HiTool Platform

User Guide

Issue 11

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About This Document

Purpose

The HiTool Platform is a platform tool that integrates tools such as the HiBurn, HiFastplay, and HiLoader. This document describes the functions and usage of the platform framework.

Related Versions

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

Product Name	Version
Hi3798M	V1XX/V2XX/V3XX(H)
Hi3796M	V1XX/V2XX
Hi3798C	V2XX
Hi3716M	V4XX
Hi3716M	V31X
Hi3716M	V32X
Hi3716M	V33X
Hi3521	V1XX
Hi3531	V1XX
Hi3518	V1XX
Hi3520D	VXXX
Hi3535	V1XX
Hi3751	V8XX
Hi3751	V6XX
Hi3751	V5XX
Hi3251	V1XX
Hi3110E	V5XX

Product Name	Version
Hi3518E	V2XX
Hi3516C	V2XX
Hi3519	V100
Hi3519	V101
Hi3559	V100
Hi3536C	V100
Hi3559A	V100ES
Hi3536D	V100
Hi3751	V81X

Intended Audience

This document is intended for:

- Technical support engineers
- Software development engineers

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
DANGER	Alerts you to a high risk hazard that could, if not avoided, result in serious injury or death.
WARNING	Alerts you to a medium or low risk hazard that could, if not avoided, result in moderate or minor injury.
CAUTION	Alerts you to a potentially hazardous situation that could, if not avoided, result in equipment damage, data loss, performance deterioration, or unanticipated results.
TIP	Provides a tip that may help you solve a problem or save time.
NOTE	Provides additional information to emphasize or supplement important points in the main text.

Change History

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

Issue 11 (2018-09-30)

This issue is the eleventh official release, which incorporates the following changes:

Hi3716M V430, Hi3716M V450, and Hi3798M V300H are supported.

Issue 10 (2018-01-30)

This issue is the tenth official release, which incorporates the following changes:

Hi3751 V81X is supported.

Issue 09 (2017-08-31)

This issue is the ninth official release, which incorporates the following changes:

Hi3798M V300 is supported.

Issue 08 (2017-02-09)

This issue is the eighth official release, which incorporates the following changes:

Hi3796M V200 is supported.

Section 1.2 is modified.

Issue 07 (2016-11-04)

This issue is the seventh official release, which incorporates the following change:

Hi3798M V200 is supported.

Issue 06 (2016-04-19)

This issue is the sixth official release, which incorporates the following change:

Section 9.6 is added.

Issue 05 (2015-08-04)

This issue is the fifth official release, which incorporates the following changes:

The contents related to the Hi3518E V200, Hi3518 E201, and Hi3516C V200 are added.

Issue 04 (2015-04-30)

This issue is the fourth official release, which incorporates the following changes:

Hi3798C V200, Hi3716M V420, and Hi3716M 410 are supported, most figures in the document are updated, and the name of the document is changed.

Chapter 5 "Log Management" is deleted, and chapter 6 "Updating the Tool Components" is added.

Issue 03 (2015-03-10)

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

Hi3110E V500 is supported.

Issue 02 (2014-11-06)

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

The Hi3751 series are supported.

Issue 01 (2014-10-30)

This issue is the first official release, which incorporates the following change:

Hi3796M V100 is supported.

Issue 00B01 (2014-05-15)

This issue is the first draft release.

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1 Overview

1.1 Introduction to the HiTool Platform

The HiTool Platform is a platform for integrating tools. It provides the running environment and common functions for those integrated tools.

1.2 Environment Preparations

For HiTool-*XXX*-4.0.15 and later versions, JRE is integrated and therefore no installation is required. For versions earlier than HiTool-*XXX*-4.0.15, pre-install 32-bit JRE 1.6 (such as jre-6u1-windows-i586-p); otherwise, the HiTool may fail to run properly.

You can download JRE 1.6 from http://www.oracle.com/technetwork/java/javase/downloads/java-archive-downloads-javase6-419409.html.

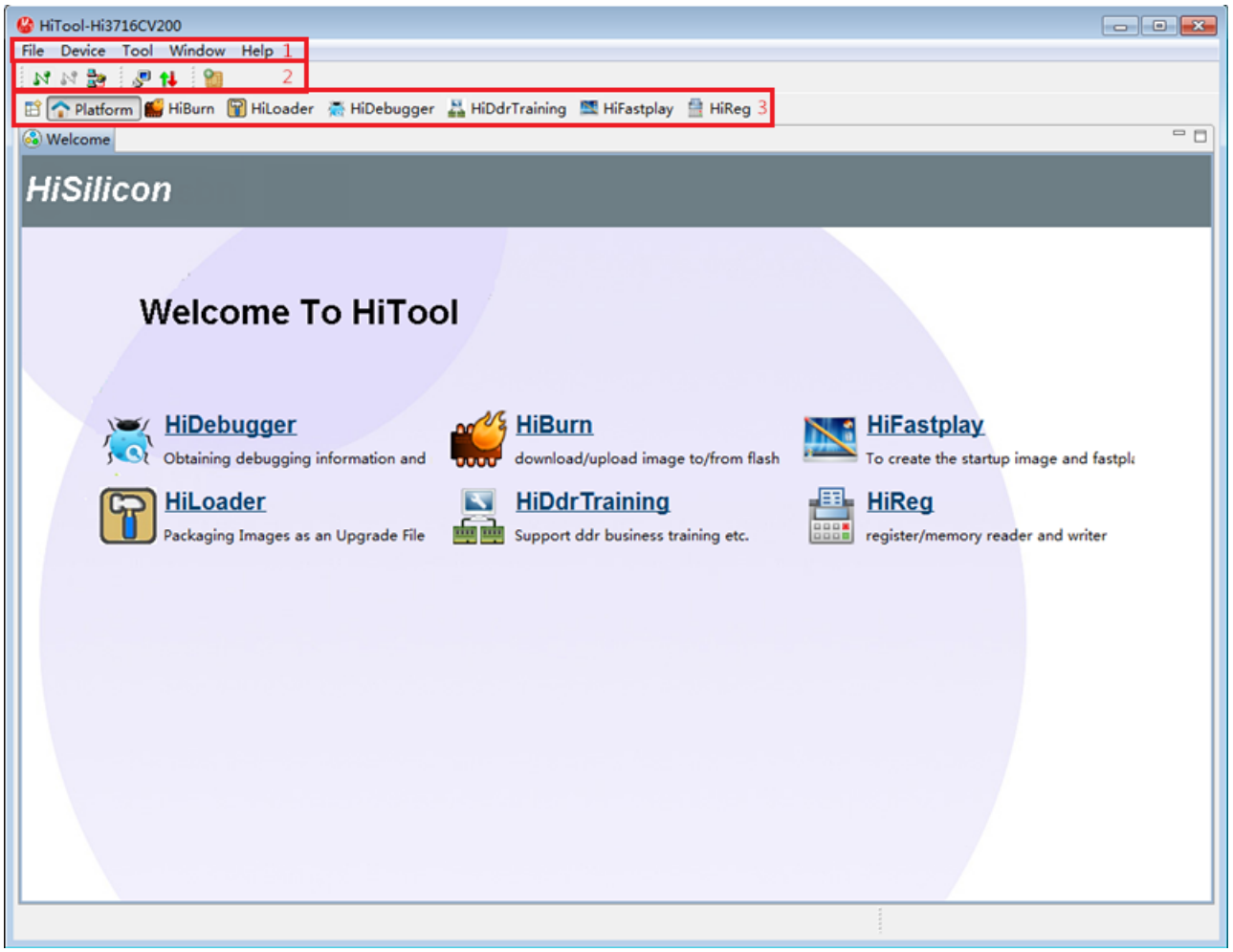
1.3 Main GUI

Start the HiTool Platform. The startup GUI shown in Figure 1-1 is displayed.

Figure 1-1 Startup GUI

Then the startup GUI is redirected to the main GUI, as shown in Figure 1-2.

Figure 1-2 Main GUI



The main GUI consists of three parts:

- Menu bar (area 1)
- Toolbar (area 2)
- Perspective view bar (area 3)

The following describes the icons on the toolbar:

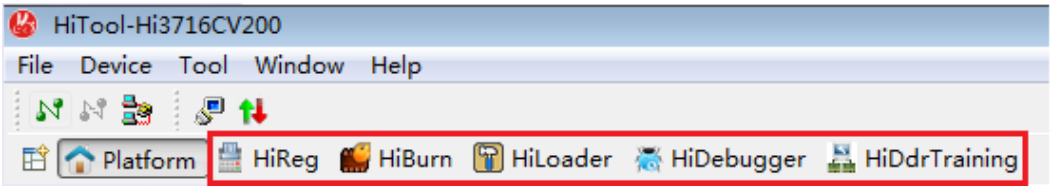
- 
  - Function: connection manager
  - Description: Select the connection mode, connect, or disconnect.
- 
  - Function: terminal tool
  - Description: Open the terminal tool view.
- 

- Function: TFTP view
- Description: Open the TFTP view.

If you switch to the perspective view of a tool, tool buttons inherent in the tool are also displayed on the toolbar, and clicking a tool button implements the corresponding function.

On the main GUI, you can find the perspective view icon of the HiTool Platform and those for the integrated and activated tools. See Figure 1-3.

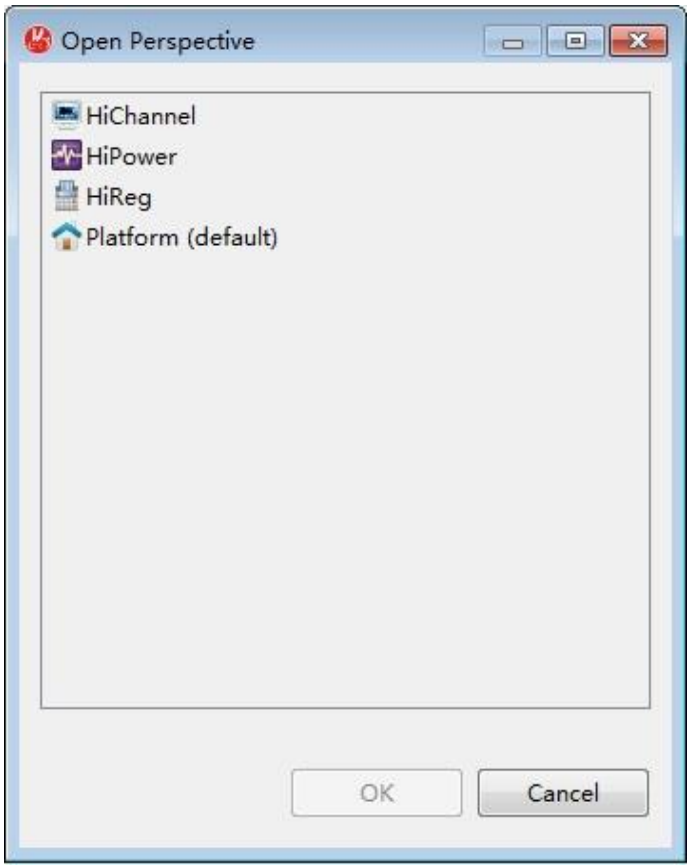
Figure 1-3 Perspective views



Clicking a perspective view icon switches to the corresponding tool perspective view. The icons can be dragged to adjust the sequence or be deleted.

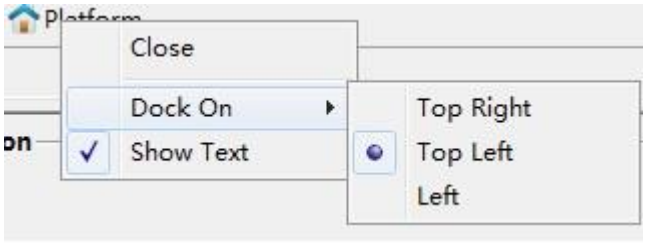
Clicking  opens the **Open Perspective** dialog box. You can select the perspective view to be opened, and add the shortcut icon, as shown in Figure 1-4.

Figure 1-4 Open Perspective



The dock mode of the perspective view toolbar can be set to **Top Right**, **Top Left**, or **Left**, as shown in Figure 1-5.

Figure 1-5 Dock mode



2 Chip Management

2.1 Importing Chip Data

To import chip data, perform the following steps:

Step 1 Start the tool platform.

Step 2 Choose **Device** > **Update Device List**, as shown in Figure 2-1. The **update device list** dialog box is displayed, as shown in Figure 2-2.

Figure 2-1 Update Device List

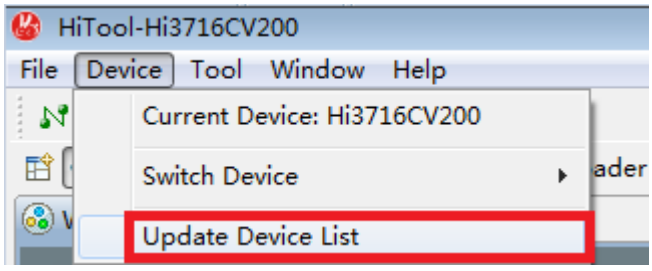
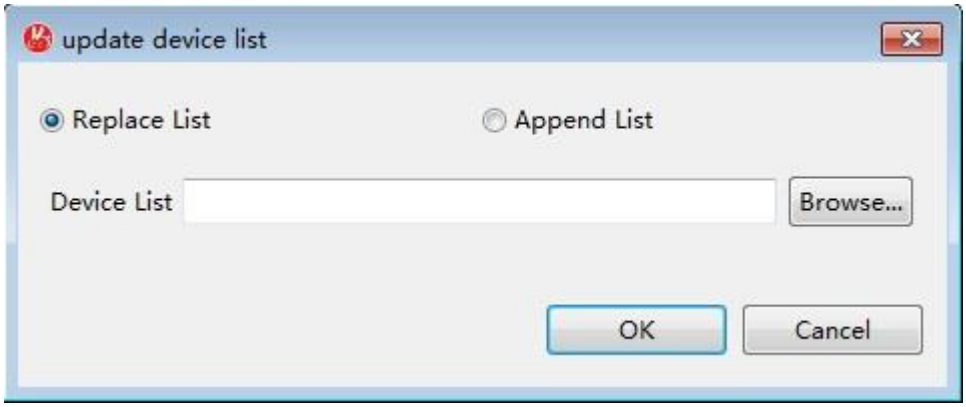


Figure 2-2 update device list dialog box



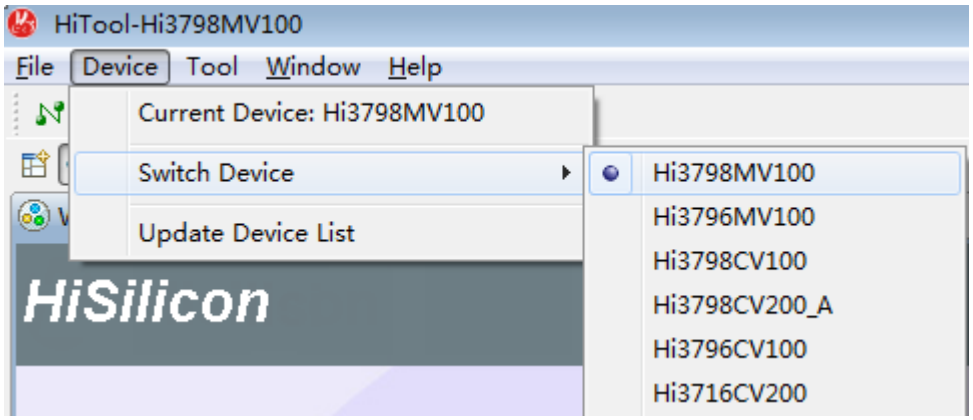
Step 3 Select **Replace List**, click **Browse** to select the path for the chips to be imported, and click **OK**. The system displays a message indicating that data is successfully imported, and the chip list retains only data that is just imported. You can also select **Append List**, click **Browse** to select the path for the chips to be imported, and click **OK**. The system displays a message indicating that data is successfully imported, and the chip list displays all imported chips (a chip that is imported repeatedly has only one record in the list).

----End

2.2 Switching a Chip

To switch the current chip, choose **Device** > **Switch Device** in the menu bar, and select a chip, as shown in Figure 2-3. After the chip is switched, tools in the platform that do not support the chip are disabled automatically.

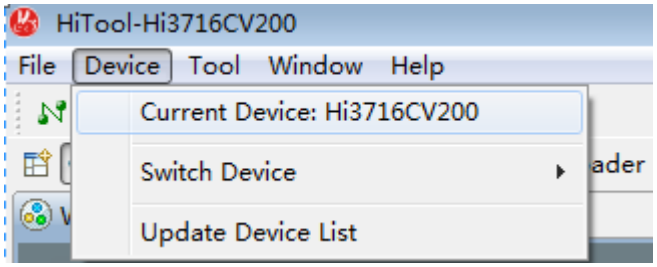
Figure 2-3 Switching the chip



2.3 Adaptation

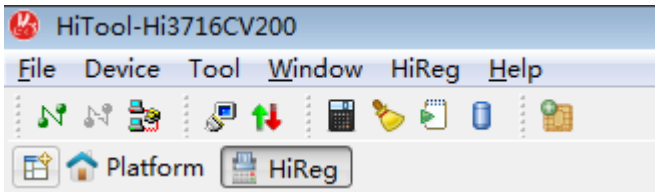
Choose **Device** > **Current Device** on the menu bar. As shown in Figure 2-4, the current chip is the Hi3716C.

Figure 2-4 Switching to the Hi3716C



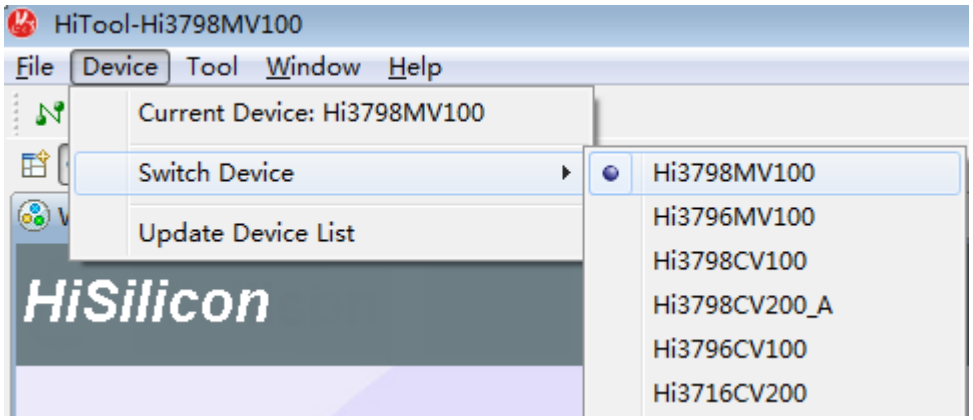
Tools (HiReg and Platform) that are available for the Hi3716C are displayed on the GUI, as shown in Figure 2-5.

Figure 2-5 Available tools for the Hi3716C



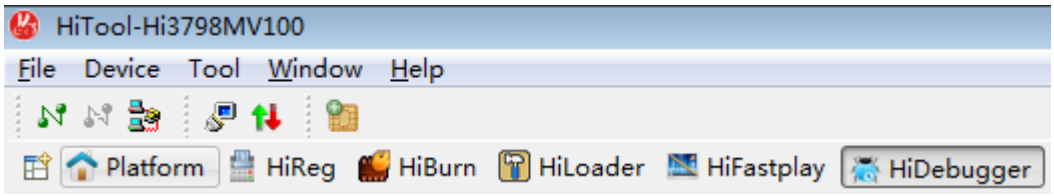
Switch the chip to another one, for example, to Hi3798M V100, as shown in Figure 2-6.

Figure 2-6 Switching to Hi3798M V100



Tools (HiBurn and Platform) that are available for Hi3798M V100 are displayed on the GUI, as shown in Figure 2-7.

Figure 2-7 Available tools for Hi3798M V100



3 Communication Management

3.1 Connection Manager

The connection manager allows you to set two connection modes:

- Serial port connection
- Telnet connection

3.1.1 Serial Port Connection

Click  on the toolbar to open the **Connection Manager** dialog box. Select **Serial** from the **Connector Type** drop-down list, set the corresponding parameters, and click **Connect** to complete the serial port connection configuration, as shown in Figure 3-1.

Figure 3-1 Configuring serial connection information

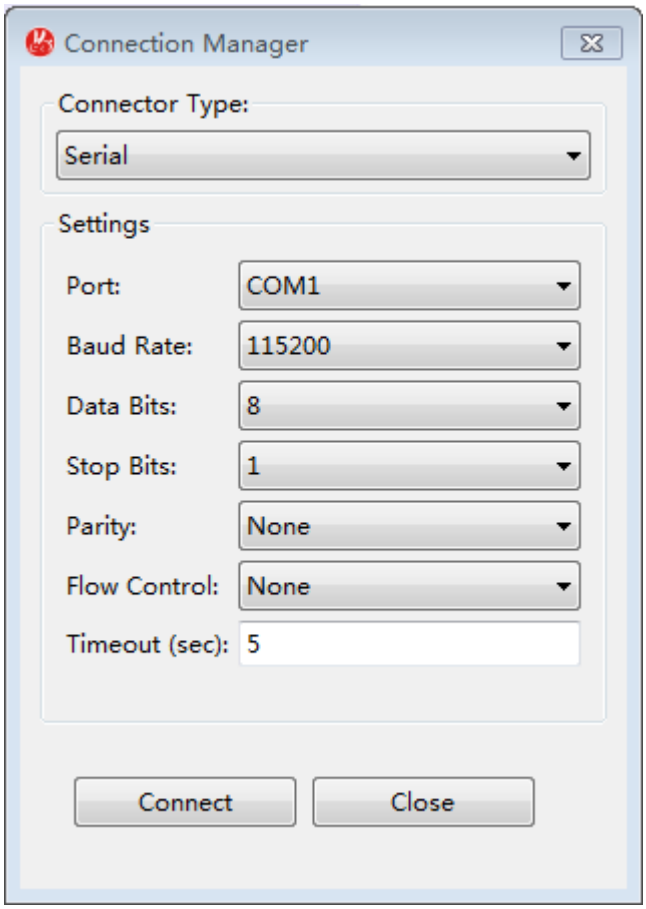
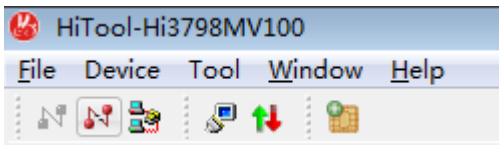


Figure 3-2 shows that the serial port connection has been established.

