



HiUpdateEdit

User Guide

Issue 00B03

Date 2015-04-30

Copyright © HiSilicon Technologies Co., Ltd. 2015. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of HiSilicon Technologies Co., Ltd.

Trademarks and Permissions



HISILICON, and other HiSilicon icons are trademarks of HiSilicon Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between HiSilicon and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

HiSilicon Technologies Co., Ltd.

Address: Huawei Industrial Base
Bantian, Longgang
Shenzhen 518129
People's Republic of China

Website: <http://www.hisilicon.com>

Email: support@hisilicon.com



About This Document

Purpose

This document describes how to use the HiSilicon HiUpdateEdit.

Related Versions

The following table lists the product versions related to this document.

Product Name	Version
Hi3716C	V2XX
Hi3751	V1XX
Hi3719C	V1XX
Hi3719M	V1XX
Hi3718C	V1XX
Hi3718M	V1XX
Hi3716C	V1XX
Hi3716H	V1XX
Hi3716M	V2XX
Hi3716M	V3XX
Hi3712	V1XX
Hi3716M	V4XX
Hi3798C	V1XX
Hi3798C	V2XX
Hi3796C	V1XX
Hi3798M	V1XX
Hi3796M	V1XX



Intended Audience

This document is intended for:

- Technical support engineers
- Software development engineers

Change History

Changes between document issues are cumulative. Therefore, the latest document issue contains all changes made in previous issues.

Issue 00B03 (2015-04-30)

This issue is the third draft release, which incorporates the following change:

Hi3798C V200, Hi3716MV410, and Hi3716MV420 are supported.

Issue 00B02 (2014-12-22)

This issue is the second draft release, which incorporates the following change:

Chapter 3 is added.

Issue 00B01 (2014-11-15)

This issue is the first draft release.



Contents

About This Document.....	i
1 Overview.....	1
1.1 Introduction to the HiUpdateEdit	1
1.2 Environment Preparation.....	1
1.3 Quick Start	1
1.3.1 Installation	1
1.3.2 Main GUI.....	1
1.3.3 Precautions.....	2
2 GUI and Functions.....	3
2.1 Preparations.....	3
2.2 Changing an Image	3
2.3 Adding/Deleting an APK in the System Partition	5
2.4 Adding/Deleting an APK in the Data Partition.....	8
2.5 Modifying a Configuration File	8
2.6 Creating the Upgrade Package	10
3 FAQs	11
3.1 What Do I Do If update.zip Is 0 KB After Being Edited by Using the HiUpdateEdit?.....	11
3.2 What Do I Do If Error Information Is Displayed When the OTA Upgrade Package Is Being Created by Using the HiUpdateEdit?	11



Figures

Figure 1-1 Main GUI of the HiUpdateEdit	2
Figure 2-1 Image tab page.....	4
Figure 2-2 A button marked with an asterisk.....	5
Figure 2-3 System Pre-installed APK tab page	6
Figure 2-4 Adding an APK.....	7
Figure 2-5 Deleting an APK.....	8
Figure 2-6 Settings tab page.....	9
Figure 2-7 Selecting a program for opening the configuration file	10



1 Overview

1.1 Introduction to the HiUpdateEdit

The HiUpdateEdit is used for quickly modifying the upgrade package **update.zip**. It runs on the Windows XP, Windows 7 32-bit, Windows 7 64-bit.

1.2 Environment Preparation

Copy the directory for storing the HiUpdateEdit to a local disk drive of Windows, and double-click **HiUpdateEdit.exe** to run the tool.

