IMPORTANT UPGRADING NOTES

• Since 1.0.7.5, we have added support for new format of P values, for the old `<P xx>value</Pxx>` format, in the xml config file, please use `<config version="1">`; for the new format of P value, that is `<item name="xx.xx.xx.xx">value</item>`, in the xml config file, please use `<config version="2">`. DP7xx now support both format XML config file but will not work if the version number is wrong.

• Upgrade DP730/DP720/DP722 from 1.0.7.5 to 1.0.9.1 or higher will need update both firmware and resource images, so it will download and reboot twice. After upgraded to 1.0.9.1 or higher, the upgrade procedure will only happen once as always.

• For DP720, after the base station (DP750 or DP752) upgraded to 1.0.7.5, the handset DP720 will not automatically upgrade because of the whole GUI has been changed from 1.0.4.10. Users please manually operation the handset firmware on “Menu” -> “Settings” -> “Firmware Upgrade” to upgrade to 1.0.7.5.

• For all DP series, once upgraded to 1.0.7.5 or above, downgrading to 1.0.4.10 or previous firmware version is not supported.

• For DP750/DP720/DP760, once upgraded to 1.0.4.2 or above, downgrading to 1.0.3.40 or previous firmware version is not supported.

• For DP750/DP720, once upgraded to 1.0.3.23 or above, downgrading to 1.0.3.17 or previous firmware version is not supported.

• For DP750/DP720, once upgraded to 1.0.3.17 or above, downgrading to 1.0.2.16 or previous firmware version is not supported.

• For DP750/DP720, once upgraded to 1.0.2.16 or above, downgrading to 1.0.1.x or previous firmware version is not supported.

• For DP750/DP720, firmware 1.0.0.99 (The first public released beta firmware) and all above can upgrade to 1.0.4.7 directly, no transitional firmware is needed.
# Table of Content

**IMPORTANT UPGRADING NOTES** ................................................................. 1

**FIRMWARE VERSION 1.0.9.9** ......................................................................... 6

- PRODUCT NAME .......................................................................................... 6
- DATE .............................................................................................................. 6
- FIRMWARE FILE INFORMATION ................................................................... 6
- IMPORTANT UPGRADING NOTES ................................................................. 6
- ENHANCEMENT ........................................................................................... 6
- BUG FIX ........................................................................................................ 7
- NEW FEATURES OVERVIEW ......................................................................... 7
  - TRUSTED CA CERTIFICATES ................................................................. 7
  - CUSTOMIZED TIMEZONE AND DAYLIGHT-SAVING TIME SETTINGS ....... 8

**FIRMWARE VERSION 1.0.9.1** ....................................................................... 11

- PRODUCT NAME .......................................................................................... 11
- DATE .............................................................................................................. 11
- FIRMWARE FILE INFORMATION ................................................................... 11
- IMPORTANT UPGRADING NOTES ................................................................. 11
- ENHANCEMENT ........................................................................................... 11
- BUG FIX ........................................................................................................ 12
- NEW FEATURES OVERVIEW ......................................................................... 12
  - DISABLE SESSION TIMER ..................................................................... 13
  - MANUALLY CONFIGURE DATE AND TIME ............................................. 13
  - ALLOW UNSOLICITED REFER ................................................................. 14
  - INTERCOM ............................................................................................... 14

**FIRMWARE VERSION 1.0.7.5** ....................................................................... 17

- PRODUCT NAME .......................................................................................... 17
- DATE .............................................................................................................. 17
- FIRMWARE FILE INFORMATION ................................................................... 17
- IMPORTANT UPGRADING NOTES ................................................................. 17
- ENHANCEMENT ........................................................................................... 17
- BUG FIX ........................................................................................................ 17
- NEW FEATURES OVERVIEW ......................................................................... 18
  - DP720 GUI UPDATES ............................................................................. 18
  - DP720 PTT FEATURE ............................................................................... 21
  - REMOTE OPENDOOR FOR GDS3710/GDS3705 ..................................... 23
FIRMWARE VERSION 1.0.4.10 ................................................................. 28
  PRODUCT NAME .............................................................................. 28
  DATE ................................................................................................. 28
  FIRMWARE FILE INFORMATION ..................................................... 28
  IMPORTANT UPGRADING NOTES .................................................... 28
  ENHANCEMENT .............................................................................. 28
  BUG FIX ............................................................................................ 28
  NEW FEATURES OVERVIEW .......................................................... 28
    OPTION FOR ADDING MAC ADDRESS TO USER AGENT ................. 28

FIRMWARE VERSION 1.0.4.7 ................................................................. 30
  PRODUCT NAME .............................................................................. 30
  DATE ................................................................................................. 30
  FIRMWARE FILE INFORMATION ..................................................... 30
  IMPORTANT UPGRADING NOTES .................................................... 30
  ENHANCEMENT .............................................................................. 30
  BUG FIX ............................................................................................ 30
  NEW FEATURES OVERVIEW .......................................................... 30
    DISPLAY ACCOUNT NAME ONLY .................................................... 31
    PROVISION CONFIG FILE BY MODEL .......................................... 31
    TLS PROTOCOL FOR SYSLOG ......................................................... 31
    SRTP ICON ON HANDSET UI ......................................................... 32

FIRMWARE VERSION 1.0.4.2 ................................................................. 33
  PRODUCT NAME .............................................................................. 33
  DATE ................................................................................................. 33
  FIRMWARE FILE INFORMATION ..................................................... 33
  IMPORTANT UPGRADING NOTES .................................................... 33
  ENHANCEMENT .............................................................................. 33
  BUG FIX ............................................................................................ 33
  NEW FEATURES OVERVIEW .......................................................... 34
    CTI FEATURE ................................................................................. 34
    CUSTOMIZE THE SYSLOG PORT .................................................... 35

FIRMWARE VERSION 1.0.3.40 ................................................................. 37
  PRODUCT NAME .............................................................................. 37
  DATE ................................................................................................. 37
<table>
<thead>
<tr>
<th>FIRMWARE FILE INFORMATION</th>
<th>37</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPORTANT UPGRADING NOTES</td>
<td>37</td>
</tr>
<tr>
<td>ENHANCEMENT</td>
<td>37</td>
</tr>
<tr>
<td>BUG FIX</td>
<td>38</td>
</tr>
<tr>
<td>NEW FEATURES OVERVIEW</td>
<td>38</td>
</tr>
<tr>
<td>USER-AGENT PREFIX</td>
<td>38</td>
</tr>
<tr>
<td>USE SIP OPTIONS TO KEEP ALIVE</td>
<td>39</td>
</tr>
<tr>
<td>RANDOM UPGRADE AND PROVISION</td>
<td>40</td>
</tr>
<tr>
<td>OPENVPN</td>
<td>41</td>
</tr>
<tr>
<td>CONFIGURE DATE AND TIME DISPLAY</td>
<td>43</td>
</tr>
</tbody>
</table>

FIRMWARE VERSION 1.0.3.37 ................................................................. 44

PRODUCT NAME ................................................................. 44
DATE ................................................................. 44
FIRMWARE FILE INFORMATION .................................................. 44
IMPORTANT UPGRADING NOTES ................................................ 44
ENHANCEMENT ................................................................. 44
BUG FIX ................................................................. 44
NEW FEATURES OVERVIEW .................................................... 44
  DEVICE CUSTOM CERTIFICATE SETTINGS ................................ 45
  CUSTOMIZE THE SYSLOG PORT ........................................... 46
  DP760 AUTO REGION ........................................................ 46

FIRMWARE VERSION 1.0.3.34 ................................................................. 48

PRODUCT NAME ................................................................. 48
DATE ................................................................. 48
IMPORTANT UPGRADING NOTES ................................................ 48
ENHANCEMENT ................................................................. 48

FIRMWARE VERSION 1.0.3.31 ................................................................. 49

PRODUCT NAME ................................................................. 49
DATE ................................................................. 49
IMPORTANT UPGRADING NOTE ................................................ 49
ENHANCEMENT ................................................................. 49
BUG FIX ................................................................. 49

FIRMWARE VERSION 1.0.3.23 ................................................................. 51

PRODUCT NAME ................................................................. 51
DATE ................................................................. 51
IMPORTANT UPGRADING NOTE ................................................ 51
ENHANCEMENT ................................................................. 51
FIRMWARE VERSION 1.0.2.16 ...............................................................68

PRODUCT NAME ........................................................................68
DATE .........................................................................................68
IMPORTANT UPGRADING NOTE ..................................................68
ENHANCEMENT .......................................................................68
BUG FIX ..................................................................................68
NEW FEATURES OVERVIEW ......................................................72
ACCESS CONTROL LIST ..........................................................72
ENABLE/DISABLE TR-069 .........................................................72
CORE DUMP LIST STATUS .......................................................73
HTTPS WEB ACCESS ..............................................................73
INITIAL SUPPORT FOR REPEATER ..........................................74
DOCUMENTS ADDED TO SUPPORT PAGE .................................76
LANGUAGES UPDATED ............................................................76
FIRMWARE VERSION 1.0.9.9

PRODUCT NAME
DP750 / DP720 / DP760 / DP752 / DP730 / DP722

DATE
4/23/2019

FIRMWARE FILE INFORMATION
• Firmware file name: dp75xfw.bin
• MD5: 5b7b6c0079c3e6758f452a71da0fa90f

IMPORTANT UPGRADING NOTES
• Since 1.0.7.5, we have added support for new format of P values, for the old <P xx>value</Pxx> format, in the xml config file, please use <config version="1">; for the new format of P value, that is <item name="xx.xx.xx.xx">value</item>, in the xml config file, please use <config version="2">. DP7xx now support both format XML config file but will not work if the version number is wrong.
• Upgrade DP730/DP720/DP722 from 1.0.7.5 to 1.0.9.1 or higher will need update both firmware and resource images, so it will download and reboot twice. After upgraded to 1.0.9.1 or higher, the upgrade procedure will only happen once as always.
• For DP752/DP730/DP722, firmware 1.0.7.5 is the first public released beta firmware.
• For DP720, after the base station (DP750 or DP752) upgraded to 1.0.7.5, the handset DP720 will not automatically upgrade because of the whole GUI has been changed from 1.0.4.10. Users please manually operation the handset firmware on “Menu” -> “Settings” -> “Firmware Upgrade” to upgrade to 1.0.7.5.
• For all DP series, once upgraded to 1.0.7.5 or above, downgrading to 1.0.4.10 or previous firmware version is not supported.

ENHANCEMENT
• Added DP75X Trusted CA Certificate option for HTTPS/FTPS. [TRUSTED CA CERTIFICATES]
• Added support to configure customized time zone and daylight-saving time (DST) on the web UI. [CUSTOMIZED TIMEZONE AND DAYLIGHT-SAVING TIME SETTINGS]
• Removed the limitation of Intercom call that it must enable Direct IP call. Now the Intercom call will be working regardless if Direct IP Call is disabled or not.
• Increased DP75X web UI voice mail user ID character length to 30.
• Increased SIP Certificate length limitation from 2048 characters to 8192.
• Added support to show warning messages on handset GUI after clicking “Open” button for GDS doorbell, now it will display success or failed to indicate the result.
• Added support for FTP/FTPS User Name/Password for firmware upgrade and provisioning.
• Added support to configure Voice Mail access number on DP75X web UI as the same as GXP21XX phones, now configure the access code to “*97, password” will automatically dial the Voice Mail box and enter the password.

**BUG FIX**

• Fixed DP75X keep using the “#” as dial key even after setting “Use # as Dial Key” as “No”.
• Fixed DP75X sometimes crash when calling number as 011xxxxxx.
• Fixed DP75X does not send DNS request to the Preferred DNS Server at first.
• Fixed DP75X does not set time zone properly in the recovery image.
• Fixed DP75X setting of Validate Server Certificates does not take effect.
• Fixed DP75X fixed Web UI support documentation URL link cannot be found error.
• Improved DP72X/DP730 Intercom call feature:
  o Removed “conference” option when one of the calling is intercom call.
  o Left softkey now will display Intercom or Line correctly by matching the entered digit.
  o Fixed when handsets have 2 intercom calls with different handsets, one of the call will display SIP account instead of HS name.
• Fixed DP75X web UI customized ringtones display full file path instead of just file name.
• Fixed DP75X Device Custom Certificate does not take effect after enabled.
• Fixed DP72X/DP730 failed to open GDS doorbell after first answered GDS call and then answered/rejected the second call from other non-GDS accounts.
• Fixed DP75X can be factory reset when there is active call, now it will factory reset after all calls on the base been released.
• Fixed DP75X LLDP system description and firmware revision TLV incorrect issue.
• Fixed DP75X Allow Unsolicited REFER issue that it does not transfer a call when received REFER with Allow Unsolicited REFER enabled.
• Fixed DP75X Web UI cannot set Phonebook download mode to TFTP.
• Fixed DP72X/DP730 missed call notification count number is incorrect when same account calls are merged.

**NEW FEATURES OVERVIEW**

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

**TRUSTED CA CERTIFICATES**

• Functionality

Now DP750/DP752 can upload Trusted CA Certificates for HTTPS/FTPS server. Customer can choose what certificates used to verify the server: default certificate only (built-in), custom certificate only or all
certificate.

