

Version 9.2.0.7

Release Date: July 23, 2013

Component Versions

1. LTE Emulators : 9.2.0.7
2. LTE Emulators Console: 9.2.0.7

Resolved Issues

Issue #	Summary
7947	"Broadcasts Request Count" and "Repetition Period" cannot be set to 0 when sending a CMAS Alert from MME.
7284	MME cannot handle Path Switch Request if it receives unsolicited Location Report Indication before Path Switch Request message from Target eNodeB.
7873	MME fails to show detail information of an UE while the UE's Attach procedure is ongoing.
7948	MME sets incorrect cell-id value in Write-Replace Warning Request for Home eNodeB.
7964	PGW terminates abnormally after receiving GTPU Error Indication from SGW followed by DL traffic for the same UE.
8087	For repeated "Network-initiated bearer modification without TFT change" operation on a dedicated bearer, PGW includes TFT parameters in Update Bearer Request second time onwards.
8148	In S1-Handover with MME relocation, Source MME sends malformed S1AP Handover Command message to source eNodeB.
8029	Full-Duplex TCP Traffic over both Default & Dedicated Bearer causes around 40% TCP Retransmission when attach procedure is ongoing for 10000 UEs.

Known Issues

Issue #	Summary
8196	Inclusion of Warning type IE in Write-Replace Warning Request message needs to be configurable.
8183	SGW does not respond to Create Session Request with TEID 0 from a new MME if an active PDN connection exists for the same UE with a different MME.
8170	Inclusion of Warning area list IE in Kill request message needs to be configurable from Emulators Console.
8151	MME terminates abnormally if MMEConfigureAlert API function is used with Tracking Area list and without MCC and MNC.
8103	EPC Emulators can not handle data packets bigger than 1400 bytes.
8003	MME cannot handle UE Context Release Request from Source eNodeB while Handover is going on.

Version 9.2.0.6

Release Date: June 27, 2013

Component Versions

1. LTE Emulators : 9.2.0.6
2. LTE Emulators Console: 9.2.0.6

Resolved Issues

Issue #	Summary
7571	When a PCC Rule is created in the PCRF, the Port Range option cannot be used to specify the TFT.
7655	Occasionally PGW terminates abnormally during node creation in 64 bit systems.
7659	Downlink UDP traffic cannot be sent over GBR bearer.
7660	MME crashed while performing paging procedure repeatedly on a single UE.
7738	MME does not send Create Bearer Response to SGW/PGW if NAS bearer activation message comes before S1AP ERAB Setup Response during dedicated bearer activation.
7741	Modification of PDN Context in HSS throws Tcl error.
7761	PGW can not process Create Session Request that contains both APN-NI and APN-OI parts inside an APN IE.
7830	Attach procedure fails with Samsung Galaxy S3 handset.
7836	PGW crashed while running overnight test with TCP and UDP UL + DL data traffic on few UEs.
7838	Service Request procedure fails when UE has more than two bearers.
7964	In Ubuntu 11.10 32 bit system, PGW Emulator may terminate abnormally during detach procedure after running UDP DL traffic on few UEs.

Known Issues

Issue #	Summary
7729	Sometimes Emulator console shows incomplete 'Create PGW' dialog box when Console is running on Ubuntu 12.10 32 bit system
7858	Setting up and Closing total 10000 S1 connections from 100 eNodeBs to 100 MMEs causes instability in MME Emulator.
7859	On Windows 7, Console window cannot be restored if a child window is opened followed by a "Show Desktop" operation.
7868	Network-Initiated operations such as Paging, MME-initiated Detach procedures cannot be triggered for more than 5000 UEs in single operation.
7930	Resetting an Emulator and changing the Emulator Type does not always work. For example, an MME Emulator cannot be reset and used as a PGW Emulator.
7935	Emergency UE Attach with IMEI fails when PMIP is used on S5.
7947	"Broadcasts Request Count" and "Repetition Period" cannot be set to 0 when sending a CMAS Alert from MME.

Version 9.2.0.4

Release Date: May 14, 2013

Component Versions

1. LTE Emulators : 9.2.0.4
2. LTE Emulators Console: 9.2.0.4

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

Resolved Issues

Issue #	Summary
6598	MME Emulator console should support all S1AP messages.
6629	MME does not release E-RAB after receiving "Activate Dedicate EPS bearer context reject " from UE
6896	EPC Emulator does not trigger bearer update procedure when QoS is modified for non-GBR bearer.
6989	MME does not release UE-associated logical connection towards eNodeB if MME receives Initial Context Setup Failure after receiving Attach Complete from UE during Attach procedure.
6992	MME does not respond to Service Request message when MME receives Initial Context Setup Failure from eNB after Attach Complete message.
6997	Tcl error 'can't read "resultArray(0,sgw_ip)": no such element in array' occurs while performing Attach-Detach from script in a large loop.
7322	EPC Emulator does not support "bidirection" packet filter.
7327	Need to support for S1AP "Warning Message Transmission Messages".
7375	MME does not respond to TAU Request message if the packet contains IMSI as UE Identifier.
7412	MME does not release previous UE-associated logical connection towards eNodeB if UE sends a fresh Attach Request and that UE is already attached to the network.
7480	Attach Reject cause should be set to "PLMN Not Allowed" when UE tries to attach with different PLMN and roaming is not supported in the network.
7485	MME terminates abnormally when eNodeB does not respond properly during multiple GBR bearer creation/deletion procedure.
7617	Initial Context Setup Request triggered by UE initiated Service Request procedure contains only default bearer even when dedicated bearer exists.
7641	MME sends MME configuration transfer message to source eNodeB instead of target eNodeB after receiving configuration transfer message from source eNodeB.
7652	EPC Emulator rejects bearer modification if UE wants to delete last packet filter of a dedicated bearer using opcode "Delete Packet Filters from existing TFT".

