

Zyxel LTE4506 Release Note	CONFIDENTIAL	
	Date:	2017 / 12/ 07
	SW Version:	V1.00(ABDO.3)C0
	Doc Version :	V1.0

V1.00(ABDO.3)C0 Release Note Information

- **FW ver.:** V1.00(ABDO.3)C0

- **New Features:**
 - Support GT SIM card (GT is one of the Taiwanese LTE service providers).
 - Support PIN saving
 - Web UI password fields must be masked
 - Routing/Firewall: sync with LTE7460

- **Fixed Bugs:**
 - Fix command injection in Web UI NTP page
 - Fix the issue "device can't boot while user cut off device power in boot stage (RMA case)".
 - Upgrade OpenEmbedded to morty-16.0.2
 - openssl: Security fix CVE-2016-7055
 - openssl: CVE: CVE-2017-3731
 - libxml2: Security fix CVE-2016-5131
 - libxml2: fix CVE-2016-4658
 - libxml2: CVE-2016-9318
 - busybox: Security fix CVE-2016-6301
 - bash: fix CVE-2016-9401
 - bash: CVE-2016-0634
 - glibc: Security fix CVE-2016-6323
 - Upgrade dnsmasq to version 2.76
 - Fix CVE-2017-14491, CVE-2017-14492, CVE-2017-14493, CVE-2017-14494, CVE-2017-14495, CVE-2017-14496
 - Fix busybox CVE-2017-15873/15874
 - Update TR-069 to the latest version
 - Keep Password, Username, Connection Request Password, Connection Request Username after SPV.
 - Upgrade gSOAP version to 2.7.17
 - Upgrade gSOAP HTTP-DA plugin to 2.8.31
 - Fix memory leaks
 - Set soap timeout to 10 seconds

- TR-069: include the latest fixes, set PeriodicInformInterval as 86400 seconds
- Fix Linux CVE-2017-2636

■ Limitations:

- When the firewall rules are turned on, the Ethernet LAN throughput will be reduced.
- Users have to reset default values for TR-069 and new domain name.
- The LTE4506 is unable to display Host Name via wire connection.

■ Known Issues:

- Many pages display wrong while under zoom size vs. Browser's window size.
E.g. 200% zoom size or 100% Zoom size but half Browser's window size
- LTE4506 not support to change mode, e.g. 802.11b only or 802.11g only, etc.
- LTE4506 not support to change bandwidth setting e.g. 20M, 40M, 20M/40M 80M, etc.
- Users cannot change back to small screen on desktop screen.
- Signal Radio Wi-Fi throughput performance reduces to half when users turn on second radio.
 1. Single Radio condition and measure the WiFi->LAN performance measurement.
 2. Turn on the second Radio but no additional Wi-Fi client associate to the device.
 3. Wi-Fi throughput performance reduce to half.
- Users reboot the device at any time on 1st day of each month will cause the counter be reset.
- There is no new translation strings. Some of the messages are wrong in other non-English languages. The problem can be observed when testing Web UI login remaining blocked timer / remaining retry counter.

V1.00(ABDO.2)C0 Release Note Information

- **FW ver.:** V1.00(ABDO.2)C0

- **New Features:**
 - DDNS.
 - PLMN selection
 - Block user login for 5 minutes after 3 failed attempts
 - New APN list
 - New modem and Linux codebase
 - Firewall features: DoS Attack, ALG, UPnP, ICMP, ARP
 - Remote management
 - Telnet
 - DST of Time setting
 - Implement stricter web GUI password rules
 - Latest TR069 package
 - New Protection mechanism when upgrading firmware - from this version, device cannot upgrade old version and firmware not for this sku.

