

Version 11.2.0.8**Release Date:** September 14, 2017**New in this Release**

Resolved Issues

Issue #	Summary
15023	NMS is not working properly if it is accessed using FQDN
15041	In virtual EPC, support of Cinder volumes for VNF root disks to allow host migration.
15178	MME should allow activation of multiple PDN connections in parallel after default PDN activation.

Known Issues

Issue #	Summary
15644	Attach and PDN connection sometimes fail due to failure of PGW selection in MME during frequent user plane load change in a collocated SGW and PGW.

Version 11.2.0.6**Release Date:** June 23, 2017

New in this Release

Resolved Issues

Issue #	Summary
14495	Enhance deployment and scaling of Virtual EPC to support SR-IOV capability.
14793	Software upgrade from 11.2.0.4 to 11.2.0.5 with emergency configuration fails.
14806	PGW crashes while recharging balance of an attached UE.
14850	EPC support for Time based Sponsored Data Connectivity.
14866	PCRF does not forward event report towards AF if PGW sends multiple event report in different CCR msgs simultaneously.
14886	CMS is not able to connect to TLS enabled OpenStack cloud.
15021	Support for Keystone v3 (multiple identity) required.
15022	License error when vEPC is redeployed, as destroying the vEPC does not gracefully stop the VNFs.

Known Issues

Issue #	Summary
	After upgrading to NetEPC 11.2.0.6, it is necessary to save the OpenStack connection credentials again.
14425	Some subscribers continues to get service even after subscription is withdrawn in HSS/SPR Load Balancing scenario.
15208	Kernel panics during shut down if high-speed user plane is enabled.

Version 11.2.0.5 Beta**Release Date:** April 27, 2017

New in this Release

1. **IPv6 support for all EPC signaling interfaces**

Resolved Issues

Issue #	Summary
13581	Modification of subscription profile is not reflected immediately for UEs already attached via WLAN
14417	Emergency attach with unauthenticated IMSI fails
14436, 14439	MME-LB crashes randomly in different situations.
14463	GBR bearer allocation fails when high speed user plane mode is active.
14508	Automatic scaling out fails after manually deleting virtual machines of a deployed vEPC.
14547	If VLAN is used for isolation of virtual networks in OpenStack cloud, vEPC does not support IPv6 PDN.
14662	DL Data Notification fails in high-speed user plane for IPv4 fragmented packets.

Known Issues

Issue #	Summary
14425	Some subscribers continues to get service even after subscription is withdrawn in HSS/SPR Load Balancing scenario.
14793	Software upgrade from 11.2.0.4 to 11.2.0.5 with emergency configuration fails.
14806	PGW crashes while recharging balance of an attached UE.

Version 11.2.0.4 Beta

Release Date: March 17, 2017

New in this Release

1. **Cloud Management Service (CMS)** for configuration, deployment, auto-scaling and monitoring of **Virtual EPC (vEPC)**.
2. Integration of CMS with the **OpenStack** cloud platform.
3. **SPR Replication** for geo-redundancy and high availability of SPR.
4. Load balancing between multiple HSS and PCRF.
5. **High-speed User Plane** enhancements:
 - IPv6 / IPv4v6 PDN
 - Connection Tracking (NAT)
 - Jumbo frames
6. **Scheduled software upgrade** of EPC elements to ensure zero service downtime.

Resolved Issues

Issue #	Summary
13697	NetEPC deos not support APN Override
14059	Idle UE is blackholed after permanent failure of MME
10617	Logging to remote logging server

Known Issues

Issue #	Summary
	After software upgrade from NetEPC 11.1, it is necessary to explicitly save Basic Configuration of OCS, OFCS and MME-LB and restart.
13581	Modification of subscription profile is not reflected immediately for UEs already attached via WLAN
14417	Emergency attach with unauthenticated IMSI fails
14436, 14439	MME-LB crashes randomly in different situations.
14463	GBR bearer allocation fails when high speed user plane mode is active.
14508	Automatic scaling out fails after manually deleting virtual machines of a deployed vEPC.
14547	If VLAN is used for isolation of virtual networks in OpenStack cloud, vEPC does not support IPv6 PDN. Workaround: use VXLAN while installing OpenStack.

Version 11.1.0.21**Release Date:** February 20, 2017**Version 11.1.0.20****Release Date:** January 23, 2017**Version 11.1.0.19****Release Date:** December 02, 2016**Version 11.1.0.17****Release Date:** November 14, 2016**Version 11.1.0.16 Beta****Release Date:** October 05, 2016**Version 11.1.0.15 Beta****Release Date:** September 22, 2016**New in this Release**

1. CentOS 7.2 ISO package has support for UEFI boot.

Version 11.1.0.14 Beta**Release Date:** September 02, 2016**New in this Release**

1. CentOS 7.2 is now the standard Operating System for NetEPC and NetNMS.
2. High-speed user plane on S1-u, S5/S8-u, and SGi interfaces to provide multi-Gbps throughput on 10-Gbps Ethernet interfaces.
 - Currently supported: Intel 82599 10 Gigabit Ethernet Controller
3. Enhanced SPR Synchronization between Central and Deployable EPC.
4. Integration of NMS on the NetCell (eNodeB+EPC) platform.

Version 11.0.0.15**Release Date:** August 26, 2016**Version 11.0.0.14****Release Date:** July 08, 2016**Version 11.0.0.13****Release Date:** May 30, 2016**Version 11.0.0.10****Release Date:** March 22, 2016**Version 11.0.0.9****Release Date:** February 15, 2016**Version 11.0.0.8 Beta****Release Date:** January 14, 2016**Version 11.0.0.6 Beta****Release Date:** December 03, 2015**Version 11.0.0.2 Beta****Release Date:** December 03, 2015**New in this Release**

1. Control Plane performance improvement: Up to 10x faster signaling on suitable hardware compared to release 10.2.
2. HeNB Gateway with S1-MME and S1-u interfaces.
3. Location Services (LCS): SLg and SLs interfaces in MME to GMLC and E-SMLC. SLh interface in HSS to GMLC.
4. VoLTE: SRVCC Handovers with 3GPP Access networks.
5. GERAN and UTRAN support in HSS with S6d interface.
6. LIPA and SIPTO support in MME and HSS.
7. Configurable DSCP marking on Uplink and Down link traffic over S1u, S5u and SGi interfaces.
8. Untrusted non-3GPP Access Network support in HSS/AAA and PGW.
9. Trusted non-3GPP Access: Support for HSS-initiated procedures.
10. Configuration of Services without charging
11. NetCLI: Command Line Interface to configure and control NetEPC.
12. NetCell: Integrated eNB and EPC.
 - Includes MME, SGW, PGW, HSS, PCRF.
 - Supports 64 simultaneously attached users.

Version 10.2.0.12**Release Date:** December 14, 2015**Version 10.2.0.11****Release Date:** November 26, 2015**Version 10.2.0.9****Release Date:** September 11, 2015**Version 10.2.0.7****Release Date:** July 02, 2015**Version 10.2.0.6****Release Date:** May 01, 2015**Version 10.2.0.5 Beta****Release Date:** March 23, 2015**Version 10.2.0.2 Beta****Release Date:** February 25, 2015**New in this Release**

1. MBMS-GW with M1, Sm, SG-mb and SGI-mb interfaces. MBMS support in MME.
2. MME Load Balancer to distribute eNBs that do not support S1-Flex.
3. 3GPP AAA Server co-located with NetEPC HSS.
4. Inter working with IMS.
5. Trusted non-3GPP Access.
6. Off-peak Charging.
7. Event-based Online Charging.
8. Network Monitoring Dashboard.