WP820 Firmware Release Notes

Table of Content

FIRMWARE VERSION 1.0.7.15 ................................................................. 5
  PRODUCT NAME .................................................................................. 5
  DATE .................................................................................................. 5
  FIRMWARE FILE INFORMATION ...................................................... 5
  ENHANCEMENT ............................................................................... 5
  BUG FIX ........................................................................................... 5
  NEW FEATURES OVERVIEW .......................................................... 6
    FEATURE KEY SYNCHRONIZATION ............................................. 6
    TRANSFER TO LDAP CONTACTS ............................................... 6
    WPA ENTERPRISE (802.1X) ....................................................... 7
    LANGUAGE PACKAGE PROVISIONING ...................................... 7

FIRMWARE VERSION 1.0.7.7 ................................................................. 9
  PRODUCT NAME ................................................................................ 9
  DATE .................................................................................................. 9
  FIRMWARE FILE INFORMATION ...................................................... 9
  ENHANCEMENT ............................................................................... 9
  BUG FIX ........................................................................................... 9
  NEW FEATURES OVERVIEW .......................................................... 10
    WI-FI SIGNAL WARNING ........................................................... 13
    WEB USER LOGIN TIMEOUT .................................................... 13
    VOICEMAIL NOTIFICATION TONE ........................................... 14
    PREFER DHCP OPTION ............................................................. 14
    IPV4 AND IPV6 CONFIGURATION ............................................. 15
    INITIATE VIDEO CALLS ............................................................... 16
    ENABLE IN-CALL RECORDING ............................................... 16
    DEFAULT VIDEO ZOOM AREA ................................................... 17
    BROADSOFT XSI ...................................................................... 18
    MIN/MAX TLS VERSION ............................................................. 20
    ENABLE RANDOMIZED AUTOMATIC UPGRADE ....................... 20
    ADD MAC IN USER-AGENT ......................................................... 21
    UPDATED USE MAC HEADER ................................................... 21
    VIDEO PREVIEW WITH 3RD PARTY DOOR SYSTEM ................ 22
    CHARGING TONE ..................................................................... 22
    LOW BATTERY WARNING TONE ................................................... 22
SILENT MODE........................................................................................................... 23
VIBRATE MODE ......................................................................................................... 23
RINGTONE VOLUME .................................................................................................. 23
MEDIA VOLUME .......................................................................................................... 24
ALARM VOLUME ......................................................................................................... 24
START VIDEO AUTOMATICALLY ............................................................................. 24
ALLOW PTT KEY PRESS IN LOCK SCREEN .............................................................. 25
FONT SIZE .................................................................................................................. 25
ONE-CLICK DEBUGGING FROM HANDSET .............................................................. 26

FIRMWARE VERSION 1.0.5.5 ....................................................................................... 27

PRODUCT NAME ........................................................................................................ 27
DATE ............................................................................................................................... 27
FIRMWARE FILE INFORMATION ............................................................................... 27
ENHANCEMENT ......................................................................................................... 27
BUG FIX ......................................................................................................................... 28
NEW FEATURES OVERVIEW ..................................................................................... 31
BATTERY STATUS ....................................................................................................... 31
EXPORT BATTERY LOG ............................................................................................. 31
BLUETOOTH WEB UI .................................................................................................. 32
WI-FI CHANNEL MODE ............................................................................................... 33
VISUAL VOICEMAIL ..................................................................................................... 33
CUSTOM WALLPAPER ................................................................................................. 34
OPENVPN MODE ......................................................................................................... 34
WI-FI PROVISION VIA USB ........................................................................................ 35
CONFIG PROVISION VIA USB .................................................................................... 35
ACTION URL FOR SAFE/PANIC CALL ..................................................................... 36
LOCK SCREEN ON WEB UI ......................................................................................... 36
SEND MESSAGE TO CONTACTS .............................................................................. 37
SPEED DIAL VIA MULTI-FUNCTION KEY ................................................................... 37

FIRMWARE VERSION 1.0.3.20 ..................................................................................... 38

PRODUCT NAME ........................................................................................................ 38
DATE ............................................................................................................................... 38
FIRMWARE FILE INFORMATION ............................................................................... 38
ENHANCEMENT ......................................................................................................... 38
BUG FIX ......................................................................................................................... 40
KNOWN ISSUES .......................................................................................................... 45
NEW FEATURES OVERVIEW ..................................................................................... 45
VIDEO CALL ZOOM ....................................................................................................... 45
LZO COMPRESSION ..................................................................................................... 46
UCM CONFERENCE CONTROL ................................................................. 46
RTP TIMEOUT ...................................................................................... 47
CONTACTS QUICK SEARCH ................................................................. 47
DISABLED WEB LOGIN ....................................................................... 47
DISABLE LOW WI-FI SIGNAL WARNING ............................................ 48
QUICK SETUP WIZARD MODULE ...................................................... 49
DETECT UPGRADE ............................................................................ 49
MUTE ON ANSWER INTERCOM CALL .............................................. 50
CUSTOM RINGTONE FOR DOOR SYSTEM .......................................... 50
LCD SCREEN TIMEOUT AND BRIGHTNESS ........................................ 51
EMERGENCY DIAL FORCE SPEAKER ................................................ 51
REJECTED CALL NOTIFICATION ........................................................ 52
CONFIG PROVISION UPDATE ............................................................. 52
BLUETOOTH HEADSET MODE SUPPORT ......................................... 53
SIP NOTIFY TO SYNC PHONEBOOK .................................................. 53
UACSTA ............................................................................................. 54
GDMS PROVISIONING ...................................................................... 54
FACTORY RESET VIA HARD KEY UPDATE ....................................... 55
USE MAC HEADER ........................................................................... 55
MORE DISTINCTIVE RINGTONES ..................................................... 55
UPLOAD LANGUAGE FILE ................................................................. 57
PHONEBOOK MANAGEMENT ........................................................... 57
SUBSCRIBE EXPIRATION .................................................................. 58

FIRMWARE VERSION 1.0.3.6 .................................................................. 59

PRODUCT NAME ............................................................................... 59
DATE ................................................................................................ 59
FIRMWARE FILE INFORMATION ......................................................... 59
ENHANCEMENT ............................................................................... 59
BUG FIX .......................................................................................... 59

FIRMWARE VERSION 1.0.3.5 .................................................................. 60

PRODUCT NAME ............................................................................... 60
DATE ................................................................................................ 60
FIRMWARE FILE INFORMATION ......................................................... 60
ENHANCEMENT ............................................................................... 60
BUG FIX .......................................................................................... 62
KNOWN ISSUES ............................................................................... 64
NEW FEATURES OVERVIEW .............................................................. 65
LDAP PHONEBOOK ........................................................................... 65
ADDITIONAL HOME SCREENS .......................................................... 66
PNP (3CX) AUTO PROVISION ................................................................. 67
QUICK CONFERENCE DURING CALL .................................................. 67
SOFTKEY CUSTOMIZATION.................................................................. 68
PTT KEY CUSTOMIZATION .................................................................. 71
AUTOMATIC DOWNLOAD INTERVAL FOR PHONEBOOK .......................... 72
SAFE MONITORING FOR RUNNING/NO MOVEMENT/ITALT .................. 72
ENABLE/DISABLE CERTAIN SIP HEADERS ......................................... 75
RECEIVE AND DISPLAY VIDEO FOR SIP CALL ..................................... 76
PORT CUSTOMIZATION FOR SSH ACCESS .......................................... 80
WIFI CAPTIVE PORTAL ....................................................................... 80
NETWORK TROUBLESHOOTING TOOLS ............................................. 81
2.4G/5G BAND FOR WIFI .................................................................... 82
CUSTOM RINGTONE ......................................................................... 83
WIFI SIGNAL WARNING ..................................................................... 83
CUSTOM CERTIFICATE ....................................................................... 84
CONFIG PROVISION OPTION ............................................................. 85
IGMP KEEP ALIVE INTERVAL ............................................................... 85
GESTURE CONTROL ......................................................................... 86
DEFAULT RINGTONE ......................................................................... 87
NOTIFICATION TONE ......................................................................... 87
NOISE SHIELD .................................................................................. 88

FIRMWARE VERSION 1.0.1.15 .................................................................. 89

PRODUCT NAME ................................................................................ 89
DATE .................................................................................................. 89
FIRMWARE VERSION 1.0.7.15

PRODUCT NAME
WP820

DATE
10/23/2020

FIRMWARE FILE INFORMATION
• Firmware file name: wp820fw.bin
  MD5: 048d2bcbb2a279b13e8c5d902aa2524d

ENHANCEMENT
• Added Feature Key Synchronization [FEATURE KEY SYNCHRONIZATION]
• Added Berlin and Dublin into time zone list
• Added device memory info into one-click-debug package
• Added 5G Wi-Fi channels [144-165] support for Netherlands
• Added allow transfer calls to LDAP contacts [TRANSFER TO LDAP CONTACTS]
• Added Wi-Fi Security mode WPA enterprise (802.1x) to web UI [WPA ENTERPRISE (802.1X)]
• Added Language package download via provisioning [LANGUAGE PACKAGE PROVISIONING]

BUG FIX
• Fixed ACK is not being sent to the right port of the server when record-route exist
• Fixed Certificate chain validation failure with custom CA certificate for provisioning
• Fixed “Enable Video Call” still can accept video call
• Fixed When the transfer time out, the phone shows an exception and no response after pressing hang up button
• Fixed Phone sends new INVITE upon “503 Service Unavailable” if the SIP server domain name has an IPv6 address
• Fixed Setting the Multicast Paging Codec to Opus does not take effect
• Fixed Uncheck “Enable Video Call,” the phone still prompts audio/video call when calling
• Fixed The cancel button on the video zoom interface is occasionally invalid
• Fixed When set Option 66 to “Preferred, failback when failed” with empty address under option66, the same configuration file will request the web address twice
• Fixed Vibrate does not stop while line is ring muted
• Fixed Response “sendrecv” for video when receive re-invite without SDP from server
• Fixed When G722 codec is used there is no HD indicator
• Fixed Plugging headset during calls does not switch the MIC
• Fixed AVS crash issue when doing conference bridge
• Fixed Not showing video stream during video call in early media scenario
• Fixed Constraint mode: Wi-Fi and Bluetooth can still be turned ON-OFF from LCD without admin password
• Fixed Some alias config options have wrong logic
• Fixed After a call is cancelled, there is no sound when answering another call as the called party

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

FEATURE KEY SYNCHRONIZATION

• Web Configuration
  This option can be found on the web UI under Account→Advanced Settings.

• Functionality
  This feature is used for BroadSoft/Metaswitch call feature synchronization. When set to BroadSoft/Metaswitch, DND and Call Forward features can be synchronized with BroadSoft or Metaswitch server.

• New P-value

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2325 (Account 1)</td>
<td>Feature Key Synchronization</td>
<td>0 – Disable, 1 – BroadSoft/Metaswitch</td>
<td>0</td>
</tr>
<tr>
<td>P2425 (Account 1)</td>
<td>Feature Key Synchronization</td>
<td>0 – Disable, 1 – BroadSoft/Metaswitch</td>
<td>0</td>
</tr>
</tbody>
</table>

TRANSFER TO LDAP CONTACTS

• LCD Configuration
  This option can be found on the phone by pressing the phonebook key when in the transfer call screen.

• Functionality
  This feature allows users to transfer calls to LDAP contacts.
WP820 Release Notes

WP A ENTERPRISE (802.1X)

- **Web Configuration**
  
  This option can be found on the web UI under Network Settings→WiFi Settings→Add Network

- **Functionality**
  
  This feature allows using 802.1X WPA2-Enterprise secure network authentication. The EAP method can be configured for credential based or certificate cased authentication.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P7814</td>
<td>Security Mode for Hidden SSID</td>
<td>0 – None</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – WEP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 – WPA/WPA2 PSK</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 – WPA Enterprise</td>
<td></td>
</tr>
<tr>
<td>P83004</td>
<td>EAP Method</td>
<td>0 – PEAP</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – TLS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 – TTLS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 – PWD</td>
<td></td>
</tr>
<tr>
<td>P83013</td>
<td>Phase 2 Authentication</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P83011</td>
<td>CA Certificate</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P83010</td>
<td>User Certificate</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P83014</td>
<td>Identity</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P83012</td>
<td>Anonymous Identity</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P83015</td>
<td>Password</td>
<td>String</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**LANGUAGE PACKAGE PROVISIONING**

- **Web Configuration**
This option is configured using the Config Server Path on the web UI under Maintenance→Upgrade→Config File→Config Server Path.

