



M-HSS Mobilis Home Subscriber Server

TOTALLY CONVERGED SUBSCRIBER IDENTITY MANAGEMENT ACROSS FIXED LINE, GSM, 3G AND IP PLATFORMS

DELIVERING SERVICE TO SUBSCRIBER CONVERGENCE

The Mobilis Home Subscriber Server (M-HSS) is the heart of all the converged subscriber identity, access and authorization requirements. It is designed to replace an operator's existing HLR requirements while offering all the multi-profile solutions for SIP-centric IMS networks.

The M-HSS offers a cost effective solution to deploy a flexible infrastructure that can replace a service provider's existing requirements for subscriber management while providing the flexibility to allow easy transition to an NGN platform without the potential for service disruption. This puts the service provider's subscribers at the centre of the provider's strategy for mobility of IMS, UMA and other IP services.

PERFORMANCE WITH FLEXIBILITY

The M-HSS is a software based solution delivered on industry standard hardware. The M-HSS incorporates an IMS Home Subscriber Server (HSS) incorporating the User Mobility Server (UMS) and the Home Location Register (HLR). Full support is provided for all HLR and Authentication Centre (AuC) functionality along with all HSS functionality.

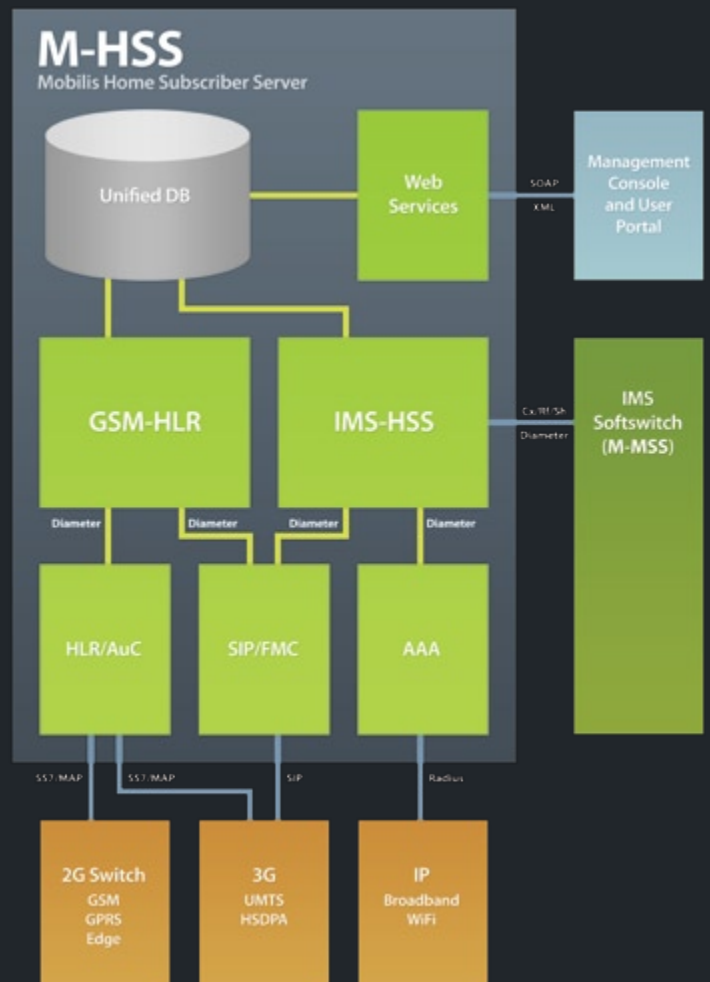
The M-HSS can scale from a few thousand subscribers to many millions on a single platform. Because of the use of an industry standard in-memory database and the advanced caching and replication within the application, performance is deterministic: single figure millisecond response times and hundreds of thousands of transactions per second.

KEY BENEFITS

- Total converged subscriber identity management minimizing OPEX by helping to consolidate subscriber/service management into a unified platform
- Provides a migration path for fixed and mobile convergence so maximizing the use of the existing infrastructure and so minimizing CAPEX
- Offers standards based integration into a network helping to maximize ROI
- Supports multiple subscriber profiles and multiple network access methods allowing service bundling
- Moves tradition switching proprietary solutions into a standardized IT domain

ARCHITECTURE

The M-HSS is architected to support both distribution and replication allowing the service provider to maximize reliability and performance. Additionally, because of the separation of signalling from transaction traffic, new signalling and transaction processing capacity can be configured without the need to add capacity. Signalling and transaction processing can be configured independent of each other. This offers two benefits to the service provider: by isolating the components, scalability can be achieved at a minimal CAPEX exposure; and a marketing campaign's services can be delivered to market quicker and cheaper because of the lack of any significant reworking of the infrastructure.



HLR/HSS FEATURES

Complies with:

- 3GPP Release 6 for IMS
- 3GPP Release 5 for 2G, 2.5G & UMTS
- 3GPP2 MMD
- TISPAN for fixed line DSL connectivity
- PCMM for cable telephony devices

Can be deployed as an HLR replacement or as an HSS or a converged HLR/HSS.

Supports standard IMS procedures:

- IMS Registration & authentication (Digest-AKAv1-MD5)
- IMS Mobile initiated de-registration
- IMS Registration timeout
- IMS Service platform initiated de-registration
- IMS Mobile terminated SIP session set-up
- IMS Initiation of a session to a non-registered user
- User profile update
- Administrative de-registration

Supports IMS Interfaces:

- Cx, Sh, Si Diameter interfaces to CSCF, SIP-AS, OSA-SCS, and IM-SSF
- Wa, Wm, Wd, Wx with AAA Server for EAP/RADIUS
- Px, Ph for Presence
- Rp, Rg for GUP-RAF & Server

Supports standard SIP procedures:

- RFC3261 SIP methods (INVITE, REGISTER, OPTIONS)
- SIP Events (SUBSCRIBE/NOTIFY)
- SIP Authentication (challenge/digest)
- SIP/USSD Gateway (MESSAGE)

Operator-controlled roaming selection (domain-based and PLMN-based)

Optional embedded SIP FMC server for Voice Call Continuity compliancy

IMS Security framework

Pre-GUP XML Subscriber Data Server

ENUM interworking & proxy

Web Service support for Diameter & HSS provisioning

GSM Registration agent

SMS mediation agent and router

Configurable Data Synchronization Facility rules and policies

PLATFORM FEATURES

- 19" rack mounted, 12U NEBS-compliant 14 slot ATCA chassis
- ATCA PICMG 3.0+ and IPMI v1.5 compliant
- Carrier class Enterprise Linux
- Carrier class real-time distributed Oracle

ARCHITECTURE FEATURES

- Stateful hot-standby
- Configures as 1+1, n+n and load sharing
- Fault detection with automated failover
- Redundancy with Mated pair, Active/Standby and Active/Active

SUPPORTED PROTOCOL STACKS

- SS7 – MAP, TCAP, SCCP, MTP (ANSI & ITU)
- SIGTRAN – M3UA, SUA, SCTP
- Radius, Diameter, SIP
- UDP, TCP & IP

