



# How to add a new app

1. Create a folder below  
src/apps/aud-base/main/playback
2. Modify  
src/apps/aud-base/main/makefile

```
20
21
22 PLAYBACKOBS = playback/playback_tts.c playback/playback_tts_cli.c \
23             playback/playback_prompt.c playback/playback_prompt_cli.c
24
25
26 AIS_APP = ais_app/aispeech_app.c ais_app/aispeech_app_cli.c
27
28 WIFI_SETTING_OBJS = wifi_setting/wifi_setting.c wifi_setting/wifi_setting_cli.c wifi_setting/w
29
30 MISC_OBJS = misc/misc.c misc/misc_cli.c misc/misc_dhcp.c \
31
32 UPGOBS = upg/upg.c upg/upg_cli.c
33
34 LED_OBJS = led/led.c
35
36 SOURCE := $(MAINOBS) $(LIBOBS) $(AMOBS) $(APPOBS) $(CLIOBS) $(ACFGOBS) \
37           $(OSOBS) $(RWLOCKOBS) $(UTILOBS) $(PLAYBACKOBS) $(BTNSOUNDOBS) \
38           $(DMOBS) $(UIOBS) $(AIS_MANAGER) $(ASSISTANT_STUB_OBJS) $(BLUETOOTH_OBJS)
39
40 CPP_SOURCE := playback/playback_uri.cpp playback/playback_uri_cli.cpp
41
```

# How to add a new app

## 3. App sample code like playback\_usb.c

```

$
VOID a_playback_usb_register($
    AMB_REGISTER_INFO_T* pt_reg$
) $
{
    if (TRUE == t_g_pb_usb.b_app_init_ok) {
        return;
    }
    $
    memset(pt_reg->s_name, 0, sizeof(CHAR)*(APP_NAME_MAX_LEN + 1));
    strncpy(pt_reg->s_name, PB_USB_THREAD_NAME, APP_NAME_MAX_LEN);
    $
    pt_reg->t_fct_tbl.pf_init = _playback_usb_init;
    pt_reg->t_fct_tbl.pf_exit = _playback_usb_exit;
    pt_reg->t_fct_tbl.pf_process_msg = _playback_usb_process_msg;
    pt_reg->t_desc.ui8_flags = ~(UINT64)0;
    pt_reg->t_desc.t_thread_desc.z_stack_size = PB_USB_STACK_SIZE;
    pt_reg->t_desc.t_thread_desc.ui1_priority = PB_USB_THREAD_PRIORITY;
    pt_reg->t_desc.t_thread_desc.ui2_num_msgs = PB_USB_NUM_MSGS;
    pt_reg->t_desc.ui2_msg_count = PB_USB_MSGS_COUNT;
    pt_reg->t_desc.ui2_max_msg_size = PB_MAX_MSGS_SIZE;
    $
    return;
}
$

```

# How to add sample app

4. register new app in main function

src/apps/aud-base/main/main/appmainprog.c

```
appmainprog.c
0 10 20 30 40 50 60 70 80 90
46 $
47 /*-----*/
48 * extern function declarations
49 *-----*/
50 extern VOID a_hellotest_register(AMB_REGISTER_INFO_T* pt_reg);
51 extern VOID a_dm_register(AMB_REGISTER_INFO_T* pt_reg);
52 extern VOID a_sm_register(AMB_REGISTER_INFO_T* pt_reg);
53 extern VOID a_playback_usb_register(AMB_REGISTER_INFO_T* pt_reg);
54 extern VOID a_playback_all_register(AMB_REGISTER_INFO_T* pt_reg);
55 extern VOID a_playback_tts_register(AMB_REGISTER_INFO_T* pt_reg);
56 extern VOID a_button_sound_register(AMB_REGISTER_INFO_T* pt_reg);
57 extern VOID a_timerd_register(AMB_REGISTER_INFO_T* pt_reg);
58 extern VOID a_acfg_register(AMB_REGISTER_INFO_T* pt_reg);
59 extern VOID a_upg_control_register(AMB_REGISTER_INFO_T* pt_reg);
60 extern VOID a_user_interface_register(AMB_REGISTER_INFO_T* pt_reg);
61 extern VOID a_aispeech_register(AMB_REGISTER_INFO_T* pt_reg);
62 $
63 $
64 /*-----*/
65 * private function declarations
66 *-----*/
67 VOID x_appl_init (VOID);
68 $
69 $
70 /*-----*/
71 * variable declarations
72 *-----*/
73 void* g_mas_handle = NULL;
74 $
75 static APP_REG app_to_reg[] = {
76 > > {a_timerd_register, {0}, TIMERD_THREAD_NAME},
77 > > {a_acfg_register, {0}, ACFG_THREAD_NAME},
78 > > {a_sm_register, {0}, SM_THREAD_NAME},
79 > > {a_playback_usb_register, {0}, PB_USB_THREAD_NAME},
80 > > {a_playback_all_register, {0}, PB_ALL_THREAD_NAME},
81 > > {a_playback_tts_register, {0}, PB_TTS_THREAD_NAME},
82 > > {a_button_sound_register, {0}, BS_THREAD_NAME},
```

# How to add sample app

## 5. How to check app init successful -- key word <appmain>

String

```
(170207_10:53:42.451)<appmain>*****
(170207_10:53:42.451)<appmain>Appcliation Init Begin
(170207_10:53:42.451)<appmain>Audio Mas process Init
(170207_10:53:42.531)<appmain>Cli Init
(170207_10:53:42.531)<appmain>Dbg Backtrace Init
(170207_10:53:42.531)<appmain>OS thread Init
(170207_10:53:42.531)<appmain>AEE Init
(170207_10:53:42.531)<appmain>Handle Usr Init
(170207_10:53:42.531)<appmain>Am Init
(170207_10:53:42.531)<appmain>1.timerd Init Begin
(170207_10:53:42.531)<appmain>1.timerd Init Successful
(170207_10:53:42.531)<appmain>2.acfg Init Begin
(170207_10:53:42.531)<appmain>2.acfg Init Successful
(170207_10:53:42.531)<appmain>3.state_mgr Init Begin
(170207_10:53:42.531)<appmain>3.state_mgr Init Successful
(170207_10:53:42.531)<appmain>4.playback_usb Init Begin
(170207_10:53:42.531)<appmain>4.playback_usb Init Successful
(170207_10:53:42.531)<appmain>5.playback_line_in Init Begin
(170207_10:53:42.531)<appmain>5.playback_line_in Init Successful
(170207_10:53:42.531)<appmain>6.button_sound Init Begin
(170207_10:53:42.531)<appmain>6.button_sound Init Successful
(170207_10:53:42.531)<appmain>7.dev_mgr Init Begin
(170207_10:53:42.531)<appmain>7.dev_mgr Init Successful
```

Q&A

Thank you!

MEDIA TEK CONFIDENTIAL  
yubin@linglongtech.com USE

**MEDIA TEK**

*everyday genius*