

Accelero™ Application Development Platform

For Building Next Generation Network Software

Network application development platform enabling transport-independent deployment over converging wireless, IP and IN networks



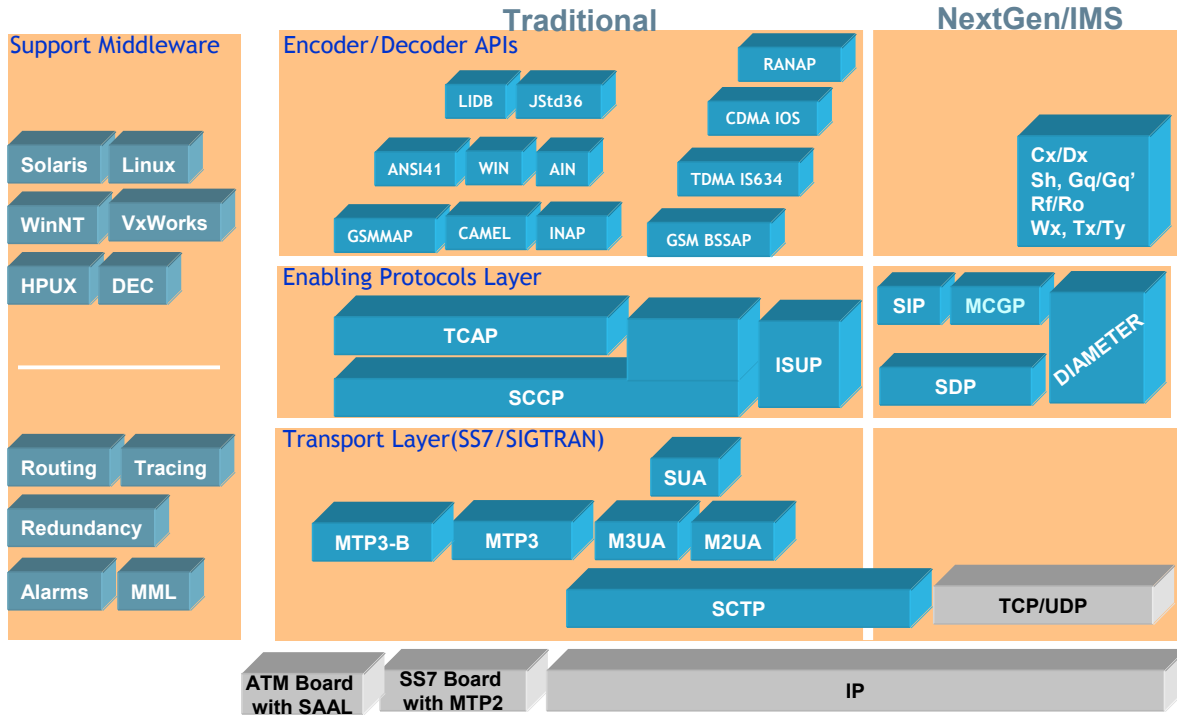
The Diametriq Accelero™ Application Development Platform provides a versatile development environment for converging wireless, IP and intelligent network (IN) applications. Accelero simplifies building new network applications and services by insulating the application developer from the complexities of integrating third party components such as protocol stacks, application layer APIs and hardware interface cards. Accelero allows distributed applications to interoperate across disparate networks – despite differences in transport protocols, geographic location or network architecture. It empowers the application developer with a comprehensive solution suite to simplify the development process and reduce development time and cost. Accelero includes the necessary infrastructure components combining signaling protocols, encoders/decoders and OA&M software with development tools and a robust redundancy scheme.

Mature, Widely Deployed Signaling Protocol Stacks

The Accelero protocols have powered a rich feature set of more than fifty diverse telecom applications in more than sixty countries around the globe. Accelero has enabled high-performance applications and has carried signaling to support more than 100 million subscribers. The Accelero stack includes mature implementations of enabling protocols for transaction management (TCAP), signaling and address (SCCP), call processing (ISUP) and message transfer (MTP). The Accelero stack seamlessly integrates the IP signaling protocols for SIGTRAN.

Accelero™ APIs are:

- Easy to use C++ API's that are modular and have an object-oriented implementation.
- Independent of the underlying stack configuration, such as ITU/ANSI/mixed.
- Flexible so you can bind more than one API suite, e.g. GSM MAP and CAMEL, at the same time.
- Hardware vendor and platform interoperable.



Carrier Grade Reliability

The Accelero™ Application Development Platform employs a sophisticated 1+1 active/active redundancy scheme. The redundancy mechanism is based on high-speed distributed shared memory (DSM) that allows applications to operate on a 1+1 load sharing mode. The redundancy is based on an open architecture that can be extended and built directly on top of the FT/HA exchange methods. A Health Status Monitor Interface manages the performance of the various threads that are running within processes of the nodes, providing redundancy at the node level. The nodes are in “active-active” mode. If one node fails, the overlying applications are unaffected since the processes are still running on the other nodes.

