HT818 Firmware Release Notes

Table of Content

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

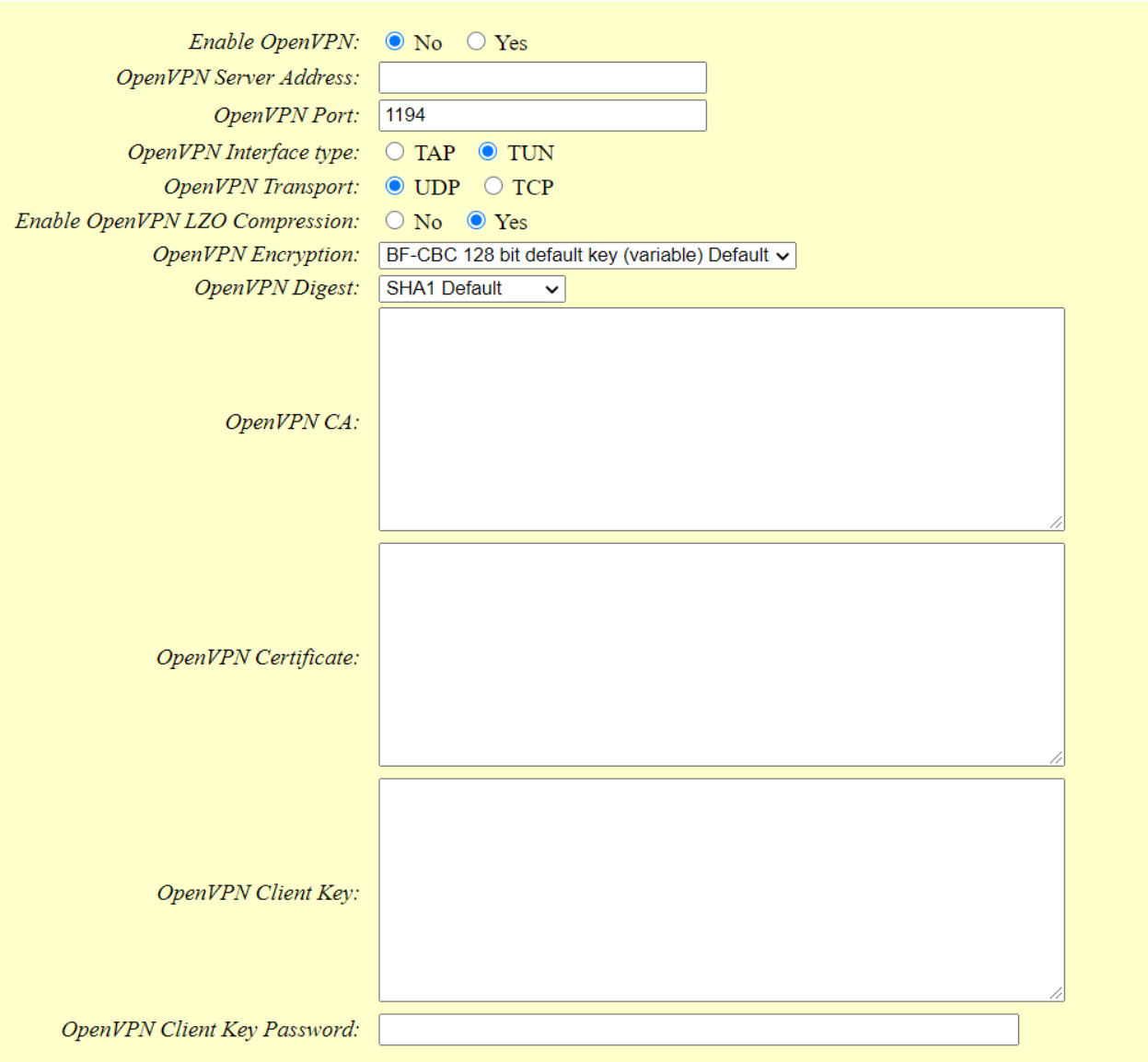
NEW FEATURES OVERVIEW

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.



- **Functionality**

This feature allows users to configure OpenVPN.

- **New P Values**

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

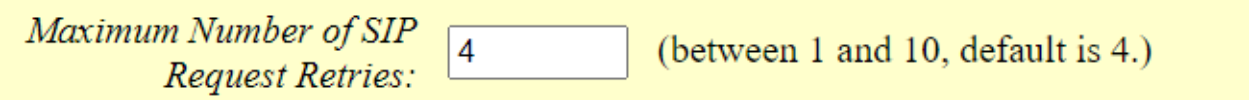
P20714	OpenVPN Interface type	tap – TAP tun – TUN	tap – TAP
P2912	OpenVPN Transport	udp – UDP tcp – TCP	udp – UDP
P20716	Enable OpenVPN LZO Compression	0 – No 1 – Yes	1 - Yes
P20717	OpenVPN Encryption	BF-CBC - BF-CBC 128 bit default key (variable) Default DES-CBC - DES-CBC 64 bit default key (fixed)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

		DSA – DSA RIPEMD160 - RIPEMD160 RSA-RIPEMD160 - RSA-RIPEMD160 MD4 - MD4 RSA-MD4 - RSA-MD4 ecdsa-with-SHA1 - ecdsa-with-SHA1 RSA-SHA256 - RSA-SHA256 RSA-SHA384 - RSA-SHA384 RSA-SHA512 - RSA-SHA512 RSA-SHA224 - RSA-SHA224 SHA256 - SHA256 SHA384 - SHA384 SHA512 - SHA512 SHA224 - SHA244 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.



