

Product	Name SINTRAN III/VSX version K generation 406	Category STPR																				
	Module SINTRAN III/VSX ND-210575K SINTRAN III/VSX-500 ND-210576K SINTRAN III/VSX-500 ND-220049K04 (standard system D) SINTRAN III/VSX-500 ND-220050K04 (standard system C) SINTRAN III/VSX-500 ND-220051K04 (standard system B)																					
Reason	. New product . Error Correction x Change/Addition x Different Environment . Other:																					
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Purpose	Operating system on the ND-100/CX, ND-110 or ND-5000.																					
Prerequi- sites	Computer Type Floating format ND-100 CX 32-bit / 48-bit w/Memory Management II ND-110 any 32-bit / 48-bit in both cases with an ND-5000 CPU (NOT an ND-500 CPU).																					
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SINTRAN III/VSX is delivered on either 2 double-density/double-sided 8-inch or 5 $\frac{1}{4}$ -inch diskettes, with the following layout:		
Directory name:	N-2200xxK04--01D	User name: SYSTEM
File name	Type T Pages	Containing
MACM-1718L	BPUN A 20	MACM
SINTRAN	DATA A 574	SINTRAN:DATA
Directory name:	N-2200xxK04--02D	User name: SYSTEM
File name	Type T Pages	Containing
NEW-SYSTEM	PROG C 21	NEW-SYSTEM program
DMAC-1915F	BPUN C 19	DMAC
F32-FMAC-1920C	PROG C 15	FMAC for 32-bit floating format
F48-FMAC-1408D	PROG C 15	FMAC for 48-bit floating format
FILSYS-SYMBOLS	SYMB C 21	File system symbol list
RTLO-SYMBOLS	SYMB C 24	RT-Loader symbol list
COS-TADADM	BPUN C 4	COSMOS TADADM
LIBRARY-MARKS	SYMB C 8	Library marks
SYMBOL-1-LIST	SYMB C 38	Symbol list, config. independent
SYMBOL-2-LIST	SYMB C 25	Symbol list, config. dependent
N500-SYMBOLS	SYMB C 31	Symbol list, ND-500 Monitor
or, on 6 single-density/single-sided 8-inch diskettes, with the following layout:		
Directory name:	N-2200xxK04--01S	User name: SYSTEM
File name	Type T Pages	Containing
MACM-1718L	BPUN A 20	MACM
SINTRAN-I	DATA A 127	SINTRAN:DATA
Directory name:	N-2200xxK04--02S	User name: SYSTEM
File name	Type T Pages	Containing
SINTRAN-II	DATA A 147	SINTRAN:DATA
Directory name:	N-2200xxK04--03S	User name: SYSTEM
File name	Type T Pages	Containing
SINTRAN-III	DATA A 147	SINTRAN:DATA
Directory name:	N-2200xxK04--04S	User name: SYSTEM
File name	Type T Pages	Containing
SINTRAN-IV	DATA A 147	SINTRAN:DATA
Directory name:	N-2200xxK04--05S	User name: SYSTEM
File name	Type T Pages	Containing
NEW-SYSTEM	PROG C 21	NEW-SYSTEM program
DMAC-1915F	BPUN C 19	DMAC
F32-FMAC-1920C	PROG C 15	FMAC for 32-bit floating format
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1. CHANGED PREREQUISITES

The SINTRAN III/VSX requires:

- ND-100/CX CPU with ECO 100-522 (48-bit floating repr.)
or ECO 100-523 (32-bit floating repr.)
- Memory management II (16 PITs) with ECO 100-534 (level N)
- or - ND-110/CX CPU (CPU and memory management on one card) (level L)
- if SMD disk controller (10 MHz) is used, ECO level BD is required
- if Dual Disk Channel Switch is present, ECO level H is required

2. CHANGES TO THE HENT-MODE AND LOAD-MODE FILES

The following changes must be made to the mode file to be run after a cold start (usually called HENT-MODE:MODE):

- Remove the commands used to load the ND-500 System Monitor explicitly.
- Ensure that all @ENTER-DIRECTORY commands on disks conform to the new parameter syntax - note that UNIT is now always required.
- Include @DEFINE-MASS-STORAGE-UNIT commands to take care of disk units without a fixed mounted pack, as well as magnetic-tape drives and floppy-disk drives.
- Remove any DEFINE-MEMORY-CONFIGURATION commands to the ND-500 Monitor.

The following changes must be made to the batch file to be run after a warm start (usually called LOAD-MODE:BATC):

- Ensure that all @ENTER-DIRECTORY commands on disks conform to the new parameter syntax - note that UNIT is now always required.
- Include @DEFINE-MASS-STORAGE-UNIT commands to take care of disk units without a fixed mounted pack, as well as magnetic-tape drives and floppy-disk drives.
- Include the necessary *REMOVE-SPOOLING-HEADER commands to the SINTRAN-Service-Program (previously used only each time SINTRAN was loaded from diskette).

Detailed information of the changes in SINTRAN III version K is found in the SINTRAN III Release Information, K-version (ND-60.230.4 EN).

Also refer to the list of subsystems affected by the K-version on the next page.

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3. SUBSYSTEMS AFFECTED BY SINTRAN III K-VERSION

- The C-version of the SINTRAN Configuration program (ND-211024) must be used on systems using SCSI devices.
- Only version I of the ND-500 Background Monitor (ND-210333) may be used with SINTRAN III version K generation 406.
- Only version I of the ND-500 Swapper (ND-211034) may be used with SINTRAN III version K generation 406.
- Only version K or later of XMSG (ND-210373) can be used with SINTRAN III version K.
- Version D or later of Cosmos Basic Module (ND-210374) is required when running XMSG version K or later.
- Version H of the Backup system (ND-210337) is required to handle files with file index > 255 (more than 256 files per user). Version I is required to handle SCSI streamer tape drives.
- Versions A or B of the File Manager (part of ND-210518) will not handle files with file index > 255 (more than 256 files per user). Version C of the File Manager (ND-211075) will handle this problem.
- Version O of the File System Investigator (part of ND-210628) is required to handle files with file index > 255 (more than 256 files per user).
- Version H of the Linkage Loader (ND-210319) is required to handle communication with RT-programs due to the changed RTFIL format.
- Version F of the Symbolic Debugger (ND-210336) may be used when running SINTRAN III version K to debug RT-programs.
- Version CO1 of Telefix-Local (ND-210775) is required.
- Version B of User Environment (ND-210518) must be changed slightly to run under SINTRAN III/VSX version K. Version C of User Environment offers a highly improved performance when used under the K-version of SINTRAN.