- **Functionality**
  The phone will use the Config Server Path to fetch the "language.txt" file to provision the device's language package.
FIRMWARE VERSION 1.0.7.7

PRODUCT NAME
WP820

DATE
11/20/2019

FIRMWARE FILE INFORMATION
• Firmware file name: wp820fw.bin
  MD5: 91231597d5001a87a9c1775f8b3bb36a

ENHANCEMENT
• Added “Wi-Fi Signal Warning” [WI-FI SIGNAL WARNING]
• Added language support for Finnish
• Optimize data query logic to shorten contact export time
• Updated UI for global toast and confirm dialog
• Increased phone number width in call history interface
• Added timeout setting for web UI auto logout [WEB USER LOGIN TIMEOUT]
• Added voicemail notification tone [VOICEMAIL NOTIFICATION TONE]
• Added show USB disk plug in state icon on status bar
• Added support prefer DHCP option logic [PREFER DHCP OPTION]
• Added support for stateless ipv6
• Added IPv4 and IPv6 configuration of Wi-Fi config [IPV4 AND IPV6 CONFIGURATION]
• Added initiate video call on WP820 [INITIATE VIDEO CALLS]
• Added “Enable In-call Recording” [ENABLE IN-CALL RECORDING]
• Added “Default Video Zoom Area” [DEFAULT VIDEO ZOOM AREA]
• Added Broadsoft XSI support [BROADSOFT XSI]
• Added Broadsoft contact page
• Added support IPv6 TLS for syslogd
• Added detection for upgrade fail if speed lower than 1B/s for 120 secs for all modes
• Updated CPE to 1.0.1.134 version
• Added web prompt text when the phone is waiting to install firmware.
• Added web UI pop-up prompts when device need to reboot.
• Added “Minimum TLS version” and “Maximum TLS version” [MIN/MAX TLS VERSION]
• Updated reboot logic when configure guest login mode
• Added “Enable Randomized Automatic Upgrade” [ENABLE RANDOMIZED AUTOMATIC UPGRADE]
• Added "Add MAC in User-Agent" [ADD MAC IN USER-AGENT]
• Updated "Use MAC Header" [UPDATED USE MAC HEADER]
• Web UI maintenance->upgrade UI improvements
• Voicemail UI improvement
• Bluetooth details page UI improvement
• Improved battery logging
• Added support for Hebrew language
• Added ability to configure outbound proxy from LCD menu
• Added video preview ability with 3rd party door system [VIDEO PREVIEW WITH 3RD PARTY DOOR SYSTEM]
• Added “Charging Tone” [CHARGING TONE]
• Added “Low Battery Warning Tone” [LOW BATTERY WARNING TONE]
• Added “Silent Mode” [SILENT MODE]
• Added “Vibrate Mode” [VIBRATE MODE]
• Added “Ringtone Volume” [RINGTONE VOLUME]
• Added “Media Volume” [MEDIA VOLUME]
• Added “Alarm Volume” [ALARM VOLUME]
• Added “Start Video Automatically” [START VIDEO AUTOMATICALLY]
• Added “Allow PTT Key Press When Lock Screen is enabled” [ALLOW PTT KEY PRESS IN LOCK SCREEN]
• Added “Font Size” [FONT SIZE]
• Added “One-click Debugging” feature on handset UI [ONE-CLICK DEBUGGING FROM HANDSET]
• Added SN info on LCD and web UI

BUG FIX
• Fixed No indicator for device mute when long press * key on the notification or interface status page.
• Fixed SRTP negotiation issue when SRTP is set to No
• Fixed Logic error of failover when failed to fetch cfg from tftp override server
• Fixed Battery usage is inaccurate after long time video call
• Fixed Metaswitch: Attended transfer UI problem
• Fixed After turning off the lock screen Settings, the device still needs to be unlocked
• Fixed After a long call, the handset will be in locked mode
• Fixed Page prompt content display overlaps when upgrading
• Fixed After upgrading TFTP failed, the device has displayed the progress bar continuously.
• Fixed Audio during ringback will have comfort noise
• Fixed Set automatic upgrade every week, the phone does not send request automatically according to the setup time
• Fixed Changing the web automatic upgrade configuration, it doesn't take effect immediately
• Fixed Sometimes using GDMS to upgrade firmware, the download progress unchanged
• Fixed Battery capacity below 15%, change upgrade path, configuration file can be successfully provisioned
• Fixed Silent ringtones do not take effect
• Fixed Enable authenticate conf file option, the device USB upgrade prompt error
• Fixed SIP call forking - reverted ring have audio issue
• Fixed Upload firmware file upgrade failed
• Fixed It still send register to override sip servers after close option 120 from DHCP
• Fixed Device after pairing and connecting to wp820 via Bluetooth, wp820 won’t share the contacts and call history
• Fixed The sound of the "Ding Dong" is output from the receiver
• Fixed GDMS: The capture trace function should only request the capture file
• Fixed Cancel save should restore the original configuration
• Fixed Cannot handle video re-invite from GXV3xxx phone
• Fixed Issues with UCM visual voicemail: clear all messages, mark all as read and IPv6
• Fixed Issues with guest login feature
• Fixed The slave always shows "downloading" after entering auto config page
• Fixed The time does not refresh immediately when modify time zone in web
• Fixed The mobile interface causes the notification interface to have a quick setup option.
• Fixed Clicking Cancel when opening/closing the DND outgoing number will resend the invite
• Fixed When the device is in the ringing state, it will not automatically receive the emergency PTT
• Fixed Setting hold/unhold notification URI and leave the configuration item empty, device still send notifications
• Fixed Device detect cfg in LCD and the prompt is inconsistent with requirements
• Fixed WP820 automatically switches to the boot animation interface and generate a core file when setting incorrect IPv4 address.
• Fixed Displays "device network penetration abnormal"
• Fixed Send a short message from the contact interface and the recipient is not visible.
• Fixed The call records on guest mode can be synchronized to the original account.
• Fixed The blacklist account number calls, the phone screen does not need to wake up.
• Fixed MWI Indicator not flashing when cancel "Disable Missed Call Indicator" in web
• Fixed After canceling the audio connection of the A2DP headset telephone, the voice is silent when using the handset.
• Fixed Contacts are sorted by name, and the contact list does not match the name of the contact details.
• Fixed Unable to delete the password when long press delete button
• Fixed Config provision completed interface is display abnormal
• Fixed Config file with failed application is not listed
• Fixed The loading of text in Wi-Fi setting interface is not smooth
• Fixed The homepage button is abnormal when switching from the quick setup page to the home page
• Fixed WP820 cannot recognize NTFS format USB disk.
• Fixed Ping failed and prompted 'unknown host', and debugInfo file is 0.0kb.
• Fixed Switch the page, causes some options to display abnormal
• Fixed The words of 'Update Detect' and 'Start Provision' button are not shown in full in English.
• Fixed Can still pop up file selection box after uploading 10 ringtone files.
• Fixed Idle interface SMS selection box after uploading 10 ringtone files.
• Fixed The interface cursor is incorrect when send message from an LDAP contact.
• Fixed When multiple accounts have unread voicemails, the Notification is not updated when the unread voicemail of one of the accounts goes to 0
• Fixed After setting the time as using 12-hour format, the voicemail's time still display as 24-hour format.
• Fixed When setting First/Last Name of UCM account to character string, device will fail to callback
• Fixed The voicemail time is incorrect after changing Time Zone and updating voicemail.
• Fixed The Capture trace function is abnormal
• Fixed After the call, the device with CFG file in USB will not be upgraded automatically.
• Fixed Device does not automatically light up the screen, popping up the configuration upgrade prompt
• Fixed After entering Wi-Fi connection page and click return, the back page is not correct
• Fixed Match popover window, device title display no longer use ellipsis.
• Fixed The prompt box that is unable to match will appear 2 times and the position is different.
• Fixed System operating time should be displayed in time format
• Fixed After connecting a network with a long name, the connection process SSID will always jump.
• Fixed The battery usage of Bluetooth still has data display after factory reset.
• Fixed The IP address type is incorrect when setting static IP by Wi-Fi upgrade
• Fixed Enable the "Disconnected" Event Notification and after ending the call, device will send twice event notification information.
• Fixed Empty group should not be displayed
• Fixed The group details editing member does not display the total number when saving
• Fixed Contact option display is incomplete
• Fixed The PIN code of the previous input should not be displayed
• Fixed In local settings, the grey items in the call transfer settings are still allowed to enter characters.
• Fixed Network statistics interface correlation value display error when WIFI is not connected
• Fixed IP acquisition type should be displayed as "DHCP and static"
• Fixed Incomplete display of device name on the Bluetooth page.
• Fixed Outgoing call event notification display abnormal, after set the "$remote" and "$display_remote" variables
• Fixed Unable to get IPV6 address when change IPV4 to IPV6
• Fixed Limit account name length to 64 to sync with WebUI
• Fixed IPv6 address TextView can't wrap correctly on right home page
• Fixed Adjust PSensor threshold to fix factory test problem
• Fixed Hide bluetooth detail entry on the launcher when device work mode is guest mode.
• Fixed tilt detection alarm problem when vertical

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

WI-FI SIGNAL WARNING
• Web Configuration
  This option can be found on the web UI under Network Settings->Wi-Fi Settings->Wi-Fi Basics.

  Wi-Fi Signal Warning  
  Level 3

  • Functionality
    When the Wi-Fi signal strength is lower than the threshold set by this level, the device will display a warning.

  • New P-value

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>wifi_warning</td>
<td>Wi-Fi Signal Warning</td>
<td>0 - 5</td>
<td>3</td>
</tr>
</tbody>
</table>

WEB USER LOGIN TIMEOUT
• Web Configuration
  This option can be found on the web UI under System Settings->Security Settings->Web/SSH Access.
User Login Timeout

- **Functionality**
  Sets the login timeout (in minutes) for the logged in user. If there is no activity within the specified amount of time, the user will be logged out, and the system will jump to the login page automatically. If set to 0, the user will not be logged out automatically.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>web_timeout</td>
<td>User Login Timeout</td>
<td>0 - 60</td>
<td>15</td>
</tr>
</tbody>
</table>

**VOICEMAIL NOTIFICATION TONE**

- **Web Configuration**
  This option can be found on the web UI under System Settings->Preferences->Sound.

  Voicemail Notification Tone

  - **Functionality**
    Plays a tone when there is an unread voicemail message.

  - **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>disable_vm_tone</td>
<td>Voicemail Notification Tone</td>
<td>0 – Enable</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Disable</td>
<td></td>
</tr>
</tbody>
</table>

**PREFER DHCP OPTION**

- **Web Configuration**
  This option can be found on the web UI under Maintenance->Upgrade->Provision.

  Allow DHCP Option 43, 160 and 66 Override Server

  - **Functionality**
    If set to "Prefer, fallback when failed", the device can fallback to use the configured provisioning server under its firmware or config server path in case the server from DHCP Option fails.
• New P-value

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P145</td>
<td>Allow DHCP Option 43, 160 and 66 Override Server</td>
<td>0 – No</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 – Prefer, fallback when failed</td>
<td></td>
</tr>
</tbody>
</table>

IPV4 AND IPV6 CONFIGURATION

• Web Configuration

This option can be found on the web UI under Network Settings->Wi-Fi Settings->Wi-Fi Basics->SSID->Details->Edit->Show Advanced Options.

IPV4 Address Type  ○ DHCP  ○ Static IP

IPV6 Address Type  ○ DHCP  ○ Static IP

### IPv4

- IP Address
- Default Gateway
- Network Prefix Length
- DNS 1
- DNS 2

### IPv6

- Static IPv6 Address
- IPv6 Prefix Length
- DNS Server 1
- DNS Server 2
• **Functionality**
  Allows configuration of dynamic and static IPv4 and IPv6 address.

**INITIATE VIDEO CALLS**

• **Web Configuration**
  This option can be found on the web UI under Phone Settings->Call Settings.

  Enable Video Call

  ![Enable Video Call](image)

• **Functionality**
  When video calls are enabled, the phone will prompt whether to initiate audio or video call when dialing.

• **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P22091</td>
<td>Enable Video Calls</td>
<td>0 – Enable</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Disable</td>
<td></td>
</tr>
</tbody>
</table>

**ENABLE IN-CALL RECORDING**

• **Web Configuration**
  This option can be found on the web UI under Phone Settings->Call Settings.

  Enable In-call Recording

  ![Enable In-call Recording](image)
• **Functionality**
  If enabled the device can record audio during a call. If disabled, this feature is hidden during a call.

• **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>disable_call_record</td>
<td>Enable In-call Recording</td>
<td>0 – Enable</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Disable</td>
<td></td>
</tr>
</tbody>
</table>

**DEFAULT VIDEO ZOOM AREA**

• **Web Configuration**
  This option can be found on the web UI under Phone Settings->Call Settings.

  Default Video Zoom Area  
  0 (Full Screen)

• **Functionality**
  This setting specifies the default area which is displayed after press “Zoom” during a video call. The default value is 0 (full screen), and the zones corresponds to the numbers below:

• **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>default_zone_area</td>
<td>Default Video Zoom Area</td>
<td>0 - 9</td>
<td>0</td>
</tr>
</tbody>
</table>
BROADSOFT XSI

- **Web Configuration**

This option can be found on the web UI under Value-added Service->BroadSoft Directories.

### BroadSoft Directories

<table>
<thead>
<tr>
<th>XSI Service Settings</th>
<th>Network Directories</th>
</tr>
</thead>
</table>

- **Authentication Type**
- **Login Credentials**
- **Server**
- **Port**
- **Action Path**
- **BroadWorks User ID**
- **Login Password**
- **BroadSoft Directory & Call Logs Update Interval (s)**
- **BroadSoft Directory Hits**
- **Associated BroadSoft Account**
  - **Account 1**
- **BroadSoft Directory Order**
  - Personal Directory
  - Group Common
  - Group Directory
  - Enterprise Common
  - Enterprise Directory
• **Functionality**

Configures the Broadsoft XSI service to work with Broadsoft Directories and Broadsoft XSI related services.

• **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P22054</td>
<td>Authentication Type</td>
<td>0 – SIP Credentials 1 – Login Credentials</td>
<td>1</td>
</tr>
<tr>
<td>P1591</td>
<td>Server</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P1592</td>
<td>Port</td>
<td>0 - 65535</td>
<td>N/A</td>
</tr>
<tr>
<td>P2937</td>
<td>Action Path</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P22034</td>
<td>BroadWorks User ID</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P1593</td>
<td>SIP Authentication ID</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P1594</td>
<td>SIP Authentication Password</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P22103</td>
<td>Login Password</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>TBA</td>
<td>Broadsoft Directory &amp; Call Logs Update Interval</td>
<td>60 - 2147483647</td>
<td>1800</td>
</tr>
<tr>
<td>P22014</td>
<td>BroadSoft Directory Hits</td>
<td>1 – 1000</td>
<td>N/A</td>
</tr>
<tr>
<td>xsi_call_accountid</td>
<td>Associated Broadsoft Account</td>
<td>0 – Account 1</td>
<td>0</td>
</tr>
</tbody>
</table>
MIN/MAX TLS VERSION

- **Web Configuration**
  This option can be found on the web UI under System Settings->Security Settings->TLS.

<table>
<thead>
<tr>
<th>Minimum TLS Version</th>
<th>1.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum TLS Version</td>
<td>No limit</td>
</tr>
</tbody>
</table>

- **Functionality**
  Configures the minimum and maximum TLS version supported by the phone.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P22293</td>
<td>Minimum TLS Version</td>
<td>10 – 1.0</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11 – 1.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12 – 1.2</td>
<td></td>
</tr>
<tr>
<td>P22294</td>
<td>Maximum TLS Version</td>
<td>10 – 1.0</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11 – 1.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12 – 1.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>99 – No Limit</td>
<td></td>
</tr>
</tbody>
</table>

ENABLE RANDOMIZED AUTOMATIC UPGRADE

- **Web Configuration**
  This option can be found on the web UI under Maintenance->Upgrade->Provision.

  Enable Randomized Automatic Upgrade  

- **Functionality**
  Configures whether the phone will upgrade automatically at random time point within the configured period. This option is mainly used when multiple phones are upgrading at the same time.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P8458</td>
<td>Enable Randomized</td>
<td>0 – Disable</td>
<td>0</td>
</tr>
</tbody>
</table>
ADD MAC IN USER-AGENT

- **Web Configuration**
  This option can be found on the web UI under Account->SIP Settings.

  Add MAC in User-Agent  
  
  • **Functionality**
  Configures whether to add MAC address in User-Agent header. If set to "No", all outgoing SIP messages will not attach MAC address to the User-Agent header. If set to "Yes except REGISTER", all outgoing SIP messages except REGISTER message will attach the MAC address to the User-Agent header. If set to "Yes to All SIP", all outgoing SIP messages including REGISTER message will attach MAC address to the User-Agent header.

