



# Netra™ Data Plane Software Suite 2.0 Update 2 Release Notes

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Sun Microsystems, Inc.  
[www.sun.com](http://www.sun.com)

Part No. 820-5213-11  
July 2008, Revision A

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# Netra Data Plane Software Suite 2.0 Update 2 Release Notes

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These Release Notes contain last minute information about the Netra™ Data Plane Software Suite 2.0. Netra Data Plane Software is also referred to in this document as Netra DPS.

Topics include:

- [“Software Notes” on page 2](#)
- [“Configuring LM-X Licenses” on page 9](#)
- [“Feedback and Support” on page 10](#)

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The Netra Data Plane Software Suite 2.0 documentation set is located at:

<http://docs.sun.com/app/docs/prod/netra.dp>

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# Software Notes

## Open Issues

### CR 6529219: Compilation fails if a function returns a structure

Compilation fails if a function within an application returns a structure. This situation is due in part to private functions missing from `libc`.

Workaround: The function needs to return a pointer to the structure.

### CR 6578957: `ipc_tx()`: chaining of messages is not supported

Chaining of messages using the `b_next` field in the `mblk_t` structure is not supported in this release. `ipc_tx()` must be called once for every message.

Workaround: None.

### CR 6621350: `teja_profiler_dump()` can dump discrepant information to the console

This bug had been resolved and will be in the next Sun Enterprise T2000 and T5220 Platform System Firmware Release.

Workaround: In a guest domain, find when LDoms is used. When using the profiler on the Netra CP3260 platform, make sure that the LDoms configuration is used.

## CR 6624475: ipsecgw\_QGC: “nxge\_desc\_setup: Cannot allocate rx buffer!” message seen

ipsecgw over QGC displays messages if traffic is already started before the application boots up. The application, however, is still able to receive and pass the traffic after all ports are initialized.

Workaround: None.

## CR 6637959: Ctr+c may not work properly on an application built by ipsecgw\_niu\_multi

This behavior only occurs on the Netra CP3260 system.

Workaround: None.

## CR 6670046: ipfwd4g - 4 ports performance obtained on QGC is not what is expected with 64-byte or 128-byte packet sizes

In ipfwd4g, performance is lower than expected. This is seen when running all 4 ports with 64-byte or 128-byte packet sizes.

Workaround: None.

## CR 6670493: ipfwd10g\_niu: performance drops when resuming to execution from Ctr+c

ipfwd10g\_niu performance drops when going from 1500 bytes to 64 bytes (either directly or gradually). This is seen on Netra CP3260 and Sun SPARC Enterprise T5120 and T5220 systems.

Workaround: None.

## CR 6677123: ipfwd10g\_niu: going from one packet size to 64-byte affects the performance on Netra T5220

After booting up the ipfwd10g\_niu, performance on a Netra T5220 system is affected when going from one packet size to 64-byte.

Workaround: None.

## CR 6694950: autoconfig: fails to proceed because of an unnecessary check for vntsd in “factory-default” configuration

When responding “yes” to the “Netra Data Plane Suite Configurator” program prompt, the following is displayed:

```
INFO: vntsd service not online, trying to enable it
ERROR: Unable to enable vntsd service. It is required for
connecting to the logical domains console
```

## CR 6695750: ipfwd\_acl: crashes if acl algorithm is initialized while traffic is running

The IP forwarding application with ACL crashes if the ACL algorithm is initialized while traffic is running.

Workaround: Stop the traffic and then initialize the ACL algorithm.

## CR 6695813: ipsecgw\_niu\_multi on Netra T5220 - packets getting dropped even for lower line rates

For ipsecgw\_niu\_multi application on a Netra T5220 system, there is some difference in the number of packets received by the ports when sending 100% line rate and when sending the number of packets that each packet size can handle.

Workaround: None.



## CR 6696427: `ipfwd_acl`: connection timed out when trying to delete entries

The ACL delete operation times out if wildcards (0.0.0.0/0) are used.

Workaround: When removing rules, use the same source/destination prefixes which has been used while adding the particular rule. Do not rely on wildcards.

## CR 6697317: `ipfwd-arp`: not able to pass traffic

When configuring IXIA, as well as the required LDoms environment for `ipfwd-arp`, `ipfwd-arp` does not work properly in both setups: `10g_niu` on Sun SPARC Enterprise T5120/T5220 system, as well as QGC on the Sun Fire T2000 system.

Workaround: None.

## CR 6702655: Netra ATCA CP3260 system build has limited hash policy options

To build for running on Netra ATCA CP3260 systems, `HASH_POLICY` options are limited to the following policies: `IP_ADDR`, `IP_DA`, and `IP_SA`.

Workaround: None.

## CR 6713076: (W36) The `acltool` hangs if its previous invocation was interrupted by Ctrl+c

The next invocation of `acltool` hangs if it is interrupted by Ctrl+c. This also occurs after timeout, when rules are still being inserted by `Hicut`.

Workaround: None.

