

Version 10.2.0.15

Release Date: Aug 28, 2015

Resolved Issues

Issue #	Summary
11336	MME does not release previous S1 association when UE Context Release Request procedure is interrupted by Tracking Area Update procedure.
11445	MME crashes during mixed S1 and X2 Handover scenario with multiple PDNs if SGW stops responding.
11489	MME does not send Membership status to closed cell during Handover with emergency bearer.
11499	MME crashes during creation of piggyback bearers when eNB includes “E-RAB Failed to Setup List” in Initial Context Setup Response message.
11504	Emulator Console throws error when user tries to configure "SMS only" service in “Configure CS-Fallback” dialog box.
11513	MME crashes during UE session establishment if SGW stops responding.
11548	LTE Emulators Programmers Guide needs to be updated for PNSPRModifySubscriptionProfile API as implementation does not match with documented API.
11562	MME implicitly detaches a UE when CSG Membership is changed from “Member” to “Non-Member” in HSS when UE is camped to that CSG cell.
11633	MME sends Downlink Data Notification Acknowledge message to SGW on wrong port when Downlink Data Notification is not accepted by MME.

Known Issues

Issue #	Summary
11647	MME crashes during long-duration load testing when GTP-C sequence number is wrapped around.
11656	PCRF crashes when IMS chat service is not authorized and subscriber tries to re-register itself after failure operation.
11682	PCRF crashes when network-initiated bearer operation is triggered from PCRF using Tcl API without proper syntax.

Version 10.2.0.14

Release Date: Jul 8, 2015

Resolved Issues

Issue #	Summary
11049	MME does not send ZUC based EPS Integrity and Encryption algorithms in S1AP UESecurityCapabilities IE.
11330	MME cannot handle UE initiated Detach Request when Detach Request comes over Initial UE message and S1 association exists for that UE.
11351	Emulator Console should display the last configured Overload Action in the Set Overload Policy dialog box.
11363	EPC system gets first IP address from the range of UE IP addresses defined in PGW for a particular APN when co-located DHCP server is used.
11373	PCRF crashes sometimes during IMS voice call.
11375	MME sends S1AP Write Replace Warning Request message to all eNBs irrespective of the eNB IP address configured via PNMMEConfigureAlert API.
11405	Indirect data forwarding does not work during S1 Handover with SGW relocation due to invalid F-TEID sent by MME to SGW in Create Indirect Data Forwarding Tunnel Request message.
11415	Paging Priority IE is not included in Paging message if paging is triggered via MMEPageUE API and UE does not have prioritized default bearer.
11423	MME should not send Attach Accept with Combined EPS/IMSI Attach when configured only with CDMA 1xRTT CSFB.
11428	MME does not send bearer contexts to SGW for failed bearers when bearer setup procedure is partially successful.
11456	Sometimes MMEGetUEInfo API generates tcl error.
11462	MME does not send RAN Information Relay message to SGSN after receiving Direct Information Transfer Request message from eNB.

Version 10.2.0.13

Release Date: May 25, 2015

Resolved Issues

Issue #	Summary
10527	MME cannot process Tracking Area Update Request message after implicit detach is triggered for the UE and SGW responds with "Context Not Found".
11040	Enhancement required in MME to support multiple PLMNs in S1 Setup Response and MME Configuration Update S1AP messages.
11049	MME does not support ZUC based EPS Integrity and Encryption algorithms.
11071	Enhancement required in MME to support Re-keying of the entire EPS key hierarchy.
11075	Sometimes MME does not respond to Attach Request message if UE's previous attach attempts were terminated during Authentication phase due to unresponsiveness of eNB.
11088	MME does not respond to Extended Service Request NAS message when UE is not registered to CS domain.
11107	PNMMEDeconfigureAlert API needs to be enhanced to remove dependency on the presence of optional parameters.
11210	Enhancement required in MME to support S1AP policy configuration for S1 Setup Failure Message with any cause value.
11212	Saving and loading configuration file modifies RFSP Index value previously configured in SPR.
11214	MME does not support multiple bearer creation/modification in a single S1AP message.
11226	Enhancement required in MME to include Handover Restriction List IE in Downlink NAS Transport message whenever required.
11227	EPC makes the UE Idle when an active dedicated bearer is deleted from EPC.
11239	HSS shows incorrect PLMN in Trace Activation dialog box when multiple PLMNs are configured in HSS Emulator.
11241	MME does not validate eNB UE S1AP ID received in S1AP Reset message resulting in making UE idle erroneously.
11255	MME sends Modify Bearer Request with EPS Bearer Id set to zero during APN-AMBR modification procedure when Subscription Profile contains multiple PDN Contexts and UE is attached to a PDN different than the first one.