1.3 Quick Start

1.3.1 Installation

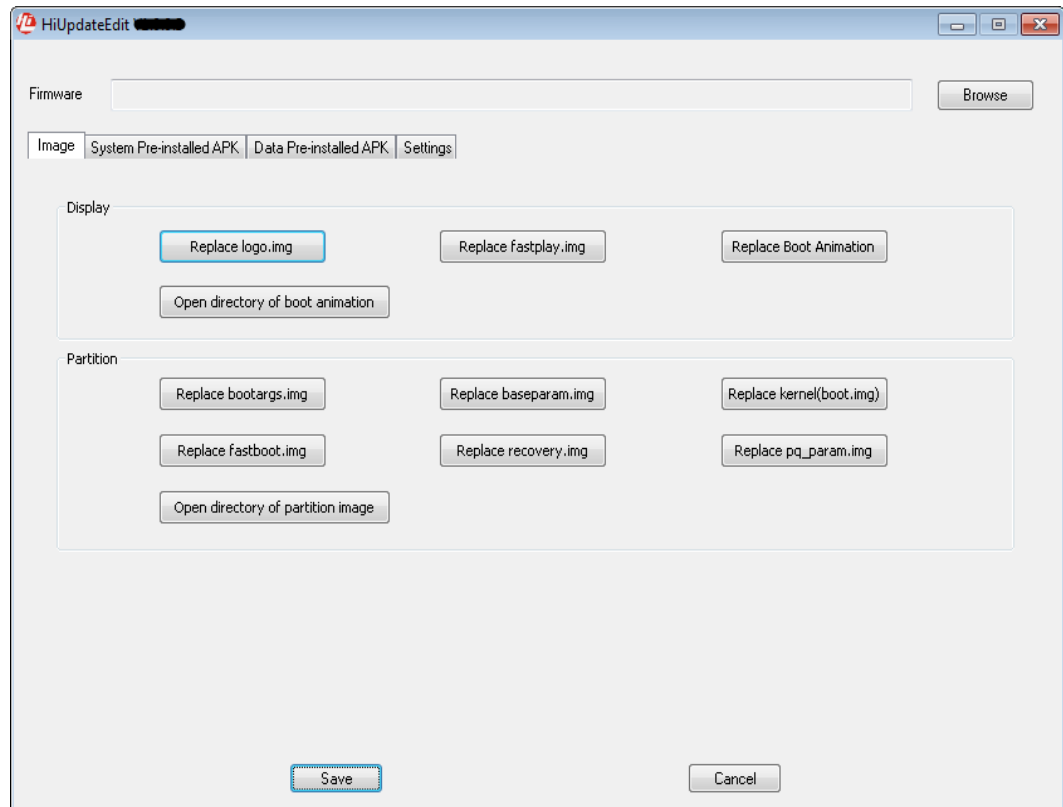
Installation is not required. Double-click the .exe file to run the tool.

1.3.2 Main GUI

[Figure 1-1](#) shows the main graphical user interface (GUI) of the HiUpdateEdit.



Figure 1-1 Main GUI of the HiUpdateEdit



1.3.3 Precautions

Before using the HiUpdateEdit, ensure that **platform.pk8**, **platform.x509.pem**, **testkey.pk8**, **testkey.x509.pem**, and **signapk.jar** in the **/Config** directory of the tool are consistent with the corresponding files provided in the SDK in the upgrade package. If they are inconsistent, replace the five files in the tool directory with those in the SDK. **platform.pk8**, **platform.x509.pem**, **testkey.pk8**, and **testkey.x509.pem** are stored in **\build\target\product\security**, and **signapk.jar** is stored in **\out\host\linux-x86\framework**.



2 GUI and Functions

The GUI of the HiUpdateEdit consists of four tab pages:

- **Image:** Changes the images.
- **System Pre-installed APK:** Adds/Deletes APKs in the system partition.
- **Data Pre-installed APK:** Adds/Deletes APKs in the data partition
- **Settings:** Modifies configuration files.

2.1 Preparations

Click **Browse**, select the upgrade package to be modified, and click **Open**. The HiUpdateEdit automatically decompresses the package to **\src\temp** in the tool directory. If historical records exist, the HiUpdateEdit deletes the historical records before decompressing the upgrade package.