- **Fixed Bugs:**
 - English string issues
 - 1. Log in to the device GUI, scroll to the Wi-Fi tab> Wi-Fi Status; message is displayed as "SSID is not enable", this should be fixed to read "SSID is not enabled"
 - 2. The below pop-up message is shown - "Upgrade will begin, please don't refresh the browser, otherwise the upgrading may be failed." Correct sentence: "Firmware upgrade will begin, please don't refresh the browser or switch off your device; otherwise the Firmware upgrade may fail."
 - Enter the contacts, click on **New** or **Delete**, there is no action on the device.
 - "Set Up User" page will appear in Setup Wizard when Wi-Fi 2.4G and Wi-Fi 5G are both disabled.
 - Can't apply in Setup Wizard under Bridge Mode.

- Insert a SIM card which contains some contacts, but it displays empty in the SIM Contacts list.
- Users are unable to save the settings of DHCP Server.
- Users can log in to the device via telnet.
- After users activate WPS, WPS doesn't stop.
- PCs cannot ping IPv6 address displayed in internet status.
- After unlocking PIN in bridge mode, the IP address of the computer which connects to the device is its local IP address.
- The response value of the TR-069 parameter "Device.DeviceInfo.FirstUseDate" is null after factory reset.
- Registered TR069 setting has to indicate the successful registered setting. However the device displays the last attempt if there is no registered server.
- The web GUI does not support to change PDN Type but there is a TR-069 parameter supporting this function.
- The response of the TR-069 parameter "Device.DeviceInfo.Description" is incorrect, "4G_Hotspot".
- SPV "Device.Cellular." supported parameters via ACS, but TR069 SPV Scenario does not complete even if the command is executed successfully.
- The TR-069 parameter "Device.Cellular.Interface.{i}.Stats.X_"A0XXXX"_SupportedBand" has to support R/W that is dependent on the device's supported bands.
- The TR-069 parameter "Device.Cellular.Interface.{i}.Enable" should be able to enable or disable the interface.
- The web GUI displays abnormally when users access the web GUI by IE8 browser.
- TR069 does not return all parameters with correct information when users use partial path name as argument in GPV.
- Read only, not allow for writing with Design feedback, "Device.Cellular.AccessPoint.{i}.Enable", then the Fault code 9001: Request denied (no reason specified) should be indicated at the Response to Server not accept SPV but no action.
- [Registered TR069 Setting] have to indicate the success Registered setting. But display the last trial if no Registered server.

- The TR-069 parameter “Device.Cellular.Interface.{i}.Stats.X_“A0XXXX”_SupportedBand” has to support R/W but it is dependent on Supported bands of the device. If it is LTE4506 which does not allow users to select bands on the web GUI only, an SPV request coming in to the LTE4506 will therefore generate a Fault code 9001: Request denied (no reason specified) from the LTE4506 to ACS.
- On the LTE4506, the response of the TR-069 parameter “Device.Cellular.Interface.{i}.Enable” should be Fault code 9001: Request denied (no reason specified) because the interface is the only interface which also bears the TR-069 connection. The LTE4506 can accept SPV but without any action.
- No Prompt to show remaining blocked timer. Once users try to log in and there is the mechanism to protect Brute-force attack, it does not comply with R-7 of the specification “User Account Management on Interface v1.0”.
- No Prompt to show remaining retry counter. Once users try to log in and there is the mechanism to protect Brute-force attack, it does not comply with R-8 of the specification “User Account Management on Interface v1.0”.
- Small Screen provides "APN Profile" setting but it does not function as expected.
- Small Screen have to provide "Preferred Network Selection" setting but it does not function as expected.
- Small Screen provide "Network Selection: Mode, Auto/Manual & PLMN Scan/Selection" settings but it does not function as expected.
- The web GUI restricts users to disable Dynamic DNS if there is an empty setting within DDNS.
- The web GUI design is wrong if users want to change "Account" logout timer setting, in that users have to enter both "Password" and "Confirm Password" when changing account password.
- Multi-APN within Single PLMN does not function as expected. Auto APN mechanism attempts connection with multiple APNs does not work, for example, the PLMN number 27201 has many

APNs but the device will always attempt with the APN setting as tescomobile.liffeytelecom.com.

