Yealink T55A MS Teams Phone with ThinkTel SIP configured with Hybrid Mode

Prepared by:
Gerrie Joubert
ThinkTel Communications Ltd.

11/18/2021

Contents

Overview

Welcome to the Yealink T55A Microsoft Teams with hybrid mode provisioning guide. This document covers the basic steps required:

- Requesting the temporary 30-, 90- & 180-days temporary license(s).
- Applying the temporary or permanent license(s) in the phones GUI.
- Upgrading the phone firmware to the supported hybrid mode feature.
- Enabling the hybrid mode feature.
- Configure the ThinkTel SIP trunk and testing the deployment.

Important:

After the phones new SIP license is applied and the firmware is upgraded to the supported hybrid mode firmware the T55A will still be a Teams phone device with a newly supported hybrid mode will support a single SIP trunk as a registered survivable option.

The Hybrid mode when enabled does not turn off MS Teams and does not turn the phone into a SIP only device. At the time of this document the T55A was EOL and Yealink does not have any roadmap to turn the T55A into a SIP only device.
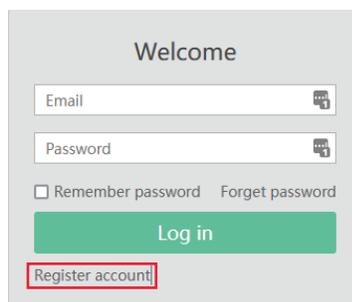
Requirements

Before you start

1. The installer/customer will need all the devices MAC addresses, best to record those into a word or notepad file.
2. Download T55A (T56A, T58A)-58.15.0.143.rom or newer firmware.
3. The installer/customer will need a valid Yealink login.
4. The installer/customer will need to apply for the relevant licenses for the T55A phones.
5. Access to a POE power source.

Yealink SIP License(s)

Creating Your Yealink Support Login

Navigate to https://sso.yealink.com/login and select the Register account option below the Log in key.

A new window will be displayed and requires the following info be completed:

- **Username:** Provide a username of your choice.
- **Account Type:** Select between End User, Partner, or reseller.
- **Email Address:** Provide your email address, this is to confirm your account registration and receive the new licenses.
- **Password:** Enter a secure password.
- **Confirm Password:** Re-enter a secure password.
- **Phone Number:** Provide your business or mobile phone number.
- **Job Title:** Enter your job title.
- **Company:** Enter your company name.
- **Company Website:** Enter your company website address.
- **Area:** Select your area.
- **Country:** Select your country.
- State/Province: Select your province.

Select the Apply button at the bottom of the enrolment form and wait a few minutes, check your email for an account confirmation email.
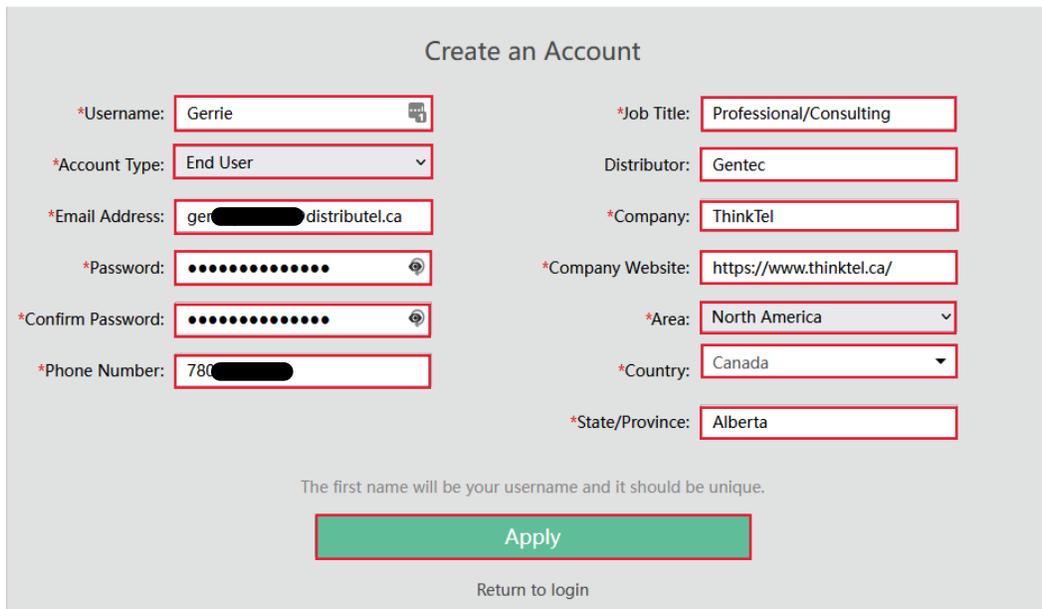
Create an Account

