数据库

用户名	密码	database	访问	端口	其他
boxagent	Box_0_agent	agent	允许指定IP进行远程访问	3306(默认)	代理
boxapp	Box_0_app	boxapp	允许指定IP进行远程访问	3306(默认)	APP服务

用户创建:

```
1
    -- 代理用户以及database的创建
 2
 3
   -- database create
   CREATE DATABASE IF NOT EXISTS boxagent
 4
     DEFAULT CHARSET utf8
    COLLATE utf8_general_ci;
 6
7
8
   -- user create
9
   CREATE USER `root`@`yourIP` IDENTIFIED BY 'Box_0_agent';
10
   -- database user grant
   GRANT Alter, Alter Routine, Create, Create Routine, Create Temporary
11
    Tables, Create View, Delete, Drop, Event, Execute, Grant Option, Index,
    Insert, Lock Tables, References, Select, Show View, Trigger, Update ON
    `boxagent`.* TO `boxagent`@`yourIP`;
12
13
   -- app服务用户以及database的创建
14
15
   -- database add
16
   CREATE DATABASE IF NOT EXISTS boxapp
     DEFAULT CHARSET utf8
17
18
    COLLATE utf8 general ci;
19
   -- user add
20
   CREATE USER `boxapp`@`yourIP` IDENTIFIED BY 'Box_0_app';
   -- database user grant
21
   GRANT ALTER, ALTER ROUTINE, CREATE, CREATE ROUTINE, CREATE TEMPORARY
22
    TABLES, CREATE VIEW, DELETE, DROP, EVENT, EXECUTE, GRANT OPTION, INDEX,
    INSERT, LOCK TABLES, REFERENCES, SELECT, SHOW VIEW, TRIGGER, UPDATE ON
    `boxapp`.* TO `boxapp`@`yourIP`;
23
```

代理数据表的创建

操作步骤:

```
1 #1, 登录mysql
2 $mysql -u root -p
3 #2, 切换db
4 $mysql>USE boxagent;
5 #3, 更新数据库
6 $mysql>source [path]/agent_table_init.sql
7
```

