EtherLINQ Configuration Command Reference

Tech Note ELTN0001

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Introduction

The tables below document the available configuration commands for Proxicast's EtherLINQ 4G LTE Router. These are the recognized commands that are valid in the EtherLINQ's Additional Configuration Settings field.

Configuration commands have the format:
command=value
with a space required between each value and the next command. No spaces are permitted immediately before or after the equals sign.

The commands are grouped by function but may be entered into the EtherLINQ in any order. Command values are preserved across system reboots unless otherwise noted.

The tables below indicate the command syntax, allowed values, whether the command is generated (G) internally by the EtherLINQ'a web GUI or must be manually (M) entered into the Additional Configuration Settings field and the minimum EtherLINQ firmware version which supports the command. If a generated parameter is entered into the Additional Configuration Settings field, its value will override the generated value.

The EtherLINQ's web GUI interface has fields for the most commonly used parameters and will automatically write the necessary commands in the proper format. Manual commands are for advanced or diagnostic functions.

MODE SETTINGS

Command	Type	F/W	Description
PM=*PPP* or *NAT* or *VPN*	G	1.3.0	Primary operating mode. Valid options: PPP = IP Pass-Through (bridge) NAT = Network Address Translation (router) VPN = Virtual Cable Mode

NAT ROUTER MODE SETTINGS

Command	Type	F/W	Description
MYIP=*x.y.z.t*	G	1.3.0	IP address assigned to the EtherLINQ when operating in NAT Router Mode. Default = 192.168.1.1
MYNM=*x.y.z.t*	G	1.3.0	IP netmask assigned to the EtherLINQ when operating in NAT Router Mode. Default = 255.255.255.0
DISABLEDHCP=*0 or 1*	G	2.2.90	1 = Disable DHCP server function
MYDHCPSTART=*x.y.z.t*	G	1.3.0	Beginning IP address for DHCP Server to use in NAT Router mode. Default = 192.168.1.33
MYDHCPEND=*x.y.z.t*	G	1.3.0	Ending IP address for DHCP Server to use in NAT Router mode. Default = 192.168.1.161
MYDHCPLEASE=n	M	5.2.6	Number of seconds to reserve a DHCP lease assigned to a LAN client device. Default = 864000 (10 days)
NATS	G		String holding NAT Table values

VIRTUAL CABLE MODE SETTINGS

Command	Type	F/W	Description
VS=*string*	G	1.3.0	Virtual Cable SwitchBoard server address. Default = vc.etherlinq.net:9999
VA=*string*	G	1.3.0	Virtual Cable Mode Account Name. Use a globally unique identifier such as your email address.
VC=*string*	G	1.3.0	Virtual Cable Network Name. All EtherLINQs which are communicating among themselves must have the same Network Name value.
VK=*aes* or *aeshex* or *twofish*	G		Virtual Cable Encryption Algorithm. All EtherLINQs which are communicating among themselves must use the same algorithm.
VP=*string*	G	1.3.0	Virtual Cable Network Encryption Key (up to 32 char or aes & twofish; exactly 64 characters for aeshex)

			used to encryption Virtual Cable communications. For maximum security choose a long key. To disable encryption leave the password field blank. All EtherLINQs which are communicating among themselves must use the same password key.
IP=*x.y.z.t* **NM=*a.b.c.d*** **DG=*e.f.g.h***	M	1.3.0	Static IP settings for use when there is no WAN DHCP server available - EtherLINQ router will automatically establish a VPN (Virtual Cable) using its Ethernet port if there is no WAN connection.

LTE MODEM SETTINGS

Command	Type	F/W	Description
MOD_APN=*string*	G	1.3.0	Access Point Name. Cellular access point to which the SIM has been assigned by the mobile operator.
MOD_PIN=*number*	G	1.3.0	SIM PIN code required to unlock modem's SIM card prior to use (optional).
MOD_MTU=*number*	G	2.2.63	Forces MTU size to N. If not specified, MTU=1428.
MOD_AP_PROTOCOL=*disabled* or *icmp* or *http*	G		Protocol to use when sending keep-alive packets.
MOD_AUTOPING=*string*	G		IP address or FQDN of destination for keep-alive packets.
MOD_APF=*number*	G	1.4.0	Time in seconds between AutoPing messages (frequency).
MOD_APT=*number*	G	1.4.0	Length of time in seconds to wait for each message to be acknowledges (max. latency).
MOD_APL=*number*	G	1.4.0	Number of consecutive non-acknowledged messages that constitute a failed connection (tolerance).
ALLOWROAMING=*0* or *1*			0 = Do not allow cellular connections while roaming. 1 = Allow roaming connections.

