RodinX通讯接口文档

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# 总览

## Request请求规范

1. 遵循restfull规范

GET（SELECT）：从服务器取出资源（一项或多项）。

POST（CREATE）：在服务器新建一个资源。

PUT（UPDATE）：在服务器更新资源（客户端提供改变后的完整资源）。

PATCH（UPDATE）：在服务器更新资源（客户端提供改变的属性）。

DELETE（DELETE）：从服务器删除资源。

例如：

GET /zoos：列出所有动物园

POST /zoos：新建一个动物园

GET /zoos/ID：获取某个指定动物园的信息

PUT /zoos/ID：更新某个指定动物园的信息（提供该动物园的全部信息）

PATCH /zoos/ID：更新某个指定动物园的信息（提供该动物园的部分信息）

DELETE /zoos/ID：删除某个动物园

GET /zoos/ID/animals：列出某个指定动物园的所有动物

DELETE /zoos/ID/animals/ID：删除某个指定动物园的指定动物

1. 所有请求参数名使用小写,中间使用-分割单词
2. 请求默认包头：Content-Type: application/x-www-form-urlencoded
3. 管理员用户的认证信息放置在http header中，key为Access\_Token

|  |  |
| --- | --- |
| Access\_Token | testaccesstoken |

1. 普通用户不需要带Access\_Token,不能进行更新操作

## Response返回规范

1. 遵循restfull Status Codes规范
2. 常用状态码

2xx成功

|  |  |  |
| --- | --- | --- |
| code | method |  |
| 200 OK | GET | 服务器成功返回用户请求的数据，幂等 |
| 201 CREATED | POST/PUT/PATCH | 用户新建或修改数据成功 |
| 204 NO CONTENT | DELETE | 用户删除数据成功 |

4xx客户端错误

|  |  |  |
| --- | --- | --- |
| code | method |  |
| 400 | POST/PUT/PATCH | 用户发出的请求有错误，服务器没有进行新建或修改数据的操作，幂等 |
| 401 | \* | 表示用户没有权限 |
| 404 NOT FOUND | \* | 用户发出的请求针对的是不存在的记录，服务器没有进行操作，幂等 |

5xx服务端错误

|  |  |  |
| --- | --- | --- |
| code | method |  |
| 500 | \* | 通用错误消息，服务器遇到了一个未曾预料的状况，导致了它无法完成对请求的处理 |
| 501 | \* | 服务器不支持当前请求所需要的某个功能 |

1. 2xx成功时，返回以json方式返回
2. 4xx和5xx 时，服务端需要进一步返回错误信息，错误信息以json方式返回

|  |
| --- |
| {  'error': "Invalid API key"  } |

# 登录页

## admin/root用户登录

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /users/{userName} | | |
| 调用类型 | PATCH | 是否完成 | 是 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| userName | admin/root | √ | 只能admin/root |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| password | 用户密码 | √ | MD5加密 |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00",  "access\_token": "abcdefg"  } | | | |

## admin/root用户登出

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /users/{userName} | | |
| 调用类型 | PATCH | 是否完成 | 是 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| userName | admin/root | √ | 只能admin/root |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00"  } | | | |

## 修改/重置admin用户密码

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /users/admin/password | | |
| 调用类型 | PUT | 是否完成 |  |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| oldPassword | 老密码 |  | 修改密码时必填 |
| password | 新密码 |  | 修改密码时必填 |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00"  } | | | |

## 通用-查询服务器状态

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /server | | |
| 调用类型 | GET | 是否完成 | 是 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00",  "user": "guest1"  } | | | |

## 通用-查询放大器列表

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /amps | | |
| 调用类型 | GET | 是否完成 | 否 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| 正常返回值 | | | 格式：json |
| {  "rows": [  "A1",  "A2",  "B1",  "C1"  ]  } | | | |

