

HUAWEI Module

CSTool User Guide

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About This Document

Revision History

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1 Introduction

The CSTool is used to update Huawei modules' software at the production line. This document describes how to use the CSTool, including its operating environment, operation guide, and FAQs.

This document is intended for technical personnels who need to use the CSTool to update Huawei modules' software.

Table 1-1 Terms

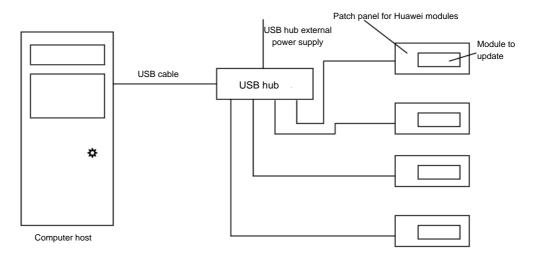
Term	Description
Update	Update module software.
Single-module update	Use the CSTool to update only one module's software at one time.
Multi-module update	Use the CSTool to update multiple modules' software at one time.
Huawei production- dedicated driver	This driver is dedicated for simultaneous software loading to multiple modules at the production line. Compared with normal drivers, this driver improves the software loading stability.
Password file	A password file stores the international mobile equipment identities (IMEIs) and unlock passwords of Huawei modules. When a Huawei module already has its IMEI written in and needs to be updated, it must be unlocked with its unlock password before the update.



2 CSTool Operating Environment

The CSTool can support to update at most eight Huawei modules at the same time. This chapter describes the environment where the CSTool runs by showing how to update four Huawei modules at the same time. Figure 2-1 shows the connection block diagram.

Figure 2-1 Connection block diagram



Hardware Preparation

Item	Quantity	Specifications	Remarks
Computer	1	Memory: 1 GB or more CPU: Pentium 4 3.0 GHz or higher	To update two or more Huawei modules, use a desktop computer. If only one Huawei module needs updating, either a desktop or laptop computer is suitable.
USB cable	5	-	-



Item	Quantity	Specifications	Remarks
USB hub	1	Standalone, external power supply required	A USB hub is required to update three or more Huawei modules simultaneously.
Patch panel for Huawei modules	4	-	-

Software Version

Scenario	Operating System	Driver Version	Excel Version	Remarks
Single- module update	Windows 7 Home Basic/Professional 32 bit	WinDriver 4.25.45.04 or later	Microsoft Office Excel 2003 or later	The Excel version requirements apply only when an XLS password file is to be used.
	Windows 7 Home Basic/Professional 64 bit			
Multi- module update	Windows 7 Home Basic/Professional 32 bit	Product Line Windows Driver		
	Windows 7 Home Basic/Professional 64 bit	2.78.04.00 or later		

Password File

The CSTool supports password files in the following formats:

- XLS
- TXT
- \square NOTE

To prepare a password file, see section 5.1 Password File.



3 CSTool Operation Guide

3.1 Precautions

- During the update, do not insert or remove the modules, restart the computer, or close the CSTool. Otherwise, firmware loading exceptions will occur, terminating the update process. In this case, you must return the modules to the factory for software loading.
- Make sure you log in to the computer operating system as the administrator so the CSTool can properly perform read and write operations on files.

3.2 Installing the Driver

Install the required driver according to requirements described in chapter 2 CSTool Operating Environment.

MOTE

For details about how to install the Huawei production-dedicated driver, see the *Installation Methods of Huawei Drivers for Production Lines*.

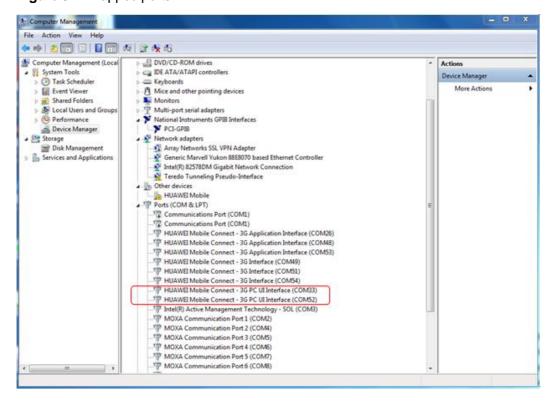
3.3 Checking the Module Status

Before updating modules, ensure that all modules connected are activated and correctly detected by the computer to be used. For example, if two modules are connected to a computer and if both of them are activated and correctly detected by the computer, they are displayed in the Device Manager as shown in Figure 3-1.

