IDE-daemon-client Command Reference

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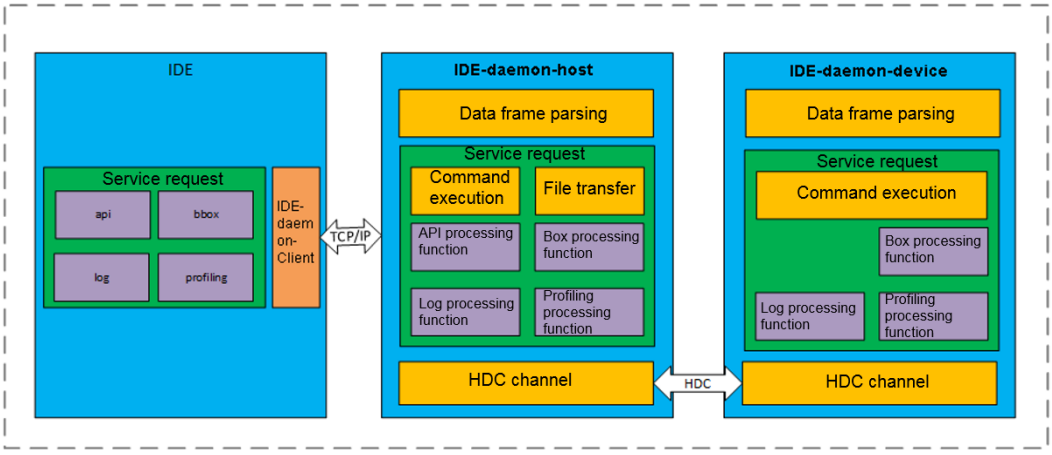
1 Introduction

After the **IDE-daemon-client** command is run, the specified command is sent to the host. If the command needs to be run on the host, run it directly on the host. If the command needs to be run on the device, connect the host to the device and run the command on the device. For details, see the *IDE-daemon-client Command Reference*.

Figure 1-1 Overall architecture of IDE-daemon



Currently, the **IDE-daemon-client** command can be run on the host server in PCIe mode or on the server where the DDK is located.

- To run the command the host server, you can log in to the host server as the **HwHiAiUser** user and run the **IDE-daemon-client** command. This document uses this scenario as an example.
- If the DDK is installed, run the **IDE-daemon-client** command on the DDK server.
  - The DDK is deployed on an independent server and is not shared with the host server. You can log in to the DDK server as the DDK installation user, run the following commands to set the environment variables, and run the **IDE-daemon-client** command: (replace *DDK installation directory* with the actual directory):
    export LD_LIBRARY_PATH=*DDK installation directory***/ddk/uihost/lib**
    export PATH=$PATH:*DDK installation directory***/ddk/uihost/bin**

- If the DDK is deployed on the host server and the DDK installation user is **HwHiAiUser**, you can log in to the server as the **HwHiAiUser** user, and run the **IDE-daemon-client** command without setting the environment variables.

Commands that exceed one line will be automatically wrapped due to the restriction of the PDF document format. Therefore, if you want to use commands in this document directly, you need to manually merge the lines into one line and separate the parameters with spaces.

2 Sending a Command to the Device by Using IDE Daemon

Function

Sends a command to the device by using IDE Daemon, such as a command for querying the date information on the device.

Syntax

```
IDE-daemon-client --host <host_ip>:<port> [--device <deviceID>] --cmd <command>
```

Parameter

Table 2-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--host	• *host_ip*: specifies the IP address of the host. • *port*: specifies the port number.	Yes	The default value of *port* is **22118**.
--device	If the host is connected to multiple devices, you can specify a device by using --**device** *deviceID*. If the device is not specified, the device with *deviceID* of **0** is used by default.	No	The default value of *deviceID* is **0**.

Parameter	Description	Mandatory or Not	Default Value
--cmd	Specifies the command to be executed on the device. For details about the command list, see **Command List**. Except the **date** command, other commands must be placed in single quotation marks or double quotation marks. If a command contains double quotation marks, put the command in single quotation marks. If the command contains single quotation marks, place the command in double quotation marks.	Yes	-

Example

1. Log in to the server on the host as the **HwHiAiUser** user.
2. Run the following command to view the date information on the device:
   ```
   IDE-daemon-client --host xx.xx.xx.xx:22118 --cmd date
   ```

   NOTE

   Replace *xx.xx.xx.xx* with the actual IP address of the host.

Command List

If a command has variables, replace the variables such as *xxxx* or *yy* with the actual directory name or file name.

In the commands, ~ indicates the home directory of the user who starts the IDE-daemon-host or IDE-daemon-device process.

Category	Command	Remarks
Command without variables	pkill cce-gdbserver	-
	ide_cmd.sh --reboot	The **sudo** command is used to escalate the user's operation permission. The actually executed command is **reboot mini**. Used to restart the developer board.
	date	-
	mkdir -p /tmp/profiler-tools/	-
	rm /opt/mini/mini_developerKit*.rar	-
	chmod +x /opt/mini/minirc_install_phase1.sh	-
	chmod +w ~/ide_daemon/rollback_idedaemon_crt.sh	-
	chmod +w ~/ide_daemon/backup_idedaemon_crt.sh	-
	/opt/mini/minirc_install_phase1.sh	-
	tar -xvf ~/host/EVB.tar -C ~/host/	-
	rm -rf /var/dlog/*	-
	rm -rf ~/host	-
	mkdir -p ~/host	-
	rm -rf ~/HIAI_PROJECTS/dlog.tar	-
	tar -cPf ~/HIAI_PROJECTS/dlog.tar /var/dlog/	-
	grep -rn "firmware upgrade finish, start to reboot" /var/davinci/log	-
	grep -rn "fail" /var/davinci/log/firmware_upgrade_progress.log	-

	python -c \"import future;import sys;sys.exit(future.__version__ < 0.15)\"	Checks the version number of the future library on the host. The actually executed command is as follows: python -c "import future;import sys;sys.exit(future.__version__ < 0.15)"
	python -c \"import numpy;import sys;sys.exit(numpy.__version__ < 1.14)\"	Checks the version number of the numpy library on the host. The actually executed command is as follows: python -c "import numpy;import sys;sys.exit(numpy.__version__ < 1.14)"

