

Gear up your PBX

Cut Costs, Boost Profits

Version 20160711

Configuring a Desk Telephone



Goal of this Module

- Configure a local LAN Desktop IP Phone
 - Prerequisites
 - Concepts of
 - Provisioning (PnP)
 - Firmware Management
 - BLF
 - Remote Control (CTI)

Prerequisites for this Module

- A 3CX Supported IP Phone
 - Fanvil
 - Htek
 - snom
 - Yealink
- Fulfill Minimum Firmware Requirements
- IP Phone within the same subnet as 3CX
- 3CX running on SIP Port 5060 *

All IP Phones listed at <http://www.3cx.com/support>

* 3CX not running on 5060 → NO PnP provisioning

What is Provisioning ?

- Provisioning = Providing
 - Prefilled Configuration
 - Vendor Specific Syntax
 - Removes Human Errors
 - Boost Deployment Speed

“Provisioning is the process of passing a predefined set of settings onto a device. In this case to an IP phone. This decreases the administration time per device and eliminates setup errors. Never configure a device manually!”

Concept: PnP Provisioning

- Simple & Fast
- Admin Driven
- Based on MultiCast Messages
 - Client Announces Presence
 - PBX Receives Announcement
 - Admin Approves and Assigns Desktop Phone
- **Note:** Multicast Ends At Router/Border Devices

Using: PnP Provisioning

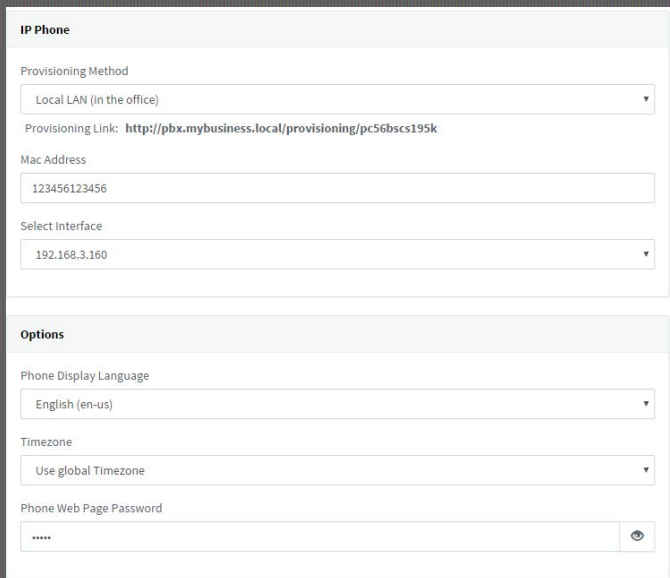
- Boot Up the Desktop Phone (or 3CX Client)
- From **Management Console** → **Phones** node
- Select the “**Bold**” entry
- **Assign** to existing **Extension** or **Add** new **EXT**ension
- More than one Phone possible (SIP Fork)

The screenshot shows the 'Phones' management interface. On the left is a sidebar with navigation links: Dashboard, Phones, Extensions, Groups, Contacts, SIP Trunks, Inbound Rules, Outbound Rules, and Digital Receptionist. The main area is titled 'Phones' and contains a toolbar with buttons: '+ Add Phone', '+ Add Ext', '+ Assign Ext' (highlighted with a red box), '+ Reject', '+ Firmware', '+ Reboot', '+ Reprovision', 'Phone UI', 'Password', and '+ Config'. Below the toolbar is a search bar and a table of phone entries. The first row of the table is highlighted with a red box.

