masc-ato

Automated Transaction Operator
Installation Guide
***
VSE/MVS
Version 4.1.0

MATO-IN410-1-E

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Further copies of this documentation may be ordered with the enclosed order form.

PREFACE

This manual describes the installation of Automated Transaction Operator (***masc-ato***).

Readers of this publication should have a fundamental knowledge of VSE or MVS functions respectively. System knowledge of VTAM and TP monitors is an advantage.

DOCUMENTATION OVERVIEW

The following ***masc-ato*** documents and manuals are available:

- o MATO-HO410-1-E ***masc-ato*** "Automated Transaction Operator": *Handout*
- o MATO-GI410-1-E ***masc-ato*** "Automated Transaction Operator": *General Information*
- o MATO-UG410-1-E ***masc-ato*** "Automated Transaction Operator": *User's Guide*
- o MATO-IN410-1-E ***masc-ato*** "Automated Transaction Operator": *Installation Guide*
- o MATO-MC410-1-E ***masc-ato*** "Automated Transaction Operator":*Messages and Codes*
- o MATO-SA410-1-E ***masc-ato*** "Automated Transaction Operator": *Samples*

A complete set of manuals is included with the software package. More sets of these manuals and documents may be ordered with the enclosed order form.

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1. Introduction

The standard delivery of ***masc-ato*** is **pregenerated** on a 6250 BPI cartridge in NOCOMPACT format.

For 9370 Systems 1600 BPI tapes are supplied.

About four cylinders of a volume type 3380 are needed for the installation of ***masc-ato***.

If you are installing ***masc-ato*** on a MVS operating system, start with chapter "MVS Installation" on page 10.

Note:

masc-ato is well-tolerated by the various operating systems. There is no direct release-dependency.

2. VSE Installation

2.1. Preparation for Installation

We recommend that you create a ***masc-ato*** library, for example *userlib.ATO410*.

The addition of the library in the ASI Proc is not necessary.

2.2. Loading the *masc-ato* Software (Pregenerated Version) for VSE

Load the ***masc-ato*** software according to the sample JCL in figure 1.

```
* $$ JOB ATOINST
// JOB ATOINST
// OPTION LOG
// PAUSE MOUNT TAPE ATO410 ON cuu
// ASSGN SYS006,cuu
// MTC REW,SYS006
// MTC FSF,SYS006,21
// EXEC LIBR
  RESTORE TAPE=SYS006 ID=ATO310 -
          S=MASC.ATO310:userlib.ato410 -
          REPLACE=YES
/*
// MTC RUN,SYS006
/&
* $$ EOJ
```

Figure 1. VSE Loading ATO Software (Pregenerated Version)

The first part of the installation is now completed for a pregenerated version. Continue with the chapter: "VTAM Definitions" on page 15 to complete the next steps in the installation.

2.3. Loading the *masc-ato* Software (Maintenance Version) for VSE

Unload the ***masc-ato*** software according to the sample JCL in figure 2. Note that the Maintenance Version is only used by support personnel of the licensor. Therefore, skip this step if you are installing the normal pregenerated version of ***masc-ato***.

```
* $$ JOB ATOINST
// JOB ATOINST
// OPTION LOG
// PAUSE MOUNT TAPE ATO410 ON cuu
// ASSGN SYS006,cuu
// MTC   REW,SYS006
// ASSGN SYSIPT,SYS006
// EXEC  LIBR,SIZE=800K,PARM='ACC S=userlib.ATO410'
// MTC   SYS006,RUN
/*
/&
* $$ EOJ
```

Figure 2. VSE Loading ATO Software (Maintenance-Version)

Note:

The volume and header are skipped with SYSIPT. Cataloguing will be done with REPLACE=YES.

Note that the partition utilized should have a size of about 2048K.

Warning

With certain VSE versions the utility program ends with RC=0, although individual books have not been installed completely. It is therefore recommended to check the books according to figure Fehler! Textmarke nicht definiert..

