

### Troubleshooting

Tekelec's Integrated Applications Solution (IAS) provide operators with complete visibility to everything going on within their networks. They are able to determine why subscribers are unable to access e-mail, troubleshoot download failures from ringtone servers, even identify issues with traditional IN services such as CNAM and LNP.

IAS provides real-time data and reporting, as well as alarming capabilities to ensure proactive responses to network issues. Operators are able to quickly isolate problems in the network and respond accordingly, cutting troubleshooting time significantly.

Tekelec's IAS is vendor agnostic, accessing the signaling network and providing decode and tracing capabilities within the SS7 as well as IP domains. No longer must an operator purchase two disparate systems for different network topologies. IAS supports both traditional networks as well as IP-based networks.

As operators evolve their networks to support VoIP or IMS, the ability to supervise the transactions between the networks becomes paramount. Identifying failures between gateways, tracing registrations in the SIP domain and tracking authentication are important for troubleshooting in the new network environment as well as the TDM network. Tekelec provides operators with the best tools available for cross-domain network monitoring when upgrading voicemail platforms, SMS, or additional trunks and circuits.

Regularly scheduled reports and dashboards can be developed by users to enhance the visibility provided by IAS. These reports and dashboards can be delivered in a number of ways, and access can be given to any user with a standard Web browser (and the proper permissions).

Network troubleshooting has become increasingly complex, especially as networks evolve to all IP-based infrastructures. Traditional monitoring systems designed for SS7 networks no longer support the needs of these new networks. Tekelec's IAS provides everything that an operator needs to maintain their network, while providing additional value with capabilities that can be used throughout the organization. IAS is more than a troubleshooting tool; it is a business tool capable of providing operators the visibility they need for building and maintaining their networks while ensuring profitability in their business.

### Benefits

Tekelec's IAS troubleshooting capabilities allow wireless and wireline operators to:

- **Perform real-time troubleshooting of TDM and IP-based networks.** As operators begin the transition to VoIP or IMS, troubleshooting between the two network domains becomes impossible without the right tools. IAS fills the gap, supporting both networks on one platform, with one common set of applications. Operators are able to identify failures between gateways, trace registrations in the SIP domain, even track authentication
- **Supervise 2G, 3G, and 4G wireless networks.** Wireless providers can finally trace more than just wireless voice calls. IAS tracks e-mail transactions, data downloads, Website access, and more
- **Troubleshoot more than just the network.** With IAS, operators can identify access problems before customers realize them. They are able to track the overall performance of the network including the time to access Web portals, performance of the GGSN/SGSNs, and other network access points
- **Monitor content downloads.** Operators can verify that subscribers are able to download the content provided, and ensure they pay content providers for only the successful transactions
- **Proactively manage customer care.** Access to vital and reliable incident-related data allows operators to more efficiently manage the network, respond swiftly to technical problems before they impact customer satisfaction and demonstrate responsiveness to complaints. Operators can easily detect and resolve the leading problems cited in customer dissatisfaction surveys, including: wrong dialing code, wrong VPN usage and call forwarding loops