WAN SETTINGS

Command	Type	F/W	Description
WAN_PORT=*Disabled* or *WAN*,or *LAN*	G		Determines the function of the WAN/LAN2 Ethernet port.
WAN_TYPE=*DHCP* or *Static*			How the Ethernet WAN port should obtain an IP address.
WAN_MTU=*number*	G	2.2.63	Forces MTU size to N. If not specified, MTU=1500.

WAN_IP=*x.y.z.t*	G	1.3.0	IP address assigned to the Ethernet WAN.
WAN_NM=*x.y.z.t*	G	1.3.0	IP netmask assigned to the Ethernet WAN.
WAN_GW=*x.y.z.t*	G	1.3.0	IP address of the default gateway for the Ethernet WAN.
WAN_DNS1=*x.y.z.t*	G	1.3.0	IP netmask assigned to the Ethernet WAN.
WAN_PRIORITY=*1* or *2*	G		1 = Ethernet, LTE 2 = LTE, Ethernet
WAN_FALLBACK=*number*	G		# of seconds between down interface status checks.
AP_PROTOCOL=*disabled* or *icmp* or *http*	G		Protocol to use when sending keep-alive packets.
AUTOPING=*string*	G		IP address or FQDN of destination for keep-alive packets.
APF=*number*	G	1.4.0	Time in seconds between AutoPing messages (frequency).
APT=*number*	G	1.4.0	Length of time in seconds to wait for each message to be acknowledges (max. latency).
APL=*number*	G	1.4.0	Number of consecutive non-acknowledged messages that constitute a failed connection (tolerance).
TTLCLOAK=1	M	2.2.104	Prevents the EtherLINQ from decrementing the Time-To-Live counter on packets sent to the WAN or LTE interface. Makes the EtherLINQ “invisible” to ISP’s that restrict traffic based on expected TTL values.

WIFI SETTINGS

Command	Type	F/W	Description
WIFIDISABLED=*0* or *1*	G	1.3.0	0 = WiFi Enabled 1 = WiFi Disabled.
WIFISSID=*string*	G	1.3.0	WiFi network name (max 32 char).
HIDESSID=*0* or *1*	G	2.2.63	0 = Broadcast SSID. 1 = Do not broadcast SSID..
WIFIMODE=*11bgn* or *11b* or *11g* or *11n* or *11bg* or *11ng*	G		802.11 protocols to use/
WIFICHAN=*auto* or *number [1 to 11]*	G		WiFi channel number to use.
WIFIWMM=*0* or *1*	G	1.4.0	0 = Disable Wireless MultiMedia

			1 = Enable Wireless MultiMedia
WIFISEC=*none* or *wep* or *psk* or *psk2*	G	1.4.0	WiFi security technique to use.
WIFIPASS=*string*	G	1.4.0	WiFi password.

IPSEC SETTINGS

Command	Type	F/W	Description
IPSEC_ENABLED=*0* or *1*	G	1.3.0	0 = IPSec Disabled. 1 = IPSec Enabled.
IPSEC_LOG_LEVEL=*0* or *5*	G	1.3.0	0 = Normal IPSec Logging 5 = Debug Level IPSec Logging.

GPS SETTINGS

Command	Type	F/W	Description
GPSENABLED=*0* or *1*	G	1.3.0	0 = GPS Disabled. 1 = GPS Enabled.
GLL=*0* or *1* **GGA=*0* or *1*** **GSA=*0* or *1*** **GST=*0* or *1*** **GSV=*0* or *1*** **RMC=*0* or *1*** **VTG=*0* or *1*** **GNGNS=*0* or *1*** **GNGSA=*0* or *1*** **GLGSV=*0* or *1***	G	1.3.0	0 = Disable NMEA sentence. 1 = Enable NMEA sentence.
TAG=*string*	G		TAG Block string prepended to NMEA sentences.
PUBTYPE=*tcp* or *udp*	G		Packet type used when publishing NMEA stream.
PUBPORT=*number*	G		Port number to publish NMEA stream on.
SENDADDRESS= *x.y.z.t*			IP address of where to push NMEA stream.
SENDTYPE= *tcp* or *udp*			Packet type used when pushing NMEA stream to a remote address.
SENDPORT= *number*			Port number to publish NMEA stream to on remote address.