  • **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P26061</td>
<td>Add MAC in User-Agent</td>
<td>0 – No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Yes except REGISTER</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 – Yes to all SIP</td>
<td></td>
</tr>
</tbody>
</table>

UPDATED USE MAC HEADER

- **Web Configuration**
  This option can be found on the web UI under Account->SIP Settings.

  Use MAC Header  
  
  • **Functionality**
  Configures whether to use MAC header for SIP. If set to "No", all SIP REGISTER messages will not contain MAC header. If set to "Only for REGISTER", MAC header will only be included in SIP REGISTER and UNREGISTER messages. If set to "Yes to All SIP", all outgoing SIP REGISTER messages will contain MAC header.

  • **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P29090</td>
<td>Use MAC Header</td>
<td>0 – No</td>
<td>0</td>
</tr>
</tbody>
</table>
1 – Yes except REGISTER
2 – Yes to all SIP

### VIDEO PREVIEW WITH 3RD PARTY DOOR SYSTEM

- **Web Configuration**
  This option can be found on the web UI under Value-added Service->Door System.

  ![Door System Type](image)

- **Functionality**
  Configures the door system type to work with non-GDS devices.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA</td>
<td>Door System Type</td>
<td>TBA</td>
<td>TBA</td>
</tr>
</tbody>
</table>

### CHARGING TONE

- **Web Configuration**
  This option can be found on the web UI under System Settings->Preferences->Sound.

  ![Charging Tone](image)

- **Functionality**
  Enables a notification sound when the handset is charging.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P22224</td>
<td>Charging Tone</td>
<td>0 – Disable</td>
<td>1</td>
</tr>
</tbody>
</table>

### LOW BATTERY WARNING TONE

- **Web Configuration**
  This option can be found on the web UI under System Settings->Preferences->Sound.

  ![Low Battery Warning Tone](image)

- **Functionality**
  Enables a notification sound when the battery is low.
• **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>low_battery_tone</td>
<td>Low Battery Warning Tone</td>
<td>0 – Disable 1 – Enable</td>
<td>1</td>
</tr>
</tbody>
</table>

**SILENT MODE**

• **Web Configuration**
This option can be found on the web UI under System Settings->Preferences->Sound.

  Silent Mode

• **Functionality**
Enables silent mode on the handset.

• **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>silent_mode</td>
<td>Silent Mode</td>
<td>0 – Disable 1 – Enable</td>
<td>0</td>
</tr>
</tbody>
</table>

**VIBRATE MODE**

• **Web Configuration**
This option can be found on the web UI under System Settings->Preferences->Sound.

  Vibrate Mode

• **Functionality**
Enables vibrate mode on the handset.

• **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>vibrate_mode</td>
<td>Vibrate Mode</td>
<td>0 – Disable 1 – Enable</td>
<td>0</td>
</tr>
</tbody>
</table>

**RINGTONE VOLUME**

• **Web Configuration**
This option can be found on the web UI under System Settings->Preferences->Sound.
**Ringtone volume**

- **Functionality**
  Configures the volume of the ringtone.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA</td>
<td>Ringtone Volume</td>
<td>0 – 15</td>
<td>8</td>
</tr>
</tbody>
</table>

**MEDIA VOLUME**

- **Web Configuration**
  This option can be found on the web UI under System Settings->Preferences->Sound.

- **Functionality**
  Configures the volume of the media.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA</td>
<td>Media Volume</td>
<td>0 – 15</td>
<td>8</td>
</tr>
</tbody>
</table>

**ALARM VOLUME**

- **Web Configuration**
  This option can be found on the web UI under System Settings->Preferences->Sound.

- **Functionality**
  Configures the volume of the alarm.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA</td>
<td>Alarm Volume</td>
<td>0 – 15</td>
<td>8</td>
</tr>
</tbody>
</table>

**START VIDEO AUTOMATICALLY**

- **Web Configuration**
This option can be found on the web UI under Account->Call Settings.

Start Video Automatically ☑

- **Functionality**
  Configures whether to enable video automatically when there is a call from contacts or dialing interface. If set to enabled, the video call will be started automatically. If set to "No," the call will be audio call.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2314</td>
<td>Start Video Automatically</td>
<td>0 – Disable</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Enable</td>
<td></td>
</tr>
</tbody>
</table>

**ALLOW PTT KEY PRESS IN LOCK SCREEN**

- **Web Configuration**
  This option can be found on the web UI under Phone Settings->PTT/Multicast Settings->General Settings.

  Allow PTT/Paging When Lock Screen Status ☑

- **Functionality**
  Configures whether the device can initiate PTT/Paging when device is in the lock screen status.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>enable_PTT_when_screen_lock</td>
<td>Allow PTT/Paging When Lock Screen Status</td>
<td>0 – Disable</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Enable</td>
<td></td>
</tr>
</tbody>
</table>

**FONT SIZE**

- **Web Configuration**
  This option can be found on the web UI under System Settings->Preferences->LCD & LED Management.

  Font size ☑

  - **Functionality**
    Configures the font size for the LCD display.
• New P-value

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
</table>
| P22275  | Font Size   | 1 – Standard  
2 – Large  
0 – Small | 1       |

ONE-CLICK DEBUGGING FROM HANDSET

• Web Configuration

This option can be found on the handset UI under Menu->Diagnostics->One-click Debugging.

• Functionality

Allows users to perform the one-click debugging feature from the handset and save the output files to USB drive.
FIRMWARE VERSION 1.0.5.5

PRODUCT NAME
WP820

DATE
7/15/2019

FIRMWARE FILE INFORMATION
• Firmware file name: wp820fw.bin
  MD5: 98a94c0585457ebff6f3beba314b0deb

ENHANCEMENT
• Added battery status [BATTERY STATUS]
• Added export battery log [EXPORT BATTERY LOG]
• Added recording animation effects to the system diagnostic audio loopback
• Added Bluetooth interface on web UI [BLUETOOTH WEB UI]
• Added Wi-Fi Channel Mode [WI-FI CHANNEL MODE]
• Added visual voicemail function [VISUAL VOICEMAIL]
• Added custom wallpaper support on web UI [CUSTOM WALLPAPER]
• Added OpenVPN mode [OPENVPN MODE]
• Added Wi-Fi provision via USB [WI-FI PROVISION VIA USB]
• Added config file provision via USB [CONFIG PROVISION VIA USB]
• Added action URL notify when SAFE Panic Alarm triggers [ACTION URL FOR SAFE/PANIC CALL]
• Added web feature for lock screen [LOCK SCREEN ON WEB UI]
• Added UCM conference screen to show participants count info
• Added make-call warning prompt for CSTA.
• Added additional error info when check new firmware
• Added language support for PTT setting page
• Added phone support for clicking ok button to accept call
• Added send message in contacts UI [SEND MESSAGE TO CONTACTS]
• Added speed dial option for multi-purpose key [SPEED DIAL VIA MULTI-FUNCTION KEY]
• Updated time format of call log interface
• Updated UI of call log details interface
• Updated MAC header format and user-agent mac info
• Updated 802.1x Wi-Fi connect UI
• Updated alarm UI
• Updated contacts UI
• Updated the UI of PTT/Paging send/receive screen
• Updated CPE to 1.0.1.128 version
• Removed weak cipher algorithms for security
• Optimized channel scanning of WPA
• Increased phonebook server path character limit

BUG FIX
• Fixed Remove input method in date setting and time setting interface
• Fixed The call transfer interface loses its cursor when cursor moves
• Fixed The configuration is not changed when the time shift is turned on, and the call shift icon is not present in the Panel
• Fixed The default time of call transfer is error in 12-hour format
• Fixed Web contact sorting has extra "...
• Fixed Adding Video Preview ability with 3rd Party Door System (2N IP Intercom)
• Fixed "Modify Network" interface clicks back to the wrong interface
• Fixed WP820 will not register with the sip server assigned in DHCP Option 120, after trying to modify the QOS parameter
• Fixed Set the interface state list recycled view the change not comprehensive
• Fixed Brightness option is blocked in large fonts
• Fixed In speed dial interface, the account and contact name order in reverse
• Fixed After switching languages/fonts, the notification/quick setting interface has no cursor
• Fixed There is no cursor in the setting page after the device start
• Fixed When the "Transfer on 3 Way Conference Hangup" is checked, the emergency intercom will not be accessed
• Fixed Ping should support the input of IPv6 address
• Fixed The # key dialing option for account 2 is invalid
• Fixed Cannot add new GDS by issuing p-value
• Fixed Web access set to HTTPS, port can be set to 80
• Fixed In the PTT paging, if a call is made to a contact and the number does not exist, the number line status is not displayed
• Fixed IPv4 and IPv6 should be set up independently
• Fixed Custom ring name is too long when the line is displayed
• Fixed The "Multicast address" input box cursor is incorrect
• Fixed The soft button interface lacks subordinate signs
• Fixed Bluetooth device name is not replaced with "...
after more than ten characters
• Fixed Unable to connect after switching security when add SSID
• Fixed LCD part text display English when language is Chinese traditional
• Fixed Bluetooth "Phone audio/Media audio" prompt option should be modified
• Fixed The choice of LCD account status view should be deleted
• Fixed The device cannot connect to OpenVPN after setting the wrong OpenVPN username or password and changing it to the correct username password
• Fixed It will send all packets to tun0 after connecting OpenVPN
• Fixed Fix the Wi-Fi switch state can't sync with Wi-Fi actual state at switch screen
• Fixed The account status displays abnormal
• Fixed Firmware issued by GDMS caused the device to be disconnected
• Fixed The default value of Periodic Inform Interval should be 300s
• Fixed The account could not receive SMS message after the SIP message was started
• Fixed When select the network protocol/band, click the power button and the Wi-Fi will not open automatically
• Fixed The password option should not appear when 802.1x-EAP method is TLS
• Fixed Device will not parse the "RTCP Monitoring Server" domain name
• Fixed Turning on or off "Bluetooth headset mode" can affect the option of "Bluetooth visibility"
• Fixed Both sides turn on "Use the First Match Code in 200OK SDP" and "Turn on the Forward Error Correction of Audio" then audio is silent
• Fixed Device enable HFP, make a call and no voice
• Fixed After connecting the Bluetooth headset, you can access the 3.5mm headset when you dial, and the earphone cannot hear the ring back tone
• Fixed Disabled option2/42 still write 2/42 value
• Fixed Traceroute cannot return complete results
• Fixed Devices on GDMS do not display DND status
• Fixed After manually connecting 2.4Gwifi, it will automatically switch to 5Gwifi
• Fixed The device connects to 2.4Gwifi rather than 5G Wi-Fi when uses 2.4G&5G(probability)
• Fixed Delete two sip accounts at the same time on GDMS, and the device only cancels the registration of one account
• Fixed When Wi-Fi is off, network information still retains Wi-Fi information
• Fixed In the standby interface, the first dial tone is emitted from the speaker
• Fixed It has no voice after make call by IPV6
• Fixed When the firmware update detects if there is a new version, it should be prompted
• Fixed Auto Provisioning not fully update
• Fixed The recipient is not visible when jump from contacts to text messages
• Fixed Access contacts during the call then call a number that is on the phone and the prompt is incorrect
• Fixed Unable to move cursor forward while editing message recipient
• Fixed Text message interface and text message details interface options have translation error
- Fixed The option button in meeting interface can't be clicked
- Fixed The device is always connected to 2.4G network after recovery
- Fixed The device displays messy code when Option 120 is ip address
- Fixed Device cannot get IP when DHCP server configures option 242
- Fixed When outbound proxy and secondary outbound proxy are domain name address, DNS parsing will not use SRV mode
- Fixed CN country code does not support the 12 and 13 channels
- Fixed VPN IP displays error in the network state page
- Fixed No weak signal toast when DTU screen timeout during the call
- Fixed Equipment for connection to the 3.5 mm earphone, long press the volume (+), high volume remind box pops up many times
- Fixed The tips of "Wi-Fi security" is wrong
- Fixed Click "return" button in the authentication window and it don't return to the Wi-Fi list interface
- Fixed When the device is connected to a 3.5mm earphone and the volume (+) button is pressed, the high-volume reminder does not pop up.
- Fixed DTU does not connect SSID when click "connect" button(probability)
- Fixed Web UI "cannot get trace list"
- Fixed Music did not come out of the speaker after canceling the A2DP headset's multimedia connection
- Fixed When there is a second call, cannot answer the call using the Bluetooth headset after hang up the current call
- Fixed Can't answer the second call when use Bluetooth
- Fixed LCD and web's Wi-Fi roaming information display inconsistencies
- Fixed Reboot tips message is displayed incorrectly
- Fixed One-click debugging is unavailable
- Fixed Unable to edit GDS
- Fixed Chinese translation of "enable call waiting" option is wrong
- Fixed Auto end PTT speaking if line is hold
- Fixed Fix the logic of changed font size in setting
- Fixed Existing contacts will still show "Add to local contacts"
- Fixed Toast prompt cannot be cleared by clicking any button when switching accounts
- Fixed The loudness of the speaker after connecting to the Bluetooth headset is inconsistent with when not connected
- Fixed After the multicast talkback hold/unhold, the call does not ring the call waiting tone.
- Fixed The volume of ringtone is different with connect BT
- Fixed Snooze countdown still triggers security monitoring when it's in the background
- Fixed There is no Wi-Fi alert after connecting WIFI Portal when the signal is weak
- Fixed Device can't scan 5G SSID (probability)
• Fixed Device cannot join multicast after turning off DND
• Fixed When "Custom SMS Reply Content" is not empty, button display error
• Fixed "Speed Dial" interface title shows error
• Fixed 1-level domains are not accepted under SIP server field
• Fixed P-value 8501 is abnormal when upload another device’s configuration
• Fixed The prompt is wrong in firmware upgrade detect
• Fixed Web page always show "Detecting...Please wait" when click detect button
• Fixed After modify door system ringtone, add new door system, will default select this ringtone
• Fixed Web "Contact Group" has untranslated prompts
• Fixed Unable to click the acceptance clause popup
• Fixed Detect Upgrade don’t download the config file
• Fixed Daily test produces gs_phone core file
• Fixed Setting incorrect IPv4 address causes core dump

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

BATTERY STATUS

• Handset Configuration
  This option can be found on the handset UI under Menu->Status->Battery.

