Auto Provision Server

User Manual

Provision Server User manaul

Chapter 1 -- Hardware and Software

1-1. Hardware requirement

	Min hardware require	Default hardware	
Central Processor Unit	Pentium 4 1.0 GHz above	Intel Celeron 2.4 GHz	
RAM	256 MB	512 MB	
HDD	80 GB	80 GB	
Network	10Base-T/100Base-T (10/100 Mbps)	10Base-T/100Base-T (10/100 Mbps)	
CDROM	52x CDROM	52x CDROM	

1-2. software requirement

OS : Linux WWW : Apache DataBase : My SQL Webmin JAVA : MyJS SNTP

1-3. Authorized management quantities of ITA. (VoIP device)

Basic version 500 pcs ITA

Chapter 2 – How to use and manage provision server

2-1 Basic Operation:

For managing a large number of VoIP device efficiently, the provision server store different configuration and different firmware which allow VoIP device to download automatically.

Provision server provides more convenient manage method to remote and update the VoIP device instantly. Also solved the problem that VoIP device behind the DHCP server(internal IP)

2-1 . Login:

Use IE Browser, fill in the username and password to login the management system.

O Login	
	Login Provision server
	Username: Password:
	Send Reset
	You must enter a username and password to login the Provision server.

After you login successfully, you will see each server component monitoring page, or you can click "System" to see this page.

							IIII LIS(Deployed		
User: jane										
sion										
			_	Server se	rvice status (u	pdate: 2007-11	-09 16:51:11)			
	Linking:	Real IP		Server se	rvice status (u Re	pdate: 2007-11	-09 16:51:11)	Inte	ernal IP 192 16	8.222.1
Www	Linking: MyS	Real IP iqi W	ebmin	Server se	rvice status (u R(Ssh	pdate: 2007-11 eal IP: Smtp	- 09 16:51:11) Pop3	Inte Proxy	ernal IP:192.168 Imap	8.222.1 Dns
Www ON	Linking: MyS	Real IP qI W	ebmin IFF	Server se MyJS	rvice status (u Re Ssh	pdate: 2007-11 eal IP: Smtp OFF	-09 16:51:11) Pop3	Inte Proxy OFF	ernal IP:192.160 Imap	8.222.1 Dns

Administrator management:

Click \rightarrow System \rightarrow Administrato \rightarrow User , here you can edit or delete the user.

		>>	<u>System</u>	Define	Allowed List		Pending List	Deployed List	Macros	Logout
 U 	ser: jane		Adminis	trator	Backup/Restor	<u>e</u> •	Version			
🛈 Adm	inistrator									
					■ <u>User</u>		Access log			
						User				
	User			Password	Lev	vel Modify		Delete		
	jeff			******	A	Modify				
	jane			******	A	Modify				
	demo1			******	с	Modify				
	demo			******	B	Modify				
	jason			******	A	Modify				
	Count: 5			Add		l	Delete	(🗖 All Select/All Clear)		

The administration system separate to 3 levels:

You have to type the correct username and password for entering.

 $\mathsf{A}:\mathsf{AII}$

B : Only Modify Password /Pending List/Deployed List/Modify Firmware

C: Only Modify Password /Pending List/Deployed List/Modify Firmware, but in the GW list, only shows his

own Group, a C level account can manage many Group

2-2 Access log:

Click Administrator/Access log , you can check the log history.

	>> <u>System</u> Defi	Allowed List	Pending List	Deployed List Macros	Logout
 User: jane 	Administrator	Backup/Restore	 Version 		
Administrator					
		 User 	Access log		
		Access	s log		
User Name	From IP	LoginTime	Logout Time	Operating	
jane	61.231.68.110	2007-11-12 09:19:43	2007-11-12 10:1	9:43 Operating	
jane	59.120.201.155	2007-11-09 17:26:06	2007-11-09 18:2	6:06 Operating	
demo1	59.120.201.155	2007-11-09 17:25:13	2007-11-09 17:2	5:34 Operating	
jane	59.120.201.155	2007-11-09 17:25:00	2007-11-09 17:2	5:07 Operating	
jane	59.120.201.155	2007-11-09 17:24:39	2007-11-09 17:2	4:55 Operating	
demo	59.120.201.155	2007-11-09 17:23:10	2007-11-09 17:2	4:35 Operating	
jane	59.120.201.155	2007-11-09 16:28:29	2007-11-09 17:2	3:03 Operating	
jane	59.120.201.155	2007-11-08 09:47:24	2007-11-08 10:4	7:24 Operating	

Click the Operating in the right, you can see more details about each log file.

