

If you use dedicated server for SQL, the first look on the server's status can be found at Online information, which provide history for the past 48 hours, and the Watch from the template General Performance, which provides history for the past 60 days, but mainly informs about eventual overload. The Watch General performance consists of almost the same parameters as are displayed in Online information :

**CPU Usage System** - it's necessary that there's always some reserve, i.e. that the CPU should rarely reach over 90%

**Used Physical Memory** - total occupied physical RAM, which is often the maximum for SQL and therefore it's not the main relevant parameter

**Disk activity** - best reflects overload of the SQL server from the general parameters, if the system is overloaded, this value reaches the upper percents

**Disk Avg Read/Write** - if the system is overloaded, one of the values is higher than 2. Thanks to this parameter, you can determine if the overload is on the side of reading or writing.

There's a template prepared for the configuration, whose activation is very simple thanks to the wizard in C-Monitor Console in Watches. The procedure is illustrated on the following images.

Below you can find illustration images from Online informations for an overloaded state of the SQL server and the state before.

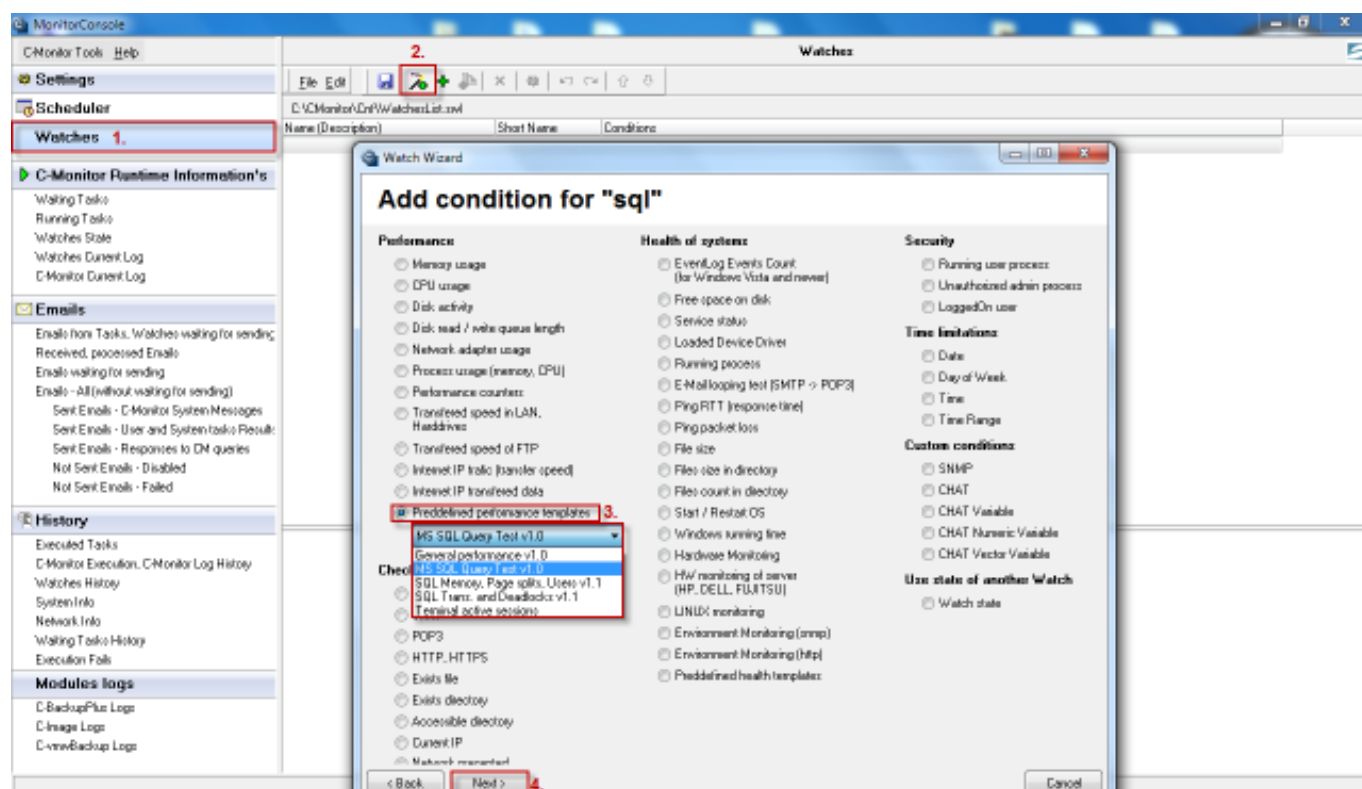


Image: Vstup do watchov a pridanie podmienok pre sledovanie SQL serverov General performance

