



## **SERVER VIRTUALISATION**

The QlikView technical requirements specifications assume a non-virtualised environment. Server Virtualisation is recognised as a mechanism for assisting Disaster Recovery and for dynamically sizing the environment, but this will always degrade performance of the QlikView software. The impact of virtualisation will be most noticeable to End Users when the QlikView Server is implemented in a Virtual Machine because of the extensive RAM & CPU that the QlikView Server may require, and likely competition with other VMs using those resources. The most common Server Virtualisation software appears to be VMware. QlikTech recommends that Memory Ballooning drivers are disabled in the Guest Operating System (Virtual Machine (VM)) and that the VM is assigned dedicated Resource Pool (CPU, RAM) that are not shared with other VMs. QlikView Support are clear in the statement at http://www.vmware.com/files/pdf/isv/QlikTech\_Support\_Statement.pdf that VMware is a recognised and supported hardware abstraction layer but that some problems may require a customer to recreate their problem in a non-virtualised environment.

## **DESKTOP VIRTUALISATION**

Desktop Virtualisation is an attractive deployment mechanism for some large organisations to centralise administration of User Applications and the hardware resources they may require for operation. The most common Desktop Virtualisation software appears to be Citrix XenApp (formerly known as Citrix Presentation Server or Citrix Metaframe Server).

## **QLIKVIEW PLUGIN CLIENT**

The QlikView ActiveX Plugin client for Internet Explorer may be easier to deploy in a Desktop Virtualisation environment than distributing software to many geographically dispersed users and computers, however QlikTech recommends use of the AJAX client for WAN deployments. All Web Users consume a QlikView Client Access Licence (CAL) when interacting with a QlikView document, regardless of which client they choose to use (Plugin, AJAX, etc). QlikTech does not anticipate there being any Licence Management issues or substantial Resource Utilisation concerns caused by use of the QlikView Plugin or Browser clients within a Desktop Virtualisation environment.

## **QLIKVIEW DESKTOP**

Development of a OlikView document is performed using OlikView Desktop and can require substantial RAM and Disk IO. This product requires a Licence to enable a developer to share QVW files with other developers, and this Licence is typically provided by "Borrowing a Named CAL" from the OlikView Server. A Named CAL may be used to elevate OlikView Personal Edition to unrestricted OlikView Desktop at two unique MacAddresses per User. OlikView anticipated that a User may develop a document on their Laptop while at the office, and may continue to work on that document when connected to the office by VPN (thus a different MacAddr) however deployment of OlikView Desktop on a multi-node Citrix XenApp farm may expose OlikView to more MacAddresses (one per node) than permitted even though the Developer is unaware of what Node/Server of the Citrix XenApp farm that they are using. OlikView does not allow a Named User to elevate Personal Edition to OlikView Desktop on a third or subsequent host when Borrowing a Named CAL from the OlikView Server. OlikView document development can be a very RAM intensive process and could adversely affect the performance of other Citrix-deployed applications.

OlikView (eg Microsoft Terminal Services connection to a OlikView Publisher host) to minimise contention for resources. Because of the two MacAddress limitation of a Borrowed CAL, OlikTech recommends that if OlikView Desktop is published to a Citrix XenApp Farm then the "Published Application" should be constrained to no more than two specific Servers otherwise the User will observe that OlikView Desktop to more than two hosts (MacAddr) that the developer will use (whether physical or virtualised), then OlikTech requires them to acquire a Local Client Licence for each host where OlikView will be used by that user.

See also Citrix Presentation Server v4.5 Administrator's Guide http://support.citrix.com/servlet/KbServlet/download/12606-102-16435/Administrators\_Guide.pdf or the simpler guidance at http://citrixxperience.com/2007/05/24/publish-an-application-with-citrix-presentation-server-45/