

Jetstream® CPX-1000 Release Notes

Release 2.5.0.3

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Introduction

Release 2.5.0.3 is a maintenance release to update 2.5 software for the CPX-1000.

This release note identifies the new features in release 2.5 and describes known and resolved issues in 2.5 through 2.5.0.3.

New in Release 2.5

CPX-1000 Release 2.5 supports the following:

- STS1 PSTN interface with integrated compression
- 12-port T1 PSTN interface with integrated compression
- Support for 4000 IADs or 16,000 lines (CRVs)
- Network Resource Manager
- Automated IAD Software Download
- Voice Quality Alarm
- Support for OAM F5 loopback cells
- Historical performance monitoring
- Auto configuration backup
- Fax/modem auto-detection
- Dynamic Compression

New Components in Release 2.5

Component
Release 2.5 Software
2.5 Software Upgrade Kit
JetCraft Software 2.5
JetVision NT Software 2.5
JetVision Solaris Software 2.5
JetVision Client Software 2.5

System Requirements for Release 2.5

Feature	CP	MP	ATM	STS	12 port T1 ECAC	8 port T1	EC/ECAC
Maximum IADs = 4000 Lines = 16,000	CP1/CP2	MP3	2 ATM for redundancy	Supported	Supported	Supported	Supported (8 port only)
2000 calls	CP1/CP2	MP3	4 ATM for redundancy	672 calls/card Max Call limit: 2000	284 calls/card Max Call limit: 2000	188 calls/card Max Call limit: 1000	672 calls/card (8 port only)

Upgrading from Previous Releases

Upgrading CPX-1000 shelves from release 2.3.x to 2.5 requires:

- 2.5 software upgrade kit

Interoperability with Other Jetstream Products

JetCraft

JetCraft release 2.5 is compatible with CPX-1000 release 2.5 and not with previous releases. Previous versions of JetCraft will not interoperate with CPX-1000 release 2.5.

JetVision

JetVision release 2.5 is compatible with CPX-1000 release 2.5 and supports 2.3.x CPX releases. Previous versions of JetVision will not interoperate with CPX-1000 release 2.5.

CPX-1000 System Compatibility

This table illustrates the CPX-1000 components of release 2.5.

CPX-1000 Component	Part Number
Common Equipment	
CPX-1000 Shelf Redundant Enhanced	1000-B1-502
Software Release	
Release 2.5	1000-D2-002
Mounting Ears	
Bell Rack Mount Ears	1000-F1-001
NEBS 2000 Rack Mount Ears	1000-F1-002
I/O Modules	
PSTN Interface	
TDM 8 Port T1	1001-B1-001
TDM 12 Port T1 with ECAC	1001-B1-003
TDM STS EC	1001-B1-004
TDM STS ECAC	1001-B1-002
Packet Interface	
ATM-OC3S	1002-B1-001
ATM-OC3M	1002-B1-002
Resource Modules	
Echo Cancellation	1003-B1-001
Echo Cancellation and Compression	1003-B1-002
Common Equipment Spares	
CP for HA systems	1000-F1-200
CP2 for HA systems	1000-F1-201
HSC-HA/HS	1000-F1-202
PDU2 Power Unit for 200 AC chassis	1000-F1-802
MP-HA/HS	1000-F1-203
Other Spares	
CPX-1000 empty shelf	1000-F1-800
Power Supply Mod. – 48VDC	1000-F1-801
Direct Power Distribution Module	1000-F1-802
Fan Module	1000-F1-803

CPX-1000 Component	Part Number
Alarm Module HA	1000-F1-804
Fan Filter	1000-F1-805
CPU Cables	1000-F1-502
Reset Button Cover Plate Assy.	1000-F1-910
Peripheral Components	
Cable Management System	1000-F1-500
Bezel Assembly	1000-F1-900
JetCraft 2.5	1000-D2-006
JetVision Windows 2.5	1010-D2-003
JetVision Solaris 2.5	1010-D2-004

Release 2.5 Considerations

System Configuration

Installation of any base module (front card) paired with a transition module (rear card) requires the following steps:

- When *removing* modules, remove the base module first, followed by the transition module.
- When *installing* modules, install the transition module first, followed by the base module.

The default setting for 1+1 ATM protection switching is set to OFF.

The MP module must always be installed in slot 6.

Hot Swap/Growth

Perform hot swaps and hot growth one card at a time, ensuring that the swapped or new card initiates properly before hot-swapping or adding any other cards.

Hot Swap is only supported with a like card. If you remove a card, replace it with the same type of card.

If the tabs on a base module (front card) are accidentally unlatched, you must remove and re-insert the module to return it to the active state.

When performing an unplanned hot swap of any MP card, after releasing the latches, wait 90 seconds to remove the card.

When performing an unplanned hot swap of any other card, after releasing the latches, wait 10 seconds to remove the card.

Paradyne recommends performing hot swap and hot growth actions as scheduled maintenance activities.