The screenshot shows the 'Watch Wizard' window with the title 'Conditions for "MS SQL general performance"'. It contains a list of five conditions:

- CPU Usage System < 95%  
Check on each watch state evaluation  
Value will be sent to CM Server only if change to last sent value is more than 3
- Used Physical Memory Size < 98%  
Check on each watch state evaluation  
Value will be sent to CM Server only if change to last sent value is more than 3
- Disk Activity < 90%  
Check on each watch state evaluation  
Value will be sent to CM Server only if change to last sent value is more than 3
- Disk Read Queue Length < 4  
Check on each watch state evaluation  
Each value will be sent to CM Server
- Disk Write Queue Length < 4  
Check on each watch state evaluation  
Each value will be sent to CM Server

Below the list are three buttons: 'Add Condition', 'Edit Condition', and 'Delete Condition'. The 'State of watch is' section shows 'OK' (green) and a dropdown menu set to 'if all conditions are true'. To the right, it says 'FAIL - if at least one condition is false'. There is a checkbox for 'Delay for FAIL state. Conditions for FAIL state must be met at least' with a value of '5' and a 'Min' dropdown. A 'Show Advanced Options' button is also present.

**Note:** Watches are active from 5 min after the operating system start

At the bottom are buttons: '< Back', 'Next >', 'Skip Actions >>', and 'Cancel'.

Image: Prehľad aké parametre sú zahrnuté v šablóne a môžete upraviť limity k vzniku chyby, ďalej pokračujte podľa sprievodcu (nastavte alebo preskočte nastavenie akcií)

The screenshot displays the 'Watches (Online monitoring)' section of the Customer Monitor application. The interface includes a navigation menu on the left with options like 'Upozornenia', 'Zobrazenia', and 'Manažerské informácie'. The main area shows a list of watches with the following columns: Stav, Meno, Hodnota, Posledná zmena stavu, Podmienky k určaniu stavu, CM ID počítača, Meno počítača v sieti, Umiestnenie, and Posl. online spojenie s CM.

Stav	Meno	Hodnota	Posledná zmena stavu	Podmienky k určaniu stavu	CM ID počítača	Meno počítača v sieti	Umiestnenie	Posl. online spojenie s CM
●	General performance	CPU System 0% Used Phys.M.S. 96% Disk Activity 0% Disk Read Queue Length 0 Disk Write Queue Length 0	6. Mar 2013 19:43:40	OK - because all conditions are true ● TRUE - CPU Usage "System" (0%) < 100% ● TRUE - Memory Usage "Used Phys.M.S." (96 %) < 100 % ● TRUE - Disk Activity "" (0%) < 100% ● TRUE - Disk Read Queue Length (0) < 3 ● TRUE - Disk Write Queue Length (0) < 3 Delay for FAILED state is 10s	RCHSV03	NAV1	Seal Serverovna	7. Mar 2013 01:00:37
●	General performance	CPU System 0% Used Phys.M.S. 98% Disk Activity 0% Disk Read Queue Length 0 Disk Write Queue Length 0	6. Mar 2013 21:08:13	OK - because all conditions are true ● TRUE - CPU Usage "System" (0%) < 95% ● TRUE - Memory Usage "Used Phys.M.S." (97 %) < 99 % ● TRUE - Disk Activity "" (0%) < 90% ● TRUE - Disk Read Queue Length (0) < 4 ● TRUE - Disk Write Queue Length (0) < 4 Delay for FAILED state is 10s	RCHSV08	NAV2	esx-Nav1	7. Mar 2013 01:00:23

