

# HT818 Firmware Release Notes

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## **FIRMWARE VERSION 1.0.27.2**

### **PRODUCT NAME**

HT818

### **DATE**

04/15/2021

### **FIRMWARE FILE INFORMATION**

- HT818 firmware file name: ht818fw.bin  
MD5: f9c45d8cf113e3ea76c264f445d32da7

### **ENHANCEMENT**

- Increased maximum Dial Plan supported length.

### **BUG FIX**

- Removed.TR069 parameter "Device.X\_GRANDSTREAM\_Diagnostics.Capture.DiagnosticsState" as HT8xx does not support packets capture.

### **KNOWN ISSUES**

- Device will crash when downgrade to firmware 1.0.21.4 or lower version via GDMS platform

## FIRMWARE VERSION 1.0.25.5

### PRODUCT NAME

HT818

### DATE

03/23/2021

### FIRMWARE FILE INFORMATION

- HT818 firmware file name: ht818fw.bin  
MD5: 4a44af4d4f9ba9ec0a746cdaac8b83fe

### ENHANCEMENT

- Added support for "OpenVPN". [OpenVPN]
- Added support of "Maximum Number of SIP Request Retries". [MAXIMUM NUMBER OF SIP REQUEST RETRIES]
- Added support for "Failback Timer". [FAILBACK TIMER]
- Expanded the supported certificate's length to 8192 for P2386/P2486/P2586/P2686, P280, P8220

### BUG FIX

- Fixed UCM could not detect HT818 CID.
- Fixed Management VLAN routing used the wrong gateway.
- Fixed the caller ID may not be detected when receiving incoming calls.
- Fixed when RTP attack happens, calls have no audio.
- Fixed devices freeze randomly and is HTTP/SSH inaccessible with no dial tone in the attached analog phone.
- Fixed extreme low audio transmitted randomly.
- Fixed HT8xx may freeze if running FAX for a long time.

### KNOWN ISSUES

- Device will crash when downgrade to firmware 1.0.21.4 or lower version via GDMS platform

### NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

#### OpenVPN

- **Web Configuration**

User can find the configuration section at Web -> Advanced Settings.

Enable OpenVPN: ☒ No ☐ Yes  
 OpenVPN Server Address:   
 OpenVPN Port:   
 OpenVPN Interface type: ☐ TAP ☒ TUN  
 OpenVPN Transport: ☒ UDP ☐ TCP  
 Enable OpenVPN LZO Compression: ☐ No ☒ Yes  
 OpenVPN Encryption:   
 OpenVPN Digest:   
 OpenVPN CA:   
 OpenVPN Certificate:   
 OpenVPN Client Key:   
 OpenVPN Client Key Password:

- Functionality**

This feature allows users to configure OpenVPN.

- New P Values**

| Pvalue | Description            | Value range       | Default |
|--------|------------------------|-------------------|---------|
| P7050  | Enable OpenVPN         | 0 – No<br>1 – Yes | 0 – No  |
| P7051  | OpenVPN Server Address | Maxlength: 64     | NULL    |
| P7052  | OpenVPN Port           | Maxlength: 64     | 1194    |

|        |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                         |
|--------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| P20714 | OpenVPN Interface type         | tap – TAP<br>tun – TUN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | tap – TAP                                                                                               |
| P2912  | OpenVPN Transport              | udp – UDP<br>tcp – TCP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | udp – UDP                                                                                               |
| P20716 | Enable OpenVPN LZO Compression | 0 – No<br>1 – Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1 - Yes                                                                                                 |
| P20717 | OpenVPN Encryption             | BF-CBC - BF-CBC 128 bit default key (variable) Default<br>DES-CBC - DES-CBC 64 bit default key (fixed)<br>RC2-CBC - RC2-CBC 128 bit default key (variable)<br>DES-EDE-CBC - DES-EDE-CBC 128 bit default key (fixed)<br>DES-EDE3-CBC - DES-EDE3-CBC 192 bit default key (fixed)<br>DESX-CBC - DESX-CBC 192 bit default key (fixed)<br>RC2-40-CBC - RC2-40-CBC 40 bit default key (variable)<br>CAST5-CBC - CAST5-CBC 128 bit default key (variable)<br>RC2-64-CBC - RC2-64-CBC 64 bit default key (variable)<br>AES-128-CBC - AES-128-CBC 128 bit default key (fixed)<br>AES-192-CBC - AES-192-CBC 192 bit default key (fixed)<br>AES-256-CBC - AES-256-CBC 256 bit default key (fixed) | BF-CBC - BF-CBC 128 bit default key (variable) Default<br>BF-CBC 128 bit default key (variable) Default |
| P20725 | OpenVPN Digest                 | SHA1 - SHA1 Default<br>MD5 - MD5<br>RSA-MD5 - RSA-MD5<br>RSA-SHA1 - RSA-SHA1<br>DSA-SHA1-old - DSA-SHA1-old<br>DSA-SHA1 - DSA-SHA1<br>RSA-SHA1-2 - RSA-SHA1-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SHA1 - SHA1 Default                                                                                     |

|        |                             |                                                                                                                                                                                                                                                                                                                                                             |      |
|--------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
|        |                             | DSA – DSA<br>RIPEMD160 - RIPEMD160<br>RSA-RIPEMD160 - RSA-RIPEMD160<br>MD4 - MD4<br>RSA-MD4 - RSA-MD4<br>ecdsa-with-SHA1 - ecdsa-with-SHA1<br>RSA-SHA256 - RSA-SHA256<br>RSA-SHA384 - RSA-SHA384<br>RSA-SHA512 - RSA-SHA512<br>RSA-SHA224 - RSA-SHA224<br>SHA256 - SHA256<br>SHA384 - SHA384<br>SHA512 - SHA512<br>SHA224 - SHA244<br>Whirlpool - whirlpool |      |
| P9902  | OpenVPN CA                  | 8192– Max Character Number                                                                                                                                                                                                                                                                                                                                  | NULL |
| P9903  | OpenVPN Certificate         | 8192– Max Character Number                                                                                                                                                                                                                                                                                                                                  | NULL |
| P9904  | OpenVPN Client Key          | 8192– Max Character Number                                                                                                                                                                                                                                                                                                                                  | NULL |
| P20715 | OpenVPN Client Key Password | Maxlength: 64                                                                                                                                                                                                                                                                                                                                               | NULL |

### MAXIMUM NUMBER OF SIP REQUEST RETRIES

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Maximum Number of SIP Request Retries:*  (between 1 and 10, default is 4.)

- Functionality**

This feature allows user to configure the number of SIP retries before failover occurs.

- New P Values**

| Pvalue | Description                                       | Value range       | Default |
|--------|---------------------------------------------------|-------------------|---------|
| P60055 | Maximum Number of SIP Request Retries (Profile 1) | Min: 1<br>Max: 10 | 4       |
| P60155 | Maximum Number of SIP Request Retries (Profile 2) | Min: 1<br>Max: 10 | 4       |

## FAILBACK TIMER

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Failback Timer:*  (in minutes. default 60 minutes, max 45 days)

- Functionality**

When the primary SBC is up, device will send SIP requests to the primary SBC. If at any point device fails over to the secondary SBC, the SIP requests will stay on the failover SBC for the duration of the failback timer. When the timer expires, device will send SIP requests to the primary SBC.

- New P Values**

| Pvalue | Description                | Value range           | Default |
|--------|----------------------------|-----------------------|---------|
| P60056 | Failback Timer (Profile 1) | Min: 60<br>Max: 64800 | 60      |
| P60156 | Failback Timer (Profile 2) | Min: 60<br>Max: 64800 | 60      |

## **FIRMWARE VERSION 1.0.23.5**

### **PRODUCT NAME**

HT818

### **DATE**

1/13/2021

### **FIRMWARE FILE INFORMATION**

- HT818 firmware file name: ht818fw.bin  
MD5: a6be2a48e4be2c0ba5004d7391afe2fc

### **ENHANCEMENT**

- Added support for more than 2 layers certificate chain loading. Expanded max length of P8472 from 4096 to 8192.
- Added Special Feature IZZI to support N-Way conference hosted on Nokia IMS.
- Added support for "DNS SRV Failover Mode". [DNS SRV FAILOVER MODE]
- Added support of "Register Before DNS SRV Failover". [REGISTER BEFORE DNS SRV FAILOVER]

### **BUG FIX**

- Fixed with option 43, device could not upgrade via FTPS.
- Fixed losing connectivity on LAN connected devices on ATA's using PPPoE.
- Fixed when upgrade via HTTPS, if server returns more data than requested in partial content, the provision will fail.
- Fixed the device obviate the T flag on dial plan.
- Fixed when Internet Protocol set to Both, prefer IPv6, device does not send registration after changing the sip transport from TCP to UDP.
- Fixed "Automatic Upgrade" does not take effect as configured.
- Fixed when STUN is using, device may fail to resolve the host name of STUN server and resulting in calls failure.

### **KNOWN ISSUES**

- Device will crash when downgrade to firmware 1.0.21.4 or lower version via GDMS platform

### **NEW FEATURES OVERVIEW**

This section lists major new features and describes how to use it from the user's point of view.

#### **DNS SRV FAILOVER MODE**

- **Web Configuration**

User can find the configuration section at Web -> Profile Settings.

*DNS SRV Failover Mode:* Default ▼  
*Register Before DNS SRV Failover:* ☐ No ☒ Yes

- **Functionality**

Configure the preferred IP mode when DNS Mode is SRV or NAPTR/SRV.

- **Default**  
SIP request will always be sent to the address with the top priority based on the SRV query result, even if this address is different from the registered IP address.
- **Saved one until DNS TTL**  
SIP request will always be sent to the registered IP address until DNS TTL expires or registered IP address is unreachable
- **Saved on until no response**  
SIP request will always be sent to the registered IP address only until registered IP address is unreachable.

- **New P Values**

| Pvalue | Description                       | Value range                                                                   | Default     |
|--------|-----------------------------------|-------------------------------------------------------------------------------|-------------|
| P26040 | DNS SRV Failover Mode (Profile 1) | 0 – Default<br>1 – Saved one until DNS TTL<br>2 – Saved one until no response | 0 – Default |
| P26140 | DNS SRV Failover Mode (Profile 2) | 0 – Default<br>1 – Saved one until DNS TTL<br>2 – Saved one until no response | 0 – Default |

## REGISTER BEFORE DNS SRV FAILOVER

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*DNS SRV Failover Mode:* Default ▼  
*Register Before DNS SRV Failover:* ☐ No ☒ Yes

- **Functionality**

This feature is used to control whether the device need to initiate a new registration request (following existing DNS SRV fail-over mode) first and then direct the non-registration SIP request (INVITE) to the

new successfully registered server or not.

