

MonitorMagic Remote Monitoring Showcase

Bandwidth Consumption

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Introduction

This document is intended to detail the bandwidth consumption when using MonitorMagic in its “agentless” form, which means remote monitoring without installing an agent locally on the target computer.

1.1 Monitor bandwidth consumption

Table 1: Bandwidth consumption of MonitorMagic’s default monitors.

# of monitors	Name	Type	Poll rate	Bandwidth (bytes/sec)
1	IP Ping	Ping	5 sec	32*
50	IP Ping	Ping	5 sec	256*
1	Disk C:	Disk	5 sec	300
5	All disks	Disk	5 sec	1400
1	Alertter service	Service	5 sec	11000
50	All services	Service	5 sec	11000
1	Application log	Event log	5 sec	320000
3	All event logs	Event log	5 sec	320000
1	CPU load %	Performance counter	5 sec	2000
50	Various counters	Performance counter	5 sec	9000
1	Outlook	Process	5 sec	250
N/A	File	File	N/A	N/A
N/A	Cluster	Cluster	N/A	N/A
1	SNMP Get	SNMP Get	5 sec	2000
50	SNMP Get	SNMP Get	5 sec	4000
N/A	SNMP Trap	SNMP Trap	N/A	N/A
N/A	Command	Command	N/A	N/A

*Ping packet size is configurable; default is 32 bytes per ICMP echo

Considerations:

The table above shows that, with the exclusion of the event monitor, all monitors take up very little bandwidth, even when applying 50 monitors of the same type using a poll rate of 5 seconds. Note that MonitorMagic only executes up to 8 monitors at the same time, all others are queued for execution to improve performance.

Excluded monitors:

File monitor – bandwidth is dependent on the target file size

Cluster monitor – bandwidth consumption for this monitor has not been measured

SNMP trap – bandwidth consumption for this monitor has not been measured

Command – bandwidth consumption is dependent on the executed command and its return value

Conclusion:

MonitorMagic consumes very little bandwidth on all monitors with the exception of the event log monitor. Performance polling and realtime status checking of disks, performance counters, SNMP values, processes and services can be done without any performance impact using the “agentless” deployment model. Tools4ever recommends reviewing the deployment strategy for event monitoring using a local MonitorMagic agent.

1.2 Event archiving bandwidth consumption

Table 2: Bandwidth consumption of event archiving using MonitorMagic.

Name	Type	Schedule	Bandwidth (Kbytes/sec)
All event logs	Event archiving	22:45 every day	1700000

Considerations:

Event archiving effectively means copying and storing the entire event logs of multiple computers into a central database. This implicates moving lots of data over the network. When using remote monitoring, be aware of the fact that MonitorMagic will have to copy multiple megabytes each time it executes an archive operation.

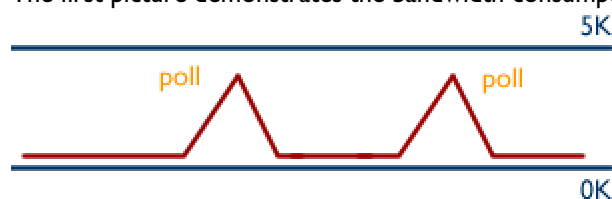
Conclusion:

When archiving event logs, MonitorMagic will use all available bandwidth for a short amount of time to copy large event logs from multiple sources to one target, a central database. This short amount of time can be schedule, preferable during the night when nu end-users are connected to the network.

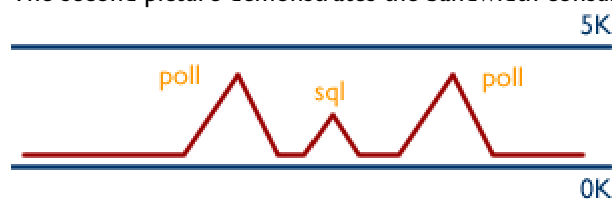
1.3 Remote SQL database storage

When using the “agentless” deployment model as described in the introduction, you have the option to use local or remote database storage. Remote database storage means that the return value from the monitor is being stored at another location than where the MonitorMagic service, that executes the monitoring operation, is running.

The first picture demonstrates the bandwidth consumption without SQL storage:



The second picture demonstrates the bandwidth consumption with remote SQL storage:



Conclusion:

When using MonitorMagic using the “agentless” deployment model, you can easily use remote SQL database storage. The bandwidth consumption is always less than the original monitor bandwidth consumption, which is already very low (see Table 1 for details), so it doesn’t add up to the total bandwidth consumption of MonitorMagics monitor.