

ManageEngine Free Tools User Manual



Azure Performance Monitor Tool

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Overview

Free ManageEngine Azure Performance Monitor tool

Windows Azure is a cloud computing platform, which allows users to create virtual computers and run their software application. Windows Azure cloud platform allows you to launch, deploy applications that can allow you to scale capacity very quickly. Applications running on these cloud environment requires continuous monitoring from remote location to ensure high availability. ManageEngine Azure Monitor tool addresses this monitoring need.

The ManageEngine Free Azure Performance Monitor is a lightweight tool which helps system administrator, to view the performance of the Web and Worker Roles. This Tool makes connection with Windows Azure cloud environment and fetches performance metrics about Web/Worker Role instances and presents them as a visually elegant graphs and reports.

ManageEngine Azure Performance Monitor Tool monitors the metrics of the Web/Worker Role instances. You can monitor any number of instances using this tool. The best part is that this tool is made available to you absolutely FREE of cost.

Key Benefits

Azure Performance Monitor Tool, allows you to monitor performance metrics like CPU Utilization, Memory Utilization of configured instances in real time. This tool presents the resource usage in an elegant graph and reports and also shows the important Performance Counters for the Web/Worker Roles present in a tree view. This tool also populates Event Log records collected from Azure environment.

Using this tool, an administrator can see historical performance counters of instances running in the Azure environment and also can see the live resource utilization metrics in a just click of a button.

The ManageEngine Azure Performance Monitor serves as a smart desktop tool that continuously monitors Azure instances from remote location. Tool helps Administrator to monitor web/worker role instances effortlessly in real-time and ensures your mission-critical applications are running smoothly.

Snapshots

The screenshot displays the 'Free Azure Performance Monitor' interface for a 'WebRole1' instance. The left sidebar shows a tree view with 'WebRole1' selected, containing metrics like 'Memory\Available MBytes', 'ASP.NET\Application Restarts', 'ASP.NET\Requests Queued', 'ASP.NET Applications\Requests/S', and 'Processor(_Total)\% Processor Time'. The main area features two line graphs: 'CPU Utilization' (y-axis 0.0 to 0.5) and 'Memory Utilization' (y-axis 0 to 250). Below the graphs are two summary sections: 'ASP.NET' with 'Application Restarts', 'Requests Queued', and 'Worker Process Restarts' (all showing 'No Details Available'); and 'ASP.NET Applications' with 'Errors Total' and 'Requests/Sec' (also showing 'No Details Available'). An 'Events' table is visible at the bottom, listing recent events with columns for Timestamp, RoleInstance, ProviderName, EventId, and Level.

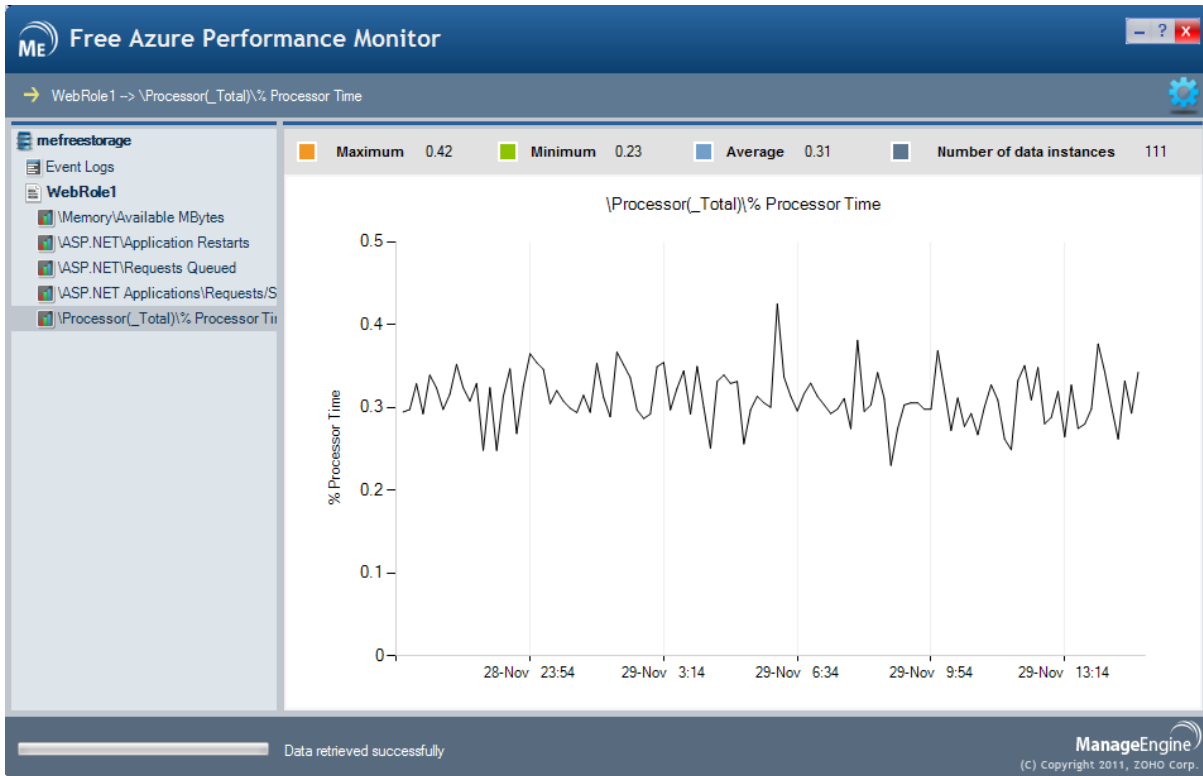
Timestamp	RoleInstance	ProviderName	EventId	Level
29/11/2011 02:29 PM	WebRole1_IN_0	Service Control Manager	7023	Error
29/11/2011 02:29 PM	WebRole1_IN_0	Service Control Manager	7036	Information
29/11/2011 01:29 PM	WebRole1_IN_0	Service Control Manager	7023	Error
29/11/2011 01:29 PM	WebRole1_IN_0	Service Control Manager	7036	Information
29/11/2011 12:29 PM	WebRole1_IN_0	Service Control Manager	7023	Error
29/11/2011 12:29 PM	WebRole1_IN_0	Service Control Manager	7036	Information
29/11/2011 11:29 AM	WebRole1_IN_0	Service Control Manager	7023	Error

