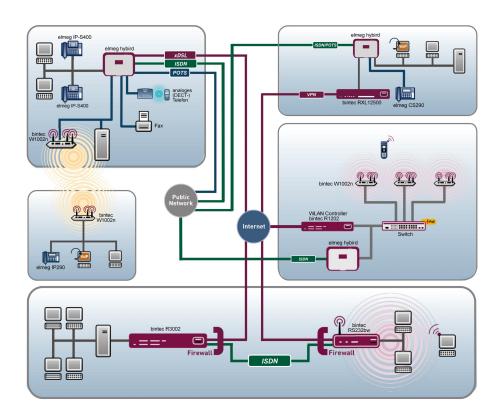
Manual





## **Release Notes**

9.1.9

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#### **Legal Notice**

#### Aim and purpose

This document is part of the user manual for the installation and configuration of bintec elmeg devices. For the latest information and notes on the current software release, please also read our release notes, particularly if you are updating your software to a higher release version. You will find the latest release notes under <a href="https://www.bintec-elmeg.com">www.bintec-elmeg.com</a>.

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## **Chapter 1 Important Information**

## 1.1 Preparation and update with the GUI

Updating the system software with the Graphical User Interface (GUI) is done using a BLUP (bintec Large Update) file so as to update all the necessary modules intelligently. All those elements that are newer in the BLUP than on your gateway are updated.



#### Note

The result of an interrupted updating operation could be that your gateway no longer boots. Hence, do not turn your gateway off during the update.

To prepare and carry out any update to **System Software 9.1.10** using the Graphical User Interface, proceed as follows:

- (1) For the update, you'll need the file XXXXX\_b19110.xxxwhere XXXXX stands for you device. Ensure that the file that you require for the update is available on your PC. If the file is not available on your PC, enter www.bintec-elmeg.com in your browser. The bintec-elmeg-homepage will open. You will find the required file in the download area for your gateway. Save it on your PC.
- (2) Backup the current boot configuration before updating. Export the current boot configuration using the menu Maintenance->Software &Configuration in the Graphical User Interface. To do this, select: Action = Export configuration, Current File Name in Flash = boot, Include certificates and keys = activated, Configuration Encryption = disabled. Confirm with Go. The Open <name of gateway>.cf window opens. Leave the selection Save file and click OK to save the configuration to your PC. The file <name of gateway.cf> is saved and the Downloads window shows the saved file.
- (3) Update to System Software 9.1.10 via the Maintenance->Software &Configuration menu. To do this, select: Action = Update system software, Source Location = Local File, Filename = XXXXX\_b19110.xxx . Confirm with Go. The message "System request. Please stand by. Operation in progress." or "System Maintenance. Please stand by. Operation in progress." shows that the selected file is being uploaded to the device. When the upload procedure is finished, you will see the message "System Maintenance. Sucess. Operation completed successfully". Click on Reboot. You will see the message "System Reboot. Rebooting. Please wait. This takes approximately 40 seconds." The device will start with the new system software, and the browser window will open.

## 1.2 Downgrade with the GUI

If you wish to carry out a downgrade, proceed as follows:

- (1) Replace the current boot configuration with the previous backup version. Import the saved boot configuration via the Maintenance->Software &Configuration menu. To do this, select: Action = Import configuration, Configuration Encryption = disabled, Filename = <name of device>.cf. Confirm with Go. The message "System request. Please stand by. Operation in progress." or "System Maintenance. Please stand by. Operation in progress." indicates that the selected configuration is being uploaded to the device. When the upload procedure is finished, you will see the message "System Maintenance. Sucess. Operation completed successfully." Click on Reboot. You will see the message "System Reboot. Rebooting. Please wait. This takes approximately 40 seconds." The device will start and the browser window will open. Log into your device.
- (2) Downgrade to the desired software version using the **Maintenance->Software &Configuration** menu.

To do this, select: **Action** = <code>Update system software</code>, **Source Location** = <code>Local File</code>, **Filename** = <code>RXL\_Series\_bl9109.biq</code> (example). Confirm with **Go**. The message "System request. Please stand by. Operation in progress." or "System Maintenance. Please stand by. Operation in progress." shows that the selected file is being uploaded to the device. When the upload procedure is finished, you will see the message "System - Maintenance. Sucess. Operation completed successfully". Click on **Reboot**. You will see the message "System - Reboot. Rebooting. Please wait. This takes approximately 40 seconds." The device will start with the new system software, and the browser window will open.

You can log into your device and configure it.

## 1.3 Supported web browsers

The HTML GUI supports the use of the following browsers, each in their latest version:

- Microsoft Internet Explorer
- Mozilla Firefox



### Important

Ensure that you keep your browser updated to the latest version, since you need to do so to take advantage of new functions and security features. The HTML GUI does not support versions that are no longer supported by the manufacturer and supplied with software updates. If necessary, go to the software manufacturer's website to find out which versions they currently support.

## **Chapter 2 New Functions**

**System Software 9.1.10** includes a number of new functions that significantly improve performance compared with the previous version of the system software.



#### Note

Please note that not all the functions listed here are available for every device. Please refer, if necessary, to the current data sheet for your device or to the relevant manual.



#### Note

Please note that there may be a new feature for different device was introduced at different times.

## 2.1 Available languages

With **System Software 9.1.10** the GUI and the announcements of the voicemail box are prepared for other languages. In future, the languages German, English, Italian, Spanish, French, Portuguese and Dutch will be available.

The online help is scheduled in the languages German, English, Spanish, French and Portuguese.

