ISN

Information Technology for the Energy Industry

Centralised Geological and Geophysical applications

Benefits

> Control and manageability of the desktop environment – manage your desktop environment centrally as they are effectively now running in the data centre.

> Lower TCO – streamline administration, reduce energy costs and potentially extend the useful life of your PC environment.

> Reduce data duplication – maintain all G&G files and databases in one location.

> Improve security for applications and intellectual property – centrally control user privileges and data storage. In the event of a disaster enjoy easier and faster recovery by maintaining a universal DR strategy.

> Allows for peer review across geographical boundaries.

> Potential cost saving on application licensing.

Use 3D apps anywhere.

Avoid the need for powerful workstations in every office and let your G&G users work from anywhere.

While remote access, virtualisation and centralised management of applications have been common place for many businesses, the oil and gas industry has been slow to adopt these emerging technologies due to the nature and complexity of the software typically used. Recent developments by leading virtualisation and application delivery vendors have prompted ISN to develop a solution that can address these constraints.

What is Remote Access to G&G apps?

By moving the computing functions used by a G&G application from the desktop computer to a device in a data centre, it can be accessed from any location while still providing the performance from the host's resources.

Each G&G user continues to access a dedicated, powerful device to run 3D applications but is free to work from the head office or a satellite office and check in for task progress from home or on the road.

Use 3D apps anywhere: Centralised Geological and Geophysical applications
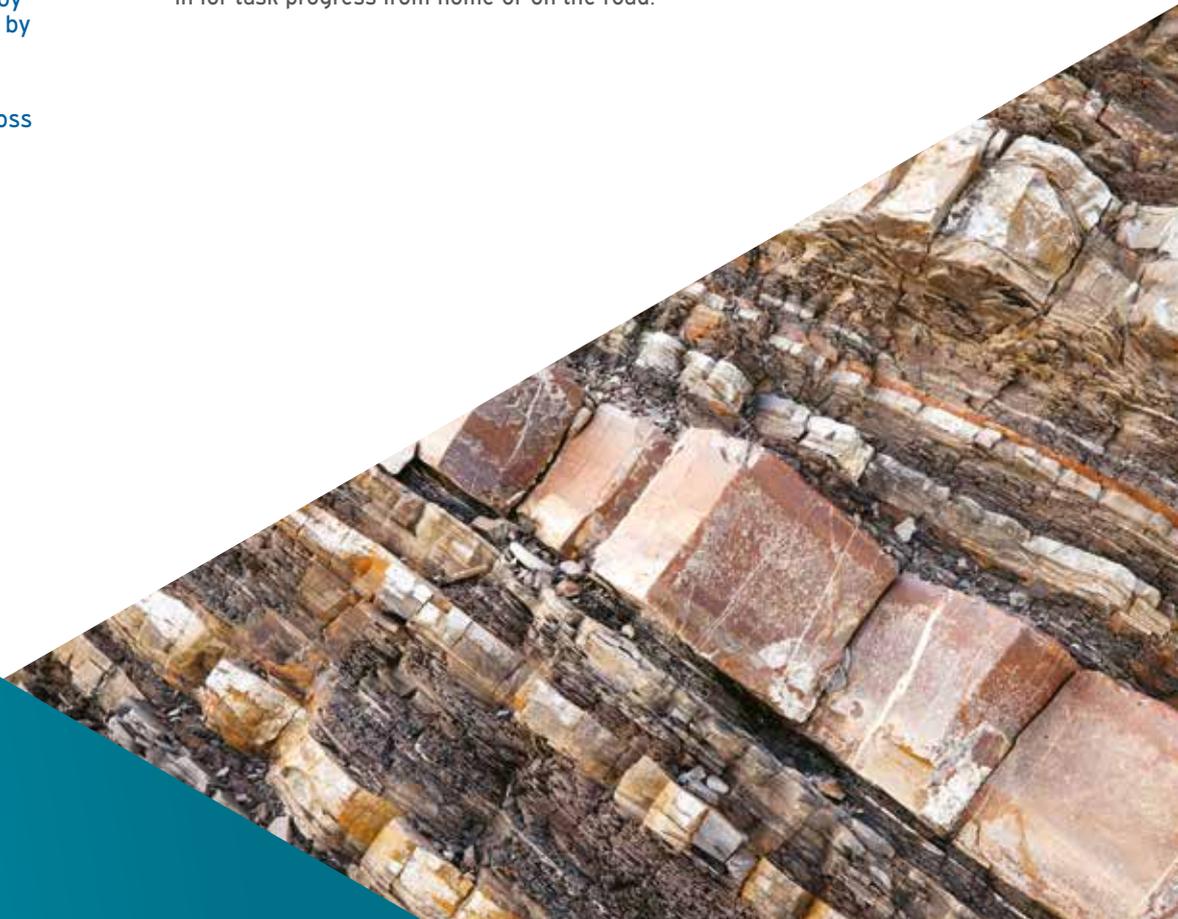
The challenge

