

System Monitor – Local computer

The System Monitor communication driver gets information about the local system, such as the 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.

Summary Information

Communication Driver Name: System Monitor

Current Version: 1.0.0.0

Implementation DLL: T.ProtocolDriver.SystemMonitor.dll

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

Supported Operands:

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

Point Configuration

The syntax for the Ping address points is: <Property>

Where:

- **Processor** = The percentage used
- **MemoryAvailable** = The total memory available (including virtual memory) in kilobytes
- **MemoryInUse** = The total memory used (including virtual memory) in kilobytes
- **MemoryTotal** = The total memory (including virtual memory) in kilobytes
- **MemoryPhysicalAvailable** = The total physical memory available in kilobytes
- **MemoryPhysicalInUse** = The total physical memory used in kilobytes
- **MemoryPhysicalTotal** = The total physical memory in kilobytes
- **HDWriteBytesPerSecond** = The bytes per seconds written on the Hard Disk
- **HDReadBytesPerSecond** = The bytes per seconds read on the Hard Disk
- **NetDataReceivedBytesPerSecond** = The bytes per seconds received through the network
- **NetDataSentBytesPerSecond** = The bytes per seconds sent through the network

You can map each property to a Tag in the application, or you can define only one line under Edit > Device > Points, mapping the entire data structure to a Template Tag

In order to use template tags:

- Create the tag template "SystemMonitor" by using Member names as the properties names
- Create a tag from the Template "SystemMonitor"
- Under Edit > Device > Points, put your tag in 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

Troubleshoot

The most common error is related to the Windows cache of the performance counter. To recover the system, execute the following commands in the Command prompt while running the prompt with Administrator privileges: `C:\windows\system32>lodctr/r`

If you still have this 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 message is:

- Info: Successfully rebuilt performance counter setting from system backup store

The status of the driver's execution can be observed through the diagnostic tools, which are:

- Trace window
- Property Watch
- Module Information