The languages German and English are selectable as default in the GUI, other languages are made available on our Web sites <a href="www.bintec-elmeg.com">www.bintec-elmeg.com</a> in the download area of your device. You can download it via the GUI onto the device. Information on this can be found in your device manual.



#### Note

Note that each device can be operated with two languages simultaneously.

If you want to replace one of the two languages previously used by another language, please note the following:

The user of the language that is no longer to be used in the future must log out. His session must be completed and expired. Then, that user or another user can log in

and choose the desired language, if it is loaded.

#### 2.2 W1001n

The device W1001n is supported by System Software 9.1.10 for the first time.

## 2.3 New UMTS Stick supported

With **System Software 9.1.10** the UMTS-Stick ZTE MF680 is supported.

## 2.4 New LTE sticks supported

With **System Software 9.1.10** the sticks Telekom LTE Speed Stick III (Huawei E3276) and Alcatel L100 LTE are supported.

## 2.5 Display optimised for smartphone displays

The GUI has been optimised for viewing on smartphones. At low resolution, the header and the menu tree are hidden and can be displayed via the corresponding buttons with the bintec-elmeg logo.

## 2.6 Hardware - New LED mode available

With **System Software 9.1.10** a new LED mode is available on devices with an integrated UMTS or LTE modem.

If you want to put a device into this mode, you can see from the LEDs which wireless standard is currently in use and which signal quality is available for the wireless network. For wireless connections with an external UMTS or LTE stick the function is not available.

Detailed information can be found in the Release Notes 9.1.7 of the devices of the RS Series. The corresponding section of these Release Notes can be found in annex *From Release Notes 9.1.7* on page 25.

## 2.7 Internet Assistant - New Internet Service Provider

In the wizard Internet Access under New in the second window with the settings Type = Predefined and Country = Germany under Internet Service Provider the two new choices Telekom Business and Telekom Business - VDSL are made available.

## 2.8 Roaming mode expanded

In the menu Physical Interfaces->UMTS/LTE->UMTS/LTE->P->Advanced Settings the Roaming Mode Unlimited is available again.

This mode ensures optimal connectivity. It is intended for special requirements.



#### Note

Note that in this mode, a scan is performed on all APNs first.

## 2.9 SIM data displayed

The roaming data of the SIM card are read from **System Software 9.1.10** and displayed in the menu **Physical Interfaces->UMTS/LTE->UMTS/LTE->**. A **Mobile Network Provider** may possibly also be entered manually in the menu **Physical Interfaces->UMTS/LTE->**. over the field **Mobile Network Provider**. This requires you to select in the field **Roaming Mode** Fixed Operator and in the field **Mobile Network Provider**.

Manual Selection.

## 2.10 Extended switching contact

In the menu Physical Interfaces->Relay->Relay Configuration you can switch on the relay under Contact in the field Function via indicators for a given period with <code>indicators</code> (only <code>period</code>) (e.g. a door opener is on for three seconds) or the switch the relay via indicators with <code>indicators</code> (only <code>switch over</code>).

## 2.11 Provisioning of keys on IP1x0

From **System Software 9.1.10** the transfer of the function button configuration to the devices of the IP1x0 Series for automatic provisioning is available.

Detailed information can be found in the Release Notes 9.1.8 of the devices of the hybrid Series. The corresponding section of these Release Notes can be found in annex *From Release Notes 9.1.8* on page 26.

## 2.12 IGMP Snooping

With System Software 9.1.10 IGMP snooping is supported.

In the menu Wireless LAN->WLAN->Wireless Networks (VSS)->New->Advanced Settings you can enable or disable IGMP snooping. By default, IGMP snooping is disabled.

IGMP snooping reduces the data traffic and thus the network load, as Multicast packets from the LAN are not forwarded. Only those Multicast packets will be forwarded that are requested by the respective clients. When you enable IGMP snooping, IGMP snooping, therefore, provides the framework in which Multicast is applied.

## 2.13 WLAN bandwidth management

In WLAN connections, the assignment may be limited by individual clients.

For more information on WLAN bandwidth management, see the Release Notes 9.1.9 for the WLAN devices of the new generation (W1003n, W2003n, W2004n-ext). The corresponding section of these Release Notes can be found in annex *From Release Notes 9.1.9* on page 32. The function is now also available for other WLAN-enabled devices as well as in the Wireless LAN Controller.

## 2.14 WLAN client mode available

With **System Software 9.1.10** the WLAN Client Mode is available for WLAN enabled devices of the RS Series and for RV120w.

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## 2.15 WLAN Controller Monitoring

Monitoring of the Wireless LAN Controller has been significantly expanded by a graphic display, including the utilisation of the Controller and the assignment by clients and their traffic.

For more information, see the Release Notes 9.1.9 for the WLAN devices of the new generation (W1003n, W2003n, W2004n-ext) and the RXL Series. The corresponding section of these Release Notes can be found in annex *From Release Notes 9.1.9* on page 32. The function is now available for all devices that support the Wireless LAN Controller.

## 2.16 DHCP options for bintec 4Ge LE

For the operation of a bintec 4Ge LE in a bintec device, the transfer of certain DHCP options is necessary. These can now be set during configuration of the DHCP server via the GUI.

For more information, see the Release Notes 9.1.9 for the WLAN devices of the new generation (W1003n, W2003n, W2004n-ext) and the RXL Series. The corresponding section of these Release Notes can be found in annex *From Release Notes 9.1.9* on page 32 under *DHCP Options for bintec 4Ge-LE* on page 38.

## 2.17 Function Button (RS353 series)

Using the Function Button on the case of an RS353 Series device, you can trigger a Scheduler event. To do so, press this Function Button for one second.