Figure 3-2 Serial port connection established

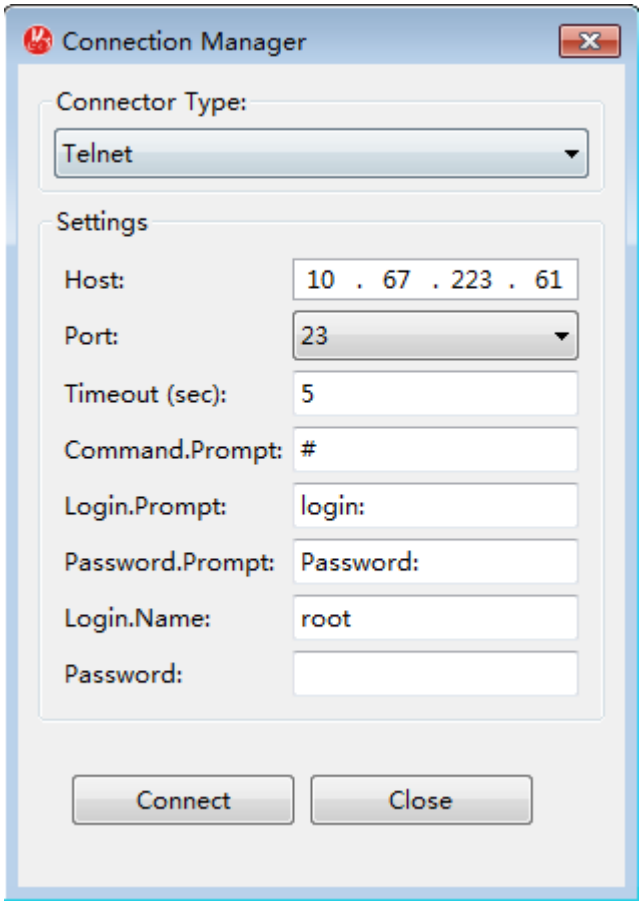


3.1.2 Telnet Connection

To add a telnet connection, perform the following steps:

Step 1 Click  on the toolbar to open the **Connection Manager** dialog box. Select **Telnet** from the **Connector Type** drop-down list, as shown in Figure 3-3.

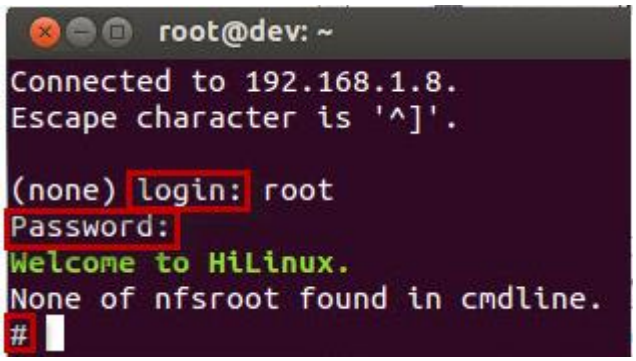
Figure 3-3 Selecting Telnet



Step 2 Set the corresponding parameters based on board configurations. Figure 3-4 shows board configurations, and the parameters are described as follows:

- **Host**: IP address of the board
- **Port**: Port ID
- **Timeout**: timeout period for the connection
- **Command.Prompt**: command prompt, for example, **#** in Figure 3-4
- **Login.Prompt**: login user ID prompt, for example, **login:** in Figure 3-4
- **Password.Prompt**: password prompt, for example, **Password:** in Figure 3-4
- **Login.Name**: login name, for example, **root** in Figure 3-4
- **Password**: password, for example, the password in Figure 3-4 is left blank

Figure 3-4 Board telnet connection parameters

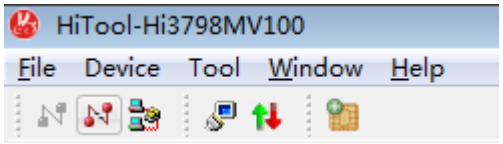


CAUTION

When establishing a telnet connection to the board, check whether the board needs to verify the user ID and password. If yes, modify parameters for the telnet connection as required; if not, check whether the command prompt is consistent with that on the board.

Step 3 Click **Connect** to add the telnet connection, as shown in Figure 3-5.

Figure 3-5 Telnet connection



----End

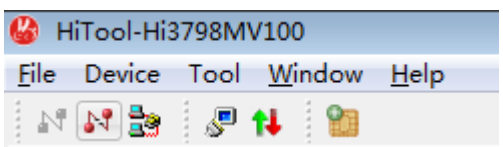
3.2 Board-End Communications

The connection manager is used as follows:

Step 1 Start the tool platform.

Step 2 Select a connection on the toolbar, for example, **Serial**. Click the connection icon, as shown in Figure 3-6.

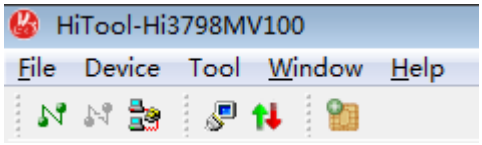
Figure 3-6 Connected status



The connection icon is dimmed, indicating connected.

Step 3 Click the disconnection icon. The connection is ended, as shown in Figure 3-7.

Figure 3-7 Disconnected status



The disconnection icon is dimmed, indicating disconnected.

----End

3.3 TFTP View

3.3.1 Opening the TFTP View

Click  on the toolbar, as shown in Figure 3-8. The TFTP view is displayed.

Figure 3-8 TFTP icon

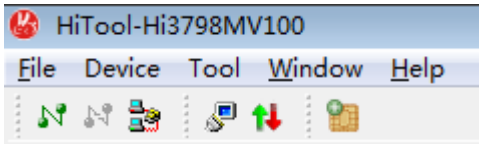
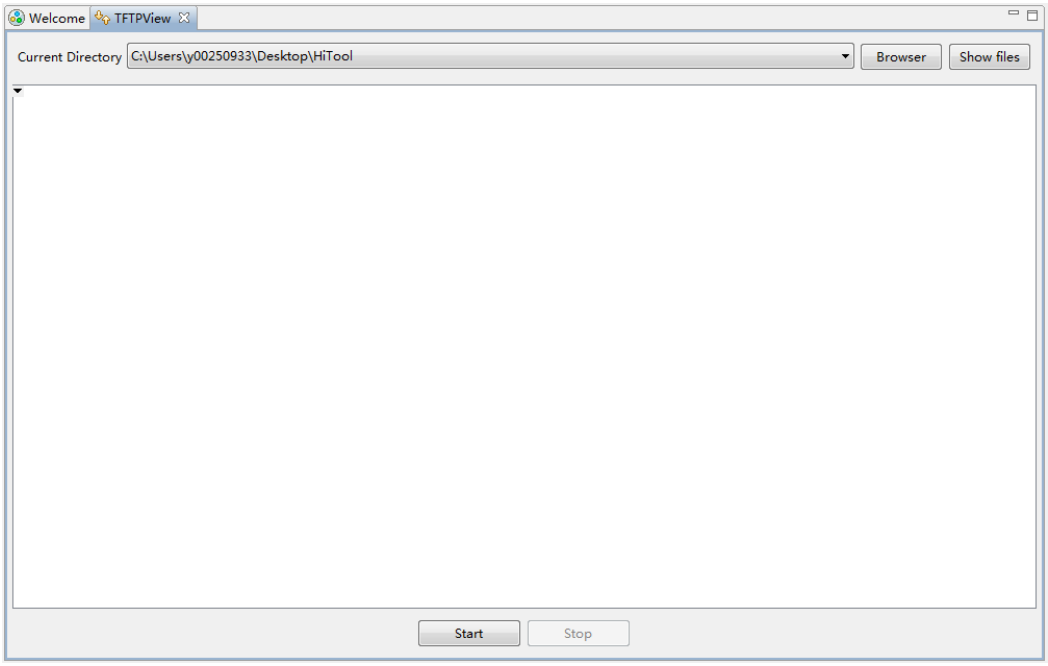


Figure 3-9 shows the layout of the TFTP view.

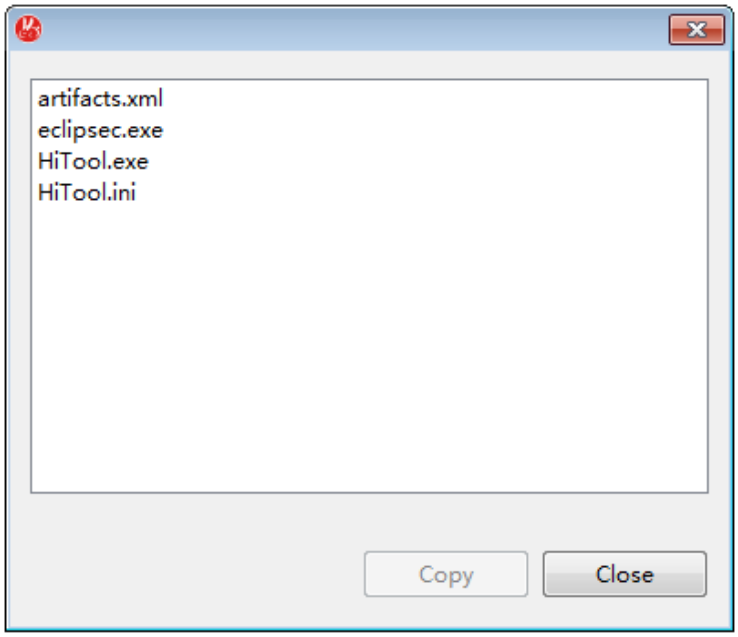
Figure 3-9 TFTP view



3.3.2 Selecting a TFTP Server Directory

Click **Browser** to select a TFTP server directory. The selected directory is displayed and saved in the **Current Directory** drop-down list for facilitating switchover. Click **Show files**. All files in the current directory are displayed, as shown in Figure 3-10.

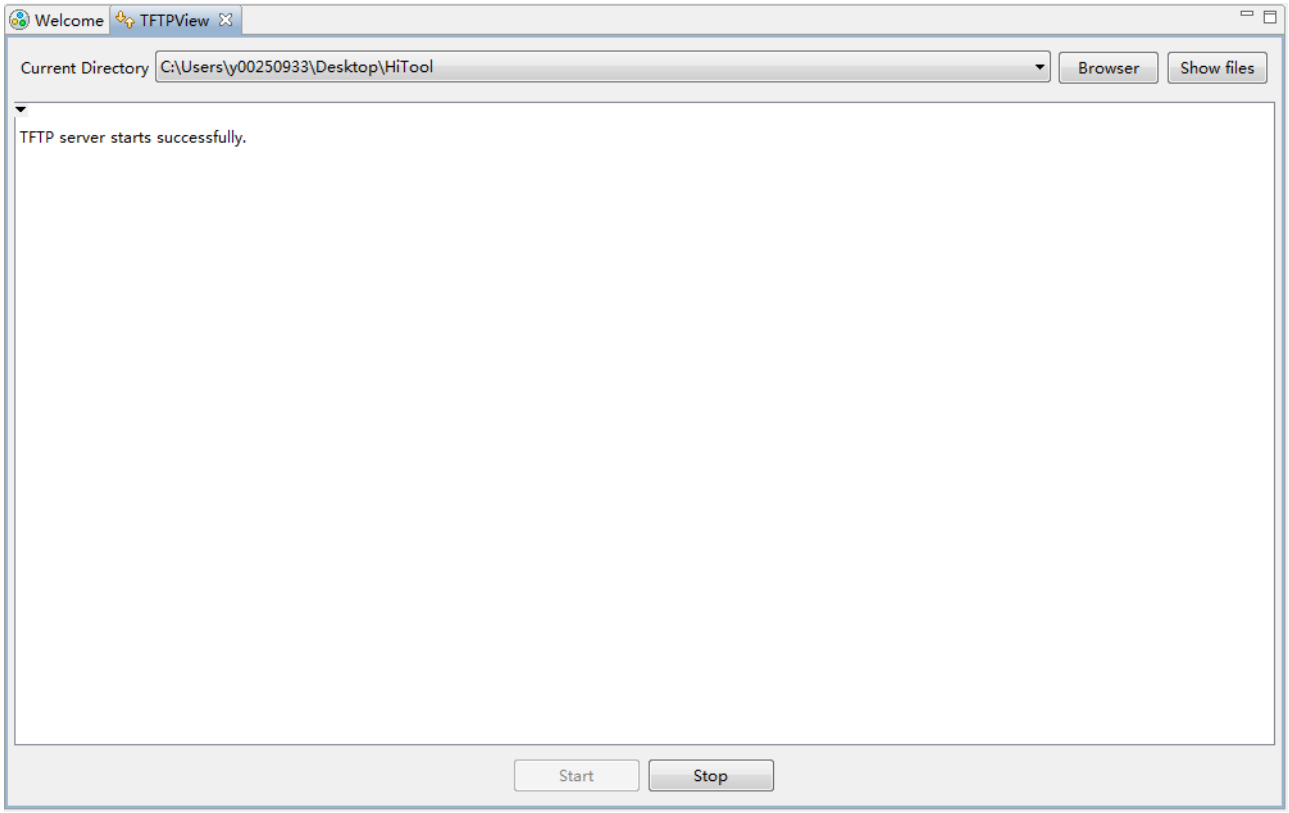
Figure 3-10 TFTP server directory



3.3.3 Starting the TFTP Server

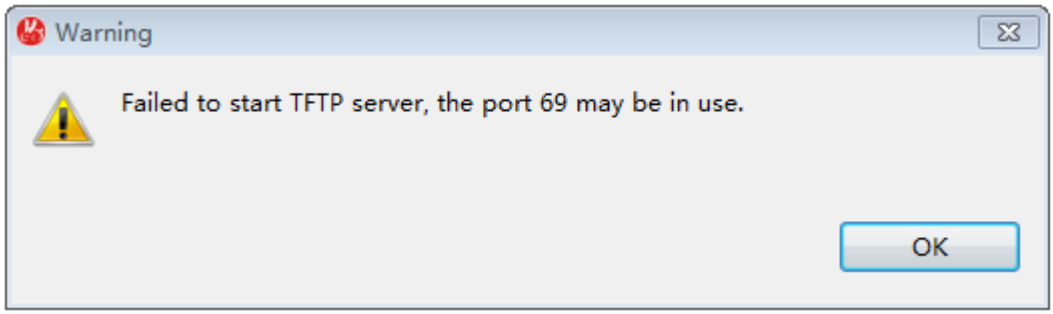
Click **Start** to start the TFTP server. After the server is started, the **Start** button is unavailable while the **Stop** button is available, as shown in Figure 3-11.

Figure 3-11 Starting the TFTP server



If the TFTP port has been occupied, clicking **Start** displays a dialog box indicating that the TFTP port is being occupied. See Figure 3-12.

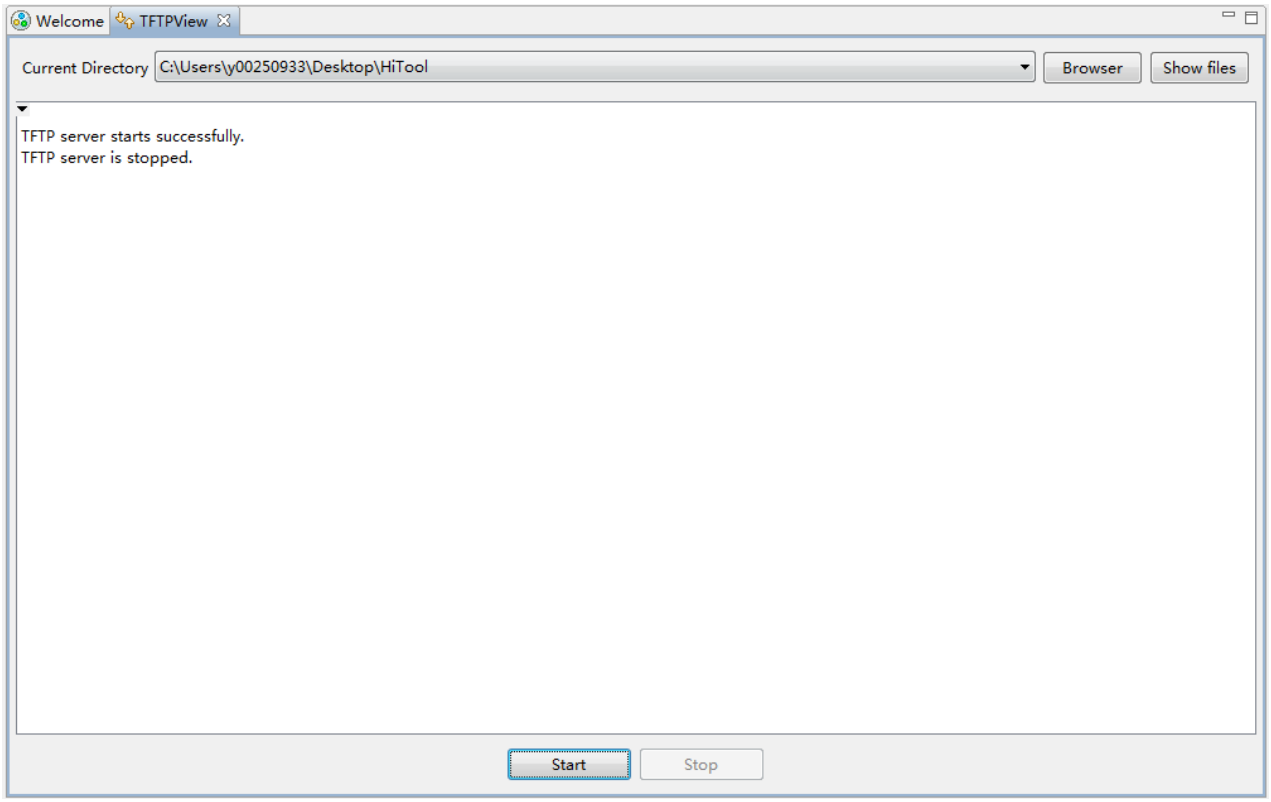
Figure 3-12 Information indicating that the TFTP port is being occupied



3.3.4 Stopping the TFTP Server

Click **Stop** to stop the TFTP server. After the server is stopped, the **Start** button is available while the **Stop** button is unavailable, as shown in Figure 3-13.

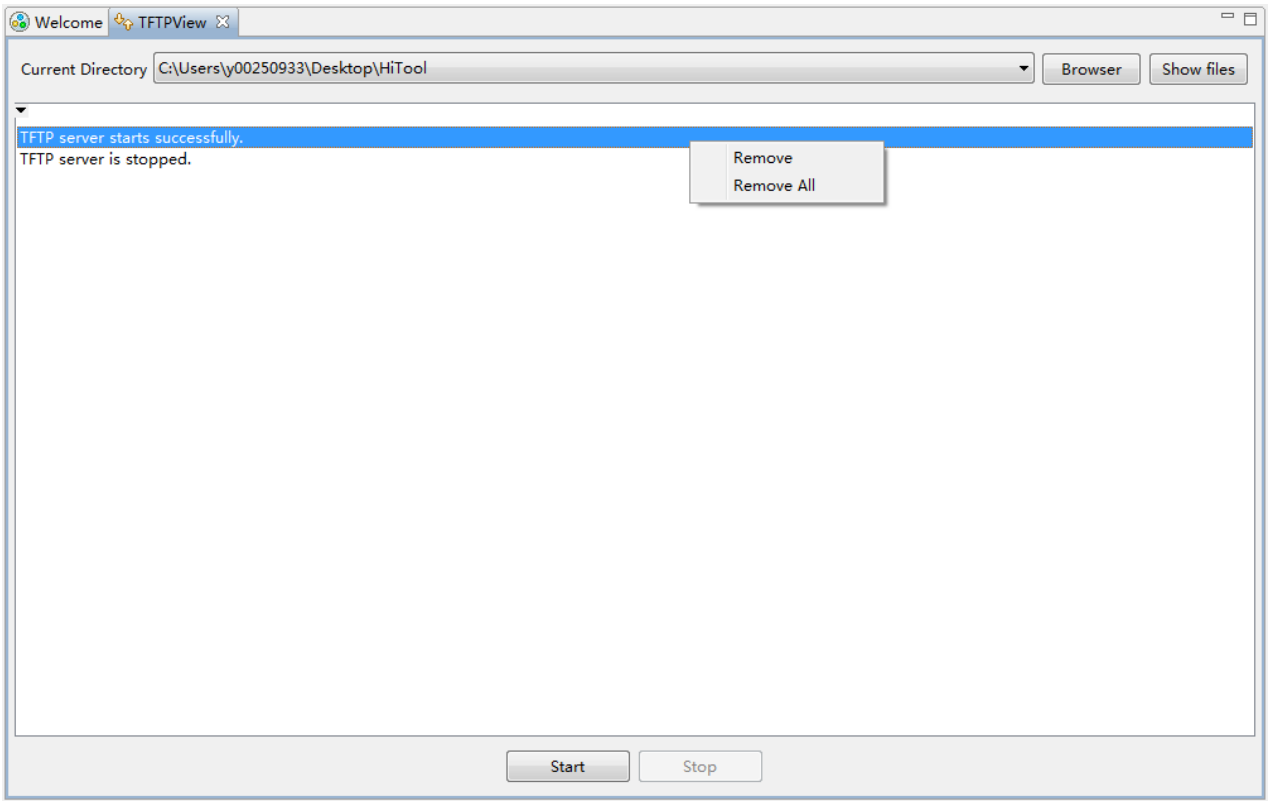
Figure 3-13 Stopping the TFTP server



3.3.5 Displaying Information

The information display area is in the middle of the TFTP view. It displays information about starting and stopping the TFTP server, switching the directory, and transferring files. You can right-click a message in the information display area to delete the message or all messages. See Figure 3-14.

Figure 3-14 Deleting output information



3.4 Terminal Tool

3.4.1 Creating a Serial Port Connection

To create a serial port connection, perform the following steps:

Step 1 Click  on the toolbar, as shown in Figure 3-15. The **Terminal** view is displayed, as shown in Figure 3-16.