- **New P Values**

| Pvalue | Description                                  | Value range       | Default |
|--------|----------------------------------------------|-------------------|---------|
| P29095 | Register Before DNS SRV Failover (Profile 1) | 0 – No<br>1 – Yes | 0 – No  |
| P29195 | Register Before DNS SRV Failover (Profile 2) | 0 – No<br>1 – Yes | 0 – No  |

## FIRMWARE VERSION 1.0.21.4

### PRODUCT NAME

HT818

### DATE

10/16/2020

### FIRMWARE FILE INFORMATION

- HT818 firmware file name: ht818fw.bin  
MD5: 79f0abb77499d5ab75431696d5c33891

### ENHANCEMENT

- Added support for IPv6 address without square brackets.
- Added support for DHCP Domain Name configuration. [DHCP DOMAIN N]
- Added support of "Use Configured IP" for "DNS Mode". [DNS MODE USE CONFIGURED IP]
- Added support for "Play Busy Tone When Account is unregistered". [PLAY BUSY TONE WHEN ACCOUNT IS UNREGISTERED]

### BUG FIX

- Fixed when DNS Mode set to SRV, device does not failover to the second IP got from SRV when receive 503.
- Fixed STUN Server can not identify square bracket.
- Fixed when Internet Protocol is set to "Both, prefer IPv6", device will not switch to IPv4 to get registered if IPv6 is not available.
- Fixed device will send SIP requests to default port 5060 when a different port was configured.
- Fixed "Automatic Upgrade" does not take effect as configured.

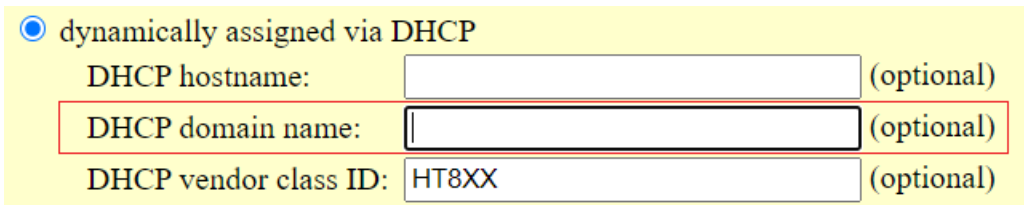
### NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

#### DHCP DOMAIN NAME

- Web Configuration**

User can find the configuration section at Web -> Basic Settings.



The screenshot shows a configuration interface for DHCP. It has a yellow background. At the top, there is a radio button selected with the text "dynamically assigned via DHCP". Below this, there are three rows of configuration fields. The first row is "DHCP hostname:" followed by an empty text box and the word "(optional)". The second row is "DHCP domain name:" followed by an empty text box and the word "(optional)". The third row is "DHCP vendor class ID:" followed by a text box containing "HT8XX" and the word "(optional)".

- **Functionality**

This feature specifies the domain name that client should use when resolving hostname via the Domain Name System.

- **New P Values**

| Pvalue | Description      | Value range    | Default |
|--------|------------------|----------------|---------|
| P147   | DHCP domain name | Max Length: 32 | Null    |

## DNS MODE USE CONFIGURED IP

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*DNS Mode:* ☒ A Record ☐ SRV ☐ NAPTR/SRV ☐ Use Configured IP

*DNS SRV use Registered IP:* ☒ No ☐ Yes

Primary IP:

Backup IP1:

Backup IP2:

- **Functionality**

When "Use Configured IP" is selected, if SIP server is configured as domain name, device will not send DNS query, but will use "Primary IP" or "Backup IP" to send sip message if at least one of them are not empty. It will try to use "Primary IP" first, after 3 tries without any response, it will switch to "Backup IP 1", then "Backup IP 2", and then it will switch back to "Primary IP" after 3 re-tries.

- **New P Values**

| Pvalue | Description            | Value range    | Default |
|--------|------------------------|----------------|---------|
| P2308  | Primary IP (Profile 1) | Max Length: 15 | Null    |
| P2309  | Backup IP1 (Profile 1) | Max Length: 15 | Null    |
| P2310  | Backup IP2 (Profile 1) | Max Length: 15 | Null    |
| P2408  | Primary IP (Profile 2) | Max Length: 15 | Null    |
| P2409  | Backup IP1 (Profile 2) | Max Length: 15 | Null    |
| P2410  | Backup IP2 (Profile 2) | Max Length: 15 | Null    |

## PLAY BUSY TONE WHEN ACCOUNT IS UNREGISTERED

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

*Play Busy Tone When Account is* ☒ No ☐ Yes (If set to Yes, busy tone will be played when user goes offhook from an *unregistered*: unregistered account.)

- **Functionality**

When this feature is set to Yes, device will play busy tone when the FXS port account is not registered and the attached analog phone is offhook.

- **New P Values**

| Pvalue | Description                                 | Value range       | Default |
|--------|---------------------------------------------|-------------------|---------|
| P28181 | Play Busy Tone When Account is unregistered | 0 – No<br>1 – Yes | 0 – No  |

## FIRMWARE VERSION 1.0.19.11

### PRODUCT NAME

HT818

### DATE

07/13/2020

### FIRMWARE FILE INFORMATION

- HT818 firmware file name: ht818fw.bin  
MD5: f3f347af088f226fc2dfed57436b4f21

### ENHANCEMENT

- Added support for Telnet. [TELNET]
- Added “Disable” option for “Web Access Mode” feature.
- Added configuration for “DNS cache refresh time” (P4208) via config file provisioning.
- Added feature “Web Access Privilege Pattern” (P28152), configurable via config file provision or SSH, not on Web UI.
- Added feature “DNS Cache Duration” (P28160), configurable via config file provision or SSH, not on Web UI.
- Moved “Trusted CA certificates” from Profile1/Profile2 (P2386/P2486) to Advanced Settings and renamed as Trusted CA Certificates A (P2386) and Trusted CA Certificates B (P2486).
- Added feature “Disable User Level Web Access” and “Disable Viewer Level Web Access”. [USER/VIEWER LEVEL WEB ACCESS]
- Added feature “Use P-Asserted-Identity Header”. [USE P-ASSERTED-IDENTITY HEADER]
- Added feature “Load CA Certificates”. [LOAD CA CERTIFICATES]
- Added feature “Connection Request Port”. [CONNECTION REQUEST PORT]
- Added support for Telefonica Spain special flash digit control 3-way conference mode when Special Feature set to “Telefonica Spain”.
- Added support for when Special Feature set to “Telefonica Spain”, # key will act as dial key only if the dialed string is beginning with digits.
- Added Special Feature “Oi\_BR”.
- Added support for answer 480 for an inbound call when the phone is off hook longer than 1 minutes.
- Added support to play ringback tone during call transfer when Special Feature is set to ROSTELECOM.
- Updated Special Feature “Telefonica Spain” ETSI-FSK prior to ringing with RP Caller ID scheme FSK signal field 0x01, 0x02, and 0x07.
- Added support to set Ring Timeout to 0 for unlimited ring timeout.

- Added support for Telefonica specific failover mechanism based on DNS SRV for Special Feature “Telefonica”.
- Added New Zealand Standard for Pulse Dialing Standard.
- Added Russian language support for Web UI and IVR.
- Increased “SIP TLS Certificate” and “SIP TLS Private Key” supported maximum length from 2048 to 4096.

## BUG FIX

- Fixed TR-069 NATTraversal parameter lack UPNP choice.
- Fixed TR-069 Device.LAN.AvailableAddressingType lack of PPPoE mode.
- Fixed random port of HT818 will lock up and no longer make or receive calls after an uncertain amount of time or calls.
- Fixed remote could not hear HT818 voice when enabling Flash Digit Control.
- Fixed device will crash if factory reset via Web UI.
- Fixed after setting NATTraversal of Profile 2 on the ACS server, the device could not apply the change.
- Fixed TR-069 Device.LAN.AvailableAddressingType lack of PPPoE mode.
- Fixed could not add or delete an object on ACS server
- Fixed device may crash when processing 183 message.
- Fixed SIP TLS related settings will back to default settings after reboot.
- Fixed IVR operation will cause device crash.
- Fixed memory leak issue.
- Fixed the CLIP format does not meet the ITE-CA-001 : 6.3.1.5 ETSI ES 300 659-2 ( ETSI FSK V.23 signaling with DT-AS) format.
- Fixed device will crash when SIP TLS Private Key is set but SIP TLS Private Key Password is not configured.
- Fixed “DHCP IP Lease Time” could be set to negative.
- Fixed device login credential could be found in the data package.
- Increase the maximum ptime from 30 to 60 when using codec G729
- Fixed when device act as the callee, after the analog phone offhook to accept the incoming call and sent 200OK, if the ACK could not be received, the port will lockup.
- Fixed distinctive ring tone does not take effect when set to more than 9000ms.
- Fixed the sin wave signal for the ring tone exceeds 5% distortion on shape.
- Fixed device could not make a call when use \*19 to disable SRTP per call.
- Fixed device LAN DHCP Base IP will not change automatically when the WAN port receives 192.168.2.1 IP address from the network.
- Fixed device does not take port from SRV results when SIP transport type is TLS.
- Fixed device fails to register when enabling “Validate Incoming SIP Message”.
- Fixed device sends Register to port 5060 when configured as a different port.
- Fixed device will not reach GAPS when LAN IP conflict with WAN IP.

- Fixed a security vulnerability that device will crash if an attacker sends a TCP message that does not contain a '\r'.
- Fixed a security vulnerability that device will crash due to a null pointer dereference when an authentication header is present in the HTTP Get request, but the header is not a well-formed digest message.
- Fixed a security vulnerability that the TR-069 interface hardcodes the nonce and opaque values that the HTTP digest authentication values could be reused.
- Fixed when SIP user ID contains domain name and puts @<sip server> to the From/To/Contact header, HT818 could not get registered.
- Fixed incoming call does not work with TLSv1.2.
- Fixed the security vulnerability related to provisioning XML password bypass and command injection.
- Removed gssu commend from SSH.
- Fixed when HT818 SRTP mode is set to "Enabled but not forced" and the SIP server does not support SRTP, HT818 will reject the call.
- Fixed when set up an admin password longer than 15 characters, the web access will keep showing "Sorry. Your Login Password is not recognized. Please try again."

## NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

### TELNET

- **Web Configuration**

User can find the configuration section at Web -> Basic Settings.

*Disable SSH:*   ☒ No   ☐ Yes

*SSH Port:*      (default is 22. Cannot be the same as Telnet Port.)

---

*Disable Telnet:*   ☐ No   ☒ Yes

*Telnet Port:*      (default is 23. Cannot be the same as SSH Port.)

- **Functionality**

This feature allows users access device CLI by using Telnet. The default Telnet port is 23, this should be different from SSH port.

- **New P Values**

| Pvalue | Description    | Value range           | Default |
|--------|----------------|-----------------------|---------|
| P28120 | Disable Telnet | 0 - No<br>1 - Yes     | 1 - Yes |
| P28128 | Telnet Port    | 5 – Max String Length | 23      |

## USER/VIEWER LEVEL WEB ACCESS

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

**Disable User Level Web Access:** ☒ No ☐ Yes  
**Disable Viewer Level Web Access:** ☒ No ☐ Yes

- Functionality**

These features allow customer to enable or disable user/viewer web access.

- New P Values**

| Pvalue | Description                     | Value range       | Default |
|--------|---------------------------------|-------------------|---------|
| P28158 | Disable User Level Web Access   | 0 – No<br>1 – Yes | 0 – No  |
| P28159 | Disable Viewer Level Web Access | 0 – No<br>1 – Yes | 0 – No  |

## USE P-ASSERTED-IDENTITY HEADER

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Use P-Asserted-Identity Header:* ☒ No ☐ Yes

- Functionality**

When this feature is set to Yes, device will send P-Asserted-Identity Header on the SIP Invite.

- New P Values**

| Pvalue | Description                                 | Value range       | Default |
|--------|---------------------------------------------|-------------------|---------|
| P29098 | User P-Asserted-Identity Header (Profile 1) | 0 – No<br>1 – Yes | 0 – No  |
| P29198 | User P-Asserted-Identity Header (Profile 2) | 0 – No<br>1 – Yes | 0 – No  |

## LOAD CA CERTIFICATES

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

*Load CA Certificates:* Built-in trusted certificates ▼

- **Functionality**

This feature allows user to specify which CA certificate to trust when performing server authentication.

- **New P Values**

| Pvalue | Description          | Value range                                                                                         | Default                           |
|--------|----------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------|
| P8502  | Load CA Certificates | 0 – Built-in trusted certificates<br>1 – Custom trusted certificate<br>2 – All trusted certificates | 0 – Built-in trusted certificates |

## CONNECTION REQUEST PORT

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

*Connection Request Password:*

*Connection Request Port:*

- **Functionality**

This feature allows user to configure the TR-069 connection request port.

- **New P Values**

| Pvalue | Description             | Value range | Default |
|--------|-------------------------|-------------|---------|
| P4518  | Connection Request Port | 0 – 65535   | 7547    |

# FIRMWARE VERSION 1.0.17.5

## PRODUCT NAME

HT818

## DATE

11/14/2019

## FIRMWARE FILE INFORMATION

- HT818 firmware file name: ht818fw.bin  
MD5: 3e7c17f9c7a881446b3222bbfdc2c646

## ENHANCEMENT

- Added support for TLS version configuration. [TLS VERSION]
- Updated "São Paulo" time zone to UTC-3.

## BUG FIX

- Fixed device automatically sends a Re-Invite to un-hold the call after the call on-hold for 90 seconds via hook-flash.
- Fixed when device receives Re-Invite with SDP including both T.38 and audio, device will reply 200OK with audio only in SDP.
- Fixed when certification related P values are not configured in a config file, latter P values will not be applied during provision.
- Fixed when DNS SRV is used, device will send sip Register to wrong SIP destination port.
- Fixed when Ring Timeout set to 0, hunting group feature will not work.
- Fixed device will crash when the username of URL of To header is Null.
- Fixed when the SRV contains one more A record, device will use the default destination port.
- Fixed memory leak when working on GDMS platform.
- Fixed device sent SIP requests to outbound proxy 5060 when configured as a different port.

## NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

### TLS VERSION

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

|                      |             |
|----------------------|-------------|
| Minimum TLS Version: | Unlimited ▼ |
| Maximum TLS Version: | Unlimited ▼ |

- Functionality**

These features allow customer to choose desired TLS Version.

- **New P Values**

| Pvalue | Description         | Value range                                                    | Default        |
|--------|---------------------|----------------------------------------------------------------|----------------|
| P22293 | Minimum TLS Version | 99 - Unlimited<br>10 – TLS 1.0<br>11 – TLS 1.1<br>12 – TLS 1.2 | 99 - Unlimited |
| P22294 | Maximum TLS Version | 99 - Unlimited<br>10 – TLS 1.0<br>11 – TLS 1.1<br>12 – TLS 1.2 | 99 - Unlimited |

## FIRMWARE VERSION 1.0.15.4

### PRODUCT NAME

HT818

### DATE

09/16/2019

### FIRMWARE FILE INFORMATION

- HT818 firmware file name: ht818fw.bin  
MD5: 7930040046b6972d2ceb90cd1e4bc3b3

### ENHANCEMENT

- Added support for Packet Lost stats using P28157 from config file.
- Updated Pvalue for Automatic Upgrade from P194 to P22296.
- Added more choices to feature "Disable Weak TLS Ciphers".
- Added feature "Syslog Protocol". [SYSLOG PROTOCOL]
- Added support for "Distinctive Call Waiting Tone". [DISTINCTIVE CALL WAITING TONE]
- Added support for "Call Waiting Tones". [CALL WAITING TONES]
- Added support for DHCP option 67.
- Added support to play the second dial tone for unconditional call forwarding in variable mode in Metaswitch platform.
- Added support to allow CID name fields for ports that are part of the active hunting group to take effect.
- Added support for GDMS.
- Updated Dropbear version to 2019.78
- Added Russian language to Web UI and IVR.

### BUG FIX

- Fixed TLS Connection could not establish when there are multiple Via headers.
- Fixed device could not get stateful IPv6 address.
- Fixed when device was on a call, reboot the device via ACS server, device will reboot during the call.
- Fixed Dial Plan Prefix displayed null when Dial Plan Prefix includes ".".
- Fixed could not configure device via TR-069 when Internet protocol is set to Both, Preferred IPv6 or IPv6 Only.
- Fixed device keeps sending BOOTSTRAP message to ACS server.

### NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

## SYSLOG PROTOCOL

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

|                         |                      |
|-------------------------|----------------------|
| <i>Syslog Protocol:</i> | UDP ▼                |
| <i>Syslog Server:</i>   | <input type="text"/> |

- Functionality**

- Allow users to customize the Syslog Protocol.

- New P Values**

| Pvalue | Description     | Value range            | Default |
|--------|-----------------|------------------------|---------|
| P8402  | Syslog Protocol | 0 – UDP<br>1 – SSL/TLS | 0 – UDP |

## DISTINCTIVE CALL WAITING TONE

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

|                                       |                       |                               |                      |
|---------------------------------------|-----------------------|-------------------------------|----------------------|
| <i>Distinctive Call Waiting Tone:</i> | Call Waiting Tone 1 ▼ | used if incoming caller ID is | <input type="text"/> |
|                                       | Call Waiting Tone 1 ▼ | used if incoming caller ID is | <input type="text"/> |
|                                       | Call Waiting Tone 1 ▼ | used if incoming caller ID is | <input type="text"/> |

- Functionality**

This feature allows users to configure call waiting tone depending on the caller ID.

- New P Values**

| Pvalue | Description                               | Value range                                                                                                                                                                                                                                                                  | Default                 |
|--------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| P29074 | Call Waiting Tone Choice 1 (Profile 1)    | 0 – Call Waiting Tone 1<br>1 – Call Waiting Tone 2<br>2 – Call Waiting Tone 3<br>3 – Call Waiting Tone 4<br>4 – Call Waiting Tone 5<br>5 – Call Waiting Tone 6<br>6 – Call Waiting Tone 7<br>7 – Call Waiting Tone 8<br>8 – Call Waiting Tone 9<br>10 – Call Waiting Tone 10 | 0 – Call Waiting Tone 1 |
| P29077 | Used if incoming caller ID is (Profile 1) | 64 – Max String Length                                                                                                                                                                                                                                                       | Null                    |

|        |                                           |                                                                                                                                                                                                                                                                              |                         |
|--------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| P29075 | Call Waiting Tone Choice 2 (Profile 1)    | 0 – Call Waiting Tone 1<br>1 – Call Waiting Tone 2<br>2 – Call Waiting Tone 3<br>3 – Call Waiting Tone 4<br>4 – Call Waiting Tone 5<br>5 – Call Waiting Tone 6<br>6 – Call Waiting Tone 7<br>7 – Call Waiting Tone 8<br>8 – Call Waiting Tone 9<br>10 – Call Waiting Tone 10 | 0 – Call Waiting Tone 1 |
| P29078 | Used if incoming caller ID is (Profile 1) | 64 – Max String Length                                                                                                                                                                                                                                                       | Null                    |
| P29076 | Call Waiting Tone Choice 3 (Profile 1)    | 0 – Call Waiting Tone 1<br>1 – Call Waiting Tone 2<br>2 – Call Waiting Tone 3<br>3 – Call Waiting Tone 4<br>4 – Call Waiting Tone 5<br>5 – Call Waiting Tone 6<br>6 – Call Waiting Tone 7<br>7 – Call Waiting Tone 8<br>8 – Call Waiting Tone 9<br>10 – Call Waiting Tone 10 | 0 – Call Waiting Tone 1 |
| P29079 | Used if incoming caller ID is (Profile 1) | 64 – Max String Length                                                                                                                                                                                                                                                       | Null                    |
| P29174 | Call Waiting Tone Choice 1 (Profile 2)    | 0 – Call Waiting Tone 1<br>1 – Call Waiting Tone 2<br>2 – Call Waiting Tone 3<br>3 – Call Waiting Tone 4<br>4 – Call Waiting Tone 5<br>5 – Call Waiting Tone 6<br>6 – Call Waiting Tone 7<br>7 – Call Waiting Tone 8<br>8 – Call Waiting Tone 9<br>10 – Call Waiting Tone 10 | 0 – Call Waiting Tone 1 |
| P29177 | Used if incoming caller ID is (Profile 2) | 64 – Max String Length                                                                                                                                                                                                                                                       | Null                    |
| P29175 | Call Waiting Tone Choice 2 (Profile 2)    | 0 – Call Waiting Tone 1<br>1 – Call Waiting Tone 2<br>2 – Call Waiting Tone 3<br>3 – Call Waiting Tone 4<br>4 – Call Waiting Tone 5                                                                                                                                          | 0 – Call Waiting Tone 1 |