## CR 6717561: `ipctest` utility subcommands hang if traffic is sending from the traffic generator

The `ipc_test` utility may hang when the `perf-pkts-rx-tx` command is used with the single threaded application while traffic is exchanged with the Solaris module (`lwmod`) on another channel. Once the first command hangs, subsequent calls in `ipc_test` will also hang.

Workaround: None.

## CR 6722072: Performance forwarding from one 10G port to another 10G port within a NIU is very low

Currently, when traffic is forwarded from one NIU 10G port to another NIU 10G port and if traffic flow is not statically bound (and multi-Q is set), the performance is extremely low (about 450 kpps).

Workaround: None.

## CR 6722102: remotecli: gets profiler data when not in "console" mode

When trying to get a coredump, profiler data also gets displayed. Profiler data should only be displayed if the "console" subcommand is executed.

Workaround: None.

## CR 6722103: remotecli: dbg> prompt returns before coredump command competes

The dbg> prompt was returned although the coredump was not yet completed.

Workaround: None.

## CR 6722105: ipsec\_niu\_multi: takes a few minutes for the numbers to settle on Netra CP3260

A slight degradation occurs when the application is first booted, but numbers settle a few minutes later.

Workaround: None.

## CR 6723787: ndpstgen generates eight times more packets than specified for 10g\_niu

When the `-n` option is used, the number of packets generated is per channel. The total number of packets should equal the number specified after `-n` option (spread equally among channels).

Workaround: None.

## CR 6724125: autoconfig - fails to check the existence of the file

The `autoconfig` application failed to check the existence of the file under the `/export` directory while adding the filename as backend to the virtual disk server device.

Workaround: None.

## CR: 6731036: ipctest utility hangs when doing perf-pkts-rx-tx

The `ipc_test` utility hangs when the `perf-pkts-rx-tx` command is used while traffic is exchanged with the Solaris module (`lwmod`) on another channel.

Workaround: None.

## CR 6732270: autoconfig/tftp - boot server configuration failed

The `tftp` boot server configuration using the `autoconfig` tool will fail if the `tftpd` service is not imported into the Solaris `smf` service.

Workaround: Uncomment the `tftp` entry in the `/etc/inetd.conf` file and run the `inetconv` command

## CR 6732964: ipfwd-diffserv: Support for multiple nxge instances

The DiffServ reference application currently supports only both ports on a single NIU or 10GB nxge card, or four ports on a single quad gigabyte nxge card.

Workaround: None.

## CR 6732966: ipfwd-diffserv: Class-based scheduling does not work across DMA channels

Flows being transmitted on different DMA channels of the same port are not scheduled according to their respective weights or priority.

Workaround: None.

## CR 6735138 remotecli: coredump does not always dump core

coredump works about 50% of the time. When it returns to the prompt, entering "c" to continue results in "Error."

Workaround: None.

## CR 6737845: ipfwd4g - Some of the ports are not receiving traffic

In ipfwd4g, nxge 2 and 3 ports are not receiving traffic though they have the correct MAC address set. nxge 0 and 1 ports work fine.

Workaround: None.

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# Configuring LM-X Licenses

## Working with Licenses Using LM-X

You must have a license file to use the software. When you invoke compilation of any application, Netra DPS reads the license file. A valid license file must be present at `/opt/LM-X/license`. Sun Microsystems issues two kinds of licenses:

- Node-locked licenses (multiple user); see [Node-Locked Licenses](#).
- Time bound evaluation licenses (multiple user); see [“Evaluation Licenses” on page 10](#)

## Node-Locked Licenses

A node-locked license, or uncounted license, is a license that runs on a single machine. The license file contains permission to run various tools for multiple users simultaneously.

## Obtaining a Node-Locked License File

To obtain a license file, email the following information to `NetraDPSlicense@sun.com`:

- Name of the license user name, address, and phone number of your company
- Product and target processor
- Purchase order number
- The host ID of the host computer where the distribution is installed

You can find the host ID by running `hostid` (located under `/usr/bin/`).

## Installing a Node-Locked License

When you receive the license file (for example, `license`), simply copy it to the following folder: `/opt/LM-X/` (create this folder if not present).

Compiling any of the reference applications or your own application automatically finds the license file.

Set the `LM_LICENSE_FILE` environment variable to include the location of the new license file. For example, in UNIX or Linux, use the `setenv` command in a C shell:

```
setenv LM_LICENSE_FILE /opt/LM-X/license
```

## Evaluation Licenses

An evaluation license, or counted license, is a temporary license for a specified number of days. An evaluation license allows multiple users to use a single license file on a single computer for a limit of 90 days.

### Obtaining an Evaluation-License File

To obtain an evaluation license file, email the following information to `NetraDPSlicense@sun.com`:

- Name of the license user (or contact name)
- Name, address, and phone number of your company
- Product and target processor
- The host ID of the host computer where the distribution is installed

You can find the host ID by running `hostid` (located under `/usr/bin/`).

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## Feedback and Support

You can request Sun support and provide feedback to Sun at the following email address:

[ndps-feedback@sun.com](mailto:ndps-feedback@sun.com)