API USERMANUAL

BioTime 9.5

Date: **September 11 2024**

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API Description

BioTime 8.5 API is dedicated to the platform data connection for the third-party system. The third-party system can read and set business data flexibly, which effectively reduces the complexity of the third-party system business integration and provides convenient, fast standard connection mode and data structure.

1. Get System User AuthToken

There are two kinds of auth token for software system user: JWT auth token and general auth token.

1.1 Get JWT AuthToken

(1) Request Instruction

HTTPS Method	POST
URI	/jwt-api-token-auth/
Content Type	application/json
Response Type	JSON
Parameter Description	username: string, is required, the username to login the system. password: string, is required, the password to login the system.

Request Herders	{
	   "Content-Type":"application/json"
	}

Request Body	{
	   "username":"username", "password":"pwd"
	}

(2) How to GetToken

1) Get token via browser, input the following link in the browser:

http://serverIP:serverPort/api/docs/#jwt-api-token-auth

serverIP: BioTime 8.5 server or computer IP, such as: 192.168.218.8

serverPort: The server port of BioTime 8.5, such as: 8090

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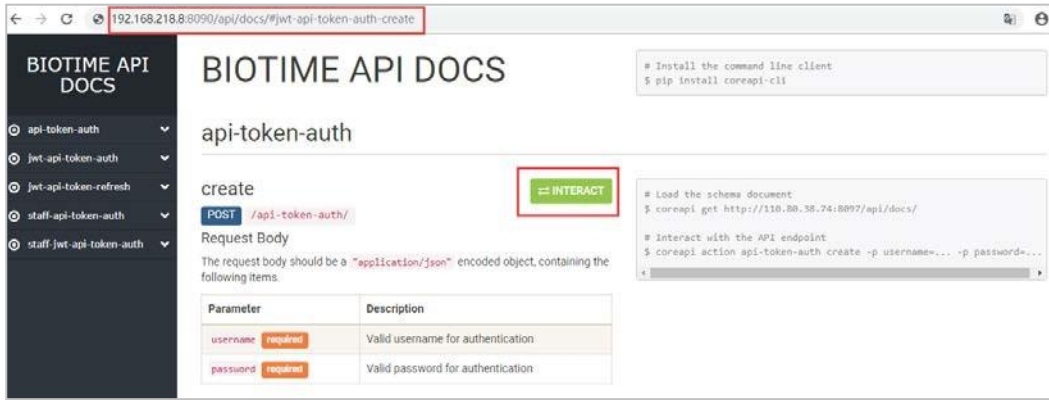
2) Get token via third-party, such as Postman.

1.2 Get General auth token

(1) Request Instruction

Same as getting JWT Token

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(2) How to GetToken

1) Get token via browser, input the following link in the browser:

http://serverIP:serverPort/api/docs/#api-token-auth

serverIP: BioTime 8.5 server or computer IP, such as: 192.168.218.8

serverPort: The server port of BioTime 8.5, such as: 8090
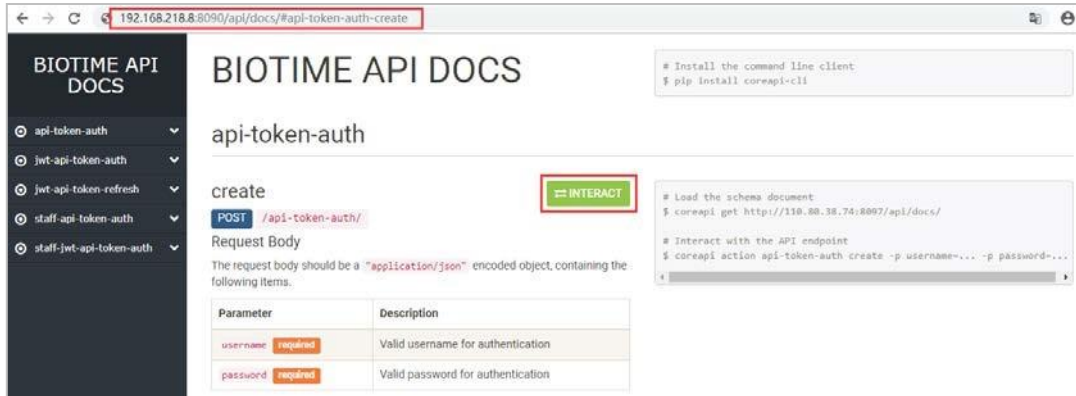
2) Get token via third-party API development tool, such as Postman.

