## WHY VIRTUAL DESKTOP MONITORING NOT EQUALS SIGN VIRTUAL SERVER MONITORING



Since virtual machines are used in both server virtualization and desktop virtualization, you are probably using or planning to use the same performance monitoring tool for both environments. However, as the table below shows, there are clear and distinct differences between server virtualization and desktop virtualization. You need a performance monitoring solution for desktop virtualization that recognizes these differences.

Server Virtualization Infrastructures	Desktop Virtualization Infrastructures
A server virtualization monitoring solution focuses on monitoring the virtualization platform (e.g., VMware vSphere/ ESX , Citrix XenServer, Microsoft Hyper-V, etc).	A virtual desktop infrastructure includes several software and hardware tiers. The virtualization platform is only one of the tiers. An ideal virtual desktop monitoring solution must monitor every layer of every tier including the connection brokers, Active Directory servers, web interfaces, storage devices, network devices, terminal servers, profile servers, etc.
Few VMs (<10) per physical server	Many (30-70) VMs per physical server
The workload of a VM is similar over time because the application servers deployed on a VM do not change over a few hours.	The workload of a virtual desktop varies depending on the user who is logged on to the desktop.  Depending on the user's role in an organization, the application mix running in the virtual desktop could be very different. Hence, monitoring should be based on user activity - not virtual machine activity.
VMs remain powered on all the time as the application servers they host need to be accessible at all times.	VMs are powered on when users log on and then powered off when users log off.
Monitoring is mostly from the VM perspective; e.g., which VMs are on, what resources (CPU, memory, disk, etc.) are they using.	Monitoring must be from the user perspective.  To handle support calls from users, it is imperative to know which users are logged in, which VM a specific user is assigned to, and what applications he/she is accessing and what resources the user is consuming.

## **Server Virtualization Infrastructures**

## **Desktop Virtualization Infrastructures**

In-depth monitoring is required for monitoring applications such as Citrix, Oracle, etc. that are running inside the VMs. Hence, it is likely that monitoring agents are deployed in the VMs to monitor the applications running in the VMs and a view of the performance inside the VMs is available from these agents.

Virtual desktops do not have server applications running in them. Hence, in-depth monitoring of applications on the desktop is not required.

Furthermore, the higher number of VMs on each physical server, the higher the cost of installation, licensing and maintenance of the agents. The resource overhead resulting from agents on every desktop is also high. Therefore, from a monitoring perspective, the challenge is to monitor activities inside a VM without relying on agents to be installed in the VMs.

## About eG Innovations

eG Innovations provides intelligent performance management solutions that automate and dramatically accelerate the discovery, diagnosis, and resolution of service performance issues in virtual, cloud, and physical service infrastructures. Managing some of the largest XenApp deployments in the world, only eG Innovations offers 360-degree service visibility with virtualization-aware performance correlation across every layer and every tier - from desktops to applications, and from network to storage. This unique approach delivers deep, actionable insights into the true causes of cross-domain service performance issues and enables administrators to pre-emptively detect, diagnose, and fix root-cause issues - before end users notice.