|        |                                           |                                                                                                                                                                                                                                                                              |                         |
|--------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
|        |                                           | 5 – Call Waiting Tone 6<br>6 – Call Waiting Tone 7<br>7 – Call Waiting Tone 8<br>8 – Call Waiting Tone 9<br>10 – Call Waiting Tone 10                                                                                                                                        |                         |
| P29178 | Used if incoming caller ID is (Profile 2) | 64 – Max String Length                                                                                                                                                                                                                                                       | Null                    |
| P29176 | Call Waiting Tone Choice 3 (Profile 2)    | 0 – Call Waiting Tone 1<br>1 – Call Waiting Tone 2<br>2 – Call Waiting Tone 3<br>3 – Call Waiting Tone 4<br>4 – Call Waiting Tone 5<br>5 – Call Waiting Tone 6<br>6 – Call Waiting Tone 7<br>7 – Call Waiting Tone 8<br>8 – Call Waiting Tone 9<br>10 – Call Waiting Tone 10 | 0 – Call Waiting Tone 1 |
| P29179 | Used if incoming caller ID is (Profile 2) | 64 – Max String Length                                                                                                                                                                                                                                                       | Null                    |

## CALL WAITING TONES

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

|                           |                                                                                                                                                               |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Call Waiting Tones</b> | Syntax: <code>f1=val[, f2=val[, c=on1/off1[-on2/off2[-on3/off3]]]];</code><br>(Frequencies are in (300, 3400) Hz and cadence on and off are in (0, 64000) ms) |
| Call Waiting Tone 1:      | <input type="text" value="f1=440@-13,c=300/10000;"/>                                                                                                          |
| Call Waiting Tone 2:      | <input type="text" value="f1=440@-13,c=300/10000;"/>                                                                                                          |
| Call Waiting Tone 3:      | <input type="text" value="f1=440@-13,c=300/10000;"/>                                                                                                          |
| Call Waiting Tone 4:      | <input type="text" value="f1=440@-13,c=300/10000;"/>                                                                                                          |
| Call Waiting Tone 5:      | <input type="text" value="f1=440@-13,c=300/10000;"/>                                                                                                          |
| Call Waiting Tone 6:      | <input type="text" value="f1=440@-13,c=300/10000;"/>                                                                                                          |
| Call Waiting Tone 7:      | <input type="text" value="f1=440@-13,c=300/10000;"/>                                                                                                          |
| Call Waiting Tone 8:      | <input type="text" value="f1=440@-13,c=300/10000;"/>                                                                                                          |
| Call Waiting Tone 9:      | <input type="text" value="f1=440@-13,c=300/10000;"/>                                                                                                          |
| Call Waiting Tone 10:     | <input type="text" value="f1=440@-13,c=300/10000;"/>                                                                                                          |

- Functionality**

This feature allows user to customize call waiting tone.

- **New P Values**

| Pvalue | Description                      | Value range            | Default                 |
|--------|----------------------------------|------------------------|-------------------------|
| P29080 | Call Waiting Tone 1 (Profile 1)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29081 | Call Waiting Tone 2 (Profile 1)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29082 | Call Waiting Tone 3 (Profile 1)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29083 | Call Waiting Tone 4 (Profile 1)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29084 | Call Waiting Tone 5 (Profile 1)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29085 | Call Waiting Tone 6 (Profile 1)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29086 | Call Waiting Tone 7 (Profile 1)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29087 | Call Waiting Tone 8 (Profile 1)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29088 | Call Waiting Tone 9 (Profile 1)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29089 | Call Waiting Tone 10 (Profile 1) | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29180 | Call Waiting Tone 1 (Profile 2)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29181 | Call Waiting Tone 2 (Profile 2)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29182 | Call Waiting Tone 3 (Profile 2)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29183 | Call Waiting Tone 4 (Profile 2)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29184 | Call Waiting Tone 5 (Profile 2)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29185 | Call Waiting Tone 6 (Profile 2)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29186 | Call Waiting Tone 7 (Profile 2)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29187 | Call Waiting Tone 8 (Profile 2)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29188 | Call Waiting Tone 9 (Profile 2)  | 64 – Max String Length | f1=440@-13,c=300/10000; |
| P29189 | Call Waiting Tone 10 (Profile 2) | 64 – Max String Length | f1=440@-13,c=300/10000; |

## DISABLE WEAK TLS CIPHER SUITES

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

*Disable Weak TLS Cipher Suites:*

- **Functionality**

This feature allows users to disable weak ciphers.

- **New P Values**

| Pvalue | Description                    | Value range                                                                                                                                                       | Default                            |
|--------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| P8536  | Disable Weak TLS Cipher Suites | 0 – Enable Weak TLS Ciphers Suites<br>1 – Disable Symmetric Encryption RC4/DES/3DES<br>2 - Disable Symmetric Encryption SEED<br>3 - Disable All Of The Above Weak | 0 – Enable Weak TLS Ciphers Suites |

|  |  |                                                                                                                                                                                                                                                                                                                                         |  |
|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  |  | <p>Symmetric Encryption</p> <p>4 - Disable Symmetric Authentication<br/>MD5</p> <p>5 - Disable All Of The Above Weak<br/>Symmetric Authentication</p> <p>6 - Disable Protocol Version<br/>SSLv2/SSLv3</p> <p>7 - Disable All Of The Above Weak<br/>Protocol Version</p> <p>8 - Disable All Of The Above Weak<br/>TLS Ciphers Suites</p> |  |
|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

## FIRMWARE VERSION 1.0.13.7

### PRODUCT NAME

HT818

### DATE

07/15/2019

### FIRMWARE FILE INFORMATION

- HT818 firmware file name: ht818fw.bin  
MD5: fdec7bdffbada3cf621e23b38f7fba2

### ENHANCEMENT

- Added ability to support provisioning server path containing the server authentication credentials for the DHCP option 66. Format should be "username:password@Provisioning\_Server\_IP".
- Added support to validate syntax of ACL entry.
- Added support to view, download, and delete the call history through device Web UI.
- Added support to store SIP file locally.
- Added support to send SNMP trap to 3 different servers. The trap servers should be separated with comma.
- Added support for Packet Lost stats using P28157.
- Added the support to verify if configured Gateway is on the same subnet as the configured IP address.
- Added feature "Call Features Settings" [CALL FEATURES SETTINGS]
- Added feature "Use SIP User-Agent". [SIP User-Agent]
- Updated "Use SIP User-Agent Header" to "SIP User-Agent Postfix".
- Added feature "Disable Reminder Ring for DND". [DISABLE REMINDER RING FOR DND]
- Added feature "CDR File Option". [CDR FILE OPTION]
- Added feature "SIP File Option". [SIP FILE OPTION]
- Added feature "Disable Weak TLS Cipher Suites". [DISABLE WEAK TLS CIPHER SUITES]
- Added feature "Pulse Dialing Standard". [PULSE DIALING STANDARD]
- Added feature "Callee Flash to 3WC". [CALLEE FLASH TO 3WC]
- Added feature "RFC2833 Count" [RFC2833 COUNT]
- Added feature "Replace Beginning '+' with 00 in Caller ID". [REPLACE BEGINNING '+' WITH 00 IN CALLER ID]
- Added feature "Reset Call Features". [RESET CALL FEATURES]

### BUG FIX

- Fixed TR-069 manufacture field is empty on the INFORM header.

- Fixed when ACS URL is set to ipv6 and device is in STUN mode, STUN Server address will be wrong.
- Fixed when downloaded a config file, device could not escape "<, >, \", ' , &" symbols properly.
- Fixed device will keep sending the bootstrap message to the ACS server.
- Fixed User Agent customization not working properly.
- Fixed when the SIP call flow includes 183 ringing, there will be audible chirp or beep.
- Fixed authenticate server certificate chain failed.
- Fixed device does not authenticate with ACS server to upload device config.
- Fixed factory reset initiated by ACS server could not reset the device.
- Fixed the TR-069 periodic inform time not right.
- Fixed device did not report SIP mutual TLS authentication information.

## NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

### CALL FEATURES SETTINGS

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

## Call Features Settings

Enable Call Features: ☐ No ☒ Yes ☐ Enable All

(When enabled, Do No Disturb, Call Forward and other call features can be used via the local feature codes on the phone. Otherwise, the ITSP feature codes will be used. Enable All will override all individual features enable setting.)

Reset Call Features: ☒ No ☐ Yes

-----  
 SRTP Feature: ☐ No ☒ Yes

Enable SRTP:

Disable SRTP:

-----  
 SRTP per call Feature: ☐ No ☒ Yes

Enable SRTP per call:

Disable SRTP per call:

-----  
 CID Feature: ☐ No ☒ Yes

Enable CID:

Disable CID:

-----  
 CID per call Feature: ☐ No ☒ Yes

Enable CID per call:

Disable CID per call:

-----  
 Direct IP Calling Feature: ☐ No ☒ Yes

Direct IP Calling:

-----  
 CW Feature: ☐ No ☒ Yes

Enable CW:

Disable CW:

-----  
 CW per call Feature: ☐ No ☒ Yes

Enable CW per call:

Disable CW per call:

-----  
 Call Return Feature: ☐ No ☒ Yes

Call Return:

|                                          |                                     |                                      |
|------------------------------------------|-------------------------------------|--------------------------------------|
| Unconditional Forward Feature:           | <input type="radio"/> No            | <input checked="" type="radio"/> Yes |
| Enable Unconditional Forward:            | <input type="text" value="72"/>     |                                      |
| Disable Unconditional Forward:           | <input type="text" value="73"/>     |                                      |
| -----                                    |                                     |                                      |
| Busy Forward Feature:                    | <input type="radio"/> No            | <input checked="" type="radio"/> Yes |
| Enable Busy Forward:                     | <input type="text" value="90"/>     |                                      |
| Disable Busy Forward:                    | <input type="text" value="91"/>     |                                      |
| -----                                    |                                     |                                      |
| Delayed Forward Feature:                 | <input type="radio"/> No            | <input checked="" type="radio"/> Yes |
| Enable Delayed Forward:                  | <input type="text" value="92"/>     |                                      |
| Disable Delayed Forward:                 | <input type="text" value="93"/>     |                                      |
| -----                                    |                                     |                                      |
| Paging Feature:                          | <input type="radio"/> No            | <input checked="" type="radio"/> Yes |
| Paging:                                  | <input type="text" value="74"/>     |                                      |
| -----                                    |                                     |                                      |
| DND Feature:                             | <input type="radio"/> No            | <input checked="" type="radio"/> Yes |
| Enable DND:                              | <input type="text" value="78"/>     |                                      |
| Disable DND:                             | <input type="text" value="79"/>     |                                      |
| -----                                    |                                     |                                      |
| Blind Transfer Feature:                  | <input type="radio"/> No            | <input checked="" type="radio"/> Yes |
| Enable Blind Transfer:                   | <input type="text" value="87"/>     |                                      |
| -----                                    |                                     |                                      |
| Disable LEC per call Feature:            | <input type="radio"/> No            | <input checked="" type="radio"/> Yes |
| Disable LEC per call:                    | <input type="text" value="03"/>     |                                      |
| -----                                    |                                     |                                      |
| Disable Bellcore Style 3-Way Conference: | <input checked="" type="radio"/> No | <input type="radio"/> Yes            |
| Star Code 3WC Feature:                   | <input type="radio"/> No            | <input checked="" type="radio"/> Yes |
| Star Code 3WC:                           | <input type="text" value="23"/>     |                                      |
| -----                                    |                                     |                                      |
| Forced Codec Feature:                    | <input type="radio"/> No            | <input checked="" type="radio"/> Yes |
| Forced Codec:                            | <input type="text" value="02"/>     |                                      |
| PCMU Codec Feature:                      | <input type="radio"/> No            | <input checked="" type="radio"/> Yes |
| PCMU Codec:                              | <input type="text" value="7110"/>   |                                      |

PCMA Codec Feature: ☐ No ☒ Yes  
*PCMA Codec:*

G723 Codec Feature: ☐ No ☒ Yes  
*G723 Codec:*

G729 Codec Feature: ☐ No ☒ Yes  
*G729 Codec:*

iLBC Codec Feature: ☐ No ☒ Yes  
*iLBC Codec:*

G722 Codec Feature: ☐ No ☒ Yes  
*G722 Codec:*

- **Functionality**
- Allow users to customize the feature codes.
- **New P Values**

| Pvalue | Description                           | Value range                         | Default |
|--------|---------------------------------------|-------------------------------------|---------|
| P191   | Enable Call Features (Profile 1)      | 0 – No<br>1 – Yes<br>2 – Enable All | 1 – Yes |
| P24060 | SRTP Feature (Profile 1)              | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24001 | Enable SRTP (Profile 1)               | Number                              | 16      |
| P24002 | Disable SRTP (Profile 1)              | Number                              | 17      |
| P24061 | SRTP per call Feature (Profile 1)     | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24003 | Enable SRTP per call (Profile 1)      | Number                              | 18      |
| P24004 | Disable SRTP per call (Profile 1)     | Number                              | 19      |
| P24062 | CID Feature (Profile 1)               | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24006 | Enable CID (Profile 1)                | Number                              | 31      |
| P24005 | Disable CID (Profile 1)               | Number                              | 30      |
| P24065 | CID per call Feature (Profile 1)      | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24019 | Enable CID per call (Profile 1)       | Number                              | 82      |
| P24010 | Disable CID per call (Profile 1)      | Number                              | 67      |
| P24063 | Direct IP Calling Feature (Profile 1) | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24007 | Direct IP Calling (Profile 1)         | Number                              | 47      |
| P24064 | CW Feature (Profile 1)                | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24009 | Enable CW (Profile 1)                 | Number                              | 51      |

|        |                                           |                   |         |
|--------|-------------------------------------------|-------------------|---------|
| P24008 | Disable CW (Profile 1)                    | Number            | 50      |
| P24067 | CW per call Feature (Profile 1)           | 0 – No<br>1 – Yes | 1 – Yes |
| P24013 | Enable CW per call (Profile 1)            | Number            | 71      |
| P24012 | Disable CW per call (Profile 1)           | Number            | 70      |
| P24066 | Call Return Feature (Profile 1)           | 0 – No<br>1 – Yes | 1 – Yes |
| P24011 | Call Return (Profile 1)                   | Number            | 69      |
| P24068 | Unconditional Forward Feature (Profile 1) | 0 – No<br>1 – Yes | 1 – Yes |
| P24014 | Enable Unconditional Forward (Profile 1)  | Number            | 72      |
| P24015 | Disable Unconditional Forward (Profile 1) | Number            | 73      |
| P24072 | Busy Forward Feature (Profile 1)          | 0 – No<br>1 – Yes | 1 – Yes |
| P24021 | Enable Busy Forward (Profile 1)           | Number            | 90      |
| P24022 | Disable Busy Forward (Profile 1)          | Number            | 91      |
| P24073 | Delayed Forward Feature (Profile 1)       | 0 – No<br>1 – Yes | 1 – Yes |
| P24023 | Enable Delayed Forward (Profile 1)        | Number            | 92      |
| P24024 | Disable Delayed Forward (Profile 1)       | Number            | 93      |
| P24069 | Paging Feature (Profile 1)                | 0 – No<br>1 – Yes | 1 – Yes |
| P24016 | Paging (Profile 1)                        | Number            | 74      |
| P24070 | DND Feature (Profile 1)                   | 0 – No<br>1 – Yes | 1 – Yes |
| P24017 | Enable DND (Profile 1)                    | Number            | 78      |
| P24018 | Disable DND (Profile 1)                   | Number            | 79      |
| P24071 | Blind Transfer Feature (Profile 1)        | 0 – No<br>1 – Yes | 1 – Yes |
| P24020 | Enable Blind Transfer (Profile 1)         | Number            | 87      |
| P24074 | Disable LEC per call Feature (Profile 1)  | 0 – No<br>1 – Yes | 1 – Yes |
| P24025 | Disable LEC per call (Profile 1)          | Number            | 03      |
| P24075 | Star Code 3WC Feature (Profile 1)         | 0 – No<br>1 – Yes | 1 – Yes |
| P24026 | Star Code 3WC (Profile 1)                 | Number            | 23      |
| P24059 | Forced Codec Feature (Profile 1)          | 0 – No<br>1 – Yes | 1 – Yes |

|        |                                       |                                     |         |
|--------|---------------------------------------|-------------------------------------|---------|
| P24000 | Forced Codec (Profile 1)              | Number                              | 02      |
| P24076 | PCMU Codec Feature (Profile 1)        | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24027 | PCMU Codec (Profile 1)                | Number                              | 7110    |
| P24077 | PCMA Codec Feature (Profile 1)        | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24028 | PCMA Codec (Profile 1)                | Number                              | 7111    |
| P24078 | G723 Codec Feature (Profile 1)        | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24029 | G723 Codec (Profile 1)                | Number                              | 723     |
| P24079 | G729 Codec Feature (Profile 1)        | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24030 | G729 Codec (Profile 1)                | Number                              | 729     |
| P24084 | iLBC Codec Feature (Profile 1)        | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24035 | iLBC Codec (Profile 1)                | Number                              | 7201    |
| P24085 | G722 Codec Feature (Profile 1)        | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24036 | G722 Codec (Profile 1)                | Number                              | 722     |
| P751   | Enable Call Features (Profile 2)      | 0 – No<br>1 – Yes<br>2 – Enable All | 1 – Yes |
| P24260 | SRTP Feature (Profile 2)              | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24201 | Enable SRTP (Profile 2)               | Number                              | 16      |
| P24202 | Disable SRTP (Profile 2)              | Number                              | 17      |
| P24261 | SRTP per call Feature (Profile 2)     | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24203 | Enable SRTP per call (Profile 2)      | Number                              | 18      |
| P24204 | Disable SRTP per call (Profile 2)     | Number                              | 19      |
| P24262 | CID Feature (Profile 2)               | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24206 | Enable CID (Profile 2)                | Number                              | 31      |
| P24205 | Disable CID (Profile 2)               | Number                              | 30      |
| P24265 | CID per call Feature (Profile 2)      | 0 – No<br>1 – Yes                   | 1 – Yes |
| P24219 | Enable CID per call (Profile 2)       | Number                              | 82      |
| P24210 | Disable CID per call (Profile 2)      | Number                              | 67      |
| P24263 | Direct IP Calling Feature (Profile 2) | 0 – No<br>1 – Yes                   | 1 – Yes |

|        |                                           |                   |         |
|--------|-------------------------------------------|-------------------|---------|
| P24207 | Direct IP Calling (Profile 2)             | Number            | 47      |
| P24264 | CW Feature (Profile 2)                    | 0 – No<br>1 – Yes | 1 – Yes |
| P24209 | Enable CW (Profile 2)                     | Number            | 51      |
| P24208 | Disable CW (Profile 2)                    | Number            | 50      |
| P24267 | CW per call Feature (Profile 2)           | 0 – No<br>1 – Yes | 1 – Yes |
| P24213 | Enable CW per call (Profile 2)            | Number            | 71      |
| P24212 | Disable CW per call (Profile 2)           | Number            | 70      |
| P24266 | Call Return Feature (Profile 2)           | 0 – No<br>1 – Yes | 1 – Yes |
| P24211 | Call Return (Profile 2)                   | Number            | 69      |
| P24268 | Unconditional Forward Feature (Profile 2) | 0 – No<br>1 – Yes | 1 – Yes |
| P24214 | Enable Unconditional Forward (Profile 2)  | Number            | 72      |
| P24215 | Disable Unconditional Forward (Profile 2) | Number            | 73      |
| P24272 | Busy Forward Feature (Profile 2)          | 0 – No<br>1 – Yes | 1 – Yes |
| P24221 | Enable Busy Forward (Profile 2)           | Number            | 90      |
| P24222 | Disable Busy Forward (Profile 2)          | Number            | 91      |
| P24273 | Delayed Forward Feature (Profile 2)       | 0 – No<br>1 – Yes | 1 – Yes |
| P24223 | Enable Delayed Forward (Profile 2)        | Number            | 92      |
| P24224 | Disable Delayed Forward (Profile 2)       | Number            | 93      |
| P24269 | Paging Feature (Profile 2)                | 0 – No<br>1 – Yes | 1 – Yes |
| P24216 | Paging (Profile 2)                        | Number            | 74      |
| P24270 | DND Feature (Profile 2)                   | 0 – No<br>1 – Yes | 1 – Yes |
| P24217 | Enable DND (Profile 2)                    | Number            | 78      |
| P24218 | Disable DND (Profile 2)                   | Number            | 79      |
| P24271 | Blind Transfer Feature (Profile 2)        | 0 – No<br>1 – Yes | 1 – Yes |
| P24220 | Enable Blind Transfer (Profile 2)         | Number            | 87      |
| P24274 | Disable LEC per call Feature (Profile 2)  | 0 – No<br>1 – Yes | 1 – Yes |
| P24225 | Disable LEC per call (Profile 2)          | Number            | 03      |
| P24275 | Star Code 3WC Feature (Profile 2)         | 0 – No            | 1 – Yes |