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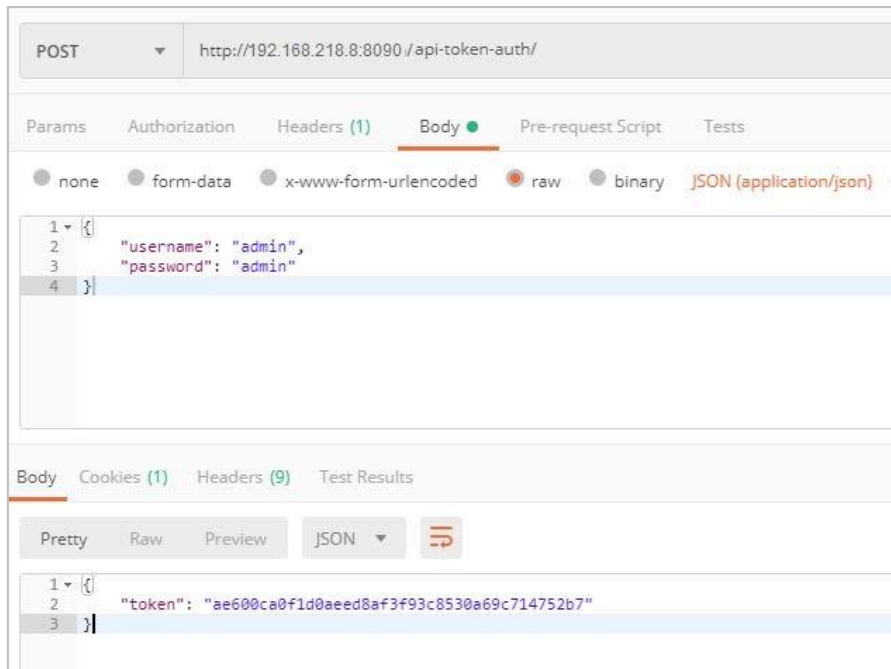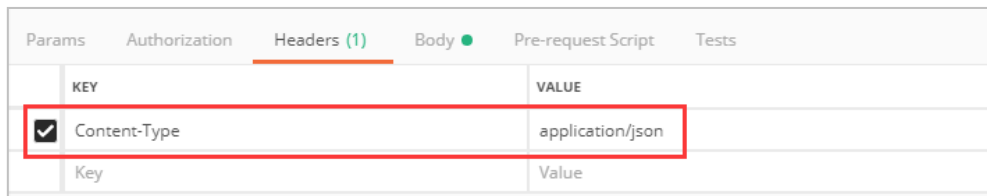
2. Get Staff Auth Token

2.1 Staff JWT authtoken

URL: http://serverIP:serverPort/staff-jwt-api-token-auth/

serverIP: BioTime 8.5 server or computer IP

serverPort: The server port of BioTime 8.5

The way to get token is the same as JWT token above.

