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**H300IPC NetEx/IP<sup>®</sup>**  
**for Unisys Dorado Systems**

**Release 7.4.3**

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**Memo to Users**

November 30, 2014

# Introduction

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This memo provides supplementary and release-dependent information for NetEx users. It should be reviewed carefully prior to installation of the product.

H300IPC 7.4.2 is a maintenance release supporting direct IP communication via CPCOMM without an outboard channel-attached appliance. H300IPC is compatible and interoperable with all other NetEx/IP products.

## Support

Support for NetEx and all associated products is available via:

- 24x7 telephone at (800) 854-0359
- The worldwide web: <http://www.netex.com/>
- email [support@netex.com](mailto:support@netex.com)

## Distribution

This product is available via download from our ftp server. This format requires that the release file be transferred to your Unisys system via cpFTP using “bin” and “cfmt” options.

The release is a single program file containing all required executables and utilities.

NetEx Software’s policy is to release a distribution for new products without source code.

## Maintenance Release - Release 7.4.3:

- Maintenance Release for various bug fixes – see the “Update Summary” section for further details.
- Allow option to hostname to be preserved in the connection sequence when utilizing groups in the NCT. This allows verification of proper host connection to be done (i.e. HOSTCHK for BFX).
- The hang when multiple NetEx instances with the same *netexid* are started before initialization has been resolved.

## Maintenance Release - Release 7.4.2:

- Maintenance Release for various bug fixes – see the “Update Summary” section for further details.
- Allow access to NetEx and IPC logfile while NetEx and IPC are still running.
- H300IPC\*RELEASE-742.IPCRUN/SAMPLE contains updated PADS commands that should be used in place of the PADS commands that are in your existing run stream.

## Maintenance Release - Release 7.4.1:

- Maintenance Release for various bug fixes – see the “Update Summary” section for further details.

## **New Features – Release 7.4:**

- Support for Domain Name Services

There are now 2 ways to establish the IP addresses to be used by NetEx for the GNAs in the NCT: SET IP command or DNS lookup. If the new initialization parameter NODNS is zero, NetEx will initiate a request to IPC to find the IP addresses that are set in a reachable DNS server or in the local CPCOMM configuration. The default value for NODNS is 1 for compatibility with previous releases (i.e., SET IP required). SET IP for a GNA overrides any value found by DNS.

For more details see the reference manual sections on NODNS, SET IP, DISPLAY IP, LOAD NCT, Using CPCOMM, Using DNS and the related new messages in Appendix C.

- Various bug fixes – see the “Update Summary” section for further details.

## **New Features - Release 7.3.3:**

- Maintenance Release for various bug fixes – see the “Update Summary” section for further details.

# Service Notes

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## X-keyin

Avoid terminating programs using NetEx with the X-keyin. Otherwise, their termination may not be detected by the NetEx TRMRG\$ routine and some NetEx resources will be lost until NetEx is re-initialized. Use the E-keyin (or @@X T) instead, if necessary.

*To obtain a dump for analyzing a problem use the ABORT command.*

## NetEx dumps

The control language in NTXANALYSIS gives an example of how to produce a formatted analysis of a NetEx dump. It requires the DAP processor and its library in SYS\$LIB\$\*DAP\$. It is extremely difficult to analyze most NetEx problems without the formatted analysis.

## Tape and Disk Trace

Traces taken to tape may be formatted by use of the TAPETRACE utility program. It can selectively print trace records based on time period and/or event types. See the program source for documentation.

Traces taken to disk files may be formatted using TRC. It requires that the NETEX\$TRACE file cycle to be analyzed has an internal name of NETEX\$TEST. Edit the sample provided to print the events of interest.

## Multiple Common Dbanks & AFCB BDIs

To change the number of common Dbanks from the default (1) or to change the default BDI(s) for NTX\$COMN and NTX\$DB0 (0401101 & 0401102), reference the initialization statements NTXBDIS and DBANKS in the manual.

Note that all common banks must be AFCBs. Sample INSTALL SGS's are supplied.

Because AFCBs are reloaded, the NetEx run must have the appropriate security privilege, or SYS\$\*DLOC\$ must be assigned.

## Multiple Concurrent NetExes

Multiple NetExes may be run concurrently, but care must be taken so that they use unique NTX\$COMN & NTX\$DBn common banks. (They must be separately installed with different BDIs for each). Multiple H300IPC NetExes must each have their own NX\$INIT file with unique NTXNUM, NTXBDIS, CON-SKY, and HOST values.

All NetExes use the same IPC. IPC may share its NTX\$INIT parameter with one of the NetExes or have its own. The only parameters used by IPC are CPCOMM\_MODE and NTXMAIL. Applications must map the correct common banks for the NetEx they will use. See the software manual for more information.

## IPC Notes

A new run is required for the H300IPC program (see IPCRUN/SAMPLE in the release file). Because IPC reloads an AFCB, its userid must have the appropriate security privilege, or SYSS\*DLOC\$ must be assigned.

IPC uses UDP port 6950. This port should not be blocked to any remote NetEx.

## CPCOMM PING

In order to test network connectivity, a 'ping' command can be issued from the Unisys host CPCOMM operator interface. The syntax from the "CPCOMM Operator" manual:

```
[cpcomma] PING HOST,{host-name | ip-address} [REPEAT-COUNT,number] [BYTES,number];  
[WAIT,seconds] [RECORD-ROUTE | TIMESTAMP] [LOCAL-IP,ip-address]
```

## Mailbox Bank Re-install

If both local and remote hosts are defined in the NCT with the LONGMSG HOST option enabled, then the network 'message proper' protocol may be up to 192 bytes (normally 64). This is to improve the performance of applications which use user Odata in high volume sessions.

