



Program Directory for Network Terminal Option (NTO)

Release 11

Program Number 5735-XX7

FMID HNT1B05

for Use with
MVS/ESA
OS/390

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Note!

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1.0 Introduction

This program directory is intended for the system programmer responsible for program installation and maintenance. It contains information concerning the material and procedures associated with the installation of NTO R11 MVS. You should read all of this program directory before installing the program, and then keep it for future reference.

This program directory contains the following sections:

- 2.0, "Program Materials" on page 3 identifies the basic and optional program materials and documentation for NTO R11 MVS.
- 3.0, "Program Support" on page 7 describes the IBM* support available for NTO R11 MVS.
- 4.0, "Program and Service Level Information" describes the (program and service level) information incorporated into NTO R11 MVS.
- 5.0, "Installation Requirements and Considerations" on page 11 identifies the resources and considerations for installing and using NTO R11 MVS.
- 6.0, "Installation Instructions" on page 15 provides detailed installation instructions for NTO R11 MVS.
- Appendix A, "Installation Logic" on page 25 provides the installation logic for NTO R11 MVS.
- Appendix B, "APARs Incorporated into this Program" on page 27 provides a list of APARs incorporated into this product.

Before installing NTO R11 MVS, read 3.2, "Preventive Service Planning" on page 7. This section tells you how to find any updates to the information and procedures in this program directory.

IBM recommends that you use an OS/390 ServerPac to install this level of NTO. If you use a ServerPac, you get the service integrated in the product. ServerPac is available at no additional charge when you have an OS/390 license.

Do not use this program directory if you are installing NTO R11 MVS with an MVS Custom-Built Installation Process Offering (CBIPO), SystemPac, or ServerPac. When using these offerings, use the jobs and documentation supplied with the offering. This documentation may point you to specific sections of the program directory as required.

If you are installing NTO R11 MVS using the MVS Custom-Built Product Delivery Offering (CBPDO) (5751-CS3), use the softcopy program directory provided on the CBPDO tape. Your CBPDO contains a softcopy preventive service planning (PSP) upgrade for this product. All service and HOLDDATA for NTO R11 MVS are included on the CBPDO tape.

To facilitate the installation of NTO R11 MVS, all JCL statements that appear in this program directory are also in machine-readable format on the product tape. The JCL is contained in Relative File 3, DLIB=ANCP5AMP, MEMBER=CXNINJCL. The JCL to unload the installation JCL is in 6.1.3, "Unload the Sample JCL from the Product Tape" on page 15.

In the JCL examples shown in this program directory, all occurrences of lowercase variables must be changed to the appropriate uppercase values in order for the JCL to execute properly.

At the end of this program directory you will find a Reader's Comment Form. Please take the time to complete this form and return it to the address shown on the form. Your comments and suggestions help improve this program directory and make installation easier.

1.1 NTO R11 MVS FMIDs

NTO R11 MVS consists of FMID HNT1B05.

2.0 Program Materials

An IBM program is identified by a program number and a feature number. The program number for NTO R11 MVS is 5735-XX7.

Basic Machine-Readable Materials are materials that are supplied under the base license and feature code, and are required for the use of the product. Optional Machine-Readable Materials are orderable under separate feature codes, and are not required for the product to function.

The program announcement material describes the features supported by NTO R11 MVS. Ask your IBM representative for this information if you have not already received a copy.

The following sections identify:

- Basic and optional program materials available with this program
- Program publications
- Program source materials
- Publications associated with this program
- Publications useful during installation

2.1 Basic Machine-Readable Materials

The distribution medium for this program is a 9-track magnetic tape (written at 6250 BPI), a 3480 cartridge, or a 4 mm cartridge. The tape or cartridge contains all the programs and data needed for installation. NTO R11 MVS is installed using SMP/E and is in SMP/E RELFILE format. See section 6.0, "Installation Instructions" on page 15 for more information about how to install NTO R11 MVS.

Figure 1 describes the tape or cartridge.

Notes:

1. If you are installing NTO R11 MVS using the MVS Custom-Built Product Delivery Offering (CBPDO) (5751-CS3), some of the information in these figures may not be valid. Consult the CBPDO documentation for actual values.
2. The program tape and cartridge contain "Restricted Material of IBM".