*Username:	Gerrie	*Job Title:	Professional/Consulting
*Account Type:	End User	Distributor:	Gentec
*Email Address:	ger____distributel.ca	*Company:	ThinkTel
*Password:	●●●●●●●●●●●●●	*Company Website:	https://www.thinktel.ca/
*Confirm Password:	●●●●●●●●●●●●●	*Area:	North America
*Phone Number:	780_____	*Country:	Canada
		*State/Province:	Alberta

The first name will be your username and it should be unique.

Apply

Return to login

Select the email link to confirm your account registration. Navigate to the login screen and now enter your username and password and select the login button.

Welcome

gerr____@thinktel.ca

●●●●●●●●●●●●●
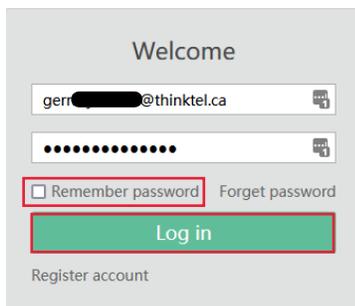
☐ Remember password   Forget password

Log in

Register account

Requesting The New SIP License

Once logged into the Yealink support site select the License Management Platform from the options blade for the new T55A SIP license.


In the Yealink License Management Platform, navigate to License Management -> My application, click "New Temporary License" or "New Permanent License" based on your need.

Select "New Temporary License" or "New Permanent License" depending on the needs of your deployment or project. Temporary licenses are generally used for POC's.

Note: *Once a new license is assigned in the device it can not be removed, this applies to factory resting and firmware upgrade/downgrading the device firmware!*
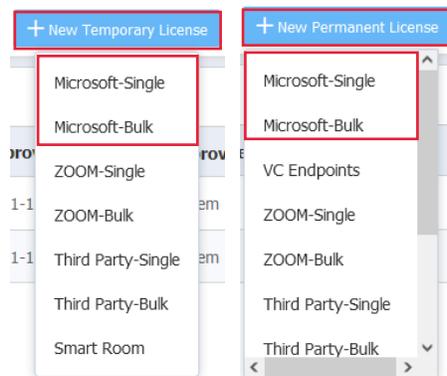
Once the license option selection is made, a new windows form will be displayed. Continue to complete the form and select the OK key when the form is complete.

Remark	Please enter project remark, within 128 characters

Tips - Contact resellers to pruchase Teams/SFB Edition Phone directly, no need to apply license anymore

[OK]   [Cancel]

Temporary licenses are generated within a few minutes, whereas the permanent licenses can take up to 48 hours. A confirmation email will be sent to the registered email address on file for the support account, with the generated license.

The new licenses can also be downloaded from the license management platform, using the download button.

| Order No.	Business Type	Order Type	Authorized Co	MAC	Machine ID	Status	Submission Date	Approved Date	Approver	Action
20211113011f47	Microsoft	Temporary	ThinkTel	805E0C19B2C9	— —	Approved	2021-11-12 10:50	2021-11-12 10:50	system	
2021111301c32d	Microsoft	Temporary	ThinkTel	805E0C01DE71	— —	Approved	2021-11-12 10:48	2021-11-12 10:48	system	

Yealink T55A Phone

Retrieve The IPv4 Address

When the phone boots up for the first time select the **Settings menu** button and scroll down to **Device Settings menu** then scroll down to the **About menu**.