2.2 Get staff General Auth Token

URL: http://serverIP:serverPort/staff-api-token-auth/

serverIP: BioTime 8.5 server or computer IP
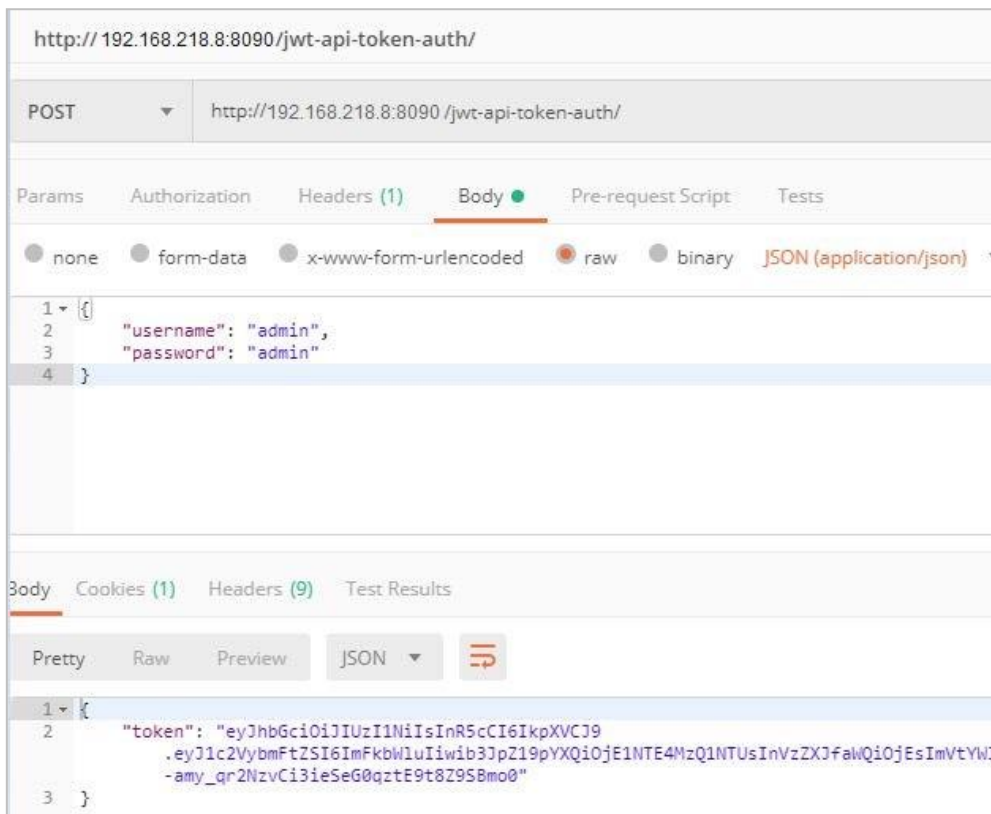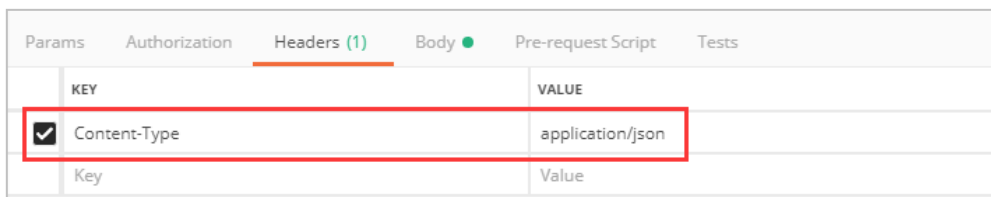
serverPort: The server port of BioTime 8.5

The way to get token is the same as JWT token above.

3. Use Auth Token

3.1 Demo 1

Request URL	http://serverIP:serverPort/iclock/api/terminals/

Request Herders	**JWT Token**
	
	{
	   "Content-Type":"application/json",
	    "Authorization":"JWT ey........oQi98"
	}
	
	General Token
	
	{
	   "Content-Type":"application/json",
	    "Authorization":"Token ae600ca0f1d0aeed8af3f93c8530a69c714752b7"
	}

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Response Content	```
	{
	    "count": 0,
	    "next": null,
	    "previous": null,
	    "msg": "", "code":
	    0, "results": [],
	    "data": []
	}
	``

3.2 Demo 2 (with Third Party Tool - Postman)

(1) Use General Token (same way to use JWT token)

4. Device API

4.1 Get Device List API

HTTP Method	GET
URI	/iclock/api/terminals/
Data Type	application/json

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Response Type	JSON
Request Address	http://serverIP:serverPort/iclock/api/terminals/?sn=**&page=**page_size=**&alias=**&area=** sn, page, page_siz, alias , area are optional filter field, use & as connector While the request address without any filter field, you will get all devices list.

Response JSON Format	Example:
	Request Address:
	http://192.168.217.8:8090/iclock/api/terminals/?sn=ACEZ185060382
	Response:
	{
	    "count": 1,
	    "next": null,
	    "previous": null,
	    "msg": "", "code":
	    0,
	    "data": [
	        {
	            "id": 1,
	            "sn": "ACEZ185060382",
	            "ip_address": "127.0.0.1",
	            "alias": "ACEZ185060382_name",
	            "terminal_name": null,
	            "fw_ver": null,
	            "push_ver": "",
	            "state": 1,
	            "terminal_tz": 8,
	            "area":{
	                "id": 1,
	                "area_code": "1",
	                "area_name": "Not Authorized"
	            },

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"last_activity": null,

"user_count": null,

"fp_count": null,

"face_count": null,

"palm_count": null,

"transaction_count": null,

"push_time": null,

"transfer_time": "00:00;14:05",

"transfer_interval": 10,

"is_attendance": true,

"area_name": "Not Authorized"

