

DECOMMISSION OF A LEGACY DNS SYSTEM AND UPGRADE OF VITALQIP APPLICATION ENVIRONMENT

SUMMARY

Our client is a large international provider of investment products and services with offices worldwide. This project focused on the European organisation.

The client faced a number of challenges related to their DNS system which had developed on an ad hoc basis over a number of years. It was both inefficiently constructed and expensive to maintain.

Managed by a Tomorrow Communications Project Manager a small team of specialist staff upgraded the VitalQIP Application to a supported version, re-architected the VitalQIP infrastructure, and retired the legacy BIND service leaving the client with an efficient, cost-effective and easily supportable DNS Service.

PROBLEM

Context

The organisation had partially rolled out the Lucent VitalQIP Application a number of years previous, but due to stability issues at that time they continued to maintain a legacy native BIND solution also. As there was no integration between these two systems they effectively had to maintain two separate services. This created a number of service related issues and proved costly both in terms of resourcing and also related service downtime. In addition to this they were also running VitalQIP 6.0, a version that was no longer supported by Lucent and both systems were hosted on old unsupported hardware.

Over a period of 5 years the client had attempted to address the issues highlighted above but due to the complexity of the solution and cultural and procedural barriers in the way, a long-term solution had not been achieved.

Tomorrow Communications were engaged by the Client to produce a consultative document to highlight the current difficulties and identify areas of improvement in both procedures and technologies. This was constructed following a detailed technical analysis and a series of workshops with the interested parties within the Clients organisation. From this document the Client was able to define the scope, technical approach and methodology for the Project. A Tomorrow Communications Project Manager was appointed by the Client to lead the project with a remit to drive through the changes regardless of the difficulties previously faced by the Organisation and a consultant with an in-depth knowledge of VitalQIP and the associated technologies was engaged as Technical Lead.

OBJECTIVES

The main objectives of this project are as follows:

- Upgrade the VitalQIP application and clients from V6.0 to V6.2
- Decommission the current Legacy (End of Life) hardware in both the VitalQIP and Native BIND environments and replace with supportable equipment in a more efficient and resilient architecture
- Retire the legacy DNS system
- Reduction of the support effort and cost required to manage the two systems in parallel

THE SOLUTION

Technical Process

A modular approach to delivering the objectives was undertaken by the Project Team in the following way:

Discovery Phase

A detailed study of the systems and devices to be included in the Project scope was undertaken to establish system ownership and dependencies.

Client Upgrade Phase

Having successfully tested the compatibility of VitalQIP 6.2.Clients with V6.0 of the VitalQIP application in a Laboratory environment, the team rolled out the upgrade to all clients used by System Administrators across the region.

Environment Refresh Phase

New system architecture for the VitalQIP environment was designed and rolled out in two UK-based Data Centres. The architectural criteria were dictated by the Client's own Standards and were designed to introduce resilience and manageability where none previously existed.

VitalQIP Application Upgrade Phase

Due to the fact that the system's VitalQIP Enterprise Server was hosted by another part of the organisation, extensive testing was undertaken in the Client's test laboratory to ensure compatibility between the Remote Servers running 6.2 and the Enterprise Server running 6.0.

Once this compatibility had been proved the 26 Remote Servers in scope for the project were upgraded to run V6.2 of the VitalQIP Application.

Update DNS and DHCP Preferences

In order to retire the legacy DNS system without affecting service, a thorough audit of the data contained on both DNS systems was performed to ensure that the transition to the VitalQIP application was seamless. Once this information was established, all servers in the clients' estate had to be updated to reference the new VitalQIP infrastructure. This was done across all technology groups; Wintel, UNIX and iSeries.

As the DHCP component of the service was also being upgraded, the DHCP scopes for all Subnets in the environment were also updated to reference the new server estate.

This phase of the project was logistically challenging due to the size and complexity of the environment, however a standard methodology was adopted and all updates were completed without any interruption to services.

Decommission of Legacy DNS service

Once all updates had been completed the final component of the Project was to decommission the legacy BIND DNS service. This was completed successfully and without any interruption to service.

KEY BENEFITS

- The client was able to manage all DNS/DHCP services via one application thus vastly reducing management costs.
- Inherent in operating two separate DNS systems is the risk that these systems will get out of sync leading to multiple service interruptions. This was eradicated at the conclusion of the project
- The client was able to retain support from the VitalQIP thus reducing risk
- The new DNS system architecture was more resilient and easily supportable post the technology refresh, thus reducing risk
- As the VitalQIP application provides access via simple GUI rather than command line instruction, specialist skills are not required and the pool of support staff has been extended.

HOW TOMORROW COMMUNICATIONS CAN HELP YOU?

- We have a detailed knowledge of the VitalQIP application and the best practices that are associated with DHCP and DNS systems in heterogeneous environments.
- We have demonstrable experience in architecting, engineering and deploying suitable hardware infrastructures to support the VitalQIP application
- We have a strong track record of delivering difficult or stalled projects in complex environments.