	System Defi	ine <u>Allowed List</u>	Pending List	Deployed List	<u>Macros</u>	Logout
 User: jane 	Administrator	Backup/Restore	Version			
Back		Print Operating	<u>1 Report</u>			
User Name	From IP	LoginTime		Logout Time		
jane	61.231.68.110	2007-11-12 09:19:43		2007-11-12 10:19:43		
2007-11-12 09:35:04 2007-11-12 09:35:10 2007-11-12 09:35:13 2007-11-12 09:39:56 2007-11-12 09:40:09 2007-11-12 09:40:30	Pending List Allowed List-Edit Deployed List Pending List Pending List-Autho MAC:0002edbeef6/ Deployed List	rization 6-Profile:fxs-Group:aaa-Partner ID	:-File:-Section:-Paramete	er:-Value:		
2007-11-12 09:41:35 2007-11-12 15:32:37	Deployed List System-Administra	tor				
2007-11-12 15:32:41 2007-11-12 15:33:09	System-Administra System-Administra	tor-Access log tor-Access log-Access log				

3. Logout : by Click Logout, you will see the message as following,

Lagout
You have logget the Provision conver
Tod have logod, the Provision server.
Login again

4. System Backup and Restore:

Click→ System → Backup → Restore, into the page below to do "Download" and "Restore"

Backup/Restore									
Time	Conter	nt	Remark	Download	Restore	Delete			
2007-11-12 16:53:23	Define&Allowed L	.ist&Macros	edu	Download	Restore				
	(Count: 1)	Delete		(🗖 All select/Do	not select comple	tely)			
Display: 20	record number			Page: 1 💌					
Backup	Define&Allowed List&Macros 🔽	Remark :			Backup				
1 	verine&Allowed List&Macros Define Illowed List facros								
Restore		瀏覽 (Maximum:38M)		Restore				

Backup :

You can choose 3 different type of backup method depending on your need :

Define& Allowed List& Macros : Backup all contents.

Define : Backup the system file.

Allowed List : Backup the configuration of those managed by Provison server.

Macros : Backup the Macros.

Downloaded files will be stored in Provision Server, you can also download files to your computer.

Restore :

Select the file that you need to restore, click [Restore] to upload file.

5. Server service status / version :

Click \rightarrow System \rightarrow Version, you can see the internal application software, database, server and monitor the working status of this provision server.

the application software of this provision server :

Linux OS

WWW: Apach

Data base: MySQL

Webmin

Java: MyJS

SNTP

		System	<u>Det</u>	īne	Allowed List		Pending List	Deplo	wed List	<u>Macros</u>	<u>Logout</u>
 User: jane 		Adn	ninistrator	•	Backup/Restor	<u>e</u> •	Version				
Version											
				Server s	ervice status	(update: 200	17-11-12 17:09:06)			
	Linking	: Real IP				Real IP:			Internal IP:192.16	68.222.1	
10/10/10	M	/Sql	Webmin	MyJS	Ssh	Sm	p Pop3	Prox	/ Imap	Dns	
ON	10 🔘	1 (OFF	ON	ON	OFF	OFF	OFF	OFF OFF	OFF	
					VAIRE						
	Logo:				瀏寬 (BIZE:169 X 5	5 pixel)				
						Jpload					
				Transien Con	er 4.0 (Quitala	la haardid df	m - D202 - 200b	- 200->			
				1 UVISION SEP	ver 1.0 (Sultab	ie poard:140	m • 8202 • 300b	• 300C)			

6. Define the model name :

The default model name in this server is IPPhone 300 111 series 900 can define your own model name here by click \rightarrow Define \rightarrow Device Types

	>>	System	Define	Allowed List	Pending List	De	ployed List	Macro	s Logo
User: jane		Device Type	pes •	Device Profiles	Eirmwares		Group		1
				Device	Types				
Family		Model	Rema	rk		Modify	De	elete	
202		IP202	202			Modify	Г	1	
300b		Type1	PSTN	Backup		Modify	Г	5	
300c		Type2	FXS o	r FXQ		Modify	Г	1	

7. Upload device profile :

For building your own VoIP devices network efficiently, you can make a common profile which includes the call out route, call in route, register info, and other configuration.

