The Challenge

Our Client, a UK based organisation who provide validation services for eletronic navigational charts, were restricted by an outdated I.T system hosted within a secure MOD environment. Novo Systems were engaged to provide a solution to meet the following high level requirements:

- Migration of all services to a new environment including File, Print, Email, FTP and Line of Business Applications
- Design of a solution to facilitate secure remote access to all services for remote workers and international offices
- Design of a solution which minimises on-site infrastructure and capital expenditure
- Design of the solution to meet the clients availability, data protection and performance requirements
- Provision of a hosted web filtering service to control and secure user Internet Access
- Provide an option for on-going support

The Approach

Novo Systems architects held several discovery sessions with the client to gain a firm understanding of the existing systems in use, including any specialist applications. It became apparent that several key line of business applications would need to be understood in greater detail in order to assess their suitability for migration to a new environment. Novo Systems worked with each application vendor to understand system requirements, technical and licensing limitations.

An initial concept and high level design was presented to the client. Following approval, work began to build the base service. Low level designs were produced for each core service of the solution prior to build.

The Solution

The solution presented to the client utilised a Microsoft Azure Infrastructure as a Service environment to host the following services:

- A new Windows Server 2012R2 Domain
- Management service for patching, monitoring and security control
- Secure FTP service
- Remote Desktop Services environment including remote access via two factor authentication
- File services
- SQL Database Infrastructure

All cloud infrastruture was designed and built with both performance and availability requirements in mind with a mimumum of N+1 on for all services.

The solution also provided the following infrastructure and services for the clients head office based in the UK:

- Leased network infrastructure to create a local network with secure VPN connection to the Azure cloud
- Provision of three types of client device build to include Operating System and local applications
- Provision and management of a cloud hosted web filtering service

The new cloud infrastructure as a service platform was also integrated with Office 365 for Mail, Unified messaging and Sharepoint which provided a seamless user experience across both platforms.

High Level Overview
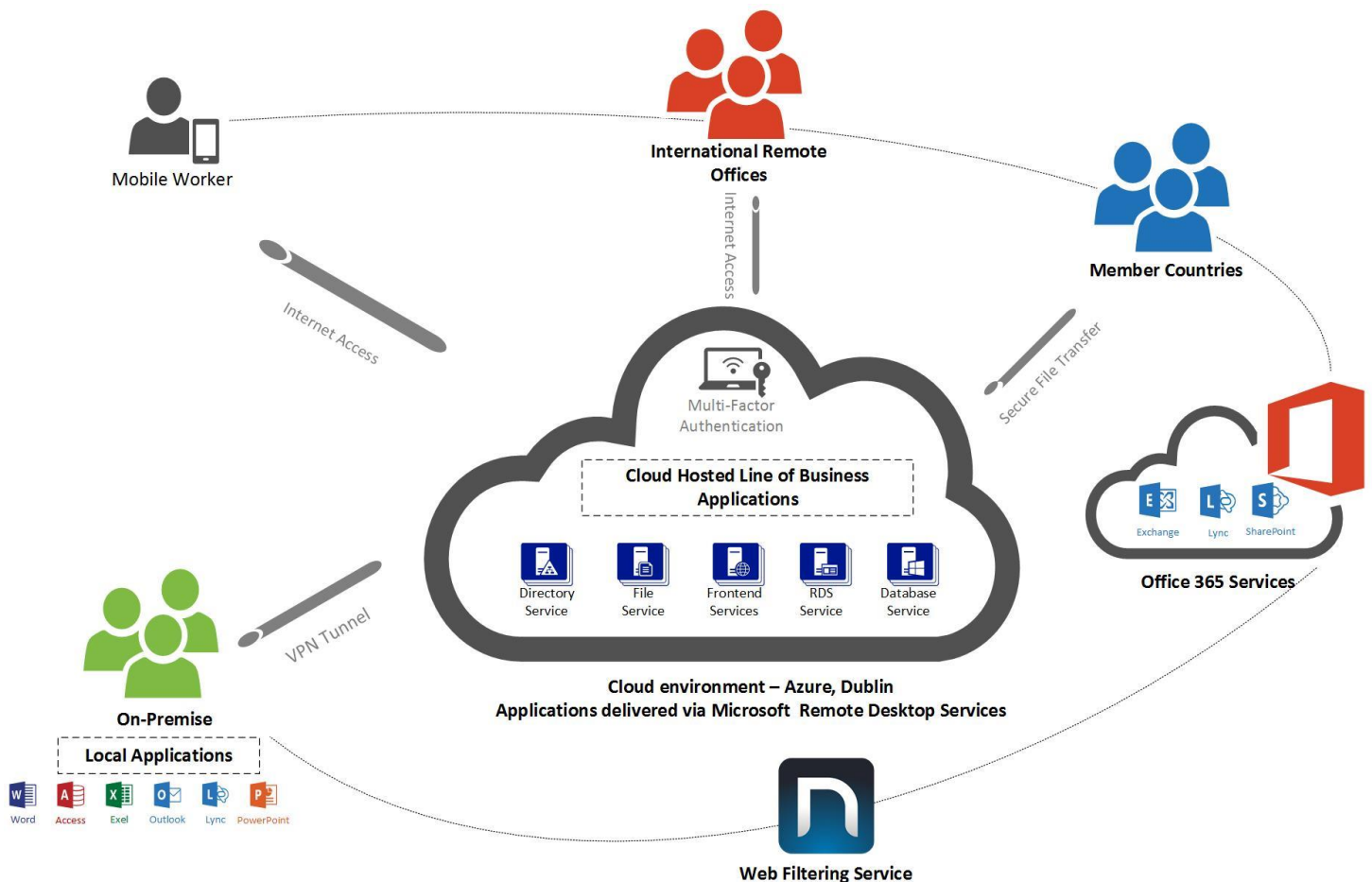
On-going Support

In addition to design and build of the solution, an option was provided for on-going support and maintenance which was taken up by the Client.

Novo Systems provide the following on-going support of the solution:

- 1st / 2nd and 3rd line user support via an online helpdesk, phone, and ad-hoc onsite
- Support of all servers including monitoring, fault diagnosis, patching and reporting
- Patching and antivirus compliance for all domain joined client devices
- Support of authentication services between Azure IaaS and Office 365
- Ad-Hoc change and consultancy

Client Testimonial

"Following a successful public tender process, Novo Systems were engaged to design and migrate our Business I.T. estate to a cloud environment. From initial engagement through to delivery, we have been more than happy with the service we received. The new environment delivered by Novo Systems has enabled us to move from an inflexible and isolated legacy network to a modern cloud based environment. This move has enabled us to fully integrate our international offices with our head office in Taunton, England, promoting closer working and better collaboration. Novo Systems have gone above and beyond on numerous occasions to ensure our main office and offices around the world receive the service we require and has enabled us to achieve the global growth we targeted for.

Now approaching the first year of operating on the new I.T. system, we are embarking on a new venture with Novo Systems to upgrade and re-develop our internal line of business applications and look forward to tackling the challenges ahead together."

James Harper, General Manager
The International Centre for Electronic Navigational Charts