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4. INSTALLATION PROCEDURES

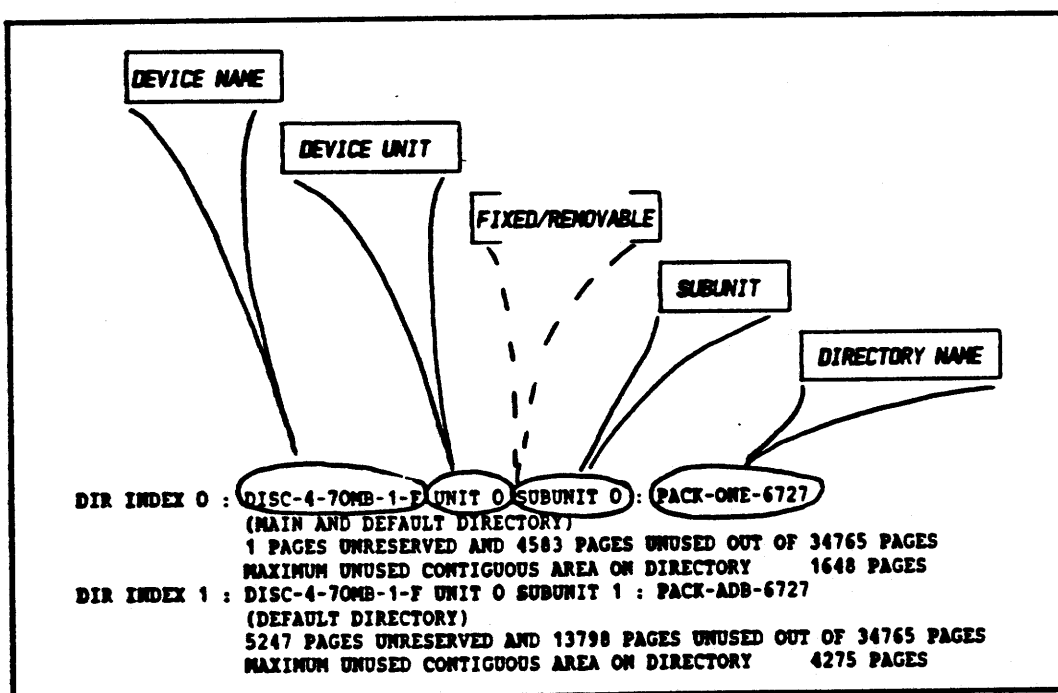
BEFORE STARTING

To load SINTRAN III you need some information about the main directory in your system.

Type:

```
@DIRECTORY-STATISTICS↵
  DIRECTORY NAME:↵
  OUTPUT FILE:↵
```

Look for the directory marked as (MAIN AND DEFAULT DIRECTORY). Note the device name, the unit number, whether it is fixed or removable, the subunit number and the directory name.



Also, use the LIST-TITLE command to get the CPU number of your system. Type:

```
@LIST-TITLE↵
```

and note the number of your CPU.

You should also at this point install any new versions required of the following software, for example:

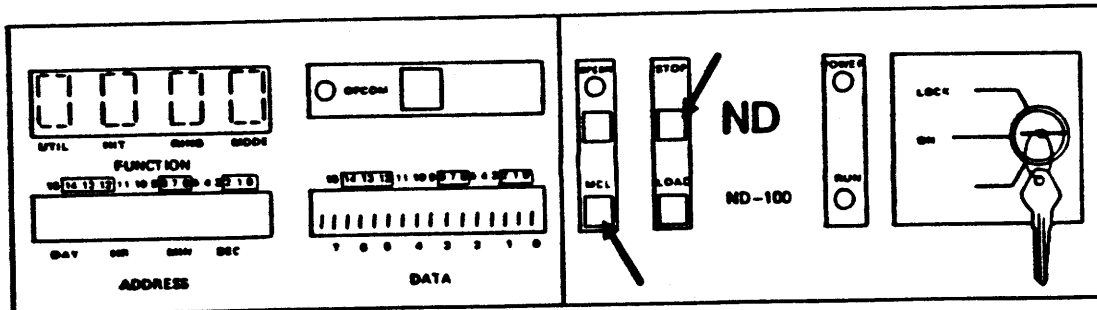
```
ND-500 Monitor      (version I required)
ND-500 Swapper      (version I required)
XMSG                 (version 2 K required)
COSMOS Basic Module (version 2 D required)
```

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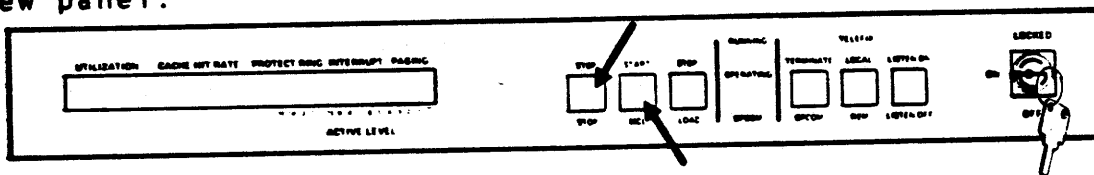
Now, stop the system in a controlled way as described in the SINTRAN III System Supervisor manual.

Finally, turn the panel key to the ON position and stop the system by pressing the STOP button. Then press the MCL button.