Dashboard

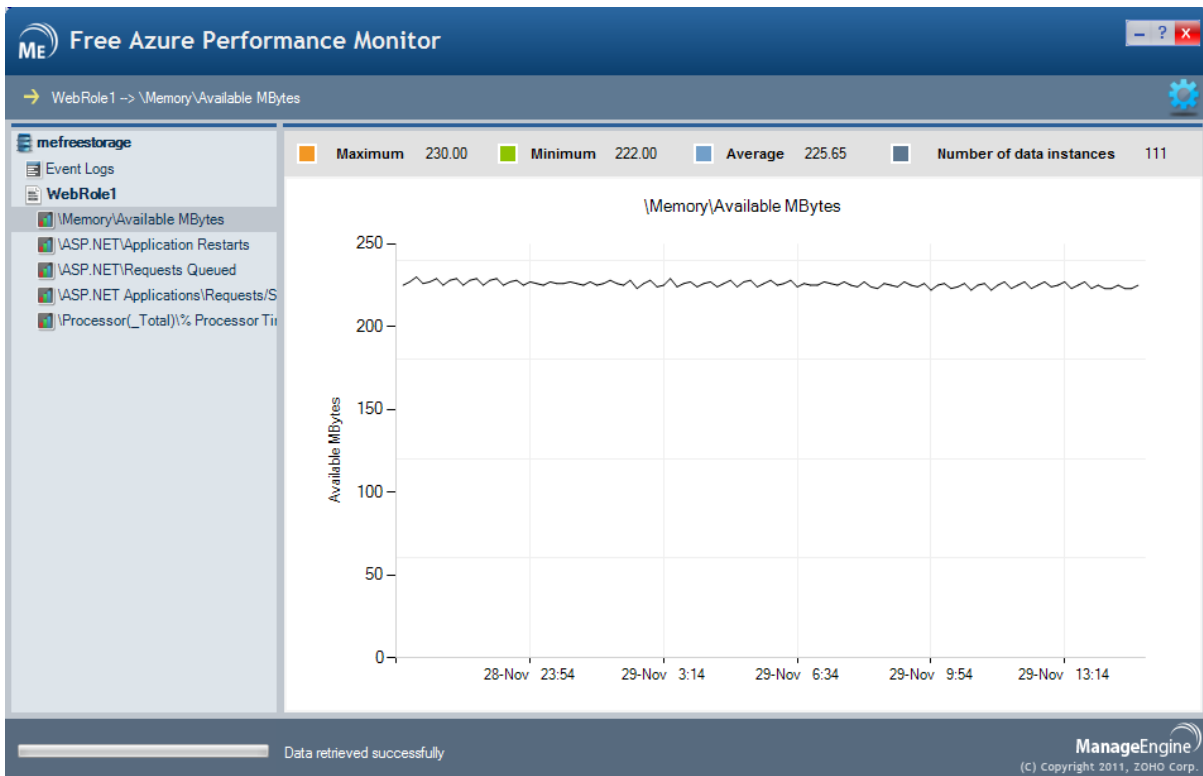
The screenshot shows the 'Event Logs' view in the 'Free Azure Performance Monitor'. The left sidebar is identical to the dashboard view. The main area displays a table of event logs with columns: Timestamp, RoleInstance, ProviderName, EventId, and Level. The table shows a sequence of events from 07:29 AM to 02:29 PM. At the bottom, there are controls for 'Fetch Past' (set to 1 day(s)) and 'Refresh Interval' (set to 15 min(s)).