- **Functionality**

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

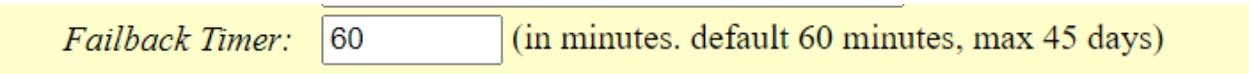
- **New P Values**

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

FAILBACK TIMER

- **Web Configuration**

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



- **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 Max: 64800	60
P60156	Failback Timer (Profile 2)	Min: 60 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

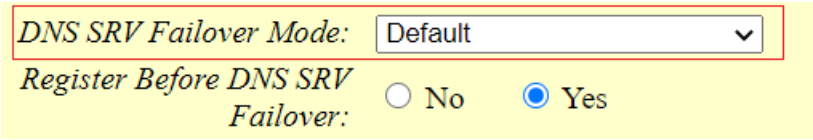
NEW FEATURES OVERVIEW

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.



- **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.

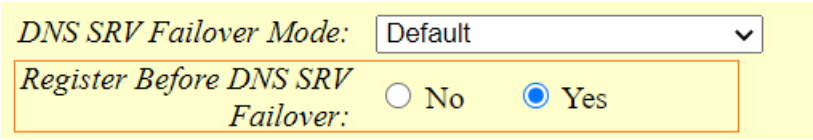
- **New P Values**

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



- **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 1 – Yes	0 – No
P29195	Register Before DNS SRV Failover (Profile 2)	0 – No 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.

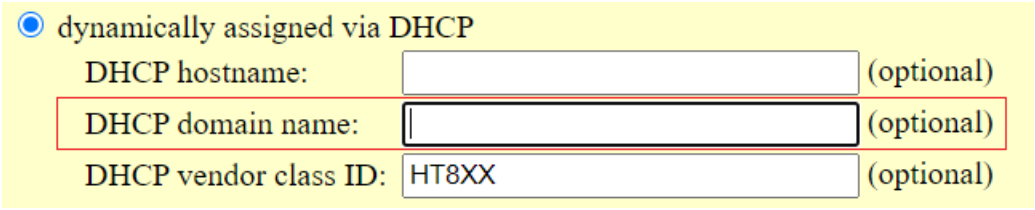
NEW FEATURES OVERVIEW

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.



- **Functionality**

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

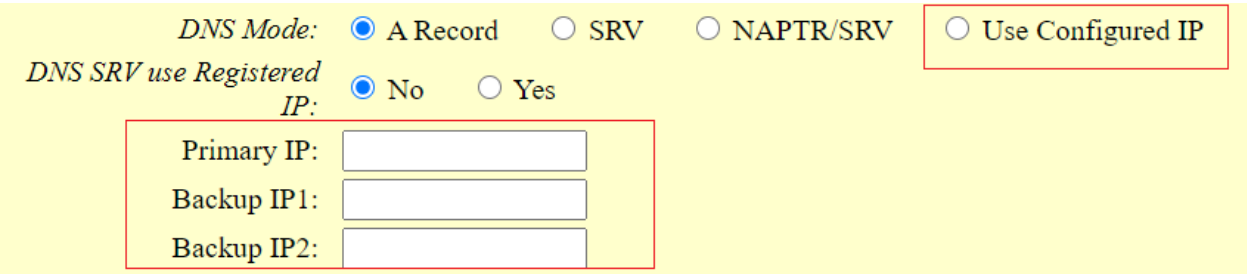
- **New P Values**

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.



- **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 unregistered: ◉ No ○ Yes (If set to Yes, busy tone will be played when user goes offhook from an 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 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/Profie2 (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.
- Fisxed 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."

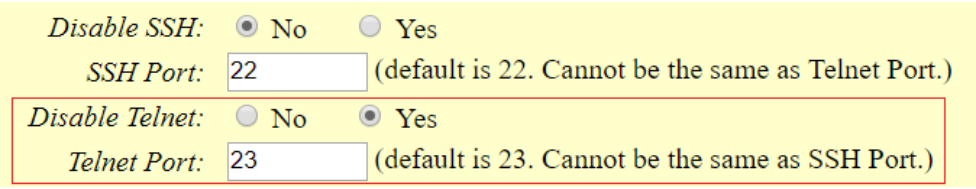
NEW FEATURES OVERVIEW

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.



- **Functionality**

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

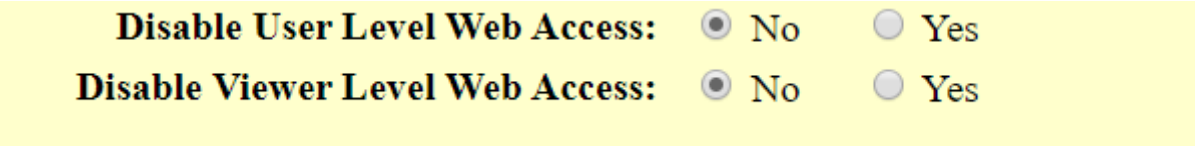
- **New P Values**

Pvalue	Description	Value range	Default
P28120	Disable Telnet	0 - No 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.



