

## Metaswitch SIP Provisioning Server Endpoint Pack Documentation

This document explains how to use a specific endpoint pack with the Metaswitch SIP Provisioning Server. If you require further help using this pack and this is an accredited or certified device then Metaswitch will be able to provide assistance. For community packs, please contact the pack author.

For further details on how to develop or extend endpoint packs please see the official documentation, including “Creating an Endpoint Pack”. To find out more about your SIP end-point, please consult the Admin and User guides.

**Note: this endpoint pack is only compatible with SIP PS SDK version 2.03 and above. It should not be installed on systems using earlier versions. If you are unsure which version of SIP PS SDK you are running, see <https://communities.metaswitch.com/docs/DOC-91097> for a guide.**

For general information on how to use the SIP Provisioning Server, please contact your Metaswitch representative.

### Pack Details

<b>Endpoint Pack ID</b>	Yealink_T4X_certified
<b>Author</b>	Yealink Network Technology Co., Ltd
<b>Minimum SIP PS Version</b>	2.02
<b>Version</b>	4
<b>Support contact</b>	<a href="mailto:support@yealink.com">support@yealink.com</a>
<b>Date of Publication</b>	2015-05-20
<b>End-point Vendor</b>	Yealink
<b>End-point devices covered by this pack</b>	T41P,T42G ,T46G,T48G
<b>Firmware version(s) included</b>	T48G: T48G-35.80.202.1.rom T46G: T46G-28.80.202.1.rom T42G: T42G-29.80.202.1.rom T41P: T41P-36.80.202.1.rom

### Setup Instructions

<b>DHCP Option to use</b>	66
<b>DHCP URL</b>	<a href="http[s]://example.com/sip-ps/">http[s]://example.com/sip-ps/</a>
<b>How to configure provisioning URL via web interface</b>	<ul style="list-style-type: none"> <li>- Navigate to the ‘Settings’ link on the upside.</li> <li>- Navigate to the ‘Auto Provision’ link on the left hand side</li> <li>- Enter <a href="http[s]://example.com/sip-ps/">http[s]://example.com/sip-ps/</a> in the Server URL field.</li> <li>- Click on “Confirm” to save</li> </ul>
<b>How to configure provisioning URL via endpoint menu</b>	For T41P and T42G: Menu >4. Settings > 2. Advanced Settings> 9.Auto Provision>

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1.URL  
For T46G and T48G:  
Menu > Advanced> 6.Auto Provision> 1.URL

<b>Authorisation mode</b>	HTTP Digest
<b>Non-alphanumeric character input instructions (enter n/a if not possible to enter)</b>	For T41P and T42G: Press the 'Abc' softkey to switch to non-numeric input mode. Press key * for " *,!:@+-\$ / " , key # for " # " For T46G and T48G: Press the 'Abc' softkey to switch to non-numeric input mode. Press key * for " .*/:@+-\$[] " , key # for " # "

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## Authentication Login

<b>HTTP Digest login instructions</b>	After phone starts,the LCD screen will display a "Login" Soft Key when the phone is idle, click "Login" Soft Key, The phone will display an input form asking for a username and password. Enter the subscriber DN for the username and their EAS password for the password,and click OK.
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## Default Settings

<b>Default user password for web UI</b>	user
<b>Default passwords for endpoint menu, if different from web UI</b>	
<b>Default admin password for web UI</b>	admin

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## Miscellaneous

**This pack is compatible with Yealink firmware X.80.202.1.** If an endpoint of other firmware is provisioned then it will be given this version automatically .

## Changes to MWI defaults

Please note that the behaviour in the pack has now changed so that phones do not SUBSCRIBE to MWI by default. This is because the CFS Remote Media Gateway Model fixbit "Expects unsolicited MWI" is set by default in our recommended RMGMs. There are now two options:

- **"Phone uses unsolicited MWI" (default):** the phone does not send SUBSCRIBEs to MWI. If this is chosen the "Expects unsolicited MWI" fixbit should be checked in the Remote Media Gateway Model.
- **"Phone subscribes to MWI":** the phone does send SUBSCRIBEs to MWI. If this is chosen the "Expects unsolicited MWI" fixbit should be NOT be checked in the Remote Media Gateway Model. If the phone is a shared line then it will not be able to subscribe and you should use "Phone uses unsolicited MWI".

