

Home  
PBXware  
SERVERware  
TELCOware  
SIPmon  
SIPProt  
Desktop & Mobile  
BRM  
UADs  
Appliances  
EOL

## From Bicom Systems Wiki

### Contents

- 1 Introduction
- 2 Requirements
  - 2.1 Identifying Phone Model
  - 2.2 Phone Firmware
  - 2.3 DHCP Server
  - 2.4 PBXware Version
- 3 Installation
  - 3.1 Power Adapter
  - 3.2 Power over Ethernet (PoE)
  - 3.3 Find the Phone's IP Address
  - 3.4 Reset to Factory Settings
- 4 Registering Phone
  - 4.1 Manual Configuration
  - 4.2 Auto Provisioning
  - 4.3 Using TLS
  - 4.4 DNS SRV
- 5 Configure BLF
  - 5.1 Extension Settings
  - 5.2 Phone Settings
- 6 Additional Configuration Template

## Introduction



This Configuration Guide is written as a general guide on how to configure the Yealink phone model SIP-T31G to work with PBXware 5.3.10.

## Requirements

### Identifying Phone Model

To start and successfully complete the registration of your Yealink phone, you need to know which phone model to set up.

On the back of each Yealink phone, there is model information that you should check. Although various phone models can have exactly the same requirements and installation procedures, phone models can also have significantly different requirements and installation procedures, so that is why it is important to know the model you own which results in you setting up the device successfully.

### Phone Firmware

- Make sure that your phone is loaded with an appropriate firmware version, [124.85.257.55](#).
- To find out the firmware version of your Yealink phone model, open a new browser window and enter your phone IP address in order to access the phone's web administration interface login screen. Example: **http://192.168.1.22**.
- Log in to the phone's web administration interface with your username and password. Please note that the factory default login details are as follows: username is **admin** and password is **admin**.

# DHCP Server

Fully configured and operational DHCP server.

## PBXware Version

PBXware version **5.3.8**.

In order to find out the PBXware version:

- Log in to PBXware
- Navigate to **Settings: About**.

On the top of the **About** page, you may see a code similar to this one **PBXware Edition: Multi-Tenant Release: 5.3.8.0 (251dc1c5) Running: 13.23.1-gc-040bbaca, Proxy v5.3.8 (231c5f3), API: 5.3, libmemcached version: 1.0.18**, where Release denotes the current version of PBXware.

# Installation

This section describes how to install and connect the phone to the electrical power and data network as well as how to apply factory settings.

The following topics are covered:

- Power Adapter
- Power over Ethernet (PoE)
- Factory Settings

## Power Adapter

Connect the Network and Power

- Connect the DC plug on the power adapter to the DC port on the phone and connect the other end of the power adapter into an electrical power outlet.
- Connect the Ethernet cable between the Internet port on the phone and the network port on a router or switch to access LAN.

**NOTE:** *If you are using Power over Ethernet (PoE), you do not need to connect the AC adapter. Please make sure that the Ethernet cable and router or switch is Power over Ethernet (PoE) compliant.*

## Power over Ethernet (PoE)

Connect the Network (only)

Using a regular Ethernet cable, your phone can be powered from a Power over Ethernet (PoE) compliant router or switch.

- Connect the Ethernet cable between the Internet port on the phone and an available port on the in-line power router or switch.

**NOTE:** If you are using Power over Ethernet (PoE), you do not need to connect the AC adapter. Please make sure that the Ethernet cable and router or switch is Power over Ethernet (PoE) compliant.

## Find the Phone's IP Address

Find out the Yealink phone's IP Address.

- Press the **OK** button.

The IP address will be displayed on the top of display.

## Reset to Factory Settings

This step is not required for brand new out-of-the-box phones, however, if the phone has been already used then it is a must.

- Hold **OK** for 5 seconds on the home screen.
- Press **OK** to confirm the factory reset.

Or:

- Open a new browser window and enter your phone's IP address in order to access the phone's web administration interface login screen. Example: **http://192.168.1.22**.
- Log in to the phone's web administration interface with your username and password. Please note that the factory default login details are as follows: username is **admin** and password is **admin**.
- Click the **Upgrade** tab.
- Click the **Reset** button in order to reset the phone to factory settings. The phone will reset to the factory settings and reboot.
- Wait some time for a device to reboot.

**NOTE:** Do not unplug or remove power to the phone while it is updating firmware and configuration.

## Registering Phone

This section describes how to identify the Yealink phone model, requirements that must be met, and how to register the phone using manual configuration or auto provisioning.