- **Functionality**

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

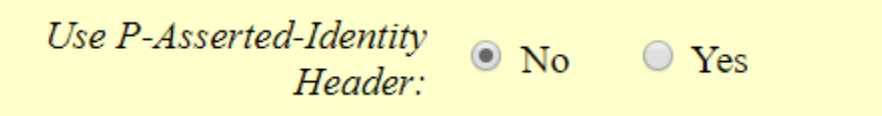
- **New P Values**

Pvalue	Description	Value range	Default
P28158	Disable User Level Web Access	0 – No 1 – Yes	0 – No
P28159	Disable Viewer Level Web Access	0 – No 1 – Yes	0 – No

USE P-ASSERTED-IDENTITY HEADER

- **Web Configuration**

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



- **Functionality**

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

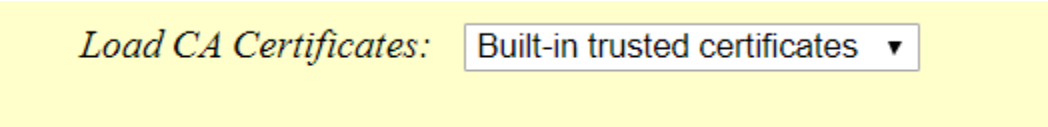
- **New P Values**

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

LOAD CA CERTIFICATES

- **Web Configuration**

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



- **Functionality**

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

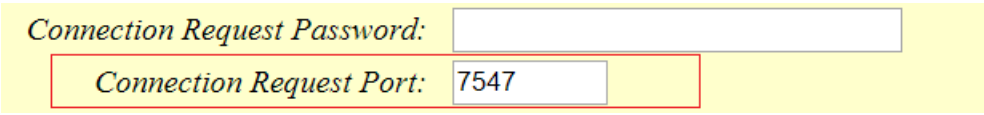
- **New P Values**

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

CONNECTION REQUEST PORT

- **Web Configuration**

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



- **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.

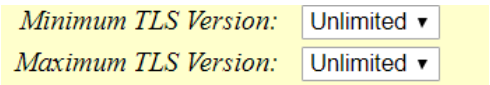
NEW FEATURES OVERVIEW

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.



- **Functionality**

These features allow customer to choose desired TLS Version.

- **New P Values**

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

- **Functionality**
- Allow users to customize the Syslog Protocol.

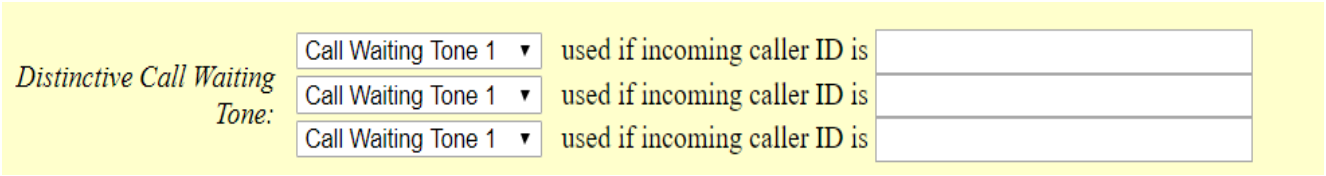
- **New P Values**

Pvalue	Description	Value range	Default
P8402	Syslog Protocol	0 – UDP 1 – SSL/TLS	0 – UDP

DISTINCTIVE CALL WAITING TONE

- **Web Configuration**

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



- **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 1 – Call Waiting Tone 2 2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5 5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9 10 – Call Waiting Tone 10	0 – Call Waiting Tone 1
P29077	Used if incoming caller ID is (Profile 1)	64 – Max String Length	Null

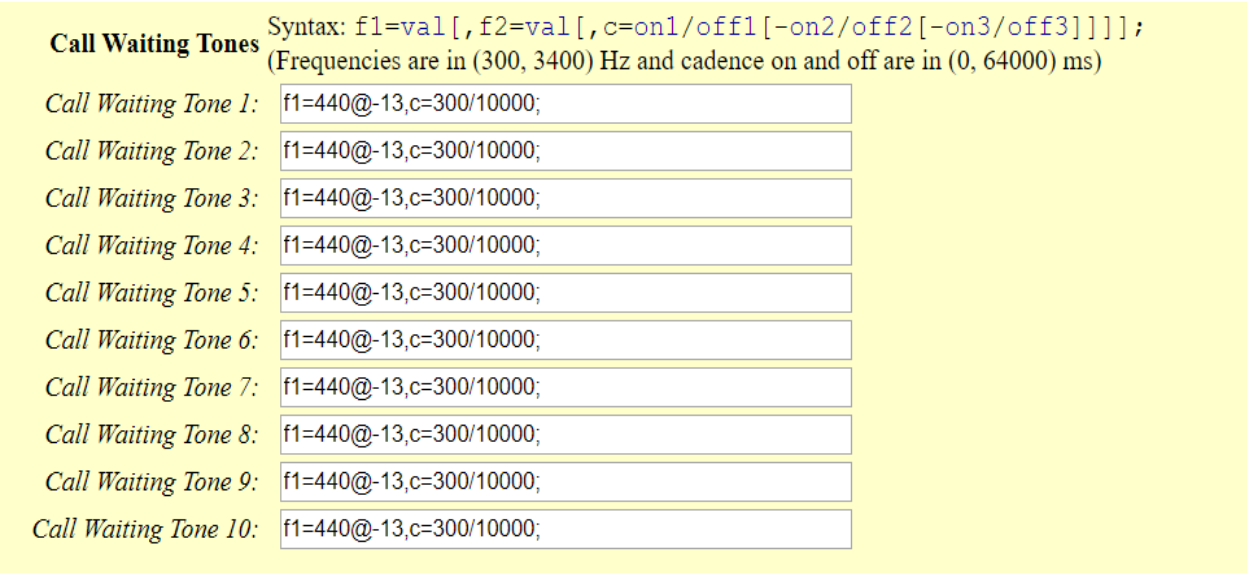
P29075	Call Waiting Tone Choice 2 (Profile 1)	0 – Call Waiting Tone 1 1 – Call Waiting Tone 2 2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5 5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9 10 – Call Waiting Tone 10	0 – Call Waiting 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 1 – Call Waiting Tone 2 2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5 5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9 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 1 – Call Waiting Tone 2 2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5 5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9 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 1 – Call Waiting Tone 2 2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5	0 – Call Waiting Tone 1

