

SQL BANDWIDTH METER

DESCRIPTION

SQL Bandwidth Meter is a unique tool for SQL Server bandwidth usage monitoring, counting and reporting.

What makes it unique? It provides a **bandwidth control on per user basis**. With this tool you can see the amount of data used (downloaded and uploaded) by each SQL Server user. Thus you can bill your customers for the SQL bandwidth usage or just find out which customers use your SQL server intensively.

The current version of SQL Bandwidth Meter works with Microsoft SQL Server 2005 and 2008. It counts SQL network packets, 1 packet = 4 Kbytes.

TRIAL AND REGISTRATION

The evaluation version of SQL Bandwidth Meter monitors traffic from several client IP addresses only (from 1 to 8), but there is no time limits. To register the software please place your order at www.HostsTools.com and email us the IP address of your SQL Server, we will generate a license key bound to the IP.

INSTALLATION

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

1. Download and install WinPcap library. You can either take it from SQL 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 SQL Server yet.
3. Download SQL Bandwidth Meter 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 **BWSQL2005** (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 - SQL Bandwidth Meter for SQL Server 2005' menu and click 'Change config [SQL Bandwidth Meter]' shortcut.
6. Specify your SQL Server IP address (e.g. 192.168.10.2\SQL2005 or 192.168.45.20) in **SQLServerIP** field.
7. Then either:

a) Enter **1** in **UseTrust** field. Leave **SQLUser** and **SQLPassword** fields empty.

or:

b) In **SQLUser** and **SQLPassword** fields enter a SQL username and password, this SQL user must have 'read' access rights for SQL system tables. Enter **0** in **UseTrust** field.

8. Then enter a license key if you have one.

If no key specified, the program monitors traffic from several client IP addresses only (from 1 to 8). To register the software please place your order at www.HostsTools.com and email us the IP address of your SQL Server, we will generate a license key bound to the IP.

9. Click 'Ok' button to save the settings. Then go to 'Start – (Programs) – Administrative Tools – Services', select **BWSQL2005** service and start or restart it.

DATA

SQL Bandwidth Meter monitors all SQL Server connections and creates a log file of the following format:

HOURL,SQL_LOGIN,TOTAL-PACKETS-OUT, TOTAL-PACKETS-IN

The legend:

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

SQL_LOGIN – an SQL user name of the monitored SQL Server connection.

TOTAL-PACKETS-OUT (TOTAL-PACKETS-IN) – total data amount (measured in packets) sent (received) by this SQL connection during the hour.

Note: 1 packet = 4 Kbytes

SQL Bandwidth Meter log sample:

```
1,dnnUser1,11957,4325
1, WssUsr,1857,25430
1, prod_server,11289,93762
1, james,635,349
1, michael,416,536
1, NONE,1903,2047
```

*Note: **NONE** user 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** user.*

You can find the log files at C:\Program Files\HostsTools.com\BWSQL2005-1.0.2\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>
- Install the LogParser.
- Then take samples-logparser.rar file from the SQL Bandwidth Meter installation package and unzip it. There are 'logs' folder, copy your SQL Bandwidth Meter log files to that folder.
- Run text.bat and you will see the list of SQL users sorted by their bandwidth usage.
- Run chart.bat and it will create chart.gif file. View chart.gif and you will see a bandwidth usage chart. 10 most active users are shown there.

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.