# **Htek Phone Provision Tool**

# **Quick Guide**

Version 1.3 beta 20180913

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## **Brief Intro**

Htek Provision Tool (HPT) is a software used on windows os to manage HTEK phones. It is well designed to make provision Htek phones conveniently and easily by providing many useful functions, such as configuration file (cfg file) visual edit, cfg files batching, online devices discovery, manual provision, PNP, cfg file server, firmware server, etc. It is a complete tool to provision Htek phone in the same network segment in the LAN.

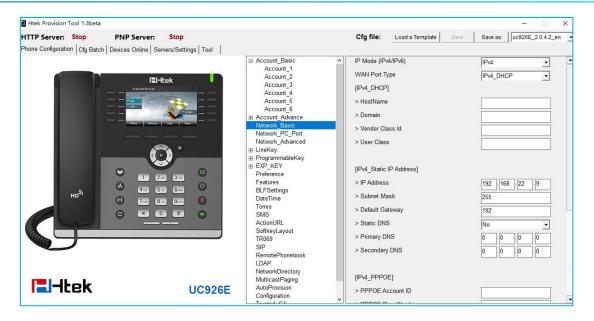
## **Operating Environment**

System	Windows 7 and later versions
Display	Minimum: 1280 X 800 pixels
Network	The computer running the software needs to be in the same network
	segment of the same area as the phone to be provisioned

## **Pages Introduction**

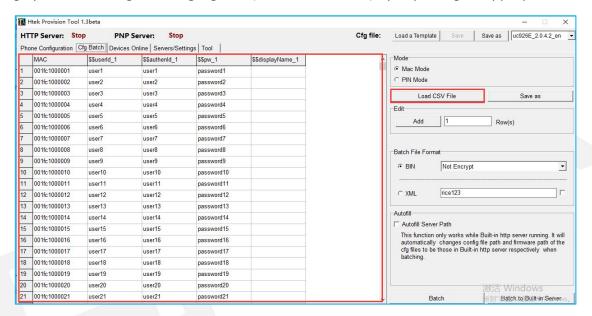
## 1. Visual edit (Phone Configuration page)

The configuration of the phone can be specifically edited in this page. Most of the configurable items can be found in this page.



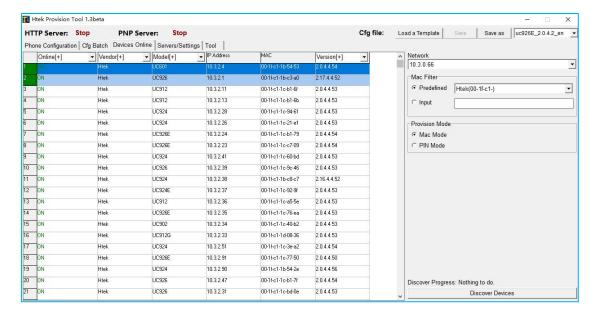
#### 2. Configuration files batching (Cfg Batch page)

On this page you can batch generating cfg files (bin or xml format) by importing an appropriate CSV file.



#### 3. Device discovery and manual provision (Devices Online page)

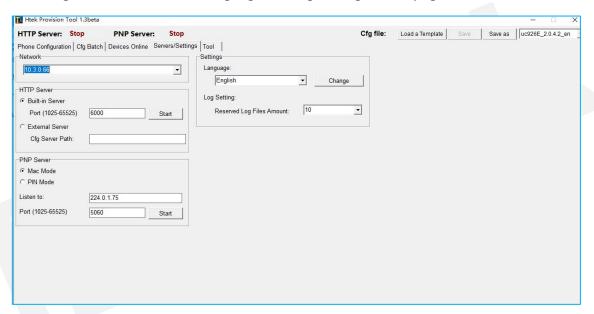
HPT will list all the online Htek Phones in the same network segment after scanning on this page. By right click, you can provision more than one phones at same time.



