

## About Tools Programmer's Guide

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# Chapter 1

## File Index

### 1.1 File List

Here is a list of all documented files with brief descriptions:

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## Chapter 2

# File Documentation

### 2.1 aboot.h File Reference

#### Typedefs

- typedef void(\* [aboot\\_callback\\_func\\_t](#)) (const char \*json, void \*ctx)

#### Enumerations

- enum [aboot\\_callback\\_event\\_t](#) {  
    ABOOT\_EVENT\_SYSTEM\_LOG, ABOOT\_EVENT\_DOWNLOAD\_INIT, ABOOT\_EVENT\_DOWNLOAD\_  
    \_START, ABOOT\_EVENT\_DOWNLOAD\_STOP,  
    ABOOT\_EVENT\_DOWNLOAD\_GET\_TRAININGS, ABOOT\_EVENT\_DEVICE\_NEW, ABOOT\_EVENT\_  
    DEVICE\_CHANGE, ABOOT\_EVENT\_RELEASE\_LIST\_PRODUCTS,  
    ABOOT\_EVENT\_RELEASE\_GENERATE }

#### Functions

- int ABOOT\_API [aboot\\_engine\\_init](#) (void)
- void ABOOT\_API [aboot\\_engine\\_exit](#) (void)
- void ABOOT\_API [aboot\\_engine\\_register\\_cb](#) ([aboot\\_callback\\_func\\_t](#) cb, void \*ctx)
- void ABOOT\_API [aboot\\_engine\\_unregister\\_cb](#) (void)
- int ABOOT\_API [aboot\\_download\\_init](#) (const char \*json)
- int ABOOT\_API [aboot\\_download\\_config\\_trainings](#) (const char \*json)
- int ABOOT\_API [aboot\\_download\\_get\\_trainings](#) (void)
- int ABOOT\_API [aboot\\_download\\_start](#) (const char \*json)
- void ABOOT\_API [aboot\\_download\\_stop](#) (void)
- int ABOOT\_API [aboot\\_download\\_enable\\_device](#) (const char \*json)
- int ABOOT\_API [aboot\\_release\\_list\\_products](#) (const char \*json)
- int ABOOT\_API [aboot\\_release\\_generate](#) (const char \*json)

#### 2.1.1 Detailed Description

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##### Version

1.0

## 2.1.2 LICENSE

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## 2.1.3 DESCRIPTION

The time class represents a moment of time.

## 2.1.4 Typedef Documentation

### 2.1.4.1 aboot\_callback\_func\_t

```
typedef void(* aboot_callback_func_t) (const char *json, void *ctx)
```

Callback function pointer type

#### Parameters

<i>json</i>	callback info
<i>ctx</i>	user data pointer

## 2.1.5 Enumeration Type Documentation

### 2.1.5.1 aboot\_callback\_event\_t

```
enum aboot_callback_event_t
```

Callback events to upper layer

## 2.1.6 Function Documentation

### 2.1.6.1 `about_download_config_trainings()`

```
int ABOUT_API about_download_config_trainings (
    const char * json )
```

Configure USB port training data.

**Parameters**

<i>json</i>	USB port training configuration data in json format [ { "locationInfo": string, // port location information "order": integer // device order allocated }, { "locationInfo": string, // port location information "order": integer // device order allocated } ]
-------------	--

**Returns**

0 on success, otherwise failed

**2.1.6.2 aboot\_download\_enable\_device()**

```
int ABOOT_API aboot_download_enable_device (
    const char * json )
```

Enable aboot device for downloading.

**Parameters**

<i>json</i>	device info in json format { "path": string // COMM device name }
-------------	--

**Returns**

0 on success, otherwise failed

**2.1.6.3 aboot\_download\_get\_trainings()**

```
int ABOOT_API aboot_download_get_trainings (
    void )
```

Get USB port training data.

**Returns**

0 on success, otherwise failed

#### 2.1.6.4 aboot\_download\_init()

```
int ABOOT_API aboot_download_init (
    const char * json )
```

Initialize aboot download module.

##### Parameters

<i>json</i>	config release package info in json format { "path": string, // release package file path "address": integer, // or release package in memory address "size": integer // with size }
-------------	---

##### Returns

0 on success, otherwise failed

#### 2.1.6.5 aboot\_download\_start()

```
int ABOOT_API aboot_download_start (
    const char * json )
```

Start aboot download module.

##### Parameters

<i>json</i>	startup options in json format { "baudRate": integer, // baud rate setting for UART "usbOnly": bool, // only download for USB device "usbAutoEnable": bool, // USB device auto start "enableOnce": bool, // enable device only once "disabledGroups": [ "1", "2" ] // array of disabled downloading groups }
-------------	---

##### Returns

0 on success, otherwise failed

#### 2.1.6.6 aboot\_download\_stop()

```
void ABOOT_API aboot_download_stop (
    void )
```

Stop aboot download module.

#### 2.1.6.7 aboot\_engine\_exit()

```
void ABOOT_API aboot_engine_exit (
    void )
```

Cleanup aboot engine.

#### 2.1.6.8 aboot\_engine\_init()

```
int ABOOT_API aboot_engine_init (
    void )
```

Initialize aboot engine.

##### Returns

0 on success, otherwise failed

#### 2.1.6.9 aboot\_engine\_register\_cb()

```
void ABOOT_API aboot_engine_register_cb (
    aboot_callback_func_t cb,
    void * ctx )
```

Register engine call back.

##### Parameters

<i>cb</i>	callback function pointer
<i>ctx</i>	user data pointer

#### 2.1.6.10 aboot\_engine\_unregister\_cb()

```
void ABOOT_API aboot_engine_unregister_cb (
    void )
```

Unregister engine call back.

#### 2.1.6.11 aboot\_release\_generate()

```
int ABOOT_API aboot_release_generate (
    const char * json )
```

Generate a release package

**Parameters**

<i>json</i>	specify the options in json format { "path": string, // configuration base directory "product": string, // product name "output": string, output file name "custom": { "seagull": string, "msa": string } }
-------------	---

**Returns**

0 on success, otherwise failed

**2.1.6.12 about\_release\_list\_products()**

```
int ABOUT_API about_release_list_products (  
    const char * json )
```

List supported release products

**Parameters**

<i>json</i>	specify the configuration base directory in json format { "path": string }
-------------	---

**Returns**

0 on success, otherwise failed



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