

# 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.

The features introduced in this guide apply to Yealink 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.

## Icon Instructions

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

Line Icon			Agent Status
SIP-T42G/T41P/T40P/T27P/T23P/T23G/T21(P) E2/T19(P) E2	SIP-T46G/T29G	SIP-T48G	
			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.
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

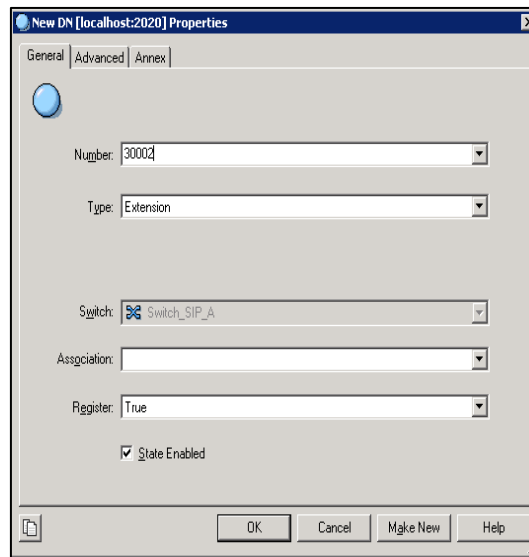
To configure the ACD feature on the Genesys server, you need to do the following steps:

- 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:**

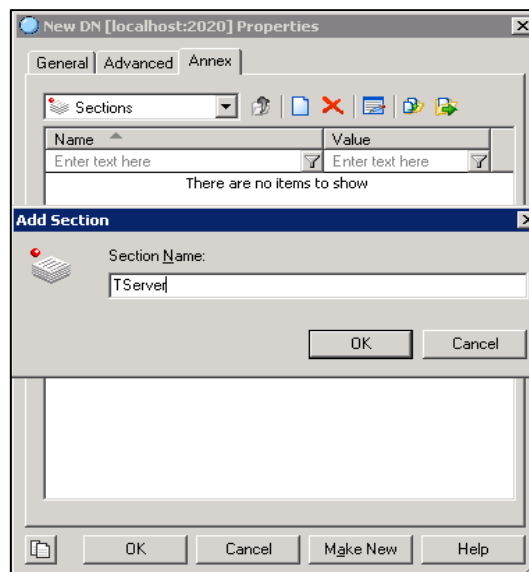
1. Double click the Start Configuration Manager application.
2. Double click **Configuration->Resource->Switches** to open these folders.
3. Select the desired switch.
4. Right click on **DNs**, and then select **New->DN**.
5. In the New DN properties dialog box, specify the following properties:

- 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' dropdown is empty. The 'Register' dropdown is set to 'True'. The 'State Enabled' checkbox is checked. The dialog has buttons for 'OK', 'Cancel', 'Make New', and 'Help'.

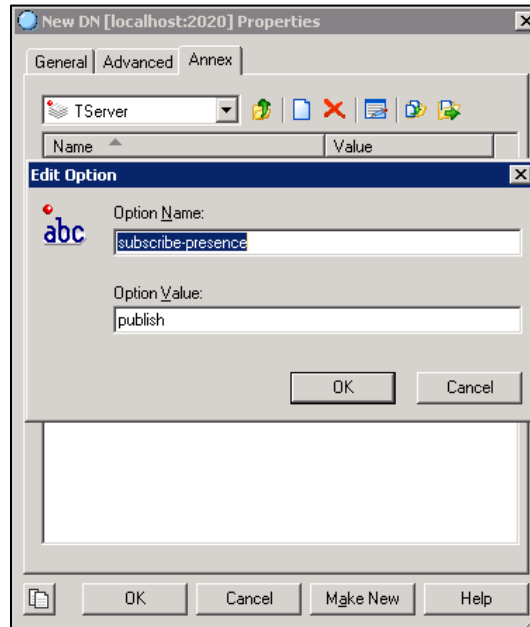
- 2) On the **Annex** tab, create a TServer section.



