



**CTP System**

## **CTPOS Release Notes**

*Release 5.2*

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# CTPOS Release 5.2

## Release Overview

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These *Release Notes* accompany Release 5.2 of the CTPOS Circuit Emulation software. They describe the enhancements as well as known issues with the software. CTPOS runs on all Juniper Networks CTP 1000-series and 2000-series platforms. CTPView 3.2 or later is required for this release.

If the information in these *Release Notes* differs from the information found in the published documentation set, follow these *Release Notes*. These *Release Notes* include the following sections:

- Release Overview on page 1
- Required Files on page 1
- New Features on page 2
- New Hardware on page 3
- Known Issues on page 4

You can also find these release notes on the Juniper Networks Technical Publications CTP documentation Web page, at <http://www.juniper.net/techpubs/hardware/ctp/>.

## Required Files

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- Release 5.2R1 upgrade file: acorn\_429\_081007.tgz
- T1E1 Winpath firmware update:  
acorn\_429\_080502\_winmon\_2000\_t1e1\_v26.tgz
- Serial and T1E1 firmware update:  
acorn\_429\_080815\_fpga\_2000\_ser\_v71\_t1e1\_vEA\_16.tgz
- 5.2R1 FLASH image: flash\_5.2R1.img

## Upgrade Notes

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**NOTE:** The information in this section assumes you are using a CTPView Management appliance to upgrade your CTP systems.

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The files listed in Required Files are for upgrades from CTPOS 4.5R1 and later. When upgrading from the following releases, it is necessary to rerun the upgrade process for it to complete properly:

- CTPOS 4.5R1 through 4.5R7
- CTPOS 4.6R1 through 4.6R2

Please confirm the correct version by checking the version reported at the end of the CTPView upgrade status window. If the version is not Release 5.2R1, rerun the upgrade and it should complete successfully.

For versions between 4.3R2 and 4.5R1, the following additional file is required:

- CTPOS FLASH upgrade file (CTP1002): acorn\_429\_071029\_k256.tgz

Software versions prior to Release 4.3R2 may require additional support files to complete the upgrade process. Please contact Juniper Technical Support with questions.

## New Features

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This section describes features new to this release.

### Menu Update

The menu structure has been updated to accommodate voice compression features.

### VCOMP Bundle Support

With the addition of the voice compression (VCOMP) bundle type, you can now create a bundle consisting of one or more T1/E1 channels or 4-wire E&M interfaces carrying voice traffic. These bundles can have various levels of compression applied to them.

### Voice TX/RX Gain: CTP2000-IM-4WMEM Module

4W-E&M ports only support Mu-Law and A-Law companding. The companding is a bundle configuration parameter. If the bundle companding is set to transparent, the bundle goes to CfgFAIL on activation and a log message is generated.

The only port configuration required is to set the gain in the two directions:

```
=====
= (nova44 10/06/08 19:13:30 GMT) | Port configuration menu 0
= Bundle type: VCOMP
= Bundle description:
```

```

=====
Please select a number from the following list:
-----
0) Back to Previous Menu
1) Voice port Tx gain: 0.0 dB
2) Voice port Rx gain: 0.0 dB
----- Your choice [2]: 1

```

The default values is 0 dB for both TX and Rx. If there are multiple ports in the bundle, all ports are configured with the same gain settings. The Tx direction is from the analog interface toward the digital interface or network, and the Rx direction is from the digital interface or network toward the analog interface. The gains can be set in 0.1 dB intervals from -17.3 to +8.1 in the Rx direction and from -6.4 to +19.0 in the Tx direction.

## New Hardware

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This section describes hardware new to this release.

### ***CTP2000-Compression Module***

The CTP2000-Compression module enables serial data and voice bundles to be compressed and passed through a CTP2000 system.

Voice bundles originating from the CTP2000-IM-8P-T1E1 module or from the analog CTP2000-IM-4WE&M module use the CTP2000-Compression module to compress the voice bundle. Various compression algorithms are supported, as well as tone relay and echo cancellation options.

### ***CTP2000-IM-4WEM Module***

The CTP2000-IM-4WEM interface module has eight 4-wire E&M ports and provides support for voice applications. It is used with voice compression (VCOMP) bundles in CTP2000 models and can be used only with a CTP2000-Compression module. It is primarily used for trunks between central office (CO) and PBX systems.

### ***Clock Module***

Clock modules provide clock distribution between modules when the backplane is in use by voice applications. Distribution is accomplished through a “hub-and-spoke” configuration composed of a main module (CTP-CLK-Main) and a spoke module (CTP-CLK-Spoke).

The CTP-CLK-Main module serves as a clock input platform with the ability to distribute a reference clock to other CTP modules in a circuit emulation voice-configured system. The CTP-CLK-Spoke module accepts the clock signal from a CTP-CLK-Main module and delivers it to the front module associated with it.

### **CTP2000-IM-8P-IRIG Module**

The 8-port CTP2000-IM-8P-IRIG interface module provides standard serial services and support for the transmission of the standards-based IRIG-B time code signal across an IP network.

It is available on CTP2000 models only.

### **Known Issues**

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**NOTE:** The CTP2000-IM-4WEM interface module requires the installation of both a front and rear module in tandem. Be sure to note slot locations to ensure that the mating front and rear cards are installed in the appropriate slots.

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### **VCOMP Bundles**

- FAX and modem relay are nonfunctional at this time. This issue will be addressed in a later release of the software.
- Transparent companding is not supported with the CTP2000-IM-4WEM interface module. Using this configuration option for a VCOMP bundle associated with a 4-wire E&M port results in a CfgFAIL event and corresponding log message entry.
- When using Mixed Excitation Linear Prediction (MELP) and G.728 compression algorithms for a VCOMP bundle, the maximum number of supported channels per bundle is 17.
- Although the range of CID values is 0–249, CID 0 is not valid for VCOMP bundles.
- If the database state of a bundle is active and the bundle state is not running, check the log file for more information.

### **CE/PBS/Aggregator Mode**

- Use of aggregator mode requires a dedicated physical Ethernet port for VLAN to serial translation. A separate physical interface must be used to carry circuit emulation (CE), packet-based serial (PBS), and management traffic.

### **Bugs Fixed**

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No bugs were fixed since the last release.