### New P Values

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Alias</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>8433</td>
<td>maintenance.security.device.trusted_ca.1</td>
<td>Text for trusted ca content</td>
<td>string</td>
<td>null</td>
</tr>
<tr>
<td>8434</td>
<td>maintenance.security.device.trusted_ca.2</td>
<td>Text for trusted ca content</td>
<td>string</td>
<td>null</td>
</tr>
<tr>
<td>8435</td>
<td>maintenance.security.device.trusted_ca.3</td>
<td>Text for trusted ca content</td>
<td>string</td>
<td>null</td>
</tr>
<tr>
<td>8436</td>
<td>maintenance.security.device.trusted_ca.4</td>
<td>Text for trusted ca content</td>
<td>string</td>
<td>null</td>
</tr>
<tr>
<td>8437</td>
<td>maintenance.security.device.trusted_ca.5</td>
<td>Text for trusted ca content</td>
<td>string</td>
<td>null</td>
</tr>
<tr>
<td>8438</td>
<td>maintenance.security.device.trusted_ca.6</td>
<td>Text for trusted ca content</td>
<td>string</td>
<td>null</td>
</tr>
<tr>
<td>8502</td>
<td>maintenance.security.load_ca_certificates</td>
<td>Phone will verify the server certificate based on the built-in, custom or both trusted certificates list.</td>
<td>0 - Default Certificates 1 - Custom Certificates 2 - All Certificates</td>
<td>2</td>
</tr>
</tbody>
</table>

### CUSTOMIZED TIMEZONE AND DAYLIGHT-SAVING TIME SETTINGS

- **Functionality**
  
  Now DP750/DP752 can disable session timer on web UI, which is under Profile X -> SIP Settings -> Session Timer. By default, it is enabled.
### Date and Time

<table>
<thead>
<tr>
<th>Alias</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>maintenance.date_time.enable_time_zone</td>
<td>Enable or disable customized time zone.</td>
<td>0 - Disabled, 1 - Enabled</td>
<td>0</td>
</tr>
<tr>
<td>maintenance.date_time.time_zone_day_week</td>
<td>DST Type, set Daylight Savings by day or by week.</td>
<td>0 – by week, 1 – by day</td>
<td>0</td>
</tr>
<tr>
<td>maintenance.date_time.time_zone_offset</td>
<td>UTC offset</td>
<td>-12 ~ 14</td>
<td>0</td>
</tr>
<tr>
<td>maintenance.date_time.time_zone_month</td>
<td>Start months for custom time zone that daylight savings type is by week.</td>
<td>1 ~ 12 for 12 months</td>
<td>4</td>
</tr>
<tr>
<td>maintenance.date_time.time_zone_hour</td>
<td>Start hour for custom time zone that daylight savings type is by week.</td>
<td>0 ~ 23</td>
<td>2</td>
</tr>
<tr>
<td>maintenance.date_time.time_zone_minute</td>
<td>Start minute for custom time zone that daylight savings type is by week.</td>
<td>0 ~ 59</td>
<td>0</td>
</tr>
</tbody>
</table>

#### System Time Zone Settings

- **Time Zone**: Self-Defined Time Zone
- **Self-Defined Time Zone**: MTZ+0MDT+5.32 0 M11 1.0

#### Custom Time Zone Settings

- **Custom Time Zones**: Disabled
- **UTC Offset**: 0
- **Second Offset**: 0
- **DST Type**: by week
- **Start & End Times**
  - Start: 2, End: 0

#### Time zone settings by week

- **Start & End Months**: Start April, End September
- **Start & End settings by week**: Start Sunday, Week 1, End Sunday, Week 1

#### Time zone settings by day

- **Start & End settings by day**: Start 1, End 1
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Details</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>27834</td>
<td>maintenance.date_time.time_zone_day_of_week</td>
<td>Start weekday for custom time zone that daylight savings type is by week.</td>
<td>0 ~ 6 (0 is Sunday, 6 is Saturday)</td>
</tr>
<tr>
<td>27835</td>
<td>maintenance.date_time.time_zone_week</td>
<td>Start week number for custom time zone that daylight savings type is by week.</td>
<td>1 – Week 1, 2 – Week 2, 3 – Week 3, 4 – Week 4, 5 – Week 5</td>
</tr>
<tr>
<td>27836</td>
<td>maintenance.date_time.time_zone_day_of_year</td>
<td>Start day for custom time zone that daylight savings type is by day.</td>
<td>0 – 365</td>
</tr>
<tr>
<td>27837</td>
<td>maintenance.date_time.second_time_zone_offset</td>
<td>Second Offset</td>
<td>-12 ~ 14</td>
</tr>
<tr>
<td>27838</td>
<td>maintenance.date_time.second_time_zone_month</td>
<td>End months for custom time zone that daylight savings type is by week.</td>
<td>1 ~ 12 for 12 months</td>
</tr>
<tr>
<td>27839</td>
<td>maintenance.date_time.second_time_zone_hour</td>
<td>End hour for custom time zone that daylight savings type is by week.</td>
<td>0 ~ 23</td>
</tr>
<tr>
<td>27840</td>
<td>maintenance.date_time.second_time_zone_minute</td>
<td>End minute for custom time zone that daylight savings type is by week.</td>
<td>0 ~ 59</td>
</tr>
<tr>
<td>27841</td>
<td>maintenance.date_time.second_time_zone_day_of_week</td>
<td>End weekday for custom time zone that daylight savings type is by week.</td>
<td>0 ~ 6 (0 is Sunday, 6 is Saturday)</td>
</tr>
<tr>
<td>27842</td>
<td>maintenance.date_time.second_time_zone_week</td>
<td>End week number for custom time zone that daylight savings type is by week.</td>
<td>1 – Week 1, 2 – Week 2, 3 – Week 3, 4 – Week 4, 5 – Week 5</td>
</tr>
<tr>
<td>27843</td>
<td>maintenance.date_time.second_time_zone_day_of_year</td>
<td>End day for custom time zone that daylight savings type is by day.</td>
<td>0 – 365</td>
</tr>
</tbody>
</table>
FIRMWARE VERSION 1.0.9.1

PRODUCT NAME
DP750 / DP720 / DP760 / DP752 / DP730 / DP722

DATE
3/1/2019

FIRMWARE FILE INFORMATION
• Firmware file name: dp75xfw.bin
• MD5: aaa031f5526d55fd630fec6a6d91d287

IMPORTANT UPGRADING NOTES
• For DP752/DP730/DP722, firmware 1.0.7.5 is the first public released beta firmware.
• For DP720, after the base station (DP750 or DP752) upgraded to 1.0.7.5, the handset DP720 will not automatically upgrade because of the whole GUI has been changed from 1.0.4.10. Users please manually operation the handset firmware on “Menu” -> “Settings” -> “Firmware Upgrade” to upgrade to 1.0.7.5.
• For all DP series, once upgraded to 1.0.7.5 or above, downgrading to 1.0.4.10 or previous firmware version is not supported.

ENHANCEMENT
• Added option to enable or disable Session Timer for DP75x. [DISABLE SESSION TIMER]
• Added option to enable or disable DP730 keypad backlight at GUI -> Settings -> Display.
• Added “Silent” for DP730 central softkey when receiving a GDS doorbell call.
• Added support of EXTRA DEBUG level Syslog for DP75X.
• Upgraded Dropbear SSH from version 2016.74 to 2018.76 to enhance the security.
• Upgraded mini_httpd 1.19 to 1.30 to enhance the security.
• Add ability to manually configure date and time on the base Web GUI. [MANUALLY CONFIGURE DATE AND TIME]
• Added support to enable or disable “Allow Unsolicited REFER” option for DP750/DP752. [ALLOW UNSOLICITED REFER]
• Change DP720/DP730 Preferences option “Mute as DND” default to “Enabled” from “Disabled” to make enabling DND more convenient.
• Added support for Intercom feature. [INTERCOM]
BUG FIX

- Fixed DP720/DP730 stop playing dial tone when connect USB power cable during off-hook.
- Fixed DP720/DP730 speaker volume does not match configured volume if off-hook first then enable speaker mode.
- Fixed DP720/DP730 issue when have a call on hold and another incoming call rings, unhold the first call will have no audio or abnormal UI depends on the ringtone settings.
- Fixed DP720/30 default outgoing line is not the first order and be selected when choose line in the dialing interface.
- Fixed DP730 will not auto dial out after no key entered timeout that is 4 seconds by default.
- Fixed DP720/DP730 change ringtone 6, 7, 8 volume does not take effect issue.
- Fixed DP720/DP730 cannot use speaker key to call out when has multiple accounts.
- Fixed DP730 cannot use center navigation button to save SIP settings and system settings.
- Fixed DP720/DP730 keypad tone becomes abnormal after enter audio loopback diagnosis and exit before completed.
- Fixed DP720/DP730 still shows “transfer” and “cancel” option after call been hold, changed it to “select” and “unhook”.
- Fixed DP750/DP752 some STUN Server Address setting issue
- Fixed DP750/DP752 option “Layer 2 QoS 802.1p Priority Value for SIP signaling” cannot be saved after being changed.
- Fixed DP750/DP752 web status page shows account status is “in idle” while there is ongoing call.
- Fixed DP750/DP752 SSH status result return idle status while the account is being used.
- Fixed DP750/DP752 profile 4 session timer UAS Specify Refresher cannot be changed to UAS.
- Fixed DP720/DP730 “Delete All” option for contacts to only delete all private contacts.
- Fixed DP750/DP752 does not apply the configuration file when set SIP protocol to be TLS.
- Fixed DP750/DP752 semi-attended failed when enabled Refer-To User Target Contact.
- Fixed DP750/DP752 call failed when behind BroadSoft SBC because of 2 m lines for both RTP and SRTP streaming.
- Fixed DP720/DP730 stopped to calculate call talk time after it answered another call.
- Fixed DP720/DP730 Hebrew contact name is not displayed from right to left issue.
- Fixed Session Timer UAS specify refresher is not following RFC4028 issue.
- Fixed DP720/DP730 issue that the SRTP security icon should be displayed only if both TLS and SRTP are enabled.
- Fixed DP750/DP752 does not respect Session Timer when using compact header.
- Fixed DP750/DP752 unable to download firmware when trying to upgrade it via an HTTPS server with option ssl_verify_client enabled on the server.
- Fixed DP750/DP752 should not reboot via SSH command when there is an ongoing call.
- Fixed some inappropriate translations.

NEW FEATURES OVERVIEW

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

- **Functionality**

Now DP750/DP752 can disable session timer on web UI, which is under Profile X -> SIP Settings -> Session Timer. By default, it is enabled.

![Session Timer](image)

- **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Alias</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2395</td>
<td>profile.1.sip.enable_session_timer</td>
<td>&lt;New Pvalue&gt;</td>
<td>0 – Disabled</td>
<td>1 – Enabled</td>
</tr>
<tr>
<td>P2495</td>
<td>profile.2.sip.enable_session_timer</td>
<td>To enable/disable Session Timer support.</td>
<td>0 – Disabled</td>
<td>1 – Enabled</td>
</tr>
<tr>
<td>P2595</td>
<td>profile.3.sip.enable_session_timer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2695</td>
<td>profile.4.sip.enable_session_timer</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MANUALLY CONFIGURE DATE AND TIME

- **Functionality**

Instead of using NTP server to automatically get the time from internet, now DP support manually configure the date and time, the settings are under Maintenance -> Date and Time.

![Date and Time](image)
• New P Values

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Alias</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27821</td>
<td>maintenance.date_time.enable_manual_time</td>
<td>Disable/Enable manual time setting</td>
<td>0 – Disabled</td>
<td>0 – Disabled</td>
</tr>
<tr>
<td>P27823</td>
<td>maintenance.date_time.manual_time_year</td>
<td>Year</td>
<td>2016-2037</td>
<td>2019</td>
</tr>
<tr>
<td>P27824</td>
<td>maintenance.date_time.manual_time_month</td>
<td>Month</td>
<td>1 - 12</td>
<td>1</td>
</tr>
<tr>
<td>P27825</td>
<td>maintenance.date_time.manual_time_day</td>
<td>Day</td>
<td>1 - 31</td>
<td>1</td>
</tr>
<tr>
<td>P27826</td>
<td>maintenance.date_time.manual_time_hour</td>
<td>Hour</td>
<td>0 - 11</td>
<td>0</td>
</tr>
<tr>
<td>P27827</td>
<td>maintenance.date_time.manual_time_minute</td>
<td>Minute</td>
<td>0 - 59</td>
<td>0</td>
</tr>
</tbody>
</table>

ALLOW UNSOLICITED REFER

• Functionality
User now can configure if allow unsolicited REFER to accomplish an outgoing call. The settings are under Profile X -> SIP Settings -> Call Settings.