Image: Ukážka stavu watchov zo šablóny General Performance

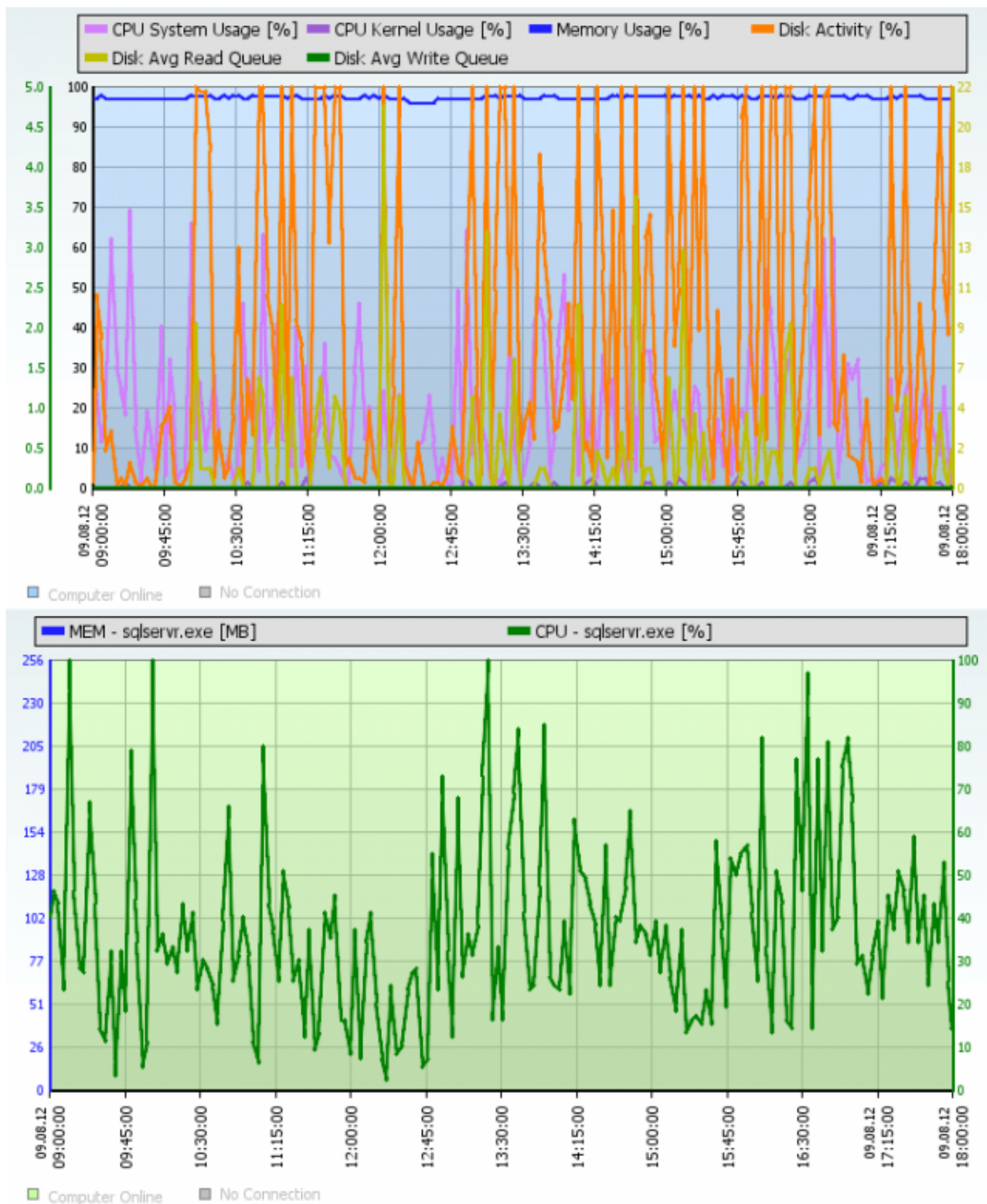


Image: Ilustračný obrázok Online informácií z SQL servera, keď server nie je preťažený. Aj napriek vysokej aktivite disku nedochádza k zvyšovaniu hodnoty Disk queue (stále je max 1)

