

FUJITSU Cloud Service K5

# API Reference Manual

Version 1.3

FUJITSU LIMITED

# Preface

## Purpose of This Document

This guide describes the specification of the API (Application Programming Interface) provided by the FUJITSU Cloud Service K5.

You are recommended to also refer to the following related manuals:

- K5 API User Guide
- K5 Portal User Guide

## Compliance with Export Control Regulations

When exporting this document or providing it to a third party, check the export control laws and regulations of your country and the U.S. and take necessary procedures.

## Notices

- The contents of this manual are subject to change without notice.
- The contents of this manual shall not be reproduced without express written permission from FUJITSU LIMITED.
- FUJITSU LIMITED shall bear no responsibility for any claims of violation of a third party's patent or other rights arising from the use of the data described in this document.

## Document history

| Version | Date         | Edited places                                                                                     | Description                                     |
|---------|--------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 1.1     | Oct 7, 2016  | 2.2 API Execution Errors<br>3.2 API Execution Errors                                              | Update error messages.                          |
| 1.2     | Dec.22, 2016 | 1.2 Access Rights by Role                                                                         | Add the section                                 |
|         |              | 1.1 List of API<br><br>2.3.1 Get Access Token<br><br>3.3.5 Update user authentication information | Modifications corresponding to the new function |
| 1.3     | May.15, 2017 | 2.3.1 Get Access Token                                                                            | Add explanation                                 |

## Table of Contents

|       |                                             |    |
|-------|---------------------------------------------|----|
| 1     | Chapter 1 – API Outline .....               | 1  |
| 1.1   | List of API .....                           | 2  |
| 1.2   | Access Rights by Role .....                 | 3  |
| 1.3   | Glossary .....                              | 4  |
| 2     | Chapter 2 – Authentication API .....        | 5  |
| 2.1   | Request Headers .....                       | 6  |
| 2.2   | API Execution Errors.....                   | 6  |
| 2.3   | API Specification .....                     | 8  |
| 2.3.1 | Get access token .....                      | 8  |
| 3     | Chapter 3 – User management API .....       | 10 |
| 3.1   | Request Headers .....                       | 11 |
| 3.2   | API Execution Errors.....                   | 11 |
| 3.3   | API Specification .....                     | 13 |
| 3.3.1 | Create new user.....                        | 13 |
| 3.3.2 | Change user information.....                | 15 |
| 3.3.3 | Change user password .....                  | 17 |
| 3.3.4 | Delete user .....                           | 18 |
| 3.3.5 | Update user authentication information..... | 19 |

---

# Chapter 1 – API Outline

---

## 1.1 List of API

| No. | API Group       | API                                    | Method | URL                                                                                                                                                                                             | Description                                                    |
|-----|-----------------|----------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| 1   | Authentication  | Get access token                       | POST   | <a href="https://auth-api.jp-east-1.paas.cloud.global.fujitsu.com/API/paas/auth/token">https://auth-api.jp-east-1.paas.cloud.global.fujitsu.com/API/paas/auth/token</a>                         | Get token for API authentication.                              |
| 2   | User management | Create user                            | POST   | <a href="https://k5-apiportal.paas.cloud.global.fujitsu.com/API/v1/api/users">https://k5-apiportal.paas.cloud.global.fujitsu.com/API/v1/api/users</a>                                           | Create a new user.                                             |
| 3   |                 | Change user information                | PUT    | <a href="https://k5-apiportal.paas.cloud.global.fujitsu.com/API/v1/api/users">https://k5-apiportal.paas.cloud.global.fujitsu.com/API/v1/api/users</a>                                           | Change information of the contractor or the specified user.    |
| 4   |                 | Change user password                   | PUT    | <a href="https://k5-apiportal.paas.cloud.global.fujitsu.com/API/v1/api/userspassword">https://k5-apiportal.paas.cloud.global.fujitsu.com/API/v1/api/userspassword</a>                           | Change password of the specified user.                         |
| 5   |                 | Delete user                            | DELETE | <a href="https://k5-apiportal.paas.cloud.global.fujitsu.com/API/v1/api/users/?login_id={UserName}">https://k5-apiportal.paas.cloud.global.fujitsu.com/API/v1/api/users/?login_id={UserName}</a> | Delete the specified user.                                     |
| 6   |                 | Update user authentication information | PUT    | <a href="https://k5-apiportal.paas.cloud.global.fujitsu.com/API/v1/api/usersauthenticationmethod">https://k5-apiportal.paas.cloud.global.fujitsu.com/API/v1/api/usersauthenticationmethod</a>   | Update user authentication method of the contractor or a user. |