Figure 1. Basic Material: Program Tape

Medium	Feature Number	Physical Volume	External Label Identification	VOLSER
6250 tape	7402	1	MVS HNT1B05	NT1B05
3480 cart.	7403	1	MVS HNT1B05	NT1B05
4 mm cart.	5709	1	MVS HNT1B05	NT1B05

Figure 2 on page 4 describes the file content of the program tape or cartridge.

Figure 2. Program Tape: File Content

VOLSER	File	Name	Dist. Lib.	RECFM	LRECL	BLK SIZE
NT1B05	1	SMPMCS		FB	80	6400
NT1B05	2	IBM.HNT1B05.F1	AMACLIB (JCLIN)	FB	80	8800
NT1B05	3	IBM.HNT1B05.F2	ACXNMOD1 ANCPMOD1	U	0	6144
NT1B05	4	IBM.HNT1B05.F3	ANCPMAC1 ANCPSTAMP	FB	80	8800

2.2 Optional Machine-Readable Materials

There are no optional machine-readable materials for NTO R11 MVS.

2.3 Program Publications

The following sections identify the basic and optional publications for NTO R11 MVS.

2.3.1 Basic Program Publications

Figure 3 identifies the basic program publications for NTO R11 MVS. One copy of each publication is included when you order the basic material for NTO R11 MVS. For additional copies, contact your IBM representative.

Figure 3. Basic Material: Program Publications

Publication Title	Form Number
Network Terminal Option Planning, Migration, and Resource Definition	SC30-3347
Network Terminal Option Licensed Program Specifications	GC38-0299

2.3.2 Optional Licensed Program Publications

Figure 4 identifies the optional licensed program publications for NTO R11 MVS. The first copy is available at no charge to licensees of the basic material by ordering the 7xxx Feature Number. Order additional copies using the 8xxx feature number. A fee is charged for additional copies.

Figure 4. Optional Material: Licensed Program Publications

Publication Title	Form Number	Feature Number First Copy	Feature Number Additional Copy
Network Terminal Option Diagnosis	LY30-3194	7046	8323

2.3.3 Publications Associated with NTO R11 MVS

Figure 5 lists publications that may be helpful when you use this program. To order copies, contact your IBM representative. A fee is charged for each publication.

Figure 5. Publications Associated with NTO R11 MVS

Publication Title	Form Number
Planning for NetView, NCP, and VTAM	SC31-8063
Planning for Integrated Networks	SC31-8062

2.4 Program Source Materials

Microfiche is not provided with NTO R11 MVS.

Customers with access to View Program Listings (VPL), such as through S/390 SoftwareXcel, can use the VPL facility for online viewing of available program listings. Those customers without access to VPL can contact their IBM representative.

2.5 Publications Useful During Installation

The publications listed in Figure 6 may be useful during the installation of NTO R11 MVS. To order copies, contact your IBM representative. A fee is charged for each publication.

Figure 6 (Page 1 of 2). Publications Useful During Installation

Publication Title	Form Number
MVS Software Manufacturing Offerings General Information	GC23-0351
MVS/ESA JCL Reference	GC28-1829
MVS/ESA JCL User's Guide	GC28-1830
MVS/ESA System Codes	GC28-1815
MVS/ESA System Messages, Volume 1	GC28-1812
MVS/ESA System Messages, Volume 2	GC28-1813
OS/390 MVS JCL Reference	GC28-1757

Figure 6 (Page 2 of 2). Publications Useful During Installation

Publication Title	Form Number
OS/390 MVS JCL User's Guide	GC28-1758
OS/390 MVS System Codes	GC28-1780
OS/390 MVS System Messages, Vol 1 (ABA-ASA)	GC28-1784
OS/390 MVS System Messages, Vol 2 (ASB-EWX)	GC28-1785
OS/390 MVS System Messages, Vol 3 (GDE-IEB)	GC28-1786
OS/390 MVS System Messages, Vol 4 (IEC-IFD)	GC28-1787
OS/390 MVS System Messages, Vol 5 (IGD-IZP)	GC28-1788
OS/390 SMP/E Commands	SC28-1805
OS/390 SMP/E Messages and Codes	SC28-1738
OS/390 SMP/E Reference	SC28-1806
OS/390 SMP/E User's Guide	SC28-1740
SMP/E: Messages and Codes	SC28-1108
SMP/E: Reference Guide	SC28-1107
SMP/E: User's Guide	SC28-1302

3.0 Program Support

This section describes the IBM support available for this program.