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Alias</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P26023</td>
<td>profile.1.sip.allow_unsolicited_refer</td>
<td>Allow unsolicited REFER to accomplish an outgoing call.</td>
<td>0 – Disabled</td>
<td>0 – Disabled</td>
</tr>
<tr>
<td>P26123</td>
<td>profile.2.sip.allow_unsolicited_refer</td>
<td>Allow unsolicited REFER to accomplish an outgoing call.</td>
<td>1 – Enabled</td>
<td></td>
</tr>
<tr>
<td>P26223</td>
<td>profile.3.sip.allow_unsolicited_refer</td>
<td>Allow unsolicited REFER to accomplish an outgoing call.</td>
<td>2 – Enabled/Force Auth</td>
<td></td>
</tr>
<tr>
<td>P26323</td>
<td>profile.4.sip.allow_unsolicited_refer</td>
<td>Allow unsolicited REFER to accomplish an outgoing call.</td>
<td>0 – Disabled</td>
<td>0 – Disabled</td>
</tr>
</tbody>
</table>

INTERCOM

• Functionality
Intercom (intercommunication) provide users ability to make phone calls between different handsets directly without remembering each user’s phone number. To use it, users need go to Handset GUI -> Shortcut to configure an navigation key (up, down, left or right key) to “Intercom”. When using it, just press the key just
configured, choose the handset name that you want to call.

As 1.0.9.1 is the first version we start to support Intercom feature, there are some known limitations that we plan to remove in a future release:

1. Each handset needs at least one SIP account registered.
2. The Base need enable Direct IP Call (By default, this is enabled at Web UI -> Settings -> System Features)

- **Configure and usage on Handset:**
  For example, in below screenshots we configure the Down Key to use Intercom feature.

<table>
<thead>
<tr>
<th>Shortcut</th>
<th>Shortcut</th>
<th>Down Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up Key</td>
<td>Outgoing Calls</td>
<td>9. Voice Mail</td>
</tr>
<tr>
<td>Down Key</td>
<td>Intercom</td>
<td>10. Ringer Volume Up</td>
</tr>
<tr>
<td>Left Key</td>
<td>Ringer Volume Down</td>
<td>11. Ringer Volume Down</td>
</tr>
<tr>
<td>Right Key</td>
<td>Ringer Volume Up</td>
<td>12. Audio Volume Up</td>
</tr>
<tr>
<td>Speed Dial</td>
<td></td>
<td>13. Audio Volume Down</td>
</tr>
</tbody>
</table>

- **System Features**

- **SIP Account Settings**
To use the Intercom, press Down Key, it will pop up all available handsets’ name, select the one you want to dial by left softkey or green off-hook button, initiate the call.

<table>
<thead>
<tr>
<th>Intercom</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HS2</td>
<td></td>
</tr>
<tr>
<td>HS3</td>
<td></td>
</tr>
</tbody>
</table>

If the Intercom call failed, please check if the handset has a valid SIP account registered and Direct IP call is enabled.
FIRMWARE VERSION 1.0.7.5

PRODUCT NAME
DP750 / DP720 / DP760 / DP752 / DP730

DATE
1/29/2019

FIRMWARE FILE INFORMATION
- Firmware file name: dp75xfw.bin
- MD5: 86afe0c9b4c5de4df3b3e908008377a4

IMPORTANT UPGRADING NOTES
- For DP752/DP730, firmware 1.0.7.5 is the first public released beta firmware.
- For DP720, after the base station (DP750 or DP752) upgraded to 1.0.7.5, the handset DP720 will not automatically upgrade because of the whole GUI has been changed from 1.0.4.10. Users please manually operation the handset firmware on “Menu” -> “Settings” -> “Firmware Upgrade” to upgrade to 1.0.7.5.
- For all DP series, once upgraded to 1.0.7.5 or above, downgrading to 1.0.4.10 or previous firmware version is not supported.

ENHANCEMENT
- Added support for DP752/DP730 model.
- Changed DP720 GUI to new design with new style. [DP720 GUI UPDATES]
- Added support for Push-to-Talk for DP720. [DP720 PTT FEATURE]
- Added support to work with GDS3710/GDS3705 to remote open door with “Open” button. [REMOTE OPENDOOR FOR GDS3710/GDS3705]
- Added support for “Music on Hold URI” for DP750. [MUSIC ON HOLD URI]
- Added support for “Use Random SIP Port” for DP750. [USE RANDOM SIP PORT]
- Disable DP720 auto upgrade to 1.0.7.X or above.
- Improved DP720 built-in ringtones.
- Added support for new format of P values, which has more meaningful name. [NEW FORMAT OF PVALUES]

BUG FIX
- Fixed DP750 "Enable Call Waiting in Parallel Mode" need reboot to take effect.
- Fixed DP750 issue that it sometimes crash and self-generate a core dump file, only recover after
reboot.

- Fixed DP720 does not display the contact name on the call history if the number starts with “+”.

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

DP720 GUI UPDATES

- **Functionality**

  DP720 GUI has been updated on 1.0.7.5. Once upgraded to new GUI, the handset will not able to downgrade to 1.0.4.10. To use 1.0.7.5 new GUI, the user need go to handset “Menu” -> “Settings” -> “9. Firmware Upgrade” to start the upgrade. Even DP750 enabled handset automatically to upgrade, for this specific time, because of the GUI has been redesigned, the user need click the “9. Firmware Upgrade” to complete the upgrade.

  Below screenshots are the noticeable changes in the new GUI.

  - **Idle screen:**

    We changed the maximum SIP account display from 3 to 2 and changed the fonts and style, background picture.

    ![Default Softkeys](image1)
    ![Customized Softkeys](image2)

  - **Menu**

    We changed 6-grid menu to 9-grid. Re-arranged the order, added 3 sections as:

    1. **Registration**: to be easier to register handset to base station for out of box experience.
    2. **Preferences**: to configure the handset specific preference like auto answer, off-cradle pickup, on-cradle hang-up, enable or disable Push to Talk, etc.
3. **Shortcuts**: to configuration the action of the LSK (Left Softkey), RSK (right Softkey), navigation keys and speed dial from number key. These settings are used to under “Settings” -> “User Settings”. this improved the setting to be more organized and also provide easier access to use PTT, because PTT feature need a dedicated button.

![Contacts](image)

- **Voice Mail**:

On 1.0.4.10, we provided a shortcut button “Key 1” to access the voice mail and printed an icon on it. However, we are surprised to know that some users do not aware of this “key 1” shortcuts, so now we promoted this configuration, to help users more confident and convenient to use key 1 to access a preconfigured voice mail.
• **Calling Operation**

Now when you have 2 concurrent call on the same handset, you will be able to select between 2 calls by Up and Down key and choose to how to operate the calls. The on-hook (red button) will always act for hang-up the current selected call. This makes the call operation more intuitive.

• **Call Features**

Call features are now all line specific settings, compare to preferences that are all handset specific settings. We also improved the Call Forward settings to allow users to quickly enable and disable the settings without wipe the forward destination number. On 1.0.4.10 when you disabled the call forward, the destination number will be also removed.
DP720 PTT FEATURE

- Web Configuration

PTT feature is always enabled on the base station, to use the PTT feature, users need enable the PTT on handset at:

Handset Menu -> Preferences -> PTT -> set “Enabled”. Also, to use PTT, the handset need a dedicated button to push and then to talk, user can choose to use either LSK (Left Softkey) or RSK (Right Softkey) in Shortcuts settings. (If you forgot to enable the PTT, when you press the PTT softkey, it will redirect you to the setting to enable it before you can use it.)

(Step1: Enable)  (Step2: Choose a softkey)

Users can configure “DECT PTT Silence Timer” on the Web UI at -> DECT -> General Settings. When a PTT call established, any handset who enabled PTT feature will automatically join the PTT call. if there is no one talking, after certain time, the PTT call will be closed. This timeout setting is to determine how long the PTT call will be closed after being idle status. If set to 0, the timer will be disabled, and the PTT will be remaining forever until all party exit the PTT call.
• **Functionality**

To use the PTT feature, simply press and hold the configured softkey (LSK or RSK), after you see the audio wave in green color, you can talk, and other handsets that registered on the same base station who enabled PTT feature will automatically join the PTT and play the voice on speaker.

Note: when initial a PTT call, it could take a little bit longer to establish the call for handshake, once the PTT call been established, any handset can quickly start to talk by holding the softkey.

(Initializing)  (Talking)  (Idle)

---

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Alias</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27778</td>
<td>Pbase.ppt.silence_timer</td>
<td>&lt;New Pvalue&gt;</td>
<td>0 ~ 60</td>
<td>2</td>
</tr>
</tbody>
</table>
DECT PTT Silence Timer.
Sets timeout for PTT call (in minutes) if no handset unmutes. If set to 0, this timer will be disabled.

REMOTE OPENDOOR FOR GDS3710/GDS3705

- **Web Configuration**

The settings can be found at Web UI -> Settings -> Network Settings -> External Service. DP series phones works the same way as GXP phones. For more detail, please refer document: 

<table>
<thead>
<tr>
<th>Order</th>
<th>Service Type</th>
<th>Account</th>
<th>System Identification</th>
<th>System Number</th>
<th>Access Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GDS</td>
<td>Account 1</td>
<td>Front Door</td>
<td>3501</td>
<td>**************</td>
</tr>
<tr>
<td>2</td>
<td>None</td>
<td>Account 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>None</td>
<td>Account 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>None</td>
<td>Account 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>None</td>
<td>Account 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>None</td>
<td>Account 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>None</td>
<td>Account 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>None</td>
<td>Account 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>None</td>
<td>Account 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>None</td>
<td>Account 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Functionality**

After feature been configured, when GDS37xx doorbell been pressed, DP will receive an incoming call and play the doorbell ring. User will able to press the “Open” button to remote open the door.

- **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Alias</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>P32000</th>
<th>Pexternal_service.type.1</th>
<th>&lt;New Value&gt; Service Type. to choose which</th>
<th>-1 – None</th>
<th>0 – GDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>P32005</td>
<td>Pexternal_service.type.2</td>
<td></td>
<td>-1 - None</td>
<td></td>
</tr>
<tr>
<td>P32010</td>
<td>Pexternal_service.type.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32015</td>
<td>Pexternal_service.type.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32020</td>
<td>Pexternal_service.type.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32025</td>
<td>Pexternal_service.type.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32030</td>
<td>Pexternal_service.type.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32035</td>
<td>Pexternal_service.type.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32040</td>
<td>Pexternal_service.type.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32045</td>
<td>Pexternal_service.type.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32001</td>
<td>Pexternal_service.account.index.1</td>
<td>&lt;New Value&gt; Account. to specific which account to associate with the service</td>
<td>0 – Account 1</td>
<td>1 – Account 2</td>
</tr>
<tr>
<td>P32006</td>
<td>Pexternal_service.account.index.2</td>
<td></td>
<td>2 – Account 3</td>
<td>3 – Account 4</td>
</tr>
<tr>
<td>P32011</td>
<td>Pexternal_service.account.index.3</td>
<td></td>
<td>4 – Account 5</td>
<td>5 – Account 6</td>
</tr>
<tr>
<td>P32016</td>
<td>Pexternal_service.account.index.4</td>
<td></td>
<td>6 – Account 7</td>
<td>7 – Account 8</td>
</tr>
<tr>
<td>P32021</td>
<td>Pexternal_service.account.index.5</td>
<td></td>
<td>8 – Account 9</td>
<td>9 – Account 10</td>
</tr>
<tr>
<td>P32026</td>
<td>Pexternal_service.account.index.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32031</td>
<td>Pexternal_service.account.index.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32036</td>
<td>Pexternal_service.account.index.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32041</td>
<td>Pexternal_service.account.index.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32046</td>
<td>Pexternal_service.account.index.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32002</td>
<td>Pexternal_service.system.id.1</td>
<td>&lt;New Value&gt; System Identification. to configure a unique identity to differentiate each service.</td>
<td>Strings</td>
<td>NULL</td>
</tr>
<tr>
<td>P32007</td>
<td>Pexternal_service.system.id.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32012</td>
<td>Pexternal_service.system.id.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32017</td>
<td>Pexternal_service.system.id.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32022</td>
<td>Pexternal_service.system.id.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32027</td>
<td>Pexternal_service.system.id.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32032</td>
<td>Pexternal_service.system.id.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32037</td>
<td>Pexternal_service.system.id.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32042</td>
<td>Pexternal_service.system.id.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32047</td>
<td>Pexternal_service.system.id.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32003</td>
<td>Pexternal_service.system.number.1</td>
<td>&lt;New Value&gt; System Number. For GDS service, this is used to configure the GDS SIP account or IP address (IP Call)</td>
<td>Strings</td>
<td>NULL</td>
</tr>
<tr>
<td>P32008</td>
<td>Pexternal_service.system.number.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32013</td>
<td>Pexternal_service.system.number.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32018</td>
<td>Pexternal_service.system.number.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32023</td>
<td>Pexternal_service.system.number.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32028</td>
<td>Pexternal_service.system.number.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32033</td>
<td>Pexternal_service.system.number.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32038</td>
<td>Pexternal_service.system.number.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32043</td>
<td>Pexternal_service.system.number.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P32048</td>
<td>Pexternal_service.system.number.10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### MUSIC ON HOLD URI

- **Web Configuration**

The settings can be found at Web UI -> Profiles -> Profile {1-4} -> Call Settings

| Anonymous Call Rejection | Yes
| Special Feature | Standard
| **Music On Hold URI** |

- **Functionality**

Configure the music on hold URI to call when a call is on hold if server support it.

- **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Alias</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2350</td>
<td>Pprofile.1.sip.moh_uri</td>
<td>&lt;New Pvalue&gt; Music on Hold URI</td>
<td>Strings</td>
<td>NULL</td>
</tr>
<tr>
<td>P2450</td>
<td>Pprofile.2.sip.moh_uri</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2550</td>
<td>Pprofile.3.sip.moh_uri</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2650</td>
<td>Pprofile.4.sip.moh_uri</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### USE RANDOM SIP PORT

- **Web Configuration**

The settings can be found at Web UI -> Profiles -> Profile {1-4} -> SIP Settings -> Basic Settings -> Use Random SIP Port.
• **Functionality**

Configure to use random SIP port or not, if configured, the Local SIP Port setting will be ignored.

