

Using Genesys ACD on Yealink IP Phones

Introduction

This guide introduces how to configure the Automatic Call Distribution (ACD) feature on the Genesys server. In addition, it introduces how to configure and use ACD on the Yealink IP phones.

This guide applies to the following Yealink IP phones:

- SIP-T48G, SIP-T46G, SIP-T42G, SIP-T41P, SIP-T40P, SIP-T29G, SIP-T27P, SIP-T23P/G, SIP-T21(P) E2, SIP-T19(P) E2 and CP860 IP phones running firmware version 80 or later
- SIP-T48S, SIP-T46S, SIP-T42S, SIP-T41S and SIP-T27G IP phones running firmware version 81 or later

Icon Instructions

The line icons and the corresponding agent statuses are listed as below:

Line Icon			Agent Status
SIP-T42G/T42S/T41P/ T41S/T40P/T27P/T27G/ T23P/T23G/ T21(P) E2/T19(P) E2	SIP-T46G/T46S /T29G	SIP-T48G/ T48S	
			Logout
			Login, Available
			Login, Unavailable
			ACW (after call work)

LED Instructions

Line key LED (configured as an ACD key, not applicable to SIP-T19(P) E2 IP phones)

LED Status	Description
Solid green	The ACD state is available.

LED Status	Description
Slow flashing green	The ACD state is unavailable.
Solid red	The ACD state is ACW (after call work).
Off	Log out of the ACD system.

Using Automatic Call Distribution

Yealink IP phones support ACD feature on the Genesys server. With this feature enabled on the Genesys server, ACD handles incoming calls by automatically queuing and directing calls to available personnel. The caller is placed in a simple queue, where each call is answered in order. The Genesys server plays music to the caller while waiting. When an agent logged into the queue becomes available, the Genesys server automatically connects the caller to this agent.

Configuring the Genesys Server

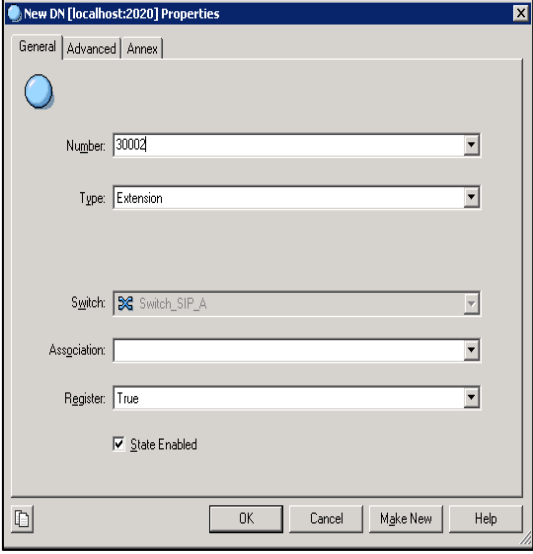
To configure the ACD feature on the Genesys server, you need to do the following steps:

- Create a DN
- Create an ACD queue
- Create a place
- Associate the place with the DN
- Create an agent login
- Create a person
- Associate the agent with the person
- Assign the person to an agent group

To create a DN on the Genesys server:

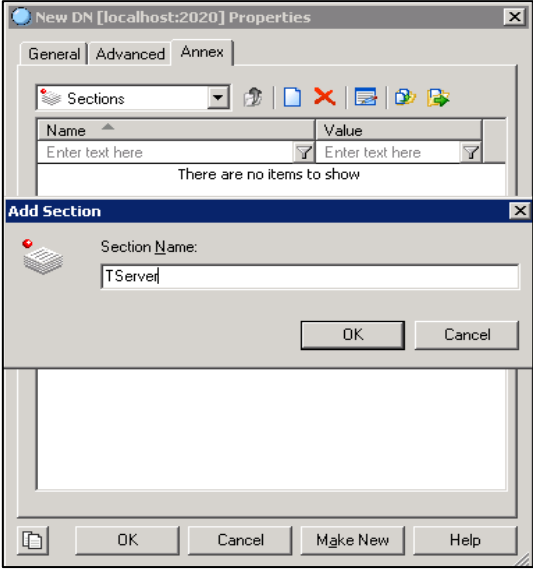
1. Double click the Start Configuration Manager application.
2. Double click **Configuration**->**Resource**->**Switches** to open these folders.
3. Select the desired switch.
4. Right click on **DNs**, and then select **New**->**DN**.
5. In the New DN properties dialog box, specify the following properties:

- 1) On the **General** tab, enter the phone number in the **Number** field, and select **Extension** from the pull-down list of **Type**.



