The Star Solutions Sonata® SE MSC Server provides a comprehensive standards-based softswitch mobile switching center (MSC/VLR) solution for second and third generation (2G and 3G) CDMA2000 and GSM/UMTS networks. Fully compliant with 3GPP and 3GPP2 industry standards, this powerful platform is a key component of Star Solutions’ product suite – a complete solution for 3G wireless operators.

**MULTIPLE BENEFITS**

With the MSC Server, wireless operators gain substantial benefits, including lower transport and operational costs due to efficient routing and convergence of voice and data services on a single infrastructure. Additional benefits can include optimized bandwidth utilization through use of multiple compression schemes. Operators that deploy the MSC Server also gain a future-proof solution that can enable rapid, cost-effective deployment of advanced services and applications.

**HIGHLY SCALABLE**

Using the MSC Server, operators can serve customers with IP connected base stations anywhere in the world, enabling them to expand geographic coverage and serve new markets. The MSC Server can cost-effectively scale from small deployments to very large configurations supporting up to 500,000 Busy Hour Call Attempts (BHCAs). Its open, standards-based, distributed architecture enables flexible distribution of platforms such as Home Location Registers (HLRs) and media gateways at optimal locations in the network. This modular solution scales easily and cost effectively with the addition of off-the-shelf hardware and distributed software applications.

**FULL-FEATURED PLATFORM**

The MSC Server features system redundancy, and advanced application management, ensuring reliable, carrier-class performance for networks regardless of size. The MSC Server is proven to easily integrate and interoperate in multi-vendor environments to meet the diverse needs of network operators. The MSC Server is standards-based and communicates with other distributed elements using industry open standards such as MGCP, Megaco/H.248, SIP, M2PA, M2UA and M3UA. The MSC Server incorporates industry standards as defined by ETSI, ITU, GSM, 3GPP and 3GPP2 and other leading standard bodies.
STAR SOLUTIONS ALL-IP NETWORK

### TECHNICAL SPECIFICATIONS

#### CAPACITY
- Busy Hour Call Attempts (BHCA): Up to 500,000
- SS7 Links: 2–1,024
- E1/T1 Spans: 2–2,048
- ITU ISUP: Q.762, 763, 764; Q730-737; including country variants
- ANSI ISUP: ANSI 88, ANSI 92
- CAS: R1, R2, DTMF; including country variants
- ISDN: ISDN Primary Rate Interface
- Intelligent Network: WiN or CAMEL

#### PSTN INTERFACES
- ITU ISUP
- ANSI ISUP
- CAS
- ISDN
- Intelligent Network

#### GSM/UMTS MOBILITY INTERFACES
- A (MSC-HLR): GSM 08.08, GSM 04.08
- D (HLR-VLR): TS29.002 v3.5.0 Release 99
- E (MSC-SMS): TS29.002 v3.7.2 Release 99
- Iu CS (RNC-MSC): TS25.413 v3.4.0 Release 99
- GPRS Interfaces: Gc, Gs

#### IS-41 MOBILITY INTERFACES
- MSC-VLR-HLR: IS-41-D MAP

#### PROTOCOL SUPPORT
- Media Control: MGCP, Megaco/H.248, SIP
- Signaling Transport: M2PA, M2UA, M3UA, SCTP, SCCP-Lite, TCCS
- Management: XML, SNMP

#### PLATFORM
- Sun Microsystems Netra™ Family
- Sun Solaris™ 8
- Sun Solaris™ 10