

Oracle VM Server for SPARC 3.6.2 Supplemental Release Notes



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Using This Documentation

- **Overview** - Provides Oracle Solaris OS system administrators with detailed information and procedures that describe the installation, configuration, and use of the Oracle VM Server for SPARC 3.6.2 software.
- **Audience** - System administrators who manage virtualization on SPARC servers.
- **Required knowledge** - System administrators on these servers must have a working knowledge of UNIX systems and the Oracle Solaris 11.4 operating system (Oracle Solaris OS).

Product Documentation Library

Documentation and resources for this product and related products are available at <http://www.oracle.com/technetwork/documentation/vm-sparc-194287.html>.

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1

What's New in The Oracle VM Server for SPARC 3.6.2 Release

For information about new features and fixes for each Oracle VM Server for SPARC release, see [What's New in Oracle VM Server for SPARC Software](#).

Oracle Solaris 11.4 SRU 39: Virtual HBA LUN Reconfiguration

When both the `vhba` and `vsan` modules support at least vHBA protocol Version 1.2, the `vhba` module permits the insertion of a new device at a previously used path. The kernel and the `vhba` modules ensure that any outstanding I/Os that are sent to the path's original device are gracefully terminated. I/Os that are sent to the path's new device successfully complete.

For more information about this feature, see the following information:

- [Discovering SCSI Devices in Oracle VM Server for SPARC 3.6 Administration Guide](#)
- [Protocol Version Combinations in Oracle VM Server for SPARC 3.6 Administration Guide](#)
- [The Hidden Device at LUN0 in Oracle VM Server for SPARC 3.6 Administration Guide](#)
- [Simulating a LUN0 in Oracle VM Server for SPARC 3.6 Administration Guide](#)

`ldm add-vsant-dev` Command Supports Domain Migration

Starting with the Oracle VM Server for SPARC 3.6.2 update release, you can migrate a guest domain that has a `vhba` instance associated with a virtual SAN that has the `mask` property set to `on` (`mask=on`).

New `calculate-effective-max-pagesize` Option for `add-domain` and `set-domain` Commands

Starting with the Oracle VM Server for SPARC 3.6.2 update release, the `ldm add-domain` and `ldm set-domain` commands support the new `calculate-effective-max-pagesize` option. This option enables or disables the `pagesize` limit that is pre-determined by Oracle Solaris for a domain.

Supported Oracle Solaris OS Versions

Because Oracle VM Server for SPARC 3.6.2 is delivered with Oracle Solaris 11.4 SRU 16, you must install at least SRU 16 in the control domain. It is highly recommended to install the latest SRU to obtain new features and bug fixes.

It is also highly recommended to run at least this same Oracle Solaris OS version in all domain types that access physical I/O (service, root, and I/O).

For guest domains that use only virtualized I/O, you can run any version of Oracle Solaris supported on your platform, but if running Oracle Solaris 11.4 OS, we highly recommend at least the SRU 16 release.

Oracle Solaris 11.4 SRU 16 OS resolves a couple issues that may impact `vdisk` operation.

2

Known Issues in Oracle Solaris 11.4

Known Issues in Oracle Solaris 11.4 SRU 46

Undo `pycurl-27` Workaround to Successfully Install at Least the Oracle Solaris 11.4 SRU 46 Release

If you performed the workaround to use `pycurl-27` for the OVS Agent (Bug ID 33595469), you must perform the following steps to successfully install Oracle Solaris 11.4 releases starting with Oracle Solaris 11.4 SRU 46:

1. Unfreeze the `pycurl-27` package in the repository.

```
# pkg unfreeze library/python/pycurl-27
```
2. Upgrade your system to at least Oracle Solaris 11.4 SRU 46.

Known Issues in Oracle Solaris 11.4 SRU 39

`ovs-agent` Fails When Upgrading to Oracle Solaris 11.4 SRU 39

Bug ID 33595469: The `pycurl-27` package has been removed from Oracle Solaris 11.4 SRU 39. The removal of this package renders the Oracle VM SPARC Agent for Oracle Solaris inoperable.

To work around this issue, you must perform the workaround steps on a system that runs an Oracle Solaris 11.4 SRU version between SRU 39 and SRU 47.

Note that the `pycurl-27` package has been re-introduced in Oracle Solaris 11.4 SRU 46. If you applied the workaround, you must unfreeze the `pycurl-27` package before you upgrade to at least the Oracle Solaris 11.4 SRU 46 release:

```
# pkg unfreeze library/python/pycurl-27
```

See [Undo `pycurl-27` Workaround to Successfully Install at Least the Oracle Solaris 11.4 SRU 46 Release](#).

Also see [Oracle VM: ovs-agent SMF Services in Offline or Maintenance State Following Solaris 11.4 SRU 39 Update \(Doc ID 2825982.1\)](#).

