

EX5600-T0/EX5601-T0/ EX5600-T1/EX5601-T1 Generic

Firmware Release Note

V5.70(ACDZ.3.2)C0

Date: Jun. 28, 2024

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Reviewer:

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Revision History

Date	Release	Author	Description
2022/04/06	1.0	Frank Chang	FW release for V5.70(ACDZ.0)b1
2022/05/23	2.0	Frank Chang	FW release for V5.70(ACDZ.0)b2
2022/06/22	3.0	Winnie Wen	FW release for V5.70(ACDZ.0)b3
2022/07/18	4.0	Frank Chang	FW release for V5.70(ACDZ.0)b4
2022/08/08	5.0	Frank Chang	FW release for V5.70(ACDZ.0)b5
2022/08/29	6.0	Frank Chang	FW release for V5.70(ACDZ.0)b6
2022/09/05	7.0	Frank Chang	FW release for V5.70(ACDZ.0)b7
2022/09/08	8.0	Frank Chang	FW release for V5.70(ACDZ.0)C0
2022/09/27	9.0	Frank Chang	FW release for V5.70(ACDZ.1)b1
2022/11/04	10.0	Frank Chang	FW release for V5.70(ACDZ.1)b2
2022/11/30	11.0	Frank Chang	FW release for V5.70(ACDZ.1)b3
2022/12/19	12.0	Frank Chang	FW release for V5.70(ACDZ.1)b4
2022/12/26	13.0	Frank Chang	FW release for V5.70(ACDZ.1)b5
2022/12/30	14.0	Frank Chang	FW release for V5.70(ACDZ.1)C0
2023/02/24	15.0	Frank Chang	FW release for V5.70(ACDZ.2)b1
2023/04/28	16.0	Frank Chang	FW release for V5.70(ACDZ.2)b2
2023/06/16	17.0	Frank Chang	FW release for V5.70(ACDZ.2)b3
2023/07/28	18.0	Frank Chang	FW release for V5.70(ACDZ.2)b4
2023/09/01	19.0	Frank Chang	FW release for V5.70(ACDZ.2)C0
2023/10/20	20.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3)b1
2023/12/29	21.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3)b2
2024/03/01	22.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3)b3
2024/04/08	23.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3)b4
2024/04/24	24.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3)C0
2024/06/14	25.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3.1)b1
2024/06/14	26.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3.1)C0
2024/06/28	27.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3.2)b1
2024/06/28	28.0	Yen-Chun Lin	FW release for

			V5.70(ACDZ.3.2)C0
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EX5600-T0/EX5601-T0/EX5600-T1/EX5601-T1
Generic
V5.70(ACDZ.3.2)C0
Release Note

Date: Jun. 28, 2024

Supported Platforms:

Zyxel EX5600-T0/EX5601-T0/EX5600-T1/EX5601-T1 Generic

Versions:

Bootbase version : V2.7 | 10/20/2023 08:21:21

Firmware version : V5.70(ACDZ.3.2)C0

Kernel version: 5.4.171

WLAN code version: 7.6.2.5

3G WWAN package version: 1.24

D2 DSP package version: HERMAN4 GW 2.4 Release 5.6

Notes:

Public Domain Software Announcements

Open Source Used (3rd party software)	Version	From (Source)	Licensing Term	Modified / Used
alsa-lib	1.2.4	https://ftp.osuosl.org/pub/blfs/conglomeration/alsa-lib/alsa-lib-1.2.4.tar.bz2	LGPLv2.1	Used
alsa-ucm-conf	1.2.4	https://www.alsa-project.org/files/pub/lib/alsa-ucm-conf-1.2.4.tar.bz2	BSD 3-Clause	Used
alsa-utils	1.2.4	https://ftp.osuosl.org/pub/blfs/conglomeration/alsa-utils/alsa-utils-1.2.4.tar.bz2	GPLv2	Used
argp-standalone	1.3	http://sources.buildroot.net/argp-standalone/argp-standalone-1.3.tar.gz	LGPLv2	Used
atftp	0.7.4	https://sourceforge.net/projects/atftp/	GPLv2	Modified
attr	2.4.48	http://savannah.nongnu.org/projects/attr	GPLv2	Used
binutils	2.35.1	https://sourceware.org/pub/binutils/releases/	GPLv2	Used
bridge-utils	1.7	http://www.linuxfromscratch.org/blfs/view/svn/basicnet/bridge-utils.html	GPLv2	Modified
busybox	1.31.1	https://busybox.net/	GPLv2	Modified
bwm-ng	0.6.1	http://www.grobb.org/?id=projects&sub=bwm-ng	GPLv2	Modified
bzip2	1.0.8	http://sources.buildroot.net/bzip2/bzip2-1.0.8.tar.gz	BSD-style license	Modified
ca-certificates	20210119	http://ftp.debian.org/debian/pool/main/c/ca-certificates/ca-certificates_20210119.tar.xz	GPLv2	Used
c-ares	1.17.2	https://c-ares.haxx.se/download	c-ares license	Modified
cgi-io	44447	https://firmware.download.immortalwrt.eu.org/package-sources/cgi-io-2021-09-08-98cef9dd.tar.xz	ISC	Used
clinkc	2.4	https://sourceforge.net/projects/clinkc/	BSD	Modified
conntrack-t	1.4.6	https://git.netfilter.org/conntrack-tools/	GPLv2	Used