Version 10.2.0.11

Release Date: Apr 22, 2015

Resolved Issues

Issue #	Summary
10527	MME cannot process NAS messages received from an UE when running for long hours and UE is not detached in between.
11057	Enhancement requested to change the Attach Reject cause when eNB does not respond to Initial Context Setup Request S1AP message.
11059	Handover fails if UE is connected to more than 5 PDNs.
11070	MME does not send UE context Modification Request S1AP message to eNB when CSG subscription is added for the CSG where UE is already getting service via Hybrid Cell.
11072	Equivalent PLMN configuration in MME is not properly loaded during loading of previously saved configuration file.
11078	Emulator Console throws an error if a subscriber is searched by IMSI or IMEI from Subscriber Monitoring page when MME Emulator is running on Ubuntu System.
11089	Emulator Console throws error during node creation if any of the network interface name present in the Emulator Server system contains ' ' .
11102	Enhancement required to support sending of Kill Request message from MME without Warning Area list.
11107	PNMMEDeconfigureAlert Tcl API has dependency on the presence of optional parameters.
11109	Enhancement requested to change the Attach Reject cause for few scenarios.
11116	Sometimes PGW cannot handle session creation request for an UE if a session already exists for that UE in that APN.
11117	MME sends different MME UE S1AP ID to eNB during detach procedure after handover failure.
11121	MME does not process a fresh Attach Request if integrity check fails for previously received Attach/TAU messages for that UE.
11126	MME sends same Paging DRX value in Paging message to eNBs having different Paging DRX cycle.
11157	MME does not respond to TAU Request if DL Data Notification arrives in between for an ECM-Connected UE.
11174	MME does not trigger session deletion procedure at old SGW after TAU with SGW relocation.
11185	MME crashes when S1-HO is performed with dedicated bearers and Target eNB does not allocate resources for it.
11194	MME crashes during Handover from E-UTRAN to GERAN during Mobile Originated CS-fallback with PS Handover.

Version 10.2.0.10

Release Date: Mar 9, 2015

Resolved Issues

Issue #	Summary
10527	MME cannot process NAS messages received from an UE when running for long hours and UE is not detached in between.
11004	Display warning if Emulator product license is about to expire.
11026	Warning message content IE is always included in S1AP Write Replace Warning Request message even when user does not specify any warning message.
11045	Sometimes MME fails to send Release Access Bearer Request message to SGW during S1 Release Procedure.
11048	Warning Area Type IE is always included in S1AP Write Replace Warning Request message even when user chooses to skip this IE from Emulator Console.
11058	Data Traffic does not go over Default Bearer when number of piggybacked dedicated bearer is more than 5.

Known Issues

Issue #	Summary
11059	Handover fails if UE is connected to more than 5 PDNs.
11078	Emulator Console throws an error if a subscriber is searched by IMSI or IMEI from Subscriber Monitoring page when MME Emulator is running on Ubuntu System.

Version 10.2.0.9

Release Date: Feb 6, 2015

Resolved Issues

Issue #	Summary
10539	Enhancement required in MME to support negative policy setting for dropping Initial Context Setup Response message from eNB.
10665	Enhancement required in MME to display connected eNBs in MME Neighbors tab.
10805	Modification of allowed CSG List for a subscriber is not maintained across configuration reload.
10829	MME sends incorrect QCI in Modify EPS Bearer Context Request NAS message during Bearer Resource Modification procedure when only QoS parameters are modified.
10831	PGW sends incorrect PCO when a valid secondary DNS IP Address is configured in an APN.
10852	MME sends incorrect cause in "Deactivate EPS bearer context request" NAS message during UE-initiated PDN disconnection.
10877	MME does not cleanup UE Contexts properly after detecting S11 Path failure.
10878	Generation of duplicate M-TMSI across MME restart causes service denial.
10902	MME crashes after receiving MME Configuration Update Failure message from eNB.
10918	MME gets segmentation fault when it receives Error Indication message with Criticality Diagnostics IE from eNB.
10941	MME cannot handle the scenario when UE initiated Service Request and Network Triggered Service Request procedure collides.
10953	Enhancement required in EPC to display priority level (PL) related to each bearer in Bearers tab of monitored Subscriber.
10954	Sometimes configuration changes does not work across configuration file reload.
10967	MME fails to delete UE context when received partial S1-Reset from HeNB-GW and crashes eventually.
10976	Sometimes MME crashes during S1-Handover.