- The PC UI interfaces are the ports to which the modules are connected.
- If no PC UI interfaces are displayed, the modules are not connected correctly. In this case, verify the connections.



Figure 3-1 Mapped ports



The mapped ports in the figure are provided only for your reference. The actual module may be different.

3.4 Running the CSTool

Step 1 Open the folder where the CSTool software package is stored. Double-click the program file to run the CSTool.

M NOTE

The program file must be placed in a folder and cannot be directly placed on the desktop.



Figure 3-2 Running the CSTool

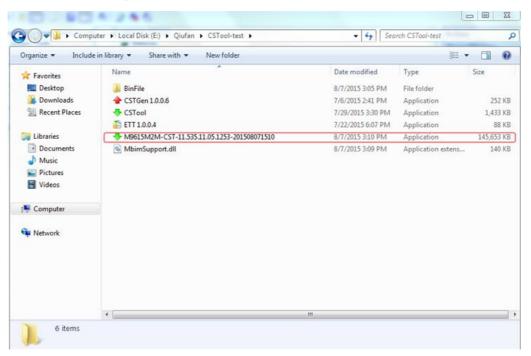
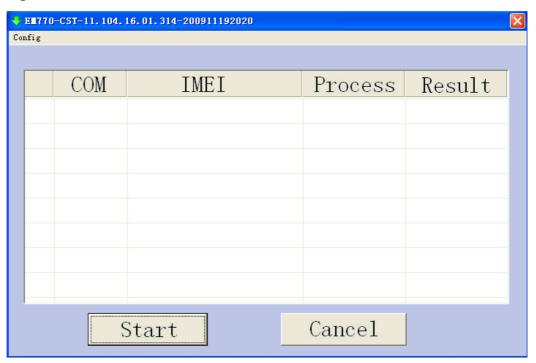


Figure 3-3 CSTool UI



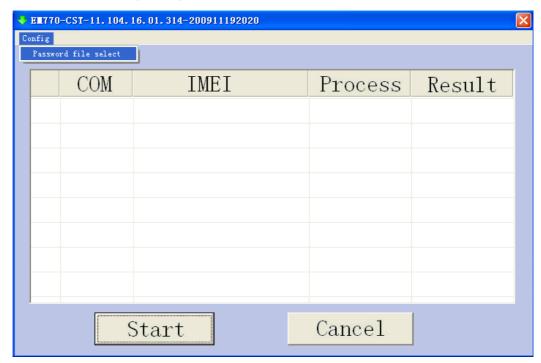
The user interface (UI) language of the CSTool is Chinese only when the computer used runs a Chinese operating system. In other cases, the UI language is English.



Step 2 Choose Config > Password file select.

The dialog box for selecting a password file is displayed, as shown in Figure 3-4.

Figure 3-4 Choosing Config > Password file select



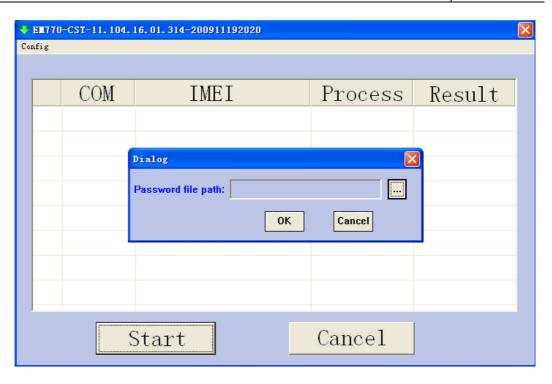
Step 3 Click , select the save path of the password file, and click **OK**.

