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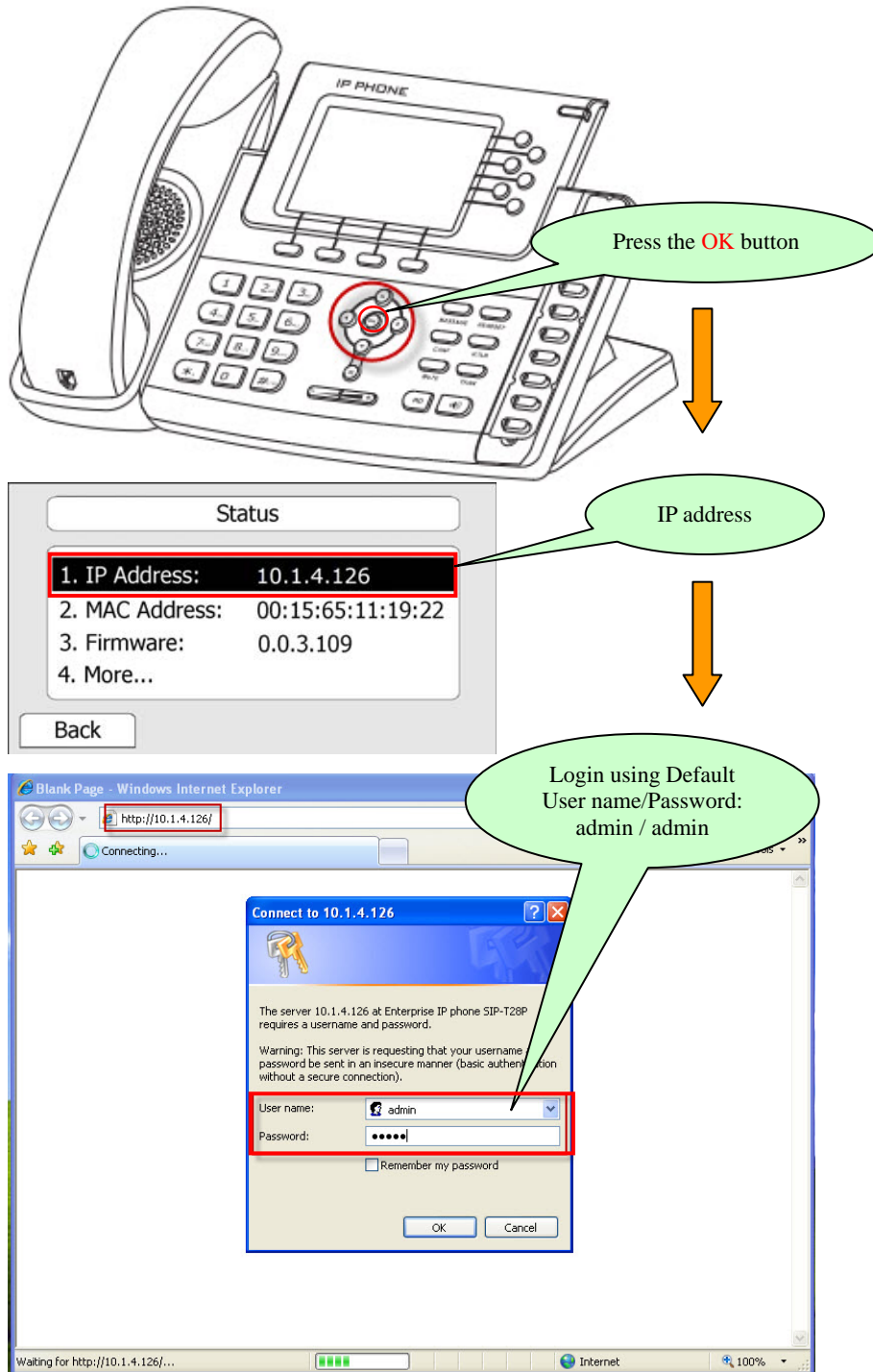
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## 1. Requirements and Preparation

- Software image 5.1.x or higher running on the Quadro2x/4x/16x.
- Software image x.42.x.x or higher running on the Yealink IP Phone.