Old panel:



New panel:



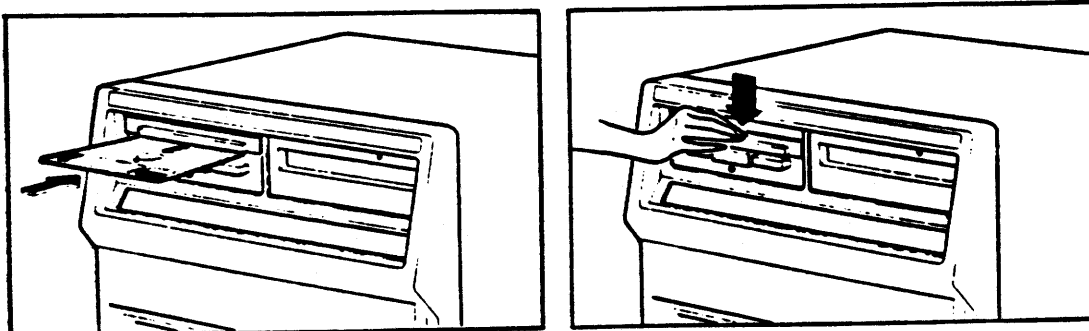
You should now have a # on your terminal.

In the following text, underlined words are commands that must be typed by you. Commands typed without the @ sign on the screen must be typed without pressing the carriage return key!

START

If you make any mistakes during the loading of SINTRAN III, make a restart from this point.

Place the SINTRAN diskette-I in FLOPPY-DISC-1 UNIT 0:



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Type without giving
carriage return:

1560&

If you get any questions on the terminal, answer them with the information you got about your main directory and CPU number.

First, you will get the question:

GIVE DISK TYPE AS ONE OF THE FOLLOWING OCTAL NUMBERS:

- 0: DISC-14MB
- 1: DISC-21MB
- 2: DISC-23MB
- 3: DISC-28MB
- 4: DISC-30MB (DISC-60MB/DISC-90MB)
- 5: DISC-33MB
- 6: DISC-38MB
- 7: DISC-45MB
- 10: DISC-66MB
- 11: DISC-70MB
- 12: DISC-74MB
- 13: DISC-75MB
- 14: DISC-140MB (DISC-2-70MB)
- 15: DISC-2-75MB
- 16: DISC-288MB-R (DISC-225MB-R/DISC-3-75MB/DISC-4-70MB-R)
- 17: DISC-288MB-F (DISC-4-70MB-F)
- 20: DISC-450MB-F (DISC-2-225MB-F/DISC-6-70MB-F)
- 21: DISC-288MB-E (DISC-4-70MB-E)
- 22: DISC-450MB-N (DISC-2-225MB-N/DISC-6-70MB-N)
- 23: DISC-288MB-N (DISC-4-70MB-N)
- 24: SCSI

DISK TYPE:

Find the disk type of your main directory and enter the corresponding number.

You will then get a message telling you which disk type is selected, and then a summary of further commands.

Wait until:

TYPE ANY MACM COMMAND:

Type without giving
carriage return:

10.0\$

Wait until:

**** 00000 DIAGNOSTICS ****

Check:

Make sure that you have got
00000 diagnostics. If not,
make a restart from START.

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If you have a system delivered on single-sided/single-density diskettes, you must now remove diskette-I and repeat this procedure on diskette-II, diskette-III and diskette-IV, each time giving the command 10,0\$ (without return) when a diskette is entered in FLOPPY-DISC-1 unit 0.

Type without giving
carriage return:

22!

Wait until:

PAGES FOR SWAPPING (OCT.):
<number of pages for swapping>

Then do the following:

Enter main directory

- Press ESCAPE.
- After ENTER give carriage return.
- After PASSWORD give carriage return.
- The message NO MAIN DIRECTORY will be typed.
- Enter the main directory by typing:

@ENTER-DIRECTORY↵

Answer the questions with the information
you noted about the main directory before
you started.

- Log out.
- Log in as user SYSTEM

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Now, replace diskette-I with diskette-II (or diskette-IV with diskette-V) in FLOPPY-DISC-1 UNIT 0.

@ENTER-DIRECTORY, FLOPPY-DISC-1,0↵

Start the program NEW-SYSTEM from the floppy by typing:

@(N:SYSTEM)NEW-SYSTEM↵

This program will guide you through the copying of the symbol list and start the patch file.
You may get two unfamiliar questions:

Give CPU number (in decimal):

and

Give CPU type (in decimal):

Answer the questions by giving the CPU number from the LIST-TITLE command.

When the NEW-SYSTEM program is finished, you may want to change the configuration of your system by using the S3-CONFIG program. If you have installed Net/One, you may also want to install the NOTS configuration program, which is found on the same diskette.

You must first copy the program(s) to disk, the procedure is as follows:

Replace the SINTRAN III diskette (or the patch file) with the diskette containing the S3-CONFIG program.

@ENTER-DIRECTORY 211024, FLOPPY-DISC-1,0↵

@COPY-FILE "S3-CONFIG:PROG" (211024:FL-U)S3-CONFIG:PROG↵

@COPY-FILE "NOTS-SERVICE:PROG" (211024:F)NOTS-SERVICE:PROG↵

@RELEASE-DIRECTORY 211024↵

You can then start the S3-CONFIG program by typing:

@S3-CONFIG↵

and follow the instructions (you will also find a description of S3-CONFIG in SINTRAN III Release Information, K-version).

You should at least adjust the number of background processes, spooling programs and ND-500 processes, and set the spooling device numbers and define line printer parameters.

If your system needs any special or local patches, your local (system-specific) patch file should be run at this point.

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If your installation does not include Net/One, you may skip the following two pages.

The Net/One Service Program is a program used by system supervisors on ND machines using Net/One terminal servers.

Before you can connect to ND machines via Net/One, the system supervisor must set the configuration on the ND machine in SINTRAN. This is done in the save or image area for each NOTS (Net/One terminal server) on the machine. In another words, the system supervisor only needs to define the configuration on a machine each time SINTRAN is installed.

The first time you use Net/One, you may use the NOTS-CONFIGUR program manually when you install SINTRAN, for example, just after you give the generate command in the SINTRAN Configuration program, and just before @COLD-START. Here is an example of a first time NOTS installation:

- Install Net/One hardware in ND machine
- Install SINTRAN III/VSX version K, generation 406 and run patch file.
- Use generate command in SIII-Configuration.
- Run NOTS-SERVICE and use save and image areas.
- Do a cold-start.

