

Re: UDP checksum problem

Source: <http://linux.derkeiler.com/Newsgroups/comp.os.linux.networking/2007-08/msg00412.html>

- *From:* Tauno Voipio <tauno.voipio@xxxxxxxxxxxxxx>
 - *Date:* Sun, 26 Aug 2007 18:08:20 GMT
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r3gis wrote:

On Aug 20, 11:58 pm, Jack Snodgrass <jacks_temp_id_bf2...@xxxxxxxxxxxxxx> wrote:

On Mon, 20 Aug 2007 14:00:25 +0000, r3gis wrote:

Hi !
For some strange reason I cant get correct checksums when I am sending packets through simple UDP socket.Can anyone tell me what I am doing wrong ?

The code is following :

```
int sendUDP(char* buf,int size,char* ip_str,char* port_str) {  
  
    int sockfd, portno, ip;  
    struct sockaddr_in serv_addr;  
    sockfd = socket(PF_INET, SOCK_DGRAM,0); if (sockfd <  
    0)  
        error("ERROR opening socket");  
    memset((void*)&serv_addr,0,sizeof(struct sockaddr_in));  
    serv_addr.sin_family=PF_INET;  
    portno=atoi(port_str);  
    serv_addr.sin_port = htons(portno);  
    serv_addr.sin_addr.s_addr=inet_addr(ip_str);  
    if(serv_addr.sin_addr.s_addr==-1)  
        error("wrong ip");  
    int len=sendto(sockfd,buf,size,0,(struct
```

Re: UDP checksum problem

```
sockaddr*)&serv_addr,sizeof(serv_addr));  
close(sockfd);
```

```
return len;  
}
```

I didn't look at this too close.... just wanted to clarify something first.... you don't have anything to do with the CRC... that's a built-in feature... (how ever you want to phrase it) are you 100% sure your getting a bad crc error... where are you seeing this?

jack

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D.A.M. – Mothers Against Dyslexia

see <http://www.jacksnodgrass.com> for my contact info.

jack – Grapevine/Richardson

I have checked this in Wireshark and tcpdump. They both indicate bad CRC for all UDP packets. Fortunately I have been able to solve this . It appeared that is was caused by the inet_addr function O_o , when I have changed it to inet_aton the CRC is calculated correctly .

If the bad checksum is indicated on datagrams sent by the same computer running the libpcap application (tcpdump, ethereal, wireshark ...), the most probable cause is that the checksum calculation is off-loaded to the network interface hardware. The checksums are not calculated yet at the point of processing where the capture is done.

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