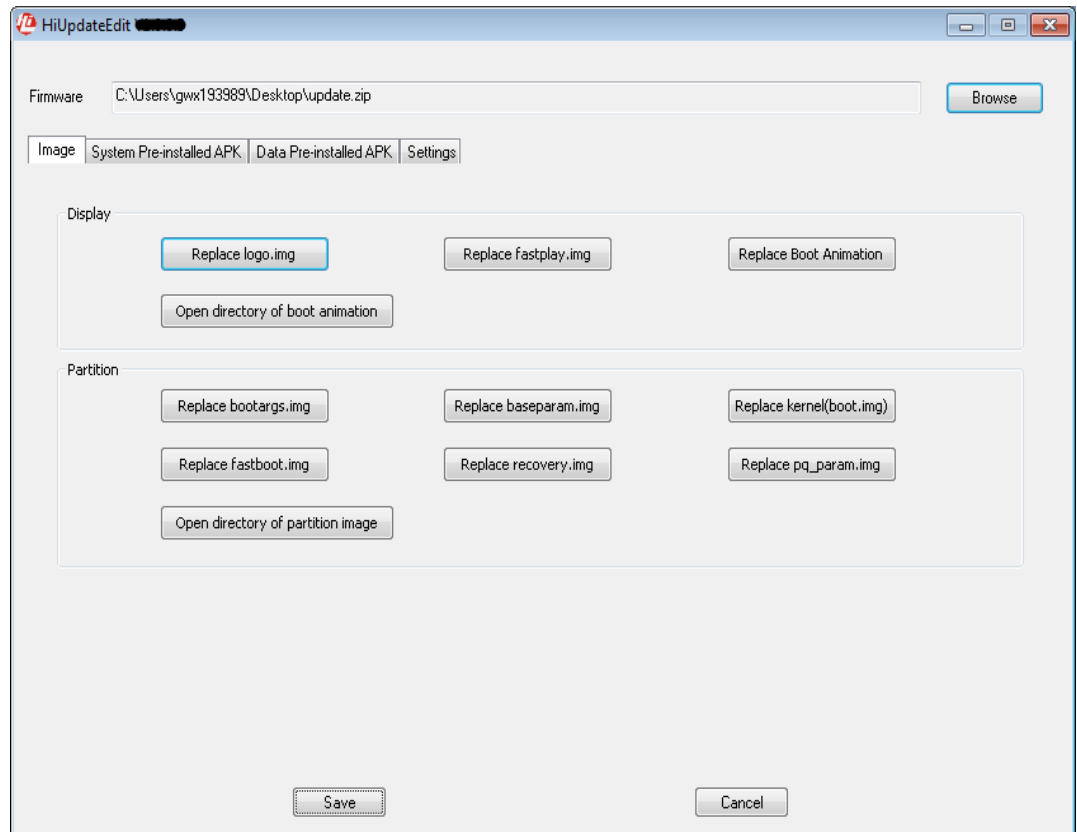
2.2 Changing an Image

To change an image, perform the following steps:

Step 1 Click the **Image** tab, as shown in [Figure 2-1](#).