<table>
<thead>
<tr>
<th>Battery</th>
<th>Battery usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current battery 62%</td>
<td></td>
</tr>
<tr>
<td>Used time 3Hrs.20Mins.</td>
<td></td>
</tr>
<tr>
<td>Remaining time 4Hrs.48Mins.</td>
<td></td>
</tr>
<tr>
<td>Battery temperature 29.0°C</td>
<td></td>
</tr>
<tr>
<td>Battery usage &gt;</td>
<td></td>
</tr>
<tr>
<td>Back</td>
<td></td>
</tr>
<tr>
<td>Screen 99.8%</td>
<td></td>
</tr>
<tr>
<td>Wi-Fi 90.6%</td>
<td></td>
</tr>
<tr>
<td>LED &lt;0.1%</td>
<td></td>
</tr>
<tr>
<td>Bluetooth &lt;0.1%</td>
<td></td>
</tr>
<tr>
<td>Backlight</td>
<td></td>
</tr>
</tbody>
</table>

• Functionality
  Displays the battery status and the battery usage details.

EXPORT BATTERY LOG

• Web Configuration
This option can be found on the web UI under Maintenance->System Diagnosis->Debug->Debug Info Menu.

One-click Debugging

Debug Info Menu

- **Check All**
- **Syslog**
- **Logcat**
- **Capture Trace**
- **Tombstones**
- **ANR Log**
- **Battery Log**

**Functionality**

Allows the downloading of battery log as part of the one-click debugging feature.

**BLUETOOTH WEB UI**

**Web Configuration**

This option can be found on the web UI under Network Settings->Bluetooth.

- **Device Name**: WP820_E301D3
- **Bluetooth Headset Mode**: Off
- **Bluetooth**: Off
- **Bluetooth Devices**: Scan

**Functionality**

Enables Bluetooth and perform Bluetooth related functions on the web UI.

**New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA</td>
<td>Device Name</td>
<td>String</td>
<td>N/A</td>
</tr>
</tbody>
</table>
WI-FI CHANNEL MODE

- **Web Configuration**
  
  This option can be found on the web UI under Network Settings->Wi-Fi Settings->Advanced Settings.

  ![Channel Mode Configuration](image)

- **Functionality**
  
  If set to “Auto,” the device will process all available Wi-Fi channels when scanning for SSIDs. The “Customize” option allows the user to specify the channels that the device should scan when scanning operations occur.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P22288</td>
<td>Channel Mode</td>
<td>See config template for full value list.</td>
<td></td>
</tr>
</tbody>
</table>

VISUAL VOICEMAIL

- **Web Configuration**

  There is no configuration for this feature.

- **Functionality**

  WP820 added support for UCM6xxx visual voicemail feature. After login to the UCM voicemail, the user can listen to individual voicemails on the device. Note: Requires UCM 6xxx v1.0.20.6 or later.
CUSTOM WALLPAPER

- **Web Configuration**
  
  This option can be found on the web UI under Phone Settings->Wallpaper Setting.

- **Functionality**
  
  This feature allows the user to upload and set the device idle screen wallpaper.

OPENVPN MODE

- **Web Configuration**
  
  This option can be found on the web UI under Network Settings->OpenVPN Settings
**Functionality**
This feature allows the user to choose whether to use “Simple Mode” or “Professional Mode” for OpenVPN configuration. The “Simple Mode” provides a basic set of parameters on the web UI for OpenVPN. The “Professional Mode” allows the user to upload an OpenVPN configuration for a more customized setup for VPN. Note: Please see OpenVPN configuration upload guide on the Grandstream product page for additional details.

**New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA</td>
<td>OpenVPN Mode</td>
<td>TBA</td>
<td>TBA</td>
</tr>
</tbody>
</table>

**WI-FI PROVISION VIA USB**

**Web Configuration**
There is no configuration for this feature.

**Functionality**
This feature allows the user to place a Wi-Fi configuration package on USB and upload to WP820. Note: Please see the Wi-Fi configuration upload guide on the Grandstream product page for additional details.

**CONFIG PROVISION VIA USB**

**Web Configuration**
There is no configuration for this feature.

**Functionality**
This feature allows the user to place a XML configuration file on a USB drive and upload to WP820. Note: WP820 will automatically scan the USB drive for cfg(mac).xml files after the connection is
established. Please ensure only one instance of the file type is contained in the root directory of the USB drive.

**ACTION URL FOR SAFE/PANIC CALL**

- **Web Configuration**
  This option can be found on the web UI under Maintenance->Event Notification

  ![SAFE/Panic Call](image)

- **Functionality**
  When SAFE/Panic call alarm is triggered, the device will send the corresponding SAFE/Panic call action URL in the event notification page.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA</td>
<td>SAFE/Panic Call</td>
<td>String</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**LOCK SCREEN ON WEB UI**

- **Web Configuration**
  This option can be found on the web UI under System Settings->Security Settings->Lock Screen Settings.

  ![Screen Lock Function](image)  
  ![Screen Lock Password](image)

- **Functionality**
  Allows the user to configure lock screen functions on the web UI. The screen lock password was also added to provide additional security.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P22235</td>
<td>Screen Lock Function</td>
<td>0 – Off, 1 – On</td>
<td>0</td>
</tr>
<tr>
<td>P1383</td>
<td>Screen Lock Password</td>
<td>String (numbers only)</td>
<td>N/A</td>
</tr>
</tbody>
</table>
SEND MESSAGE TO CONTACTS

- **Handset Configuration**
  This option can be found on the handset UI under Menu->Contacts->Options.

![Contacts Menu](image)

- **Functionality**
  In the contacts menu, users can now select the option to send text message to a contact.

SPEED DIAL VIA MULTI-FUNCTION KEY

- **Handset Configuration**
  This option can be found on the handset UI under Settings->Basic Settings->Button Customization->Multi-function button.

![Multi-function Button](image)

- **Functionality**
  The multi-function key can be used to speed dial a contact. Note: The speed dial function will need to be setup before activating the feature.
FIRMWARE VERSION 1.0.3.20

PRODUCT NAME
WP820

DATE
4/10/2019

FIRMWARE FILE INFORMATION
• WP820 firmware file name: wp820fw.bin
  MD5: 1c813bef7ca0521e4c336eacf80c76a8

ENHANCEMENT
• Added video call zoom function. [VIDEO CALL ZOOM]
• Added web upgrade error messages and error logic.
• Added OpenVPN LZO Compression Switch. [LZO COMPRESSION]
• Added UCM conference control. [UCM CONFERENCE CONTROL]
• Updated SRTP icon to display only when signaling and media are both encrypted.
• Added enable/disable SSH without rebooting.
• Updated menu bar Wi-Fi connection status to display according to the interaction.
• Added "RTP Timeout (s)" feature. [RTP TIMEOUT]
• Updated DTMF view to show 4 seconds and then auto hide.
• Added ability to press 0~9 to enter search mode in contacts menu. [CONTACTS QUICK SEARCH]
• Added disabled web login in system security. [DISABLED WEB LOGIN]
• Added disable Wi-Fi warning option. [DISABLE LOW WI-FI SIGNAL WARNING]
• Added logic to avoid display voice mail number data as negative number.
• Added quick setup wizard module. [QUICK SETUP WIZARD MODULE]
• Added packet drop rate warning.
• Updated LED display.
• Added detect firmware upgrade feature on web UI. [DETECT UPGRADE]
• Added mute on answer intercom call. [MUTE ON ANSWER INTERCOM CALL]
• Added custom ringtone for door system. [CUSTOM RINGTONE FOR DOOR SYSTEM]
• Added LCD screen timeout and brightness. [LCD SCREEN TIMEOUT AND BRIGHTNESS]
• Updated attended transfer confirmation msg.
• Updated Dutch language file.
• Changed configuration item name 'Multicast Paging' to 'Multicast Paging Function'.
• Added Factory reset: first unregister sip message without contact head.
- Added SAFE/Panic show 'Emergency Dial Force Speaker' config. [EMERGENCY DIAL FORCE SPEAKER]
- Updated LCD UI when powered off and in charging mode.
- Increased dial digit limit to 30 characters.
- Upgraded sqlite3 for security problem.
- Optimized Security/Alarm snooze design.
- Added Reject Call Notification feature. [REJECTED CALL NOTIFICATION]
- Removed “Personalized Account” menu and move related options to Settings->Call settings.
- Update UI of ringtone selector interface.
- Added support to use $product and $mac for config provision. [CONFIG PROVISION UPDATE]
- Added processing animation for one click debug.
- Added Wi-Fi restart when changed Wi-Fi frequency.
- Added displaying Bluetooth account.
- Added Bluetooth headset mode support. [BLUETOOTH HEADSET MODE SUPPORT]
- Updated device LCD language supported list.
- Added icon to show the type of Bluetooth device under Bluetooth devices menu.
- Updated text string in call forward mode “others.”
- Added SIP Notify to sync phonebook. [SIP NOTIFY TO SYNC PHONEBOOK]
- Added tooltip for Wi-Fi warning.
- Added uaCSTA support. [UACSTA]
- Updated time zone list and values on web.
- Updated POSIX time values for time zone provisioning
- Updated UI of toast messages.
- Updated SMS interface.
- Enabled ACS and ACS URL by default.
- Add 2 second delay when detect flip to reject call.
- Updated Wi-Fi and Bluetooth refresh animation.
- Added the ability to add/remove contacts via web UI.
- Support GDMS provisioning via TR069. [GDMS PROVISIONING]
- Added always boot up device when charging.
- Updated factory reset using hard key interface. [FACTORY RESET VIA HARD KEY UPDATE]
- Added call detection before performing factory reset.
- Updated Czech and Slovak language.
- Added ability to automatically power on device when charging the device
- Added support for 3CX platform
- Added support for IPv6 syslog, SIP and provisioning.
- Added Use MAC header [USE MAC HEADER]
- Added more options for distinctive ring tone [MORE DISTINCTIVE RINGTONES]
• Added upload language file [UPLOAD LANGUAGE FILE]
• Added contacts management features on Web UI [PHONEBOOK MANAGEMENT]
• Added subscribe expiration [SUBSCRIBE EXPIRATION]