Settings > **Device Settings** > **About**
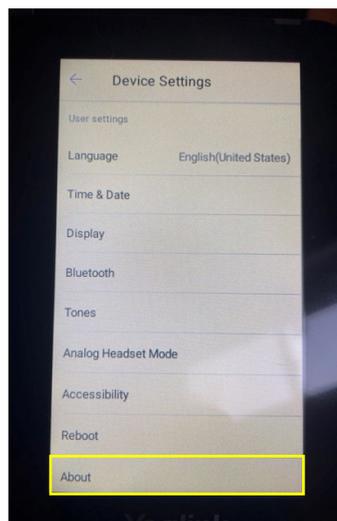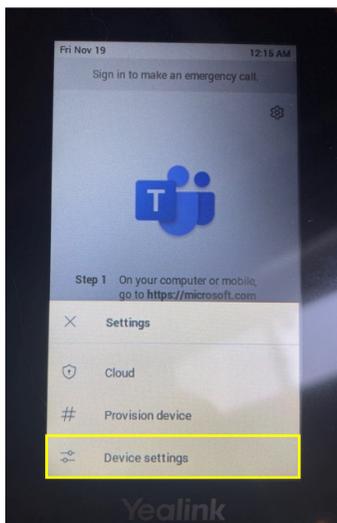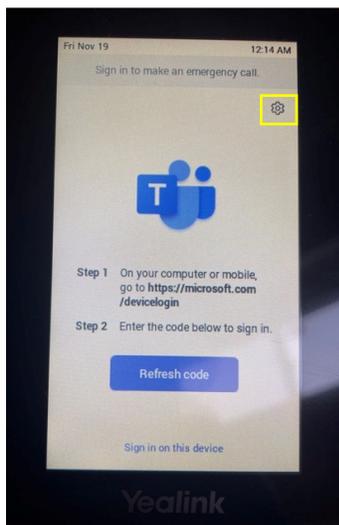
In this menu the IPv4 address (192.168.42.44) is now available, this will allow the customer/installer the ability to access the phones Web user interface.
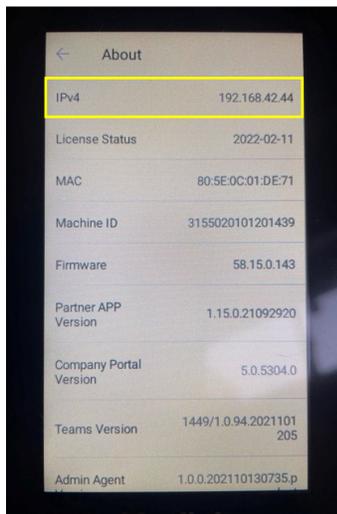

Applying The License

At the login prompt of the phones Web UI enter the default username (*admin*) and password (*admin*).

Note: *The SIP license(s) needs to be applied to the phone prior to performing the upgrade. Performing the steps in this order minimizes the number of reboots required before enabling hybrid mode.*

In the left navigation pane, expand the **Security** menu and select the **License** sub-menu. On the right side of the display, select the Browse button and navigate to the phones new SIP license. Once the license is selected, use the **Upload** button to apply the new license to the phone.
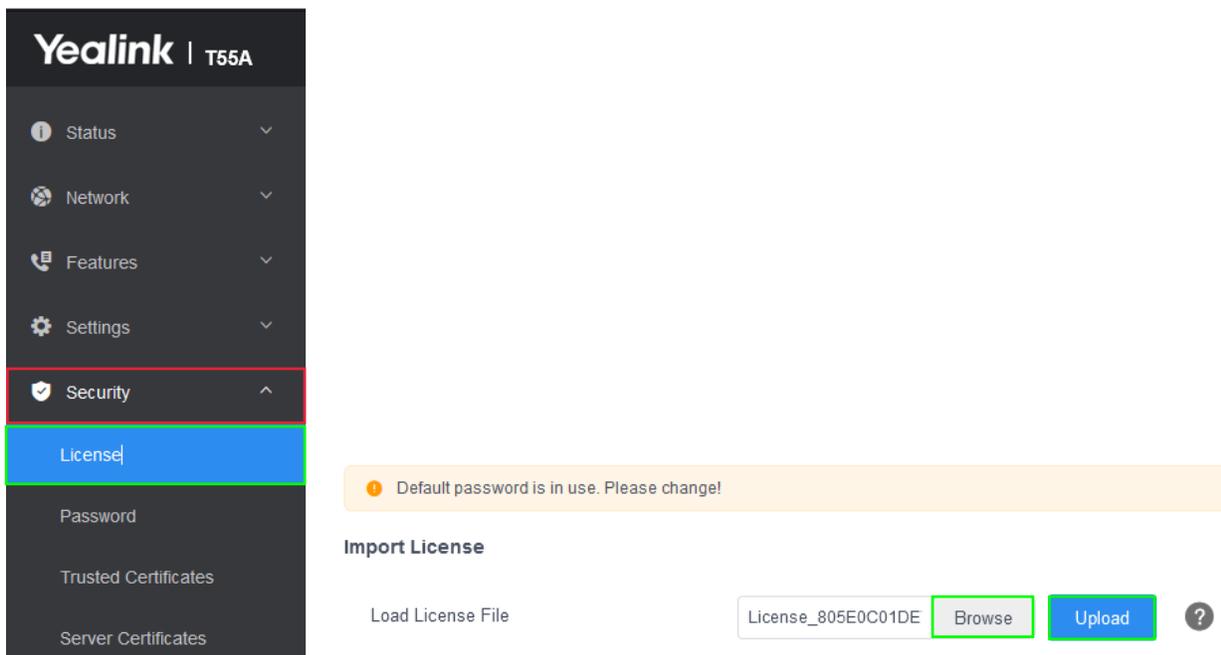
Upgrade The Phone Firmware