#### 4. HTTP and PNP servers (Servers/Setting page)

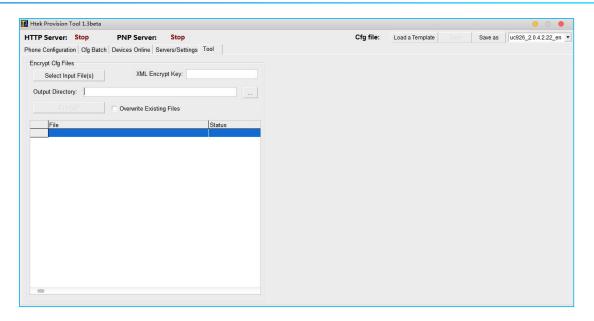
On this page, you can turn on an HTTP server and use it as a configuration file server and/or firmware server. Also you can turn on the PNP server to automatically provision phones.

You can also change HPT user interface language and log setting on this page.



## 5. Tool page

HPT provides an encrypt tool to encrypt readable cfg file of both BIN and XML format.



## **Quick Use**

**NOTE:** All operations shown below are proceed in "Mac Mode". "Pin Mode" is not supported right now.

#### Step 1. Open servers

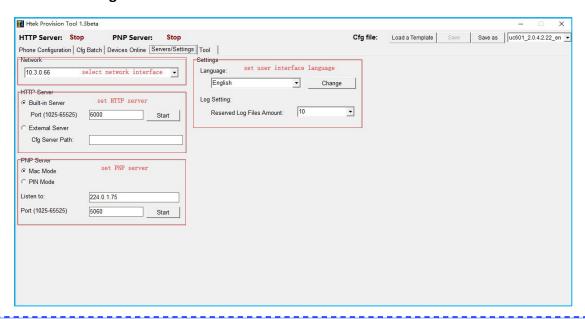
In general, to fully use all of the capabilities of this tool, you need to configure and start relevant servers first (Skip this step only when you just want to edit cfg files ).

- Switch pages to "Servers".
- Select the right network interface, which can be accessed by other devices on the same network segment.

**NOTE**: For HTTP servers, you can choose build-in or external one.PNP server cannot be turned on until you selected the external HTTP server or started built-in HTTP server.

- To start build-in HTTP server, you need to fill in the port edit area with appropriate port, and then click "Start" to run. If the port is not available, it needs to be modified.
- While choosing external Server, you need to fill in a configuration file server address (Cfg Server Path), such as "http://192.168.0.150:80/cfg" (without "/" at the end). Make sure that this path is accessible.

Start PNP server. For the Htek phones, fill "Listen to" box with "224.0.1.75" and fill "Port" box with "5060". Do Not Change These Two Parameters If You Do Not Know What These Mean.



NOTE: Step 2 ~Step 5 can be skipped if cfg files already generated.

#### **Step 2. Select Device**

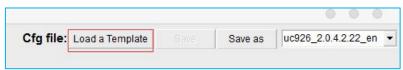
Click the drop-down box to select the device for visual editing.



#### Step 3. Load the configuration file template

By default, the software automatically selects the default cfg file of the current device (Default cfg file of a device is in the device directory, named as "\$devCfg.bin").

You can also click "Load a Template" button to load a bin/xml format cfg file as template. After loading, loaded cfg file will automatically rewrite the information in the Phone Configuration page.



After edit the contents of the Phone Configuration page, the "Save" button will be available. By clicking

"Save" button, loaded cfg file will be modified. By clicking "Save as" button, you can save the current modification as another file without modifying the loaded file. Or just let them alone.



#### Step 4. Visual edit

Switch to "Phone Configuration" page.

This page is divided to 3 areas. Left area shows the phone image, keys that can be set can be clicked.

Middle area is the outline of all the configurable items. Right area shows details where you edit the exact configuration here.



In the process of editing, the software will automatically remember changes, so you can switch directly among the outline items. All the changes are kept temporally. You can click "Save" or "Save as" button to save these changes. Or let them alone.

## Step 5. Bulk generate configuration files

Switch pages to "Cfg Batch" page.