API character encoding is UTF-8.

## 1.2 Access Rights by Role

Each user of the K5 Portal is assigned a 'Role' that controls the operations the user is authorized to perform on the K5 Portal. (Refer to the 'K5 Portal User Guide' for detail.)

Also for the use of APIs, access rights are assigned by role as shown below.

| API group       | API name                               | K5 common service Roles |               |                  |            |           |                  |            |      |
|-----------------|----------------------------------------|-------------------------|---------------|------------------|------------|-----------|------------------|------------|------|
|                 |                                        | Contractor              | USER          |                  |            |           |                  |            |      |
|                 |                                        |                         | Administrator |                  |            | Developer |                  |            |      |
| Authntication   | Get Access Token                       | ✓                       |               | ✓                |            |           | ✓                |            |      |
| User Management |                                        | Operation object        |               | Operation object |            |           | Operation object |            |      |
|                 |                                        | Oneself                 | USER          | Oneself          | Contractor | USER      | Oneself          | Contractor | USER |
|                 | Create New User                        | X                       | ✓             | X                | X          | ✓         | X                | X          | X    |
|                 | Change User Information                | *1                      | ✓             | ✓                | *1         | ✓         | ✓                | X          | X    |
|                 | Change User Password                   | ✓                       | X             | ✓                | X          | X         | ✓                | X          | X    |
|                 | Delete User                            | X                       | ✓             | X                | X          | ✓         | X                | X          | X    |
|                 | Update user authentication information | ✓                       | X             | ✓                | X          | X         | ✓                | X          | X    |

✓: Permitted X: Not Permitted \*1: Permitted with restrictions (See [Change user information ] below.)

By API name, the roles to which the executions are permitted are shown below.

### [Create New User]

- The Contractor and Administrator can create a user except with the role of Contractor.

### [Change user information]

- The Administrator and Developer can change the information of one's own, including password.
- The information of the Contractor which can be changed by an Administrator is only its password.
- The Contractor can change his/her own information, except its user status.
- The Contractor and Administrator can change the information of USERS (Administrator / Developer ).

### [Change user password]

- Regardless of role, a user can change one's own password.

### [Delete user]

- The Contractor and Administrator can delete a user with a role except Contractor.

### [Update user authentication information]

- All users can update his/her own user authentication method.

## 1.3 Glossary

| Term      | Explanation                                                                                                 |
|-----------|-------------------------------------------------------------------------------------------------------------|
| User      | Person (or system, service) who uses or manages a function                                                  |
| User name | Unique ID of a user                                                                                         |
| Role      | Authorization granted to a person or a group.<br>Role of a user determines which API that user can execute. |
| Role code | Unique ID of a role                                                                                         |

---

## Chapter 2 – Authentication API

---

## 2.1 Request Headers

Request headers for authentication API

| No. | Header Name       | Required  | Header value                          |
|-----|-------------------|-----------|---------------------------------------|
| 1   | Content-Type      | Yes       | application/json                      |
| 2   | X-FCX-Client-Cert | *See note | Client certificate mapped to the user |

\*Note: Required, in cases where 'Certificate and Password' authentication is used.