	"python -c \"\n"\"import enum\n"\"import sys \n"\"try:\n"\" if enum.__version__ >= 0.4:\n"\" sys.exit(0)\n"\"except AttributeError:\n"\" if enum.version >= 1.0:\n"\" sys.exit(0)\n"\"\""	Checks the version number of the enum library or enum34 library on the host.
		The actually executed command is as follows:
		python -c \"
		import enum
		import sys
		try:
		if enum.__version__ >= 0.4:
		sys.exit(0)
		except AttributeError:
		if enum.version >= 1.0:
		sys.exit(0)
		\"

	cat /etc/sys_version.conf	Obtains the Ascend 310 software version of the developer board.

Command with variables	rm -rf ~/hdcd; rm -rf ~/HIAI_PROJECTS/*xxxx*; rm -rf ~/HIAI_DATANDMODELSET/*xxxx*; rm -rf ~/profiler-app/*xxxx*; rm -rf ~/ide_daemon/*xxxx*	-
	rm ~/HIAI_PROJECTS/*xxxx*; rm ~/HIAI_DATANDMODELSET/*xxxx*; rm ~/profiler-app/*xxxx*; rm ~/ide_daemon/*xxxx*	-
	wc -l ~/hdcd/*xxxx*; wc -l ~/HIAI_PROJECTS/*xxxx*; wc -l ~/HIAI_DATANDMODELSET/*xxxx*; wc -l ~/profiler-app/*xxxx*	-
	mkdir -p ~/hdcd/*xxxx*; mkdir -p ~/HIAI_PROJECTS/*xxxx*; mkdir -p ~/HIAI_DATANDMODELSET/*xxxx*; mkdir -p ~/profiler-app/*xxxx*; mkdir -p ~/ide_daemon/*xxxx*	Runs an executable file.
	mkdir ~/HIAI_PROJECTS/*xxxx*; mkdir ~/HIAI_DATANDMODELSET/*xxxx*; mkdir ~/profiler-app/*xxxx*; mkdir ~/ide_daemon/*xxxx*	-
	tar -cf ~/hdcd/*xxxx*/*yy*.tar -C ~/HIAI_PROJECTS/*xxxx xxxx*; tar -cf ~/HIAI_PROJECTS/*xxxx*/*yy*.tar -C ~/HIAI_PROJECTS/*xxxx xxxx*; tar -cf ~/HIAI_DATANDMODELSET/*xxxx*/*yy*.tar -C ~/HIAI_DATANDMODELSET/*xxxx xxxx*; tar -cf ~/profiler-app/*xxxx*/*yy*.tar -C ~/profiler-app/*xxxx xxxx*	Compress the directories and files specified by **-C** into packages specified by **-cf**. Change *xxxx* to the actual directory name and *yy* to the actual .tar package name.
	tar -xvf ~/hdcd/*xxxx*/*yy*.tar -C ~/HIAI_PROJECTS/*xxxx*; tar -xvf ~/HIAI_PROJECTS/*xxxx*/*yy*.tar -C ~/HIAI_PROJECTS/*xxxx*; tar -xvf ~/HIAI_DATANDMODELSET/*xxxx*/*yy*.tar -C ~/HIAI_DATANDMODELSET/*xxxx*; tar -xvf ~/profiler-app/*xxxx*/*yy*.tar -C ~/profiler-app/*xxxx*	-
	mv ~/hdcd/*xxxx* ~/HIAI_PROJECTS/*xxxx*; mv ~/HIAI_PROJECTS/*xxxx* ~/HIAI_PROJECTS/*xxxx*; mv ~/profiler-app/*xxxx* ~/profiler-app/*xxxx*	-
	chmod +x ~/hdcd/*xxxx*; chmod +x ~/HIAI_PROJECTS/*xxxx*; chmod +x ~/profiler-app/*xxxx*; chmod +x ~/ide_daemon/*xxxx*	-
	chmod -w ~/hdcd/*xxxx*; chmod -w ~/ide_daemon/*xxxx*	-
	cp ~/HIAI_PROJECTS/*xxxx* ~/HIAI_PROJECTS/*xxxx*; cp -af ~/HIAI_PROJECTS/*xxxx* ~/HIAI_PROJECTS/*xxxx*	-

	sha512sum ~/hdcd/*xxxx*; sha512sum ~/HIAI_DATANDMODELSET/*xxxx*	-
	find ~/HIAI_DATANDMODELSET/*xxxx* -type f|xargs sha512sum|sort	-
	~/HIAI_PROJECTS/*xxxx*; ~/ide_daemon/*xxxx*	Runs an executable file.
	~/HIAI_PROJECTS/xxxx ~/HIAI_DATANDMODELSET/xxxx yyy ddd zzz	Runs a binary file with fixed parameters. Replace **~/HIAI_DATANDMODELSET/***xxxx*, *yyy*, *ddd*, and *zzz* with the actual values.
	cce-gdbserver *ip_address:port* --attach *xxx* 2>&1; cce-gdbserver *ip_address:port* ~/ide_daemon/debug/*xxxx*	Replace *ip_address* and *port* with the actual values. Replace *xxx* with the actual process ID.
	pgrep -x -f "cce-gdbserver *ip_address:port* --attach *xxx*"; pgrep -x -f "cce-gdbserver *ip _ddress:port* ~/ide_daemon/debug/*xxxx*"	Replace *ip_address* and *port* with the actual values. Replace *xxx* with the actual process ID.
	pidof xxxx	Replace *xxxx* with the actual process name.
	ps ux | awk '{print}'| sed 1d; ps ux | awk '{print $x \t$y}'| sed 1d	-
	ps -ef | awk '{print}'| sed 1d; ps -ef | awk '{print $x \t$y}'| sed 1d	-