Version 10.2.0.8 Beta

Release Date: Jan 15, 2015

New in this Release

1. Support for IPv6 for signaling between LTE Network Elements.

Resolved Issues

Issue #	Summary
9401	Simulation of GTP-U Error Indication in SGW/PGW in response to Uplink Data Traffic.
10242	IPv6 Support required in LTE Core Network Elements.
10664	MME cannot handle procedure collision scenario between UE initiated Service Request and Downlink Data Notification procedure.
10714	MME does not send proper rejection cause to Source eNB when Target eNB fails to allocate resource during S1-Handover.
10744	S1-Handover between HeNBs fails in consecutive runs.
10789	MME does not include failed bearers in "ERAB to Release list" in Handover Command message.
10806	MME crashes during S1- Handover when target cell is a Hybrid cell.
10655	Sometimes MME does not respond to TAU Request message after back to back Handover/TAU procedure with MME relocation.
10656	MME sends malformed Handover Restriction IE when more than five entries are present in the Forbidden TA / Forbidden LA list.
10658	Target MME does not release UE context if Handover is terminated after successful resource allocation.

Known Issues

Issue #	Summary
10902	MME crashes after receiving MME Configuration Update Failure message from eNB.

Version 10.2.0.7 Beta

Release Date: Nov 19, 2014

New in this Release

1. MBMS-GW Emulator with M1, Sm, SG-mb and SGi-mb interfaces and internal BM-SC Simulator to generate MBMS traffic.
2. eMBMS support in eNodeB and MME Emulator.
3. Inter-working with trusted non-3GPP Access Network with S2a, S6b, STa and Gxa interfaces.
4. AAA Server functionality in HSS Emulator.
5. SMS transmission from MME to UE and UE-to-UE SMS loopback support in MME.
6. Equivalent PLMN and Forbidden TA/LA configuration in MME.
7. Minimization of Drive Test (MDT) configuration and activation.
8. HSS-initiated Trace Activation/Deactivation on S6a.
9. GERAN and UTRAN support in PCRF.
10. AF Session Establishment/Termination/Modification in Visited PLMN.
11. Support for Diameter Redirect Agent and Diameter Proxy Agent in SGW and PCRF.
12. Gxc interface in PCRF Emulator.
13. Cx interface in HSS Emulator to test IMS Voice Calls and SMS.
14. Use of OpenIMS Server to test IMS Voice Calls and SMS.
15. Use of DHCP server co-located with PGW for allocation of UE IP addresses.

Known Issues

Issue #	Summary
10655	Sometimes MME does not respond to TAU Request message after back to back Handover/TAU procedure with MME relocation.
10656	MME sends malformed Handover Restriction IE when more than five entries are present in the Forbidden TA / Forbidden LA list.
10658	Target MME does not release UE context if Handover is terminated after successful resource allocation.

Resolved Issues

Issue #	Summary
10401	Support required to include GUMMEI IE in Overload Start/Stop message.
10402	Support required for "MDT configuration" IE in the Initial Context Setup Request message.
10413	MME cannot trigger UE Context Release Command with cause "Load Balancing TAU required".
10432	Support required for equivalent PLMNs and forbidden TA/LA in Handover Restriction List IE.
10493	MME should not use same MME UE S1AP ID during back to back Handover when previous S1 association with same id is not terminated.
10498	Paging priority IE is not present in when paging is triggered from Emulator Console for user having a priority bearer.
10501	MME does not send Delete Session Request to SGW in case of Handover Cancellation.
10520	Support required to trigger Path-Switch Request Failure from MME.
10526	MME does not send Delete Session Request to SGW in case of Handover Failure.
10532	MME should send Delete Session Request to SGW if the UE Reattaches without explicit Detach.
10564	MME does not respond to Attach Request containing GUTI or IMSI if MME is restarted and UE arrives with previously allocated GUTI.
10569	MME does not respond to next attach attempt after eNB sends UE-associated S1-Reset message for that UE.

Version 10.2.0.3 Beta

Release Date: Jul 25, 2014

New in this Release

1. ANSDF Emulator with S14, Zh and Ub interfaces.
2. UES14 Emulator with S14 interface.

Version 10.1.0.12

Release Date: Nov 15, 2014

Version 10.1.0.11

Release Date: Oct 15, 2014

Version 10.1.0.10

Release Date: Sep 17, 2014

Version 10.1.0.9

Release Date: Aug 20, 2014

Version 10.1.0.7 Beta

Release Date: Jul 22, 2014

Version 10.1.0.6 Beta

Release Date: Jun 26, 2014

Version 10.1.0.4 Beta

Release Date: May 30, 2014

New in Release 10.1

1. Standalone PCRF Emulator with Gx, Rx, S9 and proprietary Sp interfaces.
2. Standalone HSS Emulator with S6a interface.
3. Multimedia Priority Service.
4. Support for Diameter Redirect Agent and Diameter Proxy Agent in MME and PGW.
5. Network-triggered Service Restoration on GTP based S5/S8.
6. UE IPv6 Address assignment via DHCPv6 on GTP-based S5/S8.
7. PS Handover during CS Fallback to GERAN and UTRAN.
8. Support for Relay Node in MME.
9. HSS Identity resolution and SGW selection using DNS in MME.
10. Radio Resource Management and Mobility Restriction in MME.
11. UE Time Zone reporting.
12. APN Restriction.
13. PGW Restart Indication and Modify Access Bearer Request support in MME and SGW.