## 2.2 API Execution Errors

API execution error information is returned in HTTP response body under json format.

| No. | Format         | Item               | Type         | Cardinality | Description            |
|-----|----------------|--------------------|--------------|-------------|------------------------|
| 1   | JSON<br>[Body] | errorLevel         | string       | 1..1        | Error level            |
| 2   |                | framework          | object       | 1..1        | Framework object       |
| 3   |                | └systemErrorCode   | string       | 1..1        | System error code      |
| 4   |                | business           | object       | 1..1        | Business object        |
| 5   |                | └businessErrorInfo | string       | 1..1        | Error message          |
| 6   |                | └responseErrorCode | string       | 1..1        | Response error code    |
| 7   |                | └embeddedString    | string array | 1..1        | Additional information |

Example :

```
{
  "errorLevel": "888",
  "framework": {
    "systemErrorCode": ""
  },
  "business": {
    "businessErrorInfo": "Cannot create token from the specified user information.",
    "responseErrorCode": "RCM301802",
    "embeddedString": [ ]
  }
}
```

### List of response errors

| No. | HTTP status | Error Information       | Error message                                                                     | Error reason                                                                 |
|-----|-------------|-------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 1   | 400         | Request parameter error | Parameter is invalid.<br>Specified parameter: XXX<br>* XXX is the parameter name. | Request parameter error (empty parameter, invalid length, invalid format...) |
| 2   | 401         | Cannot create token     | Cannot create token from the specified user information.                          | User information specified in the request is invalid                         |
| 3   | 500         | Server error            | Failed to create token (Internal Error).                                          | Internal server error                                                        |

## 2.3 API Specification

### 2.3.1 Get access token

#### 1. Request

##### Parameter definition

| No. | Format         | Item               | Required | Cardinality | Min. length | Max. length | Restrictions | Description                            |
|-----|----------------|--------------------|----------|-------------|-------------|-------------|--------------|----------------------------------------|
| 1   | JSON<br>[Body] | auth               | Yes      | 1..1        | -           | -           | Object       | Authentication object                  |
| 2   |                | └identity          | Yes      | 1..1        | -           | -           | Object       | Identity object                        |
| 3   |                | └└password         | Yes      | 1..1        | -           | -           | Object       | Password object                        |
| 4   |                | └└user             | Yes      | 1..1        | -           | -           | Object       | User object                            |
| 5   |                | └└└contract_number | Yes      | 1..1        | 8           | 8           | See Note(*)  | Contract number of authentication user |
| 6   |                | └└└name            | Yes      | 1..1        | 4           | 246         | See Note(*)  | User name of authentication user       |
| 7   |                | └└└password        | Yes      | 1..1        | 16          | 64          | See Note(*)  | Password of authentication user        |

(\*): Upper/Lower case alphanumeric characters. For more details please refer to K5 Portal User Guide (1.1.2 Essential Information for the use of the K5 Portal) input restrictions.

Example:

```
{
  "auth":{
    "identity":{
      "password":{
        "user":{
          "contract_number":"xxxxxxx",
          "name":"user-name",
          "password":"user-password"
        }
      }
    }
  }
}
```

## 2. Response

HTTP STATUS: 200

Response body:

| No. | Format         | Item             | Cardinality | Description                              |
|-----|----------------|------------------|-------------|------------------------------------------|
| 1   | JSON<br>[Body] | token            | 1..1        | Token object                             |
| 2   |                | └expires_at      | 1..1        | Token expiration time (JST in Time Zone) |
| 3   |                | └scope           | 1..1        | Token scope                              |
| 4   |                | └user            | 1..1        | User object                              |
| 5   |                | └contract_number | 1..1        | Contract number of authentication user   |
| 6   |                | └name            | 1..1        | User name of authentication user         |

Example:

```
{
  "token":{
    "expires_at":"2016-05-16T03:20:42",
    "scope":"paas",
    "user":{
      "contract_number":"xxxxxxx",
      "name":"user-name"
    }
  }
}
```