3.1 Program Services

Contact your IBM representative for specific information about available program services.

3.2 Preventive Service Planning

Before installing NTO R11 MVS, you should review the current Preventive Service Planning (PSP) information. If you obtained NTO R11 MVS as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO tape.

If you obtained NTO R11 MVS on a product tape, or if the CBPDO is more than two weeks old when you install it, you should contact the IBM Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

PSP Buckets are identified by UPGRADEs, which specify product levels, and SUBSETs, which specify the FMIDs for a product level. The UPGRADE and SUBSET values for NTO R11 MVS are:

Figure 7. PSP Information

UPGRADE	SUBSET	Description
NT01B0	HNT1B05	NT0 R11 MVS

3.3 Statement of Support Procedures

For help with problem determination and problem source identification, refer to *Network Control Program, System Support Programs, and Emulation Program Diagnosis Guide* and the *Network Terminal Option Diagnosis*. Report any difficulties you have using this program to your IBM Support Center.

Figure 8 identifies the component ID (COMPID) and RETAIN Release for NTO R11 MVS.

Figure 8. Component IDs

FMID	COMPID	Component Name	REL
HNT1B05	5735XX700	NT0 R11 MVS	B05

4.0 Program and Service Level Information

This section identifies the program and service level information for NTO R11 MVS. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated into the product. Information about the cumulative service tape is also provided.

4.1 Program Level Information

See Appendix B, "APARs Incorporated into this Program" on page 27 for a list of APAR fixes against previous releases of NTO incorporated into this product.

4.2 Service Level Information

No PTFs against this release of NTO have been incorporated into the product tape.

4.3 Cumulative Service Tape

A cumulative service tape, containing PTFs not incorporated into this release, might be included with this program. Installation instructions for cumulative service tapes can be found in the SMP/E publications.

If you received this product as part of a CBPDO or a ProductPac, PTFs not incorporated into this release are provided on the tape, and a separate cumulative service tape will not be provided.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing NTO R11 MVS. The following terminology is used:

- *Driving system*: the system used to install the program.
- *Target system*: the system on which the program is installed.

In many cases, the same system can be used as both a driving system and a target system.

5.1 Driving System Requirements

This section describes the environment of the driving system required to install NTO R11 MVS.

5.1.1 Operating System Requirements

The operating system requirements are defined by SSP V4R7 MVS licensed program number 5655-041.

5.1.2 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

5.1.3 Programming Requirements

Figure 9. Driving System Software Requirements

Program Number	Product Name and Minimum VRM/Service Level
5668-949	System Modification Program/Extended (SMP/E) Release 8.1 or higher

A platform-dependent BookManager product is required to display softcopy publications on CD-ROM. Limited function DOS, Windows, and OS/2 versions of these products are available on your CD-ROM. For more information or to order full-function releases of these products, or MVS versions, refer to the IBM BookManager home page at <http://booksrv2.raleigh.ibm.com>.

5.2 Target System Requirements

This section describes the environment of the target system required to install and use NTO R11 MVS.

5.2.1 Machine Requirements

This program operates on any IBM 3745 Communication Controller.

5.2.2 Programming Requisites

5.2.2.1 Minimum Requisites:

A minimum requisite is defined as one of the following:

- *Installation Requisite:* A product that is required at installation time. i.e. this product **will not install** successfully unless this requisite is met. This includes products that are specified as REQs, PREs, or CALLLIBs.
- *Run Time Requisite:* A product that is **not** required for the successful installation of this product, but **is** needed at run time in order for this product to work.

NCP V7R7 is required to operate this program.

SSP V4R7 is required to generate this program.