The screenshot shows the 'New DN [localhost:2020] Properties' dialog box with the 'General' tab selected. The 'Number' field contains '30002' and the 'Type' dropdown is set to 'Extension'. The 'Switch' dropdown is set to 'Switch_SIP_A'. The 'Association' field is empty. The 'Register' dropdown is set to 'True'. The 'State Enabled' checkbox is checked. The dialog has 'OK', 'Cancel', 'Make New', and 'Help' buttons at the bottom.

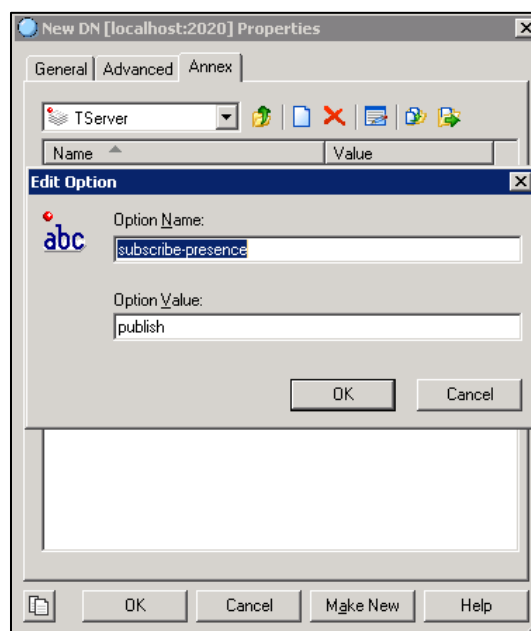
- 2) On the **Annex** tab, create a TServer section.



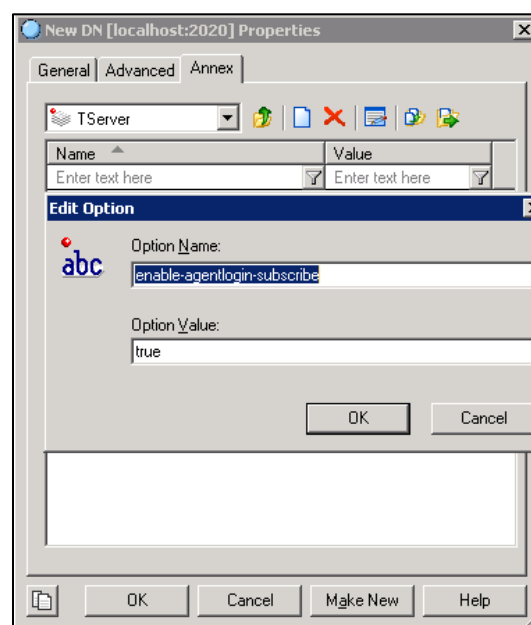
The screenshot shows the 'New DN [localhost:2020] Properties' dialog box with the 'Annex' tab selected. The 'Sections' list is empty, displaying 'There are no items to show'. An 'Add Section' dialog box is open, showing the 'Section Name' field with the text 'TServer'. The 'Add Section' dialog has 'OK' and 'Cancel' buttons. The main dialog has 'OK', 'Cancel', 'Make New', and 'Help' buttons at the bottom.

a) Specify one of the following options:

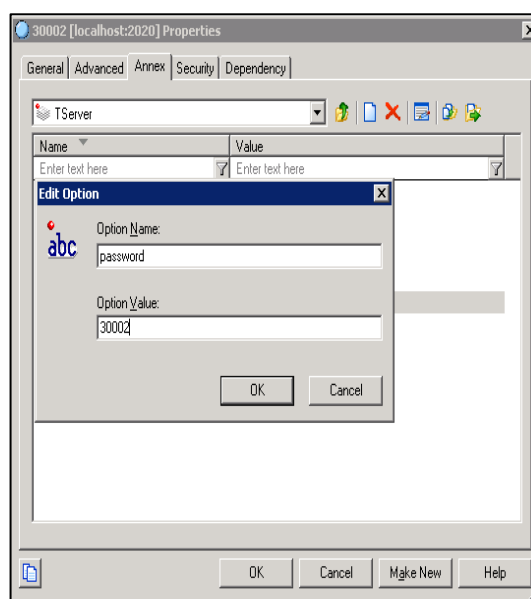
subscribe-presence: Set this option to publish, It means that the Genesys server can map the agent state from a PUBLISH SIP request sent by a IP phone.



enable-agentlogin-subscribe: Set this option true, It means that the Genesys server can log in or log out an agent in response to SIP SUBSCRIBE requests and can also change the availability state for an agent in response to NOTIFY requests.



- b) Create a password for the DN.



