Release Notes for TA1610

Version 40.19.0.X
===Firmware Version: V40.19.0.23====
Applicable Model: TA1610
Release Date: March 28, 2018

New Features

1. Added “Ignore SDP Version” setting on VoIP trunk.
   The TA gateway will treat any received data as new data and update media stream accordingly.
==Firmware Version: V40.19.0.19====
Applicable Model: TA1610
Release Date: October 11, 2015

Hardware Compatibility

1. This firmware version is compatible with old hardware (version older than 1.2) and new hardware (version newer than 1.3).
2. You do not have to reset the system after upgrade.

New Features

1. If multiple routes (IP->Port or Port->IP) are created on the system, the system would route the incoming calls by the dial patterns set on the routes. If the routes have the same dial pattern, the system would route the incoming calls from the top route to the bottom route.
2. Added support for the time zones:
   - 8 Irkutsk
   - 9 Yakutsk
   - 11 Srednekolymsk
3. Rename “Qualify” setting on VoIP trunk as “Keep Alive Type”. You can select which SIP packet to send to the VoIP provider to keep the trunk alive. The system supports “OPTIONS” and “NOTIFY” packets.
Upgrade Notes

In this version, we redesign the Web GUI to have new connection modes and routes settings to help you to connect your SIP server and TA1610 in an easier way. In the new version, we provide:

3 types of VoIP Trunk

☑ Account
☑ SIP
☑ Service Provider

You can choose any one of these 3 types of VoIP trunk to connect your SIP server and TA1610. Please refer to TA1610 User Manual or relative solution documents for details.

2 types of Route

☑ IP -> Port
  Control calls from your SIP server to TA1610 FXO ports
☑ Port -> IP/Port
  Receiving incoming calls to PSTN trunks on TA1610 and route the calls to your SIP server or another PSTN trunk on TA1610.

IMPORTANT:

1. We strongly recommend that you back up the configurations and all the files before upgrade.
2. We suggest that you double check or reconfigure the route settings after upgrade.
3. Backup files from higher firmware version cannot be restored to the device with lower firmware version.
4. Please clear the browser’s cache after the upgrade.
New Features

4. New Connection Mode for your SIP server and TA1610.
5. Added SNMP feature.
6. Added Call Duration Settings for FXO ports.
7. Added Port Group Settings.
8. Added Trunk Group Settings.
10. Added Blacklist settings to block incoming or outgoing calls.
11. Added Alert settings for IP attack or web-based attack.
15. Added support for G723 and G729AB codec.

New Features (Instruction)

1. **New Connection Mode for your SIP server and TA1610.**
   
   **Instruction:**
   
   In the previous version, you should configure a VoIP Server, a Dial Pattern Template and apply them to a FXO port, then configure IP->Port or Port->IP route settings.

   ![Configurations in old version]

   In the new version, we delete **VoIP Server Settings** and **Dial Pattern Template Settings** on TA1610 and provide 3 types of VoIP Trunks and 2 types of Routes to make the configuration clearer and easier.

   **3 Types of VoIP Trunk** (Account Mode, Trunk Mode, Service Provider Mode)
   
   **Path:** Gateway→VoIPSettings→VoIP Trunk
   
   **Instruction:**
   
   Choose one type of VoIP trunk to connect your SIP server and TA1610.
2 Types of Route (IP->Port, Port->IP/Port)

Path: Gateway→Routes Settings

Instruction:
- **IP -> Port**
  Control calls from your SIP server to TA1610 FXO ports.
- **Port -> IP/Port**
  Receiving incoming calls to PSTN trunks on TA1610 and route the calls to your SIP server or another PSTN trunk on TA1610.
2. **Added SNMP feature.**

   **Path:** System → Network Preferences → SNMP Settings

   **Instruction:**
3. **Added Call Duration Settings for FXO ports.**
   **Path:** Gateway→PortList→FXO Port List
   **Instruction:**
   In this page you can configure the duration of the FXO port. A phonenotification or an email notification will be received if the balance reaches Alarm threshold you set for the port.

