Real TTY drivers for Linux 3.x.x Release Notes

<table>
<thead>
<tr>
<th>Version: v3.0</th>
<th>Build: Build 19101416</th>
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<td>Release Date: Oct 24, 2019</td>
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**Applicable Products**
NPort 5100A Series, NPort 5100 Series, NPort P5150A Series, NPort 5200A Series, NPort 5200 Series, NPort 5400 Series, NPort 5600 Series, NPort 5600-DT Series, NPort 5600-DTL Series, NPort Express Series, NPort IA5000A-I/O Series, NPort IAW5000A-I/O Series, NPort S8000 Series, NPort S9450i Series, NPort S9650i Series, NPort W2150A/W2250A Series, NPort IA5000A Series, NPort IA5000 Series, NPort 5000AI-M12 Series, NPort 6100/6200 Series, NPort 6400/6600 Series, CN2510 Series, CN2600 Series, MiiNePort E1 Series, MiiNePort E2 Series, MiiNePort E3 Series, MiiNePort W1 Series, NE-4100 Series

**Supported Operating Systems**
Linux Kernel 3.x

**New Features**
- Supports the systemd process to load the Real TTY driver on the Linux platform.

**Enhancements**
- The connections of the opened TTY ports will not be disconnected and reconnected when adding or removing servers. The related descriptions are also removed in README.txt due to this change.

**Bugs Fixed**
N/A

**Changes**
- Divided an independent driver version 3.0 to support only Linux kernel 3.x.

**Notes**
N/A
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