Figure 10. Minimum Requisites

Program Number	Product Name and Minimum VRM/Service Level	Install Req?
5655-041	System Support Program Version 4 Release 7	No
5648-063	Network Control Program Version 7 Release 7	Yes

5.2.2.2 Functional Requisites:

A functional requisite is defined as a product that is *not* required for the successful installation of this product or for the base function of the product, but one or more of the products *may be* needed at run time for a specific function of this product to work depending upon the specific customer installation.

There are no functional requisites required.

5.2.2.3 Compatibility Requisites:

There are no compatibility requisites required.

5.2.2.4 Toleration/Coexistence Requisites:

There are no toleration/coexistence requisites required.

5.2.2.5 Incompatibility (Negative) Requisites:

There are no incompatible products associated with this product.

5.3 DASD Storage Requirements

Space requirements for SMP/E libraries (data sets) must take into consideration other programs that may use these libraries. The following products share data sets:

- NCP V7R7
- EP R14
- NTO R11
- NRF R9
- NTuneMON V2R5

Note: Abbreviations used for the data set type are:

- U** Unique data set used by only the FMIDs listed. In order to determine the correct storage needed for this data set, this table provides all required information; no other tables (or program directories) need to be referenced for the data set size.
- S** Shared data set used by more than the FMIDs listed. In order to determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other program directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old one and reclaim the space used by the old release and any service that had been installed. You can determine whether or not these libraries have enough space by deleting the old release with a dummy function, compressing the libraries, and comparing the space requirements with the free space in the libraries.

For more information on the setup of the SMP/E environment, refer to the NCP V7R7 MVS Program Directory.

NCP, EP, NTO, NRF, and NTuneNCP share target and distribution libraries (data sets). If you install these products, you must allocate additional space for these data sets. Refer to the appropriate program directories for storage requirements for these products.

The storage requirements of this program must be added to the storage required by other programs having data in the same data set (library). An estimate of the required space is the data set's current allocation plus the storage required by this program.

For more information on the names and sizes of the required data sets, please refer to 6.1.4, "Allocate SMP/E Target and Distribution Libraries" on page 16.

The following figures list the target and distribution libraries (data sets) and their attributes required to install NTO R11 MVS. The storage requirements of NTO R11 MVS must be added to the storage required by other programs having data in the same data set (library).

Figure 11. Storage Requirements for NTO R11 MVS Target Libraries

Library DDNAME	T Y P E	D S O R G E M	R E C F M	L R E C L	No. of Blks	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR Blks
SCXNMOD1	S	PO	U	0	24	6144	4	3	1
SNCPMAC1	S	PO	FB	80	52	8800	11	9	3
SNCPMOD1	S	PO	U	0	98	6144	14	11	17

Figure 12. Storage Requirements for NTO R11 MVS Distribution Libraries

Library DDNAME	T Y P E	D S O R G E M	R E C F M	L R E C L	No. of Blks	BLK SIZE	No. of 3380/ 9345 Trks	No. of 3390 Trks	No. of DIR Blks
ACXNMOD1	S	PO	U	0	50	6144	8	6	9
ANCPMAC1	S	PO	FB	80	52	8800	11	9	3
ANCPMOD1	S	PO	U	0	98	6144	14	11	17
ANCP SAMP	S	PO	FB	80	3	8800	1	1	1

5.4 FMIDs Deleted

Please see the SMPMCS file in Appendix A for the FMIDs deleted by NTO R11 MVS.

5.5 Special Considerations

NTO R11 MVS has no special considerations for the target system.

6.0 Installation Instructions

This section describes the installation method and the step-by-step procedures to install NTO R11 MVS.

6.1 Installing NTO R11 MVS

6.1.1 SMP/E Considerations for Installing NTO R11 MVS

This release of NTO R11 MVS is installed using the SMP/E RECEIVE, APPLY, and ACCEPT commands. The SMP/E dialogs may be used to accomplish the SMP/E installation steps.

6.1.2 SMP/E Environment

All SMP/E installation jobs provided assume that all necessary DD statements for the execution of SMP/E are defined using DDDEFs.

Sample jobs are provided to assist you in installing NTO R11 MVS. The JCL samples in this section use lowercase character strings to represent items that must be changed to uppercase names for your specific environment. Figure 13 provides a description of each character string.