- The device fails to establish the SSL TR069 connection with Zyxel ACS
- There is rebooting with timer prompt to users while changing TR069 settings at debug pages. However, actually there is no reboot process.
- Save a message whose receiver contains semicolon, the sender's name displays incorrectly.
- APN Method changes to be "Auto" when select it to PAP/CHAP/None in Setup Wizard.
- There is a grammatical error on Wi-Fi page's pop-up message when users enters Wi-Fi page under Bridge Mode.
- The device will not reboot when users clicks on **Apply** to switch from bridge mode to bridge mode without changing anything.
- CWMP Certificate Validation Vulnerability [Not validate the ACS certificate (CWE-295)]
- The connection request port setting of is not the standard port, i.e. port 51005; instead it is port 7547.
- There is no TRANSFER COMPLETE event report to ACS that causes firmware upgrade failure from ACS' perspective.
- Web GUI enable/disable Telnet icon is not synchronized with current status.

■ **Limitations:**

- When the firewall rules are turned on, the Ethernet LAN throughput will be reduced.
- Users have to reset default values for TR-069 and new domain name.
- The LTE4506 is unable to display Host Name via wire connection.
- New firmware protection mechanism to check sku information is not applied to TR upgrade function.

■ **Known Issues:**

- Many pages display wrong while under zoom size vs. Browser's window size.
E.g. 200% zoom size or 100% Zoom size but half Browser's window size
- LTE4506 not support to change mode, e.g. 802.11b only or 802.11g only, etc.
- LTE4506 not support to change bandwidth setting e.g. 20M, 40M, 20M/40M 80M, etc.
- Cannot change back to small screen on desktop screen.
- Signal Radio Wi-Fi throughput performance reduces to half when users turn on second radio.
 1. Single Radio condition and measure the WiFi->LAN performance measurement.
 2. Turn on the second Radio but no additional Wi-Fi client associate to the device.
 3. Wi-Fi throughput performance reduce to half.
- Users reboot the device at any time on 1st day of each month will cause the counter be reset.
- There is no new translation strings. Some of the messages are wrong in other non-English languages. The problem can be observed when testing Web UI login remaining blocked timer / remaining retry counter.

V1.00(ABDO.1)C0 Release Note Information

- **FW ver.:** V1.00(ABDO.1)C0



- **New Features:**

- LED indication of New SMS.
- Add connecting/disconnecting status on home page.
- Change default WIFI encryption type to WPA2 only.

- **Fixed Bugs:**

- Issue: Spending long period to connect to the internet after boot.
- Issue: WIFI IOT issues.
- Issue: Grammatical error of the string "SSID is not enable".
- Issue: Got 192.168.0.20 wrong IP when bridge mode is enabled.
- [19834]After clicking "export a profile file" which is stored in Profile List, web UI can't be logged in.
- IPv6 got IP, but the device can't ping server successfully.

- **Limitations:**

- When the firewall rules are turned on, the Ethernet LAN throughput will be reduced.
- Need to reset default values for TR-069 and new domain name.
- Wrong firmware bin file protect mechanism can't check previous WAH7706 FWs.

- **Known Issues:**

- None

V1.00(ABDO.0)C0 Release Note Information

- **FW ver.:** V1.00(ABDO.0)C0
- **New Features:**
 - Change domain name to zyxel.localhost.
- **Fixed Bugs:**
 - None.
- **Limitations:**
 - When the firewall rules are turned on, the Ethernet LAN throughput will be reduced.
 - Need to reset default values for TR-069 and new domain name.
 - Wrong firmware bin file protect mechanism can't check previous WAH7706 FWs.
- **Known Issues:**
 - [19347]WiFi connection quality is unstable (It might be Qualcomm limitation in WIFI dual mode)
 - [19343]WiFi can't be connected or scanned when multi devices have connected to wifi on condition that wifi is dual mode. (It might be Qualcomm limitation in WIFI dual mode)
 - [19345]The Client can't enter the Web UI but can ping the DUT LAN IP address correctly.(Once)
 - IOT connection issue with Samsung note4, A8
 - FW upgrade protection issue