To be sure that Net/One is configured each time you install SINTRAN, we suggest the following line(s) be included in your HENT-MODE file:

This example assumes that you have 2 controllers (0 & 1), your computer name is ND, you have 2 outgoing lines, no controller bits are set, and you store this info in the save and image areas of SINTRAN:

```
@NOTS-SERVICE set-nots-configuration 0 ND 2 0 SI
@NOTS-SERVICE set-nots-configuration 1 ND 2 0 SI
```

It does not matter where you put this in the HENT-MODE file. A comparable operation might be initialising XMSG, since that only needs to be done each time you install SINTRAN.

The NOTS-Service program has the following commands:

```
EXIT
GET-LINE-INFORMATION
GET-NOTS-CONFIGURATION
RELOAD-NOTS
RESTART-NOTS
SET-NOTS-CONFIGURATION
```

Used from a mode file, all parameters should be given on one line. In interactive use, the program will prompt for each parameter. When a command is completed, the program will exit.

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SET-NOTS-CONFIGURATION <NOTS no.>,<NOTS name>,<no. out. lines>,
<contr. flag>,<area>

Set configuration parameters for a NOTS. Only the image and save areas of SINTRAN III can be changed.

NOTS number : This is the device number of the controller to be configured. It is set by a thumbwheel on the NOTS controller. The numbers start with 0.

NOTS name : This is the name of the ports to be used by network resources (NIU's). Default setting is 'ND'. Normally, you should use the name of your computer (the same name as you use in @CONNECT-TO).

No. of outgoing lines : Specify the number of ports to be reserved for outgoing calls. Such ports are intended for printers and cannot be connected from the network

Controller flag : Flag to set some options for the server.
Bit 0 = 1 : disconnect line on logout.
Bit 1 = 1 : do not set terminal type to 0 when establishing a connection
Bit 2 = 1 : 8-bit I/O on incoming lines.
Bit 3 = 1 : 8-bit I/O on outgoing lines.
Other bits not assigned, should be zero.

Area (S,I) : Update save (S) or image (I) or both (SI).

GET-NOTS-CONFIGURATION <NOTS number>,<area>

List the configuration parameters for a controller. The parameters can be listed for save, image or memory.

GET-LINE-INFORMATION <NOTS number>

This function lists the information about all ports for the specified controller.

RESTART-NOTS <NOTS number>

The restart function can be used to stop all terminals connected to the specified server.

RELOAD-NOTS <NOTS number>

The reload function sends a 'load request' to the network manager, which reloads the controller.
Use RELOAD if you get a new release of the MBNIU software.

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When finished, restart (cold start) the system by typing:

@COLD-START↵

Then do the following:

Enter main directory

Follow the previous routines.

Run the HENT-MODE file by typing:

@MODE↵
INPUT FILE: HENT-MODE:MODE↵
OUTPUT FILE: ↵

5. MODIFICATIONS

A detailed description of new and modified commands and monitor calls is found in the SINTRAN III Release Information, K-version (ND-60.230.4 EN).

5.1 HIGHLIGHTS

- New hardware supported, for example SCSI disks and streamer tape drives and Net/One.
- The ND-500 System Monitor is now a part of SINTRAN III/VSX and is installed together with SINTRAN.
- Systems may now be tailored to fit one particular installation by using a configuration program (S3-CONFIG).
- The number of files for each user may be increased from the previous maximum of 256 to 4096. The limit is set for each user individually, and may be changed in steps of 256 files.
- The commands LIST-FILES, FILE-STATISTICS, COPY, COPY-FILE, APPEND-SPOOLING-FILE, DELETE-SPOOLING-FILE, REMOVE-FROM-SPOOLING-QUEUE and MOVE-SPOOLING-QUEUE-ENTRY may now specify remote files.

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- Reentrant subsystems and ND-500 standard domains may now be protected by command protection in just the same way as commands.
- The default file access when a user is created may now be changed. The same applies to default friend access.
- ND-Net is no longer supported.
- The internal structures of SINTRAN III/VSX are changed considerably to allow larger configurations. The number of segments available has increased considerably.
- Due to the change in the internal structure, private patches will, in general, have to be revised completely.

5.2 COMMANDS REMOVED

- COMMUNICATIONS-LINE-STATUS
- COMMUNICATIONS-STATUS
- LOCAL
- REMOTE
- REMOTE-LOAD
- REMOTE-PASSWORD
- START-COMMUNICATION
- STOP-COMMUNICATION

5.3 MODIFIED COMMANDS

- APPEND-SPOOLING-FILE
The first and second parameters (PERIPHERAL FILE NAME and FILE NAME) may now specify files on remote systems.
- CHANGE-DIRECTORY-ENTRY
The second parameter, DEVICE UNIT, is now always a required parameter.
- COPY
The two parameters may now specify files on remote systems.
- COPY-DEVICE
The two parameters DEVICE UNIT are now always required parameters.

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- COPY-FILE
The two parameters may now specify files on remote systems.
- CREATE-DIRECTORY
The third parameter, DEVICE UNIT, is now always a required parameter.
- DELETE-SPOOLING-FILE
The second parameter (FILE NAME) may now specify a file on a remote system.
- DEVICE-FUNCTION
Subfunction CLEAR-DEVICE is not allowed on floppy disk.
Two new subfunctions, LOAD and RESET-DEVICE, have been introduced for SCSI streamer tapes.
- DUMP-DIRECTORY-ENTRY
The second parameter, DEVICE UNIT, is now always a required parameter.
- ENTER-DIRECTORY
The third parameter, DEVICE UNIT, is now always a required parameter.
- FILE-STATISTICS
The first parameter, FILE NAME, may now specify files on remote systems.
- LIST-DEVICE-FUNCTIONS
A new parameter, COMMAND, is introduced as the first parameter.
- LIST-FILES
The first parameter, FILE NAME, may now specify files on remote systems.
- LIST-TITLE
Information shown is extended to include version, generation and revision level and configuration status.
- LOOK-AT
Changed first parameter (space reference).
- MOVE-SPOOLING-QUEUE-ENTRY
The second and last parameters (FILE NAME and FILE NAME) may now specify files on remote systems.
- RELEASE-DEVICE-UNIT
The second parameter, DEVICE UNIT, is now always a required parameter.

