

# **QBR** *Knowledge base*

## TROUBLESHOOTING SLOW LOCAL TRANSFER SPEEDS

### SCOPE

This article discusses troubleshooting slow local backup speeds on the network that seem to occur with no apparent reason.

### CAUSE

1. Local network traffic is high.
2. Local server activity is high/available resources are low.
3. NICs are not properly configured to best handle network traffic.
4. Physical connections to the device have hardware damage.
5. Protected servers have either disk errors or are heavily fragmented.

### SOLUTION

1. Local network traffic. You'll want to analyze the traffic usage on your protected server as well as the available resources on the server. StorageCraft has put together a great article discussing best practices for improving the reliability of the backup agents.

<http://www.storagecraft.com/support/kb/article/241>

The most important aspects of this article to consider are page file locations, large send off-loads, as well as memory management keys. Many of these recommendations will require reboots of the target machine.

2. Many NIC management software platforms will have different settings to configure the performance of Virtual NICs. Different virtual providers also provide different settings for their NICs. Many times, the version of the virtual software platforms such as VMware or HyperV can have either updated virtual tool installations (VMWare Tools, HyperV Best Practice Analyzer, VirtualBox Guest Additions, etc). Many providers suggest different ways of modifying some of the NIC settings to improve network performance.

VMWare: <http://pubs.vmware.com/vsphere-4-esx-vcenter/index.jsp?topic=/com.v...>

HyperV: <http://social.technet.microsoft.com/Forums/en-US/winserverhyperv/th...>

VirtualBox: <http://www.virtualbox.org/manual/ch06.html>

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XenServer: <http://www.xenappblog.com/2010/citrix-xenserver-slow-network-perfor...>

3. Testing physical network connections are important. The network cable should be tested to confirm it has good connections. Check also the health of the physical server NICs with any diagnosis tools provided by the NIC manufacturer. Also verify the speed of the NICs from the Network tab on the device interface. All QBR device NICs are at gigabit speed. Verify that the switch the network cable is plugged into supports a gigabit connection. NICs can also be bonded or teamed on the local QBR device should your switch support link aggregation to improve local throughput.
4. Check the physical health of the disks and RAID with disk cleanup and defragmentation utilities. Schedule a chkdsk /r and defragmentation as when time permits.