高通协议技术期刊 –2015/10/22

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Revision History

Revision	Date	Description
A	Oct 2015	Initial release

Note: There is no Rev. I, O, Q, S, X, or Z per Mil. standards.

Contents

- Latest QXDM version and configuration file .DMC
- MUST CR for FOTA support
- MT VOICE CALL FAILURES ANALYSIS
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- FR29345 EFS/NV Settings to be Read per Sub
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Latest QXDM version and configuration file .DMC

Latest QXDM version: QXDM4 is available to customer.

There is only one log mask: MTF_LogSize. Please use this log mask and give us feedback.

MUST CR for FOTA support

- We have found one CR fix, which is required to support MBN upgrade through FOTA. If OEMs first launch a Non-VoLTE design and then plan to upgrade VoLTE support through FOTA, please get a SBA for **CR826164**. The changes are in AP side.

- Note this CR fix is present in following 8909 builds onwards. So if any OEM is based on an old build, please ask for a SBA.

Baseline	META build on this it is present for the first time	Date of release
LA.1.1	MSM8909.LA.1.1-01141-STD.PROD-1	Oct 15, 2015
LA1.1.C7	MSM8909.LA.1.1.c7-011337110-STD.PROD-3	Oct 16, 2015
LA1.2	MSM8909.LA.1.2-01215-STD.PROD-1	June 12, 2015

MT VOICE CALL FAILURES ANALYSIS

Document [MT VOICE CALL FAILURES ANALYSIS](), DCN: 80-P2930-1 is released. Please refer to this document for MT voice call analysis.

CMCC eHPLMN list /nv/item_files/modem/nas/ehplmn is in CT MBN

Issue:

In some CT MBN file, CMCC eHPLMN /nv/item_files/modem/nas/ehplmn is listed.

Solution:

Please delete this item from CT MBN, or apply SBA for CR923766.

FR29345 EFS/NV Settings to be Read per Sub

- **Background:**
- Currently in BO.2.6 L+1X 7+5 mode, SW (i.e., MMode, LTE, Geran etc) seems only read EFS/NV settings from Sub0. While in 7+5 mode, CT subscription will always map to Sub0 and CMCC/CU subscription will maps to Sub1. As results, if we set DDS (LTE multimode) to CMCC/CU subscription, SW will still read all the EFS/NV settings from Sub0 MBN (CT's settings). Then all the carrier dependent EFS/NVs will be set incorrectly.

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- Ex: fs_handle = mcfg_fopen(file_name, efs_flag, MCFG_FS_DEFFILEMODE, file_type, mcfg_subs_id);

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- **From Data Service side, especially for Data Profiles**, changes are made to uses MCFG FS APIs instead of EFS APIs while reading data profiles which are stored in below respective format.

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- Subs0: /Data_Profiles/Profile1
- Subs1:/Data_Profiles/Profile1_subscription01

- …
- **Conclusion:**
- **Legacy /Data_Profiles/SubsX is NOT used any more.**
- If Customer is using QC MBN solution -> Customer needs to re-flash the newer MBNs which will copy all the profiles under /Data_Profiles/,
- If Customer is NOT using QC MBN solution -> Customer need to copy profiles to /Data_Profiles/ with above mentioned format ProfileX_subscription0Y (Y>=1)

UE side configuration when doing Iperf DL throughput test

- Please follow the below procedure:
- **RNDIS data throughputs:**
- 1. Do Adb root first to be the root user
- 2. Ensure data enable is on and device gets embedded IPv4 and IPv6 address

- Adb root
- Adb shell ip a -> to check ipv4 and ipv6 address
- 3. Enable USB tethering

- From windows command prompt do ipconfig , to check the ip address assigned to the tethered PC
- Example:
- c:\Automation\DS_LTE_TBS_Automation>ipconfig
- Windows IP Configuration
- Ethernet adapter Local Area Connection 2:

UE side configuration when doing Iperf DL throughput test

- Connection-specific DNS Suffix . :
- IPv6 Address. . . . . : 2002:c023:9c17:ead1:714a:d00b:82cd:11fd
- Temporary IPv6 Address. . . . . . : 2002:c023:9c17:ead1:1924:87a2:d70a:d74e
- Link-local IPv6 Address . . . . . : fe80::714a:d00b:82cd:11fd%24
- IPv4 Address. . . . . : 192.168.42.164
- Subnet Mask . . . . : 255.255.255.0
- Default Gateway . . . . : fe80::cd29:abcd:4706:5cfb%24
- 192.168.42.129
- IPv4 address starts with 192.168.42.xx
- IPv6 address will be a global address similar to embedded V6 address
- 4. Since Ipv4 address is a private address , NAT rules needs to be added to route the packets to tethered PC.
- 5. For IPV6 address data transfers , since the address is the global address, we can directly use the IPV6 address assigned to the tethered host for data transfers

