

Release Notes

System Software 10.1.21

Content

Content.....	1
1 New functions	4
1.1 GUI – New design.....	4
1.2 LISP Light	4
1.3 Assistant – Initial operation Telekom	4
1.4 SNMP – Selective read access	4
1.5 VDSL – Configurable synchronisation tones	4
1.6 IPsec - IKEv2 Initiator mode.....	5
1.7 IPsec – Backup peer	5
1.8 VoIP - Clearmode	5
1.9 VoIP - CA and host verification.....	5
1.10 SIP – External call forwarding.....	5
1.11 SIP - E.164 exceptions	5
1.12 Telephony – Support for elmeg IP620 and IP630.....	5
1.13 Telephony – elmeg IP630 function keys.....	5
1.14 Telephony – Updating elmeg OEM telephones.....	6
1.15 WLC – Interface assignment	6
1.16 DHCP – Support for DHCP Option 43.....	6
2 Changes.....	6
2.1 OpenSSL / OpenSSH	6
2.2 IPv6 – General improvements	7
2.3 SIP - 1TR114 compatibility	7
2.4 ADSL / VDSL – Automatic discovery.....	7
2.5 Status page.....	7
3 Error corrections	7
3.1 System – Sporadic reboot	7
3.2 System – Stack trace.....	7
3.3 System – Login problem	7

3.4	Configuration – Boot configuration deleted.....	7
3.5	GUI – Symbols having different colors	8
3.6	GUI – Display problems.....	8
3.7	GUI – Missing input field.....	8
3.8	Assistant First Steps – Not reachable by host name	8
3.9	Internet Assistant – Wrong IP address assignment.....	8
3.10	System Management – Manually entering date and time.....	8
3.11	Bridge – interface description not available	8
3.12	Bridge – Update issues.....	9
3.13	VLAN – Entries not deleted	9
3.14	B.A.B.E. – No switching tone.....	9
3.15	B.A.B.E – Connection failure	9
3.16	RADIUS – Incorrect authentication.....	9
3.17	System Management – Incorrect display.....	9
3.18	Certificates – Incorrect display.....	9
3.19	Certificates – HTTPS	10
3.20	LTE – Standard not preferred.....	10
3.21	Telephony – Import of phone book fails.....	10
3.22	Telephony - P-P DDI Exception.....	10
3.23	Telephony – Incorrect communication with the Voice Mail System.....	10
3.24	Telephony – Voice Mail System not functional	10
3.25	Telephony – Stack trace	10
3.26	Telephony– Connection interrupted.....	10
3.27	Telephony– Wrong call distribution.....	11
3.28	Telephony– Missing button.....	11
3.29	Telephony– System phone loses connection	11
3.30	Telephony– 1TR118 incompatibility.....	11
3.31	Telephony– SIP connection issues.....	11
3.32	Telephony– T.38 inactive.....	11
3.33	Voice Mail Box – No error message	11
3.34	WLAN – Display issues on mobile devices.....	11
3.35	WLC – Diskrepanz zwischen WLC- und WLAN-Menü	12
3.36	WLC – Access point management failing.....	12

3.37	WLC – Wrong bandwidth.....	12
3.38	WLC – Guest WLAN issue	12
3.39	IPv6 – Address management	12
3.40	NAT –NAT Reverse issues.....	12
3.41	Multicast – Stream blocked.....	12
3.42	OSPF – Routes erroneously deleted	13
3.43	IPSec – Connection failing.....	13
3.44	IPSec – Peer not functional	13
3.45	GRE over IPSec – Not functional after update	13
3.46	be.IP Secure Client – Page loses focus	13
3.47	Firewall – Wrong display.....	13
3.48	DynDNS – Panic and stack trace	13
3.49	DHCP – Wrong sorting	13
3.50	Filter – Black List entry displayed	14
3.51	Maintenance – Impossible to display page.....	14
3.52	Monitoring IPSec – Incorrect display	14

1 New functions

Please note that not all new functions are available in all our products. refer to the data sheet of your device for information about its scope of functions.

A detailed description of the individual new functions can be found in the online help and the manual of your device.

1.1 GUI – New design

The Graphical User Interface (GUI) of your products has received a complete redesign based on the Material Design Lite (MDL) design language.