Oil and gas companies use rich, powerful and complex applications in all aspects of the project lifecycle; exploration, appraisal, development and production. These types of applications have been difficult to move away from a traditional PC architecture because of the intensive resources they require to run effectively; graphics processing, disk performance and memory utilisation all become important factors. Since Windows client operating systems are designed to be used solely by the person sitting in front of the computer, the scope to access these applications remotely has been problematic until now.

Considerations

Each category of oil and gas application for example: seismic interpretation; reservoir management and well logging present different deployment challenges to the IT team. By evaluating the leading remote access solutions, ISN has determined which platform is most suited to each deployment scenario and the configuration required for optimal performance.

How does it work?

Using state-of-the-art technology from Citrix, ISN Solutions has built a solution to meet these challenges.

We combine those key products to provide remote access to 3D applications using the following components:

> A powerful host computer that powers the 3D rendering of G&G applications.

> A lightweight application running on any client device (PC, Thin-Client) that is used to view the 3D content.

> A storage device to act as a central repository for all application data.

> A WAN optimiser at each location to increase the performance of remote connections.

> Existing comms links between each site e.g. MPLS or VPN.

Our approach

Having a wide customer base in the upstream oil and gas industry, ISN has great experience of configuring and supporting various G&G applications, remote access solutions and other communications used in restrictive IT environments. We adopt a technically led, consultative approach to identify specific requirements and then propose a solution fit for purpose based on your own business requirements.

Who we work with

ISN Solutions work with the world's leading vendors to deliver solutions to allow access to geo-science apps from anywhere, including:

> Citrix

> NetApp

> NVIDIA

> Microsoft

Remote Access solutions delivered

ISN has implemented Citrix solutions for Afren, Premier Oil, Northern Petroleum, Summit Petroleum, Karachaganak, PetroCeltic, Desire, Encana and Nexen. These solutions have been accessed from all corners of the globe and from some of the most hostile locations, scaling from satellite comms on off-shore platforms to high speed fibre links for large regional offices.

Using these solutions has allowed our clients to save significant costs by avoiding the need for data centres and other costly equipment in each location.

Find out more... see it for real

Let us demonstrate these systems in your network, using your applications. We would be happy to spend a week with you implementing a simple proof of concept for 10 users.

What will I learn?

> 3D application resourcing

> Network bandwidth requirements

> WAN optimisation gains

> G&G data storage techniques

About ISN

ISN deliver IT and Communication services, solutions and consultancy to the Energy Industry. From complete outsourcing and managed service contracts, to strategy development and bespoke implementation projects, we enable our clients to operate effectively and efficiently in remote and challenging environments across the globe. Through our technical expertise, knowledge of current technologies and experience of the Energy Industry, we help our clients satisfy their operational needs and achieve their business goals.