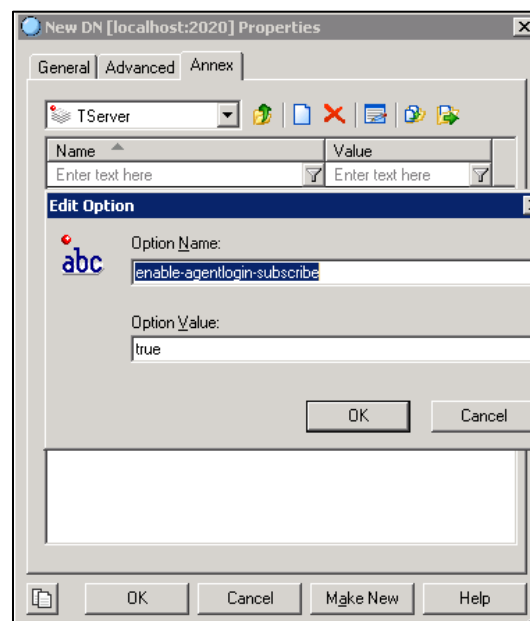
The screenshot shows the 'New DN [localhost:2020] Properties' dialog box with the 'Annex' tab selected. The 'Sections' list is empty, displaying 'There are no items to show'. An 'Add Section' dialog box is open, showing the 'Section Name' field with the text 'TServer'. The 'Add Section' dialog has 'OK'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

a) Specify one of the following options:

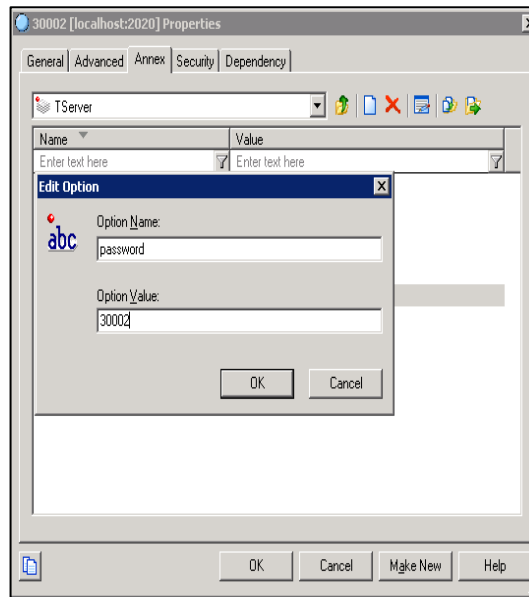
**subscribe-presence:** Set this option to publish, It means that the Genesys server can map the agent state from a PUBLISH SIP request sent by a IP phone.



**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**

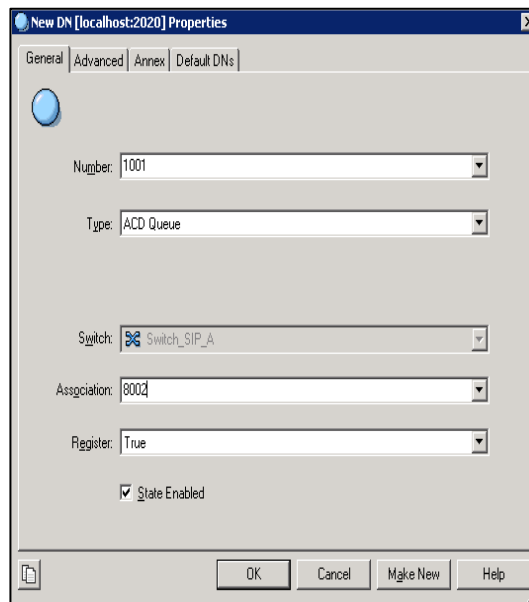
The two options (**subscribe-presence** and **enable-agentlogin-subscribe**) are not compatible with each other. You can configure one of them for a DN only.