---

## Chapter 3 – User management API

---

### 3.1 Request Headers

API execution error information is returned in HTTP response body under json format.

| No. | Header Name  | Required | Header value                                              |
|-----|--------------|----------|-----------------------------------------------------------|
| 1   | Token        | Yes      | Access token acquired by executing "Get access token API" |
| 2   | Content-Type | Yes      | application/json                                          |

### 3.2 API Execution Errors

API execution error information is returned in HTTP response body under json format.

| No. | Format         | Item               | Type            | Cardinality | Description                |
|-----|----------------|--------------------|-----------------|-------------|----------------------------|
| 1   | JSON<br>[Body] | errorLevel         | string          | 1..1        | Error level                |
| 2   |                | framework          | object          | 1..1        | Framework object           |
| 3   |                | └systemErrorCode   | string          | 1..1        | System error code          |
| 4   |                | business           | object          | 1..1        | Business object            |
| 5   |                | └businessErrorInfo | string          | 1..1        | Business error information |
| 6   |                | └responseErrorCode | string          | 1..1        | Response error code        |
| 7   |                | └embeddedString    | string<br>array | 1..1        | Error message              |

Example:

```
{
  "errorLevel": "888",
  "framework": {
    "systemErrorCode": ""
  },
  "business": {
    "businessErrorInfo": "BECSA000113",
    "responseErrorCode": "RCS100001",
    "embeddedString": [
      "Internal Server Error"
    ]
  }
}
```

## List of response errors

| No. | HTTP status | Error Information                                           | Error message                                                                                            | Error reason                                                   |
|-----|-------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| 1   | 400         | Request parameter error<br><br>* XXX is the parameter name. | - Parameter is insufficient.<br>Required parameter: XXX<br>- Parameter is required.                      | Insufficient parameters                                        |
|     |             |                                                             | Character count of parameter is invalid. Specified parameter: XXX                                        | Input parameter check error (digit number fault)               |
|     |             |                                                             | The format of parameter is invalid. Specified parameter: XXX                                             | Input parameter format error (other than digit number)         |
| 2   | 400         | Delete contractor error                                     | Could not delete user because the target user is a contractor.                                           | Try to delete a contractor                                     |
| 3   | 400         | Password check error                                        | Password is of invalid format or does not satisfy password policy. Please try again.                     | Violate password policy                                        |
|     |             |                                                             | Password cannot be changed again within 24 hours since the last change. Please try again after 24 hours. | Try to change password again within 24 hours                   |
|     |             |                                                             | Failed to change password. The old password was invalid.                                                 | Previous password error                                        |
| 4   | 400         | Invalid user status                                         | Cannot change user information because user status of the target user is invalid.                        | Try to change information of user whose status is invalid      |
| 5   | 401         | Invalid token                                               | The specified access token is not valid.                                                                 | Access token is not valid                                      |
| 6   | 403         | Authorization error                                         | Authorization Error.                                                                                     | Action not authorized                                          |
| 7   | 403         | Change contractor status error                              | Unauthorized to change information of the specified user.                                                | Try to change user status of a contractor                      |
| 8   | 404         | Not found                                                   | The target information does not exist.                                                                   | Target information not found                                   |
| 9   | 409         | Exclusive error                                             | Operation conflicts with another one.                                                                    | Target information has already been changed by another process |
| 10  | 500         | Internal Server Error                                       | Internal Server Error.                                                                                   | Consistency error, or other server errors                      |