2.4. Overview of VSE Books Supplied (Maintenance Version)

The following books are cataloged:

Book Name	*Description*	*Installation Generation*
ATO.OBJ	Base Module	ATO.PHASE
ATOEXI.OBJ	ATO User Exit	ATOEXI.PHASE
ATOHLL.OBJ	ATO HLL Interface	ATOHLL.PHASE
ATOOCO.OBJ	Logic Module	ATOOCO.PHASE
ATOVAL.OBJ	Validation Module	ATOVAL.PHASE
ATO.A	Base Module	ATO.PHASE
ATOEXI.A	ATO User Exit	ATOEXI.PHASE
ATOOCO.A	Logic Module	ATOOCO.PHASE
ATOVAL.A	Validation Module	ATOVAL.PHASE
ABORT.A	Macro	ABORT.E
COPY.A	Macro	COPY.E
DCL.A	Macro	DCL.E
EPILOG.A	Macro	EPILOG.E
FILL.A	Macro	FILL.E
GETRDR.A	Macro	GETRDR.E
GOTO.A	Macro	GOTO.E
HLLCALL.A	Macro	HLLCALL.E
LOGTIME.A	Macro	LOGTIME.E
LOOP.A	Macro	LOOP.E
MAP.A	Macro	MAP.E
MAPEND.A	Macro	MAPEND.E
MARK.A	Macro	MARK.E
MAPFLD.A	Macro	MAPFLD.E
MOVE.A	Macro	MOVE.E
PENDING.A	Macro	PENDING.E
PERFORM.A	Macro	PERFORM.E
PROC.A	Macro	PROC.E
PROCEND.A	Macro	PROCEND
PROLOG.A	Macro	PROLOG.E
PUTLOG.A	Macro	PUTLOG.E
PUTPRT.A	Macro	PUTPRT.E
PUTWTO.A	Macro	PUTWTO.E
SCAN.A	Macro	SCAN.E
SCANB.A	Macro	SCANB.E
SLEEP.A	Macro	SLEEP.E
UEXIT.A	Macro	UEXIT.E
VAL.A	Macro	VAL.E
ATOMOD.A	Sample VTAM Modetab	
ATOAPPL.A	Sample VTAM Appl. Def.	
ATOTCT.A	Sample CICS TCT Def.	
ATOSAMPn.A	Sample Dialogs	

Figure 3. Overview VSE-Books

2.5. VSE Macro Generation (Maintenance Version)

This step is not necessary for the pregenerated version. Generate the macros according to the sample JCL in figure 4. Skip this step if you are installing the pregenerated version of ***masc-ato***.

```
* $$ JOB ATOMAC
// JOB ATOMAC
// OPTION LOG
// DLBL IJSYSPH,'DECK.IJSYSPH.BG',0
// EXTENT SYSPCH,,,,CHHR,60
ASSIGN SYSPCH,DISK,VOL=SER=volser,SHR
// LIBDEF *,SEARCH=(userlib.ato410)
// OPTION NOXREF,EDECK
// EXEC ASSEMBLY
     COPY ABORT
     COPY COPY
     COPY DCL
     COPY EPILOG
     COPY FILL
     COPY GETRDR
     COPY GOTO
     COPY HLLCALL
     COPY LOGTIME
     COPY LOOP
     COPY MAP
     COPY MAPEND
     COPY MARK
     COPY MAPFLD
     COPY MOVE
     COPY PENDING
     COPY PERFORM
     COPY PROC
     COPY PROCEND
     COPY PROLOG
     COPY PUTLOG
     COPY PUTPRT
     COPY PUTWTO
     COPY SCAN
     COPY SCANB
     COPY SLEEP
     COPY UEXIT
     COPY VAL
     END
/*
CLOSE SYSPCH,PUNCH
// DLBL IJSYSIN,'DECK.IJSYSPH.BG',0
// EXTENT SYSIPT
ASSIGN SYSIPT,DISK,VOL=SER=volser,SHR
// EXEC LIBR,PARM='ACC S=userlib.ato410'
/*
/&
// JOB ATOFAIL
CLOSE SYSIPT,READER
CLOSE SYSPCH,PUNCH
/&
* $$ EOJ
```