Timestamp	RoleInstance	ProviderName	EventId	Level
29/11/2011 07:29 AM	WebRole1_IN_0	Service Control Manager	7036	Information
29/11/2011 07:29 AM	WebRole1_IN_0	Service Control Manager	7023	Error
29/11/2011 08:29 AM	WebRole1_IN_0	Service Control Manager	7036	Information
29/11/2011 08:29 AM	WebRole1_IN_0	Service Control Manager	7023	Error
29/11/2011 09:29 AM	WebRole1_IN_0	Service Control Manager	7036	Information
29/11/2011 09:29 AM	WebRole1_IN_0	Service Control Manager	7023	Error
29/11/2011 10:29 AM	WebRole1_IN_0	Service Control Manager	7036	Information
29/11/2011 10:29 AM	WebRole1_IN_0	Service Control Manager	7023	Error
29/11/2011 11:29 AM	WebRole1_IN_0	Service Control Manager	7036	Information
29/11/2011 11:29 AM	WebRole1_IN_0	Service Control Manager	7023	Error
29/11/2011 12:29 PM	WebRole1_IN_0	Service Control Manager	7036	Information
29/11/2011 12:29 PM	WebRole1_IN_0	Service Control Manager	7023	Error
29/11/2011 01:29 PM	WebRole1_IN_0	Service Control Manager	7036	Information
29/11/2011 01:29 PM	WebRole1_IN_0	Service Control Manager	7023	Error
29/11/2011 02:29 PM	WebRole1_IN_0	Service Control Manager	7036	Information
29/11/2011 02:29 PM	WebRole1_IN_0	Service Control Manager	7023	Error

EventLogs



Process Time



Memory Utilization

Features

Free Azure Performance Monitor Tool

ManageEngine Free Azure Performance Monitor tool helps system administrator or developer to monitor resource utilization of Web/Worker Role instances. This tool can connect to the Windows Azure environment, monitor live feed data and historical data of Web/Worker Role Instances.

- Dashboard View
- Graphs for Performance Counters
- Historical Data
- Live Data
- Event Logs

Dashboard View

Dashboard quickly shows important counters like CPU Utilization, Memory Utilizations details in a elegant graph. If CPU-Utilization graph or Memory Utilization graph is clicked, tool will show detailed view of that particular graph. Tool also populates details of the few other counters such as ASP performance counters.

Dashboard also shows glimpse of Event log of its corresponding Role.

Graphs for Performance Counters

Each performance counter is represented as a graph so that user can visualize the data. Moreover the maximum, minimum and average values of the counters are presented to the user. This helps the user to identify the deviation of values for that performance counter.

The performance counters are shown based on the configuration done in the Azure Environment for that particular Role.

Default performance counters shown are given as below.

CPU Utilization

The Processor\% Processor Time provides the CPU Utilization for that particular Role. This counter provides the percentage of time all threads spend using the processors.

Memory Utilization

The Memory\Available MBytes provides the amount of physical RAM available

ASP.NET Counters

- **ASP.NET\Application Restarts**

This counter gives the details about, The number of times a web application has restarted since the time a Web Server's has started.

- **ASP.NET\Requests Queued**

The number of requests waiting in the queue to be serviced.

- **ASP.NET\Worker Process Restarts**

This counter provides the count of the number of times an ASP.NET process gets restarted or may be recycled.

- **ASP.NET Applications\Errors Total**

This counter provides the number of errors that occurred during all the phases of an HTTP request processing life cycle.

- **ASP.NET Applications\Requests/Sec**

This counter provides the value of the number of requests served per second.

Tool shows Historical data and Live feed data in elegant graphs and reports.

History Data

When the graph is configured to show historical data, the data between a particular time frame is shown to the user. This graph will not be refreshed like Live data. When a new time frame is selected the data within the selected time frame is retrieved and rendered as graph and shown to the user.

Live Feed Data

Tool fetches data in real time and plots graph continuously, based on the data fetch interval.

Graph Zoom In/Out

The data rendered in graph can be further analyzed by zooming in/out and viewing the detailed data in the X-Axis. The data in the X-Axis shows you the date and time corresponding to the points plotted in the graph.

