



***Smart Dispatch  
Troubleshooting Guide***



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# Documentation Information

This section describes the conventions and revision history of this document.

## Documentation Conventions

### Instructional Icons

Icon	Description
 <b>Tip</b>	Indicates information that can help you make better use of your product.
 <b>Note</b>	Indicates references that can further describe the related topics.
 <b>Caution</b>	Indicates situations that could cause data loss or equipment damage.
 <b>Warning</b>	Indicates situations that could cause minor personal injury.
 <b>Danger</b>	Indicates situations that could cause major personal injury or even death.

### Notational Conventions

Convention	Description
“ ”	The quotation marks enclose the name of a software interface element. For example, click “OK”.
<b>Bold</b>	The text in boldface denotes the name of a hardware button. For example, press the <b>PTT</b> key.
->	The symbol directs you to access a multi-level menu. For example, to select “New” from the “File” menu, we will describe it as follows: “File -> New”.

## Revision History

Version	Release Date	Description
V4.5	04-2015	Modified all screenshots that involve the product version number.
V4.2	07-2014	Minor changes to wording.
V4.0	11-2013	Added the cases such as the dispatch station/repeater failing to get online, GPS real-time positioning problem and no sound in all call.

Version	Release Date	Description
V3.6	02-2013	Initial release.

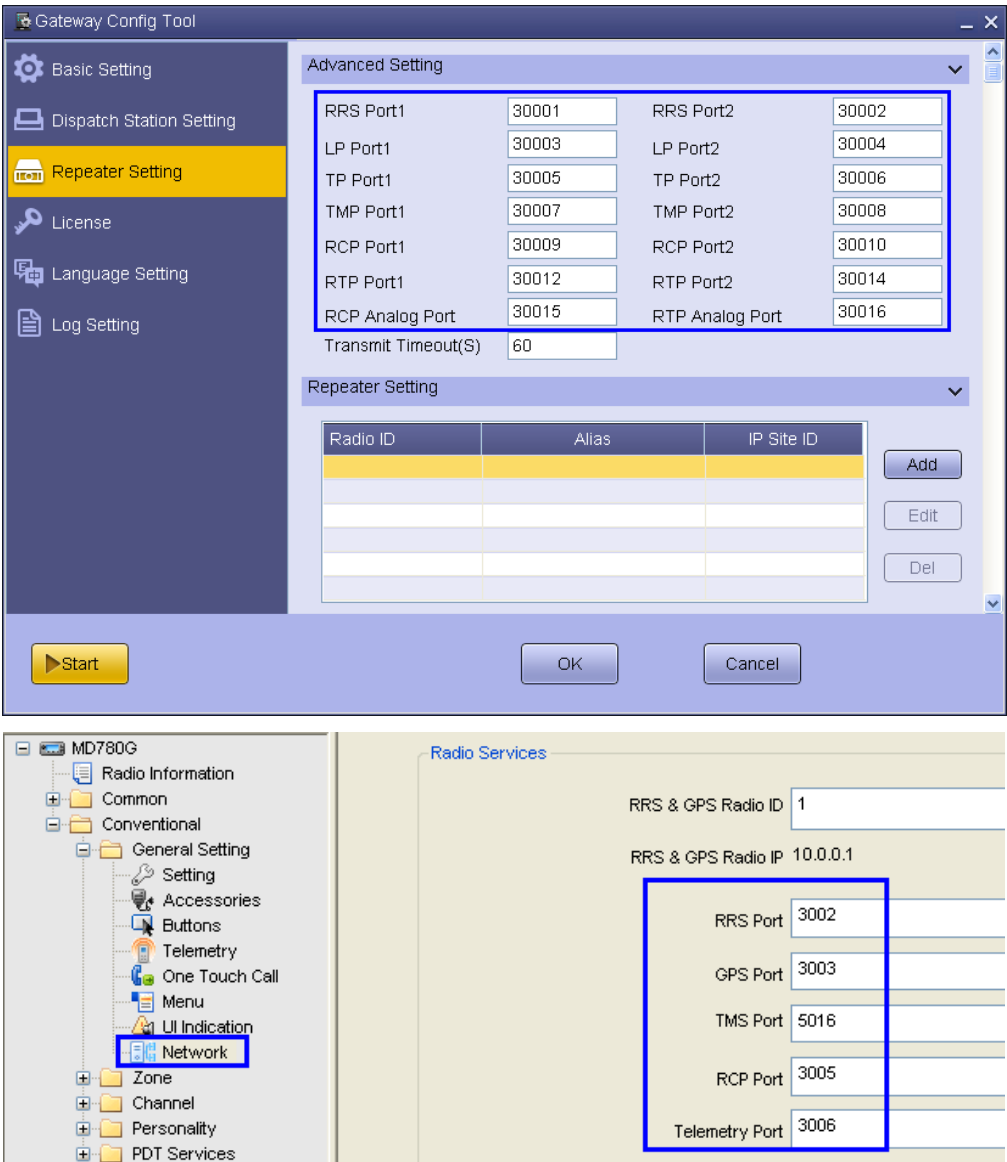
# 1. Instructions

Before determining any problem, satisfy the following requirements first.

- Ensure the radio and the dispatch station/repeater work on the same channel with the same color code and slot, and within the range of communication.
- Ensure the router and the computer are working normally, and the network cable is in proper connection.
- Ensure the firewall and the antivirus software allow the following programs to run.

Smart Dispatch Gateway Configuration Tool	Gateway\Gateway.exe
	Gateway\ConfigTool_Gateway.exe
	Gateway\GatewayConsole\GatewayConsole.exe
	Gateway\RDSServiceDog.exe
Smart Dispatch Server Configuration Tool	Server\RDSServer.exe
	Server\ConfigTool_Server.exe
	Server\ServerConsole\ServerConsole.exe
	Server\RDSServiceDog.exe
Cilent	Client\DispatcherClient.exe

- Ensure the firewall of the computer allows the access by the following UDP ports.





The screenshot shows the 'Settings' dialog box with the 'Call Setting' tab selected. The left sidebar contains 'Base Setting', 'Call Setting' (highlighted), 'Map Setting', 'Log Setting', and 'MuteGroup Setting'. The main area is divided into sections: 'PTT Setting' with checkboxes for 'Short Press', 'External PTT' (set to 'COM1'), and 'PTT Shortcut' (set to 'Space'); 'Emergency Alarm' with checkboxes for 'Center on the map', 'Emergency Shrink', and 'Mute', and a text field for 'Alarm sound file' (set to 'C:\Program Files (x86)\Hytera\SmartDispatch4.5\C'); 'VOIP Port' with a spinner box set to '18000'; and 'Private Call' with checkboxes for 'Private Call' and 'Mute'. 'Save' and 'Cancel' buttons are at the bottom.

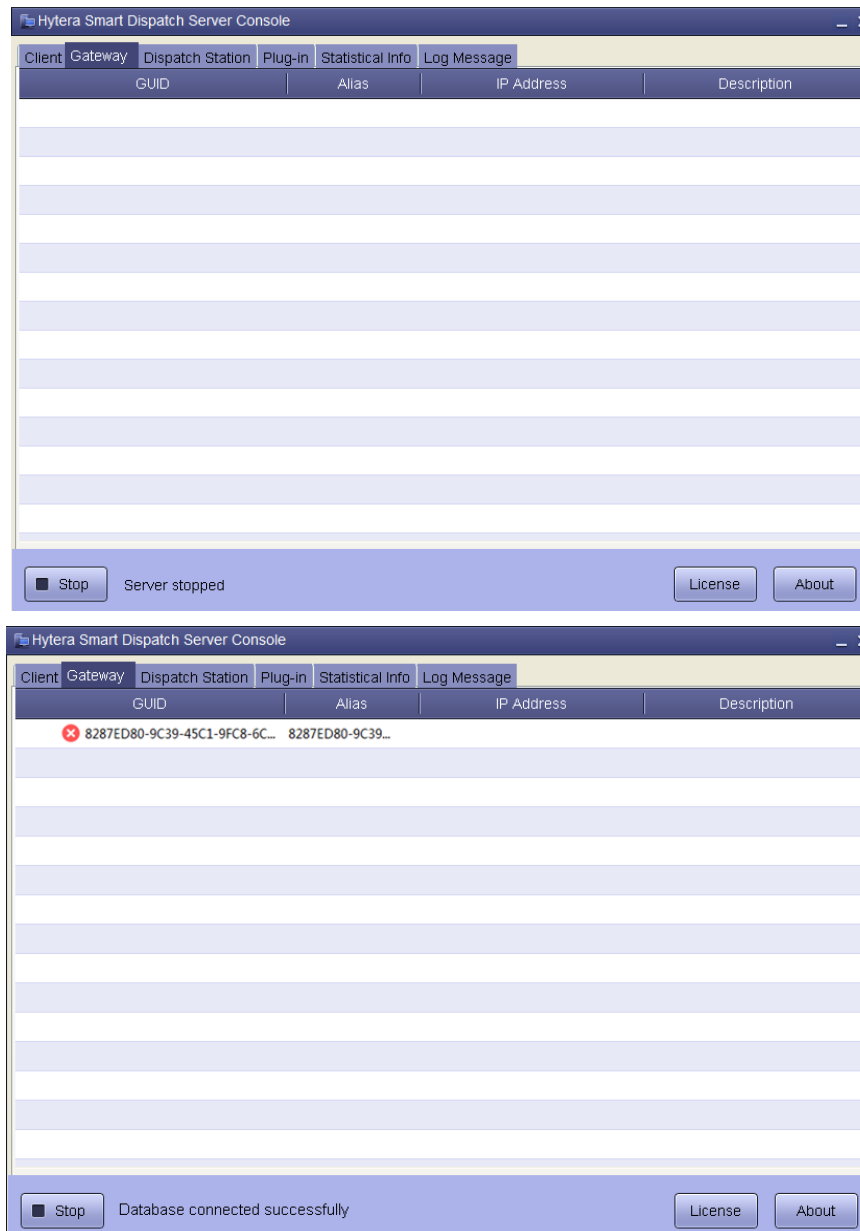
The screenshot shows the 'Server Config Tool' with the 'Basic Setting' tab selected. The left sidebar contains 'Basic Setting' (highlighted), 'Database Setting', and 'Geofencing Alarm Setting'. The main area shows 'Local IP Address' (192.168.25.29), 'Command Port' (61400), and 'VOIP Port' (17000). A blue box highlights the 'Command Port' and 'VOIP Port' fields.

**Note**

VOIP port is used for voice communication in the server. It is recommended to reserve 400 ports for voice communication. For example, if the starting port number is 17000, the port range will be 17000–17399.

## 2. The Smart Dispatch Gateway cannot connect to the Smart Dispatch Server

### Symptom



### Possible Cause

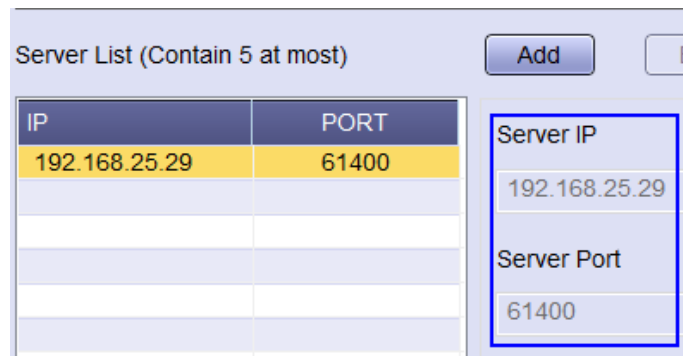
- The Smart Dispatch Server is not started.
- The IP address and port number of the Smart Dispatch Server is incorrect.
- Network connection between the Smart Dispatch Gateway and Smart Dispatch Server fails.
- The "Server Port" set in the Smart Dispatch Gateway Config Tool is unavailable.

- The UDP port of the Smart Dispatch Gateway is wrongly configured.

