

Huawei HiLens

Best Practices

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1 Overview

This document includes a number of best practices in terms of how you could use HUAWEI HiLens to develop and deploy AI capabilities onto end-user devices like smart cameras.

- **Developing a Face Detection Skill:** This chapter describes how to use the model import and skill development functions of Huawei HiLens to create a new face detection skill based on the Caffe model.
- **Developing a Safety Helmet Detection Skill (with an External IPC):** This chapter describes how to connect an external Internet protocol camera (IPC) to a HiLens Kit device, run the safety helmet detection skill on the HiLens Kit device, and use the POST method to output the results.
- **Distributing a Skill to a Product (Manufacturers):** This chapter describes how to manage devices, subscribe to skills, and distribute licenses to devices through the Huawei HiLens management console, enabling cameras with HiSilicon Hi35xx series chips with AI capabilities.

2 Developing a Face Detection Skill

Huawei HiLens allows developers to import (convert) models and develop skills. You can develop models, import them to Huawei HiLens, compile logic code based on service requirements, and create skills based on your custom algorithm models and logic code.

This chapter provides an example face detection skill to describe the overall process of creating a skill from importing a model to viewing the skill effect, helping you quickly get familiar with skill creation on Huawei HiLens.

Before you start, make the preparations described in [Preparations](#). To develop a skill, perform the following steps:

- [Step 1: Prepare Data](#)
- [Step 2: Import \(Convert\) the Model](#)
- [Step 3: Create the Skill](#)
- [Step 4: \(Optional\) Release the Skill](#)
- [Step 5: Install the Skill](#)
- [Step 6: Start the Skill](#)

Preparations

- Make sure your HUAWEI CLOUD account is not in arrears or frozen.
- Purchase a HiLens Kit device and prepare the network cable, computer, router, HDMI cable, and display.
- Register the HiLens Kit device with the Huawei HiLens management console. For details, see [Registering HiLens Kit Devices](#) in the *Huawei HiLens User Guide*.
- Create a bucket and folders in OBS for storing the sample model data. The OBS bucket is named **hilens-test1**, and the folders are **face-detection** and **face-detection-output**.

For details about how to create an OBS bucket and folder, see [Creating a Bucket](#) and [Creating a Folder](#). For successful model data access, ensure that the created OBS bucket and Huawei HiLens are in the same region.

Operations that occupy OBS resources are billed. For details about the billing rules, see [OBS Pricing Details](#).

Step 1: Prepare Data

Huawei HiLens provides a sample model named **face_detection_model** in the public OBS bucket. This chapter uses this model to develop a skill. Perform the following operations to upload the model file to the OBS directory **hilens-test1/face-detection** created in preparations.

- Step 1** Download the sample model **face_detection_model** to the local host. Verify the signature in the directory where the file is stored (Git is recommended for Windows). After the verification is successful, **OK** is returned. Run the following command:

```
echo ec5160c48f5ba6025dac696d7ff8b827f1902f6aa712b6969609cb5f290d149a face_detection_model.zip | sha256sum -c
```

- Step 2** Decompress the **face_detection_model** package. For example, decompress the package to the **face_detection_model** folder on the local PC. The folder contains two subfolders: **caffemodel+transfer** and **logic_code**.
- Step 3** Upload the three files in the **caffemodel+transfer** folder to the **hilens-test1/face-detection** OBS directory. For details, see [Uploading a File](#). The three files are Caffe model files **.caffemodel** and **.prototxt**, and configuration file **.cfg**.

----End

Step 2: Import (Convert) the Model

The imported models can be in **.om**, **.pb**, or **.caffemodel** format. Only models in **.om** format can run on HiLens Kit devices. Models in **.pb** or **.caffemodel** format can be automatically converted into the **.om** format by Huawei HiLens.

- Step 1** Log in to the Huawei HiLens management console. In the navigation pane, choose **Skill Development > Models**. The **Models** page is displayed.
- Step 2** On the **Models** page, click **Import (Convert) Model** in the upper right corner.
- Step 3** On the **Import Model** page, set parameters according to [Table 2-1](#). After confirming the information, click **OK**.