1.2 LISP Light

The Locator/ID Separation Protocol (LISP) offers a new way of addressing network nodes allowing for a better structuring of the internet and supporting the increasing number of mobile terminals, in particular.

The term **LISP Light points** to the fact that a subset of the RFC 6830 specification has been implemented. The extent of the implementation can be gathered from the online help or the manual of system software 10.1.21.

1.3 Assistant – Initial operation Telekom

System Software 10.1.21 offers a clearer flagging of completed steps in the assistant Initial operation Telekom.

1.4 SNMP – Selective read access

System Software 10.1.21 introduces support for a selective read access via SNMPv3. You can define users with limited permissions, i.e. such a user can only access those MIB parameters that have been defined for them. Accordingly, they can only perform a certain set of actions on the device. MIB parameters can be defined individually, or they can be collected in groups (sets). You can, e.g. create a user that has access to specifically those MIB parameters required to monitor the status of the mobile network. Configuration is carried out on the MIB shell using the MIB variable **SNMPAccessLevel=rule-based** in the **biboAdmLoginTable**. Rules and entries for access control are configured through the new MIB tables **snmpAccessRuleTable** and **snmpltemSetTable**. Rules are assigned to a user through the **biboAdmLoginSNMPAccessRuleFirst** variable.

1.5 VDSL – Configurable synchronisation tones

The tones used for VDSL synchronisation are provider- as well as country-specific. System Software 10.1.21 supports adjusting the tones through the MIB variable **GHSCarrierSets** inside the **adsilLineTable**. This is an advanced configuration option, and no GUI support is available. A description of the options is available in the online help of the SNMP browser or in the MIB reference.

1.6 IPSec - IKEv2 Initiator mode

System Software 10.1.21 supports the IKEv2 initiator mode for IPSec connections.

1.7 IPSec – Backup peer

System Software 10.1.21 supports selecting an already configured peer as a fallback option. If a peer has been configured for the Start Mode **Always up**, you can select another, already configured peer as a backup option. If the current peer becomes inactive, e.g. because of an outage of the central VPN dial-in node, the backup peer can initiate a connection to a backup VPN dial-in node. If the primary dial-in node becomes available again, the connection is seamlessly switched back.

This solution requires that the routing for the peers has to be configured in a way that a connection to the remote site is actually possible via either of them. Moreover, the routing metric for the backup peer should be lesser than for the primary peer. This ensures that the tunnel is switched back to the primary peer as soon as its connection is available again.

1.8 VoIP - Clearmode

System Software 10.1.21 supports the RFC 4040 „Clearmode“ for devices in PBX mode.

1.9 VoIP - CA and host verification

System Software 10.1.21 supports verification of the Certification Authority (CA) and the host if using certificates.

1.10 SIP – External call forwarding

System Software 10.1.21 supports external call forwarding through a SIP Code 302 in media gateway mode.

1.11 SIP - E.164 exceptions

Numbers dialed through a SIP provider of the type DeutschlandLAN/SIP Trunk are automatically converted to the E.164 format. Special and emergency numbers are excluded from the conversion. System Software 10.1.21 support configurable special numbers. These can be created in the menu **Call Routing -> Outgoing Services -> Special Number** in PBX mode and in the menu **VoIP -> Media Gateway -> Special Numbers** in media gateway mode.

1.12 Telephony – Support for elmeg IP620 and IP630

System Software 10.1.21 adds support for the elmeg IP620 and elmeg IP630 telephones.

1.13 Telephony – elmeg IP630 function keys

If an elmeg IP630 is connected to an elmeg PBX certain features of the PBX can be controlled through the function keys of the telephone. A feature can be activated and deactivated through the same key (Macro Function). When activating a feature, the

function key LED is lit. Keys are programmable and can be used for the following features:

- User-defined: freely configurable
- Night mode: Switch between day and night modes
- CFU/CFB/CFNR: enable or disable call forwarding
- Team Signalization: log in to or out of a team.

Note: Note that activating and deactivating the keys is not synchronized with features controlled and configured through the device GUI. If, e.g. call forwarding is enabled for the respective telephone in the PBX itself, the respective key of the telephone will not light up.