UE side configuration when doing Iperf DL throughput test

- Adding NAT rules for IPV4 data transfer:
- Adb shell
- iptables -t nat -I PREROUTING -i rmnet_data0 -j DNAT --to-destination 192.168.42.164
- iptables -I FORWARD -d 192.168.42.164 -j ACCEPT
- Example:
- c:\Automation\DS_LTE_TBS_Automation>adb shell
- root@msm8952_64:/ # iptables -t nat -I PREROUTING -i rmnet_data0 -j DNAT --to-destination 192.168.42.164
- -i rmnet_data0 -j DNAT --to-destination 192.168.42.164 <
- root@msm8952_64:/ # iptables -I FORWARD -d 192.168.42.164 -j ACCEPT
- iptables -I FORWARD -d 192.168.42.164 -j ACCEPT
- root@msm8952_64:/ #

UE side configuration when doing Iperf DL throughput test

- Iperf Commands:
- **UDP :**
- V4 Iperf Commands:
- UL
- Client: iperf 172.22.1.201 –u –l 1470 –b 50m –l 1 -w 1m –t 900 –p 5004 –B 192.168.42.xx
- This is run on tethered host windows command prompt
- Server: iperf –sui 1 –w 1m –p 5004
- This is run on NW Server
- DL:
- Client :iperf –c 172.22.1.100 –u –l 1400 –b 150m –w 1m –l 1 –t 900 –p 5020
- This is run on NW Server
- Server: iperf –sui 1 –w 1m –p 5009
- This is run on tethered host windows command prompt
- Note:
  - In v4 DL we should give embedded Ip address for data transfer
  - 172.22.1.100 is assumed as embedded ipv4 address
  - 172.22.1.201 is assumed as NW server address for this example
  - Please change them accordingly for your tests

UE side configuration when doing Iperf DL throughput test

- V6 Iperf Commands:
- UL
- Client: iperf 2001::10 –V –u –l 1400 –b 50m –l 1 –t 900 –w 1m –p 5004 –B 2002:c023:9c17:ead1:714a:d00b:82cd:11fd
- This is run on tethered host windows command prompt
- Server: iperf –sui 1 –w 1m –p 5004 -V
- This is run on NW Server
- DL:
- Client :iperf –c 2002:c023:9c17:ead1:714a:d00b:82cd:11fd –V –u –l 1400 –b 150m –w 1m –l 1 –t 900 –p 5020
- This is run on NW Server
- Server:iperf –sui 1 –w 1m –p 5009 -V
- This is run on tethered host windows command prompt
- Note:
- 2002:c023:9c17:ead1:714a:d00b:82cd:11fd is assumed as tethered host ipv6 address
- 2001::10 is assumed as NW server IPv6 address for this example
- Please change them accordingly for your tests

UE side configuration when doing Iperf DL throughput test

- **TCP :**
- V4 Iperf Commands:
- UL
- Client: iperf 172.22.1.201 –I 1 -w 1m –t 900 –p 5004 –B 192.168.42.xx
- This is run on tethered host windows command prompt
- Server: iperf –si 1 –w 1m –p 5004
- This is run on NW Server
- DL:
- Client :iperf –c 172.22.1.100 –w 1m –I 1 –t 900 –p 5020
- This is run on NW Server
- Server: iperf –si 1 –w 1m –p 5009
- This is run on tethered host windows command prompt
- Note:
- In v4 DL we should give embedded Ip address for data transfer
- 172.22.1.100 is assumed as embedded ipv4 address
- 172.22.1.201 is assumed as NW server address for this example
- Please change them accordingly for your tests

UE side configuration when doing Iperf DL throughput test

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- 2002:c023:9c17:ead1:714a:d00b:82cd:11fd is assumed as tethered host ipv6 address
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- Please change them accordingly for your tests

Tabasco Modem (TA 1.0) Lab conformance results, IOT reports and Field test results

- As a part of our effort to reduce incoming cases, pertaining to queries for various documents, we've prepared a list of customer shareable docs - applicable to Tabasco 1.0 Modem.

- This list consists of PICS, IOT reports, carrier specific test results reports etc.