The selected save path will be auto-saved to the **cfg.ini** file in the CSTool installation directory. Next time you start the CSTool, it will auto-read the password file save path from the **cfg.ini** file.

M NOTE

To run the CSTool from the CD-ROM, configure the **cfg.ini** file in a local hard disk, place it in the same folder as the CSTool, and prepare a CD-ROM file.





Before you proceed, make sure the modules to update are connected properly. For details, see section 3.2 Installing the Driver.

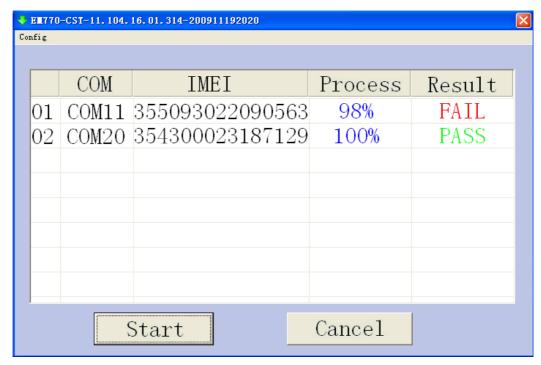
Step 4 Click **Start** to start the update.

The window similar to Figure 3-5 is displayed.

- COM: COM ports mapped to the connected modules.
- **IMEI**: IMEIs of the connected modules.
- **Process**: update progress represented in percentage format.
- Result: update result, which is FAIL or PASS.



Figure 3-5 Update result



----End

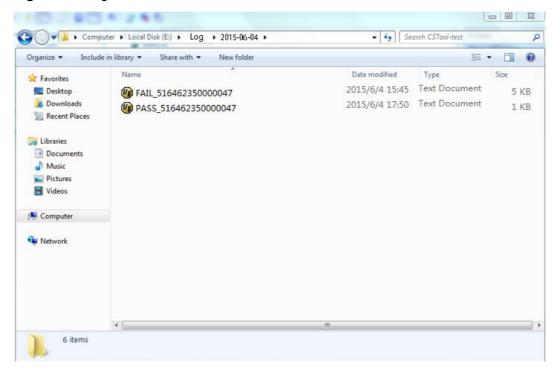
3.5 Checking the Log File

The CSTool logs each update process. The log files are saved to the current directory or other specified directory. Figure 3-6 shows the log files generated after two modules are updated on June 4, 2015.

You can use the log files to check update processes and locate update failures.



Figure 3-6 Log files





4 FAQs

4.1 Why Does the CSTool Exit Unexpectedly?

This may happen if errors occur with opening an XLS password file. Possible causes include:

- 1. The computer does not have Microsoft Office installed.
- 2. Microsoft Office on the computer has expired.
- The EXCEL process experiences exceptions. Open the Task Manager and forcibly close all EXCEL.EXE processes in the process list. Then, run the CSTool again.
- 4. The current user is not an administrator and does not have the right to read, write or create files.

If the problem persists, restart the computer.

4.2 The Update Fails When the Progress is 1%. Why?

This may happen if errors occur with switching the module's port types during the update. Reconnect the module by the USB port, and restart the CSTool.

Possible causes for port type switching errors include:

- 1. The module driver is not properly installed or the driver installed is not in the required version.
- If three or more modules are being updated simultaneously, the computer may not be able to provide sufficient power and consequently not all ports are enumerated.
- 3. The modules are disconnected during the update.

Port type switching errors may cause failures to read module IMEIs. In this case, restart the CSTool.



4.3 The Update Fails When the Progress is 97%. Why?

This may happen if the CSTool does not detect the port for the module after the module is updated and the CSTool is restarted. Reconnect the module by the USB port, and restart the CSTool.

Possible causes for port detection failures include:

The module driver is not properly installed or the driver installed is not in the required version.

Sometime, modules malfunction during restarts. In this case, use the CSTool to update them again. If the IMEIs fail to be read, try restarting the CSTool.

