Release Notes

Meta-View Agent and Host for Linux – version D.05d

Introduction

The following sections list the enhancements and resolved issues for this release and for past releases. This document is available on the documentation page of the Lund website at:

http://www.lund.com/support/documentation.html

Summary of significant changes

Added support for Oracle 9 and 9i database metrics.

Added support for Red Hat ES, AS, WS 3.0

Compatibility Matrix

Minimum versions of client/agent components:

MV Agent / Linux	MV Web	MV Alert	Performance Gallery Gold
D.05d	B.03f	A.01f	F.01g
D.04g	B.03f		F.03c
B.04d	B.01j		
B.04a	A.01o	A.01f	F.01g

Current Version

Version D.05d – Released April 19, 2005

This release is based on version D.05b.

Enhancements

SR#	Service Request Description
1244	On the mvlogx network report more values are displayed as ***** because the space allocated for them is insufficient.

Issues Resolved

SR#	Service Request Description
1226	IPC information is not logged.

Known Issues

SR#	Service Request Description
367	Rounding errors may result in small differences between total CPU% and the sum of CPU% across all processes.
368	The CPU% reported for a process that is stressing the CPU may occasionally jump to very high (incorrect) values. This occurs in mvhost when the user requests manual updates at irregular intervals.

SR#	Service Request Description
485	mvlogd starts logging data due to the fact that one of mvmid threads becomes defunct. The only platform on which this issue was encountered on is a Red Hat Enterprise WS release 2.1 with kernel 2.4.9-e.12smp. This problem has not been encountered in the current version of Meta-View.
593	The disk metrics shown on mvhost's Disk I/O Summary screen, DISC-AVG-SERV-TIME and DISC-QUEUE-LEN may be incorrect due to known problems in the SARD patch for 2.4 kernels (which is incorporated into Red Hat distributions). A fix has been developed to alleviate this problem so that we can provide a more fair image on disk activity (however this is not a kernel fix, this meaning that these statistics are not 100% accurate).
861	On certain configurations (Red Hat kernel 2.4.20-20.7, glibc 2.2.93-5) mvhost/mvlogd aborts with segmentation fault. This problem was only once encountered on a Red Hat 8 system. The problem was not able to be reproduced, as we do not know much about the context within which it appeared.
886	Pressing an arrow key while entering "Add Oracle Instance" editbox, may cause mvhost to crash when using certain types of terminals.
1065	mvlogd should log a warning before the logfile location $LUND_VAR_PATH would become not usable because of no more space left on the device.

Product History

This product history lists enhancements and resolved issues in prior releases.

Version D.05b – Released January 20, 2005

This release is based on version D.04g

Enhancements

SR#	Service Request Description
1144	Mvlogx would not support generic instance specification. An instance can be now indentified by its index (II#) in the report files. As an example some of the reports were updated.

Issues Resolved

SR#	Service Request Description
1190	Oracle items were incorrectly logged by mvlogd, due to an alignment problem in itemlist.
1181	Some mvlogx reports would not display correctly the values specified due to wrong formatting (e.g. fsspace.rpt).
1172	mvhost would crash with segmentation fault on Red Hat ES 3.0. This bug only appears in version lower than D.04k.

Version D.04k – Released December 6, 2004

This release is based on version D.04g

Enhancements

SR#	Service Request Description
1043	Kernel 2.6 support has been added to Meta-View. However, the tests for this enhancement are still ongoing to cover a wider spectrum of Linux distributions.

Issues Resolved

SR#	Service Request Description
679	mvhost no longer crashes with the message: "Fatal error at file: fs.c line 675".
862	mvhost no longer crashes with the message: "Fatal error at file: fs.c line 219".
887	Oracle instance configuration would not be saved at exit time by mvHost.
888	mvhost would fail to export logfile to PFG; error message: "Invalid item in pfgitems file: DISC-DEV2"
1075	mvhost and mvlogd would crash with the message: "Linux/psfskstat.c line: 313 Incorrect file format". This problem was encountered on a Red Hat AS 2.1 server.

SR#	Service Request Description
1081	"disk util%" by drive would show up incorrect high values.
1088	mvlogd and mvhost would abort with no core and no log info.
1178	mvlogd and mvhost would not stay up for more than one sample period.

Version D.04g – Released May 12, 2004

This release is based on version D.04f

Enhancements

SR#	Service Request Description
900	Added support for Red Hat Enterprise Linux 3.0 series.

Issues Resolved

SR#	Service Request Description
910	mvHost would crash at Oracle instance connecting when run on an Oracle 9 platform.