Figure 2-1 Importing a model

* Name

* Version

* Description

* Model Source Import From OBS Import From ModelArts

Model Address

* Type

TF-FrozenGraph-To-Ascend-HiLens 2.2.200.011 Studio C308902	TF-SavedModel-To-Ascend-HiLens 2.2.200.011 Studio C308902	Caffe to Ascend 2.2.0.031 C308893
TF-FrozenGraph-To-Ascend 2.2.0.031 C308893	TF-SavedModel-To-Ascend 2.2.0.031 C308893	

Import From

* Export To

> Advanced Options

Table 2-1 Parameters for importing a model



Parameter	Recommended Configuration
Name	Enter face-detection-demo .
Version	Enter 1.0.0 .
Description	Enter the description of the model to be imported.
Model Source	Click Import From OBS . In the Model Address area, click  . Go to the /hilens-test1/face-detection/ directory where the model is uploaded, select the face_detection.caffemodel file, and click OK . See Figure 2-2 for more information.
Type	Select Caffe to Ascend .
Import From	After you select a model source, the path is automatically entered.
Export To	Click  and select the /hilens-test1/face-detection-output/ directory.
Advanced Options	Set the input tensor shape and output node. In this example, retain the default values.

Figure 2-2 Model source
OBS Address

If no bucket or folder is available, click [here](#) to create one.

OBS > hilens-test1 > **face-detection**

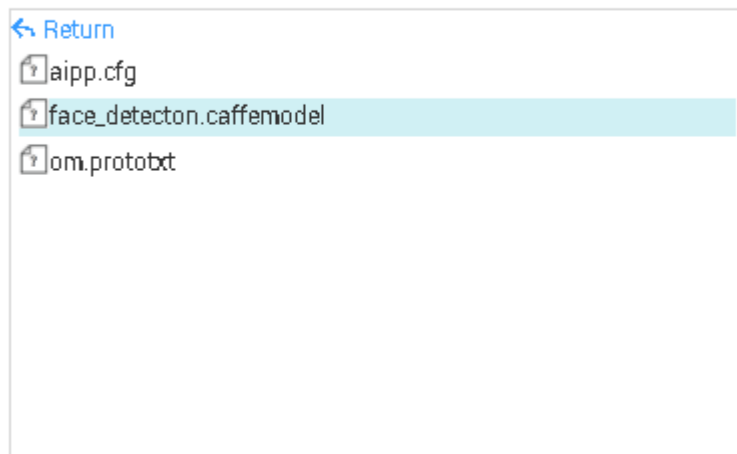


Figure 2-3 Importing a model

After the model is imported, the **Models** page is displayed. You can view the model import (conversion) status in the list, including **Converting**, **Conversion failed**, **Conversion succeeded**, **Import failed**, and **Import succeeded**. When the status changes to **Import succeeded**, you can create skills on the Huawei HiLens management console.

----End

Step 3: Create the Skill

- Step 1** In the navigation pane of the Huawei HiLens management console, choose **Skill Development > Skills**.
- Step 2** On the **Basic Skills** tab, click **Create Skill** in the upper right corner. The **Create Skill** page is displayed.
- Step 3** On the **Create Skill** page, set **Template** to **Create from scratch**, and enter the basic information and skill content. In this example, you can skip **(Optional) Runtime Configurations**, **(Optional) Hard Example Upload Settings**, and **(Optional) Elastic Skill Parameters**.

Basic Information

Enter the basic information by referring to [Table 2-2](#), as shown in [Figure 2-4](#).

Table 2-2 Basic information

Parameter	Recommended Configuration
Template	Select Create from scratch .
Name	Enter Face_Detection .
Version	Enter 1.0.0 .
Chip	Retain the default value Ascend 310 .

Parameter	Recommended Configuration
Verification Value	Set this parameter to test (the value of the init function parameter in the main.py file under the face_detection_model > logic_code folder downloaded in Step 1: Prepare Data). The verification value must be the same as the value of the init function parameter.
Application Scenario	Select Others and enter Face Detection in the text box.
Icon	Upload a skill icon.
OS Platform	Select Linux .
Description	Enter the description of the skill.

Figure 2-4 Basic information

Basic Information

Skill Templates Create from Scratch | Select Template

* Name

* Skill Version

* Chip

* Skill Code Value

* Application Scenario

Icon

* OS Platform Linux Android iOS LiteOS Windows

Description

B I H | 🗑️ 📄 📑 🔗 🖼️ 👁️ 🗑️ ✖️

Skill Content

Based on your model and logic code, fill in the skill content by referring to [Table 2-3](#), as shown in [Figure 2-5](#).