## 2. Configure Yealink IP Phone

### 2.1 Login to WEB management



## 2.2 Configure the Account Settings

① Select "Account"

② Select one Account

③ Active Account

④ Fill in these fields

⑤ Voicemail code

check Note

After entering the above settings, Account1 will be available to make calls.

**Note :** If the SIP server is behind a NAT, you should enable "NAT Traversal" as "STUN" and then specify a STUN Server. For more details about STUN, please refer to

<http://www.voip-info.org/wiki/view/STUN>. To learn about NAT, you should refer to

<http://www.voip-info.org/wiki/view/NAT+and+VOIP>

## 2.3 Configure the DSS Key as BLF

① Select "Phone"

② Select "DSS Key"

③ Select "BLF"

④ Select the right line

⑤ Extension number

⑥ Pickup code

Key	Type	Mode	Line	Expansion	Pickup Number
DSS Key 1	BLF	Conference	Line 1	101	97
DSS Key 2	N/A	Conference	Line 1	6002	
DSS Key 3	N/A	Conference	Line 1		
DSS Key 4	N/A	Conference	Line 1		
DSS Key 5	N/A	Conference	Line 1		
DSS Key 6	N/A	Conference	Line 1		
DSS Key 7	N/A	Conference	Line 1		
DSS Key 8	N/A	Conference	Line 1		
DSS Key 9	N/A	Conference	Line 1		
DSS Key 10	N/A	Conference	Line 1	*9315	

NOTE

**Key Type**  
The free function key Types: Speed Dial, BLF, Key Event, Intercom, URL.

**Key Event**  
Key events are predefined shortcuts to phone and call functions.

**Intercom**  
Enable the 'Intercom' mode and it is useful in an office environment as a quick access to connect to the operator or the secretary.

**URL**  
This key function allows you to send HTTP requests to a web server.

Confirm Cancel

After entering the above settings, DSS Key1 is ready as BLF for Line 1, monitoring Extension 101. When there's an incoming call on 101, DSS Key1 will flash red and you can directly press it to pick up the call.

## 2.4 Configure the DSS Key as Call Park

① Select "Phone"

② Select "DSS Key"

③ Select "KeyEvent"

④ Select "Call Park"

⑤ Select the right line

⑥ Park code + parking orbit

Key	Type	Mode	Line	Expansion	Pickup Number
DSS Key 1	BLF	Conference	Line 1	101	97
DSS Key 2	KeyEvent	Call Park	Line 1	*5	
DSS Key 3	N/A	Conference	Line 1		
DSS Key 4	N/A	Conference	Line 1		
DSS Key 5	N/A	Conference	Line 1		
DSS Key 6	N/A	Conference	Line 1		
DSS Key 7	N/A				
DSS Key 8	N/A	Conference	Line 1		
DSS Key 9	N/A	Conference	Line 1		
DSS Key 10	N/A	Conference	Line 1	*9315	

**NOTE**

**Key Type**  
The free function key "Types" Speed Dial, BLF, Key Event, Intercom, URL.

**BLF**  
The button can be used to indicate Busy Line status. It is used with the "Busy Line" function. This function is supported by the sip server.

**Key Event**  
Key events are predefined shortcuts to phone and call functions.

**Intercom**  
Enable the "Intercom" mode and it is useful in an office environment as a quick access to connect to the operator or the secretary.

**URL**  
This key function allows you to send HTTP requests to a web server.

Confirm Cancel

After entering the above settings, DSS Key2 is ready as Call Park for Line1.

An active call can be parked by pressing DSS Key2 during your conversation.