## Solution

**Step 1** Ensure the Smart Dispatch Server is running.

**Step 2** Check the “Server IP” and “Server Port” in the “Hytera Smart Dispatch GatewayConfigTool” and ensure these settings are correct.



**Step 3** Check the network connection between the Smart Dispatch Gateway and the Smart Dispatch Server.

To do so, enter “telnet” + the server IP + the server port number (e.g.: “telnet 192.168.100.200”) in the command window. If no error information is displayed, it means that the connection is normal.



### Note

In Windows 7, the “telnet” command may be disabled. In this case, you need to start the telnet service in the console.

**Step 4** Check to ensure the “Server Port” set in the Smart Dispatch Gateway Config Tool is available.

For example, to check the port 61400, enter “**netstat -ano | findstr 61400**” in the command window.

**Step 5** Check the UDP port of the Smart Dispatch Gateway.

Ensure the “Local Port” in the “Hytera Smart Dispatch GatewayConfigTool” is set to “0” or this port is not occupied by other programs.

Gateway Config Tool

**Basic Setting**

Dispatch Station Setting

Repeater Setting

License

Language Setting

Log Setting

Local IP: 192.168.25.29

Local Port: 0

Local VOIP Port: 19000

GPS Speed Unit of Telemetry: Kilometers per hour

Auto Stop Unsubscribed GPS: ☒

Server List (Contain 5 at most)

IP	PORT
192.168.25.29	61400

Add Edit Del

Server IP: 192.168.25.29

Server Port: 61400

Stop OK Cancel

## 3. The dispatch station or repeater fails to get online

### 3.1 The dispatch station or repeater cannot be displayed in the Smart Dispatch Client

#### Symptom

The dispatch station/repeater cannot be displayed in the Smart Dispatch Client.

#### Possible Cause

- The dispatcher is not authorized to dispatch the dispatch station/repeater.
- The dispatch station is set to transfer the GPS data only, so the dispatcher can't dispatch it.
- "GPS Repeater" is set for the selected slot of the repeater, so the dispatcher can't dispatch the repeater.
- The Smart Dispatch Gateway and the Smart Dispatch Server are in connection error.
- The dispatch station/repeater is not set in the "Hytera Smart Dispatch GatewayConfigTool".

#### Solution

**Step 1** Ask the administrator to grant the appropriate right to the dispatcher to dispatch the dispatch station/repeater.

**Step 2** Run the Smart Dispatch Gateway Config Tool and check if the "Only for GPS Data"/"GPS Repeater" or "Quick GPS" is selected in "Dispatch Station Setting" or "Repeater Setting" correspondingly.

If yes, deselect the corresponding option; otherwise, the slot used by the dispatch station/repeater will not be displayed in the Smart Dispatch Client.

**Step 3** Check the connection between the Smart Dispatch Gateway and Smart Dispatch Server. See the details in ["2 The Smart Dispatch Gateway cannot connect to the Smart Dispatch Server"](#).

**Step 4** Configure the dispatch station/repeater in the "Hytera Smart Dispatch GatewayConfigTool".

### 3.2 The dispatch station fails to get online

#### Symptom

The IP address (i.e. "PC IP") of the dispatch station in the CPS is consistent with that of the dispatch station in the Smart Dispatch Gateway. Also, the console shows that the Smart Dispatch Gateway is online. However, the dispatch station is displayed offline in the Smart Dispatch Client.

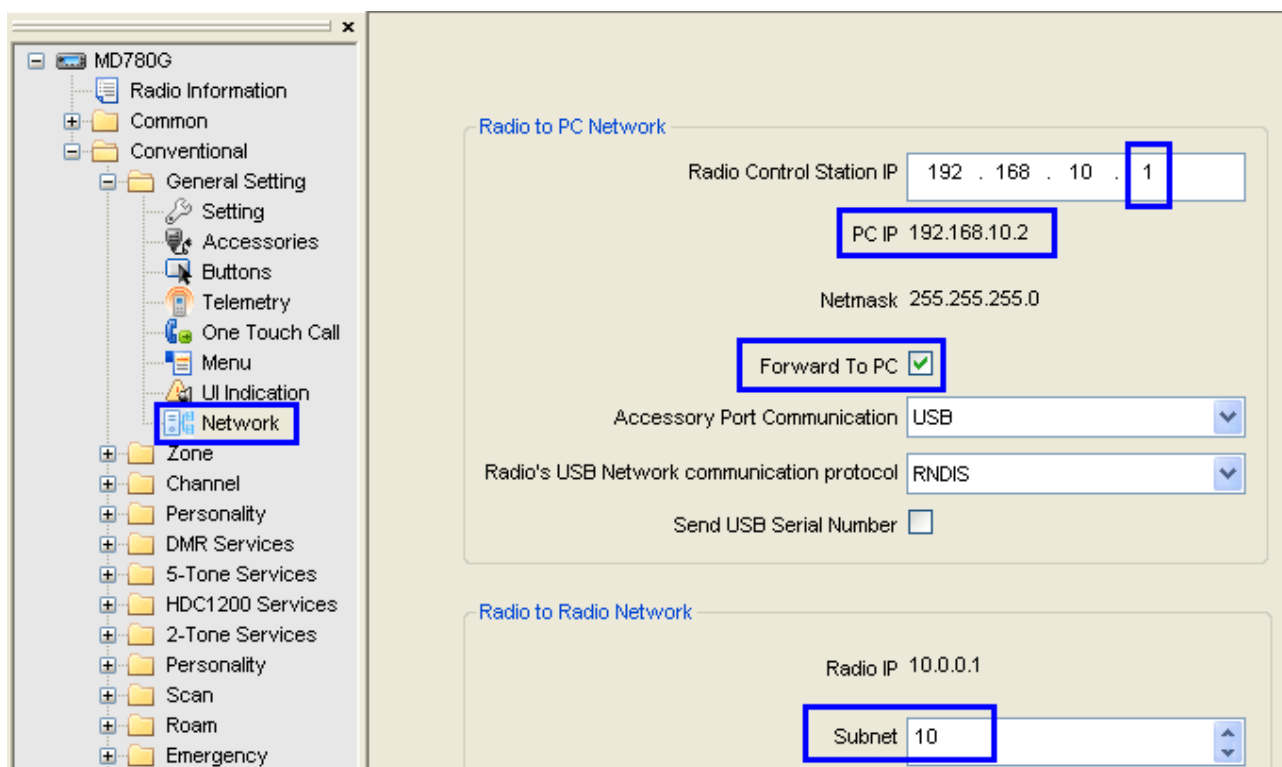
## Possible Cause

- The dispatch station is improperly programmed.
- The dispatch station is in connection error.
- The IP address of the dispatch station is incorrectly set in the “Hytera Smart Dispatch GatewayConfigTool”.
- The UDP port for the dispatch station is occupied by other programs.

## Solution

**Step 1** Check the correct programming for the dispatch station and satisfy the following settings:

- Select “Forward to PC”.
- The “Subnet” must be different from the first field of the IP address of other devices in the LAN. For example, if the IP address of one device in the LAN is 30.68.3.20, the “Subnet” cannot be set to “30”.
- The subnet ID shall be unique when multiple dispatch stations are connected to the same Smart Dispatch Gateway.
- The last field of the “Radio Control Station IP” must be set to “1”.
- The “PC IP” of the dispatch station shall be unique in the LAN.

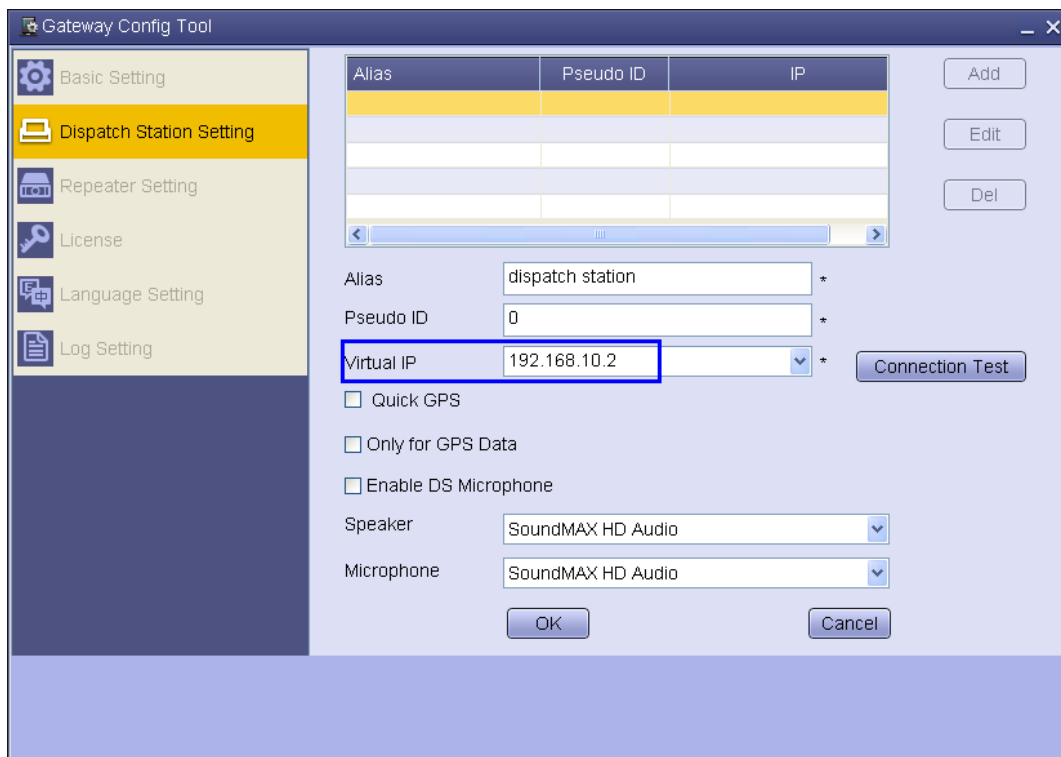


**Step 2** Check if the dispatch station is normally connected.

- Ensure that the USB driver of the dispatch station is installed and works properly, or no conflict with other programs occurs.
- Make sure that the dispatch station is on and connected successfully to the computer. To do so, try to re-connect them, replace the programming cable or restart the computer.
- Check if the IP address of the dispatch station exists.

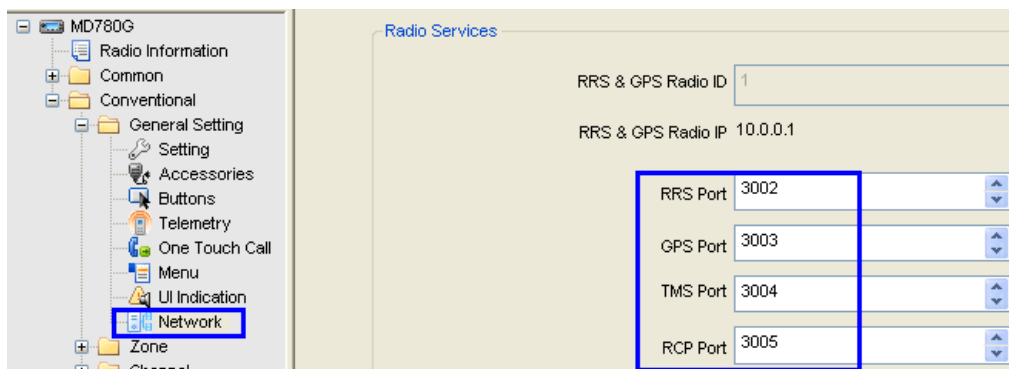
Enter “ipconfig” in the command window to check the IP address of the dispatch station.

**Step 3** Ensure that the IP address of the dispatch station in the Smart Dispatch Gateway is consistent with that of the dispatch station in the CPS.



**Step 4** Ensure that the UDP port of the dispatch station is not in use by other programs.

For example, to check the usage of the port 3002, enter “**netstat -ano | findstr 3002**” in the command window.



