



Iskratel Voice Modernisation

Advanced Class 4 Solution

Why the Iskratel Class 4 Solution?

- Cost efficient
- Proven technology
- Fully standard compliant
- Backward compatible with legacy systems (EWSD and others)
- Experts in network modernization

Transit traffic operators are facing extreme pressure from pricing, efficiency and effectiveness, while competitiveness is rising.

An operator's business model for transit switching (Class 4) is very sensitive. Therefore an appropriate solution must offer excellent support and flexibility.

The technology must be scalable, reliable, fast to implement and easy to maintain. Power consumption must be low. Open and standardized interfaces are mandatory for interoperability with the existing legacy systems, and seamless integration.

Lastly, the investment needs to be future proof – and the technology used capable of smooth migration to the IMS.

THE ISKRATEL APPROACH

Building on its rich experience and tradition in switching systems, Iskratel has created a perfect end-to-end solution for the operators dealing with transit telecommunications traffic. The core of an advanced Class 4 solution consists of the SI3000 Call Server (CS) and the SI3000 Signalling and Media Gateway (SMG). Proven technology is used in a combination designed for the needs of transit operators. It contains a rich set of routing features that can be easily adapted to the customer's needs for traffic and costs optimization (LCR).

Operator's profitability is reached by the scalability of the platform. The Iskratel Class 4 Solution builds on a proven ETSI MEA platform that begins at one box size and can be extended according to the customer's needs. Alternatively, a standardized ATCA platform can be used for projects starting at higher capacities.

The solution supports different national ISUP variants, guaranteeing easy integration in the network. For optimized bandwidth usage a variety of audio codecs are supported. Transcoding between the different audio codecs is an essential part of the solution. Further network optimization and improved quality of service is supported by the functionalities like TDM-hairpinning, echo cancellation.

The complete solution is designed as a carrier-grade solution, and contains all the necessary mechanisms for high availability and redundancy – including geo-redundancy.

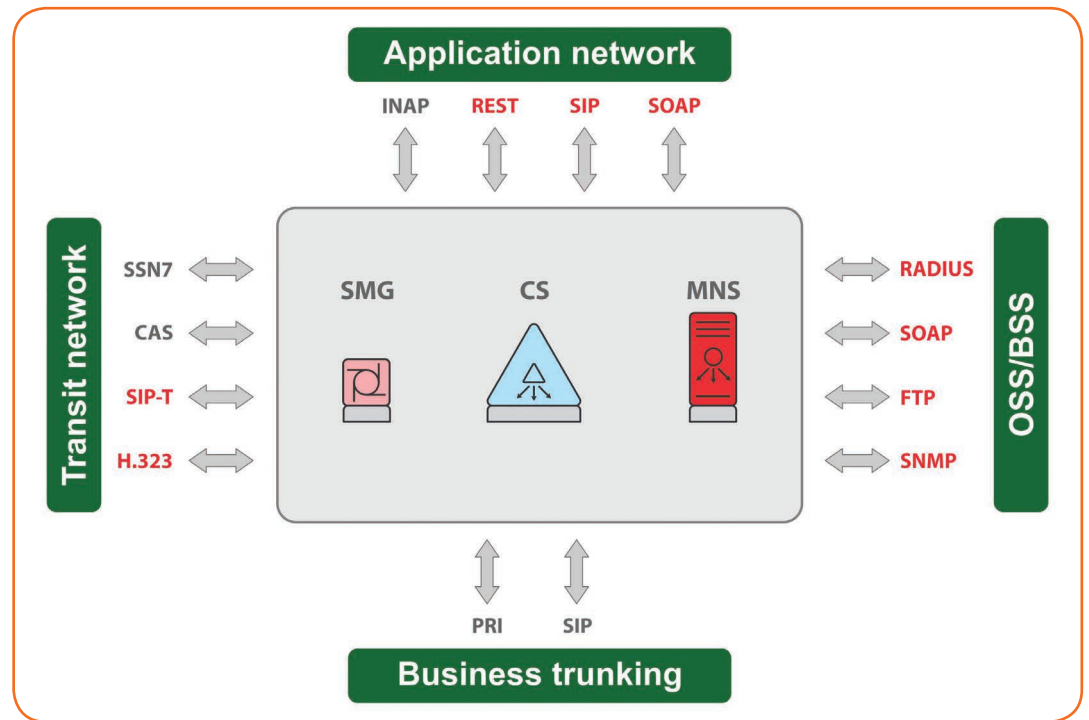
A real-time detailed overview of system performance and utilization is important for maintenance personnel, allowing them to be more efficient. The Iskratel Advanced Class 4 solution contains a Performance and Quality Monitoring System (PQMS) and a Fault Monitoring System (FMS), which support a collection of alarms and integration with the Iskratel SI3000 products and third party equipment present in an operator's network.

Operator benefits:

- Carrier-grade solution
- Entirely scalable – pay as you grow
- Open interfaces for easy integration into existing network
- Interoperable with existing legacy environments
- Future-proof design for easy transition to IMS
- Integrated with fraud protection tools

Key services of the Iskratel Advanced Class 4 solution:

- Flexible routing and rich set of routing features (LCR)
- Open interfaces and APIs to OSS/BSS integration
- Regulatory features (NP, LI, SORM)
- Various ISUP national variants
- One-box solution
- Statistics, Diagnostics (PQMS), Fault Monitoring System (FMS)



Governmental requirements – like Number Portability and Lawful Interception are supported in different local and country-specific variants.

The complete solution can be implemented in an NGN or IMS mode of operation. Migration from NGN configuration to the IMS architecture can be done anytime by an administration procedure without SW and HW changes. Furthermore, only additional licenses (and no SW changes) are needed for the same platform to be used as a combined or pure Class 5 solution.

The solution can be positioned universally as an International or National Class 4 solution or combined Class 4/Class 5 City or regional solution.

USING THE ISKRATEL CLASS 4 SOLUTION

Predefined procedures allow for simple and fast implementation of the solution in an operator's network. Experts at Iskratel have expansive knowledge of products from other manufacturers that may be in the network

and that have to be replaced. Therefore, the migration procedures for selected Class 4 systems are also prepared.

The recommended replacement process begins with a survey of the current network state, followed by preparation of the migration steps and all the necessary data for the migration of the system databases. After the completed migration, the process is finalized with a final service operation check.

Management and maintenance of the Iskratel Advanced Class 4 solution is simple and user friendly thanks to the Management Network System (MNS).

The management has a variety of interfaces for connection to the OSS/BSS systems. Similarly, open application layer interfaces enable the implementation of new, customer-tailored applications based on legacy TDM or new IP-based standards.

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