• **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Alias</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P20501</td>
<td>Pprofile.1.network.use_random_sip_port</td>
<td>Use a random port for SIP messages rather than the Local SIP Port.</td>
<td>0 – No</td>
<td>0 - No</td>
</tr>
<tr>
<td>P20502</td>
<td>Pprofile.2.network.use_random_sip_port</td>
<td></td>
<td>1 – Yes</td>
<td></td>
</tr>
<tr>
<td>P20503</td>
<td>Pprofile.3.network.use_random_sip_port</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P20504</td>
<td>Pprofile.4.network.use_random_sip_port</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NEW FORMAT OF PV VALUES**

• **Web Configuration**

The downloaded config file now will display the P value in new format, that has more meaningful name.
• Functionality

Below is an example of how new P values looks like, please note that the old numeric P values will still be working, for example, in a single config file, the user can choose to use P values in the format of P9 or Pnetworks.static.address.ip.octet.1, or mixed format for different settings, the device will takes all of them. We are still improving the downloaded config file by adding the help text and re-ordering the settings to match the web.
FIRMWARE VERSION 1.0.4.10

PRODUCT NAME
DP750 / DP720 / DP760

DATE
10/30/2018

FIRMWARE FILE INFORMATION
- Firmware file name: dp75xfw.bin
- MD5: b6945458f447ea859a85196b1731728a

IMPORTANT UPGRADING NOTES
- For DP750/DP720/DP760, once upgraded to 1.0.4.2 or above, downgrading to 1.0.3.40 or previous firmware version is not supported.
- For DP750/DP720, firmware 1.0.0.99 (The first public released beta firmware) and all above can upgrade to 1.0.4.7 directly, no transitional firmware is needed.

ENHANCEMENT
- Added option to add MAC address to User Agent for each profile. [OPTION FOR ADDING MAC ADDRESS TO USER AGENT]

BUG FIX
- Fixed DP750 phonebook XML file downloading will fail when the server is using TLS v1.2.
- Fixed DP750 distinctive ringtones do not work with alert-info header.
- Fixed DP720 does not display the contact name on the call history if the number starts with “+”.

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

OPTION FOR ADDING MAC ADDRESS TO USER AGENT
- **Web Configuration**
The settings can be found at Web UI -> Profiles -> Profile {1-4} -> SIP Settings -> Basic Settings -> Use MAC Header.
• **Functionality**

By default, the settings is “No”, if set to “Yes except REGISTER”, the sip message for register or unregister will contains MAC address in the header, and all the outgoing SIP messages except REGISTER message will attach the MAC address to the User-Agent header; If Yes to ALL, the sip message for register or unregister will contains MAC address in the header, and all the outgoing SIP message including REGISTER will attach the MAC address to the User-Agent header; If No, neither will the MAC header be included in the register or unregister message nor the MAC address be attached to the User-Agent header for any outgoing SIP message.

```
> From: 434: 1178 bytes on wire (9424 bits), 1178 bytes captured (9424 bits) on interface 0  
  Ethernet II, Src: Grandstream-87:00:a5 (00:00:02:08:00:a5), Dst: Cisco_7c:36:33 (00:26:00:7c:36:33)  
  User Datagram Protocol, Src Port: 5060, Dst Port: 5060  
  Session Initiation Protocol (INVITE)  
  Request-Line: INVITE sip:012@192.168.41.55 SIP/2.0  
  Via: SIP/2.0/UDP 192.168.88:17:5660;branch=z9hG4bK11750163932;rport  
  From: "Remote 012" <sip:012@192.168.41.55>;tag=1063131458  
  To: <sip:013@192.168.41.55>  
  Call-ID: 118217752-5060-4@823-881.11.8H  
  CSeq: 10 INVITE  
  Contact: "Remote 012" <sip:012@192.168.88:17:5660>  
  Max-Forwards: 70  
  User-Agent: Grandstream DP750 1.0.4.18 000b23708a5  
  Privacy: none  
  P-Preferred-Identity: "Remote 012" <sip:012@192.168.41.55>  
  Supported: replaces, path, timer, eventlist  
  Allow: INVITE, ACK, OPTIONS, CANCEL, BYE, SUBSCRIBE, NOTIFY, INFO, REFER, UPDATE  
  Content-Type: application/sdp  
  Accept: application/sdp, application/utf-8relay  
  Content-Length: 453  
  Message Body
```

• **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P26061</td>
<td>&lt;New Pvalue&gt;</td>
<td>0 – No</td>
<td>0 - No</td>
</tr>
<tr>
<td>P26161</td>
<td>Configure if use MAC address in the</td>
<td>1 – Yes except REGISTER</td>
<td></td>
</tr>
<tr>
<td></td>
<td>User Agent</td>
<td>2 – Yes to all SIP</td>
<td></td>
</tr>
<tr>
<td>P26261</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P26361</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FIRMWARE VERSION 1.0.4.7

PRODUCT NAME
DP750 / DP720 / DP760

DATE
10/12/2018

FIRMWARE FILE INFORMATION
- Firmware file name: dp75xfw.bin
- MD5: 833d7b7b226234f02892b00920165a67

IMPORTANT UPGRADING NOTES
- For DP750/DP720/DP760, once upgraded to 1.0.4.2 or above, downgrading to 1.0.3.40 or previous firmware version is not supported.
- For DP750/DP720, firmware 1.0.0.99 (The first public released beta firmware) and all above can upgrade to 1.0.4.7 directly, no transitional firmware is needed.

ENHANCEMENT
- Added the ability to display Account Name only. [DISPLAY ACCOUNT NAME ONLY]
- Added support to provision config file by model. [PROVISION CONFIG FILE BY MODEL]
- Added support TLS protocol for Syslog. [TLS PROTOCOL FOR SYSLOG]
- Added SRTP icon on handset UI. [SRTP ICON ON HANDSET UI]
- Updated German translations for both DP750 Web UI and DP720 handset UI

BUG FIX
- Fixed DP750 CTI feature related issue that handset would not return to idle after it received api-send_key request.
- Fixed DP750 CIT feature related issue that phone number sometimes get partially missing upon api-make_call request.
- Fixed DP750 issue that under 802.1x network environment if unplug network cable and re-plugin it, the following calls has no audio.
- Fixed DP750 issue that if answer a call that nearly timeout, the call has no audio.
- Fixed DP750 sometimes keep sending REGISER and cannot make calls.
- Fixed DP750 TLS registration not working properly sometimes.
- Fixed DP750 still sending codec PCMU after transferred even when the codec G729 is the only
configured codec.

- Fixed DP750 “Crypto Life Time” does not reload after it enabled or disabled.
- Fixed DP750 “Handset Config File Prefix” cannot be set to empty, it always switch to default value when set to empty.
- Fixed DP750 issue that after changing SIP protocol from UDP to TCP or from TCP to UDP without reboot, the following calls might introduce big noise.
- Fixed DP750 OpenVPN set option “comp-lzo no” to disable the LZO-compression does not working.
- Fixed DP720 issue that it may fail to exit ringing interface until manually return to idle, and the DP750 responses “486 busy” for any incoming call when staying in ringing.
- Fixed DP720 right Softkey does not show “delete” when editing last name/Home/Work/Mobile in contacts edit mode.
- Fixed DP760 Repeater network LED does not on when use PPPoE network mode.

NEW FEATURES OVERVIEW

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

DISPLAY ACCOUNT NAME ONLY

- **Functionality**
  
  On DP720 browse to Settings -> User Settings -> SIP Account Display, it can be set to “Name & ID”, “Name Only”, “ID only” or “None”
  
  DP720 will display both Account Name and SIP User ID and, Account Name Only, SIP User ID or none accordingly.

PROVISION CONFIG FILE BY MODEL

- **Web Configuration**
  
  There is no need to configure anything on the web UI, by default this feature is always enabled.

- **Functionality**
  
  When DP750 conduct provisioning, the device will request cfg(MAC).xml and cfg.xml file, after added this enhancement, DP750 will also request cfgdp750.xml to allow provisioning devices by a model specified xml file.

TLS PROTOCOL FOR SYSLOG

- **Web Configuration**
  
  On DP750 Web -> Maintenance -> Syslog, added an option to set “Syslog Protocol” to “SSL/TLS” other than default “UDP”.
• **Functionality**

After configured, all the Syslog will be send under SSL/TLS protocol.

• **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P8402</td>
<td>&lt;New Pvalue&gt; Allow sending syslog through secured TLS protocol to syslog server</td>
<td>0 – UDP</td>
<td>0 – UDP</td>
</tr>
<tr>
<td></td>
<td>Note: CA verification is required</td>
<td>1 – SSL/TLS</td>
<td></td>
</tr>
</tbody>
</table>

**SRTP ICON ON HANDSET UI**

• **Web Configuration**

There is no need to configure anything on the web UI, by default this feature is always enabled.

• **Functionality**

When using SRTP for call, there will be an icon on handset UI to indicate that.
FIRMWARE VERSION 1.0.4.2

PRODUCT NAME
DP750 / DP720 / DP760

DATE
07/19/2018

FIRMWARE FILE INFORMATION
- Firmware file name: dp75xfw.bin
- MD5: e46cd212301a5ebbd30231765e2da6b4

IMPORTANT UPGRADING NOTES
- For DP750/DP720/DP760, once upgraded to 1.0.4.2 or above, downgrading to 1.0.3.40 or previous firmware version is not supported.
- For DP750/DP720, firmware 1.0.0.99 (The first public released beta firmware) and all above can upgrade to 1.0.4.2 directly, no transitional firmware is needed.

ENHANCEMENT
- Added support for CTI (Computer-Telephony Integration) feature as the same as GXP phones. [CTI FEATURE]
- Improve the support to customize the Syslog port. [CUSTOMIZE THE SYSLOG PORT]
- Added support for DP720 to use Audio Loopback test when it is not registered
- Play keypad tone during the call if it is enabled

BUG FIX
- Fixed DP750 User Agent header uses wrong MAC format when downloading phonebook.xml
- Fixed P6007 doesn't return configure value in SSH
- Fixed DP750 cannot access web and cannot upgrade/download when using OpenVPN
- Fixed the default values for Verify host when using HTTPS that under Provision and Upgrade/ Downgrade are different, set both value to enabled
- Fixed DP750 always registers to Failover SIP Sever First if configured, and fails to register to the second IP of SRV Records of Primary SIP server
- Fixed DP750 web display a crash warning while there isn't a core dump
- Fixed DP750 circular mode sometimes two sides have no sound when the second incoming call timeout
- Fixed DP750 under repeater mode, when two handsets set up 2 concurrent calls on the same
repeater DP760, a third handset can still switch to this repeater

- Fixed DP720 customized ringtone file will be corrupt when rebooting during downloading
- Fixed DP720 does not play confirmation tone when saving language settings
- Fixed DP720 does not play the ringtone when change the volume after received a missed call.
- Fixed DP720 mute key misfunction if mute by long pressing 3 second and unmute by a quick pressing, the handset LCD shows unmuted, but the handset still stay in mute mode.
- Fixed DP720 system ring become abnormal after playing ringtone on handset and configuring tone on DP750 Web at the same time
- Fixed DP720 does not play keypad tone if unsubscribed and re-subscribed and press off-hook or speaker key first
- Fixed DP720 answer incoming call during searching base will lead the call become abnormal
- Fixed DP720 show "Error" and back to idle automatically after access and exit to menu quickly
- Fixed DP720 cannot switch to the last call record when pressing up key on the first record

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

CTI FEATURE

- **Web Configuration**
  There is no need to configure anything on the web UI, by default this feature is always enabled.

- **Functionality**
  Here is the full user manual for CTI feature of GXP phones:

For DP750/DP720/DP760, all the usage is the same except:

1. GXP is single phone, while DP750 could register 5 handsets, therefore, for some URL, it will need specific which handset it is.
2. DP720 does not support as many keys as GXP phones. Here are all the keys that DP720 support:
   0-9, HASH, *, LEFT_SOFT_KEY, RIGHT_SOFT_KEY, MUTE, SPEAKER, STAR, ONHOOK, OFFHOOK, OK, LOCK, UNLOCK, UP, DOWN, LEFT, RIGHT.