# Dashboard页

## 查询dashboard默认(default)布局内容

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /dashboard | | |
| 调用类型 | GET | 是否完成 | 是 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| 正常返回值 | | | 格式：json |
| {  "name": "Layout-Default",  "com": "COM3",  "baud\_rate": 9600,  "rows": [  {  "index": 0,  "title": "A",  "items": [  {  "name": "A1",  "addr": 1,  "chs": [  {  "name": "CH1",  "desc": "第一层1号角CH1"  },  {  "name": "CH2",  "desc": "第一层1号角CH2"  }  ]  },  {  "name": "A2",  "addr": 2,  "chs": [  {  "name": "CH1",  "desc": "第一层2号角CH1"  },  {  "name": "CH2",  "desc": "第一层2号角CH2"  }  ]  },  {  "name": "A3",  "addr": 3,  "chs": [  {  "name": "CH1",  "desc": "第一层2号角CH1"  },  {  "name": "CH2",  "desc": "第一层2号角CH2"  }  ]  }  ]  },  {  "index": 1,  "title": "B",  "items": [  {  "name": "B1",  "addr": 7,  "chs": [  {  "name": "CH1",  "desc": "第二层1号角CH1"  },  {  "name": "CH2",  "desc": "第二层1号角CH2"  }  ]  },  {  "name": "B2",  "addr": 8,  "chs": [  {  "name": "CH1",  "desc": "第二层2号角CH1"  },  {  "name": "CH2",  "desc": "第二层2号角CH2"  }  ]  }  ]  }  ]  } | | | |

## 更新dashboard布局内容

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /dashboard | | |
| 调用类型 | PUT | 是否完成 | 是-- |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| content | 布局内容json | √ | 参考dashboard布局内容返回值 |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00"  } | | | |

## 更新放大器地址

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /dashboard/{ampName} | | |
| 调用类型 | PATCH | 是否完成 | 是-- |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| ampName | 放大器名称 | √ | A1、B2 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| addr | 地址 | √ | 范围0-255 |
| d1 | CH1描述 |  |  |
| d2 | CH2描述 |  |  |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00"  } | | | |

## 查询dashboard状态

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /dashboard/status | | |
| 调用类型 | GET | 是否完成 |  |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| version代表layout版本号，如果客户端发现version改变，自动更新布局  0=无火  1=有火  2=报警  3=离线 | | | |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00",  "modify\_time": "2017-07-01 12:00:00",  "status": {  "A1": [  0,  0  ],  "A2": [  0,  0  ],  "A3": [  0,  0  ]  }  }  0=无火  1=有火  2=报警  3=离线 | | | |

# Detail页

## 查询放大器详情

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /detail/{ampName} | | |
| 调用类型 | GET | 是否完成 | 否 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| ampName | 放大器名称 | √ | A1、B2 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| 正常返回值 | | | 格式：json |
| {      "name": "A1",      "addr": 1,      "ch1": {         "enable": true,  "file": 0,          "onth": 2000,          "ontl": 600,          "max": 1600,          "min": 400,          "ac": 1500,          "dc": 1000,          "freq": 99,          "type": "IR",          "status": 1,          "fault": "00",          "temp": 29,          "fq": 75      },      "ch2": {          "onth": 2000,          "ontl": 600,          "max": 1600,          "min": 400,          "ac": 1999,          "dc": 462,          "freq": 99,          "type": "IR",          "status": 1,          "fault": "00",          "temp": 29,          "fq": 99      }  } | | | |