ools				
curl	8.4.0	https://curl.se/	MIT	Modified
Berkeley DB	4.7.25.NC	https://src.fedoraproject.org/lookaside/extras/nss_db/db-4.7.25.NC.tar.gz/073ab7f20d24b3872a51ca762f5090e7/db-4.7.25.NC.tar.gz	Sleepycat	Modified
dnsmasq	2.85	http://www.thekelleys.org.uk/dnsmasq/doc.html	GPLv2/GPLv3	Modified
dropbear	2022.83	https://github.com/mkj/dropbear	MIT	Modified
ebtables	2018-06-27-48cff25d	https://git.netfilter.org/ebtables/	GPLv2	Modified
elfutils	0.18	https://fedorahosted.org/elfutils/	GPLv2/GPLv3/LGPLv3	Modified
ethtool	5.1	http://www.kernel.org/pub/software/network/ethtool/	GPLv2	Used
eventlog	0.2.10	https://github.com/balabit/eventlog	BSD	Used
expat	2.5.0	https://github.com/libexpat/libexpat	MIT	Used
ez-ipupdate	3.0.11b8	http://ez-ipupdate.com/	GPLv2	Modified
ffmpeg	4.3.1	https://ffmpeg.org/releases/	GPLv2/GPLv3/LGPLv2.1/LGPLv3	Modified
flac	1.3.3	https://downloads.xiph.org/releases/flac/	GPLv2/LGPLv2.1	Modified
fstools	2021-01-04-c53b1882	https://sources.openwrt.org/fstools-2021-01-04-c53b1882.tar.xz	GPLv2	Modified
fwtool	2019-11-12-8f7fe925	https://openwrt.org/packages/pkgdata/fwtool	GPLv2	Used
gdbm	1.18.1	https://www.gnu.org/software/gdbm/	GPLv3	Modified
gettext	0.19.8.1	http://www.gnu.org/software/gettext/	GPLv3	Used
glib	2.68.4	http://www.gtk.org/	LGPLv2.1	Used
gmp	6.2.1	http://gmplib.org/	GPLv3	Used
gnutls	3.7.1	http://www.gnutls.org/	GPLv2 + LGPLv2.1	Modified
i2c-tools	4.3	https://i2c.wiki.kernel.org/index.php/I2C_Tools	GPLv2 + LGPL	Used

			v2.1	
iproute2	5.11.0	https://github.com/shemminger/iproute2	GPLv2	Modified
iptables	1.8.7	https://git.netfilter.org/iptables/	GPLv2	Modified
iw	5.9-8fab0c9e	http://wireless.kernel.org/en/users/Documentation/iw	ISC	Modified
json-c	0.15	https://github.com/json-c/json-c/downloads	MIT	Modified
jsonfilter	2018-02-04-c7e938d6	http://git.openwrt.org/?p=project/jsonpath.git	ISC	Modified
kmod	27	https://www.kernel.org/pub/linux/utils/kernel/kmod/	LGPL2.1	Used
lame	3.1	http://sourceforge.net/projects/lame	LGPLv2	Used
libcap	2.43	https://www.kernel.org/pub/linux/libs/security/linux-privs/libcap2/	GPLv2	Modified
libcap-ng	0.8.1	https://people.redhat.com/sgrubb/libcap-ng/index.html	GPLv2+LGPL2.1	Used
libdbi	0.9.0	http://libdbi.sourceforge.net/	LGPL2.1	Used
libedit	20210419-3.1	http://pkgs.fedoraproject.org/repo/pkgs/libedit/libedit-20080712-2.11.tar.gz /	BSD	Modified
libexif	0.6.22	https://libexif.github.io/	LGPL2.1	Modified
libffi	3.3	http://pkgs.fedoraproject.org/repo/pkgs/libffi/libffi-3.0.11.tar.gz/	MIT	Used
libgcrypt	1.8.7	https://www.gnupg.org/related_software/libgcrypt/	GPLv2+LGPL2.1+ BSD_3Clause+ X License+Public domain+ OCB license 1	Used
libgpg-error	1.42	https://www.gnupg.org/related_software/libgpg-error/	GPLv2+LGPL2.1	Modified
libgpod	1.4.4	https://git.kernel.org/pub/scm/libs/libgpod/libgpod.git	LGPL2.1	Used
libiconv	1.16	https://ftp.gnu.org/gnu/libiconv/libiconv-1.16.tar.gz	GPLv3/LGPLv2	Modified
libid3tag	0.15.1b	http://mad.sourceforge.net/	GPLv2	Used
libjpeg-turb	2.0.6	https://www.libjpeg-turbo.org/	IJG License + BSD	Used

o			3-clause License + zlib License	
libmnl	1.0.4	http://www.netfilter.org/projects/libmnl/	LGPLv2.1	Modified
libnetfilter_ conntrack	1.0.8	https://git.netfilter.org/libnetfilter_conntrack/	GPLv2	Used
libnetfilter- cthelper	1.0.0	http://www.netfilter.org/projects/libnetfilter_cthelper/	GPLv2	Used
libnetfilter_ cttimeout	1.0.0	http://www.netfilter.org/projects/libnetfilter_cttimeout/	GPLv2	Used
libnetfilter_ queue	1.0.5	https://git.netfilter.org/libnetfilter_queue/	GPLv2	Used
libnfnetlink	1.0.1	https://git.netfilter.org/libnfnetlink/	GPLv2	Used
libnl	3.5.0	http://www.infradead.org/~tgr/libnl/	LGPLv2.1	Modified
libnl-tiny	2020-08-05- c291088f	https://github.com/openwrt/openwrt/tree/master/package/libs/libnl-tiny	LGPLv2.1	Modified
libogg	1.3.4	https://downloads.xiph.org/releases/ogg/	BSD 3-Clause	Used
libpcap	1.9.1	www.tcpdump.org	BSD 3-Clause	Used
libselinux	3.2	https://github.com/SELinuxProject/selinux/releases/download/3.2	public domain	Used
libsepol	3.2	https://github.com/SELinuxProject/selinux/releases/download/3.2	LGPLv2.1	Used
libsrtp	1.6.0	http://oss.metaparadigm.com/json-c/	BSD	Modified
libstrophe	0.10.0	https://codeload.github.com/strophe/libstrophe/tar.gz/	GPLv3	Modified
libtirpc	1.3.2	http://libtirpc.sourceforge.net/	BSD	Modified
libtool	2.4.6	http://www.gnu.org/software/libtool/	GPLv2	Used
libubox	2021-05-16- b14c4688	http://mirror.greenwavereality.com/openwrt/	ISC	Used
libusb	1.0.24	https://sourceforge.net/projects/libusb/	LGPL 2.1	Used
libvorbis	1.3.7	http://downloads.xiph.org/releases/vorbis/	BSD	Used
libxml2	2.9.12	http://xmlsoft.org/sources/	MIT	Used
Linux/Arm	5.4.171	http://ftp.ntu.edu.tw/pub/linux/kernel/v5.x/	GPLv2	Modified