Event Logs

This table provides the latest events that has occurred in the Windows Azure environment. This table lists the following fields

- Timestamp - This field provides the timestamp at which this event had occurred.
- Role Instance - The Role Instance that caused this event.
- Provider Name - The field provides the source of the event.
- Event ID - This is the event ID (it provides event type that has occurred)
- Level - This field provides the severity of the event

Documents

Free Azure Performance Monitor Tool

Getting Started

The Free Azure Performance Monitor Tool helps the developer/administrator to collect and monitor the resource utilization of the deployed Web / Worker Roles. This will help to make the operational and business decisions more quickly with greater confidence.

Settings Window

Please provide the Windows Azure credentials and HTTP proxy credentials (if required).

Windows Azure Credentials

- **Account Name** : This is the name in which you have created an account in the Windows Azure environment.
- **Account Key** : This is the key provided by the Azure environment.
- **Deployment ID** : This is the deployment ID which the Azure environment gives to the user while creating webrole / workerrole.

Proxy Credentials

- **Proxy Host Name** - Host name of the Proxy server
- **Proxy Port** - Port of the Proxy server
- **Proxy Username** - Username of the Proxy Server
- **Proxy Password** - Password of the Proxy Server

Click on the "Connect" button in order to connect the Windows Azure environment.

If the connection to Windows Azure environment is successful, this tool populates all deployed Web / Worker Role Instances, along with the Performance Counters that has been configured for each of the WebRole in an elegant tree view .

The performance counters shown are

ASP.NET Counters

Following ASP.NET counter are shown

- ASP.NET\Application Restarts
- ASP.NET\Requests Queued
- ASP.NET\Worker Process Restarts
- ASP.NET Applications\Errors Total
- ASP.NET Applications\Requests/Sec

CPU Utilization

- Processor\% Processor Time
Tool populates CPU utilization details

Memory Utilization

- Memory\Available Mbytes
Tools shows Memory Utilization details

Graph Zoom In/Out

By zooming in, you can examine the finer details of the data. To zoom into the graph, click the mouse on the graph and drag along the X-Axis. This will provide a detailed view of the graph based on our selection. The time line provided in the X-axis also gets adjusted according to the selected area. By clicking on the circle on the bottom left corner in the graph you can zoom-out to the original graph.

Configuring Performance counter Graphs

Select any performance counter in the left tree, then click the setting icon available in the top right corner of the graph view. This will open graph setting dialog. In this dialog , three modes configuration available . They are

- **Default view**

Click and select default option, In this mode, user can enter past time in minutes/hours/days/weeks to view reports.

- **Custom**

Click and select Custom option, In this mode, the user can select a particular starting date and time and an ending date and time to view report.

- **Live Feed**

Click and select Live feed option, In this mode the user can specify the interval in minutes. The data will be continuously refreshed between every interval.

Event Logs View

Tool populates the events from the Azure . By default, the Event Logs node will be selected in the tree and the latest events details will be displayed.

To get technical assistance or to receive further details regarding Azure Performance Monitor tool, please contact free-tools@manageengine.com

System Requirements

Hardware

- **CPU** : 1 GHz (x86 processor) or 1.4 GHz (x64 processor) and higher versions.
- **Memory** : Atleast 512 MB of RAM
- **Disk Space** : Atleast 3 MB of disk space must be available before installation and less than 10 MB of disk space is needed after installation.

Software

This tool monitors Web Role / Worker Roles running in Windows Azure environment. We need the latest .NET framework.

- Microsoft .Net Framework 4.0

Note : If you do not have Microsoft .NET Framework, please download the required version from

- <http://www.microsoft.com/download/en/details.aspx?id=17851>
(Microsoft .Net Framework 4.0)

This tool provides facility to monitor Azure environment. To download more free tools, please visit our ManageEngine website <http://www.manageengine.com/free-software-download.html>.

FAQ

1. I have downloaded the tool but it is not running. What should I do?

Please check whether the Dot Net platform is installed in your system. Run the utility available in the bin directory, DotNetUtilities.exe, it will inform you the Dot Net version. If Dot Net platform is not available in your system, download the platform. This tool requires Dot Net Version 4 for it to run successfully. So please see the software requirements page for downloading the platform.

2. I have connected to my Azure environment successfully. But I don't see any counters. What is the problem?

You need to enable performance monitoring in your Azure environment. There are 3rd party software which helps you to do this. After you have done that configuration, you can monitor your environment with this tool.

3. Can I monitor only one Azure Account?

Yes. You can monitor only one azure account.

4. Can I monitor more than one Roles in my environment.

Yes you can monitor all the roles deployed in an environment.

To monitor more servers simultaneously please visit <http://www.manageengine.com/network-monitoring> or send mail to free-tools@manageengine.com