberos', 'LDAP', 'User-defined notifications', 'Password policy', 'SAML', 'Security', 'SMTP', 'Users', and 'SCIM'. The 'Users' category is expanded, and the 'General' sub-tab is selected. The main content area displays configuration options for users, including checkboxes for 'E-mail address required' and 'Validate e-mail address', and input fields for 'Maximum login name length' (100), 'Maximum picture size (in bytes)' (1048576), 'Initial session duration (in minutes)' (60), and 'Maximum session duration (in minutes)' (7200). The 'Initial session duration' and 'Maximum session duration' fields are highlighted with a red box. Other fields include 'Impersonation target users' (superuser,system), 'Name of the default group', and 'Display technical users' (checkbox).

- It is also possible to obtain the token with preemptive basic authentication. In this case, user name and password are not specified as parameters. Instead, the HTTP header must contain the entry **Authorization: Basic xyz**, where **xyz** is the BASE64 representation of the string **name:password**.

3.2 Releasing a UMC session token

When the UMC session is no longer required, it should be explicitly invalidated, thus releasing the consumed ARIS license. The endpoint to use is:

DELETE <https://<servername>/umc/api/tokens/eyJhbGciOiJIUzI1NiIsInR5cCI6IkpzZW50aWZ5IiwiaWF0Ijoi>

EXAMPLE

DELETE

<https://<servername>/umc/api/tokens/eyJhbGciOiJIUzI1NiIsInR5cCI6IkpzZW50aWZ5IiwiaWF0Ijoi>

4.2 tokensV1

POST

/v1/tokens

Generate new API token.

Parameter

- tenant * // Tenant name
- Name // User name
- Password // Password

This API call generates a new API token for the user using user credentials or basic authentication. User needs to have the licenses required to access the API.

The tenant name is required

EXAMPLE

Request

https://<servername>/umc/api/v1/tokens

Response

```
{  
  "csrfToken": "-8Bfw5u-o6W7k5IJkYXuYZdYRzVbAsrACmF-oDTeFCc",  
  "token":  
  "eyJhbGciOiJIUzI1NiJ9.eyJpYXQiOiJlM0Y3OTksImp0aSI6IjI1bnN2pobUxhWmRfZ3VYMQQ2NHJtZFNhbzJJMmtQeEUydGFmSWl0OFM2Z29YcjFMejZEcG9zSHRPNW91Rm5lZnZ0bWF3liwic3Viljoic3lzdGVtliwidGVuljoiZGVmYXVsdCIsImFwaSI6dHJ1ZX0.SRaGJZquSClmaqagi8rSSGdHPp2AxctP87st7T64wxGQ"  
}
```

4.3 tokensV2

POST

/v2/tokens/csrfToken

Parameter

- hashAlgorithm // Hash Algorithm (SHA-256)

This API call generates new CSRF token for the user token. The user token must be present in the cookies.

EXAMPLE

Request

https://<servername>/umc/api/v2/tokens/csrfToken?hashAlgorithm=SHA-256

Response

llo5bSt78pzGyekws9szm0mq0PbHAsVzD7CBEDv9raM

POST

/v2/tokens

Parameter

- tenant * // Tenant name
- name // User name
- password // Password

This API call generates a new API token for the user using user credentials or basic authentication. User needs to have the licenses required to access the API.

The tenant name is required

4.4 API token deletion

DELETE

/tokens/{id}

Parameter

- id * // API token

This API call Invalidate API token.

The parameter ID (API token) is required.

This call returns if everything is correct. Otherwise all errors will be returned.

EXAMPLE

Request

```
http://<servername>/umc/api/tokens/eyJhbGciOiJIUzI1NiJ9.eyJpYXQiOiJlE3MTkyOTA2MDgsI  
mp0aSI6InNmMUcxS2VfTnpmeXhMbTlrMk5lZ05TNldwSXcwcFBmQ1JQNExnQ1VQRGd1eVBIT  
DB0Q05SciUiLCJzdWliOiJzeXN0ZW0iLCJ0ZW4iOiJkZWZhdWx0IiwiaXBiOiJp0cnVifQ.AUEuzU6B  
hxRgNGL-ol-9FNlxKONtmKxGHeZio2x34VA
```

Remarks

ARIS for SAP® Enable Now license should be enabled.

5. Users

5.1 Retrieve licenses of the user

GET

/users/{name}/licenses

Parameter

- name * // Username

This API offers to retrieve the licenses of the user. The user name is required.

EXAMPLE

Request

https://<servername>/umc/api/users/muruga/licenses

Response

```
[  
  "YCSDC",  
  "YCSPD",  
  "YCSDA"  
]
```

5.2 Retrieve user picture

GET

/users/{name}/picture

Parameter

- name * //Name of username

This API offers to retrieve the picture of the user. The user name is required.

This returns null if the user does not exist or if user does not have picture.

5.3 Retrieve user by name

GET

/users/{name}

Parameter

- name * //User login

This API offers to retrieve the user by name. The user name is required.

This

EXAMPLE

Request

https://<servername>/umc/api/users/testuser1

Response

```
{
  "login": "testuser1",
  "firstname": "testuser1",
  "lastname": "testuser1",
  "email": "testuser1@softwareag.com",
  "_links": {
    "self": {
      "href": "https://<servername>/umc/api/users/testuser1"
    },
    "picture": {
      "href": "https://<servername>/umc/api/users/testuser1/picture"
    },
    "licenses": {
      "href": "https://<servername>/umc/api/users/testuser1/licenses"
    }
  }
}
```

5.4 Retrieve a page of users

GET

/users

Retrieves a page of users

Parameter

- offset // Offset of the first result to fetch
- limit // The maximum number of hits is limited to 500.

EXAMPLE

Request

Error! Hyperlink reference not valid.

Response

```
{
"first": "https://<servername>/umc/api/users?offset=0&limit=13",
"last": "https://<servername>/umc/api/users?offset=13&limit=0",
"users": [
{
"login": "testuser1",
"firstname": "testuser1",
"lastname": "testuser1",
"_links": {
"self": {
"href": "https://<servername>/umc/api/users"
},
"picture": {
"href": "https://<servername>/umc/api/users/picture"
},
"licenses": {
"href": "https://<servername>/umc/api/users/licenses"
}
}
},
],
}
```



```
{
  "login": "system",
  "firstname": "Administrator",
  "lastname": "System",
  "_links": {
    "self": {
      "href": "https://<servername>/umc/api/users"
    },
    "picture": {
      "href": "https://<servername>/umc/api/users/picture"
    },
    "licenses": {
      "href": "https://<servername>/umc/api/users/licenses"
    }
  }
},
"_links": {
  "self": {
    "href": "https://<servername>/umc/api/users?offset=0&limit=13"
  }
}
}
```

6 Legal information

6.1 Documentation scope

The information provided describes the settings and features as they were at the time of publishing. Since documentation and software are subject to different production cycles, the description of settings and features may differ from actual settings and features. Information about discrepancies is provided in the Release Notes that accompany the product.

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- Subscribe to early warnings and critical alerts
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