## 2.5 Configure the DSS Key as Intercom

① Select "Phone"

② Select "DSS Key"

③ Select "Intercom"

④ Select the right line

⑤ Intercom code + extension

Key	Type	Mode	Line	Expansion	Pickup Number
DSS Key 1	BLF	Conference	Line 1	101	97
DSS Key 2	KeyEvent	Call Park	Line 1	*5	
DSS Key 3	Intercom	Conference	Line 1	*80105	
DSS Key 4	N/A	Conference	Line 1		
DSS Key 5	N/A	Conference	Line 1		
DSS Key 6	N/A	Conference	Line 1		
DSS Key 7	N/A	Conference	Line 1		
DSS Key 8	N/A	Conference	Line 1		
DSS Key 9	N/A	Conference	Line 1		
DSS Key 10	N/A	Conference	Line 1	*9315	

**NOTE**

**Key Type**  
The free function key 'Types' Speed Dial, BLF, Key Event, Intercom, URL.

**BLF**  
The button can be configured Busy Line Field function with specified account. This feature must be supported by the sip server.

**Key Event**  
Key events are predefined shortcuts to phone and call functions.

**Intercom**  
Enable the 'Intercom' mode and it is useful in an office environment as a quick access to connect to the operator or the secretary.

**URL**  
This key function allows you to send HTTP requests to a web server.

After entering the above settings, DSS Key3 will work as an Intercom key with Line1

### 3. Auto-configure the Yealink Phone by the Epygi Server

Auto-configuration is the recommended setup method.

This section provides step-by-step instructions on configuring IP lines connected to the Quadro LAN. The following steps are detailed below:

#### 3.1 Login to Epygi

Refer to section 4.1

#### 3.2 Configure an Extension

Refer to section 4.2

#### 3.3 Configure the Attached IP line

Login IP Line Settings page (Refer to section 4.3)

Note: Phone Model Yealink SIP-T28 in example, the MAC address of Yealink SIP-T28 bind to IP Line 1, Quadro generates a configuration file and places it in its built-in TFTP server.

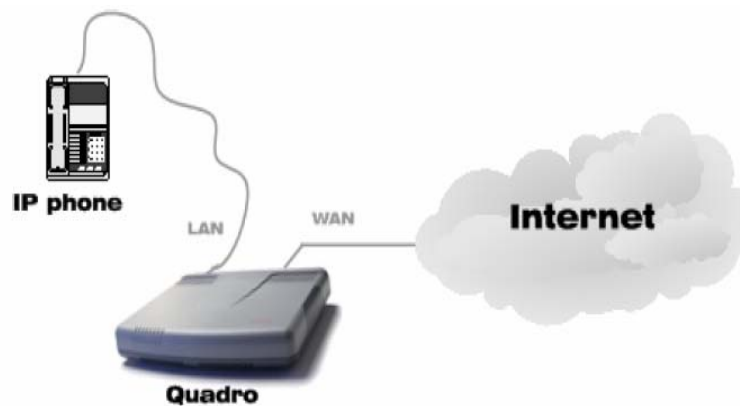


### 3.4 IP Phone Configuration

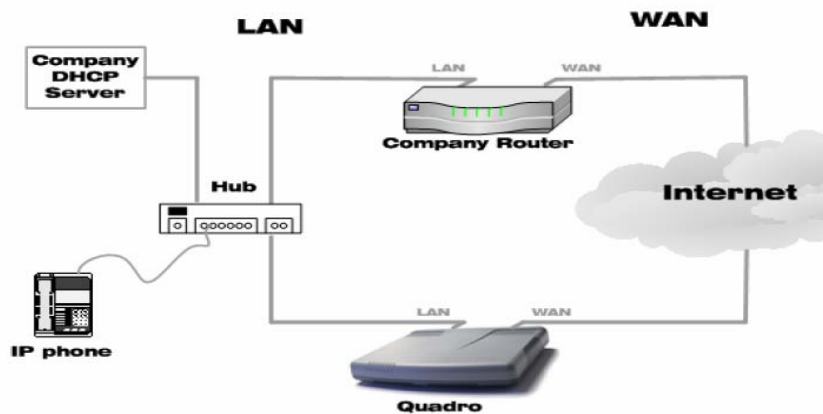
The next step in auto-configuration is to notify the IP phone to download its configuration file(s) from the Quadro's TFTP. This means the phone should have the Quadro LAN address as its boot server (TFTP server) address. The configuration varies depending on whether the IP phone is using the Quadro as the DHCP server or not:

**1. The IP phone is using the Quadro as its DHCP server,** it will obtain the basic network parameters from the Quadro. These parameters include also the TFTP server address set to the Quadro LAN address (by default 172.30.0.1). The only required step in this case is to reboot/reset the phone to initiate configuration file download (see figure 5).