		5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9 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 1 – Call Waiting Tone 2 2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5 5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9 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.



- **Functionality**

This feature allows user to customize call waiting tone.

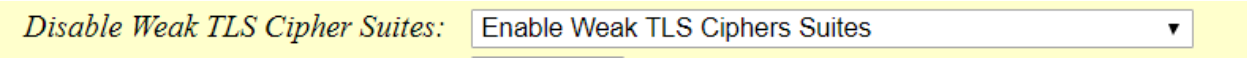
- **New P Values**

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.



- **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 1 – Disable Symmetric Encryption RC4/DES/3DES 2 - Disable Symmetric Encryption SEED 3 - Disable All Of The Above Weak	0 – Enable Weak TLS Ciphers Suites

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

FIRMWARE VERSION 1.0.13.7

PRODUCT NAME

HT818

DATE

07/15/2019

FIRMWARE FILE INFORMATION

- HT818 firmware file name: ht818fw.bin
  MD5: fdecb7bdffbada3cf621e23b38f7fba2

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: 16

Disable SRTP: 17

SRTP per call Feature: ○ No ◉ Yes

Enable SRTP per call: 18

Disable SRTP per call: 19

CID Feature: ○ No ◉ Yes

Enable CID: 31

Disable CID: 30

CID per call Feature: ○ No ◉ Yes

Enable CID per call: 82

Disable CID per call: 67

Direct IP Calling Feature: ○ No ◉ Yes

Direct IP Calling: 47

CW Feature: ○ No ◉ Yes

Enable CW: 51

Disable CW: 50

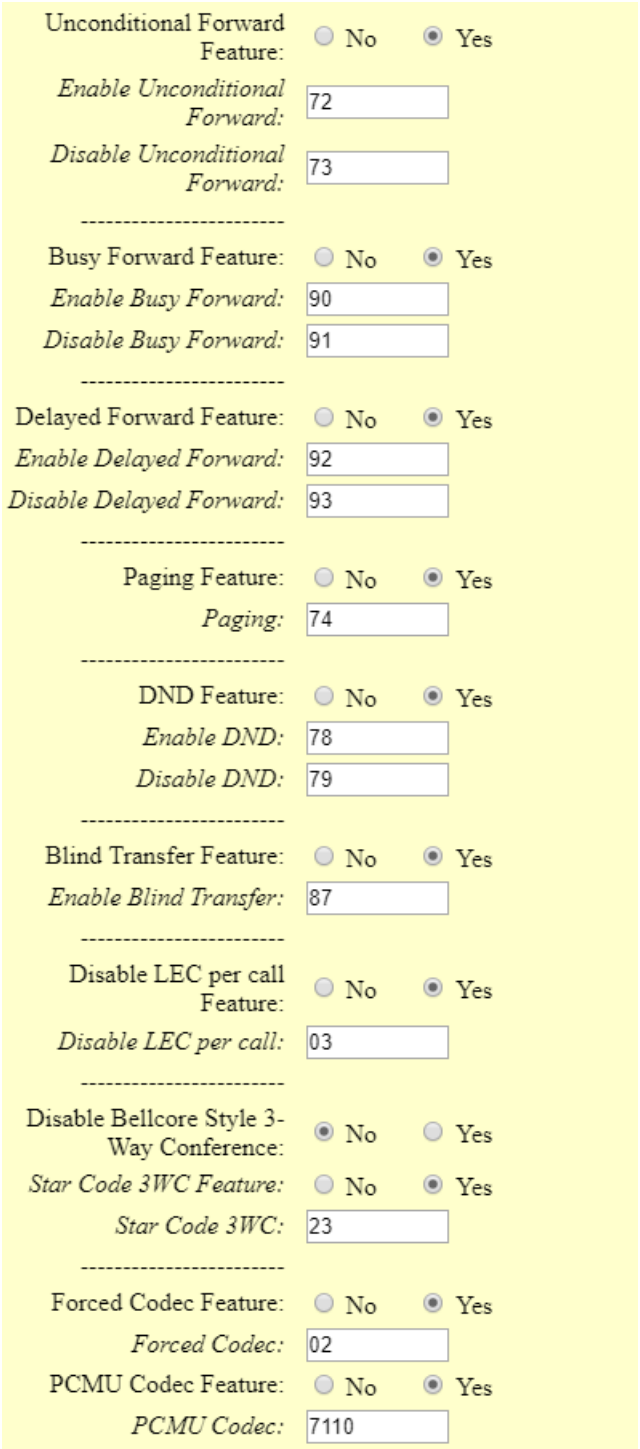
CW per call Feature: ○ No ◉ Yes

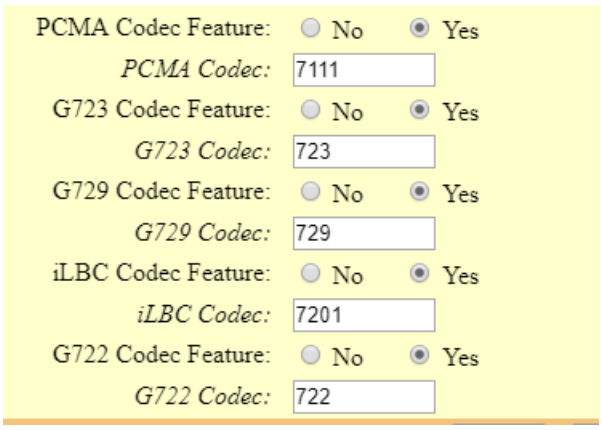
Enable CW per call: 71

Disable CW per call: 70

Call Return Feature: ○ No ◉ Yes

Call Return: 69


Unconditional Forward Feature: No Yes
Enable Unconditional Forward: 72
Disable Unconditional Forward: 73
Busy Forward Feature: No Yes
Enable Busy Forward: 90
Disable Busy Forward: 91
Delayed Forward Feature: No Yes
Enable Delayed Forward: 92
Disable Delayed Forward: 93
Paging Feature: No Yes
Paging: 74
DND Feature: No Yes
Enable DND: 78
Disable DND: 79
Blind Transfer Feature: No Yes
Enable Blind Transfer: 87
Disable LEC per call Feature: No Yes
Disable LEC per call: 03
Disable Bellcore Style 3-Way Conference: No Yes
Star Code 3WC Feature: No Yes
Star Code 3WC: 23
Forced Codec Feature: No Yes
Forced Codec: 02
PCMU Codec Feature: No Yes
PCMU Codec: 7110



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

Pvalue	Description	Value range	Default
P191	Enable Call Features (Profile 1)	0 – No 1 – Yes 2 – Enable All	1 – Yes
P24060	SRTP Feature (Profile 1)	0 – No 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 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 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 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 1 – Yes	1 – Yes
P24007	Direct IP Calling (Profile 1)	Number	47
P24064	CW Feature (Profile 1)	0 – No 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 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 1 – Yes	1 – Yes
P24011	Call Return (Profile 1)	Number	69
P24068	Unconditional Forward Feature (Profile 1)	0 – No 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 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 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 1 – Yes	1 – Yes
P24016	Paging (Profile 1)	Number	74
