System Monitor Communication Driver

System Monitor Communication Driver gets information about the local system, like processor, memory, hard disk and network information. When running a distributed application, the metrics will refer to the server computer. Using the Channel remote execution, you can get information from other computers running the application.

This document has the specific information related to the driver configuration. For a generic explanation on Devices, Channels, Nodes and Points configuration, please refer to reference guide.

Contents

Section 1 – Summary Information

Communication Driver Name: System Monitor

Current Version: 1.0.0.0

Implementation DLL: T.ProtocolDriver.SystemMonitor.dll

Description: System Monitor Communication Driver gets information about the local system, like processor, memory, hard disk and network information. When running a distributed application, the metrics will refer to the server computer.

Max number of nodes: only one node can be defined to each channel

Supported Operands:

Operand	Read	Write	Data Type	Address size
Processor	✓	X	Real	8 bytes
MemoryAvailable	✓	X	Real	8 bytes
MemoryInUse	✓	X	Real	8 bytes
MemoryTotal	✓	X	Real	8 bytes
MemoryPhysicalAvailable	✓	X	Real	8 bytes
MemoryPhysicalInUse	✓	X	Real	8 bytes
MemoryPhysicalTotal	✓	X	Real	8 bytes
HDWriteBytesPerSecond	✓	X	Real	8 bytes
HDReadBytesPerSecond	✓	X	Real	8 bytes
NetDataReceivedBytesPerSecond	✓	X	Real	8 bytes
NetDataSentBytesPerSecond	✓	X	Real	8 bytes

Table 1

Section 2 – Point Configuration

The syntax for the Ping address points is: < Property > . Where property can be one of the the above:

Processor   Percentage is being used

MemoryAvailable   Total of memory available (including virtual memory) in kilobytes

MemoryInUse   Total of memory is being used (including virtual memory) in kilobytes

MemoryTotal   Total of memory (including virtual memory) in kilobytes

MemoryPhysicalAvailable   Total of physical memory available in kilobytes

MemoryPhysicalInUse   Total of physical memory is being used in kilobytes

MemoryPhysicalTotal   Total of physical memory in kilobytes

HDWriteBytesPerSecond   Bytes per seconds are being written in the Hard Disk

HDReadBytesPerSecond   Bytes per seconds are being read in the Hard Disk

NetDataReceivedBytesPerSecond   Bytes per seconds are being received through the network

NetDataSentBytesPerSecond   Bytes per seconds are being sent through the network

You can map each property to a Tag in the application, or you can defined only one line at Edit-Device-Points, mapping the entire data structure to a Template tag. In order to use template tags:

a) Create a Tag Template "SystemMonitor", using as Member names the properties names.

b) Create a tag from the Template "SystemMonitor"

c) At Edit-Devices-Points, put your tag at the TagName column, and select the address *SystemMonitor* and the address field. The system will automatically get all the members of the template when running the application.

Section 3 – Troubleshoot

The most common error when you when you have an error, it is related with the Windows cache of the performance counter. The procedure to recover the system, it is to execute the following commands at the Command prompt, running the prompt with Administrador priviledge:

C:\windows\system32> lodctr /r

If you still have the error: Error: Unable to rebuild performance counter setting from system backup store, error code is 2

Then, you should run:

C:\windows\SysWOW64> lodctr /r

The expected rmessage is:

Info: Successfully rebuilt performance counter setting from system backup store

The status of the driver execution can be observed through the diagnostic tools. Refer to the product documentation on the use of the following tools:

- TraceWindow

- PropertyWatch

- ModuleInformation

Revision History

Revision	Description	Date
A	Initial Revision	November, 28, 2014
B	Error messages description	March, 2015