6. Click **OK** to accept the change.

Note

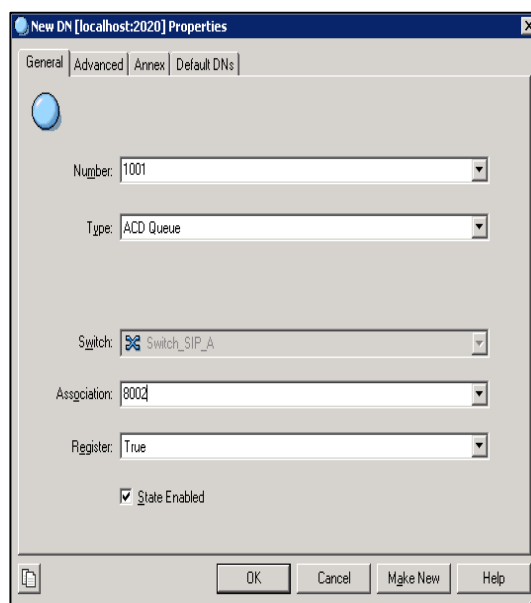
The two options (**subscribe-presence** and **enable-agentlogin-subscribe**) are not compatible with each other. You can configure one of them for a DN only.

Before creating an ACD queue on the Genesys server, you should make sure that the routing point DN has been provided on the Genesys server. For more information, contact your Genesys administrator.

To create an ACD queue on the Genesys server:

1. Double click the Start Configuration Manager application.
2. Double click **Configuration**->**Resource**->**Switches** to open these folders.
3. Select the desired switch.
4. Right click on **DNs**, and then select **New**->**DN**.
5. In the New DN properties dialog box, specify the following properties:

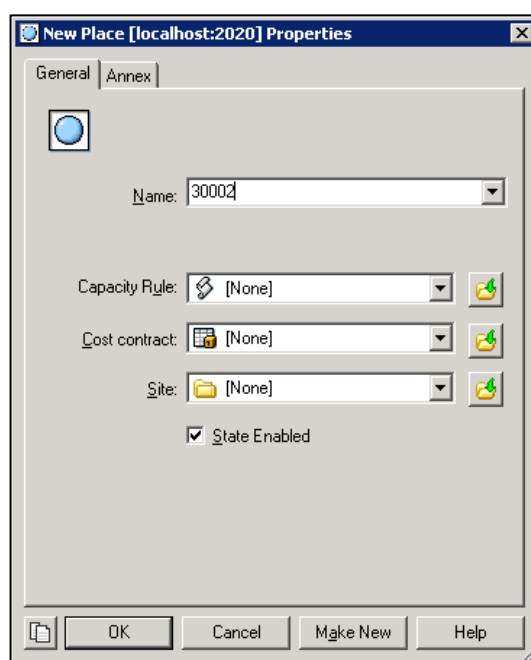
- 1) On the **General** tab, enter the ACD queue number in the **Number** field, select **ACD Queue** from the pull-down list of **Type**, and enter the desired routing point number in the **Association** field.



- 2) Click **OK** to accept the change.

To create a place on the Genesys server:

1. Double click the Start Configuration Manager application.
2. Double click **Configuration**->**Resource**->**Places**.
3. Right click on **Places**, and then select **New**->**Place**.
4. In the New Place properties dialog box, specify the following properties:
 - 1) On the **General** tab, enter the name in the **Name** field.



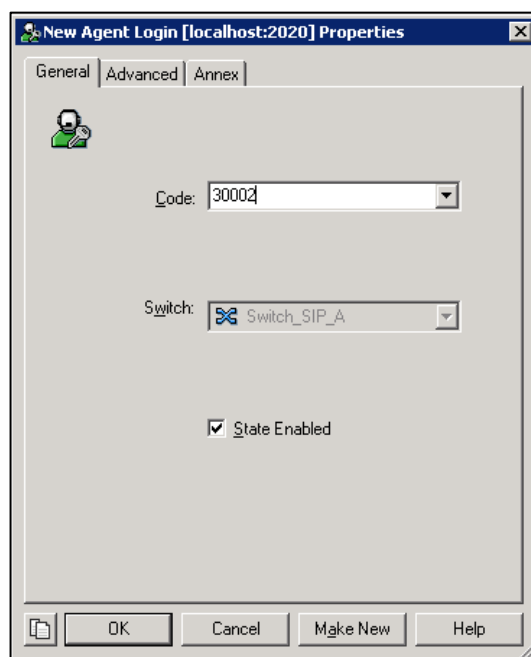
5. Click **OK** to accept the change.

