

## strongSwan - Issue #462

### strongswan android app can not use on android 4.4 OS

06.12.2013 13:59 - yang sun

<b>Status:</b> Feedback	<b>Resolution:</b>
<b>Priority:</b> Normal	
<b>Assignee:</b> Tobias Brunner	
<b>Category:</b> android	
<b>Affected version:</b> 5.1.1	
<b>Description</b> when I update to latest android os 4.4 the strongswan android app can not use but ok for android os 4.3 what's problem?	
<b>Related issues:</b>	
Related to Issue #695: StrongSwan Android: failed to setup up TUN device with...	<b>Closed</b> <b>01.09.2014</b>
Has duplicate Issue #473: problem with strongswan android app for android 4.4	<b>Rejected</b> <b>29.12.2013</b>
Has duplicate Issue #613: StrongSwan fails to reconnect after no internet for...	<b>Closed</b>
Has duplicate Issue #668: TUN overlapping in Android 4.4.2	<b>Rejected</b>

#### History

##### #1 - 06.12.2013 17:54 - Tobias Brunner

- Category set to android
- Status changed from New to Feedback
- Assignee set to Tobias Brunner
- Priority changed from Urgent to Normal

I don't know what your exact problem might be as you provided no logs (from logcat and/or the app). But there are currently several known issues on Android 4.4.

Unfortunately, Google changed several aspects of the VpnService implementation and these changes broke most VPN apps.

You might want to have a look at the open issues on Google's issue tracker: [62714](#), [61948](#), [62410](#), [62872](#), [61678](#), [62588](#).

Apparently, some of these have been fixed with 4.4.1.

##### #2 - 09.12.2013 09:51 - Tyrael Wang

Maybe , @yang sun meant Stongswan for android App did not support android 4.4 , because the new ART mode would crash the app

##### #3 - 09.12.2013 09:54 - yang sun

@Tyrael Wang yes. android App did not support android 4.4. do you know how to solve it?

##### #4 - 09.12.2013 15:38 - Tobias Brunner

Tyrael Wang wrote:

Maybe , @yang sun meant Stongswan for android App did not support android 4.4 , because the new ART mode would crash the app

[ART](#) is experimental and only enabled if the user does so manually in the developer options. Even so, the app actually seems to work fine with ART (I just tried it on a Nexus 5), so that's apparently not an issue.

yang sun wrote:

@Tyrael Wang yes. android App did not support android 4.4. do you know how to solve it?

You still don't describe what problem your are facing exactly (nor the device you are using or any other useful information).

#5 - 09.12.2013 15:49 - yang sun

@Tyrael Wang hi you can use strongswan android app in your Nexus 5 without problem?