	ide_cmd.sh --eth0_up ip _address	The **sudo** command is used to escalate the user's operation permission. The actually executed command is **ifconfig eth0 ip_address**. This command applies only to developer boards. Replace *ip_address* with the actual value.
	ide_cmd.sh --setup_eth0 *ip_address netmask_address gw_address*	The **sudo** command is used to escalate the user's operation permission. The actually executed command is **ifconfig eth0 ip_address netmask netmask_address && route add default gw gw_address**. This command applies only to developer boards. Replace *ip_address*/**netmask_address/gw_address** with the actual value.
	sed -i '/iface.eth0/{n;s/address.*/address *ip_address*/;}' /etc/network/interfaces	The **sudo** command is used to escalate the user's operation permission. **sudo** *command* This command applies only to developer boards. Replace *ip_address* with the actual value.

	sed -i '/iface.eth0/{n;n;s/netmask.*/netmask *ip_address*/;}' /etc/network/interfaces	The **sudo** command is used to escalate the user's operation permission. **sudo** *command* This command applies only to developer boards. Replace *ip_address* with the actual value.
	sed -i '/iface.eth0/{n;n;n;s/gateway.*/gateway *ip_address*/;}' /etc/network/interfaces	The **sudo** command is used to escalate the user's operation permission. **sudo** *command* This command applies only to developer boards. Replace *ip_address* with the actual value.
	del /f/s/q *D:*|profiler-app; del /f/s/q *D:*|profiler-app\xxx	Deletes a file on the Windows OS. Replace *D* in the command with the actual drive letter on the Windows PC.
	dir *D:*\profiler-app; dir *D:*\profiler-app\xxx	Lists all files in a directory on the Windows OS. Replace *D* in the command with the actual drive letter on the Windows PC.
	md *D:*\profiler-app; md *D:*\profiler-app\xxx	Creates a folder on the Windows OS. Replace *D* in the command with the actual drive letter on the Windows PC.

	rd /s/q *D*:\profiler-app; rd /s/q *D*:\profiler-app\xxx	Deletes a folder on the Windows OS. Replace *D* in the command with the actual drive letter on the Windows PC.
	tar -xvf *D*:\profiler-app\xxx.tar -C *D*:\profiler-app \yyy	Creates a compressed package on the Windows OS. Replace *D* in the command with the actual drive letter on the Windows PC.
	kill $(pidof ~/HIAI_PROJECTS/xxxx/out/yyy)	-
	kill $(pidof -x ~/HIAI_PROJECTS/xxxx/out/yyy)	-
	kill -9 $(pidof ~/HIAI_PROJECTS/xxxx/out/yyy)	-
	kill -9 $(pidof -x ~/HIAI_PROJECTS/xxxx/out/yyy)	-
	kill `pgrep -x -f "cce-gdbserver *ip_address:port* --attach xxx"`	Replace *ip_address* and *port* with the actual values. Replace *xxx* with the actual process number.
	kill -9 `pgrep -x -f "cce-gdbserver *ip_address:port* --attach xxx"`	Replace *ip_address* and *port* with the actual values. Replace *xxx* with the actual process number.
	kill `pgrep -x -f "cce-gdbserver *ip_address:port* ~/ide_daemon/debug/xxxx"`	Replace *ip_address* and *port* with the actual values.
	kill -9 `pgrep -x -f "cce-gdbserver *ip_address:port* ~/ide_daemon/debug/xxxx"`	Replace *ip_address* and *port* with the actual values.
	cd ~/HIAI_PROJECTS/*xxxx*/out;./*yy*	Runs an executable file in the directory. This command has no parameter.

	cd ~/HIAI_PROJECTS/*xxxx*/out;./*yy* ~/HIAI_DATANDMODELSET/xxxx yyy ddd zzz	Runs a binary file in the directory. The parameters are fixed. Replace **~/HIAI_DATANDMODELSET/***xxxx*, *yyy*, *ddd*, and *zzz* with the actual values.
	cd ~/HIAI_PROJECTS/xxxx/out;~/HIAI_PROJECTS/xxxx/out/yyy ~/HIAI_DATANDMODELSET/xxxx yyy ddd zzz	Runs a binary file in the directory. The parameters are fixed. Replace **~/HIAI_DATANDMODELSET/***xxxx*, *yyy*, *ddd*, and *zzz* with the actual values.

3 Sending a Command to the Device by Using IDE Daemon

Function

Sends a command to the host by using IDE Daemon, such as a command for querying the date information on the host.

Syntax

```
IDE-daemon-client --host <host_ip>:<port> --hostcmd <command>
```

Parameter

Table 3-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--host	• *host_ip*: specifies the IP address of the host. • *port*: specifies the port number.	Yes	The default value of *port* is **22118**.

Parameter	Description	Mandatory or Not	Default Value
--hostcmd	Specifies the command to be executed on the host. For details about the command list, see **Command List**. Except the **date** command, other commands must be placed in single quotation marks or double quotation marks. If a command contains double quotation marks, put the command in single quotation marks. If the command contains single quotation marks, place the command in double quotation marks.	Yes	-

Example

1. Log in to the server on the host as the **HwHiAiUser** user.
2. Run the following command to view the date information on the host:
   ```
   IDE-daemon-client --host xx.xx.xx.xx:22118 --hostcmd date
   ```

   NOTE

   Replace *xx.xx.xx.xx* with the actual IP address of the host.

Command List

If a command has variables, replace the variables such as *xxxx* or *yy* with the actual directory name or file name.