Kernel				fied
logrotate	3.17.0	https://launchpad.net/ubuntu/hardy/i386/logrotate/	GPLv2	Modi fied
lua	5.1.5	http://www.tecgraf.puc-rio.br/lua/ftp/	MIT	Modi fied
lua	5.3.5	http://www.tecgraf.puc-rio.br/lua/ftp/	MIT	Modi fied
luasocket	2019-04-21- 733af884	https://github.com/diegonehab/luasocket	MIT	Modi fied
lucihttp	2021-06-11- 3dc89af4	https://github.com/jow-/lucihttp.git	MIT	Used
lxc	2.0.4	https://linuxcontainers.org/lxc/downloads/	LGPLv2.1/GPLv2	Modi fied
mailsend	1.19	https://github.com/muquit/mailsend/	BSD	Modi fied
mbedtls	2.16.11	https://codeload.github.com/ARMmbed/mbedtls/tar.gz/v2.16.11	GPLv2	Modi fied
minidlna	1.3.0	https://sourceforge.net/projects/minidlna/files/minidlna/1.3.0/	GPLv2/BSD	Modi fied
musl-fts	1.2.7	https://github.com/pullmoll/musl-fts.git	BSD 3-Clause	Used
nbtscan	1.5.1a	http://ftp.debian.org/debian/pool/main/n/nbtscan/	GPLv2	Used
ncurses	6.2	http://ftp.gnu.org/pub/gnu/ncurses/	MIT with exception	Modi fied
net-snmp	5.8	http://www.net-snmp.org/	BSD/BSD-like	Modi fied
nettle	3.6	https://ftp.gnu.org/gnu/nettle/	GPLv2/LGPLv3	Modi fied
nghttp2	1.43.0	https://osdn.net/projects/immortalwrt/storage/sources/nghttp2-1.43.0.tar.xz/	MIT	Used
ntfs-3g	2022.10.3	http://ntfs-3g.org	GPLv2/LGPLv2	Used
ntpcient	2015_365	http://doolittle.icarus.com/ntpcient/	GPLv2	Modi fied
omcproxy	2018-12-14- 722151f0	https://osdn.net/projects/immortalwrt/storage/sources/omcproxy-2018-12-14-722151f0.tar.xz/	Apache License v2	Modi fied
openssl	3.1.2	http://www.openssl.org	OpenSSL	Modi fied

pciutils	3.7.0	https://github.com/yifengyou/pciutils-3.7.0	GPLv2	Modified
pcr	8.44	https://sourceforge.net/projects/pcr/files/pcr/8.44/	PCRE LICENCE	Used
popt	1.16	http://rpm5.org/files/popt/	MIT	Modified
ppp	2.4.3	http://www.roaringpenguin.com/pppoe	GPLv2/BSD	Modified
pptp	1.7.1	https://sourceforge.net/projects/pptpclient/files/pptp/pptp-1.7.1/	GPLv2	Used
procd	2021-02-23-37eed131	https://downloads.openwrt.org/releases/21.02.1/targets/arc770/generic/openwrt-21.02.1-arc770-generic-default.manifest	LGPL v2.1	Modified
pure-ftpd	1.0.50	http://pureftpd.org	ISC/BSD	Modified
radvd	1.8	http://www.litech.org/radvd/	BSD	Used
readline	8.1	http://cnswww.cns.cwru.edu/php/chet/readline/rltop.html	GPLv3	Used
resolveip	2	https://github.com/openwrt/openwrt/tree/openwrt-21.02/package/network/utils/resolveip	GPLv2	Used
rp-pppoe	3.14	https://dianne.skoll.ca/projects/rp-pppoe/download	GPLv2	Modified
samba	3.6.25	https://download.samba.org/pub/samba/samba-3.6.25.tar.gz	GPLv3	Modified
sqlite	3330000	http://www.sqlite.org/	Public Domain License	Used
swconfig	12	https://github.com/openwrt-mirror/openwrt/blob/master/target/linux/generic/files/drivers/net/phy/swconfig.c	GPLv2	Used
syslog-ng	3.38.1	https://github.com/balabit/syslog-ng	GPLv2	Used
tcpdump	4.99.4	http://www.tcpdump.org/	BSD	Used
u-boot	2021.01	https://source.denx.de/u-boot/u-boot	BSD 2-clause / BSD 3-clause /eCos-2.0 / GPLv2 / ibm-pibs / ISC / LGPLv2.0 / LGPLv2.1 / MIT / OFL / X11 License / Others	Used