Figure 3-15 Toolbar

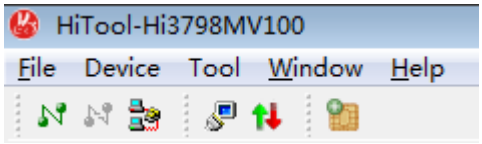
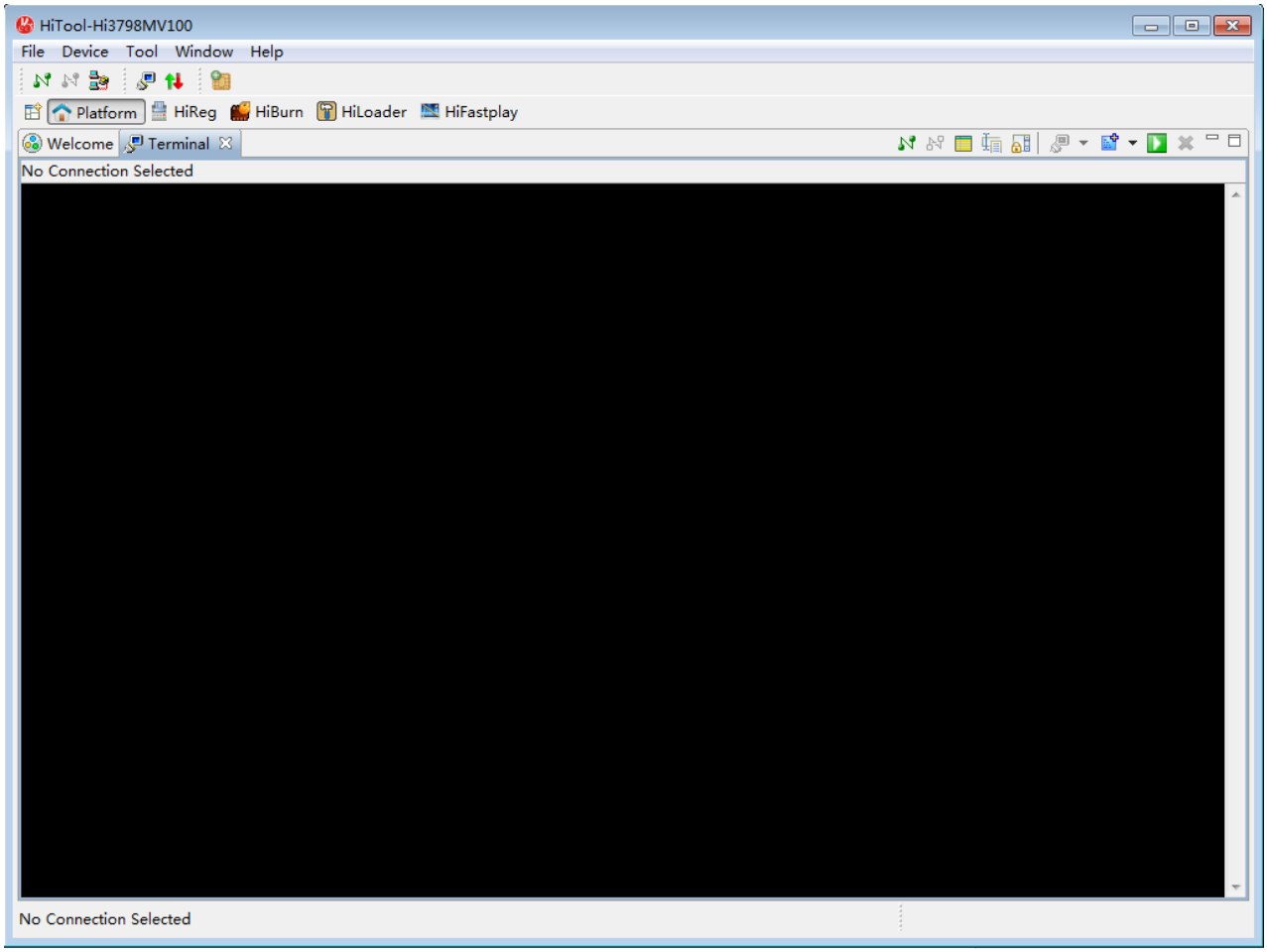


Figure 3-16 Terminal view



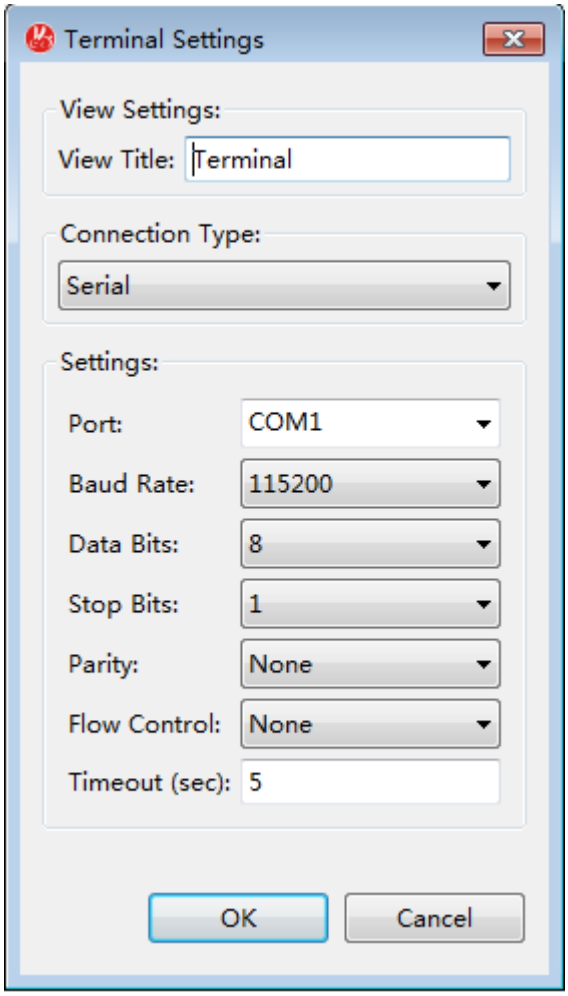
Buttons on the toolbar of the **Terminal** view are described as follows:

- 
  - Function: terminal toolbar
  - Description: connection settings, connection, and disconnection
- 
  - Function: connect button
  - Description: If the button is green, the terminal is not connected, and you can click the button to connect to the terminal. If the button is unavailable (dimmed), the terminal is connected.
- 
  - Function: disconnect button
  - Description: If the button is red, the terminal is connected, and you can click the button to disconnect the terminal. If the button is unavailable (dimmed), the terminal is not connected. (The disconnect button is unavailable in the preceding terminal toolbar.)

- 
  - Function: connection configuration button
  - Description: Clicking this button allows you to change the current connection into one that has been configured.
- 
  - Function: command input box button
  - Description: Clicking this button displays a text box for entering commands in the lower right corner of the terminal view.
- 
  - Function: scroll lock button
  - Description: Clicking this button prevents the terminal view from scrolling automatically so that you can view the information.
- 
  - Function: connection switchover button
  - Description: When there are multiple terminal connections, this button is available for switching the current connection.
- 
  - Function: connection creation button
  - Description: Clicking this button allows you to create multiple connections in the current terminal view or a new terminal view.
- 
  - Function: terminal log saving path button
  - Description: Clicking this button configures the output path of information in the terminal view. After configuration, information displayed in the terminal view is stored into the file in the configured path.
- 
  - Function: terminal deletion button
  - Description: When there are multiple terminal views, this button is available for closing the current terminal view.

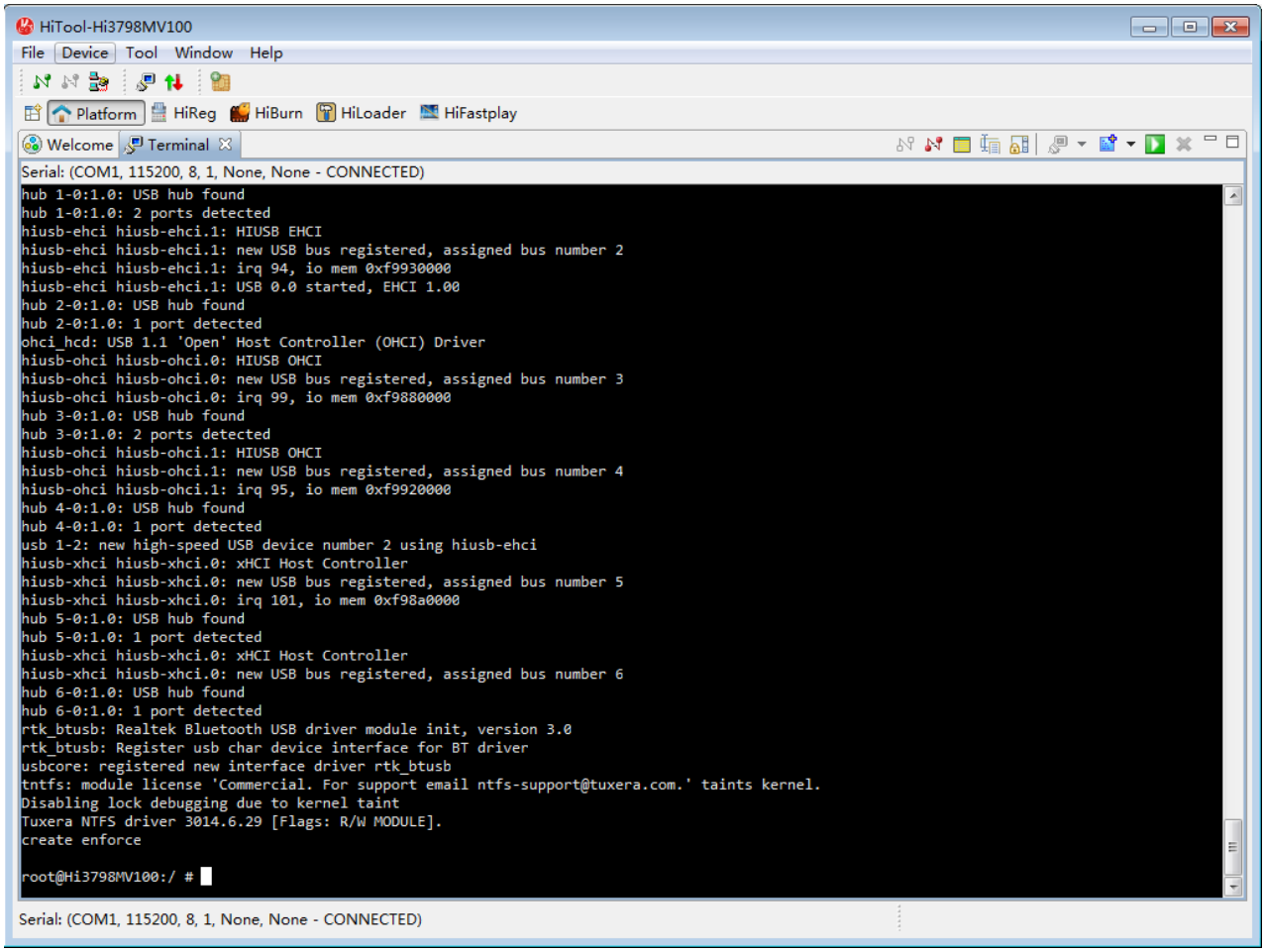
Step 2 Click  . The **Terminal Settings** dialog box is displayed, as shown in Figure 3-17.

Figure 3-17 Terminal Settings (serial)



Step 3 Set **Connection Type** to **Serial**, configure the related parameter, and click **OK** to create the serial port connection, as shown in Figure 3-18.

Figure 3-18 Establishing a serial port connection



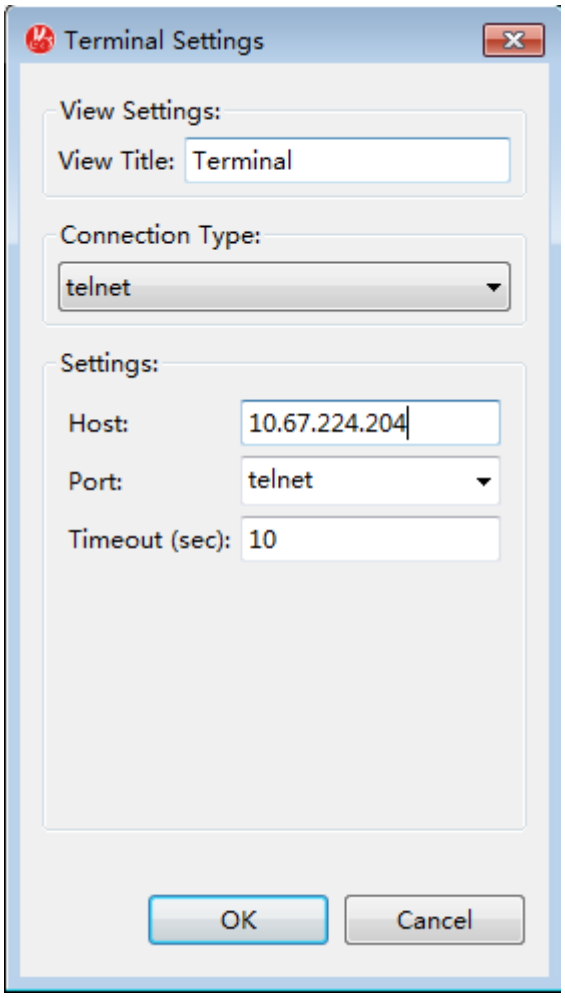
----End

3.4.2 Creating a Telnet Connection

To create a telnet connection, perform the following steps:

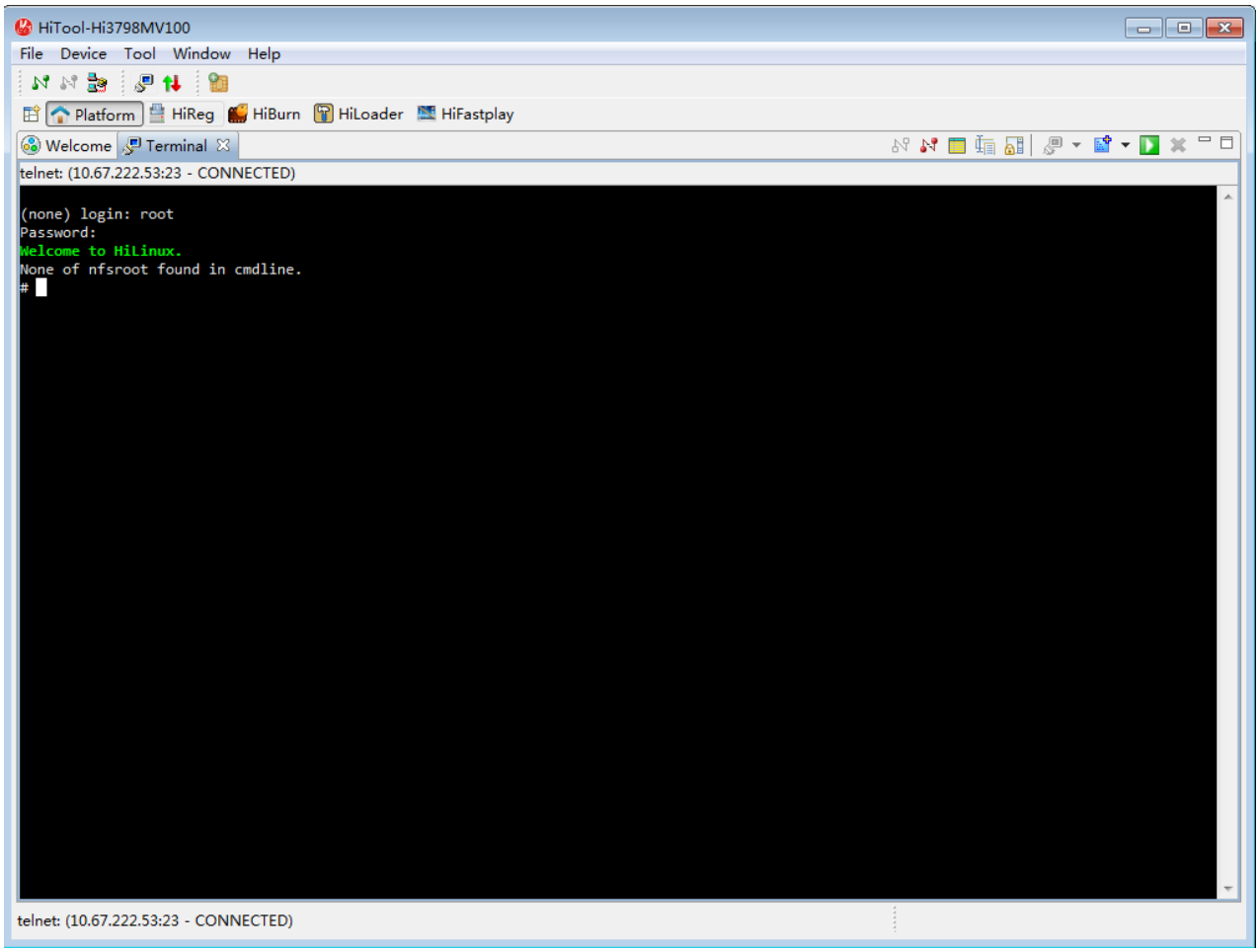
Step 1 If no connection has been created, click  . The **Terminal Settings** dialog box is displayed, as shown in Figure 3-19. If there is an existing connection, click  to modify the connection attributes.

Figure 3-19 Terminal Settings (telnet)



Step 2 Set the connection parameters and click **OK**. If ID authentication is required, enter the user ID and password. The telnet connection is successfully established, as shown in Figure 3-20.

Figure 3-20 Establishing a telnet connection



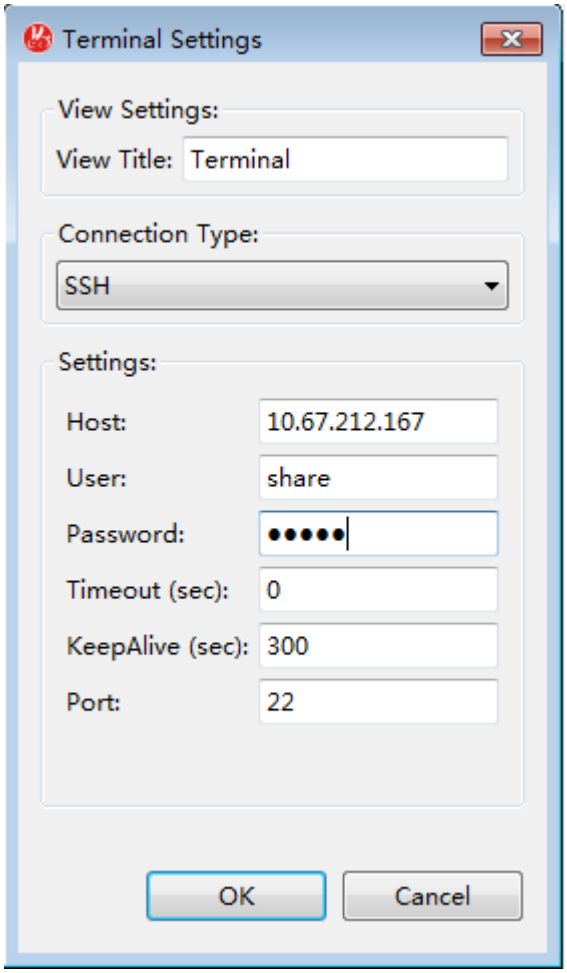
----End

3.4.3 Creating an SSH Connection

To create a secure shell (SSH) connection, perform the following steps:

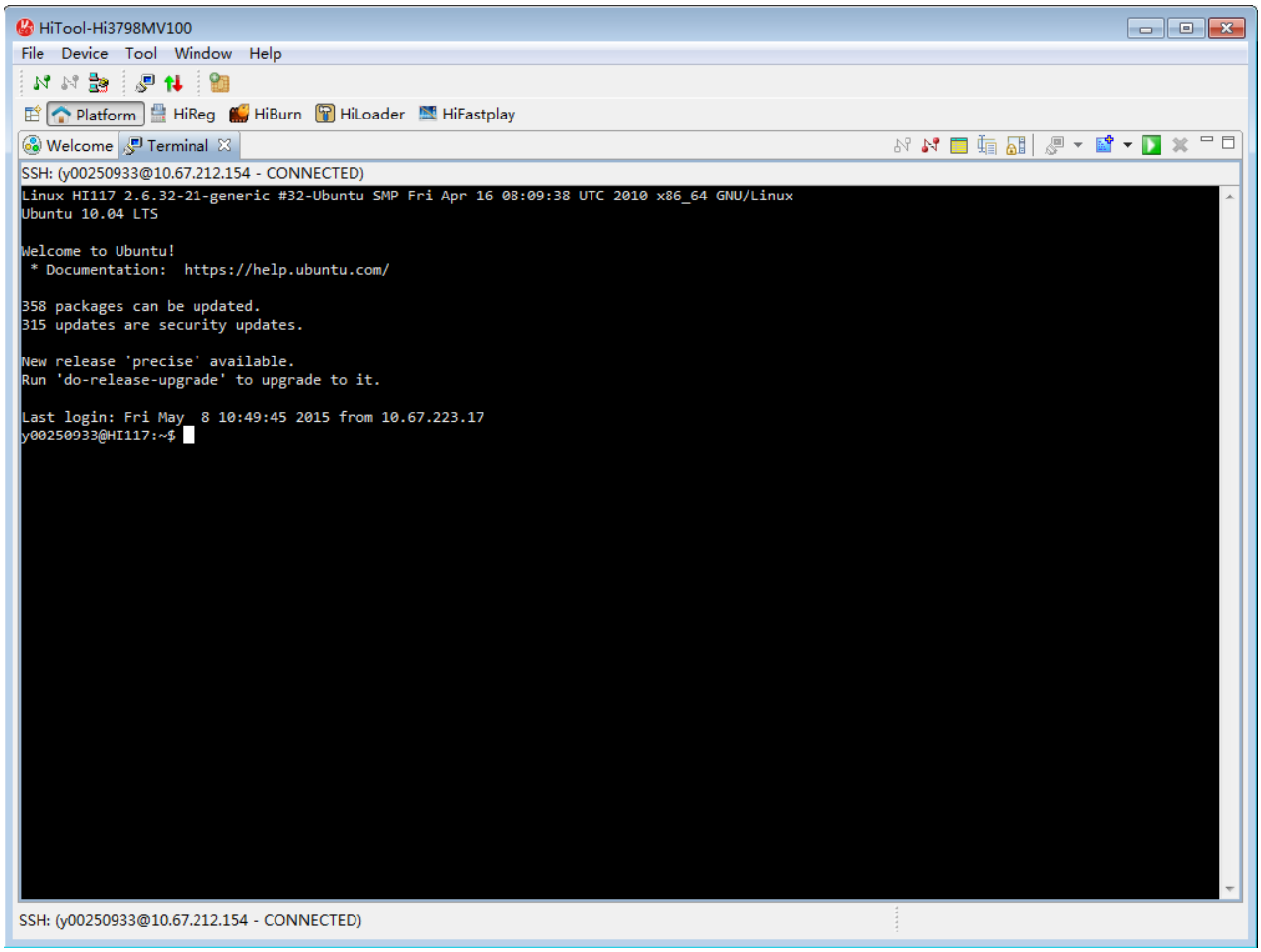
Step 1 If no connection has been created, click  . The **Terminal Settings** dialog box is displayed, as shown in Figure 3-21. If there is an existing connection, click  to modify the connection attributes.