Table 2-3 Skill content parameters


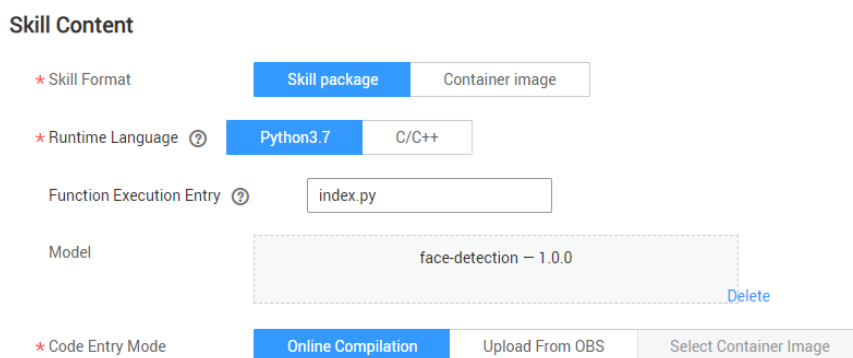
Parameter	Recommended Configuration
Skill Format	Select Skill package .
Runtime Language	Select Python3.7 .
Code Execution Entry	The default value is index.py . In this example, the code file name is main.py . Therefore, enter main.py .
Model	Click the plus sign (+). In the dialog box that is displayed, select the imported model face-detection-demo .
Code Entry Mode	<ol style="list-style-type: none"> Select Compile online and edit the code in the code editing box. Click  and change the name of the default file index.py to main.py. Then, copy the code in the face_detection_model > logic_code > main.py file downloaded in Step 1: Prepare Data and paste it to the editing box of the main.py file. Choose File > Create Peer File, enter the file name postprocess.py, and click OK. Copy the code in the face_detection_model>logic_code>postprocess.py file downloaded in Step 1: Prepare Data and paste it to the editing box of the postprocess.py file.

Figure 2-5 Skill content



Step 4 After entering the basic information and skill content, view the parameter values on the right of the page. If a parameter is incorrectly set, a red cross is displayed on the right.

Confirm the information and click **OK**. The skill is successfully created.

Figure 2-6 Confirming the information and creating a skill

Basic Information ⓘ

Skill Templa...	Create from S...
* Name	Face_Detecti...
* Skill Version	1.0.0
* Chip	Ascend310
* Skill Code V...	test
* Application ...	Others-Face_...
Icon	
* OS Platform	Linux
Description	

Skill Content ⓘ

* Skill Format	file
* Runtime La...	Python3.7
Function Ex...	index.py
Model	[{"model_vers...
Code Entry ...	Online Compil...

(Optional) Runtime Configuration ⓘ



----End

After the skill is created, you can choose **Skill Development > Skill Management** to release the skill (in the **Not Released** state) to the skill market. You can also deploy the skill on devices and view the skill usage effect.

After the skill is released, its status becomes **Reviewing**. Huawei HiLens personnel will complete the review within three working days. After passing the review, the skill is in the **Approved and released** state.

Step 4: (Optional) Release the Skill

- Step 1** Log in to the Huawei HiLens console, choose **Skill Development > Skills** in the left navigation pane. The **Skills** page is displayed.
- Step 2** Select the skill to be released and click **Release** in the **Operation** column.
- Step 3** In the displayed **Release Skill** dialog box, set the release information based on [Table 2-4](#), and click **OK**.

Table 2-4 Parameters for releasing skills

Parameter	Description
Publish	Service to which the skill is to be released. Select HiLens Skill Market in this example.
Billing Policy	Billing policy for releasing the skill to the skill market. The value can be Free or Charged .
Billed By	Billing mode after the skill is released. <ul style="list-style-type: none">• If you select the Free billing policy, only One-off can be selected.• If you select the Charged billing policy, Yearly/Monthly and One-off can be selected.
Measurement Unit	Specifications that can be used on the device. The value can be Number of channels or QPS . If you select Number of channels , one license can be installed on a device to use one channel of video.
Specification Limitation	Maximum number of video channels that the skill can process on a device or the maximum number of concurrent video channels.
Privacy Policy	User privacy policies involved in this skill.

After the release application is submitted, it will be sent to the Huawei HiLens background for review. The review will be completed within three working days.

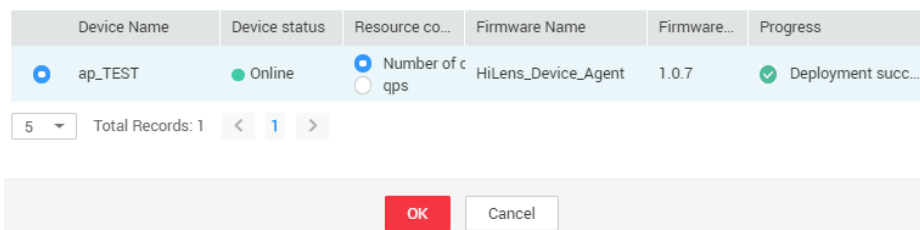
----End

Step 5: Install the Skill

- Step 1** Choose **Skill Development > Skills**, select the developed skill, and click **Install** in the **Operation** column.
- Step 2** Select a registered online device and click **Install**. After the installation is successful, click **OK**. See [Figure 2-7](#).