Due to this change, the mailbox bank format was changed in release 7.2. If you are migrating from a release prior to 7.2, you MUST re-install the mailbox BDI. In addition, NetExes running in a single partition must all be at Version 7.1 or must all be Version 7.2 or above.

## IPC Diagnostic Information

To increase the diagnostic information available to NetEx Customer Support for diagnosing product problems, please verify that both the NETEX and IPC print datasets are breakpointed.

In addition, please add the following statements to your IPC run after the execution of IPC and PADS.

- @COPY DIAG\$,*[yourdiagfile]*
- @COPY LINK\$QSF\$,*[yourlinkfile]*

These files may contain information required by support to assist in analyzing a problem. The files must be previously catalogued.

# Update Summary

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## Release 7.4.3

The following support tickets have been resolved in this release.

- 5401 BFX Protocol error
- 5402 Random Storage overlay
- 5913 bufsize = 160000 aborts NetEx
- 5945 Check seg eyeball check before and after the call to IPC
- 6185 Multiple NetEx fails to start/stop with duplicate ntx numbers
- 6247 BFX PROTOCOL Error --- NetEx problem
- 6254 COMMENTED CODE FOR BUFFERS and ACK CR parameters BUFAck
- 6382 Add SNDGRNM support

## Release 7.4.2

The following support tickets have been resolved in this release.

- 5670 Allow NetEx log to be closed and a new cycle created.
- 5759 Correct Buffsize parameter parsing.
- 5767 Remove snap dump of dropped messages
- 5811 Invalid datamode / adapter status 5 / NetEx abort at startup
- 5868 Allow IPC log to be closed and a new cycle created.
- 5869 Large transfer failure will collect additional information
- 5886 Delete unused code to reclaim code space
- 5947 Send the actual host name in the connect when using groups
- 5951 Random Storage overlay will be trapped in three additional locations
- 5974 Correct install documentation to copy in new common dbanks
- 5983 ntxWrite hold lock for entire I/O duration
- 5985 BFX Protocol error
- 6029 NetEx abort- no IPC heartbeat
- 6158 Out of control buffers - (deva, ipc aborted on a remote system)
- 6170 IPC Abort at customer site
- 6176 NetEx fails when ntxnum=6
- 6177 NetEx ignores ntxnum in use error
- 6178 Display ipcnum in use when requesting termination
- 6179 Display local GNA in use when failing to start NetEx

- 6180 Add message to open verify not fieldata
- 6181 IPC KILL command
- 6183 Additional traps for x1 getting set to 0

## Release 7.4.1

The following support tickets have been resolved in this release.

- 4899 IPC may move too much data
- 4949 BFX failures - NetEx Abort: Bad Odata length check and abend in operator
- 4966 Improve some debugging info
- 5245 Error messages from CPCComm need IP addresses to resolve the problem
- 5336 Draining a host that's not in the NCT gives an indication that it got drained
- 5337 There should be an indication that a host is drained in the display host command
- 5338 There are 2 cmds, halt trunk and start trunk which are no longer needed
- 5385 MAXOD can be set > 256
- 5404 Add diagnostics for open failures on the ntx\$init file
- 5406 IPC sample run updated with diagnostic file enhancements
- 5431 Segsize not being properly negotiated
- 5560 Disk trace fails if file not assigned without warning
- 5564 DNSLOOKUP: NO BUFFER FOR DNS LOOKUP - SKIPPED. flooded console
- 5567 Document disk tracing
- 5597 NetEx aborts on BUFSIZE command
- 5598 NetEx d h command drops characters in host name at end of line
- 5599 Add seg to extra buffer in nxnetw
- 5603 Delete mailbox-dump program
- 5604 Intrahost fails transfer if segsize less than block size
- 5615 NetEx abort with more than 66 nits/connection
- 5631 IPC holding initfile cannot generate new pamfile with IPC UP.
- 5671 2300 in bfxjs - Disconnect not sent
- 5674 Print the date in ntxlog at midnight
- 5675 Increase disk trace buffers and snap if buffer not written or end of extent
- 5722 Remove DROPPED msg from console

## Release 7.4

The following support tickets have been resolved in this release.

- 5130 NetEx accepts inbound call from unconfigured peer
- 5286 NetEx abend - BFX close specified on receiving side only

- 5307 Adapter Initialization problem.
- 5305 NetEx does not terminate on a NTX TERM command
- 5275 IPC hangs on locks with NetEx during termination
- 5274 IPC aborts during term command if IPCLOG >3
- 4918 IPC 4106 error code; NetEx abort
- 4966 Improve some diagnostic info
- 5111 Implement settable max SEGSIZE parameter
- 5053 Configmgr fails when group members have different Protocols
- 4973 NetEx GEN fails with NRBSTAT 15 NRBPROTL=0
- 4902 Random store problem; longmsg issue

## Release 7.3.3

The following support tickets have been resolved in this release.

- 4423 H300IPC NetEx abort on initialization
- 4748 Display Key command doesn't display the actual installed key
- 4898 Error in IPC error checking (4938)
- 4952 NetEx may fail to start after being terminated