V1.00(ABDO.0)B10 Release Note Information

■ FW ver.: V1.00(ABDO.0)B10

■ New Features:

- Icon of Ethernet connected device is added.
- TR-069 is same as fw_0401TR_t2.bin.

■ Fixed Bugs:

- [19354] Send messages to many whose content contains 1000 characters can't send successfully.
- [19350] Data call will not connect via on demand if data call is always disconnection after rebooting.
- [19355] In the short message, when the inbox and outbox are full, it will lead firewall can't be set successfully.
- [19332] PC can't ping the website when Cellular Network Mode set to 4G Mode and Connection Method set to On Demand.
- [19344] Add a new message, input 1000 chinese in the content, click send or save, the webui can't be entered, the malmanager crashed.
- [19340] Import about 1500 messages to the inbox, the malmanager will crash.
- [19346] On Demand doesn't work. (Because TR keep alive message)

■ Limitations:

- When the firewall rules are turned on, the Ethernet LAN throughput will be reduced.
- Need to reset default values for TR-069.

■ Known Issues:

- [19347] WiFi connection quality is unstable (It might be Qualcomm limitation in WIFI dual mode)

- [19343]WiFi can't be connected or scanned when multi devices have connected to wifi on condition that wifi is dual mode. (It might be Qualcomm limitation in WIFI dual mode)
- [19345]The Client can't enter the Web UI but can ping the DUT LAN IP address correctly.(Once)

V1.00(ABDO.0)B9 Release Note Information

- **FW ver.:** V1.00(ABDO.0)B9

- **New Features:**
 - Update LTE4506 product's hyperlink.
 - Fine tune WIFI <-> Ethernet throughput.

- **Fixed Bugs:**
 - [19142] LTE4506 IPv4 throughput performance degraded if concurrent IPv6 and IPv4 traffic delivering.
 - [19143]IPv6 UL UDP traffic will make LTE4506 crash.

- **Limitations:**
 - When the firewall rules are turned on, the Ethernet LAN throughput will be reduced.
 - Need to reset default values for TR-069.

- **Known Issues:**
 - The icon of Ethernet connected device is not correct.
 - [19347]WiFi connection quality is unstable (It might be Qualcomm limitation in WIFI dual mode)
 - [19343]WiFi can't be connected or scanned when multi devices have connected to wifi on condition that wifi is dual mode. (It might be Qualcomm limitation in WIFI dual mode)
 - [19354]Send messages to many whose content contains 1000 characters,can't send successfully.
 - [19355]In the short message,when the inbox and outbox are full,it will lead firewall can't be set successfully.
 - [19350]Data call will not connect via on demand if data call is always disconnection after rebooting.
 - [19345]The Client can't enter the Web UI but can ping the DUT LAN IP address correctly.

- [19340] Import about 1500 messages to the inbox,the malmanager will crashed. (RD find the root cause. Will fixed in next version)
- [19346] On Demand Function doesn't work. (RD find the root cause. Will fixed in next version)
- [19344] Add a new message,input 1000 chinese in the content,click send or save,the webui can't be entered,the malmanager crashed. (RD find the root cause. Will fixed in next version)

V1.00(ABDO.0)B8 Release Note Information

■ FW ver.: V1.00(ABDO.0)B8

■ New Features:

- None

■ Fixed Bugs:

- [19321] LAN to LTE Throughput (TCP Uplink) is unstable
- [19040] LTE to LAN Throughput : When test TCP UL and TCP Bi-direction, the data is unatable
- [19142] LTE4506 IPv4 throughput performance degraded if concurrent IPv6 and IPv4 traffic delivering.
- [19066] The SMS received when DUT is power off is stored in SIM SMS.
- [19322] Receive a message contains more than 300 characters,then receive a message contains more than 153 charactes,the content displays abnormally.
- [19334] Can't upgrade firmware via ethernet.
- [19265] Channel column will be blank under the certain situation.
- [19264] Channel column will be blank under the certain situation.
- [19324] Set the static ip address same as the lan ip address,can set successfully.
- [19329] In the URL Filter, edit the rule,can edit the rule same as the other rule.
- [19266] The channel of SSID2 is wrong on Wi-Fi Status page.
- [19325] Add a rule whose address is a invalid address then delete it,the other rule disappears.
- [19327] In the IPv4/Port Filter and IPv6/Port Filter,add two same rules,can be added successfully.
- [19328] In the IPv4/Port Filter and IPv6/Port Filter,edit the rule,can edit the rule same as the other rule.

■ **Limitations:**

- When the firewall rules are turned on, the Ethernet LAN throughput will be reduced.
- Need to reset default values for TR-069.

■ **Known Issues:**

- There is no correct icon of Ethernet connected device.
- WIFI <-> Ethernet throughput is no good due to HW limitation.
- [19142] LTE4506 IPv4 throughput performance degraded if concurrent IPv6 and IPv4 traffic delivering.
- [19143] IPv6 UL UDP traffic will make LTE4506 crash.

V1.00(ABDO.0)B7 Release Note Information

■ FW ver.: V1.00(ABDO.0)B7

■ New Features:

- None

■ Fixed Bugs:

- [19143] IPv6 UL UDP traffic will make LTE4506 crash.
- [19262] When the message content includes all letters, numbers, symbols of keyboard, receiver can receive the message, but the content is empty.
- [19261] Send a message to the Iphone6 whose content contains about 300 mixed number, English letters and symbols or only symbols, the phone can receive the SMS, but the content is empty.
- [19270] The page will pop up the prompt when the inbox contains 249 messages.
- [19271] The page will pop up the prompt twice after receive a message when inbox is full.
- [19266] The channel of SSID2 is wrong on Wi-Fi Status page.
- [19264] Channel column will be blank under the certain situation.
- [19265] Channel column will be blank under the certain situation.
- [19212] The duration of time before PC obtains WWAN IP address is too long under certain condition.
- [19133] Inserted SIM but not in the service area, WEB shows [SIM not inserted]
- [19136] Within success connection to reduce eNB power until connection down.

■ Limitations:

- When the firewall rules are turned on, the Ethernet LAN throughput will be reduced.

- Need to reset default values for TR-069.

■ **Known Issues:**

- There is not correct icon of Ethernet connected device.
- [19142] LTE4506 IPv4 throughput performance degraded if concurrent IPv6 and IPv4 traffic delivering.

V1.00(ABDO.0)B6 Release Note Information

■ **FW ver.:** V1.00(ABDO.0)B6

■ **New Features:**

- None

■ **Fixed Bugs:**

- [19074] After disable SSID_1 then ethernet and wi-fi function can't work and ping failed for 8.8.8.8.
- [19073] Insert a sim card who contains 500 contacts, it will lead to the malmanager crash.
- [19213] DHCP Server Settings can be modified during WPS pairing.
- [19214] DNS Settings can be modified during WPS pairing.
- [19065] The phone can't receive the full SMS which is sent from DUT.
- [19194] Modify the web domain name to the special value,can't login web url setting.
- [19203] When SIM card contains 500 contacts, web UI can't be logged in.
- [19206] After save a message whose name length is more than 40, web UI can't be logged in.
- [19207] When the message content includes all letters, numbers,symbols of keyboard, it can't be received.
- [19068] Modify the subnet mask,it does not match the dhcp range,can apply successfully.
- [19218] There is no new message prompt when inbox is full.
- [19209] When Subnet Mask set to 255.255.255.192, DHCP range can be set to invalid range.
- [19048] Static DHCP record can't be added under certain condition.
- [19202] The prompt is incorrect when insert an invalid SIM card and click Internet.
- [19185] The APN is abnormal when input it to be full.