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- REMOVE-FROM-SPOOLING-QUEUE
The second parameter (FILE NAME) may now specify a file on a remote system.
- RENAME-DIRECTORY
The fourth parameter, DEVICE UNIT, is now always a required parameter.
- RENAME-FILE
Files which are open, cannot be renamed.
- RESERVE-DEVICE-UNIT
The second parameter, DEVICE UNIT, is now always a required parameter.
- STOP-TERMINAL
Terminals in 'waiting' or 'escape-off' state may now be stopped.

5.4 NEW COMMANDS

- DEFINE-MASS-STORAGE-UNIT
Define a mass storage device in the directory table.
- DELETE-MASS-STORAGE-UNIT
Delete a definition of a mass storage device from the directory table.
- GIVE-OBJECT-BLOCKS
Make it possible to create more than 256 files for a single user.
- LIST-MASS-STORAGE-UNITS
List all mass storage units and corresponding directory index.
- SET-INITIAL-FILE-ACCESS
Set default file access to be used for all users created.
- SET-INITIAL-FRIEND-ACCESS
Set default friend access to be used for all users created.
- TAKE-OBJECT-BLOCKS
Restricts the number of files for a single user.
- UNLOCK-DIRECTORY
Unlock a directory which was entered but not released on an other system.

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5.5 MODIFIED MONITOR CALLS

- WCI MON 20
Changed error return.
- N500M MON 60
Several new functions to support the ND-5000 systems.
- ABSTR MON 131
The restriction that parameters had to reside on PIT 0 is removed. In function 43 (read format table) and 44 (write format table), the third parameter (disk address) is changed. Some functions now support SCSI streamer tape drives.
- MAGTP MON 144
Function 21 (clear device) is only allowed from RT-programs running on hardware protection ring 2.
- ENTSG MON 157
MON ENTSG (MON 157) has been changed to "remember" which segments are entered and reenter these after a power fail restart.
- DEBUG MON 205
Functions for multi-segment debugger have been added to this monitor call.
- APSPF MON 240
The parameters containing file name to be appended to spooling file (pointed to by the X-register), and peripheral file (pointed to by the A-register), may now contain remote file specification.
- SUSCN MON 241
If originally logged in as user RT, it is no longer possible to set user context to user SYSTEM.
- DEABF MON 256
The parameters containing abbreviated file name (pointed to by the X-register), and full file name (pointed to by the A-register), may now contain remote file specification.
- CPUT MON 262
The ND-110/CX CPU is now supported and some new values are returned.
- GDEVT MON 263
Net/One and MTAD devices are now supported and some new values are returned.
- MLAMU MON 315
Two new function, functions 9 and 10 are introduced.

Product	Name	Category
	SINTRAN III/VSX version K generation 406	STPR

- FSMTY MON 327
Three new functions introduced: 2 (return block size), 3 (get file name) and 4 (get file/device information)
- UDMA MON 333
Function 62 (Wait on interrupt/DMA finish) now has two new subfunctions.
- IOPTY MON 336;
MON IOPTY is totally revised.

5.6 NEW MONITOR CALLS

- RSREC MON 340
Read system record (RT-description or Segment table entry).
- SGMTY MON 341
MON SGMTY is used to change the active segments of a program and/or the page index tables.
- ADP MON 342
MON ADP is reserved for internal use by ND.
- CONFIG MON 343
MON CONFIG is used to read and/or change configuration parameters for a "standard system" SINTRAN III.
- PERFO MON 344
MON PERFO is used for performance measurements. Only available in generation 301 and later, but NOT in generation 406.
- MTAD MON 345
MON MTAD is used for handling Mailbox Terminal Devices. It is intended to be used from the MTAD library (ND-250222).
- 5MTRANS MON 515
MON 5MTRANS is used for fast disk transfer from the ND-500. Only available in generation 301 and later.

5.7 SINTRAN-SERVICE-PROGRAM

Changes and new commands in the SINTRAN-SERVICE-PROGRAM are found in the SINTRAN III Release Information, K-version (ND-60.230.4 EN).

5.8 RT-LOADER

Changes to the RT-Loader are found in the SINTRAN III Release Information, K-version (ND-60.230.4 EN).

ND SOFTWARE LIBRARY DISKETTE

PAGE 1

Containing :
SINTRAN III Configuration Program

Directory Name :
211024C01-XX-01S

User Name : FLOPPY-USER

No	File name	Type T	Public	Friend	Own	Pages	Bytes
0	S3-CONFIG-C00	PROG I	R	R	R	90	184320
1	DDBTABLES-E07	VTM I	R	R	R	17	32448
2	files using 107 pages. 148 pages reserved out of 148 pages.						

ND SOFTWARE LIBRARY DISKETTE

PAGE 1

Containing :
SINTRAN III Configuration Program

Directory Name :
211024C01-XX-02S

User Name : FLOPPY-USER

No	File name	Type	T	Public	Friend	Own	Pages	Bytes
0	NOTS-SERVICE-C00	PROG	I	R	R	R	52	86016
1	file using 52 pages. 148 pages reserved out of 148 pages.							

ND SOFTWARE LIBRARY DISKETTE

PAGE 1

Containing :
SINTRAN III Configuration Program

Directory Name :
211024C01-XX-01D

User Name : FLOPPY-USER

No	File name	Type T	Public	Friend	Own	Pages	Bytes
0	S3-CONFIG-C00	PROG I	R	R	R	90	184320
1	DDBTABLES-E07	VTM I	R	R	R	17	32448
2	NOTS-SERVICE-C00	PROG I	R	R	R	52	86016
3	files using 159 pages. 610 pages reserved out of 610 pages.						