Version D.04f – Released May 5, 2004

This release is based on version B.04d

Enhancements

SR#	Service Request Description
285	The item descriptions for pwsitems/itemlist/pfgitems2 configuration files were reviewed and updated.
415	Oracle 8 performance metrics are provided by Meta-View Agent for Linux.
486	Changed directory names from "lps" to "lund" and the environment variables from LPS_* to LUND_*.
595	System wide configuration files can be set in /etc/opt/lund. If user configuration files are present than these will be the ones processed.
616	The limit for the number of exported PROCESS class instances was increased from 100 to 127 in mvlogx PGG extracts.
649	The mvAgent can retrieve performance data from Oracle 9 database.
650	The limit for the number of PROCESS class instances present in SL files was changed from 10 to 20.
657	The limit for the number of exported PROCESSOR class instances was increased from 10 to 64 in mvlogx PGG extracts.
778	The alert_config was improved and updated for the new mvdatad protocol version (1.2).
873	Mvdatad implements a new communication protocol version (1.2). Compatibility is maintained with existing clients that use version 1.1 of the communication protocol.

Issues Resolved

SR#	Service Request Description
570	mvlogd would use wrong debug message in case it couldn't get the priority of mvmid because mvmid died.
626	In mvlogx, PGG extracts from the PROCESS class values were not synchronized with the rest of the classes.
659	The unit measure for memory items in PROCESS class was changed from B to KB.
670	On Red Hat 9 systems every time mvlogd restarted at the end of run time session, the system log reported the following error: "mvlogd(797) has SIGCHLD set to SIG_IGN but calls wait()". No other effects were encountered due to this problem. This was enountered only on Red Hat 9 systems.
720	mvlogx would create bad PGG extracts if duplicate samples (same timestamp) exist in the SL file. This situation was encountered when SL files were created when the system clock was updated due to Daylight Saving Time.
778	The mvdatad alert_config configuration file was updated for the new mvdatad protocol (version 1.2).
802	UDP Packet data was not updating in mvhost and they were not logged in mvlogd.

SR#	Service Request Description
803	Meta View Host would not show NFS client stats. In mvhost, on NFS client screen, NFS clients stats were not displayed when NFS activity was encountered. mvlogd was not logging these metrics.
832	Licensed code number was changed. New licenses must be issued for this release.
874	mvdatad would issue an invalid handshake response by including serverInfo tags when it should just return the handshake protocol version
875	mvdatad would issue an invalid response by not surrounding errorID with itemValue tags.
885	Rpm installation would not kill previous version Metaview running instances.
887	In certain situations, mvhost would not save the defined Oracle instance list.
888	Metaview Linux would use DISC-DEV2 pgg item name as other Metaview Unix products use DISC-DEV.
906	mvdatad.log would not be created with group owner set to LUND_GROUP

Version B.04d – Released November 10, 2003

This release is based on version B.04c.

Enhancements

SR#	Service Request Description
485	Support for Red Hat Advanced Server (AS), Enterprise Server (ES) , and Workstation Server (WS) distributions.
417	Support for Red Hat Linux 9.0. Compatibility issues with the kernel and glibc versions in RH 9.0 have been resolved.

Issues Resolved

SR#	Service Request Description
408	Special filesystems (e.g. /proc) were shown on the Filesystem Summary screen in mvhost.
483	mvlogx failed to export some PROCESSOR data items, due to incorrect item names in the pfgitems2 configuration file.
581	Adding new disk partitions caused mvlogd to crash.
582	mvhost now properly distinguishes between a swap partition and a swap file.
583	The ownership and permissions on the /var/opt/lps/tmp directory were incorrectly set by the installer. This could prevent mvdatad from starting.

Version B.04c – Released September 24, 2003

This release was based on version B.04b.

Issues Resolved

SR#	Service Request Description
405	File System Space Summary needs wider field in the Size column.
	Description: There are asterisks in the SIZE column in the File System Space Summary screen.Resolution: Made the SIZE column wider to support larger numbers displayed.
409	Remove Avg Response Time: N/A from Global Tabular screen. Description: Average Response Time metric is not available in Linux.
	Resolution: Removed this metric from the Global Tabular screen.
411	Default alert_config needs reconfiguration. Description: The alert_config file is set up with metrics that are not available on Linux. It needs revision.
	Resolution: New thresholds have been defined for Meta-View Linux. Most notable: memory advice messages, VM-PAGE-OUT-RATE advice will popup only when during an interval larger than 30s will show high values. The amount of used memory is monitored not accounting for caches and buffers. Disk activity warning advice only after 30s of high loads.
412	Need all the memory details from "free" command in mvhost and logged.
	Resolution: Added these metrics to the "m" screen and mvlogd.

SR#	Service Request Description
413	Change RPM name. Description: to format product.version-release.architecture.rpm metaview-B.04b- 1.i586.rpm.
	Resolution: changed RPM name to conform to this format.
439	Default Advice Notifications needs reconfiguration. Description: Meta-View Linux warns about page outs but other performance tools show 0 swap in use.
	Resolution: New thresholds have been defined for Meta-View Linux. Most notable: memory advice messages, VM-PAGE-OUT-RATE advice will popup only when during an interval larger than 30s will show high values. The amount of used memory is monitored not accountint for caches and buffers. Disk activity warning advice only after 30s of high loads.

