



## Xangati Solution for Virtual Desktop Infrastructure

### Virtual Desktop Infrastructure (VDI) Manageability Challenges

Moving to VDI brings another layer of complexity to manage if you want to ensure positive end-user experiences and their corresponding high levels of productivity. Prior to VDI, performance issues were solely related to network-based applications like email. With VDI, desktop applications like MS-Word become network-based applications.

VDI creates a layer of abstraction between the thin-client machine sitting on the users' desk and the applications that used to run on that physical desktop machine. What now exists (*Figure 1*) is a thin client machine running a software client (that VMware refers to as a VDM client) that accesses a virtual desktop VM over the network through a remote desktop protocol (either RDP, PCoIP or ICA depending on the environment). Because VDI requires all applications to be accessed over the network, one's desktop experience is directly affected by clashes for resources over the network. For example, trying access basic desktop applications over a congested wide area link I could be adversely affected by network congestion and latency.

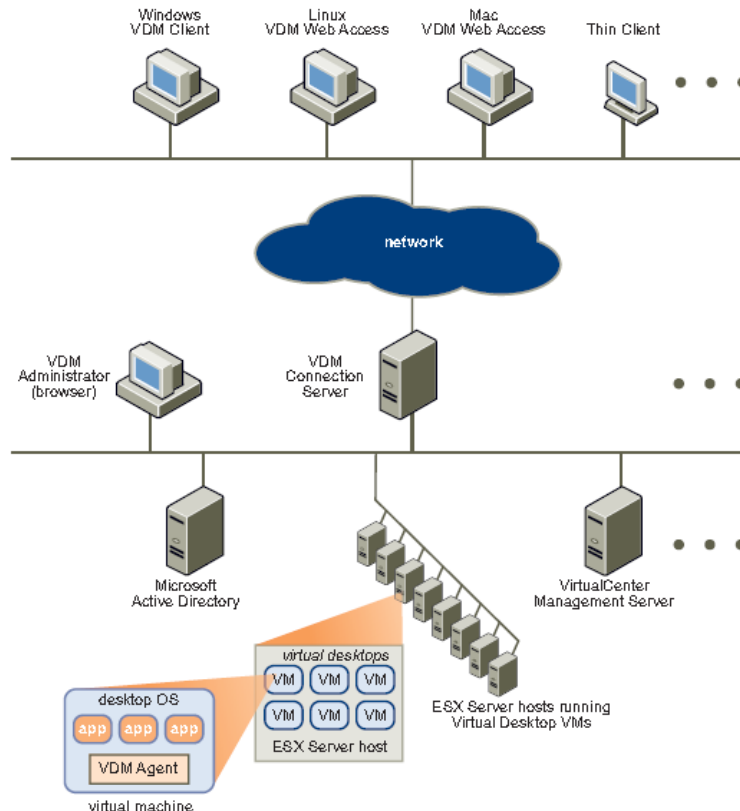


Figure 1: Virtualized Infrastructure (Source: VMware)

Because of this network dependency, monitoring the interaction between the virtual desktop VM and any virtual server VM that may be accessed delivers critical information for service assurance. Without it, issues at this level will be very difficult to troubleshoot and vast amounts of time and money can be wasted unnecessarily. This is especially evident for basic communication issues between a client and the virtual desktop can occur at startup. A connection broker mediates this conversation, which in the case of VMware is housed in their VDM connection server. Being aware of the interactions VDM clients have talking to their connection brokers and how this translates to a VDI sessions in real-time provides complete visibility.

## Xangati Application Management 2.0 Solution

The Xangati Application Management 2.0 solution is a next generation application management offering specifically designed to tackle the challenges highlighted above. Xangati “fights fire with fire” by leveraging Web 2.0 principles, such as streaming visuals, collaboration and user-generated content, to manage the performance of all one’s applications from the network perspective. Understanding application performance from the network perspective is the only way to track the interactions of all networked resources including VDM clients and virtual desktop VMs. Xangati’s UI (*Figure 2 below*) presents information in real-time (live, to-the-second real-time) and can be dynamically customized to the role of the user and the eco-systems needed to be monitored. Virtualized environments are especially well suited to Xangati because it provides cross IT discipline awareness (such as between VDI and the network) and can track changes that happen in a “blink of an eye” that polling based offerings can’t see or detect.

Additionally, the Xangati solution is zero-footprint—*no agents, no probes*—which means it can be deployed immediately and cost-effectively across your entire virtual and physical infrastructure.