![Figure 5 Call Duration Settings](image)

4. **Added Port Group Settings.**
   **Path:** Gateway→PortList→Port Group
   **Instruction:**
   You can select FXO ports and group them, then define the strategy for the group
   When the Trunk Group is applied to a route for IP-to-Port calls or Port-to-Port calls, TA1610 will choose a PSTN trunk from the Trunk Group to call out according to the strategy.
   - Round-robin: select the next available port in line
   - Least used: select the port that is least used
5. **Added Trunk Group Settings.**
   **Path:** Gateway→VoIPSettings→Trunk Group
   **Instruction:**
   Group the selected SIP trunks or SIP accounts.

6. **Added Callback Settings.**
   **Path:** Gateway→RoutesSettings→Callback Settings
   **Instruction:**
   1) If you’d like to use callback feature, please make sure it’s enabled on the IP->Port or Port->IP/Port route setting panel.
   2) No callback rules needed to be set if the trunk supports call back with the caller ID directly.
3) Add Callback numbers, then callback will work for the added callback numbers. Tick “Allow All Numbers”, callback feature will work for all numbers.

![Callback Settings](image)

![Add New Blacklist](image)

7. **Added Blacklist settings to block incoming or outgoing calls.**
   **Path:** Gateway→RouteSettings→Blacklist  
   **Instruction:**  
   Blacklist is used to block an incoming or outgoing call. If a number is listed in the blacklist, the caller will hear the following prompt: “The number you have dialed is not in service. Please check the number and try again”, then the call is disconnected.

8. **Added Alert settings for IP attack or web-based attack.**
   **Path:** System→SecurityCenter→Alert Settings  
   **Instruction:**  
   After enabling this feature, phone notification or email notification will be sent to users if the system has been attacked.
9. **Added Port Monitor Tool on web interface for FXO ports debugging.**
   
   **Path:** Status→Reports→Port Monitor Tool
   
   **Instruction:**
   Select a FXO port and click “Start” to monitor the FXO port, stop monitoring by clicking “Stop” button.

10. **Added Auto Provision feature.**
    
    **Path:** System→SystemPreferences→Auto Provision Settings
    
    **Instruction:**
    Three Methods are supported for Auto Provision: PNP, DHCP and you can manually configure a server URL to get the configuration file from the server.
PNP and DHCP modes work along with MyPBX "NeoGate Provisioning". Firstly, users need to configure TA1610 on MyPBX "NeoGate Provisioning" page. Then TA1610 will find and get the configuration file from MyPBX during boots up.

If you use DHCP mode to do auto provision, you should enable DHCP Server on MyPBX to make it as a DHCP server. (System→NetworkPreferences→DHCP Server).

Then select DHCP mode on LAN settings page to make TA1610 as a DHCP client.
Another way to do auto provision is to download configuration file from the configured server URL. Fill in the URL, user name, password, and set the time, TA1610 will get the configuration file from the server automatically and regularly. **Note:** if there is no user name and password for the server, leave these fields blank.

![Server Settings](image)

**Other Settings for Auto Provision**
- **AES Key:** If the configuration file is encrypted by AES key, you need to fill the key in this field.
- **Always Apply:** whether to check the new configuration and apply to TA1610.

11. **Added VAD and Echo Tail Length settings.**
   **Path:** Gateway→GatewaySettings→General Preferences
   **Instruction:**
   Adjust VAD and Echo Tail Length settings to get better voice quality.

![General Settings](image)

12. **Added support for G723 and G729AB codec.**
    **Path:** Gateway→VoIPSettings→SIPSettings→Codec
    **Instruction:**
G729AB is compatible with G729, G729A and G729B.
G723 Encoding Rate can be adjusted on Gateway→GatewaySettings→General Preferences page.

Figure 17 Codec