

BANDWIDTH METER FOR MICROSOFT VIRTUAL SERVER 2005

DESCRIPTION

Bandwidth Meter for Microsoft Virtual Server 2005 is a unique tool for MS Virtual Server 2005 bandwidth usage monitoring, counting and reporting.

What makes it unique? It provides a **bandwidth control on per virtual server basis for different protocols** (ARP, TCP, UDP, ICMP, IGMP). With this tool you can see the amount of data used (downloaded and uploaded) by each virtual server. Thus you can bill your customers for the bandwidth usage or just find out which servers cause a high network load.

TRIAL AND REGISTRATION

The evaluation version of Bandwidth Meter for Microsoft Virtual Server 2005 monitors traffic for random virtual servers at random hours, but there is no time limit. To register the software please place your order at www.HostsTools.com and email us the IP address of your server, we will generate a license key bound to the IP.

INSTALLATION

The below mentioned steps must be done on the server you wish to be monitored.

1. Download and install WinPcap library. You can either take it from the Bandwidth Meter installation package (WinPcap_4_0_2.exe file) or download from <http://www.winpcap.org/> (version 4.0.2 or higher). To install this library just run its EXE file (e.g. WinPcap_4_0_2.exe) and follow the installation wizard. Answer 'OK'/'Yes' to all the wizard's questions and use the default settings.
2. Install Microsoft .NET Framework 3.5 if you do not have it installed on your server yet.
3. Download the Bandwidth Meter for Microsoft Virtual Server 2005 installation package from <http://www.HostsTools.com> and run setup.exe file. Follow the installation wizard.
4. Now you have a new Windows service named **BWVDS103** (You can see it at 'Start – Programs – Administrative Tools – Services'). Do not start it yet, you need to configure it first.
5. Click Windows Start button, open 'All Programs - MS VS 2005 bandwidth meter' menu and click 'Change options.ini' shortcut.
6. Specify your MS VS 2005 host IP (NicIP parameter). Then enter a license key if you have one.

i. If no key specified, the program monitors traffic from random virtual servers at random hours. To register the software please place your order at www.HostsTools.com and email us the IP address of your server, we will generate a license key bound to the IP.

7. There is UseRAW parameter in options.ini file. It is 0 by default. If you set it to 1 the bandwidth monitor will create bwvdsraw.log file and save raw traffic data to this file. It will not calculate “per protocol” and “per hour” data.

CAUTION: *If UseRAW=1 the log files become really huge and it takes lots of HDD space. You can run out of disk space shortly.*

The raw log sample:

```
DATETIME,VDS-SRC,VDS-DST,PROTOCOL,MAC-SRC,MAC-DST,IP-SRC,IP-DST,PORT-SRC,PORT-DST,TOTAL
25/09/2009 03:33:19.5260,,ENT2003,TCP,02004C4F4F50,0003FF0F4CDC,192.168.10.1,192.168.10.2,1302,3389,74
```

8. Click ‘OK’ button to save the settings. Then go to ‘Start – (Programs) – Administrative Tools – Services’, select **BWVDS103** service and start or restart it.

DATA

The Bandwidth Meter monitors all server connections and creates a log file of the following format:

VS-NAME, HOUR, INBOUND|OUTBOUND, PROTOCOL:TOTAL

The legend:

VS-NAME – a Virtual Server name.

INBOUND|OUTBOUND – traffic direction.

HOUR – an hour of the day (0 to 23), the program saves the data collected once per hour.

PROTOCOL:TOTAL – network protocol (ARP, TCP, UDP, ICMP, IGMP) and total data amount (in bytes) sent and received by this connection during the hour.

The Bandwidth Meter log sample:

```
VDS01 23 Inbound ARP:360 TCP:5702082 UDP:0 ICMP:0 IGMP:0
VDS01 23 Outbound ARP:360 TCP:121613794 UDP:0 ICMP:0 IGMP:0
VDS02 23 Inbound ARP:550 TCP:543161 UDP:0 ICMP:0 IGMP:0
VDS02 23 Outbound ARP:550 TCP:23613124 UDP:0 ICMP:0 IGMP:0
```

*Note: **NONE** server mentioned in the log shows you the total traffic of unidentified connections. In some cases it is just impossible to detect the traffic owner and the program adds its value to **NONE** server.*

You can find the log files at C:\Program Files\HostsTools.com\BwVDS\...\Logs\

The log file names have the following format: DDMMYY.log (D – day, M – month, Y – year).

DATA ANALYSIS

There are 2 main ways to get the data from the log files and make some report or chart.

1. Use Microsoft LogParser software.

- You can download the LogParser from <http://www.microsoft.com/downloads/details.aspx?FamilyID=890cd06b-abf8-4c25-91b2-f8d975cf8c07&displaylang=en>

2. Use Microsoft Excel, Microsoft Access etc.

The log files are comma-separated, so you can easily open them with MS Excel or import to any database and make an analysis.

TROUBLESHOOTING

In case of any errors, please:

- Make a screenshot of the error message window
- Describe your steps and the case
- Email the screenshot and description to support@hoststools.com

Thank you.