Figure 2-1 Image tab page



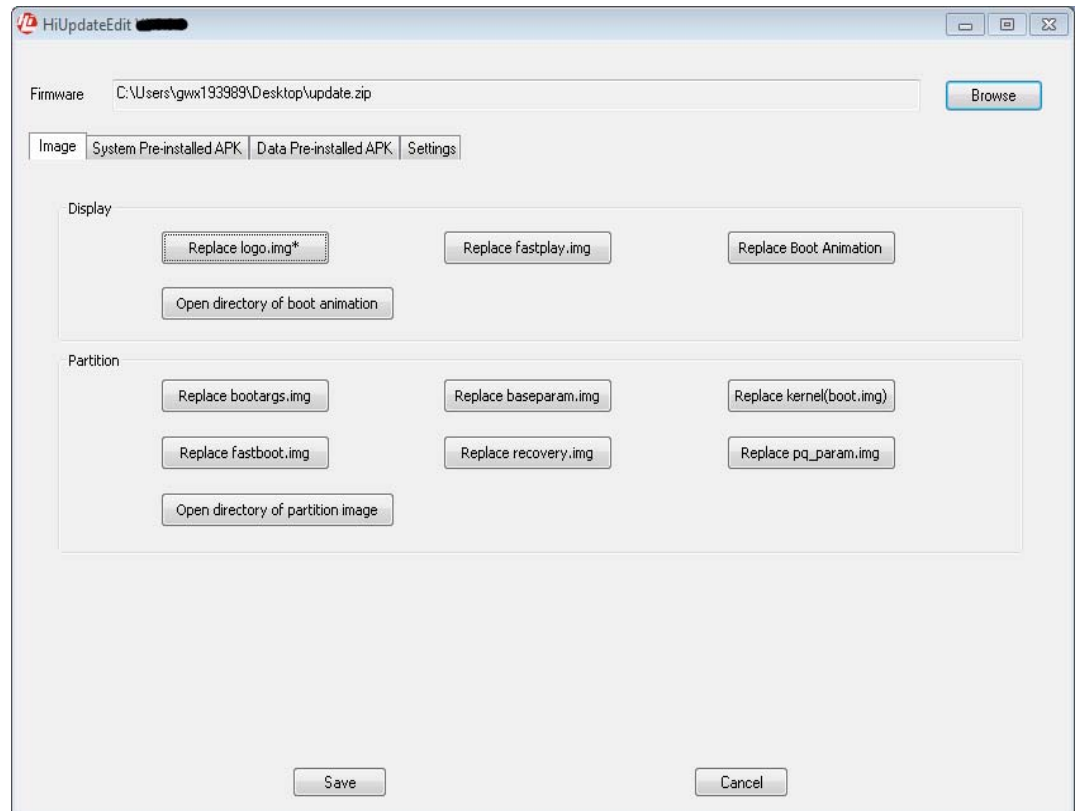
Step 2 Click a button on the **Image** tab page, and select a file for replacing the original image. The HiUpdateEdit automatically changes the name of the selected file to the corresponding file name and replaces the original image file in the upgrade package with the selected file. The following buttons are provided:

- Replace logo.img
- Replace fastplay.img
- Replace Boot Animation
- Replace bootargs.img
- Replace baseparam.img
- Replace kernel(boot.img)
- Replace fastboot.img
- Replace recovery.img
- Replace pq_param.img
- Open directory of boot animation
- Open directory of partition image

After the image is replaced successfully, the corresponding button is marked with an asterisk (*), indicating that the image is changed. For details, see the **Replace logo.img*** button in [Figure 2-2](#).



Figure 2-2 A button marked with an asterisk



CAUTION

If you click **Open directory of boot animation** or **Open directory of partition image** to directly enter the directory and modify the image, the HiUpdateEdit cannot monitor the operations. That is, if you directly modify images in the directory, the operations cannot be recorded in the log file, and the corresponding buttons are not marked.