Figure 4. VSE ATO Macro Generation (Maintenance-Version)

2.6. VSE OBJ Generation (Maintenance Version)

This step is not necessary for the pregenerated version. Generate the ***masc-ato*** object modules according to the sample JCL in figure 5. Skip this step if you are installing the pregenerated version of ***masc-ato***.

```
* $$ JOB ATOOBJ
// JOB ATO
// OPTION LOG
// LIBDEF *,SEARCH=(userlib.ato410),CATALOG=userlib.ato410
// OPTION CATAL
   ACTION CLEAR
   PHASE ATO,*
   INCLUDE ATO
// EXEC LNKEDT
/*
/&
// JOB ATOOCO
// OPTION LOG
// LIBDEF *,SEARCH=(userlib.ato410),CATALOG=userlib.ato410
// OPTION CATAL
   ACTION CLEAR
   PHASE ATOOCO,*
   INCLUDE ATOOCO
// EXEC LNKEDT
/*
/&
// JOB ATOVAL
// OPTION LOG
// LIBDEF *,SEARCH=(userlib.ato410),CATALOG=userlib.ato410
// OPTION CATAL
   ACTION CLEAR
   PHASE ATOVAL,*
   INCLUDE ATOVAL
// EXEC LNKEDT
/*
/&
// JOB ATOHLL
// OPTION LOG
// LIBDEF *,SEARCH=(userlib.ato410),CATALOG=userlib.ato410
// OPTION CATAL
   ACTION CLEAR
   PHASE ATOHLL,*
   INCLUDE ATOHLL
// EXEC LNKEDT
/*
/&
// JOB ATOEXI
// OPTION LOG
// LIBDEF *,SEARCH=(userlib.ato410),CATALOG=userlib.ato410
// OPTION CATAL
   ACTION CLEAR
   PHASE ATOEXI,*
   INCLUDE ATOEXI
// EXEC LNKEDT
/*
/&
* $$ EOJ
```

Figure 5. VSE ATO OBJ Generation (Maintenance-Version)

2.7. VSE Base Generation (Maintenance Version)

This step is not necessary for the pregenerated version. Generate the ***masc-ato*** base module according to the sample JCL in figures 6 and 7. Skip this step if you are installing the pregenerated version of ***masc-ato***.

```
* $$ JOB ATOGEN
// JOB ATOGEN
// OPTION LOG
// LIBDEF *,SEARCH=(userlib.ato410),CATALOG=userlib.ato410
// OPTION CATAL,XREF
   ACTION CLEAR
   PHASE ATO,*
// EXEC ASSEMBLY
         COPY ATO
         END
/*
// EXEC LNKEDT
/*
/&
* $$ EOJ
```

Figure 6. VSE ATO Base Generation

```
* $$ JOB ATOHLL
// JOB ATOEXI
// OPTION LOG
// LIBDEF *,SEARCH=(userlib.ato410),CATALOG=userlib.ato410
// OPTION CATAL,XREF
   ACTION CLEAR
   PHASE ATOHLL,*
// EXEC ASSEMBLY
         COPY ATOHLL
         END
/*
// EXEC LNKEDT
/*
/&
* $$ EOJ
```

Figure 7. VSE ATO Base Generation ATOHLL

To complete the next steps in the installation, skip to the chapter "VTAM Definitions" on page 15.

3. MVS Installation

3.1. Preparation for Installation

You have to define a ***masc-ato*** product alias according to your installation requirements and naming conventions. It is not necessary that the ***masc-ato*** datasets have their own user catalog.

