

# Performance Sentry Query Tool for Microsoft System Center Operations Manager



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## 1. Revision History

Author	Date	Version	Description
Mark Fuini	02-10-2012	v1.0	Initial Version
Phil Henninge	06-01-2012	V1.0	Revision 1

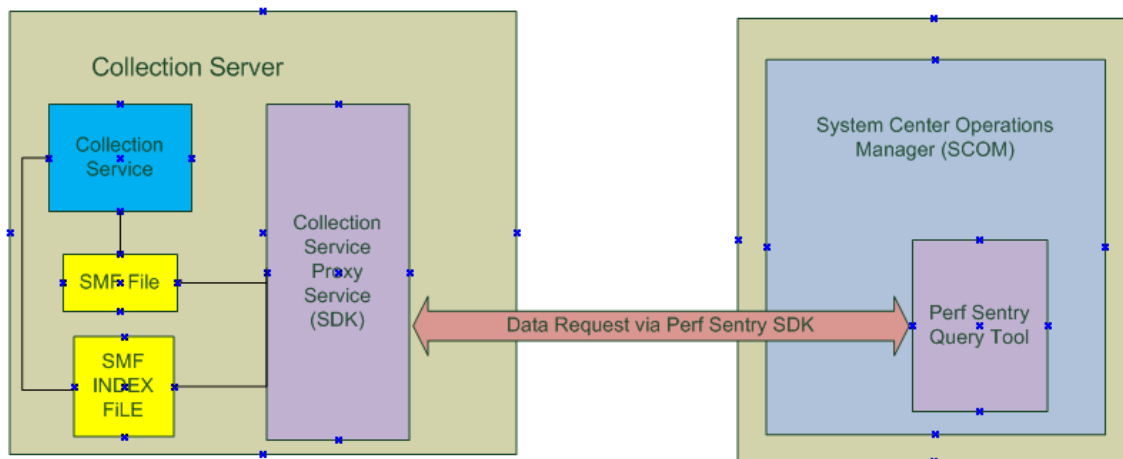
## 2. Overview

Thank you for your interest in Demand Technology Software's Performance Sentry product.

This document describes the Performance Sentry Query Tool. The Query Tool is a management pack for Microsoft System Center Operations Manager (SCOM). The Query Tool will allow administrators to retrieve near real-time or historical performance data from a particular machine running the Performance Sentry Collection Service. The Query Tool utilizes the Performance Sentry SDK to retrieve the data from the Performance Sentry Collection Service. Once the data is retrieved from the Collection Service into SCOM, it can be displayed or exported to CSV for further analysis.

## 3. Performance Sentry Query Tool Architecture

### Performance Query Tool Architecture



## 4. Performance Sentry Query Tool Components and Installation

The Performance Sentry Query Tool requires at minimum System Center Operations Manager 2007.