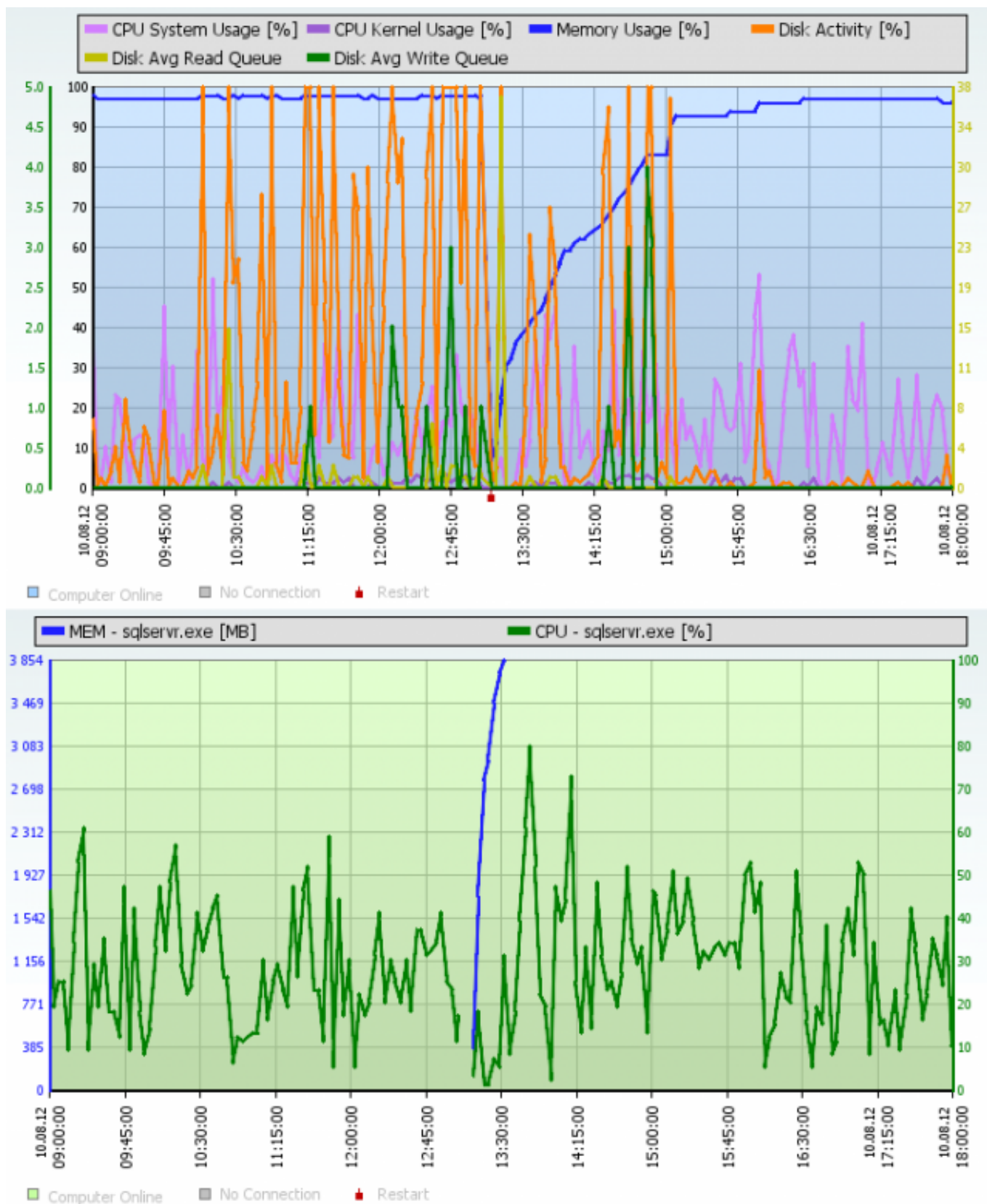


Image: Ilustračný obrázok Online informácií z SQL servera, keď server JE preťažený. Aktivita disku je síce v čase nižšia, ale hodnoty Disk queue Write nadobúda až hodnotu 4. Toto sa aj v praxi prejavilo spomalením.