## 3.3 The repeater stays offline in the Smart Dispatch Client

### 3.3.1 The repeater stays offline in the Smart Dispatch Gateway Console

#### Possible Cause

- When the repeater is used for dispatching, any of these IP addresses is set to “127.0.0.1”: the “Local IP” in the “Hytera Smart Dispatch GatewayConfigTool, the “Local IP Address” in the “Hytera Smart Dispatch ServerConfigTool and the “Server IP” in the login interface of the Smart Dispatch Client.
- The “Radio ID” of the repeater set in the CPS is inconsistent with that in the Smart Dispatch Gateway.
- Network connection between the Smart Dispatch Gateway and the repeater fails.
- The IP address of the repeater or the MAC address conflicts.
- The repeater is programmed improperly: the “Forward to PC” option is deselected for the master repeater, or the IP address and port in the Smart Dispatch Gateway are incorrect.
- The “Radio ID” of the repeater connected to the Smart Dispatch Gateway is not unique.

#### Solution

**Step 1** When the repeater is used for dispatching, be sure to enter the actual IP address instead of “127.0.0.1” in the following fields.

The image shows two configuration windows. The top window is titled 'Gateway Config Tool' and has a sidebar with 'Basic Setting' (selected) and 'Dispatch Station Setting'. The 'Local IP' field is highlighted with a blue box and contains the value '192.168.25.29'. The 'Local Port' field contains the value '0'. The bottom window is titled 'Server Config Tool' and has a sidebar with 'Basic Setting' (selected), 'Database Setting', and 'Geofencing Alarm Setting'. The 'Local IP Address' field is highlighted with a blue box and contains the value '192.168.25.29'. The 'Command Port' field contains the value '61400' and the 'VOIP Port' field contains the value '17000'.

Tool	Field	Value
Gateway Config Tool	Local IP	192.168.25.29
	Local Port	0
Server Config Tool	Local IP Address	192.168.25.29
	Command Port	61400
	VOIP Port	17000

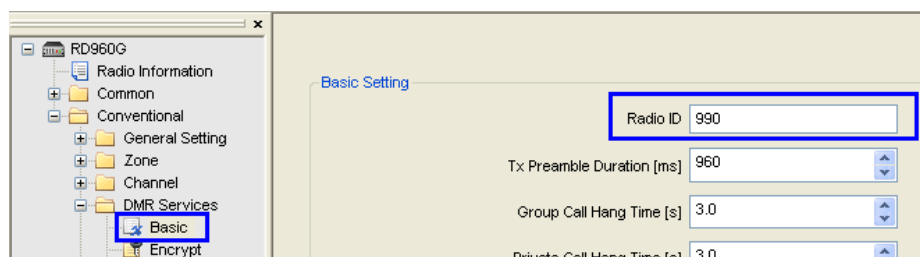




The image shows the Hytera Smart Dispatch V4.5 login window. It has a dark blue header with the Hytera logo and version number. The main area is light blue and contains the following fields and buttons:

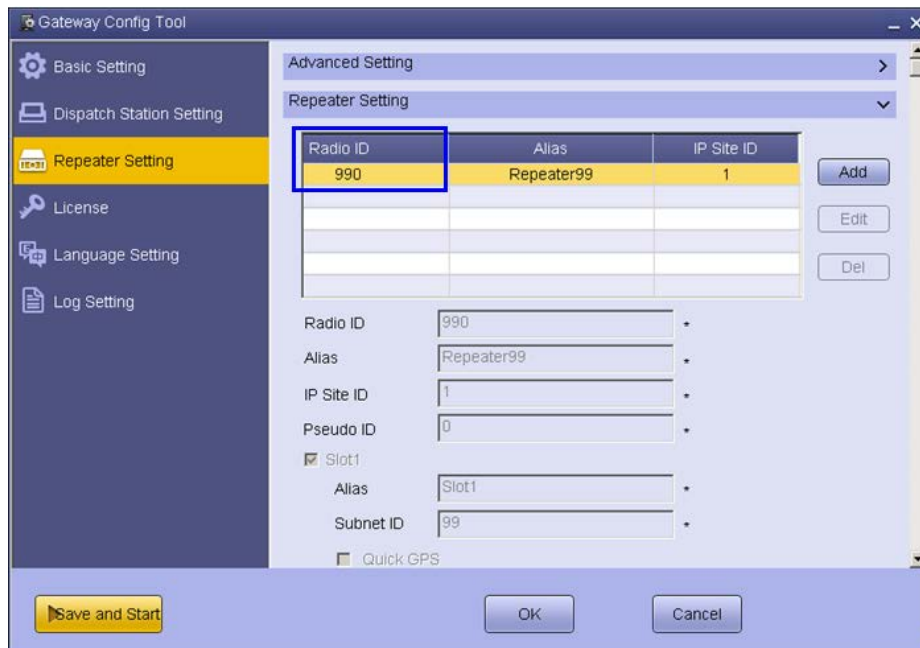
- User Name:** A dropdown menu with 'admin' selected.
- Password:** An empty text input field.
- Setting:** A dropdown menu with a downward arrow.
- Server IP:** A text input field containing '192.168.25.29', which is highlighted with a blue box.
- Port:** A text input field containing '61400'.
- Login Button:** A blue button with a lock icon and the text 'login'.
- Footer:** Copyright ©2014 Copyright (C) Hytera Communications Co., Ltd. All Rights Reserved. and a 'Cancel' button.

**Step 2** Check the “Radio ID” of the repeater in the CPS and the Smart Dispatch Gateway respectively, and ensure the radio ID is identical.



The image shows the RD960G Basic Setting window. The left sidebar shows a tree view with 'Basic' selected under 'DMR Services'. The main area is titled 'Basic Setting' and contains the following fields:

- Radio ID:** A text input field containing '990', which is highlighted with a blue box.
- Tx Preamble Duration [ms]:** A numeric input field with '960' and up/down arrows.
- Group Call Hang Time [s]:** A numeric input field with '3.0' and up/down arrows.
- Private Call Hang Time [s]:** A numeric input field with '3.0' and up/down arrows.

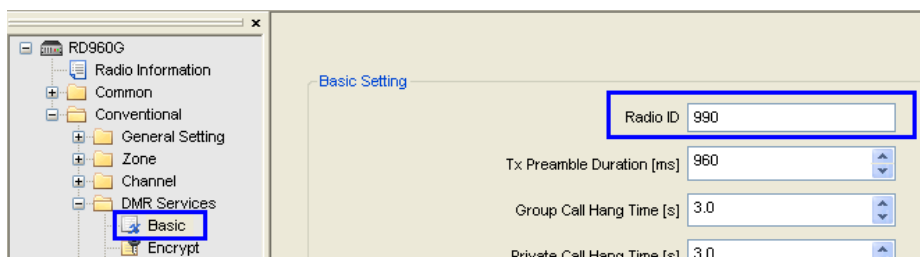


**Step 3** Check the network connection between the Smart Dispatch Gateway and the repeater.

To do so, ping the IP address of the repeater in the computer where the Smart Dispatch Gateway is installed. If the ping command fails, change the IP address.

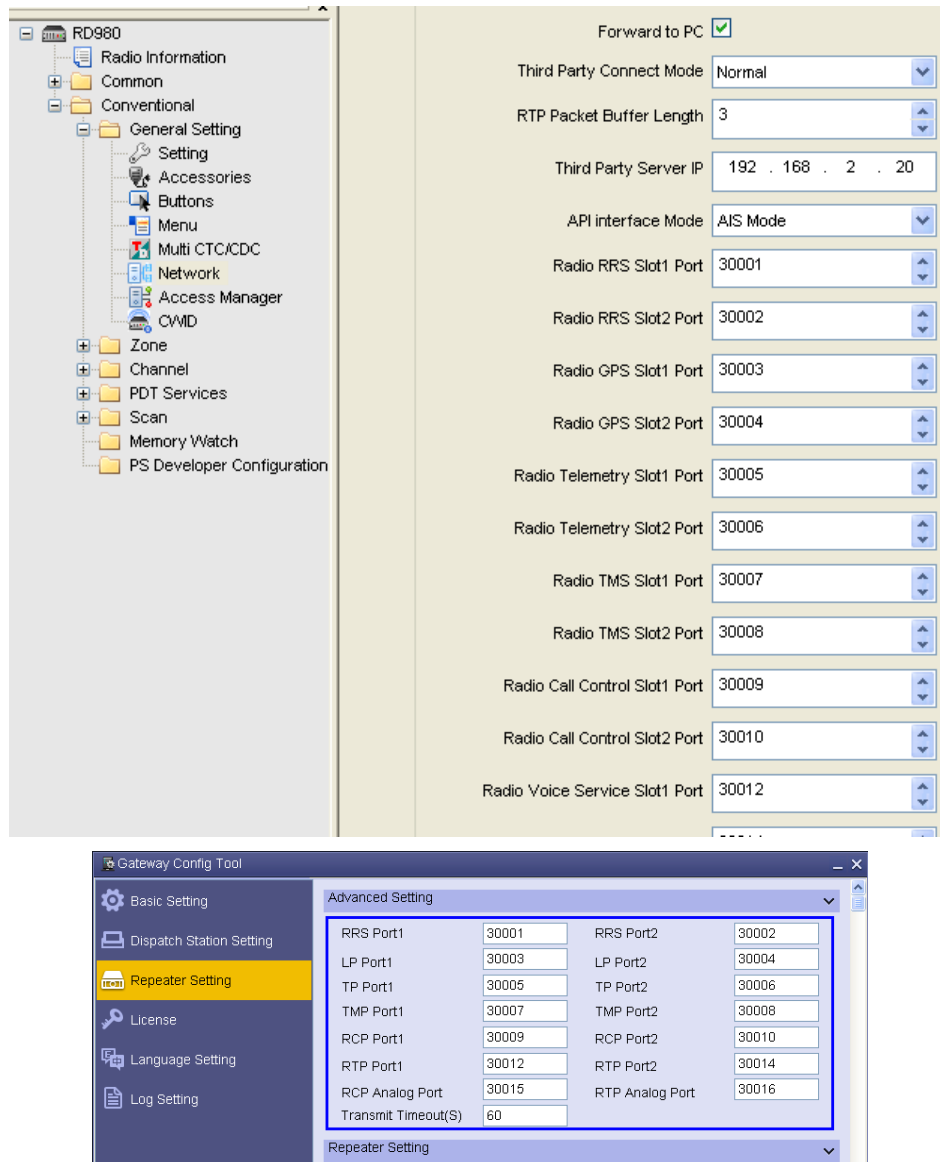
**Step 4** Ensure the repeater IP address or the MAC address does not conflict.

**Step 5** Check the “Radio ID” of the repeater connected to the Smart Dispatch Gateway and ensure it is unique.



**Step 6** Check the repeater settings in the CPS.

Ensure that the “Forward to PC” option is selected, the “Third Party Server IP” is the IP address of Smart Dispatch Gateway, and each port number is consistent with the corresponding port number in the Smart Dispatch Gateway.



### 3.3.2 The repeater stays offline in the Smart Dispatch Server Console

#### Possible Cause

- The repeater is displayed offline in the Smart Dispatch Gateway Console.
- Connection between the Smart Dispatch Gateway and the Smart Dispatch Server fails.

#### Solution

**Step 1** Ensure the repeater is online in the Smart Dispatch Gateway Console.

For details, see “[3.3.1 The repeater stays offline in the Smart Dispatch Gateway Console](#)”.

**Step 2** Ensure the connection is normal between the Smart Dispatch Gateway and the Smart Dispatch Server.

For details, see “[2 The Smart Dispatch Gateway cannot connect to the Smart Dispatch Server](#)”.

## 3.4 The radio stays offline and the online check fails

### Symptom

The radio is displayed offline in the Smart Dispatch Client, and its online check fails.