To associate the place with the DN:

1. Double click the Start Configuration Manager application.
2. Double click **Configuration**->**Resource**->**Switches** to open these folders.
3. Select the desired switch.
4. Double click **DNs** to open the folder.
5. Right click on the desired DN, select **Copy**.
6. Double click **Places** to open the folder.
7. Select the desired place, right click in the right blank area, and select **paste**.
8. Click **OK** to accept the change.

To create an agent login on the Genesys server:

1. Double click the Start Configuration Manager application.
2. Double click **Configuration**->**Resource**->**Switches** to open these folders.
3. Select the desired switch.
4. Right click on **Agent Logins**, and then select **New**->**Agent Login**.
5. In the New Agent Login properties dialog box, specify the following properties:
 - 1) On the **General** tab, enter the agent login ID in the **Code** field.



Note

When the DN option is set to "**subscribe-presence=publish**", the agent login ID must be the same as the DN configured on the Genesys server.

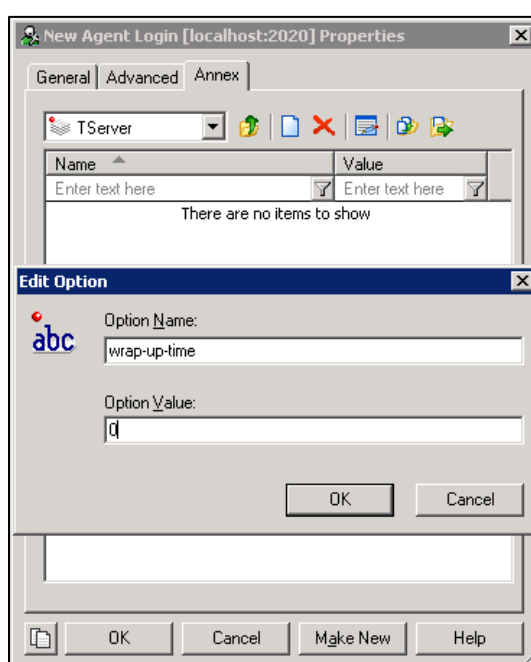
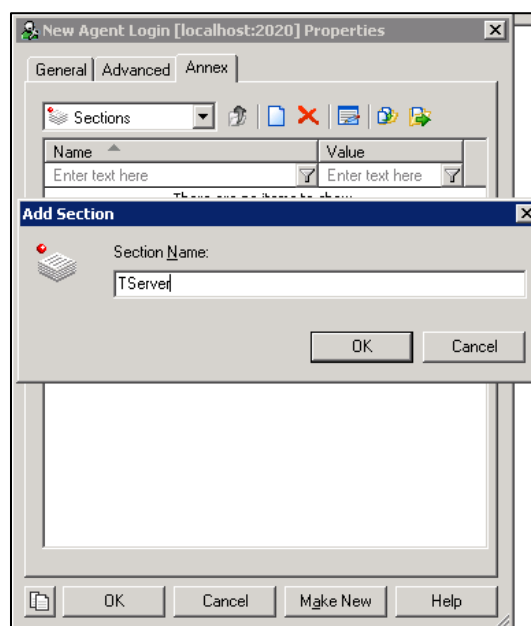
- 2) On the **Advanced** tab, enter the password in the **Enter Password** field and re-enter the password in the **Re-enter Password** field.

The screenshot shows a dialog box titled "New Agent Login [localhost:2020] Properties" with three tabs: "General", "Advanced", and "Annex". The "Advanced" tab is selected. The dialog contains the following fields and controls:

- Use Override:** A checked checkbox followed by a dropdown menu.
- Switch-specific Type:** A text input field containing the number "1".
- Enter Password:** A password input field with five dots.
- Re-enter Password:** A password input field with five dots.

At the bottom of the dialog, there are four buttons: "OK", "Cancel", "Make New", and "Help".

- 3) On the **Annex** tab, create a TServer section and configure the following options:
wrap-up-time: 0



6. Click **OK** to accept the change.

To create a person on the Genesys server:

1. Double click the Start Configuration Manager application.
2. Double click **Configuration**->**Resource**->**Persons** to open these folders.
3. Right click on **Persons**, and then select **New**->**Person**.
4. In the New Person properties dialog box, specify the following properties:
 - 1) On the **General** tab, enter the employee ID in the **Employee ID** field, and enter the

username in the **User Name** field.

- 2) Enter the desired password in the **Enter Password** field.
- 3) Re-enter the desired password in the **Re-enter Password** field.