Product	Name SINTRAN III Configuration program	Reg. no. 211024C	Category STPR
Reason	. New product X Change/Addition . Other: Error Correction . Different Environment		
Documentation	Title SINTRAN III System Supervisor SINTRAN III K Release Information	ND-no. ND-30.003.7 ND-60.230.4	
Purpose	Configuration of SINTRAN III-VSX (version K or later).		
Prerequisites	Computer Type Floating format Op. system Version	All All All SINTRAN III VSX >= K	
	Minimum permanent mass storage resources	User Userspace Number of files SYSTEM 155 pages on 3 files	
		ND-no. for Source 250165C	
File Name	Type	Containing	
S3-CONFIG-C<rev>	PROG	Configuration program.	
DDBTABLES-E07	VTM	VTM terminal tables.	
NOTS-SERVICE-B<rev>	PROG	NOTS Service program.	

1 NOTE:

<rev> is to be replaced by the current revision of the DIRECTORY or FILE. Revision is found on the "ND SOFTWARE LIBRARY DISKETTE" pages.

2 MODIFICATIONS

The NOTS-Service program is now included as a part of this product. It is only needed for customers connecting to ND machines via Net/One terminal servers (NOTS).

2.1 NEW COMMANDS

SCSI: Is used to initiate SCSI-disks.

3 INSTALLATION PROCEDURE

Product	Name	Reg. no.	Category
	SINTRAN III Configuration program	211024C	STPR

4 Installation together with SINTRAN

If this program is installed together with SINTRAN III VSX version K, it will be done by the program NEW-SYSTEM, which is run during installation of SINTRAN.

5 Separate installation

Log in as user SYSTEM. make sure that user SYSTEM has enough files and disk space. Put the diskette into a diskette drive. Enter the directory:

```
@ENTER-DIRECTORY↓  
DIRECTORY NAME: 211024C<rev>-XX-01↓  
DEVICE NAME: FLOPPY-DISC-<drive-no.>,<floppy-unit>↓
```

Copy the configuration program to disk:

```
@COPY-FILE↓  
DESTINATION FILE: "S3-CONFIG-C<rev>:PROG"↓  
SOURCE FILE: (211024C:FLOPPY-USER)S3-CONFIG-C:PROG↓
```

Remember to delete the old S3-CONFIG-A/B, because the C-version have a new datastructure in the configuration file.

If your system does not already have a file called DDBTABLES-D:VTM nor DDBTABLES-E:VTM you must also copy it from the diskette:

```
@COPY-FILE↓  
DESTINATION FILE: "DDBTABLES-E07:VTM"↓  
SOURCE FILE: (211024C:FLOPPY-USER)DDBTABLES-E07:VTM↓
```

The configuration program is now completely installed.

If you have Net/One terminal server controllers in your ND machine, you need to install the NOTS-Service program:

```
@COPY-FILE↓  
DESTINATION FILE: "NOTS-SERVICE-C<rev>:PROG"↓  
SOURCE FILE: (211024C:FLOPPY-USER)NOTS-SERVICE-B:PROG↓
```

ND SOFTWARE LIBRARY DISKETTE

PAGE 1

Containing :
SINTRAN III/VSX Patchfile
Patch level 007300
(211291K07-30-01S)

Directory Name :
ND-PATCH-SIN-K

User Name : SYSTEM

No	File name	Type T	Public	Friend	Own	Pages	Bytes
0	NEW-SYSTEM	PROG C	RWACD	RWA	RWACD	21	43008
1	START-PATCH-FILE	MODE C	RWACD	RWA	RWACD	2	1771
2	PATCH-FILE	MODE C	RWACD	RWA	RWACD	3	4639
3	SYMBOLS	FADM C	RWACD	RWA	RWACD	1	27
4	PATCHES	PATC I	RWACD	RWA	RWACD	110	221526
5	REFERENCE	FADM I	RWACD	RWA	RWACD	5	7781

6 files using 142 pages. 148 pages reserved out of 610 pages.

ND SOFTWARE LIBRARY DISKETTE

PAGE 1

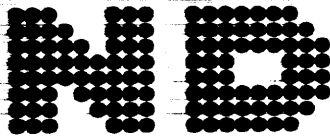
Containing :
SINTRAN III/VSX Patchfile
Patch level 007300
(211291K07-30-01D)

Directory Name :
ND-PATCH-SIN-K

User Name : SYSTEM

No	File name	Type T	Public	Friend	Own	Pages	Bytes
0	NEW-SYSTEM	PROG C	RWACD	RWA	RWACD	21	43008
1	START-PATCH-FILE	MODE C	RWACD	RWA	RWACD	2	1771
2	PATCH-FILE	MODE C	RWACD	RWA	RWACD	3	4639
3	SYMBOLS	FADM C	RWACD	RWA	RWACD	1	27
4	PATCHES	PATC I	RWACD	RWA	RWACD	110	221526
5	REFERENCE	FADM I	RWACD	RWA	RWACD	5	7781

6 files using 142 pages. 148 pages reserved out of 610 pages.



Norsk Data A.S

MEMO

To: Sintran III support personell
From: HML, Tech.Support, System.
Date: 25 March 1988
Subject: PATCH-SIN-K-7300 VSX.

Attached is the latest patch-file for systems running Sintran III K-version, PATCH-SIN-K-7300, containing reports of type fatal according to the attached cross-reference list.

This patch-file can only be installed on VSX-systems.

Regards
Hans Magnus Løbakk (HML)
Tech. Support, Skullerud.

--ooTECHNICAL SUPPORToo--

Listed below are changes since Patch File 005400

Report no: 387
Program: WM406
Subject: Error in monitor call MAPAREA (M0440) if function 1
and 2 from ND5000.
Symptom: Name pool of attach segment names wasn't updated.
Failure to return physical segment number if using
existing segment name.

Report no: 375
Program: VSX/500/5000
Subject: Error in MON MAPAREA (M0440), function 1 from ND500.
Symptom: Incons. info in swappers segment table if no. of
processes using the segment is more than 1.