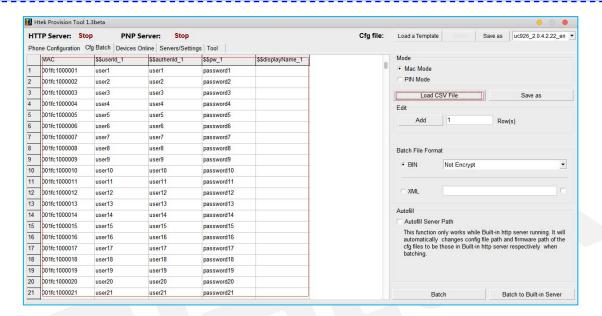
HPT can batch generate cfg files in a **Keyword-replace** manner.

In MAC mode, the first column must be "MAC" column, where only MAC addresses allowed in the form like "001fc1aabbcc" (lowercase).

"Keyword-replace" means to replace the item content (P value) by the exact keyword. To do this, the item to be replaced need to set its content (P value) to a unique string, such as "\$\$userId\_1". If the CSV file contained a column whose head is just "\$\$userId\_1", then all cfg files generated will substitute "\$\$userId\_1" with the string in the cell of the column (specific row is determined by the MAC column).

- Prepare a CSV file (Sample path: \samples\MacModeSample.csv. Two rows at least needed. ).
- Make sure you have fill the right items with the right keywords in step 4.
- Click "Load CSV File" to load CSV file. All the content will be shown on the table.

**NOTE**: For many CSV editor, opened file is exclusively occupied. You need to close this file first, then load it with HPT.



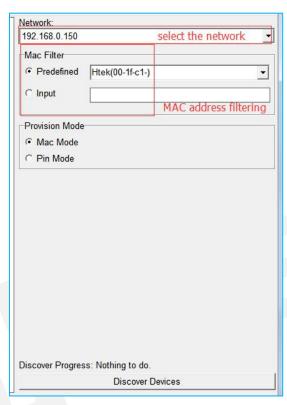
- Modified csv file if need. You can add rows, edit content or save this table as another file.
- Choose batching file format: BIN or XML.
- Choose to encrypt the generate files or not. For XML format, encrypt key is needed.
- If built-in HTTP server started, you can check "Autofill Server Path" to autofill the cfg server path and firmware server path.
- Click "Batch" to generate cfg files and save them in the desired directory, or click "Batch to Buit-in Server" to generate and store them in the built-in HTTP server file directory (\server\htdocs\cfg and \server\htdocs\fw).

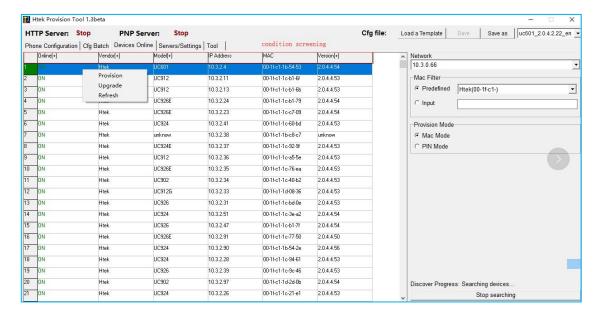
## Step 6. Search and provision online devices

Switch pages to "Devices Online".

On this page, you can search for devices on the same network segment within the LAN and provision them.

- Select the right network interface, which can be accessed by other devices on the same network segment.
- Select a Mac address filter or input one (Input filter format: 00-1f, 00-1f -, 00-1f c, 00-1f c1-11-22 , etc.).
- Click "Discover Devices" to start search. When the desired content has been found, click this button to end search, or wait for it to end on its own.





The results of the search are presented as shown in the table above. The head can be used for the screening of device model and version number.

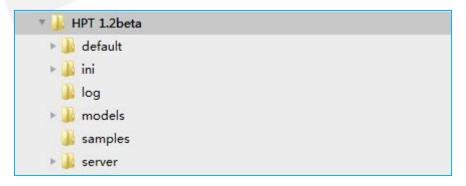
Click the most left num column, you can select a device, or you can select multiple devices by hold pressing left mouse key and dragging. Click the top left corner of the form to select all the devices of the current table. Left-click on the selected device, which will cancel the selection.