Command and Example:

- api-get_account_status

  Accepted arguments: account
  Example: [http://192.168.5.135/cgi-bin/api-get_account_status?passcode=admin&account=2](http://192.168.5.135/cgi-bin/api-get_account_status?passcode=admin&account=2)

- api-get_hs_status

  Accepted arguments: hs
  Example: [http://192.168.5.135/cgi-bin/api-get_hs_status?passcode=admin&hs=1](http://192.168.5.135/cgi-bin/api-get_hs_status?passcode=admin&hs=1)
• api-get_hs_line_status

Accepted arguments: hs
Example: http://192.168.5.135/cgi-bin/api-get_hs_line_status?passcode=admin&hs=1

• api-make_call

Accepted arguments: hs, phonenumber
Example: http://192.168.5.135/cgi-bin/api-make_call?passcode=admin&hs=1&phonenumber=3501

• api-device_operation

Accepted arguments: hs, line, cmd (cmd can be endcall, holdcall, unholdcall, acceptcall, rejectcall, cancel, speaker, mute, setdnd, unsetdnd)
Example:
http://192.168.5.135/cgi-bin/api-device_operation?passcode=admin&hs=1&line=1&cmd=endcall
http://192.168.5.135/cgi-bin/api-device_operation?passcode=admin&hs=1&line=1&cmd=holdcall
http://192.168.5.135/cgi-bin/api-device_operation?passcode=admin&hs=1&line=1&cmd=unholdcall
http://192.168.5.135/cgi-bin/api-device_operation?passcode=admin&hs=1&line=1&cmd=acceptcall
http://192.168.5.135/cgi-bin/api-device_operation?passcode=admin&hs=1&line=1&cmd=rejectcall
http://192.168.5.135/cgi-bin/api-device_operation?passcode=admin&hs=1&line=1&cmd=cancel

For mute, speaker and setdnd, unsetdnd command, there is no “line=x” argument.
http://192.168.5.135/cgi-bin/api-device_operation?passcode=admin&hs=1&cmd=mute
http://192.168.5.135/cgi-bin/api-device_operation?passcode=admin&hs=1&cmd=speaker
http://192.168.5.135/cgi-bin/api-device_operation?passcode=admin&hs=1&cmd=setdnd
http://192.168.5.135/cgi-bin/api-device_operation?passcode=admin&hs=1&cmd=unsetdnd

• api-send_key

Accepted arguments: hs, keys (keys are in format <key1>:<key2>:<key3>:...., keys can be 0-9, HASH, *, LEFT_SOFT_KEY, RIGHT_SOFT_KEY, MUTE, SPEAKER, STAR, ONHOOK, OFFHOOK, OK, LOCK, UNLOCK, UP, DOWN, LEFT, RIGHT)
Example: http://192.168.5.135/cgi-bin/api-send_key?passcode=admin&hs=1&keys=3:3:0:9:HASH
Please be aware that # key need be sent as HASH on DP750/DP720.

All the response from HTTP request, please check the GXP CTI user manual.

CUSTOMIZE THE SYSLOG PORT

• Web Configuration

To customize the Syslog port, login DP750 Web, and just add the port after the Syslog Server address. Previous we added a separated option and P value to configure the Syslog port, which is not consistent with other product and since we already support port after Server address like the SIP server and other
similar setting, we decide to remove the delicate settings for Syslog port, but just use it long with the Syslog Server address.

Now you can still configure this value by using the P207 which is for Syslog Server address.
FIRMWARE VERSION 1.0.3.40

PRODUCT NAME
DP750 / DP720 / DP760

DATE
05/22/2018

FIRMWARE FILE INFORMATION
- Firmware file name: dp75xfw.bin
- MD5: a719a1bb6c9b385e2414e7591406486a

IMPORTANT UPGRADING NOTES
- Upgrading handsets from web UI is disabled while in repeater mode. Please move the handset in range of DP750 base station and start upgrading from handset.
- For DP750/DP720, once upgraded to 1.0.3.23 or above, downgrading to 1.0.3.17 firmware version or lower is not supported.
- For DP750/DP720, once upgraded to 1.0.3.17 or above, downgrading to 1.0.2.16 firmware version or lower is not supported.
- For DP750/DP720, once upgraded to 1.0.2.16 or above, downgrading to 1.0.1.x firmware version or lower is not supported.
- For DP750/DP720, firmware 1.0.0.99 (The first public released beta firmware) and all above can upgrade to 1.0.3.23 directly, no transitional firmware needed.

ENHANCEMENT
- Added support to allow configure prefix for User-Agent in SIP header. [USER-AGENT PREFIX]
- Increased the length of Authenticate ID, SIP User ID, Password from 32 to 128.
- Added support for ".#", ".T" and “T" and alphanumeric characters in the Dial Plan.
- Added support for SIP OPTIONS Keep Alive. [USE SIP OPTIONS TO KEEP ALIVE]
- Added support for automatic upgrade and provisioning be triggered at a random time in every certain days. [RANDOM UPGRADE AND PROVISION]
- Removed force core generation from web
- Added OpenVPN feature as the same as GXP phones. [OPENVPN]
- Added the option to set Date and Time Display Format via the web GUI and Provisioning. [CONFIGURE DATE AND TIME DISPLAY]
- Increased the number of digits that can be dialed on the handset
BUG FIX

- Fixed sometime DP750 failed to register accounts sometimes when using SIP/TLS
- Fixed DP750 does not save certain allowed inputs in the Dial Plan
- Fixed DUT crashed after downloaded some files via TR069
- Fixed the SIP Authentication password is visible from the handset
- Fixed When handset line1 set to none, handset off hook didn’t have default outgoing line configured
- Fixed Pvalue template that downloaded from device Web UI have some Pvalues missing.

NEW FEATURES OVERVIEW

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

USER-AGENT PREFIX

- **Web Configuration**

Add support to allow configure customized User-Agent Prefix. The configuration is under Web UI -> Settings -> System Features -> User-Agent Prefix.

![System Features](image)

**Functionality**

```
Session Initiation Protocol (REGISTER)
Request-Line: REGISTER sip:192.168.254.5 SIP/2.0
Message-Header:
Via: SIP/2.0/UDP 192.168.219.10:5064;branch=a9h4BkK6423545846192784024
From: "3503" <sip:3503@192.168.254.5>;tag=742784024
To: <sip:3503@192.168.254.5>
Call-ID: 295784746-5064-18 JC.GF.C1.BA
CSeq: 2000 REGISTER
Contact: <sip:3503@192.168.219.10:5064>;reg-id=3
Max-Forwards: 70
User-Agent: Company Grandstream DP750 1.0.3.48
Supported: SDP
Expires: 3600
Allow: INVITE, ACK, OPTIONS, CANCEL, BYE, SUBSCRIBE, NOTIFY, INFO, REFER, UPDATE
Content-Length: 0
```
• **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P8358</td>
<td>&lt;New Pvalue&gt; Configure the prefix in the User-Agent header.</td>
<td>String</td>
<td>null</td>
</tr>
</tbody>
</table>

**USE SIP OPTIONS TO KEEP ALIVE**

• **Web Configuration**

Add option to use SIP OPTIONS to Keep Alive. It’s under Web UI -> Profiles -> SIP Settings -> Basic Settings.

![Web Configuration Interface](image-url)
• **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2397 (Profile 1)</td>
<td>&lt;New Pvalue&gt; Enable OPTIONS Keep Alive, to check SIP server</td>
<td>0 – No</td>
<td>0 – No</td>
</tr>
<tr>
<td>P2497 (Profile 2)</td>
<td></td>
<td>1 – Yes</td>
<td></td>
</tr>
<tr>
<td>P2597 (Profile 3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2697 (Profile 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2398 (Profile 1)</td>
<td>&lt;New Pvalue&gt; OPTIONS Keep Alive Interval: Time interval for OPTIONS Keep Alive feature in seconds</td>
<td>1 – 64800</td>
<td>30</td>
</tr>
<tr>
<td>P2498 (Profile 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2598 (Profile 3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2698 (Profile 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2399 (Profile 1)</td>
<td>&lt;New Pvalue&gt; OPTIONS Keep Alive Max Lost: Maximum number of lost packets for OPTIONS Keep Alive feature before the phone re-registration</td>
<td>3 – 10</td>
<td>3</td>
</tr>
<tr>
<td>P2499 (Profile 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2599 (Profile 3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2699 (Profile 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RANDOM UPGRADE AND PROVISION**

• **Web Configuration**

The Setting is under Web UI -> Maintenance -> Firmware Upgrade / Provisioning:

- Verify host when using HTTPS
- Upgrade via TFTP HTTP HTTPS
- Firmware Server Path 102.168.219.5/share/dp7
- Firmware File Prefix
- Firmware File Postfix
- Allow DHCP Option 43 and Option 66 to Override Server
- Automatic Upgrade
  - Yes, check for upgrade every 1 day(s)
  - Yes, check for upgrade every 60 minute(s)
  - Yes, check for upgrade every day
  - Yes, check for upgrade every week
- Random Interval Start Time 1
- Random Interval Stop Time 1
- Hour of the Day (0-23) 1
- Day of the Week (0-6) 1
- Firmware Key
- Handset Firmware
  - Upload Delete
  - Save Save and Apply Reset
• **Functionality**

This feature is used to set DP750 or DP760 automatic upgrade or provisioning at a random time in a certain period. You can set the device randomly automatic upgrade in X days and run upgrade / provisioning between the start time and stop time. Reboot the device will not lose the pending upgrade / provisioning.

• **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27816 (Upgrade)</td>
<td>&lt;New Pvalue&gt; check for upgrade at random every X day(s).</td>
<td>1 – 3650</td>
<td>1</td>
</tr>
<tr>
<td>P27817</td>
<td>Random upgrade start hour and start minutes, stop hour and stop minutes.</td>
<td>0 – 23</td>
<td>1</td>
</tr>
<tr>
<td>P27818</td>
<td>0 – 59</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>P27819</td>
<td>0 – 23</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>P27820</td>
<td>0 – 59</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>P27812</td>
<td>&lt;New Pvalue&gt; Random provisioning start hour and start minutes, stop hour and stop minutes.</td>
<td>0 – 23</td>
<td>1</td>
</tr>
<tr>
<td>P27813</td>
<td>0 – 59</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>P27814</td>
<td>0 – 23</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>P27815</td>
<td>0 – 59</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**OPENVPN**

• **Web Configuration**

The Setting is under Web UI -> Settings -> Network Settings -> OpenVPN Settings. After configured OpenVPN, you can also choose to use VPN as NAT Traversal at Profile X -> Network Settings -> NAT Traversal.
### New P Values

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P7050</td>
<td>&lt;New Pvalue&gt; Enable or disable OpenVPN®</td>
<td>0 – No, 1 – Yes</td>
<td>0</td>
</tr>
<tr>
<td>P7051</td>
<td>&lt;New Pvalue&gt; OpenVPN® Server Address</td>
<td>String</td>
<td>Null</td>
</tr>
<tr>
<td>P7052</td>
<td>&lt;New Pvalue&gt; OpenVPN® Port</td>
<td>1 – 65535</td>
<td>1194</td>
</tr>
<tr>
<td>P2912</td>
<td>OpenVPN® Transport Determines network protocol used for OpenVPN®</td>
<td>0 – UDP, 1 – TCP</td>
<td>0 – UDP</td>
</tr>
<tr>
<td>P8394</td>
<td>&lt;New Pvalue&gt; OpenVPN® username</td>
<td>String</td>
<td>Null</td>
</tr>
<tr>
<td>P8395</td>
<td>&lt;New Pvalue&gt; OpenVPN® password</td>
<td>String</td>
<td>Null</td>
</tr>
<tr>
<td>P8396</td>
<td>&lt;New Pvalue&gt; OpenVPN® cipher Method</td>
<td>0 – Blowfish, 1 – AES-128, 2 – AES-256, 3 – Triple-DES</td>
<td>0</td>
</tr>
</tbody>
</table>
**CONFIGURE DATE AND TIME DISPLAY**

- **Web Configuration**

The Setting is under Web UI -> DECT -> Handset Settings -> HS X Settings, to configure the display format of Time and Date.

![Web Configuration Diagram]

- **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P30080 (HS 1)</td>
<td>&lt;New Pvalue&gt; Set the displayed Time Format</td>
<td>0 – 12hr</td>
<td>0 – 12hr</td>
</tr>
<tr>
<td>P30081 (HS 2)</td>
<td>on handsets.</td>
<td>1 – 24hr</td>
<td></td>
</tr>
<tr>
<td>P30082 (HS 3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P30083 (HS 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P30084 (HS 5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P30060 (HS 1)</td>
<td>&lt;New Pvalue&gt; Set the displayed Date Format</td>
<td>0 – DD-MM-YYYY</td>
<td>0</td>
</tr>
<tr>
<td>P30061 (HS 2)</td>
<td>on handsets.</td>
<td>1 – MM-DD-YYYY</td>
<td></td>
</tr>
<tr>
<td>P30062 (HS 3)</td>
<td></td>
<td>2 – YYYY-MM-DD</td>
<td></td>
</tr>
<tr>
<td>P30063 (HS 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P30064 (HS 5)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FIRMWARE VERSION 1.0.3.37

PRODUCT NAME
DP750 / DP720 / DP760

DATE
03/16/2018

FIRMWARE FILE INFORMATION
- Firmware file name: dp75xfw.bin
- MD5: 7f2e584240b0d230079fd92b6355799a

IMPORTANT UPGRADING NOTES
- Upgrading handsets from web UI is disabled while in repeater mode. Please move the handset in range of DP750 base station and start upgrading from handset.
- For DP750/DP720, once upgraded to 1.0.3.23 or above, downgrading to 1.0.3.17 firmware version or lower is not supported.
- For DP750/DP720, once upgraded to 1.0.3.17 or above, downgrading to 1.0.2.16 firmware version or lower is not supported.
- For DP750/DP720, once upgraded to 1.0.2.16 or above, downgrading to 1.0.1.x firmware version or lower is not supported.
- For DP750/DP720, firmware 1.0.0.99 (The first public released beta firmware) and all above can upgrade to 1.0.3.23 directly, no transitional firmware needed.