In the commands, ~ indicates the home directory of the user who starts the IDE-daemon-host or IDE-daemon-device process.

Category	Command	Remarks
Command without variables	pkill cce-gdbserver	-
	ide_cmd.sh --reboot	The **sudo** command is used to escalate the user's operation permission. The actually executed command is **reboot mini**. Used to restart the developer board.
	date	-
	mkdir -p /tmp/profiler-tools/	-
	rm /opt/mini/mini_developerKit*.rar	-
	chmod +x /opt/mini/minirc_install_phase1.sh	-
	chmod +w ~/ide_daemon/rollback_idedaemon_crt.sh	-
	chmod +w ~/ide_daemon/backup_idedaemon_crt.sh	-
	/opt/mini/minirc_install_phase1.sh	-
	tar -xvf ~/host/EVB.tar -C ~/host/	-
	rm -rf /var/dlog/*	-
	rm -rf ~/host	-
	mkdir -p ~/host	-
	rm -rf ~/HIAI_PROJECTS/dlog.tar	-
	tar -cPf ~/HIAI_PROJECTS/dlog.tar /var/dlog/	-
	grep -rn "firmware upgrade finish, start to reboot" /var/davinci/log	-
	grep -rn "fail" /var/davinci/log/firmware_upgrade_progress.log	-

	python -c \"import future;import sys;sys.exit(future.__version__ < 0.15)\"	Checks the version number of the future library on the host. The actually executed command is as follows: python -c "import future;import sys;sys.exit(future.__version__ < 0.15)"
	python -c \"import numpy;import sys;sys.exit(numpy.__version__ < 1.14)\"	Checks the version number of the numpy library on the host. The actually executed command is as follows: python -c "import numpy;import sys;sys.exit(numpy.__version__ < 1.14)"

	"python -c \"\n"\"import enum\n"\"import sys \n"\"try:\n"\" if enum.__version__ >= 0.4:\n"\" sys.exit(0)\n"\"except AttributeError:\n"\" if enum.version >= 1.0:\n"\" sys.exit(0)\n"\"\""	Checks the version number of the enum library or enum34 library on the host.
		The actually executed command is as follows:
		python -c \"
		import enum
		import sys
		try:
		if enum.__version__ >= 0.4:
		sys.exit(0)
		except AttributeError:
		if enum.version >= 1.0:
		sys.exit(0)
		\"

	cat /etc/sys_version.conf	Obtains the Ascend 310 software version of the developer board.

Command with variables	rm -rf ~/hdcd; rm -rf ~/HIAI_PROJECTS/*xxxx*; rm -rf ~/HIAI_DATANDMODELSET/*xxxx*; rm -rf ~/profiler-app/*xxxx*; rm -rf ~/ide_daemon/*xxxx*	-
	rm ~/HIAI_PROJECTS/*xxxx*; rm ~/HIAI_DATANDMODELSET/*xxxx*; rm ~/profiler-app/*xxxx*; rm ~/ide_daemon/*xxxx*	-
	wc -l ~/hdcd/*xxxx*; wc -l ~/HIAI_PROJECTS/*xxxx*; wc -l ~/HIAI_DATANDMODELSET/*xxxx*; wc -l ~/profiler-app/*xxxx*	-
	mkdir -p ~/hdcd/*xxxx*; mkdir -p ~/HIAI_PROJECTS/*xxxx*; mkdir -p ~/HIAI_DATANDMODELSET/*xxxx*; mkdir -p ~/profiler-app/*xxxx*; mkdir -p ~/ide_daemon/*xxxx*	Runs an executable file.
	mkdir ~/HIAI_PROJECTS/*xxxx*; mkdir ~/HIAI_DATANDMODELSET/*xxxx*; mkdir ~/profiler-app/*xxxx*; mkdir ~/ide_daemon/*xxxx*	-
	tar -cf ~/hdcd/*xxxx*/*yy*.tar -C ~/HIAI_PROJECTS/*xxxx xxxx*; tar -cf ~/HIAI_PROJECTS/*xxxx*/*yy*.tar -C ~/HIAI_PROJECTS/*xxxx xxxx*; tar -cf ~/HIAI_DATANDMODELSET/*xxxx*/*yy*.tar -C ~/HIAI_DATANDMODELSET/*xxxx xxxx*; tar -cf ~/profiler-app/*xxxx*/*yy*.tar -C ~/profiler-app/*xxxx xxxx*	Compress the directories and files specified by **-C** into packages specified by **-cf**. Change *xxxx* to the actual directory name and *yy* to the actual .tar package name.
	tar -xvf ~/hdcd/*xxxx*/*yy*.tar -C ~/HIAI_PROJECTS/*xxxx*; tar -xvf ~/HIAI_PROJECTS/*xxxx*/*yy*.tar -C ~/HIAI_PROJECTS/*xxxx*; tar -xvf ~/HIAI_DATANDMODELSET/*xxxx*/*yy*.tar -C ~/HIAI_DATANDMODELSET/*xxxx*; tar -xvf ~/profiler-app/*xxxx*/*yy*.tar -C ~/profiler-app/*xxxx*	-
	mv ~/hdcd/*xxxx* ~/HIAI_PROJECTS/*xxxx*; mv ~/HIAI_PROJECTS/*xxxx* ~/HIAI_PROJECTS/*xxxx*; mv ~/profiler-app/*xxxx* ~/profiler-app/*xxxx*	-
	chmod +x ~/hdcd/*xxxx*; chmod +x ~/HIAI_PROJECTS/*xxxx*; chmod +x ~/profiler-app/*xxxx*; chmod +x ~/ide_daemon/*xxxx*	-
	chmod -w ~/hdcd/*xxxx*; chmod -w ~/ide_daemon/*xxxx*	-
	cp ~/HIAI_PROJECTS/*xxxx* ~/HIAI_PROJECTS/*xxxx*; cp -af ~/HIAI_PROJECTS/*xxxx* ~/HIAI_PROJECTS/*xxxx*	-