During the installation, the Huawei HiLens console will deliver the skill package to the device. It takes some time to deliver the skill package. You can view the skill installation progress in the progress bar. After the delivery is complete, the progress bar displays **Installation succeeded**. See [Figure 2-7](#).

Figure 2-7 Successful installation



After the installation is successful, you can start the skill to view the skill output data.

----End

Step 6: Start the Skill

- Step 1** Use an HDMI video cable to connect the HiLens Kit video output port to the display.
- Step 2** In the navigation pane, choose **Device Management > Devices**. The **Devices** page is displayed.
- Step 3** Click the registered device. The **Skill Management** tab page is displayed. The status of the installed face detection skill is **Stopped**. Click **Start** in the **Operation** column and click **OK** to start the skill on the device.

The skill status changes to **Running** after a short period of time, indicating that the skill is successfully running on the device.

[Table 2-5](#) lists the statuses of installed skills.

Figure 2-8 Viewing skill status

Skill Name (english)	Skill Name (chinese)	Version	Status	Supported Channels	License Validity Period	Installation Time	Operation
		1.0.2	Running	8	30Day	2020-03-13 18:26:17	Start Stop Uninstall More

Table 2-5 Skill installation statuses

Status	Description
Stopped	The skill stops running on the device.
Running	The skill is successfully installed on the device and is running.

When the skill is in the **Running** status, you can view the video data output by the skill on the display.

Figure 2-9 Skill effect



----End

3 Developing a Safety Helmet Detection Skill (with an External IPC)

A HiLens Kit device has a built-in camera. It can also connect to external Internet protocol cameras (IPCs) with a resolution of 1080p or lower.

This chapter uses the safety helmet detection skill template on the Huawei HiLens console as an example to describe how to connect an IPC to a HiLens Kit device, run the safety helmet detection skill on the HiLens Kit device, and use the POST method to output the results.

Before you start, make the preparations described in [Preparations](#). To develop a skill, perform the following steps:

- [Step 1: Connect an External IPC](#)
- [Step 2: Create a Skill](#)
- [Step 3: Install the Skill](#)
- [Step 4: Configure Cameras](#)
- [Step 5: View the Skill Output Data](#)

Preparations

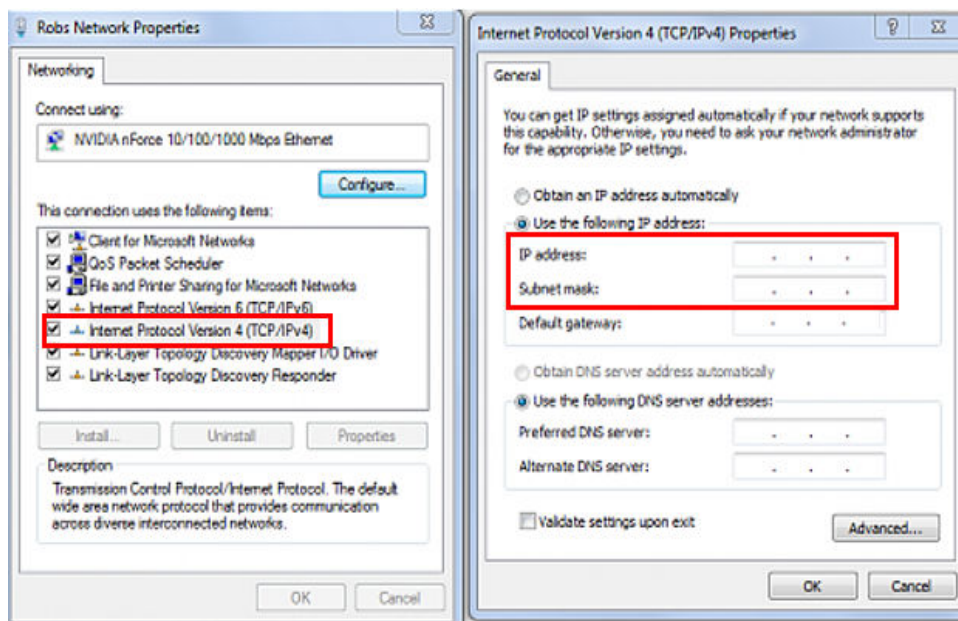
- Make sure your HUAWEI CLOUD account is not in arrears or frozen.
- Purchase a HiLens Kit device and prepare the network cable, computer (PC), router, HDMI cable, and display.
- Register the HiLens Kit device with the Huawei HiLens console. For details, see [Registering HiLens Kit Devices](#) in the *Huawei HiLens User Guide*.
- Ensure that Python has been installed on the local PC.

