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Kainos and Department for Work & Pensions (DWP):
Re-platforming major service for the UK's biggest public service department to the cloud

The Department of Work and Pensions (DWP) is the UK's largest public service department, overseeing 22 million claimants and customers. The 'Tell Us Once' service allows citizens to register births and bereavements once, and then notifies the relevant government departments and all 400 Local Authorities. Handling over 30,000 death registrations each month, resulting in over 125,000 notifications, the service is both essential to citizens and far-reaching in influence.

In line with wider public sector digital transformation objectives, DWP chose Kainos to lead on a digital re-platforming project to embrace a secure, cloud-first, future-ready approach. Beyond the realisation of cost savings and the disentanglement of legacy systems, Kainos helped the DWP move critical service functions in-house and ensure a transition without interruption for users.

Kainos' proven track record in delivering cloud-based solutions and complex migrations in a public sector framework was instrumental in winning the contract, which was procured through G-cloud.

"Kainos was a joy to work with. The team delivered over and above our expectations."

Fidelma Holland, TUO Business Lead at DWP

Read on to find out how we delivered this important project.
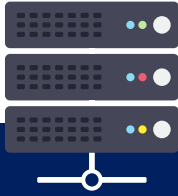
Project overview

Kainos was tasked to re-platform the **Tell Us Once** service from its home on physical hardware servers to a secure virtual environment hosted by UKCloud. It was vital that this change happened smoothly, seamlessly and - most important from a user point of view – without causing disruption to business.

"Without Kainos and their experience of UKCloud, the project would have presented a far bigger challenge. We pulled it over the line thanks to the willingness of the whole team in DWP and Kainos to go the extra 50 miles".

Pete Desmond, Pensions Technology Lead at DWP

Methodology

To ensure a smooth transition, the Kainos team worked hard to become completely familiar with the nuances of the Tell Us Once service. The project timeline involved three dinstinct stages:

Discovery – to understand the intricacies and complexities of the system, Kainos experts spent time at the DWP contact centre learning about the type of interactions and data that make up the service.

Planning – working closely with DWP and UKCloud, Kainos assessed the optimum path for virtualising the service, ensuring risk was kept to a minimum and security was guaranteed.

Migration – the actual transitioning from the physical to the virtual environment – which involved capturing data housed on physical servers, uploading data to a staging site (the Kainos 'Swing Kit' environment), performing exhaustive testing to ensure the service worked as expected, and finally activating full transition to the UKCloud environment – all required intensive activity by all involved parties.

The physical environment was switched off and the cloud solution was up and running over the space of the August Bank Holiday weekend. This remarkably tight turnaround was achieved thanks to the granular-level of planning conducted by Kainos, who managed:

- **Integrating the source virtual machine images with the target hosting platform**

- **Implementing all relevant monitoring and management tools**

- **Ensuring application and management traffic flows operated effectively**

- **Guaranteeing security and monitoring elements were configured prior to going live**
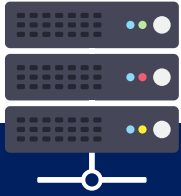
Challenges

Seamless transition

A public sector service of such importance can't simply be turned off for maintenance. DWP's evolution from physical to virtual environments needed to involve minimum disruption and fly under the radar of the user. Yet breaking up an established service, transferring sensitive data and knowledge from the previous supplier and forming a new DWP in-house team with the necessary expertise was by no means simple. Unpicking legacy systems and applications was time-consuming and complicated but the risks were mitigated thanks to rigorous planning and testing - and by keeping open channels of communication among key stakeholders.
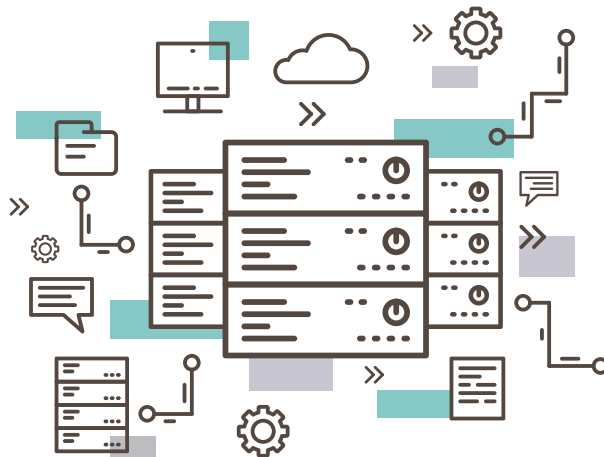
Meeting deadlines

Critically, the new service had to be operational to coincide with the end of a supplier contract in August 2016. If the new system had not been ready by this date, the service would not have been provided.

Ensuring the highest levels of data security

Ensuring an iron-clad and secure framework, as well as aligning with government best security practice, were critical for the transfer of sensitive data between hosting environments and suppliers. The sensitive nature of the data means that DWP operates in a very closed technological environment, so Kainos and key stakeholders had to operate within strict parameters when it came to sharing data or documents across multiple networks. Throughout the transition, the protection of user data was top priority and was never compromised.

