

IT Transformation Proof-of-Concept Application Performance Testing

Networked Application Challenges

Virtualisation, Datacentre Consolidation, Cloud Computing and Network Change all offer potentially significant cost saving benefits to IT departments.

However, before embarking on such projects it pays to fully understand the impact they will have on the applications and the networks that will need to adapt to these new delivery models.

iTrinegy, the Networked Application Performance Lifecycle Specialists, provides application performance monitoring & testing technology and services to help you understand and address the challenges these new scenarios present.

iTrinegy Solutions

Whichever IT Transformation you are considering, iTrinegy provides tools and services enable you to adopt a proven 3-stage procedure to analyse/predict, test and monitor networked application performance throughout the project lifecycle.

By deploying iTrinegy technology you will reduce the risk of deployment failure and ensure there is no loss of application or service delivery performance.

Stage 1 Pre-Transformation Analysis & Benchmarking

INE Companion, iTrinegy's network profiling and traffic capture technology is placed into the network to non-intrusively profile current application response times and usage in the existing infrastructure. (See Diagram 1)

Its real time traffic analysis facility can be deployed to create network scenarios for use with the iTrinegy Network Emulator which will be used to replicate the proposed new network environment the applications will be expected to operate in during Stage 2 of the Proof-of-Concept process (see below). This greatly enhances the realism of the application performance test.

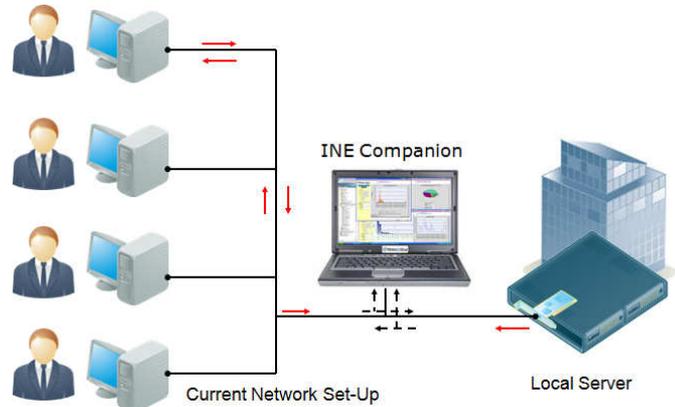


Diagram 1
INE-Companion monitoring application performance in the existing network infrastructure prior to transformation

Stage 2 Pre-Transformation Prediction & Testing

We look here at two typical examples of transformation:

1. Virtualisation & Datacentre Consolidation

Virtualisation involves the migration of the existing servers and applications over to a new physical server where the new virtual servers will be reside.

This will result in the new physical server having to cope with all the network traffic that was previously shared among the "pre-virtualised" servers and this needs to be fully analysed and planned for, in advance, to avoid problems when the migration occurs.

If physical relocation is also involved, as is usually the case with a datacentre consolidation, then it may require users to access applications and services remotely over WAN, Wireless, Cable, Satellite or similar networks with the associated restricted bandwidth, latency and packet loss issues that will impact application performance.

2. Cloud Computing

Cloud computing is centred around network-delivered services, whether public and private. Once again the success of the Infrastructure as a Service (IaaS) model it is based on will rely heavily on the performance of the application running over the network which cannot be

taken for granted due to bandwidth, latency and loss issues of the Cloud. You need to be sure your applications will cope well when delivered like this.