3.2. Loading the Installation Dataset for MVS

An installation dataset is included with the ***masc-ato*** software that has the necessary JCL for the installation. Unload this dataset from cartridge or tape with the following sample JCL.

```
//ATOINST JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: UNLOAD THE MASC-ATO INSTALLATION DATASET
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <UNIT>   = UNIT NAME OF YOUR INSTALLATION FOR
//*                      CARTRIDGE OR TAPE.
//*       3.) <PREFIX> = HIGHLEVEL-QUALIFIERS FOR THE MASC-ATO
//*                      PRODUCT DATASETS ON TARGET SYSTEM.
//*       4.) <VOLSER> = VOLUME SERIAL FOR THE MASC-ATO-PRODUCT
//*                      DATASETS ON TARGET SYSTEM.
//* ********************************************************************
//*
//UNLOAD   EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//IN       DD  DSN=ATO.V410.CNTL,DISP=OLD,LABEL=(1,SL),
//             UNIT=<UNIT>,VOL=SER=ATO410
//OUT      DD  DSN=<PREFIX>.CNTL,DISP=(NEW,CATLG,DELETE),
//             UNIT=SYSDA,VOL=SER=<VOLSER>,
//             SPACE=(CYL,(1,1,5),RLSE)
//SYSIN    DD  *
   COPY INDD=IN,OUTDD=OUT
/*
```

Figure 8. MVS Loading ATO Installations-Dataset

Please note:

Replace the following variables in the sample JCL.

1. <**unit**> = The unit name for cartridge or tape of your MVS installation
2. <**prefix**> = High level qualifier for the ***masc-ato*** product datasets according to your conventions
3. <**volser**> = Volume serial name of the target dataset <prefix.ORIG410.CNTL>

3.3. Loading the *masc-ato* Product Datasets for MVS

The ***masc-ato*** product datasets are loaded with the job ATOLOAD as shown in figure 9. An example for this job is available in the installation dataset <prefix.V410.CNTL>.

Before execution, please adapt the following JCL statements:

1. <**unit**> = The unit name for cartridge or tapes of your MVS installation
2. <**prefix**> = High level qualifier for the ***masc-ato*** product datasets according to your conventions
3. <**volser**> = Volume serial name of target datasets

ATOLOAD creates and loads the ***masc-ato*** product datasets needed.

```
//ATOLOAD JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=&SYSUID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: UNLOAD THE MASC-ATO DELIVERY TAPE
//* ****************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) UNIT     = UNIT NAME OF YOUR INSTALLATION FOR
//*                      CARTRIDGE OR TAPE.
//*       3.) PREFIX   = HIGHLEVEL-QUALIFIERS FOR THE MASC-ATO
//*                      PRODUCT DATASETS ON TARGET SYSTEM.
//*                      THIS SHOULD BE THE SAME WHERE THIS JCL
//*                      IS, IF NOT PLEASE ADJUST THE SYSIN DSNAME
//*       4.) VOLSER   = VOLUME SERIAL FOR THE MASC-ATO PRODUCT
//*                      DATASETS ON TARGET SYSTEM.
//* ****************************************************************
//UNLOAD   PROC UNIT=CTAPE,             <-- PLEASE ADJUST
//              VOLSER=,                <-- PLEASE ADJUST
//              PREFIX='ATO.V410'       <-- PLEASE ADJUST
//* ****************************************************************
//* UNLOAD FILE 2 MACLIB    (MASC-ATO MACROS)
//* ****************************************************************
//UNLOAD2  EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//IN       DD  DSN=ATO.V410.MACLIB,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=ATO410),LABEL=(2,SL)
//OUT      DD  DSN=&PREFIX..MACLIB,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=9040,RECFM=FB,LRECL=80),
//             SPACE=(CYL,(1,1,5),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DSN=&PREFIX..CNTL($COPY),DISP=SHR
//* ****************************************************************
//* UNLOAD FILE 3 LOAD   (MASC-ATO LOAD MODULES)
//* ****************************************************************
//UNLOAD4  EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//IN       DD  DSN=ATO.V410.LOAD,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=ATO410),LABEL=(3,SL)
//OUT      DD  DSN=&PREFIX..LOAD,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=23200,RECFM=U,LRECL=0),
```

```
//             SPACE=(CYL,(1,1,5),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DSN=&PREFIX..CNTL($COPY),DISP=SHR
//* ******************************************************************
//* UNLOAD FILE 4 SAMPLIB   (MASC-ATO SAMPLE DIALOGS)
//* ******************************************************************
//UNLOAD3  EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//IN       DD  DSN=ATO.V410.SAMPLIB,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=ATO410),LABEL=(4,SL)
//OUT      DD  DSN=&PREFIX..SAMPLIB,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=9040,RECFM=FB,LRECL=80),
//             SPACE=(CYL,(1,1,5),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DSN=&PREFIX..CNTL($COPY),DISP=SHR
//* ******************************************************************
//* UNLOAD FILE 5 PROCLIB (MASC-ATO PROCUDURES)
//* ******************************************************************
//UNLOAD3  EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//IN       DD  DSN=ATO.V410.PROCLIB,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=ATO410),LABEL=(5,SL)
//OUT      DD  DSN=&PREFIX..PROCLIB,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=9040,RECFM=FB,LRECL=80),
//             SPACE=(CYL,(1,1,5),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DSN=&PREFIX..CNTL($COPY),DISP=SHR
//*
//         PEND
//GO       EXEC UNLOAD
```