The following topics are covered:

- Manual Configuration
- Auto Provisioning

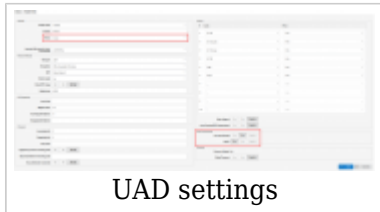
## Manual Configuration

This section describes how to set UAD settings, create a PBXware Extension, and register the phone.

The following topics are covered:

- UAD Settings
- Creating an Extension
- Registering a Phone

## UAD Settings



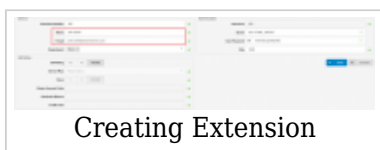
Log in to the PBXware's web administration interface

- Open a new browser window and enter the IP address in order to access the PBXware's web administration login screen. Example: **http://192.168.1.10**.
- Log in to PBXware with the e-mail address and password.

UAD Settings

- Navigate to **Settings:UAD**.
- Make sure that Yealink UAD is enabled. To check the UAD status, click the **Edit** icon corresponding to your Yealink phone.
- Make sure **Status** is set to **Active**, **Auto provisioning** is set to **No**, and **DHCP** is set to **Yes**.
- Click the **Save** button to save changes.

## Creating an Extension



Add an Extension

- Navigate to **Extensions**. Click **Add Extension**.
- The standard options window will be shown below.
- Select the Yealink phone model from the **UAD** select box.
- Select Location: **Local** or **Remote**.

**Local** is for all Extensions registered on the LAN and **Remote** is for all Extensions registered from remote networks, WAN, Internet etc.

- Click the **Next step** button.

## Extension Values

Enter values into the required field text boxes.

### **REQUIRED FIELDS:**

- **Name**

Enter a name for the Extension being created. Example: **John Smith**.

- **E-mail**

Enter the e-mail address associated with this Extension. This e-mail address will receive all system notification messages. Example: **john.smith@bicomsystems.com**

- **Department**

Department to which this Extension belongs to. Example: **Sales**.

- Click the **Save** button.

## **Registering a Phone**

This section describes how to register a Yealink phone using **Hostname or IP Address** or **DNS SRV**.

The following topics are covered:

- Hostname or IP Address
- DNS SRV

### **Hostname or IP Address**

Log in to the phone's web administration interface

- Open a new browser window and enter your phone's IP address in order to access the phone's web administration interface login screen. Example: `http://192.168.1.22`
- Log in to the phone's web administration interface with your username and password. Please note that the factory default login details are as follows: username is **admin** and password is **admin**.
- Click **Account**.
- Enter or set the following details into the respective fields.

### **REQUIRED FIELDS:**

- **Account Active**

Make sure that the **On** radio box is selected.

- **Register Name**

PBXware Extension number. Example: **1003**

- **User Name**

Usually the same number as the **Phone Number**.

- **Password**

The Secret of the Extension as received in the e-mail associated with this Extension.

Example: **\_%Z4M3\*Ts9y7**. A password is generated automatically for each newly created Extension.

- **Sip Server**

Enter the Hostname or IP Address of PBXware.

Example of a Hostname: **voip.bicomsystems.com**

Example of an IP Address: **192.168.1.10**

- Click the **Confirm** button.
- You will have to wait some time for a device to reboot. If everything is done as described above, you should have successfully registered your phone to PBXware.

Dial \*123 to verify the registration.

### **DNS SRV**

This section describes how to use a **DNS SRV** record which specifies the location of PBXware.

**NOTE:** Your DNS server needs to be configured correctly for this to work. Bicom Systems can provide the service to set this up for you.

Log in to the phone's web administration interface

- Open a new browser window and enter your phone's IP address in order to access the phone's web administration interface login screen. Example: <http://192.168.1.22>

- Log in to the phone's web administration interface with your username and password. Please note that the factory default login details are as follows: username is **admin** and password is **admin**.
- Click **Account**.
- Enter or set the following details into the respective fields.

### **REQUIRED FIELDS:**

- **Account Active**

Make sure that the **On** radio box is selected.

- **Register Name**

PBXware Extension number. Example: **1003**

- **User Name**

Usually the same number as the **Phone Number**.

- **Password**

The Secret of the Extension as received in the e-mail associated with this Extension.

Example: **\_%Z4M3\*Ts9y7**. A password is generated automatically for each newly created Extension.

- **Sip Server**

In the **Sip Server** field, enter the Hostname.

Example of a Hostname: **bicomsystems.com**

- Make sure that you replace Hostname from this example with your PBXware Hostname.
- Make sure that the DNS server is configured to automatically route registration request to PBXware which is actually under another domain name. Example: **newbicomsystems.com**.

- **Transport**

Select **DNS SRV** from the drop-down menu.