P24070	DND Feature (Profile 1)	0 – No 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 1 – Yes	1 – Yes
P24020	Enable Blind Transfer (Profile 1)	Number	87
P24074	Disable LEC per call Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24025	Disable LEC per call (Profile 1)	Number	03
P24075	Star Code 3WC Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24026	Star Code 3WC (Profile 1)	Number	23
P24059	Forced Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes

P24000	Forced Codec (Profile 1)	Number	02
P24076	PCMU Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24027	PCMU Codec (Profile 1)	Number	7110
P24077	PCMA Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24028	PCMA Codec (Profile 1)	Number	7111
P24078	G723 Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24029	G723 Codec (Profile 1)	Number	723
P24079	G729 Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24030	G729 Codec (Profile 1)	Number	729
P24084	iLBC Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24035	iLBC Codec (Profile 1)	Number	7201
P24085	G722 Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24036	G722 Codec (Profile 1)	Number	722
P751	Enable Call Features (Profile 2)	0 – No 1 – Yes 2 – Enable All	1 – Yes
P24260	SRTP Feature (Profile 2)	0 – No 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 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 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 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 1 – Yes	1 – Yes

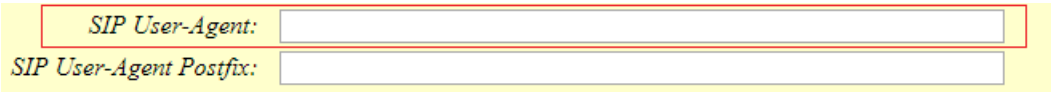
P24207	Direct IP Calling (Profile 2)	Number	47
P24264	CW Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24209	Enable CW (Profile 2)	Number	51
P24208	Disable CW (Profile 2)	Number	50
P24267	CW per call Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24213	Enable CW per call (Profile 2)	Number	71
P24212	Disable CW per call (Profile 2)	Number	70
P24266	Call Return Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24211	Call Return (Profile 2)	Number	69
P24268	Unconditional Forward Feature (Profile 2)	0 – No 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 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 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 1 – Yes	1 – Yes
P24216	Paging (Profile 2)	Number	74
P24270	DND Feature (Profile 2)	0 – No 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 1 – Yes	1 – Yes
P24220	Enable Blind Transfer (Profile 2)	Number	87
P24274	Disable LEC per call Feature (Profile 2)	0 – No 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 1 – Yes	1 – Yes
P24200	Forced Codec (Profile 2)	Number	02
P24276	PCMU Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24227	PCMU Codec (Profile 2)	Number	7110
P24277	PCMA Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24228	PCMA Codec (Profile 2)	Number	7111
P24278	G723 Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24229	G723 Codec (Profile 2)	Number	723
P24279	G729 Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24230	G729 Codec (Profile 2)	Number	729
P24284	iLBC Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24235	iLBC Codec (Profile 2)	Number	7201
P24285	G722 Codec Feature (Profile 2)	0 – No 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.