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Version 10.0.0.9

Release Date: May 19, 2014

Version 10.0.0.8

Release Date: Apr 9, 2014

Version 10.0.0.7

Release Date: Feb 24, 2014

Version 10.0.0.6

Release Date: Dec 30, 2013

New in Release 10.0

1. 3GPP Release 10 Compatibility:
3GPP Release 10 enhancements in S1AP, GTP, PMIP and Diameter messages.
2. Local Breakout Roaming using GTP-based S5.
3. Inter-working with GERAN and UTRAN:
Access to LTE Core Network via GERAN/UTRAN and Idle and Connected mode mobility between GERAN/UTRAN and LTE Network.
4. CS Fallback to GERAN and UTRAN:
Combined Attach to CS+PS network, SMS over SGs and Mobile Originated and Terminating Voice Call with Suspension of PS service during CSFB.
5. CS Fallback to CDMA2000 1xRTT Network:
Mobile Originated and Terminating Voice Call and SMS without PS Handover.
6. Dedicated Bearers on PMIP-based S5/S8 interface, Gxc interface in SGW.
7. Complete and Partial Path Failure handling.
8. GTP-U Error Indication handling.
9. Remote packet capture from Emulators Console using Wireshark.
10. Subscriber Monitoring using Emulator Console.
11. PGW selection in MME and Charging Server selection in PGW using DNS.
12. Trace Activation and Deactivation from external HSS using S6a interface.

Version 9.2.0.9

Release Date: Dec 4, 2013

Version 9.2.0.8

Release Date: Oct 21, 2013

Version 9.2.0.7

Release Date: July 23, 2013

Version 9.2.0.6

Release Date: June 27, 2013

Version 9.2.0.4

Release Date: May 14, 2013

New in Release 9.2

1. Emergency Session
2. CMAS - SBc interface between MME and Cell Broadcast Centre (CBC) and simulation of Alerts from MME
3. PMIP-based S5/S8 interface, with support for Default Bearer establishment only
4. Bearer Release initiated by eNB and MME
5. UE requested DHCP-based IPv4 address assignment
6. HSS Initiated APN-AMBR, QCI, ARP Modification
7. PCRF-initiated Location Reporting using the Emulators' Tcl scripting API
8. Support for IPv6 user plane traffic on dedicated bearer

Version 9.1.0.10

Release Date: April 23, 2013

Version 9.1.0.9

Release Date: March 06, 2013

New in this Release

1. Support for “Network Access Mode” configuration in EPC.

Version 9.1.0.8

Release Date: February 22, 2013

Version 9.1.0.7 Beta

Release Date: February 8, 2013

Version 9.1.0.6 Beta

Release Date: February 1, 2013

New in Release 9.1

1. S6a interface in MME to communicate with external HSS
2. S13 interface in MME to communicate with external EIR
3. IPv6 user plane traffic – only on default bearer
4. Trace in SGW and PGW
5. Roaming – Home-Routed

Version 9.0.0.10

Release Date: November 27, 2012

Supported Signaling Procedures (compliant to 3GPP Release 9 standards)

1. S1 Setup, S1 Close, S1 Flex
2. S1 Reset: eNB Initiated and MME Initiated
3. SCTP Multi-homing on S1-MME
4. UE Attach: Initial Attach with IMSI / old GUTI
5. UE Detach: UE Initiated and Network Initiated
6. UE Context Release
7. Service Request
8. Tracking Area Update
9. Downlink Data Notification / Paging
10. Dedicated Bearer Activation: UE and Network Initiated
11. Bearer Modification: UE and Network Initiated
12. Bearer Deactivation: UE and Network Initiated
13. S1-Based Handover - with or without MME and SGW relocation
14. X2-Based Handover - with or without SGW relocation
15. Multiple PDN Connection and Disconnection
16. Trace support in MME
17. Overload
18. Location Reporting on S1-MME
19. SGW selection in MME based on Tracking Area
20. UE IPv4 address allocation by PGW using DHCP based
21. Closed Subscriber Groups and Open/Closed/Hybrid Access Control to support Home eNB

Other Features

1. End-to-end IPv4 traffic on default and dedicated bearers
2. ICMP and UDP traffic generation using internal traffic generator
3. Simulation of abnormal and failure scenarios for negative testing
4. Procedure and Packet statistics for each protocol
5. Protocol timer configuration
6. Separate IP Address for each 3GPP interface