For information about how to install an older version of package, see [Trapped by Older Software](#).

Workaround: Install the `pycurl-27` package by unlocking and then freezing the package. Perform the following steps on a system that runs at least the Oracle Solaris 11.4 SRU 39 software:

1. Determine that the `pycurl-27` package is unavailable.

```
# pkg list | grep -i pycurl-27
```

- Determine which version of the `pycurl-27` package to use.

The version of `pycurl-27` to install depends on the Oracle Solaris publisher you use:

- Oracle Solaris 11.4 Trunk repository.** Use use `pycurl-27@7.43.0.5-11.4.39.0.0.104.0` for the Python 2.7 version of `pycurl`.
- Oracle Solaris 11.4 Support Repository Update repository.** Use use `pycurl-27@7.43.0.5-11.4.36.0.1.101.0` for the Python 2.7 version of `pycurl`.

- Unlock the `pycurl-27` package in the repository.

```
# pkg change-facet version-lock.library/python/pycurl-27=false
```

- Install the `pycurl-27` package.

Install the version of the `pycurl-27` package to install based on the Oracle Solaris publisher that you use:

- Oracle Solaris 11.4 Trunk repository.** Use use `pycurl-27@7.43.0.5-11.4.39.0.0.104.0` for the Python 2.7 version of `pycurl`.

```
# pkg install library/python/pycurl-27@7.43.0.5-11.4.39.0.0.104.0
```

- Oracle Solaris 11.4 Support Repository Update repository.** Use use `pycurl-27@7.43.0.5-11.4.36.0.1.101.0` for the Python 2.7 version of `pycurl`.

```
# pkg install library/python/pycurl-27@7.43.0.5-11.4.36.0.1.101.0
```

- Verify that the `pycurl-27` package is successfully installed.

```
# pkg list | grep -i pycurl-27
library/python/pycurl-27          7.43.0.5-11.4.39.0.0.104.0
i-1
```

Virtual HBA LUN Discovery Prevented From Working After Guest Domain Update

Oracle Solaris 11.4 SRU 39 delivers the virtual HBA LUN reconfiguration feature described in [Oracle Solaris 11.4 SRU 39: Virtual HBA LUN Reconfiguration](#). As a result, if you currently use the virtual HBA feature, carefully plan your upgrades to avoid an unanticipated disruption of the virtual HBA functionality.

Specifically, if you update a guest domain that runs virtual HBA with at least Oracle Solaris 11.4 SRU 39, while the service domain that hosts the corresponding `vsan` instance remains at the pre-update version, the virtual HBA's LUN discovery algorithm purposely stops working and is unable to pass data.

When this situation occurs, the `vhba` module in the guest domain posts the following message to its system log:

```
WARNING: vh@0 vhba(1.2) and vsan(1.0) VIO version mismatch; Device Discovery is disabled.
```

To address this issue, consult [Protocol Version Combinations in Oracle VM Server for SPARC 3.6 Administration Guide](#).

Fujitsu M10 and Fujitsu SPARC M12: `ldmd` Aborts When You Run `ldm add-spconfig -m` With a Configuration That Contains Socket Constraints (33570104)

Note:

Oracle Solaris 11.4 SRU 45 includes the fix for this bug, Bug ID 33570104.

The `ldm add-spconfig -m` command might cause `ldmd` to abort on Fujitsu M10 and Fujitsu SPARC M12 systems if any of the domains in the running configuration contain socket constraints.

When `ldmd` aborts after you run the `ldm add-spconfig -m` command, the saved configuration might be corrupted. So, remove the configuration by using the `ldm rm-spconfig` command after `ldmd` restarts.

To determine whether the running configuration contains domains with socket constraints, run the `ldm list-socket -o constraint` command.

- **Domains have socket constraints.** The affected domains are listed as follows:

```
# ldm list-socket -o constraint
CONSTRAINTS
  DOMAIN                SOCKET_ID          STATE
  g0                     2                 active
  g1                     0                 bound
```

- **Domains do not have socket constraints.** No domains are listed as follows:

```
# ldm list-socket -o constraint
CONSTRAINTS
```

Known Issues in Oracle Solaris 11.4 SRU 30

Controlling the `vhba` Module's Use of Asynchronous I/O

The `vhba` subsystem causes a significant negative performance impact for software that performs asynchronous I/O (AIO). This negative performance occurs because the `vhba` module erroneously serializes calls to the `aioread()` and `aiowrite()` routines. See the [aioread\(3C\)](#) and [aiowrite\(3C\)](#) man pages. This behavior severely degrades latency and bandwidth for software such as Oracle's database implementations.