}

]

}

4.2 Get Device Object Info API

HTTP Method	GET
URI	/iclock/api/terminals/ <id>/
Data Type	application/json
Response Type	JSON
Request Address	http://serverIP:serverPort/iclock/api/terminals/device id/

Response JSON Format	Example:
	Request Address: http://192.168.218.8:8090/iclock/api/terminals/1/
	Response:
	{
	    "id": 1,
	    "sn": "ACEZ185060382",
	    "ip_address": "127.0.0.1",
	    "alias": "ACEZ185060382_name",

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```
            "terminal_name": null,

            "fw_ver": null,

            "push_ver": "",

            "state": 1,

            "terminal_tz": 8,

            "area": {

                "id": 1,

                "area_code": "1",

                "area_name": "Not Authorized"

            },

            "last_activity": null,

            "user_count": null,

            "fp_count": null,

            "face_count": null,

            "palm_count": null,

            "transaction_count": null,

            "push_time": null,

            "transfer_time": "00:00;14:05",

            "transfer_interval": 10,

            "is_attendance": true,

            "area_name": "Not Authorized"

}
```

5. Employee API

5.1 Get Employee List API

HTTP Method	GET
URI	/personnel/api/employees/
Data Type	application/json
Response Type	JSON

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Request Address	http://serverIP:serverPort/personnel/api/employee/?emp_code=**&page=** &first_name=**&last_name=**&department=**&app_status=** page, limit, emp_code, first_name, last_name, department, app_status are optional filter fields.
Response JSON Format	Example: Request Address: http://192.168.218.8:8090/personnel/api/employee/?emp_code=employee1 Response: { "count": 1, "next": null, "previous": null, "msg": "", "code": 0, "data": [{ "id": 5, "emp_code": "employee1", "first_name": "emp1_first_name", "last_name": "emp1_last_name", "nickname": "", "device_password": "", "card_no": "", "department": { "id": 1, "dept_code": "1", "dept_name": "Department" }, "dept_name": "Department", "position": null, "position_name": null, "hire_date": "2019-04-02",

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"gender": "",

"birthday": null,

"verify_mode": null,

"emp_type": null,

"contact_tel": "",

"office_tel": "",

"mobile": "",

"national": "",

"city": "",

"address": "",

"postcode": "",

"email": "",

"enroll_sn": "",

"ssn": "",

"religion": "", "enable_att":

false, "enable_overtime":

false, "enable_holiday":

false, "dev_privilege":

null, "self_password":

"pbkdf2_sha256$36000$XIJACl8JIXWA$a4hztrK8RSMjBgd9sWL3lTMQS3O9M

z+QwaGU/RBiXRU=",

"flow_role": [], "area":

[

    {

        "id": 1,

        "area_code": "1",

        "area_name": "Not Authorized"

    }

],

"area_name": "Not Authorized",

"app_status": 0,

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```
            "app_role": null

        }

    ]

    }
```

5.2 Get Employee Object Info API

HTTP Method	GET
URI	/personnel/api/employees/ <id>/
Data Type	application/json
Response Type	JSON
Request Address	http://serverIP:serverPort/personnel/api/employees/employee ID/

Response JSON Format	Example:
	
	Request Address: http://192.168.218.8:8090/personnel/api/employees/6/
	
	Response:
	
	 {
	
	"emp_code": "employee333",
	
	    "first_name": "emp3_first_name",
	
	    "last_name": "emp3_last_name",
	
	    "nickname": null,
	
	    "device_password": null,
	
	    "card_no": null,
	
	    "department": 1,
	
	    "position": null,
	
	    "hire_date": "2019-04-02",
	
	    "gender": null,
	
	    "birthday": null,
	
	    "verify_mode": -1,
	
	    "emp_type": null,
	
	    "contact_tel": null,

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"office_tel": null,

"mobile": null,

"national": null,

"city": null,

"address": null,

"postcode": null,

"email": null,

"enroll_sn": null,

"ssn": null,

"religion": null,

"enable_att": true,

"enable_overtime": false,

"enable_holiday": true,

"dev_privilege": 1,

"self_password":
"pbkdf2_sha256$36000$XBVRNMOywdNI$P4W7MIZVa3Ho2VBdU2SewS/pb8
GavBYSGBXM/bgL+N0=",