ubox	2020-10-25-9ef88681	https://git.openwrt.org/project/ubox.git	GPLv2	Used
ubus	2021-06-30-4fc532c8	https://git.openwrt.org/?p=project/ubus.git;a=shortlog	LGPLv2.1	Used
uci	2020-10-06-52bbc99f	https://git.openwrt.org/project/uci.git	LGPLv2.1	Used
uclient	2021-05-14-6a6011df	https://git.openwrt.org/project/uclient.git	ISC	Used
udhcp	0.9.8	http://udhcp.busybox.net/	GPLv2	Modified
unbound	1.14.0	https://nlnetlabs.nl/downloads/unbound/	BSD 3 Clause	Modified
urandom-seed	3	https://github.com/ntlf9t/openwrt-1/blob/master/package/system/urandom-seed/files/etc/init.d/urandom_seed	GPLv2	Used
urngd	2020-01-21-c7f7b6b6	http://mirror.greenwavereality.com/openwrt/	GPLv2	Used
usb-modeswitch	2.1.0	http://www.draisberghof.de/usb_modeswitch/	GPLv2	Used
usign	2020-05-23-f1f65026	https://download.iopsys.eu/iopsys/mirror/usign-2020-05-23-f1f65026.tar.xz	ISC	Used
ustream-ssl	2020-12-10-68d09243	https://github.com/KoWming/Openwrt-LEDE-dl/blob/main/ustream-ssl-2020-12-10-68d09243.tar.xz	ISC	Used
util-linux	2.36.1	https://github.com/karelzak/util-linux/	GPLv2	Used
vim	9.0	http://ftp.vim.org/pub/vim/unix	VIM LICENSE	Modified
wide-dhcpv6	20080615	https://sourceforge.net/projects/wide-dhcpv6/	BSD	Modified
wireless-regdb	2021.08.28	https://git.kernel.org/pub/scm/linux/kernel/git/sforshee/wireless-regdb.git/	ISC	Modified
wireless-tools	29	https://hewlettpackard.github.io/wireless-tools	GPLv2	Modified
wolfssl	4.8.1-stable	http://www.wolfssl.com/	GPLv2	Modified
wsdd2	2021-08-09-bcc51c3e	https://github.com/Netgear/wsdd2	GPLv3	Used

xl2tpd	1.3.16	https://github.com/xelerance/xl2tpd.git	GPLv2	Modified
xz	5.2.5	https://tukaani.org/xz	XZ Utils Licensing	Modified
zlib	1.2.11	https://github.com/madler/zlib	zlib	Used
zoneinfo	2021a	https://www.iana.org/time-zones/repository/releases/tzcode2021a.tar.gz https://www.iana.org/time-zones/repository/releases/tzdata2021a.tar.gz	BSD 3-clause	Modified
miniupnpd	2.3.1	https://github.com/miniupnp/miniupnp	BSD-3-Clause	Used
quagga	1.2.4	https://github.com/Quagga/quagga	GPLv2	Used

Known issues

Modules	Issue	Risk Impact Information

Notification

1. OpenSSL 3.1.2 Upgrade Notification

The certificates signed using SHA1 or older/weaker hashes are no longer supported for authenticating servers or clients.

Before upgrading the firmware:

- Please ensure that certificates in your devices are not using weak hashes.
- If weak hashes are detected, kindly update and verify your certificates promptly with stronger hash
(The minimum recommended hash is SHA256)

Modifications in 5.70(ACDZ.3.2)C0

Based on V5.70(ACDZ.3.2)b1 to release FCS version

● Feature Enhancement

Modified Modules	Features Enhancement List

- Bug Fixed

Modified Modules	Bug Fixed List

Modifications in 5.70(ACDZ.3.2)b1

- Feature Enhancement

Modified Modules	Features Enhancement List
WebGUI	1. [eITS#240600745] Rejecting firmware due to WebGUI https CA handling and http shut down decision

- Bug Fixed

Modified Modules	Bug Fixed List
Vulnerability	1. [CVE-2024-38266, 38267, 38268, 38269][Zyxel-SI-1559][Vulnerability] Multiple authenticated buffer overflow vulnerabilities

Modifications in 5.70(ACDZ.3.1)C0

Based on V5.70(ACDZ.3.1)b1 to release FCS version

- Feature Enhancement

Modified Modules	Features Enhancement List

- Bug Fixed

Modified Modules	Bug Fixed List

Modifications in 5.70(ACDZ.3.1)b1

- Feature Enhancement

Modified	Features Enhancement List
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Modules	

- **Bug Fixed**

Modified Modules	Bug Fixed List
TR069	1. [eITS#240501006] TR069 communication issues after patch to 3C0 2. [eITS#240400570] TR069 process dies
Vulnerability	1. [CVE-2024-5412][Zyxel-SI-1557][Vulnerability] Unauthenticated heap buffer overflow in the libclinkc library.

Modifications in 5.70(ACDZ.3)C0

Based on V5.70(ACDZ.3)b4 to release FCS version

- **Feature Enhancement**

Modified Modules	Features Enhancement List

- **Bug Fixed**

Modified Modules	Bug Fixed List

Modifications in 5.70(ACDZ.3)b4

- **Bug Fixed**

Modified Modules	Bug Fixed List
Rom-D	1. [eITS#240300263] EX5601, Applying up to date custom romd based on newer FW on field devices turns them generic
TR-069	1. [eITS#240300709] EX5601, Slow tr069 SPV replies starting from 2C0/2.1C0

	<ol style="list-style-type: none"> [eITS#240200784] GPN Device.WiFi. fail [eITS#240300581] EX5601 + Opal Family, iPerf from TR069 fail if the iPerf parameters are sent in separate SPVs
VoIP	<ol style="list-style-type: none"> [eITS#240101401] CPE cannot receive Some Incoming Calls after Huawei adds the new SIP service port 5062 to the Soft Switch (SS).
Wi-Fi	<ol style="list-style-type: none"> [eITS#240301183] EX5601, Auto Channel Selection feature broken in 2.1C0

Modifications in 5.70(ACDZ.3)b3

● Feature Enhancement

Modified Modules	Features Enhancement List
GUI	<ol style="list-style-type: none"> [eITS#230701557][EX5601-T1] Show info which LAN port is connected the client.
CLI	<ol style="list-style-type: none"> [eITS#231200465] Feature improvement request - WAN ip lease time

● Bug Fixed

Modified Modules	Bug Fixed List
VLAN auto hunt	<ol style="list-style-type: none"> [eITS#231200545][EX5601-T1] VLAN Auto hunt doesn't work
GUI	<ol style="list-style-type: none"> [eITS#240100804] EX5601, Conditionally unable to open Connectivity List and add new Parental Control rule
TFTP	<ol style="list-style-type: none"> [eITS#231200824] EX5601, CPE not allowing STB to download firmware using TFTP.
Vulnerability	<ol style="list-style-type: none"> [CVE-2024-0816][Zyxel-SI-1536] [Vulnerability] Buffer overflow vulnerability in the "traceroute" command
TR-069	<ol style="list-style-type: none"> [eITS#240101103] EX5601, unable to disable wifi triggered directly from bootstrap event
Wi-Fi	<ol style="list-style-type: none"> [eITS#240100978] EX5601, Unable to connect to Main SSID with AX201 with guest network enabled.

