



SightLine Power Agent for Windows Systems

The SightLine™ Power Agent™ for Microsoft® Windows® Systems collects and reports performance data from all of the major applications that run on Windows platforms. It also collects all standard Windows operating system metrics including CPU, Memory, Disk, Network, and Process Information, as well as hundreds of other metrics available to the System Manager.

The real power of SightLine can be found in its ability to correlate and analyze the data from these disparate groups, helping the manager understand completely how application activity impacts system resources.

SightLine Interface Agents

A set of Interface Agents is available to monitor key hardware or services external to the Windows operating system. Data gathered by these Interface Agents is easily correlated with other SightLine data for an end-to-end view of service-level performance.

- ◆ **MS Exchange**—collects key performance metrics to help tune and ensure the service of Microsoft Exchange
- ◆ **SQL Server**—collects database metrics and user activity to report which activities adversely affect performance
- ◆ **IIS**—collects Web and FTP publishing service metrics for activity and throughput
- ◆ **Terminal Server**—collects user-based metrics, showing which terminal user(s) are impacting the system the most
- ◆ **.NET Framework**—collects Web and FTP publishing service metrics for activity and throughput
- ◆ **EMC Symmetrix®**—collects performance metrics to tune and manage the EMC Symmetrix storage subsystem
- ◆ **Brocade®**—collects activity and utilization metrics from Brocade switches
- ◆ **Caché**—collects performance metrics from the Intersystems Caché database
- ◆ **Oracle**—collects performance metrics from Oracle database instances

Operating Systems Statistics

The following describes some of the key metrics that are collected by the SightLine for Windows Power Agent and analyzed using SightLine Expert Advisor/Vision™.

CPU Statistics

SightLine reports both global and individual statistics for the processors in the system. For each CPU, the %CPU, %User, %Privileged, and %Interrupt times give information on how busy the processor is in the different modes. In addition, Deferred Procedure Call (DPC) and Asynchronous Procedure Call (APC) statistics are reported. At the system level, the queue length of the processor, along with the context switches per second, enable you to monitor processor congestion.

Memory Statistics

One of the most common causes of serious performance problems is lack of memory. SightLine reports available physical memory and paging activity, which are two useful metrics for evaluating memory constraints. Page Faulting activity, Cache Fault information, and Paged and NonPaged Pool resources are tracked to give detailed information about the memory usage on the system. SightLine also monitors cache statistics. When pages can be retrieved from the cache instead of the disk, system performance is significantly improved. Metrics such as the Data Map Hit and Copy Read Hit percentages monitor cache efficiency. Data Map Pinned and MDL (Memory Descriptor List) statistics provide valuable information to evaluate cache performance.

Disk Statistics

Disk activity is a key aspect of performance. When there is a shortage of memory, the Windows operating system is engineered to automatically page to the disk to free up space. Disk activity can be reported either as physical disk or logical disk statistics. SightLine reports disk queue length, the percentage of time the disk is busy servicing I/O requests, the disk throughput in KB and in number of transfers, and the average time for a transfer. I/O requests may also be broken into Read and Write requests, providing more detailed knowledge of disk activity.

Network Statistics

The Windows Server is a Network Operating System (NOS) that can also work as an application server. Reporting comprehensive network statistics is therefore crucial for performance monitoring the server. SightLine reports detailed information about any network software installed in the system, including Browser, Network Protocols, and Server, among others. WINS Server and MacFile Server statistics are also reported.

Network Protocols

SightLine reports detailed statistics for a wide variety of network protocols including AppleTalk, IP, ICMP, NetBEUI, NWLink IPX & SPX, NWLink NetBIOS, TCP, and UDP. The number of variables under the network category is large and protocol-specific. Generally, network throughput rates in KB and in packets, frames, or fragments are reported. Errored or Failed connection statistics help to keep track of network glitches that can point to hardware problems. SightLine also helps keep track of Remote Access Services (RAS) by reporting metrics for the RAS Total and RAS Port objects.

Process Statistics

One flexible feature of SightLine is the ability to group processes under user-defined "Workloads." Once a Workload is defined, all the process information is available for it to use. In particular, you can monitor the %CPU utilization, working set size and priority of the process or groups of processes, and the number of threads generated. You can monitor any application running on the server directly during the process statistics if its process name(s) can be identified.

Browser Statistics

A Browser service runs on any machine that has elected to have a browse list. Browser statistics allow you to monitor server and domain announcements and errored components like Missed Server List Requests or other specific types of requests.

Server Statistics

The Server is the process that serves as an interface between the local computer and the network services. Monitoring server activity usually gives a good idea of how busy the network is. Network throughput and accurate error logs provide the means to track the network. In addition to reporting these metrics, SightLine reports process statistics for the server, including memory used in the Paged and NonPaged Pools.

SightLine...

...the Key to Performance Information



SightLine Systems Corporation
11130 Fairfax Boulevard, Suite 200
Fairfax, VA 22030
703-563-3000
877-744-4854
www.sightlinesystems.com

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