## 查询/Read放大器UserSettings

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /detail/{ampName}/usersettings/{source} | | |
| 调用类型 | GET | 是否完成 | 否 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| ampName | 放大器名称 | √ | A1、B2 |
| source | 数据来源 | √ | m或d  m:服务器内存  d:设备 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| 正常返回值 | | | 格式：json |
| {  "name": "A1",  "addr": 1,  "ch1": {  "name": "ch1",  "type": "IR",  "enable": true,  "file": 0,  "filea": {  "ac\_gain": 1,  "fc": 99,  "ac\_on\_th": 1999,  "ac\_on\_tl": 600,  "max": 1600,  "min": 300,  "dc\_gain": 1,  "dc\_on\_th": 1999,  "dc\_on\_tl": 0,  "freq\_on\_th": 126,  "freq\_on\_tl": 0,  "otd": 1,  "ffrt": 3  },  "fileb": {  "ac\_gain": 1,  "fc": 99,  "ac\_on\_th": 1999,  "ac\_on\_tl": 600,  "max": 1600,  "min": 300,  "dc\_gain": 1,  "dc\_on\_th": 1999,  "dc\_on\_tl": 0,  "freq\_on\_th": 126,  "freq\_on\_tl": 0,  "otd": 1,  "ffrt": 5  }  },  "ch2": {  "name": "ch2",  "type": "IR",  "enable": true,  "file": 1,  "filea": {  "ac\_gain": 3,  "fc": 99,  "ac\_on\_th": 1999,  "ac\_on\_tl": 600,  "max": 1600,  "min": 300,  "dc\_gain": 1,  "dc\_on\_th": 1999,  "dc\_on\_tl": 0,  "freq\_on\_th": 126,  "freq\_on\_tl": 0,  "otd": 1,  "ffrt": 2  },  "fileb": {  "ac\_gain": 2,  "fc": 99,  "ac\_on\_th": 1999,  "ac\_on\_tl": 600,  "max": 1600,  "min": 300,  "dc\_gain": 1,  "dc\_on\_th": 1999,  "dc\_on\_tl": 0,  "freq\_on\_th": 126,  "freq\_on\_tl": 0,  "otd": 1,  "ffrt": 4  }  }  } | | | |

## 更新放大器UserSettings

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /detail/{ampName}/usersettings | | |
| 调用类型 | PUT | 是否完成 | 否 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| ampName | 放大器名称 | √ | A1、B2 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| content | 放大器UserSettings | √ | 参考usersettings内容返回值 |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00"  } | | | |

## 查询/Read放大器SystemSettings-FullSettings

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /detail/{ampName}/systemsettings/{source} | | |
| 调用类型 | GET | 是否完成 | 否 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| ampName | 放大器名称 | √ | A1、B2 |
| source | 数据来源 | √ | m/d  m:服务器内存  d:设备 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| 正常返回值 | | | 格式：json |
| {      "name": "A1",      "addr": 1,      "version\_info": {          "amp\_version": 2.0,          "ch1": 1.0,          "ch2": 1.0,          "fw\_version": 1.2      },      "check\_enables": {          "scan1": 0,          "scan2": 0,          "t1": 0,          "t2": 0,          "da1": 1,          "da2": 1,          "fram": 0      },      "ch1": {          "name": "ch1",          "type": "IR",          "enable": true,          "file": 0,          "ao\_value": {              "ao\_4ma\_value": 0,              "ao\_20ma\_value": 4095          },          "filea": {              "public": {                  "otd": 1,                  "ffrt": 3              },              "ac": {                  "l\_band": 3,                  "l\_weight": 3,                  "l\_d": 3,                  "weight\_pl": 3,                  "line\_turn": 3,                  "r\_band": 3,                  "r\_weight": 3,                  "r\_d": 3,                  "weight\_ph": 3,                  "line\_param": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              },              "dc": {                  "weight\_pl": 3,                  "weight\_ph": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              },              "frequency": {                  "raise\_v1": 500,                  "raise\_v2": 500,                  "raise\_num": 3,                  "weight\_pl": 3,                  "drop\_v1": 500,                  "drop\_v2": 500,                  "drop\_num": 3,                  "weight\_ph": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              }          },          "fileb": {              "ac": {                  "l\_band": 4,                  "l\_weight": 3,                  "l\_d": 3,                  "weight\_pl": 3,                  "line\_turn": 3,                  "r\_band": 3,                  "r\_weight": 3,                  "r\_d": 3,                  "weight\_ph": 3,                  "line\_param": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              },              "dc": {                  "weight\_pl": 3,                  "weight\_ph": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              },              "frequency": {                  "raise\_v1": 500,                  "raise\_v2": 500,                  "raise\_num": 3,                  "weight\_pl": 3,                  "drop\_v1": 500,                  "drop\_v2": 500,                  "drop\_num": 3,                  "weight\_ph": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              }          }      },      "ch2": {          "name": "ch2",          "type": "IR",          "enable": true,          "file": 0,          "ao\_value": {              "ao\_4ma\_value": 0,              "ao\_20ma\_value": 4095          },          "filea": {              "public": {                  "otd": 1,                  "ffrt": 3              },              "ac": {                  "l\_band": 3,                  "l\_weight": 3,                  "l\_d": 3,                  "weight\_pl": 3,                  "line\_turn": 3,                  "r\_band": 3,                  "r\_weight": 3,                  "r\_d": 3,                  "weight\_ph": 3,                  "line\_param": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              },              "dc": {                  "weight\_pl": 3,                  "weight\_ph": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              },              "frequency": {                  "raise\_v1": 500,                  "raise\_v2": 500,                  "raise\_num": 3,                  "weight\_pl": 3,                  "drop\_v1": 500,                  "drop\_v2": 500,                  "drop\_num": 3,                  "weight\_ph": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              }          },          "fileb": {              "ac": {                  "l\_band": 4,                  "l\_weight": 3,                  "l\_d": 3,                  "weight\_pl": 3,                  "line\_turn": 3,                  "r\_band": 3,                  "r\_weight": 3,                  "r\_d": 3,                  "weight\_ph": 3,                  "line\_param": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              },              "dc": {                  "weight\_pl": 3,                  "weight\_ph": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              },              "frequency": {                  "raise\_v1": 500,                  "raise\_v2": 500,                  "raise\_num": 3,                  "weight\_pl": 3,                  "drop\_v1": 500,                  "drop\_v2": 500,                  "drop\_num": 3,                  "weight\_ph": 3,                  "weight\_n": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_l": [                      0.05, 0.2, 0.2, 0.55                  ],                  "weight\_h": [                      0.05, 0.2, 0.2, 0.55                  ]              }          }      }  } | | | |