BUG FIX
• Fixed Disabled autocomplete username and password input box
• Fixed OpenVPN® Cipher Method remove Triple-DES option
• Fixed Remove some language select options to be the same as LCD
• Fixed Remove select option “GMT +0:00” to be the same as LCD.
• Fixed Replace background image of lock screen to match idle screen
• Fixed Adjust the shadow of date/time in lock screen for wp820
• Fixed Shouldn’t ring hands-free tone when clicking “Add to Contact” in dial interface
• Fixed The option and prompt of “Incoming ID display” do not match
• Fixed AlertInfo control different ringing inoperative
• Fixed When the device is asleep, the trigger time of static detection and tilt detection is inconsistent with the setting
• Fixed Probabilistic no warning when calling for emergency
• Fixed Voice/video encoding is incorrectly arranged
• Fixed Did not download after provision phonebook path with config file
• Fixed When account 1 is not active, off hook auto dial prompt “account is unavailable”
• Fixed The password input box should be aligned with other input boxes when use 802.1x
• Fixed Video encoding tips have unsupported options
• Fixed When you successfully log in to the web, prompted “Username or password is incorrect...”
• Fixed The edited contact will be displayed repeatedly on the dialing interface.
• Fixed Speed dial should follow the dialing rules
• Fixed The mute function should be hidden when the meeting is hold
• Fixed “Sort Phonebook by” first name, and it don't work immediately.
• Fixed Use the search function to search displays duplicate options
• Fixed Search results display abnormality
• Fixed The call button should not be grayed after the dialing interface selects the call record
• Fixed When the line is full, the channel button should be hidden
• Fixed The options in the meeting should be displayed as "Delete Members" + Contact Name
• Fixed After the phone unhold, the voice channel from handset to speaker
• Fixed When selecting group members, cursor can only be moved in group members.
• Fixed Display abnormal when login failed by password
• Fixed The font is too large, and the label set by PTT is not complete.
• Fixed Talkback should show speaker icon or only speaker channel
• Fixed Should add speaker icon when PTT intercom
- Fixed Wi-fi web page text editing interface not beautiful
- Fixed You cannot directly add a new call by pressing the dial button during single line call.
- Fixed The display of ringtone is inconsistent with the setting of ringtone.
- Fixed Contact: Setting custom ringtone prevents the contact from entering the edit screen
- Fixed Deletion of one of the members in the conference recording will not prompt the recording to stop.
- Fixed Modify the SSH port value when it conflicts with the WEB port and the Web port will still prompt the conflict when it is saved.
- Fixed HTTP/HTTPS proxy server host name fills in illegal IP, wrong IP can be saved
- Fixed Download LDAP binary configuration file contain % character, page displays gibberish
- Fixed Select the hold line and click the conference. The conference cannot be successfully established.
- Fixed Typing "x" will only bring up the dial pad (the filter character set contains x)
- Fixed Web not agree with LCD in language options
- Fixed Press the multi-function button when call coming, without stopping the vibration
- Fixed DTMF value should always exist
- Fixed When calling out during a meeting, it should not allow to hold
- Fixed The "option" button should be hidden when holding (two lines)
- Fixed Mute icon shows after hanging up the phone
- Fixed When editing dialing, return the ringtone to the speaker channel
- Fixed LDAP number filtering rules does not support "%" 
- Fixed Caller ID display confusion in PTT receiver
- Fixed The name of LDAP details is incomplete when setting several LDAP display name attributes.
- Fixed Rejecting an anonymous call should reply 433 instead of 486
- Fixed Add LDAP contacts to local, prompt "download successful".
- Fixed The stability time option has no unit
- Fixed The device does not use ppp0 address to send the registration packet
- Fixed SDP connection address is wrong when enable OpenVPN but OpenVPN NAT is NAT NO
- Fixed Multicast paging without voice after the end of the emergency channel paging
- Fixed Can't search for DTMF settings in search box
- Fixed The country code in search box of web displays error
- Fixed automatic deployment feature and wp-master use conflict
- Fixed Receiving a PTT when calling out results in no ringback tone
- Fixed Dial-up interface - click on the contact to edit the dial, cannot edit
- Fixed The focus shows abnormal when failed to connect to Wi-Fi
- Fixed Under large font, the text list interface is not beautiful
- Fixed Search cannot match "admin password"
- Fixed "Account Name" should be displayed as "Extension Number"
- Fixed After uploading the wrong firmware to the web page, the page button prompts you to make modifications.
- Fixed There are some problems in the search bar.
- Fixed Short press PTT button, device probably shows the speaking interface all the time.
- Fixed Press the number key quickly to pop up the virtual keyboard.
- Fixed Can't uncheck the checkbox in GWN Cloud Wi-Fi portal page.
- Fixed WIFI authentication uses GWN cloud, and the interface is incomplete.
- Fixed The ringtone is set to mute, but the selected ringtone is still the last set.
- Fixed Contact download interface clear and replace options no default value.
- Fixed The button of the server list of Guest login is logically incorrect.
- Fixed Only labels should be displayed "Not set".
- Fixed Using H.264 Constrained Profiles should be removed.
- Fixed The tooltip of PNP (3CX) needs to be modified.
- Fixed After the completion of the installation it will not automatically log out.
- Fixed When the firmware version is the same, click update in web, web and LCD without any hints.
- Fixed Even if the input format is wrong, you can still click the start button.
- Fixed Multicast settings should be changed to groups.
- Fixed Probability does not vibrate when the device receives PTT frequently.
- Fixed When the secondary SIP server is not saved, the accounts will affect each other.
- Fixed Heard speaker noise at the end of receiving PTT.
- Fixed The appropriate hints should be given when downloading a recording file.
- Fixed Toggle the web page, and the check box that imports the contact mode does not work.
- Fixed Layer 3 SIP QoS and audio QoS are empty when clicking save, should prompt cannot be empty.
- Fixed When you do not fill in the SIP domain, clicking the login button does not indicate that the domain name cannot be empty.
- Fixed Alternate SIP server annotation displays error.
- Fixed GDS calls, device has no ring tone.
- Fixed SIP account drops line (probability).
- Fixed When imported contact is over the maximum value, the contact should be prompted to be full.
- Fixed VCard contact files can be imported when more than 500 people.
- Fixed Device connect Bluetooth headset, ringtone output from the handset.
- Fixed Bluetooth headset /SPK cannot hear the ring tone at the same time when calling.
- Fixed Remove the WIFI button from the WIFI page.
- Fixed Charging tone is not complete when booting.
- Fixed Initiating alarm causes the phone to cancel mute.
- Fixed The green light is not always on during the preloader phase of the factory restoration process.
• Fixed Configure the server address is “fm.grandstream.com/gs”, config update mode no switch to HTTPS
• Fixed Text message popover title should be changed to "text message"
• Fixed Photosensitivity will also take effect at the launcher interface
• Fixed Exit the interface directly when click "select" button in account ring interface
• Fixed The range of roaming step value is not reasonable
• Fixed Speaker play hands-free sound during installing the firmware
• Fixed LCD terminal account ring is missing the mute ring
• Fixed City name web does not correspond to LCD
• Fixed Web language have no Slovencina language
• Fixed GDS menu name is displayed incorrectly
• Fixed Can save the same system number
• Fixed "RTCP Monitoring Server" should add a prompt when the port is not filled out
• Fixed Network state of IPv4 displays incorrect
• Fixed The layer 2 QoS 802.1p Priority Value is incorrect
• Fixed "Detect upgrade" without prompt
• Fixed after the ringtone is deleted, the device still rings this ringtone
• Fixed Web can't delete the recordings
• Fixed Horizontal scroll bar is not displayed when the WEB side window is shrunk
• Fixed “Second Dial Tone” is empty
• Fixed Large font in the contact edit interface input symbols will cause the input method selection box flashing
• Fixed "Connect" button appear in page
• Fixed Modifying group name does not take effect immediately
• Fixed Editing the contacts that are already in the group will delete other members of the group
• Fixed System security - "Select" button click is invalid
• Fixed Time setting for no answer transfer should be optimized
• Fixed LCD setting time interface can be saved without modifying time, and the interface can only be operated at about 10s
• Fixed Running/no movement/tilt detection time lack unit
• Fixed The alert and alarm sound in the security/warning are not selected after entering the selection page
• Fixed The preferred network protocol setup is not good
• Fixed In low temperature environment, can't close the tip.
• Fixed The unanswered-timeout range of web is inconsistent with the local
• Fixed Wi-Fi details interface display is insufficient
• Fixed Speed Dialing - After clicking Edit and, the Delete button disappears
• Fixed Spectralink interface option is incorrect
• Fixed PTT selection screen displays irrelevant options (probability)
• Fixed Wi-Fi scan should have a dynamic effect
• Fixed LCD terminal turns on the emergency call, but the emergency call number is empty, and no prompt is given when saving.
• Fixed The settings of the alarm tone ringtone and the reminder tone ringtone will affect each other.
• Fixed The transfer failed to cause the hold line to collect and output sound
• Fixed device cannot obtain IP after configuring option 242 parameter
• Fixed "账" should be displayed as ‘帐’
• Fixed After the device enters "Encryption unsuccessful" interface, it will not work properly
• Fixed There is no live update option when pairing/disconnecting Bluetooth
• Fixed Refresh Bluetooth list, it can also search for the Bluetooth that has been turned off
• Fixed Bluetooth saved list prompts redundant
• Fixed Can't check page option in Wi-Fi Portal page
• Fixed When network disconnected, MAC address display for 00:00:00:00:00:00 in the system information
• Fixed No prompt “The line is full” when the call is made from the contact
• Fixed The text was clear after the screen off
• Fixed After modifying the parameters of WIFI roaming interface, the screen was not saved and the parameters changed back to the original value after lighting the screen
• Fixed The screen may show black after make call
• Fixed The device cannot be handled properly after receiving the server reply 301
• Fixed If the DND on/off number of account 1 is not online, the account displayed by the DND on/off number of account 2 is wrong
• Fixed The prompt of Wi-Fi connect success shows black bottom
• Fixed After picking up the phone, the mute button should be changed
• Fixed Gesture control interface prompt text incomplete
• Fixed "reply content" lacks secondary menu guidance
• Fixed issue when displaying long SSID names in Wi-Fi status screen
• Fixed when enable two accounts and set register expiration to 5mins, then it will lose registration
• Fixed enable keepalive in sleeping state device may lose the keep alive timer.
• Fixed enable keepalive and disable PTT, then device won't sleep
• Fixed Cannot navigate in loop in Network Status menu
• Fixed The web page plays the recording, and the right download, edit and delete icons are grayed out.
• Fixed ESSID and password for Wi-Fi settings cannot be cleared
• Fixed Secondary SIP Server wrong explanation on Web GUI
• Fixed When the third layer SIP QoS and audio QoS are empty, click Save, and the prompt should not be empty.
• Fixed WP820 has distorted audio when answering SRTP calls from Call Queue
• Fixed SIP header requirement for Hot Desking feature
• Fixed Warning tone and alarm tone default values
• Fixed Input issues for Voicemail ID on LCD menu->Account
• Fixed Date display format have no effect on LCD date display
• Fixed MOH mode does not work with the account registered with the standby server.
• Fixed Prompt additional credentials if the network requires
• Fixed the issue that cannot play DTMF while number matched the second dial tone.
• Fixed Repair some APs cannot be scan when there are too many APs nearby
• Fixed Adding a warning tone when it's low on battery
• Fixed After provision to disable missed call and MWI indicator, device still flash LED on missed calls and new voicemail
• Fixed Missed call notification - Shows in two places
• Fixed Wi-Fi SSID setup menu has the word "Safety" to describe "Security mode"
• Fixed Repair device cannot sleep when enable syslog
• Fixed When cancel saving the Wi-Fi of 802.1x, the certificates of user and CA should not be cleared
• Fixed Unable to adjust volume when Bluetooth and 3.5mm headset connected.
• Fixed AutoConfig language does not take effect.
• Fixed WP820: 1-level domains are not accepted under SIP server field
• Fixed TR069 ACS sends FactoryResetTask, but device executes reboot
• Fixed Disable the Android NTP service NetworkTimeUpdateService
• Fixed After Wi-Fi roaming, device should send IGMP report immediately
• Fixed ACS does not send a request connection to IPV6 address

KNOWN ISSUES
• PTT does not support IPv6 address
• Wi-Fi protected setup not supported

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

VIDEO CALL ZOOM
• Web Configuration
  This option is enabled by default.
• Functionality
During GDS call, the user can select Options->Zoom to enter the zoom interface. This interface allows the user to choose zoom in on certain sections of the image or use full screen mode.

LZO COMPRESSION

- **Web Configuration**
  This option can be found on the web UI under Network Settings->OpenVPN Settings
  
  Enable OpenVPN® Comp-lzo

- **Functionality**
  This option configures whether to enable LZO compression for OpenVPN. Note: This option needs to be enabled if configured on the OpenVPN server.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P8508</td>
<td>Enable OpenVPN® Comp-lzo</td>
<td>0 – Off</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – On</td>
<td></td>
</tr>
</tbody>
</table>

UCM CONFERENCE CONTROL

- **Web Configuration**
  This feature is enabled by default. Please see UCM user guide for configuration of UCM CEI Notify feature.

- **Functionality**
The WP820 supports UCM CEI notify feature to receive conference status and to control the conference. Currently it can show the conference participants and can add additional party members via the “Invite” feature.

RTP TIMEOUT

- **Web Configuration**
  This option can be found on the web UI under Account 1/2->Codec Settings.

  RTP Timeout (s)  

![](image)

- **Functionality**
  This option sets the RTP timeout of the phone. If the phone does not receive the RTP packet within the specified RTP time, the call will be automatically disconnected.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P29068  (Account 1)</td>
<td>RTP Timeout (s)</td>
<td>0 – 600</td>
<td>30</td>
</tr>
<tr>
<td>P29168  (Account 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CONTACTS QUICK SEARCH

- **Handset Configuration**
  This option can be found on the handset UI under contacts interface.
• **Functionality**
  This feature allows the user to start a search in the contacts interface by pressing the keypad keys.

**DISABLED WEB LOGIN**

• **Handset Configuration**
  This option can be found on the handset UI under Settings->Advanced Settings->System Security->Disable web UI access.

**DISABLE LOW WI-FI SIGNAL WARNING**

• **Handset Configuration**
  This option can be found on the handset UI under Settings->Network Settings->Wi-Fi signal warning.
• **Functionality**
  Sets the sensitivity of the Wi-Fi signal warning when Wi-Fi signal is low. Default is level 3. Set to “Disabled” to turn off the warning.

<table>
<thead>
<tr>
<th>WiFi signal warning</th>
<th>Warning sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Disabled</td>
</tr>
<tr>
<td></td>
<td>Level 1 (Lowest)</td>
</tr>
<tr>
<td></td>
<td>Level 2</td>
</tr>
<tr>
<td><strong>Level 3</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Level 4</td>
</tr>
<tr>
<td></td>
<td>Select</td>
</tr>
<tr>
<td></td>
<td>Back</td>
</tr>
</tbody>
</table>

**QUICK SETUP WIZARD MODULE**

• **Handset Configuration**
  This option can be found on initial boot up of a factory default device.

![Welcome Screen]

**DETECT UPGRADE**

• **Web Configuration**
  This option can be found on the web UI under Maintenance->Upgrade->Firmware.
Firmware Upgrade

- **Functionality**
  When activated, this feature will detect if a firmware upgrade is available for the device using the firmware URL provided. This feature has been updated with animation and progress indicator to indicate its operation.

**MUTE ON ANSWER INTERCOM CALL**

- **Web Configuration**
  This option can be found on the web UI under Account 1/2->Call Settings.

  Mute on Answer Intercom Call

  - **Functionality**
    When enabled, phone will set mute feature upon answering incoming intercom calls.

  - **New P-value**

    | P-value                  | Description                                   | Value range | Default |
    |-------------------------|-----------------------------------------------|-------------|---------|
    | P26071 (Account 1)      | Mute on Answer Intercom Call                  | 0 – Off     | 1       |
    | P26171 (Account 2)      |                                               | 1 – On      |         |

**CUSTOM RINGTONE FOR DOOR SYSTEM**

- **Web Configuration**
  This option can be found on the web UI under Value-added Service->Door System

  System Ringtone

  - **Functionality**
    Sets the system ringtone when receive calls from GDS.

  - **New P-value**

    | P-value     | Description     | Value range                                                                 | Default                        |
    |-------------|-----------------|----------------------------------------------------------------------------|--------------------------------|
    | P22241-P22250 | System Ringtone | See config template ringtone value table                                   | /system/media/audio/ringtones/DingDong |
LCD SCREEN TIMEOUT AND BRIGHTNESS

- **Web Configuration**
  This option can be found on the web UI under System Settings->Preferences->LCD & LED Management

  ![Brightness slider](image1)
  ![Timeout selector](image2)

- **Functionality**
  Sets the LCD brightness and timeout interval. When display times out it shows a black screen.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P910</td>
<td>Brightness</td>
<td>1 – 255</td>
<td>182</td>
</tr>
<tr>
<td>P1412</td>
<td>Timeout</td>
<td>0 – Never, 15 – 15 Seconds, 30 – 30 Seconds, 60 – 1 Minute, 120 – 2 Minutes, 300 – 5 Minutes, 600 – 10 Minutes, 1800 – 30 Minutes</td>
<td>60</td>
</tr>
</tbody>
</table>

EMERGENCY DIAL FORCE SPEAKER

- **Web Configuration**
  This option can be found on the web UI under Value-added Service->SAFE/Panic Call.

  ![Emergency Dial Force Speaker slider](image3)

- **Functionality**
  If set to “Yes”, the phone will use speaker for emergency call.

- **New P-value**
<table>
<thead>
<tr>
<th>P22273</th>
<th>Emergency Dial Force Speaker</th>
<th>0 – Off</th>
<th>1 – On</th>
<th>0</th>
</tr>
</thead>
</table>

### REJECTED CALL NOTIFICATION

- **Web Configuration**
  This option can be found on the web UI under Phone Settings->Call Settings.

  ![Rejected Call Notification](image)

- **Functionality**
  When enabled, a missed call will prompt on LCD after rejecting an incoming call.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P8393</td>
<td>Rejected Call Notification</td>
<td>0 – Off 1 – On</td>
<td>0</td>
</tr>
</tbody>
</table>

### CONFIG PROVISION UPDATE

- **Web Configuration**
  This option can be found on the web UI under Maintenance->Upgrade->Provision->Config Provision.

  ![Config Provision](image)

- **Functionality**
  Device will download the configuration files and provision by the configured order. This feature has been revised so that the user can use the following tags in the value: `cfg$mac.xml`, `cfg$mac`, `cfg$product.xml` where “mac” represents the mac address of the device and “product” represents the device model.

- **New P-value**
<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P8501</td>
<td>Config Provision</td>
<td>List config file name in the preferred order separated by “;”. For example: cfg$mac;cfg$mac.xml;cfg$product.xml;cfg.xml</td>
<td>All selected</td>
</tr>
</tbody>
</table>

**BLUETOOTH HEADSET MODE SUPPORT**

- **Handset Configuration**
  This option can be found on the handset UI under Settings->Network Settings->Bluetooth Settings.

