Mobility Virtualized Platform® (MVP)

iCore ® in the Cloud

Tecore's Mobility Virtualized Platform® (MVP) delivers scalability and Cloud capability to the iCore family of products. With the MVP platform providing the consolidation of resources across multiple servers into a common pool, the virtualization package is able to partition resources into multiple virtual machines (VM) and provide the CPU, memory, and storage required in an encapsulated VM environment. The MVP provides a highly reliable platform that is expandable in processing capabilities and resource pools that can adjust as the network grows. This provides an upward scalability for the iCore suite of Core Network elements that was not possible on previous hardware platforms. The MVP platform leverages commercial off-the-shelf hardware and virtualization technology to create a flexible environment for the iCore Applications Suite. Ultimately, this translates into the most flexible Cloud-based Core Network in the industry and future protection of CAPEX investment as the network grows.

FEATURES + BENEFITS

- Full support for the iCore software defined core network product suite
- Scalable from 100 to millions of sessions
- Third party application support
- Multi-server architecture
- Geo-redundancy options

Hardware Independence

Virtual machines are completely independent from their underlying physical hardware, which increases the availability of hardware and applications for improved business continuity.

Compatibility

Virtual machines are completely compatible with all standard next generation Intel processors, applications, and device drivers, so you can use a virtual machine to run all applications that you would run on a server-based computing platform.

Isolation

While virtual machines can share the physical resources of a single computer, they remain completely isolated from each other as if they were separate physical machines.

Encapsulation

A virtual machine is essentially a software container that bundles or "encapsulates" a complete set of virtual hardware resources -as well as an operating system and all its applications- inside a software package. Encapsulation makes virtual machines incredibly portable and easy to manage.

Specifications

Multi-Technology Capabilities	5G
	4G LTE
	3G HSPA+
	2G/GSM/GPRS/EDGE
Service Capabilities	Packet data services
	Multimedia messaging services
	Voice services
	Short messaging services
Integrated Functional Capabilities	UMSC/MSC/VLR
	GGSN/SGSN
	MME/S-Gateway/PDN-Gateway
	HLR/HSS, AuC/AC/AAA/PCRF
Operations & Maintenance	Platform-independent user interface
	Local or centralized management
	Fully operational in minutes
Physical Dimensions	Server:
	1.74 x 17 x 27 inches
	4.29 x 43.41x 68.28 cm
	Storage:
	3.4 x 18 x 22 inches
	8.68 x 44.63 x 56.1 cm
Voice Coding Capabilities	G.711 PCM (mu/A-Law) at 64 Kbps
	G.729B CS-ACELP at 8 kbps
	GSM 6.10 Full Rate at 13.2 kbps
	EVRC at 4.0 kbps and 8.55 kbps
	AMR at 4.75-12.2 kpbs
	All vocoders are supported with: bundling, VAD, transcoder free operation (TrFO) and tandem free operation (TFO)
System Features	Wireless Multi-Technology/ Multi Generation Support
	Media Gateway Function
	SIGTRAN/SS7 Signaling Gateway
	SIP Gateway Trunking
	(Including local VoIP Codecs)
	Wireless VoIP Codec Support
	Peer to Peer IP Switching
	Localized Call Routing
	Multi MCC/MNC
Power Capabilities	AC Power - 120-240 VAC
	DC Power - 48 VDC

MVP Model Options

The MVP is available in five models, based on processing and storage capabilities. Each model's targeted configuration is designed to support the capacity, feature set, and processing capabilities required for the specific iCore configuration.

Mirrored Run Time

The MVP supports mirrored virtual machines running in lockstep within the hypervisor's pooled resources. This capability provides run time protection for applications against the failure of a hardware node. The mirroring can be accomplished at the same physical location or - for geo-redundancy - mirrored images can be located at a separate physical facility, providing additional run time protection for iCore applications.

VM Migration

The MVP platform also implements a migration capability for virtual machines that allows operators to migrate from one set of hardware resources to another for support of maintenance activities.

Third Party Application Hosting

The MVP Platform also provides the capability to host third party applications within an encapsulated virtual machine. These applications have access to the same mirrored runtime and migration options available to the iCore.

Reporting and Management

The MVP series of products provide local management capabilities as well as web-based utilities to monitor and configure via web-based access. Additionally, the platform supports north bound SNMP alarming, allowing the MVP to integrate with higher order management systems.

MVP 1000
Enterprise Network

MVP 2000
Rural Network

MVP 3000
Small Centralized Core Network

MVP 4000
Medium Centralized Core Network

MVP 5000
Large Centralized Core Network

Tecore networks

To learn more about our technology, products, and services, call us at **+1.410.872.6500** or visit us at **www.tecore.com** ©Tecore Inc.

*Features and prices are subject to change

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