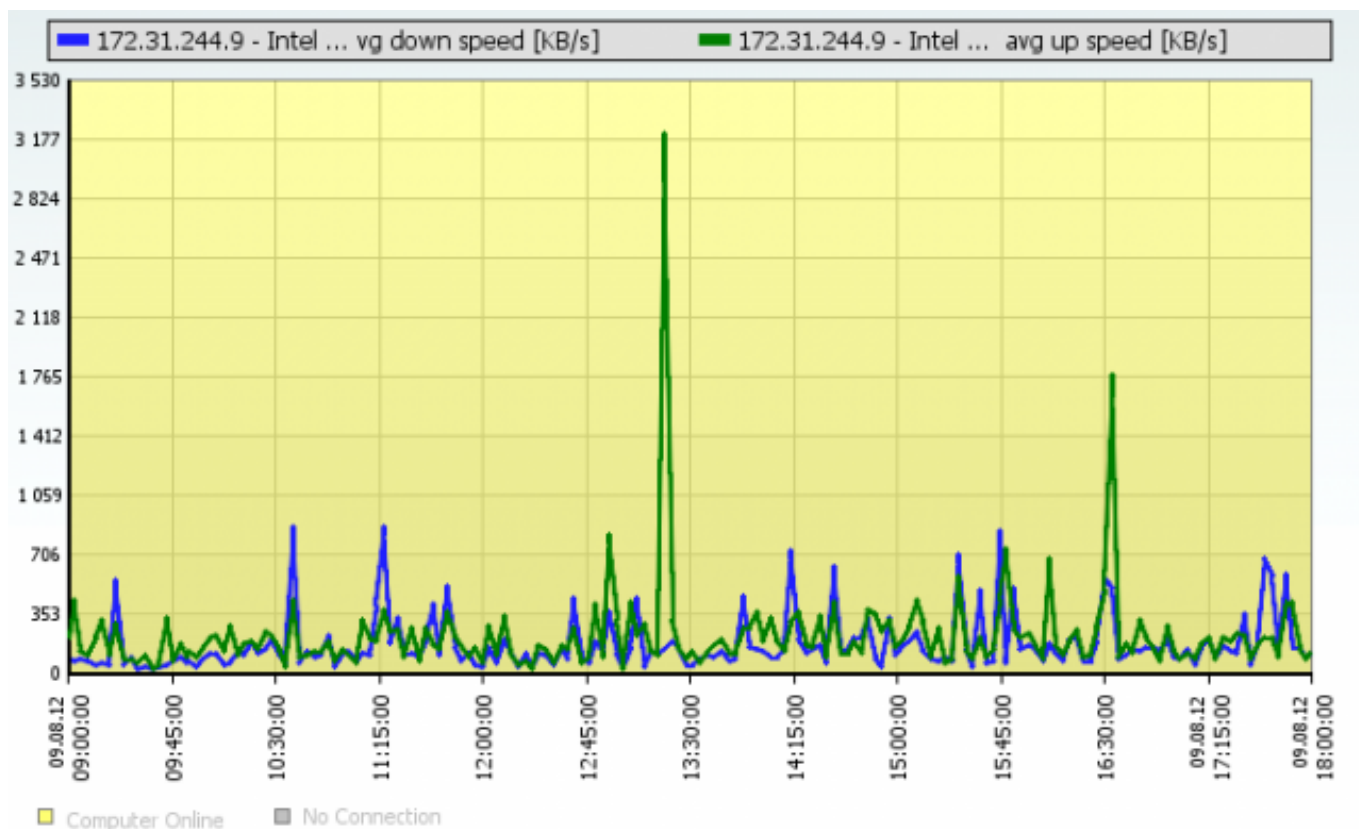


Image: Ilustrácia Online informácií s prenosom na sieťovej karte, keď SQL server preťažený nebol

