

表情服务

修改历史

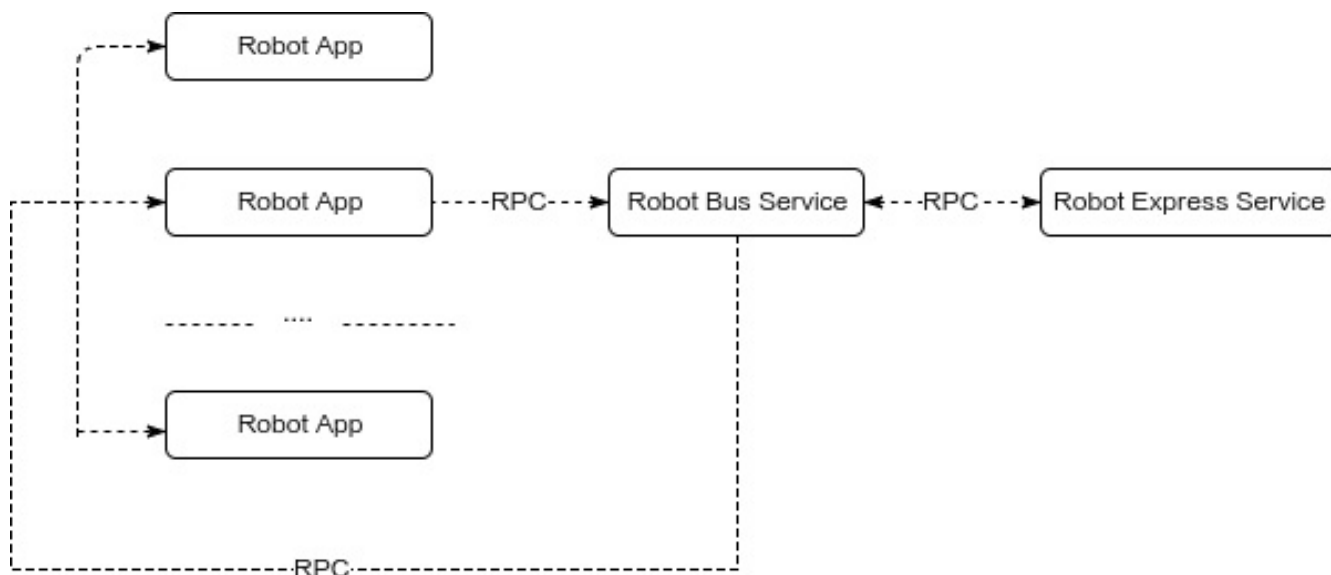
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v1.0	彭钉	17/10/06	初版

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表情服务结构设计

1、表情服务\总线\应用关系示意图



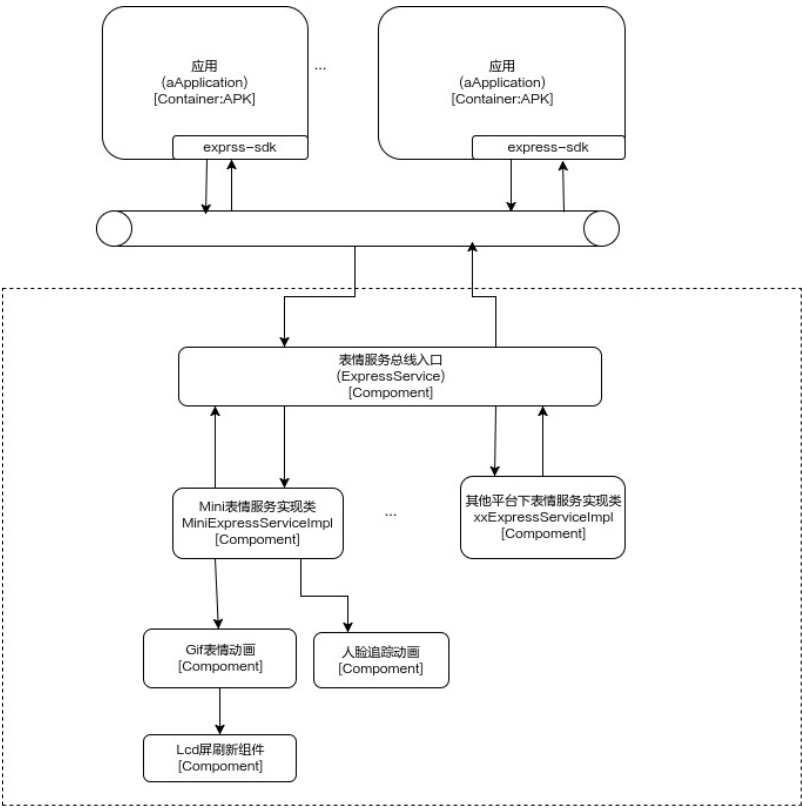
说明:

