



ePulse Application Manager

Applications Monitoring Tool for UNIX/Linux and Microsoft Windows hosts

DESCRIPTION

ePulse Application Manager (eM) is a Web-delivered solution to monitor and manage Unix/Linux and Microsoft Windows based systems. Although eM is capable of monitoring other platforms, the main objective in this SPD is to provide a simple and open solution for monitoring and managing heterogeneous applications installations. Example given here is a Reuters RMDS™ Platform.

The product operates at two levels. The first is at the operating system or host level, where parameters such as memory, disk and CPU performance are measured. The second is at the application level where application specific (e.g. RMDS) monitoring services are implemented. An example of this can be demonstrated whereby an RMDS service can be monitored to ensure its services are up and running; display how many user connections are live; monitor watchlist sizes, etc. Agents are running on each monitored host. These collate data in XML form and send it to an XML Server which passes it on to a Web Application Server. This provides an easy to use web interface.

System-Wide alerts can be configured for specific fields collected by the agents. Once an alert is triggered, an action (or set of actions) can be invoked, such as sending emails or SMS/SNMP messages.

The diagram below provides a simple overview of the

ePulse Monitor architecture.

SYSTEM OVERVIEW

The ePulse Monitor product consists of the following components:

- *Host Services* (for Windows NT/2000/XP and Unix/Linux) and RMDS services. These services collect information at regular intervals or on demand and return the information to an XML Server.
- *Alerts Service* – Process pre-defined alert rules and dispatch any alerts to email, web page, etc.
- *XML Server* - Responsible to routing messages from agents to Web Server.
- *Application Web Server* – Provides a web based interface of the collected data to the user. This includes the above Alerts Service
- *Supervisor* – Ensures all components are running and, if not, are started up.

Each component is described in greater detail in the sections below.

Example RMDS Application Service

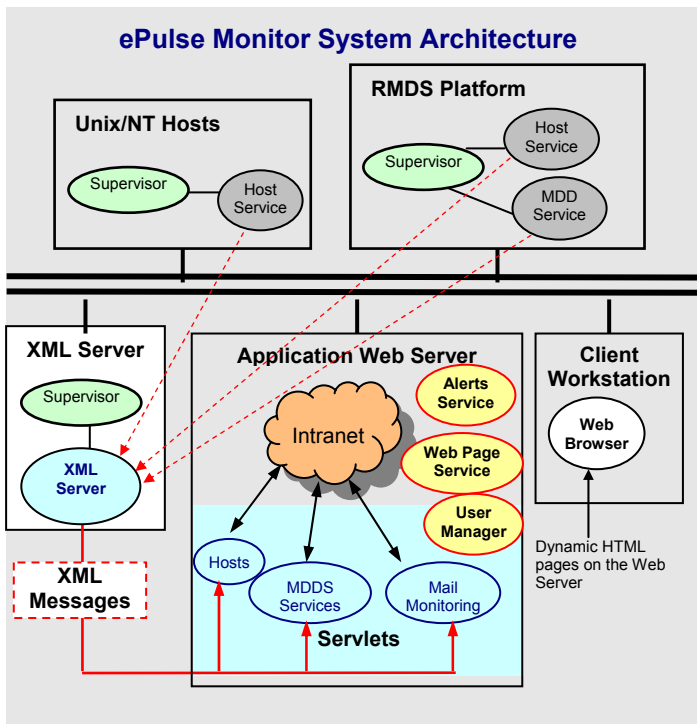
RMDS platforms provide mechanisms to allow 3rd-parties to obtain status information and statistics. The summary of the data and operations provided by the RMDS services is as follows:

- State of the platform servers (all levels such as feed servers, application servers, Sources and Sinks for Reuters platforms)
- Producer or source status
- Instruments on watch (by host or by user) per producer/source
- Instruments in cache
- Watchlist size, size of cache
- Active number of workstation and user connections
- Maximum number of connections allowed
- Number of active connections and the items on subscription by each workstation
- System configuration and status including start time, version numbers, etc
- Indicators of primary and secondary resources, such as permissions servers and gateways

NOTE: data may differ across vendor platforms.