Step 1: Connect an External IPC

Ensure that the IPC, local PC, and HiLens Kit device are in the same network segment. That is, the network segment configured for the IPC is the network segment where the HiLens Kit device is located in the networking. For details about the networking configuration, see [User Guide > Wireless Network Configuration](#) and [User Guide > Wired Network Configuration](#).

- Step 1** Use a network cable to connect the IPC to the PC, and connect the PC to a wireless network.
- Step 2** Change the IP address of your PC so that it is in the same network segment as that of the IPC.
1. Choose **Network and Sharing Center > Change adapter settings** on the PC.
 2. In the **Network Connections** window, right-click the Ethernet connection and choose **Properties**.
 3. Double-click **Internet Protocol Version 4** and select **Use the following IP address**. Then, enter an IP address that is in the **same network segment** as the IPC and click the **Subnet mask** text box to automatically generate a subnet mask. Click **OK**.

Figure 3-1 Changing the IP address of an IPC



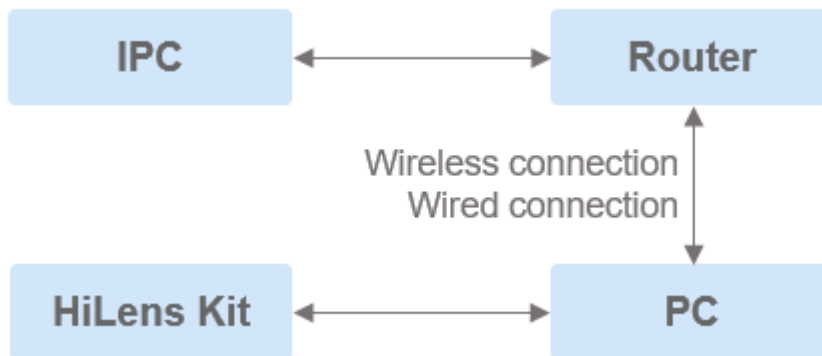
For example, if the default IP address of the IPC is **192.168.1.1** and the default gateway is **255.255.255.0**, the IP address in the same network segment as that of the IPC is **192.168.1.X**, where *X* is an integer from 2 to 255 except 111. In this case, you can change the local IP address of the PC to **192.168.1.55**.

- Step 3** Open the **cmd** window and enter the **ipconfig** command to check the IPv4 address, subnet mask, and default gateway of the wireless network connected to the PC. The IPv4 address is the network segment of the router connected to the PC.
- Step 4** Open the browser, enter the IP address of the IPC, and change the IP address to be in the same network segment as the router.

For example, assume that the IP address of the IPC is **192.168.1.1**, and the IPv4 address of the wireless network connected to the PC queried in the previous step is **192.168.137.101**. Enter **192.168.1.1** in the address box of the browser and change the IP address of the IPC to **192.168.137.7** in the basic settings page so that it is in the same network segment **192.168.137.X** as the IP address of the wireless network connected to the PC.

- Step 5** Disconnect the network cable between the IPC and the PC in **step 1**, use network cables to connect the IPC to the router and the HiLens Kit device to the PC, as shown in **Figure 3-2**.

Figure 3-2 Connection with an external IPC



----End

Step 2: Create a Skill

- Step 1** Log in to the Huawei HiLens console (basic edition), and choose **Skill Development > Skills**.
- Step 2** On the **Basic Skills** tab, click **Create Skill** in the upper right corner. The **Create Skill** page is displayed.
- Step 3** Click **Select Template** for **Skill Templates**. The **Select Skill Template** dialog box is displayed.
- Step 4** Select the **Safety Helmet Detection** template and click **OK**.
- The area for editing the skill content on the **Create Skill** page is displayed. The default configuration of the selected template is automatically loaded. You can view the related information on the right pane of the page.
- Step 5** Specify **Name**, **Skill Version**, and **Application Scenario** based on User Guide > Create a Skill.
- Step 6** Confirm the information, and click **OK**.

----End

Step 3: Install the Skill

- Step 1** Log in to the Huawei HiLens console, choose **Skill Development > Skills** in the left navigation pane. The **Skills** page is displayed.
- Step 2** Select the skill created in **Create a Skill** and click **Install** in the **Operation** column.
- Step 3** In the dialog box that is displayed, select the device to which the skill is to be installed and click **Install**.

When the progress bar displays a message indicating that the installation is successful, the skill is successfully installed on the HiLens Kit device.