## 3.3 API Specification

### 3.3.1 Create new user

#### 1. Request

##### Parameter definition

| No. | Format         | Item             | Required | Cardinality | Min.<br>length | Max.<br>length | Restrictions                       | Description                                |
|-----|----------------|------------------|----------|-------------|----------------|----------------|------------------------------------|--------------------------------------------|
| 1   | JSON<br>[Body] | login_id         | Yes      | 1..1        | 4              | 246            | See Note (**)                      | User name of the user to be created        |
| 2   |                | user_description | No       | 0..1        | 1              | 255            | See Note (**)                      | User description of the user to be created |
| 3   |                | mailaddress      | Yes      | 1..1        | 1              | 256            | Proper email address format (*)    | Email address of the user to be created    |
| 4   |                | user_status      | Yes      | 1..1        | 1              | 1              | Invalid (0) / Valid (1)            | User status of the user to be created      |
| 5   |                | password         | Yes      | 1..1        | 16             | 64             | See Note (**)                      | Password of the user to be created         |
| 6   |                | language_code    | Yes      | 1..1        | 2              | 2              | Japanese (ja) / English (en)       | Language code of the user to be created    |
| 7   |                | role_code        | Yes      | 1..1        | 2              | 2              | Administrator (00), Developer (01) | Role code of the user to be created        |
| 8   |                | user_last_name   | Yes      | 1..1        | 1              | 64             | See Note (**)                      | Last name of the user to be created        |
| 9   |                | user_first_name  | Yes      | 1..1        | 1              | 64             | See Note (**)                      | First name of the user to be created       |

(\*): For the detail of email address format, please refer to K5 Portal User Guide (1.1.2 Essential Information for the use of the K5 Portal) input restrictions.

(\*\*): Upper/Lower case alphanumeric characters. For more details, please refer to K5 Portal User Guide (1.1.2 Essential Information for the use of the K5 Portal) input restrictions.

Example:

```
{
  "login_id": "fujitsu123",
  "user_description": "User description",
  "mailaddress": "abc@xyz.com",
  "user_status": "1",
  "password": "Abcdefgh12345678",
  "language_code": "ja",
  "role_code": "00",
  "user_last_name": "Smith",
  "user_first_name": "John"
}
```

### 3. Response

HTTP STATUS: 200

Response body:

| No. | Format         | Item                  | Cardinality | Description                                                                          |
|-----|----------------|-----------------------|-------------|--------------------------------------------------------------------------------------|
| 1   | JSON<br>[Body] | login_id              | 1..1        | User name of the newly created user                                                  |
| 2   |                | user_description      | 1..1        | User description of the newly created user                                           |
| 3   |                | mailaddress           | 1..1        | Email address of the newly created user                                              |
| 4   |                | user_status           | 1..1        | User status of the newly created user<br>Invalid (0) / Valid (1)                     |
| 5   |                | language_code         | 1..1        | Language code of the newly created user<br>Japanese (ja) / English (en)              |
| 6   |                | authentication_method | 1..1        | Authentication method<br>* This API returns fixed value: Password authentication (0) |
| 7   |                | user_last_name        | 1..1        | Last name of the newly created user                                                  |
| 8   |                | user_first_name       | 1..1        | First name of the newly created user                                                 |

Example:

```
{
  "login_id": "fujitsu123",
  "user_description": "User description.",
  "mailaddress": "abc@xyz.com",
  "user_status": "1",
  "language_code": "ja",
  "authentication_method": "0",
  "user_last_name": "Smith",
  "user_first_name": "John"
}
```

### 3.3.2 Change user information

#### 1. Request

##### Parameter definition

| No. | Format         | Item             | Required | Cardinality | Min.<br>length | Max.<br>length | Restrictions                                                                                   | Description                  |
|-----|----------------|------------------|----------|-------------|----------------|----------------|------------------------------------------------------------------------------------------------|------------------------------|
| 1   | JSON<br>[Body] | login_id         | Yes      | 1..1        | 4              | 246            | See Note (**)                                                                                  | User name of the target user |
| 2   |                | mailaddress      | No (*)   | 0..1        | 1              | 256            | Proper email address format (***)                                                              | New email address            |
| 3   |                | user_description | No (*)   | 0..1        | 1              | 255            | See Note (**)                                                                                  | New user description         |
| 4   |                | language_code    | No (*)   | 0..1        | 2              | 2              | Japanese (ja) / English (en)                                                                   | New language code            |
| 5   |                | user_status      | No (*)   | 0..1        | 1              | 1              | Invalid (0) / Valid (1)<br>* Trying to change user status of a contractor will result in error | New user status              |
| 6   |                | password         | No (*)   | 0..1        | 16             | 64             | See Note(**)                                                                                   | New password                 |
| 7   |                | user_last_name   | No (*)   | 0..1        | 1              | 64             | See Note(**)                                                                                   | New user Last name           |
| 8   |                | user_first_name  | No (*)   | 0..1        | 1              | 64             | See Note (**)                                                                                  | New user First name          |