"flow_role": [],

"area": [

        1

],

"app_status": 0,

"app_role": 1

}

5.3 Create Employee API

HTTP Method	POST
URI	/personnel/api/employees/
Data Type	application/json
Response Type	JSON
Request Parameter	Reference: http://serverIP:serverPort/api/personnel_docs/#employees-create

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ResponseJSON Format	**Request Address:**
	http://192.168.218.8:8090/personnel/api/employees/
	Request Body:
	{
	    "emp_code": "employee333",
	    "first_name": "emp3_first_name",
	    "last_name": "emp3_last_name",
	    "area": [1],
	    "department": 1
	}
	Response Data:
	{
	    "id": 6,
	    "emp_code": "employee333",
	    "first_name": "emp3_first_name",
	    "last_name": "emp3_last_name",
	    "nickname": null,
	    "device_password": null,
	    "card_no": null,
	    "department": {
	        "id": 1,
	        "dept_code": "1",
	        "dept_name": "Department"
	    },
	    "dept_name": "Department",
	    "position": null,
	    "position_name": null,
	    "hire_date": "2019-04-02",
	    "gender": null,
	    "birthday": null,
	    "verify_mode": -1,

Footer

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```
            "emp_type": null,

            "contact_tel": null,

            "office_tel": null,

            "mobile": null,

            "national": null,

            "city": null,

            "address": null,

            "postcode": null,

            "email": null,

            "enroll_sn": null,

            "ssn": null,

            "religion": null,

            "enable_att": true,

            "enable_overtime": false,

            "enable_holiday": true,

            "dev_privilege": 0,

            "self_password":
"pbkdf2_sha256$36000$XBVRNMOywdNI$P4W7MIZVa3Ho2VBdU2SewS/pb8
GavBYSGBXM/bgL+N0=",

            "flow_role": [],

            "area": [

                {

                    "id": 1,

                    "area_code": "1",

                    "area_name": "Not Authorized"

