

### Ipswitch, Inc. Virtual Server FAQ

## Q1. Which virtualization software packages have WhatsUp Log Management solutions been tested in?

A1. As of November1, 2011, WhatsUp Log Management's solutions have been tested in Hyper-V Manager, Microsoft Corporation, Version 6.1.7601.17514 (2008r2 as the host machine). Other tested virtualization software packages (e.g. VMWare) include:

- ESXi 3.5
- ESXi 4.0
- ESXi 4.1

## Q2. Does Ipswitch recommend running its solutions within a virtual machine environment?

A2. If computer hardware is available, Ipswitch recommends running its solutions in a non-virtual machine environment. While virtualization technology is often a convenient way to "sandbox" certain software programs into a separate environment, Ipswitch has found that the overhead created by virtualization techniques (e.g. creating virtual network adapters on top of one physical network adapter) can significantly degrade performance. This is especially true of the WhatsUp Event Archiver™, WhatsUp Event Analyst™, WhatsUp Event Alarm™, and WhatsUp Event Rover™ titles that make up WhatsUp Log Management Suite, as they perform many network-intensive tasks when managing event log data. In some cases, running Ipswitch's software titles directly on a lower-powered host machine (e.g. desktop or workstation class system) may yield greater performance than running the same titles within a virtual server on a more powerful server.

If you are considering running WhatsUp Log Management solutions within a virtual machine environment, we recommend that you perform two tests - one test of the software inside a virtual machine, and another test directly on a non-virtual machine host. If you find that the software performance is satisfactory running inside a virtual machine, you may choose to run the software inside a virtual machine in production.

#### Q3. Does testing Ipswitch solutions inside a virtual machine environment yield a reliable benchmark for its performance characteristics in production?

A3. Absolutely not. See Answer 2 above for more details. The only way to produce a reliable benchmark of performance in production is to install the software directly on a host computer as opposed to a virtual machine. This is also true if you plan to run a database platform (e.g. Microsoft SQL Server) inside a virtual machine and run Ipswitch titles on a regular host computer. In such a scenario, the performance of the database platform itself may be degraded.

#### Q4. Can WhatsUp Log Management be used to manage and monitor event logs and other items running on Windows operating systems located inside virtual machines?

Ipswitch, Inc. 83 Hartwell Avenue Lexington, MA 02421 WWW: http://www.ipswitch.com · Telephone: 781-676-5870 Copyright © 2012 Ipswitch, Inc. All Rights Reserved. A4. Yes. If configured correctly, Windows operating systems running within a virtual machine on a Virtual Server will appear on the network just like non-virtual machine hosts.

# Q5. If I wish to monitor or manage the event logs on Microsoft Windows workstation or server installations that run inside multiple virtual machines on a single server, how many licenses do I need?

A5. Each operating system running inside a virtual machine needs a separate workstation or server license. In other words, operating systems running inside virtual machines need a separate license, just as if these installations were each running on a separate physical machine. For instance, you may have a Microsoft Windows 2003 server that is running 5 virtual machines within Microsoft Virtual Server:

Virtual machine 1 is running Windows Server 2003 Virtual machine 2 is running Windows Vista Ultimate. Virtual machine 3 is running Windows Vista Business. Virtual machine 4 is running Windows Server 2008 R2. Virtual machine 5 is running Windows 7.

In order to monitor and/or manage the event logs on all of these 5 virtual machines, you would need 3 workstation licenses (for Windows Vista Ultimate, Windows Vista Business, and Windows 7) and 2 server licenses (for Windows Server 2003 and Windows Server 2008 R2).

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