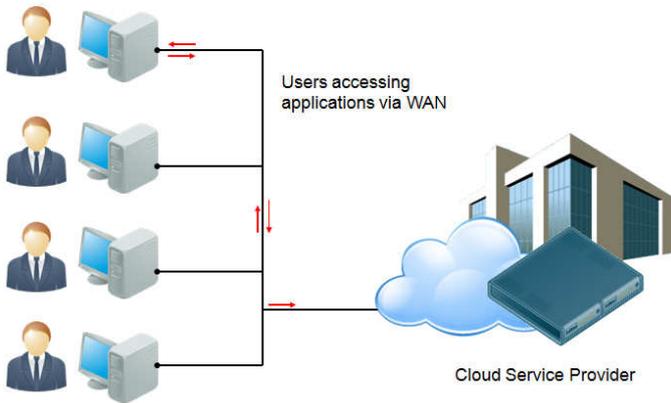


Diagram 2

An example of applications being accessed from remote servers of a Cloud Service Provider

Replicating the New Network Environment

Whichever transformation you are looking to adopt, iTrinegy Network Emulators are deployed in Stage 2 to recreate the network conditions of the proposed environment (i.e Diagram 2 above) in which you can test how applications will perform before making the investment in the new technology or signing up to the new service.

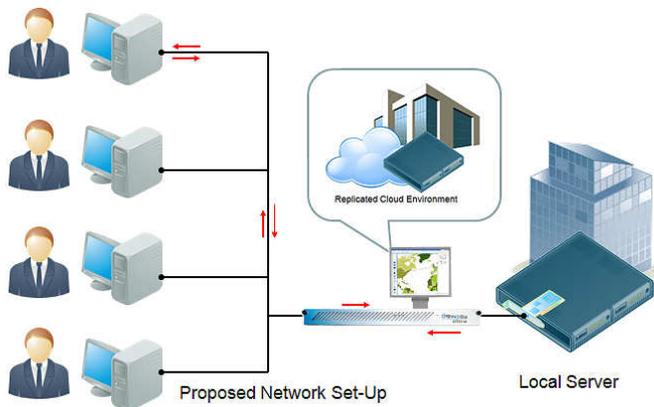


Diagram 3

The iTrinegy network emulator is replicating the proposed Cloud network allowing you to test application performance without the need to transfer applications outside your current IT infrastructure

Network impairments that can be reproduced include restricted bandwidths, latency, jitter, packet loss, packet damage and packet reordering as well as traffic shaping techniques such as QoS prioritization. You can then run your applications through the simulated network to see exactly how well they will cope prior to actual implementation.

In addition, iTrinegy network emulators can be used to

check the effectiveness of potential solutions such as WAN optimization and thin-client technologies if you are considering these.

Stage 3

Post-Transformation Monitoring

Once you have implemented your transformation strategy, it makes sense to check the anticipated performance gains are being achieved. Our AppQoS monitoring product can be used to monitor response times and performance of the migrated applications.

It is also a great technology for network troubleshooting and monitoring application usage as well.

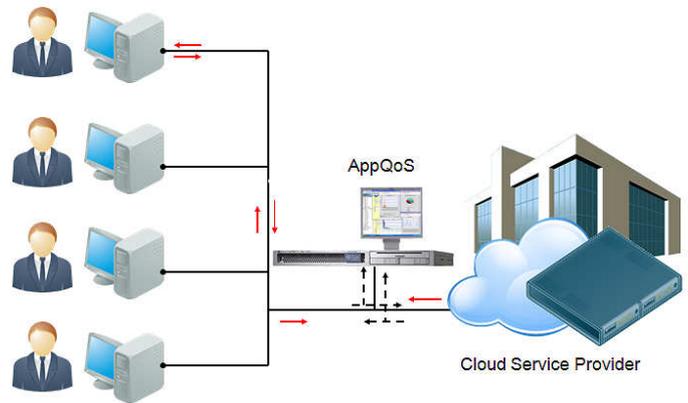


Diagram 4

An example of AppQoS monitoring application performance and usage in the post-Cloud deployment environment. This would be equally applicable to Virtualisation and Datacentre migrations

IT Transformation Services

In addition to our network emulator and monitoring tools, iTrinegy can provide consultancy services and on-site expertise to help you scope and deliver your transformation project.

Contact us today to find out how we can help you prepare for the new technology challenges you are about to face.



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