- We intend to make this list available to OEM's engineers, working on Tabasco 1.0 Modem based projects.

- Please refer to test results in relevant document(s) before raising a case. This will help in saving your and our engineering time.

- The same information is available in Solution article **00031173.**

Tabasco Modem (TA 1.0) Lab conformance results, IOT reports and Field test results

#	DCN	Document Title
		Master Document
1	80-NV610-2	PRESENTATION: MSM8952 SOFTWARE ARCHITECTURE OVERVIEW
		Modem Software
2	80-NV610-11	MSM8952 Modem Software Overview
		RF Software
3	80-NV610-12	MSM8x52 RF Software Overview
		PICS Documents
4	80-P0794-1	MPSS.TA.1.0 GSM/GPRS/EGPRS PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS)
5	80-P0794-2	MPSS.TA.1.0 3G PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS)
6	80-P0794-3	MPSS.TA.1.0 LTE PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS)
7	80-P0794-4	MPSS.TA.1.0 AGPS AND SUPL PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS)
8	80-P0794-5	MPSS.TA.1.0 USAT, USIM, UICC, SWP AND HCI PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS)

Tabasco Modem (TA 1.0) Lab conformance results, IOT reports and Field test results

		Carrier Specific Documents/Test Reports
		Verizon
9	80-P1707-2	VZW LTE SFN SGS TEST RESULTS FOR MPSS.TA.1.0
10	80-P1707-3	VZW 1X SFN DETAILED REPORT TEST RESULTS FOR MPSS.TA.1.0
11	80-P1707-13	Verizon Wireless Lab Conformance Test Case Results for MPSS.TA.1.0
12	80-P1707-4	VZW EVDO SFN DETAILED REPORT TEST RESULTS FOR MPSS.TA.1.0
		AT&T
13	80-P1707-5	MPSS.TA.1.0 V11.4.1 LAB AND FIELD TEST RESULTS (PTN)
14	80-P1707-6	ATT ADAPT 10776 V11.4.1 LAB AND FIELD TEST CASE RESULTS FOR MPSS.TA.1.0
15	80-P1707-7	3G GCF 3.59 PTCRB 5.24 TEST CASE RESULTS FOR MPSS.TA.1.0
16	80-P1707-8	2G GCF 3.59 PTCRB 5.24 TEST CASE RESULTS FOR MPSS.TA.1.0
17	80-P1707-9	LTE GCF 3.59 PTCRB 5.24 TEST CASE RESULTS FOR MPSS.TA.1.0

Tabasco Modem (TA 1.0) Lab conformance results, IOT reports and Field test results

T-Mobile		
18	80-P1707-10	T-MOBILE LAB CONFORMANCE TEST CASE RESULTS FOR MPSS.TA.1.0
19	80-P1707-11	T-Mobile Current Consumption for MPSS.TA.1.0
20	80-P1707-12	T-Mobile Modem Field Test Results for MPSS.TA.1.0
21	80-P1707-20	T-Mobile HLFS, HSPA+ and LTE Features for MPSS.TA.1.0
Sprint		
22	80-P1707-14	Sprint Lab Conformance Test Case Results for MPSS.TA.1.0
China Unicom		
23	80-P1707-17	China Unicom (CU) Lab Conformance Test Case Results for MPSS.TA.1.0
China Telecom		
24	80-P1707-16	China Telecom (CT) Lab Conformance Test Case Results for MPSS.TA.1.0

Tabasco Modem (TA 1.0) Lab conformance results, IOT reports and Field test results

CMCC		
25	80-P1707-15	CMCC LTE Lab Conformance Test Case Results for MPSS.TA.1.0
CTA Certification		
26	80-P1707-18	CTA Lab Conformance Test Case Results for MPSS.TA.1.0
RJIL		
27	80-P1707-19	RJIL Lab Conformance Test Case Results for MPSS.TA.1.0
LATAM		
28	80-P2280-2	LATIN AMERICA (LATAM) PRECERTIFICATION CHECKLIST

Tabasco Modem (TA 1.0) Lab conformance results, IOT reports and Field test results

