

OTA 升级接口规范

修订历史 Revision History

版本 Rev.	日期 Date	修订描述 Change Description
1.0	2022/7/19	新增 OTA 升级规范

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功能需求 Functional Requirements

接口名称	接口解释	接口备注
Hh_GetVersion()	获取当前活跃分区的总版本号	
Hh_GetAllVersion()	获取当前活跃分区的所有版本号	
Hh_PrepareUpgrade()	检查升级前条件是否满足	
Hh_GetLocation()	获取差分还原前旧包的路径，具体到文件	提供的 path 具体到文件
Hh_StartInstall()	获取到文件，开始升级	
Hh_GetInstallProgress()	返回升级状态，升级进度	
Hh_AbortInstall()	停止升级	
Hh_SwitchSlot()	执行切分区动作	
Hh_SwitchSlotResult()	询问切分区结果	无耗时动作，回复成功状态，进度100%
Hh_RollbackSlot()	执行回滚动作	
Hh_RollbackSlotResult()	询问回滚结果	无耗时动作，回复成功状态，进度100%
Hh_Reset()	重置接口	升级过程中不支持调用，升级成功或者失败后调用

```
enum ResultState{
    sucesss = 0x00,
    fail     = 0x01,
    pengding= 0x02,
}

struct GetRusultProgress {
    char* package; //packagename
    int  percent;  //0x00~0x64
    char* log; //errorcode
    ResultState state; //0x00: success;0x01:fail;0x02:pending
};
```

1 Hh_GetVersion()

```
/**
 * @brief Get the version
 * @param [in] software_id which package
 * @param [out] The version of the package identified by software_id
 * @return HhtOtaError.error_code is ERROR_OK, if successfully
 * @see HhtOtaError
```

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*/

HhtOtaError Hh_GetVersion(uint8_t software_id, uint8_t* version);

2 Hh_GetAllVersion()

/**

* @brief Get the all packages version
 * @param [out] versions The all packages version
 * @return HhtOtaError.error_code is ERROR_OK, if successfully
 * @see HhtOtaError

*/

```
typedef struct {
    uint8_t software_id;
    uint8_t version [128];
} INOF_T;
```

HhtOtaError Hh_GetAllVersion(INOF_T* info);

3 Hh_PrepareUpgrade()

/**

* @brief Check the pre-installation conditions
 * @return HhtOtaError.error_code is ERROR_OK, if successfully

*/

HhtOtaError Hh_PrepareUpgrade(void);

4 Hh_GetLocation()

/**

* @brief Get the source package path
 * @param [out] path
 * @return HhtOtaError.error_code is ERROR_OK, if successfully

*/

HhtOtaError Hh_GetLocation(uint8_t* path);

5 Hh_StartInstall()

/**

* @brief Upgrade operation
 * @param [in] packagename the packages wanted to upgrade
 * @return HhtOtaError.error_code is ERROR_OK, if successfully
 * @see HhtOtaError

*/

HhtOtaError Hh_StartInstall(uint8_t* packagename);

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6 Hh_GetInstallProgress()

```
/**
 * @brief Get the self-installer InstallProgress
 * @param [in] package
 * @param [out] state
 * @param [out] percent
 * @return HhtOtaError.error_code is ERROR_OK, if successfully
 * @see HhtOtaError
 */
HhtOtaError Hh_GetInStallProgress(GetRusultProgress* package, GetRusultProgress state,
GetRusultProgress percent);
```

7 Hh_AbortInstall()

```
/**
 * @brief Abort operation
 * @param [in] packagename
 * @return HhtOtaError.error_code is ERROR_OK, if successfully
 * @see HhtOtaError
 */
HhtOtaError Hh_AbortInstall(uint8_t* packagename);
```

8 Hh_SwitchSlot()

```
/**
 * @brief SwitchSlot operation
 * @return HhtOtaError.error_code is ERROR_OK, if successfully
 * @see HhtOtaError
 */
HhtOtaError Hh_SwitchSlot(void);
```

9 Hh_SwitchSlotResult()

```
/**
 * @brief Get the SwitchSlotResult state
 * @param [out] state
 * @param [out] percent
 * @return HhtOtaError.error_code is ERROR_OK, if successfully
 * @see HhtOtaError
 */
HhtOtaError Hh_SwitchSlotResult(GetRusultProgress state, GetRusultProgress percent);
```

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10 Hh_RollbackSlot()

```
/**
 * @brief Rollback operation
 * @return HhtOtaError.error_code is ERROR_OK, if successfully
 * @see HhtOtaError
 */
HhtOtaError Hh_RollbackSlot(void);
```

11 Hh_RollbackSlotResult()

```
/**
 * @brief Get the RollbackSlotResult state
 * @param [out] state
 * @param [out] percent
 * @return HhtOtaError.error_code is ERROR_OK, if successfully
 * @see HhtOtaError
 */
HhtOtaError Hh_RollbackSlotResult(GetRusultProgress state, GetRusultProgress
percent);
```

12 Hh_Reset()

```
/** ,
 * @brief Restart the system
 * @return HhtOtaError.error_code is ERROR_OK, if successfully
 * @see HhtOtaError
 */
HhtOtaError Hh_Reset(void);
```

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