**If you wish your phones to continue sending SUBSCRIBEs to MWI after installing the latest version of this pack, you will need to change the MWI setting to “Phone subscribes to MWI”.**

## Release Notes

Change	Comments	SFR (if applicable)
Optimized the feature of Basic Call Park.	<p>The feature of Basic Call Park can now be used in the new version.</p> <p>To configure this feature via CommPortal phone configurator: Programmable Keys-&gt;Key N-&gt;Soft Key Action For more information, refer to <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_Configuring_Guide</i>.</p>	
Optimized the Http-Digest authentication	<p>A new soft key “Login” on idle LCD screen when the IP phone was powered on has been added. User can press the Login soft key to enter the Auto Provision Screen, with entering the user name and the password the phone would send the information to the server for authentication.</p> <p>For more information, refer to <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_CommPortal_Phone_Applications_User_Guide</i> and <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_Configuring_Guide</i>.</p>	
Added the feature that the Time zone can synchronize with the server	<p>A new valid value has been added to configure Time Zone Sync. If you configure “Match My Account” as the default value of Time Zone, the phone will match DST &amp; Time Zone sync settings with the Metaswitch EAS/CFS Account .</p> <ul style="list-style-type: none"> <li>Match My Account</li> </ul> <p>To configure this feature via CommPortal phone configurator: Preferences-&gt;Time &amp; Date-&gt;Time Zone . For more information, refer to <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_Configuring_Guide</i>.</p>	
Added the feature of Push-to-talk	<p>A new configuration has been added to enable or disable Push-to-talk feature(Only applicable to T41P/T42G/T46G).</p> <ul style="list-style-type: none"> <li>Push to talk mode enable</li> </ul> <p>To configure this feature via CommPortal phone configurator: Features-&gt;Intercom For more information, refer to <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_Configuring_Guide</i>.</p>	
Added a new Submodular of CommPortal	<p>Multiple new configurations have been added to configure CommPortal Phone Applications.They are listed below--See their help text in the phone profile editor for a full description of what</p>	

<p>Phone Applications</p>	<p>they do:</p> <ul style="list-style-type: none"> <li>• CommPortal Phone Apps Enable</li> <li>• CommPortal Web Access</li> <li>• CommPortal Web Access Username</li> <li>• CommPortal Web Access Password</li> <li>• CommPortal Keep Alive Interval Time(min)</li> <li>• Hot Desking Log Out Enable</li> <li>• Network Contacts Enable</li> <li>• Network Contacts Update Interval(min)</li> <li>• Contacts Group Enable</li> <li>• Contacts Group Display Name</li> <li>• Extensions Group Enable</li> <li>• Extensions Group Display Name</li> <li>• MLHGS Group Enable</li> <li>• MLHGS Group Display Name</li> <li>• Network Call List Enable</li> <li>• Replace Local Call List</li> <li>• Messages List Enable</li> <li>• Automated Call Distribution Enable</li> <li>• Automated Call Distribution Enable For Account</li> </ul> <p>To configure this feature via CommPortal phone configurator: Features--&gt;CommPortal Phone Apps For more information, refer to <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_CommPortal_Phone_Applications_User_Guide.</i></p>
<p>Added a new feature of DND Sync for Shared Line</p>	<p>A new configuration has been added to enable or disable the DND synchronization feature for the shared line.</p> <ul style="list-style-type: none"> <li>• DND Sync for Shared Line</li> </ul> <p>To configure this feature via CommPortal phone configurator: Features-&gt;DND&amp;Forward For more information, refer to <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_Configuring_Guide.</i></p>
<p>Added some features to the Soft key Action</p>	<p>Multiple soft key actions have been added. They are listed below:</p> <ul style="list-style-type: none"> <li>• Park Call</li> <li>• Paging List</li> <li>• ACD</li> <li>• Log Out</li> <li>• Network Contacts</li> <li>• History</li> <li>• Messages List</li> </ul> <p>To configure this feature via CommPortal phone configurator: Programmable Keys-&gt;Key N-&gt;Soft Key Action For more information, refer to <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_Configuring_Guide</i> and <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_CommPortal</i></p>

*\_Phone\_Applications\_User\_Guide\_*

Modified the configuration name of Intercom feature

Modified the display name of the feature “Intercom” as “Intercom/PTT”. It enables or disables the phone to configure an Intercom/PTT key for the line key.

To configure this feature via CommPortal phone configurator:  
Programmable Keys->Key N->Soft Key Action  
For more information, refer to *Yealink\_SIP\_Phones\_Integrated\_with\_Metaswitch\_Configuring\_Guide*.