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:

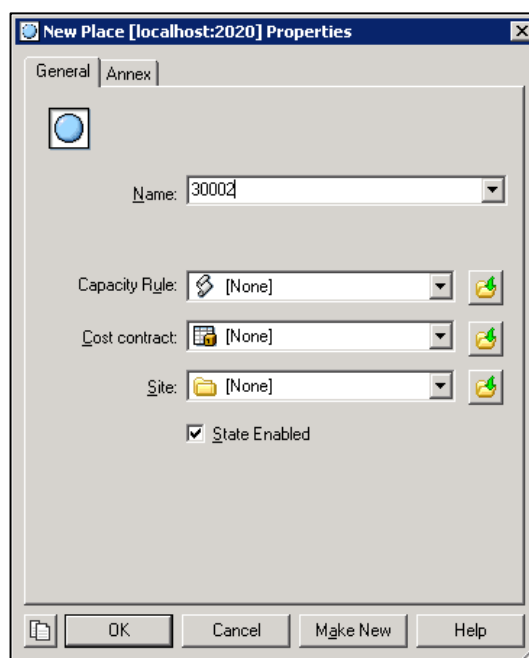
- 1) On the **General** tab, enter the ACD queue number in the **Number** field, select **ACD Queue** from the pull-down list of **Type**, and enter the desired routing point number in the **Association** field.



- 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.



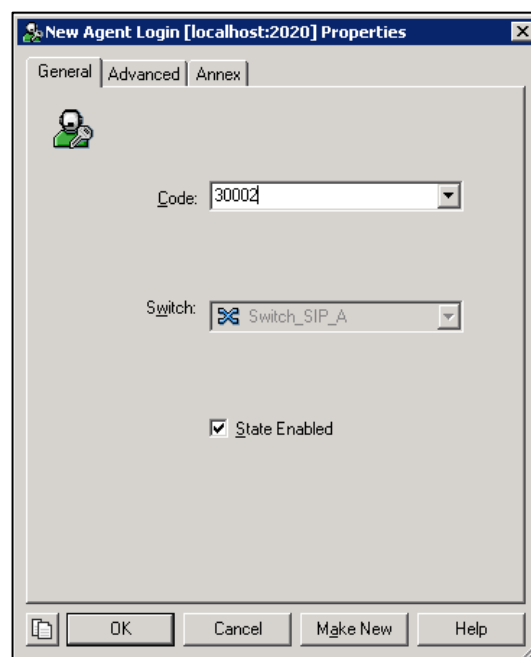
5. Click **OK** to accept the change.

**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.

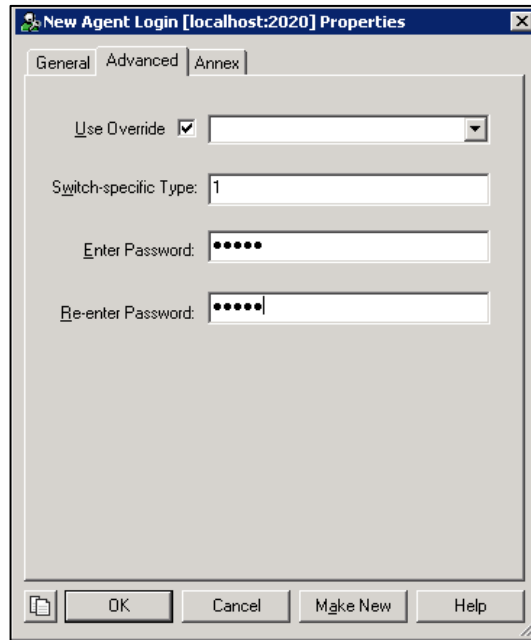
**To create an agent login on the Genesys server:**