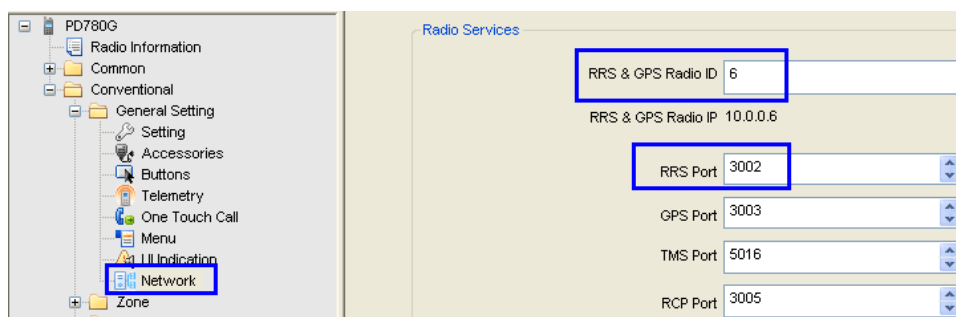
### Possible Cause

- The radio is programmed incorrectly, so it cannot send the registration information to the dispatch station/repeater.
- The radio or the dispatch station/repeater is not working on digital channel.
- The radio stops automatic registration after it re-registers for the limited times.

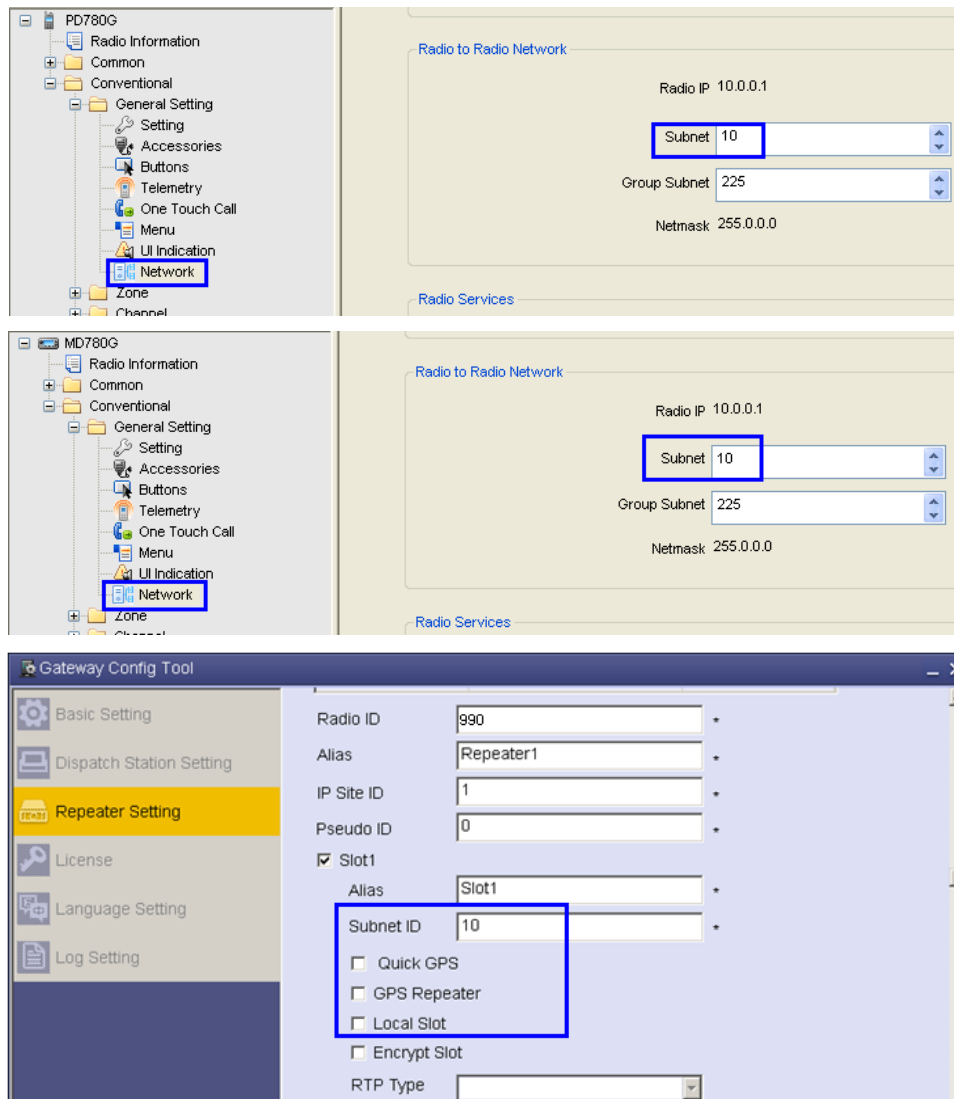
### Solution

**Step 1** Check the radio settings in the CPS and satisfy the following requirements.

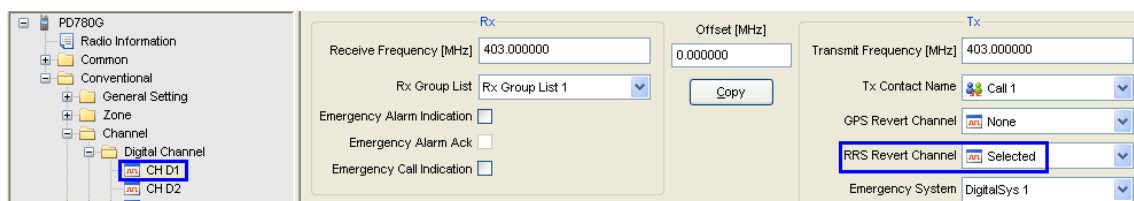
- Set the “RRS & GPS Radio ID” correctly:
  - When the dispatch station is used, enter its radio ID in this field.
  - When the repeater is used for dispatching, this parameter is subject to the repeater working mode. For example, if the repeater works in the Normal mode, enter the master repeater’s ID in this field; if the repeater works in the Selective mode, enter the radio ID of the repeater through which the radio communicates with other radios in this field.



- The “RRS Port” number of the radio shall be 3002.
- The subnet of the radio must be consistent with that of the dispatch station/repeater. When the radio registers with the repeater, the “Subnet” must be consistent with the “Subnet ID” of the repeater slot set in the “Hytera Smart Dispatch GatewayConfigTool”, rather than that of the “GPS Repeater”.



- The “RRS Revert Channel” must be set to “Selected” for the radio.



### ⚠ Caution

If the firmware version of the radio is V4.05, the “RRS” option needs to be selected for the channel which is used as the RRS revert channel.

**Step 2** Ensure the radio or the dispatch station/repeater is working on digital channel.

**Step 3** Switch the channel or restart the radio.

Thus the radio will always send the registration request to the dispatch station/repeater automatically.

## 4. Call

### 4.1 No sound is heard after a call is initiated

#### Symptom

The call initiated by a radio is displayed silently in the Smart Dispatch Client. Also, the call initiated by the dispatcher can be received by the radio, but no sound is heard on the radio.

#### Possible Cause

- The dispatcher is not authorized to dispatch the radio.
- The sound card of the computer with the Smart Dispatch Client installed is incorrectly set.
- The Smart Dispatch Client is not restarted after the speaker is plugged or removed from the computer where the Client is installed or after the properties of the audio output device are modified in the computer.
- When a dispatch station is used, its audio setting is incorrect for the Smart Dispatch Gateway.
- When a repeater is used for dispatching, the IP address of the Smart Dispatch Server is incorrectly set.

#### Solution

**Step 1** Ensure the dispatcher is authorized to dispatch the radio.

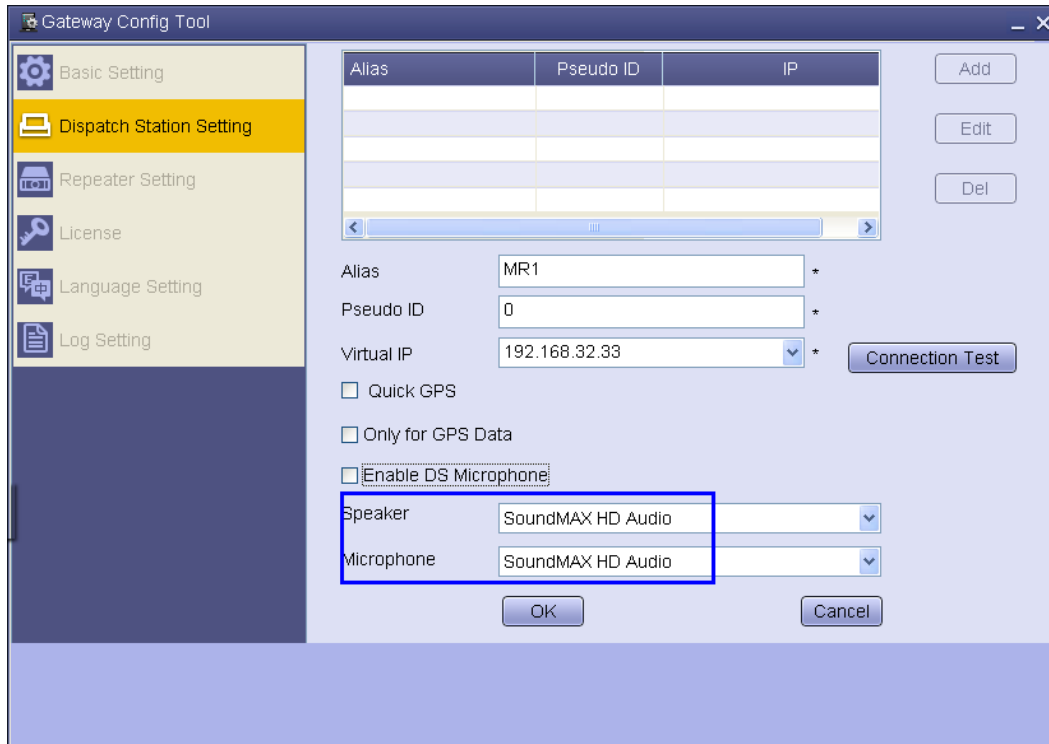
**Step 2** Check if the sound card is correctly set in the computer where the Smart Dispatch Client is installed.

See the details in “Testing the Sound Card” in the corresponding *Smart Dispatch Configuration Guide*.

**Step 3** Check if the Smart Dispatch Client is restarted after the speaker is plugged or removed from the computer where the Client is installed or after the properties of the audio playback device are modified in the computer.

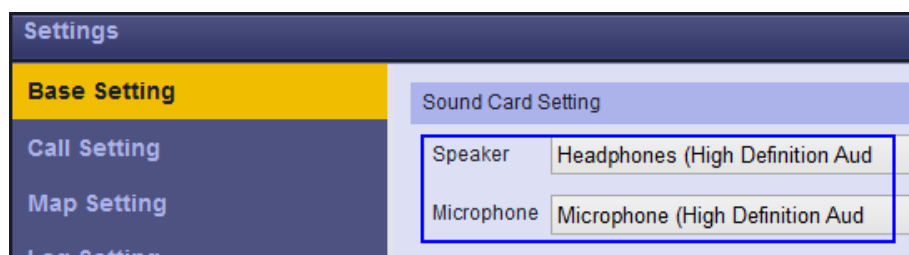
**Step 4** When a dispatch station is used, check its audio settings and satisfy the following requirements:

- Ensure the audio settings for the Smart Dispatch Gateway are correct.



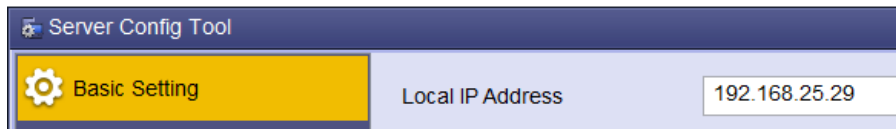
- Ensure the audio cable of the dispatch station is connected properly.
- Whenever the audio cable is plugged into or removed from the computer, restart the Smart Dispatch Gateway.
- Restart the Smart Dispatch Gateway when the properties of the audio playback device are modified in the computer where the Smart Dispatch Gateway is installed.

**Step 5** Ensure the parameters of “Sound Card Setting” are set correct in the Smart Dispatch Client, as shown in the example below.



