Net-SNMP Metrics

Contents

- Overview
- List of Required Net-SNMP MIBs
- System Configuration Data
- System Performance Data

Overview

Uptime Infrastructure Monitor collects the configuration and performance data outlined in this article from Net-SNMP implementations. Additional performance data outside of this set can be collected using the SNMP service monitor with retained performance metrics. If you haven't already please review How to add a Net-SNMP enabled server to Uptime Infrastructure Monitor

List of Required Net-SNMP MIBs

All data that Uptime Infrastructure Monitor gathers from Net-SNMP is based on the following MIB implementations:

- RFC 1213 - Management Information Base for Network Management of TCP/IP-based internets
  Presents network interface information.
- UCD-SNMP-MIB
  Presents general system state information.
- Host Resources MIB (RFC 2790)
  Presents system performance data.

System Configuration Data

Metric	Explanation	Source MIB
sysName	The name of the system on which Net-SNMP is running.	RFC 1213 - sysName
sysDesc	The hardware architecture of the system.	RFC 1213 - sysDesc
hrDeviceTable	Uptime Infrastructure Monitor uses the following information returned by this metric: the number of CPUs on the system and the CPU configuration.	HOST-RESOURCES-MIB - hrDeviceTable.
memTotalReal	The amount of memory available on the system.	UCD-SNMP-MIB - memTotalReal
memTotalSwap	The size of swap space available on the system.	UCD-SNMP-MIB - memTotalSwap
ifDescr	The name of the network card that is installed on the system.	RFC 1213 - interfaces/ifDescr
ifMtu	The largest amount of data that the network interface can transmit in a single physical frame.	RFC 1213 - interfaces/ifMtu
ifSpeed	The maximum speed of the network interface.	RFC 1213 - interfaces/ifSpeed
ifPhysAddress	The physical address of the network interface.	RFC 1213 - interfaces /ifPhysAddress

System Performance Data

Metric	Explanation	Source MIB
ssCpuUser	The amount of time that the CPU on the system spends executing user processes.	UCD-SNMP-MIB - systemstats/ssCpuUser
ssCpuSystem	The amount of time that the CPU spends processing system calls.	UCD-SNMP-MIB - systemstats/ssCpuSystem
ssCpuIdle	The amount of time that the CPU is idle.	UCD-SNMP-MIB - systemstats/ssCpuIdle
hrSystemProcesses	The number of processes that are running on the system.	HOST-RESOURCES-MIB - hrSystemProcesses
memTotalSwap	The total amount of swap space on the system.	UCD-SNMP-MIB - memory/memTotalSwap
memAvailSwap	The amount of swap space that is available.	UCD-SNMP-MIB - memory/memAvailSwap

memAvailReal	The amount of available memory.	UCD-SNMP-MIB - memory/memAvailReal
memTotalFree	The total amount of free memory.	UCD-SNMP-MIB - memory/memTotalFree
ifDescr	The name of the network interface.	RFC 1213 - interfaces/ifDescr
ifInOctects	The amount of data, measured in octets, that is moving into the network interface.	RFC 1213 - interfaces/ifInOctects
ifInErrors	The number of inbound errors.	RFC 1213 - interfaces/ifInErrors
ifOutOctects	The amount of data, measured in octets, that is moving out of the network interface.	RFC 1213 - interfaces/ifOutOctects
ifOutErrors	The number of outbound errors.	RFC 1213 - interfaces/ifOutErrors
hrStorageDescr	A description of the file system.	HOST-RESOURCES-MIB - hrStorage /hrStorageDescr
hrStorageSize	The total amount of storage space on the file system.	HOST-RESOURCES-MIB - hrStorage /hrStorageSize
hrStorageUsed	The amount of storage space on the file system that has been used.	HOST-RESOURCES-MIB - hrStorage /hrStorageUsed
hrSWRunName	The name of a process that is currently running.	HOST-RESOURCES-MIB - hrSWRun /hrSWRunName
hrSWRunIndex	The ID of the process that is currently running.	HOST-RESOURCES-MIB - hrSWRunIndex
hrSWRunPerfCPU	The number of centi-seconds of the total system CPU resources that a running process is consuming.	HOST-RESOURCES-MIB - hrSWRunPerf /hrSWRunPerfCPU
hrSWRunPerfMem	The amount of memory that a running process is using.	HOST-RESOURCES-MIB - hrSWRunPerf /hrSWRunPerfMem
hrSystemNumUsers	The number of users currently active on the system.	HOST-RESOURCES-MIB - hrSystemNumUsers