Right click, quick menu will pop up. There are three commands:

- "Provision": This command ask phones to fetch cfg file from the HTTP server where you defined on Page "Servers".
- "Upgrade": Same as "Provision" on current HPT version.
- "Refresh": Check if the phones selected are still online.

All the selected phones will execute the command.

## **Files Hierarchy**



The files hierarchy of the software is shown in the figure (only the folder type is displayed).

The root directory of the software folder has "default", "ini", "log", "models", "samples" and "server".

The "log" folder shows once you run this app. It stores log files.

The "default" folder contains the "\$json" folder and the "\$cfg.bin" file. When the "models" folder is empty, the software reads the files in that folder. Do not delete.

There is currently "\$default.ini" configuration file in the "ini" folder, which holds the default configuration of the software. After the software is turned off for the first time, the "setting.ini" file will be generated in this folder. If the user does not modify the configuration, the file will be consistent with the "\$default.ini" file, otherwise changes will be stored in this file. The "\$default.ini" file cannot be deleted. Deleting "setting.ini" will restore the software to the default configuration.

The "models" folder contains information about different devices. By adding and subtracting and updating this folder, you can add or subtract or update device information. You can't rename the folder at will, which will cause the image to be invalid.

The samples folder currently has a CSV template for batch generation configuration files. This folder is not required.

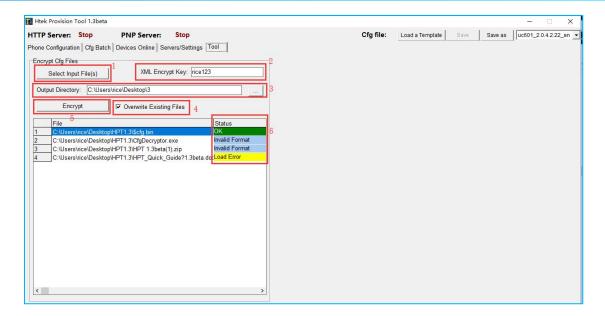
The "server" folder contains the "htdocs" folder, which contains the "cfg" (for cfg files store) and "fw"(for firmware files store) folders. Built-in HTTP server need these folders.

## Tool

#### **Encrypt tool:**

Encrypt tool is used to encrypt readable cfg files of BIN or XML format. With this tool, you can easily encrypt cfg files those generated with HPT or other tools. Steps to use listed as below:

- > Select readable cfg files. You can select multiple files of BIN or XML format at once.
- Input XML encrypt key if you want to encrypt XML files.
- Input or select the target output directory to put encrypted files in.
- Check "Overwrite Existing Files" to overwrite existing files in output directory if needed.
- Click "Encrypt" button to encrypt.



## Q&A

1. Why cannot PNP server be started?

Usually this is because of port occupied. For example, 3CX server exclusively occupies port 5060. You should not use HPT on this PC, or shut down 3CX services.

- Provision command make phone reboot, but why doesn't phone configuration change?
   This can be caused by many reasons. 1. Check if the cfg file name is right (Just like "cfg001fc1112233").
- 2. Check if the cfg server path is right. 3. Check if there is any router in the LAN has DHCP OPTION-66 defined. 4. Check if there is any other PNP server in the LAN.
- 3. Why the table is empty when I load a CSV file?

  For many CSV editor, opened file is exclusively occupied. You need to close this file first, than load it with HPT.
- 4. Why doesn't Provision command work on 926E in WIFI environment?

  Sorry, current version of HPT doesn't work well when phones in WIFI environment. We are working on this issue.

## **Upgrade Note**

2018-09-13: 1.3beta

1. Support loading and generating XML formattg file.

- 2. Add cfg file encrypt tool to encrypt BIN and XML format file.
- 3. Fix the bug that sometimes generated cfg file is not complete.

#### 2018-01-17: 1.2beta

- 1. Fix the bug that provisioning phones with built-in HTTP server failed;
- 2. Fix the bug that "Discover Devices" failed to reset;
- 3. Add log mechanism;
- 4. Other fixes and changes.

#### 2017-09-26: 1.1beta

- 1. Support multi-language user interface;
- 2. Improve stability of built-in HTTP server.

2017-09-07: 1.0beta HPT first release.