----End

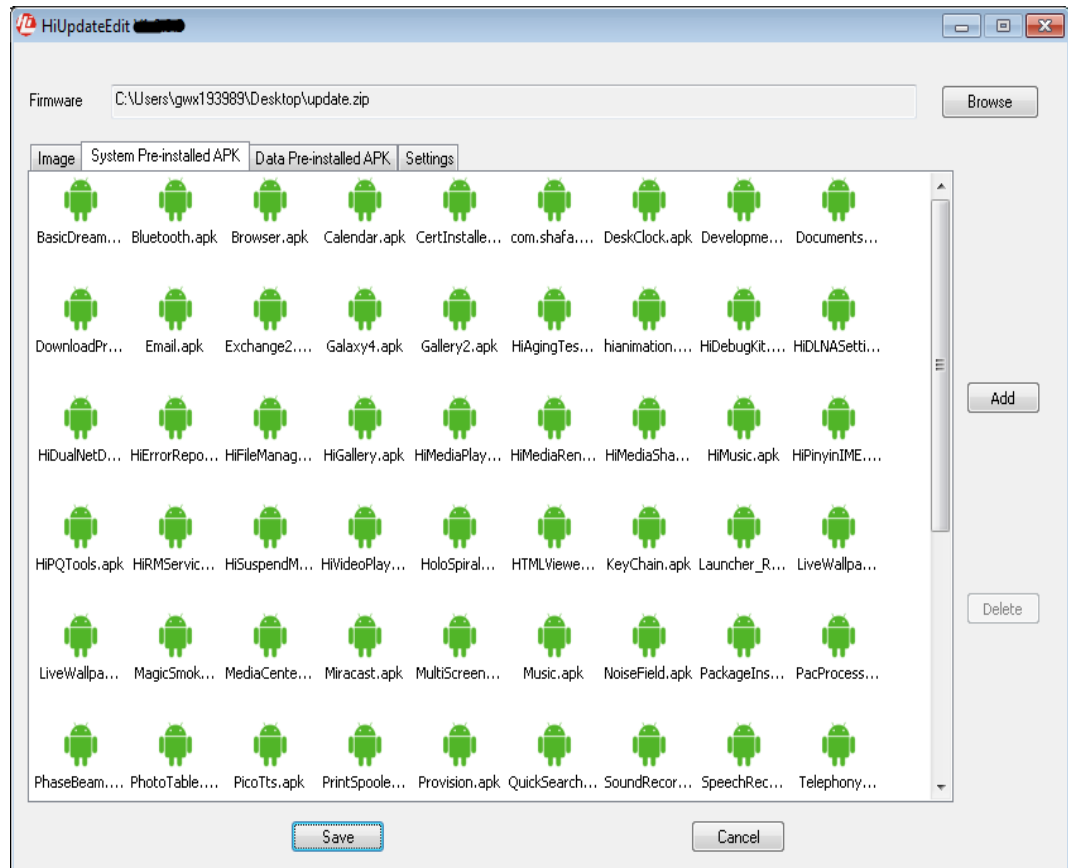
2.3 Adding/Deleting an APK in the System Partition

To add or delete an APK for the system partition, perform the following steps:

- Step 1** Click the **System Pre-installed APK** tab. The HiUpdateEdit displays all APKs stored in `/system/app` and `/system/priv-app`. See [Figure 2-3](#).