STS-1 Card behaviors

The Splitter Assembly is part of the STS system. The Splitter Assembly provides card redundancy by splitting receive and transmit signals to two STS cards. The active STS card both receives and transmits signal. The standby card only receives signal.

The Splitter Assembly is shipped with BNC terminators in place to prevent signal degradation. The terminators should be left in place until an STS cable is connected, and should be replaced if the cable is removed.



When pulling cables on STS systems, disconnect the cable at the splitter end first and immediately install a terminator. Then, disconnect the cable at the STS card end. When reconnecting, connect the cable at the STS card end first. Then, remove the terminator at the splitter assembly and immediately connect the STS cable.

The BNC terminators should also be used if the Splitter Assembly is used in a non-redundant environment. For example, customers who order the splitter assembly with the intent to upgrade later to redundancy should keep the terminators in place.

STS-1 line card statistics are not retrievable through core console.

CP Card behavior

Statistics are only valid on the active CP card.

The reset button on both CP cards should be pressed simultaneously for the entire CPX system to reset. Pressing a single reset button will not reset the CPX and may result in degradation of system performance. Customers may mount an optional cover plate (orderable with each CP) to prevent access to the reset and abort buttons.

Miscellaneous

If the CPX is restored with an old database (a DB backed up prior to new IAD provisioning), it will not provision new IADs until the DB is updated (synchronized) with the most recent IAD information (IADs which were added or deleted since last backup).

Some customers may use an external third party STS-1 Multiplexer (MUX) in conjunction with their CPX 1000 (configured with STS-1). The default parameter settings for these multiplexers may have to be modified in order to provide optimal interface with the CPX.

The CPX does not support alarm notification of transition cards.

Serial number information is not available on all components through the software.

If the database is configured, the CPX system requires installation of at least one line card to boot up properly.

The CPX-1000 does not support concurrent clock sources.

When using RT provisioning, do not unlock the IAD until the CRVs are enabled on the switch. If the IAD is unlocked, without the CRVs enabled the IAD will not get dialtone.

Known Issues in 2.5

Description	Workaround
While an STM-1 card is unlocked, and a port is locked no alarm will be generated.	For this single port STM-1 card, lock at the card level only.
A screech can sometimes be heard if hot-swapping the Octal E1 card during phone calls.	Hot swap Octal E1 during a scheduled maintenance window.
Internal system clock does not default to 8 Port T1 for timing.	Enter the 8 port T1 card as the first card in the clocking table.
In some cases, short cable length for STS may result in signal degradation due to lack of attenuation.	Use cables greater than 100 feet in length or add attenuators to the line.
When using an external SNMP management tool to query IADs subtended from a scaled CPX-1000 system, the SNMP manager may time out due to the time it takes for the query to execute.	Increase the timer value on the SNMP management tool more than 20 seconds.
If you provision an IAD immediately after creating an Interface Group, that IAD may not initially get dial tone.	Wait for EOC/TMC control channels to be in service before provisioning the IAD.
With STS1, an unconnected Bits port generates a Loss of Frame alarm instead of Loss of Signal.	Check system conditions to determine true cause of Loss of Frame alarm if it occurs.

Issues Resolved in 2.5 through 2.5.0.3

Description	Status
If the connection between CME and core software was bouncing then there was potential for calls to be affected.	Resolved.
CME software was updating the TimesTen IAD port table unnecessarily which was causing corruption to occur in the database.	Removed the unnecessary database accesses.
CP2 card bridge chip changed device ID. CP2 cards with part numbers ending in 18E and higher required a change to software to support the new device ID.	Updated software to support both old and new bridge chips on CP2 cards.
Multiple on-hooks and off-hooks in a short period of time could make a port unusable for a period of 5 minutes.	Updated software to fix race condition that caused this problem.
Windows NT database application contains a memory leak.	Memory leak fixed in new version of TimesTen shipped with R2.5 software.
When using RT provisioning in a scaled environment, the MP software may experience a memory leak.	Resolved.
Jetcraft/Jetvision did not display serial numbers for all cards.	Updated to reflect serial numbers for all cards.
Active and historical alarm browsers have no facility to print or export	Added print and export menu items.
EC or ECAC Card removal did not raise an alarm.	Alarm raised.
Jetcraft/Jetvision does not show T1 transition card not found.	Alarm is raised if T1 transition card is not found.
Maximum number of VCs per ATM card was 1023.	Corrected maximum number of VCs to 1024 per ATM card.

Warranty, Sales, Service, and Training Information

Contact your local sales representative, service representative, or distributor directly for any help needed. For additional information concerning warranty, sales, service, repair, installation, documentation, training, distributor locations, or Paradyne worldwide office locations, use one of the following methods:

- **Internet:** Visit the Paradyne World Wide Web site at **www.paradyne.com**. (Be sure to register your warranty at **www.paradyne.com/warranty**.)
- **Telephone:** Call our automated system to receive current information by fax or to speak with a company representative.
 - Within the U.S.A., call 1-800-870-2221
 - Outside the U.S.A., call 1-727-530-2340