This profile will be the main setup file when you want to install each of your VoIP box, before start to do that , upload this profile to \rightarrow Define... \rightarrow Device Profiles

>> System	Define Allowed List	Pending List	Deployed List	Macros	Logout
User; jane Device]	Types Device Profiles	 Eirmwarea 	Group		
Device Profiles					
	Dew	ce Profiles			
DateTime	Profile	Remark Downlos	ad Modify	Delete	
2007-11-01 14:58:51	edu	Downlo	ad Modify	Г	
2007-11-06 10:54:25	edu_type2	Downlo	ad Modify		
2007-11-07 17:50:10	firs	Downlos	ad <u>Modify</u>		
(Count 3)		Delete (🗖	Select/Unselect All)		
Display: 20	records per page	Pa	ge: 1 (1-1)		
Upter	ad profile		Creat from		

Upload:C:\Documents and Setting:	瀏覽… (zip or tar.gz or tar or tgz)
Model name:reset	
Remark:	
Upload Back	

Make a profile easily by one VoIP device :

You only need to setup a VoIP device as a sample by \rightarrow "Creat from", that can help you to make a profile instantly.

Input GW IP: VoIP device IP address (the sample)

Input GW Port: 80port (default)

Input GW User: The username of login to VoIP device

Input GW Password: The password of login to VoIP device

Input GW TimeOut: waiting time for how long that no response form VoIP device.

Model name

Input GW IP:59.118.1	69.50	Edit
Input GW Port:80		
Input GW User: _{Voip}		
Input GW Password:		
Input GW TimeOut:5		
Model name: _{test}		
Remark:		<u></u>
		Y
Upload	Back	

8. Firmware version management

 \rightarrow Define \rightarrow Firmwares, you can upload and download different models and different version of firmware, prepare this for next time VoIP devices connect to update automatically.

	>>	<u>System</u>	Define	Allowed List	Pending List	Deployed List	<u>Macros</u>	Logout
 User: jane 		Device T	<u>ypes</u>	Device Profiles	Eirmwares	Group		
O Firmwarel								
								_
				Firmw	are			
				Model: Sel	lect?			
				IP20 Typ	02 be1			
Comments:				Тур	be2			

9. Upload the different parameters as Excel CSV file

In \rightarrow Allowed List \rightarrow Upload, you can upload different parameter list of VoIP device in this page, (common parameters please set on profile), the parameters please edit as Excel CSV file, [Upload] this CSV file when ready.

💿 Upload		
	0002edbeef66,300b,fxs,rs1.ini,c,ed,1,aaa,, 0002edbeef66,300b,fxs,rs1.ini,c,nu1,77201111,aaa,, 0002edbeef66,300b,fxs,rs1.ini,c,pw1,77201111,aaa,, 0002edbeef66,300b,fxs,rs1.ini,c,ac1,77201111,aaa,,	
	Back	

When the upload finished, the uploaded data will list as following for you to check.

			Uploa	ad		
MAC	Model	Profile	Group	Phone	Email	Remark
0002edbeef66	300b	fxs	aaa			
00024657e06c	300b	fixs	aaa			
000246580022	300b	fxs	aaa			
000246575438	300b	fxs	aaa			

The system will build a subdirectory to store the parameter files after the upload done. When there is a VoIP device which matched the MAC address and IP address to list connect to Provision server and ask to execute provision, the parameter files in this list will be allowed to download to device.

10. Edit the parameter file:

You can browse, edit, modify the parameter file by IE browser, \rightarrow Allowed List \rightarrow Edit, find the VoIP device with MAC address or IP address, list the content of parameter.

				Edit				
Mac:		Account	NO:					
Model: All 💌		Group:	Γ	All 🔽			Find	
MAC	Model	Profile	Group	Phone	Email	Remark	Modify	Delete
	3006	fxs	aaa				Modify	
0002edbeef66	0000							
0002edbeef66 00024657e06c	300b	fxs	aaa				Modify	
0002edbeef66 00024657e06c 000246580022	300b 300b	fxs fxs	aaa aaa				Modify Modify	

Click [Modify] to edit the content.