Figure 3-21 Terminal Settings (SSH)



Step 2 Set the connection parameters and click **OK**. The SSH connection is successfully established, as shown in Figure 3-22.

Figure 3-22 Establishing an SSH connection



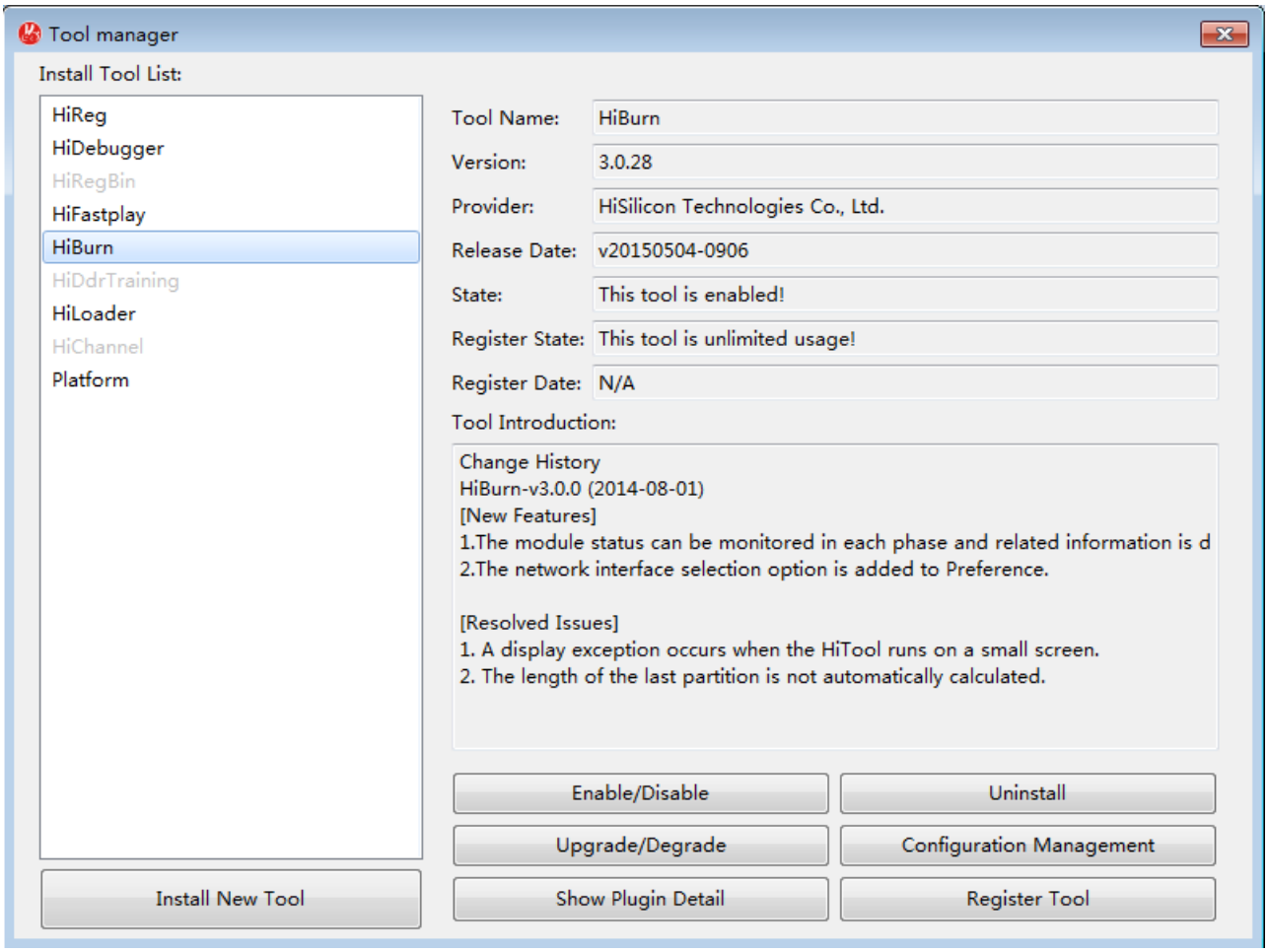
----End

4 Tool Management

4.1 Tool Manager

Start the tool platform. Choose **Tool** > **Tool Manager**. The **Tool manager** window is displayed, as shown in Figure 4-1.

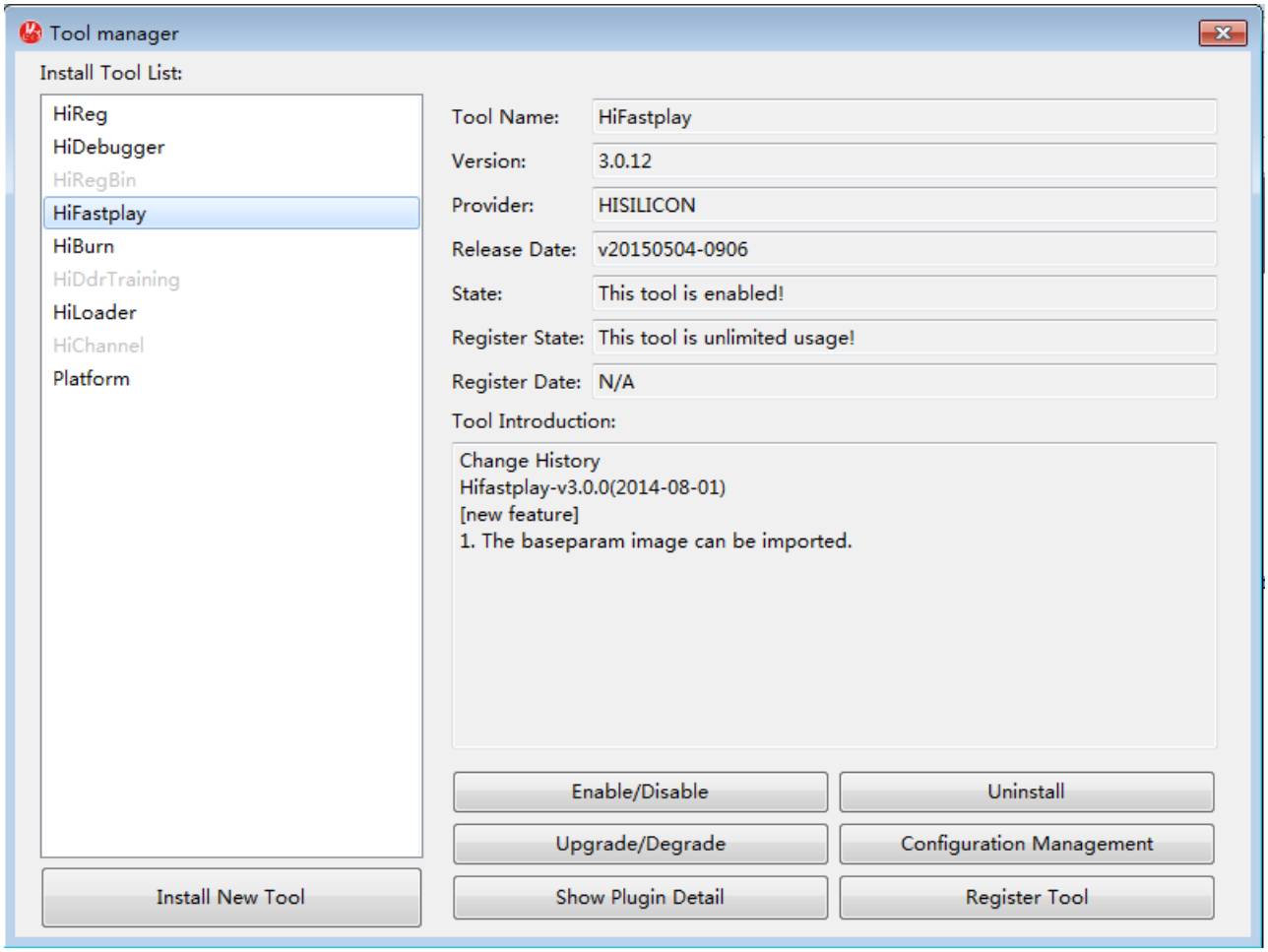
Figure 4-1 Installed tools



- **Install Tool List**: Displays all installed tools.

  If you select a tool in the list, for example, HiReg (not registered), the right pane displays details about the tool, including the register and enable/disable status of the tool. See Figure 4-2.

Figure 4-2 Details about an installed tool



- **Install New Tool**: Displays a wizard UI allowing you to select and install a tool package. Basic information about the tool package is pre-read, and the installation cannot continue if the detected tool package is invalid. The tool can be registered during installation.
- **Enable/Disable**: Disables an available and enabled tool, or enables an available and disabled tool. An unavailable tool (for example, a tool that mismatches the current chip) cannot be enabled.
- **Uninstall**: Uninstalls an installed tool. Select a tool and click **Uninstall**. A dialog box is displayed, asking whether you are sure to uninstall the tool. If yes, click **Yes**. The selected tool is uninstalled.
- **Upgrade/Degrade**: Upgrades/Degrades an installed tool. You can select an upgrade or degrade package based on the version of the installed tool. The validity of the installation package is checked.

- **Configuration Management**: Modifies configuration parameters of a tool. Select a tool, and click **Configuration Management**. The **Configuration Management** dialog box is displayed. Select **Export**, click **Browse** to select a path, and click **Execute**. The parameter configuration information is exported. You can also select **Import**, and click **Browse** to select the file to be imported. The content of the file to be imported must be verified. If the file passes verification, it is imported to the configuration parameter information of the tool.
- **Show Plugin Detail**: Displays information about plug-ins of a tool.
- **Register Tool**: Registers a tool. Select a tool, and click **Register Tool**. A dialog box is displayed. Enter the registration code, and start verification. If the registration code is correct, a message is displayed indicating that the tool is registered successfully, and the state of the tool in the tool manager is updated.

4.2 Installing a Tool

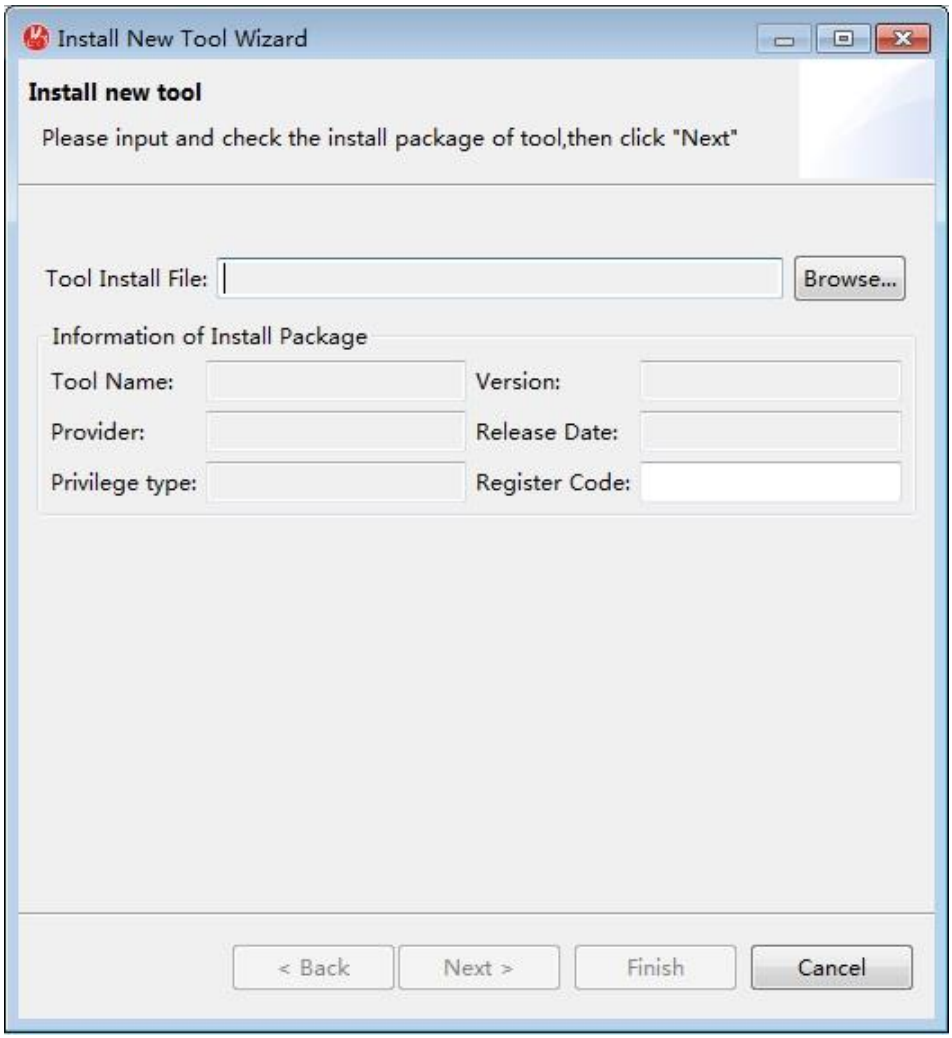
To install a tool, perform the following steps:

Step 1 Start the tool platform.

Step 2 Choose **Tool** > **Tool Manager**.

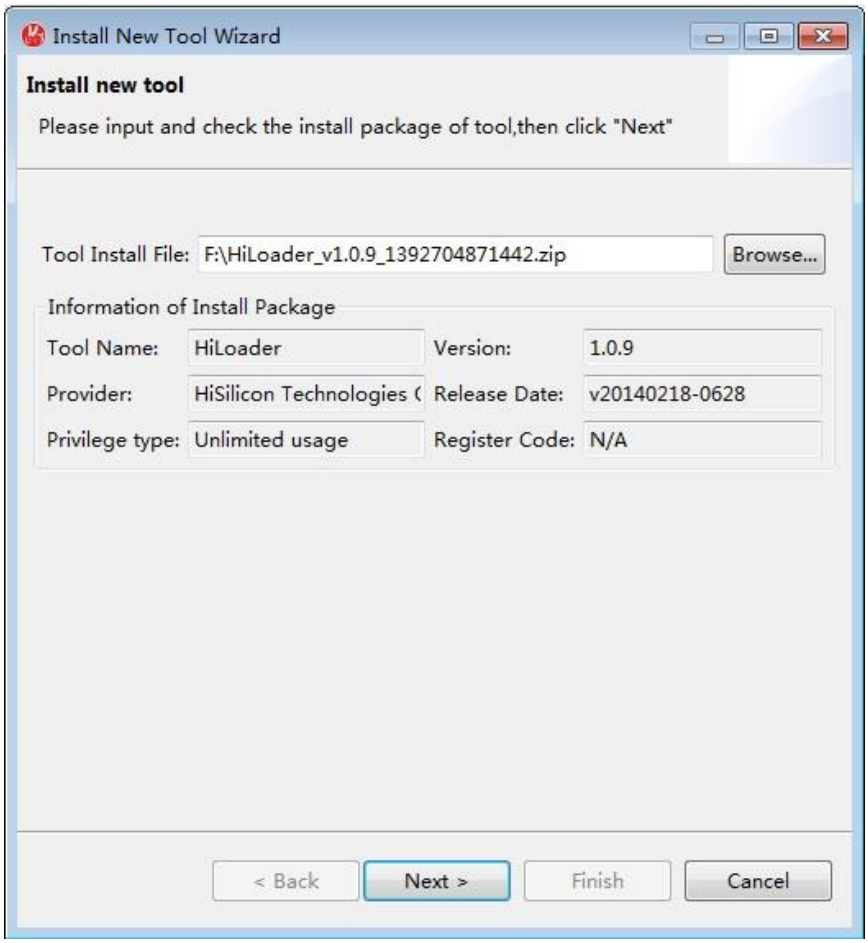
Step 3 Click **Install New Tool**. The **Install New Tool Wizard** dialog box is displayed, as shown in Figure 4-3.

Figure 4-3 Install New Tool Wizard



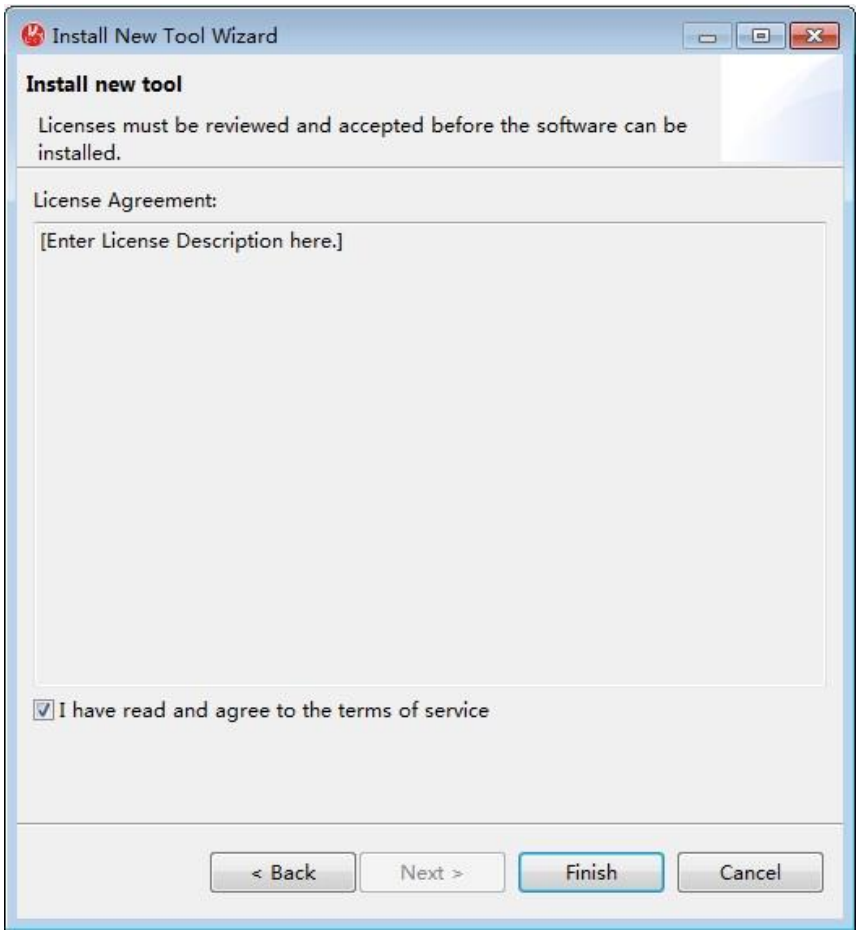
Step 4 Click **Browse** to select a tool package for installation, and click **Next**. Basic information about the tool package is pre-read, and the installation cannot continue if the detected tool package is invalid. The tool can be registered during installation. See Figure 4-4.

Figure 4-4 Verifying the tool package



Step 5 Select **I have read and agree to the terms of service**, and click **Finish**, as shown in Figure 4-5.

Figure 4-5 License agreement



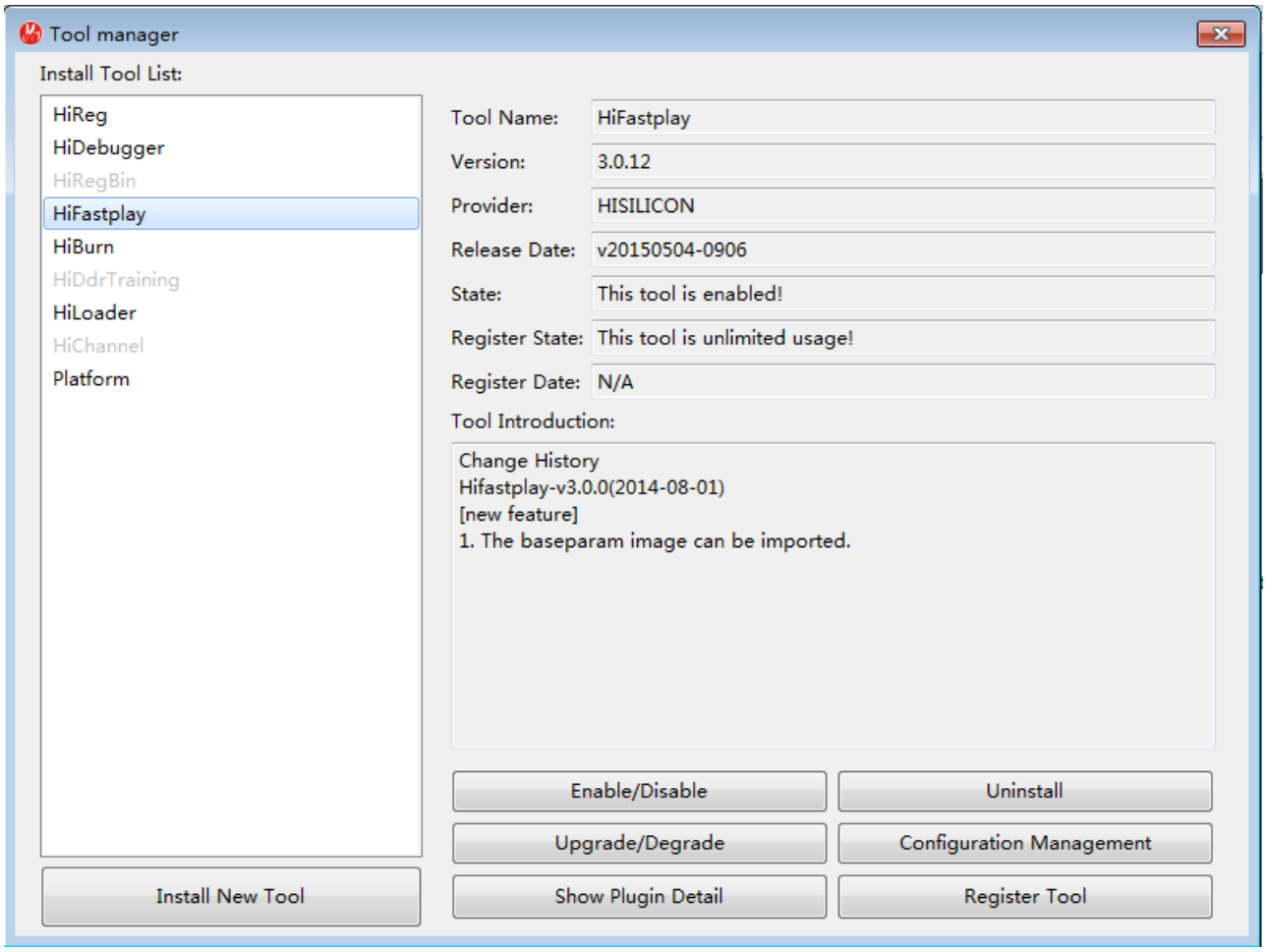
After installation, the system displays a message asking you to restart the platform for the installation to take effect. If you do not restart the platform, an error may occur. See Figure 4-6.