Added a new Submodular to Paging Groups

Multiple new configurations have been added to configure a Paging Group.They are listed below--See their help text in the phone profile editor for a full description of what they do:

- Description
- IP Address
- Port

To configure this feature via CommPortal phone configurator:  
Paging Groups->Paging Group N.  
For more information, refer to *Yealink\_SIP\_Phones\_Integrated\_with\_Metaswitch\_Configuring\_Guide*.

Added some configurations to the Submodular of Outbound

Multiple new configurations have been added to configure Outbound backup.They are listed below – See their help text in the phone profile editor for a full description of what they do:

- Backup outbound proxy
- Backup outbound proxy Port
- Proxy Fallback Interval

To configure this feature via CommPortal phone configurator:  
Line-->SIP Server

Added some configurations of Voice Mail Access Code

Multiple new configurations have been added to configure the voice mail access code for account X. They are listed below – See their help text in the phone profile editor for a full description of what they do:

- Message Waiting Indicator
- Voice Mail Access Code

To configure this feature via CommPortal phone configurator:  
Line-->Voice Mail

Added two valid values to the Submodular of Ring Tone

Two valid values have been added to the configuration of Ring Tone for account X. They are listed below:

- Silent.wav
- Splash.wav

To configure this feature via CommPortal phone configurator:  
Line-->Ring Tone

Deleted the submodular of DTMF

The Submodular of DTMF has been deleted .

Added some

Multiple new configurations have been added to configure SIP

configurations to the Submodular of Session Timer

Session Timer . They are listed below – See their help text in the phone profile editor for a full description of what they do:

- Session Timer
- Session Expires
- Session Refresher

To configure this feature via CommPortal phone configurator:  
Line-->Session Timer

The CommPortal web setting path of the following configurations has been adjusted :

- SIP Session Timer T1
- SIP Session Timer T2
- SIP Session Timer T4

Adjusted some configurations on the Submodular of Session Timer

CommPortal web setting path of Endpoint Pack Version 3:Line ->Session Timer

CommPortal web setting path of Endpoint Pack Version 4:Preferences->SIP

Note:these parameters are incompatible between the EP V3 version and EP V4 version.

Previous settings about these parameters do not work in the EP V4 version.

Added a new Submodular to Voice Monitor

Multiple new configurations have been added to configure Voice Monitor for account X. They are listed below-See their help text in the phone profile editor for a full description of what they do:

- VQ RTCP-XR Collector name
- VQ RTCP-XR Collector address
- VQ RTCP-XR Collector port

To configure this feature via CommPortal phone configurator:  
Line-->VQ RTCP-XR

Added some configurations to the Submodular of General

Multiple new configurations have been added . They are listed below--See their help text in the phone profile editor for a full description of what they do:

- Display Method on Dialing
- Reset By Long Pressing Ok
- Recent Call In Dialing

To configure this feature via CommPortal phone configurator:  
Features-->General

Deleted the Submodular of Conference

The Submodular of Conference has been deleted .

Added some configurations to the Submodular of LDAP

Multiple new configurations have been added to configure LDAP feature . They are listed below--See their help text in the phone profile editor for a full description of what they do:

- LDAP TLS Mode
- LDAP Lookup for Callout
- LDAP Search for Incoming Call

To configure this feature via CommPortal phone configurator:

Features-->LDAP	
Added a new configuration to the Submodular of Remote Phone book	<p>A new configuration has been added to enable or disable the IP phone to refresh the local cache of the remote phone book every time the phone accesses the remote phone book:</p> <ul style="list-style-type: none"> <li>Refresh When Accessing Remote Phonebook</li> </ul> <p>To configure this feature via CommPortal phone configurator: Features--&gt;Remote Phone Book</p>
Added some configurations to the new Submodular of Notification Popups	<p>Multiple new configurations have been added to configure Notification Popups feature . They are listed below--See their help text in the phone profile editor for a full description of what they do:</p> <ul style="list-style-type: none"> <li>Display Voice Mail Popup</li> <li>Display Missed Call Popup</li> <li>Display Forward Call Popup</li> <li>Display Text Message Popup</li> </ul> <p>To configure this feature via CommPortal phone configurator: Features--&gt;Notification Popups .</p>
Added a new configuration to the Submodular of General	<p>A new configuration has been added to enable or disable the phone to forbid the calling function without an account:</p> <ul style="list-style-type: none"> <li>Forbid a Calling For Unregistered Account</li> </ul> <p>To configure this feature via CommPortal phone configurator: Preferences--&gt;General</p>
Added a new Submodular of Call Display	<p>Multiple new configurations have been added to configure Call Display feature . They are listed below--See their help text in the phone profile editor for a full description of what they do:</p> <ul style="list-style-type: none"> <li>Display Contact Photo</li> <li>Display Called Party Information</li> <li>Call Information Display Method</li> </ul> <p>To configure this feature via CommPortal phone configurator: Preferences--&gt;Call Display</p>
Added two valid values to the Submodular of Ring Tone	<p>Two valid values have been added to the configuration of Ring Tone. They are listed below:</p> <ul style="list-style-type: none"> <li>Silent.wav</li> <li>Splash.wav</li> </ul> <p>To configure this feature via CommPortal phone configurator: Preferences--&gt;Ring Tone</p>
Deleted the configuration of Record in the submodular of Country Tone	<p>The configuration of Record in the submodular of Country Tone has been deleted.</p>
Added a new Submodular of Input Methods	<p>Multiple new configurations have been added to configure Input Methods feature . They are listed below--See their help text in the phone profile editor for a full description of what they do:</p> <ul style="list-style-type: none"> <li>Default Input Method For Directory Searching</li> </ul>

- Default Input Method For Directory Editing
- Upload Input Method

To configure this feature via CommPortal phone configurator:  
Preferences-->Input Methods

Added a new  
Submodular of  
Logo

Multiple new configurations have been added to configure Logo feature . They are listed below--See their help text in the phone profile editor for a full description of what they do:

- Logo Mode
- Upload Logo
- Delete Logo

To configure this feature via CommPortal phone configurator:  
Preferences-->Logo

Added a new  
Submodular of  
Voice  
Monitoring

Multiple new configurations have been added to configure Voice Monitoring feature . They are listed below--See their help text in the phone profile editor for a full description of what they do:

- Send RTCP-XR Report Packet
- Send RTCP-XR Report During a Call
- VQ RTCP-XR Session Report
- VQ RTCP-XR Interval Report
- Period for Interval Report
- Warming threshold for Moslq
- Critical threshold for Moslq
- Warming threshold for Delay
- Critical threshold for Delay
- Display Report options on Web
- Display Report options on phone
- Report options on phone UI

To configure this feature via CommPortal phone configurator:  
Preferences-->Voice Monitoring

Added a new  
Submodular of  
SIP

Multiple new configurations have been added to configure SIP feature . They are listed below--See their help text in the phone profile editor for a full description of what they do:

- SIP NAT STUN Enable
- SIP NAT STUN Server
- SIP NAT STUN Server Port
- SIP Session Timer T1
- SIP Session Timer T2
- SIP Session Timer T4
- Local SIP Port
- TLS SIP Port
- Accept SIP Messages From Trusted Server

To configure this feature via CommPortal phone configurator:  
Preferences-->SIP

Added a new  
Submodular of  
Power LED

Multiple new configurations have been added to configure Power LED feature . They are listed below--See their help text in the phone profile editor for a full description of what they do:

- Common Power Light On



- Talk/Dial Power Light On
- Ring Power Light Flash
- Voice/Text Mail Power Light Flash
- Mute Power Light On
- Hold/Held Power Light On

To configure this feature via CommPortal phone configurator:  
Preferences-->Power LED

Added a new  
Submodular of  
Custom  
Settings

Multiple new configurations have been added to configure Custom Settings feature . They are listed below--See their help text in the phone profile editor for a full description of what they do:

- Custom Settings Protected Enable
- Custom Settings Synchronized Enable
- Custom Settings Upload Method

To configure this feature via CommPortal phone configurator:  
Provisioning-->Custom Settings

Added a new  
configuration  
to the  
Submodular of  
Server Address

A new configuration has been added to configure the value (vendor name of the device) of DHCP option 60.

- DHCP Option 60 Value

To configure this feature via CommPortal phone configurator:  
Provisioning-->Server Address

Added some  
configurations  
to the  
Submodular of  
Diagnostics

Multiple new configurations have been added to configure Diagnostics feature . They are listed below--See their help text in the phone profile editor for a full description of what they do:

- Diagnostics Mode
- Diagnostics Server

To configure this feature via CommPortal phone configurator:  
Provisioning-->Diagnostics

Added a new  
configuration  
to the  
Submodular of  
IP Setting

A new configuration has been added to configure the IP phone to use manually configured static IPv4 DNS when the Internet (WAN) port type for IPv4 is configured as DHCP.