Figure 2-3 System Pre-installed APK tab page

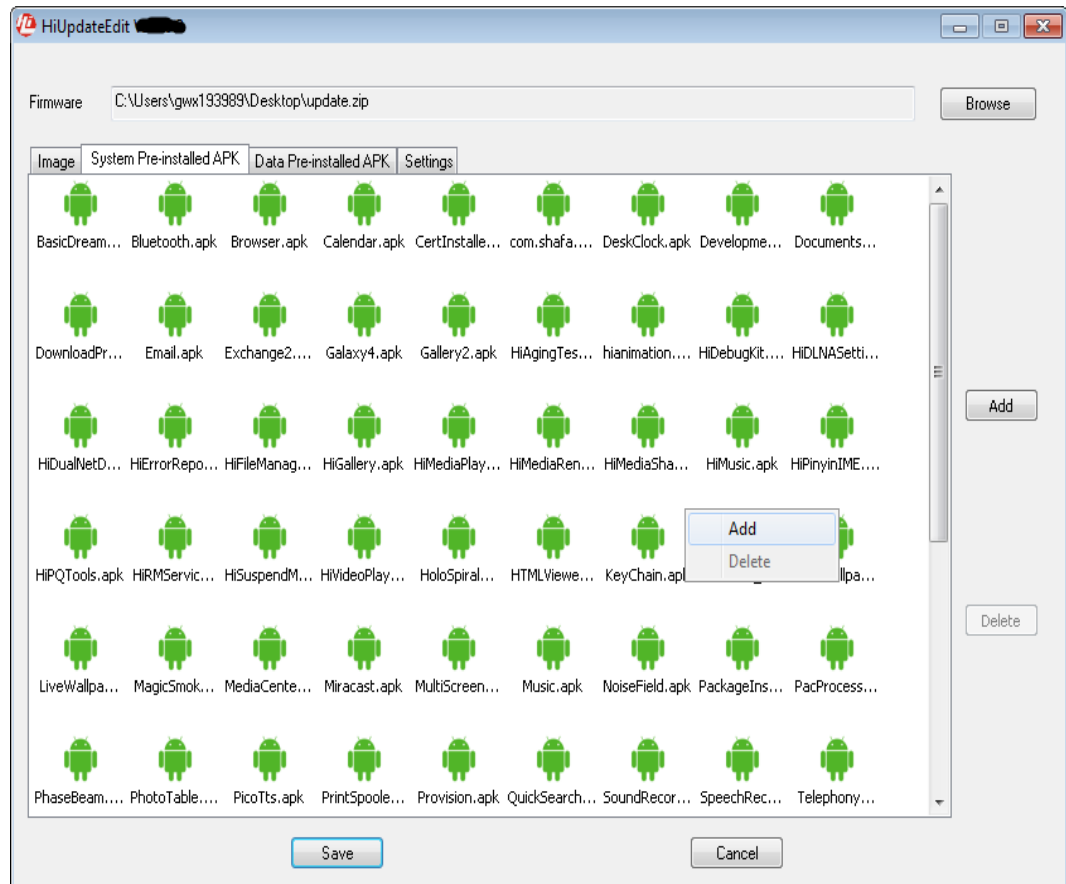


Step 2 Add or delete APK files in the system partition.

- To add an APK, click **Add** or right-click the blank area in the APK list and choose **Add** from the shortcut menu. You can also drag the file to be added in the resource manager to the APK list of the HiUpdateEdit. The HiUpdateEdit decompresses the APK file, copies files in the **/lib** directory to the **/system/lib** directory, signs the APK file, and then copies the signed APK file to the **/system/app** directory. In this way, the APK file is successfully added. See [Figure 2-4](#).