ENHANCEMENT
- Added support for DP750 to configure device with custom certificate signed by custom CA certificate. [DEVICE CUSTOM CERTIFICATE SETTINGS]
- Added support for DP750 to customize the Syslog port. [CUSTOMIZE THE SYSLOG PORT]
- Reset DP760 repeater region to AUTO when pressing page and reset button more than 2s. [DP760 AUTO REGION]
- Increased all volume levels by +4dB

BUG FIX
- Issued a new DP750 HTTPS default certificate for it had expired. New issue certificate will be expired in year 2038.
- Fixed DP750 issue that it cannot register the SIP account when using SRV.
- Fixed DP720 issue that after handset selected another base the original base still marked it as online.
• Fixed DP750 issue that it fails lookup LDAP contact names during ringing if the number starts with +.
• Fixed DP720 keep rebooting automatically when battery is low.
• Fixed DP750 crashes and generates core dump randomly when transferring a call.
• Fixed DP720 automatically reboot after loading phonebook that included specific Japanese/Russian character.
• Fixed DP750 issue that handset fails to receive incoming call but response SIP 486 error
• Fixed DP750 cannot send BYE message when using TLS in some specific SIP proxy.
• Fixed DP720 would not play ringtone after pressed speaker to answer a call.

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

DEVICE CUSTOM CERTIFICATE SETTINGS

• Web Configuration
Add custom certificate support, now the user can configure their own custom certificate and private key for their own HTTPS server. It’s under Web UI -> Maintenance -> Security Settings -> Device Custom Certificate Settings.

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27776</td>
<td>&lt;New Pvalue&gt;</td>
<td>String</td>
<td>null</td>
</tr>
</tbody>
</table>
### Device Custom Certificate
Certificate used by device during provisioning and web access

**P27775** &lt;New Pvalue&gt;  
Device Custom Private Key: Key used by device during provisioning and web access

**P27777** &lt;New Pvalue&gt;  
Enable Device Custom Certificate: Enable it will use custom certificate else use default certificate

#### CUSTOMIZE THE SYSLOG PORT

- **Web Configuration**

  Add option to configure Syslog port. It’s under Web UI -> Maintenance -> Syslog.

- **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
</table>
  | P8472  | &lt;New Pvalue&gt;  
  Syslog port: Syslog messages will be sent to this port instead of the default syslog port of 514 | Integer (1 – 65535) | 514 |

### DP760 AUTO REGION

Now DP760 supports auto region for US/Europe/Brazil mode.
After pressing Page/Reset button for more than 2 seconds, DP760 will enter AUTO region mode, you can use any region DP750 to pair with it, after the DP760 paired with a base station, it will set it’s region to the same as the base station (DP750).

Note: 1. If you have a DP760 that has FW before 1.0.3.34, you will need upgrade it to 1.0.3.34 first, then do a factory reset. After that, the unit will support Auto-Region feature.
2. By default, after factory reset, the DP760 will enter Auto Region mode.
FIRMWARE VERSION 1.0.3.34

PRODUCT NAME
DP750 and DP720

DATE
02/05/2018

IMPORTANT UPGRADING NOTES

• Upgrading handsets from web UI is disabled while in repeater mode. Please move the handset in range of DP750 base station and start upgrading from handset.
• For DP750/DP720, once upgraded to 1.0.3.23 or above, downgrading to 1.0.3.17 firmware version or lower is not supported.
• For DP750/DP720, once upgraded to 1.0.3.17 or above, downgrading to 1.0.2.16 firmware version or lower is not supported.
• For DP750/DP720, once upgraded to 1.0.2.16 or above, downgrading to 1.0.1.x firmware version or lower is not supported.
• For DP750/DP720, firmware 1.0.0.99 (The first public released beta firmware) and all above can upgrade to 1.0.3.23 directly, no transitional firmware needed.

ENHANCEMENT

• Enhanced the stability when working with DP760 repeater.
FIRMWARE VERSION 1.0.3.31

PRODUCT NAME
DP750 and DP720

DATE
11/28/2017

IMPORTANT UPGRADING NOTE
• Upgrade of handsets from web UI is disabled while in repeater mode. Please move the handset in range of DP750 base station and start upgrade from handset.
• For DP750/DP720, once upgraded to 1.0.3.23 or above, downgrading to 1.0.3.17 firmware version or lower is not supported.
• For DP750/DP720, once upgraded to 1.0.3.17 or above, downgrading to 1.0.2.16 firmware version or lower is not supported.
• For DP750/DP720, once upgraded to 1.0.2.16 or above, downgrading to 1.0.1.x firmware version or lower is not supported.
• For DP750/DP720, firmware 1.0.0.99 (The first public released beta firmware) and all above can upgrade to 1.0.3.23 directly, no transitional firmware needed.

ENHANCEMENT
• Added language support for Slovakian, Swedish.
• Hide RPN from web UI.
• Add icon or symbol to indicate if the handset is using repeater or not

BUG FIX
• Change NTP Server default value to pool.ntp.org.
• Fixed Phonebook contacts with numbers leading with "0" are not resolved in incoming/outgoing calls.
• Fixed the receiver cannot hear the voice if it answered the call from DP720 quickly.
• Fixed DP720 cannot play ring-back tone if it as transferee in blind transfer.
• Fixed DP750 didn't send RTP and there is no audio in the call after the receiver of transfer was ringing timeout.
• Fixed DP720 can still receive incoming call after long pressing mute key to enable DND function.
• Fixed DP750 issue of CPE closes the TCP connection before sending empty HTTP POST request.
• Fixed DP750 crashed after downloaded some files via TR069.
• Fixed DP720 can't search base even that base have opened subscribe.
• Fixed DP760 not able to be managed by DP750 via web when using VLAN.
• Fixed DP750 still allows more than 3 current calls under repeater mode, that lead more than 5 channels be used and causes device crashes, now DP750/DP720 will only able to make 2 current calls when enabled Repeater Mode.
FIRMWARE VERSION 1.0.3.23

PRODUCT NAME
DP750 and DP720

DATE
03/14/2017

IMPORTANT UPGRADING NOTE

• For DP750/DP720, once upgraded to 1.0.3.23 or above, downgrading to 1.0.3.17 firmware version or lower is not supported.
• For DP750/DP720, once upgraded to 1.0.3.17 or above, downgrading to 1.0.2.16 firmware version or lower is not supported.
• For DP750/DP720, once upgraded to 1.0.2.16 or above, downgrading to 1.0.1.x firmware version or lower is not supported.
• For DP750/DP720, firmware 1.0.0.99 (The first public released beta firmware) and all above can upgrade to 1.0.3.23 directly, no transitional firmware needed.

ENHANCEMENT

• Improved maximum concurrent calls from 4 wide-band calls to 5.
• Added Email address to core debug page. [CORE COLLECTION EMAIL]
• Added DP720 factory reset combo key to be able to recover the device during booting up. [DP720 FACTORY RESET DURING BOOTING UP]
• Implemented Handset Provisioning feature. Add warning information to SIP Account Settings and Line Settings Pages if Handset Provisioning enabled. [HANDSET PROVISIONING FEATURE]
• Implemented DP750 Debug Tools that allow generate and submit debug files to Grandstream debug server directly. Add handset notification for base core dump files. [DP750 DEBUG TOOLS]
• Added web UI support to DP750 for repeater management such as display/link/unlink, etc. [REPEATER MANAGEMENT PAGE]
• Removed Tools/alarm menu from DP720 GUI, replaced by Status menu.
• Added keypad tones for non DTMF keys on DP720.
• Added subscribe Softkey in idle screen if HS no subscribed on DP720
• Added backup configuration feature. [BACKUP CONFIGURATION]
• Added UPnP discovery feature. [UPNP DISCOVERY]
• Added support for more languages and updated translation.
• Added DP750/DP720 product resource link to DP750 web UI footer at left side.
• Added support for page refresh by Refresh Page button, and added the icons of Refresh Page, Open Subscription and Page All button to icon bar. [ICON BAR WITH SHORTCUT ICON BUTTON]
• Added the ability to customize DP720 ringtones. [CUSTOMIZE DP720 RINGTONES]
• Enhanced factory reset feature by adding options to select Full RESET, RESET without deleting handsets subscription or RESET only deleting handset subscription. [ENHANCED FACTORY RESET]
• Added capability to rename the profile. [RENAME THE PROFILE]
• Added support for Distinctive Ringtone based on a customized SIP Alert-info header
• Added support to upload TXT configuration file, now user can upload TXT configuration file as the same as XML configuration files.
• Added support to auto-refresh on dect status web UI
• Added a new tab named “Support” under Maintenance page for support document, configuration support and debug tools.
• Added DP720 walk through setup wizard after factory rest.
• Added DP750 the ability to send SIP INFO and RFC2833 at same time. [SEND SIP INFO AND RFC2833 AT SAME TIME]
• Added force reboot button to web UI to force reboot DP750 in factory reset page under maintenance section.
• Improved power savings and stability.

BUG FIX
• Fixed DP720 did not play busy tone in speaker when handset is in speaker mode
• Fixed DP750 UPnP only able to display one DP device at the same time
• Fixed DP750 IP call cannot be redialed
• Removed “Disable Call Waiting Tone” from Profile page, the settings are now under DECT -> Handset Settings now
• Fixed DP750 Music on hold is not sending correct signal for resume
• Fixed DP750: Self-defined time zone field length is too short, increased it from 32 characters to 64
• Fixed DP750 SIP Registration before expiration field value limit is too small, increased it to 64800
• Fixed DP750 SIP Registration failure retry sending duplicated REGISTER packets
• Fixed DP750 cannot unsubscribe the handset after factory reset via TR069
• Fixed DP750 could not make outbound call after handset stay in the off-hook status more than two minutes
• Removed UCM Zero Config template offline download from DP750 web GUI, because DP has official released and the template now can be accessed directly on UCM
• Fixed DP750 cannot factory reset when reset device by TR069
• Fixed DP750 "support tools" online support links are open in self-page and removed offline user manual
• Fixed DP750 Change web port did not tip reboot
• Fixed DP720 contacts cannot display all after browse more than 10 entries
• Fixed DP720 key mapping settings does not working properly
• Fixed DP720 reboot automatically when receiving a call at the same time of successfully saving a new contact
• Fixed DP720 LSK/RSK becomes invalid in Settings menu after fast repeat enter and exit User Settings
• Fixed DP720 ring5 cannot be save and apply to melody
- Fixed DP720 cannot access to submenu or back to idle when unsubscribe it during in the call history interface
- Fixed DP720 did not play busy tone in speaker when handset is in speaker mode
- Fixed DP720 keypad tone is very small
- Fixed HS prompt "Unknown User" when it is not subscribed and pressing keypad from main interface, update the prompt to "Not subscribed"
- Fixed "Check for New Firmware" button does not prompt "the operation successfully" after being clicked
- Fixed handset will lose connection after conference member end the call sometimes
- Fixed when set the SRTP Mode to "enabled and forced", after answering the second calls, the status of handset will become abnormal
- Fixed handset to prompt "Current account was disabled" instead of "User unknown" when calling using disabled account
- Fixed VLAN settings sometimes does not working properly issue
- Fixed incoming account misrepresented in Circular/Parallel/Shared hunt mode
- Fixed "Disable Call Waiting Caller ID" option does not working
- Fixed reject incoming call from single handset will terminates the call instead of advancing to the next handset in circular/linear mode
- Fixed DP750 is providing incorrect Line status to ACS server
- Fixed the confirmation tone is not played by speaker
- Fixed DP750 inactive SIP accounts triggers No Registration LED
- Fixed the System Info page does not refresh after clicking Check Firmware button
- Changed the “Upgrade” button to “Check for New Firmware” and added firmware version information after the button being pressed
- Fixed after changed IP, user could not access web UI
- Fixed that DP750 can reboot when DP720 is upgrading
- Fixed the value cannot be saved if typing Return key on White/Black list for WAN side
- Fixed account info mismatch when in Parallel or Shared mode
- Fixed DP750 doesn't accept dial plan that works fine on GXP
- Fixed 750 crashes after 24-36 hours of operating time which is caused by incoming parallel call been canceled too soon.

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

CORE COLLECTION EMAIL
- **Web Configuration**
  Add email field for core collection tools. Uses can leave a contact email to get feedbacks.
• **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27774</td>
<td>&lt;New Pvalue&gt; Contact email address for core dump files</td>
<td>String max 256 bit</td>
<td>null</td>
</tr>
</tbody>
</table>

**DP720 FACTORY RESET DURING BOOTING UP**

• **Web Configuration**

No web configuration needed, this feature is a built-in for all DP720 since 1.0.3.22

• **Functionality**

This feature uses combo keys to factory reset DP720 during booting up prior it’s fully booted, to give DP720 the ability to recover from some extreme cases like self-reboot or stuck right after booted up.

The procedure for DP720 factory reset using combo key:

1. Connect the USB cable and power off DP720.
2. Power on DP720 and wait for Green LED.
3. Press 3 times Central Key (OK/Selection Key) quickly after Green LED on.
4. Press Speaker Key (left bottom) first and then Mute Key (right bottom) after Red LED on.
5. DP720 LED will start blinking in 3 colors: Green, Red and Orange if factory reset successful triggered.
6. Wait for about 1-3 minutes, the DP720 will boot up with setup wizard for initial language and date format settings.