In the menu **Local Services->Scheduling->Trigger->New** you set with **Event Type** = Function Button that an event on the Function Button is to be triggered.

The field **Status of the function button** indicates what state the button is in before an event is triggered.

## 2.18 Secure E-mails

With **System Software 9.1.10** the encryption of e-mails (SSL / TLS) is available and enabled by default. In the menu **External Reporting->Alert Service->Alert Settings** the field **SMTP Port** is preset to *25* and **SSL** Encryption is enabled.

## **Chapter 3 Changes**

The following changes have been made in **System Software 9.1.10**:



#### Note

Please note that there may be a change for different device was placed at different times available.

## 3.1 Improved login behaviour

The login behaviour after a warm restart has been improved for several USB sticks.

## 3.2 UMTS/LTE adjusted

With System Software 9.1.10 the wizard for internet access sets at Connection Type = UMTS / LTE in the MIB table mobileSimCfgTable the MIB variables Dispatch in each case to none and the MIB variable Access Mode to  $umts\_pref$  for a UMTS modem, as well as to  $lte\_pref$  for an LTE modem.

## 3.3 hybird - Parameter display language removed

In the menu System Management->Global Settings->System the field Display Language was removed. The corresponding setting is now performed with the respective configuration of the telephone via the field Display Language in the menu Terminals->elmeg System Phones->System Phones->Settings or Terminals->elmeg System Phones->elmeg IP1x->Settings

# 3.4 hybird - length of the SIP provider password adjusted

In the menu VoIP->Settings->SIP Provider->New a Password maximum of 64 characters can be entered in the field. (So far, 32 characters were possible.)

3 Changes bintec elmeg GmbH

## 3.5 WLAN - increased number of wireless networks

In all bintec elmeg devices equipped with WLAN, the number of configurable Wireless Networks (VSS) has been increased from 8 to 16.

## 3.6 Routes - List sorted

With System Software 9.1.10 in the menu Network->Routes->IPv4 Route Configuration in the field Layer 4 Protocol the list is in alphabetical order.

## 3.7 IPSec - sorting of peer modified

With **System Software 9.1.10** in the menu **VPN->IPSec->IPSec Peers** the peers are displayed as sorted by priority.

## **Chapter 4 Bug Fixes**

The following bugs have been fixed in **System Software 9.1.10**:



#### Note

Please note that a bug fix for different device may have been made available at different times.

## 4.1 Sporadic Reboot (RXL Series)

### ID 18468, 18204

In a scenario with two RXL 12500 as BRRP Master / Slave sporadic reboots occurred on both devices.

## 4.2 No online help available

#### ID 18446

With the Google Chrome browser, no online help could be called in the GUI for the SNMP browser.

## 4.3 Page with Internet Explorer 8 faulty

#### ID 18692

With Internet Explorer 8, in the **System Management->Configuration Access->Access Profiles-> menu New** the page was not displayed correctly, the site could only be used once, the configuration of the site was also faulty.

## 4.4 ISDN - problems with B-channel

#### ID 18643

It could happen that only three connections were available for outgoing calls for a device with two BRI interfaces, because a B-channel was reserved, when connecting to a number that had sent an ALERT package with CCNR, regardless of whether the connection was established or not.

## 4.5 SIM Card - Incorrect status display for Providers

#### ID 18395

It could happen that the status of some providers on a SIM card was displayed as "forbidden" although the card was not locked.

### 4.6 LTE - No connection

#### ID 18554

With a special APN and using a Closed User Group, it was not possible to establish an LTE connection.

# 4.7 UMTS / LTE - parameters Fallback number in wrong format

## ID 18631, 18732

In the menu Physical Interfaces->UMTS/LTE->UMTS/LTE-> in the field Fallback

Number and the menu System Management->Global Settings->System in the fields of International Prefix / Country Code and National Prefix / City Code not only numbers but any characters could be entered.

## 4.8 UMTS - modem problems

#### 18561

Several problems occurred with the Sierra Wireless MC8700 modem: After a few days, the router could no longer find a mobile network and the registration failed. It could occur that the device went in an endless loop during a reboot.

## 4.9 UMTS - Stick did not work (RS Series)

#### ID 18333

The UMTS Stick HUAWEI E3131s-2 did not work in the RS Series devices.

## 4.10 UMTS / LTE - router not working

#### ID 18803

During initialisation of the modem MC7710, the router ceased the operation.

# 4.11 UMTS / LTE - Incorrect display of the modem name

#### ID 18558

It could happen that the menu **Physical Interfaces->UMTS/LTE->D** displayed another **Modem Model** than the set one. The name of the network operator was not displayed.

## 4.12 UMTS / LTE - Incorrect message

#### 18601

If in the menu Physical Interfaces->UMTS/LTE->UMTS/LTE->Advanced Settings

with **Roaming Mode** = Fixed Operator and **Mobile Network Provider** = Manual Selection in the field **Mobile Network Provider** more than the maximum allowed six characters were entered, an incorrect error message was displayed.

## 4.13 UMTS - GSM used in error

#### ID 18485

With the setting **Preferred Network Type** = *UMTS* preferred **GSM** was used, even if UMTS was available.

## 4.14 GSM - ISDN login not working

#### ID 18705

ISDN Login with V.110 and 9600 bit/s did not work for incoming wireless connections via GSM. No login prompt displayed.

## 4.15 Modem problems

#### ID n/a

It could happen that the Sierra Wireless MC7710 module could no longer log in. A preferred network operator was neither configured nor could a network operator be excluded.

The login into foreign networks has been improved.

## 4.16 Wizard Getting Started - IP address

#### ID 18594

In the menu **Assistants->First steps->Basic Settings** in the field **IP Address** entered values were not checked for their plausibility. It could happen that an incorrect default route was created.