|        |                                  |                   |         |
|--------|----------------------------------|-------------------|---------|
|        |                                  | 1 – Yes           |         |
| P24226 | Star Code 3WC (Profile 2)        | Number            | 23      |
| P24259 | Forced Codec Feature (Profile 2) | 0 – No<br>1 – Yes | 1 – Yes |
| P24200 | Forced Codec (Profile 2)         | Number            | 02      |
| P24276 | PCMU Codec Feature (Profile 2)   | 0 – No<br>1 – Yes | 1 – Yes |
| P24227 | PCMU Codec (Profile 2)           | Number            | 7110    |
| P24277 | PCMA Codec Feature (Profile 2)   | 0 – No<br>1 – Yes | 1 – Yes |
| P24228 | PCMA Codec (Profile 2)           | Number            | 7111    |
| P24278 | G723 Codec Feature (Profile 2)   | 0 – No<br>1 – Yes | 1 – Yes |
| P24229 | G723 Codec (Profile 2)           | Number            | 723     |
| P24279 | G729 Codec Feature (Profile 2)   | 0 – No<br>1 – Yes | 1 – Yes |
| P24230 | G729 Codec (Profile 2)           | Number            | 729     |
| P24284 | iLBC Codec Feature (Profile 2)   | 0 – No<br>1 – Yes | 1 – Yes |
| P24235 | iLBC Codec (Profile 2)           | Number            | 7201    |
| P24285 | G722 Codec Feature (Profile 2)   | 0 – No<br>1 – Yes | 1 – Yes |
| P24236 | G722 Codec (Profile 2)           | Number            | 722     |

### SIP User-Agent

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*SIP User-Agent:*

*SIP User-Agent Postfix:*

- Functionality**

This feature allows users to configure SIP User-Agent. If not configured, device will use the default User-Agent header.

- New P Values**

| Pvalue | Description                | Value range              | Default |
|--------|----------------------------|--------------------------|---------|
| P29071 | SIP User-Agent (Profile 1) | 1024 – Max String Length | Null    |
| P29171 | SIP User-Agent (Profile 2) | 1024 – Max String Length | Null    |

### DISABLE REMINDER RING FOR DND

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Disable Reminder Ring for DND:* ☒ No ☐ Yes

- **Functionality**

This feature allows user to disable reminder ring when FXS port is on DND mode.

- **New P Values**

| Pvalue | Description                               | Value range       | Default |
|--------|-------------------------------------------|-------------------|---------|
| P29072 | Disable Reminder Ring for DND (Profile 1) | 0 – No<br>1 – Yes | 0 – No  |
| P29172 | Disable Reminder Ring for DND (Profile 2) | 0 – No<br>1 – Yes | 0 – No  |

## CDR FILE OPTION

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

*CDR File Option:* ☒ Keep ☐ Override  
*SIP File Option:* ☒ Keep ☐ Override  
*Disable Weak TLS Cipher Suites:* ☒ No ☐ Yes  
*Syslog Server:*

- **Functionality**

By default, the device will split the allowed memory for CDR file into 2 parts. Device will create the first CDR file which is half of the allowed size, when it is full, device will create the second file. When “CDR File Option” is set to Keep, device will keep the call records when both files are full, no more new record will be stored. When this feature is set to Override, device will clear the first CDR file and start storing again.

- **New P Values**

| Pvalue | Description     | Value range              | Default  |
|--------|-----------------|--------------------------|----------|
| P8534  | CDR File Option | 0 – Keep<br>1 – Override | 0 – Keep |

## SIP FILE OPTION

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

*SIP File Option:* ☒ Keep ☐ Override

- **Functionality**

By default, the device will split the allowed memory for SIP file into 2 parts. Device will create the first SIP file which is half of the allowed size, when it is full, device will create the second file. When “SIP File Option” is set to Keep, device will keep the call records when both files are full, no more new record will be stored. When this feature is set to Override, device will clear the first SIP file and start storing again.

- **New P Values**

| Pvalue | Description     | Value range              | Default  |
|--------|-----------------|--------------------------|----------|
| P8535  | SIP File Option | 0 – Keep<br>1 – Override | 0 – Keep |

## DISABLE WEAK TLS CIPHER SUITES

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

*SIP File Option:* ☒ Keep ☐ Override

*Disable Weak TLS Cipher Suites:* ☒ No ☐ Yes

- **Functionality**

This feature allows users to disable weak ciphers DES/3DES and RC4.

- **New P Values**

| Pvalue | Description                    | Value range       | Default |
|--------|--------------------------------|-------------------|---------|
| P8536  | Disable Weak TLS Cipher Suites | 0 – No<br>1 – Yes | 0 – No  |

## PULSE DIALING STANDARD

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Enable Pulse Dialing:* ☒ No ☐ Yes

*Pulse Dialing Standard:*

- **Functionality**

This feature allows users to use Swedish pulse dialing standard.

- **New P Values**

| Pvalue | Description                        | Value range                                  | Default              |
|--------|------------------------------------|----------------------------------------------|----------------------|
| P28165 | Pulse Dialing Standard (Profile 1) | 0 – General Standard<br>1 – Swedish Standard | 0 – General Standard |
| P28166 | Pulse Dialing Standard (Profile 2) | 0 – General Standard<br>1 – Swedish Standard | 0 – General Standard |

## CALLEE FLASH TO 3WC

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Callee Flash to 3WC:* ☒ No ☐ Yes

*Offhook Auto-Dial Delay:*  (0-60 seconds, default is 0)

- **Functionality**

When this feature is set to Yes, device would be able to set up the 3-way conference call even when device is the callee in the second call.

- **New P Values**

| Pvalue | Description                     | Value range       | Default |
|--------|---------------------------------|-------------------|---------|
| P28169 | Callee Flash to 3WC (Profile 1) | 0 – No<br>1 – Yes | 0 – No  |
| P28170 | Callee Flash to 3WC (Profile 2) | 0 – No<br>1 – Yes | 0 – No  |

## RFC2833 COUNT

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*RFC2833 Events Count:*  (between 2 and 10, default is 8)  
*RFC2833 End Events Count:*  (between 2 and 10, default is 3)

- **Functionality**

This feature allows users to customize the count of RFC2833 events and end events.

- **New P Values**

| Pvalue | Description                          | Value range                 | Default |
|--------|--------------------------------------|-----------------------------|---------|
| P28173 | RFC2833 Events Count (Profile 1)     | 2 – minimum<br>10 – Maximum | 8       |
| P28174 | RFC2833 Events Count (Profile 2)     | 2 – minimum<br>10 – Maximum | 8       |
| P28177 | RFC2833 End Events Count (Profile 1) | 2 – minimum<br>10 – Maximum | 3       |
| P28178 | RFC2833 End Events Count (Profile 2) | 2 – minimum<br>10 – Maximum | 3       |

## REPLACE BEGINNING '+' WITH 00 IN CALLER ID

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Replace Beginning '+' with 00 in Caller ID:* ☒ No ☐ Yes

- **Functionality**

When this feature is set to Yes, device will replace the “+” sign at the beginning of a number in the FROM header.

- **New P Values**

| Pvalue | Description                                | Value range | Default |
|--------|--------------------------------------------|-------------|---------|
| P29073 | Replace Beginning '+' with 00 in Caller ID | 0 – No      | 0 – No  |

|        |                                                        |                   |        |
|--------|--------------------------------------------------------|-------------------|--------|
|        | (Profile 1)                                            | 1 – Yes           |        |
| P29173 | Replace Beginning '+' with 00 in Caller ID (Profile 2) | 0 – No<br>1 – Yes | 0 – No |

## RESET CALL FEATURES

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Reset Call Features:* ☒ No ☐ Yes

- Functionality**

When this feature allows users to reset all call features configuration.

- New P Values**

| Pvalue | Description                     | Value range       | Default |
|--------|---------------------------------|-------------------|---------|
| P24199 | Reset Call Features (Profile 1) | 0 – No<br>1 – Yes | 0 – No  |
| P24399 | Reset Call Features (Profile 2) | 0 – No<br>1 – Yes | 0 – No  |

## FIRMWARE VERSION 1.0.11.7

### PRODUCT NAME

HT818

### DATE

04/22/2019

### FIRMWARE FILE INFORMATION

- HT818 firmware file name: ht818fw.bin  
MD5: 040091c585f34eec686ef1e468c61863

### ENHANCEMENT

- Added support for SIP keep-alive to use SIP NOTIFY.
- Added support to display CPU load on the device web STATUS page.
- Added feature "RFC2543 Hold". [RFC2543 Hold]
- Added feature "Idle Call Setup Action". [Idle Call Setup Action]
- Added feature "Call Record". [Call Record]
- Added feature "Use ARP to detect network connectivity". [USE ARP TO DETECT NETWORK CONNECTIVITY]

### BUG FIX

- Fixed when Enable 100rel feature set to Yes, device did not send PRACK in Allow header when sent 180 Ringing and lead to call failing between HT818 ports.
- Fixed device will not auto-reboot after factory reset via TR-069.
- Fixed cloned WAN MAC address does not take effect when the device mode is set to Bridge.
- Fixed device network LED will flash abnormally when plug in the network cable after unplugging the network cable for a while.
- Fixed device sends wrong time zone to the analog phone attached with device.
- Fixed the issue that no miniupnpd server is running.
- Correctly parse the STUNMaximumKeepAlivePeriod set to -1 and exchange the min and max.
- Fixed when enable UpnP support, no audio when making a call.
- Fixed PPPoE password is not hidden on device Web GUI.
- Fixed device security vulnerability that Pvalues could be configured via DHCP Options.
- Fixed device is freezing every few hours.
- Fixed device WAN port drops the network when device is operating in Bridge mode.
- Fixed when connected device LAN port with a PC, device will lose network connection after reboot.

