



## iTrinegy Guarantees the Performance of Mission Critical Applications for APD Communications Customers

APD Communications is a global leader in mobile information, resource location/tracking and control room solutions. The company specialises in delivering mission-critical and business-critical solutions to organisations within the public sector, transport, security, logistics and the emergency services. APD Communications' products are used in over 90 client sites in the United Kingdom, Scandinavia, Eastern Europe and the Middle East. Customers include 80 per cent of police forces in the United Kingdom (including The Metropolitan Police Service, Merseyside Police and Hampshire Police), Abu Dhabi Police, Swedish Police and leading organisations such as London Underground, Balfour Beatty Infrastructure Services and Data.

APD Communications was selected by Airwave to help develop Omniguard, their personal safety solution developed in collaboration with UK ambulance services for the safety of staff working alone. Omniguard is capable of being integrated into radios connected to Airwave's TETRA network, allowing staff who are working in threatening situations to request heightened monitoring from the control room. The product can also be extended to support other network bearers, devices and control room environments, allowing monitoring to be extended to include non-TETRA devices such as smartphones and PDAs on GPRS/3G networks.

Given the critical nature of the solution, APD Communications chose iTrinegy's Network Emulator (INE Enterprise), to recreate all the network types and conditions needed to test application resilience in the field.

Simon Read, Head of Product Management for APD Communications, said: "To ensure the effective resilience and failover features of Omniguard, we purchased INE Enterprise to emulate the network conditions that would be experienced by workers in the field and test all variables that could impact these users. The tool has been invaluable in helping to determine the best ways for us to ensure workers can conduct vital tasks, with the knowledge that the control room is aware of their location and status at all times."



*INE Enterprise replicated the network conditions experienced by workers in the field*

INE Enterprise provided APD Communications with a wealth of simulated 'real-world' network parameters; ensuring the Omniguard system was truly fit for purpose before release. This ensured the system would adapt and optimise for any unexpected connectivity and synchronisation issues. This confidence in the delivery is vital where the stability of the solution is directly related to the safety and wellbeing of lives in the field.

With the need to connect control rooms with workers in the field, it is important for INE Enterprise to simulate the network conditions of sites at different geographical locations. "iTrinegy's solution provides the ability to recreate various inter-site connectivity scenarios, while giving the option to test under high load or with unpredictable network conditions. As a result, the Omniguard delivers a resilient dual-site capability that ensures the control room is always monitoring the needs of lone workers in the field," continued Read.

### Set-up and Ease of Use

Dan Ellis, Development Manager for APD Communications, had the responsibility of sourcing and implementing a solution. He noted: "After purchasing INE Enterprise, we wanted to get the

solution working quickly. We found the product to be very easy to set up and as a result we have cross-trained other departments within APD Communications. iTrinegy's comprehensive training and support ensured we were up to speed within a short space of time, and additional technical support is always on hand from iTrinegy should we require it."

### Enabling Developers to Address Issues

"By utilising the Network emulator in our development labs with our CORTEX ICCS product, we have been able to test our new VoIP TETRA Port Pooling solution over a variety of different simulated connections including ADSL, Satellite and congested LANs. With VoIP usage on the increase but with differing network conditions we have been able to reliably simulate customers' environments and successfully re-factor the relevant code to address any problems. Furthermore, we can now state with certainty the bandwidth requirements of any particular scenario; essential for mission critical services where accuracy is paramount," continued Ellis.

### iTrinegy Profiler

Following the successful implementation of INE Enterprise across a number of different departments, APD Communications looked to iTrinegy's Profiler.



*Profiler was used to provide a comprehensive view of APD's clients network and application performance*

This powerful network profiling tool assesses an organisation's actual network performance and the performance of the applications running over that network; essential for recreating a realistic customer environment.

In particular this functionality is being used to show clients where potential issues lie, for example bandwidth constraints.

"We are currently using Profiler to provide a comprehensive view of our clients' needs. Our support and on-site teams use the solution to help diagnose issues with customer networks to ensure these can be addressed and resolved - for example, we use it to monitor a satellite link for a mobile control room in Abu Dhabi. This will identify any network issues to ensure our CORTEX ICCS product works effectively in mission-critical circumstances" continued Ellis.

### Why iTrinegy?

"No two networks are the same and with customer data travelling across ISDN, TETRA, satellite, wireless and WAN, it is important for us to be able to recreate all these network scenarios to meet the needs of our clients. Given our existing relationship with iTrinegy, knowledge of their expertise and comprehensive Virtual Test Networking (network emulation) and Network Profiling solutions, the iTrinegy INE Enterprise and Profiler were obvious choices to help us provide our customers a solution tailored to meet their requirements. For example, we recently won a £3million national framework contract to provide Special Branch and Counter Terrorism Officers throughout the UK with our Mobile Identification Units. These units allow officers to instantly validate the identification of individuals by scanning their passport, smart card, fingerprint, iris and then query security databases such as PNC, Voter's Register and other specialist databases holding counter terrorism and homeland security data. The mobile unit securely transmits data via an integrated GPRS or TETRA modem; conditions that were simulated using INE Enterprise to ensure the solution would work effectively in the field," concluded Read.

iTrinegy's Virtual Test Network and Network Profiling solutions can be easily used by developers and testers to determine how an application will perform prior to roll-out. This capability helps to save time and money by identifying and fixing issues earlier in the development lifecycle. iTrinegy is the technology leader in Virtual Test Networks and is the only vendor with both Network Profiling and Network Emulation solutions.

With iTrinegy's Virtual Test Network and Network Profiling solutions you can be confident in having the capability to meet all your current and future test requirements.