	sha512sum ~/hdcd/*xxxx*; sha512sum ~/HIAI_DATANDMODELSET/*xxxx*	-
	find ~/HIAI_DATANDMODELSET/*xxxx* -type f|xargs sha512sum|sort	-
	~/HIAI_PROJECTS/*xxxx*; ~/ide_daemon/*xxxx*	Runs an executable file.
	~/HIAI_PROJECTS/xxxx ~/HIAI_DATANDMODELSET/xxxx yyy ddd zzz	Runs a binary file with fixed parameters. Replace **~/HIAI_DATANDMODELSET/***xxxx*, *yyy*, *ddd*, and *zzz* with the actual values.
	cce-gdbserver *ip_address:port* --attach *xxx* 2>&1; cce-gdbserver *ip_address:port* ~/ide_daemon/debug/*xxxx*	Replace *ip_address* and *port* with the actual values. Replace *xxx* with the actual process ID.
	pgrep -x -f "cce-gdbserver *ip_address:port* --attach *xxx*"; pgrep -x -f "cce-gdbserver *ip _ddress:port* ~/ide_daemon/debug/*xxxx*"	Replace *ip_address* and *port* with the actual values. Replace *xxx* with the actual process ID.
	pidof xxxx	Replace *xxxx* with the actual process name.
	ps ux | awk '{print}'| sed 1d; ps ux | awk '{print $x \t$y}'| sed 1d	-
	ps -ef | awk '{print}'| sed 1d; ps -ef | awk '{print $x \t$y}'| sed 1d	-

	ide_cmd.sh --eth0_up ip _address	The **sudo** command is used to escalate the user's operation permission. The actually executed command is **ifconfig eth0 ip_address**. This command applies only to developer boards. Replace *ip_address* with the actual value.
	ide_cmd.sh --setup_eth0 *ip_address netmask_address gw_address*	The **sudo** command is used to escalate the user's operation permission. The actually executed command is **ifconfig eth0 ip_address netmask netmask_address && route add default gw gw_address**. This command applies only to developer boards. Replace *ip_address*/**netmask_address/gw_address** with the actual value.
	sed -i '/iface.eth0/{n;s/address.*/address *ip_address*/;}' /etc/network/interfaces	The **sudo** command is used to escalate the user's operation permission. **sudo** *command* This command applies only to developer boards. Replace *ip_address* with the actual value.

	sed -i '/iface.eth0/{n;n;s/netmask.*/netmask *ip_address*/;}' /etc/network/interfaces	The **sudo** command is used to escalate the user's operation permission. **sudo** *command* This command applies only to developer boards. Replace *ip_address* with the actual value.
	sed -i '/iface.eth0/{n;n;n;s/gateway.*/gateway *ip_address*/;}' /etc/network/interfaces	The **sudo** command is used to escalate the user's operation permission. **sudo** *command* This command applies only to developer boards. Replace *ip_address* with the actual value.
	del /f/s/q *D:*|profiler-app; del /f/s/q *D:*|profiler-app\xxx	Deletes a file on the Windows OS. Replace *D* in the command with the actual drive letter on the Windows PC.
	dir *D*:\profiler-app; dir *D*:\profiler-app\xxx	Lists all files in a directory on the Windows OS. Replace *D* in the command with the actual drive letter on the Windows PC.
	md *D*:\profiler-app; md *D*:\profiler-app\xxx	Creates a folder on the Windows OS. Replace *D* in the command with the actual drive letter on the Windows PC.

	rd /s/q *D*:\profiler-app; rd /s/q *D*:\profiler-app\xxx	Deletes a folder on the Windows OS. Replace *D* in the command with the actual drive letter on the Windows PC.
	tar -xvf *D*:\profiler-app\xxx.tar -C *D*:\profiler-app \yyy	Creates a compressed package on the Windows OS. Replace *D* in the command with the actual drive letter on the Windows PC.
	kill $(pidof ~/HIAI_PROJECTS/xxxx/out/yyy)	-
	kill $(pidof -x ~/HIAI_PROJECTS/xxxx/out/yyy)	-
	kill -9 $(pidof ~/HIAI_PROJECTS/xxxx/out/yyy)	-
	kill -9 $(pidof -x ~/HIAI_PROJECTS/xxxx/out/yyy)	-
	kill `pgrep -x -f "cce-gdbserver *ip_address:port* --attach xxx"`	Replace *ip_address* and *port* with the actual values. Replace *xxx* with the actual process number.
	kill -9 `pgrep -x -f "cce-gdbserver *ip_address:port* --attach xxx"`	Replace *ip_address* and *port* with the actual values. Replace *xxx* with the actual process number.
	kill `pgrep -x -f "cce-gdbserver *ip_address:port* ~/ide_daemon/debug/xxxx"`	Replace *ip_address* and *port* with the actual values.
	kill -9 `pgrep -x -f "cce-gdbserver *ip_address:port* ~/ide_daemon/debug/xxxx"`	Replace *ip_address* and *port* with the actual values.
	cd ~/HIAI_PROJECTS/*xxxx*/out;./*yy*	Runs an executable file in the directory. This command has no parameter.

	cd ~/HIAI_PROJECTS/*xxxx*/out;./*yy* ~/HIAI_DATANDMODELSET/xxxx yyy ddd zzz	Runs a binary file in the directory. The parameters are fixed. Replace **~/HIAI_DATANDMODELSET/***xxxx*, *yyy*, *ddd*, and *zzz* with the actual values.
	cd ~/HIAI_PROJECTS/xxxx/out;~/HIAI_PROJECTS/xxxx/out/yyy ~/HIAI_DATANDMODELSET/xxxx yyy ddd zzz	Runs a binary file in the directory. The parameters are fixed. Replace **~/HIAI_DATANDMODELSET/***xxxx*, *yyy*, *ddd*, and *zzz* with the actual values.