		Mac: 0002edbeef66		
Model:	300b			
Profile:	fxs	(fxs)		
Group:	aaa 💌 (aaa)			
User name:	jane			
Address:	TAIPEI			
Phone:	85123390			
Email:	jane@yahoo.co	m.tw	r	
Remark:				
File	Section	Parameters	Value	Remark
rs1.ini	ç	ed	1	1
rs1.ini	ç	nut	77201111	1
rs1.ini	c	pw1	*******	-
rs1.ini	c	ac1	77201111	1

11. pending list (devices which not been authorized) :

When a VoIP device which it's IP address or MAC address not been included in the parameter list come to ask the parameter content, provision server will not allow and put this device to Pending list, and also list the model name, IP, MAC, first link time and last linked :

ending List							
				Pending List			
		Mo	Set AL MAC:	_	Find		
Model	Wan IP	Lan IP	Mac	First link time	Last linked	Authorize	Delete
Type1	163.20.112.55	192.168.22.1	00024657e04a	2007-11-08 10:46:24	2007-11-13 10:46:05	Authorize	
Type 1	163.20.112.54	192.168.22.1	00024657e078	2007-11-08 10:47:25	2007-11-13 11:32:25	Authorize	П

If you allow this unauthorized device get the permission to ask and download the parameter file, you can click [Authorize], and start to do the basic configuration of this device.

	Authorize
Profile:	fxs
Group:	Select 💌
Wan IP:	163.20.112.55
Lan IP:	192.168.22.1
Mac:	00:02:46:57:e0:4a
First linked:	2007-11-08 10:46:24
Last linked:	2007-11-13 10:46:05

Just assign the corresponding profile and group, this device will be moved to deployed list.

12. Deployed List :

In Deployed List, that will list all VoIP devices which has been confirmed and got the permission to ask for download data, files from provision server. This page shows device status, model name, register status, WAN IP, MAC, parameter file, last linked time, firmware version, and synchronized status.

		_	**	<u>System</u>	Define All	owed List	Pending Li	<mark>st</mark> Depl	oved List		Ma	CTOS	Logo
	User: jan	е											
Dep Dep	loyed List	t											
													-
						r	enlowed List						
						2	opioyou ciot						
	Mode	l:		All			Status:		Both	•			
	Group): unt NIO:		All			MAC:						
	ACCOL	Int NO.				10000	Find						
						1000	r ma						
	Online	Model	Status	Wan IP	Mac	Profile	Last linked	Firmware	SetGW		Renew	Remove	
	۲	Type1	<u>Status</u>	<u>172.16.7.133</u>	0002edbeef66	fixs	2007-11-13 11:15:24	Mon Oct 29 200	<u>SetGW</u>	0 0			
	۲	Type1	<u>Status</u>	59.120.201.155	000246575438	fxs	2007-11-13 09:20:00	Mon Oct 29 200	<u>SetGW</u>	0 0			

You can remove any device in this page by click [Remove], also you can get the newest parameter file by click [Renew].

For more detail information about the device, just move the cursor to WAN IP of the device, there will show the pop-up info as following.

		>>	System	Define	Allows	<u>id List</u>	Pending Lit	st De	ployed List		Ma	ICTOS	L
 User: jan 	10												
		_											
Deployed List	t												
						Deployed L	ist						
			-										
Mode	£.		La La	u 💌			Status:		Both	•			
Group	p:		14	u 💌			MAC:						
Accou	unt NO:					100	1						
				Grou	p: ie:	aaa 17216713	9						
				Lan I	P	192.168.22	í						
Online	Model	Status	Wan IP	Mac User	name:	Jane				- 18	Renew	Remove	
۲	Type1	Status	172.16.7.133	0002hor	ess. 10)	02-8512339	0						
۲	Type1	Status	59.120.201.1	55 0002 Ema	it: ark:	jane@yaho	.com.tw			+1			
-		markin		Addi		201 ¹ (-	-	

If the VoIP device had been synchrozied before, the column of [Online] will shows green light, otherwise will be red light. But if you want to modify the content of parameter in provision server, you only need to click [SetGW] for entering each setup page of parameter to modify.



In this setup page, you can modify the parameter content of this type of device, save modification when it done, next time when the devices connect to provision server, they will synchronize to the newest data.

13. Edit Macro :

If you want to modify the parameter content of all devices which already has been deployed or part of them, you can add a [Macro] by \rightarrow Macros \rightarrow Edit Macro, just name the Macro, and click [Add].

		<u>System</u>	Define	Allowed List	Pending List	Deployed List	Macros	Logo
User: j:	jane 🛛	Edit Macro		Execute Macro	Modify Firmware	Firmware Download		
) Edit Marc	co							
				Edit Marc	:0			
М	larco Name		M	odify	Delete			
Ac	dd SIP acct		Mc	odify				
A	.dd Ir=1 to rs1.ini		Mc	odify				
A	dd SIP acct for Ashok.		Mc	odify				
C	hange 5308 to Live S	iP	Me	odify				
Si	et enX to 1		Mc	odify				
200	act GV - 202 52 99 26	8:61710	hđi	odify				

			I	Edit Marco / test			
File	Session	Parameters	Value		Remark	Modify	Delete
gk.ini	2	ip	sip:sip.tonfre	e.com:5060	tonfree sip位置	<u>Modify</u>	
	(Count: 3 Disp) lay: 30 reco	Delete	(🗌 All select/D completely)	o not select Pagination: 1	Back	
File:		inbo	und.ini				
Sessio	in:	1					
Param	eters:	num	lber				
Value:		3					
Remar	k:	cha	nge number				

Add each parater content after the Macro has been added.

