



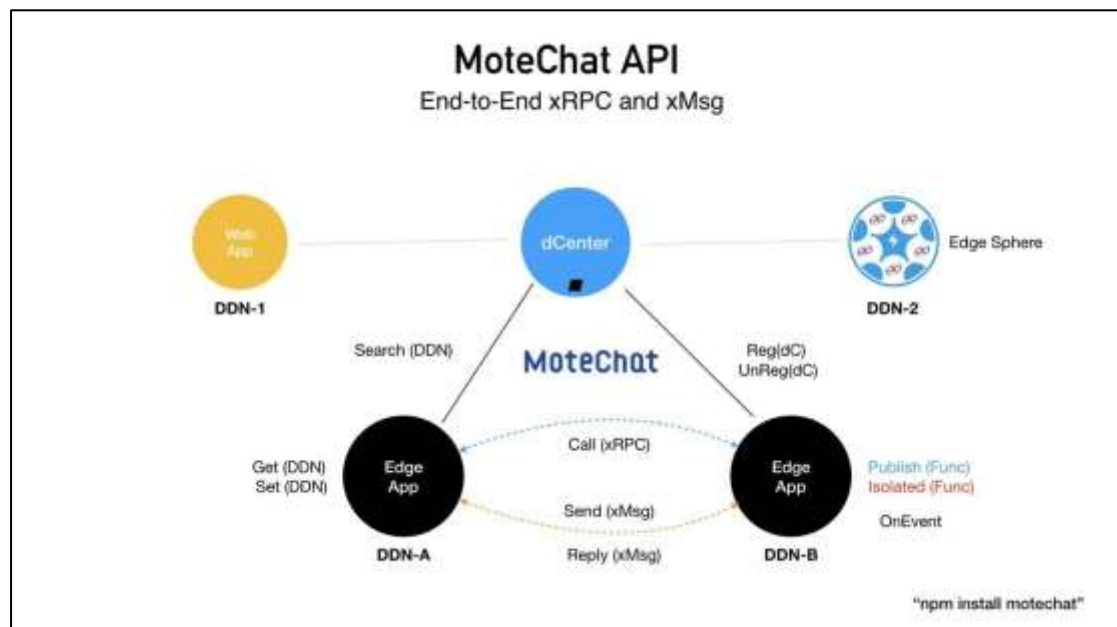
## API of MoteChat

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# System Diagram



## List of API

Command	Description
Open	Open motechat
Close	Close motechat
Publish	Publish function
Isolated	Publish isolated function
Reg	Register to device center
UnReg	Un-register from device center
Call	Call function of another device
Send	Send message to another device
Get	Get the information of my device
Set	Set the device information of my device
Search	Search nearby device
OnEvent	Set event handler

## Function List

Command	Function
Open	mChat.Open()
Close	mChat.Close()
Publish	mChat.Publish()
Isolated	mChat.Isolated()
Reg	mChat.Reg()
UnReg	mChat.Unreg()
Call	mChat.Call()
Send	mChat.Send()
Get	mChat.Get()
Set	mChat.Set()
Search	mChat.Search()
OnEvent	mChat.OnEvent()

# Command

## Open

### Input:

conf: the configuration object for init. { "AppName": "", "IOC": "", "DCenter": "", "AppKey": "", "UseWeb": "" }

AppName: the name of motebus MMA

IOC: the MMA of IOC

DCenter: the MMA of device center

UCenter: the MMA of user center

AppKey: the key string of app

UseWeb: can be 'websocket', 'ajax', or ''

reg: the information of register ( option, the info of reg to DC )

EiToken: device token

SToken: app token

WIP: WAN IP

LIP: LAN IP

cb: callback( {ErrCode, ErrMsg, result} )

### Example 1:

```
var conf = { "AppName": "", "IOC": "", "DCenter": "", "UCenter": "", "AppKey": "",
"UseWeb": "" }
conf.AppName = 'myfunc';
conf.DCenter = 'dc@boss.ycloud.com:6788';
conf.AppKey = 'YfgEeop5';
var mChat = require('motechat');
mChat.Open(conf, function(result){
    console.log('init result=%s', JSON.stringify(result));
})
```

### Example 2: reg to DC directly

```
var conf = { "AppName": "", "IOC": "", "DCenter": "", "AppKey": "", "UseWeb": "" }
conf.AppName = 'myfunc';
conf.DCenter = 'dc@boss.ycloud.com:6788';
conf.AppKey = 'YfgEeop5';
var reginfo = {"EiToken": "8diICCKj", "SToken": "baTi52uE", "WIP": "", "LIP": ""};
```

```
var mChat = require('motechat');
mChat.Open(conf, reginfo, function(result){
    console.log('init result=%s', JSON.stringify(result));
})
```

## Close

Input:

cb: callback( {ErrCode, ErrMsg } )

## Publish

Input:

app: the name of name

func: the user function entry which is published

cb: callback( {ErrCode, ErrMsg} )

