

DATA CENTER & SERVER RELOCATION AND CONSOLIDATION



INTRODUCTION

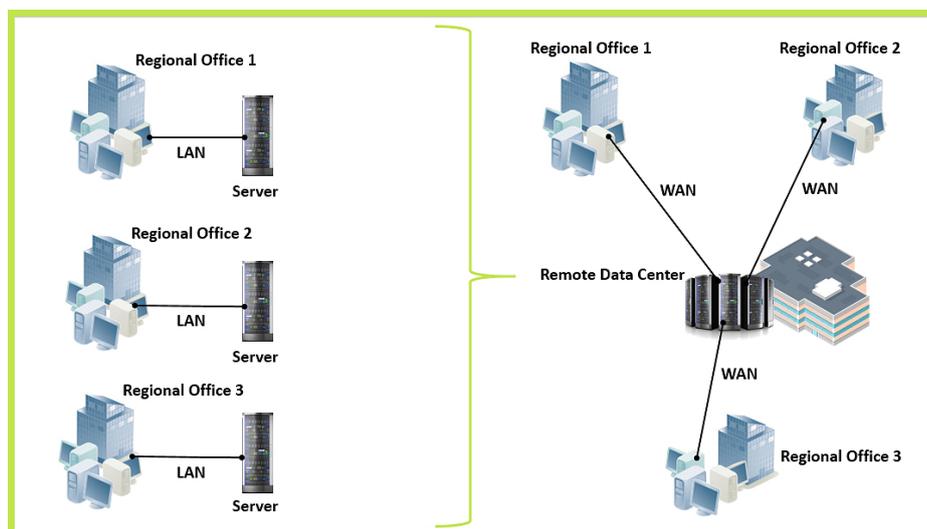
Data Center & Server Relocations and Consolidations provide organizations with the opportunity to deploy newer, faster servers; reduce IT infrastructure costs; streamline business processes and improve information security.

However, as with all such projects, risk and uncertainty is introduced as they will necessarily involve a change in the way applications are going to be delivered to the end-users. Users who were previously accessing applications and services over a LAN, now find themselves needing access to these same services over typically longer-distance WAN connections which, with variable link quality caused by latency, jitter and loss, could significantly impact application performance. Therefore, to reap the benefits of any data center and server relocation or consolidation project, businesses need to ensure application performance and end-user experience do not deteriorate as a result of any migration.

To ensure success, it is essential to conduct realistic pre-implementation verification of application performance in a test environment that accurately reflects the network conditions of the proposed production environment. This is best achieved by using Virtual Test Networks.

IDENTIFYING RELOCATION ISSUES

Consolidation of IT infrastructure will typically concentrate processing power into fewer, purpose-built data centers as shown below. Whereas previously applications and data were hosted on local servers and accessed over short LAN pathways, post-relocation, servers are now housed in data centers that could be hundreds or even thousands of miles away. These greater distances will introduce significant latencies that could result in noticeably longer application response times, leading to frustrated users and loss of productivity. Solutions do exist to overcome such problems including application re-engineering and the deployment of WAN optimization technologies but how can you be sure they will be effective before committing resource and budget to your planned relocation.



The solution is to recreate the planned environment and test how applications and data will traverse the greater network distances involved. The most cost-effective way to achieve this is to deploy a Virtual Test Network in the current IT environment that can accurately mimic the real-world WANs including associated bandwidths, latencies, losses and all the other network characteristics likely to be encountered. Users can then be dynamically switched between the existing networks and the proposed networks from their current workstations, using live applications without the need to re-patch cables or make other local configuration changes without disrupting normal operational use. Those applications that are found to struggle in the new environment can then be re-engineered or even considered for replacement by more WAN-tolerant alternatives.

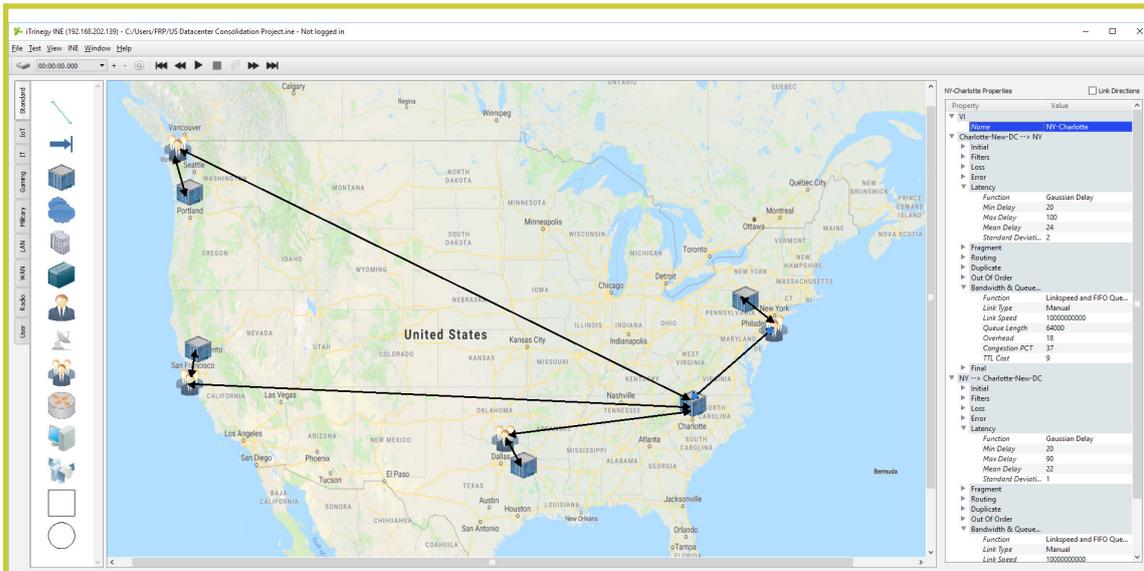
In addition, any WAN optimization technologies you may be considering can also be introduced into the Virtual Test Network to ascertain whether they will deliver the expected performance benefits.

CREATING PROPOSED REAL-WORLD NETWORKS IN THE LAB

iTrinegy's INE Virtual Test Networks are already being used by leading enterprises to recreate the large-scale multi-link network environments and associated network characteristics of their proposed data center or server relocation infrastructures.

The INE Network Drawing Interface lets you quickly map out and save different scenarios that can be simultaneously used by multiple teams. Each separate network link can be dynamically modified to accurately reflect the anticipated network conditions from "best case" to worst case" scenarios so that you have full visibility, prior to activation of your relocation programme, of exactly how your applications and services will be experienced by your end-users.

INE Virtual Test Networks will help you identify those applications that will require re-engineering and those that will respond positively to any proposed use of WAN optimization technologies you may be considering as part of your relocation initiative.



The INE Network Drawing Interface makes it easy to map out and replicate the WAN conditions of your proposed data center or server locations

INE MODELS AND FEATURES

iTrinegy's INE Network Emulators are available as either Virtual (VMware's ESXi Server) or Physical Appliances with 1Gbps to 10Gbps network connectivity. There is a range of model options available to best suit your needs.

Rack-Mount Appliance



Up to 10 Gbps

Virtual Appliance



Up to 1 Gbps

ABOUT ITRINEGY

iTrinegy is an established world leader in Network Emulation and is trusted by governments, military organizations and enterprises across the globe.