**Step 6** When a repeater is used for dispatching, check if the IP address of the Smart Dispatch Server is correctly set:

- Ensure to enter the actual IP address rather than “127.0.0.1” in the “Local IP Address” field in the “Hytera Smart Dispatch ServerConfigTool”.



- Ensure to enter the actual IP address rather than “127.0.0.1” in the “Server IP” field in login interface of the Smart Dispatch Client.



## 4.2 Sometimes no sound is heard in the Smart Dispatch Client

This problem only occurs in Windows 7.

### Symptom

The sound is only heard in the Smart Dispatch Client when the radio initiates a call for the first time; or no sound is heard from time to time when a radio is initiating a call.

### Possible Cause

Windows 7 Service Pack 1 (SP1) is not installed in the computer where the Smart Dispatch Client is installed.

### Solution

Install the Service Pack 1 (SP1) of Windows 7 in the computer where the Smart Dispatch Client is installed. First, ensure there is enough disk space for the installation:

Windows 7	Estimated Needed Disk Space
x86 (32-bit)	750 MB
x64 (64-bit)	1050 MB

It is recommended to use Windows Update to install the SP1. See more installation methods in the



Microsoft website.

If the automatic update program is set for the computer, the Windows Update will prompt you to install SP1. Then follow the instructions in the pop-up windows to finish the installation. If no SP1 installation prompt is received, do as follows:

**Step 1** Disable the antivirus software while installing the SP1.

**Note**

Some antivirus software may forbid or slow down the SP1 installation. To disable the application, make sure you know the risk. And enable the software after the SP1 installation.

**Step 2** Connect the computer to Internet.

**Step 3** Go to “Start -> All Programs -> Windows Update” from the desktop.

**Step 4** Click “Check for Updates” in the pop-up window.

**Step 5** Click the link to view the available updates if you find any. In the update list, select “Microsoft Windows Service Pack (KB976932)” and click “OK”.

If the SP1 is not listed, you need to install other necessary updates first. Then return to the “Windows Update” window to check for updates again.

**Step 6** Click “Install Updates” .

Enter the administrator password or confirm if the system lets you do so.

**Step 7** Follow the instructions in the pop-up windows to finish the installation.

**Step 8** After the installation, log in to the computer if the Windows login prompt appears.

You may see a notice to tell you whether the update is finished.

**Step 9** If the antivirus software is disabled, enable it.

## 4.3 The Smart Dispatch Client takes a long time or fails to initiate a call to the radio

This problem only occurs in Windows 7.

### Symptom

The call initiated by the Smart Dispatch Client takes a long time or fails to be established.

### Possible Cause

Windows 7 Service Pack 1 (SP1) is not installed in the computer where the Smart Dispatch Gateway is installed.

## Solution

Install the Service Pack 1 (SP1) of Windows 7 in the computer where the Smart Dispatch Gateway is installed.

See the installation method in “[Solution](#)” of “[4.2 Sometimes no sound is heard in the Smart Dispatch Client](#)”.

## 4.4 When a radio under a slave repeater in Normal mode initiates a call, the call fails to be displayed in the Smart Dispatch Client

### Symptom

The Smart Dispatch Client fails to display the call or message received from a radio under a slave repeater in Normal mode.

### Possible Cause

The IP multi-site connection between the master repeater and the slave repeaters is unsuccessful.

### Solution

Check the IP multi-site connection between the master repeater and the slave repeaters.

- Ensure to ping the IP address of all the repeaters in the Normal mode successfully on the computer equipped with the Smart Dispatch Gateway.
- Note that you cannot ping the IP address when the repeaters power off or the IP multi-site network is disconnected.

## 4.5 The radio cannot receive the group call from the Smart Dispatch Client

### Symptom

The radio can receive the group call from the dispatch station but not the Smart Dispatch Client.

### Possible Cause

- The group call ID set for the Smart Dispatch Client is inconsistent with that set for the radio.
- The group call ID is not included in the radio's Rx group list.

### Solution

Check if the group call ID set for the radio is consistent with that set for the Smart Dispatch Client.

The screenshot shows the 'Group Management' section on the left sidebar with 'Group Management' selected. The main area displays a table of groups:

Workgroup	Org. Block
Group ID	Alias
21	g21
44	g23
45	g24
46	g25
47	g26
48	g27

Below this, the 'Contact List' window is open, showing a table of contacts:

No.	Call Alias	Call Type	Call ID
1	Call 21	Group Call	21
2	Call 44	Group Call	44

Ensure the group call ID is included in the Rx group list of the radio. Take Group 21 as an example here.

The first screenshot shows the 'Contact List' window with the 'Call ID' column highlighted for 'Call 21'.

The second screenshot shows the 'Rx Group List' window. The 'Available' list contains 'Call 44' and the 'Members' list contains 'Call 21'. The 'Add >>' button is visible.

The third screenshot shows the 'Rx' configuration window. The 'Rx Group List' dropdown is set to 'Rx Group List 1'. The 'Receive Frequency [MHz]' is 450.000000 and the 'Offset [MHz]' is 0.000000.

## 5. Message

### 5.1 The dispatcher fails to send message to an individual radio

#### Symptom

The Smart Dispatch Client prompts the sending failure when the dispatcher sends message to an individual radio.

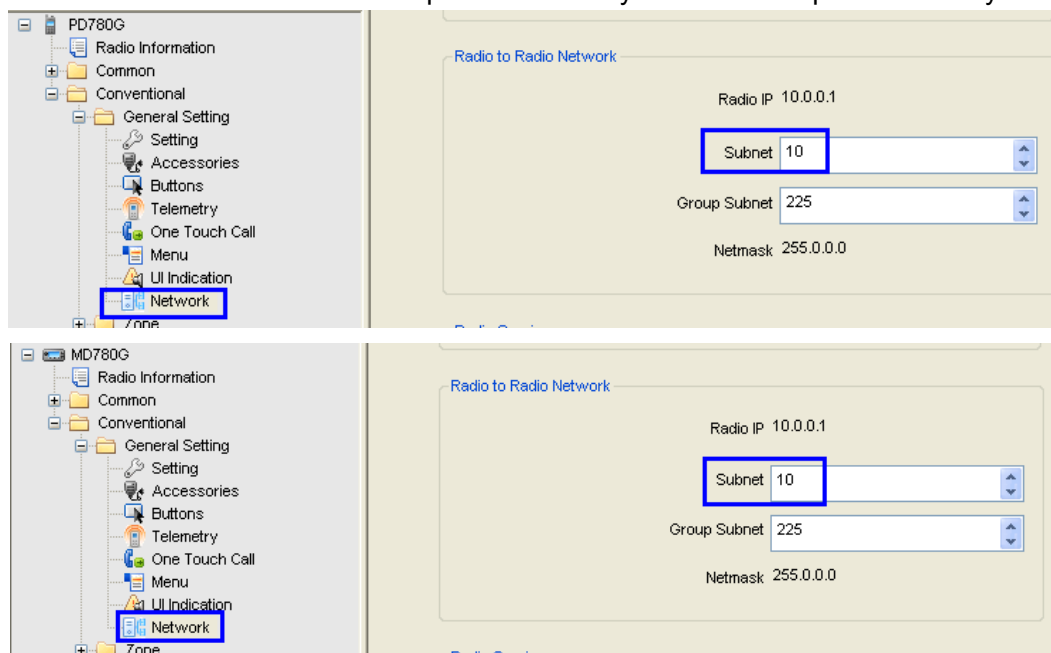
#### Possible Cause

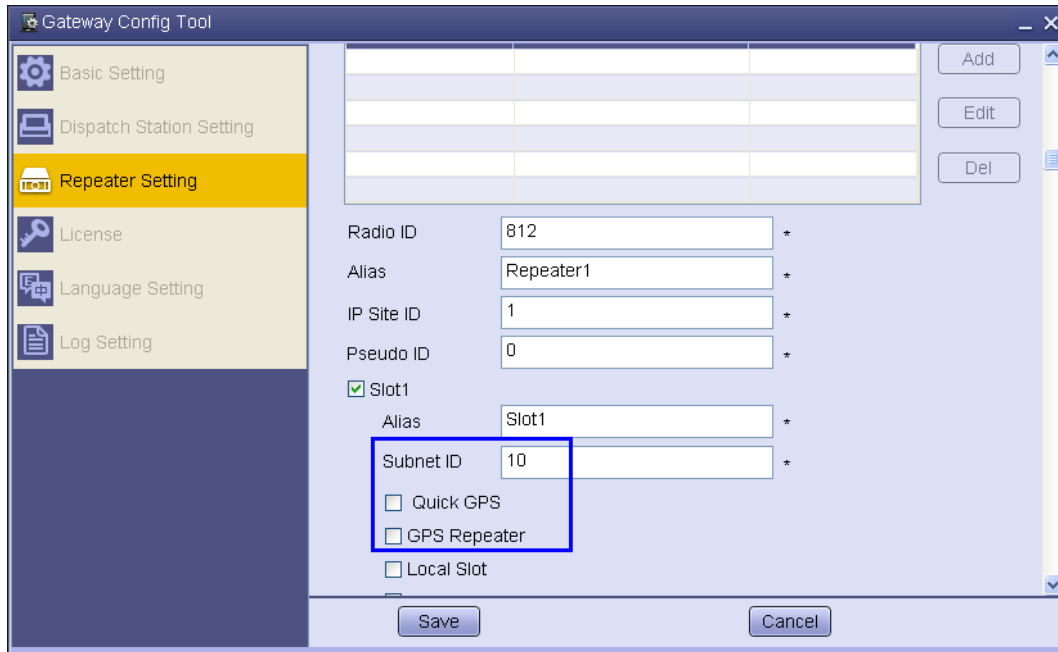
- Network error occurs between the radio and the dispatch station/repeater.
- When the dispatch station is used, its TMS port number is not set to “3004”.

#### Solution

**Step 1** Ensure the subnet of the radio is consistent with that of the dispatch station/repeater.

When the repeater is used for dispatching, the subnet is set to the same value with that of the “Radio ID” set for the slot of the repeater in the “Hytera Smart Dispatch GatewayConfigTool”.





**Step 2** When the dispatch station is used, ensure its TMS port number is “3004”.

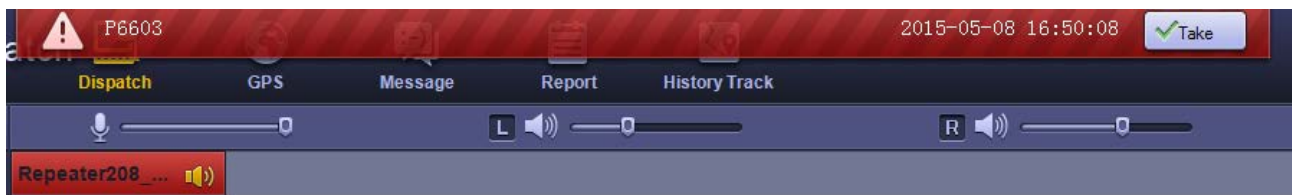


## 6. Emergency Alarm

### 6.1 No prompt pops up in the Smart Dispatch Client when an emergency alarm is triggered

#### Symptom

When the radio makes an emergency alarm, the following prompt does not pop up in the Smart Dispatch Client.