                }

            ],

            "area_name": "Not Authorized",

            "app_status": 0,

            "app_role": 1

}
```

5.4 Update Employee API

HTTP Method	PATCH
URI	/personnel/api/employees/ <id>/
Data Type	application/json
Response Type	JSON
Request Parameter	Reference: http://serverIP:serverPort/api/personnel_docs/#employees-update
Response JSON Format	**Request Address:**
	http://192.168.218.8:8090/personnel/api/employees/6/
	Resquest Body:
	{
	"first_name": "emp3_first_name_update",
	"last_name": "emp3_last_name_update",
	}
	Response Data:
	{
	"id": 6,
	"emp_code": "employee333", "first_name":
	"emp3_first_name_update", "last_name":
	"emp3_last_name_update", "nickname":
	null,
	"device_password": null,
	"card_no": null,
	"department": 1,
	"position": null,
	"hire_date": "2019-04-02",
	"gender": null,
	"birthday": null,
	"verify_mode": -1,
	"emp_type": null,

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"contact_tel": null,

"office_tel": null,

"mobile": null,

"national": null,

"city": null,

"address": null,

"postcode": null,

"email": null,

"enroll_sn": null,

"ssn": null,

"religion": null,

"enable_att": true,

"enable_overtime": false,

"enable_holiday": true,

"dev_privilege": 1,

"self_password": "pbkdf2_sha256$36000$XBVRNMOywdNI$P4W7MIZVa3Ho2VBdU2SewS/pb8GavBYSGBXM/bgL+N0=",

"flow_role": [],

"area": [

1

],

"app_status": 0,

"app_role": 1

}

}

5.5 Delete Employee API

HTTP Method	DELETE
URI	/personnel/api/employees/<id>/
Data Type	application/json

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Response Type	JSON
Request Address	http://127.0.0.1:81/personnel/api/employees/6/

6. Resign API

6.1 Get Resign Personnel List API

Method	GET
URI	/personnel/api/resigns/
Headers	Content-Type: application/json Authorization: "JWT ey.........oQi98"

Query Parameters	
Parameter	page
	page_size
	employee
	resign_type
	resign_date
Response JSON Format	```{ "count": 5, "next": null, "previous": null, "msg": "", "code": 0, "data": [{ "id": 5, "resign_date": "2020-06-04", "resign_type": 1, "disableatt": true, "employee": { "id": 3, "emp_code": "11111122", "first_name": "aaabb", "last_name": "" }, "first_name": "aaabb", "last_name": "" }, ...] }```

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6.2 Get Resign Personnel Request API

Method	GET
URI	/personnel/api/resigns/{id}/
Headers	Content-Type: application/json Authorization: "JWT ey.........oQi98"

Path Parameters	
Parameter: id **Description:** required	
Url	/personnel/api/resigns/5/

Response JSON Format	{
	   "id": 5,
	   "resign_date": "2020-06-04",
	   "resign_type": 1,
	   "disableatt": true,
	   "employee": {
	     "id": 3,
	     "emp_code": "11111122",
	     "first_name": "aaabb",
	     "last_name": ""
	   },
	   "first_name": "aaabb",
	   "last_name": ""
	}

6.3 Create Resign Personnel API

Method	POST
Url	/personnel/api/resigns/
Headers	Content-Type: application/json Authorization: "JWT ey.........oQi98"

Request Body JSON Format	{
	   "employee": 3,
	   "disableatt": true,
	   "resign_type": 1,
	   "resign_date": "2020-06-01",
	   "reason": ""
	}

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Parameter	Required	Type	Description
resign_type	Y	Integer	
disableatt	Y	Bool	
disableatt	Y	String	format: yyyy-mm-dd
Employee	Y	Integer	
reason	N	String	

Response JSON Format	{
	   "id": 5,
	   "resign_date": "2020-06-01",
	   "resign_type": 1,
	   "disableatt": true,
	   "employee": {
	     "id": 3,
	     "emp_code": "11111122",
	     "first_name": "aaabb",
	     "last_name": ""
	   },
	   "first_name": "aaabb",
	   "last_name": ""
	}

6.4 Update Resign Personnel API

Method	PUT
Url	/personnel/api/resigns/{id}/
Headers	Content-Type: application/json Authorization: "JWT ey.........oQi98"
Path Parameter	**Parameter:** id **Description:** required

Request Body JSON Format	{
	   "resign_date": "2020-06-02"
	}

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Parameter	Required	Type	Description
resign_type	N	Integer	
disableatt	N	Bool	
disableatt	N	String	format: yyyy-mm-dd
reason	N	String	

Url	/personnel/api/resigns/5/

Response JSON Format	{
	  "id": 5,
	  "resign_date": "2020-06-02",
	  "resign_type": 1,
	  "disableatt": true,
	  "employee": {
	    "id": 3,
	    "emp_code": "11111122",
	    "first_name": "aaabb",
	    "last_name": ""
	  },
	  "first_name": "aaabb",
	  "last_name": ""
	}

6.5 Delete Resign Personnel API

Method	DELETE
Url	/personnel/api/resigns/{id}/
Headers	Content-Type: application/json Authorization: "JWT ey.........oQi98"
Path Parameter	**Parameter:** id **Description:** required
Response	**None**

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6.6 Reinstatement Resign Personnel API