## 4.17 Wizard Getting Started - Settings incompletely

## displayed

#### ID n/a

In the menu **Assistants->Internet Access->Internet Connections** the username for Business T-Online settings in the field **Login Name** was not fully visible, as only 30 characters could be displayed in this field. The maximum number of displayable characters was increased to 50.

# 4.18 Assistant VoIP PBX in the LAN - IP address Delete faulty

#### ID 18553

Under certain circumstances, it could happen that, when deleting an IP address in the menu **Assistants->VoIP PBX in LAN->VoIP PBX in LAN->New**, more IP addresses and other parameters were deleted in this menu.

## 4.19 IP - No communication possible

#### ID 18411

If in the menu **System Management->Interface Mode / Bridge Groups** for the interface en1-0 a new bridge group was created, IP communication was no longer possible.

## 4.20 Access Profiles - display incorrectly

#### ID 18535

If in the menu System Management->Configuration Access->Access Profiles-> New a description was entered under Navigation Entries the setting Monitoring = Allow All was chosen and OK was clicked, after the recall of the entry with under Navigation Entries the field Monitoring and the subordinate field QoS were displayed each marked with a yellow check mark and not a green check mark.

## 4.21 Telephony - caller transfer faulty

#### ID 18743

For outgoing external calls from elmeg IP1x- or elmeg DECT devices, the TAPI driver of hybird added the sign # to the phone number. For database connections via TAPI, the number could therefore not be evaluated in some cases.

## 4.22 Telephony - Multiple stack traces

#### ID 18556

It could happen that a configured IP140, that was no longer connected to a hybird, caused several stack traces without rebooting.

## 4.23 Telephony - update not possible CS290 / CS290U

#### ID 18716

A firmware update of the elmeg CS290 or CS290-U elmeg telephones via hybird as external update server was not possible.

A firmware update of the other system telephones was possible.

## 4.24 Server dialer not working correctly

#### ID 18822

It was not possible to configure e.g. a hybird with the Service Dialer tool. The tool failed to configure several menus, such as Call Routing->Automatic Route Selection->General, Call Routing->Automatic Route Selection->Interfaces / Provider->New or Call Routing->Automatic Route Selection->Zones &Routing->New. A script error was issued.

## 4.25 WLAN - MIC failure handled incorrectly

#### ID n/a

MIC error had no effect on a bintec elmeg Access Point, i.e. they were processed in a manner not compliant with WLAN. According to Wi-Fi specification, an Access Point should reject all authentication trials for a minute after two occurrences of an MIC error.

## 4.26 WLAN - communication problems

#### ID 18409

With the new generation of WLAN devices, problems with Intra-cell Repeating and roaming could occur.

## 4.27 WLAN - Calculation of octets incorrect

#### ID n/a

If A-MPDU frames were sent, the sum of the calculated octet was incorrect.

## 4.28 WLAN - No beacon packets sent

### ID n/a

If five to seven wireless networks were configured per radio module, some wireless networks sent no Beacon packets.

## 4.29 WLAN - scheduling problems

#### **ID 18638**

If in the menu Wireless LAN->WLAN->Radio SettingsWLAN: Operation Mode = Access-Point / Bridge Link Master and Operation Band = 5 GHz In / Outdoor was set and in the menu Local Services->Scheduling->Actions the Command Type 5

GHz WLAN Bandscan was used, the radio module switched off.

## 4.30 WLAN - wireless bridge link error displayed

#### ID 18791

TCP packets sent over a wireless bridge link generated the error message "DEBUG / WLAN: 7500000: wlib\_wblmaster\_update\_tx\_stats - Station (...) not found".

## 4.31 WLAN - wireless bridge link faulty

#### ID 18773

A Bridge Link Client did not connect with the Master again, if the MIB variable **Txpower** of the module in the MIB table **wlanlfTable** was changed.

## 4.32 WLAN Client faulty

#### 18775

If a device of the new WLAN series was operated as a WLAN client and the corresponding interface was set either with ifconfig to down or the corresponding entry in the MIB table wlanClientTable was deleted, the MIB variable Opera State in the MIB table wlanI-fTable was not set to false.

## 4.33 Wireless LAN Controller - error displayed

#### ID 18805

After upgrading to Release 9.1.9 Patch 1, when selecting the menu **Wireless LAN Controller**->**Monitoring->WLAN Controller**, the GUI was closed, the error message "Wrong content in ajaxBodySucess() ..." and then the login screen were displayed.

# 4.34 Wireless LAN Controller - Different number of active clients

#### ID 18736

In the menu Wireless LAN Controller->Monitoring->Active Clients and the menu Wireless LAN Controller->Monitoring->Client Management, the numbers of active clients differed from each other.

# 4.35 Wireless LAN Controller - Incorrect display of WLAN client

#### 18813

The graphical display of a WLAN client was deleted in every roaming process.

## 4.36 Wireless LAN Controller - Management faulty

#### ID 18453

If on a device of the new WLAN generation the Wizard **Wireless LAN** was used so that the Wireless LAN Controller would take over the Management of its own radio module, and in the menu **System Management->Global Settings->System** the field **LED mode** = Off was set, the Wireless LAN Controller Module removed its radio module from the Management and all other radio modules were disabled.

## 4.37 NAT - Incorrect entry

#### ID 18814

In the menu **Network->NAT->NAT Configuration->New**, for outgoing traffic and symmetric NAT method, the input port field in the MIB table **ipNatOutTable** was incorrectly stored.

