

# Release Note for TA400/800

Version 41.19.0.X

Yeastar Information Technology Co. Ltd.

# ===Firmware Version: V41.19.0.16== Applicable Model: TA400/800 Release Date: November 24, 2015

# **New Features**

- 1. Added TR-069 feature.
- 2. Added Distinctive Ringtones feature.
- 3. Added Port Monitor Tool on web interface for FXS port debugging.
- 4. Added support for auto provision from a specified server.
- 5. Added Echo Cancellation enable and disable option for FXS ports.
- 6. Added Caller ID Sending Mode option for FXS ports.
- 7. Added support for G729A/B, G723 and iLBC codecs.
- 8. Added Ring Timeout setting for Hunt Group.
- 9. Added DSP Fax feature.
- 10. Added support for Broadsoft transfer mechanism.
- 11. Added Direct Caller ID Dialing feature for internal calls.
- 12. Added Virtual Ring Back Tone feature.
- 13. Added support for Serbia Tone Zone and Korea Tone Zone.
- 14. Added support for Hook Flash event.
- 15. Added Adaptive option for Jitter Buffer.
- 16. Added Enable Call Logs option.

# Optimization

- 1. Defined 3 register modes of VoIP Server.
- 2. Optimized Flash setting for FXS ports.
- 3. The characters [\* , # ] are allowed in User Name filed and Authentication Name filed when registering FXS ports to a VoIP server.

# **Bug Fixes**

- 1. Fixed the issue that if the FXS port's DID number contained any of the characters [n, x, z], no incoming calls would reach the FXS port.
- 2. Deleted the "Dial Timeout" setting on General Preferences page, which is a useless setting that limits the time to ring a device when calling out from TA gateway.



## **New Features (Instruction)**

## 1. Added TR-069 feature.

Path: System→Network Preferences→TR-069 Settings

#### Instruction:

Service Providers, using TR-069, can have one common platform to manage all Yeastar TA devices.

TR069 Settings		
General Settings		
Enable TR069:	Yes V	
ACS Username:		
ACS Password:		
ACS URL:	http://iot.tr069.ru:8051/yeastar/CPEMana	
Enable Periodic Inform:	Yes V	
Periodic Inform Interval(s):	30	
Enable STUN:		
STUN Server Address:	stun.sipgate.net	Port: 10000
STUN Server Username:		
STUN Server Password:		
Connection Request Address:		Port:
Connection Request Username:		
Connection Request Password:		

## 2. Added Distinctive Ringtones feature.

**Path:** Gateway $\rightarrow$  Advanced Setting $\rightarrow$  Distinctive Ringtones **Instruction:** 

Users could configure different ringtones to match different incoming caller ID.

Edit Ringtones - 1	x
Ringtones ID:	1
Ring Cadence 🛈 :	200,400,200,400
Inbound Caller Pattern 🛈 :	4XX
💉 Save	X Cancel

3. Added Port Monitor Tool on web interface for FXS port debugging.

**Path:** Status→Reports→Port Monitor Tool **Instruction:** 

Select a FXS port and click "Start" to monitor the FXS port, stop monitoring by clicking "Stop" button.

Port Monitor Tool
Monitor Stopped
Port: (Port1)
Start Stop 👱 Download

Added support for auto provision from a specified server.
Path: System → System Preferences → Auto Provision Settings
Instruction:

Besides provisioning Yeastar TA gateway with MyPBX, users could do auto



provision from a specified server. Users could manually configure a provisioning server URL, TA gateway will get the configuration file from the server automatically and regularly.

AutoProvision Mode	
T	Provision's Way:
	PNP: No v
	DHCP: No V
	Server URL: Yes 🗸
 [	Server Address:
	Server URL 0:
	User Name 🛈 :
	Password 0:
	O Interval of time 180 Minute
	Specified time Everyday OO  : 00
-	Other:
	AES Key 🛈 :
	Always Apply : No 🗸

Added Echo Cancellation enable and disable option for FXS ports.
Path: Gateway→ Port List

## Instruction:

If the port is connected to a POS machine, it is suggested that echo cancellation is disabled.



Seneral	Other Settings	
General – Cal	ler ID Name 🛈 : 460	Caller ID Number : 460
VolP Sen	ver Template	
Vo	IP Server €: VolPServer1(1) ▼	
U	ser Name 🛈 : 460	Authentication Name
	Password 🛈 : 🚥	From User
Enable Hotline	Hotline : No 🔻	Delay Dial 🕡 : 2 s
Flash —		
Send Ho	ok Flash Event 🛈 : No 🔹	
I	Min Flash Time 🛈 : 300 ms	Max Flash Time 🛈 : 1000 ms
Call Durat	ion Setting	
Max Ca	Il Duration (): 6000 s	

## 6. Added Caller ID Sending Mode option for FXS ports.

Path: Gateway→ Port List

#### Instruction:

Choose the Caller ID Sending mode. TA gateway supports the following sending modes:

- Ring + Caller ID + Ring
- Caller ID + Ring
- Polarity + Caller ID + Ring

**Note**: If the FXS port is connected to a device's FXO port, Caller ID settings on FXS port and FXO port should be the same, or the call cannot be established.