The screenshot shows a dialog box titled "(50002) [localhost:2020] Properties" with the "General" tab selected. The fields are as follows:

- First: Person
- Last: (empty)
- Employee ID: 50002
- E-Mail: (empty)
- Internal Authentication:
 - User Name: 50002
 - Enter Password: ****
 - Re-enter Password: ****
- External Authentication:
 - External User ID: (empty)
- State Enabled:
- Is Agent:

Buttons at the bottom: OK, Cancel, Make New, Help. A checkbox "Add to the same Access ..." is checked.

5. Click **OK** to accept the change.

To associate the agent with the person on the Genesys server:

1. Double click the Start Configuration Manager application.
2. Double click **Configuration**->**Resource**->**Persons** to open these folders.
3. Select the desired person.
4. On the **Agent Info** tab, click **Add ID** to add an agent.
5. Click **OK** to accept the change.

A person can be associated with more than one agent.

Before assigning the person to an agent group on the Genesys server, you should make sure that the agent group has been provided on the Genesys server. For more information, contact your Genesys administrator.

To assign the person to an agent group on the Genesys server:

1. Double click the Start Configuration Manager application.
2. Double click **Configuration**->**Resource**->**Persons** to open these folders.
3. Right click on the desired person, select **Copy**.
4. Double click **Agent Groups** to open the folder.
5. Select the desired agent group, right click in the right blank area, and select **paste**.
6. Click **OK** to accept the change.

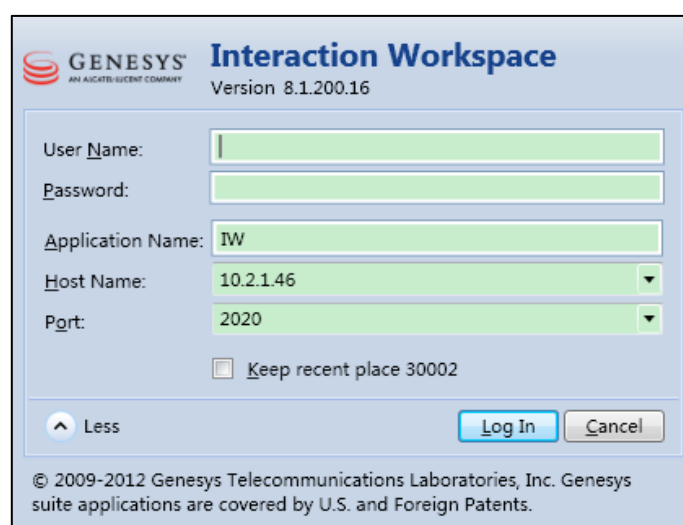
Changing the ACD state on the Interaction Workspace

This section provides instructions on how to change the ACD state on the Interaction Workspace for Windows. You can ask the distributor or Yealink FAE for Interaction Workspace software and install it following the setup wizard.

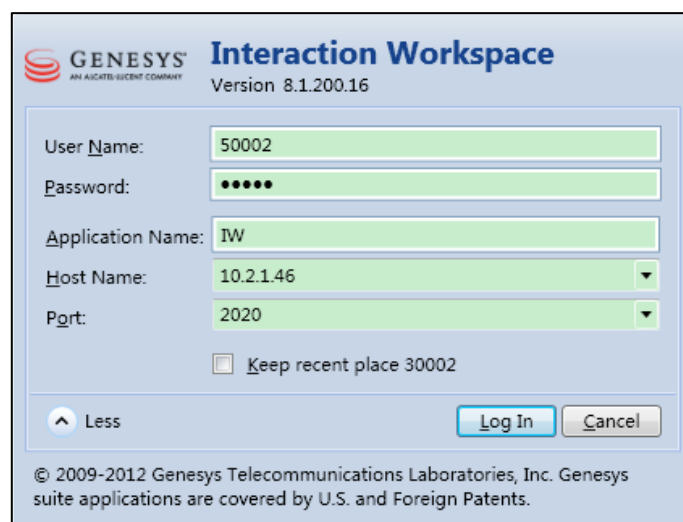
To change the ACD state on the Interaction Workspace:

1. To start the InteractionWorkspace application.

The login window is shown as below:

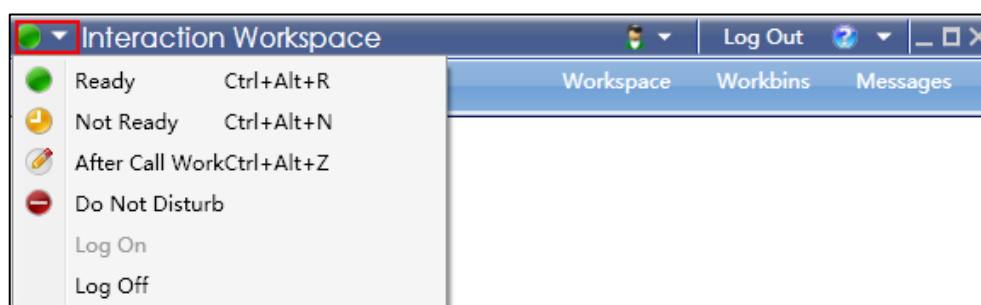


2. Enter the desired username and user password in the corresponding fields.



3. Click **Log In**.
4. Enter the desired place in the **Place** field and then select the desired queue from the pull-down list of **Queue**.