----End

Step 4: Configure Cameras

Step 1 In the navigation pane, choose **Device Management > HiLens Kit** and select the card of the device where the skill is installed.

The device details page is displayed.

Step 2 On the device details page, click **Camera Management**.

The **Camera Management** tab page is displayed.

Step 3 Click **Add Camera** and enter information about the external IPC according to [Table 3-1](#).

Table 3-1 Camera configurations

Parameter	Description
Name	Name of a camera, which is used for identification. This parameter is user-defined.
User Name	Username for logging in to the IPC. You can obtain it from the camera's user manual.
Password	Password for logging in to the IPC.
Protocol	Protocol used by the camera to transmit videos. The default value is rtsp and cannot be changed.
Path	URL for accessing videos shot by the camera, for example, 192.168.0.1/root . Obtain the value from the camera's user manual (set it to the path provided by the IPC vendor).

Step 4 After entering and confirming the information, click **OK** to add the camera and deliver the configurations to the device. A row of camera information exists on the **Camera Management** page.

Step 5 On the device details page, click **Manage Skill** to switch to the **Manage Skill** tab page.

Step 6 Select the skill created in [Create a Skill](#) and click **Runtime Configuration** in the **Operation** column.

Step 7 Set runtime configuration parameters according to [Table 3-2](#), and click **Execute Configuration**.

Table 3-2 Runtime configuration parameters

Parameter	Description
server_url	Server IP address used to receive the POST data. You can run the config command in the cmd command-line interface (CLI) to query the address, which is IPv4 address + port of the wireless network connected to the PC in Step 1: Connect an External IPC . For example, if the IPv4 address of the PC wireless network is 192.168.137.101 , enter http://192.168.137.101:8080 here.
IPC_address	Address of the IPC. In this example, enter the Name of the added camera. For details, see Table 3-1 .

----End

Step 5: View the Skill Output Data

If Python is not installed on the local PC, install Python on the local PC.

1. Enter **cmd** to open the CLI and run the **pip install flask** command to install the flask library of Python on the local PC.

Figure 3-3 Installing flask

```
C:\Users\> pip install flask
Collecting flask
  Downloading https://files.pythonhosted.org/packages/f2/28/2a032524fb9ebf377440fba6a7841b47083260bf8bd9e7370c6952df834/flask-1.1.2-py2.py3-none-any.whl (94kB)
    100% |#####| 102kB 122kB/s
Collecting itdangerous<=0.24 (from flask)
  Downloading https://files.pythonhosted.org/packages/76/ae/44b03b253d5fada317432c24d100b3b35c223807046a4c953c7b89fa49e/itdangerous-1.1.0-py2.py3-none-any.whl
Collecting click>=5.1 (from flask)
  Downloading https://files.pythonhosted.org/packages/d2/3d/fa76db83bf75c4f8d338c2fdd15c8d33fdd7ad23a9b5e57eb6c5de26b430e/click-7.1.2-py2.py3-none-any.whl (82kB)
    100% |#####| 92kB 20kB/s
Collecting Jinja2>=2.10.1 (from flask)
  Downloading https://files.pythonhosted.org/packages/30/9e/f663a2a66a09d838042ae1a2c5659828bb9b41ea3a6efa20a20fd92b121/Jinja2-2.11.2-py2.py3-none-any.whl (125kB)
    100% |#####| 133kB 17kB/s
Collecting Werkzeug>=0.15 (from flask)
  Downloading https://files.pythonhosted.org/packages/cc/94/5f7079a0b0bd6863ef8f1da638721e9da21e5bacee597595b318f71d62e/Werkzeug-1.0.1-py2.py3-none-any.whl (298kB)
    100% |#####| 307kB 16kB/s
Collecting MarkupSafe>=0.23 (from Jinja2>=2.10.1->flask)
  Downloading https://files.pythonhosted.org/packages/65/cb/23997004236d1dd681af8aebf172558cddfd6e43d7a5184a675f4711f5/MarkupSafe-1.1.1-cp37-cp37m-win_amd64.whl
Installing collected packages: itdangerous, click, MarkupSafe, Jinja2, Werkzeug, flask
Successfully installed Jinja2-2.11.2 MarkupSafe-1.1.1 Werkzeug-1.0.1 click-7.1.2 flask-1.1.2 itdangerous-1.1.0
You are using the legacy pip. However, version 21.2.4 is available.
You should consider upgrading via the 'python -m pip install --upgrade pip' command.
```

2. Log in to the Huawei HiLens console. In the navigation pane, choose **Skill Development > Skill Templates**.
3. On the **Skill Templates > All** page, enter "safety helmet detection" in the search box and click the card of the **Safety Helmet Detection** template.
4. On the details page of the **Safety Helmet Detection** template, click **Download Template**, save the template to the local PC, and decompress it.
5. Open the **cmd** CLI, go to the **./safety helmet detection template/safety helmet detection template/server.py** directory of the **server.py** file in the skill template, and run **python server.py**.
6. On the **Manage Skill** tab page of the device details page, select the skill created in **Create a Skill** and click **Start** in the **Operation** column.
After the skill is started, its status changes to **Running**.