Report no: 368
Program: VSX/500/5000
Subject: Initialisation of ND-500 after 'STOP-ND-500' command.
Symptom: The ND-500 message buffer will not be initialised. If
the message buffer area has been used for swapping,
this will lead to different symptoms when starting up
ND-500.

Report no: 367
Program: WM406
Subject: Error in N500(0) restart from nowait.
Symptom: Permit Violation in write protected segments. (1
location in mess. buffer bank was zeroed, can lead to
many symptoms)

Report no: 361 B
Program: VSX/500(0)
Subject: Monitor call MAPAREA (M0440) function 1 from ND500.
(Protect violation in Nortext 500)
Symptom: Error code 1003B Error in monitor call. Failure to
return segment number if using existing physical
segment. (18th Nortext 500 user returns Protect
Violation on <JUST>).

Report no: 358
Program: VSX/5000 (WM406)
Subject: Error in DELETE-STANDARD-DOMAIN if common segments.
Symptom: "Illegal physical segment" or "error in monitor call"
when place other domains afterwards.

Report no: 356
Program: VSX/500
Subject: Error in routine SGBUILD when error return.
Symptom: Errcode returned was the physical segment no which was
connected, instead of correct error code.

Report no: 350
Program: ALL
Subject: Cosmos script-files on certain TAD's.
Symptom: The TAD will not be disconnected correctly, background
program will loop.

Report no: 348
Program: ALL
Subject: Escape while using SIBAS.
Symptom: SIBAS-semaphores (DIAnn) will not be released, and all
other terminals using SIBAS will hang.

Software System Reports included

Report no: 347
Program: ALL
Subject: Error in allocation of Device Buffers for special use.
Symptom: 1.File system pages overwritten on disk. 2.Wrong
spooling output. 3.Programs waiting for a DB which is
not later released.

Report no: 345 B
Program: ALL
Subject: Hanging TAD's (ISIZE,ESCAPE)
Symptom: TAD's are hanging when ESC is typed or MON ISIZE is
used.

Report no: 344
Program: VSX/500
Subject: Error in XMSG monitor call from ND500.
Symptom: Function code in XMSG could be overwritten by another
proces Diff. symptoms like: "No default
message", "Illegal port no".

Report no: 337
Program: ALL
Subject: @START-SPOOLING
Symptom: Gives error message NO SPOOLING FOR THIS DEVICE, when
trying to start spooling on a special configured
Sintran.

Report no: 336
Program: CSX/500
Subject: Monitor call MAPAREA (Mo440), function 2 from ND500.
Symptom: Segment attached with MO440 couldn't map more than
1MB.

Report no: 333
Program: VSX
Subject: Restart after powerfail when using 140MB/2-70MB disk.
Symptom: DISK-TRANSFER-ERROR after restart.

Report no: 331 B
Program: ALL
Subject: Missing carrier on terminal interfaces while
characters still are present in buffer.
Symptom: MON INBT will result in error code 316 (terminal line
not connected) even if there are characters in the
buffer, read while the carrier was up. Some programs
will loop.

Report no: 328
Program: all
Subject: Error in remote MAGTP
Symptom: If several filesystem functions are already activated
when copying to a remote magtape with the backup-
system,ir-relevant error messages may appear.

Report no: 327
Program: ALL
Subject: Wrong status on function 36 in ABSTR/MAGTP on magtape.
Symptom: The BACKUP-SYSTEM is unable to differentiate between
STC and PERTEC interfaces on magtape.

Report no: 320
Program: VSX
Subject: Sector address field is overwritten on disk.
Symptom: DISK TRANSFER ERROR AND ADDRESS MISMATCH ON DISK With
STATUS=50431

Software System Reports included

Report no: 319 B
Program: All
Subject: Gpib driver, more flexible defining of PRIVILEGE-USER
(Modification patch).
Symptom: None.

Report no: 318
Program: All
Subject: Lamu's connected when @LOGOUT (also after @STOP-TERM,
or timeout after NO ACTIVITY ON THIS TERMINAL)
Symptom: If bit 1 (7ZMEMORY) in EXSECUR is set, and a Lamu is
con-nected when logging out. The contents of the Lamu
is set to ZERO.

Report no: 301 B
Program: ALL
Subject: MON IOSET to mag. tape, floppy, versatec, and line
printer.
Symptom: Various: system hang, device buffer header links
destroyed, DUMMY taken out of execution queue, etc.

Report no: 291 D
Program: VSX/500/5000
Subject: 1. Escape while starting ND-500 the very first time.
2. Powerfail ND 5000
Symptom: 1. System looping on level 1, and various other
symptoms. 2. Auto-restart after powerfail didn't work.
ND 100 started but ND 5000 processes did not continue.

Report no: 282 B
Program: VSX/500/5000
Subject: ABORT-PROCESS command in ND-500 monitor.
Symptom: ABORT-PROCESS in erroneously allowed for public users.

Report no: 265 C
Program: VSX/500/5000
Subject: ND-500 Monitor command INSERT-IN-TIME-SLICE.
Symptom: Error ILLEGAL PARAMETER when trying to insert into one
of classes 8-15.

Report no: 262 B
Program: VSX
Subject: Two WINCHESTER discs on different controller
Symptom: System hangs when using the second controller

Report no: 248 B
Program: VSX
Subject: Unable to use LASTC monitor call from a background
program unless user is SYSTEM.
Symptom: Error return even if device is reserved by caller.

Report no: 230 C
Program: ALL
Subject: RT-loader command DELETE-PROGRAM
Symptom: In certain cases the system will stop. This happens if
the program to be deleted is in RTwait or in the time
queue, and has reserved an ND500 process

Report no: 192 E
Program: ALL
Subject: 1. MON LOGIN when UE login is enabled. 2. @UE-
AUTOMATIC-LOGIN
Symptom: 1. The program trying to log in a terminal goes into
waiting state for 1 minute, but the terminal is not
logged in. 2. System 'hang', or other strange symptoms

Software System Reports included

Report no: 179 B
Program: SIN-K
Subject: The error lamp at the upper memory module will always
be lit when sintran-k is starting
Symptom: The upper memory module lamp will always be lit

Report no: 177 F
Program: VSX
Subject: Fast disk access from ND-500 swapper.
Symptom: Disk access from ND-500 may hang now and then. This
can cause a situation in which a deadlock occurs.

