



## Driver for NPort Express Series (Real TTY for Linux 3.x.x, 4.x.x) Release Notes

<b>Version:</b> 1.19	<b>Build:</b> N/A
<b>Release Date:</b> Jan 18, 2019	

### Applicable Products

N/A

### Supported Operating Systems

Linux 3.x, Linux 4.x

### New Features

- Supports Raspbian Jessie and later for Raspberry Pi 2/3.
- Added driver background polling feature to eliminate the waiting time when an NPort is not present in Slackware 14.0.

### Enhancements

- Supports kernel 4.13.
- Compiling errors with error message "error: expected expression before '{' token" in specific platforms.
- When using a domain name as the mapping address for NPort, it will be translated every time when Real TTY is opening the port.
- Compiling errors when using secured Real COM mode.
- Shutdown hanging might happen in Red Hat Enterprise Linux 7.2 (3.10.0-123.el7).

### Bugs Fixed

- Real TTY can't start up TTY ports with the domain name mapped after the system is rebooted.
- Kernel panic with error message "unable to handle kernel paging request" on specific platforms.
- Driver doesn't load properly after system reboot on Ubuntu 16.04.
- Driver may cause a kernel crash with the error message "soft lockup" with specific network interface cards.
- The command stty may output an error if there is no loopback connector on NPort in Redundant mode.
- Network reconnection problems when using redundant mode.
- The Real TTY service may not start automatically in Debian 6.0 and later versions.
- There may be communication loss when using IPv6.
- Data can't be read due to abnormal flow control in Linux kernel 3.8 and later.
- When security mode is enabled, the driver may crash if it connects to an offline NPort.
- Port mapping is incorrect after rebooting in Kernel 3.2.48.
- When NPort is offline, the current serial parameters are not saved for reconnection.
- While executing mxsetsec, the configuration of the driver will be cleared.
- When opening node /dev/ttyr10, port 16 should be opened, but port 10 is opened instead.
- The driver reference count becomes negative after a port open fails.

### Changes

- No longer supports kernel 2.x.
- Log file increasing without limit causes a file system crash.

### Notes

N/A