Figure 4-6 Message asking you to restart the platform

Step 6 Click **Yes** to restart the platform. The startup UI is displayed.

Choose **Tool** > **Tool Manager**. Then you can find the installed tool in the **Install Tool List** pane. See Figure 4-7.

Figure 4-7 Tool manager



----End

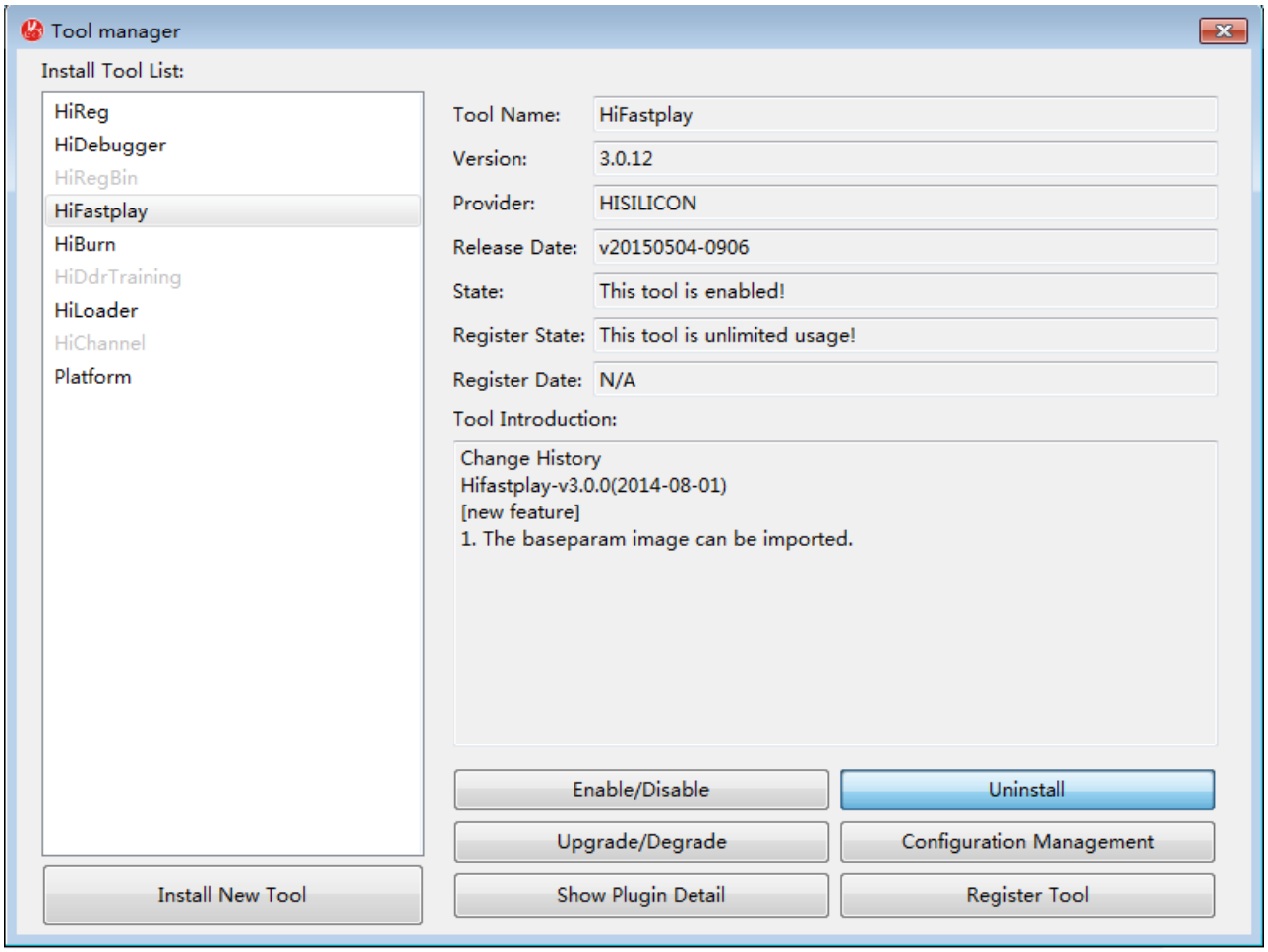
4.3 Uninstalling a Tool

To uninstall a tool, perform the following steps:

Step 1 Start the tool platform.

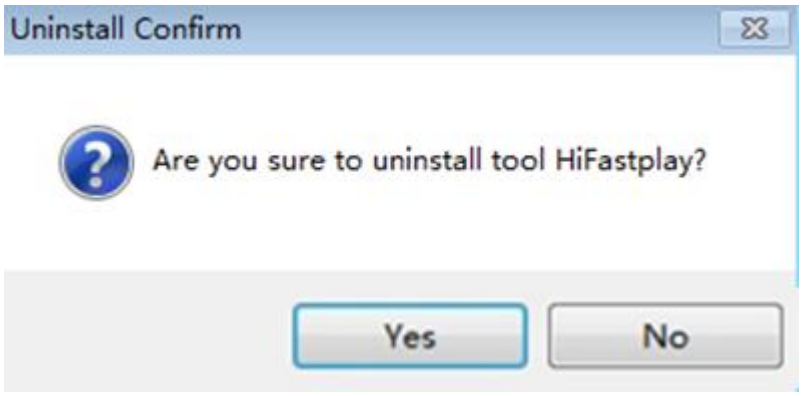
Step 2 Choose **Tool** > **Tool Manager**. The **Tool manager** window is displayed, as shown in Figure 4-8.

Figure 4-8 Before uninstallation



Step 3 Select the tool to be uninstalled from **Install Tool List**, for example, HiLoader, and click **Uninstall**. The system displays a message, asking whether you are sure to uninstall the tool. See Figure 4-9.

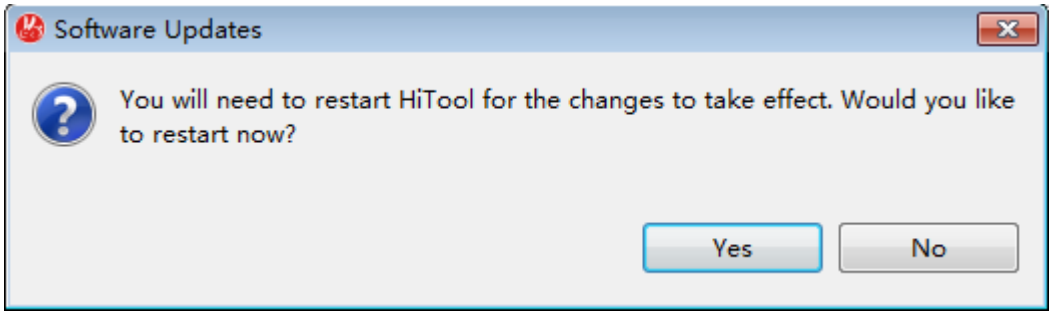
Figure 4-9 Confirming uninstallation



Step 4 Click **No** to exit uninstallation or click **Yes** to continue uninstallation.

After the tool is uninstalled, the system displays a message, asking you to restart the platform for the uninstallation to take effect. See Figure 4-10.

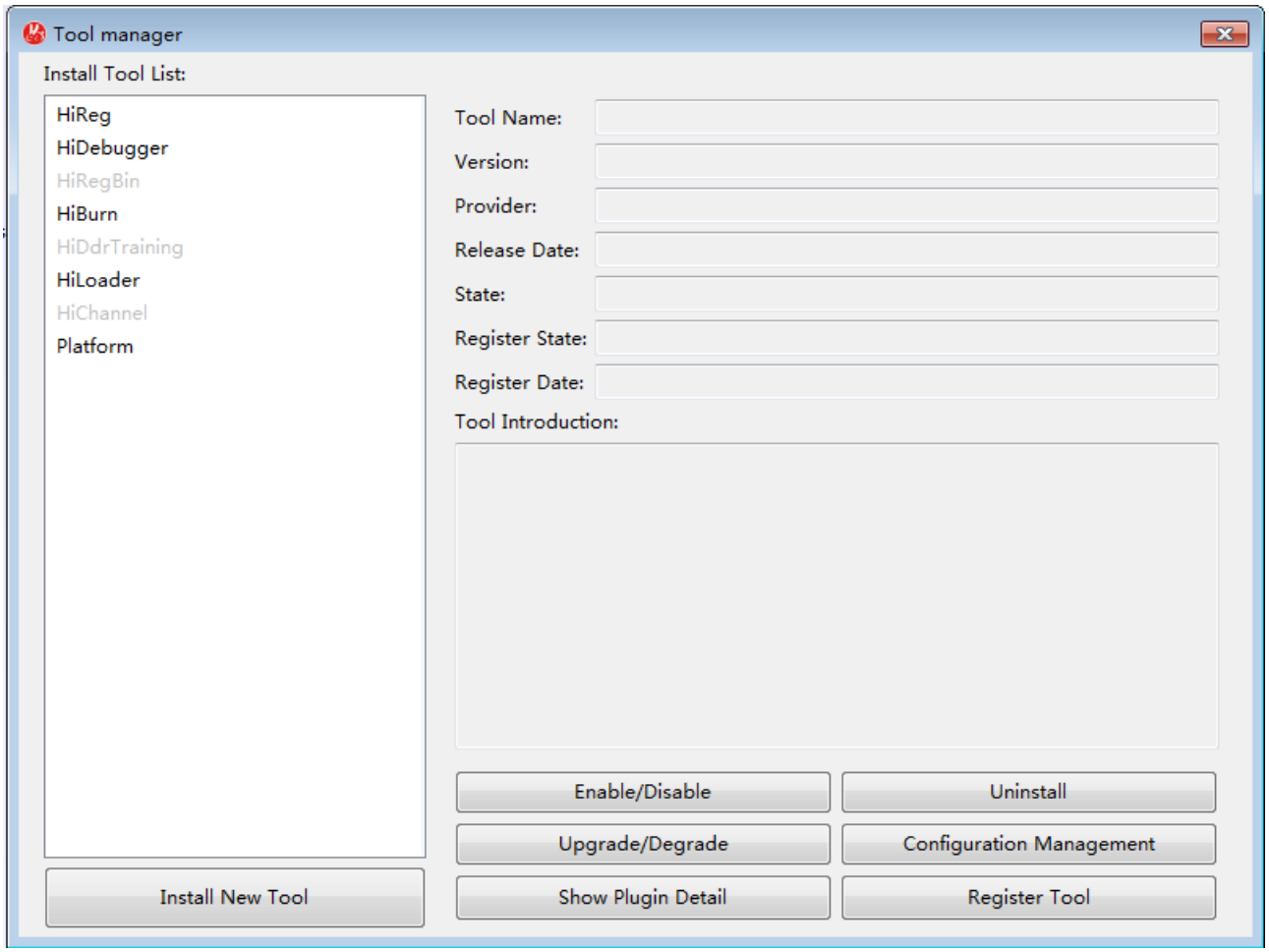
Figure 4-10 Message asking you to restart the platform



Step 5 Click **Yes** to restart the platform. The startup UI is displayed.

Choose **Tool** > **Tool Manager**. The uninstalled tool (for example, the HiLoader) is no longer displayed in **Install Tool List**. See Figure 4-11.

Figure 4-11 After uninstallation



----End

4.4 Upgrading/Degrading a Tool

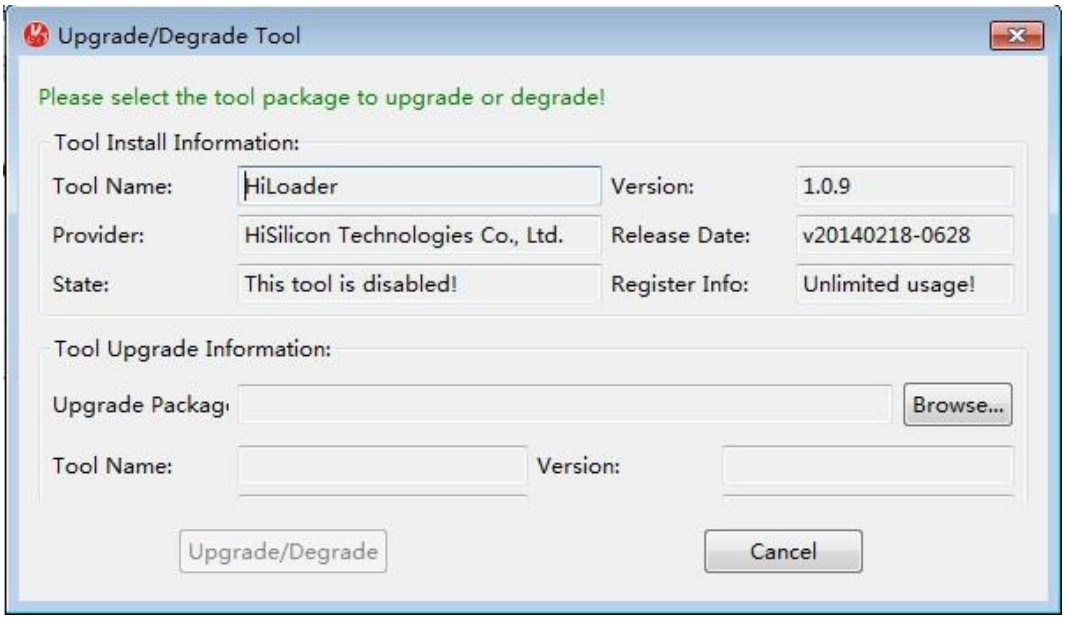
To upgrade/degrade a tool, perform the following steps:

Step 1 Start the tool platform.

Step 2 Choose **Tool** > **Tool Manager**.

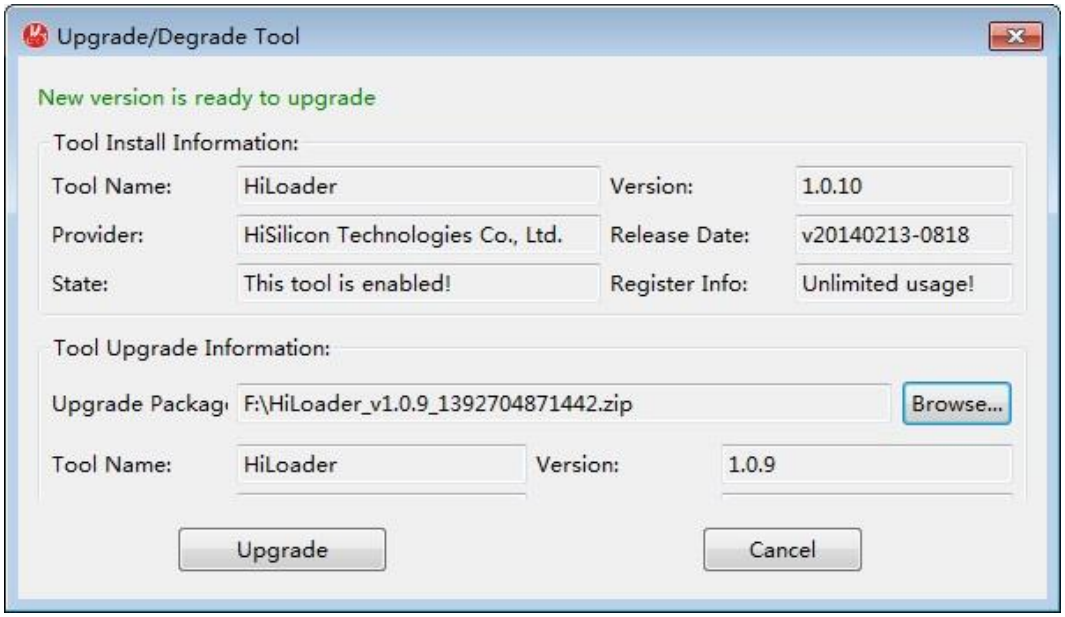
Step 3 Select the tool to be upgrade in **Install Tool List**, for example, HiLoader, and click **Upgrade/Degrade**. The **Upgrade/Degrade Tool** dialog box is displayed, as shown in Figure 4-12.

Figure 4-12 Upgrade/Degrade Tool



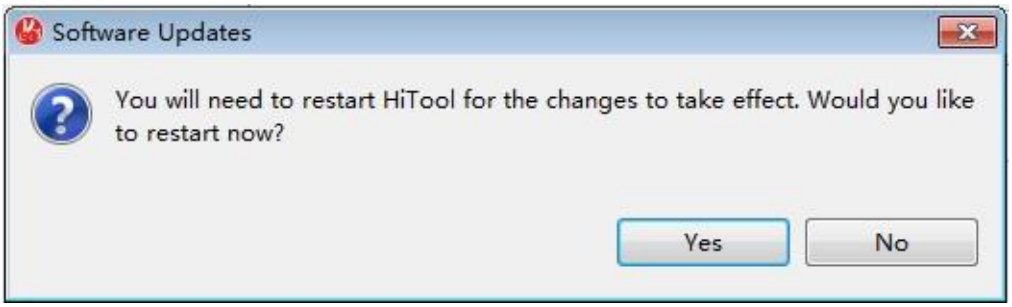
Step 4 Select an installation package to check the validity, as shown in Figure 4-13. The platform automatically compares the version of the installation package with that of the installed software. If the version of the installation package is later than that of the installed software, the **Upgrade** button is displayed; otherwise, the **Degrade** button is displayed.

Figure 4-13 Checking the validity of the installation package



Step 5 Click **Upgrade**/**Degrade**. After the upgrade/degrade is complete, the system displays a message asking you to restart the platform for the upgrade/degrade to take effect. If you do not restart the platform, an error may occur. See Figure 4-14.

Figure 4-14 Restarting the platform



----End

4.5 Enabling/Disabling a Tool

To enable/disable a tool, perform the following steps:

Step 1 Start the tool platform.

Step 2 Choose **Tool** > **Tool Manager**.

Step 3 Select a tool from **Install Tool List**, for example, **HiReg**.

Step 4 Click **Enable/Disable**. The system displays a message asking whether you want to enable/disable the tool. See Figure 4-15 and Figure 4-16.

Figure 4-15 Whether to enable a tool

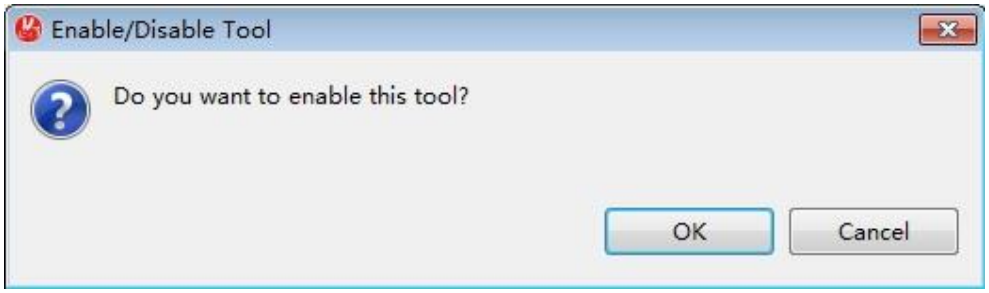
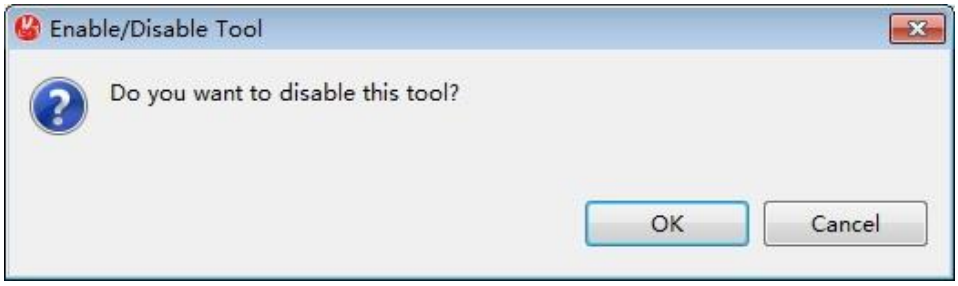


Figure 4-16 Whether to disable a tool



Step 5 Click **OK**. You can check the current state of the tool by viewing the **State** information. See Figure 4-17 and Figure 4-18.