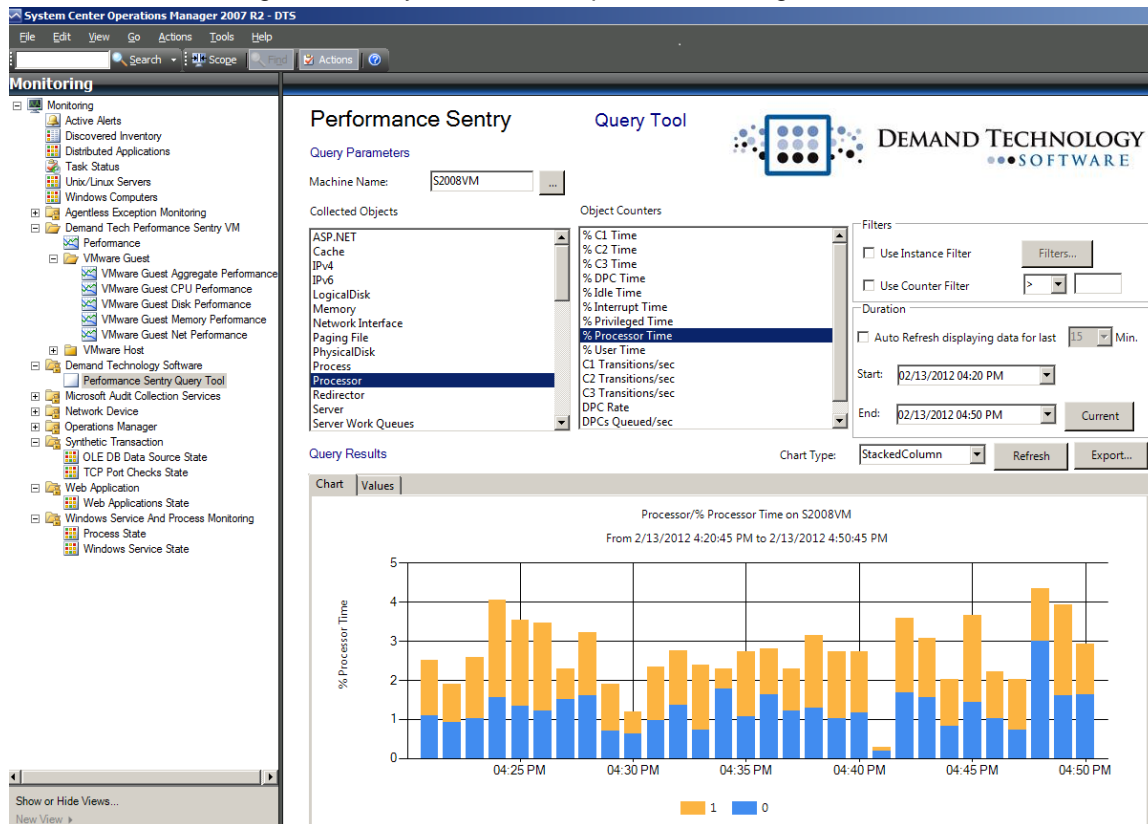
It also requires version 4.0.0.13 of the Performance Sentry Collection Service which also includes the Performance Sentry Proxy Service (the Collection Service Proxy Service seen in the diagram above). Both services must be installed and started on the machine from which you intend to retrieve and chart performance data.

The following table lists the Performance Sentry Query Tool components shipped with the package that must be installed as indicated in the installation instructions column.

Name	Description	Installation Instructions
DemandTechnology.PerfSentry.QueryTool.UI.dll	User Control DLL for the Perf Sentry Query Tool created in .Net 3.5 SP1	Copy to the SCOM Folder
System.Windows.Forms.DataVisualization.dll	.Net 3.5 SP1 Chart Control for Graphing in the Query Tool	Copy to the SCOM Folder
DemandTechnology.PerfSentry.QueryTool.UI.mp	Perf Sentry Tool Management Pack	Place with other management packs  Import into SCOM using SCOM Console

## 5. Performance Sentry Query Tool Operation

Performance Sentry Query Tool uses the Performance Sentry SDK to retrieve and chart the performance data requested by the user. The following screen capture shows the Query Tool User Interface running inside of System Center Operations Manager:



Use the following steps to retrieve and chart near real-time performance data from a machine running the Performance Sentry Collection Service:

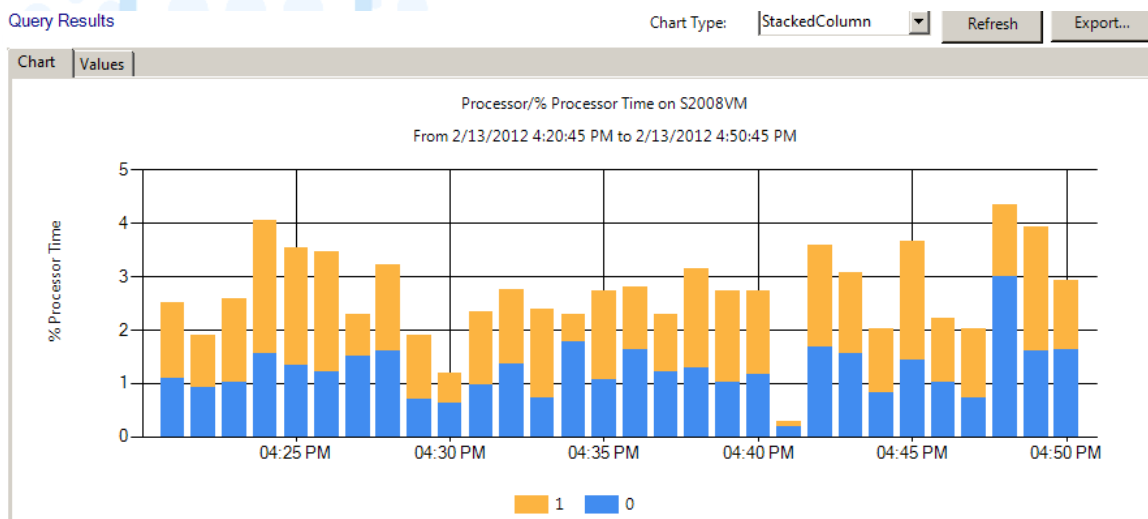
1. Using the interface from within SCOM, select a machine with the browse '...' button.