4 Transferring a File to the Device by Using IDE Daemon

Function

Transfers a file to the device by using IDE Daemon

Syntax

```
IDE-daemon-client --host <host_ip>:<port> [--device <deviceID>] --file <source_dir> <dest_dir>
```

Parameter

Table 4-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--host	• *host_ip*: specifies the IP address of the host. • *port*: specifies the port number.	Yes	The default value of *port* is **22118**.
--device	If the host is connected to multiple devices, you can specify a device by using --**device** *deviceID*. If the device is not specified, the device with *deviceID* of **0** is used by default.	No	The default value of *deviceID* is **0**.

Parameter	Description	Mandatory or Not	Default Value
--file	• *source_dir*: specifies the directory of the source file on the IDE Daemon server. The value includes the file name. • *dest_dir*: specifies the directory of the destination file on the device, including the file name. *dest_dir* must be specified. Otherwise, the command fails to be executed. The file path must be a directory in **/home/HwHiUser/hdcd**. You only need to specify the relative path in the command. For example, if the destination file path is **/home/HwHiUser/hdcd/ide_daemon/B.java**, you only need to set **file** to **ide_daemon/B.java** in the command.	Yes	-

Example

1. Log in to the server on the host as the **HwHiAiUser** user.

2. Run the following command to transfer the **A.java** file to the device and save the file as **B.java**:

```
IDE-daemon-client --host xx.xx.xx.xx:22118 --file /tmp/A.java "ide_daemon/B.java"
```

> **NOTE**
>
> Replace *xx.xx.xx.xx* with the actual IP address of the host.

5 Transferring a File to the Host by Using IDE Daemon

Function

Transfers a file to the host by using IDE Daemon.

Syntax

```
IDE-daemon-client --host <host_ip>:<port> --sync <source_dir> <dest_dir>
```

Parameter

Table 5-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--host	• *host_ip*: specifies the IP address of the host. • *port*: specifies the port number.	Yes	The default value of *port* is **22118**.

Parameter	Description	Mandatory or Not	Default Value
--sync	• *source_dir*: specifies the directory of the source file on the IDE Daemon server. The value includes the file name. • *dest_dir*: specifies the directory of the destination file on the host, excluding the file name. For example, the directory of the destination file is **~/ide_daemon** or **~/ide_daemon/**, both of which indicate that the destination file is stored in the **ide_daemon** directory. *dest_dir* must be specified. Otherwise, the command fails to be executed. Files can be stored only in the following directories: – ~/ide_daemon – ~/HIAI_PROJECTS – ~/HIAI_DATANDMODELSET	Yes	-

Parameter	Description	Mandatory or Not	Default Value
	– /opt/mini – /var/log/hisi_logs – /var/dlog		

Example

1. Log in to the server on the host as the **HwHiAiUser** user.
2. Run the following command to transfer the **A.java** file to the specified directory on the host:
   ```
   IDE-daemon-client --host xx.xx.xx.xx:22118 --sync /tmp/A.java "~/ide_daemon"
   ```

   NOTE

   Replace *xx.xx.xx.xx* with the actual IP address of the host.

6 Obtaining a File from the Host by Using IDE Daemon

Function

Obtains a file from the host by using IDE Daemon.

Syntax

```
IDE-daemon-client --host <host_ip>:<port> --get <dest_dir> <source_dir>
```

Parameter

Table 6-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--host	• *host_ip*: specifies the IP address of the host. • *port*: specifies the port number.	Yes	The default value of *port* is **22118**.

Parameter	Description	Mandatory or Not	Default Value
--get	• *source_dir*: specifies the directory of the source file on the host, including the file name. Files can be stored only in the following directories: – ~/ide_daemon – ~/HIAI_PROJECTS – ~/HIAI_DATANDMODELSET – /opt/mini – /var/log/hisi_logs – /var/dlog • *dest_dir*: specifies destination directory used to store the file. The value includes the file name. *dest_dir* must be specified. Otherwise, the command fails to be executed.	Yes	-

Example

1. Log in to the server on the host as the **HwHiAiUser** user.
2. Run the following command to obtain the **B.java** file from the host and save it as **A.java** by using IDE Daemon:
   ```
   IDE-daemon-client --host xx.xx.xx.xx:22118 --get /tmp/A.java "~/ide_daemon/B.java"
   ```

NOTE

Replace *xx.xx.xx.xx* with the actual IP address of the host.

7 Detecting the Heartbeat Between IDE Daemon and the Host

Function

Detects the heartbeat between IDE Daemon and the host to check whether the host server is running.

Syntax

```
IDE-daemon-client --host <host_ip>:<port> --detect
```

Parameter

Table 7-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--host	• *host_ip*: specifies the IP address of the host. • *port*: specifies the port number.	Yes	The default value of *port* is **22118**.
--detect	Detects the heartbeat. If the heartbeat message is detected, **SUCCESS** is returned. Otherwise, no information is returned.	Yes	-

Example

1. Log in to the server on the host as the **HwHiAiUser** user.
2. Run the following command to check the heartbeat between IDE Daemon and the host:
   ```
   IDE-daemon-client --host xx.xx.xx.xx:22118 --detect
   ```

   NOTE

   Replace *xx.xx.xx.xx* with the actual IP address of the host.

8 Setting Log Levels

Function

Sets the log levels for the host and device.

Syntax

```
IDE-daemon-client --host <host_ip>:<port> [--device <deviceID>] --log '<params>'
```

Parameter

Table 8-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--host	• *host_ip*: specifies the IP address of the host. • *port*: specifies the port number.	Yes	The default value of *port* is **22118**.
--device	If the host is connected to multiple devices, you can specify a device by using **--device** *deviceID*. If the device is not specified, the device with *deviceID* of **0** is used by default.	No	The default value of *deviceID* is **0**.