14. Execute Macro :

if you need to modify any one or any group or all decives which already has been deployed with Macro file, you can select by model name, group, MAC address. (\rightarrow Macros \rightarrow Execute Macro)

			<u>System</u>	Define	Allowed List		Pending List	Deployed List	<u>Macros</u>	Logout
= (Jser: jane		Edit Macro		Execute Macro		Modify Firmware	Firmware Download		
		-								
O Exe	ecute Macro									
_										_
					S	learch				
	Model			-			Otatua:	Dette I		
	Group		All				MAC:	Both		
	Account	NO:	181		_		MAC.			
						Find				
					20	10.000				
					Exec	ute Macr	0			
	Online	Model	Wan IP	Lan IP	Mac F	Profile	Last linked	Firmware	SetGW	
		Type1	172.16.7.133	192.168.22.1	0002edbeef66 f	xs	2007-11-13 16:32:54	Mon Oct 29 200	SetGW 0 0	
		Type1	59.120.201.155	192.168.22.1	000246575438f	xs	2007-11-13 09:20:00	Mon Oct 29 200	SetGW 0 0	

Choose the device you need to modify and select the Macro.

Marco Name:	Add SIP acct	
	列表: Add SIP acct	
Sat	Add SIP acct for Ashok	
Sec.	Set enX to 1	
	Test GK - 202.52.88.36:61719	

Then server will list the device which will be modified.



15. Update firmware:

if you need to update any one or any group or all decives which already has been deployed, you can select by model name, group, MAC address. (\rightarrow Macros \rightarrow Modify Firmware)

	= >>	<u>System</u>	<u>Define</u>	Allowed List	1	Pending List	Deployed List	Macros	L
 User: jane 		Edit Macro	•	Execute Macro		Modify Firmware	Firmware Downloa	<u>ad</u>	
) Modify Firmware									
				Se	arch				
Model:		Тур	e1 💌		S	(atus:	Both		
Group:		Seler	a		М	AC:	-		
Account N	0:	Туре	1	-					
		Туре	.2	F	nd				
				Statu	s: Both				
				Mode	турст				
				Modify	Firmware				
Online	Model	Wan IP	Lan IP	Mac	Profile	Last linked	Firmware	SetGW	
	Type1	172.16.7.133	192.168.22.1	0002edbeef66	fxs	2007-11-13 17:14:11	Mon Oct 29 200	SetGW XIO	

Choose the device you need to update, click [Set], and select the version of firmware.

16

Firmware:	Muti Language Vision (2006-04-18 19:34:15) 💌
	Muti Language Vision (2006-04-18 19:34:15) New testing (2006-04-23 21:29:18)
Common and a second sec	

Then the server will list the devices which will be updated, next time when the device connect provision server, it will check if there is new firmware can be updated.

16. Provision Server list :

 \rightarrow Global Setting \rightarrow Server list, you can set the IP address of provision server at least 5 set, when there is a change, as long as the VoIP device can connect to any one of these provision server, the update list will be renew.

		Provision Server list	
		🗹 Enable 🔟 🔳	
Provision Server IP #1:	59.120.201.147	Server Name #1:	TVV
Provision Server IP #2:	203.84.131.74	Server Name #2:	НК
Provision Server IP #3:	207.226.29.3	Server Name #3:	LA
Provision Server IP #4:	202.8.43.106	Server Name #4:	SG
Provision Server IP #5:	172.16.37.88	Server Name #5:	基隆
Provision Server IP #6:	172.16.37.88	Server Name #6:	金門
Provision Server IP #7:	172.16.37.88	Server Name #7:	台南
Provision Server IP #8:	61.218.47.77	Server Name #8:	馬祖
Provision Server IP #9:	172.16.37.88	Server Name #9:	新竹
Provision Server IP #10:	172.16.37.88	Server Name #10:	廈門

Interval time for Client link to Provision Server:

In this item, you can set the auto renew period, less time will faster the update cycle, but it will also occupy more bandwidth.