- Click the **Confirm** button.
- You will have to wait some time for a device to reboot. If everything is done as described above, you should have successfully registered your phone to PBXware.

Dial \*123 to verify the registration.

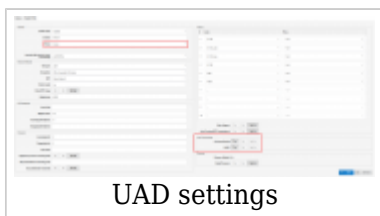
## Auto Provisioning

This section describes how to set UAD settings, create a PBXware Extension, and register the phone using DHCP or Static IP address.

The following topics are covered:

- UAD Settings
- Creating an Extension
- Registering a Phone

### UAD Settings



UAD settings

Log in to the PBXware's web administration interface.

- Open a new browser window and enter the IP address in order to access the PBXware's web administration login screen. Example: **http://192.168.1.10**.
- Log in to PBXware with your e-mail address and password.

UAD settings

- Navigate to **Settings:UAD**.
- Make sure that Yealink UAD is enabled. To check the UAD status, click the **Edit** icon corresponding to your Yealink phone.
- Make sure that **Status** is set to **Active**, **Auto provisioning** is set to **Yes**, and **DHCP** is set to **Yes**.
- Click the **Save** button to save changes.

### Creating an Extension



Creating Extension

Add an Extension

- Navigate to **Extensions**. Click **Add Extension**.
- The standard options window will be shown below.
- Select the Yealink phone model from the **UAD** select box.
- Select Location: **Local** or **Remote**.

**Local** is for all Extensions registered on the LAN and **Remote** is for all Extensions registered from remote networks, WAN, Internet etc.

- Click the **Next step** button.

Extension values

Enter values into the required field text boxes.

### **REQUIRED FIELDS:**

- **Name**

Enter a name for the Extension being created. Example: **John Smith**.

- **E-mail**

Enter the e-mail address associated with this Extension. This e-mail address will receive all system notification messages. Example: **john.smith@bicomsystems.com**

- **Auto Provisioning**

Set to **Yes**.

- **MAC Address**

Enter the Yealink phone's MAC address. Example: **001565123456**. The MAC address can be found at the back of the phone.

- Click the **Save** button.

## **Registering a Phone**

This section describes how to register a Yealink phone using **DHCP, TFTP, HTTP & HTTPS** or **DNS SRV**.

The following topics are covered:

- DHCP
- TFTP or HTTP & HTTPS
- DNS SRV

## DHCP

### Configure DHCP

- Make sure that your DHCP router is configured to use **option 66** to automatically instruct phones with the URL for auto provisioning. For more information, please refer to your router documentation or contact the network administrator.

### Phone's first boot or user-initiated reboot

- The auto provisioning process will start during the phone's first boot or after the reboot process has been initiated by the user. The DHCP server will instruct the phone from where to pick up an appropriate configuration file. If everything is done as described above, you should have successfully registered your phone to PBXware.

Dial **\*123** to verify registration.

## TFTP or HTTP & HTTPS

- Open a new browser window and enter your phone's IP address, e.g. **http://192.168.1.22**.
- Enter **username** and **password** and press the **Confirm** button. **NOTE:** The factory default login details are as follows: username is **admin** and password is **admin**.
- Click the **Settings** tab.
- Click the **Auto Provision** link in the left-hand navigation menu.
- Choose what **server type** you intend to use: **HTTP**, **HTTPS** and **Trivial FTP**. **NOTE:** Our recommendation is to use **HTTP**.

If you choose to use **server type HTTP** or **HTTPS**, enter **http://** or **https://** followed by a **Hostname** or an **IP Address**, followed then by **/prov**.

Example of a Hostname using HTTP: **http://abc.bicomsystems.com/prov**

Example of a Hostname using HTTPS: **https://abc.bicomsystems.com/prov**

Example of an IP Address using HTTP: **http://192.168.1.10/prov**

Example of an IP Address using HTTPS: **https://192.168.1.10/prov**

- Enter the **Auto Provisioning** username and password into the **User Name** and **Password** fields.

If you choose to use **server type TFTP**, enter **tftp://** followed by a **Hostname** or an **IP Address**

Example of a Hostname: **https://voip.bicomsystems.com**

Example of an IP Address: **tftp://192.168.1.10**

- Click the **Autoprovision Now** button.
- A pop-up window will show up. Click the **OK** button to confirm your action.
- You will have to wait a couple of seconds for the configuration to be updated. **NOTE:** Do not power off your phone.
- The auto provisioning process will start during the phone's reboot process. The phone will pick up an appropriate configuration file from PBXware. If everything is done as described above, you should have successfully registered your phone to PBXware.

Dial **\*123** to verify registration.