The `vhba:vhba_nointr` kernel tunable in the `/etc/system` file specifies whether the `vhba` module uses the AIO algorithm. When set to 0, the `vhba` module supports the AIO algorithm. When set to 1, the `vhba` module does not use the new AIO algorithm.

Starting with the Oracle Solaris 11.4 SRU 30 release, the `vhba:vhba_nointr` tunable is set to 1 by default.

To improve performance when you run applications that use AIO, set the `vhba:vhba_nointr` value to 0. You must reboot any domain in which the `vhba` module runs to ensure that the change takes affect.

Note that any software that issues synchronous I/O to the `vhba` module is unaffected by the `vhba:vhba_nointr` tunable. Synchronous I/O uses the `read()`, `pread()`, `write()`, and `pwrite()` system calls. See the [pread\(2\)](#), [pwrite\(2\)](#), [read\(2\)](#), and [write\(2\)](#) man pages.

Known Issues in Oracle Solaris 11.4 SRU 16

`ldmd` Dumps Core on `ldm evacuate-io` for a Loaned PCIe Card

Bug ID 30213683: The `ldm evacuate-io` and `ldm restore-io` commands are not supported for PCIe devices that are loaned out to domains other than the one that owns the PCIe bus. This restriction is not enforced in the code. As a result, attempting to do so will produce unpredictable results. Newer Oracle SPARC systems do not support loaning out PCIe cards, so this is only an issue for Fujitsu SPARC platforms.

`calculate-effective-max-pagesize=off` of a Guest Domain is Not Migrated By `ldm migrate-domain`



Note:

Oracle Solaris 11.4 SRU 27 includes the fix for this bug, Bug ID 30413014.

Bug ID 30413014: By default, the Logical Domains Manager calculates effective maximum pagesize, for example, `calculate-effective-max-pagesize=on`. To disable this calculation, type:

```
-->ldm add-domain calculate-effective-max-pagesize=off <ldom>
```

With `calculate-effective-max-pagesize=off`, Logical Domains Manager does not calculate effective maximum pagesize after the `<ldom>` is rebooted. When an `<ldom>` is migrated, the `calculate-effective-max-pagesize` flag is not migrated from the source domain to the target domain. The target domain will have the default value of this flag, which is `calculate-effective-max-pagesize=on`. To disable calculation of effective max pagesize for the target domain, type:

```
-->ldm add-domain calculate-effective-max-pagesize=off <target-ldom>
```

Improve Use of Force in `ldm evacuate-io` and `restore-io`

Bug ID 30508890: If the target device for the `evacuate-io` command is a network device and the physical function (PF) is providing a persistent Internet Protocol (IP) interface to the Root Domain in which it is installed, then the `evacuate-io` command will fail. For example:

```
primary# ldm evacuate-io /SYS/RCSA/PCIE14
Failed to power off /SYS/RCSA/PCIE14 in domain nprd.
Error message from svc:/ldoms/agents in domain nprd:
```

```
Poweroff Failed. ERROR: devices or resources are busy.
/pci@30e/pci@1/network@0:
{ Hold: module specfs (modid=5): Device opened. }
{ Open: module udp6 (modid=87). }
{ Open: module udp (modid=86). }
{ Network interface net3 }
{ net3: plumbed but down }
{ Plumbed IP Address }
```

To allow the `evacuate-io` command to succeed, the IP interface must be deleted from the active configuration and removed from the persistent configuration. The following command will delete and remove the IP interface:

```
nprd# ipadm delete-ip netx
```

where `netx` is the `net0-netn` name for the interface. This net alias name for the NAC name used with the `evacuate-io` command can be found in the output of the `hotplug list -vl` command.

Once the interface is deleted and removed, run the `evacuate-io` command again:

```
primary# ldm evacuate-io /SYS/RCSA/PCIE14
primary#
```

It is expected that the PF of the device in the Root Domain is generally not in use on field configurations for those devices that are providing virtual functions (VFs) to other domains. So the exposure to this failure mode is limited.

Known Issues in Oracle Solaris 10

Oracle Solaris 10 Guest Domain Hangs and Has Hundreds of Expired Callouts

Bug ID 28319382: A guest domain that runs the Oracle Solaris 10 OS hangs. Rebooting the guest domain results in a panic. The callout table of the core dump has dozens of expired callouts that are assigned to a single CPU.

Workaround: Install patch ID 150400-64. To obtain this patch you must purchase Oracle Solaris 10 Extended Support.

Known Issues in Oracle VM Server for SPARC 2.2

`ldm init-system` Command Might Not Correctly Restore a Domain Configuration on Which Physical I/O Changes Have Been Made

Bug ID 15783031: You might experience problems when you use the `ldm init-system` command to restore a domain configuration that has used direct I/O or SR-IOV operations.