- The Query Tool uses the SDK to retrieve the names of the objects being collected by the Collection Service. Once an object is selected by the user, the Performance Sentry Query tool retrieves the respective counters for that object:

The screenshot shows the Query Tool interface. On the left, under 'Collected Objects', a list includes ASP.NET, Cache, IPv4, IPv6, LogicalDisk, Memory, NetworkInterface, Paging File, PhysicalDisk, Process, Processor, Redirector, Server, and Server Work Queues. The 'Process' entry is highlighted with a red box. On the right, under 'Object Counters', a list includes % C1 Time, % C2 Time, % C3 Time, % DPC Time, % Idle Time, % Interrupt Time, % Privileged Time, % Processor Time, % User Time, C1 Transitions/sec, C2 Transitions/sec, C3 Transitions/sec, DPC Rate, and DPCs Queued/sec. The '% Processor Time' entry is selected. To the right of these lists are 'Filters' and 'Duration' settings. The 'Filters' section has checkboxes for 'Use Instance Filter' and 'Use Counter Filter', both of which are unchecked. The 'Duration' section has a checkbox for 'Auto Refresh displaying data for last 15 Min.', which is unchecked. Below this, there are 'Start' and 'End' time pickers. The 'Start' time is set to '02/13/2012 04:20 PM' and the 'End' time is set to '02/13/2012 04:50 PM'. There is also a 'Current' button next to the 'End' time picker.