Parameter	Description	Mandatory or Not	Default Value
--log	*params* includes the following items: • **SetLogLevel**: sets the global log level. The value **0** indicates the global log level, the value **1** indicates the module-level log level, and the value **2** indicates the event log level. When the event log level is set, **enable** indicates that the event log level is enabled, and **disable** indicates that the event log level is disabled. • **SetLogLevel[** *Module name*:*Level***]**: sets the log level of a specified module. – *Level*: **error**, **info**, **warning**, **debug**, **null** (**null** indicates that no log is recorded.) – *Module name*: **dlog**, **slog**, **cce**, and other values	Yes	-

Example

1. Log in to the server on the host as the **HwHiAiUser** user.
2. Run the following commands to set the log level for the host and device:

```
IDE-daemon-client --host xx.xx.xx.xx:22118 --log 'SetLogLevel(0)[error]'
IDE-daemon-client --host xx.xx.xx.xx:22118 --log 'SetLogLevel(1)[slog:error]'
IDE-daemon-client --host xx.xx.xx.xx:22118 --log 'SetLogLevel(2)[enable]'
```


NOTE

- Replace *xx.xx.xx.xx* with the actual IP address of the host.
- The value of *Module name* is defined in the enumerated format. The options are as follows:

  enum {

  DLOG = 0, // Dlog

  SLOG, // Slog

  IDEDD, // IDE daemon device

  IDEDH, // IDE daemon host

  LOGAGTH, // log agent host

  HCCL, // HCCL

  FMK, // Framework

  HIAIENGINE, // Matrix

  DVPP, // DVPP

  RUNTIME, // Runtime

  CCE, // CCE

  #if (OS_TYPE == LINUX)

  HDC, // HDC

  #else

  HDCL, // HDCL windows has a def with the same name HDC, so change HDC to HDCL

  #endif

  DRV, // Driver

  MDCCONTROL, // Mdc control

  MDCFUSION, // Mdc fusion

  MDCLOCATION, // Mdc location

  MDCPERCEPTION, // Mdc perception

  MDCMOP,

  MDCFSM,

  MDCCOMMON,

  MDCMONITOR,

  MDCBSWP, // MDC basesoftware platform

  MDCDEFAULT, // MDC UNDEFINE

  MDCSC, // MDC spatial cognition

  MDCBP,

  MDCTF,

  MLL,

  DEVMM, // Dlog memory managent

  KERNEL, // Kernel

  MDCSMCMD, // sm_control_cmd

  MDCSCREEN, // parking_spot_screen

  LIBMEDIA, // Libmedia

  CCECPU, // ai cpu

  ASCENDDK, // AscendDK

  ROS, // ROS


```
HCCP,
RoCE,
TEFUSION,
PROFILING, // Profiling
DP, // Data Preprocess
APP, // User Application call HIAI_ENGINE_LOG
INVLID_MOUDLE_ID
};
```

9 Sending Profiling Items to the Host by Using IDE Daemon

Function

Sends profiling items to the host by using IDE daemon and start profiling.

Syntax

```
IDE-daemon-client --host <host_ip>:<port> --profile "<params>"
```

Parameter

Table 9-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--host	• *host_ip*: specifies the IP address of the host. • *port*: specifies the port number.	Yes	The default value of *port* is **22118**.
--profile	Specifies profiling items in *params*.	Yes	-

Prerequisites

Mind Studio has been installed and project files compiled on Mind Studio have been copied to the directory on the host in advance.

For example, if the project name on Mind Studio is **testProject** and files generated after the project is compiled are in *Home directory of the Mind Studio installation user*/**tools/projects/testProject/out**, you need to upload files in *Home directory*

of the Mind Studio installation user/**tools/projects/testProject/out** to the **/home/HwHiAiUser/HIAI_PROJECTS/workspace_mind_studio/testProject/out** directory on the host and rename the executable file as **workspace_mind_studio**_*Project name* (for example, **workspace_mind_studio_testProject**). In addition, you need to run the **chmod +x workspace_mind_studio_testProject** command to grant the execute permission to the executable file.

Example

1. Log in to the Mind Studio server as the Mind Studio installation user.
2. Run the following commands to set the environment variables:
   ```
   export  LD_LIBRARY_PATH=~/tools/che/ddk/ddk/uihost/lib
   export  PATH=$PATH:~/tools/che/ddk/ddk/uihost/bin
   ```
3. Run the **IDE-daemon-client** command.

   The following is only an example. You need to change the parameters to actual values.

   - Replace *xx.xx.xx.xx* after **--host** with the actual IP address of the host server.
   - */home/ascend* indicates the home directory of the Mind Studio installation user. Change it to the actual value.
   - Replace */xxx/xxx* after **app_dir** with the path of the app on the host, for example, **/home/HwHiAiUser/HIAI_PROJECTS/workspace_mind_studio/testProject/out**.
   - Replace *app* with the app name in the directory specified by **app_dir**, for example, **workspace_mind_studio_testProject**.
   - Replace the path after **result_dir** with the actual directory on the host server. After running the command, you can view the profiling result in the directory specified by **result_dir**.

   ```
   IDE-daemon-client --host xx.xx.xx.xx:22118 --profile "{\"ddk_dir\": \"/home/ascend/tools/che/ddk/ddk\",\"app\": \"workspace_mind_studio_testProject\",\"app_dir\": \"/home/HwHiAiUser/HIAI_PROJECTS/workspace_mind_studio/testProject/out\", \"umode\": \"MIND\",\"result_dir\": \"/home/ascend/tools/projects/test_ycm\",\"peripheral_profiling\": \"\",\"ts_cpu_profiling\": \"off\",\"ai_cpu_profiling\": \"off\",\"rts_profiling\": \"on\",\"ai_core_profiling_mode\": \"\",\"ai_core_profiling\": \"off\", \"hiai_engine_profiling\": \"off\",\"framework_profiling\": \"off\",\"ctrl_cpu_profiling\": \"off\", \"profiling_mode\": \"online\",\"llc_profiling\": \"off\",\"ddr_profiling\": \"on\",\"deviceid\": \"0\", \"ddr_profiling_events\": \"read,write\", \"hiai_engine_profiling\": \"on\", \"analysis_target\": \"Launch Application\"}"
   ```

   NOTE

   For details about the meanings of profiling items, see the "Profiling" section in *Ascend 310 Mind Studio Auxiliary Tools*.

