Panasonic KX-TGP500 VoIP DECT Telephones configure for Asterisk

Configuring the Panasonic KX-TGP500 Telephones for use with Asterisk.

The Administrator's Manual
Panasonic Product Page for the KX-TGP500
Firmware and Manuals from the Panasonic Site

DECT telephones offer advantages for wireless because they use different frequencies than WiFi. I have 3 telephones registered with the base unit and the base unit is registered with an Asterisk ver.13 PBX as SIP extension 7005 using voicemail box 8005. *(This means that when the extension is called, all 3 telephones ring. The phones can be configured to ring individually on different extensions. That is up to the user.)* This DECT set is working with the Asterisk ver.13 configurations found in my previous post, title: Configuration Files for Asterisk v.13 and AllStar Link . The network it is configured for is a HSMM-Mesh Network, so if it were to be configured for a normal LAN the host names would change to IP addresses.

Quick Start: A newly purchased KX-TGP500 base unit that is "open" (that is not pre-configured by a provider) and a KX-TPA50 handset need to be powered on. The handset needs to be registered with the

base. To register the phone with the base you need to do the following:

1. Open the menu of the handset by pressing down on the joystick on the telephone
2. Then press #130 on the telephone dial pad
3. There is a button located on the DECT base unit. Press it down for 4 seconds
4. Then press OK on the Telephone, which will be the button to the right of the word menu just under the screen.
5. Then dial 0000 on the telephone. Once it returns to the normal screen the handset should be registered and show you a number beside the battery symbol in the screen.

This needs to be done for each phone being registered.

To open the HTML configuration for the base unit, you need to press the joystick on the telephone down and then select the “tool box”, “Network Settings”, “Embedded Web”, and then “On”. The phone will sound a long tone. Then from a web browser sharing the same LAN, type in the IP address of the DECT base unit. You can find this IP address on the telephone by pressing down on the joystick and selecting the tool box icon, then Network Settings, then IP settings. Log into the DECT Base unit HTML configuration with the default username Admin and default password adminpass. Select the VoIP tab on the top menu, and then “line 1” under “SIP Menu” from the left sidebar menu. You should now be on a page that looks like this image:

KX-TGP500B04 - Mozilla Firefox

KA7U.us - FireFTP | KX-TGP500B04

10.45.111.82/CgiStart.cgi?Page

Panasonic

KX-TGP500B04

Status | Network | System | VoIP | Telephone | Maintenance

Web Port Close

VoIP
- SIP Settings
  - Line 1
  - Line 2
  - Line 3
  - Line 4
  - Line 5
  - Line 6
  - Line 7
  - Line 8
- VoIP Settings
  - Line 1
  - Line 2
  - Line 3
  - Line 4
  - Line 5
  - Line 6
  - Line 7
  - Line 8

Phone Number	
Phone Number	7005
Line ID	
SIP Server	
Registrar Server Address	KA7U-2
Registrar Server Port	5060 [1-65535]
Proxy Server Address	KA7U-2
Proxy Server Port	5060 [1-65535]
Presence Server Address	
Presence Server Port	5060 [1-65535]
Outbound Proxy Server	
Outbound Proxy Server Address	
Outbound Proxy Server Port	5060 [1-65535]
SIP Service Domain	
Service Domain	KA7U-2
SIP Source Port	
Source Port	5060 [1024-49151]
SIP Authentication	
Authentication ID	7005
Authentication Password	●●●●●●●●●●●●●●●●
DNS	
Enable DNS SRV lookup	(•) Yes ( ) No
SRV lookup Prefix for UDP	_sip._udp.
SRV lookup Prefix for TCP	_sip._tcp.
Timer Settings	
T1 Timer	500 milliseconds
T2 Timer	4 seconds
INVITE Retry Count	6
Non-INVITE Retry Count	10
Quality of Service (QoS)	
SIP Packet QoS (DSCP)	Best Effort (default) (000 000)
SIP extensions	
Supports 100rel (RFC 3262)	(•) Yes ( ) No
Supports Session Timer (RFC 4028)	0 seconds [60-65535, 0: Disable]
Keep Alive	
Keep Alive Interval	30 seconds [10-300, 0: Disable]
Security	
Enable SSAF (SIP Source Address Filter)	( ) Yes (•) No

Save | Cancel

You

may want to change the addresses from ka7u-2 to your host name or IP address and the extension number is the authentication ID in my Asterisk PBX. The authentication password is the “secret” for the extension as listed in sip.conf.

This should be enough configuration for the DECT phone system to work with Asterisk ver. 13 PBX. There are many other configurations according to your needs.

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