Figure 13. Character String Descriptions

Character string	Description
xxxxxx	Volume ID of the library pack
ncpzxxx	High-level qualifier for data sets
ncptgt	SMP/E target zone used for NCP
ncpdlib	SMP/E distribution zone used for NCP
tape	Tape unit type

Notes:

1. The SMP/E data sets used for the NCP installation should be used for this NTO installation.
2. The target and distribution libraries used for the NCP installation will be used for the installation of NTO.

6.1.3 Unload the Sample JCL from the Product Tape

Sample installation jobs are provided on the distribution tape to help you install NTO R11 MVS. The following sample JCL will copy the NTO R11 MVS jobs from the tape. See Figure 14 on page 16 for the JCL to unload the sample JCL from the tape.

```

//CXNINJCL JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*
/** NOTE 1) UPDATE DATA SET NAME, UNIT FIELDS,
/**      AND VOL=SER AS REQUIRED
/** NOTE 2) NORMAL JOB CONDITION CODE IS ZERO(0)
/**
//COPY      EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=A
//TAPEIN   DD  DSN=IBM.HNT1B05.F3,VOL=SER=NT1B05,
//          UNIT=tape,DISP=OLD,LABEL=(4,SL)
//DISKOUT  DD  DSN=HNT1B05.INSTALL.JCL,VOL=SER=xxxxxx,
//          UNIT=SYSDA,SPACE=(CYL,(1,1,5)),
//          DISP=(NEW,CATLG)
//SYSUT3   DD  UNIT=SYSDA,SPACE=(80,(15,1))
//SYSIN    DD  *
//          COPY I=TAPEIN,0=DISKOUT
//          SELECT MEMBER=CXNINJCL
/**

```

Figure 14. JCL to Unload the Installation JCL

Expected Return Codes and Messages:

CXNINJCL job ends with return code equal zero (RC=0). The JCL is contained in Relative File 3, DLIB=ANCPSAMP, MEMBER=CXNINJCL.

You can also access the sample installation jobs after performing an SMP/E RECEIVE for FMID HNT1B05, and then copying the jobs from dataset **hlq.IBM.HNT1B05.F3** to a work dataset for editing and submission.

6.1.4 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job LIBRARY to allocate the NTO-unique SMP/E target and distribution libraries for NTO R11 MVS. Consult the instructions in the sample job for more information. See Figure 15 on page 17 for the JCL to allocate target and distribution libraries.


```

//LIBRARY JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*
/** NOTE THAT ACTUAL DATA SET SIZES HAVE BEEN INCREASED SLIGHTLY
/** TO ALLOW FOR MAINTENANCE.
/**
//ALLOCATE EXEC PGM=IEFBR14
//SYSPRINT DD SYSOUT=A
//ACXNMOD1 DD DSN=ncpzxxx.ACXNMOD1,VOL=SER=xxxxxx,
//           DCB=(RECFM=U,LRECL=0,BLKSIZE=6144),
//           UNIT=SYSDA,SPACE=(6144,(56,1,11)),
//           DISP=(NEW,CATLG)
//SCXNMOD1 DD DSN=ncpzxxx.SCXNMOD1,VOL=SER=xxxxxx,
//           DCB=(RECFM=U,LRECL=0,BLKSIZE=6144),
//           UNIT=SYSDA,SPACE=(6144,(30,1,2)),
//           DISP=(NEW,CATLG)
/**

```

Figure 15. JCL to Allocate Target and Distribution libraries

Expected Return Codes and Messages:

LIBRARY job ends with return code equal zero (RC=0).