(\*): At least one parameter must be set. Upper / Lower case alphanumeric characters.

(\*\*): Upper / Lower case alphanumeric characters. For more details, please refer to K5 Portal User Guide (1.1.2 Essential Information for the use of the K5 Portal) input restrictions.

(\*\*\*): For the detail of email address format, please refer to K5 Portal User Guide (1.1.2 Essential Information for the use of the K5 Portal) input restrictions.

##### Example:

```
{
  "login_id": "fujitsu123",
  "mailaddress": "abc@xyz.com",
  "user_description": "User description.",
  "language_code": "ja",
  "user_status": "1",
  "password": "Abcdefgh12345678",
  "user_last_name": "Smith",
  "user_first_name": "John"
}
```

## 2. Response

HTTP STATUS: 200

Response body:

| No. | Format         | Item                                     | Cardinality | Description                                 |
|-----|----------------|------------------------------------------|-------------|---------------------------------------------|
| 1   | JSON<br>[Body] | login_id                                 | 1..1        | User name of the target user                |
| 2   |                | language_code                            | 1..1        | New language code                           |
| 3   |                | user_status                              | 1..1        | New user status                             |
| 4   |                | mailaddress                              | 1..1        | New email address                           |
| 5   |                | user_description                         | 1..1        | New user description                        |
| 6   |                | user_last_name                           | 1..1        | New user Last name                          |
| 7   |                | user_first_name                          | 1..1        | New user First name                         |
| 8   |                | accesstoken_destruction_information_list | 1..1        | User information whose token was cancelled. |
| 9   |                | customer_group_id                        | 1..1        | Group ID to which the user belongs to.      |
| 10  |                | login_id                                 | 1..1        | Login ID of the user.                       |

Example:

```
{
  "login_id": "fujitsu123",
  "language_code": "ja",
  "user_status": "1",
  "mailaddress": "abc@xyz.com",
  "user_description": "User description.",
  "user_last_name": "Smith",
  "user_first_name": "John"

  "accesstoken_destruction_information_list": [
    {
      "customer_group_id": "HvlgXxym",
      "login_id": "fujitsu123"
    }
  ]
}
```

### 3.3.3 Change user password

#### 1. Request

##### Parameter definition

| No. | Format         | Item            | Required | Cardinality | Min.<br>length | Max.<br>length | Restrictions | Description                  |
|-----|----------------|-----------------|----------|-------------|----------------|----------------|--------------|------------------------------|
| 1   | JSON<br>[Body] | login_id        | Yes      | 1..1        | 4              | 246            | See Note (*) | User name of the target user |
| 2   |                | after_password  | Yes      | 1..1        | 16             | 64             | See Note (*) | New password                 |
| 3   |                | before_password | Yes      | 1..1        | 16             | 64             | See Note (*) | Old password                 |

(\*): Upper / Lower case alphanumeric characters. For more details, please refer to K5 Portal User Guide (1.1.2 Essential Information for the use of the K5 Portal) input restrictions.