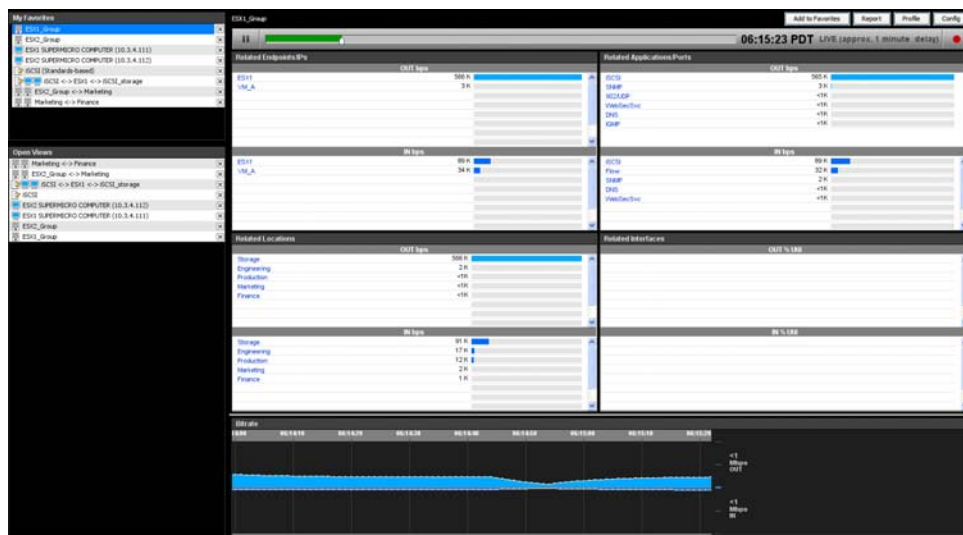
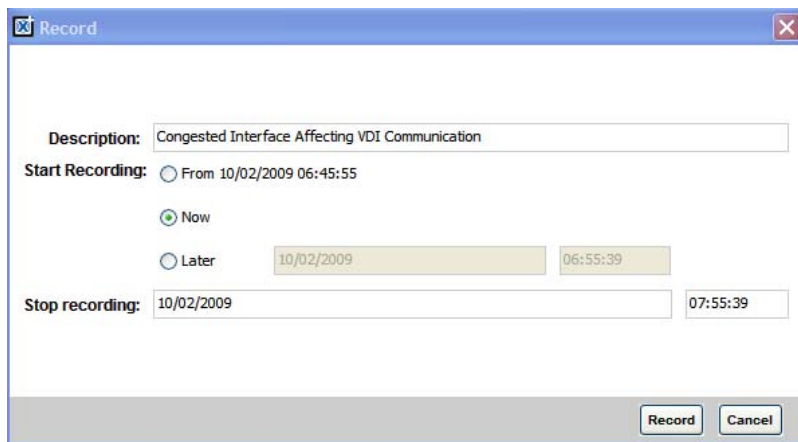


Figure 2: Xangati User Interface

## Xangati's Value in Managing and Troubleshooting VDI Environments

The Xangati solution was made for environments like VDI where the primary communication is on the network by providing very detailed views into what's happening on the network from an application and end-user perspective.

For instance, one can isolate on the specific conversation between the VDM client and the virtual desktop VM to see if that communication flow is working in real-time right now—instead of through a report of what happened the last hour. At the same time Xangati can pull up a live view of the network interface the communication is traversing to see if any congestion or latency could be responsible for delays. If the network is the issue, the VM admin can initiate a DVR recording that shows this as the issue (*Figure 3*) and can email a copy of that recording over to the network engineering team to have them address the problem. In the meantime, IT can update the end-user of the situation and let them know it is being worked toward resolution.



*Figure 3: DVR Record*

In a similar fashion, communication issues between the virtual desktop VM and the virtual server VM can occur. This information can be zoomed into in real-time with Xangati to see if there are any changes in behavior between these elements that might be affecting performance. And, it can validate there is not another interaction with the server affecting its performance, for example an unscheduled back-up occurring in the middle of the day. As stated earlier, because performance issues come and go in the blink of an eye it is essential to have a system with to-the-second, real-time visibility to make an assessment of what is actually happening in your virtualization ecosystem at any moment in time.

## About Xangati

Xangati is the provider of the industry's first Application Management 2.0 solution for both service providers and IT organizations that want a highly-developed solution for managing the dynamic and unpredictable nature of applications. Xangati has integrated prominent Web 2.0 concepts like streaming, collaboration and user-generated content into a comprehensive system for managing networked application environments. Xangati, Inc. is a privately held company founded in 2006 and headquartered in Cupertino, California. For more information, visit the company website at <http://www.xangati.com>.