Figure 4-17 After the tool is enabled

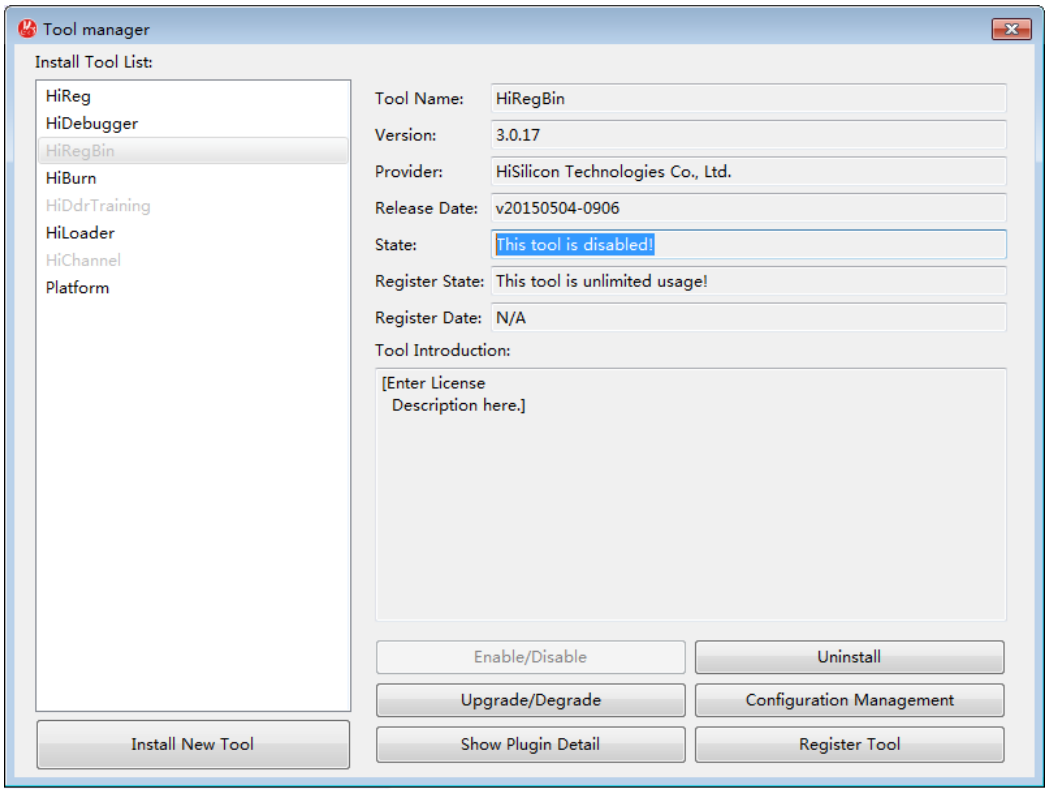
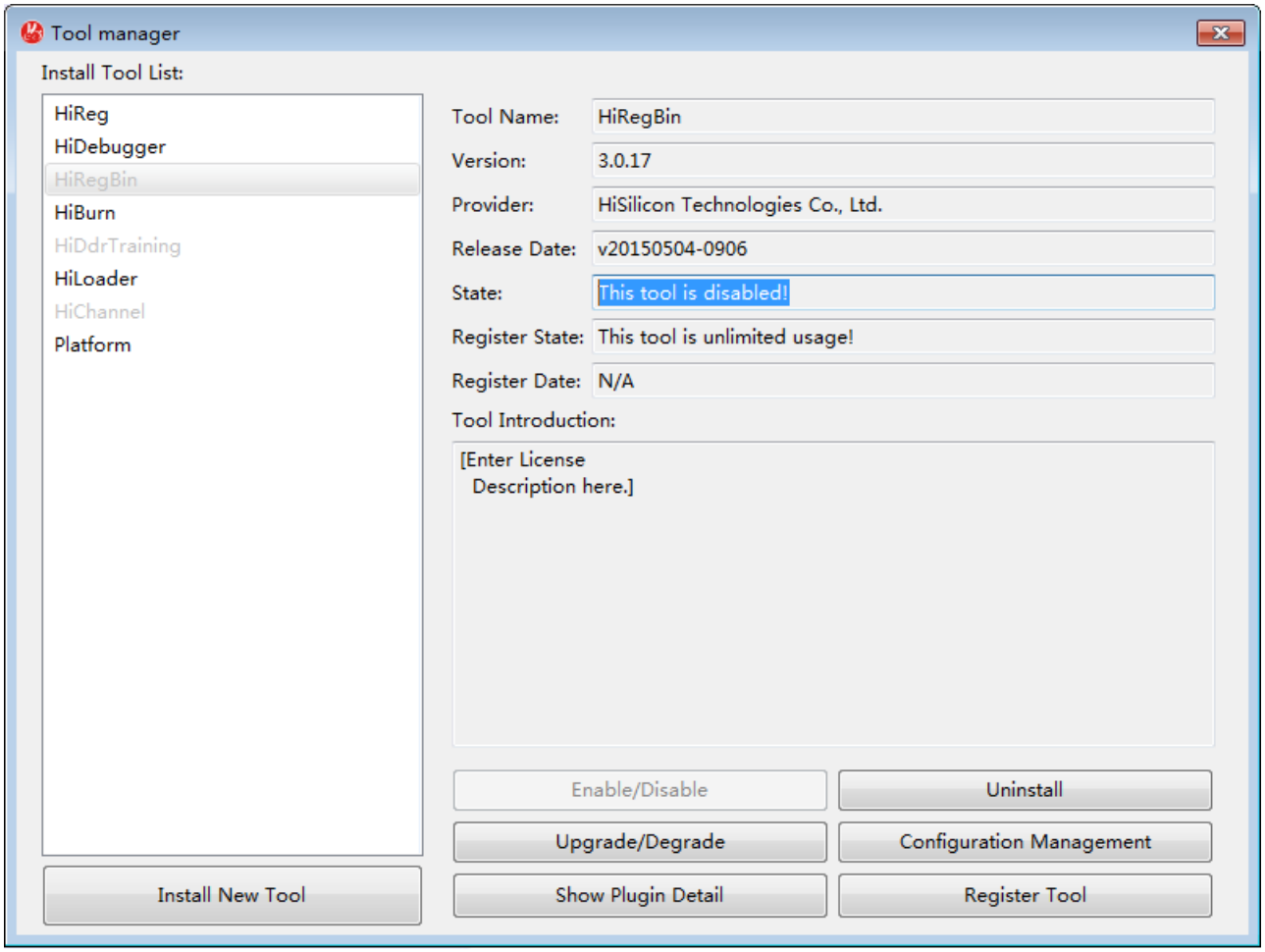


Figure 4-18 After the tool is disabled



----End

4.6 Viewing Information About Plug-ins of a Tool

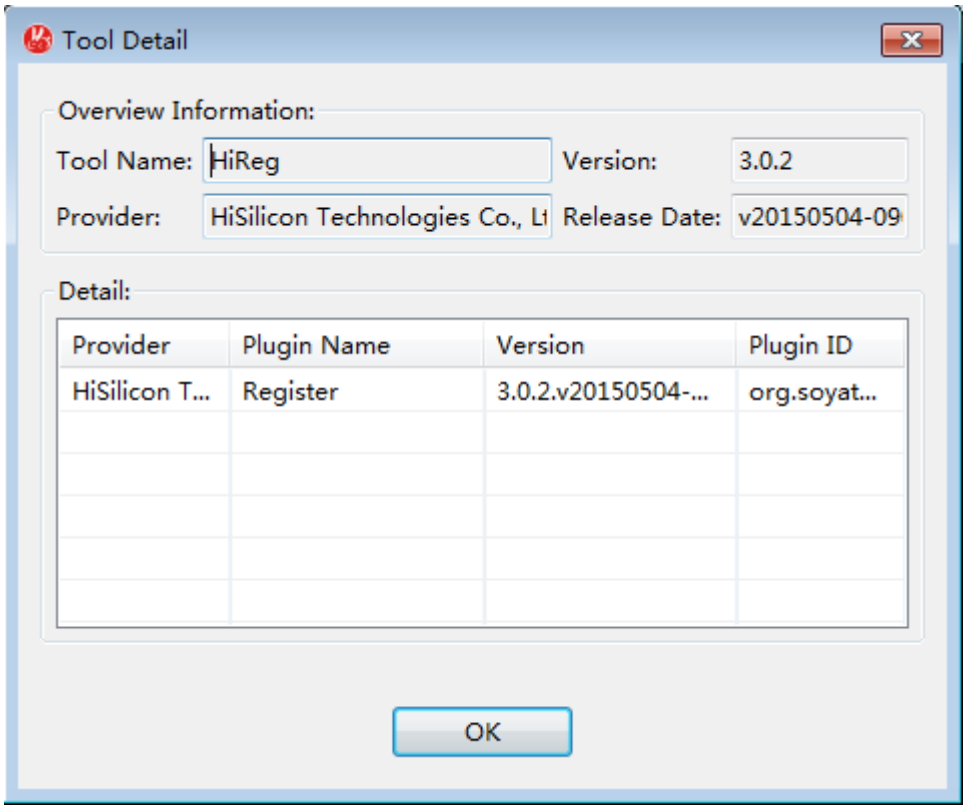
To view information about plug-ins of a tool, perform the following steps:

Step 1 Start the tool platform.

Step 2 Choose **Tool** > **Tool Manager**.

Step 3 Select a tool from **Install Tool List**, for example, **HiReg**, and click **Show Plugin Detail**. The **Tool Detail** dialog box is displayed, as shown in Figure 4-19.

Figure 4-19 Tool Detail dialog box



----End

4.7 Patching the Platform

To patch the platform, perform the following steps:

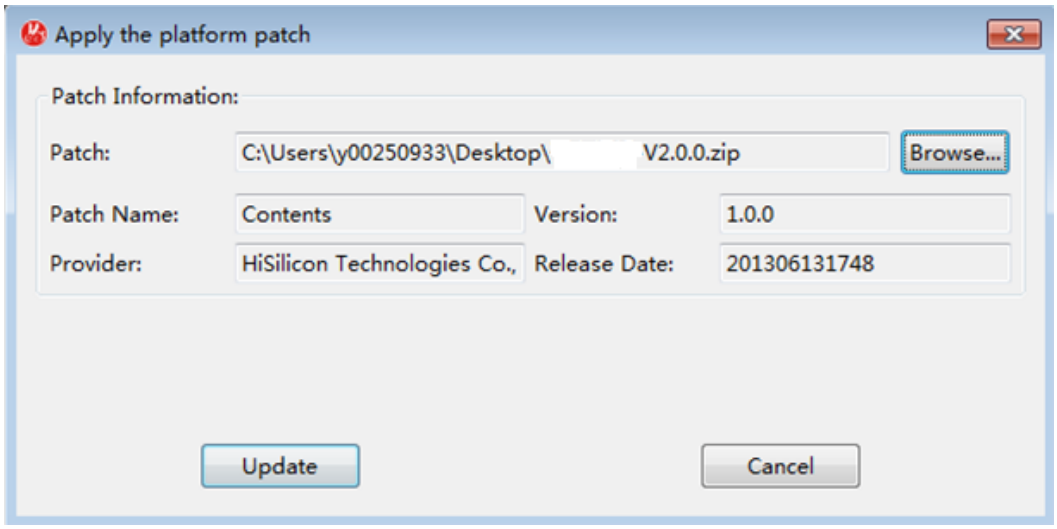
Step 1 Start the tool platform.

Step 2 Choose **Tool** > **Tool Manager**.

Step 3 Select **Platform**. You can view the current version information in the right pane.

Step 4 Click **Apply Patch**. The **Apply the platform patch** dialog box is displayed, as shown in Figure 4-20.

Figure 4-20 Applying the patch



Step 5 Select a patch package, and click **Update** to apply the patch to the platform. After the operation is complete, the system displays a message asking you to restart the platform. If you do not restart the platform, an error may occur.

----End

5 Switching the Language

You can switch the language on the menu bar.

Start the tool platform. Choose **File** > **Language**, and select the language to be switched to, as shown in Figure 5-1.

Figure 5-1 Language switch menu

If you select **English**, the system displays the startup GUI. After startup, characters on the main GUI are switched to English characters, as shown in Figure 5-2.

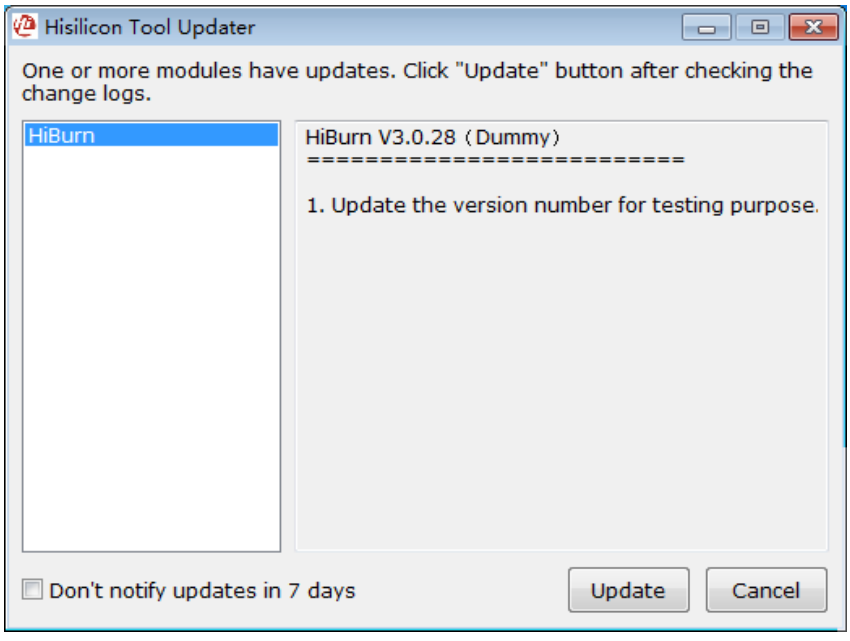
Figure 5-2 English GUI

6 Updating the Tool Components

6.1 Checking for Updates During Startup

When the HiTool is started, it automatically connects to the update server to search for components that can be updated. If a component that can be updated is detected, the HiTool displays a dialog box, as shown in Figure 6-1.

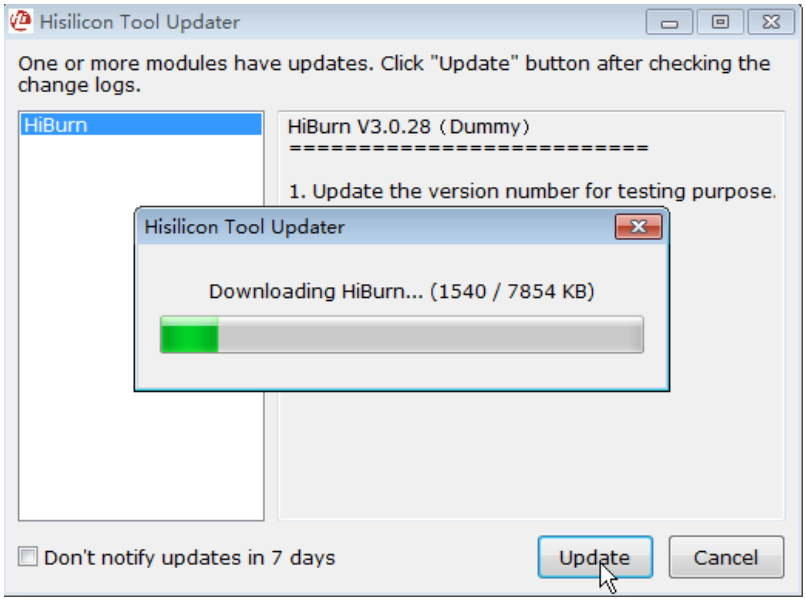
Figure 6-1 Component update dialog box



If you do not need to update the tool, click **Cancel** to exit the dialog box. If you do not want to be reminded of any update in a week, select **Don't notify updates in 7 days**.

If you want to update the tool component, confirm the version change history in the right pane, and click **Update**. Figure 6-2 shows the update process.

Figure 6-2 Update process



After the update is complete, the dialog box is not displayed, and the HiTool is restarted.

If a tool component is updated, the HiTool automatically re-registers the tool component after restart, and this could take a while. After registration, the HiTool is restarted again. The new tool component can be used after the restart.

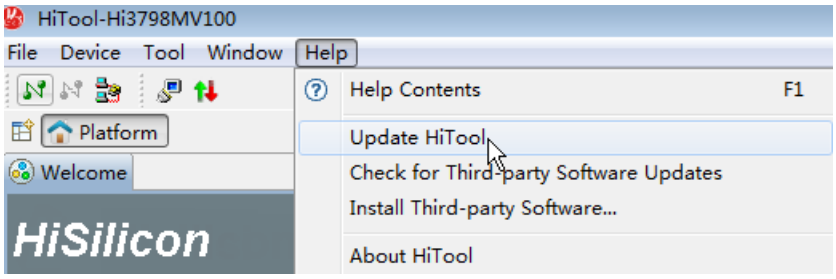
6.2 Manually Updating the Tool

To update the tool manually, perform the following steps:

Step 1 Start the HiTool, and click **Platform**.

Step 2 Choose **Help** > **Update HiTool**, as shown in Figure 6-3.

Figure 6-3 Updating the tool manually



The subsequent update process is the same as that described in section 6.1 "Checking for Updates During Startup", except that the **Don't notify updates in 7 days** option is not displayed.

----End

7 Installing Third-Party Software

NOTE

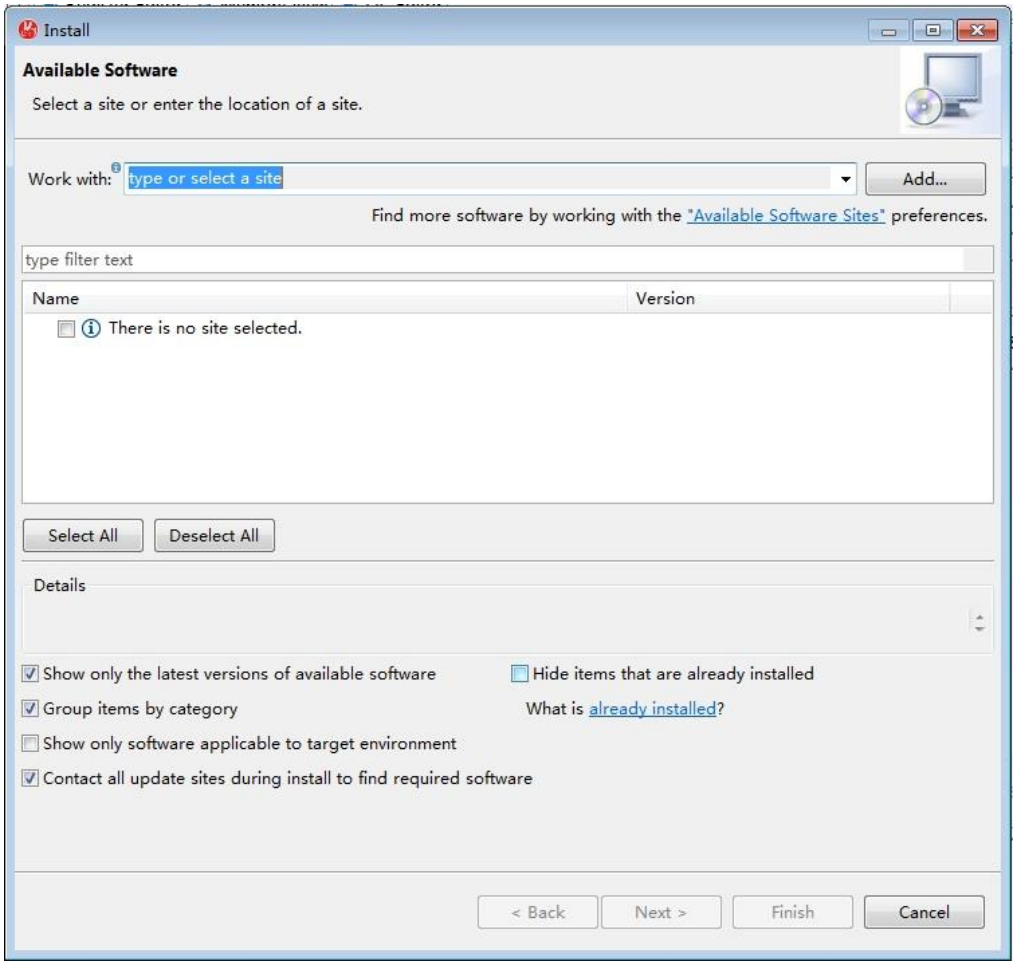
Third-party software is the software developed by personnel or companies other than the original vendor of the development platform to supplement the platform functions.

To install the third-party software, perform the following steps:

Step 1 Choose **Help** > **Install Third-party Software**.

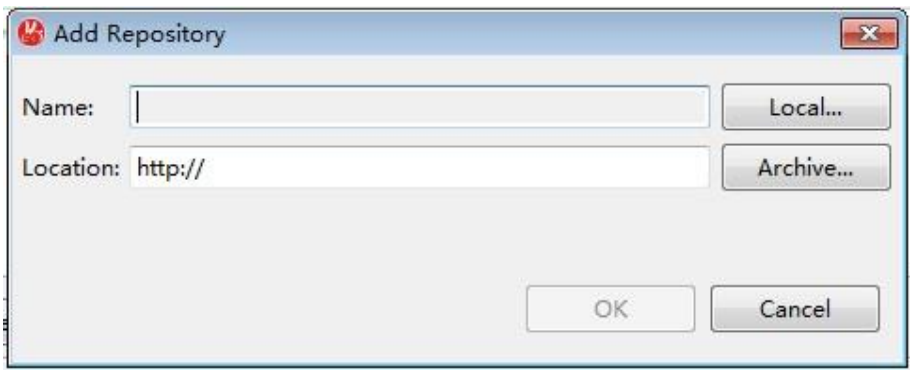
Step 2 Enter the website for the software to be installed. If the website already exists in the **Work with** drop-down list, select it directly.