6.1.5 Create DDDEF Entries

Edit and submit sample job DDDEF to create DDDEF entries for the NTO-unique target and distribution libraries for NTO R11 MVS. See Figure 16 on page 18 for the JCL to create DDDEF entries.

```

//DDDEF JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//**
//*****
//* ADD THE NEW 'DISTRIBUTION' LIBRARY DD NAME TO */
//* THE DISTRIBUTION ZONE. */
//*****
//DZONE EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SMPLOG DD DSN=ncpzxxxx.SMPLOG,DISP=SHR
//SMPPTS DD DSN=ncpzxxxx.SMPPTS,DISP=SHR
//SMPCSI DD DSN=ncpzxxxx.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
SET BDY(ncpdlib) .
UCLIN .
ADD DDDEF(ACXNMOD1) DATASET(ncpzxxxx.ACXNMOD1)
VOLUME(xxxxxx) UNIT(SYSDA) SHR .

ENDUCL .
//**
//*****
//* ADD THE NEW 'DISTRIBUTION' LIBRARY AND 'TARGET' */
//* LIBRARY DD NAMES TO THE TARGET ZONE. */
//*****
//TZONE EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SMPLOG DD DSN=ncpzxxxx.SMPLOG,DISP=SHR
//SMPPTS DD DSN=ncpzxxxx.SMPPTS,DISP=SHR
//SMPCSI DD DSN=ncpzxxxx.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
SET BDY(ncptgt) .
UCLIN .
ADD DDDEF(ACXNMOD1) DATASET(ncpzxxxx.ACXNMOD1)
VOLUME(xxxxxx) UNIT(SYSDA) SHR .
ADD DDDEF(SCXNMOD1) DATASET(ncpzxxxx.SCXNMOD1)
VOLUME(xxxxxx) UNIT(SYSDA) SHR .

ENDUCL .
//*

```

Figure 16. JCL to Create DDDEF Entries

Expected Return Codes and Messages:

DDDEF job ends with return code equal zero (RC=0).

6.1.6 Perform SMP/E RECEIVE

Edit and submit sample job NTOREC to perform the SMP/E RECEIVE for NTO R11 MVS. See Figure 17 on page 19 for the JCL to receive the data from the product tape.

```

//NTOREC JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
/**
/** RECEIVE DATA FROM THE PRODUCT TAPE
/**
//RECEIVE EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
//          TIME=1440
//SMPOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SMPCSI DD DSN=ncpzxxxx.GLOBAL.CSI,DISP=SHR
//SMPTLIB DD UNIT=SYSDA,DISP=OLD,VOL=SER=xxxxxx
//SMPPTFIN DD UNIT=tape,DISP=OLD,VOL=SER=NT1B05,
//          LABEL=(,SL),DSN=SMPMCS
//SMPCNTL DD *
//          SET BDY(GLOBAL) .
//          RECEIVE SELECT(HNT1B05) SYSMODS LIST .
/**

```

Figure 17. JCL to Perform SMP/E RECEIVE

Note: If you obtained NTO R11 MVS as part of a CBPDO, you can use the RCVPDO job found in the CBPDO RIMLIB data set to RECEIVE the NTO R11 MVS FMIDs as well as any service, HOLDDATA, or preventive service planning (PSP) information included on the CBPDO tape. For more information, refer to the documentation included with the CBPDO.

Expected Return Codes and Messages:

NTOREC job ends with return code equal zero (RC=0).

6.1.7 Perform SMP/E APPLY CHECK

Edit and submit sample job NTOAPCK to perform an SMP/E APPLY CHECK for NTO R11 MVS. See Figure 18 for the JCL to perform SMP/E APPLY CHECK.

```

//NTOAPCK JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
/**
/** BEFORE ACTUALLY UPDATING THE TARGET LIBRARIES CHECK FOR
/** ERRORS, THE LIBRARIES AFFECTED, AND ANY SYSMODS THAT WOULD
/** BE REGRESSED
/**
//APPCK EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
//          TIME=1440
//SMPCSI DD DSN=ncpzxxxx.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
//          SET BDY(ncptgt) .
//          APPLY SELECT(HNT1B05) CHECK .
/**

```

Figure 18. JCL to Perform SMP/E APPLY CHECK

Expected Return Codes and Messages:

NTOAPCK job ends with return code equal zero (RC=0).

6.1.8 Perform SMP/E APPLY

Edit and submit sample job NTOAPP to perform an SMP/E APPLY for NTO R11 MVS. See Figure 19 for the JCL to perform SMP/E APPLY.

```
//NTOAPP JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
/**
/** UPDATE THE TARGET LIBRARIES
/**
//APPLY EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
//      TIME=1440
//SMPCSI DD DSN=ncpzxxxx.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
//      SET BDY(ncptgt) .
//      APPLY SELECT(HNT1B05) .
/**
```

Figure 19. JCL to Perform SMP/E APPLY

Expected Return Codes and Messages:

NTOAPP job ends with return code equal zero (RC=0).