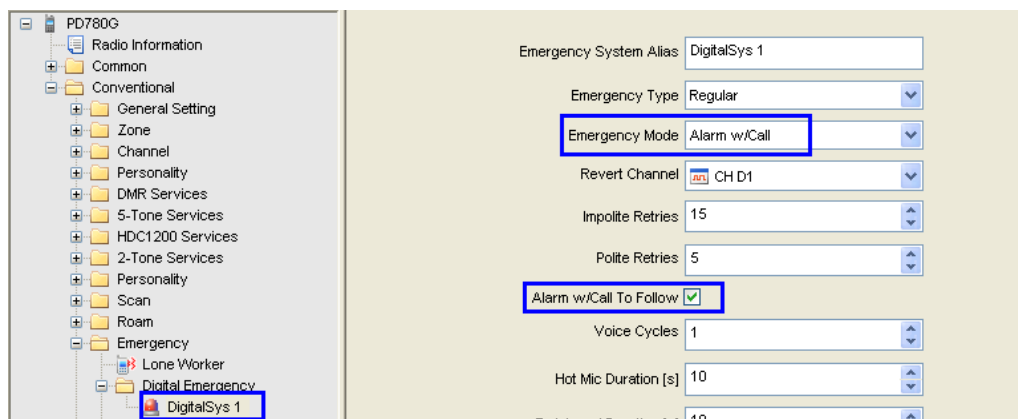


#### Possible Cause

The emergency alarm settings are incorrect in the radio programming.

#### Solution

Ensure the radio's emergency mode is set to "Call Only" or "Alarm w/Call", and select "Alarm w/Call To Follow".



### 6.2 The corresponding map view fails to come out when an emergency alarm is made

#### Symptom

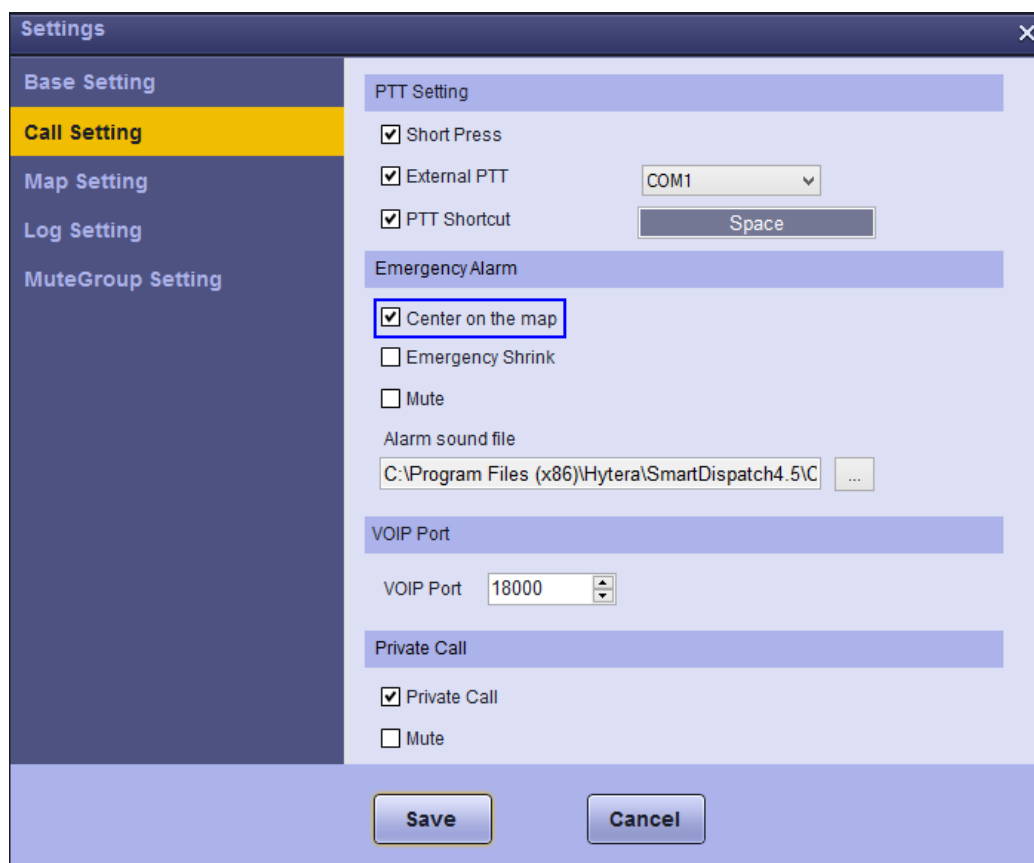
When the radio initiates an emergency alarm, the Smart Dispatch Client fails to turn to the map view.

#### Possible Cause

The emergency alarm is not set to "Center on the map" in the Smart Dispatch Client.

#### Solution

Select "Center on the map" for the emergency alarm.



## 7. GPS

### 7.1 The radio fails to be positioned in real time

#### Symptom

When positioning the radio, the Smart Dispatch Client fails to show the radio's track on the map in real time.

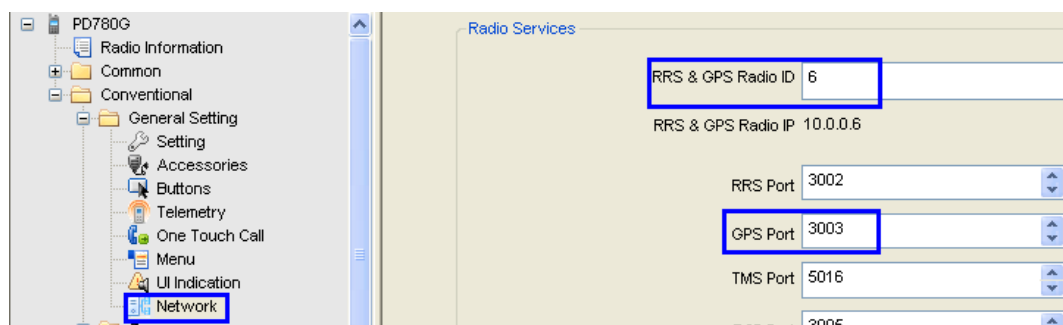
#### Possible Cause

- The radio is incorrectly programmed.
- The 3003 Port of the computer equipped with the Smart Dispatch Gateway is occupied by other programs.

#### Solution

**Step 1** Ensure to correctly set the GPS-service-related parameters of the radio:

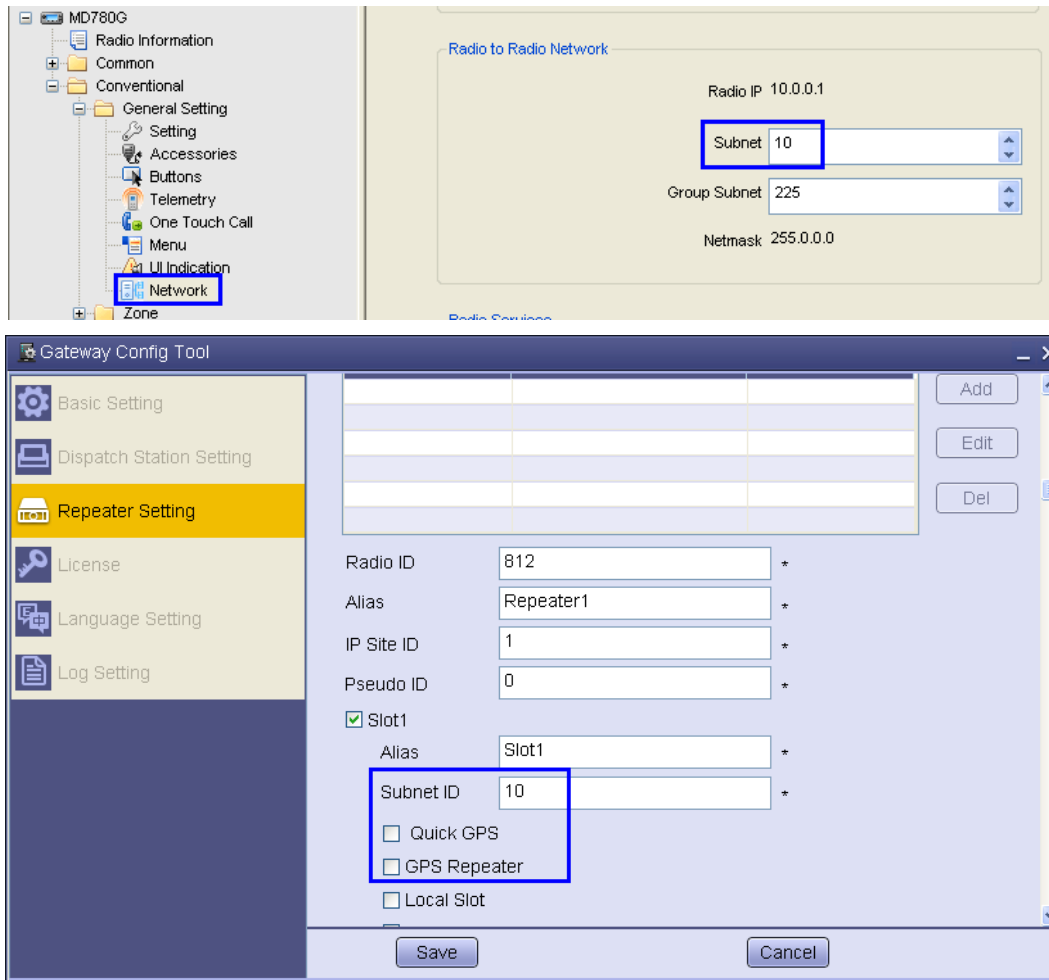
- Set the “RRS & GPS Radio ID” correctly:
  - When the dispatch station is used, input its ID into this box.
  - When using the repeater: if the repeater is in the Normal mode, fill in the master repeater's ID; if in the Selective mode, fill in the radio ID of the repeater through which the radio communicates with other radios.



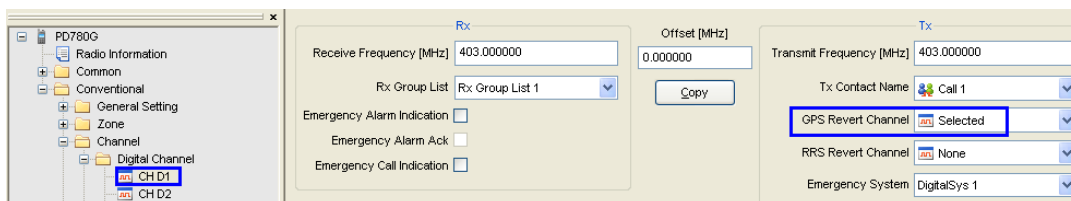
- Set the “GPS Port” to “3003”.
- Ensure the subnet of the radio is consistent with that of the dispatch station/repeater.



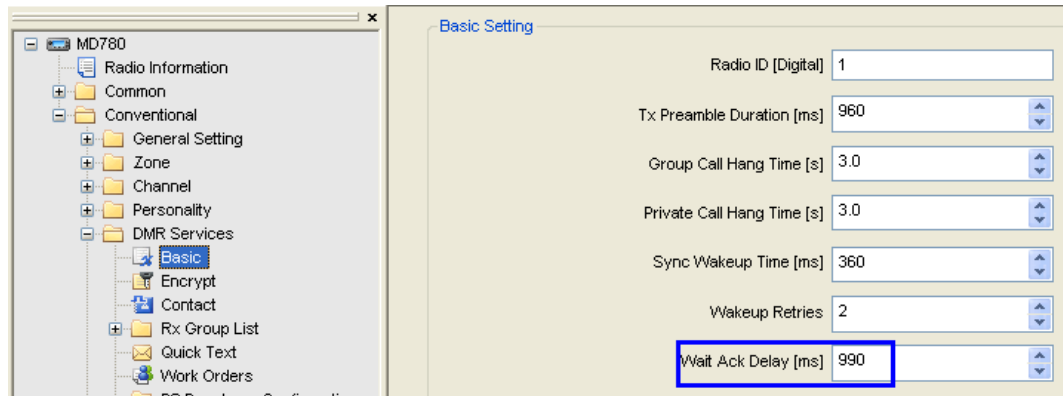




- Ensure the “GPS Revert Channel” is set for the radio, and the corresponding dispatch station/repeater to this channel shall access to the same gateway.



- The “Wait Ack Delay” of the dispatch station should be set over 960ms. Otherwise, the time for the radio to respond to the GPS positioning command will be easy to expire, causing the Smart Dispatch Client to determine that the GPS positioning fails.