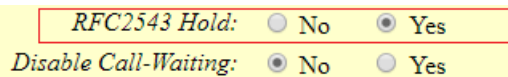
## NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

### RFC2543 Hold

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.



The screenshot shows two configuration options in a web interface. The first option, 'RFC2543 Hold:', has a radio button for 'No' and a selected radio button for 'Yes'. The second option, 'Disable Call-Waiting:', has a selected radio button for 'No' and a radio button for 'Yes'.

- Functionality**

This feature allows users to toggle between RFC2543 hold and RFC3261 hold. RFC2543 hold (0.0.0.0) allows user to disable the hold music sent to the other side. RFC3261 (a line) will play the hold music to the other side.

- New P Values**

| Pvalue | Description              | Value range       | Default |
|--------|--------------------------|-------------------|---------|
| P26062 | RFC2543 Hold (Profile 1) | 0 – No<br>1 – Yes | 1 – Yes |
| P26162 | RFC2543 Hold (Profile 2) | 0 – No<br>1 – Yes | 1 – Yes |

### Idle Call Setup Action

- Functionality**

This feature allows users to customize dial tone when user does not enter any digit. If the user picks up the handset without entering any digit, HT818 will behave in the following manner:

1. For the first 20 seconds, HT818 will play the configured dial tone.
2. If the user does not enter any digit during the first 20 seconds, HT818 will play the configured busy tone for 60 seconds, then go to silence after the busy tone.

This feature is configurable through config file or via SSH. No option in Web UI. Need to reboot device after configuration.

- New P Values**

| Pvalue | Description                          | Value range                                                                                                                      | Default      |
|--------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------|
| P28000 | Idle Call Setup Action 1 (Profile 1) | 0 – Continue<br>1 – Busy Tone<br>2 – Howler Tone<br>3 – CPC (disconnect)<br>4 – Reorder Tone<br>5 – Silence<br>6 – Stop Sequence | 0 – Continue |
| P28001 | Idle Call Setup Action 1 (Profile 2) | 0 – Continue<br>1 – Busy Tone<br>2 – Howler Tone                                                                                 | 0 – Continue |

|        |                                                  |                                                                                                                                  |                   |
|--------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------|
|        |                                                  | 3 – CPC (disconnect)<br>4 – Reorder Tone<br>5 – Silence<br>6 – Stop Sequence                                                     |                   |
| P28004 | Duration of Idle Call Setup Action 1 (Profile 1) | Min – 1 second<br>Max – 3600 seconds                                                                                             | 60                |
| P28005 | Duration of Idle Call Setup Action 1 (Profile 2) | Min – 1 second<br>Max – 3600 seconds                                                                                             | 60                |
| P28016 | Idle Call Setup Action 2 (Profile 1)             | 0 – Continue<br>1 – Busy Tone<br>2 – Howler Tone<br>3 – CPC (disconnect)<br>4 – Reorder Tone<br>5 – Silence<br>6 – Stop Sequence | 2 – Howler Tone   |
| P28017 | Idle Call Setup Action 2 (Profile 2)             | 0 – Continue<br>1 – Busy Tone<br>2 – Howler Tone<br>3 – CPC (disconnect)<br>4 – Reorder Tone<br>5 – Silence<br>6 – Stop Sequence | 2 – Howler Tone   |
| P28020 | Duration of Idle Call Setup Action 2 (Profile 1) | Min – 1 second<br>Max – 3600 seconds                                                                                             | 30                |
| P28021 | Duration of Idle Call Setup Action 2 (Profile 2) | Min – 1 second<br>Max – 3600 seconds                                                                                             | 30                |
| P28032 | Idle Call Setup Action 3 (Profile 1)             | 0 – Continue<br>1 – Busy Tone<br>2 – Howler Tone<br>3 – CPC (disconnect)<br>4 – Reorder Tone<br>5 – Silence<br>6 – Stop Sequence | 6 – Stop Sequence |
| P28033 | Idle Call Setup Action 3 (Profile 2)             | 0 – Continue<br>1 – Busy Tone<br>2 – Howler Tone<br>3 – CPC (disconnect)<br>4 – Reorder Tone<br>5 – Silence<br>6 – Stop Sequence | 6 – Stop Sequence |
| P28036 | Duration of Idle Call Setup Action 3 (Profile 1) | Min – 1 second                                                                                                                   | 1                 |

|        |                                                  |                                      |   |
|--------|--------------------------------------------------|--------------------------------------|---|
|        |                                                  | Max – 3600 seconds                   |   |
| P28037 | Duration of Idle Call Setup Action 3 (Profile 2) | Min – 1 second<br>Max – 3600 seconds | 1 |

## Call Record

- Web Configuration**

User can find the configuration in Web UI -> Status.

**Call Record:** Download

**Provision:** Not running, Last status : Firmware server is not configured.

**Core Dump:** Clean

- Functionality**

Allow user to download call history from the web GUI in CSV format. The file size limitation is 250KB. No more record will be stored if it reaches 250KB.

## USE ARP TO DETECT NETWORK CONNECTIVITY

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

*Use DNS to detect network connectivity:*    ☒ No    ☐ Yes

*Use ARP to detect network connectivity:*    ☐ No    ☒ Yes

- Functionality**

This feature allows use to control device network detection mechanism.

- New P Values**

| Pvalue | Description                            | Value range       | Default |
|--------|----------------------------------------|-------------------|---------|
| P8512  | Use ARP to detect network connectivity | 0 – No<br>1 – Yes | 1 – Yes |

## FIRMWARE VERSION 1.0.10.6

### PRODUCT NAME

HT818

### DATE

12/19/2018

### FIRMWARE FILE INFORMATION

- HT818 firmware file name: ht818fw.bin  
MD5: 3d563fbade00e4f61f9e07ae1c49ad31

### ENHANCEMENT

- Added feature "Visual MWI Type". [VISUAL MWI TYPE]
- Added feature "Disable Unknown Caller ID". [DISABLE UNKNOWN CALLER ID]
- Added feature "Disable # as Redial Key". [DISABLE # as REDIAL KEY]
- Added feature "Ring Frequency". [RING FREQUENCY]
- Added feature "Allow SIP Factory Reset". [ALLOW SIP FACTORY RESET]
- Added feature "Management Interface". [MANAGEMENT INTERFACE]
- Added Web menu in Spanish.
- For TR-069, added objects for FXS ports configuration.
- Added support to display WAN/LAN port cable status on the Web UI.

### BUG FIX

- Fixed call failed when Enable 100rel feature set to Yes.
- Fixed device could response "invite sipaaa" request when enable Validate Incoming SIP Message feature.
- Fixed device will crash if sip server configured as [IPv6 address]:port when Internet Protocol set to IPv6 Only and use STUN.
- Fixed when set Internet Protocol to IPv6 only, device voice prompt menu prompts wrong DNS server address.
- Fixed device failed to register to the second IP of SRV records.
- Fixed device voice prompt menu 15 (Upgrade Protocol) does not support FTP and FTPS methods.
- Fixed SIP User ID and Authenticate ID is not configurable for TR-069.
- Fixed for TR-069, device applies SetParameterValues even the parameter is invalid.
- Fixed device failed in getting IP address when the gateway IP is changed.
- Set the MAC address on syslog message to be lowercase.
- Fixed device IP configuration via SSH does not working.
- Fixed when set device hunting group to circular mode, device will drop the call once the last hunting group member is reached.

## NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

### VISUAL MWI TYPE

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Disable Visual MWI:* ☒ No ☐ Yes  
*Visual MWI Type:* ☒ FSK ☐ NEON

- Functionality**

This feature allows use to configure Visual WMI Type.

- New P Values**

| Pvalue | Description                 | Value range         | Default |
|--------|-----------------------------|---------------------|---------|
| P4371  | Visual MWI Type (Profile 1) | 1 – FSK<br>2 - NEON | 1 - FSK |
| P4372  | Visual MWI Type (Profile 2) | 1 – FSK<br>2 - NEON | 1 - FSK |

### DISABLE UNKNOWN CALLER ID

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*DTMF Caller ID:* Start Tone  Stop Tone   
*Disable Unknown Caller ID:* ☒ No ☐ Yes

- Functionality**

This feature allows users to disable the analog phone's caller ID when the device receive a call with Anonymous, unavailable or unknown as FROM USER and without Display-INFO.

- New P Values**

| Pvalue | Description                           | Value range       | Default |
|--------|---------------------------------------|-------------------|---------|
| P28153 | Disable Unknown Caller ID (Profile 1) | 0 - No<br>1 - Yes | 0 – No  |
| P28154 | Disable Unknown Caller ID (Profile 2) | 0 - No<br>1 - Yes | 0 - No  |

### DISABLE # as REDIAL KEY

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Use # as Dial Key:* ☐ No ☒ Yes (if set to Yes, "#" will function as the "(Re-)Dial" key)  
*Disable # as Redial Key:* ☒ No ☐ Yes (if set to Yes, "#" will not function as ReDial key)

- **Functionality**

With this feature and feature 'Use # as Dial Key' set to Yes, the # key will act as dial key but not as redial key.

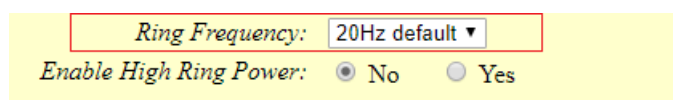
- **New P Values**

| Pvalue | Description                         | Value range       | Default |
|--------|-------------------------------------|-------------------|---------|
| P28147 | Disable # as Redial Key (Profile 1) | 0 - No<br>1 - Yes | 0 - No  |
| P28148 | Disable # as Redial Key (Profile 2) | 0 - No<br>1 - Yes | 0 - No  |

## RING FREQUENCY

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.



Ring Frequency: 20Hz default ▾  
 Enable High Ring Power: ☒ No ☐ Yes

- **Functionality**

This feature allows user to customize ring frequency

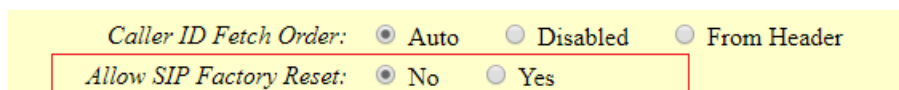
- **New P Values**

| Pvalue | Description                | Value range                    | Default           |
|--------|----------------------------|--------------------------------|-------------------|
| P4429  | Ring Frequency (Profile 1) | 20 – 20Hz default<br>25 – 25Hz | 20 – 20Hz default |
| P4430  | Ring Frequency (Profile 2) | 20 – 20Hz default<br>25 – 25Hz | 20 – 20Hz default |

## ALLOW SIP FACTORY RESET

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.