"We needed a range of skills to make this project work - softer skills as well as technical ability - and the Kainos team's strength in both areas paid off in bucket loads".

Fidelma Holland, TUO Business Lead at DWP
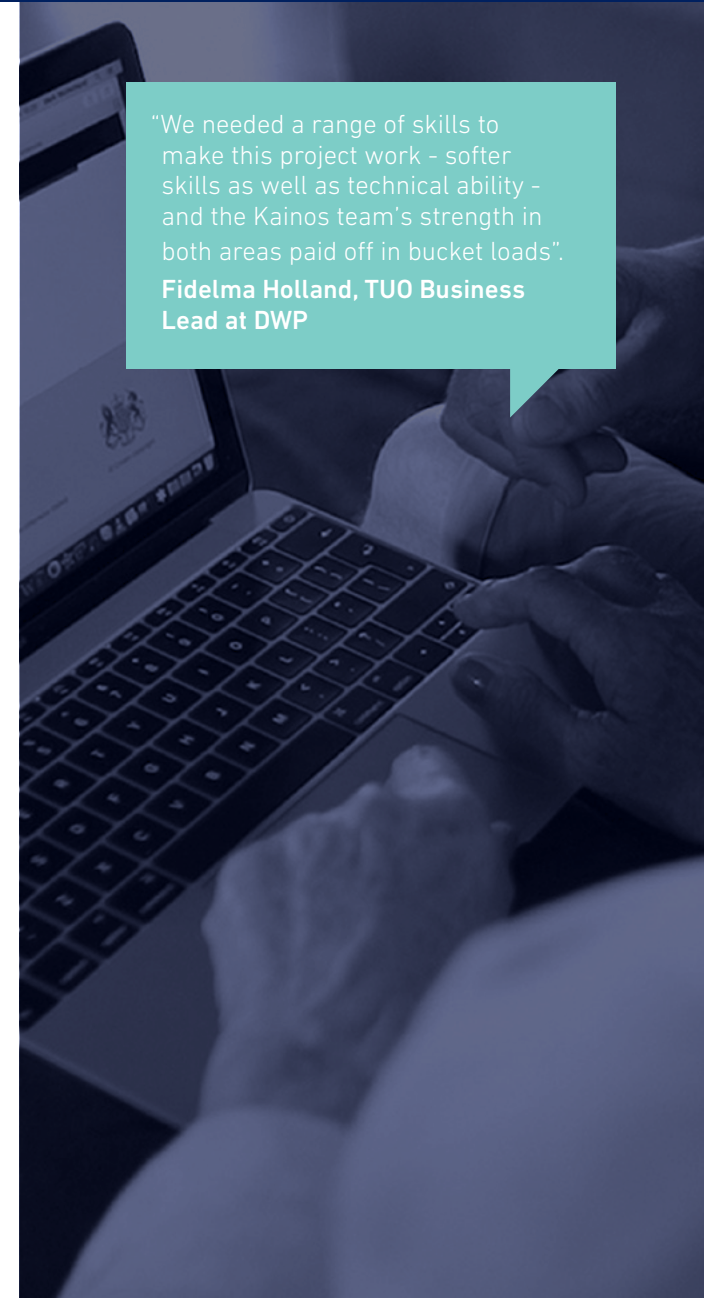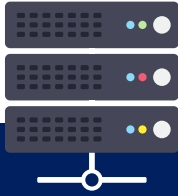
The solution

The new service – now hosted on UKCloud and underpinned by robust web-based technology – providing users with a secure and reliable service and offers the benefits of housing the service virtually to the DWP.

The management of the service is now fully controlled by DWP, with no reliance on external suppliers. Virtualisation has resulted in improved incident management and fasterf testing. Direct access to the environment and in-house responsibility for application development also means changes can be approved, developed and implemented in a shorter timescale.

By operating exactly as expected and offering the same essential services, the primary goal of the re-platforming project has been met. The service stabilised in the cloud from day one. From August 29th 2016, it was fully up and running without any glitches. All 391 Local Authorities are continuing to rely on the support of the DWP as normal and no outages were reported.

To find out how we can help deliver your digital aspirations contact us:

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Cost savings and future needs

Migration of the new service onto the more stable and robust UKCloud platform not only meets DWP's immediate service delivery needs, but also provides a secure base for future development.

The transition from physical to virtual has also reduced infrastructure costs by as much as 50 per cent, with additional cost savings likely over time. As the UK's largest public service department, such streamlining and cost efficiency is an example of best practice for others to follow. The new processes further the government's aim of reducing the total cost of technology.

50%
Reduction in infrastructure costs

With support from Kainos, DWP has experienced the value that can be derived from new technology. The newly virtualised service has already met expectations and is being continually improved and adapted as user need evolves. Plans for an extension of the online citizen services are already in the works. The modernisation of the DWP is a successful digital transformation project and one of many for the public sector in the UK in 2016 and beyond.

"The Kainos team were all consummate professionals – one of the best suppliers we've ever worked with".

Lesley O'Hara, TUO Transition Manager