## 更新放大器SystemSettings

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /detail/{ampName}/systemsettings | | |
| 调用类型 | PUT | 是否完成 | 否 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| ampName | 放大器名称 | √ | A1、B2 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| content | 放大器SystemSettings | √ | 参考systemsettings内容返回值 |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00"  } | | | |

## 查询放大器硬件配置变化历史

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /ampchanges | | |
| 调用类型 | GET | 是否完成 | 否 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00",  "rows": [  {  "name": "A0",  "timestamp": "2017-07-01 12:00:00"  },  {  "name": "A1",  "timestamp": "2017-07-01 12:00:00"  }  ]  } | | | |

## 同步放大器配置

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /detail/{ampName}/fullsettings | | |
| 调用类型 | PUT | 是否完成 | 否 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
|  |  |  |  |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| source | 数据来源 | √ | m/d  m:服务器内存同步到设备  d:设备同步到服务器内存 |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00"  } | | | |

# Alarm页

## 查询alarm列表

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /alarms?ampName={ampName}&timestamp={1470278082980} | | |
| 调用类型 | GET | 是否完成 | 否 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| ampName | 放大器名称 |  | A1、B2  不填代表查询所有 |
| timestamp | 起始时间 | √ | 报警起始时间  例如1470278082980 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
|  |  |  |  |
| 正常返回值 | | | 格式：json |
| {  "server\_time": "2017-07-01 12:00:00",  "rows": [  {  "name": "A0",  "timestamp": "2017-07-01 12:00:00",  "amp\_id": "1",  "code": 100  },  {  "name": "A0",  "timestamp": "2017-07-01 12:00:00",  "amp\_id": "1",  "code": 101  }  ]  } | | | |

# Configuration页

## 查询配置信息

|  |  |  |  |
| --- | --- | --- | --- |
| 调用地址 | /configuration | | |
| 调用类型 | GET | 是否完成 | 否 |
| URL参数名 | 参数中文 | 是否必填 | 说明 |
| 包体参数名 | 参数中文 | 是否必填 | 说明 |
| 正常返回值 | | | 格式：json |
| {  "server": {  "hismax": 360  },  "license": {  "to": "safefire",  "logo": "http://www.baidu.com/img/bd\_logo1.png"  }  } | | | |