7. View the skill data output by POST.

Method 1: In the CLI that runs **python server.py** in step 4, you can view the box information output by POST.

Method 2: In the **../safety helmet detection template/safety helmet detection template** directory where the **server.py** file resides in the downloaded **Safety Helmet Detection** template, you can view the images of faces not wearing safety helmets.

Figure 3-4 Skill effect



4 Distributing a Skill to a Product (Manufacturers)

This section describes how manufacturers of camera devices running HiSilicon Hi35xx series chips manage products, purchase skills, and bind device licenses to product skills on the Huawei HiLens console to enable the devices with AI capabilities.

This chapter describes how to purchase a skill oriented to HiSilicon Hi35xx series chips to demonstrate the entire process from product creation to skill use. Free test skills are available in the skill market for trial use, but we do not guarantee their commercial precision.

Before you start, carefully complete the preparations described in [Preparations](#).

- [Step 1: Create a Product](#)
- [Step 2: Purchase a Skill](#)
- [Step 3: Use the Skill](#)

Preparations

[Register](#) a HUAWEI CLOUD account. Before using Huawei HiLens, check the account status, which cannot be in arrears or frozen.

Step 1: Create a Product

- Step 1** Log in to the Huawei HiLens console. In the left navigation pane, choose **Device Management > Products**. The **Products** page is displayed.
- Step 2** Click **Create Product** in the upper right corner and set product parameters, as shown in [Table 4-1](#).

Figure 4-1 Creating a product
Name

The screenshot shows a web form for creating a product. It includes the following elements:

- Name:** A text input field containing the value "test".
- * Platform:** A dropdown menu with a question mark icon, currently showing "Linux".
- * Chip:** A dropdown menu with a question mark icon, currently showing "Arm".
- * Description:** A text area containing the value "test".
- Buttons:** A red "OK" button and a white "Cancel" button.

Table 4-1 Product parameters

Parameter	Description
Name	Product name. Enter 3 to 60 characters. The name must start with a Chinese character or letter and end with a Chinese character, letter, or digit. Only Chinese characters, letters, digits, underscores (_), and hyphens (-) are allowed.
Platform	Device OS type. Android, Linux, iOS, LiteOS, and Windows are supported.
Chip	Device chip model. HiSilicon Hi35xx series chips, including 3516CV500 and 3519AV100
Description	Product description. Enter 1 to 512 characters. Special characters #~^\$%\'&*<>(){}[] \\ are not allowed.

Step 3 Confirm the product information and click **OK**. After the product is created, the **Product Management** page is automatically displayed.

Step 4 Select the new product and click **Download License** in the **Operation** column to download the license file.

The license contains the identity information of the product, which is used for registration verification with the skill SDK.

----End

Step 2: Purchase a Skill

You can purchase required skills from the skill market of Huawei HiLens based on your service requirements to develop devices running HiSilicon Hi35xx series chips. The skills can be used for Hi3516EV200, Hi3516CV500, Hi3519AV100, Hi3519V101, Hi3516DV300, and Arm chips..

This example describes how to purchase the free **Human_Face_Detection_Offline_3516EV200_HiLinux** skill, which is used to develop devices running HiSilicon Hi35xx series chips.

- Step 1** Log in to the Huawei HiLens console. In the navigation pane on the left, choose **Subscribe > All Skills**. The **Skill Market** page is displayed.
- Step 2** Search for **Human_Face_Detection_Offline_3516EV200_HiLinux** in the skill search box and click the skill card. The skill details page is displayed.
- Step 3** Click **Buy Now**. The page for purchasing skills is displayed.
- Step 4** Specify **Copies**. You can retain its default value. The **Specifications** is default to **Channel(s)**, indicating that a license can be installed on one device to use one channel of video.

