



VMWARE KEEPS THE ARMY ON THE FRONT FOOT BY BOOSTING DEPLOYMENT



ARMY

CUSTOMER

THE BRITISH ARMY

WEB SITE

WWW.ARMY.MOD.UK

INDUSTRY

PUBLIC SECTOR

LOCATION

UNITED KINGDOM

KEY CHALLENGES

- Increase infrastructure resiliency
- Speed up software development
- Instil a DevOps culture

SOLUTION

The British Army has transformed, deploying a range of end-to-end products from VMware to create a fully agile, robust and scalable estate, guaranteeing the seamless running of its operations on a daily basis.

BUSINESS BENEFITS

- Increased resiliency
- Increased agility
- Greater operational efficiency

The British Army required a new hosting system to deliver the application services it needed to run day to day operations for up to 50,000 users. Applications include those used for enterprise resource planning, training, staff competency & reviews, combat readiness, HR systems and scenario planning. Replacing a legacy infrastructure that was no longer fit for purpose, the Army partnered with VMware to deliver a system enabling the development and deployment of applications much faster than before. The shift to a software-defined data centre coincided with an ongoing cultural overhaul, with the Army embracing a DevOps way of working.

The British Army is the land warfare force of the United Kingdom. It is principally charged with the defence of the population of the UK and its overseas territories, actively engaging in operations around the world. Its work ranges from peacekeeping, providing humanitarian aid, enforcing anti-terrorism measures and combatting the international drugs trade. The Army currently supports over 82,000 regular troops and more than 29,000 reservists, as well as thousands of support personnel.

The challenge

As the primary defence force of the United Kingdom, it is imperative that the Army has complete oversight of its defensive capabilities and the combat readiness of its forces. Responsible for military, peace keeping and aid functions, the Army must be ready to deploy for any situation at a moment's notice. It therefore needed a resilient infrastructure that would allow it to run its business applications and back office functionality – continuously and with minimal downtime.

The system had to increase the speed of application development, all while securely supporting more than 50,000 military personnel across requirements. It also had to provide a one-stop shop for all supporting software and applications, giving the Army greater control over its servers, and connecting into its colocation facility in Farnborough, the chosen failover site for disaster recovery.

To allow the Army to rapidly respond to any crisis, the infrastructure needed to consistently monitor and easily upgrade applications that enable its day to day running. These applications involve everything from; active troop deployments and movements, munitions resources and reserves, the health and wellbeing statuses of active and retired service personnel, training programmes and resource planning.

“Our previous system was no longer fit for purpose. It would take several weeks to develop and deploy an application into the testing environment. We needed

“With VMware, we have complete control and oversight of our infrastructure; it has significantly improved our ability to deploy and support applications services that enable the Army to deploy globally and carry out its duties.”

LT COL DORIAN SEABROOK
HEAD OF OPERATIONS, IAS BRANCH
THE BRITISH ARMY

VMWARE FOOTPRINT

- VMware Horizon
- VMware vSphere
- VMware NSX
- VMware vSAN
- VMware vRealize Suite

a system that would speed this process up, so we could rapidly develop applications as well as being confident our administrative systems would keep running in the event of any issue. It was broadly understood we would have to change our approach and working practices to accommodate a new system,” said Lieutenant Colonel (Lt Col) Dorian Seabrook, Head of Operations, IAS Branch, the British Army.

The solution

VMware helped the British Army create a modernised infrastructure that would guarantee uptime across its estate. Working with VMware’s vRealize® Suite, the Army developed a resilient infrastructure, allowing for the creation of applications within a siloed testing environment, delivering maximum uptime. Several template platforms were stored on file, enabling developers to access these blueprints to create their own infrastructure on which applications could be spun up within their development area for testing and a secure system to push it into system integration and then pre-production line once it has been developed.

To deliver a private cloud infrastructure with high availability, data protection and resiliency built-in, it deployed VMware vSphere® as the support for a private cloud. It worked to create a software-defined data centre that helped the Army achieve improved security, high availability and faster delivery of infrastructure and applications by dispensing with legacy hardware and existing infrastructure problems. This new system is now backed up through its Farnborough site, ensuring data is always available and that services and applications are not interrupted, even in the rare instances when infrastructure fails.

The move towards a DevOps culture meant the Army shifted to a more automated approach through VMware NSX® and VMware vRealize® Suite, so entire network components can be provisioned in minutes, rather than days, reducing the time taken for the Army to make system and security upgrades.

Furthermore, adding VMware Horizon® to the estate allows a limited set of users to remotely access the department’s secure virtual desktop infrastructure (VDI). Currently the organisation is running 10 clients, but it can scale this to 120 easily. The remote access capabilities also bring versatility to the Army’s applications, enabling teams who work remotely to work on application development.

Business results & benefits

VMware’s solutions allow for new software to be developed rapidly, helping the organisation have complete oversight of its combat readiness and ensuring it is effectively equipped to carry out its defence capabilities.

“Ultimately, if our systems go down, then the day to day running of the British Army becomes mandrolic; less efficient and effective,” said Lt Col Seabrook.

“Being a public institution, we are accountable to the taxpayers over where we spend our budgets. With public transparency making sure we have cost-effective solutions in place, it was important we chose a system that would deliver the changes we needed while delivering savings for the taxpayer and providing us with an easy to use and understand system,” Lt Col Seabrook concluded.

With VMware NSX, the organisation can replicate platforms and production without having the high costs of getting SI load balancers, core switches and firewall services. The Firewall appliance within VMware NSX delivers greater

“Thanks to the reduction in the time taken to develop and deploy applications, the IT team is resourced in a far more efficient and effective manner, in line with demand”

LT COL DORIAN SEABROOK
HEAD OF OPERATIONS, IAS BRANCH
THE BRITISH ARMY

flexibility to the IT teams, providing the micro-segmentation and isolation of services that would be very difficult and costly to achieve otherwise. The benefits this provides in terms of improving security, simplifying network traffic flows and securely enabling business agility are significant enablers.

“It means our users are getting functionality at a far quicker rate than previously. We now have product teams that can quickly push new functionality to the users within weeks of feedback. said Lt Col Seabrook.

Thanks to the reduction in the time taken to develop and deploy applications, the IT team is resourced in a far more efficient and effective manner, in line with demand. The reallocation of staff allows for the Army to concentrate on greater operational efficiency, ensuring it is becoming a more sophisticated public service while still working under financial constraints.

Looking ahead

The next operation for the Army's IT division is considering the viability of a hyper-converged model, where it will use its new VMware vSAN® software to upgrade and incrementally increase virtual capacity in both storage and compute. Much like the recent IT changes, the use of a hyper-converged system will require another shift in mindset and a full understanding of the benefits and security implications from the higher command.

“VMware vSAN will allow us to scale up on demand without having to invest heavily upfront unlike a traditional storage area network,” said Lt Col Seabrook.