**note:** This is the recommended configuration for IP phone setup.



**2. The IP phone is using a DHCP server other than the Quadro's built-in DHCP,** the user needs to configure the DHCP server to notify the phone the location of the TFTP server, which is the Quadro. An example of such network configuration is shown in the figure below. Here the LAN of the Quadro, the dedicated DHCP server, and the IP phone are on the same subnet (figure 6).



### 3.5 Reset and Restart the Phone to Complete the Automatic Configuration

- Restore the default configuration of the phone by performing a reset.
- Reboot the phone to initiate file download.

After reboot, the account is automatically configured to the phone.

## 4. Configure Epygi

### 4.1 Login to Epygi



#### Quadro2x Management

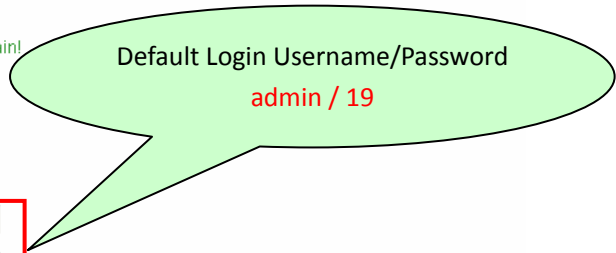
Info: Your session has timed out! Please log in again!

#### Login

Login as an Administrator or Extension.

Username / Extension:	<input type="text" value="admin"/>
Password:	<input type="password" value="••"/>

Login



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### 4.2 Configure an Extension on Epygi

#### 4.2.1 Add an extension

Main System **Users** Telephony Internet Uplink Network

Extensions Management  
Receptionist Management  
Extensions Directory  
Authorized Phones Database

**Quadro2**

**Active Calls**

Call Start Time	Call Duration	Calling Phone	Ca
No items in list.			

① Select  
Extensions Management



Internet connection status: DHCP Client

Renew WAN IP Address

Please check your pending events!  
Copyright (C) 2003-2009 Epyqi Technologies, Ltd. All rights reserved.

② Press Add

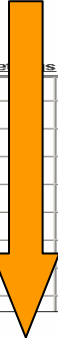
Main System Users Telephony **Internet Uplink** Network

**Extensions Management**

Add Edit Delete Select all Inverse Selection Show all extensions Reset SIP Settings

Extension	Display Name	Attached Line	SIP
<input type="checkbox"/> 00			710
<input type="checkbox"/> 11	11	IP Line 1	710
<input type="checkbox"/> 12	12	IP Line 2	710
<input type="checkbox"/> 13	13	IP Line 3	710
<input type="checkbox"/> 14		IP Line 4	710
<input type="checkbox"/> 15		IP Line 5	710
<input type="checkbox"/> 16		IP Line 6	710
<input type="checkbox"/> 17		IP Line 7	710

Upload Universal Extension Recordings  
Add Multiple Extensions  
Back



③ Enter Extension Number  
Select Extension Type

Main System Users Telephony **Internet Uplink** Network

**Extensions Management - Add Entry**

Extension

Type

Save Back

④ Click Save

Please check your pending events!  
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## 4.2.2 Attach an Extension to IP Line

**Main System Users Telephony Internet Uplink Network**

### Extensions Management

[Add](#) [Edit](#) [Delete](#) [Select all](#) [Inverse Selection](#) [Show all extensions](#) [Reset SIP Settings](#)