A problem arises if one or more of the following operations have been performed on the configuration to be restored:

- A slot has been removed from a bus that is still owned by the `primary` domain.

- A virtual function has been created from a physical function that is owned by the `primary` domain.
- A virtual function has been assigned to the `primary` domain, to other guest domains, or to both.
- A root complex has been removed from the `primary` domain and assigned to a guest domain, and that root complex is used as the basis for further I/O virtualization operations.

In other words, you created a non-`primary` root domain and performed any of the previous operations.

If you have performed any of the previous actions, perform the workaround shown in [Using the `ldm init-system` Command to Restore Domain Configurations on Which Physical I/O Changes Have Been Made \(Doc ID 1575852.1\)](#).

3

Resolved Issues in Oracle VM Server for SPARC 3.6.2

This chapter contains information about enhancement requests and bugs that have been fixed in the Oracle VM Server for SPARC 3.6.2 software.

Resolved Issues in the Oracle Solaris 11.4 SRU 63 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 63 software:

15802310

libds:ds_unreg_svc should check error return from ds_unreg_hdl

20907066

VD_OP_FLUSH is not acting as an IO barrier

27976315

ldm ls-hba exits 1 and outputs to stderr when `_any_` domain does not support vHBA

27976431

ldm ls-netstat exits 1 and writes regular output to stderr if down/unsupported

31541222

Ldoms list-group -a -l /list -l commands to report incorrect core assignment

34925719

list-bindings logic unnecessarily calls `vdisk_find_active_port()`

35015213

vntsd does a SEGV coredump and restarts, killing all console connections

35317503

softmac_hold_device exiting: device i40e0 waited too long for DS_READY

35378358

Improve error reporting on SSL setup failures

35431632

ls-constraints -x warnings pollute XML file

35484877

Improve readability of vntsd code

35495755

ldmd SEGV running `ldm remove-spconfig`

35648998

ovmtdeploy and ovmtprop fail because code expects bytes and not str

35649033

ovmtdploy error about bad argument with dd where bs=1kk

35672819

Do not warn of agent-hba DS service when ldmd knows it's not reachable

35688304

Add mdb annotations for ldmd(8) types

35715386

Parfait issues due to 1-bit signed integer bit fields in usr/src/head/ldoms/ldom.h

35723405

Fix parfait errors due to SIGNED bitfields in ldmd structs

Resolved Issues in the Oracle Solaris 11.4 SRU 60 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 60 software:

32479539

Failed LUN blocks vds_process_md() ~6 mins, guest IO hangs

34951334

vds_destroy_vd: Kernel thread stuck in nfs4_close

35019996

ovmtlibrary.c:check_vers_id() always returns 1

35023212

vds: add observability for possibly long-running Backend operations

35121339

Add SysFW version info to ldm -V output

35189715

vnet handshake failures due to accounting of shared memory usage

35236640

vdc: inefficient use of its special IO buffers

35245206

Memory leak in pcie_alloc_dvma()

35248401

Solaris 11.4 SR-IOV, unable to create VF, LDM not responding error.

35286388

LDoms gets wrong time when creating new domains on T8s

35300569

vio: add improvements to its logging features

35310568

Target LDoms Manager is in FIPS 140-2 mode (fips not enabled)

35333677

parfait: fix dr_cpu, dr_io, dr_mem, ds, mdeg, mdesc, platsvc, and vcc modules

35346151

Resource group commands disabled if a DIMM is spared

35442786

Communication through VSW is delayed when control domain is S11.4.57

35450656

mdb: add several commands for sun4v console support

Resolved Issues in the Oracle Solaris 11.4 SRU 57 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 57 software:

25422732

Recovery Mode should use zeus logging framework instead of zprintf(s)

32560448

ldm(8) MAN page needs to be corrected for Example 14

34195862

vsw: prevent creation over a VF device

34510883

Rewriting and simplifying the effective max pagesize logic in ldmd

34765391

vdc: add many more klog_printf calls

34765404

vdc: add a per-module klog buffer

34765421

vdc: add a VDC_IOCTL_LDC_RESET for fault injection

34769673

Remove references to calculate-effective-pagesize in ldm man page

34841731

Guest domain to guest domain SCP transfer is extremely slow on 11.4 SRU47

34849575

vds: add many more klog_printf calls

34853888

Wrong failure message in event registration API

34854977

Failure semantics of reg-all-events XML API are inconsistent and non-idempotent

34874499

Incorrect reporting of memory DR progress events

34882974

vio: vio_tq_cb_conn_up prevents VIO.DISCOVER from completing

34920494

ldoms: vnet sometimes reports unknown link after reboot instead of down

34923360

ldm add-vcpu <guest> dump core

34944650

seq_download_mds: Internal error, inactive guest flagged for MD generation

34951484

Change the DS timeout for named memory DR operations

34988562

Cleanup logging across different modules

35022632

ovmtconfig that self-configures Solaris in non-interactive mode doesn't seem to work