4 Bug Fixes bintec elmeg GmbH

## 4.38 QoS - Repeated sporadic panics

#### ID 18451

It could happen that, sporadically but repeatedly, a Panic occurred when the QoS configuration was modified during operation or when changing the interface status.

## 4.39 QoS - icon missing

#### ID 18686

In the menu **Network->QoS->QoS Classification** the icon to move an item was missing in the list of existing entries.

## 4.40 Network - entries cannot be deleted

#### ID 18815

In the menu **Network->Access Rules->Interface Assignment** no entries could be deleted.

## 4.41 IPSec - Invalid configuration stored

#### ID 18690

In the menu VPN->IPSec->IPSec Peers->New a Peer Address and a Peer ID could be entered, under Advanced Settings, Number of Admitted Connections = Multiple Users could be set and the configuration could be saved with OK, even though - as described in the help text - when configuring a dynamic peer, no Peer Address and no Peer ID must be specified.

# 4.42 IPSec - CIDR notation not suitable for network mask

### ID 18531, 18490

In the menu VPN->IPSec->IPSec Peers->New under Additional Traffic Filter and the menu Network->Load Balancing->Special Session Handling->New under Source IP Address/Netmask = Network the net mask could not be entered in CIDR notation (eg. / 24.

## 4.43 IPSec - Incorrect use of default route

#### ID 18509

If in the menu **VPN->IPSec->IPSec Peers->New** under **Route Entries** no netmask or 0.0.0.0 was entered as a network mask, the default route was activated without notice.

## 4.44 IPSec - Incorrect use of loopback address

#### ID 18399

The loopback address 127.0.0.1 was used in some cases as a source IP address for IKE.

## 4.45 DNS - Misleading error message

#### ID 18467

If in the menu Local Services->DNS->Static Hosts->New for example DNS Hostname = test.test.de and IP Address = 1.0.127.127 were set, the error message "Input error; Please enter a valid IP address when specifying a non-negative response!" was displayed.

## 4.46 DNS - Entries not displayed optimally

#### ID n/a

It could occur under certain circumstances, that the entries in the menu **Local Services->DNS->Cache** were not displayed optimally arranged.

### 4.47 DHCP - Incorrect IP addresses used

#### ID 18660

With a DHCP server for "PXE-boot clients" it could happen that DHCP Replies used an incorrect source IP address and an incorrect TFTP server IP address was submitted to PXE clients.

## 4.48 DHCP - address assignment incorrect

#### ID 18180

If a hybird was operated with more than 30 elmeg IP1x telephones, after a reboot of the hybird the first 30 telephones were assigned their IP address of the hybird correctly via the DHCP server, while the other telephones received several IP addresses.

## 4.49 DHCP - Server did not respond

#### ID 18523

Under certain circumstances, it could happen that DHCP requests, which the clients had sent after approx. 50% of the **Lease Time** to their DHCP server, could not be answered by the server.

## 4.50 Hotspot - Panic

### ID 18615

With the Hotspot application, it could happen under certain circumstances that every one to five minutes a Panic occured and WLAN was no longer available for guests.

## 4.51 Hotspot - problems with RADIUS

#### ID 18681

If Hotspot was used together with RADIUS, problems could occur.

## 4.52 Hotel function - call data cannot be displayed

#### ID 18592

In the menu **Applications->Hotel Functions->Room Status->** with a click of the button **Print** the call data of the guest could not be displayed. A blank window was displayed.

## 4.53 Update - No Reboot possible

#### ID 18407

If in the menu **Maintenance->Software &Configuration->Options** with the setting **Action** = Updating system software the system software was updated and then, in the message "System - Maintenance. Sucess. Operation completed successfully" **Back** was clicked, no reboot could be performed through the GUI.

## 4.54 Setup Tool - DSL modem cannot be switched off

#### **ID 18444**

A DSL modem could not be disabled, even though the DSL mode was not active in the Setup Tool.

## 4.55 Setup Tool - Fixed connection not working

#### ID 18525

If the Setup Tool with ISDN Switch Type = leased line B1 + B2 channel (64S2) a fixed connection was configured on both B-channels, it could happen that no connection could be established.

# 4.56 Setup Tool - Load Balancing not working correctly

### ID 18146, 18162

If Load Balancing was configured in the Setup Tool, the appropriate interfaces were not displayed. The MIB variable **GroupId** in the MIB table **ipLoadBlfTable** showed an incorrect value.

The configuration of the weighing for two interfaces (e.g. 0% to 100%) did not work.

## 4.57 Setup Tool - Incorrect values displayed

#### ID 18341

If, for example, in a rollout, for multiple devices for the SIM card the same PIN or no PIN was used, the SIM card parameters were incorrectly displayed in the Setup Tool.

# 4.58 Setup Tool - extended route cannot be configured

## ID 18448

After the first connection of an LTE WAN partner it was not possible to build an extended route with the type "WAN without transit network".

## **Appendix A Extendend Information**

Release 9.1.10 offers a number of functions for additional product series that may have been available for other products in an earlier release. The corrsponding information have been compiled in this appendix.

## A.1 From Release Notes 9.1.7

#### A.1.1 Hardware: New LED mode available

With **Systemsoftware 9.1.7** a new LED mode is available for the devices **bintec RS232bu+**, **RS232j-4G** and **RS120wu**.

If you want to put a device into this mode, you can see from the LEDs which wireless standard is currently in use and which signal quality is available for the wireless network.

To change mode, press the Reset button down three times in a row for longer than 0.5 seconds and release it again.

Briefly press the Reset button to restore the regular mode.