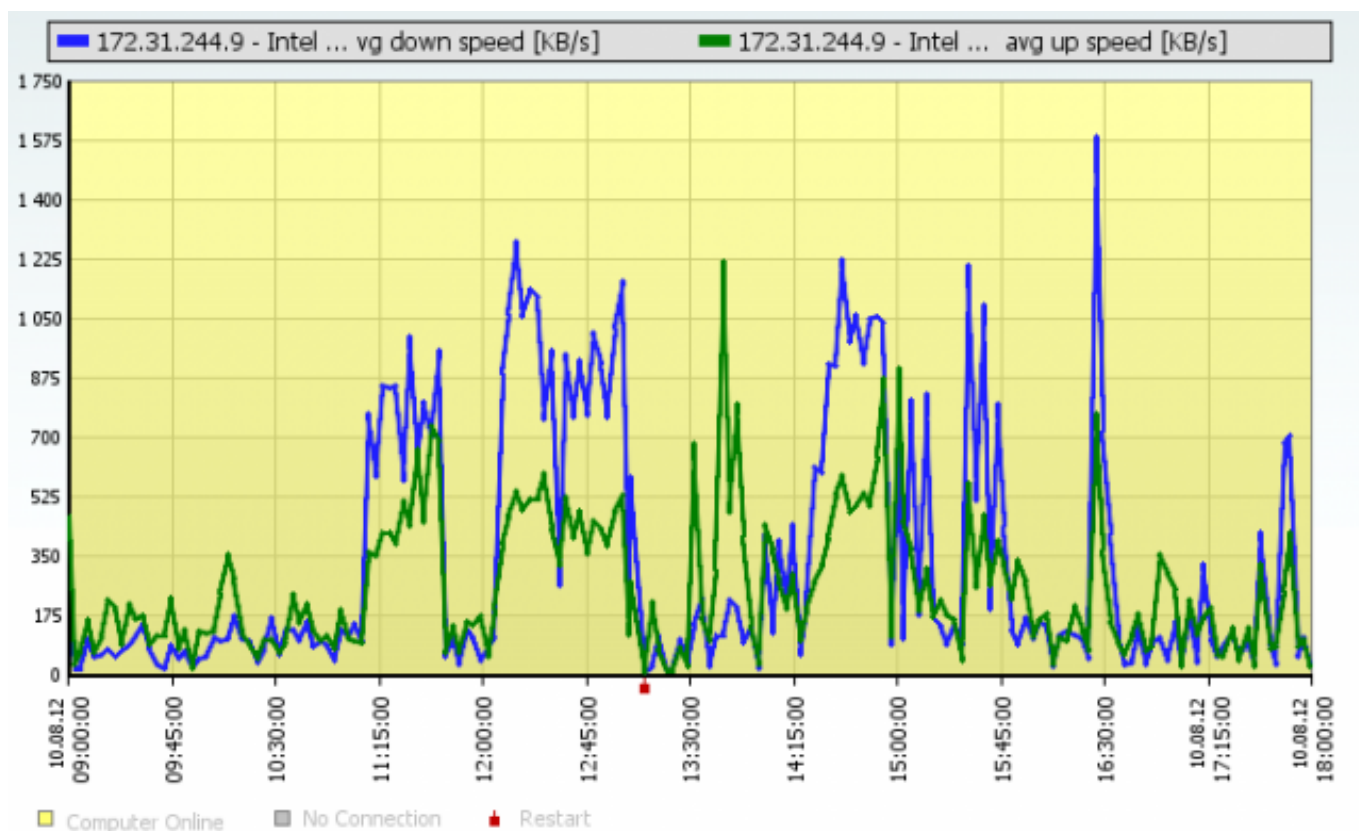


Image: Ilustrácia Online informácií s prenosom na sieťovej karte, keď SQL server BOL preťažený.

Date:

03/03/2012 Images:



## Links

[1] [https://customermonitor.co/sites/default/files/1\\_36.png](https://customermonitor.co/sites/default/files/1_36.png)

[2] [https://customermonitor.co/sites/default/files/MSSQL\\_general\\_performance\\_podmienky.png](https://customermonitor.co/sites/default/files/MSSQL_general_performance_podmienky.png)

[3] [https://customermonitor.co/sites/default/files/Watch\\_General\\_performance\\_Aktualne\\_hodnoty.png](https://customermonitor.co/sites/default/files/Watch_General_performance_Aktualne_hodnoty.png)

[4] <https://customermonitor.co/sites/default/files/online%20info%20zatazenie%20cpu%20a%20ram%20kludny%20stav.png>

[5] <https://customermonitor.co/sites/default/files/online%20info%20zatazenie%20cpu%20a%20ram.png>

[6] <https://customermonitor.co/sites/default/files/online%20info%20upload%20download%20kludny%20stav.png>

[7] <https://customermonitor.co/sites/default/files/online%20info%20upload%20download.png>