Modifications in 5.70(ACDZ.3)b2

Based on V5.70(ACDZ.3)b1 to release V5.70(ACDZ.3)b2

● Feature Enhancement

Modified Modules	Features Enhancement List
APP	1. [eITS#230300767] EX5601, MProMesh App feature request to include guest isolation level
DHCP	1. [eITS#231000756] DHCP opt 12
WAN	1. [eITS#231001139] EX5601, CCWAN bridge method not working
TR-069	1. [eITS#231100694] EX5601, Feature enhancement request: Support larger manual sfp-list
TR-098	1. [eITS#231101419] How to change DOS Protection Blocking with TR098
Wi-Fi	1. [eITS#231000006] ZYX-593 IoT SSID (FRQ to propagate 3 parameters from the controller to the agents)
TR-369	1. [eITS#231000272] EX5601-T1 - Certificate management for websocket 2. [eITS#231001817] EX5601-T1 - Web GUI configuration for websocket

● Bug Fixed

Modified Modules	Bug Fixed List
RIP	1. [eITS#230900366] Request to RIPv2
Wi-Fi	1. [eITS#230500422] EX5601, Multicast over mesh wifi 2. [eITS#231101238] EX5601, iwpriv <i> show stainfo incomplete results
WAN	1. [eITS#231001136] EX5601, Bridge mode with interface grouping not working 2. [eITS#231101317] EX5601, Disconnecting then reconnecting WAN makes changes to WAN interfaces
VoIP	1. [eITS#231001751] EX5601 / FXS Increasing Ring Delay / GBR Region

Modifications in 5.70(ACDZ.3)b1

Based on V5.70(ACDZ.2)b4 to release V5.70(ACDZ.3)b1

● Feature Enhancement

Modified Modules	Features Enhancement List
F-secure	Container based F-secure
MProMesh	[eITS#230300767]EX5601, MProMesh App feature request to include guest isolation level
CLI	<ol style="list-style-type: none"> [eITS#230300971] Display remaining lease time of WAN IP lease in CLI, see ticket 230101253 [eITS#230500277] Support CLI cfg command to show IGMP snooping status.
LAN	[eITS#230301802]EX5601, Feature enhancement - Add connected LANport to client information
GUI	<ol style="list-style-type: none"> [eITS#230400473] Support SFP information page on GUI. [EX5601-T0] Add GPON status on GUI
Wi-Fi	[eITS#230600450] EX5601 Wireless Network Max clients increase to 64
SFP	<ol style="list-style-type: none"> [eITS#230801026] IOP problem Skylane transceiver 2.5G EX 5601-T0 [eITS#231000755] SFP power RX/TX
OCAC	OCAC enhancement based on CE regulation
TR-369	<ol style="list-style-type: none"> Support TR369 feature. [eITS#230900654][AXIROS] EX5601-T1 - implementation request / WebSocket
LED Control	[eITS#230400862] Support LED control feature.
XMPP	[eITS#230601075] XMPP / STUN server support
Security	<ol style="list-style-type: none"> [Security] Setting Up the Password Strength disable console pin via software upgrade OpenSSL to 3.1.2 [CVE-2023-37929][Zyxel-SI-1506][Vulnerability] Post-authentication buffer overflow.

	5. Upgrade curl to 8.4.0
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● Bug Fixed

Modified Modules	Bug Fixed List
Wi-Fi	<ol style="list-style-type: none"> 1. [eITS#230500422]EX5601, Multicast over mesh wifi 2. [eITS#230300715] Some iPads fail to reconnect to MESH after sleep mode.
Security	<ol style="list-style-type: none"> 1. [Security] Unauthenticated Access to APIs 2. [Security] Session/Cookie Security Test 3. [Security] Outdated Software 4. [Security] Header Security Test

Modifications in 5.70(ACDZ.2)C0

Based on V5.70(ACDZ.2)b4 to release V5.70(ACDZ.2)C0

● Feature Enhancement

Modified Modules	Features Enhancement List

● Bug Fixed

Modified Modules	Bug Fixed List

Modifications in 5.70(ACDZ.2)b4

● Feature Enhancement

Modified Modules	Features Enhancement List
Wireless	[#192799] [Eye Networks] EX5601-T0, SSID naming logic when disabling mesh and allowing separate SSIDs
SFP	[#193175] [eITS#230700225]Request for support of Fibrenet BiDi Active

	Ethernet SFP [#192797] [eITS#230700001][L?necom] Active Fiber SFP Transceiver works not in the EX5601-T0
GUI	[#195668] [CVE-2011-5053][Zyxel-SI-1498][Vulnerability] WPS vulnerability on CPE in WLAN

● Bug Fixed

Modified Modules	Bug Fixed List
SYSTEM	[#191845] [System] The CPE will hang & console show FQ Empty after do throughput or stress test [#189320] [eITS#230500282]EX5601, PeriodicInformTime not acting as according to specification in terms of UTC.
WAN	[#191478] [eITS#230600405]HyperOptic-DHCPv6-ONT/OLT issue
SYSTEM	
Throughput	
DNS	
TR-069	
Security	
WAN	