#### Wireless standard

The following link exists between the lights of an LED and the wireless standard in use:

LED	Wireless standard
USB	GSM
UMTS	UMTS/HSxPA
BRI	LTE (where supported)

If the device has not yet locked in or has not yet found a signal, no LED lights up.

#### Signal quality

The following link exists between the signal quality and the lights of one or more Ethernet LEDs:

Signal strength in dBm	Number of the Ethernet LED
< -100	1

Signal strength in dBm	Number of the Ethernet LED
< -80	1, 2,
< -70	1, 2, 3
< -60	1, 2, 3, 4
>= -60	1, 2, 3, 4, 5

## A.2 From Release Notes 9.1.8

## A.2.1 Support for the provisioning of IP 1x0 function keys

System Software 9.1.9 supports transferring the configuration of the functions keys during the automatic provisioning of elmeg lp 1x0 telephones. The configuration is carried out in the menuTerminals->elmeg System Phones->elmeg IP1x->Keys.



#### Note

When updating a hybird system to **System Software 9.1.8** there may be a problem with function key configurations stored on connected telephones. Since there is no key configuration stored on the system at the moment of updating, a configuration stored on a telephone will be deleted upon the next contact between the system and the telephone if autoprovisioning is enabled. For this case, it is advisable to disconnect the hybird from any connected telephones, apply the update and create the function key configurations on the system before reconnecting the system to the LAN.

## A.2.1.1 Keys / T100

The menu **Terminals->elmeg System Phones->elmeg IP1x->Keys** displays the configuration of your system telephone's keys.



#### Note

You can configure the key assignment either through your **elmeg hybird** or on the telephone itself. We recommend using your **elmeg hybird** for this, since it overwrites the telephone configuration.

As of **System Software 9.1.8** you can avoid the overwriting for individual keys that have already been configured on the telephone by choosing *Not configured* in the **elmeg hybird**.

Your telephone is equipped with several function keys that allow the assignment of different functions. The functions available for programming are different across different types of telephones.

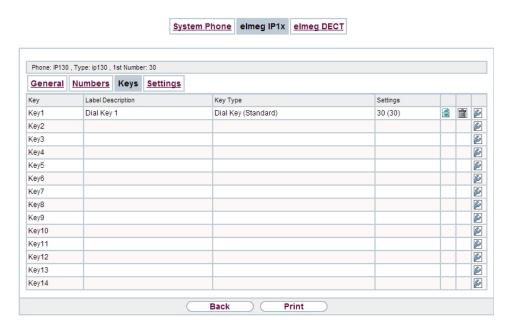


Fig. 2: Terminals->elmeg System Phones->elmeg IP1x->Keys

#### Values in the list Keys

Field	Description
Key	Displays the name of the key.
Label Description	Displays the configured key name. This appears on the labelling page (label strips).
Key Type	Displays the key type.
Settings	Displays the additional settings with a summary

**Print** allows you to print out a label sheet for the description field of your system phone or key extension.

#### **Edit**

Choose the 🔊 icon to edit existing entries. In the pop-up menu, you configure the func-

tions of your system telephone keys.

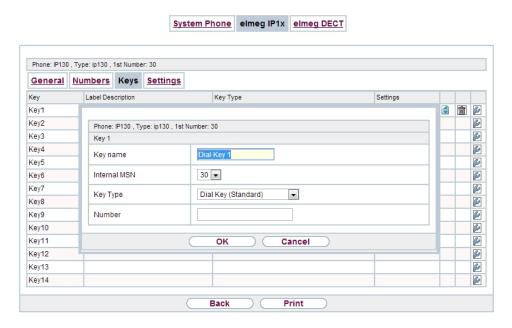


Fig. 3: Terminals->elmeg System Phones->System Phone->Keys-> Edit

You can use the following functions with system telephones:

- Dial Key (Standard): You can store a number on each function key. External numbers have to be prefixed by the exchange code Oif no automatic outside linehas been configured for your User Classon the telephone.
- Dial Key (DTMF): You can store a DTMF sequence on every function key.
- Extension Key (User): You can set up dialling to an internal extension using a line
  key. After pressing the corresponding key, hands free is switched on and the internal extension entered is selected. If a call is signalled on the internal extension you have
  entered, you can pick this up by pressing the line key.
- MSN Selection Key: Assigns a specific connection (i.e. a specific SIP account) to the
  function key. You can use this key to initiate a call via this connection, or you can accept
  a call coming in via this connection. The key flashes if a call is received, it is lit if the connection is busy. Select the desired connection. All configured connections are available.
  Configure SIP accounts exclusively on your elmeg hybird.
- Call Forwarding (enable): Assigns activating or deactivating a call forwarding that has been configured on the telephone. You can only store a single call forwarding on the device; it is applied to all calls.
- System Parking (Open Enquiry): The called extension enters an enquiry and dials
  a code. The telephone is now open for additional operations like e.g.an announcement. A

second subscriber can accept the call by picking up the receiver and dialing the code corresponding to the call. The codes are determined by the PABX, but can also be assigned to the functions keys of one or more system phones. If a call is put into open enquiry by pressing a function key, this is indicated by the flashing of the respective function key LED on all system phones with a corresponding configuration. Pressing the function key accepts the call. This function is only available if a call has been parked.

- XML-Content: Assigns an URL to the function key. You can, e.g., store customer-specific menus and temporarily show them on the display of your telephone. This function is currently not supported by elmeg hybird.
- Next call anonymous: For the next call the called party will no see your MSN.
- Menu Call Forwarding: Assigns the menu item Call Forwarding in the display menu of your telephone to the function key. You can configure the call forwarding specifics.
- Menu Resource Directory: Assigns the menu item Media-Pool in the display
  menu of your telephone to the function key. You can manage images used as screen
  saver, caller icons for phone directory entries and ring tones. Moreover, you can monitor
  the capacity of the pool.
- Menu Internet Radio: Assigns the menu item Internet Radio in the display menu
  of your telephone to the function key. You can tune in to the last selected radio station or
  select a different one.
- Not configured: The function key is managed by the telephone itself and not by elmeg hybird. This options locks the key for the provisioning by your elmeg hybird.