Figure 9. MVS Loading ATO Product-Datasets

3.4. MVS *masc-ato* Product Datasets

The following product datasets are supplied on the distribution cartridge/tape:

Tape Dataset Name	Description	File #
ATO.V410.CNTL	ATO Installation Jobs	1
ATO.V410.MACLIB	ATO Macros	2
ATO.V410.LOAD	ATO Load Modules	3
ATO.V410.SAMPLIB	ATO Samples	4
ATO.V410.PROCLIB	ATO Procedures	5

Figure 10. MVS ATO Product-Datasets

3.5. MVS JCL-Procedures for *masc-ato*

If you plan to use the compatibility mode, copy the supplied procedures ATORUN, ATOGEN and ATOGO from the dataset <prefix.V410.PROCLIB> into a user PROCLIB that is concatenated in the JES startup procedure or use the JCLLIB DD statement to point to the right library in your jobs.

Figure 11 shows the JCL procedure ATORUN to execute a dialog, figure 12 the call of ATOGO and figure 13 the procedure ATOGEN to assemble and link a ***masc-ato*** dialog without executing the dialog. Further information on the various execution modes may be found in the "*User's Guide*".

Please replace in the procedures 'PGM=ASMA90' by 'PGM=IEV90' if this corresponds to your assembler.

```
//* ************************************************
//*  STARTING AUTOMATED TRANSACTION OPERATOR (RUN-MODE)
//* ************************************************
//*
//ATORUN   PROC DIALOG=TEMP,     <-- DIALOG NAME
//             LOAD=,            <-- USER LOAD LIBRARIES FOR DIALOG
//             PREFIX=ATO.V410   <-- MASC-ATO LIBRARIES
//*
//GEN      EXEC PGM=ASMA90,
//          PARM='NODECK,OBJECT,NOXREF'
//          REGION=4096K
//*
//SYSIN    DD DDNAME=ATOCTL
//SYSPRINT DD SYSOUT=*
//SYSLIB   DD DSN=&PREFIX..MACLIB,DISP=SHR
//SYSUT1   DD UNIT=VIO,SPACE=(CYL,(5,5))
//SYSUT2   DD UNIT=VIO,SPACE=(CYL,(5,5))
//SYSUT3   DD UNIT=VIO,SPACE=(CYL,(5,5))
//SYSPUNCH DD SYSOUT=*
//SYSLIN   DD DSN=&&OBJ,DISP=(,PASS),UNIT=VIO,
//         DCB=(RECFM=FBS,LRECL=80,BLKSIZE=3040),
//         SPACE=(3040,(50,50))
//*
//LNK      EXEC PGM=IEWL,COND=(7,LT)
//            PARM='AMODE=31,RMODE=24'
//SYSPRINT DD SYSOUT=*
//SYSUT1   DD UNIT=VIO,SPACE=(1024,(20,20))
//SYSLIN   DD DSN=&&OBJ,DISP=(OLD,DELETE)
//SYSLIB   DD DSN=&PREFIX..LOAD,DISP=SHR
//SYSLMOD  DD DSN=&LOAD(&DIALOG),DISP=SHR
//*
//RUN      EXEC PGM=&DIALOG,COND=(7,LT),
//            REGION=2048K
//STEPLIB  DD DSN=&LOAD,DISP=SHR
//         DD DSN=&PREFIX..LOAD,DISP=SHR
//SYSUDUMP DD SYSOUT=*
//ATOLOG   DD SYSOUT=*
//ATOPRT   DD SYSOUT=*
//ATORDR   DD DDNAME=ATORDR
```