Example:

```
var app = 'motechat';
var XrpcMcService = {
    "echo": function(head, body){
        console.log("xrpc echo: head=%s", JSON.stringify(head));
        if ( typeof body == 'object')
            sbody = JSON.stringify(body);
        else
            sbody = body;
        console.log("xrpc echo: body=%s", sbody);
        return {"echo":body};
    }
}
mChat.Publish( app, XrpcMcService, function(result){
    console.log('motechat publish: result=%s', JSON.stringify(result));
});
```

## Isolated

### Input:

func: the user function entry which is published

cb: callback( {ErrCode, ErrMsg} )

### Example:

```
var XrpcMcSecService = {
  "echo": function(head, body){
    console.log("xrpc echo: head=%s", JSON.stringify(head));
    if ( typeof body == 'object')
      sbody = JSON.stringify(body);
    else
      sbody = body;
    console.log("xrpc echo: body=%s", sbody);
    return {"echo":body};
  }
}

mChat.Isolated( XrpcMcSecService, function(result){
  console.log('motechat isolated: result=%s', JSON.stringify(result));
});
```

## Reg

### Input:

data: the information for registration, { "EiToken":"","SToken":"","WIP":"" }

EiToken: device token

SToken: app token

WIP: WAN ip ( empty means the same as dc )

cb: callback( {ErrCode, ErrMsg, result} )

### Example:

```
var mydev = {"EiToken":"8diICCKj","SToken":"baTi52uE","WIP":""};
mChat.Reg(mydev, function(result){
  console.log('StartSession result=%s', JSON.stringify(result));
});
```

Note: At first time of the device, EiToken and SToken is empty.



## UnReg

### Input:

data: the information for registration, { "SToken":"" }  
SToken: app token  
cb: callback( {ErrCode, ErrMsg} )

### Example:

```
var mydev = {"SToken":"baTi52uE"};  
mChat.UnReg(mydev, function(result){  
    console.log('EndSession result=%s', JSON.stringify(result));  
});
```

## Call

### Input:

xrpc: xrpc control object, { "SToken":"","To":"","Topic":"","Func":"","Data":{},"SendTimeout": 6,"WaitReply": 12 }  
SToken: app token  
Topic: topic of app  
To: the target name, DDN or topic address of function  
Func: the function name  
Data: the data object for function  
SendTimeout: Integer, Timeout of send message, by sec.  
WaitReply: Integer, The wait time of reply, by sec.  
cb: callback( {ErrCode, ErrMsg} ) or callback(reply)  
reply:  
{ "IN": { "From": { "DDN": "", "Name": "", "Type": "", "Uid": "", "Topic": "" }, "To": { "DDN": "", "Name": "", "Type": "", "Topic": "" }, "State": { "ErrCode": 0, "ErrMsg": "OK", "By": "" }, "Reply": { "ErrCode": 0, "ErrMsg": "OK" } }

### Example 1:

```
var to = 'myEi';  
var func = 'echo';  
var data = {"time":"2018/4/24 10:12:08"};  
var t1 = 6;  
var t2 = 12;  
var xrpc = {"SToken":mydev.SToken, "To":to,"Func":func,"Data":data,
```

```

"SendTimeout":t1, "WaitReply":t2};
mChat.Call( xrpc, function(reply){
    console.log('CallSession reply=%s', JSON.stringify(reply));
});

```

#### Example 2:

```

var topic = 'steven.bot';
var to = 'einodered';
var func = 'echo';
var data = {"time":"2018/4/24 10:12:08"};
var t1 = 6;
var t2 = 12;
var xrpc = {"SToken":mydev.SToken,
"Topic":topic, "To":to, "Func":func, "Data":data, "SendTimeout":t1,
"WaitReply":t2};
mChat.Call( xrpc, function(reply){
    console.log('CallSession reply=%s', JSON.stringify(reply));
});

```

#### Example 3:

```

var stopic = 'steven.bot';
var target = 'einodered';
var dtopic = 'sally.bot';
var to = {"Target":target, "Topic":dtopic};
var data = {"message":"Hello World"};
var t1 = 6;
var t2 = 12;
var xrpc = {"SToken":mydev.SToken,
"Topic":topic, "To":to, "Func":func, "Data":data, "SendTimeout":t1,
"WaitReply":t2};
mChat.Call( xrpc, function(reply){
    console.log('CallSession reply=%s', JSON.stringify(reply));
});

```

#### Note:

Topic address:

```

{"Target": "(target)", "Topic": "(topic)"}

```

```

{"Target": "(target)", "Topic": {(topic)}}
{"DDN": "(DDN)", "Topic": "(topic)"}
{"DDN": "(DDN)", "Topic": {(topic)}}