#6 - 29.12.2013 16:31 - yang sun

@Tyrael Wang still problem with strongswan android app for android 4.4

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[22:00:24] zhaozhongwei: 12-29 09:03:50.577: D/dalvikvm(1417): GC_FOR_ALLOC freed 1095K, 26% free 6017K/8068K,
paused 30ms, total 36ms
12-29 09:03:50.797: I/charon(1417): 00[KNL] kernel-netlink plugin might require CAP_NET_ADMIN capability
12-29 09:03:51.137: I/charon(1417): 00[LIB] loaded plugins: androidbridge charon android-log openssl fips-prf
random nonce pubkey pkcs1 pkcs8 pem xcbc hmac socket-default kernel-netlink eap-identity eap-mschapv2 eap-md5
eap-gtc
12-29 09:03:51.137: I/charon(1417): 00[LIB] unable to load 9 plugin features (9 due to unmet dependencies)
12-29 09:03:51.137: I/charon(1417): 00[JOB] spawning 16 worker threads
12-29 09:03:51.157: I/CharonVpnService(1417): charon started
12-29 09:03:51.157: I/charon(1417): 08[IKE] initiating IKE_SA android[5] to 98.126.129.243
12-29 09:03:51.227: I/charon(1417): 08[ENC] generating IKE_SA_INIT request 0 [ SA KE No N(NATD_S_IP) N(NATD_D_
IP) ]
12-29 09:03:51.317: I/charon(1417): 08[NET] sending packet: from 10.0.2.15[38029] to 98.126.129.243[500] (660
bytes)
12-29 09:03:51.677: I/charon(1417): 11[NET] received packet: from 98.126.129.243[500] to 10.0.2.15[38029] (312
bytes)
12-29 09:03:51.687: I/charon(1417): 11[ENC] parsed IKE_SA_INIT response 0 [ SA KE No N(NATD_S_IP) N(NATD_D_IP)
N(MULT_AUTH) ]
12-29 09:03:51.727: I/charon(1417): 11[IKE] local host is behind NAT, sending keep alives
12-29 09:03:51.757: I/charon(1417): 11[IKE] sending cert request for "C=CH, O=strongSwan, CN=strongSwan CA"
12-29 09:03:51.757: I/charon(1417): 11[IKE] establishing CHILD_SA android
12-29 09:03:51.767: I/charon(1417): 11[ENC] generating IKE_AUTH request 1 [ IDi N(INIT_CONTACT) CERTREQ CPRQ(A
DDR ADDR6 DNS DNS6) N(ESP_TFC_PAD_N) SA TSi TSr N(MOBIKE_SUP) N(NO_ADD_ADDR) N(MULT_AUTH) N(EAP_ONLY) ]
12-29 09:03:51.807: I/charon(1417): 11[NET] sending packet: from 10.0.2.15[37122] to 98.126.129.243[4500] (524
bytes)
12-29 09:03:52.167: I/charon(1417): 12[NET] received packet: from 98.126.129.243[4500] to 10.0.2.15[37122] (12
60 bytes)
12-29 09:03:52.167: I/charon(1417): 12[ENC] parsed IKE_AUTH response 1 [ IDr CERT AUTH EAP/REQ/ID ]
12-29 09:03:52.167: I/charon(1417): 12[IKE] received end entity cert "C=CH, O=strongSwan, CN=98.126.129.243"
12-29 09:03:52.177: I/charon(1417): 12[CFG] using certificate "C=CH, O=strongSwan, CN=98.126.129.243"
12-29 09:03:52.177: I/charon(1417): 12[CFG] using trusted ca certificate "C=CH, O=strongSwan, CN=strongSwan
CA"
12-29 09:03:52.177: I/charon(1417): 12[CFG] reached self-signed root ca with a path length of 0
12-29 09:03:52.187: I/charon(1417): 12[IKE] authentication of 'C=CH, O=strongSwan, CN=98.126.129.243' with RSA
signature successful
12-29 09:03:52.187: I/charon(1417): 12[IKE] server requested EAP_IDENTITY (id 0x00), sending 'test'
12-29 09:03:52.197: I/charon(1417): 12[ENC] generating IKE_AUTH request 2 [ EAP/RES/ID ]
12-29 09:03:52.197: I/charon(1417): 12[NET] sending packet: from 10.0.2.15[37122] to 98.126.129.243[4500] (76
bytes)
12-29 09:03:52.517: I/charon(1417): 13[NET] received packet: from 98.126.129.243[4500] to 10.0.2.15[37122] (10
8 bytes)
12-29 09:03:52.517: I/charon(1417): 13[ENC] parsed IKE_AUTH response 2 [ EAP/REQ/MSCHAPV2 ]
12-29 09:03:52.517: I/charon(1417): 13[IKE] server requested EAP_MSCHAPV2 authentication (id 0x01)
12-29 09:03:52.527: I/charon(1417): 13[ENC] generating IKE_AUTH request 3 [ EAP/RES/MSCHAPV2 ]
12-29 09:03:52.527: I/charon(1417): 13[NET] sending packet: from 10.0.2.15[37122] to 98.126.129.243[4500] (140
bytes)
12-29 09:03:52.837: I/charon(1417): 14[NET] received packet: from 98.126.129.243[4500] to 10.0.2.15[37122] (12
4 bytes)
12-29 09:03:52.837: I/charon(1417): 14[ENC] parsed IKE_AUTH response 3 [ EAP/REQ/MSCHAPV2 ]
12-29 09:03:52.837: I/charon(1417): 14[IKE] EAP-MS-CHAPv2 succeeded: '(null)'
12-29 09:03:52.847: I/charon(1417): 14[ENC] generating IKE_AUTH request 4 [ EAP/RES/MSCHAPV2 ]
12-29 09:03:52.857: I/charon(1417): 14[NET] sending packet: from 10.0.2.15[37122] to 98.126.129.243[4500] (76
bytes)