**Step 2** Ensure the radio or the dispatch station/repeater is working on digital channel.

**Step 3** Ensure that the UDP port (3003) of the Smart Dispatch Gateway is not occupied by other programs.

Operation: enter “**netstat -ano | findstr 3003**” in the command window.

## 7.2 The Smart Dispatch Client fails to receive GPS data reported by the radio

### Symptom

The Smart Dispatch Client fails to receive GPS data reported by the radio.

### Possible Cause

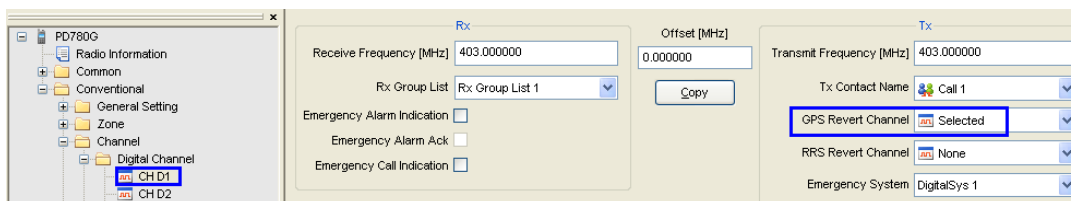
- The radio does not have the GPS module.
- The radio is incorrectly programmed.
- The radio doesn't receive the GPS signal.
- The firewall of the computer disallows the GPS data.

### Solution

**Step 1** Ensure the radio has the GPS module.

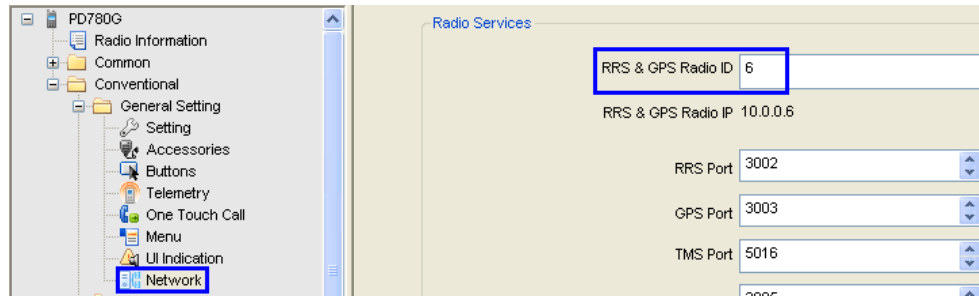
**Step 2** Ensure the following parameters of the radio is correctly set:

- The “GPS Revert Channel” is set for the radio, and the corresponding dispatch station/repeater to this channel access to the same gateway.



- Set the “RRS & GPS Radio ID” correctly:
  - When the dispatch station is used, input its ID into this box.

- When using the repeater: if the repeater is in the Normal mode, fill in the master repeater's ID; if in the Selective mode, fill in the radio ID of the repeater through which the radio communicates with other radios.



**Step 3** Check if the radio receives the GPS signal.

**Step 4** Ensure the firewall of the computer equipped with the Smart Dispatch Gateway allows GPS data.

Otherwise, you can try to close the firewall.

## 7.3 The received GPS data is not accurate

### Symptom


The Smart Dispatch client receives inaccurate GPS data from the terminal, while implementing GPS position or real-time tracking.

### Possible Cause

The terminal may adopt the GPS chip for non-industrial use, which cannot pinpoint the stationary or slow-moving terminal.

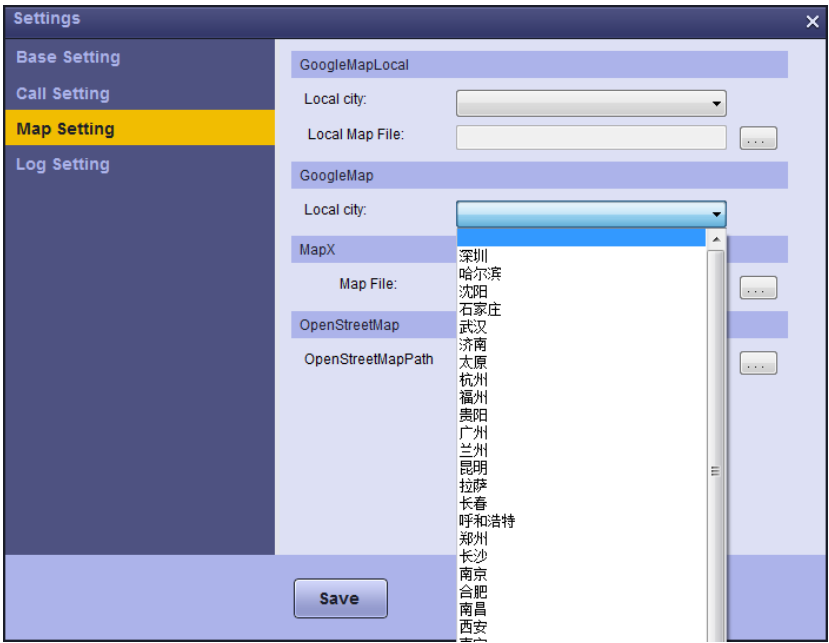
### Solution

**Step 1** Log into the Smart Dispatch Client.

**Step 2** Click  on the upper left corner of the main interface and select "Settings".

**Step 3** Select the appropriate city in the "Map Setting" page.

**Step 4** Click "Save" to save your settings.



## 8. Network

### 8.1 The Smart Dispatch fails to send command

#### Symptom

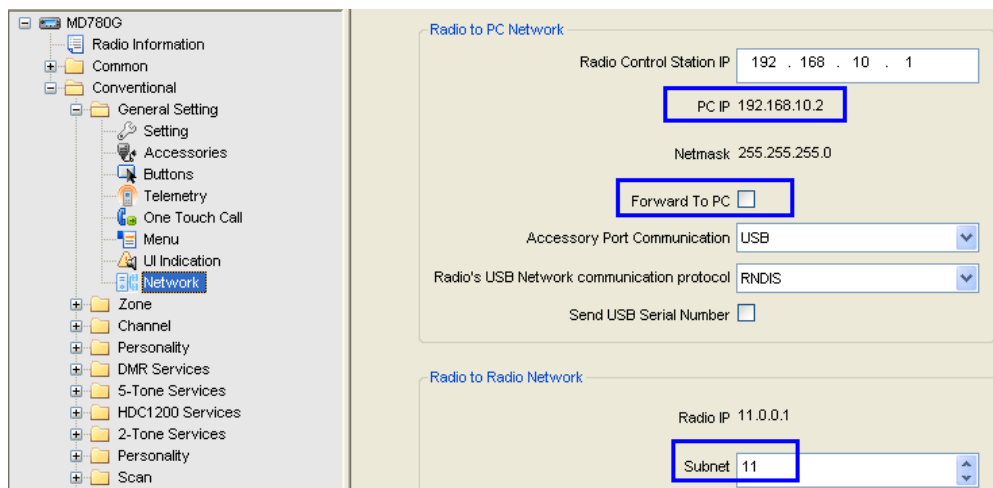
- The radio can get online automatically, and the Smart Dispatch Client can receive message from the radio.
- The Smart Dispatch Client and the radio can communicate with each other normally.
- The Smart Dispatch Client fails to send online check and message and start GPS circular polling command.

#### Possible Cause

The subnet ID of the dispatch station is set the same with the first field of the local IP address of the Smart Dispatch Gateway. For example, the local IP address of the Smart Dispatch Gateway is 10.X.X.X, and the subnet ID of the dispatch station is set to “10”.

#### Solution

Set the subnet ID of the dispatch station different from the first field of the local IP address of the Smart Dispatch Gateway.



### 8.2 The computer where the Smart Dispatch Gateway is installed cannot access Internet

#### Symptom

- When the dispatch station is not connected, the computer where the Smart Dispatch Gateway is installed can access Internet.
- When the dispatch station is connected, the computer where the Smart Dispatch Gateway is installed fails to access Internet.

- When the dispatch station is turned off or disconnected, the computer where the Smart Dispatch Gateway is installed can access Internet again.

### Possible Cause

When the dispatch station is connected to the computer, a virtual IP is generated. The OS routing network distribution mechanism may lead to that the IP routing has higher priority than the local network. Thus, when the computer tries to access to Internet, the OS will choose the IP address with higher priority (i.e. the dispatch station's IP address), causing the access failure of the computer.

### Solution

- Step 1** Double-click the file "Patch-DMRRRoute-V3.exe" from the "Tools" folder in the installation package.
- Step 2** When the dialogue "Confirm to copy files of DMR Route Service Pack(Y/N)?" appears, enter "y" and press the Enter key.
- Step 3** When the prompt "Input the Gateway IP address to access Internet" appears, enter the gateway IP address for accessing Internet.
- This gateway IP address will change with different LANs that the computer is in.
- Step 4** When the prompt "Input the IP address of Dispatch Station (Section 4 of IP must be 1)" appears, enter the IP address of the dispatch station connected to the computer (The fourth field of the IP address must start with "1", e.g.: 192.168.10.1n). After you enter "n" in the IP address, press the Enter key.
- Step 5** When this dialogue "Confirm save configuration settings or retry (Y:yes/R:retry)?" appears, enter "y" and press the Enter key and save the settings.

### Caution

If the gateway IP address for accessing Internet changes, you need to execute this installation procedure again.

## 8.3 The gateway PC cannot ping other computers

### Symptom

The computer connected with the dispatch station does not ping other computers.

### Possible Cause

The third field of the IP address in the dispatch station is identical with that of the IP address in the computer.

## Solution

Ensure that the third field of the dispatch station IP address differs from the first field of the IP address in the LAN.



## 8.4 The Smart Dispatch Client fails to send SMTP/POP3 test E-mail

### Symptom

When you finish setting the mail access service of the Smart Dispatch Client and click “Send Test Email”, the Client prompts that the SMTP/POP3 service has no response or the user name/password is wrong.

### Possible Cause

- The parameters of the E-mail are incorrectly set.
- The mailbox is stopped temporarily by the system due to login error.
- The service port is shielded by the firewall or antivirus software.

### Solution

- See the SMTP/POP3 setting instructions offered by the mailbox service provider, so as to ensure the mail box is properly set.

You can try to log in via the mailbox web page, to see whether you can log in.

- Some antivirus software will shield the service port of the mailbox, causing the service failure. Currently, such software includes McAfee.

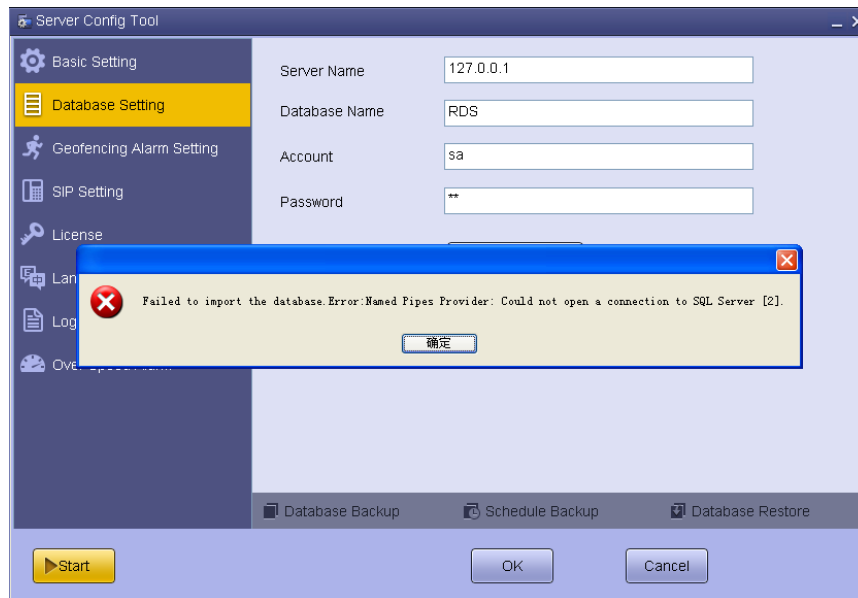
The access protection in McAfee defines the protection to Port 25. According to McAfee, this is used to prevent worms from sending mail through Port 25. The problem cannot be solved even when the Smart Dispatch process is added into this protection rule as an eliminated process.