5. Click **OK** to log in the system.
6. Click the green status sign to display a pull-down list and then select the desired agent state.



Configuring the Yealink IP Phones

When configuring the Yealink IP phone, the second soft key is assigned the ACD feature by default. The ACD agent can log in and log out through the use of the soft keys or ACD key. You can configure the ACD feature for the IP phone using the configuration files or locally.

Configuring an ACD Key

You can configure an ACD key via web user interface or configuration files. It is not applicable to SIP-T19(P) E2/CP860 IP phones.

To configure an ACD key using configuration files:

1. Add/Edit ACD key parameters in the configuration file.

The following table shows the information of parameters:

Parameters	Permitted Values	Default
linekey.X.type/ expansion_module.X.key.Y.type	42	Refer to the following content
<p>Description:</p> <p>Configures a DSS key to be an ACD key on the IP phone.</p> <p>The digit 42 stands for the key type ACD.</p> <p>For line keys (Line key is not applicable to SIP-T19(P) E2/CP860 IP phones):</p> <p>X ranges from 1 to 29 (for SIP-T48G/S)</p> <p>X ranges from 1 to 27 (for SIP-T46G/T46S/T29G)</p> <p>X ranges from 1 to 15 (for SIP-T42G/T42S/T41P/T41S)</p> <p>X ranges from 1 to 21 (for SIP-T27P/T27G)</p> <p>X ranges from 1 to 3 (for SIP-T40P/T23P/T23G)</p> <p>X ranges from 1 to 2 (for SIP-T21(P) E2)</p> <p>For ext keys (Ext key is only applicable to the SIP-T48G/T48S/T46G/T46S/T29G/T27P/T27G IP phones):</p> <p>For SIP-T48G/T48S/T46S/T46G:</p> <p>X ranges from 1 to 6, Y ranges from 1 to 40.</p> <p>For SIP-T29G/T27P/T27G:</p> <p>X ranges from 1 to 6, Y ranges from 1 to 20, 22 to 40 (Ext key 21 cannot be configured).</p> <p>Example:</p> <p>linekey.2.type = 42</p> <p>Default:</p> <p>For line keys:</p> <p>For SIP-T48G/S IP phones:</p> <p>The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0.</p> <p>For SIP-T46G/T46S/T29G IP phones:</p> <p>The default value of the line key 1-16 is 15, and the default value of the line key 17-27 is 0.</p> <p>For SIP-T42G/S IP phones:</p> <p>The default value of the line key 1-12 is 15, and the default value of the line key 13-15 is 0.</p>		

Parameters	Permitted Values	Default
<p>For SIP-T41P/S IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-15 is 0.</p> <p>For SIP-T27P/G IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-21 is 0.</p> <p>For SIP-T40P/T23P/T23G/T21(P) E2 IP phones: The default value is 15. For ext keys:</p> <p>For SIP-T48G/T48S/T46G/T46S IP phones: When Y= 1 to 40, the default value is 0 (NA).</p> <p>For SIP-T29G/T27P/T27G IP phones: When Y= 1, 21, the default value is 37 (Switch). When Y = 2 to 20, 22 to 40, the default value is 0 (NA).</p> <p>Note: It is not applicable to SIP-T19(P) E2/CP860 IP phones.</p> <p>Web User Interface: Dsskey->Line Key->Type</p>		
linekey.X.label/ expansion_module.X.key.Y.label	String within 99 characters	Blank
<p>Description: (Optional.) Configures the label displayed on the LCD screen for each DSS key. For line keys (Line key is not applicable to SIP-T19(P) E2/CP860 IP phones): X ranges from 1 to 29 (for SIP-T48G/S) X ranges from 1 to 27 (for SIP-T46G/T46S/T29G) X ranges from 1 to 15 (for SIP-T42G/T42S/T41P/T41S) X ranges from 1 to 21 (for SIP-T27P/T27G) X ranges from 1 to 3 (for SIP-T40P/T23P/T23G) X ranges from 1 to 2 (for SIP-T21(P) E2) For ext keys (Ext key is only applicable to the SIP-T48G/T48S/T46G/T46S/T29G/T27P/T27G IP phones):</p> <p>For SIP-T48G/T48G/T46G/T46S: X ranges from 1 to 6, Y ranges from 1 to 40.</p> <p>For SIP-T29G/T27P/T27G: X ranges from 1 to 6, Y ranges from 1 to 20, 22 to 40 (Ext key 21 cannot be configured).</p>		