1.14 Telephony – Updating elmeg OEM telephones

System Software 10.1.21 adds the option **Automatic Update from external Server** to the menu **Maintenance -> Update System Phones -> elmeg OEM**. You can specify if an elmeg OEM telephone is to look for new software versions on an external server and, if applicable, load it into the telephone. You can also queue the telephones for an immediate update.

1.15 WLC – Interface assignment

The WLAN Controller Wizard of System Software 10.1.21 allows you to assign an interface and a DHCP server to a VLAN configured for a wireless network (VSS). You can do so in the menu **Wireless LAN Controller -> Wizard -> Wireless LAN Controller VLAN Configuration** after having completed the WLC Wizard configuration.

1.16 DHCP – Support for DHCP Option 43

System Software 10.1.21 supports transmitting vendor-specific information (Vendor Class ID; DHCP Option 43) in the menu **Local Services -> DHCP Server -> DHCP Configuration -> New -> Advanced Settings**. Certain telephones require this information for identification purposes and in order to initiate a connection.

2 Changes

2.1 OpenSSL / OpenSSH

System Software 10.1.21 updates OpenSSL and OpenSSH to their respective newest version. SSH has been merged with version 7.1 p2 of OpenSSH. This version introduces the new crypto modes ECDSA and ED25519 for key generation.

Note that as of OpenSSH version 7.0 DSA keys are considered obsolete and their support is disabled per default. We recommend creating new keys with strong algorithms like RSA, ECDSA or ED25519. RSA keys offer maximum compatibility with diverse clients/servers. ED25519 represents the most secure version of OpenSSH but requires current versions for client and server.

You can find detailed information at <http://www.openssh.com/legacy.html>

Which keys are currently stored on your device is shown in the menu **System Management -> Administrative Access -> SSH** under **Key Status**.

2.2 IPv6 – General improvements

Our IPv6 implementation has received significant stability and usability enhancements in the fields of address management (SLAAC, DHCP), firewall and TCP support.

2.3 SIP - 1TR114 compatibility

System Software 10.1.21 introduces several changes in order to ensure compatibility with the technical specification for SIP interfaces 1TR114 Version 3 Amendment 1.2 and Amendment 5.

2.4 ADSL / VDSL – Automatic discovery

System Software 10.1.21 reliably carries out ADSL/VDSL discovery without any additional requirements.

2.5 Status page

With the new MDL GUI design, the information on the **System Management -> Status** page has been reordered.

3 Error corrections

3.1 System – Sporadic reboot

(ID 20551, 20685, 20849)

elmeg hybrid 600 be.IP plus occasionally rebooted.

3.2 System – Stack trace

(ID 20424)

Hitting a line key could cause a stack trace on devices of the elmeg hybrid family.

3.3 System – Login problem

(ID 20773)

Due to a memory issue, it could happen that the GUI could not be loaded after logging in to the device.

3.4 Configuration – Boot configuration deleted

(ID 20484)

If a configuration was saved with the option **Save configuration with boot backup**, no new boot configuration was created and the device rebooted into the ex works state.

3.5 GUI – Symbols having different colors

(ID 20497)

To access the administration pages of different telephones (elmeg IP, elmeg DECT, Octophones), the same icon was used but with different colors.

3.6 GUI – Display problems

(ID 20276)

There could be issues with the display of the GUI on screens with a horizontal screen size of less than 1024 pixel.

3.7 GUI – Missing input field

(ID 20793)

The menu **VPN -> IPSec -> IPSec Peers** was missing the input box for **IKEv2 (Internet Key Exchange, Version 2)** as soon as certain options were selected for **Filter in**.

3.8 Assistant First Steps – Not reachable by host name

(ID n/a)

If the IP address was changed in the >First Steps assistant, the change was not copied to the menu **Local Services -> DNS -> Static Hosts**, and the device could no longer be reached by its host name.

3.9 Internet Assistant – Wrong IP address assignment

(ID 20559)

If a new entry of the **Connection type** *External Gateway / Modem* was created with the **Internet** assistant, its **Physical Ethernet Port** was set to *ETH5*, and **IP parameters obtained dynamically** was *Enabled*, the ex works static IP address was erroneously not deleted.