sql文件: agent table init.sql -- [https://github.com/boxproject/agent/blob/master/db table.sql]

```
-- table create
2
3
   SET NAMES utf8mb4;
   SET FOREIGN KEY CHECKS = 0;
4
5
    __ ____
6
7
    -- Table structure for `T HASH`
8
9
    DROP TABLE IF EXISTS `T_HASH`;
   CREATE TABLE `T HASH` (
1.0
     `hash` varchar(100) NOT NULL COMMENT '模版id',
11
     `app id` varchar(20) NOT NULL DEFAULT '' COMMENT '员工id',
12
     `captain_id` varchar(60) DEFAULT NULL COMMENT '私钥id',
13
     `name` varchar(100) NOT NULL DEFAULT '' COMMENT '模板名称',
14
     `flow` text NOT NULL COMMENT '原始数据',
15
16
     `sign` text NOT NULL COMMENT '签名',
     `status` varchar(2) NOT NULL DEFAULT '' COMMENT '状态',
17
     `create_time` datetime NOT NULL COMMENT '创建时间',
18
     `update_time` timestamp NULL DEFAULT NULL ON UPDATE CURRENT_TIMESTAMP
19
    COMMENT '更新时间',
    PRIMARY KEY (`hash`)
2.0
21
    ) ENGINE=InnoDB DEFAULT CHARSET=utf8;
22
23
    -- Table structure for `T HASH OPERATE`
24
25
    __ _____
26
    DROP TABLE IF EXISTS `T_HASH_OPERATE`;
    CREATE TABLE `T HASH OPERATE` (
27
      `id` int(20) NOT NULL AUTO_INCREMENT COMMENT 'hash序列',
28
29
     `app_id` varchar(20) NOT NULL DEFAULT '' COMMENT '私钥id',
     `type` varchar(20) NOT NULL DEFAULT '' COMMENT '操作类型',
30
31
      `hash` varchar(100) NOT NULL DEFAULT '',
```

```
`option` varchar(255) NOT NULL DEFAULT '' COMMENT '审批状态',
32
33
      `sign` text NOT NULL COMMENT '签名',
     `create time` datetime NOT NULL,
34
35
     PRIMARY KEY (`id`)
    ) ENGINE=InnoDB AUTO INCREMENT=28 DEFAULT CHARSET=utf8;
36
37
38
    __ _____
39
    -- Table structure for `T REGIST`
40
    ______
    DROP TABLE IF EXISTS `T REGIST`;
41
   CREATE TABLE `T_REGIST` (
42
     reg id varchar(100) NOT NULL COMMENT '注册id',
43
      `applyer id` varchar(100) NOT NULL DEFAULT '' COMMENT '员工id',
44
     `captain_id` varchar(100) NOT NULL DEFAULT '' COMMENT '私钥id',
45
     `applyer account` varchar(100) NOT NULL DEFAULT '' COMMENT '申请人账
46
    号',
     `msg` text NOT NULL COMMENT '信息',
47
     `consent` varchar(255) NOT NULL DEFAULT '',
48
49
     `cipher_text` varchar(255) NOT NULL DEFAULT '',
     `status` varchar(255) NOT NULL DEFAULT '' COMMENT '状态',
50
51
     `pub_key` text NOT NULL COMMENT '公钥',
52
     `create time` datetime NOT NULL COMMENT '创建时间',
     `update_time` timestamp NULL DEFAULT NULL ON UPDATE CURRENT_TIMESTAMP
53
    COMMENT '更新时间',
    PRIMARY KEY (`reg_id`)
54
    ) ENGINE=InnoDB DEFAULT CHARSET=utf8;
55
56
57
    __ _____
    -- Table structure for `T_REQ_LOG`
58
    ______
59
    DROP TABLE IF EXISTS `T REQ LOG`;
60
    CREATE TABLE `T_REQ_LOG` (
61
     id bigint(20) NOT NULL AUTO INCREMENT,
62
     req type varchar(255) NOT NULL DEFAULT '',
63
      `transfer_type` varchar(255) NOT NULL DEFAULT '',
64
     `block_number` bigint(20) NOT NULL DEFAULT '0',
65
     `hash` varchar(255) NOT NULL DEFAULT '',
66
      `wd hash` varchar(255) NOT NULL DEFAULT '',
67
     `tx hash` varchar(255) NOT NULL DEFAULT '',
68
     `amount` varchar(255) NOT NULL DEFAULT '',
69
      'fee' varchar(255) NOT NULL DEFAULT '',
70
71
     from varchar(255) NOT NULL DEFAULT '',
      `to` varchar(255) NOT NULL DEFAULT '',
72
      `category` bigint(20) NOT NULL DEFAULT '0',
73
74
      `content` varchar(255) NOT NULL DEFAULT '',
      `status` varchar(255) NOT NULL DEFAULT '',
75
76
      `apply_time` datetime NOT NULL,
      `create time` datetime NOT NULL,
77
78
     PRIMARY KEY ('id')
```

```
79
    ) ENGINE=InnoDB AUTO INCREMENT=2 DEFAULT CHARSET=utf8;
 80
 81
82
    -- Table structure for `T_WITHDRAW`
    __ _____
83
    DROP TABLE IF EXISTS `T WITHDRAW`;
84
85
    CREATE TABLE `T WITHDRAW` (
      `wd hash` varchar(100) NOT NULL COMMENT '提现id',
 86
87
      `hash` varchar(100) NOT NULL DEFAULT '' COMMENT '审批id',
      `to` varchar(60) NOT NULL DEFAULT '' COMMENT '转账地址',
88
      `amount` varchar(40) NOT NULL DEFAULT '' COMMENT '转账金额',
89
      `fee` varchar(40) NOT NULL DEFAULT '' COMMENT '手续费',
90
      `category` int(3) NOT NULL DEFAULT '0' COMMENT '币种编号',
91
      `flow` text NOT NULL COMMENT '原始数据',
92
      `sign` text NOT NULL COMMENT '签名',
93
      `status` varchar(2) NOT NULL DEFAULT '' COMMENT '提现状态',
94
      `app id` varchar(20) NOT NULL DEFAULT '' COMMENT '员工id',
95
      `wd flow` text NOT NULL,
96
97
      `create_time` datetime NOT NULL COMMENT '创建时间',
98
      PRIMARY KEY (`wd hash`)
99
    ) ENGINE=InnoDB DEFAULT CHARSET=utf8;
100
101
    SET FOREIGN KEY CHECKS = 1;
102
```

APP服务数据表的创建

操作步骤:

```
1 #1, 登录mysql
2 $mysql -u root -p
3 #2, 切换db
4 $mysql>USE boxapp;
5 #3, 更新数据库
6 $mysql>source [path]/appserver_table_init.sql
```