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**

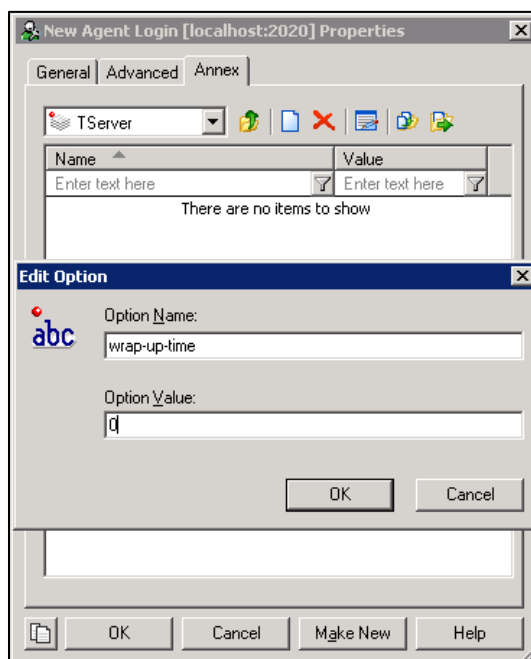
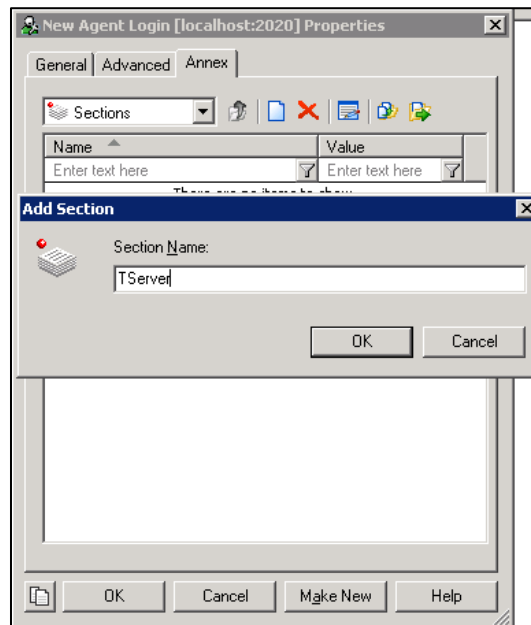
When the DN option is set to "**subscribe-presence=publish**", the agent login ID must be the same as the DN configured on the Genesys server.

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





- 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 Windows-style dialog box titled "(50002) [localhost:2020] Properties". It has several tabs: General, Agent Info, Ranks, Member Of, Annex, Security, and Dependency. The "General" tab is active. It contains a person icon and several input fields: "First" (dropdown menu with "Person" selected), "Last" (dropdown menu), "Employee ID" (text box with "50002"), "E-Mail" (dropdown menu), "Internal Authentication" section with "User Name" (dropdown menu with "50002"), "Enter Password" (password field with "\*\*\*\*"), and "Re-enter Password" (password field with "\*\*\*\*"). Below this is the "External Authentication" section with "External User ID" (dropdown menu). At the bottom, there are two checked checkboxes: "State Enabled" and "Is Agent". At the very bottom are buttons for "OK", "Cancel", "Make New", and "Help", along with a checked checkbox "Add to the same Access ...".

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.

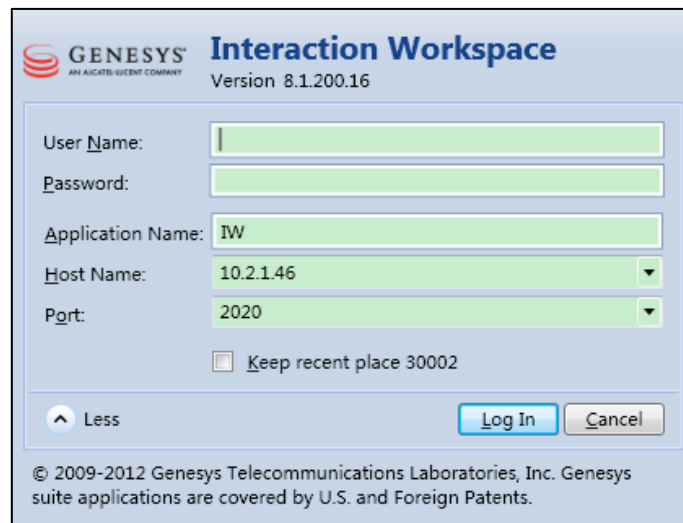
## Changing the ACD state on the Interaction Workspace

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.