In the left navigation pane, expand the **Settings** menu and select the **Upgrade** sub-menu. On the right side of the display, under the upgrade section select the Browse button and navigate to the phones new SIP/Teams firmware. Once the new firmware is selected, use the **Upload** button to apply the new phone firmware.

Once the upload button is selected a new message box will appear, select the OK button to proceed with the upgrade of the phone firmware.

A warning is displayed on the phones Web UI that needs to be adhere to. The phone can not be rebooted or powered off during this time. The upgrade can take up too 15 min to complete.

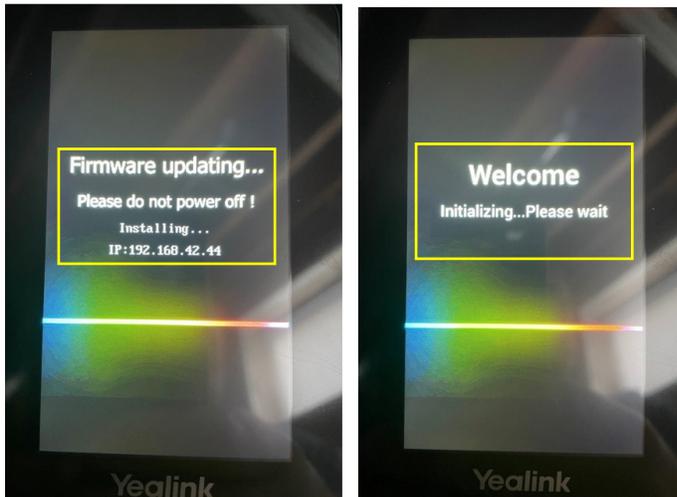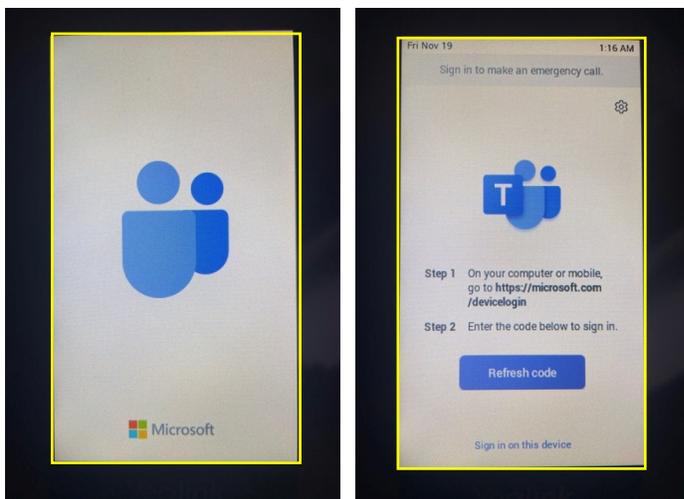During the phones firmware upgrade process the phone's display will change a few times with different messaging. Downloading firmware process:
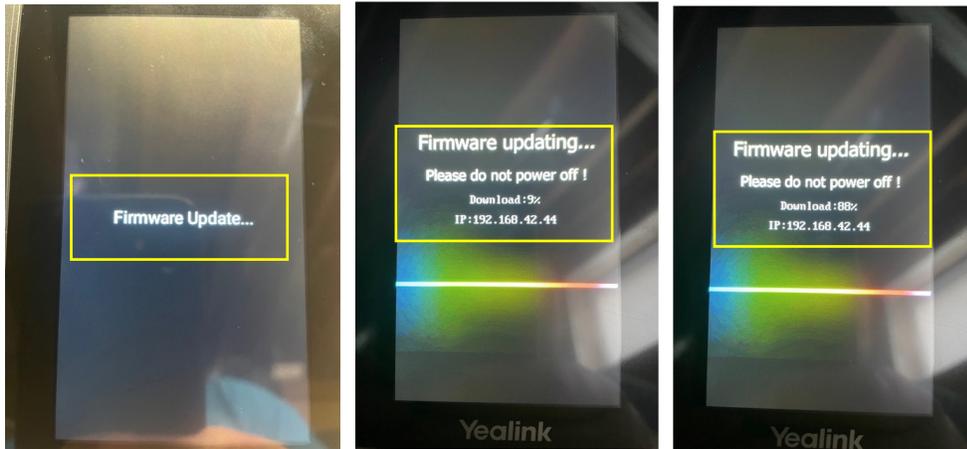