The mail accessing function can operate normally only when you ensure there is no worm in the computer and enable the block of “Prevent mass mailing worms from sending mail” in the “Access Protection Properties” in the “VirusScan Console”.

## 9. Others

### 9.1 The database has error when being imported

#### Symptom



#### Possible Cause

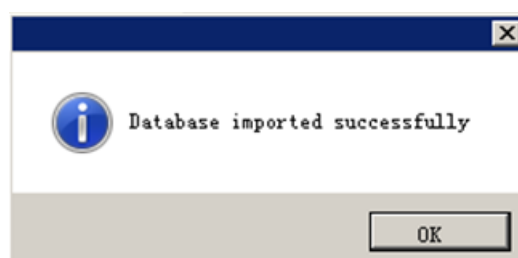
- The Smart Dispatch 3.0 or later is installed and imports the database successfully.
- The database files are kept when the SQL SERVER 2005/2008 database is deleted.
- After reinstalling the SQL SERVER 2005/2008, the Smart Dispatch database is imported with the same name as set in the last import.
- The database name does not exist or its server IP address is wrong.
- The SQL SERVER 2005/2008 is not installed properly, or Microsoft SQL Server Native Client is not installed properly when installing the Smart Dispatch Server.

#### Solution 1

**Step 1** Check if the database name is correct.

**Step 2** Change the database name to make it different from the name set in the last import.

**Step 3** Click “Database Import” and the following prompt appears.





## Solution 2

Reinstall Microsoft SQL Server Native Client.

## 9.2 No sound is heard during record playback

### Symptom

- The radio can receive the dispatcher's voice when the dispatcher calls the radio via the Smart Dispatch Client.
- When the radio calls Smart Dispatch Client, the he dispatcher can also hear the subscriber's voice output by the Smart Dispatch Client speaker.
- During the call record playback, the record file can be downloaded and played normally, but no sound is output by the speaker.

### Possible Cause

- The sound card is incorrectly set: The records of the Smart Dispatch Client are played via the default sound card in the computer. If more than one sound card are applied in the computer and the sound card set for the Client is not the default one of the computer, the records playback will fail to be output by the speaker.
- Different IP addresses are set for the Smart Dispatch Client, Server Config Tool and Gateway Config Tool.

### Solution

**Step 1** Set the sound card of the Smart Dispatch Client as the default sound card of the computer.

If you have modified the default sound play device for the computer, restart the Smart Dispatch Gateway in the computer. If you have modified the default recording device of the computer, restart the Smart Dispatch Client.

**Step 2** Check to ensure the following IP addresses of the Smart Dispatch Client, Hytera Smart Dispatch ServerConfigTool and Hytera Smart Dispatch GatewayConfigTool are consistent.

If the repeater is used for dispatching, the "Local IP" in the Smart Dispatch Gateway cannot be set to "127.0.0.1".



Hytera Smart Dispatch V4.5

User Name: admin

Password:

Setting:

Server IP: 192.168.25.29

Port: 61400

login

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Cancel



Server Config Tool

Basic Setting

Local IP Address: 192.168.25.29

Command Port: 61400

Database Setting

Gateway Config Tool

Basic Setting

Local IP: 192.168.25.29

Local Port: 0

Dispatch Station Setting

## 9.3 Error in disabling and enabling the radio

### Symptom

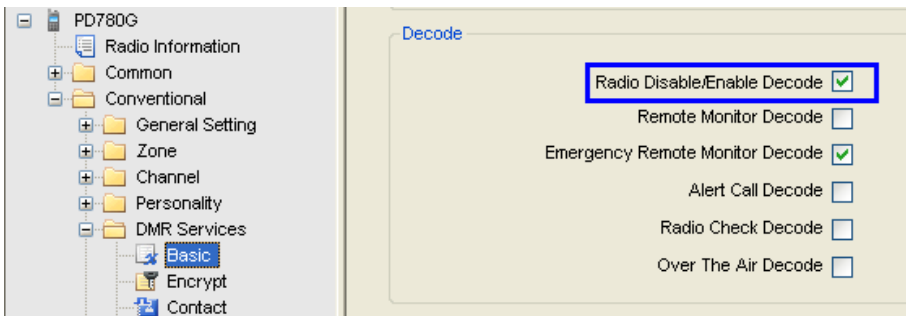
The dispatcher fails to disable and enable the radio via the Smart Dispatch Client.

### Possible Cause

The radio is incorrectly programmed.

### Solution

Select the "Radio Disable/Enable Decode" option when programming the radio.



PD780G

Radio Information

Common

Conventional

General Setting

Zone

Channel

Personality

DMR Services

Basic

Encrypt

Contact

Decode

Radio Disable/Enable Decode ☒

Remote Monitor Decode ☐

Emergency Remote Monitor Decode ☒

Alert Call Decode ☐

Radio Check Decode ☐

Over The Air Decode ☐

## 9.4 Mapinfo fails

### Symptom


The map type cannot be changed to “Mapinfo” in the Smart Dispatch Client. A prompt pops up to tell you that the string is invalid.

### Possible Cause

The offline map engine is uninstalled in the computer where the Smart Dispatch Client is installed.

### Solution 1

**Step 1** Click “OK” and close the prompt box.

**Step 2** Click  on the upper left corner of the main interface and select “Map -> GoogleMap”.

### Solution 2

Install the offline map engine. This software is not provided in our installation package, so please prepare it.

## 9.5 Neither of the “Start” and “Stop” buttons is available in the interface of the Hytera Smart Dispatch GatewayConfigTool and Gateway Console

### Symptom

Neither “Start” nor “Stop” buttons is available in the interface of the “Hytera Smart Dispatch GatewayConfigTool” and Smart Dispatch Gateway Console.

### Possible Cause

“Hytera RDS Gateway” service fails to register.

### Solution

Manually run the registration program “RegSysSrv.bat” of “Hytera RDS Gateway” in the installation directory “Gateway”. If Windows 7 is used, you’ll need to run this program with the administrator account.

## 9.6 Neither of the “Start” and “Stop” buttons is available in the interface of the “Hytera Smart Dispatch ServerConfigTool” and Server Console

### Symptom

No “Start” and “Stop” buttons are available in the interface of the “Hytera Smart Dispatch ServerConfigTool” and Smart Dispatch Server Console.

### Possible Cause

“Hytera RDS Server” service fails to register.

## Solution

Manually run the registration program “RegSysSrv.bat” of “Hytera RDS Server” in the installation directory “Server”. If Windows 7 is used, you’ll need to run this program with the administrator account.

## 9.7 The geofencing alarm is invalid

### Symptom

The geofencing alarm is not triggered when the radio leaves the specified area.

### Possible Cause

The area is specified with the alarm rule unset.

## Solution

Set the alarm rule.

**Step 1** Click “Geofencing Alarm” to open the alarm setting interface.

**Step 2** Click “Rule”.



**Step 3** Add the rule and set the parameters.

The Smart Dispatch system supports two alarm triggering conditions: Alarm upon Leaving and Alarm upon Entering. .

**Rule**

+ Add - Del

☐ rule

☒ rule1

Alias: rule

Trigger Condition: Alarm upon Leaving

Description:

Available Area: ☐ All

- ☐ new1
- ☒ wufangqing
- ☒ likai
- ☐ 1
- ☐ 5

Available Radio: ☐ All

- ☐ 562
- ☐ 563
- ☐ 564
- ☐ 565
- ☐ 566
- ☐ 567
- ☐ 568
- ☐ 569
- ☐ 570
- ☐ 571

Save Reset

Submit Cancel

**Step 4** Select the available area and available radio, and click “Save”.

**Step 5** Click “Submit” to finish.

# Appendix

## How to activate the administrator ID

Enter “**net user administrator /active:yes**” in the command window.

## How to check the process ID of Port 61400

Enter “**netstat -ano | findstr 61400**” in the command window.

## How to check the process with the ID 7940

Enter “**tasklist /v | findstr 7940**” in the command window.

## How to check the route list

Enter “route print” in the command window.

## Possible cause of disconnection of the network and the UDP port

- The network connection error occurs.
- The UDP port is blocked by the firewall.
- The UDP port is blocked by the antivirus software.
- The UDP port for the Smart Dispatch Gateway is occupied by other programs.
- The IP address conflicts.
- Error occurs in the router or the router is incorrectly set.

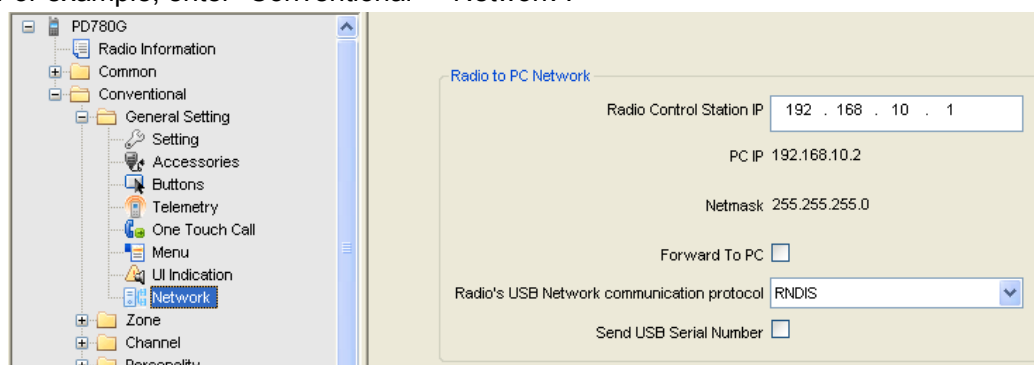
## Programming method

**Step 1** Connect the to-be-programmed device (e.g.: the radio) to the computer with the programming cable, and open the CPS.

**Step 2** Read data from the device.

**Step 3** Enter the configuration interface from the left navigation tree.

For example, enter “Conventional -> Network”.

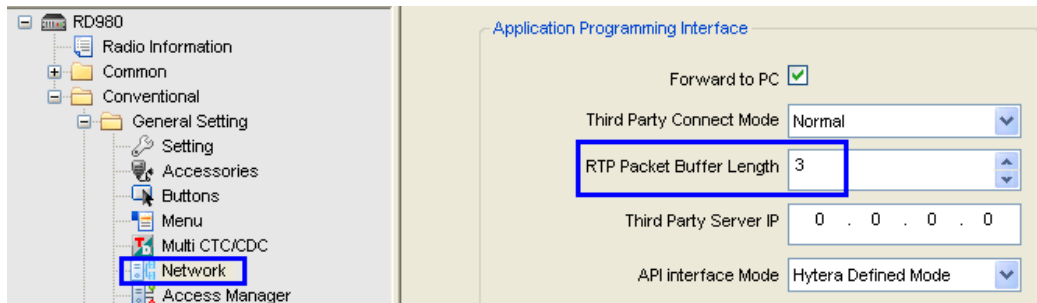


**Step 4** Set the parameters.

**Step 5** Write the data into the device.

## Instructions for the repeater to access the Smart Dispatch Gateway

- In actual use, the parameter “RTP Packet Buffer Length” of the repeater should be higher than “1”. It is suggested to be “3”.



- In the Selective mode, a subnet is formed by a master repeater and its connected slave repeater.
  - Each subnet can only have one master repeater. Both the master and slave repeaters need to have the “Forward to PC” option selected.
  - In the same subnet, both the master and the slave repeaters need to be connected to each other and to the same Smart Dispatch Gateway.
  - In the “Hytera Smart Dispatch GatewayConfigTool”, the master and slave repeaters in the same selective subnet must have the same IP Multi-site ID and subnet ID; the master and slave repeaters in different subnets must have different IP Multi-site IDs and subnet IDs.
- When programming slave repeaters in the Normal mode, the option “Forward to PC” must be deselected.



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