Report no: 172 B
Program: VSX/500(0)
Subject: Monitor call CLOSE (43B) from ND-500 if the file is
opened for direct access and conected as a segment.
Symptom: 1. Error fatal on level 2 2. Different hang situtation

Report no: 162 I
Program: ALL
Subject: Remote file access from RT-programs.
Symptom: 1. File access from RT-programs ceases to work after a
while. 2. System loops on user level.

Report no: 123 D
Program: All
Subject: Using Symbolic Debugger on programs connected to
LAMUS.
Symptom: When a breakpoint is reached, LAMU is still enabled
and the debugger may execute code in LAMU with garbled
results.

Report no: 116 D
Program: All
Subject: The monitor calls COMND (MON 70) and UECOM (MON 317)
called with a LAMU connected.
Symptom: Some commands do not work properly.

Report no: 60 C
Program: VSX/500/5000
Subject: Moving SINTRAN with ND-500, which is initialized on an
ND-100, to a ND-500 without executing a COLD-START.
Symptom: System loops on level 1.

Patch File 007300

Report no: 22 G

Program: VSX

Subject: Disk transfers from ND-500 Swapper.

Symptom: Less load on ND-100 CPU for each disk transfer from
the ND-500 Swapper.

X-origin....Patch File
Y-origin....Software System Report (SSR)
>.....SSR-revision

```

: 0 : 0 : 0 : 0 : 0 : 0 : 0 : : : : : : : : : : :
: 0 : 0 : 0 : 0 : 0 : 0 : 0 : : : : : : : : : : :
: 1 : 2 : 3 : 4 : 5 : 5 : 7 : : : : : : : : : : :
: 3 : 3 : 3 : 1 : 3 : 4 : 3 : : : : : : : : : : :
: 0 : 0 : 0 : 0 : 0 : 0 : 0 : : : : : : : : : : :
: 0 : 0 : 0 : 0 : 0 : 0 : 0 : : : : : : : : : : :
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196 : : : : A :>B : B : B : : : : : : : : : : :
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197 : : : : A : A : A : A : : : : : : : : : : :
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198 : : : : A : A : A : A : : : : : : : : : : :
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199 : : : : A : A : A : A : : : : : : : : : : :
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200 : : : : A : A : A : A : : : : : : : : : : :
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201 : : : : B : B : B : B : : : : : : : : : : :
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202 : : : : C :>D : D : D : : : : : : : : : : :
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205 : : : : A : A : A : A : : : : : : : : : : :
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206 : : : : A : A : A : A : : : : : : : : : : :
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209 : : : : A : A : A : A : : : : : : : : : : :
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210 : : : : A : A : A : A : : : : : : : : : : :
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211 : : : : A :>B : B : B : : : : : : : : : : :
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212 : : : : A : A : A : A : : : : : : : : : : :
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213 : : : : A :>B : B : B : : : : : : : : : : :
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215 : : : : A : A : A : A : : : : : : : : : : :
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216 : : : : A : A : A : A : : : : : : : : : : :
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217 : : : : A : A : A : A : : : : : : : : : : :
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218 : : : : A :>B : B : B : : : : : : : : : : :
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219 : : : : A : A : A : A : : : : : : : : : : :
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220 : : : : A : A : A : A : : : : : : : : : : :
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221 : : : : A : A : A : A : : : : : : : : : : :
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223 : : : : A : A : A : A : : : : : : : : : : :
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224 : : : : A : A : A : A : : : : : : : : : : :
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225 : : : : A : A : A : A : : : : : : : : : : :
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```

X-origin....Patch File
Y-origin....Software System Report (SSR)
>.....SSR-revision

: 0 : 0 : 0 : 0 : 0 : 0 : 0 : : : : : : : : : : : : :
: 0 : 0 : 0 : 0 : 0 : 0 : 0 : : : : : : : : : : : : :
: 1 : 2 : 3 : 4 : 5 : 5 : 7 : : : : : : : : : : : : :
: 3 : 3 : 3 : 1 : 3 : 4 : 3 : : : : : : : : : : : : :
: 0 : 0 : 0 : 0 : 0 : 0 : 0 : : : : : : : : : : : : :
: 0 : 0 : 0 : 0 : 0 : 0 : 0 : : : : : : : : : : : : :

285 : : : : : A : A : A : : : : : : : : : : : : :

286 : : : : : C : C : C : : : : : : : : : : : : :

287 : : : : : A : A : A : : : : : : : : : : : : :

288 : : : : : A : A : A : : : : : : : : : : : : :

290 : : : : : A : A : A : : : : : : : : : : : : :

291 : : : : : B :>C :>D : : : : : : : : : : : : :

292 : : : : : A : A : A : : : : : : : : : : : : :

293 : : : : : A : A : A : : : : : : : : : : : : :

294 : : : : : A : A : A : : : : : : : : : : : : :

297 : : : : : A : A : A : : : : : : : : : : : : :

298 : : : : : B : B : B : : : : : : : : : : : : :

299 : : : : : A : A : A : : : : : : : : : : : : :

300 : : : : : A :>B : B : : : : : : : : : : : : :

301 : : : : : A : A :>B : : : : : : : : : : : : :

302 : : : : : A : A : A : : : : : : : : : : : : :

303 : : : : : A : A : A : : : : : : : : : : : : :

304 : : : : : A : A : A : : : : : : : : : : : : :

305 : : : : : A :>B : B : : : : : : : : : : : : :

306 : : : : : A : A : A : : : : : : : : : : : : :

307 : : : : : A : A : A : : : : : : : : : : : : :

308 : : : : : A : A : A : : : : : : : : : : : : :

309 : : : : : A : A : A : : : : : : : : : : : : :

310 : : : : : A : A : A : : : : : : : : : : : : :

311 : : : : : A :>B : B : : : : : : : : : : : : :