sql文件: appserver_table_init.sql <u>https://github.com/boxproject/box-appServer/blob/master/scripts/box.sql</u>

```
1 -- table create
2 SET NAMES utf8mb4;
3 SET FOREIGN_KEY_CHECKS = 0;
4
5 #注册申请记录
```

```
drop table if exists `tb_registration_history`;
 7
   CREATE TABLE `tb_registration_history` (
8
                             int(10) PRIMARY KEY AUTO INCREMENT
           comment '自增ID, 主键'
    , regID
                             varchar(40) NOT NULL
9
           comment 'UUID'
                            varchar(20) NOT NULL
10
    , applyer
           comment '申请者'
    , captain
                             varchar(20) NOT NULL
11
            comment '直属上级'
12
    , applyerAcc
                             varchar(20) NOT NULL
          comment '申请者账号'
                             varchar(1000) NOT NULL
13
    , msg
           comment '注册信息'
14
    , isDeleted
                            tinyint(1) NOT NULL DEFAULT 0
           comment '该条记录是否被删除'
                             varchar(10) NOT NULL DEFAULT 0
15
    , consent
           comment '上级审批结果 1拒绝 2同意'
    , createdAt
                             timestamp NOT NULL DEFAULT
16
    CURRENT TIMESTAMP comment '申请创建时间'
17
   ) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_unicode_ci;
18
19
   drop table if exists `tb accounts info`;
20
   CREATE TABLE `tb accounts info` (
21
22
    id
                             int(10) PRIMARY KEY AUTO_INCREMENT
           comment '账号ID'
    , regID
23
                             varchar(40) NOT NULL
            comment '对应的注册申请表ID'
    , appAccountID
24
                             varchar(20) NOT NULL
            comment 'app端记录的账号ID'
    , account
                             varchar(20) NOT NULL
           comment '帐号'
                             varchar(1000) NOT NULL DEFAULT ''
26
    , pubKey
           comment '公钥'
                             varchar(1000) NULL DEFAULT NULL
27
    , enPubKey
           comment '上级对下级公钥的加密信息'
    , cipherText
                             varchar(100) NULL DEFAULT NULL
28
            comment '上级对该账号公钥生成的信息摘要'
2.9
    , isDepartured
                             tinyint(1) NOT NULL DEFAULT 0
          comment '是否离职'
    , lft
30
                             int(10) NOT NULL
           comment '左值'
                             int(10) NOT NULL
31
    , rgt
            comment '右值'
32
    , isUploaded
                             tinyint(1) NOT NULL DEFAULT 0
           comment '该账户公钥是否已发送至根节点账户'
    , depth
                             int(10) NOT NULL
33
           comment '该账号所处的节点深度'
```

```
, createdAt
                              timestamp NOT NULL DEFAULT
                          comment '帐号创建时间'
    CURRENT_TIMESTAMP
                              timestamp NULL DEFAULT NULL
35
    , updatedAt
           comment '更新时间'
   ) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_unicode_ci;
36
    #更新tb accounts info的 updatedAt
37
38
   drop trigger if exists trg accounts info update;
    CREATE TRIGGER `trg_accounts_info_update` BEFORE UPDATE ON
39
    `tb_accounts_info` FOR EACH ROW set new.updatedAt=CURRENT_TIMESTAMP;
40
   #转账申请记录
41
    drop table if exists `tb transfer`;
42
43
    CREATE TABLE `tb_transfer` (
44
                              bigint(20) PRIMARY KEY AUTO_INCREMENT
                 comment '自增ID'
45
                              varchar(40) NOT NULL
    , orderNum
                 comment '转账记录ID'
                              varchar(100) NULL DEFAULT NULL
46
    , txInfo
                 comment '订单信息'
    , transBoxHash
                              varchar(100) NULL
                 comment 'transBox上链的哈希值'
48
    , applyerID
                              varchar(20) NOT NULL
                  comment '申请员工帐号ID'
                              int(10) NOT NULL
49
    , currencyID
                  comment '交易币种ID'
                              varchar(10) NOT NULL
50
    , amount
                  comment '转账金额'
    , flowID
                              bigint(10) NOT NULL DEFAULT 1
51
                 comment '对应于哪个业务结构'
                              tinyint(1) NOT NULL DEFAULT 0
52
    , progress
                  comment '最终审批意见, 0待审批 1审批中 2驳回 3审批同意'
                              varchar(100) NULL DEFAULT NULL
53
    , txID
                  comment '对应公链的txid'
                             varchar(1000) NOT NULL
54
    , applyContent
                  comment '申请者提交的转账信息'
                              varchar(1000) NOT NULL
55
    , applyerSign
                 comment '申请者对该笔转账申请的签名'
                              tinyint(1) NOT NULL DEFAULT 0
56
    , arrived
                comment '是否到账 1-打包中 2-到账'
57
    , createdAt
                             timestamp NOT NULL DEFAULT
                              comment '申请创建时间'
    CURRENT TIMESTAMP
58
    , updatedAt
                              timestamp NULL DEFAULT NULL
                comment '更新时间'
    ) ENGINE = InnoDB DEFAULT CHARSET = utf8 COLLATE = utf8 unicode ci;
   #更新tb transfer的 updatedAt