- **Functionality**
  This feature allows the WP820 to pair with other Bluetooth mobile devices to make calls. After success pairing, the user can press the call key and then press "Accounts" to select the Bluetooth account.

**SIP NOTIFY TO SYNC PHONEBOOK**

- **Web Configuration**
  This option can be found on the web UI under Account 1/2->Advanced Settings

- **Functionality**
  When enabled, the phone will allow SIP Notify messages to sync local phonebook.

**New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P26099 (Account 1)</td>
<td>Allow Sync Phonebook via SIP Notify</td>
<td>0 – No&lt;br&gt;1 – Yes</td>
<td>1</td>
</tr>
</tbody>
</table>
UACSTA

- **Web Configuration**
  This option can be found on the web UI under Network Settings->Advanced Network Settings.

  CSTA Control

- **Functionality**
  Allows third party applications to control the WP820 via uACSTA standard. Supports 3CX uACSTA web client call control.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P32053</td>
<td>CSTA Control</td>
<td>0 – Off 1 – On</td>
<td>0</td>
</tr>
</tbody>
</table>

GDMS PROVISIONING

- **Web Configuration**
  This feature is enabled by default via TR069. TR069 configuration can be found on web UI under System Settings->TR069.

  Enable TR-069

  ACS URL
  https://acs.gdms.cloud

  ACS User Name

  ACS Password

- **Functionality**
  Allows GDMS to monitor and provision the WP820 via TR069.
FACTORY RESET VIA HARD KEY UPDATE

- **Functionality**
  The WP820 can be factory reset by holding down the 1 and 9 keys during reboot or boot up phase. If constraint mode is enabled, the user will need to enter their password before the device can be factory defaulted. We have improved the UI for hard key reset by adding the softkeys to change character input, delete and OK (submit).

USE MAC HEADER

- **Web Configuration**
  This option can be found on the web UI under Account 1/2->SIP Settings
  
  Use Mac Header  

- **Functionality**
  Use MAC Header in SIP register request and add MAC address in User-Agent header in SIP request.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P26061 (Account 1)</td>
<td>Use MAC Header</td>
<td>0 – Off</td>
<td>0</td>
</tr>
<tr>
<td>P26161 (Account 2)</td>
<td></td>
<td>1 – On</td>
<td></td>
</tr>
</tbody>
</table>

MORE DISTINCTIVE RINGTONES

- **Web Configuration**
  This option can be found on the web UI under Account 1/2->Call Settings->Ringtones
• **Functionality**

Sets the distinct ringtone for the incoming caller ID.

• **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P6716</td>
<td>Match Incoming Caller ID. (Account 1)</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P6718</td>
<td>Matching Rule 4-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P6720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P26064</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P26066</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P26068</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P26096</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Account 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P6717</td>
<td>Matching Rule 4-10 Distinctive Ringtone</td>
<td>See ringtone value</td>
<td>content://settings/system/ringtone</td>
</tr>
<tr>
<td>Model Numbers</td>
<td>Matching Rule</td>
<td>Distinctive Ringtone</td>
<td>See ringtone value table</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------</td>
<td>----------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>P6724 P6726</td>
<td>4-10</td>
<td>(Account 2)</td>
<td></td>
</tr>
<tr>
<td>P26164 P26166</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P26168 P26196</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Account 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P6723 P6725</td>
<td>4-10</td>
<td>Distinctive Ringtone</td>
<td></td>
</tr>
<tr>
<td>P6727 P26165</td>
<td></td>
<td>(Account 2)</td>
<td></td>
</tr>
<tr>
<td>P26167 P26169</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P26197</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Account 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### UPLOAD LANGUAGE FILE

- **Web Configuration**
  This option can be found on the web UI under System Settings->Time and Language->Language.

  ![Select Language File](image)

  ![Browse](image)

- **Functionality**
  Allows users to upload custom language file to the phone. (Language files are provided per special request)

### PHONEBOOK MANAGEMENT

- **Web Configuration**
  This option can be found on the web UI under Applications->Contacts.

  ![Contacts Table](image)
• **Functionality**
  Allows users to add phonebook contacts, create contact groups and blacklist on the web UI.

**SUBSCRIBE EXPIRATION**

• **Web Configuration**
  This option can be found on the web UI under Account 1/2->SIP Settings

  Subscribe Expiration (m)  

• **Functionality**
  Sets the frequency (in minutes) in which the phone refreshes its subscription for SIP events.

• **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P26051</td>
<td>Subscribe Expiration (minutes)</td>
<td>1 - 64800</td>
<td>N/A</td>
</tr>
<tr>
<td>(Account 1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P26151</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Account 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FIRMWARE VERSION 1.0.3.6

PRODUCT NAME
WP820

DATE
12/26/2018

FIRMWARE FILE INFORMATION
• WP820 firmware file name: wp820fw.bin
  MD5: d09f8fe80f4381c52795c9c5ec50c405

ENHANCEMENT
• Updated web UI tooltips.
• Changed voicemail notification wording from “Ordinary” to “Normal”.

BUG FIX
• Fixed Current call will be put on hold if receiving call from GDS.
• Fixed Device is vulnerable to remote code execution by exploiting a post auth command injection vulnerability.
FIRMWARE VERSION 1.0.3.5

PRODUCT NAME
WP820

DATE
12/16/2018

FIRMWARE FILE INFORMATION
• WP820 firmware file name: wp820fw.bin
  MD5: b82b574434e95b7314155b254722470b

ENHANCEMENT
• Added additional home screen on the right for quick access to Wi-Fi/Bluetooth/DND. [ADDITIONAL HOME SCREENS]
• Added additional home screen on the left for notification messages. [ADDITIONAL HOME SCREENS]
• Added PNP 3CX Auto Provision option. [PNP (3CX) AUTO PROVISION]
• Added config provision options to control config file retrieval behavior [CONFIG PROVISION OPTION]
• Added support for softkey customization. [SOFTKEY CUSTOMIZATION]
• Added support for PTT key customization. [PTT KEY CUSTOMIZATION]
• Added LDAP phonebook support. [LDAP PHONEBOOK]
• Added more options for phonebook automatic download interval. [AUTOMATIC DOWNLOAD INTERVAL FOR PHONEBOOK]
• Added support for captive portal. [WIFI CAPTIVE PORTAL]
• Added support for troubleshooting tools. [NETWORK TROUBLESHOOTING TOOLS]
• Added Wi-Fi band selection. [2.4G/5G BAND FOR WIFI]
• Added Wi-Fi warning when Wi-Fi signal is weak. [WIFI SIGNAL WARNING]
• Added SAFE MONITORING FEATURE [SAFE MONITORING FOR RUNNING/NO MOVEMENT/TILT]
• Added SIP header options to disable/enable Privacy Header, P-Preferred-Identity Header, P-Access-Network-Info Header and P-Emergency-Info Header. [ENABLE/DISABLE CERTAIN SIP HEADERS]
• Added support for quick conference during call. [QUICK CONFERENCE DURING CALL]
• Added support to receive video and show video up to 720p. [RECEIVE AND DISPLAY VIDEO FOR SIP CALL]
• Added support for custom ringtone. [CUSTOM RINGTONE]
- Optimized “Auto Config CPT by Region” feature.
- Added port customization for SSH access. [PORT CUSTOMIZATION FOR SSH ACCESS]
- Added support for custom certificate for provisioning [CUSTOM CERTIFICATE]
- Added Slovak language support on LCD display.
- Added door bell ring for GDS open door feature
- Renamed menu item “Tools” to “App”
- Added Calculator application under LCD Menu->App->Calculator
- Increased contacts max limit count to 1000. If device is upgraded from old firmware, please reset device to have this take effect.
- Improved time and date display for different format.
- Improved web UI strings and tooltips
- Improved SMS UI and UX
- Updated strings in English and multiple languages.
- Added stutter tone at dialing interface when the account has unread voicemail message.
- Provided support to enable adb to install third-party app to Menu->App using SDK. (SDK documentation will be provided soon)
- Added warning tone when device is low on battery. Device will generate a warning tone once when battery level becomes 15% and 5%.
- Added auto bootup when placed on charger if the device was powered off abnormally (e.g., battery too low, battery removed without manual power-off, etc.)
- Improved Wi-Fi connection status update and connection performance.
- Improved GuestLogin feature for better stability and performance.
- Improved phone UI for user-friendly purpose.
- Add option "Enable Noise Shield" [NOISE SHIELD]
- Changed incoming call softkey options from “Accept” “Transfer” “Reject” to “Accept” “Transfer” “Mute” for user friendly purpose.
- Added toast message when Wi-Fi signal is poor.
- Changed sound pressure diagnostic code from *77 to ***77* to avoid conflict with commonly used feature code.
- Added prompt for message sending status after user clicks “Send” for SMS.
- Added support for future hardware revisions.
- Added support to play audio notification beep tone during call to notify users that Wi-Fi connection is lost.
- Added IGMP keep-alive interval [IGMP KEEP ALIVE INTERVAL]
- Added gesture control [GESTURE CONTROL]
- Added default ringtone [DEFAULT RINGTONE]
- Added notification tone [NOTIFICATION TONE]
BUG FIX

- Fixed Unable to connect to hidden SSID in Wi-Fi auto config
- Fixed Wi-Fi autoconfig is unable to connect to hidden SSID
- Fixed Master connection sometimes fails after slave device enters ***801* for Wi-Fi autoconfig deployment
- Fixed When account has ringtone set to silent on web UI, the handset LCD displays unknown ringtone
- Fixed There is only one remote party’s recording for 3-way conference call
- Fixed Call interface disappears after screen off/on again if the device is in Wi-Fi details interface while answering incoming call
- Fixed Handsfree button shouldn’t take effect when user hasn’t logged in under guest mode
- Fixed Initiating transfer during two-way call causes device randomly stuck in calling state for both calls
- Fixed Layer 3 QoS for SIP and audio doesn’t apply to IPv6 for SIP call
- Fixed Alarm doesn’t stop after 1 min if setting up repeating alarm and modifying system date
- Fixed LCD shows transfer failed after blind transfer
- Fixed Transfer logic is incorrect after the transfer target clicks to transfer while device is ringing
- Fixed Device displays no response when the remote party rejects IP call
- Fixed Device does not hear the music of MOH when hold in conference
- Fixed Device does not receive Emergency Intercom when device already has 1 SIP call ringing and active PTT intercom
- Fixed No error prompt under lock screen if the device is overcharged with 12V power
- Fixed Device generates a “pu” sound randomly after entering digits and then pressing power button
- Fixed Perform search on web UI cannot jump to account related options
- Fixed Pressing any button shouldn’t trigger response during upgrading process
- Fixed LCD softkey label should “return” after restarting Wi-Fi in Wi-Fi roaming mode
- Fixed There should be no dial tone after entering number in handsfree speaker mode after device has mute on
- Fixed Unable to remove multicast paging address in web page
- Fixed Device shows 24hour format when setting the time after disable 24hour format for time display
- Fixed Device should not require password to reset again after reboot from reset which already requests password
- Fixed WP820 should power on automatically when placed on cradle
- Fixed VPN gateway and DNS shows empty information in LCD network status interface
- Fixed Device status shows gateway as 0.0.0.0 in SSH interface
- Fixed The green icon for the Bluetooth device is still displayed when Bluetooth is disconnected
- Fixed “Bypass Proxy For” doesn’t take effect after reboot
- Fixed Phone vibrates upon receiving SMS or weak Wi-Fi signal when vibration mode is off
- Fixed After enabling DND, there is no beep when there is a second call
- Fixed Web UI option "Bypass Proxy For" doesn't support multiple addresses
- Fixed After enabling guestlogin and receiving phone call, the call interface is not displayed
- Fixed Guest login option takes effect without reboot
- Fixed Device does not automatically download contacts after reboot
- Fixed When opening contacts/blacklist during SIP account settings, Delete key becomes Return key after back to SIP account settings
- Fixed The filter character set doesn't filter the number sent by SMS
- Fixed After creating message group with 500 contacts in it, if clicking “Return”, the return time takes too long
- Fixed The upgrading processing logic is incorrect when battery is low
- Fixed When device already has 500 SMS and a new SMS draft is created, the new draft will be deleted automatically
- Fixed Some menu items doesn’t support pressing UP key to loop to last item
- Fixed Phone has no pop-up prompt upon receiving SMS
- Fixed Phone doesn’t automatically restart when provisioning with a value that require reboot
- Fixed Sometimes call history will pop up automatically when there is a missed call
- Fixed LCD doesn’t go back to the Wi-Fi main interface directly after pressing return button in Wi-Fi settings menu
- Fixed Wi-Fi list still displays Wi-Fi SSID that does not exist after clicking “Refresh”
- Fixed Device may power off when charged by charging stand
- Fixed Wi-Fi security settings on web UI doesn’t take effect after reset
- Fixed Entering wrong password to connect Wi-Fi with WEP encrypt method will not prompt authentication failure
- Fixed Setting 12-hour format doesn’t show AM or PM in home screen
- Fixed The firmware upgrade/configuration file detection option name is incorrect
- Fixed Registration failure if device has turned on "Enable SIP OPTIONS Keep Alive"
- Fixed The name of the Bluetooth details interface is incorrect
- Fixed Some strings do not display completely on web UI
- Fixed Transfer interface should be removed when device has one SIP call and one multicast paging call
- Fixed SIP account doesn’t automatically register after device switches to “Prefer IPv6”
- Fixed Device enters the wrong voicemail ID interface when there are two SIP accounts
- Fixed During Wi-Fi connection, if pressing “Connect” it will forget the SSID
- Fixed Device can save two channels with the same multicast address and port in multicast paging page
- Fixed SIP registration is unable to use the network preferred protocol properly
- Fixed VPN icon disappears after restarting device
- Fixed WP820 could not do attended transfer before answer for Broadsoft platform
- Fixed Broadsoft IOT: device doesn’t respond to configuration file download authentication request
- Fixed When recording file name is too long, it will display in a new line
- Fixed When device is in sleep mode, turn off and turn on AP, the device will not register SIP account after it connects to AP
- Fixed Switching “Preferred Internet Protocol” shouldn’t take effect without reboot
- Fixed DTMF doesn’t take effect when responding to 183 from SIP server
- Fixed Unable to forget Wi-Fi that is already connected in Wi-Fi settings
- Fixed Wi-Fi list shows two identical SSID
- Fixed Battery icon is wrong when shutdown and charging
- Fixed Device doesn’t send BYE when emergency paging is received during attended transfer
- Fixed Device system time does not update after removing battery, putting back battery and going into sleep mode
- Fixed Device sometimes cannot perform attended transfer after receiving emergency paging during transfer interface
- Fixed Device sometimes cannot make call after receiving emergency paging during transfer interface
- Fixed Wi-Fi details display incorrectly when device is set to use static IP and preferred network protocol is “IPv6 only”
- Fixed OpenVPN icon disappears after enabling OpenVPN and rebooting device
- Fixed New call on device is abnormal after transfer
- Fixed Dial interface cannot dial out using OK key after entering numbers
- Fixed Device sometimes switches between charging and not charging when placed on charging stand
- Fixed Multicast paging should add prompt tone upon receiving multicast paging call
- Fixed Unable to hold or unhold after multiple frequent switching between two calls
- Fixed Pressing handset button and then pressing back will have a chance to hear a loud “Du” sound from speaker
- Fixed WP820 SIP registration failed when transport protocol is TLS
- Fixed Intelligent control option is not displayed after pressing DOWN button multiple times
- Fixed Device call interface shows abnormally when second callee answers call while device is in transfer interface
- Fixed Device cannot initiate paging in default mode when channel x is configured (x is not 1)
- Fixed When pressing dial key, the sound should always come from the speaker
- Fixed After pressing handsfree button to enter dialing interface and pressing # to redial, audio comes from handset instead of handsfree speaker

**KNOWN ISSUES**

- WEP is not supported for Wi-Fi encryption due to security concern. Only WPA/PSK is supported.
• 802.1x EAP encryption is not supported.
• WebUI access using IE8 browser is not supported.
• USB storage device in exfat format is not supported on WP820 anymore.

