

---

## smartnumbers™ from Resilient – smart enough to use Aculab

Resilient Networks plc is a provider of highly survivable voice communications services. The company helps large organisations, such as government, defence, finance, health, utilities and retail, solve enterprise wide problems with its robust and flexible communications solutions.



Resilient's services are delivered in partnership with established providers, such as BT, Orange and Regus, under its services brand smartnumbers.



This story illustrates how the business benefits of smartnumbers, delivered to one of the largest commercial clearing banks in the United Kingdom, are underpinned by Resilient's use of Aculab's Prosody X telephony resource platform.

### The background

With its partner, Resilient targeted a banking industry account that was planning to rationalise its ISDN infrastructure. The partnership worked to differentiate its proposition, to win the account from the incumbent provider, engaging the customer with a compelling narrative. The benefits that resonated with the bank were resilience, flexibility and insight; being able to fully understand and control how its calls are delivered from the PSTN and self-manage its communications, in addition to cost reduction.

### The business challenge

Whilst communication is at the heart of every business, it is the lifeblood of financial services organisations. The bank, like all others, has an obligation to its customers to ensure its published telephone numbers are not exposed to risk during potential disruption to its infrastructure. With the continuity planning requirements imposed by the FSA, the time was right to rationalise its communications. The bank wanted a solution that would reduce its operational costs and give it more organisational agility, with full visibility and centralised control of its critical voice services.

### The requirements

For any business connected to the local serving exchange, if there is an issue due to e.g., a natural disaster such as flooding, it loses its telephony. For a bank whose business depends on inbound calls, carrying such risk, with no better service level than the average small business, means an unacceptable uncertainty.

The bank needed to mitigate the risk of disruption, with continuity of service and call distribution across the branch estate. All calls had to be able to be delivered into any location, regardless of its UK geographic numbers, with automatic failover to its other sites or chosen, off-site locations.

### The solution

Under a new, long-term contract, Resilient and its partner are delivering its Direct Connect service to the bank via Resilient's smartnumbers service, which incorporates Aculab's Prosody X 1U high availability chassis, identified by Resilient as a POP.

Using Resilient's smartnumbers meant that the bank gained its own private exchange, effectively bypassing the local, single point of failure at the PSTN edge.

In summary, the service works as follows:

- The bank's numbers moved from the local exchange into the smartnumbers network
- Calls to the bank are load balanced and routed by the smartnumbers service to multiple, dedicated, redundantly configured POP installations, based on Aculab's Prosody X 1U high availability chassis, hosted on the bank's network
- Calls can be presented to the bank's corporate PBXs either as Euro ISDN or SIP-T, with Resilient's smartnumbers application controlling SS7-to-ISDN/SIP-T gateway functionality
- At any time there is a need, the bank is able to manage and control call distribution and re-routing at an individual, departmental, multi-site or corporate-wide level, using Resilient's Smart Business Portal

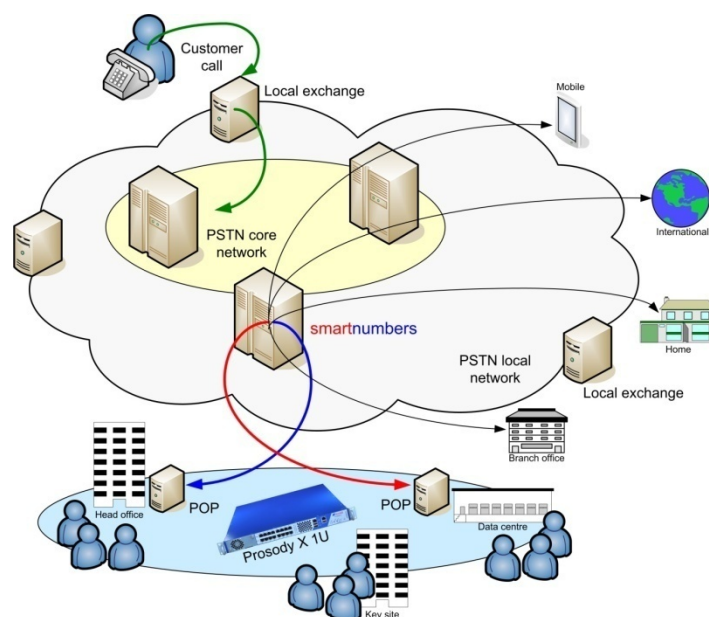
### The role of Prosody X

Because it needed deployment proven hardware, Resilient chose to design its system around the latest addition to Aculab's telephony hardware portfolio. Aculab's remote APIs, together with the distributed architecture of Aculab's Prosody X 1U high availability chassis, achieves the separation of voice media processing and application functions. That service-oriented architecture meant Resilient was able to engineer its POP configurations with several advantages:



- **Application platform virtualisation:** applications were virtualised in a dual-redundant, high availability configuration, with one virtual machine (VM) instance per POP
- **Cross-over redundancy:** VMs were paired in the cloud-based, redundant configuration, with either peer node being able to remotely control two, similarly paired POP chassis
- **Scalability:** the platform is readily scalable; when the bank needs more resources, the answer is simple – add another POP

"With Aculab's new configuration, we were able to build our platform as a number of virtual machines, symmetrically deployed across physical hosts. At the scale we've deployed for the bank, that enabled significant savings on App server costs, but with no compromise on redundancy and resilience," commented David Collins, Resilient's VP of Marketing.



**Figure 1:** Overview showing how Resilient's smartnumbers and Aculab's Prosody X 1U chassis enable the delivery of smartnumbers Direct Connect services to the bank.

## The result

Centralising the banks' critical inbound voice services reduced costs and management overheads, due to the direct SS7 interconnect between the smartnumbers network and the bank, which is facilitated by Resilient's use of Aculab's Prosody X 1U high availability chassis. Additional cost benefits were gained by the removal of unnecessary ISDN, DDI and legacy business continuity services.

"Our smartnumbers services are used by many of the UK's largest organisations across all strategic verticals. In this case, the bank realised that protecting its revenue and reputation were more important than merely shaving costs. Thanks to Aculab, we were able to provide a solution that enabled the bank to do all of those things," complimented Andrew Bale, Chief Executive Officer for Resilient.

"Resilient's endorsement of Aculab as a key supplier of distributable hardware for SS7 and telephony resources is plain. We are delighted to share in the success Resilient has achieved with smartnumbers," concluded Ian Colville, Product Manager at Aculab.

For more information, please contact your Account Manager or view our website:  
**<http://www.aculab.com>**

The information in this case study overview is provided by Aculab plc, a computer telephony company, and is for informational purposes only. Nothing in this publication forms any part of any contract.

The information contained herein is based on material, which Aculab, based on its best efforts, believes to be reliable, but no representation is made as to its completeness or accuracy. Aculab make no warranties, express or implied, in this document. E&OE