Version B.04b – Released September 5, 2003

This release was based on version B.04a.

Issues Resolved

SR#	Service Request Description
402	mvlogd dies with error "Declared log entry count exceeded 18 >17" in metaview.log.
	Resolution: fixed hard limit on number of disk partitions we can handle.

Version B.04a – Released August 19, 2003

This release was based on version B.02f.

Enhancements

SR#	Service Request Description
292	Pulse Points needs "disk queue length average."
	Resolution: this data item was added to the Pulse Points screen.
294	The User Summary should have disk RSS information.
	Resolution: RSS information was added to the User Summary.

Issues Resolved

SR#	Service Request Description
162	Unnecessary warning message when empty line is present in the license file.
	Resolution: corrected the behavior of ignoring empty lines from license-reading code.
186	Segmentation fault in mvhost/mvlogd when more than four netifs are available.The cause of this defect is unclear, however the code that allocated memory for netif data was doing this allocation every time an update was requested.
	Resolution: rewrote the code so that allocation of memory is done only when needed.
290	mvlogx fails to display reports containing logints.mvlogx was exiting with error when one tried to display OracleStats reports (which may contain longints). This is due to improper function behavior (fmt.c: fmt_longint).
	Resolution: removed the spurious modification in fmt_longint function (fmt.c).
291	Incorrect alignment of mvlogx reports (dealing with longint).fmt_longint function from fmt.c was not behaving as described in function description.
	Resolution: corrected the behavior from fmt_longint / fmt.c.
293	Big-endian licenses on little-endian machines.Licenses generated on big-endian machines were not working on little endian machines. The code by all means is endian dependent. Since Meta-View Agent licenses are generated on predefined machines (big-endian), little-endian machines should be able to recognize licenses generated on big-endian machines.
	Resolution: made crypting code generate big-endian licenses no matter what type of endian the machine running the crypting code is.
295	Meta-View Agent and Host for Linux stopped when the /proc/sys/vm/pagetable_cache file doesn't exist.This problem appears with Red Hat Linux Advanced Server release 2.1AS/\m (Pensacola) Linux zet 2.4.9-e.13enterprise #1 due to non-existence of the above file. If /proc filesystem is mounted, this type of error should generate a non-blocking Meta-View exception.
	Resolution: all the exceptions of this type (related to memory management in /proc/sys/ vm) are now treated as non-blocking.Tests were performed with 2.4.9-e.16 kernel.

SR#	Service Request Description
297	If a network interface is dynamically brought up or down, Meta-View crashes.The code that deals with the network data retrieval generates blocking errors if a network interface is brought up or down at a different time from boot time or shutdown time. For example, when making a modem connection or plugging in a PCMCIA card. Resolution: these situations are no longer treated as blocking errors, and network interface information is displayed as needed. That is, if some interface is brought up, then its information is displayed; and when it is brought down, the information related to it is removed. In fact this depends on the operating system behavior with dynamic network interfaces.
361	Incorrectly logged RSS/VSS information (measurement unit issue).The RSS/VSS information was logged as bytes, but in Linux this data is retrieved from / proc/$(PID)/status in kilobytes. At logging time this transformation was not made. Resolution: RSS/VSS data is transformed to bytes prior to logging.
362	The information from /proc/$(PID)/status is not correctly read.VM information is missing from some of these files (kernel specific modules). Resolution: /proc/$(PID)/status was read correctly. The problem proved to be an initialization issue.
363	Meta-View Web displayed Linux 2.2 in logfiles.OS_NAME and OS_VERSION are two macros that contain mvdatad platform (Linux, SunOS, HP-UX) and OS version (of the compilation platform). Linux now exports to Meta-View Web a string containing vendor detailed OS version (RH 7.3, UL 1.0, DEB) that represents compilation platform. Resolution: for Linux, Meta-View Web will retrieve OS_NAME as "LINUX" and OS _VERSION as a composition of two macros: KERNEL_SERIES LPS_DISTROV, where KERNEL_SERIES may be something like 2.2, 2.4, 2.6. LPS_DISTROV represents the detailed OS version as described above.
364	The Global Summary screen displays Swap Outs data, but not Page Faults data.Page Faults information is important for Linux performance monitoring, due to Linux's swapping algorithm type. The Global Summary screen should display both metrics. Resolution: added Page Faults data to the Global Summary.
365	Update needed for the on-line Help system to include "Swap Outs" in the glossary. Resolution: defined Swap Outs in the glossary.

Version B.02f – Released June 21, 2003

This release was based on Meta-View Performance Manager for HP-UX version D.01d.