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

LDAP PHONEBOOK

• Web Configuration
  This option can be found on web UI under Applications->LDAP Phonebook.

```
LDAP Phonebook

Connection Mode  ➤ LDAP
Server Address ➤
Port ➤ 389
Base DN ➤
User Name ➤
Password ➤
LDAP Name Attributes ➤
LDAP Number Attributes ➤
LDAP Name Filter ➤
LDAP Number Filter ➤
Search Field Filter ➤ All Filter
LDAP Display Name Attributes ➤
Max Hits ➤ 50
Search Timeout (s) ➤ 4
LDAP Lookup For Dial ➤
LDAP Lookup For Incoming Call ➤
LDAP Dialing Default Account ➤ Default
```

• Functionality
WP820 supports obtaining contacts information from a LDAP server. LDAP contacts can be viewed on handset LCD via the contacts menu or phonebook softkey.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P8037</td>
<td>Connection Mode</td>
<td>0 – LDAP</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 - LDAPS</td>
<td></td>
</tr>
<tr>
<td>P8020</td>
<td>Server Address</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P8021</td>
<td>Port</td>
<td>1 – 65535</td>
<td>389</td>
</tr>
<tr>
<td>P8022</td>
<td>Base DN</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P8023</td>
<td>User Name</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P8024</td>
<td>Password</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P8028</td>
<td>LDAP Name Attributes</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P8029</td>
<td>LDAP Number Attributes</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P8026</td>
<td>LDAP Name Filter</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P8025</td>
<td>LDAP Number Filter</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>ldap_search_field</td>
<td>Search Field Filter</td>
<td>0 - All filter</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 - Name Filter</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 - Number Filter</td>
<td></td>
</tr>
<tr>
<td>P8030</td>
<td>LDAP Displaying Name Attributes</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P8031</td>
<td>Max Hits</td>
<td>0 – 32000</td>
<td>50</td>
</tr>
<tr>
<td>P8032</td>
<td>Search Timeout</td>
<td>0 – 180</td>
<td>4</td>
</tr>
<tr>
<td>P8034</td>
<td>LDAP Lookup For Dial</td>
<td>0 – No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Yes</td>
<td></td>
</tr>
<tr>
<td>P8035</td>
<td>LDAP Lookup For Incoming Calls</td>
<td>0 – No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Yes</td>
<td></td>
</tr>
<tr>
<td>P22039</td>
<td>LDAP Dialing Default Account</td>
<td>0 – Default</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Account 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 – Account 2</td>
<td></td>
</tr>
</tbody>
</table>

**ADDITIONAL HOME SCREENS**

- **LCD Configuration**
  
  This option can be found on handset UI home screen.
• **Functionality**
  On handset home screen:
  - Press right arrow to quickly check the Wi-Fi/Bluetooth/DND status. Here you can quickly turn on and off Wi-Fi, Bluetooth or DND using the middle softkey. The left softkey is a shortcut to jump to selected menu.
  - Press left arrow to view notifications. The notification screen shows missed calls, voice messages, SMS and other notifications. Delete - Removes the selected notification. Clear - Removes all the notifications on the screen.
  - Press end call button to return to the default home screen.

**PNP (3CX) AUTO PROVISION**

• **Web Configuration**
  This option can be found on web UI under Maintenance->Upgrade->Provision

<table>
<thead>
<tr>
<th>PNP Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="PNP Feature" /></td>
</tr>
</tbody>
</table>

• **Functionality**
  When enabled, it allows 3CX plug and play provisioning and UCM zero config provisioning.

• **New P-value**

<table>
<thead>
<tr>
<th>P value</th>
<th>Description</th>
<th>Value Range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1414</td>
<td>PNP (3CX) Auto Provision</td>
<td>0 – No</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Yes</td>
<td></td>
</tr>
</tbody>
</table>

**QUICK CONFERENCE DURING CALL**

• **Functionality**
Steps to perform quick conference during a call:

1. During a call, press the left softkey “Options” key to bring up the available options.

2. Use the navigation key to select “Conference” to create a conference.

3. Use the dial pad to enter the extension for the party to invite to the conference and then press “Join conf.” The conference will automatically be bridged before the third party answers the call.

SOFTKEY CUSTOMIZATION

- Web Configuration
This option can be found on web UI under System Settings->Preferences->Button Customization

### Soft Key

<table>
<thead>
<tr>
<th>Main Screen Left Softkey</th>
<th>Call History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Screen Center Softkey</td>
<td>Menu</td>
</tr>
<tr>
<td>Main Screen Right Softkey</td>
<td>Settings</td>
</tr>
<tr>
<td>Call Screen Left Softkey</td>
<td>Option</td>
</tr>
<tr>
<td>Call Screen Center Softkey</td>
<td>Transfer</td>
</tr>
<tr>
<td>Call Screen Right Softkey</td>
<td>Hold</td>
</tr>
</tbody>
</table>

- **LCD Configuration**
  
  This option can be found on the handset UI under Settings->Basic Settings->Button customization->Soft key

- **Functionality**
  
  Users can customize the functions assigned to the softkey that will be used on the home screen or call screen. On the home screen, the softkey can be customized to one of the following options: Call History, Menu, Settings, Contacts, Voicemail or DND. On the call screen, the softkey can be customized to one of the following options: Options, Transfer, Hold, Mute, New call, Conference or Record. **Note:** One of the call screen softkey must be “Options.”

- **New P-value**

<table>
<thead>
<tr>
<th>P value</th>
<th>Description</th>
<th>Value Range</th>
<th>Default</th>
</tr>
</thead>
</table>

---
| P22252 | Main Screen Left Softkey | 0 - Call history  
1 – Menu  
2 – Settings  
3 – Contacts  
4 – Voicemail  
5 - DND | 0 |
| P22253 | Main Screen Center Softkey | 0 - Call history  
1 – Menu  
2 – Settings  
3 – Contacts  
4 – Voicemail  
5 - DND | 1 |
| P22254 | Main Screen Right Softkey | 0 - Call history  
1 – Menu  
2 – Settings  
3 – Contacts  
4 – Voicemail  
5 - DND | 2 |
| P22255 | Call Screen Left Softkey | 0 – Option  
1 – Transfer  
2 – Hold  
3 – Mute  
4 - New Call,  
5 – Conference  
6 – Record | 0 |
| P22256 | Call Screen Center Softkey | 0 – Option  
1 – Transfer  
2 – Hold  
3 – Mute  
4 - New Call,  
5 – Conference  
6 – Record | 1 |
| P22257 | Call Screen Right Softkey | 0 – Option  
1 – Transfer  
2 – Hold  
3 – Mute  
4 - New Call, | 2 |
PTT KEY CUSTOMIZATION

- **Web Configuration**
  This option can be found on the web UI under System Settings->Preferences->Button customization

<table>
<thead>
<tr>
<th>Multi-function Button</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTT/Paging</td>
</tr>
<tr>
<td>Short press to access PTT/Paging settings, hold the key to initiate PTT/Paging call</td>
</tr>
<tr>
<td>SAFE/Panic Call</td>
</tr>
<tr>
<td>Short press to open status page, long press to trigger Panic Call</td>
</tr>
<tr>
<td>Mute</td>
</tr>
<tr>
<td>Mute incoming call, mute/unmute during a call</td>
</tr>
</tbody>
</table>

- **LCD Configuration**
  This option can be found on the handset UI under Settings->Basic Settings->Button customization->Multi-function button

- **Functionality**
  Users can customize the multi-function key on the left side of WP820 to the preferred function. The multi-function key can be programmed for PTT/Paging, SAFE/Panic Call or Mute. **Note:** The mute key is only valid during a call. If not set to “PTT/Paging,” the WP820 can only receive PTT and page.

- **New P-value**

<table>
<thead>
<tr>
<th>P value</th>
<th>Description</th>
<th>Value Range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P22258</td>
<td>Multi-function button</td>
<td>0 – PTT/Paging, 1 – Mute, 2 – SAFE/Panic Call</td>
<td>0</td>
</tr>
</tbody>
</table>
AUTOMATIC DOWNLOAD INTERVAL FOR PHONEBOOK

- **Web Configuration**
  This option can be found on the web UI under Application->Contacts
  
  ![Automatic Download Interval](image)

- **Functionality**
  Users can now select 5 mins, 30mins and 1 hour for automatic download interval.

- **New P-value**

<table>
<thead>
<tr>
<th>P value</th>
<th>Description</th>
<th>Value Range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P332</td>
<td>Automatic Download Interval</td>
<td>0 – None, 5 – 5 min, 30 – 30 min, 60 – 1 Hour, 120 – 2 Hours, 240 – 4 Hours, 360 – 6 Hours, 480 – 8 Hours, 720 – 12 Hours</td>
<td>0</td>
</tr>
</tbody>
</table>

SAFE MONITORING FOR RUNNING/NO MOVEMENT/TILT

- **Web Configuration**
  This option can be found on the web UI under Value-added Service->SAFE/Panic Call.

  ![SAFE Monitoring Settings](image)

  ![](image)

- **LCD Configuration**
This option can be found on the handset UI under Settings->Advanced Settings->SAFE/Panic Call.

- **Functionality**
  SAFE monitoring feature on WP820 will monitor the user’s safety situation and trigger an alarm once it detects any unsafe situation. When it detects that the user may be in a dangerous situation such as unable to move, fall, or being chased, the WP820 can quickly alert or initiate an emergency call for timely assistance.

  In particular, the phone will automatically prompt a warning alert and message once it detects any unsafe situation. If the user does not cancel the prompt warning message to confirm its safety within the set time, an alarm will be triggered and an emergency call will be initiated (if configured) for assistance.

  There are three types of safety detection methods can be set on SAFE monitoring settings:
  - **No movement detection**
    It detects that the user may be unable to move because of an injury or a coma, etc. Users can configure the duration of the no movement. If it stays no movement longer than the duration, the device will be triggered for detection.

  - **Tilt detection**
    It detects that the user may be in a state of slipping or falling, etc. Users can configure the sensitivity and timeout for this detection. With higher sensitivity level on tilt status, a relative slight falling action will trigger tilt detection and alert.

  - **Running detection**
    It detects that user may be in a status of being chased or escaping from a dangerous environment. Users can configure the sensitivity and timeout for this detection. With higher sensitivity level on running status, a slower running speed will trigger the running detection.
To trigger alarm in a silent way during urgent or dangerous situation, configure the Panic Call silent alarm option to be on. The default setting is off. This setting will enable the phone to initiate an emergency call silently. It is mainly used when it is not convenient to play an alarm in a dangerous environment. Users can also press and hold the multi-function keys on the side of the phone to initial an emergency call in silence.

To initiate Emergency Call, users need to set the emergency call number after turning on this feature. The default setting is off.

- **New P-value**

<table>
<thead>
<tr>
<th>P value</th>
<th>Description</th>
<th>Value Range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P22259</td>
<td>Safety Monitoring</td>
<td>0 – off</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – on</td>
<td></td>
</tr>
<tr>
<td>P22260</td>
<td>No Movement Sensitivity</td>
<td>0 – Disable</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Level 1 (lowest)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 – Level 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 – Level 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 – Level 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 – Level 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 – Level 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 – Level 7 (highest)</td>
<td></td>
</tr>
<tr>
<td>P22261</td>
<td>No Movement Timeout</td>
<td>5 – 300</td>
<td>5</td>
</tr>
<tr>
<td>P22262</td>
<td>Tilt Sensitivity</td>
<td>0 – Disable</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Level 1 (lowest)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 – Level 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 – Level 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 – Level 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 – Level 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 – Level 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 – Level 7 (highest)</td>
<td></td>
</tr>
<tr>
<td>P22263</td>
<td>Tilt Timeout</td>
<td>5 – 300</td>
<td>5</td>
</tr>
<tr>
<td>P22264</td>
<td>Running Sensitivity</td>
<td>0 – Disable</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Level 1 (lowest)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 – Level 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 – Level 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 – Level 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 – Level 5</td>
<td></td>
</tr>
</tbody>
</table>
### Running Timeout

| P22265 | Running Timeout | 5 – 300 | 5 |

### Snooze Timeout

| P22266 | Snooze Timeout | 0 – 300 | 0 |

### Warning Timeout

| P22267 | Warning Timeout | 5 – 60 | 5 |

### Panic Call Silent Alarm

| P22268 | Panic Call Silent Alarm | 0 – Off 1 - On | 1 |

### Emergency Call

| P22269 | Emergency Call | 0 – Off 1 - On | 1 |

### Emergency Call Number

| P22270 | Emergency Call Number | String | N/A |

### ENABLE/DISABLE CERTAIN SIP HEADERS

**Web Configuration**

This option can be found on the web UI under Account->Account 1/2-> SIP Settings

- **Use Privacy Header**
- **Use P-Preferred-Identity Header**
- **Use P-Access-Network-Info Header**
- **Use P-Emergency-Info Header**

**Functionality**

Allows users to enable or disable the following SIP header from showing in the SIP messages:

- Use Privacy Header.
- Use P-Preferred-Identity Header.
- Use P-Access-Network Header
- Use P-Emergency-Info Header

**New P-value**

<table>
<thead>
<tr>
<th>P value</th>
<th>Description</th>
<th>Value Range</th>
<th>Default</th>
</tr>
</thead>
</table>

| P2338 | Use Privacy Header (Account 1) | 0 - Default, 1 - No, 2 - Yes | 0 |
| P2438 | Use Privacy Header (Account 2) | 0 - Default, 1 - No, 2 - Yes | 0 |
| P2339 | Use P-Preferred-Identity Header (Account 1) | 0 - Default, 1 - No, 2 - Yes | 0 |
| P2439 | Use P-Preferred-Identity Header (Account 2) | 0 - Default, 1 - No, 2 - Yes | 0 |
| P26058 | Use P-Access-Network-Info Header (Account 1) | 0 – No, 1 – Yes | 0 |
| P26158 | Use P-Access-Network-Info Header (Account 2) | 0 – No, 1 – Yes | 0 |
| P26059 | Use P-Emergency-Info Header (Account 1) | 0 – No, 1 – Yes | 0 |
| P26159 | Use P-Emergency-Info Header (Account 2) | 0 – No, 1 – Yes | 0 |

**RECEIVE AND DISPLAY VIDEO FOR SIP CALL**

- **Web Configuration**
  The video codec option can be found on the web UI under Account->Account 1/2->Codec Settings

  | P26159 | Use P-Emergency-Info Header (Account 2) | 0 – No, 1 – Yes | 0 |
The disable video option can be found on the web UI under Phone Settings->Call Settings

Other video display features can be found on the web UI under Phone Settings->Video Settings

- **Functionality**
  WP820 supports one-way video and can receive video up to 720p for SIP call. Currently, the only supported video codec is H264. The video feature can be disabled by enabling “Disable Video Call.”

