

H1 System Design

H2 Directory Struct

system level as the top directory

```
xx_foo_system
- services
- demo
  - config
    - config.yaml
    - config_test.yaml
  - impls
    - group
      - impl_change_permission_in_group.go
      - impl_change_user_in_group.go
      - server.go
    - impl_delete_group_by_id.go
    - impl_demo.go
    - server.go
  - hook
    - hook.go
  - main.go
  - .k8s.yaml
  - .k8s_test.yaml
  - Dockerfile
- bff
  - admin
    - codes
      - error_code.go
    - config
      - config.yml
      - config_test.yml
  - impls
    - group
      - impl_change_permission_in_group.go
```

```
- impl_change_user_in_group.go
- types.go
- department
  - impl_get_department_list.go
  - impl_get_department_list_with_user.go
- impl_login.go
- impl_logout.go
- impl_demo.go
- router
  - router_base.go
- hook
  - hook.go
- main.go
- .k8s.yaml
- .k8s_test.yaml
- Dockerfile
- pb
  - demo
    - group.go
    - login.go
- doc
- README.md
- Makefile
- go.mod
- go.sum
```

H3 TODO

- ☐ .k8s_yaml
- ☐ .k8s_test.yaml
- ☐ config_test.yaml
- ☐ Dockerfile
- ☐ service impls name、file organization
- ☐ bff impls name、file organization
- ☐ pb impls name、file organization
- ☐ Errcode impls name、file organization

H2 Annotation

- Type
 - service.interface
 - service.interface.request
 - service.interface.response
 - bff.interface
 - bff.interface.request
 - bff.interface.response

H2 Bff

- ☐ Mutil Bff
- ☐ Annotation
 - interface

```
// @type: bff.interface
// @name: 更改用户组权限
// @login: Y
// @page: xxxx
// @des: xxxx

func ChangePermissionInGroupHandler(state
*bff.State) {}
```

Option: des

- interface.request

```
// @type: bff.interface.request
// @interface: ChangePermissionInGroupHandler
// @des: xxxx
type ChangePermissionInGroupItem struct {
    GroupId      int64 `binding:"gte=1"` //
    用户组id | Y | 0 |
    PermissionId int64 `binding:"gte=1"` //
    权限id | Y | 0 |
    Operate      int64 `binding:"gte=0,lte=1"` //
    操作 | Y | 0 | 新增为1, 取消为0
}
```

Option: des

- interface.response

```
// @type: bff.interface.response
// @interface: ChangePermissionInGroupHandler
// @des: xxxx
type ChangePermissionInGroupRequest struct {
    List []*ChangePermissionInGroupItem // 要新增或者
    取消的list | Y | [] |
}
```

Note

- `bff` 可以有多层结构，但是接口、请求参数、返回参数不能都出现重复现象
- `interface.request`、`interface.response` 注解中的 `interface` 应该和接口名字一一对应；`interface.request`、`interface.response` 内嵌结构也需做到 `bff` 包下全局唯一

H2 Service

- ☐ Mutil service
 - ☐ Annotation
- from xxx.proto

- interface

```
// @type: service.interface
// @path: demo
// @des: Demo
service Demo {
    rpc Ping(PingRequest) returns
(PingResponse);
}
```

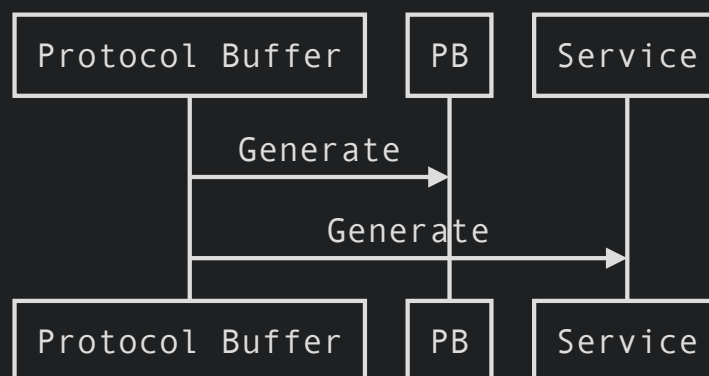
- interface.request

```
// @type: service.interface.request
// @des: Demo
message PingRequest {}
```

- interface.response

```
// @type: service.interface.response
message PingResponse {}
```

H2 Protocol



H3 protocol buffer

```
protocol
- xxx_demo_system
  - demo
    - ping.proto
    - login.proto
  - bar
    - ping.proto
- xxx_foo_system
  - demo
    - ping.proto
    - login.proto
```

H3 pb

```
pb
- demo
  - ping.go
  - login.go
- bar
  - ping.go
```