Figure 11. MVS JCL-Procedure ATORUN

```
//* ************************************************
//*  STARTING AUTOMATED TRANSACTION OPERATOR (GO-MODE)
//* ************************************************
//ATOGO    PROC DIALOG=TEMP,     <-- DIALOG NAME
//             LOAD=,            <-- USER LOAD LIBRARIES FOR DIALOG
//             PREFIX=ATO.V410   <-- MASC-ATO LIBRARIES
//*
//RUN      EXEC PGM=&DIALOG,COND=(7,LT),
//            REGION=2048K
//STEPLIB  DD DSN=&LOAD,DISP=SHR
//         DD DSN=&PREFIX..LOAD,DISP=SHR
//SYSUDUMP DD SYSOUT=*
//ATOLOG   DD SYSOUT=*
//ATOPRT   DD SYSOUT=*
//ATORDR   DD DDNAME=ATORDR
```

Figure 12. MVS JCL-Procedure for ATOGO

```
//* ************************************************
//*  STARTING AUTOMATED TRANSACTION OPERATOR (ASM & LINK)
//* ************************************************
//*
//ATOGEN   PROC DIALOG=TEMP,     <-- DIALOG NAME
//             LOAD=,            <-- USER LOAD LIBRARIES FOR DIALOG
//             PREFIX=ATO.V410   <-- MASC-ATO LIBRARIES
//*
//GEN      EXEC PGM=ASMA90,
//          PARM='NODECK,OBJECT,NOXREF'
//          REGION=4096K
//*
//SYSIN    DD DDNAME=ATOCTL
//SYSPRINT DD SYSOUT=*
//SYSLIB   DD DSN=&PREFIX..MACLIB,DISP=SHR
//SYSUT1   DD UNIT=VIO,SPACE=(CYL,(5,5))
//SYSUT2   DD UNIT=VIO,SPACE=(CYL,(5,5))
//SYSUT3   DD UNIT=VIO,SPACE=(CYL,(5,5))
//SYSPUNCH DD SYSOUT=*
//SYSLIN   DD DSN=&&OBJ,DISP=(,PASS),UNIT=VIO,
//         DCB=(RECFM=FBS,LRECL=80,BLKSIZE=3040),
//         SPACE=(3040,(50,50))
//*
//LNK      EXEC PGM=IEWL,COND=(7,LT)
//            PARM='AMODE=31,RMODE=24'
//SYSPRINT DD SYSOUT=*
//SYSUT1   DD UNIT=VIO,SPACE=(1024,(20,20))
//SYSLIN   DD DSN=&&OBJ,DISP=(OLD,DELETE)
//SYSLIB   DD DSN=&PREFIX..LOAD,DISP=SHR
//SYSLMOD  DD DSN=&LOAD(&DIALOG),DISP=SHR
```

Figure 13. MVS JCL-Procedure for ATOGEN

4. VTAM Definitions (VSE & MVS)

4.1. VTAM Major Node

To execute ***masc-ato*** dialogs it is possible to use your current screen definitions. However, we recommend to define dedicated terminals using the existing modetabs and logmodes or to use the deafult logmode D4A32782.

Define a separate major node in VTAM according to figure 14.

