总体的系统框架图如图1所示：



|  |
| --- |
| 图1 总体的框架图 |
| |  | | --- | | 图2 总体的框架图 | |



|  |
| --- |
| 图3 RA和GW注册的细节图 |



|  |
| --- |
| 图4 XXX |

我所需要做的模块包（对应于图1中的绿色部分）含以下两个部分功能：分别是**Account**和**Configuration**。

1. Account （MySQL关系型数据库，对数据的consistancy要求很高的场景）：

表1 用户信息表

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **字段** | **类型** | **长度** | **主/外键** | **是否为空** | **默认值** | **自动增长** |
| user\_id | int |  | 主 | 否 |  | 是 |
| user\_name | varchar | 255 |  | 否 | 空字符串 | 否 |
| user\_email | varchar | 255 |  | 是 | 空字符串 | 否 |
| user\_phone | varchar | 255 |  | 是 | 空字符串 | 否 |
| password | varchar | 255 |  | 否 | 空字符串 | 否 |
| valid\_from | datetime |  |  | 是 | now | 否 |
| valid\_to | datetime |  |  | 是 | now | 否 |
| status | int |  |  | 否 | 0 | 否 |

API：

userApi.register(username,password,callback)；

userApi.logIn(username,password,callback)；

userApi.logOut(username,password,callback)；

1. Configuration（Redis非关系型数据库，分布式，pub/sub 功能）：

表2 消息汇总及其内容表

|  |  |  |  |
| --- | --- | --- | --- |
| **消息名称** | **消息内容** | | **自定义数据类型** |
| StatusMessage | int32  string | code  description |  |
| Branch | int32  string  string | branch\_id  ip  subnets |  |
| LoginRequest | int32  string  string  string  string  string  AuthenticateMechanism | session\_id  username  password  token  machine  platform  mechanism | enum AuthenticateMechanism {  XAUTH = 0;  TOKEN = 1;  PKI = 2;  CUSTOM = 3;  } |
| LoginResponse | int32  int32  string  string  Branch  StatusMessage | session\_id  enterprise\_id  ip  dns  branchs  status | Branch  StatusMessage |
| RegistrationRequest | int32  int32  int32  string | session\_id  enterprise\_id  branch\_id  subnets |  |
| RegistrationResponse | int32  Branch  StatusMessage | session\_id  branchs  status | Branch  StatusMessage |
| EchoRequest | int32 | session\_id |  |
| EchoResponse | int32 | session\_id |  |
| Notification | int32  int32  int32  string  NotificationType  StatusMessage | enterprise\_id  branch\_id  src\_relay\_id  subnets  type  status | enum NotificationType {  OFFLINE = 0;  ONLINE = 1;  UPDATE = 3;  DELETE = 4;  }  StatusMessage |
| Request | LoginRequest  RegistrationRequest  EchoRequest | login  registration  echo | LoginRequest  RegistrationRequest  EchoRequest |
| Response | LoginResponse  RegistrationResponse  EchoResponse  Notification | login  registration  echo  notification | LoginResponse  RegistrationResponse  EchoResponse  Notification |