#### DINSTAR

## Dinstar Phone and Auto Provisioning

Auto provisioning / Zero-Touch / IPPBX Lists / Demo session

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**02** Reasons to use Auto provisioning







Procedure of Auto Provisioning



Steps to go



Auto Provisioning VS Zero-Touch



Demo session for HowTo



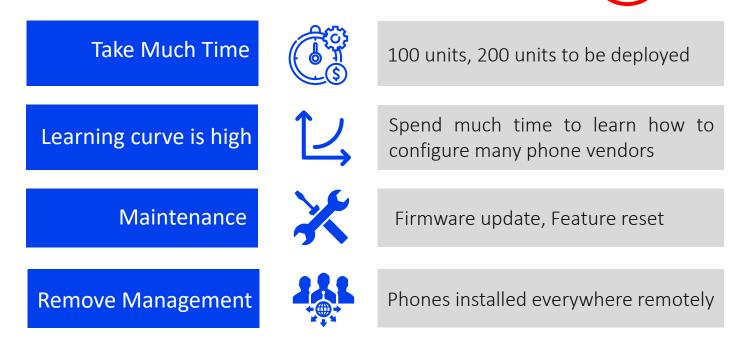
Mass deployment or auto provisioning is a feature SIP phone supported and implemented in SIP phones with firmware management to allow remote admin management (configuring/maintaining) of unlimited number of distinct SIP phones or for particular feature setup.



Auto provisioning is useful especially for in larger SIP phone installations and be used to support general and more specific configuration parameters to the SIP phones and to manage SIP phone firmware updates.



Manually configure phones? Not possible NOW.



## Basic steps for Auto configure the phone

#### **STEP 1**

#### Receive the server URL (options)

Cloud service (redirect server/service-RPS/SRPS)

Local network (SIP PnP, DHCP)

Manual configure

TR069



Fetch the Mac, phone modem and firmware

**STEP 2** 



Install configure file and firmware Reboot phones

**STEP 3** 

## What is the difference between ZT and AP





Enable deployment with password-less or get the password from admin stuff	Step 1	Phone provisioning is managed already by vendor Cloud services
Phone discovers the PBX system by SIP PnP or DHCP Option66	Step 2	Some vendor partners will be able to help premise users to do zero touch deployment
Phone get all contacts from server and configure, reboot, done	Step <b>3</b>	End users receive phone and power on and plug the phone their network
Power on the phone, choose extension for phone by admin stuff	Step <b>4</b>	Phone will automatically receive the initial provisioning/configuration and reboot/Done

## Auto configure methods-1—DHCP

#### An HTTP(s) or TFTP server that the server can reach and A DHCP server on which configure options 66 and 67

#### Four steps to go:

- 1. Set option 66 to point to HTTP/TFTP server, for example " http://172.27.0.168 "
- 2. Set option 67 to point to your file, for example "testc66.xml"
- 3. On the HTTP/TFTP server, copy file testc66.xml made above to the http root directory
- 4. After a factory reset from phone,

it will fetch the configuration file http://172.27.0.168/testc66.xml.

in the DHCP header The code for this o Code Len TFT ++   66   n   c	to identify a TFTP server when the has been used for DHCP options. ption is 66, and its minimum length P server 	
Alexander & Droms	Standards Track	[Page 26]
<u>RFC 2132</u> DHCP 0 <u>9.5</u> Bootfile name	ptions and BOOTP Vendor Extensions	March 1997
	to identify a bootfile when the ' been used for DHCP options.	file' field in
The code for this o	ption is <mark>67,</mark> and its minimum lengt	h is 1.
67   n   c	tfile name -++ 1   c2   c3   +++	

Source\*: https://datatracker.ietf.org/doc/html/rfc2132

SIP Plug & Play (PnP) provides an auto configure method to enable "Auto Provisioning" on SIP phones. By default, the phones send SIP SUBSCRIBE messages to a multicast address which is commonly used for SIP: 224.0.1.75:5060

Any SIP server can understand the message, it may reply with a SIP NOTIFY message containing the Auto Provisioning Server URL (setting\_server URL) where the phones can request their configuration file from.

Send a SIP SUBSCRIBE message to a multicast address through SIP default port:5060.