If the names NETATOn are changed, the CICS terminal definitions NETNAME and TERMID need to be adapted accordingly. See chapter "CICS Definitions" from page 19.

```
*********************************************************************
*  ATO VTAM MAJOR-NODE                                              *
*********************************************************************
ATOAPPL  VBUILD TYPE=APPL
NETATO0  APPL   EAS=1,                                  Col.72  ---> C
                AUTH=(ACQ,PASS),                                     C
                MODETAB=ATOMOD,DLOGMOD=ATODLOG
NETATO1  APPL   EAS=1,                                               C
                AUTH=(ACQ,PASS),                                     C
                MODETAB=ATOMOD,DLOGMOD=ATODLOG
NETATO2  APPL   EAS=1,                                               C
                AUTH=(ACQ,PASS),                                     C
                MODETAB=ATOMOD,DLOGMOD=ATODLOG
NETATO3  APPL   EAS=1,                                               C
                AUTH=(ACQ,PASS),                                     C
                MODETAB=ATOMOD,DLOGMOD=ATODLOG
NETATO4  APPL   EAS=1,                                               C
                AUTH=(ACQ,PASS),                                     C
                MODETAB=ATOMOD,DLOGMOD=ATODLOG
NETATO5  APPL   EAS=1,                                               C
                AUTH=(ACQ,PASS),                                     C
                MODETAB=ATOMOD,DLOGMOD=ATODLOG
NETATO6  APPL   EAS=1,                                               C
                AUTH=(ACQ,PASS),                                     C
                MODETAB=ATOMOD,DLOGMOD=ATODLOG
NETATO7  APPL   EAS=1,                                               C
                AUTH=(ACQ,PASS),                                     C
                MODETAB=ATOMOD,DLOGMOD=ATODLOG
NETATO8  APPL   EAS=1,                                               C
                AUTH=(ACQ,PASS),                                     C
                MODETAB=ATOMOD,DLOGMOD=ATODLOG
NETATO9  APPL   EAS=1,                                               C
                AUTH=(ACQ,PASS),                                     C
                MODETAB=ATOMOD,DLOGMOD=ATODLOG
```

Figure 14. VTAM Application Definitions

VSE: The necessary definitions are available as an example in book ATOAPPL. The supplement follows as a B-book in the VTAM definitions library.

Add the major node names to your ATCCONxx.B definitions.

MVS: The necessary definitions are available as an example in the member ATOAPPL in the dataset <prefix.V410.SAMPLIB>. You may copy this member to your VTAMLST dataset.

Add the major node names to your ATCCONxx member definitions in the VTAMLST dataset.

In cross domain systems (eg. VM guest systems and VM VTAM), the ATO APPL entries and the LOG terminals provided, have to be defined as cross domain resources (CDRSC), analogous to the examples in figures 15 and 16.

```
*********************************************************************
****
*  ATO VTAM CROSS DOMAIN DEFINITIONS (ATO VIRT. TERMINALS)
*
*********************************************************************
****
ATOCDRSC VBUILD TYPE=CDRSC
NETATO0  CDRSC CDRM=VSE2
NETATO1  CDRSC CDRM=VSE2
   :
NETATOn
```

Figure 15. VTAM CDRSC Definitions

```
*********************************************************************
****
*  ATO VTAM CROSS DOMAIN DEFINITIONS (ATO LOG TERMINALS)
*
*********************************************************************
****
ATOCDRSC VBUILD TYPE=CDRSC
NETL001  CDRSC CDRM=VMSNA1
NETL002  CDRSC CDRM=VMSNA1
   :
NETL00n
```

Figure 16. VTAM CDRSC Definitions (LOG Terminals)

4.2. VTAM Modetab

If you prefer not to use the default logmode D4A32782 or an existing logmode, define a Modetab ATOMOD according to figure 17.

```
        PRINT NOGEN
*********************************************************
****
* ATO VTAM MODETAB
*********************************************************
****
ATOMOD   MODETAB
ATODLOG  MODEENT LOGMODE=ATODLOG,              COL. 72
--> C
               FMPROF=X'03',
C
               TSPROF=X'03',
C
               PRIPROT=X'B1',
C
               SECPROT=X'90',
C
               COMPROT=X'3080',
C
               RUSIZES=X'8888',
C
               PSERVIC=X'020000000000186000007E00'
*                        0 1 2 3 4 5 6 7 8 9 1011
         MODEEND
         END
```