Unix/Solaris and Windows NT/XP Host Services

The Host Services extract the following information from the Operating System:



- Operating System Version
- Machine configuration
- Processor specification
- Network Name
- IP Address
- CPU Utilisation
- Memory Utilisation
- Hard Disk Utilisation

The operating system data will appear with the same user interface for both Unix and Windows systems. These pages allow support staff to set up:

- Process checks to determine whether a process is running or not
- Ping checks to remote hosts/routers
- The ability to run remote command (this should only be made available to System Administrators)

Alerts Service

Alerts can be set up to report changes in any of the values being collected. For example, an alert can be configured to detect when memory usage exceeds a certain threshold. The Administrator is then made aware of the situation and can prevent problems from arising. The Alerts Service will evaluate pre-configured alerts against the updates from each of the hosts. Alerts can be set on

- Up/down status changes
- Integer values, e.g. maximum user connections, instrument count
- Float values, CPU idle, disk usage (%)

When an alert is triggered, a message is sent to the Alerts Dispatcher. Each alert can be dispatched in a number of ways so that administrators can be promptly notified of a fault on the system. Actions allowed are:

- email alert
- SMS alert
- Instant Web alert on web page
- SMTP alerts

All alerts that are triggered and dispatched are maintained in an audit log.

XML Server

This acts as a router between the Agents and the Web Application Server. Messages sent from the clients are forwarded to the Web Application Server.

The XML server can be installed on the Application Server or a remote host. Several XML servers can also be configured to collect specific message types. This makes the ePulse Monitor very scaleable for global deployment.

Web Application Server

The Web Application Server processes the data collected by each of the agents. Web pages are used to present this data in a concise and logical way. Users can optionally create their own views of the data such that a DBA can create a view that displays only the information in which they are interested. Similarly, a RMDS support engineer can create a view just for RMDS information. The user is able to configure alert rules on the data and specify who should be notified when the alert breaks.

eManager

This is responsible in ensuring that all the components are running.

ResourceService

The ePulse Monitor has a powerful facility for monitoring file contents as well as monitoring applications graphically through their log files and pattern matching

KEY BENEFITS

The key benefits of using ePulse Application Manager:

- It allows systems administrators to pro-actively and intelligently manage business critical applications and processes. This will greatly assist the support staff in identifying potential crisis situations before they happen. Administrators can also identify and configure monitoring of applications and processes, which are of critical importance to the specific business functions.
- Administrators can be set up with different access rights. For instance Global Systems Administrators, Local Systems Administrators and Help Desk Staff for view only could be set up with different profiles.
- A sophisticated but easy to use alerts engine. A wide range of alerts can be set up with different actions being assigned to each alert, including who it is that needs to be alerted.
- ePulse Monitor has been designed using component-based architecture and developed in Java and C++ using the latest XML standards. The components can be installed on a distributed basis for larger systems. This allows for improved scalability and resilience.
- ePulse Monitor is available on Unix or NT/XP versions of MDDS servers
- ePulse Monitor has been designed to use the minimum of system resources.
- ePulse Monitor is fundamentally scalable and therefore the product can easily be extended by: the number of host machines being monitored,

additional XML filters or XML servers to monitor different applications.

- ePulse Monitor integrates the management and monitoring services of disparate systems and can also interface to third-party applications.
- ePulse Monitor is easy to configure and deploy. Once set up, authorised staff can easily re-configure systems to allow for upgrades and additions to the overall systems being monitored.
- SNMP MIB support

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Applications	Win2K	NT4	XP	Solaris
Web Server	●		●	●
Host Services	●	●	●	●
RMDS 5/6			●	●
Mail Services	●		●	●
Dealerboards	●			

INFORMATION on other products

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