**HANDSET PROVISIONING FEATURE**

- **Web Configuration**

To configure the handset provisioning, please browse the base station Web GUI at Maintenance -> Provisioning. This is the same page used for base station provisioning. Handset shares the settings of base station provisioning in the field in the red rectangle, and has its own settings in the blue rectangle. After enabled Handset Config Upgrade, need reboot the DP750 to take effect.

***Provisioning via***: Choose the method that the base station uses to request handset ipei config file. Can use TFTP, HTTP or HTTPS.
**Config Server Path:** Defines the server path for provisioning. Do not prepend address with "http://" or any other protocol.

**Handset Config File Prefix:** If configured, only the handset configuration file with the matching encrypted prefix will be downloaded and flashed into the device.

**Handset Config File Postfix:** If configured, only the handset configuration file with the matching encrypted postfix will be downloaded and flashed into the device.

- **Functionality**
  When a DP720 registers to a DP750 for the first time or an already registered handset boots up, the DP750 will send a provisioning request for a file on the configured provisioning server, with location "Config_Server_Path/[Prefix][HS IPEI].xml[Postfix]". For example, if handset’s IPEI number is 02c332b510, prefix is "ipei_", postfix is null, and config server path is “fw.grandstream.com/gs”, the request URL is “fw.grandstream.com/gs/ipei_02c332b510.xml.

**Example Configuration File**
```xml
<?xml version="1.0" encoding="UTF-8"?>
<hs_config>
  <ipei>02c332b510</ipei>
  <hs_name>HS 1FEDE</hs_name>
  <sip>
    <line>
      <display_name>1FEDE_Line_1</display_name>
      <profile_name>profile1</profile_name>
      <user_id>5328</user_id>
      <auth_id>5328</auth_id>
      <password>password</password>
      <ring_type>DID</ring_type>
    </line>
  </sip>
  <hs_settings>
    <force_apply>1</force_apply>
    <admin>
      <disable_private_phonebook>0</disable_private_phonebook>
      <disable_shared_phonebook>0</disable_shared_phonebook>
      <disable_conference>0</disable_conference>
      <disable_transfer>0</disable_transfer>
      <custom_ringtone>2</custom_ringtone>
    </admin>
    <user>
```

For more detailed information, please go to DP750/DP720 product page, at How to Guide section, found the Handset Provisioning Guide.

- **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27014</td>
<td>&lt;New Pvalue&gt; Enable Handset Config Upgrade</td>
<td>0 – No</td>
<td>0 – No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Yes</td>
<td></td>
</tr>
<tr>
<td>P27015</td>
<td>&lt;New Pvalue&gt; Handset Config File Prefix.</td>
<td>String</td>
<td>ipei_</td>
</tr>
<tr>
<td>P27016</td>
<td>&lt;New Pvalue&gt; Handset Config File Postfix.</td>
<td>String</td>
<td>NULL</td>
</tr>
</tbody>
</table>

**DP750 DEBUG TOOLS**

- **Web Configuration**

User can find the new option at Web ->Maintenance -> Support -> Debug Tools.
Debug Tools

Remote Log Submission - Terms & Conditions

The log files listed below are generated automatically if the usability of the device is affected. By clicking the Submit button, you agree to allow the device to send these files to Grandstream to be used for troubleshooting purposes. If possible, please include a comment with information regarding the use of the device when the problem occurred.

As an alternative to the device submitting the files, you may download the files below and submit them to Grandstream manually.

Agree to Terms? Yes, allow sending of crash logs to Grandstream.

Debug Log Files

- NO LOG FILES

Terminate Phone Process Generate Debug File

Handset Notification

Prompt Handsets After Recovery? Yes No

Save Save and Apply Reset

(Screenshot without debug log file)

Debug Tools

Remote Log Submission - Terms & Conditions

The log files listed below are generated automatically if the usability of the device is affected. By clicking the Submit button, you agree to allow the device to send these files to Grandstream to be used for troubleshooting purposes. If possible, please include a comment with information regarding the use of the device when the problem occurred.

As an alternative to the device submitting the files, you may download the files below and submit them to Grandstream manually.

Agree to Terms? Yes, allow sending of crash logs to Grandstream.

Comments

Something abnormal happens to my DP720 and DP724, please take a look of my debug log files, thanks. -Shane

Submit Files

(Screenshot with debug log file)
• **Functionality**
Allow user to generate debug log file and submit it to Grandstream debug server, or submit existing debug log file that self-generated from device crash. Grandstream will not collect any information without customers acknowledged and permissions. It will only send debug log file every time customer clicks the “Submit Button”, after file successfully been sent, the old one will be deleted. Also when there is any debug log files exist, the web UI will prompt it to user every time login:

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27751</td>
<td>&lt;New Pvalue&gt; Agree to terms to allow sending crash logs to Grandstream.</td>
<td>0 – No</td>
<td>1 – Yes</td>
</tr>
<tr>
<td>P27753</td>
<td>&lt;New Pvalue&gt; Configure if prompt handset if there are debug log files exist.</td>
<td>0 – No</td>
<td>1 – Yes</td>
</tr>
</tbody>
</table>

**REPEATER MANAGEMENT PAGE**

• **Web Configuration**

**General Settings**

- **Base Station Name**: DP750
- **Admin PIN Code**
- **Enable Repeater Mode**: No
- **Enable Repeater Management**: Yes

**Functionality**
After enabled Repeater Management, please reboot the base station first to take effect. Then login web UI
and browse to Status page, you will find the new tab names: DECT Repeater Status pages. In which you can find all the paired devices and discovered devices, you can simply link and unlink the repeater by click the button. You can also access the web UI of the repeaters by click the IP links.

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27019</td>
<td>&lt;New Pvalue&gt; Enable Repeater Management feature, need reboot device to take effect.</td>
<td>0 – No</td>
<td>0 – No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – Yes</td>
<td></td>
</tr>
</tbody>
</table>

**BACKUP CONFIGURATION**

- **Web Configuration**
  User can find the new option at Web -> Maintenance -> Provisioning. (at the bottom of the page)

  ![Backup Configuration](image)

- **Functionality**
  Click "Backup Settings" Button, device will generate an xml config file storing all the current configuration on device itself. After clicked, please wait a few seconds then click the refresh button on the page icon bar or wait for the page self-refresh, you will found the xml list to download then. And support maximum 10 backup files. When it reaches 10 entries this feature will be disabled and the web UI will looks like below:
Caution: Click Delete button will delete all the configuration, please download all the configuration files before you click the "Delete" button, after configuration files been delete, the UI will looks like below:

**Backup Configuration**

<table>
<thead>
<tr>
<th>Backup Configuration</th>
<th>Backup Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backup Configuration</td>
<td>NONE</td>
</tr>
</tbody>
</table>

**UPNP DISCOVERY**

- **Web Configuration**
  User can find the new option at Web -> Settings -> Networks Settings -> Advanced Settings.

**UPnP Discovery Settings**

<table>
<thead>
<tr>
<th>Enable UPnP discovery</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPnP discovery notify interval</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

- **Functionality**
  Enables UPnP discovery feature. After enabled, if you have a PC in the same network of DP750, you can browse it directly in your Network. Double click the device will open its web GUI in your default browser. The UPnP Discovery notify interval is set how often it will refresh to find the device, default interval is 30 seconds.
• **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27756</td>
<td>&lt;New Pvalue&gt; P value to enable/disable UPnP discovery</td>
<td>0 or 1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0: No (Disabled)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1: Yes (Enabled)</td>
<td></td>
</tr>
<tr>
<td>P27757</td>
<td>&lt;New Pvalue&gt; Pvalue to set the interval of UPnP discovery notify</td>
<td>15 - 86400 (seconds)</td>
<td>30</td>
</tr>
</tbody>
</table>

**ICON BAR WITH SHORTCUT ICON BUTTON**

• **Web Configuration**
User can find the icon bar right below the main menu of every page.

• **Functionality**
The first icon is click to refresh the current page. The second icon is used to enable subscription. The third icon is used to page all the handset.
CUSTOMIZE DP720 RINGTONES

- **Web Configuration**

Once use firmware provisioning method uploaded .bin ringtone files, users can assign custom ringtone to specific handset at Web -> DECT -> Handset Settings.

- **Functionality**

DP750/DP720 now support customized ringtones now. It takes up to 10 ringtone files which have be named as ring1.bin to ring10.bin, and you can assign one ringtone to each handset in the web UI as the screenshot above.

Steps of configuring a custom ringtone to a handset:

1. Get ringtone files that accepted by DP devices. DP750 and DP720 only support .bin ringtone file. Please use the ring generator tools named “Grandstream IP Phone Custom Ringtone Generator” at our official website: [http://www.grandstream.com/support/tools](http://www.grandstream.com/support/tools)
   Each ringtone files can maximum be 128KB and have to be named in ringX.bin, X can be 1 to 10.

2. Put the ringX.bin file under the firmware provisioning path, reboot DP750, it will fetch the .bin ringtone file as the same way as fetch firmware.

3. After DP750 booted up, browser to Web -> DECT -> HS Settings, at the Cutom Ringtone, you will see the uploaded ringtone listed under the drop down box. Select the one you want to use for each handset.

4. Save and Apply, wait the DP720 fully downloaded the ringtone, you will be able to set DP720 to use that ringtone.

Each handset only able to use one custom ringtone and DP750 maximum support 10 custom ringtone. You might need refresh the page of HSx Settings page to display the uploaded ringtone. Below is screenshot of how it looks like when there is a custom ringtone.
ENHANCED FACTORY RESET

• **Web Configuration**
User can set DP750 reset button behavior at Web -> Maintenance -> Factory Reset:

![Web Configuration UI](image)

• **Functionality**
Allow user to configure the behavior of Web UI reset button and hardware button on device itself.
There are 3 reset type for Web UI button:

1. Full Factory Reset - This will reset all the settings.
2. NVRAM Settings Only - This will reset all the settings except subscription information, so the handset will stay in subscribed after reset, but all the other settings like account info, call settings, audio settings, etc. will be reset.
3. DECT Settings Only – This will reset only the subscription (wipe out all the subscription information), but keep all the other settings like account, SIP settings.

There are 4 reset types for Hardware button:

1. Full Factory Reset - This will reset all the settings.
2. NVRAM Settings Only - This will reset all the settings except subscription information, so the handset will stay in subscribed after reset, but all the other settings like account info, call settings, audio settings, etc. will be reset.
3. DECT Settings Only – This will reset only the subscription (wipe out all the subscription information), but keep all the other settings like account, SIP settings.
4. Disabled – This will disable the hardware button to factory reset the base for security purpose.

**New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27766</td>
<td>&lt;New Pvalue&gt;</td>
<td>0: Full Factory Reset 3: NVRAM Settings Only 4: DECT Settings Only</td>
<td>0</td>
</tr>
<tr>
<td>P88</td>
<td>&lt;New Pvalue&gt;</td>
<td>0: Full Factory Reset 3: NVRAM Settings Only 4: DECT Settings Only 1: Disabled</td>
<td>0</td>
</tr>
</tbody>
</table>

RENAME THE PROFILE

- **Web Configuration**

User can set DP750 each profile’s name at Web -> Profiles -> each profile tab.
- **Functionality**
  Custom the name of the profile, this profile name also been used in handset config provisioning for validation. By default, the value are profile1 – profile4.

- **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27762</td>
<td>&lt;New Pvalue&gt; Pvalue to set the name of profile 1</td>
<td>String</td>
<td>profile1</td>
</tr>
<tr>
<td>P27763</td>
<td>&lt;New Pvalue&gt; Pvalue to set the name of profile 2</td>
<td>String</td>
<td>profile2</td>
</tr>
<tr>
<td>P27764</td>
<td>&lt;New Pvalue&gt; Pvalue to set the name of profile 3</td>
<td>String</td>
<td>profile3</td>
</tr>
<tr>
<td>P27765</td>
<td>&lt;New Pvalue&gt; Pvalue to set the name of profile 4</td>
<td>String</td>
<td>profile4</td>
</tr>
</tbody>
</table>

**SEND SIP INFO AND RFC2833 AT SAME TIME**

- **Web Configuration**
  User can set DP750 each profile’s name at Web -> Profiles -> each profile tab -> Audio Settings.

**Audio Settings**

- **Functionality**
  DP750 used to able to select one of the DTMF type out of in-audio, RFC2833 and SIP INFO, now the option changed from drop down box single-select to multiple check box. So use can choose to use multiple types at the same type.