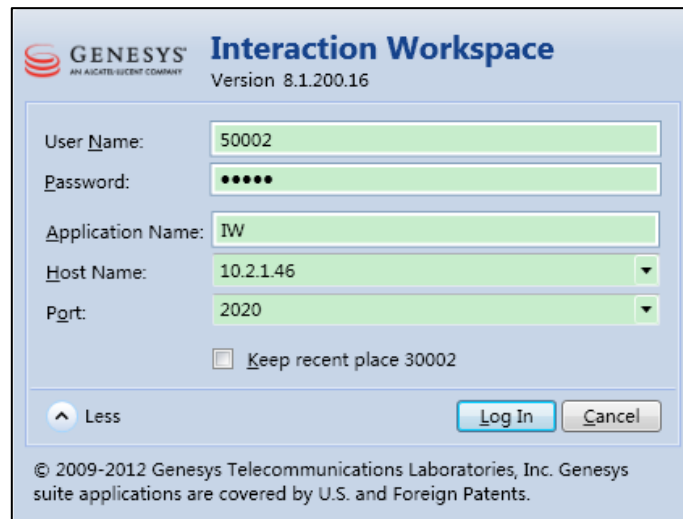
### To change the ACD state on the Interaction Workspace:

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**.

GENESYS AN ALCATEL-LUCENT COMPANY **Interaction Workspace**  
Version 8.1.200.16

Welcome 50002,  
Please provide requested login information.

Place:

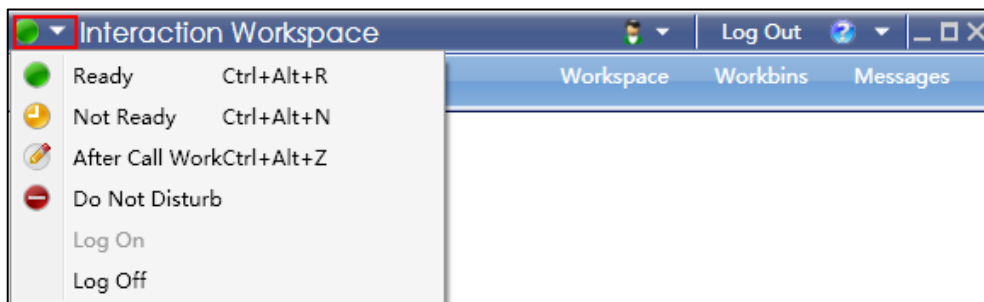
voice

Queue:

[Change login account](#)

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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 configuration files.

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><b>Description:</b></p> <p>Configures a DSS key to be an ACD key on the IP phone.</p> <p>The digit <b>42</b> stands for the key type <b>ACD</b>.</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)</p> <p>X ranges from 1 to 27 (for SIP-T46G/T29G)</p> <p>X ranges from 1 to 15 (for SIP-T42G/T41P)</p> <p>X ranges from 1 to 21 (for SIP-T27P)</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/T46G/T29G/T27P IP phones):</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><b>Example:</b></p> <p>linekey.2.type = 42</p> <p><b>Default:</b></p> <p>For line keys:</p> <p><b>For SIP-T48G IP phones:</b></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><b>For SIP-T46G/T29G IP phones:</b></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><b>For SIP-T42G IP phones:</b></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> <p><b>For SIP-T41P IP phones:</b></p> <p>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><b>For SIP-T27P IP phones:</b></p> <p>The default value of the line key 1-6 is 15, and the default value of the line key</p>		

Parameters	Permitted Values	Default
<p>7-21 is 0.</p> <p><b>For SIP-T40P/T23P/T23G/T21(P) E2 IP phones:</b></p> <p>The default value is 15.</p> <p>For ext keys:</p> <p>When Y=1, the default value is 37 (Switch).</p> <p>When Y= 2 to 20, 22 to 40, the default value is 0 (NA).</p> <p><b>Note:</b> It is not applicable to SIP-T19(P) E2/CP860 IP phones.</p> <p><b>Web User Interface:</b></p> <p>DSSKey-&gt;Line Key-&gt;Type</p>		
<p><b>linekey.X.label/ expansion_module.X.key.Y.label</b></p>	<p><b>String within 99 characters</b></p>	<p><b>Blank</b></p>
<p><b>Description:</b></p> <p>(Optional.) Configures the label displayed on the LCD screen for each DSS key.</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)</p> <p>X ranges from 1 to 27 (for SIP-T46G/T29G)</p> <p>X ranges from 1 to 15 (for SIP-T42G/T41P)</p> <p>X ranges from 1 to 21 (for SIP-T27P)</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/T46G/T29G/T27P IP phones):</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><b>Note:</b> It is not applicable to SIP-T19(P) E2/CP860 IP phones.</p> <p><b>Web User Interface:</b></p> <p>DSSKey-&gt;Line Key-&gt;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](#).

