

OsmoGSMTester - Bug #3031

ofono: wrong first DNS reported in log

03/04/2018 07:15 PM - pespin

Status: Closed	Start date: 03/04/2018
Priority: Normal	Due date:
Assignee: lynxis	% Done: 100%
Category:	
Target version:	
Spec Reference:	
Description	
I saw in a test that once the context is attached successfully, ofono prints the properties:	
<pre>/sierra_2: context activated {apn='inet46', path='/sierra_2/context2', properties={AccessPointName='inet46', Active=True, AuthenticationMethod='chap', IPv6.Settings={}, Name='Internet', Password='', Protocol='ip', Settings={Address='176.16.46.1', DomainNameServers=['8.8.8.8', '8.8.8.8'], Gateway='176.16.46.2', Interface='wwan1', Method='static', Netmask='255.255.255.252'}, Type='internet', Username='ogt'}, user='ogt'}</pre>	
However, osmo-ggsn config for that IP states 1st DNS server is 192.168.0.1 instead of 8.8.8.8:	
<pre>apn inet46 gtpu-mode tun tun-device tun46 type-support v4v6 ip prefix dynamic 176.16.46.0/24 ip dns 0 192.168.100.1 ip dns 1 8.8.8.8 ip ifconfig 176.16.46.0/24 ipv6 prefix dynamic fde4:8dba:82e1:2000:0:0:0:0/56 ipv6 dns 0 2001:4860:4860::8888 ipv6 dns 1 2001:4860:4860::8844 ipv6 ifconfig fde4:8dba:82e1:2000:0:0:0:0/56 ipv6 link-local fe80::1111:1111:1111:1112/64 no shutdown</pre>	
It would be nice to check the pcap traces to see if the 1st address is announced correctly or not, then it may be an ofono/modem issue.	

History

#1 - 03/04/2018 07:27 PM - pespin

osmo-ggsn seems to be sending the DNS in PCO fine according to pcap trace.

#2 - 03/04/2018 07:31 PM - pespin

Packet forwarded to the MS by sgsn is fine too. the modem or ofono is changing the ip. Maybe the change is done to avoid presenting private address as a DNS?

#3 - 03/04/2018 07:32 PM - pespin

- Subject changed from wrong first DNS reported in log to ofono: wrong first DNS reported in log

#4 - 03/04/2018 07:54 PM - laforge

Hi Pau,

On Sun, Mar 04, 2018 at 07:31:52PM +0000, pespin [REDMINE] wrote:

Packet forwarded to the MS by sgsn is fine too. the modem or ofono is changing the ip. Maybe the change is done to avoid presenting private

address as a DNS?

I highly doubt this is intentional. Almost all operators will hand out private IP addresses to the mobile phones, and I wouldn't be surprised if many/most also operate their own DNS servers behind the GGSN. There would be no need for those to be public addresses.

Also, at least with modem modules like those in osmo-gsm-tester, they're used in machine-to-machine use cases where people sometimes use a "private APN" that will not have any public internet connectivity.

I suspect this change is unintentional. Maybe the second address is read twice from an array, rather than 1st + 2nd somewhere in ofono or in the modem firmware. Looking at QMI traces would help to establish which of the two is faulty. Also, comparing against other modem models gives an idea if it's more likely ofono or the modem.

#5 - 12/11/2018 06:30 PM - pespin

Update: This issue still happens. Today in osmo-gsm-tester prod:

```
19:24:43.160707 tst /gobi_2: context activated {apn='inet46', path='/gobi_2/context2', properties={AccessPointName='inet46', Active=True, AuthenticationMethod='chap', IPv6.Settings={}, Name='Internet', Password='', Protocol='ip', Settings={Address='176.16.46.2', DomainNameServers=['8.8.8.8', '8.8.8.8'], Gateway='176.16.46.1', Interface='wwan2', Method='static', Netmask='255.255.255.252'}, Type='internet', Username='ogt'}, user='ogt'}
```

