

## Linux Kernel Update for UDPLite protocol

### Scope:

To update linux kernel 2.6.11 to support new transport protocol UDPLite. RFC 3828.

### Description of the changes done:

- UDP-Lite implementation was based on UDP kernel code, with modification to checksum coverage field.
- New protocol type added i.e. IP\_PROTO\_UDPLITE = 136
- New Socket type added i.e. SOCK\_LDGRAM = 6
- New Socket option type added i.e. SOL\_UDPLITE = 136
- UDPLITE socket option added for send and receive sockets i.e. UDPLITE\_SEND\_CHKLEN, UDPLITE\_RECV\_CHKLEN

### Patch for linux kernel 2.6.11:

Same patch can be applied to kernel versions from 2.6.11 to 2.6.11.8(latest)



udplite-kernel-2.6.11  
.patch

### To apply this patch:

Download linux kernel 2.6.11 or later (until 2.6.11.8)

Untar the downloaded kernel

Cd linux-2.6.11.x

Patch -p1 <path to patchfile/udplite.kernel-2.6.11.patch>

Config the kernel <make menuconfig/xconfig>

And build the kernel code

### Example client/server application:

Update the /usr/include/netinet/in.h, udplite.h

Update the /usr/include/bits/socket.h



in.h



socket.h



udplite.h



udpliteapp.tar

Extract these object files from [www.erg.abdn.ac.uk/users/william/udp-lite](http://www.erg.abdn.ac.uk/users/william/udp-lite)