- Static DNS

To configure this feature via CommPortal phone configurator:  
Network Settings-->IP Setting

Added a new  
Submodular of  
PC Port

A new configuration has been added to enable or disable the PC (LAN) port.

- PC Port Active

To configure this feature via CommPortal phone configurator:  
Network Settings-->PC Port

Added a new  
configuration  
to the  
Submodular of  
Vlan

A new configuration has been added to enable or disable the IP phone to obtain IP address with lower preference of VLAN assignment method or disable VLAN feature when the IP phone cannot obtain IP address with the current VLAN assignment method.

- Switch Or Close VLAN

	To configure this feature via CommPortal phone configurator: Network Settings-->Vlan
Modified the configuration name on the Submodular of Vlan	Modified the configuration name "Packet Interval" as "LLDP Packet Interval"  To configure this feature via CommPortal phone configurator: Network Settings-->Vlan
Added a new valid value to the configuration of WAN Port Link	A new valid value has been added to the configuration of WAN Port Link feature: <ul style="list-style-type: none"> <li>Full duplex 1000Mbps (only applicable to SIP-T48G, SIP-T46G and SIP-T42G IP phones)</li> </ul> To configure this feature via CommPortal phone configurator: Network Settings-->Port Link-->WAN Port Link
Added a new valid value to the configuration of PC Port Link	A new valid value has been added to the configuration of PC Port Link feature: <ul style="list-style-type: none"> <li>Full duplex 1000Mbps (only applicable to SIP-T48G, SIP-T46G and SIP-T42G IP phones)</li> </ul> To configure this feature via CommPortal phone configurator: Network Settings-->Port Link-->PC Port Link
Added two valid values to the configuration of 802.1x Mode	Two valid values have been added to the configuration of 802.1x Mode: <ul style="list-style-type: none"> <li>EAP-PEAP/GTC</li> <li>EAP-TTLS/EAP-GTC</li> </ul> To configure this feature via CommPortal phone configurator: Network Settings->802.1x->802.1x Mode
Added a new configuration to the Submodular of SSL Certificates	A new configuration has been added to enable or disable the IP phone to reserve custom certificates after it is reset to factory defaults. <ul style="list-style-type: none"> <li>Reserve Custom Certificates After Reset</li> </ul> To configure this feature via CommPortal phone configurator: Security->SSL Certificates
Added some Key Types to the module of Sidecar	Multiple soft key actions have been added. They are listed below: <ul style="list-style-type: none"> <li>Park Call</li> <li>Paging List</li> <li>ACD</li> <li>Log Out</li> <li>Network Contacts</li> <li>History</li> <li>Messages List</li> </ul> For more information, refer to <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_Configuring_Guide</i> and <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_CommPortal_Phone_Applications_User_Guide</i> .

Added a new configuration item to the module of Firmware	<p>A new configuration has been added to configure server type when download the firmware:</p> <ul style="list-style-type: none"> <li>Using Https</li> </ul> <p>To configure this feature via CommPortal phone configurator: Provisioning--&gt;Firmware</p>
Added a new model of User Access Permission under the Provisioning model	<p>Multiple new configurations have been added to configure the User Access Permission. They are listed below--See their help text in the phone profile editor for a full description of what they do:</p> <ul style="list-style-type: none"> <li>User Access Permission Enable</li> <li>Upload Web_Items_Level File_</li> </ul> <p>To configure this feature via CommPortal phone configurator: Provisioning--&gt; User Access Permission</p>
Adjusted configuration item	<p>Moved the configuration of Input Password When Perform Factory Reset to the path of : Features-General</p> <p>To configure this feature via CommPortal phone configurator: Features--&gt;General</p>
Added a new model of Call Log under the Features model	<p>A new configuration has been added to save call log.</p> <ul style="list-style-type: none"> <li>Save Call Log</li> </ul> <p>To configure this feature via CommPortal phone configurator: Features--&gt;Call Log</p>
Adjusted the default configuration item	<p>Adjusted the default value of DTMF model as follow:</p> <ul style="list-style-type: none"> <li>DTMF Type = AUTO or SIP INFO</li> <li>DTMF Info Type =DTMF-Relay</li> </ul> <p>To configure this feature via CommPortal phone configurator: Features--&gt;DTMF</p> <p>For more information, refer to <i>Yealink_SIP_Phones_Integrated_with_Metaswitch_Configuring_Guide</i></p>