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.

The screenshot shows the Yealink T236 web interface. The 'DSSKey' tab is selected. Under 'Line Key', there are three rows: 'Line Key1', 'Line Key2', and 'Line Key3'. 'Line Key2' is highlighted with a red box. In the 'Line Key2' row, the 'Type' dropdown is set to 'ACD', the 'Label' field is empty, and the 'Line' dropdown is set to 'N/A'. There are 'Confirm' and 'Cancel' buttons at the bottom. A 'NOTE' box on the right states: 'Line Keys allow you to quickly access features such as recall and voice mail. You can click here to get more guides.'

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

## Configuring ACD Feature

To configure the ACD feature using the configuration files:

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

X stands for the serial number of the account.

SIP-T48G/T46G/T29G: X ranges from 1 to 16.

SIP-T42G: X ranges from 1 to 12.

SIP-T41P/T27P: 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
<b>account.X.sip_server_type</b>	<b>0, 2, 8 or 10</b>	<b>0</b>
<p><b>Description:</b> Configures the type of the SIP server for account X.</p> <p><b>0-</b> Default <b>2-</b> BroadSoft <b>8-</b> Genesys <b>10-</b> Genesys Advanced</p> <p><b>Web User Interface:</b> Account-&gt;Advanced-&gt;SIP Server Type</p>		
<b>account.X.acd.enable</b>	<b>0 or 1</b>	<b>0</b>

Parameters	Permitted Values	Default
<p><b>Description:</b> Enables or disables ACD feature for account X.</p> <p>0-Disabled 1-Enabled</p> <p><b>Web User Interface:</b> None</p>		
<b>account.X.acd.available</b>	<b>0 or 1</b>	<b>0</b>
<p><b>Description:</b> 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><b>Web User Interface:</b> None</p>		
<b>genesys.acd.after_call_work_display.enable</b>	<b>0 or 1</b>	<b>0</b>
<p><b>Description:</b> 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 1-Enabled</p> <p><b>Note:</b> 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).</p> <p><b>Web User Interface:</b> None</p>		
<b>account.X.acd.auto_login_enable</b>	<b>0 or 1</b>	<b>0</b>
<p><b>Description:</b> 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.</p> <p>0-Disabled 1-Enabled</p> <p><b>Note:</b> It works only if the ACD agent successfully logged into the system before.</p>		



Parameters	Permitted Values	Default
<b>Web User Interface:</b>		
None		

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

```
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](#).

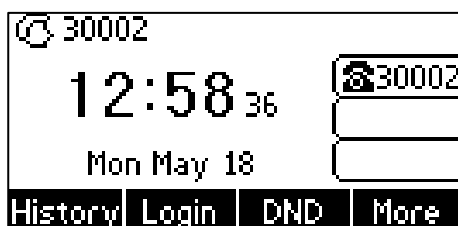
#### To configure the ACD feature via web user interface:

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 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.

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

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




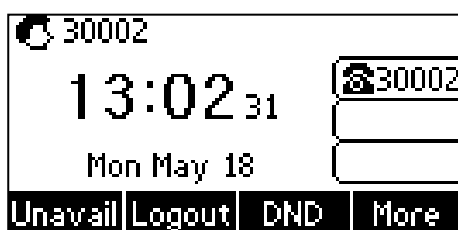
#### Note

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:

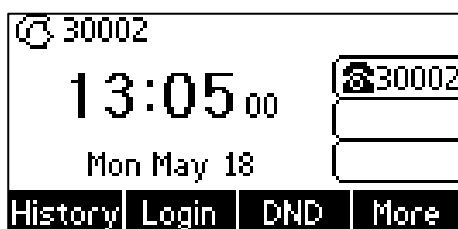
- Press the **Logout** soft key when the phone is idle.

- 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](mailto:DocsFeedback@yealink.com).