35089476

Add "ID" column for vdsdev devices

35094668

LDoms MIB: add ID property to the ldomVdsdevTable

35132218

vdc.conf: add the two name/value pairs that vdc supports

35141190

vds.conf: add the name/value pair that vds supports

Resolved Issues in the Oracle Solaris 11.4 SRU 54 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 54 software:

33374337

syseventd is not suitable for large setups

33689759

Convert Idomsmanager to OpenSSL v3 API

34405181

vhba: ensure pkt_scblen is less than what VIO.vhba protocol supports

34608263

Migration fails with "Malformed XML Document: 'data' tag missing 'password' tag"

34616485

vhba.conf: document how to manage MPxIO on per port basis

34639988

vntsd logging should add a date stamp when the console is deleted

34650289

vsan: WARNING messages for TAPE devs should only go to syslog

34682685

Severe Network Performance Degradation After 11.3 -> 11.4 KZ Upgrade

34720172

vio_dring_bind: show DRing bytelength if the function fails

34760268

vlds: improve error messages when call sysevent_evc_publish

34774570

mdb: upgrade vdc.so to use new type-aware API; PSARC 2022/157

34774599

mdb: update and add more Annotations to vdc.so module

34774821

Memory leak in sasl_server_init()

34801679

mdb: update several sun4v modules to new type-aware API

Resolved Issues in the Oracle Solaris 11.4 SRU 51 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 51 software:

21181769

get_ldom_by_rc_name() should get zeus.mlock

24935891

Guests domain left in suspend state after suspend request timeout

34032956

Add timestamp to vntsd's error messages

34281590

Panic in vhba_vio_cb_cdb

34356407

Oracle VM Server for SPARC hang in a condition variable since cachelist juice thread is not there

34400073

Add mdb annotations to ds module and improve HELP for ::dslog

34418245

STRFTIME_FMT_SIZE off by one error

34469312

vdc: improve debuggability via additions for SDT, klog, and commenting

34476643

Dump remaining fields of a DS message when ::dslog is in verbose mode

34480598

Add get_max_pagesize msg type to agent-sysadmin domain service

34492774

ldmad: MSGHBA_PHBADEV_VALIDATE allows false-positive iports

34548986

Create ::dshdl mdb DCMD

34754981

Migration fails with "Malformed XML Document: 'data' tag missing 'password' tag

Resolved Issues in the Oracle Solaris 11.4 SRU 48 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 48 software:

31338971

WARNING: numaio_get_dedi_cpu seen when running ldm set-vcpu on primary

33732041

Paths of mpxio configured on VHBAs do not get recovered after rebooting I/O domain

33860784

Whenever a new LUN is presented via vHBA, all the other LUNs report "device busy too long#012"

33865970

DR fails when doing ldm rm-vnet if vnet is used in a native zone

33876279

Local connections should skip TLS, SASL handshake

33914988

Problem with ldoms/ovmtemplat

33915007

Problem with ldoms/migration

33915024

Oracle VM Server for SPARC should use host-generated certs

33931653

SPARC T8-4 CX5 IO domain hangs reboot test

33936640

CX-5 VF driver in Oracle VM Server for SPARC should limit vnic mac addresses to factory ones

33942582

Save PRI at start of day for consumption by explorer

33953200

SPARC M8 guests with less than 512G memory only have 256M pages

- 34033683**
Improve ::ldcmsg to optionally dump encapsulated vio_msg_t
- 34033728**
Add MDB.annotations to vio module STRUCTs
- 34033784**
Add MDB.annotations to vhba module STRUCTs
- 34038143**
Re-deliver logadm changes for vntsd console logs
- 34044258**
vsan_poll_thr writes a KLOG message too frequently
- 34052902**
Remove HUP signal handler used to rotate vntsd log
- 34052942**
vntsd randomly dumps cores when running quickSuite.
- 34075623**
vsan_lun_evcb_off_notify dereferences a NULL pointer
- 34083311**
ldmd crippled, but still running, if TLS setup fails
- 34096838**
vhba: support klog for DEBUG binary if a new tunable is set
- 34100510**
panic scsi_pkt_reset_helps: CMD_PATH_RETRYNEW inappropriate
- 34100636**
Deadlock between IOR resume and ldmd
- 34104632**
Document certificate selection SMF properties
- 34129004**
MIB should use local XMPP connection
- 34129492**
An invalid LUN0 was computed by vsan
- 34132869**
vsan: improve its handling of LUN-change events
- 34145177**
Non cert-authenticated migrations fail if no CA certs configured
- 34233971**
Failed non cert-authenticated migration causes next cert-authenticated migration to fail
- 34283314**
vd_process_ioctl() can misinterpret successful taskq dispatch