12-29 09:03:53.197: I/charon(1417): 15[NET] received packet: from 98.126.129.243[4500] to 10.0.2.15[37122] (76
bytes)
12-29 09:03:53.197: I/charon(1417): 15[ENC] parsed IKE_AUTH response 4 [ EAP/SUCC ]
12-29 09:03:53.197: I/charon(1417): 15[IKE] EAP method EAP_MSCHAPV2 succeeded, MSK established
12-29 09:03:53.197: I/charon(1417): 15[IKE] authentication of 'test' (myself) with EAP
12-29 09:03:53.197: I/charon(1417): 15[ENC] generating IKE_AUTH request 5 [ AUTH ]
12-29 09:03:53.197: I/charon(1417): 15[NET] sending packet: from 10.0.2.15[37122] to 98.126.129.243[4500] (92
bytes)
12-29 09:03:55.207: I/charon(1417): 12[IKE] retransmit 1 of request with message ID 5
12-29 09:03:55.207: I/charon(1417): 12[NET] sending packet: from 10.0.2.15[37122] to 98.126.129.243[4500] (92
bytes)
12-29 09:03:55.507: I/charon(1417): 13[NET] received packet: from 98.126.129.243[4500] to 10.0.2.15[37122] (25
2 bytes)
12-29 09:03:55.517: I/charon(1417): 13[ENC] parsed IKE_AUTH response 5 [ AUTH CPRP(ADDR DNS DNS) SA TSi TSr N(
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MOBIKE_SUP) N(ADD_4_ADDR) N(ADD_4_ADDR) ]
12-29 09:03:55.517: I/charon(1417): 13[IKE] authentication of 'C=CH, O=strongSwan, CN=98.126.129.243' with EAP
successful
12-29 09:03:55.527: I/charon(1417): 13[IKE] IKE_SA android[5] established between 10.0.2.15[test]...98.126.129
.243[C=CH, O=strongSwan, CN=98.126.129.243]
12-29 09:03:55.527: I/charon(1417): 13[IKE] scheduling rekeying in 35756s
12-29 09:03:55.527: I/charon(1417): 13[IKE] maximum IKE_SA lifetime 36356s
12-29 09:03:55.577: I/charon(1417): 13[IKE] installing new virtual IP 10.12.0.5
12-29 09:03:55.587: I/charon(1417): 13[IKE] CHILD_SA android{5} established with SPIs ad792da2_i clcd74c6_o an
d TS 10.12.0.5/32 === 0.0.0.0/0
12-29 09:03:55.587: I/charon(1417): 13[DMN] setting up TUN device for CHILD_SA android{5}
12-29 09:03:55.897: W/System.err(1417): java.lang.IllegalStateException: command '82 interface fwmark rule add
tun0' failed with '400 82 Failed to add fwmark rule (No such device) '
12-29 09:03:55.907: W/System.err(1417): at android.os.Parcel.readException(Parcel.java:1469)
12-29 09:03:55.907: W/System.err(1417): at android.os.Parcel.readException(Parcel.java:1415)
12-29 09:03:55.937: W/System.err(1417): at android.net.IConnectivityManager$Stub$Proxy.establishVpn(IConnecti
vityManager.java:1555)
12-29 09:03:55.947: W/System.err(1417): at android.net.VpnService$Builder.establish(VpnService.java:471)
12-29 09:03:55.947: W/System.err(1417): at org.strongswan.android.logic.CharonVpnService$BuilderAdapter.establish(CharonVpnService.java:736)
12-29 09:03:55.977: W/System.err(1417): at dalvik.system.NativeStart.run(Native Method)
12-29 09:03:55.977: I/charon(1417): 13[LIB] builder: failed to build TUN device
12-29 09:03:56.007: I/charon(1417): 13[DMN] failed to setup TUN device
12-29 09:03:56.127: I/charon(1417): 13[IKE] peer supports MOBIKE
12-29 09:03:56.337: I/charon(1417): 00[IKE] deleting IKE_SA android[5] between 10.0.2.15[test]...98.126.129.24
3[C=CH, O=strongSwan, CN=98.126.129.243]
12-29 09:03:56.337: I/charon(1417): 00[IKE] sending DELETE for IKE_SA android[5]
12-29 09:03:56.337: I/charon(1417): 00[ENC] generating INFORMATIONAL request 6 [ D ]
12-29 09:03:56.367: I/charon(1417): 00[NET] sending packet: from 10.0.2.15[37122] to 98.126.129.243[4500] (76
bytes)
12-29 09:03:56.507: I/CharonVpnService(1417): charon stopped
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#### **#7 - 06.01.2014 13:07 - Tobias Brunner**

Could be either the same or a similar issue as [62410](#). The message is not exactly the same and it seems to happen during the initial initiation not when the TUN devices are created overlapping (did you do this right after rebooting the device?).

#### **#8 - 10.06.2014 13:45 - Tobias Brunner**

- Has duplicate Issue #613: StrongSwan fails to reconnect after no internet for long period of time added

#### **#9 - 04.08.2014 12:54 - Tobias Brunner**

- Has duplicate Issue #668: TUN overlapping in Android 4.4.2 added

#### **#10 - 01.09.2014 13:22 - Tobias Brunner**

- Related to Issue #695: StrongSwan Android: failed to setup up TUN device without DNS added