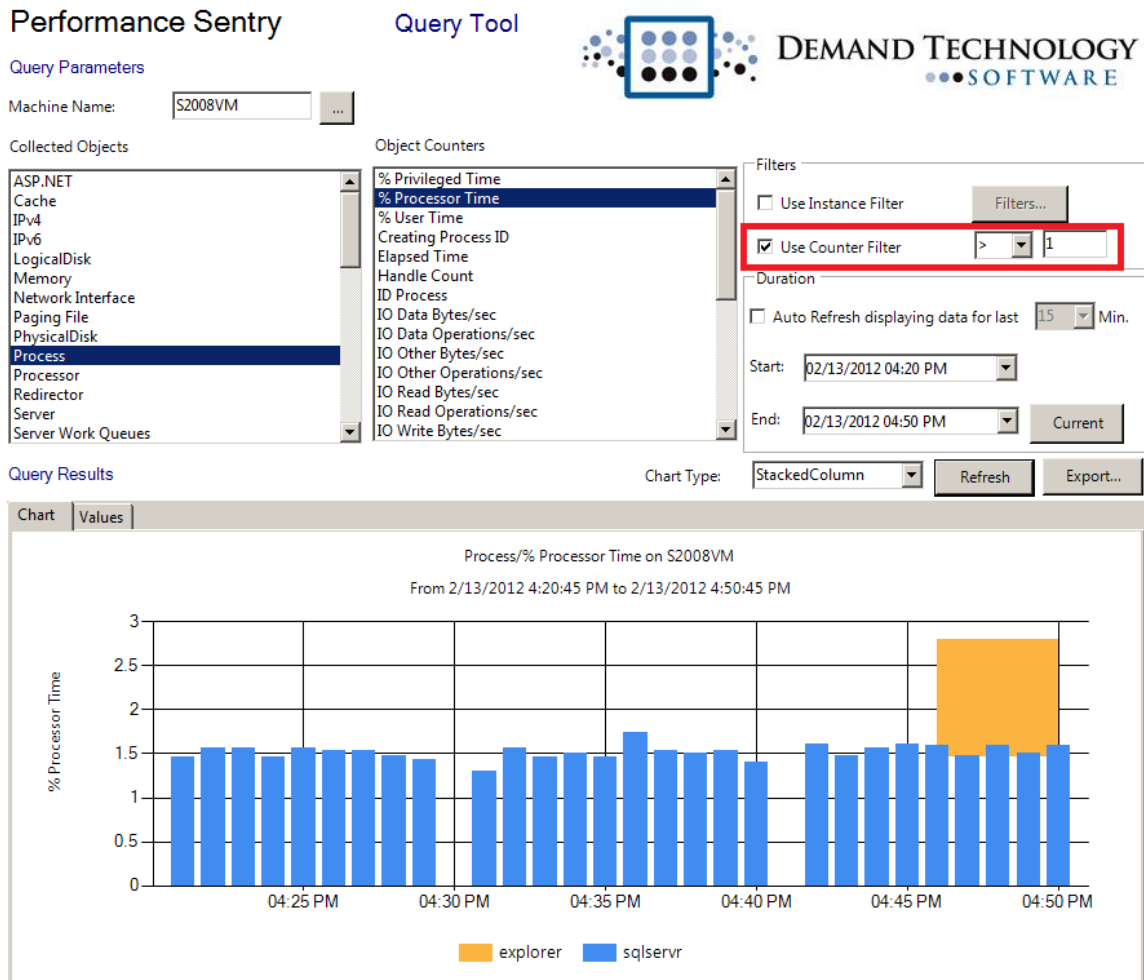
- After an object and counter pair is selected, the Query Tool retrieves the performance data for the particular Object Counter and charts the data. The values of this data can be exported in CSV format with the 'Export..' button.



4. The user can also select filters for an instanced object or on counters of the object in order to reduce the amount of data being returned from the Performance Sentry Collection Service. This is accomplished by enabling the 'Use Instance Filter' checkbox and by pressing the 'Filters...' button and entering the instance name.

The screenshot displays the Performance Sentry Query Tool interface. At the top, the title bar reads "Performance Sentry Query Tool" and the logo for "DEMAND TECHNOLOGY SOFTWARE" is visible. Below the title bar, the "Query Parameters" section shows the "Machine Name" as "S2008VM". The "Collected Objects" list on the left includes ASP.NET, Cache, IPv4, IPv6, LogicalDisk, Memory, Network Interface, Paging File, PhysicalDisk, Process, Processor, Redirector, Server, and Server Work Queues. The "Object Counters" list on the right includes % C1 Time, % C2 Time, % C3 Time, % DPC Time, % Idle Time, % Interrupt Time, % Privileged Time, % Processor Time, % User Time, C1 Transitions/sec, C2 Transitions/sec, C3 Transitions/sec, DPC Rate, and DPCs Queued/sec. The "Filters" section on the right has checkboxes for "Use Instance Filter" (checked) and "Use Counter Filter" (unchecked). A "Filters..." button is present. A "Filter Definition" dialog box is open in the foreground, showing the "Instance Filter" section with an "Instance Name" field containing "svchost" and a list of instance names below it. The "Query Results" section at the bottom shows a "Chart" tab selected, with a graph titled "Processor/% Process" and a time range of "From 2/13/2012 4:20:45 PM".

5. The user can also exclude data by a specific counter value. The following example shows data being restricted by 1% Processor Time.



Demand Technology Software also has a System Center Operations Manager Management Pack for a sister product called Performance Sentry VM. Performance Sentry VM connects to a VMware ESX server to retrieve performance data for the ESX server and all guests and formats the data in Windows Object/Counter format so that any Windows performance monitoring software can collect and report on VMware performance data.

For more information on the Performance Sentry VM Management Pack, please visit Demand Technology's product website at [www.demandtech.com/products](http://www.demandtech.com/products)