Modifications in 5.70(ACDZ.2)b3

● Feature Enhancement

Modified Modules	Features Enhancement List
SFP	[#189291] [eITS#230401145]Request for support of fs.com BiDi Active Ethernet SFP
System	[#188968] [eITS#230401200]EX5601, Support for TR-069 configurable

	Energy-Efficient Ethernet(EEE)
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● Bug Fixed

Modified Modules	Bug Fixed List
SYSTEM	[#190803] [eITS#230501661][EX5601-T1] Missed separator in the logs.
Throughput	[#189280] [eITS#230400229][CETIN] EX5601-T1 - low throughput in DS
DNS	[#188692] [eITS#230400106][Ogi] EX3301-T0 / DNSProxy issue when Primary DNS unreachable
TR-069	[#186804] [eITS#230300900]EX5601, Add support for iperf initiated from TR069
Security	[#185449] [eITS#230300165]EX5601, How to configure parental control from cli? [#190139] [eITS#230500907][Digimobil] Possible security flaw that allows to retrieve root password
WAN	[#190636] [eITS#230500783][Wemacom] no IPv4 connection via DSLite [#189673] [WAN] The CPE can't recognize HUAWEI E173 dongle [#190882] [eITS#230501450]EX5601-T0 / DHCPv6 lease not renewed [#189791] [eITS#230200637][Wemacom] DS-Lite IPv4 Data throughput to low [#185607] [eITS#230300429]EX5601, certificate Common Name doesn't match host name

Modifications in 5.70(ACDZ.2)b2

● Feature Enhancement

Modified Modules	Features Enhancement List
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MPro Mesh	[#182873] [eITS#230101291] EX5601, Disabling Mesh does not bring down the backhaul, which is still broadcasted as a hidden SSID
WAN	[#184830] Configuration of the AFTR should be possible with URL [#184825] DHCP option providing CPE firmware version
Wireless	[#182232] [eITS#230100596] EX5601, SSID naming logic when disabling mesh and allowing separate SSIDs [#183723] [eITS#230200422] EX5601-Tx TR-098 support for WiFi X_ZYXEL_CountryCode [#184733] [OPAL Generic] Change WPS button trigger condition [#188529] change the wording in SteerStatus
SFP	[#185524] [eITS#230300382] EX5601, Support for SFP: FS SFP-GE-BX [#185527] [eITS#230300384] EX5601, Support for SFP: CISCO-SO GLC-BX-U

● Bug Fixed

Modified Modules	Bug Fixed List
SYSTEM	[#184980] [System] GUI can't show any log info [#185736] [System] The DST file & GUI value are not corresponding [#185613] [System] The zhttpd will be restarted if restore ROMD configuration file and then login GUI.
Document	[#184976] [PS] RD need provide engineer & production firmware to PQA
WAN	[#165358] [WAN] CPE does not support MAP-E/MAP-T.
Throughput	[#185629] [Throughput] The wired throughput can not reach Link Rate 90% at both SFP and ETH WAN. [#186374] [DX5401] Very low Guest WiFi throughput.
NAT	[#185066] [NAT] The CPE should support NAT PCP function (For Generic version)
MPro Mesh	[#186474] [MPro Mesh] The "stale=Yes" scenario occurs during the AP roaming test. [#186468] [MPro Mesh_Agent] After using "MPro Mesh" APP to logout or swipe up the screen to close it or enable wifi guest, it will always lead APP relogin fail.

	[#185927] [MPro Mesh_APP] Set one client to blocking the internet via APP failed.
LAN	[#185279] [LAN] Interface group function can't work, Lan/Wlan can't get ip address.
VOIP	[#183043] [EX5601-T0] [VoIP] The FXS port are not match between GUI & CPE

Modifications in 5.70(ACDZ.2)b1

● Feature Enhancement

Modified Modules	Features Enhancement List
SYSTEM	[#182246] [ETSI EN 303 645] 5.8-2: The confidentiality of sensitive personal data communicated between the device and associated services shall be protected, with cryptography appropriate to the properties of the technology and usage. [#182237] [ETSI EN 303 645] The consumer IoT device shall protect the confidentiality of critical security parameters that are communicated via remotely accessible network interfaces [#182227] [ETSI EN 303 645] 5.3-2: When the device is not a constrained device, it shall have an update mechanism for the secure installation of updates. [#184772] Console redirect/Zconsole monitor [#178784] OPAL, Partial factory reset option with firmware upgrades. (tr069/gui) 220701077
GUI	[#184838] Support Web http redirect to https. [#184756] [OPAL Generic] GUI translation_ES_NL
SFP	[#177679] [EX5601-T0] [#221100421] EX5601, manual sfp-list feature
MPro Mesh	[#184213] [OPAL Regular] support APP 3.0
LAN	[#182349] [EX5601-T0] [eITS#230100744] EX5601, bridge config improvement
VOIP	[#178369] [EX5601-T0] Grain IT - TLS encrypt the SIP signalling

	[#178263] [EX5601-T0] Grain IT - SIP Encryption- SRTP
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● Bug Fixed

Modified Modules	Bug Fixed List
SYSTEM	[#177463] Zyxel-SI-1433 [Vulnerability] Buffer overflow vulnerabilities and command injection vulnerability, for EX5601-T0/EX5601-T1/EX5600-T1 Generirc
Stress	[#175425] [Stress] [Time:1 hrs][Occurs: 3 times]TR-069 firmware upgrade stress happen call trace and coredump , Lan can't get ip address.