Method	POST
Url	/personnel/api/resigns/reinstatement/
Headers	Content-Type: application/json Authorization: "JWT ey.........oQi98"

Request Body JSON Format	{
	   "resigns": [1]
	}

Parameter	Required	Type	Description
Resigns	Y	List	resign id list example: [1, 2, 3, ...]

7. Department API

7.1 Get Department List API

HTTP Method	GET
URI	/personnel/api/departments/
Data Type	application/json
Response Type	JSON
Request Address	http://serverIP:serverPort/personnel/api/departments/?dept_code=**&page=**&dept_code=**&dept_name=**&parent_dept=** page, limit, dept_code, dept_name, parent_dept are optional filter fields.
Request address	http://192.168.218.8:8090/personnel/api/departments/?dept_code=1

Response JSON Format	{
	   "count": 1,
	   "next": null,
	   "previous": null,
	   "msg": "",
	   "code": 0,
	   "data": [
	
	      {
	         "id": 1,
	         "dept_code": "1",
	         "dept_name": "Department",
	         "parent_dept": null,
	         "parent_dept_name": null
	      }
	   ]
	}

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7.2 Get Department Object Info API

HTTP Method	GET
URI	/personnel/api/departments/<id>/
Data Type	application/json
Response Type	JSON

Response JSON Format	**Request Address:**
	http://192.168.218.8:8090/personnel/api/departments/1/
	
	Request Body:
	{
	    "id": 1,
	    "dept_code": "1",
	    "dept_name": "Department",
	    "parent_dept": null,
	    "parent_dept_name": null
	}

7.3 Create Department API

HTTP Method	POST
URI	/personnel/api/departments/
Data Type	application/json
Response Type	JSON
Request Parameter	Reference: http://serverIP:serverPort/api/personnel_docs/#departments-create

Response JSON Format	**Request Address**
	http://192.168.218.8:8090/personnel/api/departments/
	
	Request Body
	{
	    "dept_code": "222",
	    "dept_name": "Department222",
	    "parent_dept": 1
	}

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	Response Data
	{
	"id": 2,
	    "dept_code": "222",
	    "dept_name": "Department222",
	    "parent_dept": 1
	}

7.4 Update Department API

HTTP Method	PATCH
URI	/personnel/api/departments/ <id>/
Data Type	application/json
Response Type	JSON
Request Parameter	Reference: http://serverIP:serverPort/api/personnel_docs/#departments-update

Response JSON Format	**Request Address**
	http://192.168.218.8:8090/personnel/api/departments/2/
	
	Resquest Body
	{
	    "dept_name": "Department222_update"
	}
	
	Response Data
	{
	    "id": 2,
	    "dept_code": "222",
	    "dept_name": "Department222_update",
	    "parent_dept": 1
	}
	}

7.5 Delete Department API

HTTP Method	DELETE
URI	/personnel/api/departments/<id>/

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Data Type	application/json
Response Type	JSON
Response JSON Format	**Request Address:** http://19.2168.218.8:8090/personnel/api/departments/2/ **Resquest Body:** {}

8. Area API

8.1 Get Area ListAPI

HTTP Method	GET
URI	/personnel/api/areas/
Data Type	application/json
Response Type	JSON
Request Address	http://serverIP:serverPort//personnel/api/areas/?area_code=**&page=**&area_code=**&area_name=**&parent_area=** page, limit, area_code, area_name, parent_area are optional filter fields.

Response JSON Format	**Request address:**
	http://192.168.218.8:8090/personnel/api/areas/?area_code=2/
	
	Response JSON format:
	{
	    "id": 2,
	    "area_code": "2",
	    "area_name": "Primero",
	    "parent_area": {
	
	        "id": 1,
	        "area_code": "1",
	        "area_name": "Not Authorized",
	        "parent_area": null
	    },
	    "parent_area_name": "Not Authorized"
	}

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8.2 Get Area Object Info API

HTTP Method	GET
URI	/personnel/api/areas/<id>/
Data Type	application/json
Response Type	JSON

Response JSON Format	**Request address:**
	http://192.168.218.8:8090/personnel/api/areas/2/
	
	Response JSON format:
	{
	    "id": 2,
	    "area_code": "2",
	    "area_name": "Primero",
	    "parent_area": {
	        "id": 1,
	        "area_code": "1",
	        "area_name": "Not Authorized",
	        "parent_area": null
	    },
	    "parent_area_name": "Not Authorized"
	}

8.3 Create Area API

HTTP Method	POST
URI	/personnel/api/areas/
Data Type	application/json
Response Type	JSON
Request Parameter	Reference: http://serverIP:serverPort/api/personnel_docs/#areas-create
Response JSON Format	**Request Address** http://192.168.218.8:8090/personnel/api/areas/ **Request Body** { "area_code": "222",

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```
        "area_name": "Department222",
        "parent_area": 1
}

Response Data
{
"id": 2,
        "area_code": "222", "area_name":
        "Department222", "parent_area":
        1
}
```

