Customization Guide

Customization Guide

Customer Support

Root Integrity Check

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Root Integrity Check

Customization Guide

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Document Revision History

Revision	Date	Author	Description
V1.0	2016-12-29	Haohsiang	Initial Release

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Lists of Tables

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1 Introduction

Root integrity check function checks handset whether has been modify (root) or not. This function is in Android recovery mode

1.1 Purpose

This document provides the programming guidelines for the root integrity check. It describes how to use this function on the Android platform.

1.2 Who Should Read This Document

This document is primarily intended for:

- Engineers with technical knowledge of the handset firmware has been modify

1.3 How to Use This Manual

This segment explains how information is distributed in this document, and presents some cues and examples to simplify finding and understanding information in this document. Table 1-1 presents an overview of the chapters and appendices in this document.

Table 1-1. Chapter Overview

#	Chapter	Contents
1	Introduction	Describes the scope and layout of this document.
2	References	References website
3	Use root integrity check	Describe how to use root integrity check
4	Abbreviations	Abbreviations
5	Customization	Customization

1.3.1 Terms and Conventions

This document uses special terms and typographical conventions to help you easily identify various information types in this document. These cues are designed to simply finding and understanding the information this document contains.

Table 1-2. Conventions

Convention	Usage	Example
[1]	Serial number of a document in the order of appearance in the References topic	Look up Chapter 2: System Architecture in [1]
☞	Important	

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2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

[1] MTK Company Profile, http://brandclips.mediatek.inc/uploads/Company-profile-1H-2016_0418-Lite-final.pptx

[2] MTK Word Template, http://brandclips.mediatek.inc/uploads/Microsoft-Office-Word-Oct-2014.rar

[3] The Android Multimedia Audio Driver, http://dms.mediatek.inc/

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3 How to use Root Integrity Check

This chapter describes how to use root integrity check.

Go to Recovery mode: Press Power key continuously then press VOLUP key

Select Root integrity check item: Press VOLUP to “Root integrity check” item then press power key

Results: If handset doesn’t modify anything, it print “System check SUCCESS”, otherwise it indicate which file has been modified, created or deleted.

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4 Abbreviations

Please note the abbreviations and their explanations provided in Table 4-1. They are used in many fundamental definitions and explanations in this document and are specific to the information that this document contains.

Table 4-1. Abbreviations

Abbreviations	Explanation
MTK	MediaTek, Asia's largest fabless IC design company.

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5 Customization

This chapter first gives a brief description of the root integrity check customization.

5.1 Source Code Organization

1. bootable/recovery/root_check.cpp
2. bootable/recovery/root_check.h
3. build/tools/releasetools/rootcheck.py

5.2 How to add common root apk for check ?

Add apk name to array file_to_check[] in bootable/recovery/root_check.cpp

We already add some root apk as followings:

1. supersu.apk
2. superroot.apk
3. superuser.apk
4. busybox.apk

5.3 How to set the encrypt key for protect checksum results?

Modify decrypt key root_check_key variable in bootable/recovery/root_check.cpp , default is 15.

Modify encrypt key ENCRYPT_KEY in build/tools/releasetools/rootcheck.py, default is 15.

5.4 How to add ignore check file?

Add apk name to array file_to_pass [] in bootable/recovery/root_check.cpp

We already add some ignore files as followings:

1. recovery-from-boot.p
2. install-recovery.sh
3. recovery_rootcheck
4. build.prop
5. S_ANDRO_SFL.ini
6. recovery.sig
7. .tlbin
8. .drbin

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