6.1.9 Perform SMP/E ACCEPT CHECK

Edit and submit sample job NTOACCK to perform an SMP/E ACCEPT CHECK for NTO R11 MVS. See Figure 20 for the JCL to perform ACCEPT CHECK.

```
//NTOACCK JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
/**
/** BEFORE ACTUALLY UPDATING THE DISTRIBUTION LIBRARIES CHECK FOR
/** ERRORS, THE LIBRARIES AFFECTED, AND ANY SYSMODS THAT WOULD
/** BE REGRESSED
/**
//ACCK EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
//      TIME=1440
//SMPCSI DD DSN=ncpzxxxx.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
//      SET BDY(ncpdlib) .
//      ACCEPT SELECT(HNT1B05) CHECK .
/**
```

Figure 20. JCL to Perform SMP/E ACCEPT CHECK

Expected Return Codes and Messages:

NTOACCK job ends with return code equal zero (RC=0).

6.1.10 Perform SMP/E ACCEPT

Edit and submit sample job NTOACC to perform an SMP/E ACCEPT for NTO R11 MVS. See Figure 21 for the JCL to update the distribution library.

```
//NTOACC JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//**
//* UPDATE THE DISTRIBUTION LIBRARIES
//**
//ACCEPT EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=ncpzxxxx.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
SET BDY(ncpdlib) .
ACCEPT SELECT(HNT1B05) .
//*
```

Figure 21. JCL to Perform SMP/E ACCEPT

Expected Return Codes and Messages:

NTOACC job ends with return code equal zero (RC=0).

6.1.11 Rejecting SMPTLIBs

If you kept the NOPURGE option in the sample CSIOPTS JCL provided with the NCP installation samples, you can reject the SMPTLIBs using the JCL shown in Figure 22 on page 22.

```

//NTOREJ JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//**
//*****
//* **
//* THE SMP/E REJECT JOB WILL DELETE SOME OF THE **
//* CSI ENTRIES FROM THE SMPTLIB DATA SETS. IT DOES **
//* NOT DELETE NTO R11 FROM THE CSI. **
//* **
//* THIS JOB WILL DELETE: **
//* GLOBAL ZONE SYSMOD ENTRIES **
//* HOLDATA ENTRIES **
//* SMPPTS MCS ENTRIES **
//* ANY ASSOCIATED SMPTLIB ENTRIES **
//* **
//* THIS JOB WILL GENERATE A NONZERO RETURN CODE **
//* IF THE SMPTLIBS HAVE BEEN PURGED FOR HNT1B05. **
//*****
// EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SMPCSI DD DSN=ncpzxxxx.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
// SET BDY(GLOBAL) .
// REJECT S(HNT1B05)
// BYPASS(APPLYCHECK,ACCEPTCHECK) .
//**

```

Figure 22. JCL to Reject SMP/E Entries and SMPTLIBs

Expected Return Codes and Messages:

NTOREJ job ends with return code equal zero (RC=0), unless the SMPTLIB data sets have been purged.

6.2 Post-Installation Information

The SSP, NCP, and controller-resident NCP-related products share post-installation procedures. After you install all products needed for the system environment, your system is ready for post-installation maintenance processing. If a PTF cumulative service tape is included with the order, install the maintenance now.

If PTFs containing replacement modules are being ACCEPTed, SMP/E ACCEPT processing will linkedit/bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder might issue messages documenting unresolved external references, resulting in a return code of 4 from the ACCEPT step. These messages can be ignored because the distribution libraries are not executable and the unresolved external references will not affect the executable system libraries.

To re-linkedit the NCP load modules under SMP/E, you may need to add a LOADNCP DD statement to the DDDEF job. The LOADNCP DD statement must point to the library that contains your NCP load modules. For an example, see the SYSLMOD DD statement in the *Network Control Program, System Support Programs, and Emulation Program Generation and Loading Guide*.