- [19195] After firmware upgrade fails, switch to the other page then switch to the page of upgrade, it will pop up fail.
- [19198] Can copy chinese in the column of NTP Server.
- [19191] The prompt isn't consistent when apply DNS Settings.
- [19204] There is an error on Contact List after importing a .vcf file

■ Limitations:

- When the firewall rules are turned on, the Ethernet LAN throughput will be reduced.
- Need to reset default values for TR-069.

■ Known Issues:

- There is not correct icon of Ethernet connected device.
- [19142] LTE4506 IPv4 throughput performance degraded if concurrent IPv6 and IPv4 traffic delivering.
- [19136] Within success connection to reduce eNB power until connection down.
- [19133] Inserted SIM but not in the service area, WEB shows [SIM not inserted]

V1.00(ABDO.0)B5 Release Note Information

■ FW ver.: V1.00(ABDO.0)B5

■ New Features:

- Check magic word in FW before upgrading.
- Update eglibc to fix CVE-2015-7547.
- Add connected information of Ethernet.
- TR-069 stage 1

■ Fixed Bugs:

- [19141] Without wrong upgrade.bin file protect mechanism that will cause device crash
- [19134] Auto APN will always use "Empty" APN configuration once Device boot up with PIN code enable.
- [19131] There is no information/configuration for Giga-Ethernet.
- [19139] The icon [connect/disconnect] can implement at below path [Internet/Internet Settings/Internet Connection Method:]
- [19135] There is no Detach Request Message be deliver while reboot LTE4506
- [19184] After wifi rebooting,the wps pairing can't be broken off.
- [19044] In the band 5GHz,set the channel to 40,it has something wrong.
- [19199] Rename the "profile_backup" to more than 20 chinese,then import it,the malmanager crashed.
- [19045] After modify the Domain Name,PC can't search for wifi 2.4GHz and 5GHz.
- [19071] The Inbox can't display the messages when 8475A send 1000 messages to DUT.
- [19062] The Encryption Key displays empty after change Encryption Mode from "No Encryption" to "WPA2" or "WPA/WPA2" in Setup Wizard.
- [19067] In the setup wizard,apply settings two times,it will pop up a prompt:"quick wifi setting is invalid".

- [19028] The time in Internet Status and in Setup Wizard is different when Internet Connection Method is "On Demand".
- [19196] When the DHCP range matching with the Subnet Mask, the algorithm has something wrong.
- [19190] PC can't enter web ui when DHCP ip range conflict with Subnet Mask.
- [19069] In the DHCP Server, the end ip can set to 255, it is unreasonable.
- [19070] Add a static dhcp rule, the ip address is 192.168.1.255 can be saved successfully, it is unreasonable.
- [19186] The internet will connect automatically when switch Connection Mode from "On Demand" to "Manual".
- [19016] Network Type is incorrect under certain condition.
- [19073] Insert a sim card who contains 500 contacts, it will lead to the malmanager crash.

■ **Limitations:**

- When the firewall rules are turned on, the Ethernet LAN throughput will be reduced.
- Need to reset default values for TR-069.

■ **Known Issues:**

- There is not correct icon of Ethernet connected device.
- [19142] LTE4506 IPv4 throughput performance degraded if concurrent IPv6 and IPv4 traffic delivering.
- [19136] Within success connection to reduce eNB power until connection down.
- [19133] Inserted SIM but not in the service area, WEB shows [SIM not inserted]
- [19074] After disable SSID_1 then ethernet and wi-fi function can't work and ping failed for 8.8.8.8.