60
    drop trigger if exists trg_transfer_update;
    CREATE TRIGGER `trg_transfer_update` BEFORE UPDATE ON `tb_transfer` FOR
    EACH ROW set new.updatedAt=CURRENT TIMESTAMP;
63
```

```
#审批转账记录
64
65
    drop table if exists `tb_review_transfer`;
    CREATE TABLE `tb review transfer` (
66
                               bigint(20) NOT NULL
67
    transID
                 comment '转账申请表的ID'
    , managerAccID
                              int(10) NOT NULL
68
                 comment '账号ID'
69
    , comments
                               tinyint(1) NOT NULL DEFAULT 0
                comment '审批意见, 1驳回 2审批同意'
                               varchar(1000) NULL DEFAULT NULL
70
    , sign
                comment '审批者签名'
                              timestamp NOT NULL DEFAULT
71
    , createdAt
    CURRENT TIMESTAMP
                                 comment '审批创建时间'
72
    ) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_unicode_ci;
73
    #币种配置列表
74
    drop table if exists `tb currency`;
75
    CREATE TABLE `tb currency` (
76
77
    id
                               int(10) PRIMARY KEY
                 comment '自增ID'
78
                               varchar(10) NOT NULL
    , currency
                 comment '充值地址'
79
    , factor
                               varchar(100) NULL DEFAULT NULL
                  comment '货币转换因子'
                              varchar(20) NOT NULL DEFAULT 0
80
    , balance
                  comment '余额'
81
    , isToken
                               tinyint(1) NOT NULL DEFAULT 0
                 comment '是否是代币'
                               varchar(66) NULL
82
    , address
                 comment '充值地址'
                               tinyint(1) NOT NULL DEFAULT 1
83
    , available
                 comment '该币种是否可用'
84
                               timestamp NULL DEFAULT CURRENT TIMESTAMP
    , updatedAt
                  comment '充值时间'
85
    ) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8 unicode ci;
86
    INSERT INTO `tb_currency` VALUES (1, 'ETH', 18, '0', 0, null, 1,
87
    CURRENT TIMESTAMP);
88
   COMMIT;
89
90
   #审批业务结构
91
    drop table if exists `tb_business_flow`;
    CREATE TABLE `tb business flow` (
92
93
                               bigint(20) PRIMARY KEY AUTO INCREMENT
                 comment '自增ID'
94
    , flowID
                               varchar(40) NOT NULL
                 comment '业务流ID'
95
                               varchar(100) NULL DEFAULT NULL
    , flowHash
                  comment '上链哈希值'
```

```
, flowName
                               varchar(100) NOT NULL
                  comment '业务结构名称'
 97
     , founderID
                              int(10) NOT NULL
                   comment '创建者账号ID'
98
     , founderSign
                               varchar(1000) NOT NULL
                   comment '创建者对模板内容的签名'
99
     , content
                              text
                   comment '业务结构内容'
100
     , singleLimit
                               varchar(10) NOT NULL
                  comment '单笔转账限额'
                               tinyint(1) NOT NULL DEFAULT 0
101
     , progress
                 comment '审批流模板审批进度 0待审批 2审批拒绝 3审批通过'
102
     , createdAt
                              timestamp NOT NULL DEFAULT
                                comment '业务结构创建时间'
     CURRENT TIMESTAMP
                              timestamp NULL DEFAULT NULL
103
     , updatedAt
                 comment '审批更新时间'
     -- , updatedAt
                                 timestamp NULL DEFAULT NULL ON UPDATE
     CURRENT_TIMESTAMP comment '审批更新时间'
     ) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8 unicode ci;
105
106
    #更新tb_business_flow的 updatedAt
    drop trigger if exists trg business flow update;
107
108
     CREATE TRIGGER `trg business flow update` BEFORE UPDATE ON
     `tb_business_flow` FOR EACH ROW set new.updatedAt=CURRENT_TIMESTAMP;
109
110
    #充值记录表
     drop table if exists `tb deposit history`;
111
    CREATE TABLE `tb_deposit_history` (
112
                               bigint(20) PRIMARY KEY AUTO_INCREMENT
113
                   comment '充值记录ID, 主键'
114
                               varchar(50) NOT NULL
     , orderNum
                   comment '订单号'
                               varchar(66) NOT NULL
115
     , fromAddr
                   comment '付款方地址'
116
     , toAddr
                               varchar(66) NOT NULL
                   comment '收款方地址'
                               int(10) NOT NULL
117
     , currencyID
                   comment '币种ID'
118
                               varchar(100) NULL DEFAULT NULL
     , amount
                   comment '充值金额'
119
                               varchar(100) NULL DEFAULT NULL
     , txID
                   comment '对应公链的txid'
                               timestamp NULL DEFAULT CURRENT_TIMESTAMP
120
     , updatedAt
                   comment '充值时间'
121
     ) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_unicode_ci;
```