- **New P-value**

<table>
<thead>
<tr>
<th>P Value</th>
<th>Description</th>
<th>Value Range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2393</td>
<td>Enable Video FEC (Account 1)</td>
<td>0 – No, 1 – Yes</td>
<td>1</td>
</tr>
<tr>
<td>P2493</td>
<td>Enable Video FEC (Account 2)</td>
<td>0 – No, 1 – Yes</td>
<td>1</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Value</td>
<td>1</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>-------</td>
<td>---</td>
</tr>
<tr>
<td>P1331</td>
<td>Enable RFC5168 Support (Account 1)</td>
<td>0 – No 1 – Yes</td>
<td>1</td>
</tr>
<tr>
<td>P478</td>
<td>Enable RFC5168 Support (Account 2)</td>
<td>0 – No 1 – Yes</td>
<td>1</td>
</tr>
<tr>
<td>P26022</td>
<td>Video FEC Mode (Account 1)</td>
<td>0 – 0 1 – 1</td>
<td>0</td>
</tr>
<tr>
<td>P26122</td>
<td>Video FEC Mode (Account 2)</td>
<td>0 – 0 1 – 1</td>
<td>0</td>
</tr>
<tr>
<td>P2394</td>
<td>FEC Payload Type (Account 1)</td>
<td>96 - 126</td>
<td>120</td>
</tr>
<tr>
<td>P2494</td>
<td>FEC Payload Type (Account 2)</td>
<td>96 - 126</td>
<td>120</td>
</tr>
<tr>
<td>P2307</td>
<td>H.264 Image Size (Account 1)</td>
<td>9 - 720P 1 – VGA 5 – CIF 4 – 4CIF 0 – QVGA 6 – QCIF</td>
<td>9</td>
</tr>
<tr>
<td>P2407</td>
<td>H.264 Image Size (Account 2)</td>
<td>9 - 720P 1 – VGA 5 – CIF 4 – 4CIF 0 – QVGA 6 – QCIF</td>
<td>9</td>
</tr>
<tr>
<td>P26045</td>
<td>Use H.264 Constrained Profiles (Account 1)</td>
<td>0 – No 1 – Yes</td>
<td>0</td>
</tr>
<tr>
<td>P26145</td>
<td>Use H.264 Constrained Profiles (Account 2)</td>
<td>0 – No 1 – Yes</td>
<td>0</td>
</tr>
<tr>
<td>P2315</td>
<td>Video Bit Rate (Account 1)</td>
<td>32 - 32 kbps 64 - 64 kbps 96 - 96 kbps 128 - 128 kbps 160 - 160 kbps 192 - 192 kbps 210 - 210 kbps</td>
<td>2048</td>
</tr>
<tr>
<td></td>
<td>Video Bit Rate (Account 2)</td>
<td>2048</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>P2415</td>
<td>32 - 32 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>64 - 64 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>96 - 96 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>128 - 128 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>160 - 160 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>192 - 192 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>210 - 210 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>256 - 256 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>384 - 384 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>512 - 512 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>640 - 640 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>768 - 768 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1024 - 1024 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1280 - 1280 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1536 - 1536 kbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2048 - 2048 kbps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SDP Bandwidth Attribute (Account 1)</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2360</td>
<td>0 – Standard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - Media Level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 - Session Level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 - None</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>SDP Bandwidth Attribute (Account 1)</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2460</td>
<td>0 – Standard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - Media Level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 - Session Level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 - None</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Disable Video Call</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>P22091</td>
<td>Value = 0; No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Value = 1; Yes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Video Frame Rate</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>P904</td>
<td>5 - 5 frames/second</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 - 15 frames/second</td>
<td></td>
</tr>
</tbody>
</table>
## Video Display Mode

<table>
<thead>
<tr>
<th>P921</th>
<th>Video Display Mode</th>
<th>Value Range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 - Original proportion</td>
<td>1 - Equal proportional cutting</td>
<td>2 - Proportional add black edge</td>
</tr>
</tbody>
</table>

## Enable Frame Skipping in Video Decoder

<table>
<thead>
<tr>
<th>P22008</th>
<th>Enable Frame Skipping in Video Decoder</th>
<th>Value Range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 – No</td>
<td>1 – Yes</td>
<td>1</td>
</tr>
</tbody>
</table>

### PORT CUSTOMIZATION FOR SSH ACCESS

- **Web Configuration**
  The video codec option can be found on the web UI under System Settings->Security Settings->Web/SSH Access
  
  
  **SSH Port**
  
  ![SSH Port](image)
  
  **Value:** 22

- **Functionality**
  Configures the SSH port for SSH access.

- **New P-value**

<table>
<thead>
<tr>
<th>P value</th>
<th>Description</th>
<th>Value Range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27006</td>
<td>SSH Port</td>
<td>Number</td>
<td>22</td>
</tr>
</tbody>
</table>

### WIFI CAPTIVE PORTAL

- **Functionality**
  WP820 can connect to Wi-Fi network that requires additional credentials to sign up or login before the connection is established. Upon connecting to an SSID that requires additional actions, WP820 LCD will automatically display the Wi-Fi portal for users to login.
**NETWORK TROUBLESHOOTING TOOLS**

- **Web Configuration**
  The options can be found on the web UI under Maintenance->System Diagnosis

<table>
<thead>
<tr>
<th>Traceroute</th>
<th>Ping</th>
<th>NSLookup</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

  **Target Host**

- **LCD Configuration**
  The options can be found on the handset UI under Menu->Diagnostics

<table>
<thead>
<tr>
<th>Diagnostics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Proximity sensor</td>
</tr>
<tr>
<td>Vibration</td>
</tr>
<tr>
<td>Certificate verification</td>
</tr>
<tr>
<td>Traceroute</td>
</tr>
<tr>
<td>Ping</td>
</tr>
<tr>
<td>NSLookup</td>
</tr>
<tr>
<td>Select</td>
</tr>
</tbody>
</table>

- **Functionality**
  Support network troubleshooting tools: Trace route, Ping and NSLookup on handset UI and web UI.
2.4G/5G BAND FOR WIFI

- **Web Configuration**
  The options can be found on the web UI under Maintenance->System Diagnosis

  WiFi Band [ ] 2.4G & 5G [ ] 2.4G [ ] 5G

- **LCD Configuration**
  The options can be found on the handset UI under Menu->Diagnostics

- **Functionality**
  Select whether to enable 2.4G, 5G or both for Wi-Fi connections. Once connected to Wi-Fi, there will be an icon on the upper status bar to indicate whether 2.4G or 5G is being used.

- **New P-value**

<table>
<thead>
<tr>
<th>P value</th>
<th>Description</th>
<th>Value Range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P25420</td>
<td>Wi-Fi Band</td>
<td>2.4G &amp; 5G - P25420=1 P25421=1</td>
<td>P25420=1</td>
</tr>
<tr>
<td>P25421</td>
<td></td>
<td>2.4G - P25420=1 P25421=0 5G - P25420=0 P25421=1</td>
<td>P25421=1</td>
</tr>
</tbody>
</table>
CUSTOM RINGTONE

- **Web Configuration**
  The options can be found on the web UI under Phone Settings->Ringtone

  ![Upload Ringtones](image)

  - **CPT Settings**
    - **Upload Ringtones**

  - **File name** | **Duration** | **Format** | **Operation**
    - [](image) | [](image) | [](image) | [](image)

  Click "Upload" Button to upload files in .mp3/.wav/.ogg format and size less than 2M.

- **Functionality**
  Allow users to upload a ringtone file and select the uploaded ringtone to be used for incoming calls.

WIFI SIGNAL WARNING

- **LCD Configuration**
  The options can be found on the handset UI under Settings->Network Settings->Wi-Fi signal warning.

  ![Wi-Fi Signal Warning Options](image)

  - **Level 1 (Lowest)**
  - **Level 2**
  - **Level 3**
  - **Level 4**
  - **Level 5 (Highest)**

- **Functionality**
  Enables low Wi-Fi signal warning notification. When the Wi-Fi signal becomes weak, WP820 will prompt a toast to notify the user. The user can adjust the sensitivity level for WIFI signal warning. The higher the sensitivity level, the more frequent the notifications when the Wi-Fi signal is getting weak. There are 5 sensitivity levels for users to select:
  - Level 1: Wi-Fi signal strength -80 dBm.
  - Level 2: Wi-Fi signal strength -75 dBm.
  - Level 3: Wi-Fi signal strength -70 dBm.
  - Level 4: Wi-Fi signal strength -65 dBm.
  - Level 5: Wi-Fi signal strength -60 dBm. This is the highest sensitivity level.
For example, if select Level 1 and the Wi-Fi signal strength is lower than -80 dBm, the low Wi-Fi signal prompt will be shown on the handset.

**CUSTOM CERTIFICATE**

- **Web Configuration**
  The options can be found on the web UI under System Settings->Security Settings->Certificate Management.

  **CA Certificate**
  ![](image)

  **User Certificate**
  ![](image)

  **Custom Certificate**
  ![](image)

- **Functionality**
  Allows users to upload custom certificates to be used for HTTPS provisioning.

- **New P-value**
  ![](image)
### CONFIG PROVISION OPTION

**Web Configuration**

Sets the config provision files and the requesting sequence.

In the above example, WP820 will request config files in the order of:
- `cfg000b82d64c80`
- `cfg000b82d64c80.xml`
- `cfgwp820.xml`
- `cfg.xml`

### IGMP KEEP ALIVE INTERVAL

**Web Configuration**

This option can be found on web UI under Phone Settings->PTT/Multicast Setting.

**Functionality**

Specifies how often the phone reports IGMP when PTT/ Paging function is turned on. IGMP reporter helps to keep PTT/ Paging receivable in dormant state. The interval may take some effect to standby time.

**New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
</table>

0

N/A
### GESTURE CONTROL

- **Web Configuration**
  
  This option can be found on web UI under System Settings->Preferences->Gesture Control

  - **Flip phone**
    
    Reject incoming call  
    
    | Option       | Value |
    |---------------|-------|
    | Off          | Off   |

  - **Pick up the phone**

    | Ringtone | Value |
    |----------|-------|
    | Off      | Off   |

- **Functionality**

  WP820 supports movement gestures to control certain phone behavior. Flip phone – Flip the phone 180 degrees to reject the call or reject with SMS message. Pick up the phone – When the phone is picked up you can choose to mute or turn down the ringtone or alarm tone.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P22225</td>
<td>Reject incoming call</td>
<td>1 – Reject, 2 – Reject with SMS, 3 – Off</td>
<td>3</td>
</tr>
<tr>
<td>P22228</td>
<td>Reply content</td>
<td>not_convenient, call_later, in_meeting, in_a_call, customize</td>
<td>not_convenient</td>
</tr>
<tr>
<td>gsensor_flip_reply_sms_customer</td>
<td>Customize (message)</td>
<td>String</td>
<td>N/A</td>
</tr>
<tr>
<td>P22226</td>
<td>Ringtone</td>
<td>1 – Mute, 2 – Ringing Down, 3 – Off</td>
<td>3</td>
</tr>
<tr>
<td>P22227</td>
<td>Alarm ringtone</td>
<td>1 – Mute, 2 – Ringing Down, 3 – Off</td>
<td>3</td>
</tr>
</tbody>
</table>
DEFAULT RINGTONE

- **Web Configuration**
  This option can be found on web UI under Phone Settings->Call Settings.

- **LCD Configuration**
  This option can be found on handset UI under Settings->Basic Settings->Sound->Default Ringtone

  ![Ringtones](See config template for full tone list)

  /system/media/audio/ringtones/Ring_Synth_04.ogg

- **Functionality**
  Configures the default ringtone for incoming calls. If an account's ringtone is set to “Default Ringtone,” it will use the ringtone specified here.

- **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA</td>
<td>Default Ringtone</td>
<td>(See config template for full tone list)</td>
<td>/system/media/audio/ringtones/Ring_Synth_04.ogg</td>
</tr>
</tbody>
</table>

NOTIFICATION TONE

- **Web Configuration**
  This option can be found on web UI under Phone Settings->Call Settings.

- **LCD Configuration**
  This option can be found on handset UI under Settings->Basic Settings->Sound->Notification tone
• **Functionality**
  Configures notification tone for new notifications such as new SMS, Voicemail and etc.

• **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA</td>
<td>Notification Tone</td>
<td>(See config template for full</td>
<td>/system/media/audio/notifications/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>tone list)</td>
<td>pixiedust.ogg</td>
</tr>
</tbody>
</table>

**NOISE SHIELD**

• **Web Configuration**
  This option can be found on web UI under Phone Settings->Call Settings.

  Enable Noise Shield  

  • **Functionality**
  Configures whether to enable noise shield feature. If enabled, all the background noise will be suppressed except the sound from speaker.

• **New P-value**

<table>
<thead>
<tr>
<th>P-value</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>avs_edrc</td>
<td>Enable Noise Shield</td>
<td>0 – No</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Yes</td>
<td></td>
</tr>
</tbody>
</table>
FIRMWARE VERSION 1.0.1.15

PRODUCT NAME
WP820

DATE
09/27/2018

This is the initial firmware.