Installing firmware process:

Installation of the device firmware complete:

Yealink T55A MS Teams phone with ThinkTel SIP configured within Hybrid Mode   11/18/2021
*Version 1.1*

Enable Hybrid Mode

In the left navigation pane, a new **Hybrid Mode** menu option is now available. Expand the **Hybrid Mode** menu and select the **Basic** sub-menu. On the right side of the display, toggle the Hybrid Mode slider from OFF to ON.
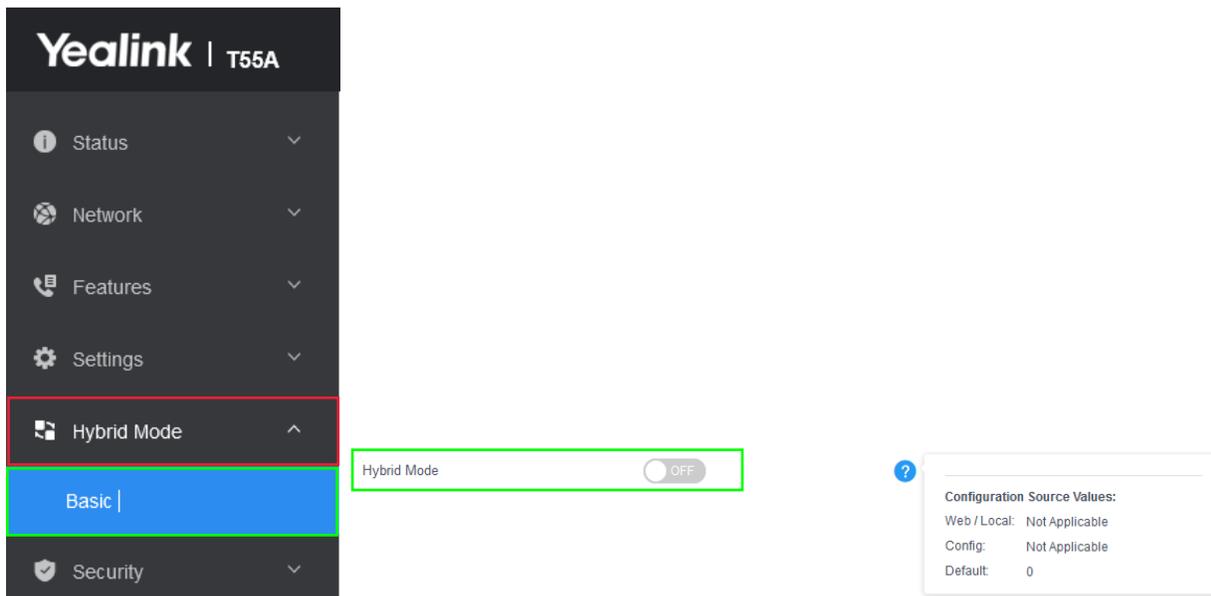
New menu options are now available for the enabled Hybrid Mode. Ensure the following settings are set:

- SIP Idle Timeout: Always On
- Quick Ball: On

Next to each option is a help (?) key that will provide an overview of that function.
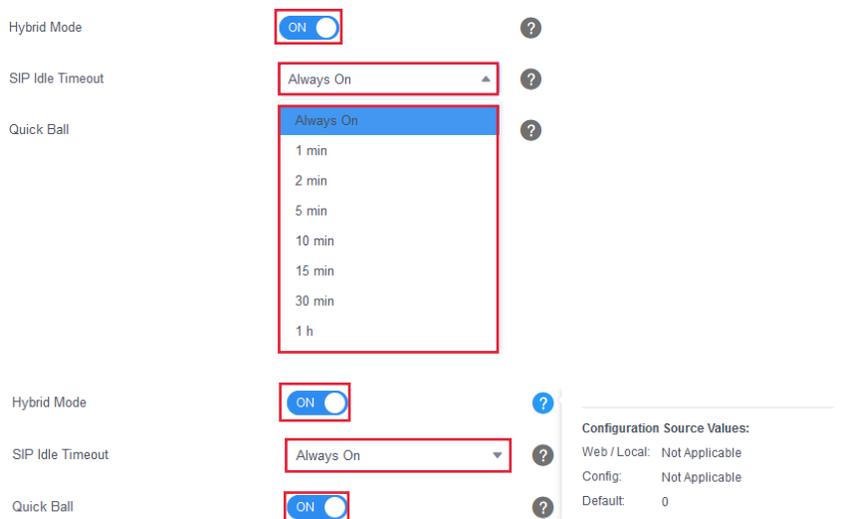
What is Quick Ball?

Quick ball allows users to switch between Teams app mode and SIP survivable app mode using an identifiable button at the bottom left of the phones display, see images below.

SIP = , Teams =

Select the Confirm button at the bottom of the web UI to apply the changes. The phone will now reboot and apply the changes, this could take up to 5 min to complete.

Message Information

 Rebooting, please wait...

Configure ThinkTel SIP

The configuration of the SIP within the phone is remarkably simple, meaning there are not many windows and fields to navigate through. With Hybrid Mode now enabled on the phone the customer/installer can navigate to and expand the **Hybrid Mode** menu and select the **Account Registration** sub-menu. On the right side of the display, toggle the Line Active slider from OFF to ON. This will allow for SIP trunk enabling and registration.
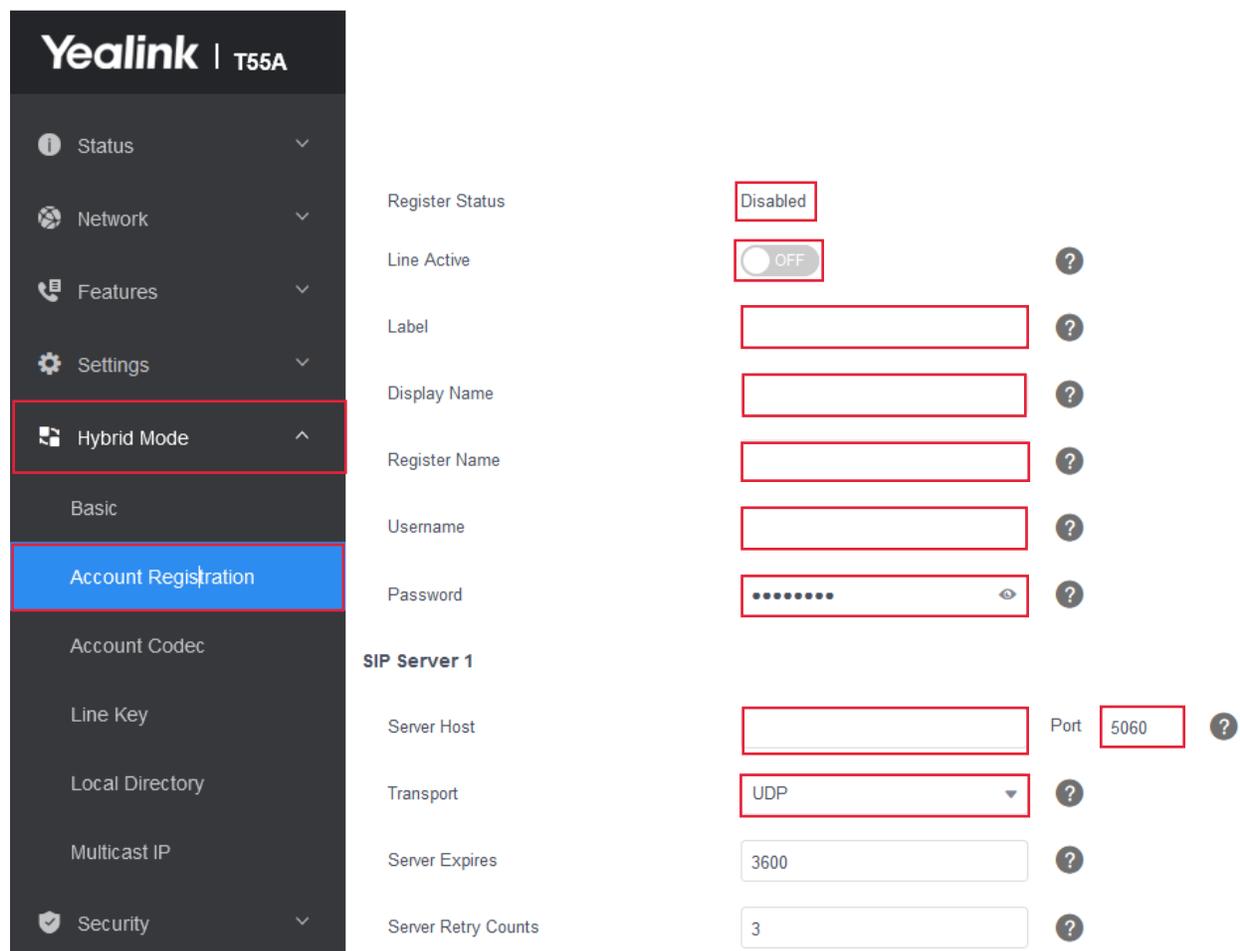
The following fields are required when configuring a SIP Trunk or HPBX extension:

- **Line Active:** Set the toggle to ON for SIP registration.
- **Label:** Can be the trunk number, HPBX extension # or a name.
- **Display Name:** This will be the name or number that displays on outbound calls.
- **Register Name:** This is the line number, extn #, or name used for the registration.
- **Username:** This is the line number, extn #, or name used for the registration.
- **Password:** This is the SIP account password provided for SIP registration.

SIP Server 1:

- **Server Host:** this is the Proxy domain of the SIP account being registered.
- **Transport:** This is the SIP Protocol for the SIP account (UDP, TCP, TLS, DNS NAPTR).

At the bottom of the window is the outbound proxy, this is often left un-configured. In this example we will also not be configuring the outbound proxies.

Once all the settings listed above are entered in their respective fields the **Confirm** button can be selected to save the configuration. After the changes are saved and the page is updated the registration status is displayed at the top of the page.

Register Status	Registered
Line Active	ON
Label	Simons failover line
Display Name	Simon Long
Register Name	587
Username	587
Password	••••••••

SIP Server 1

Server Host	edm.sub.tprm.ca	Port	5060
Transport	UDP		
Server Expires	3600		
Server Retry Counts	3		

SIP Server 2

Server Host		Port	5060
Transport	UDP		
Server Expires	3600		

Server Retry Counts	3	

SIP Server 3

Server Host		Port	5060	
Transport	▼			
Server Expires	3600			
Server Retry Counts	3			

Enable Outbound Proxy Server	OFF			
Outbound Proxy Server 1		Port	5060	
Outbound Proxy Server 2		Port	5060	
Proxy Fallback Interval	3600			

Status

Navigate to the Status menu and then select the Status sub-menu. On the right side of the display, at the top of the window the current installed software version can be observed. Scroll down to the bottom of the window and there you will observe the temporary or permanent license that was installed and just a little further down you will observe the SIP account registration status. From this status window
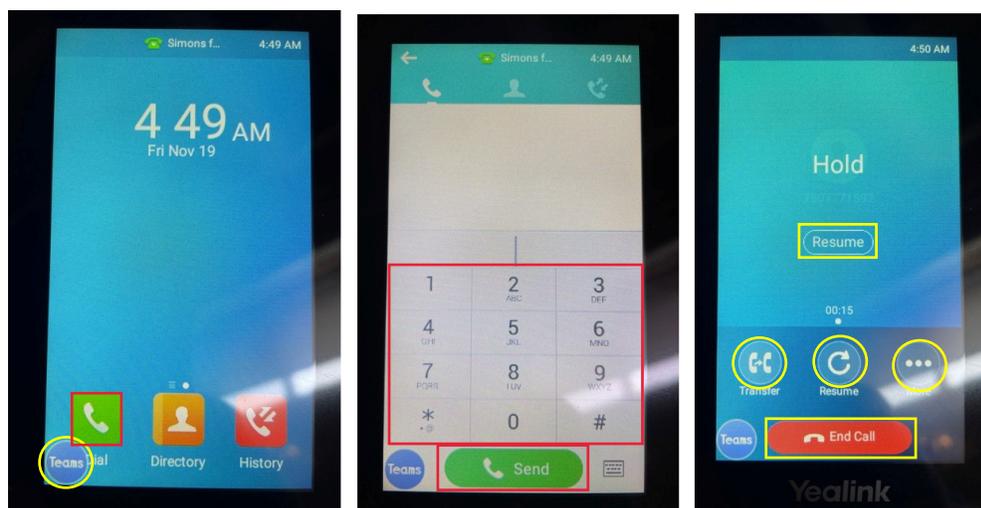
Testing SIP Mode with Outbound