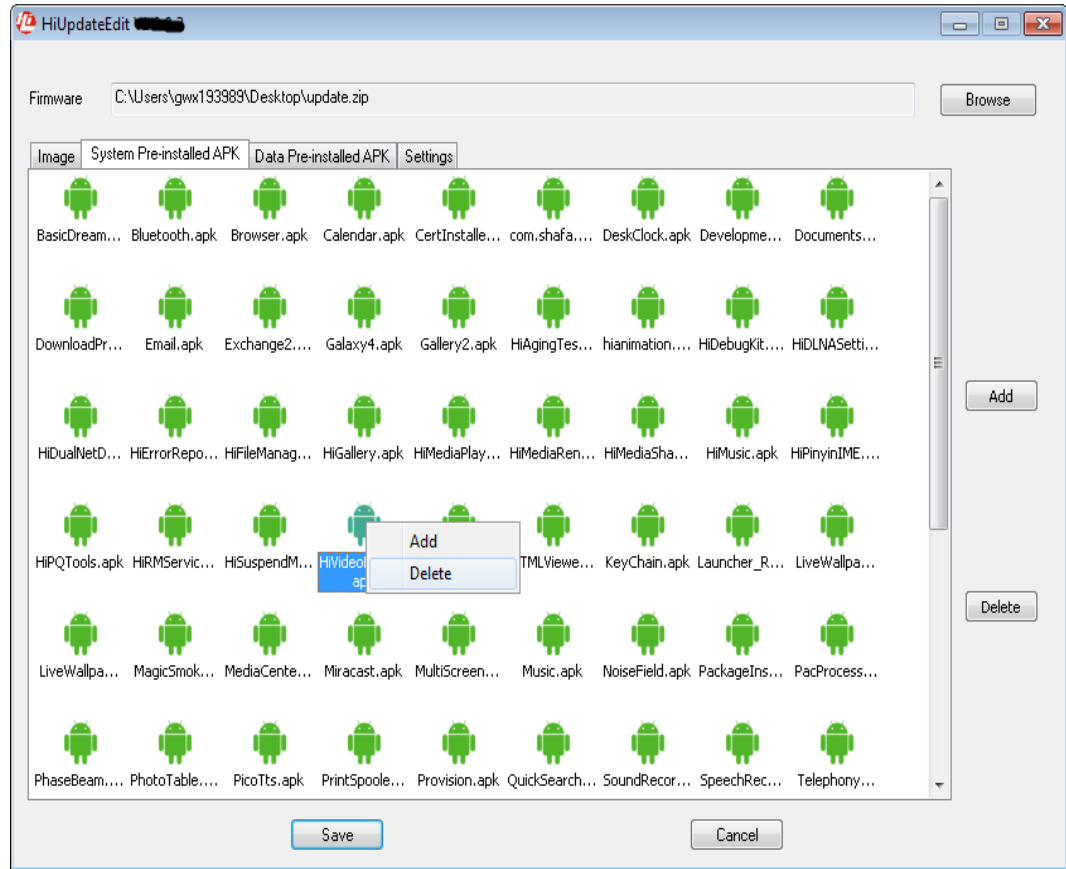
Figure 2-4 Adding an APK



- To delete an APK, select the APK and click **Delete** or right-click the APK and choose **Delete** from the shortcut menu. See [Figure 2-5](#). The HiUpdateEdit directly removes the specific APK from its directory. Because the APK may contain shared library files, the HiUpdateEdit does not delete files in the **/system/lib** directory.



Figure 2-5 Deleting an APK



----End

2.4 Adding/Deleting an APK in the Data Partition

To add or delete an APK for the data partition, click the **Data Pre-installed APK** tab. The procedures for adding or deleting an APK for the data partition are similar to those for the system partition. The only difference is that the APK file is directly copied to the **/userdata/app** directory without being decompressed or signed when an APK is added to the data partition. For details, see section 2.3 "Adding/Deleting an APK in the System Partition."

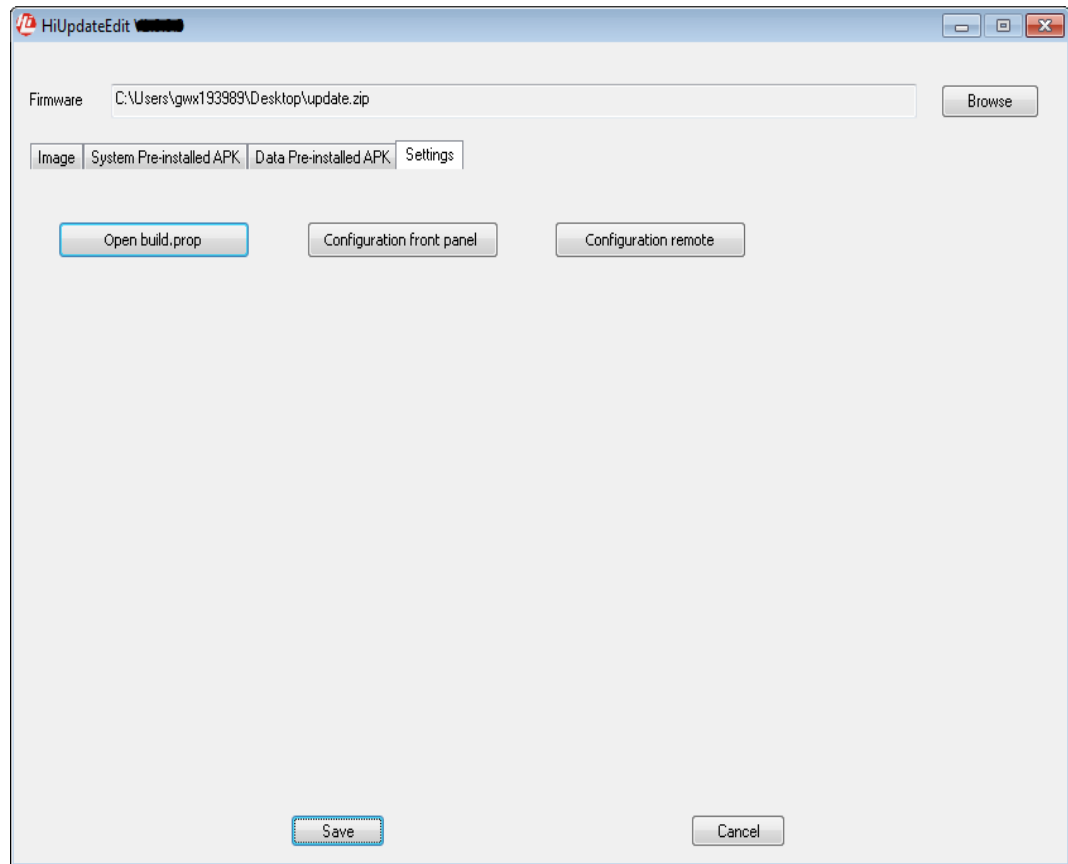
2.5 Modifying a Configuration File

To modify a configuration file, perform the following steps:

Step 1 Click the **Settings** tab, as shown in Figure 2-6.