8.4 Update Area API

HTTP Method	PATCH
URI	/personnel/api/areas/ <id>/
Data Type	application/json
Response Type	JSON
Request Parameter	Reference: http://serverIP:serverPort/api/personnel_docs/#areas-update

Response JSON Format	**Request Address**
	http://192.168.218.8:8090/personnel/api/areas/2/
	
	Resquest Body
	{
	    "area_name": "Area222_update"
	}
	
	Response Data
	{
	    "id": 2,
	    "area_code": "222", "area_name":
	    "area222_update",
	    "parent_area": 1
	}
	}

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8.5 Delete Area API

HTTP Method	DELETE
URI	/personnel/api/areas/<id>/
Data Type	application/json
Response Type	JSON
Response JSON Format	**Request Address:** http://19.2168.218.8:8090/personnel/api/areas/2/ **Resquest Body:** {}

9. Position API

9.1 Get Position List API

HTTP Method	GET
URI	/personnel/api/positions/
Data Type	application/json
Response Type	JSON
Request Address	http://serverIP:serverPort/personnel/api/positions/?position_code=**&page=**&position_code=**&position_name=**&parent_position=** page, limit, position_code, position_name, parent_position are optional filter fields.

Response JSON Format	**Request address:**
	http://192.168.218.8:8090/personnel/api/positions/?position_code=1
	
	Response JSON format:
	{
	    "count": 1,
	    "next": null,
	    "previous": null,
	    "msg": "", "code":
	    0,
	    "data": [

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```
        {
            "id": 1,
            "position_code": "1",
            "position_name": "Department",
            "parent_position": null,
            "parent_position_name": null
        }
    ]
}
```

9.2 Get Position Object Info API

HTTP Method	GET
URI	/personnel/api/positions/<id>/
Data Type	application/json
Response Type	JSON

Response JSON Format	**Request Address:**
	http://192.168.218.8:8090/personnel/api/positions/1/
	
	Request Body:
	{
	    "id": 1,
	    "position_code": "1",
	    "position_name": "Position",
	    "parent_position": null,
	    "parent_position_name": null
	}

9.3 Create Position API

HTTP Method	POST
URI	/personnel/api/positions/
Data Type	application/json
Response Type	JSON
Request Parameter	Reference: http://serverIP:serverPort/api/personnel_docs/#positions-create

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Response JSON Format	**Request Address**
	http://192.168.218.8:8090/personnel/api/positions/
	
	Request Body
	{
	    "position_code": "222",
	    "position_name": "Position222",
	    "parent_position": 1
	}
	
	Response Data
	{
	"id": 2,
	    "position_code": "222",
	    "position_name": "Position222",
	    "parent_position": 1
	}

9.4 Update Position API

HTTP Method	PATCH
URI	/personnel/api/positions/ <id>/
Data Type	application/json
Response Type	JSON
Request Parameter	Reference: http://serverIP:serverPort/api/personnel_docs/#positions-update

Response JSON Format	**Request Address**
	http://192.168.218.8:8090/personnel/api/positions/2/
	
	Resquest Body
	{
	    "position_name": "Position222_update"
	}
	
	Response Data
	{
	    "id": 2,
	    "position_code": "222",
	    "position_name": "Position222_update",
	    "parent_position": 1
	}
	}

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9.5 Delete Position API

HTTP Method	DELETE
URI	/personnel/api/positions/<id>/
Data Type	application/json
Response Type	JSON
Response JSON Format	**Request Address:** http://19.2168.218.8:8090/personnel/api/positions/2/ **Resquest Body:** {}

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10. Transaction API

10.1 GetTransaction List API

HTTP Method	GET
URI	/iclock/api/transactions/
Data Type	application/json
Response Type	JSON
Request Address	http://serverIP:serverPort/iclock/api/transactions/?emp_code=**&start_time=**&end_time=** page , page_size, emp_code, terminal_sn, start_time, end_time are optional filter fields.

Response JSON Format	**Request Address:**
	http://192.168.218.8:8090/iclock/api/transactions/?emp_code=100001&start_time=2019-03-01 00:00:00&end_time=2019-04-1 00:00:00
	
	Response JSON format:
	{
	    "count": 7,
	    "next": null,
	    "previous": null,
	    "msg": "", "code":
	    0,
	    "data": [
	        {
	            "id": 1,
	            "emp_code": "100001",
	            "punch_time": "2019-03-04 09:50:00",
	            "punch_state": "0",
	            "verify_type": 1,
	            "work_code": null,
	            "terminal_sn": "",
	            "terminal_alias": null,
	            "area_alias": null,
	            "longitude": null,
	            "latitude": null,
	            "gps_location": "",
	            "mobile": null,
	            "source": 0,

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```
                "purpose": 1,
                "crc": null,
                "is_attendance": 1,
                "reserved": null,
                "upload_time": "2019-03-04 09:50:00",
                "sync_status": 1,
                "sync_time": null,
                "is_mask": 1,
                "temperature":"35.0",
                "emp": null,
                "terminal": null
            },
        …
        …
        …
        ]
```

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For any clarifications regarding the API User Manual, please contact us

through e-mail at zk_me@zkteco.com.

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