Now that the SIP backup service is registered. The outbound and inbound needs to be tested to ensure the service works for the purpose of this document.

On the phone's display select the quick ball [SIP] button on the bottom left of the display.
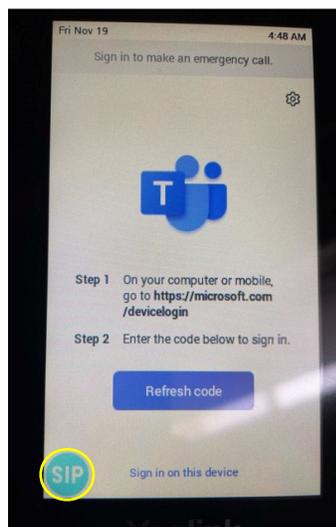
With the display now in the SIP backup display screen the testing can now proceed. With the phone being idle the user can use the dial pad on the phone or select the green Dial button on the phone to make a call.

Dial the desired number and press the send button on the display.

Once the call is answered the call can be transferred, placed on hold.

Selecting the ellipses button will present the mute, or conference options when in a call.
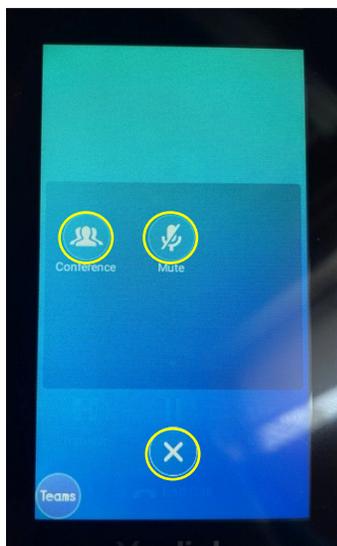
Testing SIP Mode with Inbound

With an inbound call the phone will only ring if it is not switched back to Teams mode. While the phone is still in SIP backup mode the phone display will show an incoming call and the phone will ring.

All the basic phone features are available on incoming calls as well as outgoing calls.
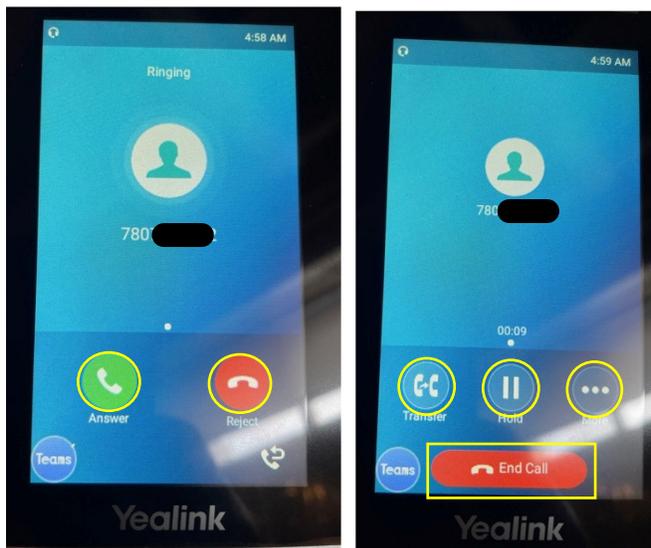
Once the phone is idle the user can select the History button on the display to review the phones calling history for inbound, outbound, and internal calls. This history only applies to the SIP failover and does not display any Teams calling history.

Yealink T55A MS Teams phone with ThinkTel SIP configured within Hybrid Mode
Version 1.1
11/18/2021