Parameters	Permitted Values	Default
<p>Note: It is not applicable to SIP-T19(P) E2/CP860 IP phones.</p> <p>Web User Interface: Dsskey->Line Key->Label</p>		

The following shows an example of configuring an ACD key using configuration files:

```
linekey.2.type = 42
```

2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to [Yealink SIP-T2 Series_T19\(P\) E2_T4 Series_CP860_IP_Phones_Auto_Provisioning_Guide_V80](#).

Yealink IP phones running firmware version 81 or later support a new boot file for auto provisioning. For more information, refer to [Yealink SIP-T2_Series_T19\(P\) E2_T4_Series_IP_Phones_Auto_Provisioning_Guide_V81](#).

To configure an ACD key via web user interface:

1. Click on **Dsskey->Line Key**.
2. In the desired DSS key field, select **ACD** from the pull-down list of **Type**.
3. (Optional.) Enter the string that will appear on the LCD screen in the **Label** field.

4. Click **Confirm** to accept the change.

Configuring ACD Feature

To configure the ACD feature using configuration files:

1. Add/Edit the ACD parameters in the configuration file.
 - X stands for the serial number of the account.
 - SIP-T48G/T48S/T46G/T46S/T29G: X ranges from 1 to 16.
 - SIP-T42G/T42S: X ranges from 1 to 12.
 - SIP-T41P/T41S/T27P/T27G: X ranges from 1 to 6.
 - SIP-T40P/T23P/T23G: X ranges from 1 to 3.
 - SIP-T21(P) E2: X ranges from 1 to 2.

SIP-T19(P) E2/CP860: X is equal to 1.

Parameters	Permitted Values	Default
account.X.sip_server_type	0, 2, 8 or 10	0
<p>Description: Configures the type of the SIP server for account X.</p> <p>0-Default 2-BroadSoft 8-Genesys 10-Genesys Advanced</p> <p>Web User Interface: Account->Advanced->SIP Server Type</p>		
account.X.acd.enable	0 or 1	0
<p>Description: Enables or disables ACD feature for account X.</p> <p>0-Disabled 1-Enabled</p> <p>Web User Interface: None</p>		
account.X.acd.available	0 or 1	0
<p>Description: Enables or disables the IP phone to display the available and unavailable soft keys for account X after the IP phone logs into the ACD system.</p> <p>0-Disabled 1-Enabled</p> <p>Web User Interface: None</p>		
genesys.acd.after_call_work_display.enable	0 or 1	0
<p>Description: Enables or disables the status of the ACD agent to be automatically changed to ACW (after call work) after the call.</p> <p>0-Disabled</p>		

Parameters	Permitted Values	Default
1-Enabled Note: ACW status depends on support from a Genesys server. Contact your server administrator for more information. If your server supports this status, make sure the parameter value is set to 1 (Enabled). Web User Interface: None		
account.X.acd.auto_login_enable	0 or 1	0
Description: Enables or disables the IP phone to automatically log into the ACD system for account X when account re-registers, phone reboots or network reconnects. 0-Disabled 1-Enabled Note: It works only if the ACD agent successfully logged into the system before. Web User Interface: None		

The following shows an example of ACD parameters for account 1 in the configuration file:

```
account.1.sip_server_type = 10
account.1.acd.enable = 1
account.1.acd.available = 1
genesys.acd.after_call_work_display.enable = 1
account.1.acd.auto_login_enable = 1
```

2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to [Yealink SIP-T2 Series_T19\(P\) E2_T4 Series_CP860_IP_Phones_Auto_Provisioning_Guide_V80](#).

Yealink IP phones running firmware version 81 or later support a new boot file for auto provisioning. For more information, refer to [Yealink SIP-T2_Series_T19\(P\) E2_T4_Series_IP_Phones_Auto_Provisioning_Guide_V81](#).