## Auto configure methods—SIP PnP

**Dinstar IP Phone** 

IP: 172.27.0.117

 Subscribe Send a multicast message within LAN, the message will across the LAN when SIP phone boots up ----- 200 OK -If any sip server understand the "Subscribe" message, it will send back a confirmation with 200 OK to IP Phone NOTIFY -Reply with SIP message NOTIFY and indicate the provisioning URL 200 OK -Phone sends a TFTP download Request Download configuration file from sip Server Apply the configuration written in the configuration file(MAC.cfg)



SIP Server IP: 172.27.0.157

## **Compatibility for Auto Provisioning With Dinstar Phone**



More IPPBXs will coming in!

#### **Phone Firmware Version**

2.60.11.7.0 or later

**PBX Firmware Version** 

37.6.0.24 or later

#### **Supported Auto Provisioning Methods**

- SIP PnP
- DHCP



**C60 Series** 





#### Phone Firmware Version

2.63.6.7.0/2.63.11.7.0

#### **PBX Firmware Version** Supported Auto Provisioning Methods

37.6.0.24 or later

- SIP PnP
- DHCP



#### **Phone Firmware Version**

2.66.6.7.0 or later

#### PBX Firmware Version Supported Auto Provisioning Methods

37.6.0.24 or later

- SIP PnP
- DHCP

## Steps to go to setup auto provisioning with Yeastar PBX

#### Step 1: Create a new Extension and allow Remote Registration

Ø Dashboard		Extension and Trunk / Extension / Edit (1000)
R Extension and Trunk	^	User Presence Voicemail Features Advanced Security Linkus Clients Phone Function Keys
Extension		
Extension Group		Extension Information
Client Permission		* Extension Number * Caller ID
Trunk		1000
Role		Registration Name     Registration Password     KdyfoA0Elb     We let let let let let let let let let le
Contacts	~	KdyfoA0Elb
Auto Provisioning	~	1 ~
‡†‡ Call Control	~	Extension and Trunk / Extension / Edit ( 1000 )
😋 Call Features	~	Outbound Caller ID (DOD) User Presence Voicemail Features Advanced Security
PBX Settings	~	Emergency Outbound Caller ID
System	×	Outbound Caller IDs SIP Security
Security	~	Outbound Caller ID Outbound Caller ID Name
× Maintenance	~	✓ Allow Remote Registration
Integrations	~	SIP User Agent Identification
	_	Enable User Agent Registration Authorization

## Steps to go to setup auto provisioning with Yeastar PBX

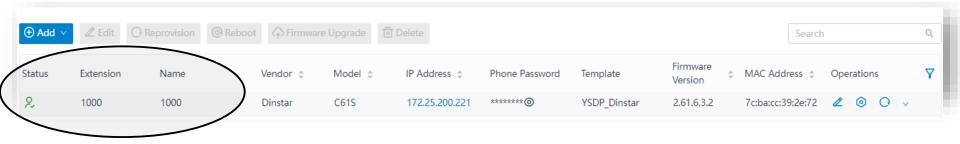
#### Step 2: Auto Provision IP Phones in Local Network (PnP Method)

Ø Dashboard	Auto Provisioning / Phones / Edit ( Dinstar C615 - 7c:ba:cc:39:2e:72 )
R Extension and Trunk ∽	
Contacts ~	IP Phone
🔚 Auto Provisioning	* Vendor * Model
Phones	Dinstar v C61S v
Gateways	MAC Address  7c:barcc:39:2e:72
Resource Repository	
↓1↓ Call Control ✓	Options
📽 Call Features 🗸 🗸	* Template
PBX Settings      Y	YSDP_Dinstar     Provisioning Method     Provisioning Link
☐ System ×	PnP (In the Office)
Security ~	
X Maintenance Ý	Assign Extension
啗 Integrations ~	* Select Extension
👜 Reports and Recordings 🗡	1000-1000
88 Plan	Save × Cancel

#### Steps to setup auto provisioning with Yeastar PBX

#### Result:

#### The configurations will be automatically applied to the Dinstar IP Phone. And the assigned extension is registered on the Dinstar IP Phone.



Demo session







Scan QR Code to Follow us

# Thank You !







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