The menu **Terminals->elmeg System Phones->elmeg IP1x->Keys->Edit** consists of the following fields:

#### Fields in the menu Telephone

reids in the menu relephone	
Field	Description
Key name	Enter a name for the key to be used as text for the corresponding key when the ID labels are printed.
Key Type	Depending on the model, telephones have seven or 14 keys that can have functions assigned to them. Optional key extension modules extend the number of available functions keys.
	Possible values:
	• Dial Key (Standard)
	• Dial Key (DTMF)
	• Extension Key (User)
	• MSN Selection Key
	• Call Forwarding (enable)

Field	Description
	• System Parking
	• XML-Content
	• Next call anonymous
	• Menu - Call Forwarding
	• Menu - Resource Directory
	• Menu - Internet Radio
	• Not configured
Internal MSN	Only for <b>Key Type</b> = Dial Key (Standard), Extension Key (User), MSN Selection Key, Call Forwarding (enable) Or System Parking  You can select one of the internal MSNs configured in the menu
	Terminals->elmeg System Phones->elmeg IP1x->Numbers.
Number	Only for Key Type = Dial Key (Standard) or Dial Key (DTMF)
	You can save a number or a DTMF sequence to any function kye. Specify the number or the characters for the DTMF sequence.
Internal Number	Only for Key Type = Extension Key (User)
	Select the internal number of the subscriber that is to be called when pressing this key.
Pick-Up Code	Only for <b>Key Type</b> = Extension Key (User)
	The code that is required for the busy lamp field to allow you picking up a call on an IP telephone when the LED is flashing.
	The default value is $\#0$ .
Waiting Queue	Only for Key Type = System Parking (Open Enquiry)
	Select the waiting queue to which the currect connection is to be added.
URL	Only for <b>Key Type</b> = XML-Content
	For this function you can store the URL to a server which hosts

U Helease Notes

Field	Description
	the desired information. This function is currently not supported by <b>elmeg hybird</b> .

## **Transfer key**

Select the  $\stackrel{\ }{\Longrightarrow}$  icon to move configured function keys.

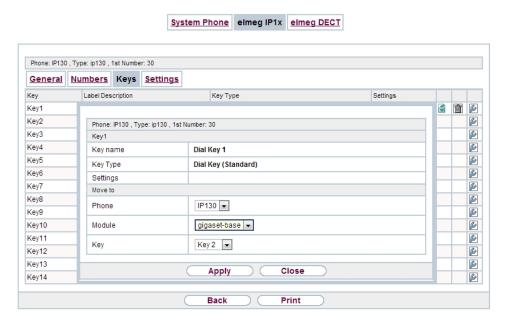


Fig. 4: Terminals->elmeg System Phones->System Phone->Keys->Move

## Fields in the menu Key

Field	Description
Key name	Displays the name of the key.
Key Type	Displays the key type.
Settings	Displays the additional settings with a summary

## Fields in the menu Move to

Field	Description
Phone	Select one of the connected telephones.

Field	Description
Module	Select Telephone or a key extension.
Кеу	Select the key to which you wish to transfer the configured function.

## A.3 From Release Notes 9.1.9

## A.3.1 WLAN Bandwidth Control

The bandwidth available for individual clients can be restricted in recieve as well as in transmit direction with the options Rx Shaping and Tx Shaping in the menu Wireless LAN->WLAN->Wireless Networks (VSS)->Edit or Wireless LAN Controller->Slave AP configuration->Wireless Networks (VSS)->Edit. The following values are available: Fields in the menu Bandwidth limitation for each WLAN client

Fields in the mend Bandwidth inintation for each WEAN Cheft	
Field	Description
Rx Shaping	Select a bandwidth limitation in the receive direction.
	Possible values are
	• No limit (default value)
	• 0,25 Mbit/s,0,5 Mbit/s,1 Mbit/s up to 10 Mbit/s in single Mbit/s steps, 15 Mbit/s, 20 Mbit/s, 30 Mbit/s, 40 Mbit/s and 50 Mbit/s.
Tx Shaping	Select a bandwidth limitation in the transmit direction.
	Possible values are
	• No limit (default value)
	• 0,25 Mbit/s,0,5 Mbit/s,1 Mbit/s up to 10 Mbit/s in single Mbit/s steps, 15 Mbit/s, 20 Mbit/s, 30 Mbit/s, 40 Mbit/s and 50 Mbit/s.

# A.3.2 WLAN Controller Monitoring

**Systemsoftware 9.1.9** introduces significantly expanded functions for monitoring the Wireless LAN Controller.



#### Note

In order to ensure adequate timing between the WLAN Controller and the connected Slave APs, the internal time server of the WLAN Controller should be enabled.

### A.3.2.1 WLAN Controller



Fig. 5: Wireless LAN Controller->Monitoring->WLAN Controller

In the **Wireless LAN Controller->Monitoring->WLAN Controller** menu, an overview of the most relevant Wireless LAN Controller parameters is displayed. The display is refreshed every 30 seconds.