```

## Send

### Input:

```

xmsg: xmsg control object, { "SToken": "", "Topic": "", "To": "", "Data": {},
"SendTimeout": 6, "WaitReply": 12 }
  SToken: app token
  Topic: the app topic
  To: can be DDN, EiName, EiTag or Topic Address of destination device
  Data: the data which want to be sent
  SendTimeout: Integer, Timeout of send message, by sec.
  WaitReply: Integer, The wait time of reply, by sec.
cb: callback({ErrCode, ErrMsg}) or callback(reply)
  reply:
    {"IN": {"From": {"DDN": "", "Name": "", "Type": "", "Uid": "", "Topic": ""}, "To": {"DDN":
    "", "Name": "", "Type": "", "Topic": ""}, "State": {"ErrCode": 0, "ErrMsg": "OK", "By":
    ""}}, "Reply": {"ErrCode": 0, "ErrMsg": "OK"}}

```

### Example 1:

```

var stoken = mydev.SToken;
var to = 'myEi';
var data = {"message": "Hello World"};
var t1 = 6;
var t2 = 12;
var xmsgctl = {"SToken": stoken, "To": to, "Data": data,
"SendTimeout": t1, "WaitReply": t2};
mChat.Send(xmsgctl, function(reply){
  console.log('sendxmsg reply=%s', JSON.stringify(reply));
});

```

### Example 2:

```

var stoken = mydev.SToken;

```

```

var topic = 'steven.bot';
var to = 'myEi';
var data = {"message":"Hello World"};
var t1 = 6;
var t2 = 12;
var xmsgctl = {"SToken":stoken,"Topic":topic,"To":to,"Data":data,
"SendTimeout":t1,"WaitReply":t2};
mChat.Send(xmsgctl, function(reply){
    console.log('sendxmsg reply=%s', JSON.stringify(reply));
});

```

### Example 3:

```

var stoken = mydev.SToken;
var stopic = 'steven.bot';
var target = 'einodered';
var dtopic = 'sally.bot';
var to = {"Target":target,"Topic":dtopic};
var data = {"message":"Hello World"};
var t1 = 6;
var t2 = 12;
var xmsgctl = {"SToken":stoken,"Topic":stopic,"To":to,"Data":data,
"SendTimeout":t1,"WaitReply":t2};
mChat.Send(xmsgctl, function(reply){
    console.log('sendxmsg reply=%s', JSON.stringify(reply));
});

```

### Note:

Topic address:

```

{"Target": "(target)", "Topic": "(topic)"}
{"Target": "(target)", "Topic": {(topic)}}
{"DDN": "(DDN)", "Topic": "(topic)"}
{"DDN": "(DDN)", "Topic": {(topic)}}

```

### Get

Input:

data: the input data object, { "SToken":"" }

SToken: app token

cb: callback( {ErrCode, ErrMsg} ) or callback(reply)

Example:

```
var data = {"SToken":mydev.SToken};
mChat.Get(data, function(result){
    console.log('GetDeviceInfo result=%s', result);
});
```

## Set

Input:

data: input data object, { "SToken":"","EdgeInfo":{} }

SToken: app token

EdgeInfo: {"EiName":"","EiType":"","EiTag":"","EiLoc":""}

cb: callback( {ErrCode, ErrMsg} ) or callback(reply)

Example:

```
var info = {"EiName":"myEi","EiType":".ei","EiTag":"#my","EiLoc":""};
var data = {"SToken":mydev.SToken,"EdgeInfo":info};
mChat.Set(data, function(result){
    console.log('SetDeviceInfo result=%s', result);
});
```

## Search

Input:

data: input data object, { "SToken":"","Keyword":"" }

SToken: app token

Keyword: keyword for search

cb: callback( {ErrCode, ErrMsg} ) or callback(reply)

Example:

```
var data = {"SToken":mydev.SToken, "Keyword":"#test"};
mChat.Search(data, function(result){
    console.log('Search result=%s', result);
});
```

## OnEvent

### Input:

stype: "message" is for getxmsg, "state" is for state changed

cb(ch, inctl, data): the user routine entry

ch: channel ( xrpc or xmsg )

inctl: IN control data {"From":"","To":""}

data: user data

### Output:

return is boolean ( true or false )

### Example:

```
var InmsgRcve = function(ch, inctl, data, retcb){  
    console.log('InmsgRcve: channel=%s, from=%s, to=%s, data=%s', ch,  
        JSON.stringify(inctl.From), JSON.stringify(inctl.To), JSON.stringify(data));  
    if ( typeof retcb == 'function') retcb({"ErrCode":0, "ErrMsg":"OK"})  
}  
Var InState = function(state){  
    console.log('InState=%s', state);  
}  
mChat.OnEvent('message',InmsgRcve);  
mChat.OnEvent('state', InState);
```

## Error Code

No	Code	Message
1	0	OK
2	-10199	in error
3	-10101	in: open XRPC error
4	-10102	in: XRPC not open
5	-10103	in: motebus not open
6	-10104	in: send error
7	-10105	in: open XMsg error
8	-10106	in: invalid data
9	-10299	motechat error
10	-10201	motechat: no DC setting
11	-10202	motechat not open
12	-10203	motechat: invalid data
13	-10204	motechat: invalid stoken
14	-10205	motechat: no rcve function
15	-10306	motechat: no matched DDN
16	-10207	motechat: no DDN
17	-10399	wsocket error
18	-10301	wsocket: invalid data
19	-10302	wsocket: no matched DDN