Caller ID Fetch Order: ☒ Auto ☐ Disabled ☐ From Header  
 Allow SIP Factory Reset: ☒ No ☐ Yes

- **Functionality**

This feature allows user to reset the devices directly through SIP Notify.

- **New P Values**

| Pvalue | Description                         | Value range       | Default |
|--------|-------------------------------------|-------------------|---------|
| P26015 | Allow SIP Factory Reset (Profile 1) | 0 – No<br>1 – Yes | 0 - No  |
| P26115 | Allow SIP Factory Reset (Profile 2) | 0 – No<br>1 – Yes | 0 - No  |

## MANAGEMENT INTERFACE

- Web Configuration**

User can find the configuration in Web UI -> Basic Settings.

**Enable Management Interface:** ☒ No ☐ Yes

**Management Access:** Management Interface Only ▼

**Management Interface IPv4 Address:** 802.1Q/VLAN Tag  (0-4094)  
 802.1p priority value  (0-7)

☒ dynamically assigned via DHCP  
☐ statically configured as:

*IP Address:*   
*Subnet Mask:*   
*Default Router:*   
*DNS Server 1:*   
*DNS Server 2:*

- Functionality**

- Allow administrator to setup a Virtual Network Interface on top of the physical interface for device management.

- New P Values**

| Pvalue | Description                                           | Value range                                                                  | Default                           |
|--------|-------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------|
| P28161 | Enable Management Interface                           | 0 – No<br>1 - Yes                                                            | 0 – Disabled                      |
| P28162 | Management Access                                     | 0 – Management Interface Only<br>1 – Both Services and Management Interfaces | 0 – Management Interface Only     |
| P22105 | Voice VLAN Type                                       | 0 – dynamically assigned via DHCP<br>1 – statically configured as            | 0 - dynamically assigned via DHCP |
| P22106 | IP Address                                            | IP Format                                                                    | 192.168.100.100                   |
| P22107 | Subnet Mask                                           | IP Format                                                                    | 255.255.255.0                     |
| P22108 | Default Router                                        | IP Format                                                                    | 192.168.100.1                     |
| P22109 | DNS Server 1                                          | IP Format                                                                    | 0.0.0.0                           |
| P22110 | DNS Server 2                                          | IP Format                                                                    | 0.0.0.0                           |
| P22111 | Management Interface IPv4 Address:<br>802.1Q/VLAN Tag | 0 – Minimum<br>4094 – Maximum                                                | 0                                 |

|        |                                                             |                            |   |
|--------|-------------------------------------------------------------|----------------------------|---|
| P22112 | Management Interface IPv4 Address:<br>802.1p priority value | 0 – Minimum<br>7 – Maximum | 0 |
|--------|-------------------------------------------------------------|----------------------------|---|

## FIRMWARE VERSION 1.0.9.3

### PRODUCT NAME

HT818

### DATE

07/30/2018

### FIRMWARE FILE INFORMATION

- Firmware file name: ht818fw.bin
- MD5: 48b277ace2300ec334c5ffc412ce98c6

### ENHANCEMENT

- Added support for call waiting tone to be repeated while the caller is still calling.
- Added support for G722 (wide-band) codec.
- Added support for FTP/FTPS for provision and firmware upgrade.
- Added feature "Conference Party Hangup Tone". [CONFERENCE PARTY HANGUP]

### BUG FIX

- Fixed NAT is not working in PPPoE.
- Fixed in RFC2833 mode, DTMF tone could not be recognized by PBX.
- Fixed device will play short dial tone after the first digit has been dialed using the pulse dialing mode.
- Fixed device sometimes would send a wrong number when using pulse dialing mode.
- Fixed DTMF tone is not heard on analog phone behind FXS port.
- Fixed when device enable "Remove OBP from Route Header" function, device will add OBP header on INVITE/REGISTER message when device using backup outbound proxy.
- Fixed device failed in provisioning Custom Certificate.

### NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

#### CONFERENCE PARTY HANGUP TONE

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

*Prompt Tone:*

f1=350@-17,f2=440@-17,c=0/0;

*Conference Party Hangup*

*Tone:*

f1=425@-15,c=600/600;

Syntax: f1=val[,f2=val[,c=on1/off1[-on2/off2[-on3/off3]]]]; (Frequencies are in (300, 3400) Hz and cadence on and off are in (0, 64000) ms)

- **Functionality**

This feature allows users to customize the tone to be played when a party leave the established conference. User need to set Special Feature (PROFILE ->Special Feature) to MTS to use this function.

- **New P Values**

| Pvalue | Description                  | Value range                                                  | Default               |
|--------|------------------------------|--------------------------------------------------------------|-----------------------|
| P28133 | Conference Party Hangup Tone | Frequency: (300,3400) Hz<br>Cadence on and off: (0,64000) ms | f1=425@-15,c=600/600; |

## FIRMWARE VERSION 1.0.8.7

### PRODUCT NAME

HT818

### DATE

04/17/2018

### FIRMWARE FILE INFORMATION

- Firmware file name: ht818fw.bin
- MD5: 330769490e81198bd6907c14a243da1c

### ENHANCEMENT

- Added feature “Custom Certificate”. [CUSTOM CERTIFICATE]
- Added feature “Use P-Access-Network-Info Header”. [USE P-ACCESS-NETWORK-INFO HEADER]
- Added feature “Use P-Emergency-Info Header”. [USE P-EMERGENCY-INFO HEADER]
- Added support for “Blacklist for Incoming Calls”. [BLACKLIST FOR INCOMING CALLS]
- Added feature “Play busy/reorder tone before Loop Current Disconnect”. [PLAY BUSY/REORDER TONE BEFORE LOOP CURRENT DISCONNECT]

### BUG FIX

- Fixed device IPv4 option 42 and IPv6 option 31 do not take effect.
- Fixed device option 66 does not take effect properly.
- Fixed device does not receive connection request from ACS.
- Fixed device failed on changing the ring frequency and removed “Ring Frequency” from web UI.
- Change “Validate Server Certificates” default value to No.
- Fixed Caller ID Display did not work with distinctive ringtone.
- Fixed device sent out unselected syslog levels messages.
- Fixed device could not hear voice when playing call waiting tone.
- Fixed device did not resolve backup outbound proxy domain.
- Fixed device DNS query malfunctioning.
- Fixed device failed to register with two-way TLS.

### NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user’s point of view.

#### CUSTOM CERTIFICATE

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

*SIP TLS Private Key Password:*

*Custom Certificate:*  
*(Private Key + Certificate)*

- **Functionality**

This feature allows users to update to the device their own certificate signed by custom CA certificate to manage client authentication.

- **New P Values**

| Pvalue | Description                                       | Value range               | Default |
|--------|---------------------------------------------------|---------------------------|---------|
| P8472  | Custom Certificate<br>(Private Key + Certificate) | 10 - Rows<br>64 - Columns | Null    |

### USE P-ACCESS-NETWORK-INFO HEADER

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Use P-Preferred-Identity Header:* ☒ Default ☐ No ☐ Yes

*Use P-Access-Network-Info Header:* ☐ No ☒ Yes

*Use P-Emergency-Info Header:* ☐ No ☒ Yes

- **Functionality**

With this feature enabled, device will populate the WAN access node with IEE-802.11a, IEE-802.11b in P-Access-Network-Info SIP header.

- **New P Values**

| Pvalue | Description                                     | Value range       | Default |
|--------|-------------------------------------------------|-------------------|---------|
| P26058 | Use P-Access-Network-Info Header<br>(Profile 1) | 0 - No<br>1 - Yes | 1 - Yes |
| P26158 | Use P-Access-Network-Info Header<br>(Profile 2) | 0 - No<br>1 - Yes | 1 - Yes |

### USE P-EMERGENCY-INFO HEADER

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

*Use P-Preferred-Identity Header:* ☒ Default ☐ No ☐ Yes  
*Use P-Access-Network-Info Header:* ☐ No ☒ Yes  
*Use P-Emergency-Info Header:* ☐ No ☒ Yes

- **Functionality**

This feature support of IEEE-48-addr and IEEE-EUI-64 in SIP header for emergency calls.

- **New P Values**

| Pvalue | Description                             | Value range       | Default |
|--------|-----------------------------------------|-------------------|---------|
| P26059 | Use P-Emergency-Info Header (Profile 1) | 0 - No<br>1 - Yes | 1 - Yes |
| P26159 | Use P-Emergency-Info Header (Profile 2) | 0 - No<br>1 - Yes | 1 - Yes |

## BLACKLIST FOR INCOMING CALLS

- **Web Configuration**

User can find the configuration section at Web -> Advanced Settings.

*Blacklist For Incoming Calls:*

- **Functionality**

Allow users to block incoming calls from specific list of numbers. Maximum allow 10 SIP numbers and each number should be separated by a comma (',') in webUI. Other allowed characters are 0-9, 26 letters (A-Z and a-z), comma (','), asterisk ('\*'), pound sign ('#') and plus sign ('+').

- **New P Values**

| Pvalue | Description                  | Value range                      | Default |
|--------|------------------------------|----------------------------------|---------|
| P28127 | Blacklist For Incoming Calls | 10 – Maximum allowed SIP numbers | Null    |

## PLAY BUSY/REORDER TONE BEFORE LOOP CURRENT DISCONNECT

- **Web Configuration**

User can find the configuration section at Web -> Profile Settings.

*Play busy/reorder tone before Loop Current Disconnect: fail)* ☒ No ☐ Yes (play busy/reorder tone before loop current disconnect upon call

- **Functionality**

Allow user to configure if it will play busy/reorder tone before loop current disconnect upon call fail. Default

is No.

- **New P Values**

| Pvalue | Description                                                           | Value range       | Default |
|--------|-----------------------------------------------------------------------|-------------------|---------|
| P21925 | Play busy/reorder tone before Loop Current Disconnect.<br>(Profile 1) | 0 - No<br>1 – Yes | 0 – No  |
| P21926 | Play busy/reorder tone before Loop Current Disconnect<br>(Profile 2)  | 0 - No<br>1 – Yes | 0 – No  |