- **Functionality**

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

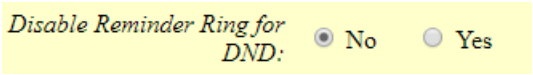
- **New P Values**

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.



- **Functionality**

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

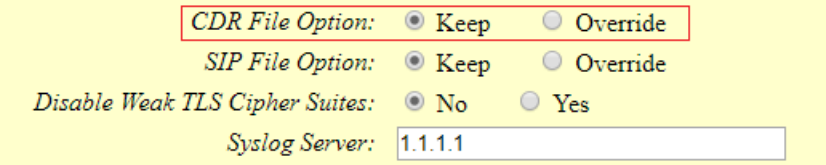
- **New P Values**

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

CDR FILE OPTION

- **Web Configuration**

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



- **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.

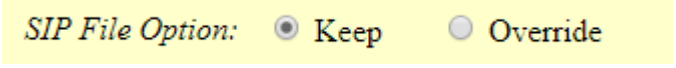
- **New P Values**

Pvalue	Description	Value range	Default
P8534	CDR File Option	0 – Keep 1 – Override	0 – Keep

SIP FILE OPTION

- **Web Configuration**

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



- **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.

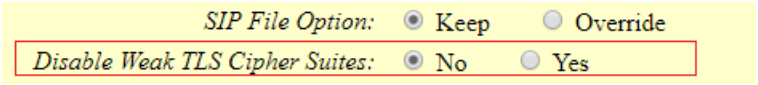
- **New P Values**

Pvalue	Description	Value range	Default
P8535	SIP File Option	0 – Keep 1 – Override	0 – Keep

DISABLE WEAK TLS CIPHER SUITES

- **Web Configuration**

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



- **Functionality**

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

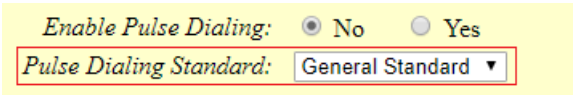
- **New P Values**

Pvalue	Description	Value range	Default
P8536	Disable Weak TLS Cipher Suites	0 – No 1 – Yes	0 – No

PULSE DIALING STANDARD

- **Web Configuration**

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



- **Functionality**

This feature allows users to use Swedish pulse dialing standard.

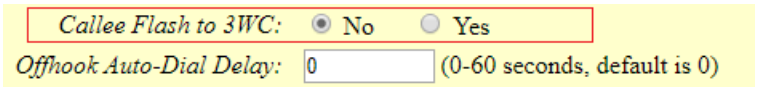
- **New P Values**

Pvalue	Description	Value range	Default
P28165	Pulse Dialing Standard (Profile 1)	0 – General Standard 1 – Swedish Standard	0 – General Standard
P28166	Pulse Dialing Standard (Profile 2)	0 – General Standard 1 – Swedish Standard	0 – General Standard

CALLEE FLASH TO 3WC

- **Web Configuration**

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



- **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.

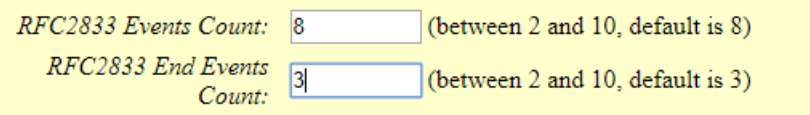
- **New P Values**

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

RFC2833 COUNT

- **Web Configuration**

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



- **Functionality**

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

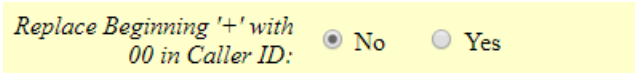
- **New P Values**

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

REPLACE BEGINNING '+' WITH 00 IN CALLER ID

- **Web Configuration**

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



- **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**

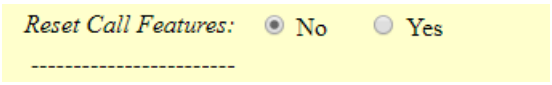
Pvalue	Description	Value range	Default

P29073	Replace Beginning '+' with 00 in Caller ID (Profile 1)	0 – No 1 – Yes	0 – No
P29173	Replace Beginning '+' with 00 in Caller ID (Profile 2)	0 – No 1 – Yes	0 – No

RESET CALL FEATURES

- **Web Configuration**

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



- **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 1 – Yes	0 – No
P24399	Reset Call Features (Profile 2)	0 – No 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.