Integrated Operation, Administration & Maintenance (OA&M) Functionality

To support the operations and maintenance needs of geographically distributed network deployments, Accelero is equipped with an industry-standard SNMP Management Information Base (MIB) . Management and provisioning can be accomplished with a web-based GUI or other SNMP-based network management system. Features include embedded trace level diagnostics and MML to dynamically configure, monitor and tune an operational system.

Signaling Transport Independence

The Accelero™ Application Development Platform literally future proofs any application with a signaling transport independent architecture. This means the application can function over an SS7 MTP transport, an IP SIGTRAN transport or an ATM transport. This flexibility enables the development of applications completely independent from the underlying network architecture.

TECHNICAL FEATURES	
Product Type	Software - Available in Linkable or Standalone Server Configuration
CPU Support	Single Processor/Multi Processor
Platforms supported	Linux (RedHat ES 4.0) - Solaris 10 - Windows XP, 2003 Server
Multithreading Support	Thread Safe
Software Redundancy	Fail over configuration [1+1], Link Sharing, Load Sharing [Active-Active]
OAM Configuration	XML – static data, API – programmer interface
Logging & Tracing	Dynamic levels of debug, File based logs/traces
Development Extension	C, C++
Transport & Security	
	Transport – SCTP (or TCP)
	Security – IPSec
Interfaces	
Diameter	IETF RFC-3588 and 3GPP-IMS 3GPP TS 29.230 3GPP Cx/Dx, Sh, Rf/Ro/Rx, Gq, Tx/Ty and others
GSM MAP	Phase 1, 2, 2+ and 3; Phase 2+ 3G TS 29 002 V3.4.0 (2000-3)
UMTS MAP	3GPP TS 29.002 V4.2.1 (2000-12)
ANSI-41	TIA/EIA-41.[1-6] D Dec 1997
CAMEL	Stage 1 & 2 ETSI TS 101 046 (V7.0.0) 3 rd Gen ETSI TS 129 078 (V3.3.0) (V5.0.0)
WIN	TIA/EIA/IS 771 July 1999 - TIA/EIA/IS 826 July 1999 - TIA/EIA/IS 848 July 1999
SUPL	OMA SUPL 1.0
RANAP	3GPP TS 25.413
INAP CS 1	CS 1 ITU-T spec 1218 (release 10/95)
INAP CS 2	CS 2 ITU-T Q1228 (09/97 release)
AIN 0.1, AIN 0.2	TELCORDIA Generic Requirements AIN0.2 GR 1299 (Issue 4, 09/97)
LIDB	TELCORDIA Generic Requirements GR-95-4-CORE (Issue 2 March 1997)
SS7 Transport	
TCAP-ANSI	ANSI T1.114 1996 1992
TCAP-ITU	Blue & White Book ITU-T Q.77x 06/97
TCAP-China	TCAP China Specification based on ITU-T Q.77x 1997
TCAP-Japan	TCAP Japan Specification based on ITU-T Q.77x 1997
SCCP-ANSI	ANSI T1.112 1996
SCCP-ITU	ITU-T Q.71X 07/96 ETSI ETS 300 009
SCCP-China	SCCP China Specification based on ITU-T Q.71x 1996
SCCP-Japan	SCCP Japan Specification based on ITU-T Q.71x 1996
ISUP-ANSI	ANSI T1.113 - 1995,
ISUP-ITU	ITU-T Q.76X 09/97
SIGTRAN Transport	
SUA	IETF Draft 14 July 2002
M3UA	IETF RFC 3332 September 2002
SCTP	IETF RFC 2960, October 2000
ATM Transport	
MTP3-B	White Book ITU Q.70x. 7/96 ANSI T1.1.11 1996

Diametriq Value-Added Services

Core Expertise. Fast Delivery. Controlled Costs. Exceptional Results

At Diametriq, we partner with our customers to develop custom product solutions that help them deliver new revenue-generating products and services, improve operational efficiencies, and reduce costs. Our customers include the world's leading network equipment suppliers, software developers, and hosted service providers. We work closely with them to understand their requirements and anticipate how our products and services can best meet their needs.

We combine wide-ranging software experience, peerless understanding of industry dynamics, and meticulously detailed software processes to deliver market-leading solutions. We can augment a customer's in-house development team with specialized expertise, or we can assume complete responsibility for a project from requirements definition to system verification - freeing up our customer to focus on other priorities. We are particularly experienced in the areas of location-based services (LBS), roaming and mobility, convergent billing, 3G/4G fixed mobile convergence (FMC), advanced messaging, and the IP Multimedia Subsystem (IMS).

Diametriq uses its **Accelero™** platform to build custom solutions. Accelero embodies the knowledge and experience of our engineering team and enables us to accelerate time to market, reduce cost, and minimize the risk associated with delivering new solutions.

We adhere to rigorous quality standards for every project. Our ISO 9000:2000 certification reflects an organization committed to producing high quality, carrier-grade communications solutions - even those requiring "five nines" reliability.

Accelero Value Proposition

- Carrier-Grade Reliability
- Mature, Widely-Deployed Signaling Protocol Stacks
- Comprehensive Suite of API's
- Rapid Application Creation
- Support for Multiple Network Types
- Integrated OA&M Functionality
- Signaling Transport Independent
- Platform and Hardware Independence



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