WEBCAM SETTINGS

Command	Type	F/W	Description

GPSENABLED=*0* or *1*	G	1.3.0	0 = GPS Disabled. 1 = GPS Enabled.
GLL=*0* or *1* **GGA=*0* or *1*** **GSA=*0* or *1*** **GST=*0* or *1*** **GSV=*0* or *1*** **RMC=*0* or *1*** **VTG=*0* or *1*** **GNGNS=*0* or *1*** **GNGSA=*0* or *1*** **GLGSV=*0* or *1***	G	1.3.0	0 = Disable NMEA sentence. 1 = Enable NMEA sentence.
TAG=*string*	G		TAG Block string prepended to NMEA sentences.
PUBTYPE=*tcp* or *udp*	G		Packet type used when publishing NMEA stream.

ROD=<0, 1>	G	1.3.0	Reboot on Disconnect. Reboot EtherLINQ when USB connection is lost. Valid option: 0 = Disabled, 1 = Enabled
HTTPPORT=<number>	G	1.3.0	TCP port for the EtherLINQ's internal HTTP (web) Server to listen on. Default = 8080
HTTPPASS=<string>	G	1.3.0	Password required to access the EtherLINQ's internal HTTP (web) Server. Default = 1234
BRIDGEIP=<x.y.z.t>	M	1.4.1	Sets "internal" IP address of bridge to x.y.z.t If not specified BRIDGEIP=192.0.2.1 EtherLINQ is always reachable via its BRIDGEIP address regardless of operation mode.
NOAUTODDNS=1	M	1.6.22	Disable auto DDNS registration @ EtherLINQ.net (v1.6.20+). Use this when USB modem has a "restricted" WAN IP (no Internet access).
NOREMOTEMGMT=1	M	2.2.12	Disables remote management of the EtherLINQ via the WAN interface.
FORCEDNS=<x.y.z.t>	M	2.1.0	Force EtherLINQ to use the indicated IP address as its DNS.
REMOTEASSISTANCE=<x.y.z.t>	M	1.3.0	Activate Remote Assistance mode and set IP address to x.y.z.t - allows Proxicast engineers to log on to the routers remotely and configure them.
WLIP=<x.y.z.t>, <a.b.c.d>	G	2.2.65	List if IP addresses permitted to make WAN connections. Blank permits all.

DYNDNS SETTINGS

Command	Type	F/W	Description
DH=<string>	G	1.4.0	DynDNS Hostname. Specify the fully qualified domain name (e.g. myrouter.dyndns.org)
DU=<string>	G	1.4.0	DynDNS account user login name (case sensitive)
DP=<string>	G	1.4.0	DynDNS account user password (case sensitive)

ADVANCED SETTINGS

Command	Type	F/W	Description
SYSTEMNAME=<string>	G	2.1.0	Descriptive name assigned to EtherLINQ for identification. No spaces allowed.
ROD=<0, 1>	G	1.3.0	Reboot on Disconnect. Reboot EtherLINQ when USB connection is lost. Valid option: 0 = Disabled, 1 = Enabled
HTTPPORT=<number>	G	1.3.0	TCP port for the EtherLINQ's internal HTTP (web) Server to listen on. Default = 8080
HTTPPASS=<string>	G	1.3.0	Password required to access the EtherLINQ's internal HTTP (web) Server. Default = 1234
BRIDGEIP=<x.y.z.t>	M	1.4.1	Sets "internal" IP address of bridge to x.y.z.t If not specified BRIDGEIP=192.0.2.1 EtherLINQ is always reachable via its BRIDGEIP address regardless of operation mode.
NOAUTODDNS=1	M	1.6.22	Disable auto DDNS registration @ EtherLINQ.net (v1.6.20+). Use this when USB modem has a "restricted" WAN IP (no Internet access).
NOREMOTEMGMT=1	M	2.2.12	Disables remote management of the EtherLINQ via the WAN interface.
FORCEDNS=<x.y.z.t>	M	2.1.0	Force EtherLINQ to use the indicated IP address as its DNS.

REMOTEASSISTANCE=<x.y.z.t>	M	1.3.0	Activate Remote Assistance mode and set IP address to x.y.z.t - allows Proxicast engineers to log on to the routers remotely and configure them.
WLIP=<x.y.z.t>, <a.b.c.d>	G	2.2.65	List if IP addresses permitted to make WAN connections. Blank permits all.

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