34289318
vntsd should not send harmless ENTR message to syslog

Resolved Issues in the Oracle Solaris 11.4 SRU 45 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 45 software:

33527154
Rotate domain console log files more often

33537194
vsan: support IOR per PSARC 2021/140 interface

33570104
add-spconfig -m may crash ldm for configs with socket constraints

33581773
Add kernel zone support for sparc Oracle VM Server for SPARC migration-class2

33596127
ZFSSA 'standby' paths to vHBA LUNs missing from guest domain after updating its service domains to st_108

33601235
Add cfg_handle output to ::vdc_mpgroup DCMD

33601275
Fix a line in "::help vds" output

33606671
Guest domain panic during cpu DR

33612418
vsw: 3-way deadlock when doing ldm set-vsw

33652122
vdisk: add MDB Annotations to vdc and vds

33652140
vhba: add MDB Annotations to vhba and vsan

33702910
Create ::ldcmemseg and ::ldcmte MDB DCMDs

33719493
Add MDB Annotations to ldc module's data structures

33754207
ldm(8): Restore 60sec timeout historically used with vHBA subcommands

33779291
vsan Discovery fails on iport with large number of LUNs

33791988
Auditing problems on incoming migrations

33819815
Problem in Idoms/ovmtemplat

33883431
Significant noise on system console from ldc driver since st_115

Resolved Issues in the Oracle Solaris 11.4 SRU 42 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 42 software:

16474721
Memory Leaks in vd_get_efi_in and vd_set_efi_in functions

21826326
vlds module has swapped arguments to memset

27299690
Logging improvements phase 2

27917592
ldmconsole needs -e to define the escape character to use

28029671
Add Oracle VM Server for SPARC migration-class2 support for M7/T7/S7/M8/T8 platforms

30822337
vhba: vdbench gives ENOENT when a vsan.iport has its SAN.switch.port disabled

31991570
ldm migrate non-standard logging

32942237
sun4vpi.so: compensate for platforms that misuse topo-skip in PRI/MD

33211291
Document Oracle VM Server for SPARC migration-class2 support for M7/T7/S7/M8/T8 platforms

33266956
vsan should not return TLs when a TargetPort is disabled under MPxIO

33272944
vntsd(8) man page: adding a new vntsd smf. property ---escape character

33323953
Logical Domains MIB: add migration-class2 support for M7/T7/S7/M8/T8 platforms

33461638
Auditing of failed authorization check sometimes fails

33508434
Implement workaround for libslldap memory leak

33514079
Add command to unbind all guests

33537167

Document new options for Idm unbind

33565383

Memory leaks in auditing code for incoming migrations

33650687

IO domain panic[cpu6]/thread=2a103c77b00: mutex_enter: bad mutex (dead mutex) when running Idm evacuate-io on FC devices

Resolved Issues in the Oracle Solaris 11.4 SRU 39 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 39 software:

33244321

Idmd uses unacceptable OpenSSL defaults

33233915

Idm in maintenance after upgrade to SRU 35

33175216

Idm add-spconfig -m option marked as "current," it should be "next poweron"

33090679

Add new "-m" option for Idm add-spconfig CLI in Idoms man page

33031786

Misleading operator precedence in memory.c:6841

32982960

vio: the VLOG macro needs to be improved

32913194

Change retire page warnings to notice

32794838

Add option to add-spconfig to rebind all guest memory

32556308

mdb: add 2 DCMDs and 2 Walkers for vhba/vsan

32556285

vsan: ensure that device path of iport is absolute

26473370

vhba: support SCSIv3 LUN Reconfiguration

Resolved Issues in the Oracle Solaris 11.4 SRU 36 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 36 software:

32962331

vio must be robust if ldc does not announce an LDC_EVT_RESET

32962105

vhba.DISCOVER can deadlock if AIO support is enabled

32918227

vdc_open calls taskq_dispatch with TQ_NOQUEUE

32866984

Need to audit vdsdev operations

32800150

Execution of last vsan.mask op can linger

32779947

The first DISCOVER can ignore the vsan.mask value

32758998

ovmtlibrary fails to validate checksum

32752140

Parse failure with VMAPI properties in ldm list output

32700688

LDOM panic while live migrating from T8 to T5

32688228

ldm add-mem operation causes sequencer thread to deadlock

32592514

dtrace probes from library objects not available to ldmd

31989198

archiveadm create-media -f usb generated file fails to boot using 11.4 SRU 23

31920132

Add support for auditing LDom's resource reconfiguration events

27766970

[FORTIFY SERVER] : BUFFER OVERFLOW AT OVMTUTILS/SRC/OVMTLIBRARY/OVMTLIBRARY.C:22

Resolved Issues in the Oracle Solaris 11.4 SRU 33 Release

32606323

ldmd core dump on ldm bind; ldm start after upgrade to 11.4.30.88.3

32544929

Bound domain migration fails between 3.6.2.0.5 & later and 3.6.1 & earlier systems