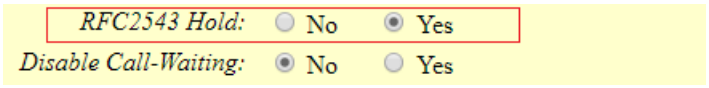
NEW FEATURES OVERVIEW

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.



- **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 1 – Yes	1 – Yes
P26162	RFC2543 Hold (Profile 2)	0 – No 1 – Yes	1 – Yes

Idle Call Setup Action

- **Functionality**

This feature allows users to customize dial tone when user dose 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 potion 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 1 – Busy Tone 2 – Howler Tone 3 – CPC (disconnect) 4 – Reorder Tone 5 – Silence 6 – Stop Sequence	0 – Continue
P28001	Idle Call Setup Action 1 (Profile 2)	0 – Continue 1 – Busy Tone 2 – Howler Tone	0 – Continue

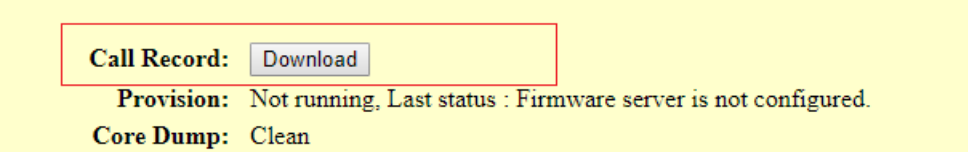
		3 – CPC (disconnect) 4 – Reorder Tone 5 – Silence 6 – Stop Sequence	
P28004	Duration of Idle Call Setup Action 1 (Profile 1)	Min – 1 second Max – 3600 seconds	60
P28005	Duration of Idle Call Setup Action 1 (Profile 2)	Min – 1 second Max – 3600 seconds	60
P28016	Idle Call Setup Action 2 (Profile 1)	0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

Call Record

- **Web Configuration**

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



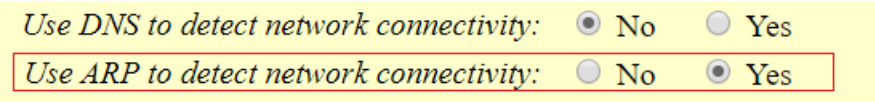
- **Functionality**

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.



- **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 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.

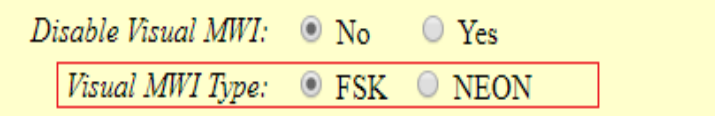
NEW FEATURES OVERVIEW

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.



- **Functionality**

This feature allows use to configure Visual WMI Type.

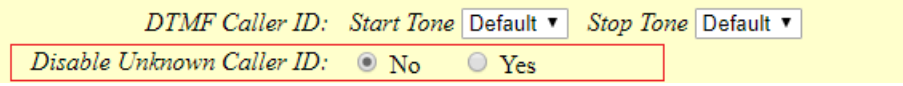
- **New P Values**

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

DISABLE UNKNOWN CALLER ID

- **Web Configuration**

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



- **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.

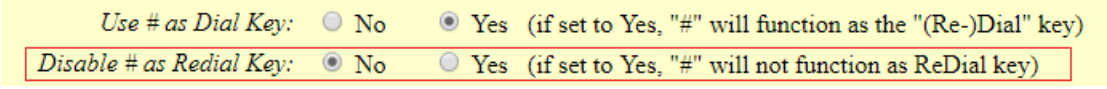
- **New P Values**

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

DISABLE # as REDIAL KEY

- **Web Configuration**

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



- **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.

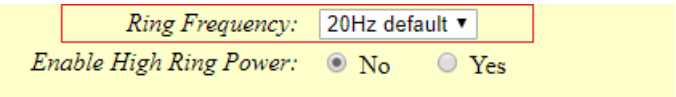
- **New P Values**

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

RING FREQUENCY

- **Web Configuration**

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



- **Functionality**

This feature allows user to customize ring frequency

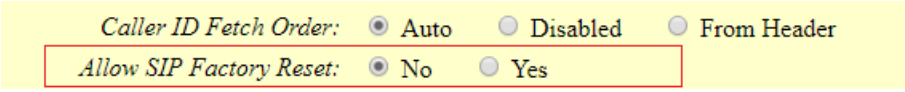
- **New P Values**

Pvalue	Description	Value range	Default
P4429	Ring Frequency (Profile 1)	20 – 20Hz default 25 – 25Hz	20 – 20Hz default
P4430	Ring Frequency (Profile 2)	20 – 20Hz default 25 – 25Hz	20 – 20Hz default