		IOT Reports
29	80-P2569-1	MSM8952 MPSS.TA.1.0 REL 1.0 ALCATEL-LUCENT ENODEB LR14.3 BANDS 2/4/5/12/17/29/30 LTE-FDD IOT REPORT
30	80-P2569-2	MSM8952 MPSS.TA.1.0 REL 1.0 ALCATEL-LUCENT BSR BSR4.3.1 1900/850 MHZ 3G IOT REPORT
31	80-P2569-3	MSM8952 MPSS.TA.1.0 REL 1.0 ALCATEL-LUCENT LR14.2W NAR 1900/850 MHZ 3G IOT REPORT
32	80-P2569-4	MSM8952 MPSS.TA.1.0 REL 1.0 ERICSSON NB W14B 850/1900 MHZ TEST PACKAGE A 2015 3G IOT REPORT
33	80-P2569-5	MSM8952 MPSS.TA.1.0 REL 1.0 ERICSSON G14B R14.1 850/1900 MHZ TEST PACKAGE A 2015 2G IOT REPORT
34	80-P2569-6	MSM8952 MPSS.TA.1.0 REL 1.0 ERICSSON ENODEB L14B BANDS 2/4/5/17/29/30 TEST PACKAGE A 2015 LTE-FDD IOT REPORT
35	80-P2569-7	MSM8952 MPSS.TA.1.0 Rel 1.0 Ericsson NB W14B Band 4 Test Package Complement 2015 3G IOT Report
36	80-P2569-8	MSM8952 MPSS.TA.1.0 Rel 1.0 Huawei RAN 17.1 Rel 99 to Rel 9 Features 2100 MHz 3G IOT Report
37	80-P2569-9	MSM8952 MPSS.TA.1.0 Rel 1.0 ip.access nano3G N3G 4.0 B2 B4 3G IOT Report
38	80-P2569-10	MSM8952 MPSS.TA.1.0 Rel 1.0 Nokia Solutions and Networks RU50 EP1 B4 UMTS Broadcast 3G IOT Report

Tabasco Modem (TA 1.0) Lab conformance results, IOT reports and Field test results

39	80-P2569-11	MSM8952 MPSS.TA.1.0 Rel 1.0 Nokia Solutions and Networks RU50 EP1 B4 CPC Fast Dormancy 3G IOT Report
40	80-P2569-12	MSM8952 MPSS.TA.1.0 Rel 1.0 Nokia Solutions and Networks RU50 EP1 B4 UMTS Device 3G IOT Report
41	80-P2569-13	MSM8952 MPSS.TA.1.0 Rel 1.0 Nokia Solutions and Networks RU50 EP1 B4 Dual Cell and Dual Band 3G IOT Report
42	80-P2569-14	MSM8952 MPSS.TA.1.0 Rel 1.0 Nokia Solutions and Networks RU50 EP1 B4 eFACH eDRX 16QAM UL 3G IOT Report
43	80-P2569-15	MSM8952 MPSS.TA.1.0 Rel 1.0 Ericsson eNodeB L14B R45CX Band 13 Carrier Aggregation LTE-FDD IOT Report
44	80-P2569-16	MSM8952 MPSS.TA.1.0 Rel 1.0 Ericsson eNodeB L14B R45CX Band 13 LTE-FDD IOT Report
45	80-P2569-17	MSM8952 MPSS.TA.1.0 Rel 1.0 Ericsson eNodeB L14B R45CX Band 13 LTE Multiband LTE-FDD IOT Report
46	80-P2569-18	MSM8952 MPSS.TA.1.0 Rel 1.0 Ericsson eNodeB L14B B2 B4 B17 B12 Regression Test Package Complement 2015 LTE-FDD IOT Report
47	80-P2569-19	MSM8952 MPSS.TA.1.0 Rel 1.0 Nokia Solutions and Networks eNodeB RL70 B2 B4 B12 B17 LTE Device LTE-FDD IOT Report
48	80-P2569-20	MSM8952 MPSS.TA.1.0 Rel 1.0 Nokia Solutions and Networks eNodeB RL70 TIOT CA B2 B4 B12 B17 LTE-FDD IOT Report
49	80-P2569-21	MSM8952 MPSS.TA.1.0 Rel 1.0 Nokia Solutions and Networks eNB RL70 TIOT VoLTE SRVCC B2 B4 LTE-FDD IOT Report
50	80-P2569-22	MSM8952 MPSS.TA.1.0 Rel 1.0 ZTE eNodeB v3.20.50.20 LTE-FDD Regression IOT Report
51	80-P2569-23	MSM8952 MPSS.TA.1.0 Rel 1.0 Nokia Solutions and Networks eNodeB RL55 B38 LTE-TDD IOT Report
52	80-P2569-24	MSM8952 MPSS.TA.1.0 Rel 1.0 TeleCommunication Systems MLC v11.1.0 SUPL v2.0 and TLS v1.0 SUPL IOT Report

Questions?

https://support.cdmatech.com