4.4 Why is an Error Message Displayed to Indicate that the Password File Path Cannot Be Found?

This may happen if errors occur with reading the **cfg.ini** file (the **cfg.ini** file stores the save path of the last selected password file path). Possible causes include:

- 1. No password file has been selected.
- The save path of the password file contains invalid characters that cannot be recognized by the computer operating system. In this case, save the password file to a path containing only English characters and try again.
- 3. The current user of the computer operating system does not have sufficient right to read, write, or create configuration files.



5 Appendix

5.1 Password File

This section describes how to prepare a password file in XLS or TXT format.

5.1.1 XLS Password File

In an XLS password file:

- 1. The password column is labeled "PASSWORD".
- 2. The IMEI column is labeled "IMEI". The **Number** attribute of the cells in this column must be **Text**.
- 3. The sheets are named **sheet1**, **sheet2**, ... **sheet8**. Each password file can contain at most eight sheets.
- 4. Password files can contain other columns (useless information). The names of these columns cannot contain the word "password" or "imei" (not case sensitive).

Figure 5-1 shows an example of the XLS password file.

- The PASSWORD and IMEI columns are mandatory but do not have to be in columns A and B.
- The generated XLS password file must be in the version of Microsoft Office Excel 2003, and its extension must be .xls.



C2 fx C Ε В Α D 1 **PASSWORD** IMEL 12345678 123456789012345 3 4 5 6 7 8 ↓ ↓ ▶ N Sheet1 Sheet2 Sheet3 Sheet4 Sheet5 (

Figure 5-1 XLS password file example

5.1.2 TXT Password File

In a TXT password file:

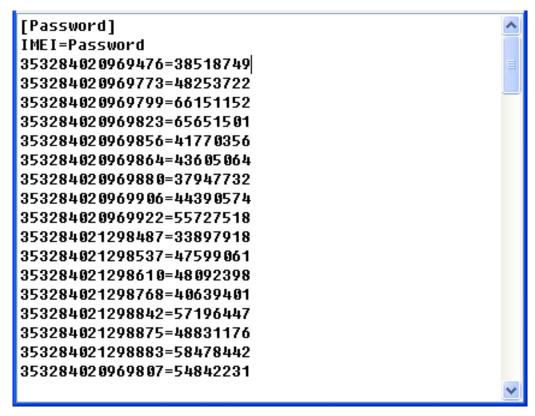
- 1. The keywords are **Password** and **IMEI=Password**.
- 2. The relationships between IMEIs and passwords are represented in the format of "IMEI=password".

Figure 5-2 shows an example of the TXT password file.

- Each row must be in the format of "IMEI=password". Except for the IMEIs, passwords, and line breaks, no other characters are allowed in the password file.
- The keywords cannot be changed.



Figure 5-2 TXT password file example

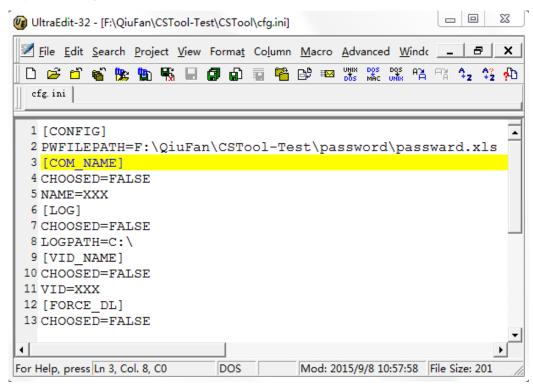


5.2 Configuration File

After a password file path is selected, the CSTool generates a **cfg.ini** configuration file in its root directory. Figure 5-3 shows the content format.



Figure 5-3 cfg.ini file



- To specify a search keyword, change CHOOSED=FALSE to CHOOSED=TRUE, NAME=XXX under [COM_NAME], where XXX specifies the keyword, for example, NAME=PC UI.
- To specify the log output path, change CHOOSED=FALSE to CHOOSED=TRUE, LOGPATH=XXX under [LOG], where XXX specifies the keyword, for example, LOGPATH=D:\.

- All paths must be absolute ones.
- The value of [COM_NAME] is case sensitive and must be consistent with the actual mapped port name.