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#### Values in the Overview list

Status	Meaning
AP discovered	Displays the number of discovered access points.
AP offline	Displays the number of access points not connected to the Wireless LAN Controller.
AP managed	Displays the number of managed access points.
WLAN Controller: VSS throughput	Displays the data traffic in receive and transmit direction in bytes per second.
CPU usage [%]	Displays the percentaged CPU load over time.
Memory usage [%]	Displays the percentaged memory consumption over time.
Connected clients/VSS	Displays the number of connected clients per wireless network (VSS) over time.

## A.3.2.2 Slave Access Points

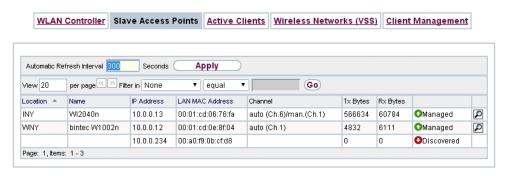


Fig. 6: Wireless LAN Controller->Monitoring->Slave Access Points

#### LAN MAC Address

Via the picon, you can open an summary with additional details about the Slave Access Points.

#### A.3.2.2.1 Overview

In the **Overview** menu, additional information about the selected access point is displayed. The display is refreshed every 30 seconds.



Fig. 7: Wireless LAN Controller->Monitoring->Slave Access Points->Overview

### Values in the Overview list

Status	Meaning
Throughput	Displays the received and transmitted data traffic per radio module over time.
Connected clients	Displays the number of connected clients per radio module over time.

## A.3.2.2.2 Radio 1

In the **Radio Module** menu, the received and transmitted data traffic per client is displayed over time. Each graph in the display is distinctly assigned to a client by its color and MAC address.

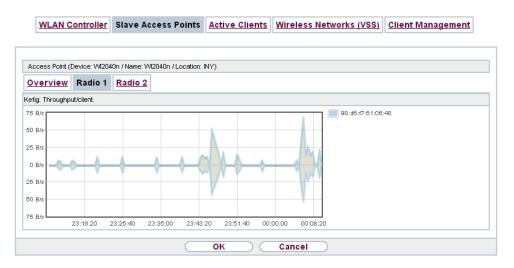


Fig. 8: Wireless LAN Controller->Monitoring->Slave Access Points->Radio

#### Values in the Radio list

Status	Meaning
Throughput/client	Displays the received and transmitted data traffic per client over time.

#### A.3.2.3 Active Clients

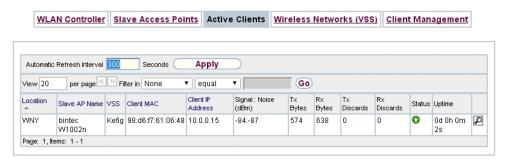


Fig. 9: Wireless LAN Controller->Monitoring->Active Clients

In the **Wireless LAN Controller->Monitoring->Active Clients** menu, current values of all active clients are displayed.

For each client you will see an entry with the following parameter set: Location, Slave AP Name, VSS, Client MAC, Client IP Address, Signal: Noise (dBm), Tx Bytes, Rx Bytes, Tx Discards, Rx Discards, Status, Uptime.

#### Possible values for Status

Status	Meaning
None	The client is no longer in a valid status.
Logon	The client is currently logging on with the WLAN.
Associated	The client is logged on with the WLAN.
Authenticate	The client is in the process of being authenticated.
Authenticated	The client is authenticated.

Via the  $\sideset{Dients}$  icon, you can open a summary with additional details about the **Active Clients**.

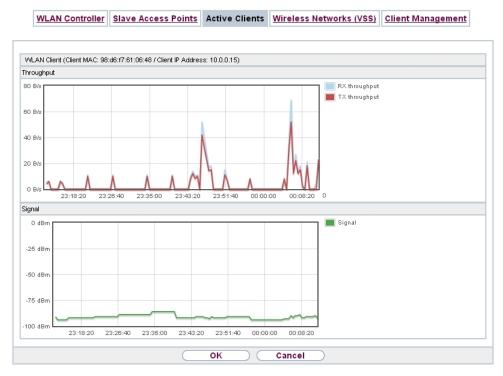


Fig. 10: Wireless LAN Controller->Monitoring->Active Clients->

## Value in the list WLAN Client list

Status	Meaning
Throughput	Displays the data traffic - separated into received and transmitted traffic - for the selected WLAN client over time.
Signal	Displays the signal strength of the selected WLAN client over time.

## A.3.2.4 Wireless Networks (VSS)



Fig. 11: Wireless LAN Controller->Monitoring->Wireless Networks (VSS) In the Wireless LAN Controller->Monitoring->Wireless Networks (VSS) menu, an overview of the currently used AP is displayed. You see which wireless module is assigned to which wireless network. For each wireless a parameter set is displayed (Location, Slave AP Name, VSS, MAC Address (VSS), Channel, Status).

## A.3.2.5 Client Management



Fig. 12: Wireless LAN Controller->Monitoring->Client Management

The Wireless LAN Controller->Monitoring->Client Management menu displays information on the client management by the access points. You can, e.g., see the number of connected clients, the number of clients that are affected by the **2,4/5 GHz changeover** and the number of rejected clients.

You can delete the values of an entry using the 📻 symbol.

## A.3.3 DHCP Options for bintec 4Ge-LE

For the operation of **bintec 4Ge-LE System Software 9.1.9** offers additional DHCP options via the GUI.

In the menu Local Services->DHCP Server->DHCP Configuration->Advanced Settings, proceed as follows in order to specify the respective parameter:

- (1) Click the Add button in the DHCP Options field and choose Option = Vendor String.
- (2) Click the button to edit the entry.
  The window Basic Parameters opens.
- (3) Under Select vendor, select bintec.
- (4) Add the desired values for your 4Ge-LE in the fields APN and PIN and click Apply.

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