Figure 4-2 Purchasing the skill

Purchased Skill

1 Configure 2 Finish

Copies

Specifications ⓘ Channel(s)

Privacy Statement
* Saves data on devices
* Reads the device's microphone data

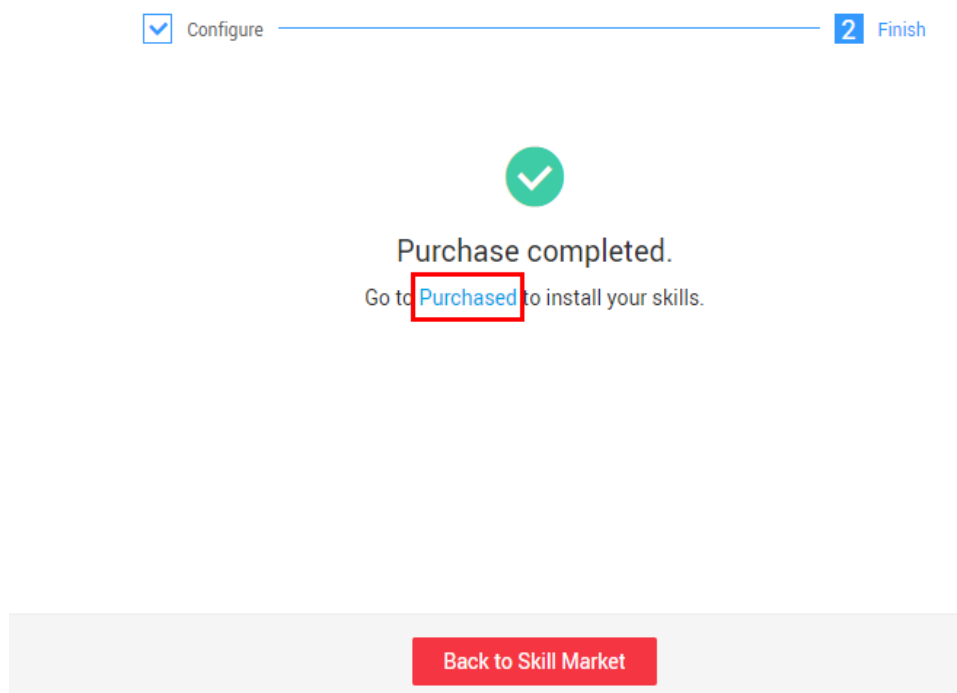
I agree to the skill's privacy policies

Total Price ¥0

- Step 5** Confirm the price and click **Buy Now**.

After the purchase is successful, you can click **Purchased** to go to the **Subscribe > Order Management** page and distribute the skill.

Figure 4-3 Successful purchase
Purchased Skill



Step 6 Go to **Subscribe > Order Management** to distribute the skill.

----End

Step 3: Use the Skill

Skills oriented to HiSilicon Hi35xx series chips can be used only after being distributed to device groups. For devices that run HiSilicon Hi35xx series chips, a maximum of five skills can be distributed to a device group due to performance restrictions.

Step 1 Log in to the Huawei HiLens console. In the navigation tree on the left, choose **Subscribe > Order Management**. The **Skill Orders** tab is displayed by default.

Step 2 Select a skill designed to run on HiSilicon Hi35xx series chips, and distribute the skill license to a product group.

1. Select the skill to be distributed and click **Distribute** in the **Operation** column.
2. In the **Distribute to Product** dialog box, select the product group to which the license is to be distributed, and click the **Distribute to Product** button.

If you select **Yes** under **Automatic Upgrade**, the skill in the product will be automatically upgraded to the latest version if a new skill version is available. This function is not available yet and will be provided.

Figure 4-4 Distributing a skill

Distribute to Thin Product

<input type="checkbox"/>	Name	Description	Platform	Chip	Automatic Upgrade
<input type="checkbox"/>		sadsds	Linux	Arm	<input type="checkbox"/> Yes
<input checked="" type="checkbox"/>		device	Linux	3516CV500	<input type="checkbox"/> Yes
<input checked="" type="checkbox"/>		device	Linux	3516CV500	<input type="checkbox"/> Yes
<input type="checkbox"/>		device	Linux	3516CV500	<input type="checkbox"/> Yes
<input type="checkbox"/>		device	Linux	3516CV500	<input type="checkbox"/> Yes

5 Total Records: 34 < 1 2 3 4 5 6 7 >

Distribute to Product
Cancel

3. The skill distribution information is displayed in the dialog box. Confirm that the **Installation Status** is **Successful** and click **OK**.

Step 3 On the **Skill Orders** tab page, select the skill you want to use and click **Download** in the **Operation** column. The browser automatically downloads the SDK package of the skill.

Figure 4-5 Downloading SDK



Step 4 Install the skill. Integrate the downloaded SDK package to the device.

The device location where the skill is integrated varies according to the device. For details, see the description document in the SDK.

----End