

ManageEngine Free Tools User Manual



Free Process Traffic Monitor Tool

ManageEngine Process Traffic Monitor is a powerful, Windows-based tool that monitors the traffic of all the port-occupying processes. It has an elegant Graphical User Interface that helps in viewing the incoming and outgoing traffic usage (of the machine / server / individual interfaces) graphically. The tool lists all the port occupying processes in the given machine and also provides useful performance metrics of the processes concerned.

This tool actively monitors all data transmissions of the given machine. It calculates the traffic generated by each process by mapping the traffic of the port being used by that process. By logically grouping relevant information, the tool provides traffic usage and process details, as two different tabs to the user. The tabs are a) Interface Traffic b) Process Traffic respectively.

Interface Traffic

This tab lists all the active interfaces of the given machine. Based on user selection it displays the traffic usage of the selected interface or overall traffic usage of machine, graphically. By default it displays the overall system traffic usage. Here user can configure threshold limit for the traffic usage which will ease checking whether traffic usage is under control or not.

Threshold Configuration

Here you can configure the traffic usage threshold and time interval for updating the graph.

Bandwidth (kbps) :

Max threshold for traffic usage for both incoming and outgoing value can range up to 1000000 kbps. If the traffic usage exceeds the configured threshold level, a line indicating threshold level will be drawn and a message will be put in the graph.

Update Interval(ms) :

The Interval at which the graph plot to be updated. Update interval can be within the range of 250 ms to 5 s.

For configuring the above parameters, follow the steps below,

- Click Stop button, now the fields become editable and the graph plot will stop.
- Configure the traffic usage threshold and update interval.
- Click Start. The graph will start plotting according to the new configuration.

If any interface goes down while graph plot for the same is in progress, tool will proceed with plotting traffic usage for the lexicographically next interface in the list with message stating that the interface has went down.

If any interface comes up while tool is running, it will be updated on click of the start button (ie) if any interface comes up, to update the same, click Stop and then Start.

Process Traffic

This tab lists all the port occupying process details in the given machine with few important performance metrics like CPU Usage, Memory Usage, thread count and few useful information like process name, process ID, port number, protocol, user name etc, in tabular form. Most importantly it shows the incoming & out going traffic generated by each and every process. Also user is allowed to choose a list of columns that he/she is interested to display from the list of parameters being monitored and configure threshold for incoming and outgoing traffic usage by individual processes.

By default this tab displays the following parameters

Process	The name of the process running in the system.
PID	process ID of the process
Local Port	Port being used by the process.
Sent Rate	Outgoing data rate in kbps.
Received Rate	Incoming data rate in kbps.
CPU Usage	CPU Usage of the process as %.
Memory Usage	Memory consumed by the process in kB.

User can add his/her choice of columns to display from the list of parameters being monitored using Column Chooser. Additional parameters available are as follows,

Protocol	Protocol being used by the process for data transmission(UDP or TCP).
Local Address	Actual IP Address in which the port is bound.
State	Present state of the connection in case of TCP (i.e) Listening, Established, etc.
Priority	Priority of the process (i.e) High, Normal, etc.
UserName	User who has started the process.
CPU Usage	CPU Usage of the process as %.
Thread Count	Number of threads associated with the process.

Details View

User can double-click on any process/row to view the details of process in separate window.

Threshold Configuration

User can configure Max threshold for sent and received rate of a process and also can modify the refresh interval (i.e) time interval to fetch the details of process and it's traffic usage.

- **Sent Rate(kbps)**

Max threshold for Sent rate for a given process and value can range up to 1000000 kbps, default value is 1000 kbps.

- **Received Rate(kbps)**

Max threshold for Sent rate for a given process and value can range up to 1000000 kbps, default value is 1000 kbps.

- **Refresh Interval(s)**

Time interval to fetch the process details and it's data transmission details. This value can range from 5s to 60s. By default it will be 10s, (i.e) for every 10s the values will be fetched freshly and populated to the GUI.

All the processes exceeding the threshold for Sent Rate will be marked with Orange color and all the processes exceeding the threshold for Received Rate will be marked as Red to indicate that the process exceeds threshold.

EndProcess

Users can terminate the process which is not required anymore by selecting the same by clicking the End Process button. If termination is success, status message will be shown that the process has been terminated, otherwise pop-up will be triggered with detailed error message.

Note:

Upon clicking the minimize button, the tool minimises to the system tray. Whenever the set thresholds are breached, a pop up message is thrown to alert the user.

Units	Explanation
kbps	kilo bytes per second
KB	kilo Byte
ms	Millisecond
s	Second