- **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2301</td>
<td>&lt;New Pvalue&gt; Pvalue to set if in-audio DTMF type enabled for profile 1</td>
<td>0 – not checked 1 - checked</td>
<td>0</td>
</tr>
<tr>
<td>P2302</td>
<td>&lt;New Pvalue&gt; Pvalue to set if RFC2833 DTMF type enabled for profile 1</td>
<td>0 – not checked 1 - checked</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Value</td>
<td>Status</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------------------------</td>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>P2303</td>
<td>&lt;New Pvalue&gt; Pvalue to set if SIP INFO DTMF type enabled for profile 1</td>
<td>0 – not checked</td>
<td>0</td>
</tr>
<tr>
<td>P2401</td>
<td>Pvalue to set if in-audio DTMF type enabled for profile 2</td>
<td>0 – not checked</td>
<td>0</td>
</tr>
<tr>
<td>P2402</td>
<td>&lt;New Pvalue&gt; Pvalue to set if RFC2833 DTMF type enabled for profile 2</td>
<td>0 – not checked</td>
<td>1</td>
</tr>
<tr>
<td>P2403</td>
<td>&lt;New Pvalue&gt; Pvalue to set if SIP INFO DTMF type enabled for profile 2</td>
<td>0 – not checked</td>
<td>0</td>
</tr>
<tr>
<td>P2501</td>
<td>Pvalue to set if in-audio DTMF type enabled for profile 3</td>
<td>0 – not checked</td>
<td>0</td>
</tr>
<tr>
<td>P2502</td>
<td>&lt;New Pvalue&gt; Pvalue to set if RFC2833 DTMF type enabled for profile 3</td>
<td>0 – not checked</td>
<td>1</td>
</tr>
<tr>
<td>P2503</td>
<td>&lt;New Pvalue&gt; Pvalue to set if SIP INFO DTMF type enabled for profile 3</td>
<td>0 – not checked</td>
<td>0</td>
</tr>
<tr>
<td>P2601</td>
<td>Pvalue to set if in-audio DTMF type enabled for profile 4</td>
<td>0 – not checked</td>
<td>0</td>
</tr>
<tr>
<td>P2602</td>
<td>&lt;New Pvalue&gt; Pvalue to set if RFC2833 DTMF type enabled for profile 4</td>
<td>0 – not checked</td>
<td>1</td>
</tr>
<tr>
<td>P2603</td>
<td>&lt;New Pvalue&gt; Pvalue to set if SIP INFO DTMF type enabled for profile 4</td>
<td>0 – not checked</td>
<td>0</td>
</tr>
</tbody>
</table>
FIRMWARE VERSION 1.0.2.16

PRODUCT NAME
DP750 and DP720

DATE
08/11/2016

IMPORTANT UPGRADING NOTE
• For DP750/DP720, once upgraded to 1.0.2.16 or above, downgrading to 1.0.1.x firmware version or lower is not supported.

ENHANCEMENT
• Added support for entering Plus Button ‘+’ in DP720
• Added DP720 LCD auto turn on feature when pickup from or reposition to charger
• Added Access Control List to control access to web and SSH interfaces [ACCESS CONTROL LIST]
• Added option to enable/disable TR-069 [ENABLE/DISABLE TR-069]
• Added status display as “Normal” when core dump list is empty [CORE DUMP LIST STATUS]
• Added support for HTTPS web access [HTTPS WEB ACCESS]
• Added initial support for Repeater mode [INITIAL SUPPORT FOR REPEATER]
• Added Admin/User Guides and Drilling Template to web GUI support page [DOCUMENTS ADDED TO SUPPORT PAGE]
• Added headset detection and icon for DP720 dial mode screen
• Added Serbian, Slovakian and Swedish languages. Improved support for Czech, Dutch, German, Hebrew, Japanese, Korean, Turkish, Polish languages. [LANGUAGES UPDATED]

BUG FIX
• Fixed DP750 will be “no service” if handset receives incoming call just when make new conference call
• Fixed enable Automatic XML Phonebook Download function was invalid
• Fixed after dial out code * feature, FXS LED keep blinking
• Fixed Priority value for RTP media for layer 2 QoS Settings always be 0 after changed values
• Fixed when handset default line set to none at base side, then change default line from handset side will make base server down.
• Fixed DP750 does not taking IP address from networks with LLDP option enabled
• Fixed incoming call not always rejected when HS is off hook
• Fixed NAPTR/SRV setting does not work
• Fixed DP750 does not taking IP address from networks with LLDP option enabled.
• Fixed "Add Auth Header On Initial REGISTER" option does not work
• Fixed DUT will leave a hold call when transfer failed
• Fixed after receiving incoming call with parallel/share mode some handsets cannot ring in page function
• Fixed call forwarding settings only allow 8 - 10 digits
• Changed DP720 menu "Line Status" in Call Settings to "Lines" for more accurate description
• Fixed handset cannot auto answer paging
• Fixed handset cannot display incoming calls when stay in factory reset confirm interface
• Change menu "Number" in Set Voice Mail to "VM Access Number" for more intuitive description
• Fixed call log sometimes record wrong duration time
• Fixed change ring tone would lead to the volume of call become bigger
• Fixed in contact 'search' interface, "delete" option displays as "back"
• Fixed call waiting tone only play once
• Fixed if click "reboot" option during calling, device does not reboot after called automatically
• Fixed "Number" field is empty when editing XML phonebook contact if phone type is "WORK"
• Fixed deleting all shared contacts might delete other handsets' private contacts
• Fixed Broadsoft IOT related bug that Invite with Alert-info is not playing desired tone
• Fixed Broadsoft IOT related bug that Inband DTMF not working
• Fixed Broadsoft IOT related bug that add ability to bridge conference before third party answers
• Fixed Broadsoft IOT Call transfer issue
• Fixed Broadsoft IOT related issue that in Call Manager "answer call" and "hold" function not working correctly
• Fixed handset can press conference or other options when it is in early media
• Fixed DUT could not call out after removing second line with same account
• Fixed when answer the 2nd call, remote side would hear a serious noise.
• Fixed call manager "answer call" and "hold" function not working correctly
• Fixed ringtone volume cannot restore in next incoming call after adjust ringtone volume to minimum during incoming call
• Fixed if the length of sip settings value is bigger than 12 characters in web, the handset side would display blank
• Fixed handset cannot make new call directly on contacts.
• Fixed no clock display during calling
• Fixed DP720 does not play out audio with professional Sennheiser mono headset, neither single SC230 nor dual SC262
• Fixed if click press "speaker" key quickly after off hook, audio channel will not switch to the speaker
• Fixed handset does not play ringtone when receiving incoming call in parallel or shared mode, and it cannot answer the call
• Fixed when transfer a call, device will send INVITE to the third party before sending REFER
• Fixed device will fail to transfer if the first session is hold, then handset will always prompt user unknown when calling
• Fixed handset will not play CW tone if it is in select contact UI
• Fixed digits not sent to base when 24-digit number entered via on-hook dialing (limit to 20 digits)
• Fixed speaker icon was not disappeared but actually HS was in earpiece mode
• Fixed handset lacks characters "'" and "&"
• Fixed handset auto-save the volume after adjusted the alarm volume without saving
• Fixed melody setting in individual contact is not working
• Fixed handset will crash if pressing ‘1’ or ‘4’ key just when booting up
• Fixed handset info displayed new IP address after saving new static IP in handset without reboot
• Fixed "Delayed Call Forward Wait Time" option on web is invalid
• Fixed sometimes base will still ring next handset but server already cancels the call
• Fixed direct dial on contact menu will only dial out via contact’s home number
• Fixed DNS Settings is inconsistency between DNS Server 1, DNS Server 2 and Preferred DNS Server
• Fixed after back to main menu, the icon used to indicate there are Missed Calls and Voice Messages disappeared
• Fixed DP720 Speed dial only display first name which should be both first name and last name
• Fixed if handset play standard ring tone before off hook it will in speaker mode
• Fixed the contact cannot be saved with more than 35 characters
• Fixed DUT can re-dial with outgoing number is empty
• Fixed the reshredial option cannot be used if "Use # as Dial Key" is set to NO
• Fixed after handset selected another base the original base still marked this handset as online
• Fixed the session will be hung up if unplug headset during the call
• Fixed when handset hold the call, FXS led did not blink
• Fixed DUT as transferee cannot back to call if transfer failed
• Fixed if press back key when loading contact in speed dial menu HS will back to main interface
• Fixed if handset generate two missed call history at the same time, the first missed call history name would display blank
• Fixed the call history display order is not from latest to oldest
• Fixed handset does not display LDAP contacts
• Fixed after receiving incoming call with parallel/share mode device always responded 408
• Fixed handset will display error when search LDAP contacts
• Fixed Web GUI cannot be accessed when use PPoE mode
• Fixed Web GUI cannot be accessed when use Qos2
• Fixed handset search contacts function does not work
• Fixed if the third party answers & ends the call quickly the original session will be abnormal
• Fixed handset will auto exit new call UI if receiving incoming call during new call process
• Fixed HS did not auto answer the call from contact that has been configured melody
• Fixed user cannot check sip server name in sip settings by pressing right Softkey
• Fixed handset status did not update base mac address after subscribed another base
• Fixed the name of right Softkey is displayed as "delete" but actually there is no entry
• Fixed missed call LED still flash after viewing all missed call logs
• Fixed Session Expiration value can set to small then Min-SE value
• Fixed HS cannot update CID while in alerting state
• Fixed it will not record missed call in Parallel and Shared mode
• Fixed SIP accounts cannot register to Failover SIP Server except account 1
• Fixed it will not record accepted call in Parallel and Shared mode
• Fixed DUT will not play melody ringtone when handset stay in contact list interface
• Fixed handset popped up menu for a moment every time it received incoming call
• Fixed if edit dialing number that more than 20 characters on call history HS will be block in blank interface
• Fixed remote end also heard the CW tone which was generated by HS
• Fixed device does not respond 486 if HS calls to internal HS with the fourth call
• Fixed if HS is in status UI when BS boots up the HS will not register to BS
• Fixed battery icon need change to white color icon
• Fixed green button is not always act as "Send" when making transfer and conference call
NEW FEATURES OVERVIEW

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

ACCESS CONTROL LIST

- **Web Configuration**

These settings can be found at Web -> Maintenance -> Web/SSH Access

![Web/SSH Access Configuration](image)

- **Functionality**

If added IP address to White list for WAN side field, then only the IP address in white list can access Web and Telnet.

If added IP address to Black list for WAN side field, then The IP address in black list will cannot access Web or Telnet.

- **New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P20701</td>
<td>&lt;New Pvalue&gt; White list for WAN side.</td>
<td>ipaddress</td>
<td></td>
</tr>
<tr>
<td>P20702</td>
<td>Black list for WAN side.</td>
<td>ipaddress</td>
<td></td>
</tr>
</tbody>
</table>

ENABLE/DISABLE TR-069

- **Web Configuration**
User can find the new option at Web -> Maintenance -> TR-069.

### Functionality

Allow user to enable and disable TR-069 function.

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1409</td>
<td>&lt;New Pvalue&gt; Enable or disable TR-069.</td>
<td>0 - No 1 - Yes</td>
<td>0 - No</td>
</tr>
</tbody>
</table>

### CORE DUMP LIST STATUS

- **Web Configuration**

  - **Functionality**
    If there is no Core Dump file, display a “Normal” Status.

### HTTPS WEB ACCESS

- **Web Configuration**

  User can find the new option at Web -> Maintenance -> Security Settings -> Web/SSH.
**Functionality**

New options added to allow user to enable HTTPS Web Access Mode and config HTTPS Web Port. After enabled HTTPS mode, will need reboot the DP750 to take effect the settings. Then can access the device by [https://IPADDRESS:PORTS](https://IPADDRESS:PORTS), for example: [https://192.168.1.18:443](https://192.168.1.18:443)

**New P Values**

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P27010</td>
<td>&lt;New Pvalue&gt; Port for HTTPS web access. The default setting is 443</td>
<td>1 - 65535</td>
<td>443</td>
</tr>
<tr>
<td>P1650</td>
<td>&lt;New Pvalue&gt; Sets the protocol for the web interface.</td>
<td>0 or 1&lt;br&gt;0: HTTPS&lt;br&gt;1: HTTP</td>
<td>1</td>
</tr>
</tbody>
</table>

**INITIAL SUPPORT FOR REPEATER**

**Web Configuration**

User can find the new option at Web -> DECT -> General Settings. A new option "Enable Repeater Mode" is added.
- **Functionality**
  Add initial support for repeater function. Add option to enable/disable repeater mode, the change for this option will need reboot DP750 to take effect.

Right now GS’s repeater hasn’t official released and DP750 only support EU repeater, we will add support for US repeater later.

**Step to Pair a repeater:**

1. Make sure you base is in EU region, display in Web GUI as below:
   
   ![Base DECT RF Region](EU)

2. Make sure your repeater is EU standard.
3. Set Enable Repeater Mode to “Yes”, Click Save and Apply, then reboot base take effect the settings.
4. Click “Subscribe” button in Web -> Status -> DECT Status as below screenshot or long press Page button on DP750 for 7.7 seconds to open subscription:
   
   ![Open Subscription](Subscribe)

5. Repeater will automatically pair to DP750
6. We don’t have feature to display repeater connection status right now, but repeater LED should show the connection established.
### New P Values

<table>
<thead>
<tr>
<th>Pvalue</th>
<th>Description</th>
<th>Value range</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>P20002</td>
<td>&lt;New Pvalue&gt; Pvalue to enable/disable base station repeater mode.</td>
<td>0 or 1</td>
<td>0</td>
</tr>
</tbody>
</table>

#### DOCUMENTS ADDED TO SUPPORT PAGE

- **Web Configuration**
  
  User can find the new item at Web -> Maintenance -> Support. Offline Admin/User Guide and Drilling Template can be download from DP750 now.

#### LANGUAGES UPDATED

- **Web Configuration**
  
  User can set DP750 language at Web right-top side. User can set DP720 language at handset GUI ->
Settings -> Phone Languages.