32520484

memdr assertion fails when Oracle Solaris unexpectedly returns relocatable memory

32516740

Replace build number with SRU number

32430221

Add tunable for number of vhba.dring elements

32421916

vhba: call scsi_hba_pkt_comp from a taskq thread

32414439

diskio USCSICMD ioctl failed

32392330

pylint errors in Idoms ovmtutils code

32378458

vds should not show a vds_do_init_vd message to stdout

32374036

vio should create TASKQ_DYNAMIC task queues

32341999

vhba must support tagged-qing HBA Capability

32300856

Expose migration-mem-iterations ldmd arg as SMF property

32268299

calculate-effective-max-pageszie always set to "on" after control domain reboot

32260543

ldmad: hba_link_device_node() wastes many cycles

32255356

list-hba mistakenly exports iSCSI devices managed by MPxIO

32246518

ldmad dumps core in I/O Domains

32176309

Remove unnecessary list-vhba code from ldmd

32093526

Re-disable use of PKCS#11 engine in ldmd

31951446

ovmtprop missing version info

31516949

ldmd NULL pointer in strcmp caused the core dump

31069139

Unable to remove SP config

30569373

Remove ldmd/fips1402_enabled SMF property and associated logic; it's always enabled

30258752

vhba/vsan: allocate taskq threads based on ncpus

Resolved Issues in the Oracle Solaris 11.4 SRU 30 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 30 software release:

15629872

auditing implementation is fragile & non-compliant

27997241

logctl should allow warning to be toggled (on, off)

28584729

ovmtdploy man page should clearly document the autoexpand script usage

29860580

improve synchronization of vnet link up notification

29868186

ldmd to persist and replay FMA memory page retire operations when guests reboot

31238394

Vnet multi-level PVLAN support

31656790

vhba_tran_start_pkt_comp causes a deadlock

31657076

Disable vhba's support for AIO

31786717

Add klog support to vds

31806158

Concurrent DISCOVER commands hang after IO-domain reboot

31860801

Have WARNINGS in vhba_lu_wwns_compare display the actual WWN

31861942

create ::vds DCMD and fix ::walk-vd Walker

31905102

want kstat for tx watchdog and ldc related issues in vnet driver

31940538

migration core dump due to an incorrect assertion

31951339

Interrupting ls-netstat causes ldmd to abort

31951717

vsan.mask : improve an N-squared algorithm to O(n)

32009815

Use a hash table in vhba to manage SCSI dev WWNs

- 32071936**
New SP config in status [next power on] instead of current
- 32170729**
vdc WARNING: Error during OS install/boot from LDOM guest vdisk
- 32170882**
update ldm man page now that warning messages can be controlled
- 32177570**
vhba_mon_fini erroneously calls kmem_free
- 32208344**
vdc can print the wrong SCSI opcode in vdc_scsi_status
- 32213903**
vhba_wwn_cache_init: ... console spam after fix for 32009815

Resolved Issues in the Oracle Solaris 11.4 SRU 27 Release

The following enhancement requests and bugs have been fixed in the Oracle Solaris 11.4 SRU 27 software:

- 30362633**
QE-Core migration test dumps cores when ADI is enabled
- 30413014**
calculate-effective-max-pagesize=off of a guest domain is not migrated by ldm migrate-domain
- 30493268**
DB START CAUSED KERNEL PANIC
- 30809082**
agent-system not always returning chassis serial number
- 31003230**
Log message timestamps should include year
- 31109028**
Panic after migration in LDOM 3.6 version
- 31332259**
Problem with ldoms/misc
- 31392056**
autosave recovery happening too often
- 31430180**
Add klog support to vsan
- 31447829**
Redundant blacklist replay requests sent to GM at startup

- 31463705**
ldm list-constraints may display garbage output for the MAC address of a guest domain
- 31474029**
Add klog support to vdc
- 31494243**
vdc: fix parfait errors re: compare-mixed-signedness
- 31494267**
Many vdc DMSG() calls redundantly show vdc instance number
- 31510897**
"guest_no_reset" logic for memdr and cpudr needs to be improved
- 31538687**
ldm list-netdev -p parsable output contains humanized values
- 31553565**
Switch ovmtutils agent module to Python 3.7
- 31576362**
New warning messages appearing in Idoms-ldmd:default.log
- 31644572**
Buffer overrun in log_cli_command of zeus_log.c:933
- 31651060**
Prune old sparcv7 kernel headers
- 31661574**
Comparison of integers with different signedness in null of netsvc.c:3870
- 31676120**
Potential for missing control domain keys
- 31692130**
panic: assertion failed: svc == (ds_svc_t *)svc->ops.cb_arg, file: ../../sun4v/io/ds_drv.c, line: 1075
- 31711575**
ldmd service has long startup time due to vsan_aliases
- 31727180**
DRCPU lock must be released prior to calling to clear_domain_no_reset_flag() function
- 31727860**
masks in vm_flags are incompatible with ::enum
- 31738286**
ovmtdeploy does not have the ldm_version populated during a full build
- 31740527**
Remove vsan_aliases XML tag