3.10 System Management – Manually entering date and time

(ID 20536)

The system enforced a manual entry of date and time.

3.11 Bridge – interface description not available

(ID 20576)

If multiple bridge groups were used in a configuration, it could happen that an update of the system software properly cause the bridge concept to be updated to the new version. It was not possible, however, to display any entries in the menu **System Management -> Interface Mode / Bridge Groups -> Interfaces** because there was a mismatch between MIB tables.

3.12 Bridge – Update issues

(ID 20395, 20745)

Conversion to the new bridge concept failed if the system software was updated on a device that was using a configuration based on the old bridge concept and that was using several bridge groups: An IP connection, e.g. via *br1*, was not possible. Moreover, there could be issues when using two bridge groups because of an incomplete conversion to the new bridge concept. It could occur that a device was no longer reachable.

3.13 VLAN – Entries not deleted

(ID n/a)

If an interface was deleted from a bridge with VLANs, not all entries were removed from the **vlanMemberTable**.

3.14 B.A.B.E. – No switching tone

(ID 20586)

After a system software update, it could occur that a connection to the B.A.B.E server initiated through a dial code from a terminal was properly created, but there was no switching tone at the terminal.

3.15 B.A.B.E – Connection failure

(ID 20571)

Under certain circumstances, connections to the B.A.B.E server failed after a system software update.

3.16 RADIUS – Incorrect authentication

(ID 20193)

Shell authentication via RADIUS did not work reliably.

3.17 System Management – Incorrect display

(ID n/a, 20537)

The menu **System Management -> Configuraion Access -> Access Profiles** displayed certain menu items incorrectly.

3.18 Certificates – Incorrect display

(ID n/a)

The < and > characters were incorrectly displayed as HTML code *<* and *>* in certificates.

3.19 Certificates – HTTPS

(ID n/a)

An „own“ certificate could be selected for HTTPS even though that was not supported by the device.

3.20 LTE – Standard not preferred

(ID n/a)

Even though **LTE Preferred** was selected, the MC7710 module from Sierra Wireless was operated either with UMTS or with GSM.

3.21 Telephony – Import of phone book fails

(ID 20570)

Importing a telephone book failed if it was not in the standard format.

3.22 Telephony - P-P DDI Exception

(ID 20759)

In the menu **Numbering->Trunk Settings->Trunk Numbers->New** more than four digits could be entered in the field **P-P DDI Exception**.

3.23 Telephony – Incorrect communication with the Voice Mail System

(ID 20628)

Communication between an elmeg IP 120 and the Voice Mail System did not function properly. There was no audio when calling a Voice Mail Box with an elmeg IP120.

3.24 Telephony – Voice Mail System not functional

(ID 20804)

If using a standard route over IPSec the Voice Mail System did not work.

3.25 Telephony – Stack trace

(ID 20727)

There were occasional stack traces when making an outgoing call from an analog telephone.

3.26 Telephony– Connection interrupted

(ID 20797)

Outgoing connections were sporadically interrupted after 25 to 27 seconds.

3.27 Telephony– Wrong call distribution

(ID 20701)

If specific numbers were assigned the parameters **Variant 1 (Assignment Day)** and **Variant 2 (Assignment Night)** in the assistant **Telephony-> Call Distribution -> Edit**, switching between the variants through a calendar did not work.

3.28 Telephony– Missing button

(ID 20860)

If an elmeg IP680 was displayed in the lists of telephones in the menu **Assistants-> Telephony-> Terminals**, the button **Device Configuration** was missing in the edit screen.

3.29 Telephony– System phone loses connection

(ID 20662)

If an elmeg hybrid device was operated at a point to multipoint connection with ten MSNs, and IP-S400 telephones were used, one of the telephones lost connection as soon as the fifth MSN was configured.

3.30 Telephony– 1TR118 incompatibility

(ID 20714)

There was 1TR118 incompatibility with *Deutschland LAN / SIP Trunk* connections.

3.31 Telephony– SIP connection issues

(ID 20704)

Under certain circumstances, there were repeated unsuccessful registration attempts for a SIP connection.