<input type="checkbox"/>	Extension	Display Name	Attached Line	SIP A
<input type="checkbox"/>	00			71043
<input checked="" type="checkbox"/>	11	11	IP Line 1	71043
<input type="checkbox"/>	12	12	IP Line 2	71043
<input type="checkbox"/>	13	13	IP Line 3	71043
<input type="checkbox"/>	14		IP Line 4	
<input type="checkbox"/>	15		IP Line	
<input type="checkbox"/>	16		IP	
<input type="checkbox"/>	17		IP Line	

**Upload Universal Extension Recordings**  
[Add Multiple Extensions](#)

**Main System Users Telephony Internet Uplink Network**

### Extensions Management - Edit Entry

**General Settings**

[SIP Settings](#)  
[SIP Advanced Settings](#)  
[Remote Settings](#)  
[Call Queue Settings](#)  
[Voice Mailbox Settings](#)

[Go To User Settings](#)  
[Go To Line Settings](#)

**General Settings - 11**

Display Name  
 Password  
 Confirm Password

Attached Line IP Line 1

Use Kickback  
 Allow Call Relay  
 Show on Public Directory

Percentage of Total Memory 1 %

**Main System Users Telephony Internet Uplink Network**

### Extensions Management - Edit Entry

**General Settings**

[SIP Settings](#)  
[SIP Advanced Settings](#)  
[Remote Settings](#)  
[Call Queue Settings](#)  
[Voice Mailbox Settings](#)

[Go To User Settings](#)  
[Go To Line Settings](#)

**Voice Mailbox Settings - 11**

Disable Voice Mail

Use Internal Voice Mail  
 Configuration wizard status: Passed   
 Shared Mailbox: [Edit Voice Mailbox Access List](#)

Use External Voice Mail Transport Protocol for SIP messages

Proxy Controlled Mailbox Type  
 Voice Mail Retrieve SIP URI

UDP  
 TCP

Independent Mailbox Type  
 Mailbox URI

**Note:** Percentage of Total Memory setting must be configured, or it will affect the use of voice mail etc.

### 4.3 Configure IP Line

**Step 1: Select Line Settings**

The interface shows the 'Telephony' menu with 'Line Settings' highlighted. Below is a table of extensions and their attached lines:

Extension	Attached Line
00	
11	
12	
13	
14	IP Line 4
15	IP Line 5
16	IP Line 6
17	IP Line 7

**Step 2: Select IP Line Settings**  
Click IP Line 1

The 'Line Settings' page shows 'IP Line Settings' selected. Below is a table of available IP lines:

Available IP Lines	Attached Extension	Type	Details
IP Line 1	11	SIP	UserName: 111, Model: Other
IP Line 2	12	SIP	UserName: 112, Model: Other
IP Line 3	13	SIP	UserName: 113, Model: Other
IP Line 4	14	SIP	UserName: 114, Model: Other
IP Line 5	15	SIP	UserName: 115, Model: Other
IP Line 6	16	SIP	UserName: 116, Model: Other
IP Line 7	17	SIP	UserName: 117, Model: Other
IP Line 8	18	SIP	UserName: 118, Model: Other

**Step 3: Select Phone Model**

The 'IP Line Settings - IP Line 1' page shows the 'Phone Model' dropdown set to 'Yealink SIP-T28P'. Below is a table for Hot Desking Automatic Logout:

Hot Desking Automatic Logout:
Never
After 0 hour(s) 0 min
At 0 : 0

**Step 4: Enter Username and Password**

The 'IP Line Settings - IP Line 1' page shows the 'Username' field set to '111' and the 'Password' field masked with dots.

**Note:** Here the Username and Password is the register Username and Password.

## Appendix

### 1. Default Basic Dial Code on Epygi System

Voice Mail (VMail)	*0
Call Park	*5
Callpark Retrieve	98
Intercom	*80

## Reference

- ◆ [www.epygi.com](http://www.epygi.com)
- ◆ [www.yealink.com](http://www.yealink.com)