

GGSN/P-GW Integrated System

NEC vMVNO-GW

Next Generation Mobile Service Gateway Designed for Mobile Virtual Network Operator

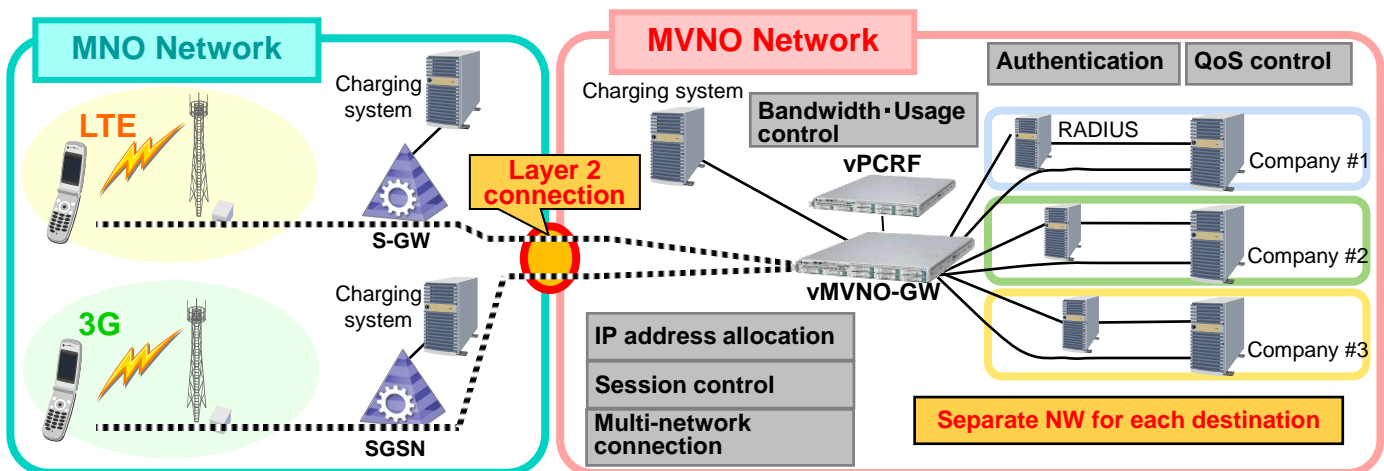
Features

Providing Scalable, Flexible and Sustainable MVNO Business Environment

A Mobile Virtual Network Operator (MVNO) offers mobile services to end users by utilizing Mobile Network Operator's (MNO's) mobile network assets.

vMVNO-GW, acting as GGSN/P-GW, enables MVNO to involve deepest in the mobile value chain, providing greater control over service offering including session management, IP address management, charging data collection and security control.

vMVNO-GW helps enable MVNO to offer its own value-added services to end users and maximize revenue.



Advantages

Mobile service tailored to customer needs

vMVNO-GW supports a variety of highly flexible services that meet customer needs such as:
 "Providing total traffic restriction service per user."
 "Expanding service to target as many companies as possible.", "Providing services that use a large number of IP addresses, such as M2M."

With its unique features including virtual APN, total traffic restriction and DPI, vMVNO-GW together with related MVNO solutions enables MVNOs to implement many value added services.

Optimizing CAPEX and OPEX

MNO's wholesale cost is the major operational expenditure for MVNO and balancing it is the key to sustainable MVNO business.

vMVNO-GW has the capability to control and optimize usage of network capacity leased from MNO to help create profitable MVNO business environment.

vMVNO-GW is highly flexible, cost-effective solution available for small to large scale deployment.


Product Lineup

Our products take advantage of virtualization technology that has been realized by vEPC (Virtualized Evolved Packet Core), which enables operations on any generic IA servers.

Accordingly, customers can reduce the number of servers that need to be installed (reduced by 60% as compared with our conventional products *), achieve power-saving and space-saving, and reduce client's TCO.

The system is built on field-proven carrier-grade platform, leveraging NEC's proprietary high-availability middleware.

* 500,000 concurrent sessions, 4 Gbps throughput

Lineup	Rack server model
Product external	
Type	1U rack server
Platform	Middleware +CG-Linux + NEC's Virtualization Platform
Redundancy	Yes
Power supply	AC
Operating environment * No condensation	Temperature: 10 to 40 °C Humidity: 20 to 80%

Specification

Interface	S5/S8, Gi/SGi, Gn/Gp, Gx, Gy Ga/Gz
PDP type	3G: IPv4, PPP LTE: IPv4, IPv6, IPv4/v6
Operation	SNMP, FTP, TELNET, SSH, NTP
IP address assignment	Static Dynamic - Internal address pool - AAA server coordination

Abbreviations

APN: Access Point Name
 DPI: Deep Packet Inspection
 GGSN: Gateway GPRS Support Node
 LTE: Long Term Evolution
 P-GW: PDN Gateway
 PDN: Packet Data Network
 PDP: Packet Data Protocol
 PPP: Point-to-Point Protocol
 RADIUS: Remote Authentication Dial-In User Service
 S-GW: Serving Gateway
 SGSN: Serving GPRS Support Node
 PCRF: Policy and Charging Rules Function

Product List

No.	Product Name
1	MX4440—MV

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