Run the HONE Configurator to determine your new load module size after installation. Storage requirements and load module size usually change from release to release, which affects the number of buffers in the buffer pool. Contact your IBM representative for assistance.

Appendix A. Installation Logic

A.1 SMP/E Modification Control Statements

The SMP/E Modification Control Statements (SMPMCS) for NTO R11 MVS are contained in the SMPMCS file on the installation tape. The SMPMCS for each FMID in the product will be loaded to the SMPPTS dataset, with a member name matching the FMID, when the FMID is SMP/E RECEIVED. You may browse or print these members using TSO/E, ISPF, or IEBGENER (or IEBTPCH).

This appendix contains a portion of the installation logic for this program.

If you ordered this program as an individual product (not in a CBIPO or CBPDO), the entire set of SMP/E modification control statements (MCS) for the installation can be obtained by printing the first file of the product tape.

Figure 23 provides a portion of the SMP/E installation logic for NTO R11 MVS.

```
++FUNCTION(HNT1B05) FESN(6511202) REWORK(1998202)
RFDSNPFX(IBM)          /* TIME=12.41.39  DATE=07/21/98 */
FILES(3)
 /* COPYRIGHT = LICENSED MATERIAL - PROPERTY OF IBM    */
 /* THIS PRODUCT CONTAINS "RESTRICTED MATERIALS OF IBM"*/
 /* 5735-XX7 (C) COPYRIGHT IBM CORP. 1982, 1998        */
 /* ALL RIGHTS RESERVED                                */
 /* U. S. GOVERNMENT USERS RESTRICTED RIGHTS -        */
 /* USE, DUPLICATION OR DISCLOSURE RESTRICTED BY     */
 /* GSA ADP SCHEDULE CONTRACT WITH IBM CORP.         */
 /* SEE COPYRIGHT INSTRUCTIONS.                        */
.
++VER(P004)
DELETE(HNT1100,HNT1200,HNT1205,HNT1210,HNT1215,HNT1305,HNT1405,
HNT1410,HNT1500,HNT1510,HNT1600,HNT1700,HNT1800,HNT1900,HNT1005)
.
++JCLIN                RELFILE(1) .
```

Figure 23. Installation Logic

You can browse these members using TSO/E or ISPF, or Figure 24 on page 26 provides a sample job to print the SMPMCS.

```
//NTOLOGIC JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//GENER EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD UNIT=tape,DISP=OLD,VOL=SER=NT1B05,
// LABEL=(1,SL),DSN=SMPMCS
//SYSUT2 DD SYSOUT=A
//SYSIN DD DUMMY
//*
```

Figure 24. Job to Print the SMP/E Modification Control Statements

Expected Return Codes and Messages:

NTOLOGIC job ends with return code equal zero (RC=0).

Appendix B. APARs Incorporated into this Program

The following NTO R10 APARs are incorporated into this program:

IR30488

IR32153

Reader's Comments

Program Directory for Network Terminal Option Release 11 for MVS

You may use this form to comment about this document, its organization, or subject matter with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

For each of the topics below please indicate your satisfaction level by circling your choice from the rating scale. If a statement does not apply, please circle N.

RATING SCALE						
very satisfied	<----->				very dissatisfied	not applicable
1	2	3	4	5	N	

	Satisfaction					
Ease of product installation	1	2	3	4	5	N
Contents of program directory	1	2	3	4	5	N
Installation Verification Programs	1	2	3	4	5	N
Time to install the product	1	2	3	4	5	N
Readability and organization of program directory tasks	1	2	3	4	5	N
Necessity of all installation tasks	1	2	3	4	5	N
Accuracy of the definition of the installation tasks	1	2	3	4	5	N
Technical level of the installation tasks	1	2	3	4	5	N
Ease of getting the system into production after installation	1	2	3	4	5	N

What order media was this product received?

- CBIPO
- CBPDO
- CustomPac
- ServerPac
- Independent
- Other

Is this the first time your organization has installed this product?

- Yes
- No

Were the people who did the installation experienced with the installation of MVS products?

___ Yes
___ No

If yes, how many years? ___

If you have any comments to make about your ratings above, or any other aspect of the product installation, please list them below:

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