3.32 Telephony– T.38 inactive

(ID 20730)

If a SWYX SIP account was configured through the assistant in media gateway mode, T.38 was not enabled per default.

3.33 Voice Mail Box – No error message

(ID 20481)

An attempt at replacing a voice mail announcement with a WAV file of an unsupported encoding failed, but there was no corresponding error message.

3.34 WLAN – Display issues on mobile devices

(ID 20734)

If Android devices using Chrome or iOS devices using Safari connected to the WLAN of a bintec elmeg device, there were display issues with the GUI: Elements were overlapping or buttons were missing.

3.35 WLC – Diskrepanz zwischen WLC- und WLAN-Menü

(ID 20017)

Configuration options were not identical in the menu **Wireless LAN Controller -> Slave AP Configuration -> Wireless Networks (VSS) -> New** and the corresponding **Wireless LAN** menu.

3.36 WLC – Access point management failing

(ID 20643)

It could occur that an access point timed out during initialization and rebooted with the WLAN Controller assuming the management of that access point.

3.37 WLC – Wrong bandwidth

(ID 20645)

If the field Operation Band was switched from 5 GHz to 2.4 GHz in the menu **Wireless LAN Controller -> Slave AP Configuration -> Radio Profiles -> Edit**, the bandwidth was not adapted to *20 MHz*.

3.38 WLC – Guest WLAN issue

(ID 20805)

It could occur that a WLAN client could connect to a guest WLAN, but was not assigned an IP address via DHCP.

3.39 IPv6 – Address management

(ID 19043)

Behvior as an IPv6 DHCP client at a BNG connection was not reliable: It could happen that the IPv6 network was not functional.

3.40 NAT –NAT Reverse issues

(ID 20318)

If multiple interfaces were displayed and the configuration was confirmed with **OK** (independently of changes having been made or not) in the menu **Netzwerk -> NAT > NAT Interfaces**, and if **Nat=reverse** was set in the **ipExtIfTable**, then this NAT setting was disabled. An error message will now be displayed.

3.41 Multicast – Stream blocked

(ID 20564)

A multicast stream was blocked as soon as n interface was added or removed.

3.42 OSPF – Routes erroneously deleted

(ID 20589)

If interface issues were caused in an OSPF configuration, the device load could reach 99% and a large number of error messages were displayed. After approx. 35 seconds all OSPF routes were deleted.

3.43 IPSec – Connection failing

(ID 20578)

After 198 days of uptime IPSec connections failed.

3.44 IPSec – Peer not functional

(ID 20546)

After a system software update it could happen that a previously functional IPSec connection failed, and the message "INFO/IPSEC: P1: peer 1 (Peer-1) sa 0 (-): No route found or configured ipsecPeerLocalAddress and/or ipsecPeerPublicIpIndex not suitable." was displayed.

3.45 GRE over IPSec – Not functional after update

(ID 20426)

Under certain circumstances, GRE over IPSec became non functional after a system software update.

3.46 be.IP Secure Client – Page loses focus

(ID n/a)

If the menu **VPN -> be.IP Secure Client** was selected and the corresponding page was displayed, then this page lost focus.

3.47 Firewall – Wrong display

In the menu **Firewall -> Policies -> IPv4 Filter Rules** or **IPv6 Filter Rules** using the filter function of the upper table incorrectly also affected the lower one.

3.48 DynDNS – Panic and stack trace

(ID 20693)

After adding a new DynDNS provider with gnudip_html and a new DynDNS client using this very provider, an update of the client entry caused a reboot, panic and a stack trace.

3.49 DHCP – Wrong sorting

(ID 20741)

Sorting of entries in the column **Remaining Lease Time** in the menu **Local Services-> DHCP Server -> IP/MAC Binding** did not work properly.

3.50 Filter – Black List entry displayed

(ID 20492)

The menu **Local Services -> Web Filter -> Filter List -> New** incorrectly allowed the selection of the category *Blacklist entry*.

3.51 Maintenance – Impossible to display page

(ID 20661)

Internet Explorer 11 was unable to display the page **Maintenance -> Software and Configuration**.

3.52 Monitoring IPSec – Incorrect display

(ID n/a)

The menu **Monitoring -> IPSec** showed useless standard headers or no headers at all on some pages.