Example:

```
{
  "login_id": "fujitsu123",
  "after_password": "Newpassword12345678",
  "before_password": "Abcdefgh12345678"
}
```

#### 2. Response

HTTP STATUS: 200

Response body:

| No. | Format         | Item                                     | Cardinality | Description                                 |
|-----|----------------|------------------------------------------|-------------|---------------------------------------------|
| 1   | JSON<br>[BODY] | accesstoken_destruction_information_list | 1..1        | User information whose token was cancelled. |
| 2   |                | └customer_group_id                       | 1..1        | Group ID to which the user belongs to.      |
| 3   |                | └login_id                                | 1..1        | Login ID of the user.                       |

Example:

```
{
  "accesstoken_destruction_information_list": [
    {
      "customer_group_id": "HvlgXxym",
      "login_id": "fujitsu123"
    }
  ]
}
```

### 3.3.4 Delete user

#### 1. Request

##### Parameter definition

| No. | Format                 | Item     | Required | Cardinality | Min.<br>length | Max.<br>length | Restrictions | Description                            |
|-----|------------------------|----------|----------|-------------|----------------|----------------|--------------|----------------------------------------|
| 1   | URL query<br>parameter | login_id | Yes      | 1..1        | 4              | 246            | See Note (*) | User name of the user to be<br>deleted |

(\*): Upper / Lower case alphanumeric characters. For more details, please refer to K5 Portal User Guide (1.1.2 Essential Information for the use of the K5 Portal) input restrictions.

Example:

```
/API/v1/api/users/?login_id= fujitsu123
```

#### 2. Response

HTTP STATUS: 200

Response body:

| No. | Format         | Item                                     | Cardinality | Description                                    |
|-----|----------------|------------------------------------------|-------------|------------------------------------------------|
| 1   | JSON<br>[BODY] | accesstoken_destruction_information_list | 1..1        | User information whose token was<br>cancelled. |
| 2   |                | └customer_group_id                       | 1..1        | Group ID to which the user belongs to.         |
| 3   |                | └login_id                                | 1..1        | Login ID of the user.                          |

Example:

```
{
  "accesstoken_destruction_information_list":[
    {
      "customer_group_id":"HvlgXxym",
      "login_id":" fujitsu123"}
  ]
}
```

### 3.3.5 Update user authentication information

#### 1. Request

##### Parameter definition

| No. | Format         | Item                  | Required | Cardinality | Min.<br>length | Max.<br>length | Restrictions | Description                                                                                                            |
|-----|----------------|-----------------------|----------|-------------|----------------|----------------|--------------|------------------------------------------------------------------------------------------------------------------------|
| 1   | JSON<br>[Body] | login_id              | Yes      | 1..1        | 4              | 246            | See Note (*) | User name of the target user                                                                                           |
| 2   |                | authentication_method | Yes      | 1..1        | 1              | 1              | See Note (*) | Authentication method for the user<br>0: Authentication by a password<br>1: Authentication by a certificate & password |

(\*): Upper / Lower case alphanumeric characters. For more details, please refer to K5 Portal User Guide

##### Example:

```
{  
  "login_id": "fujitsu123",  
  "authentication_method": "1",  
}
```

## 2. Response

HTTP STATUS: 200

Response body:

| No. | Format         | Item                                     | Cardinality | Description                                                                                                             |
|-----|----------------|------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------|
| 1   | JSON<br>[Body] | authentication_method                    | 1..1        | Authentication method for the user.<br>0: Authentication by a password<br>1: Authentication by a certificate & password |
| 2   |                | accesstoken_destruction_information_list | 1..1        | User information whose token is to be canceled.                                                                         |
| 3   |                | customer_group_id                        | 1..1        | Contract number of the user whose token is to be canceled.                                                              |
| 4   |                | login_id                                 | 1..1        | Login ID of the user whose token is to be canceled.                                                                     |

Example:

```
{
  "authentication_method": "1",
  "accesstoken_destruction_information_list": [
    {
      "customer_group_id": "HvlgXxym",
      "login_id": "fujitsu123"
    }
  ]
}
```

**FUJITSU Cloud Service K5**  
**API Reference Manual Version 1.3**  
Issued May 2017

All Rights Reserved, Copyright FUJITSU LIMITED