ArtēMon™

An Extensible System Monitor

ArteMon is a powerful, affordable system performance monitor for Linux, Solaris and Windows servers and network devices. It is written in Java and can run on any platform that supports Java. It can collect system performance data from a variety of data sources and optionally store them in a database for automated reporting and publishing.

ArteMon also provides a real time dashboard for graphical monitoring – see screenshot above. Thanks to the open plug-in architecture, ArteMon can be easily extended simply by adding new plug-in modules.

With ArteMon's agent-less implementation, no software needs to be installed on the monitored nodes. This simplifies deployment and administration and also reduces resource requirements and cost.

Easy-to-Use Configuration Console

ArteMon is controlled from an easy to use graphical user interface. This central console allows you to configure the monitoring environment and control the monitoring process. While monitoring, you can see the notifications being generated by the system. On ArteMon 1.0 this is a Java Swing interface. ArteMon 2.0 Server includes an embedded Jetty web server used to control and configure ArteMon from a web browser.

Comprehensive Alarm Management

ArteMon alarm notifications can be sent to a range of Network Management tools. There are two basic types of notifications - one is based on SNMP traps, and the other is based on the values of collected data. They can be based on any values collected by the Data Providers.

ArteMon provides a variety of rule types for alarm notifications. These rules can be as simple as the ability to alarm on a numeric threshold, but they also include the ability to alarm on smoothed data values or to alarm on Boolean expressions using multiple values.

A quality control rule looks at data values outside a range based on the mean and the standard deviation of the variable. Rules can optionally be modified using JavaScript, giving greater flexibility.

Notifications can be set to clear automatically after a user specified period. Generated notifications allow the user to configure multiple notifications generated from a single event.

Alarm Correlation

ArteMon alarm correlation is designed to reduce the number of alarms generated and to avoid false-positive alarms.

Reliability and Redundancy

ArteMon supports running in redundant mode – primary and backup servers can be configured to ensure that in the event of failure, monitoring and alarming continue.

Database of Historical Data

ArteMon data can optionally be stored in a database (MySQL, Oracle, SQL Server or Derby) for further analysis. The raw data can be optionally aggregated into a separate database using a user defined interval, for example, from 30 second raw samples to 15 minute aggregated samples. This provides a repository of information invaluable for both problem solving and performance & capacity reporting.

Plug-In Architecture

ArteMon **provider plug-ins** are responsible for actually obtaining the data and events that ArteMon monitors. The standard providers include:

- **Linux & Solaris** - samples key performance information provided by the operating system. It also allows you to configure workloads which are sets of processes.

- **Windows** – monitors any available object in the Windows Performance registry. This registry contains all the standard Windows objects, and any application can create and write its own custom objects.

- **MySQL , MySQLTableCounts & Oracle** – monitors the performance of Database Servers

- **SNMP** – collects data from any SNMP enabled device, as well as associated notifications with SNMP traps. A MIB2 data manager is included which gives you access to any MIB2 data as well as generic traps. In addition, you can create new data managers for enterprise specific data.

- **JMX** - creates data sources for monitoring MBeans. It works in a similar way to the SNMP Provider described above.

- Other more specialised Providers include:
EMC (for EMC storage systems)
DCL (for MailNGen applications)
Comverse (for Insight DSU & SMSC applications)
StreamWide HTML (for telephony applications)
SIP Data Manager (for telephony applications)
Text (for Log Files, including circular log files)

ArteMon **publisher plug-ins** send monitored data to client systems for real time display. There is currently only one publisher:

- **ArteMon PC Publisher** sends ArteMon data samples to the ArteMon Dashboard which displays this data in a graphical format. The Dashboard screens are user configurable and offer a wide choice of graph types, colours and other choices. Data can be replayed to analyse a situation after the fact and optionally the data can be stored on the PC.

ArteMon **notification action plug-ins** provide actions that are taken when a notification is generated. The current standard Notification Handlers are:

- **Write to Log File** – for audit purposes
- **Send SNMP Notification** – to an SNMP Receiver program
- **Send to NetCool** – to a Network Management Tool such as NetCool
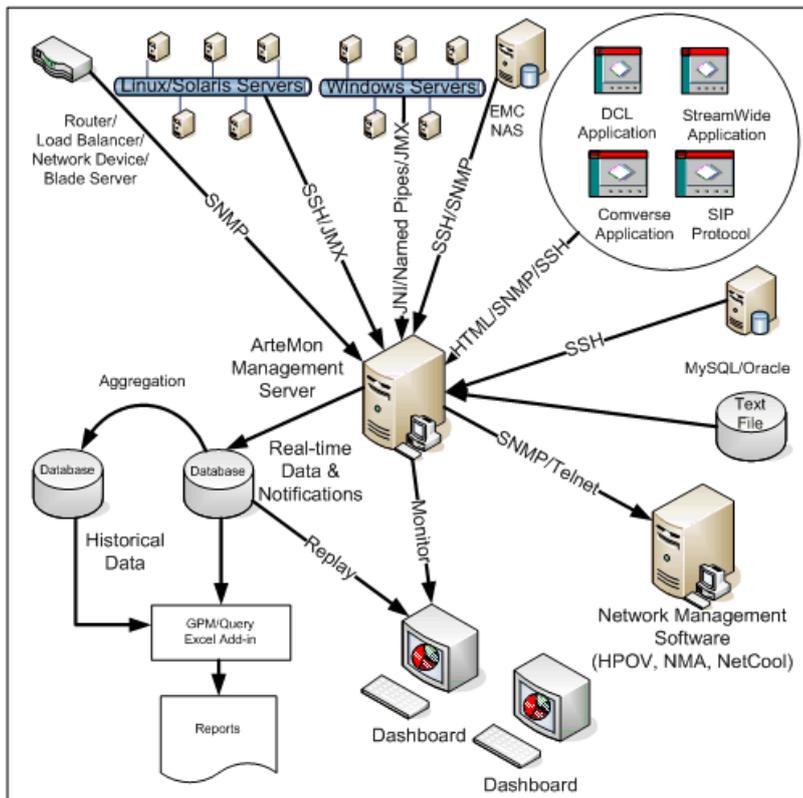
Technical Data	
ArteMon Server	Java 1.7
SNMP Provider	SNMP1,2
Linux Provider	Red Hat 3 or later
Solaris Provider	Solaris 9, 10
Windows Provider	Windows 2000 or later
DCL Provider	UC-Portal v5.0
StreamWide	StreamWide 2.4
ArteMon Dashboard	Windows 2000 or later
SNMP Notification	SNMPv2
MySQL	MySQL 5
Oracle	Oracle
Comverse	Insight 4

*Microsoft Excel and a database are not provided as part of this package.