To configure the ACD feature via web user interface:

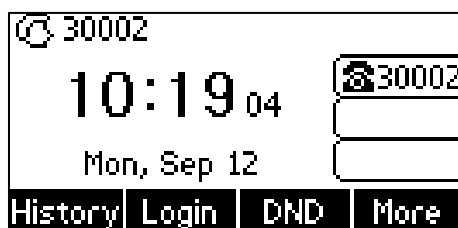
1. Click on **Account->Advanced**.
2. Select the desired value from the pull-down list of **SIP Server Type**.
 - If you select **Genesys**, the phone only supports the one-way sys synchronization the ACD state with the Genesys server. The ACD state on the server could not synchronize to the phone. The DN registered on the phone should have been configured the option "**subscribe-presence=publish**".

- If you select **Genesys Advanced**, the phone supports two-way synchronization the ACD state with the Genesys server. The DN registered on the phone should have been configured the option "**enable-agentlogin-subscribe= true**".
- 3. Click **Confirm** to accept the change.

Note

Make sure that the **SIP Server Type** is configured as **Genesys** or **Genesys Advanced** for the Genesys Environment.

The following figure shows the phone idle screen after the above configurations (take SIP-T23G IP phone as example).



Using ACD on the Yealink IP Phones

If you enable the ACD feature on the IP phone, you will be able to:

- Login and logout as an agent
- Change your agent state to available or unavailable

The following takes a SIP-T23G IP phone running firmware version 81 as an example.

Logging into the ACD System

To log into the ACD system:

1. Press the **Login** soft key/ACD key when the phone is idle (ACD key is not applicable to SIP-T19(P) E2/CP860 IP phones).

User ID: the user identity used to log in the ACD queue.


Password: the password used to log in the ACD queue.

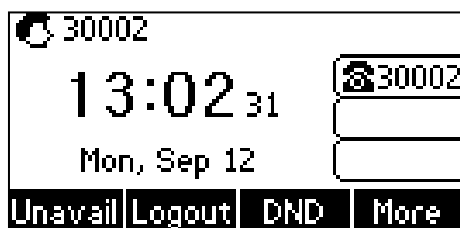
**Note**

If the **SIP Server Type** is configured as **Genesys** on the IP phone, the agent login ID entered in the **User ID** field should be the same as the DN registered on the IP phone.

2. Press the **Login** soft key.

The phone will verify the login credentials with the Genesys server. After successful verification, the phone will display the agent login ID.

The line icon changes to . The **Unavail** and **Logout** soft keys appear. The server begins distributing calls to the IP phone.




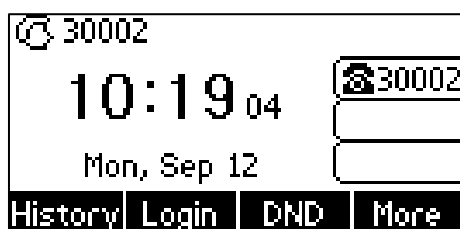
Logging out of the ACD System

To log out of the ACD system, you can do one of the following:

- Press the **Logout** soft key when the phone is idle.
 - Press the ACD key when the phone is idle. (not applicable to SIP-T19(P) E2/CP860 IP phones)
- Select **SignOut** and then press the **Save** soft key.



The line icon changes to  and the **Login** soft key appears.



Changing or Refreshing the ACD Agent Status


When the agent has logged into the ACD system successfully, you can change the agent status by pressing the **Avail/Unavail** soft key. If the agent status is available, the server will begin to distribute incoming calls to your IP phone. If the agent status is unavailable, the server will not distribute incoming calls to your IP phone.

To change the ACD agent status:

If the current agent status is available, do one of the following:

- Press the **Unavail** soft key.
- Press the ACD key when the phone is idle. (not applicable to SIP-T19(P) E2/CP860 IP phones)


Select **Unavailable** and then press the **Save** soft key.

The agent status changes to unavailable and the line icon changes to  and x.

If the current agent status is unavailable, do one of the following:

- Press the **Avail** soft key.
- Press the ACD key when the phone is idle. (not applicable to SIP-T19(P) E2/CP860 IP phones)


Select **Available** and then press the **Save** soft key.

The agent status changes to available and the line icon changes to .

If the current agent status is ACW (after call work), do one of the following:


- Press the **Avail** soft key.
- Press the ACD key when the phone is idle. (not applicable to SIP-T19(P) E2/CP860 IP phones)

Select **Available** and then press the **Save** soft key.

The agent status changes to available and the line icon changes to .

- Press the ACD key when the phone is idle. (not applicable to SIP-T19(P) E2/CP860 IP phones)

Select **Unavailable** and then press the **Save** soft key.

The agent status changes to unavailable and the line icon changes to  and x.

Customer Feedback

We are striving to improve our documentation quality and we appreciate your feedback. Email your opinions and comments to DocsFeedback@yealink.com.