Modifications in 5.70(ACDZ.1)C0

Based on V5.70(ACDZ.1)b5 to release V5.70(ACDZ.1)C0

● Feature Enhancement

Modified Modules	Features Enhancement List

● Bug Fixed

Modified Modules	Bug Fixed List

Modifications in 5.70(ACDZ.1)b5

● Feature Enhancement

Modified Modules	Features Enhancement List
Wireless	[#180986] EX5601-T0 supports the UNII-3 band
SFP	[#180954] Feature [#221201116] EX5601-T0 SFP support request

System	[#175946] Zyxel-SI-1433 [Vulnerability] Buffer overflow vulnerabilities and command injection vulnerability for EX5601-T0 Generic
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● Bug Fixed

Modified Modules	Bug Fixed List
MPro Mesh	[#181121] [MPro Mesh] Check ps on console, it has more & more sh process.

Modifications in 5.70(ACDZ.1)b4

● Feature Enhancement

Modified Modules	Features Enhancement List
SFP	[#178316] EX5601, CTS SFP support #1 #221101107 [#174524] EX5601, Add SFP support #220901595 [#178315] EX5601, CTS SFP support #2 #221101108 [#178061] EX5601-T0 SFP support #221100449

● Bug Fixed

Modified Modules	Bug Fixed List
TR-069	[#180452] EX5601, TransferComplete messages without Start/Complete Time value, reference: 221100865
STRESS	[#175425] [Stress] [Time:1 hrs][Occurs: 3 times]TR-069 firmware upgrade stress happen call trace and coredump , Lan can't get ip address.
WAN	[#180189] EX5601, bridge config [#179749] LAN] The CPE LAN side RA packets flag are still show M bit = 0 , O bit = 1 even user change to another IPv6 Address Assign setup

Modifications in 5.70(ACDZ.1)b3

● Feature Enhancement

Modified Modules	Features Enhancement List
GUI	[#178374] [GUI] Compact help link adding ito GUI
WIFI	[#174775] EX5601, Configurable WiFi Country Code (ISO 3166-1 alpha-2) [eItS: #220901661]

● Bug Fixed

Modified Modules	Bug Fixed List
VOIP	[#177765] [VoIP] "Ignore Direct IP (Enable / Disable)" still exist on PS/GUI.
System	[#177941] [System] Use EX5601-T1 to do GPV from ACS server and get value from SNMP tool, the value are still include SFP & EX5601-T0 word
GUI	[#177869] [GUI] The EX5601-T1 should not include SFP Management GUI page [#177603] EX5601, TR-069 Multi_WAN setting GUI display bug [eItS: #221100320]

Modifications in 5.70(ACDZ.1)b2

● Feature Enhancement

Modified Modules	Features Enhancement List
SYSTEM	[#174030] EX5601, nuttcp-support [#174029] EX5601, iPerf support

GUI	[#170928] EX5601, Wifi retransmission counters
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● Bug Fixed

Modified Modules	Bug Fixed List
STRESS	
Document	[#175499] [DST] The CPE GUI does not match Default Setting Table
VOIP	[#175284] [VoIP] When user select T.38 mode of fax, but CPE does not send T.38 packets
Wireless	[#174929] [MPro Mesh] Steering status page is display empty in all tables. No entry in it.
Throughput	[#175143] [Throughput] The EZconn SFP Upstream wired throughput can not reach Link Rate 90%
SFP	[#174937] [SFP] The CPE GUI should support SFP Management page
System	[#174857] [System] The ExpressBoot tool product name should show EX5601-T0 series [#174855] [System] Follow OPAL Generic test case, the CPE should support 10 language (Should add French) [#174848] [System] The CPE default admin password should be 8 character NOT 10 character (sys atck) [#174641] [System] The EX5601-T1 CPE MUST show correct Model Name in Shell mode & GUI
ACTS	[#174841] [ACTS][Wireless] After apply some wireless setting from GUI, zcmd crash and console/GUI can not login.
GUI	[#174811] [GUI] The PMG3000 SFP show incorrect speed 1000M/Full in V5.70(ACDZ.1)b1 after connect to Zyxel OLT1408A-C [#174782] [GUI] Use the Ezconn SFP, the GUI will show Ethnet WAN -> 1000M/Full
WAN	[#174987] [WAN] 3G Ether Dongle cannot link up, and LAN_PC cannot access GUI when the dongle is connected.

Modifications in 5.70(ACDZ.1)b1

● Feature Enhancement

Modified Modules	Features Enhancement List
SYSTEM	[#172258] [System] [220701077] OPAL, Feature proposal/request - Soft-Reset feature [#172255] Easy access to the webGUI (DNS redirection)
GUI	[#172264] Main mesh GUI for control whole mesh. [#172267] Wireless setting improvement for 2.4G/5G. [#172270] Disabling 5GHz WiFi breaks the Mesh system
SFP	[#171894] EX5601, auto rate detection for SFP module

● Bug Fixed

Modified Modules	Bug Fixed List
STRESS	[#172172] [MPro Mesh][Time: 51hrs][Occur: 1 time] EX5601 occurs @skb_over_panic then reboot during Mesh stress testing period.

Modifications in 5.70(ACDZ.0)C0

Based on V5.70(ACDZ.0)b7 to release V5.70(ACDZ.0)C0

● Feature Enhancement

Modified Modules	Features Enhancement List

● Bug Fixed

Modified	Bug Fixed List
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Modules	

Modifications in 5.70(ACDZ.0)b7

● Feature Enhancement

Modified Modules	Features Enhancement List

● Bug Fixed

Modified Modules	Bug Fixed List
WiFi	[#173013] [MPro Mesh][Time:1hr][Occur: 2 time] EX5601 occurs resource temporarily unavailable of the 1905Daemon, it will lead mesh topology disappear during Mesh stress testing period.