ALLOW SIP FACTORY RESET

- **Web Configuration**

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



- **Functionality**

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

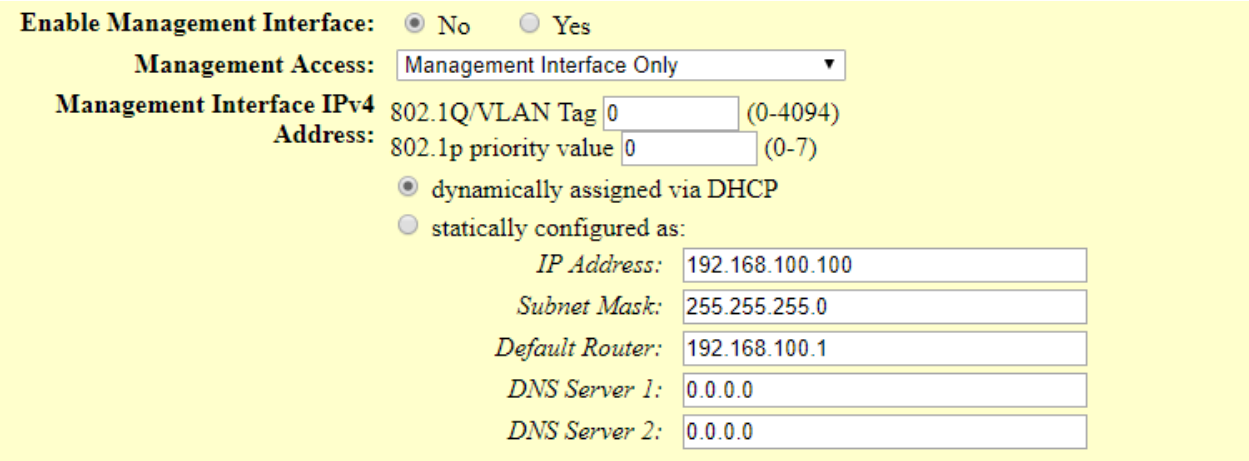
- **New P Values**

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

MANAGEMENT INTERFACE

- **Web Configuration**

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



- **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 1 - Yes	0 – Disabled
P28162	Management Access	0 – Management Interface Only 1 – Both Services and Management Interfaces	0 – Management Interface Only
P22105	Voice VLAN Type	0 – dynamically assigned via DHCP 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: 802.1Q/VLAN Tag	0 – Minimum 4094 – Maximum	0

P22112	Management Interface IPv4 Address: 802.1p priority value	0 – Minimum 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.

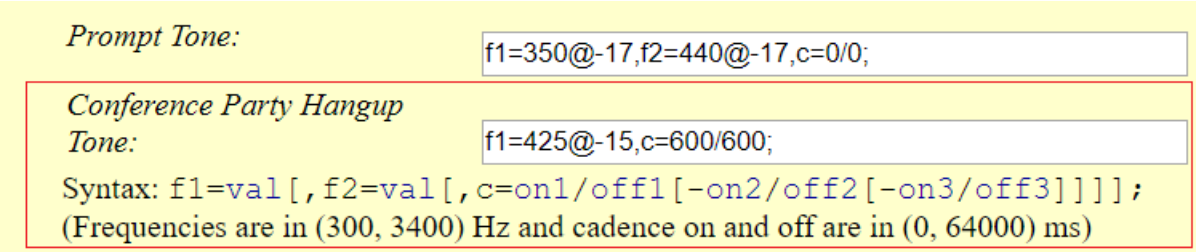
NEW FEATURES OVERVIEW

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.



- **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 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.

- **Functionality**

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

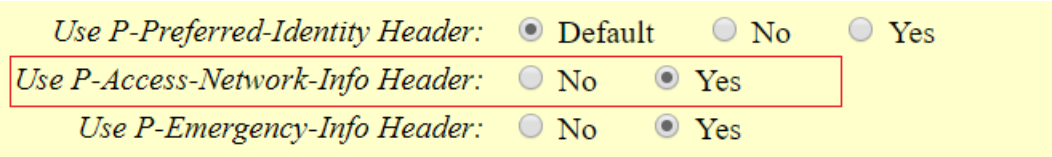
- **New P Values**

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

USE P-ACCESS-NETWORK-INFO HEADER

- **Web Configuration**

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



- **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.

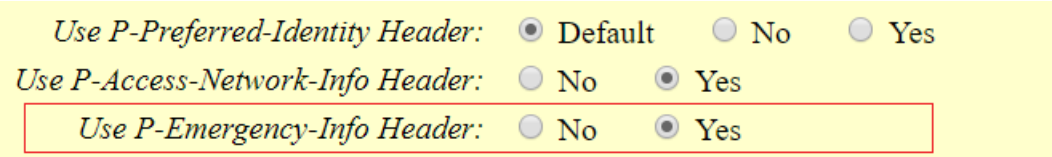
- **New P Values**

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

USE P-EMERGENCY-INFO HEADER

- **Web Configuration**

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



- **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 1 - Yes	1 - Yes
P26159	Use P-Emergency-Info Header (Profile 2)	0 - No 1 - Yes	1 - Yes

BLACKLIST FOR INCOMING CALLS

- **Web Configuration**

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

- **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 (‘+’).

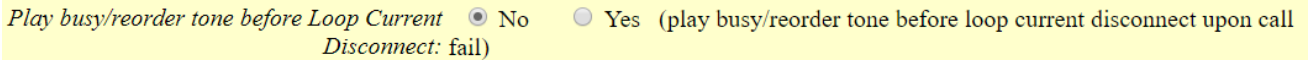
- **New P Values**

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.



- **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. (Profile 1)	0 - No 1 – Yes	0 – No
P21926	Play busy/reorder tone before Loop Current Disconnect (Profile 2)	0 - No 1 – Yes	0 – No