CASE STUDY

SECURE, SIMPLE AND SMART COUNTY-WIDE WIRELESS ACCESS TRANSFORMS PUBLIC SECTOR COLLABORATION

The UK public sector has talked for years about collaboration, shared expertise, and joined-up-thinking. Rather than hundreds of disconnected silos, wouldn’t it be great to work together to deliver services to citizens?

The Govroam project is an attempt to make real this promise. A nationwide network exclusive to public sector staff, Govroam enables secure, wireless connectivity via a single sign-on. Rather than being tied to the office network, it means public staff can work from libraries, health centres, fire stations or anywhere on the Govroam network.

TRANSFORMING MOBILITY FOR THE PUBLIC SECTOR

The Govroam project is national, but it must be delivered at a local level. Kent Public Service Network (KPSN) is charged with implementing Govroam in Kent, a county to the south east of London. For KPSN, the challenge is to enable roaming wireless services for public sector staff across 16 organisations in Kent. These would include local authorities, health centres, Kent Police and Kent Fire & Rescue and tourism destinations. The aim is to have capacity for up to 30,000 users.

The solution would involve knitting together the various existing networks at each of the 16 partner organisations. KPSN would not be building new networks, with new access points and switches, but managing secure access to what was already in place.

KPSN needed a solution capable of working across multiple vendor hardware. This involved a two-tier approach: each organisation would have a Radius server installed on its network to take requests from visitors and direct them for authentication, and a second, central Radius server on the KPSN WAN to act as a focal point to check domain information and direct responses to the partner organisation.

SIMPLIFIED ROLE-BASED ACCESS

At the heart of the KPSN solution is Aruba ClearPass Policy Manager which provides network visibility and access control. ClearPass enables KPSN to maintain consistent policies across distributed enterprises – and enforce them at every branch site.

GEORGE RHODES
TECHNICAL PROJECTS OFFICER, KENT PUBLIC SERVICE NETWORK

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OUTCOMES

• Manages secure, single sign-on access across 475 locations, from local government offices and university classrooms to a castle
• Enables wireless access for 20,000 public sector users per week, and growing
• Establishes platform to explore integration of IoT
• Strengthens public sector business continuity and remote working across Kent
• Allows consolidation of individual network infrastructure access, reducing costs and management

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with cloud-managed branch gateways. It creates agentless visibility and dynamic role-based access control for seamless security enforcement and response across partner organisation's wired and wireless networks.

The solution was designed and implemented by Khipu Networks, an Aruba partner and specialist wireless network provider and an expert in Radius Architectures.

In addition, the Govroam Companion, an interactive map application shows active Govroam venues around the UK. The app, developed separately, is compatible with iOS and Android mobile devices.

A NATIONAL SUCCESS STORY
As of May 2019, 475 sites in Kent are connected to Govroam. This includes more than 100 council buildings, all three of Kent’s universities, 87 libraries, 63 fire stations, 49 children’s centres, eight youth centres, six hospitals, a castle and a theatre. Each site includes promotional material explaining how to use Govroam.

The number of users has grown dramatically, from 6,500 per week in 2018 to 20,000 per week. For users, it is a seamless experience at any site, with the same login information they use at their office.

It has also seen KPSN take a leadership position on the roll-out of Govroam: at one point Kent comprised one-third of all the UK’s Govroam connections.

George Rhodes, Technical Projects Officer, KPSN, says the project has been a huge success: “Even today, with around 4,000 Govroam sites across the UK, Kent makes up 10% of the total. The take-up by such a broad spread of organisations here in Kent is testament to the effectiveness of the solution.”

PROVING A PLAN FOR OPERATIONAL EFFICIENCIES
The successful deployment enables public sector organisations in Kent to plan consolidation projects. Govroam allows organisations to co-locate, meaning they can strip out duplicate network infrastructure. In addition, a reduced network surface area means there are fewer network vulnerabilities.

Govroam is supported by a secure login process under the principle of a single, authenticated sign-on, managed by the user’s own organisation, explains Rhodes:

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STRENGTHENED BUSINESS CONTINUITY AND SEAMLESS COLLABORATION
More than the national recognition and more than the consolidation opportunities, the success of the KPSN Govroam project is the impact it is having on public sector collaboration. It enables the kind of multi-agency working that is an increasingly common reality.

For example, Kent and Medway Safeguarding Adults Board (KMSAB) is a multi-agency partnership. It needs to support hundreds of multi-agency staff and wants to move away from paper-based records. Govroam enables KMSAB to roll-out digital records, training is more consistent, project management more accountable, and staff can connect from across the county.

It also improves business continuity planning. With staff struggling to commute, Kent Fire & Rescue leaned on Govroam during a period of heavy snow.

“We know public sector teams have responded to Brexit planning and congestion worries by promoting working remotely,” says Stuart Cockett, Technical Operations Service Delivery manager. “Govroam allows them to work at a nearby office, rather than travel to their usual office. This kind of flexibility is here to stay.”

THE GREENLIGHT FOR MORE AMBITIOUS PROJECTS
For KPSN, success provides the greenlight for further, more ambitious projects. Extending public wireless is planned; there is an opportunity to take a national lead on integrating IoT devices.

“We’re providing the backbone infrastructure to on-board, monitor and secure IoT,” says Rhodes. “It’s then up to our partner organisations to come up with the use-cases.”

This could be environmental monitoring, or wayfinding services, or asset tracking. KPSN is in talks with local authorities’ property services and business intelligence teams, and project leaders from the University of Kent.

“A lot of the UK’s freight traffic comes through Kent,” says Lockett. “There is freight monitoring throughout Europe, then it stops at the UK. We can imagine a solution with sensors tracking freight through Kent, with connections to the network managed through ClearPass.”