Figure 7-1 Entering or selecting the website for the software to be installed



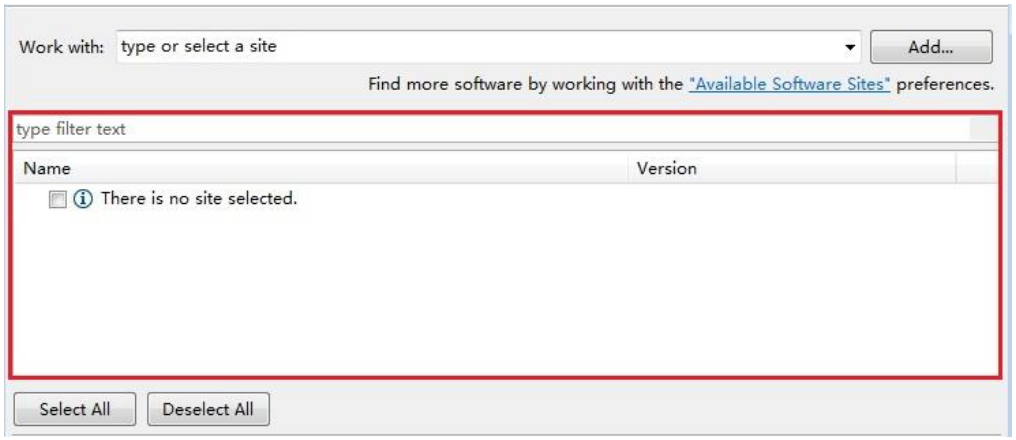
You can also click **Add** to open the dialog box shown in Figure 7-2. Enter the software name in the **Name** text box, enter the website for the software to be installed in the **Location** text box, and click **OK** to install the software. If the software has been downloaded, click **Archive** to select the downloaded software package. The **Local** button is used to select the root directory for resources.

Figure 7-2 Add Repository



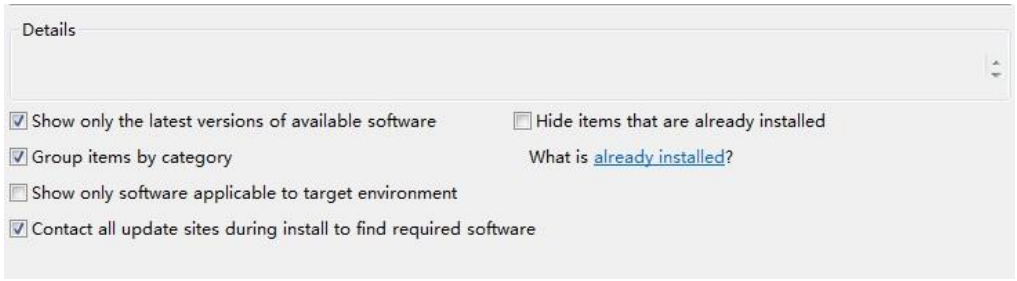
The red rectangle area in Figure 7-3 shows all software at the address specified in **Work with**.

Figure 7-3 Software list



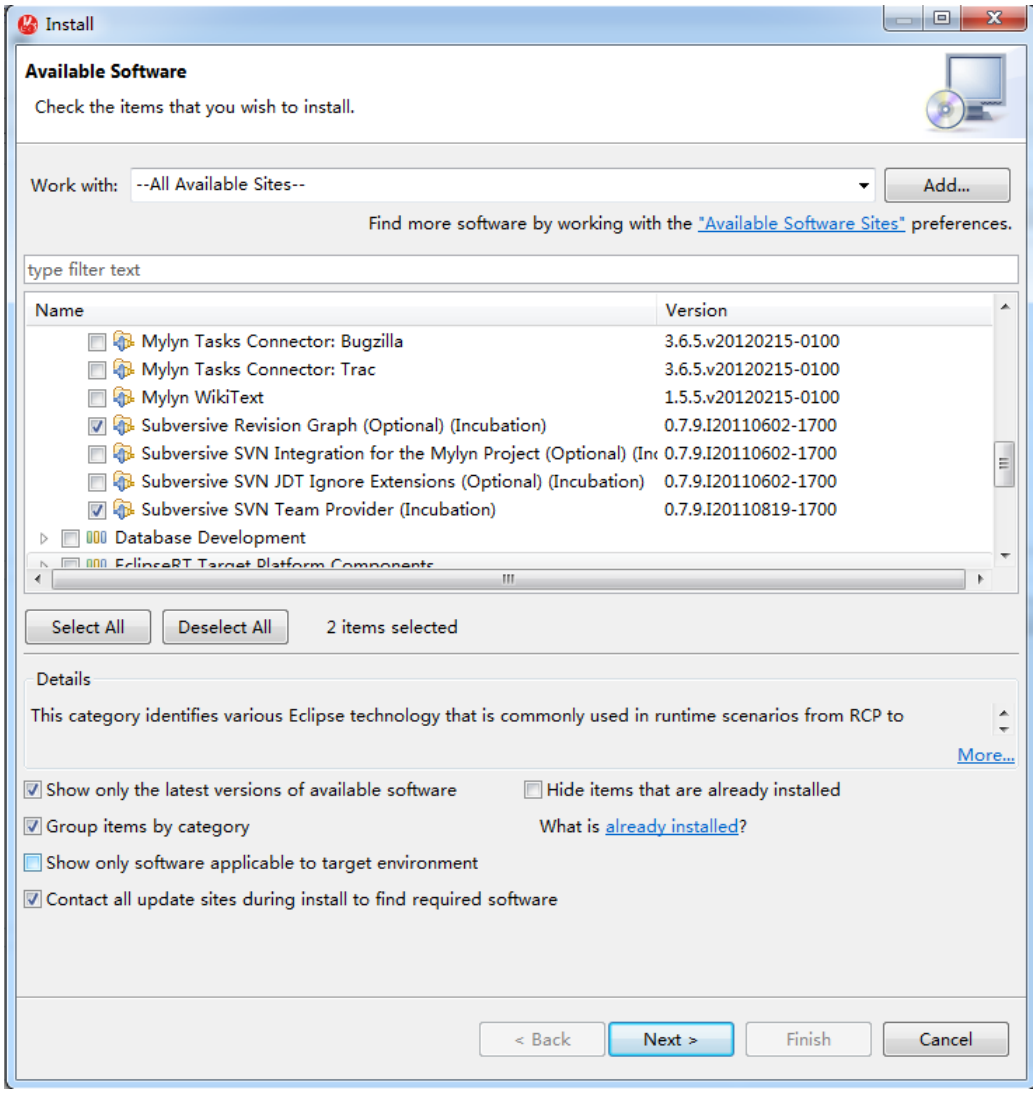
You can filter the software list by using the check boxes shown in Figure 7-4 to find the required software quickly.

Figure 7-4 Filtering the software list



Step 3 Select the software to be installed, for example, SVN plug-ins, and click **Next**, as shown in Figure 7-5.

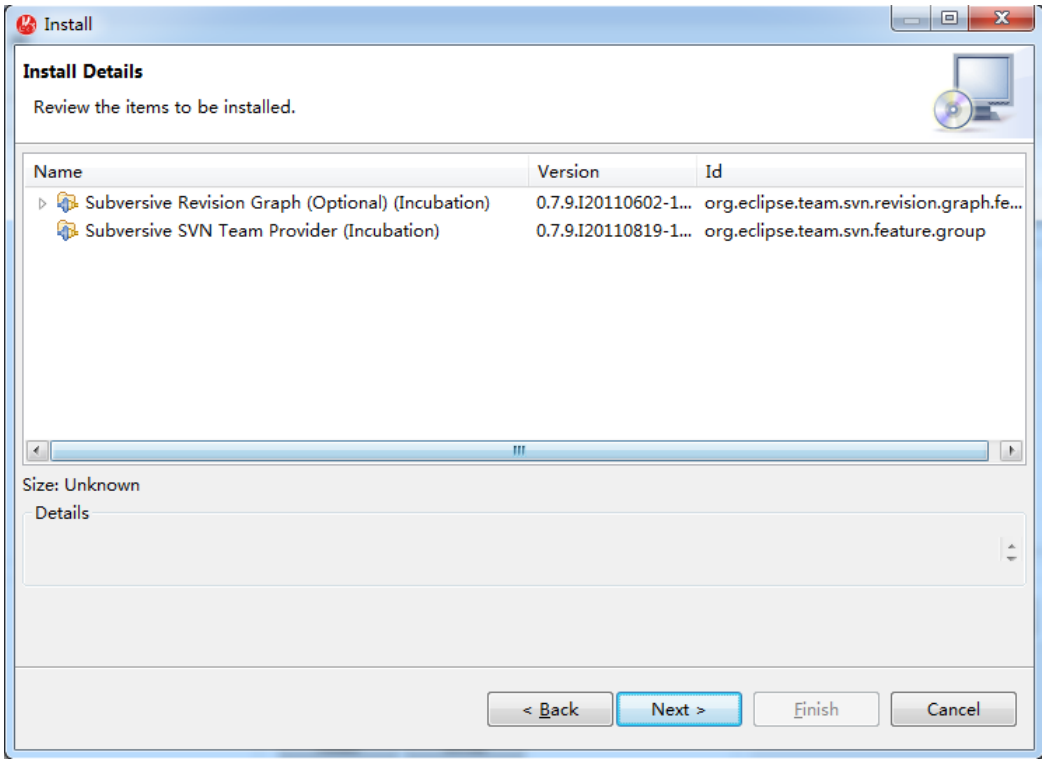
Figure 7-5 Selecting the software to be installed



Details of the SVN plug-ins are displayed.

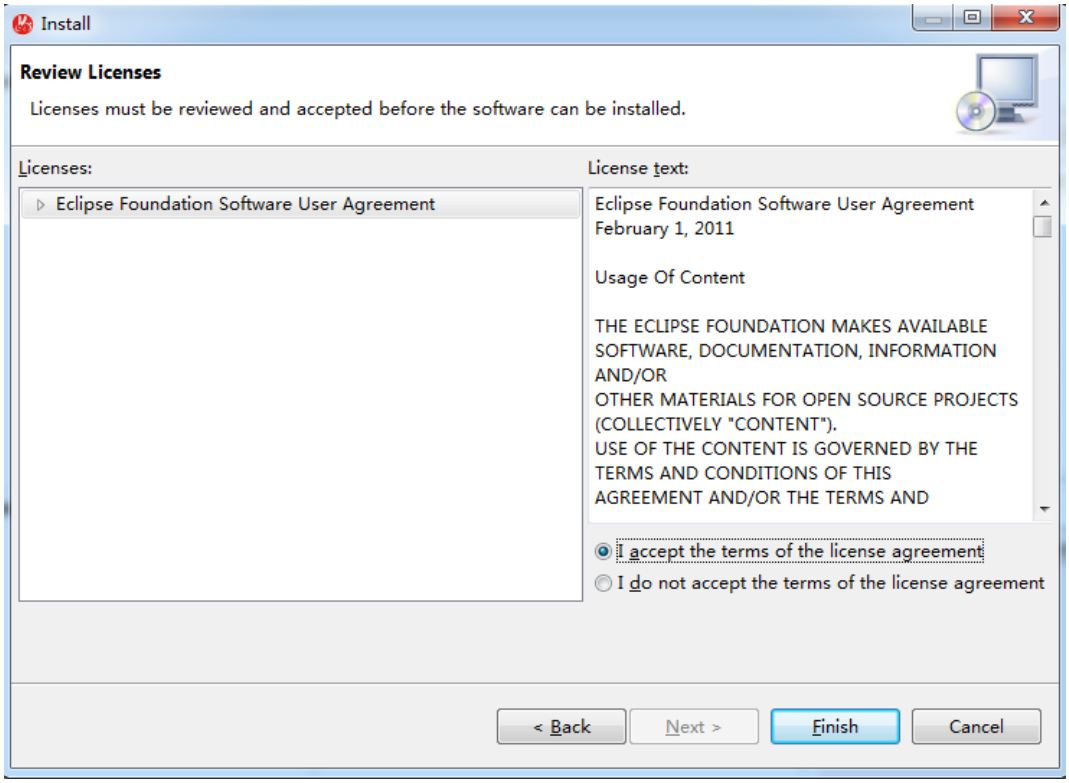
Step 4 Click **Next**, as shown in Figure 7-6.

Figure 7-6 Details of the plug-ins



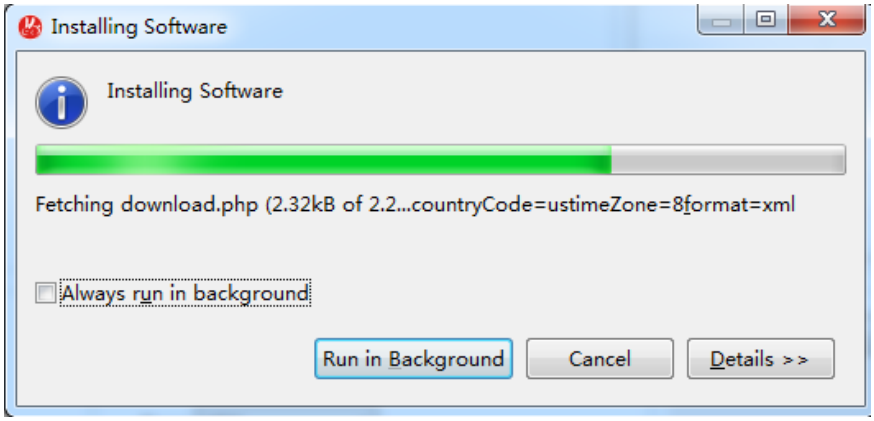
Step 5 Select **I accept the terms of the license agreement**, and click **Finish**, as shown in Figure 7-7.

Figure 7-7 Review Licenses



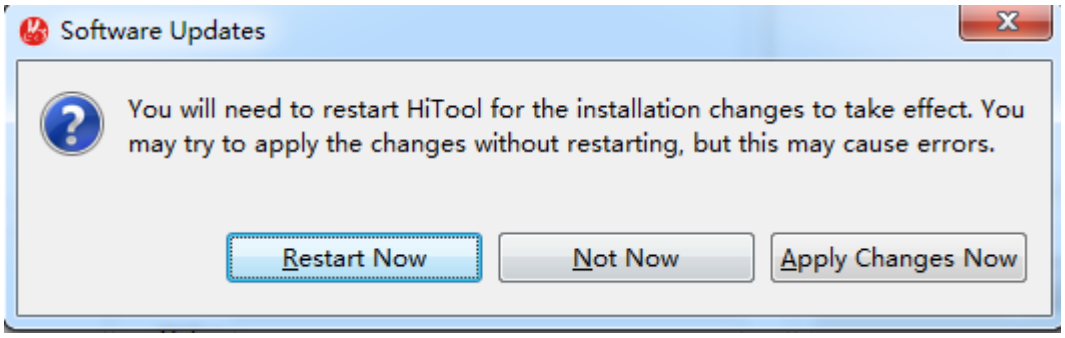
The installation progress bar is displayed, as shown in Figure 7-8. Wait until the installation is complete.

Figure 7-8 Installation progress



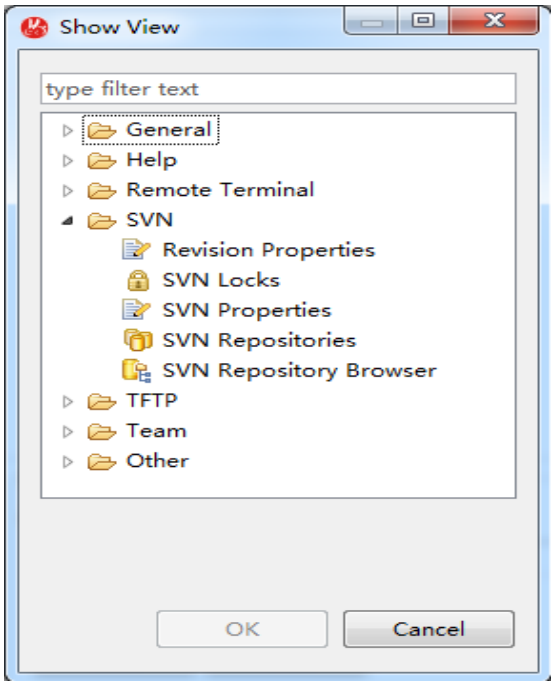
After installation is complete, the dialog box shown in Figure 7-9 is displayed, indicating that the installation is successful.

Figure 7-9 Installation success



Step 6 Restart the HiTool. You can then find the SVN in the list shown in Figure 7-10.

Figure 7-10 Viewing the installed software



----End

8 Updating Third-Party Software

To update the third-party software, perform the following steps:

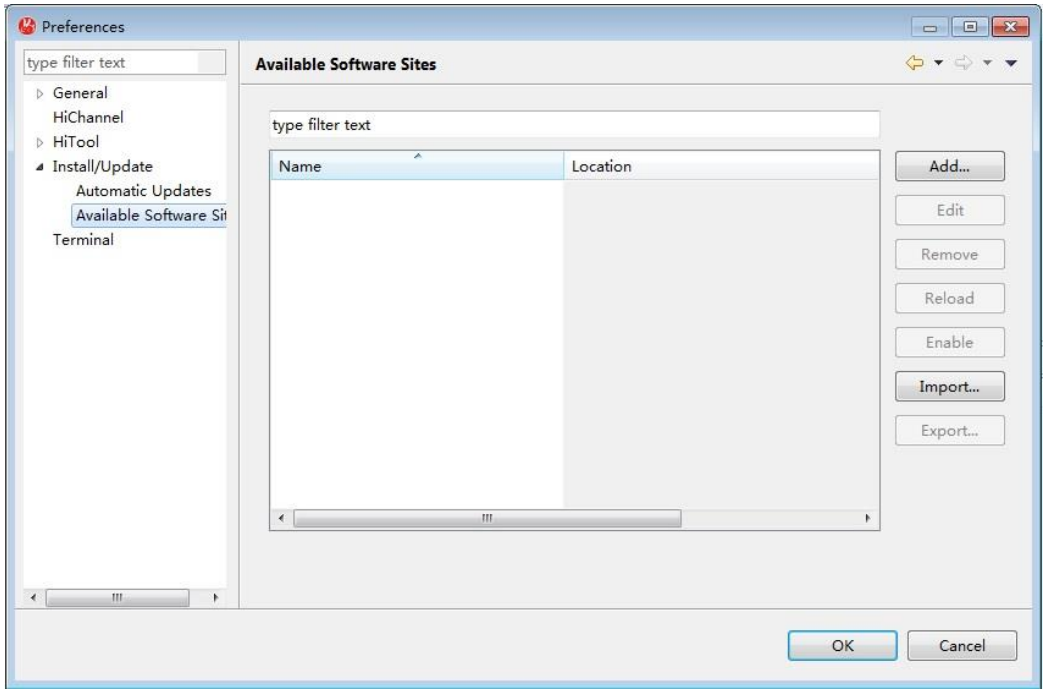
Step 1 Choose **Help** > **Check for Third-party Software Updates** to check whether the installed software needs to be updated.

If there is no update information, the system displays the message shown in Figure 8-1.

Figure 8-1 No Updates Found

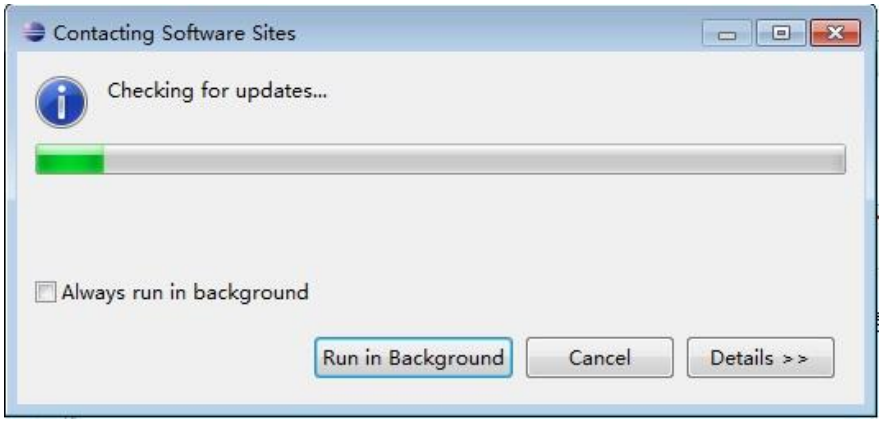
If you click **Yes**, the **Available Software Sites** page in the **Preferences** dialog box is displayed. You can view information about installed software, and edit, delete, re-download, or disable the software. You can also click **Add** to add software sites, or click **Import/Export** to import/export the installation site list. See Figure 8-2.

Figure 8-2 Available Software Sites



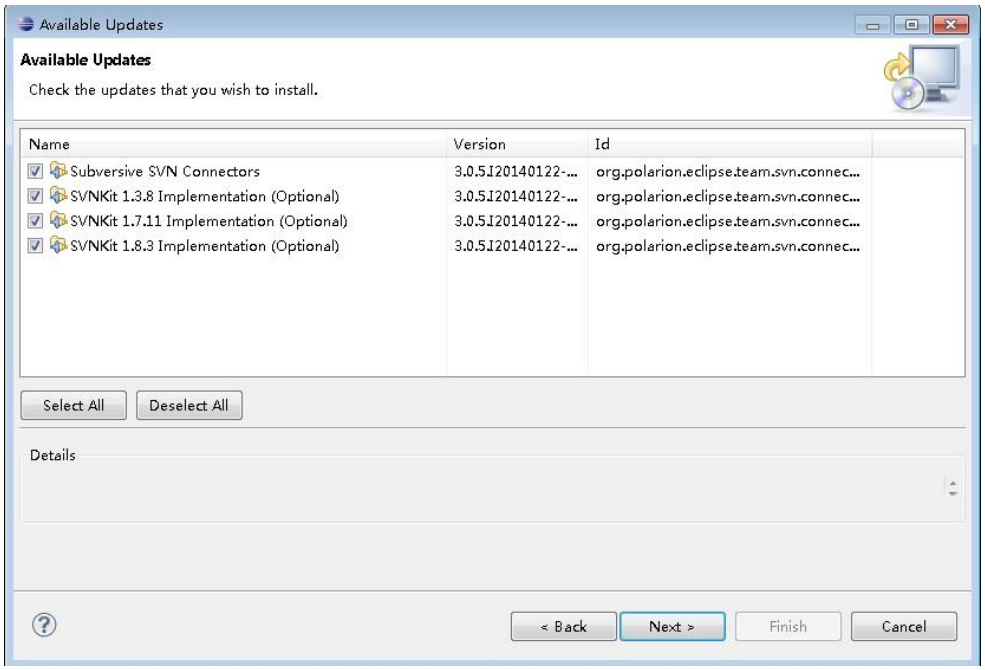
If the installed software can be updated, the platform checks whether the software site is available, as shown in Figure 8-3.