31769164

Incorrect seq_gen_guest_md() call prevents timely update of eff. max. pgsz. calculation for primary domain

31812955

ldom in OBP hangs with reset-all command

31822763

Board DR case: DRCPU lock must be released prior to calling to clear_domain_no_reset_flag() function

31845055

poweroff does not complete in guest domain on trunk builds or accelerated night

31861815

Problem with ldoms/xml

Resolved Issues in the Oracle VM Server for SPARC 3.6.2 Release

The following enhancement requests and bugs have been fixed in the Oracle VM Server for SPARC 3.6.2 software release:

28900668

ldmd service goes into maintenance mode and guests do not show up post 11.3 upgrade

30283429

cli_ldom_migrate: 'args' is accessed after it is deallocated

30155421

Cannot migrate Guest having a vsan.mask (from 3.6.1. to 3.6.2)

29991766

ldom manager should have an option to turn calculation of max-eff-pgsz off

30240130

Error cases in memory dr may access freed memory

30086348

pkg uninstall puts SMF service into maintenance before removing it

22828100

vsw backing device can be removed when linkprop still in phys-state, but cmd falsely claims an error

29364087

Wrong error message output on attempt to use unsupported IOV_DYNAMIC_OFFLINE_FORCE

29631511

Improve ldmpower error message when PM is disabled

29878508

Domain keeps effective-max-pagesize=16G after LDoms 3.4 to 3.5 upgrade, but it drops to 256M when subsequently altered with "ldm" command

29896984

Incorrect grammar in error message

29809669

Solaris 11.4 (11.4.5.3.0) ldm list uptime showing incorrect information

29869666

mem dr may free response buf twice

27974950

add-vsan-dev feature does not support Migration

28386691

fma-phys-mem-service DS should be established before requesting blacklist replay

25886316

ldm cancel-reconf causes core dump if a root domain has VCC

29405331

ldmd dumps core on removal of last named CMI resource from primary

29351514

Second add of a specific named cmi resource fails on primary after cancel reconf

29349849

Migrated domains do not work on targeted node in OVM3.6.1 with PM, named cores

28633851

PM may not work normally after two successive PPARDRs.

29697593

LDOM not having any memory allocated after reboot (Super Cluster)

29623003

problem in OVMTEMPLAT/OVMTCONFIG

29469375

Improve error messaging for ldm evacuate-io command

29363569

PPAR DR(deleteboard) for a system board which had a VF failed

29557793

Ldm commands are slow and snmp timeout

28634524

concurrent set-mem on multiple domains may cause ldm core dump

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Documentation Issues in the Oracle VM Server for SPARC 3.6.2 Release

Trap Configuration Examples Do Not Work For `net-snmp` v5.8

The examples in the [How to Send Traps in Oracle VM Server for SPARC 3.6 Management Information Base User's Guide](#) will not work when using `net-snmp` v5.8. To workaround this issue in `net-snmp` v5.8, replace this command:

```
trapsink localhost
```

with this command:

```
trapsink -s 127.0.0.1:0 localhost
```

This is a known issue for `net-snmp` v5.8 that requires you to set a source. For more information, see <https://sourceforge.net/p/net-snmp/mailman/message/36398374/>.

Changes to the Object Response Description for XML Protocol Response Messages in *Oracle VM Server for SPARC 3.6 Developer's Guide*

In Chapter 3, XML Protocol, in the Response Messages section of the Request and Response Messages section, update the first paragraph of the Object Response section as follows:

Finally, each `<data>` section in a `<cmd>` section has one required `<response>` section followed by one optional `<response>` section:

- The required `<response>` section shows whether the command being run on this particular object passes or fails. If the status of the response is `SUCCESS`, there is no `<resp_msg>` tag in the `<response>` section. If the status is `FAILURE`, there are one or more `<resp_msg>` tags in the `<response>` field depending on the errors encountered when running the command against that object. Object errors can result from problems found when running the command, or from a malformed or unknown object.
- The optional `<response>` section includes any warning messages generated by `ldmd` for the current command on the current object. When present, it will always include a single `<resp_msg>` tag with any included warnings.