- Robot Bus Service --总线服务进程
- Robot App -- 机器人端应用进程

- Robot Express Service -- 表情服务进程

2、表情服务设计

- 内部组件图



- sdk对外接口定义

ExpressService
+ impl: IExpressInterface
+ getExpressList(): List<Express.ExpressInfo>
+ doExpress(String idOrName, int repeat, float speed):void

3、表情服务接入总线

- 声明表情服务

```
<application>
  <service android:name=".ExpressService">
```

```

        <!-- name: 服务名称，应用调用哪个服务的标识 -->
        <meta-data android:name="name"
android:value="MotionService" />
        <!-- action 用于启动总线服务，label & description 描述服务的信息
-->
        <meta-data android:name="label" android:value="@string/label"
/>
        <meta-data android:name="description"
android:value="@string/description" />
        <intent-filter>
            <!-- host & scheme 值统一固定，path 表示某个调用 -->
            <action android:name="ubtrobot.service_bus.action.SERVICE"
/>
            <data android:host="express.ubtrobot.com"
android:scheme="call" android:path="/express/doExpress"/>
            <data android:host="express.ubtrobot.com"
android:scheme="call" android:path="/express/getExpressList"/>
            ...
        </service>
        <meta-data
            android:name="mst-conn-mod"
            android:value="MST_SERVICE" />
    </application>

```

定义表情服务消息格式

```

syntax = "proto3";
option java_package = "com.ubtrobot.express.protos" ;

//响应参数
message ExpressListRes{
    repeated ExpressInfo express = 1;
}

message ExpressInfo {

```

```

    int32 id = 1;//id
    string name = 2;//名称
    int32 duration = 3;//时长
}

//请求参数
message DoExpressReq {
    string name = 1;
    float speed = 2;
    int32 repeat = 3;
}

```

- 实现ExpressService

```

// 总线服务实现
@BusService(name = "express")
public final class ExpressService extends AbstractCallable {
    private IExpressInterface impl;
    //...
    @DebugLog
    @Call(path = "/getExpressList")
    public void onGetExpressList(Request request, Responder
responder){
        try {
            List<Express.ExpressInfo> expressInfos = impl.getExpressList();
            if (expressInfos == null) {

responder.respondFailure(CallGlobalCode.INTERNAL_ERROR, "call
fail: 表情解析失败");
            }else {
                responder.respondSuccess(ProtoParam.pack(
                    Express.ExpressListRes.newBuilder()
                        .addAllExpress(expressInfos)
                        .build()));
            }
        }catch (Exception e){
            e.printStackTrace();
        }
    }
}

```

```

        responder.respondFailure(CallGlobalCode.INTERNAL_ERROR,
"call fail : " + e.getMessage());
    }
}

@DebugLog
@Call(path = "/doExpress")
public void onDoExpress(Request request, Responder responder){
    try {
        String value =
ProtoParam.from(request.getParam()).unpack(StringValue.class).getVal
ue();
        int code = impl.doExpress(value);
        if (code == 0) {
            responder.respondSuccess();
        }else {
            responder.respondFailure(CallGlobalCode.BAD_REQUEST,
"表情不支持");
        }
    } catch (ProtoParam.InvalidProtoParamException e) {
        e.printStackTrace();
        responder.respondFailure(CallGlobalCode.BAD_REQUEST, "call
fail : " + e.getMessage());
    } catch (Exception e){
        e.printStackTrace();
        responder.respondFailure(CallGlobalCode.INTERNAL_ERROR,
"call fail : " + e.getMessage());
    }
}
}

```