And the osmo-ggsn config:

```
ip dns 0 192.168.100.1
ip dns 1 8.8.8.8
```

ofono output:

```
Dec 11 19:28:18 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/gprs.c:get_ss_info_cb()
Dec 11 19:28:18 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/gprs.c:handle_ss_info()
Dec 11 19:28:18 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/gprs.c:extract_ss_info()
Dec 11 19:28:18 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/gprs.c:extract_ss_info() radio in use 4
Dec 11 19:28:18 osmo-gsm-tester-prod ofonod[11951]: src/gprs.c:registration_status_cb() /gobi_1 error 0 status 1
Dec 11 19:28:18 osmo-gsm-tester-prod ofonod[11951]: src/gprs.c:ofono_gprs_status_notify() /gobi_1 status registered (1)
Dec 11 19:28:19 osmo-gsm-tester-prod ofonod[11951]: src/gprs.c:add_context() Registering new context
Dec 11 19:28:19 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/gprs-context.c:qmi_activate_primary() cid 1
Dec 11 19:28:19 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/qmibridge.c:ask_qmi() _REQ: QMI QMUX:
QMI length = 35
QMI flags = 0x00
QMI service = "wds"
QMI client = 6
QMI QMI:
QMI flags = "none"
QMI transaction = 328
QMI tlv_length = 23
QMI message = "Start Network" (0x0020)
QMI TLV:
QMI type = "APN" (0x14)
QMI length = 6
QMI value = 69:6E:65:74:34:36
QMI translated = inet46
QMI TLV:
QMI type = "IP Family Preference" (0x19)
QMI length = 1
QMI value = 04
QMI translated = ipv4
QMI TLV:
QMI type = "Authentication Preference" (0x16)
QMI length = 1
QMI value = 02
QMI translated = chap
QMI TLV:
```

```

QMI type = "Username" (0x17)
QMI length = 3
QMI value = 6F:67:74
QMI translated = ogt
Dec 11 19:28:20 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/qmibridge.c:ask_qmi() READ: QMI QMUX:
QMI length = 26
QMI flags = 0x80
QMI service = "wds"
QMI client = 6
QMI QMI:
QMI flags = "response"
QMI transaction = 328
QMI tlv_length = 14
QMI message = "Start Network" (0x0020)
QMI TLV:
QMI type = "Result" (0x02)
QMI length = 4
QMI value = 00:00:00:00
QMI translated = SUCCESS
QMI TLV:
QMI type = "Packet Data Handle" (0x01)
QMI length = 4
QMI value = 78:2A:D3:47
QMI translated = 1205021304
Dec 11 19:28:20 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/gprs-context.c:start_net_cb()
Dec 11 19:28:20 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/gprs-context.c:start_net_cb() packet handle 1205021304
Dec 11 19:28:20 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/qmibridge.c:ask_qmi() _REQ: QMI QMUX:
QMI length = 12
QMI flags = 0x00
QMI service = "wds"
QMI client = 6
QMI QMI:
QMI flags = "none"
QMI transaction = 329
QMI tlv_length = 0
QMI message = "Get Current Settings" (0x002D)
Dec 11 19:28:20 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/qmibridge.c:ask_qmi() READ: QMI QMUX:
QMI length = 26
QMI flags = 0x80
QMI service = "wds"
QMI client = 6
QMI QMI:
QMI flags = "indication"
QMI transaction = 0
QMI tlv_length = 14
QMI message = "Packet Service Status" (0x0022)
QMI TLV:
QMI type = "Connection Status" (0x01)
QMI length = 2
QMI value = 02:00
QMI translated = [ status = 'connected' reconfiguration_
required = 'no' ]
QMI TLV:
QMI type = "IP Family" (0x12)
QMI length = 1
QMI value = 04
QMI translated = ipv4
QMI TLV:
QMI type = 0x13
QMI length = 2
QMI value = 80:88
Dec 11 19:28:20 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/gprs-context.c:pkt_status_notify()
Dec 11 19:28:20 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/gprs-context.c:pkt_status_notify() conn status 2
Dec 11 19:28:20 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/gprs-context.c:pkt_status_notify() ip family 4
Dec 11 19:28:20 osmo-gsm-tester-prod ofonod[11951]: drivers/qmimodem/qmibridge.c:ask_qmi() READ: QMI QMUX:
QMI length = 128
QMI flags = 0x80
QMI service = "wds"
QMI client = 6
QMI QMI:
QMI flags = "response"
QMI transaction = 329

```

```

QMI tlv_length = 116
QMI message = "Get Current Settings" (0x002D)
QMI TLV:
QMI type = "Result" (0x02)
QMI length = 4
QMI value = 00:00:00:00
QMI translated = SUCCESS
QMI TLV:
QMI type = "IPv4 Address" (0x1e)
QMI length = 4
QMI value = 01:2E:10:B0
QMI translated = 2953850369
QMI TLV:
QMI type = "Primary IPv4 DNS Address" (0x15)
QMI length = 4
QMI value = 01:64:A8:C0
QMI translated = 3232261121
QMI TLV:
QMI type = "Secondary IPv4 DNS Address" (0x16)
QMI length = 4
QMI value = 08:08:08:08
QMI translated = 134744072
QMI TLV:
QMI type = "IPv4 Gateway Address" (0x20)
QMI length = 4
QMI value = 02:2E:10:B0
QMI translated = 2953850370
QMI TLV:
QMI type = "IPv4 Gateway Subnet Mask" (0x21)
QMI length = 4
QMI value = FC:FF:FF:FF
QMI translated = 4294967292
QMI TLV:
QMI type = "PCSCF Domain Name List" (0x24)
QMI length = 1
QMI value = 00
QMI translated = {}
QMI TLV:
QMI type = "PCSCF Server Address List" (0x23)
QMI length = 1
QMI value = 00
QMI translated = {}
QMI TLV:
QMI type = "Profile ID" (0x1f)
QMI length = 2
QMI value = 00:01
QMI translated = [ profile_type = '3gpp' profile_index =

```

'1']

```

QMI TLV:
QMI type = "Profile Name" (0x10)
QMI length = 8
QMI value = 70:72:6F:66:69:6C:65:31
QMI translated = profile1
QMI TLV:
QMI type = "PDP Type" (0x11)
QMI length = 1
QMI value = 03
QMI translated = ipv4-or-ipv6
QMI TLV:
QMI type = "APN Name" (0x14)
QMI length = 6
QMI value = 69:6E:65:74:34:36
QMI translated = inet46
QMI TLV:
QMI type = "Authentication" (0x1d)
QMI length = 1
QMI value = 02
QMI translated = chap
QMI TLV:
QMI type = "Username" (0x1b)
QMI length = 3
QMI value = 6F:67:74
QMI translated = ogt
QMI TLV:
QMI type = "GPRS Granted QoS" (0x19)

```


Patch has been merged upstream in master (1749018577d43ff8b3bf0fe565a4814e1d84de88), after 1.26 (so will be available for 1.27).
assigning to [lynxis](#) so he takes that into account when upgrading and packaging our ofono branch.

#13 - 04/11/2019 04:13 PM - lynxis

- Status changed from Feedback to Closed
- % Done changed from 90 to 100

The ofono branch got rebased (by pespin) to catch this patch up.

#14 - 04/11/2019 04:36 PM - pespin

I confirm the issue is fixed with new ofono we use now.

Files

0001-qmi-Fix-Secondary-DNS-overwriting-Primary-DNS.patch	1.59 KB	12/11/2018	pespin
--	---------	------------	--------