Figure 2-6 Settings tab page



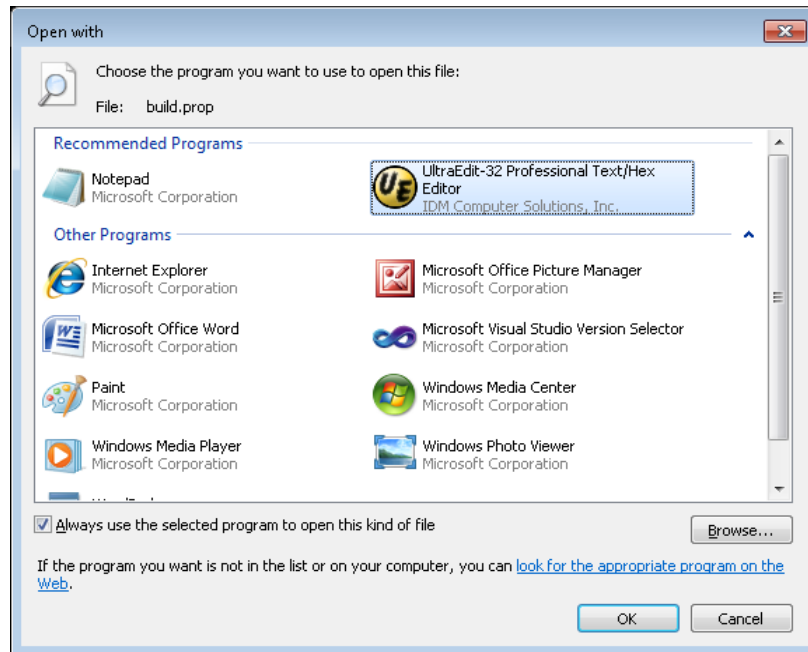
Step 2 Click a button to modify the corresponding configuration file.

- Click **Open build.prop** to modify **build.prop**.
- Click **Configuration front panel** to modify **/system/usr/keylayout/Vendor_0001_Product_0001.kl** (keypad configurations).
- Click **Configuration remote** to modify **/system/etc/key.xml** (remote control configurations).

The HiUpdateEdit opens the configuration file by using the UltraEdit by default. If the UltraEdit is not installed, the **Open with** dialog box is displayed, asking you to select a program for opening the file. See [Figure 2-7](#).



Figure 2-7 Selecting a program for opening the configuration file



----End

2.6 Creating the Upgrade Package

After modifications are complete, click **Save**, and specify a storage path. The HiUpdateEdit packages the modified files, signs the newly generated upgrade package, and stores the new upgrade package to the specified path.



3 FAQs

3.1 What Do I Do If update.zip Is 0 KB After Being Edited by Using the HiUpdateEdit?

Problem Description

After the upgrade package is edited by using the HiUpdateEdit, the size of the obtained **update.zip** is 0 KB.

Cause Analysis

This issue occurs due to a signature failure because files with invalid names exist in the edited upgrade package.

Solution

Check whether files with invalid names (such as Chinese names) exist in the **/srctemp** directory of the tool. If yes, change the invalid names. You are advised to name the files by using characters such as a to z, A to Z, 0 to 9, hyphen (-), underscore (_), and period (.).

3.2 What Do I Do If Error Information Is Displayed When the OTA Upgrade Package Is Being Created by Using the HiUpdateEdit?

Problem Description

The error information "ValueError: too many values to unpack" is displayed when the OTA upgrade package is being created by using the HiUpdateEdit.

Cause Analysis

The name of the added or modified file contains spaces.



Solution

Delete the spaces in the file name, save the upgrade package, and then create the OTA upgrade package by using the new upgrade package.