## Using TLS

**NOTE:** If you choose to use HTTPS as a protocol for registering your phone:

- Open a new browser window and enter your phone's IP address, e.g. **http://192.168.1.22**.
- Enter **username** and **password** and press the **Confirm** button. **NOTE:** The factory default login details are as follows: username is **admin** and password is **admin**.
- Click the **Security** tab and go to **Trusted certificates** and disable the **Only Accept Trusted Certificates** option.

## DNS SRV



This section describes how to use a DNS SRV record which specifies the location of PBXware.

**NOTE:** Your DNS Server needs to be configured correctly for this to work. Bicom Systems can provide the service to set up this for you.

Check if the DNS SRV is enabled in PBXware

- Contact your PBXware administrator to find out if the **DNS SRV** is enabled in PBXware, or if you have access to PBXware, you can check this yourself.
- Open a new browser window and enter the IP address in order to access the PBXware's web administration login screen. Example: **http://192.168.1.10**.
- Log in to PBXware with your e-mail address and password.
- Navigate to **Settings -> Servers**. Click the server corresponding the **Edit** button. **NOTE:** On the Multi Tenant Edition, navigate to Settings -> Tenants -> Master Tenant.
- In the **Auto Provisioning group**, please make sure that **Use DNS SRV when possible** is set to **Yes**. If it is set to **No** or **N/A**, set to **Yes** and click the **Save** button.

**NOTE:** You must re-save all your Extensions configured for auto provisioning.

Log in to the phone's web administration interface

If there is no DHCP in your network, you can still auto provision your Yealink phone. Please refer to your Yealink phone model User Guide for instructions about setting the static IP address. After you configure your Yealink phone to use a static IP address, continue with the following steps.

- Open a new browser window and enter your phone's IP address in order to access the phone's web administration interface login screen. Example: **http://192.168.1.22**
- Log in to the phone's web administration interface with your username and password. Please note that the factory default login details are as follows: username is **admin** and password is **admin**.
- Click the **Upgrade** tab.
- Click the **Advanced** tab.

## URL

In the **URL** field, enter the Hostname.

Example of a the Hostname: **bicomsystems.com**

- Make sure that you replace Hostname from this example with your PBXware Hostname.
- Make sure that the DNS server is configured to automatically route registration request to PBXware which is actually under another domain name. Example: **newbicomsystems.com**.
- Check New Config

Select **Power on + Repeatedly**.

- Click the **Confirm** button.

You will have to wait some time for a device to save changes.

- Click the **Auto Provision** button to run the auto provisioning process, after which you will be asked to confirm the action. To continue, click the **OK** button.
- The auto provisioning process will start during the phone's reboot process. The phone will pick up an appropriate configuration file from PBXware. If everything is done as described above, you should have successfully registered your phone to PBXware.

Dial **\*123** to verify registration.

## Configure BLF

This section describes how to configure BLF (Busy Lamp Field) for Yealink T31G.

The following topics are covered:

- Extension Settings
- Phone Settings

### Extension Settings

Log in to the PBXware's web administration interface.

- Open a new browser window and enter the IP address in order to access the PBXware's web administration login page. Example: **http://192.168.1.10**.
- Log in to PBXware with your e-mail address and password.

Edit an Extension.

- On the **Extensions** page, click the **Edit** icon corresponding to your Extension.
- Click the **Advanced Options** button.
- Navigate down to the **Auto Provisioning** and **Presence** group of settings.
- Make sure that **Auto Provisioning** is set to **Yes**.
- Make sure that **Presence** is set to "Yes".
- Click the **Save** button to save changes.
- Click **Enhanced Services**.
- Click the **Directory/BLF List** check box and click the **Save** button in order to enable this feature.
- Click the Directory / BLF List **Edit** button.
- Enter the user's Extension number and click the **BLF** check box.
- Click **Save**.

## Phone Settings

Log in to the phone's web administration interface.

- Open a new browser window and enter your phone's IP address in order to access the phone's web administration interface login screen. Example: **http://192.168.1.22**.
- Log in to the phone's web administration interface with your username and password. Please note that the factory default login details are as follows: username is **admin** and password is **admin**.
- Click **Phone**.
- Click **DSS Keys**.
- Configure 1 to 10 DSS Keys from the list.

Type: Select **BLF**.

Value: Enter the user's Extension. Example: **1005**

- Click the **Confirm** button to save changes.

## Additional Configuration Template

If you want to include some additional UAD configuration for Yealink T31G, add the fields to **User Agent General Auto Provisioning Template** in the **Settings -> UAD -> Yealink T31G** menu, or add them directly to the Extension in the **UAD Auto Provisioning Template** section.

Retrieved from "[http://wiki.bicomsystems.com/Yealink\\_T31G](http://wiki.bicomsystems.com/Yealink_T31G)"