Figure 8-3 Checking for updates



Step 2 After the check, a dialog box is displayed, listing all available updates. Select the required updates, and click **Next**, as shown in Figure 8-4.

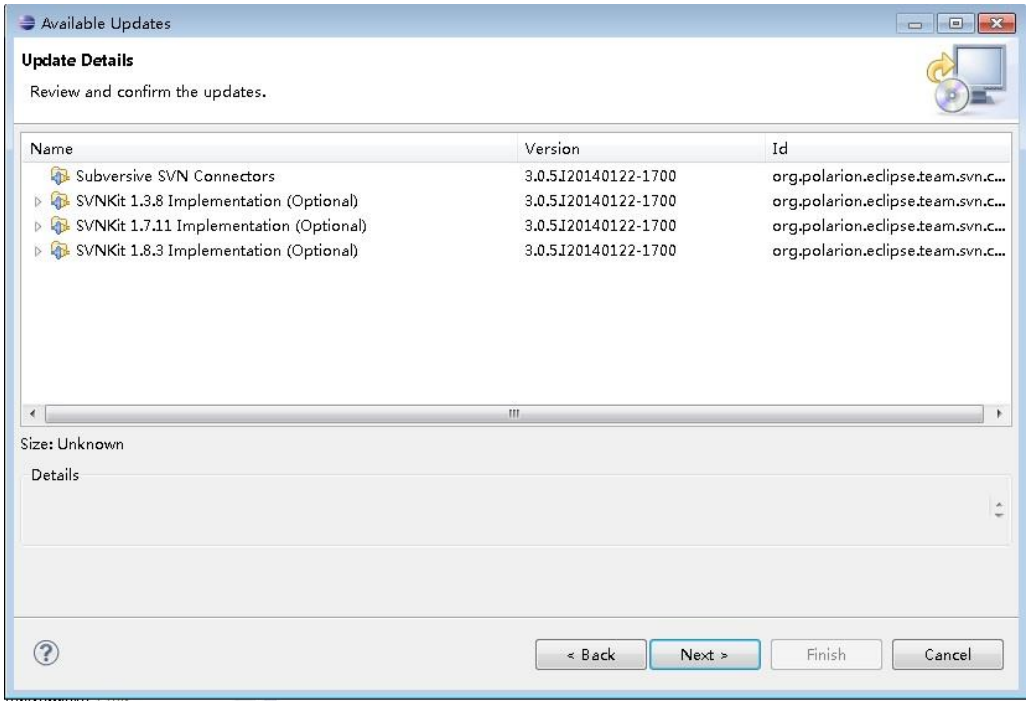
Figure 8-4 Available updates



Details about the selected updates are displayed.

Step 3 Click **Next**, as shown in Figure 8-5.

Figure 8-5 Update details



Step 4 Select **I accept the terms of the license agreement**, and click **Finish** to update the software, as shown in Figure 8-6.

Figure 8-6 Review Licenses

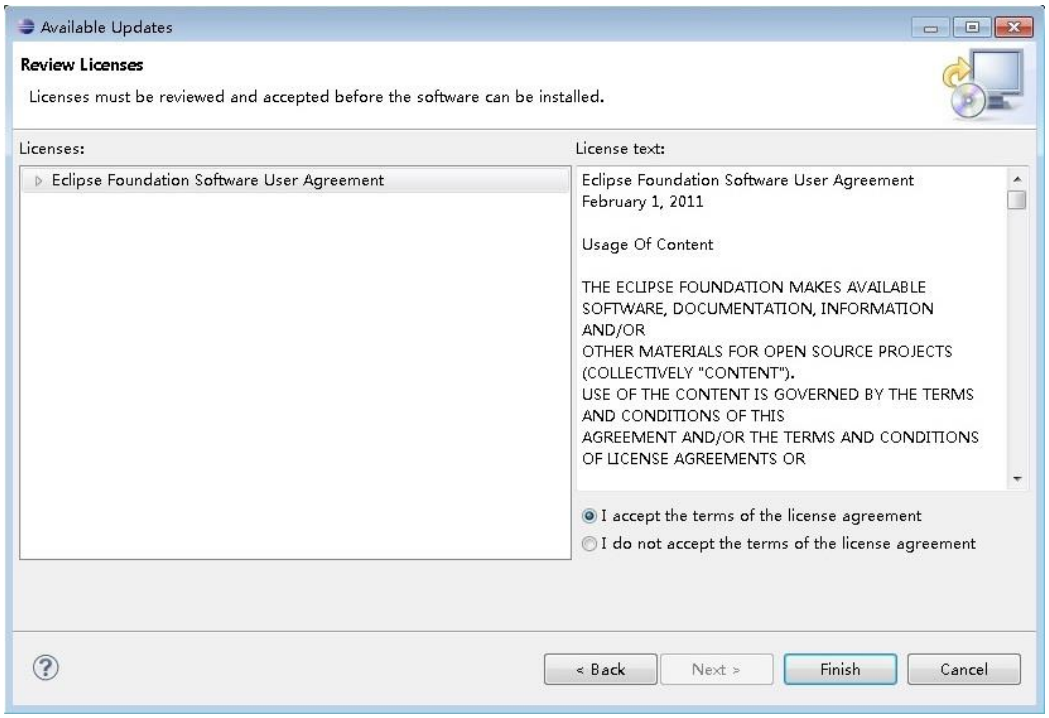
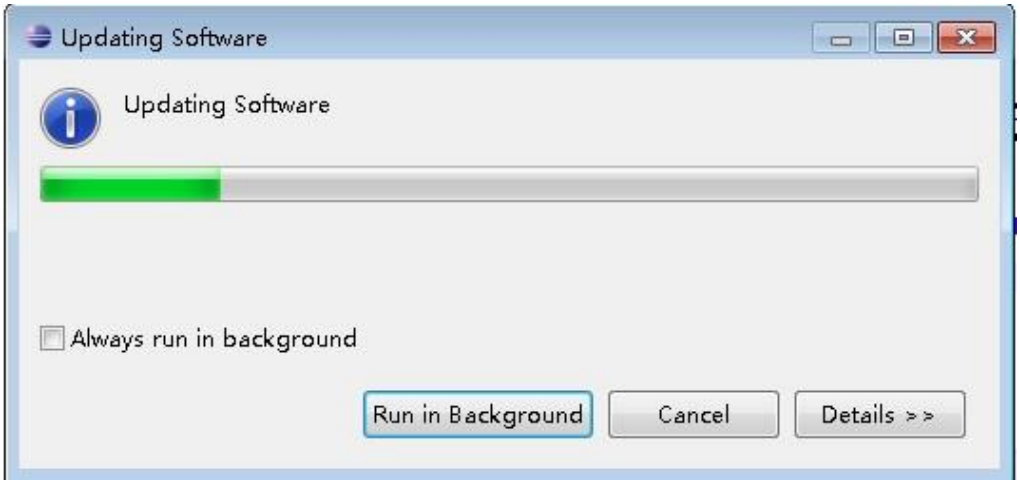


Figure 8-7 shows the update progress bar.

Figure 8-7 Updating



----End

9 FAQs

9.1 What Do I Do If the Platform Responds Slowly?

Problem Description

The platform responds slowly.

Solution

The platform is developed based on the Java language, therefore its operation mode is similar to the operation mode of general Java programs. The platform responds slowly because it requires larger memory space during operation execution (for example, to read a large number of registers or memory data to the platform). In this case, you need to reconfigure the memory for the platform.

Modify **HiTool_v1_0_9.ini** (the file name may vary according to the HiTool version) in the directory for storing the HiTool. Adjust the parameters in Table 9-1 based on the actual available physical memory of the PC:

Table 9-1 Parameter description

Parameter	Description	Default Configuration
-Xms512m	Initial heap memory allocated for the Java virtual machine (JVM)	1/64 of the physical memory
-Xmx512m	Maximum heap memory that can be allocated for the JVM (the JVM allocates the memory as required)	1/4 of the physical memory
-XX:PermSize	Initial non-heap memory allocated for the JVM	64 MB
-XX:MaxPermSize	Maximum non-heap memory that can be allocated for the JVM (the JVM allocates the memory as required)	256 MB
-XX:+UseParallelGC	The garbage collection (GC) runs	N/A

	concurrently with the JVM.	

CAUTION

- When the available default heap memory is less than 40%, the JVM heap memory is increased to the size specified by **-Xmx512m**.
- When the available default heap memory is greater than 70%, the JVM heap memory is decreased to the size specified by **-Xms512m**.
- **-Xmx512m** and **-Xms512m** are set to the same value in normal cases so that the heap memory does not need to be adjusted after each GC.
- **-XX:+UseParallelGC** can be enabled if a multi-core machine is used.
- If **-Xmx512m** or **-XX:MaxPermSize** is not specified or the specified value is small, the java.lang.OutOfMemeoryError error may occur. In this case, you need to reconfigure the parameters and restart the HiTool.

9.2 What Do I Do If an Exception Occurs When Starting the HiTool from the Start Menu?

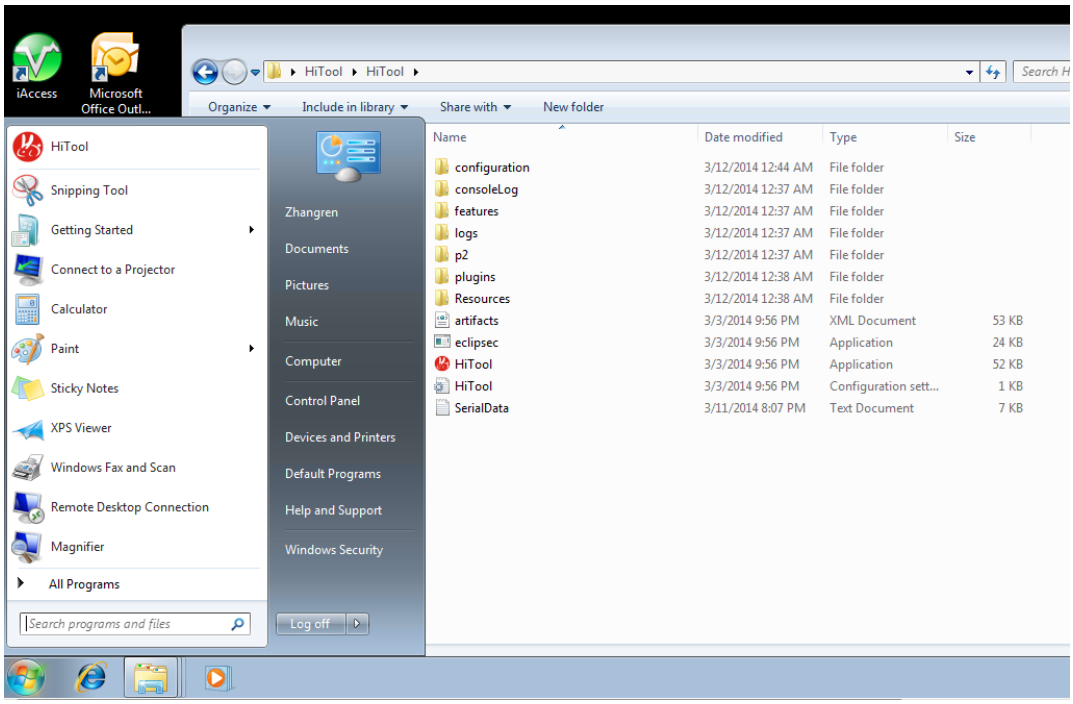
Problem Description

After the HiTool icon is dragged to the **Start** menu, an exception occurs when you start the program from the **Start** menu.

Solution

Create a shortcut of the program first, and then drag the shortcut to the **Start** menu, as shown in Figure 9-1.

Figure 9-1 Dragging the shortcut to the Start menu



9.3 How Do I Obtain the Current JRE Version Information?

Problem Description

How do I obtain the current JRE version information?

Solution

Run **java -version** in the console to check the version information.

9.4 How Do I Obtain Version Information of a Tool?

Problem Description

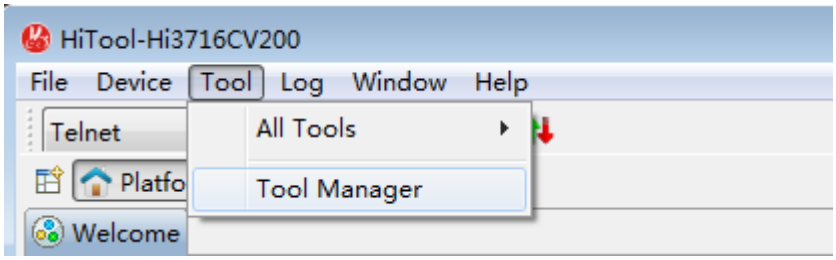
How do I obtain version information of a tool?

Solution

Do as follows:

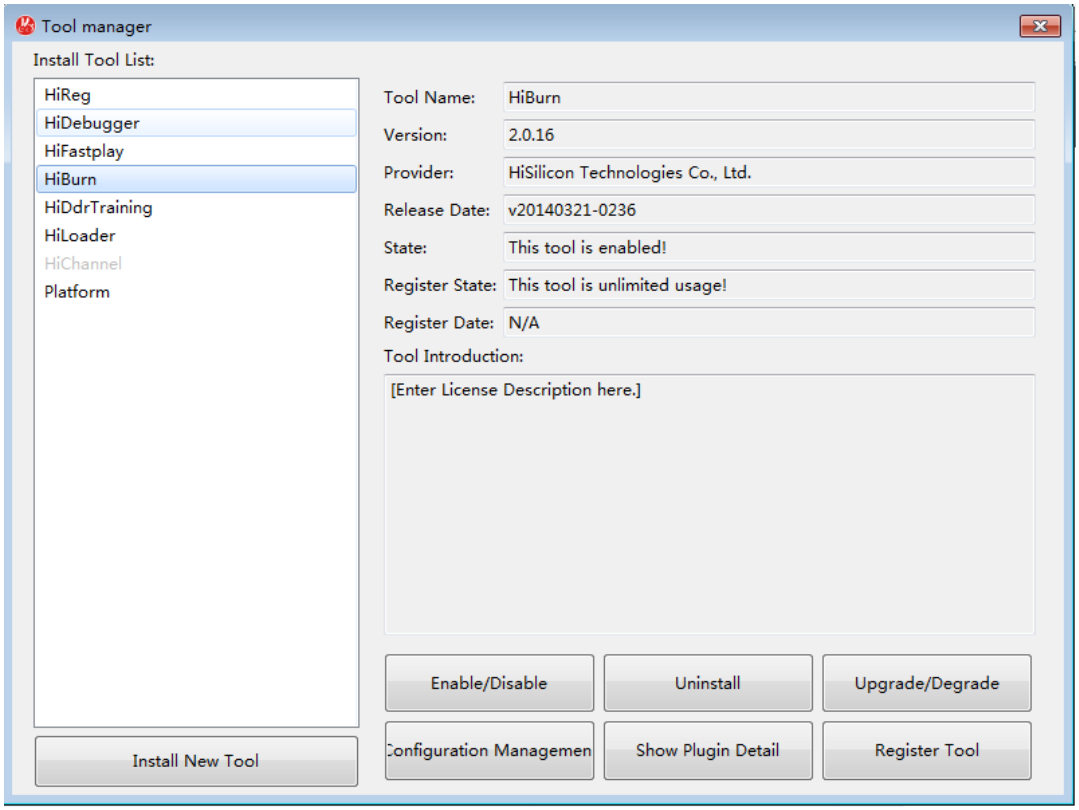
Step 1 Choose **Tool** > **Tool Manager**, as shown in Figure 9-2.

Figure 9-2 Tool manager



Step 2 Select the tool to be checked on the left. You can find the version information of the tool in the right pane, as shown in Figure 9-3.

Figure 9-3 Checking the tool version



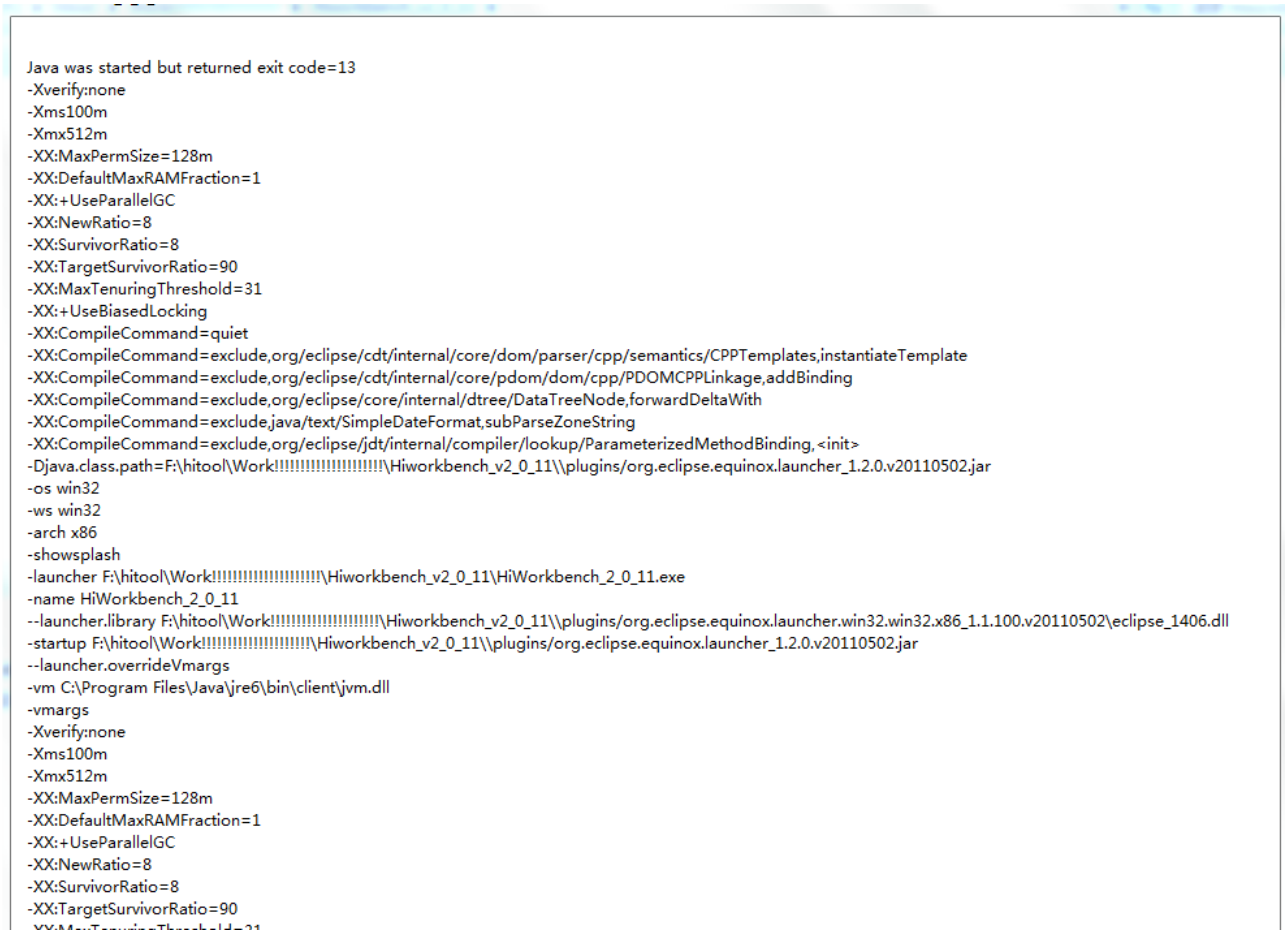
----End

9.5 What Do I Do If the HiTool Cannot Be Started When It Is Stored in a Directory Similar to F:\Work!!!!!!!!!!!!!!!!!!!!\?

Problem Description

When the HiTool is stored in a directory similar to **F:\Work!!!!!!!!!!!!!!!!!!!!**, error information shown in Figure 9-4 is displayed, and the HiTool cannot be started.

Figure 9-4 Error information



Analysis

The exclamation point (!) cannot be identified by the Eclipse on which the HiTool is dependent.

Solution

Do not store the HiTool in a path with special characters.

9.6 What Do I Do If Exceptions Occur When the Linux Version of the HiTool Is Used on the Ubuntu Operating System?

Problem Description

On the Ubuntu operating system, the Linux version of the HiTool may fail to be started or the serial ports and network port of the HiTool cannot be used.

Solution

- To start the HiTool correctly, do as follows:

  Assign the read and write permissions to the **HiTool** directory (**chmod 777 -R HiTool**) and enter the **HiTool** directory (**cd HiTool**). Enable the HiTool by using the administrator permission (**sudo ./HiTool**). In normal cases, the HiTool can be run.

- When the HiTool cannot be started, do as follows:

  Check whether the 32-bit Java development kit (JDK) 1.6 or later version is installed successfully on the current operating system and environment variables are configured (check by running the **java –version** command on the terminal). If the HiTool still cannot be started after the JDK is successfully installed, install the GTK library file corresponding to the current operating system for the HiTool depends on the GTK library file. The following commands are for reference only:

  ```
  sudo apt-get install libgtk-3-dev
  sudo apt-get install ia32-libs-gtk
  sudo apt-get install ia32-libs libglib2.0-dev
  sudo apt-get install gtk2-engines
  sudo apt-get install gtk2-engines-*
  sudo apt-get install libgtkmm-2.4-1c2
  sudo apt-get install libcanberra-gtk-module
  sudo apt-get install gtk2-engines:i386
  sudo apt-get install gtk2-engines-*:i386
  sudo apt-get install libgtkmm-2.4-1c2:i386
  sudo apt-get install libcanberra-gtk-module:i386
  sudo apt-get update
  sudo apt-get install libgtk2.0-0
  sudo apt-get install libgtk2.0-0:i386(64 bits)
  sudo apt-get install libxtst6
  sudo apt-get install libxtst6:i386(64 bits)
  ```

- When the serial ports in the HiBurn tool cannot be obtained correctly:

  Run **sudo ./HiTool** to enable the tool.

- When the TFTP network port in the HiBurn tool cannot be downloaded correctly:

  Run **sudo ./HiTool** to enable the tool. If the network port still cannot be downloaded correctly, check the network environment.

A Acronyms and Abbreviations

A	
API	application programming interface
J	
JRE	Java runtime environment
JDK	Java development kit