Qualitest Moves IaaS Cloud Migration to a Fast Finish for a Government Regulator

Challenge

Migrate 100+ apps and servers to a cloud-hosted IaaS solution.

Assure a low-risk, iterative migration in 12 months with capped spend.

Solution

Migration assurance strategy and planning, automated functional testing, performance benchmarking, NFT and UAT aligned to migration phases.

Verified business continuity and managed 3rd party penetration testing.

Results

Delivered on-time, on-budget and automated cloud transition assurance with no business disruption or impact on end users.

Future-proofed infrastructure with repeatable, automated regression packs.

Client Overview

The Pensions Regulator (TPR) is a public organization that oversees work-based pension plans in the United Kingdom. TPR promotes high standards of plan administration and works to ensure that the pension plan managers have the necessary skills and knowledge.

The Client has numerous goals, but its top priority is protecting members' benefits. To that end, TPR takes a risk-based approach, concentrating resources on plans that pose the greatest risk to the security of members' benefits.

A Trip to the Cloud with a Tight Timeframe

The Client was migrating 76 business applications and 47 servers and services from two physical sites to a cloud-hosted Infrastructure-as-a-Service (Iaas) solution. Their systems supported staff in multiple locations from a virtualized VMware environment hosted on physical servers, SAN Storage and Compute Services, which were managed inhouse.

The on-premise infrastructure was nearing vobsolescence and did not support rapid change delivery. Maintenance and support were expensive, and contracts were due to expire in 12 months, making this a time-critical initiative.

TPR required migrating services including Server Compute, firewalls and balancers, VDI compute (Desktop-as-a-Service) and machine/file level backup. They needed a business assurance partner able to deliver a low-risk, iterative cloud migration in 12 months on a fixed budget.

> " **The Client was able to transition to the Cloud within budget and with no business disruption or impact on their end users.** "

Baseline to Finish Line: Building End-to-End IaaS Assurance

After winning a competitive bid for the project, we designed, built and executed automated application testing to establish baseline tests for existing functionality. Our plan included performance benchmarking and verification of business continuity processes, plus oversight of penetration testing done by Client's approved 3rd party.

The tests identified the performance characteristics pre-migration around a known set of users interacting with the applications in scope for each phase of migration. We ran the same tests post-migration to demonstrate a consistent end user experience and identify areas where the IaaS solution failed to deliver comparable performance.

As each migration phase was done, we expanded the automated regression pack to ensure that the subsequent migration phases didn't have a detrimental effect on previously tested applications. We also rewrote and tested functionality of cloud-incompatible applications and planned, managed and supported ongoing User Acceptance Testing.

Key Benefits

Qualitest maintained control of quality throughout the five-phased migration and brought it to a successful end.

- TPR was able to transition to the cloud within budget and with no business disruption or impact on their end users.

- Our careful testing plan ensured TPR incurred no additional legacy costs and future-proofed their infrastructure with a set of automated regression packs.

- Because of our early involvement, TPR gained a better understanding of their risks, which informed their choice of IaaS provider.

- Our focus on priorities, collaborative approach and clear communication enabled TPR to make effective risk-based decisions at every stage.

- Precisely defined testing avoided a state of everything always being "work in progress" across iterations and phases, and ensured TPR always knew how close we were to a quality go-live for each phase.

" Qualitest's expert consultancy and hands-on support have been crucial to the successful delivery of this business-critical program. . . - TPR IT Director "

QUALITEST

Connect with Us

www.qualitestgroup.com

- https://www.linkedin.com/company/qualitest
- https://www.instagram.com/lifeatqualitest
- https://twitter.com/Qualitest
- https://www.facebook.com/Qualitestgroup