prj.json(project description)

Default

Configure...

HTML...

Component...

Shell...

Open Source Program...

Resource File...

Linux Executable Program...

Shared Library...

Kernel Module...

SkinOS

Sline(CLI)

Remote Control

Local Control

SkinOS

Other Project

SkinOS

Initialization

Shutdown

SkinOS

Web Server

Config

method

prj.json

Default Config file

HTML

**Skin Layer**

Component

ffff

**Linux System and Application**

Executable Program

Shared Library

Shell

API

Kernel Module

Resource file

Register for startup run

HTML Page

Register for shutdown run

Register for network online event

\_shut()

Stop the service

\_take()

Reset the service

\_setup()

Register the service according to the component configuration

\_status()

Query status

\_set()

Set config

\_get()

Get configure

sreset()

spid()

sdelete()

sstart()

Query modify Query

Default Config file

\_service() call telecom\_cpe\_register()

1. Get machine infomation
2. Sending HTTP POST with device information
3. Reutn ttrue to exit

SkinSDK

Top SDK

project

config

rice

tools

$gPLATFORM

Openwrt SDK

Bottom SDK

Linux

project

FPK

/bin/

bin/

/lib/

prj.json:cmd

bin/

/etc/

lib/

lib/

Interval Flash

prj.json:lib

etc/

Configure Flash

etc/

int/

/prj/$PROJECT\_ID

int/

\*.cfg

\*.cfg

注册为开机运行

注册为关机运行

Iftttserver可执行程序

execl

Ismartus可执行程序

execl

 \_ismartus\_service()

serv\_start

serv\_stop

\_iftt\_service()

\_setup()

\_shut()

PC中的管理程序的开发

upgrade

链接

管理程序

Gather项目

data组件

arch项目

logs

events

beacon

he命令行

libland库

land项目

调用

应用程序开发

remote

User

agent

tui

wui

Called by other components

More Project

…

method

Config

API

library

Component

Project

Web page

…

call other interface of component

executable program

other file

Config file

Register

Service

Linux library API

Syslog, Joint, Init

应用程序开发-附1管理组件配置API

application development

Component

Program

Component interaction structure

Component config( cget/cset )

obj\_t

talk\_t

attr\_t

Project C

\_get/\_set

…

More

Project

Project A

\_get/\_set

\_get/\_set

Project B

Config file

Config file

应用程序开发-与其它组件通信

application development

Component

Program

Component interaction structure

Component call( ccall/scall )

obj\_t

talk\_t

param\_t

Project C

More

Project

Method

…

Project A

Method

Method

Project B

Config file

Config file

组件开发

Config file

SkinOS startup

**boole\_t \_setup( obj\_t this, param\_t param ){}**

SkinOS shutdown

**boole\_t \_shut( obj\_t this, param\_t param ){}**

SkinOS event

**boole\_t \_take( obj\_t this, param\_t param ){}**

SkinOS

Service

**boole\_t \_service( obj\_t this, param\_t param ){}**

**boole\_t \_xxxx( obj\_t this, param\_t param ){}**

**...**

System web management

System sline CLI

**talk\_t \_status( obj\_t this, param\_t param ){}**

System agent for local control

**talk\_t \_get( obj\_t this, attr\_t path ){}**

Default Config file

**boole \_set( obj\_t this, talk\_t v, attr\_t path ){}**

System agent for remote control

应用程序开发-操作配置

终端指令

组件配置管理

可执行程序

组件

配置交互结构

path\_t

obj\_t

配置操作函数(config\_get/config\_set)

talk\_t

…

项目配置(JSON格式)

{JSON对象}

项目配置(JSON格式)

{JSON对象}

项目配置(JSON格式)

{JSON对象}

vpn@l2tpc

vpn@pptpc

openvpn@vpn

...

...

ifname@lan

ifname@wan

ifname@lte

...

client@station

client@dhcps

...

ifname@lte

ifname@lte2

...

uart@nmea

uart@modbus

uart@dtu

gnss@nmea

...

network@bridge

network@vlan

network@keeplive

...

modem@lte

modem@lte2

...

forward@route

forward@firewall

forward@nat

clock@date, clock@restart

modem@device

network@frame

uart@frame

Skinos frame compoent (land@service, land@joint, land@fpk, land@auth, land@reg...)

arch project (arch@data, arch@usb, arch@ethernet, wifi@nssid)

OpenVPN, PPTP, Proftpd, Samba

Busybox(shell, mtd, ip, tc, ...)

Skinos frame library( he, skin,daemon, libland, landnet, ... )

Library (libc, openssl,libevent...)

Kernel Module

Linux Kernel

**局域网搜索协议(UDP)**

设备

管理工具

**局域网查询协议(UDP)**

**JSON控制协议(TCP)**