10 Collecting Dump Information Recorded by the Black Box on the Host

Function

Collects dump information recorded by the black box on the host by using IDE Daemon.

Syntax

```
IDE-daemon-client --host <host_ip>:<port> --bbox <params>
```

Parameter

Table 10-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--host	• *host_ip*: specifies the IP address of the host. • *port*: specifies the port number.	Yes	The default value of *port* is **22118**.

Parameter	Description	Mandatory or Not	Default Value
--bbox	*params* includes the following items: • **--all**: obtains the list and directory of files on all abnormal devices. • **--status**: obtains the number of exceptions on all devices. If there is only one device, the value, for example, **{(0,3)}**, is returned, indicating that three exceptions occur on device 0. If there are multiple devices, the value, for example, **{(1,3);(0,3)}** is returned, indicating that three exceptions occur on device 0 and three exceptions occur on device 1. Information about multiple devices is separated by a semicolon (;). • **--latest**: obtains the list and directory of the latest files of	Yes	-

Parameter	Description	Mandatory or Not	Default Value
	abnormal devices. If **FAILED** is returned, no exception occurs. • '--filter --device *deviceID* --except-num *n*': obtains the lists and directories of files from the first *n* abnormal devices among the specified devices. If multiple devices need to be specified, separate them with a comma (,). **--filter --device *deviceID* --except-num *n*** must be placed in single or double quotation marks.		

Example

1. Log in to the server on the host as the **HwHiAiUser** user.
2. Run the following command to collect abnormal file lists and directories from all devices on the host:
   ```
   IDE-daemon-client --host xx.xx.xx.xx:22118 --bbox --all
   ```

   NOTE

   Replace *xx.xx.xx.xx* with the actual IP address of the host.

11 Obtaining the Information About the Device Connected to the Host

Function

Obtains the information about the device connected to the host by using IDE Daemon.

Syntax

```
IDE-daemon-client --host <host_ip>:<port> --api <params>
```

Parameter

Table 11-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--host	• *host_ip*: specifies the IP address of the host. • *port*: specifies the port number.	Yes	The default value of *port* is **22118**.

Parameter	Description	Mandatory or Not	Default Value
--api	*params* includes the following items: • **device_info**: indicates the list of devices connected to the host. • **device_status**: Only the status of the camera on the developer board can be queried. The value **0** indicates that the camera does not exist, and the value **1** indicates that the camera exists. If the value **100** is returned, **1** indicates the Hi3559 chip, and the last two 0s indicate that the two cameras do not exist. • **board_id**: Only the device type on the developer board can be queried. • **sys_version**: Only the product version of the developer board can be queried.	Yes	-

Example

1. Log in to the server on the host as the **HwHiAiUser** user.
2. Run the following command to obtain the list of all devices connected to the host by using IDE Daemon:
   ```
   IDE-daemon-client --host xx.xx.xx.xx:22118 --api device_info
   ```

   > NOTE
   >
   > Replace *xx.xx.xx.xx* with the actual IP address of the host.

12 Generating a Character String Encryption Files

Function

Generates character string encryption files on the IDE Daemon server, including the .secu and .store files. These two files are used during certificate replacement.

Syntax

```
IDE-daemon-client --key
```

Parameter

Table 12-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--key	Generates a character string encryption file.	Yes	-

Example

1. Log in to the server on the host as the **HwHiAiUser** user.
2. Run the following command to generate a character string encryption file in the current directory:

   Enter the password as prompted. Ensure that the **HwHiAiUser** user has the write permission on the directory where the command is run.

   ```
   IDE-daemon-client --key
   ```


13 Synchronizing the Time Between IDE Daemon and the Host

Function

Synchronizes the time of the host server with the time of the IDE Daemon server.

Syntax

```
IDE-daemon-client --host <host_ip>:<port> --time
```

Parameter

Table 13-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--host	• *host_ip*: specifies the IP address of the host. • *port*: specifies the port number.	Yes	The default value of *port* is **22118**.

Parameter	Description	Mandatory or Not	Default Value
--time	If both **--host** and **--time** are used, the time of the IDE Daemon server prevails, that is, the time on the host server is synchronized to be consistent with that of the IDE Daemon server. The IDE-daemon-client commands with the **--host** parameter can include the **--time** parameter, which is optional. The following provides an example: IDE-daemon-client --host <*host_ip*>:<*port*> --detect --time	Yes	-

Example

1. Log in to the server on the host as the **HwHiAiUser** user.
2. Run the command to check the heartbeat and synchronize the time:
   ```
   IDE-daemon-client --host xx.xx.xx.xx:22118 --detect --time
   ```

   NOTE

   Replace *xx.xx.xx.xx* with the actual IP address of the host.

14 Viewing the Help Information

Function

Displays the help information about IDE-daemon-client commands.

Syntax

```
IDE-daemon-client --help
```

Parameter

Table 14-1 Parameter description

Parameter	Description	Mandatory or Not	Default Value
--help	Displays the help information.	Yes	-

Example

1. Log in to the server on the host as the **HwHiAiUser** user.
2. Run the following command to view help information:
   ```
   IDE-daemon-client --help
   ```


15 Appendix

15.1 Change History

15.1 Change History

Release Date	Description
2020-05-30	This issue is the first official release.