Known Issues

Issue #	Summary
7571	Port range option is disabled while configuring TFT
7655	Occasionally PGW terminates abnormally during creation in 64 bit systems.
7741	Modification of PDN Context in HSS throws Tcl error.

Version 9.1.0.10

Release Date: April 23, 2013

Component Versions

1. LTE Emulators : 9.1.0.10
2. LTE Emulators Console: 9.1.0.10

Resolved Issues

Issue #	Summary
7475	Uplink data transfer does not work at PGW if PGW is configured with NF_QUEUE for packet filtering.
7627	SGW crashes if it receives GTP-U ERROR Indication packet from peer node.

Version 9.1.0.9

Release Date: March 06, 2013

Component Versions

1. LTE Emulators : 9.1.0.9
2. LTE Emulators Console: 9.1.0.9

New in this Release

1. Support for "Network Access Mode" configuration in EPC.

Resolved Issues

Issue #	Summary
7369	Occasionally MME does not send S1 Setup Failure message in response to S1 Setup request message from eNodeB after configuring S1-Setup policy.
7379	MME always sends S1 Setup Failure with "TimeToWait" IE value set to "v1s" even though configured other values.

Known Issues

Issue #	Summary
6989	MME does not release UE-associated logical connection towards eNodeB if MME receives Initial Context Setup Failure after receiving Attach Complete from UE during Attach procedure.
7375	MME does not respond to TAU Request message if the packet contains IMSI as UE Identifier.
7412	MME does not release previous UE-associated logical connection towards eNodeB if UE sends a fresh Attach Request and that UE is already attached to the network.
7475	Uplink data transfer does not work at PGW if PGW is configured with NF_QUEUE for packet filtering.
7485	MME terminates abnormally when eNodeB does not respond properly during multiple GBR bearer creation/deletion procedure.

Version 9.1.0.8

Release Date: February 22, 2013

Component Versions

1. LTE Emulators : 9.1.0.8
2. LTE Emulators Console: 9.1.0.8

Resolved Issues

Issue #	Summary
6957	UE-Initiated bearer modification procedure fails if same bearer is modified multiple times.
7253	Occasionally PGW Emulator terminates during Piggyback dedicated bearer creation with 1000 or more UEs.
7284	Polaris MME can not handle PathSwitchRequest message with unexpected IE.
7299	HSS-initiated UE Detach procedure fails for more than 5-10 UEs.
7336	MME shows incorrect packet count for "Service Request" message
7337	Emulator Console 9.x does not support eNB Emulator 4.2
7302	EPC nodes terminates abnormally after 12-14 hours while running overnight test-cases.

Version 9.1.0.7 Beta

Release Date: February 8, 2013

Component Versions

1. LTE Emulators : 9.1.0.7 Beta
2. LTE Emulators Console: 9.1.0.7 Beta

Resolved Issues

Issue #	Summary
7211	Packet loss is more than 50% when Downlink data traffic exceeds 100 Mbps.
7224	PGW Emulator terminates abnormally if it is reset after simulating various operations with 1000 or more UEs.
7228	Security Capability IE in Handover Request S1AP message contains incorrect information.
7301	MME crashes during Attach if the APN provided by the UE is not allowed by subscription.

Version 9.1.0.6 Beta

Release Date: February 1, 2013

Component Versions

1. LTE Emulators : 9.1.0.6 Beta
2. LTE Emulators Console: 9.1.0.6 Beta

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

Resolved Issues

Issue #	Summary
6536	Support for MME Configuration Update
6896	Parameter "UE Aggregate Maximum Bit Rate" needs to be configurable from MME.
6989	MME does not send UE Context Release command after receiving Initial Context Setup Failure from eNB.
6992	Sometimes MME does not send response to Service Request message.
6997	Script error while performing Attach-Detach regression test.
7007	Throughput drops if eNB makes UE idle frequently with ongoing DL data.
7008	Request for DNS configuration during Attach procedure
7021	MME Crash during S1 Handover
7027	Attach fails when UE requests to attach with a non-default APN.
7045	MME assigns same MME-UE-S1AP-ID to more than one active UE
7164	Crash observed at SGW while performing UL TCP and DL UDP with single GBR bearer created for 16 UEs
7171	MME sends Error Indication message after receiving MME Configuration Update Ack message.
7172	MME does not send MME Configuration Update message to all connected eNBs
7220	While performing ERAB setup and delete iteration we see misbehavior at PGW, SGW and MME
7227	MME throwing "None of the specified UEs are registered with this MME" error while performing Attach-Detach after 120 iterations
7234	During Handover Preparation phase, MME sends malformed target-to-source-transparent-container in "Handover Command" S1AP message.

Known Issues

Issue #	Summary
7096	PGW Emulator does not support Downlink IPv6 traffic on Dedicated Bearers
7211	Packet loss is more than 50% when Downlink data traffic exceeds 100 Mbps.
7224	PGW Emulator terminates abnormally if it is reset after simulating various operations with 1000 or more UEs.
7253	Occasionally PGW Emulator terminates during Piggyback dedicated bearer creation with 1000 or more UEs.

Version 9.0.0.10

Release Date: November 27, 2012

Component Versions

1. MME, SGW and PGW Emulators : 9.0.0.10
2. LTE Emulators Console: 9.0.0.10

Supported Signalling 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 and 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