Modifications in 5.70(ACDZ.0)b6

● Feature Enhancement

Modified Modules	Features Enhancement List
WiFi	MTK release new FW bin for DFS certification
WiFi	Country UK support U-NII3 band

● Bug Fixed

Modified Modules	Bug Fixed List
WiFi	Detect radar then wifi reload couldn't select channel

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Modifications in 5.70(ACDZ.0)b5

● Feature Enhancement

Modified Modules	Features Enhancement List

● Bug Fixed

Modified Modules	Bug Fixed List
Throughput	[165099] [Throughput] 5G wireless throughput does not pass PQA criterion
System	[170788] [System] Enable Zyxel Exec Env will fail, let ZyEE function cannot work.
Document	[170834] [Document] CPE does not match Default Setting.
NAT	[170779] [NAT] CPE happen call trace when create port trigger and LAN PC run heavy traffic.
SIP	[170773] [RD Internal][VoIP] After CPE establishes a SIP call, the ACS server does GPV ['Device.Services.VoiceService.1.VoiceProfile.1.Line.1.Stats.']. will lead to VoIP cannot work anymore.
TR-143	[167918] [TR-143] Throughput for upload diagnostic does not pass PQA criterion.
MESH	[MPro mesh] AP roaming test found that the record will stay at "IN_STEERING" will not be updated

Modifications in 5.70(ACDZ.0)b4

● Feature Enhancement

Modified Modules	Features Enhancement List

● Bug Fixed

Modified Modules	Bug Fixed List
Stress	[#165089] [Stress] CPE happen call trace (one time) then 24G/5G can not connect to CPE after run 學禮樓 [#167596] [Stress] CPE run Reboot+change pppoe account stress via TR069 will happen coredump. [#169616] [Stress] CPE happen call trace after run NBL stress then stop NBL stress. (stress time > 3 minutes)
Throughput	[#168324] [Throughput] SFP (PMG3000) download throughput only 384M (packet size:1518)
LED	[#168323] [LED] SFP LED display off when CPE connect to OLT2406.
WAN	[#167923] [WAN] When SFP WAN is up, LAN client using "ping" will happen packets lost and playing IPTV will not be smooth
TR-143	[#167918] [TR-143] Throughput for upload diagnostic does not pass PQA criterion.

Modifications in 5.70(ACDZ.0)b3

● Feature Enhancement

Modified Modules	Features Enhancement List

● Bug Fixed

Modified Modules	Bug Fixed List
MGMT	[#165081] [ACTS/MGMT] Restore configuration via ACS, After reboot config not change
IGMP	[#164806] [IGMP] Can't play IPv6 MLD stream
WAN	[#168180] [WAN] CPE not support 2.5G WAN for PMG3000. [#167385] [WAN] In IPoE with VLAN, WLAN client access internet very long time (more than 10 minutes) and ftp upload/download very slow.

LED	[#167912] [LED] CPE internet LED display red when plug in the 3G dongle and get WAN ip. [#167689] [LED] In PPPoE mode, Internet LED display red.
GUI	[#167848] [GUI] Go VoIP > Call History, GUI will keep loading.
Document	[#167610] [Document] CPE's VoIP setting does not match Default Setting. [#165263] [document] PS document not match CPE.
WLAN	[#167373] [WLAN] 24G&5G get IPv4/v6 address, it can not access https web.

Modifications in 5.70(ACDZ.0)b2

● Feature Enhancement

Modified Modules	Features Enhancement List

● Bug Fixed

Modified Modules	Bug Fixed List
WAN	[#165314] [WAN] PMG3000 (V250ABVJ1b1) connect to CPE but it will work fail. [#164920] [WAN] LAN PC can't ping outside after 3G back wan up [#164858] [WAN] VLAN Autohunt function cannot work [#164381] [WAN] In IPoE with VLAN, LAN PC access internet very long time. (more than 15 minutes)
Stress	[#165254] [ACTS/Stress] CPE does not connect to ACS server after run Reboot + change PPP username/password stress via TR069. [#165152] [Stress] CPE happen 45 times call trace after LAN & WLAN overnight Stress testing and doing Firmware Upgrade via TR069 [#165080] [Stress] 2.4G and 5G do not send beacon anymore after full loading stress over the weekend and do TR-069 firmware upgrade. (CPE is calibration board) [#165010] [Stress] CPE cannot connect to ACS Server after doing TR0-69 firmware upgrade stress overnight.

	[#165000] [Stress] CPE happen 3 times call trace when it run USB stress + FW upgrade (from TR069) [#164998] [Stress] CPE WAN cannot get IP after overnight stress [#164888] [Stress] During NBL 72 hrs stress, CPE console keeps printing messages and then reboot.
USB	[#165120] [USB] LAN / WLAN clients download/upload file through samba server will happen call trace.
GUI	[#165045] [GUI] The wireless client icon and information will display in Wire page
TR143	[#164817] [ACTS/TR143] Set TR143 Parameters cause the DUT hang
NAT	[#164782] [NAT] Follow DST, CPE should support PCP page.
Document	[#164769] [Document] CPE does not match Default Setting.
IGMP	[#164757] [IGMP] GUI multicast Status will keep loading can't access [#164746] [IGMP] GUI IGMP/MLD page some setting not work
Maintenance	[#164747] [Maintenance] CPE not support SP Domain.
WLAN	[#164710] [WLAN] WLAN Station Status page cannot display any information when wireless client is connected. [#164544] [WLAN] WPS LED isn't amber blinking when WPS process is in progress.
Security	[#164552] [Security] Some MAC Filter CLI can not work. [#164485] [Security] Parental Control work fail.
Routing	[#164480] [Routing] RIP function cannot work. (CPE cannot send RIP packets)
DLNA	[#164422] [DLNA] DLNA work fail.
VoIP	[#168271] [VoIP] CPE has support G.726-24 and G.726-32 codec.

Modifications in 5.70(ACDZ.0)b1

● Feature Enhancement

Modified Modules	Features Enhancement List

● Bug Fixed

Modified Modules	Bug Fixed List
System	[#164359] [System] CPE upgrade FW via expressboot but GUI/Console display V5.70(ACDZ.0)b0