

GSM / CDMA / 3G / IMS Multi-Technology Switching Platform



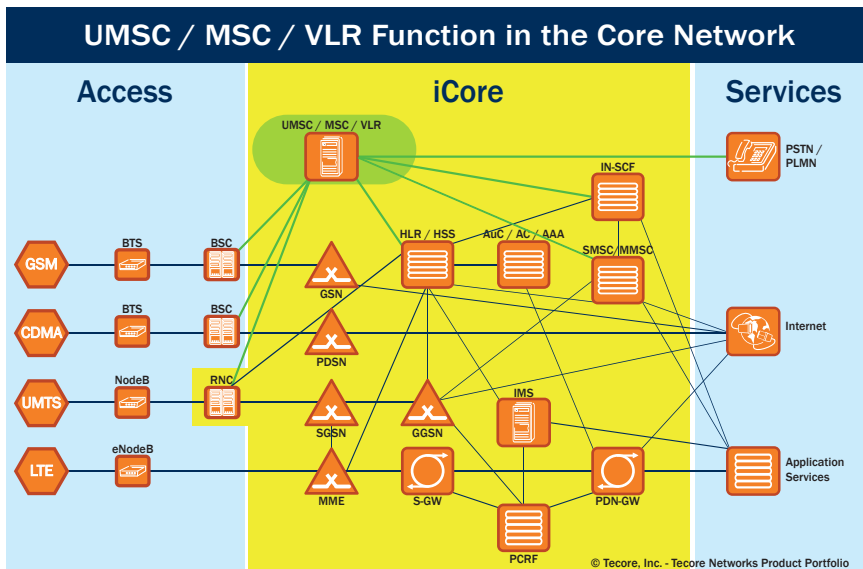
The iCore Universal Mobile Switching Center / Mobile Switching Center / Visitor Location Register (UMSC / MSC / VLR) is the world's first multi-technology distributed switching platform, available on a standalone basis or integrated within the complete iCore Network Center.

This platform delivers a scalable switching system for GSM, CDMA, GPRS/EDGE, UMTS, EV-DO, Wi-Fi and WiMAX, enabling support for the most widely deployed mobile technologies so network operators can bridge evolving network investments. The common set of object code implements support for all protocols from a single converged platform. Utilizing a carrier-grade, high-availability Linux architecture, the iCore UMSC / MSC / VLR provides a switching solution for million-subscriber markets as well as distributed scalability across any-sized market. With integrated media gateway and signaling gateway capabilities, and a choice of standalone or distributed configurations, the system offers an efficient path to convergent wireless technologies and a competitive technology roadmap for tomorrow's markets.

The iCore UMSC / MSC / VLR leverages Tecore's track record of deploying GSM, CDMA, 3G and multi-protocol networks around the globe, as well as its patented software-defined architecture guided by 3GPP/3GPP2 and IMS standards, to deliver the cornerstone of any-to-any communication.

Features

- Support for GSM, CDMA, GPRS/EDGE, UMTS, EV-DO, Wi-Fi and WiMAX from common object code
- Supports up to 1 million BHCA and 1,000 SS7 transactions per second
- Full suite of call control and routing capabilities
- Complete signaling capabilities for integration with PLMN, PSTN, IP and satellite networks
- A wide range of vocoders on software-based DSPs
- Security features including the major standards-based algorithms
- 64-bit Linux-based processing, running on an Intel off-the-shelf blade, supporting a wide range of hardware options



Commercial Carriers

The multi-protocol, multi-interface nature of the iCore MSC / VLR allows operators to maximize service quality and revenue from existing operations while simultaneously rolling out a next-generation network. Mobile operators can also build overlay (GSM-over-CDMA, CDMA-over-GSM or 3G-over-2G) networks with integrated switching, simplifying the network and reducing costs.

Government/Military Systems

The iCore MSC / VLR is ideal for tactical and first responder systems where access to multiple radio access technologies, streamlined operation and mission-critical security features are essential. The MSC / VLR can be integrated into a complete, multi-technology voice and data-capable mobile network contained in a single ruggedized case. With scalability based on standalone or integrated operations, this system is ideal for environments ranging from embassies to the battlefield.

Enterprise Mobility Management

Enterprise IT managers need a comprehensive platform to address the wide range of mobile devices accessing their network. They have few options that will support all major access technologies in a cost-effective and streamlined manner. In the iCore MSC / VLR they can find an unmatched combination of protocols, feature set and enterprise-class form factor.

Carrier-Class Chassis



Government-Class Rapid Chassis



Enterprise-Class CPU Blade



Software Specifications

SYSTEM FEATURES

- Wireless Multi-Technology/Multi Generation Support
- Media Gateway Function
- SIGTRAN/SS7 Signaling Gateway
- SIP Gateway Trunking
- Wireless VoIP Codec Support
- Peer to Peer IP Switching
- Localized Call Routing
- Multi MCC/MNC
- Multi-IMSI
- Network ID Time Zone
- Automatic Subscriber Provisioning
- MLPP

SUBSCRIBER FEATURES

- Call Forwarding Feature Pack
- Calling Line Feature Pack
- Multi-Party Feature Pack
- Call Barring Feature Pack
- Operator Determined Barring Feature Pack

MULTI-NATIONAL REGULATORY FEATURE SET

- Intercept / Monitoring
- Emergency Location Services
- Number Portability

SECURITY ALGORITHMS

- GSM Algorithm Security Pack
- CDMA Authentication Algorithm Security Pack

VOCODERS

- 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 kbps
- All vocoders are supported with: bundling, VAD, transcoder free operation (TrFO) and tandem free operation (TFO)

OPERATING SYSTEM

- 64-bit Linux-based processing

PERFORMANCE

- 1,000,000 BHCA
- 1,000 SS7 transactions/second

Can Be Integrated With iCore Network Center

CORE NETWORK CAPABILITIES

- UMSC
- UMSC / MSC / VLR
- CSCF
- HLR / HSS
- AuC/AC
- SMSC/MMSC
- SMPP Gateway Interface
- SGSN/GGSN
- IN/SIP Application Server
- IP-Centric GSM IWF
- USSD Server
- Gateway/Tandem Trunking
- STP/SP Node