Call W	aiting		Ring	1 Out 🛈 : 30
Follow m	e			
	□ Always	С	Internal Port	
Forward Type:	✓ No answer Des	tination: 🖲	Hunt Group	HuntGroup1(Group1)
	✓ When Busy	С	Number	
	Prompt: No 🗸		Music Or	n Hold 🛈 : None 🗸
Volume S	Settings			
	Rxgain 00: 40% ↔			Txgain 🛈 : 40% 🗸

# 7. Added support for G729A/B, G723 and iLBC codecs.

**Path:** Gateway $\rightarrow$  VoIP Settings $\rightarrow$  VoIP Server Settings **Instruction:** 

Codec tab is removed in SIP settings page. And it is added support for G729A/B, G723 and iLBC codecs.



it VolP Server -	VolPServer1				
General Adva	nced				
	Enable SRTP 0:				
	Keep Alive Type	Options	T		
	Keep Alive Interval	30		s	
	Caller ID				
	Maximum Channels	0			
	Boolm ():				
۸		No	Ŧ		
Au	DTME Mode:	rfc2833	-		
	First Codec:	11-2000	-		
	Second Codec:	None	-		
	Jecond Codec.	u-law			
	I nira Codec:	a-law G726			
	Fourth Codec:	G729A/B			
	Fifth Codec:	GSM			
		ADPCM			
	C.	G/22			
	V Sa	iLBC			

8. Added Ring Timeout setting for Hunt Group. Path: Gateway $\rightarrow$  Port List  $\rightarrow$  Hunt Group

Instruction:

Set the seconds to ring each port in the hunt group.

	Group ID: 1		
	Group Name 0: HuntGroup	up1	
	Strategy 0: Simultar	neous 🗸	
	Ring Timeout 0: 30	s	
Group Members	able FXS Port	Selected	
	^ »»	(Port1) (Port2)	^
		(Port3) (Port4)	
		(Port5)	
		(Port6)	

# 9. Added DSP Fax feature.

**Path:** Gateway  $\rightarrow$  Gateway Settings  $\rightarrow$  Basic Preferences  $\rightarrow$  General Settings Instruction:



If the option is set to "Yes", the system will process the Fax on DSP module, if set to "No", Fax processing will be done on ARM module.



# 10. Added support for Broadsoft transfer mechanism.

**Path:** Gateway $\rightarrow$  Gateway Settings $\rightarrow$  Basic Preferences $\rightarrow$  General Settings **Instruction:** 

By default, TA gateway use its own transfer mechanism. If this option is set to "No", TA gateway will use the Broadsoft transfer mechanism.

## Broadsoft transfer mechanism

- Blind transfer is implemented by a simple REFER method without Replaces in the REFER-TO header.
- Attended Transfer After Answer is implemented by a REFER method with *Replaces* in the REFER-TO header.



# 11. Added Direct Caller ID Dialing feature for internal calls.

**Path:** Gateway  $\rightarrow$  Gateway Settings  $\rightarrow$  Basic Preferences  $\rightarrow$  General Settings Instruction:

If the option "Internal Calling First" is set to "Yes", when making calls between internal ports (through Caller ID Number), the system will call the destination port directly, bypassing the VoIP Server.

If set to "No", the system will call the destination port through the VoIP Server and only bypassing VoIP Server when the former fails.

General Settings	
	Music On Hold: calmriver ▼
	Enable Local Transfer
	Key As Send: #
	Enable DSP Fax: Yes 🔻
	Internal Calling First : No 🔻
	Virtual Ring Back Tone 🛈 : No 🔻
	Enable Call Logs <b>①</b> : Yes ▼



## 12. Added Virtual Ring Back Tone feature.

**Path:** Gateway $\rightarrow$  Gateway Settings $\rightarrow$  Basic Preferences $\rightarrow$  General Settings **Instruction:** 

Once the feature is enabled, when the caller dials out, the caller will only hear the virtual ring back tone generated by the system before the callee answers the call. General Settings



## 13. Added support for Serbia Tone Zone and Korea Tone Zone.

**Path:** Gateway $\rightarrow$  Advanced Settings $\rightarrow$  Tone Zone Settings **Instruction:** 

Users could choose the pre-configured Serbia Tone Zone and Korea Tone Zone.

Tone Zone Settings		
Country/Region:	United States / North America	
Ring Cadence 🛈 :	Japan Korea	
Dial Tone 🛈 :	Lithuania Malaysia	
Ringback Tone:	Mexico Netherlands	
Busy Tone:	New Zealand	
Call-Waiting Tone:	Panama	
Congestion Tone:	Philippines Poland	
2nd Dial Tone:	Portugal Russian Federation	+440/100,10/100,350+440
Message Tone	Serbia	
VoiceMail Tone:	South Africa	+440/100,!0/100,!350+440/100

## 14. Added support for Hook Flash Event.

Path: Gateway→ Port List Instruction:

If the option "Send Hook Flash Event" is set to "Yes", when pressing the flash key on the analog phone during an active call. TA will send a SIP DTMF flash event to the VoIP server. It can be an interoperation with a FXO gateway which is used for informing FXO gateway to generate the flash signal to the CO line.



eneral	Other Settings	
General · Ca	aller ID Name 🛈 : 460	Caller ID Number 🛈 : 460
VoIP Se	rver Template	
v	volP Server <sup>(1)</sup> : VolPServer1(1) ▼	
0	User Name 🛈 : 460	Authentication Name
	Password	From User
Route S	ettinas	
Dial P	attern Template <sup>1</sup> : DialPatternTem	plate1(1) ▼ DID Number (1): 460
Hotline -		
Enabl	e Hotline 🛈 : No 🔻	
Hotline	Number :	Delay Dial
Flash —		
Send H	ook Flash Event 🛈 : No 🔹	

#### 15. Added Adaptive option for Jitter Buffer.

**Path:** Gateway  $\rightarrow$  Gateway Settings  $\rightarrow$  Basic Preferences  $\rightarrow$  Voice Settings Instruction:

If you select the "Adaptive" option, it will calculate a best buffer size according to the current network conditions. If the buffer size is less than the one you filled in the Jitter Buffer Max Size, TA will use this buffer size instead of the one you filled in. Otherwise, TA will use the max size you filled in.

Voice Settings		
	Enable Jitter Buffer €: Adaptive ▼ Jitter Buffer Max Size €: 40 ms	
	Echo Tail Length 🕖 : 128 ▼ ms	
	G723 Encoding Rate : 6.3 T Kbps	
	iLBC Frame SizeÛ : 30 ▼ ms	

#### 16. Added Enable Call Logs option.

**Path:** Gateway $\rightarrow$  Gateway Settings $\rightarrow$  Basic Preferences $\rightarrow$  General Settings **Instruction:** 

If this option is set to "Yes", the system will store the call logs. If not, the system won't keep call logs any more, but the logs stored previously will be still there.



General Settings	
Music On Hold:	calmriver 🔻
Enable Local Transfer	Yes <b>v</b>
Key As Send:	# •
Enable DSP Fax:	Yes V
Internal Calling First	No 🔻
Virtual Ring Back Tone	No 🔻
Enable Call Logs	Yes V



# **Optimization (Instruction)**

## 1. Defined 3 register modes of VoIP Server.

**Path:** Gateway $\rightarrow$  VoIP Settings $\rightarrow$  VoIP Server **Instruction:** 

In the new version, we define 3 register modes for a VoIP server. Users could select one mode for the VoIP server and apply it to FXS ports.

• Service Provider - IP Based VoIP Provider, do not generally require the TA gateway to register with the provider. Only IP address or domain is needed to configure on TA gateway.

**Note:** this is a peer-to-peer mode to connect VoIP server and TA gateway, you also need to create a service provider trunk connecting to TA gateway on your VoIP server.

• **Port Register** – the VoIP server requires TA gateway to register with the provider using an authentication ID and password.

If you choose the VoIP server, you need to fill in User Name, Authentication Name and Password to register the FXS port.

t FXS Port - 1			
Other Settings			
ıller ID Name 🛈 : 301	Caller ID Number 🛈: 301		
/er Template /oIP Server			
Jser Name 🛈 : 301	Authentication Name		
	- 1 Other Settings Iller ID Name : 301 /er Template /oIP Server : pbx(2) v Jser Name : 301		

• **Template Register** – register to your VoIP server and apply the template to FXS ports.



General	Advanc	ed			
		Server ID:	3		
		Server Name:	VolPServer3		
		Type:	SIP	v	
		Transport:	UDP v		
		Hostname/IP:	192.168.6.162	: 5060	
		Domain:	192.168.6.162		
			Enable Outbound Proxy Server		
Failover Hostname/IP: Register Mode ① : User Name ① : Authentication Name ① :		er Hostname/IP:		: 5060	
		egister Mode 🛈 :	Template Register 🗸		
		User Name 🛈 :	300		
		cation Name	300		
		Password 0:	•••••		
From User 0:		From User 0:			

# 2. Optimized Flash setting for FXS ports.

**Path:** Gateway→ Port List **Instruction:** 

The TA gateway will regard the flash duration between Min Flash and Max Flash as effective flash. Any flash lasting over the longest time will be considered by gateway as hang-up.



Seneral	Other Settings	
General – Cal	ller ID Name : 460	Caller ID Number : 460
VolP Ser	ver Template	
Vo	oIP Server 0: VoIPServer2(2)	
U	Jser Name 🛈 : 460	Authentication Name 🛈 : 460
	Password	From User :
Douto So	ttinge	
Dial Pa	attern Template <sup>()</sup> : DialPatternTem	plate1(1) ▼ DID Number ③: 460
Hotline –		
Enable	e Hotline 🛈 : No 🔻	
Hotline	Number 🛈 :	Delay Dial 🛈 : 2 s
Flash —		
Send Ho	ook Flash Event 🛈: No 🔹	
	Min Flash Time 🛈 : 300 ms	Max Flash Time 🛈 : 1000 ms
	ALC: NUMBER OF	

[The End]