EXT	Vendor	Model	Fw. Version	Name	User ID	Password	Phone pwd	PIN	IP	MAC
New	yealink	SIP-T27P	45.80.0.95	New	New	New	New	New	192.168.	0015
000	3CX	Phone for Windows	15.0.56772.0	Ariadna Sarah	000	*****	*****	2459	192.168.	PROVISIONED

Using: PnP Provisioning

- Validate Settings
 - Optional
 - Set Interface
 - Set Display Language
 - Set Specific TimeZone
 - Save with “OK”
- The IP Phone configures itself



The screenshot shows a web interface for IP Phone provisioning. It is divided into two main sections: 'IP Phone' and 'Options'. The 'IP Phone' section contains fields for 'Provisioning Method' (set to 'Local LAN (in the office)'), 'Provisioning Link' (a URL), 'Mac Address' (123456123456), and 'Select Interface' (192.168.3.160). The 'Options' section contains fields for 'Phone Display Language' (English (en-us)), 'Timezone' (Use global Timezone), and 'Phone Web Page Password' (masked with asterisks).

IP Phone

Provisioning Method
Local LAN (in the office) ▼

Provisioning Link: <http://pbx.mybusiness.local/provisioning/pc56bscs195k>

Mac Address
123456123456

Select Interface
192.168.3.160 ▼

Options

Phone Display Language
English (en-us) ▼

Timezone
Use global Timezone ▼

Phone Web Page Password
***** 🔍

Concept: Firmware Management

- Ensures:
 - Compatibility with 3CX
 - Tested by 3CX
- Firmware Versions definition:
 - **Support** Firmware Version (driven from MNG Console)
 - Ensures Features & Functionality are covered

Using: Firmware Management

- From **Management Console** → **Updates**
- Download Firmware
- **Phones** node → Mark **Red** entry → **Firmware**
- Press **OK** to upgrade the Firmware

Phone Firmware (52)

[Download Selected](#) ☐ Select All

Name	Status	Installed Version	Online Version	Description
Yealink SIP-T27P	New		45.80.0.130	Yealink T2...

Phones [Help](#)

Phones

[+ Add Phone](#) [Add Ext](#) [Assign Ext](#) [Reject](#) [+ Firmware](#) [Reboot](#) [Reprovision](#) [Phone UI](#) [Password](#) [+ Config](#)

Search ...

EXT	Vendor	Model	Fw. Version	Name	User ID	Password	Phone pwd	PIN	IP	MAC
101	Yealink	SIP-T27P	Not Supported 45.80.0.95	Mary Johnson	101	*****	*****	4833	192.168.9.64	001565846018

Concept: Remote Control (CTI)

- Control IP Phone with a mouse click
 - Dial
 - Hold
 - Pickup
 - Transfer
 - Conferencing
- Easy dialing from 3rd Party Sources
 - Web Pages
 - E-Mail
 - CRM Systems
- Full Phonebook and easy Search

Prereq: Remote Control (CTI)

- 3CX Client for Windows (only)
- Provisioned Supported IP Phone
- Required Network Topology*
 - IP Phone in Internal Network (routed ok)
 - 3CX Client in Internal Network (routed ok)
 - 3CX Client → Port 80 (HTTP) → IP Phone
- Manage AVs
(<http://www.3cx.com/blog/docs/3cxphone-presence-self-help/>)

*Alternatively, the PBX will trigger the call (Make Call, limited function)

Using: Remote Control (CTI)

- 3CX Client for Windows and IP Phone → same extension
- Switch 3CX Client to Deskphone (CTI) mode
- Type a number in the 3CX Client and the number will be dialed on the IP Phone



Configuration: Remote Control (CTI)

- Use of **E164** in CTI (+ Format Numbers)
 - ⚙️ → Configure Accounts → account → Advanced
- If Multiple Phones Selection


☒ Replace + with

You have multiple IP phones that support CTI registered with extension number 104. Select the phone device you would like to use from the dropdown list below.

Yealink SIP-T46G 28.80.0.130 - 192.168.9.161 ▼

Yealink SIP-T46G 28.80.0.130 - 192.168.9.161

snom870/8.7.5.44 - 192.168.9.143



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More Training Material at:
www.3CX.com/3CXAcademy