Figure 17. VTAM Modetab Definition

Note :

To activate a changed MODETAB or USSTAB the following command may be used as from VTAM Release 3.2:

V NET,TABLE,OPTION=LOAD,NEWTAB=***modetab1***

4.3. VTAM Operation for the LOG Terminal

The LOG terminal (LOGTERM) can be switched on dynamically with the definition of PROLOG LOGTERM=LOGON by USSTAB or a session manager. In addition ***masc-ato*** supports relay and pass terminals for LU TYPE 2. The presented MODETAB, as well as the SLU name and possible logon data are accepted by ***masc-ato*** without signon simulation in almost all variations. The LOGON APPLID is determined by PROLOG NETNAME. Please activate the required definitions in order to use it with your session manager.

5. CICS Definitions (VSE & MVS)

To define the necessary terminal entries for CICS you have three techniques available to choose from:

- **TCT macro definition**
- **TCT RDO in the CSD** (CICS system dataset)
- **AUTOINSTALL program with model**

Select the required technique appropriate to your CICS installation.

Note:

If you use RDO you should also define the ***masc-ato*** terminals with RDO. The same applies with the use of AUTOINSTALL.

Nonstandard Data Compression

With the use of supplementary software for data compression (3270 datastream optimizing) there might occur some problems. In these cases, the ***masc-ato*** terminals are to be excluded with the options/parameter provided for this situation.

Node Error Program

With the use of special node error programs the ***masc-ato*** terminals have to be considered correspondingly.

5.1. CICS Terminal Definition

Define your terminals for ***masc-ato*** analogous to your existing definitions. To use the LOGTERM function or to ease the development of new applications we recommend to use the same models as used with your end-users.

Please define also the alternate screen size. In the previous version this was not necessary because only screen model 2 was supported.

Please note also, that ***masc-ato*** now also supports the processing of lower case characters. To avoid compatibility problems in existing dialogs, you might want to activate the CICS upercase translation.

6. IMS Definitionen

Please add to your terminal definitions entries as shown in the following figure 18:

```
*******************************************************
* ATO IMS TERMINALS
*******************************************************
         TYPE  UNITYPE=SLUTYPE2,TYPE=3270-A02,   Col. 72  ---> C
               SIZE=(24,80),OPTIONS=TRANRESP
           TERMINAL  NAME=NETATO0,OUTBUF=2048
             NAME  USERATO0
           TERMINAL  NAME=NETATO1,OUTBUF=2048
             NAME  USERATO1
           TERMINAL  NAME=NETATO2,OUTBUF=2048
             NAME  USERATO2
           TERMINAL  NAME=NETATO3,OUTBUF=2048
             NAME  USERATO3
           TERMINAL  NAME=NETATO4,OUTBUF=2048
             NAME  USERATO4
           TERMINAL  NAME=NETATO5,OUTBUF=2048
             NAME  USERATO5
           TERMINAL  NAME=NETATO6,OUTBUF=2048
             NAME  USERATO6
           TERMINAL  NAME=NETATO7,OUTBUF=2048
             NAME  USERATO7
           TERMINAL  NAME=NETATO8,OUTBUF=2048
             NAME  USERATO8
           TERMINAL  NAME=NETATO9,OUTBUF=2048
             NAME  USERATO9
```

Abbildung 18. IMS Terminal Definitionen.

Note:

In the MACRO "TERMINAL", the parameter NAME=NETATOn has to correspond with the VTAM definitions.

In the MACRO "NAME", the name can be chosen according to your naming conventions.

In the MACRO "COMM" of the IMS definitions, the parameter RECANY should have at least a value of 512.

Additional steps:

Generate the control blocks (CTLBLKS) for your terminal definitions (stage 1 and stage 2).

If you use IMS internal Command-Security, define and activate the security parameter (type MATRIX) for the new ***masc-ato*** terminals with the Security Maintenace Utility. If not, define the external security according to your needs.

Execute an IMS cold start.

7. Installation Verification

7.1. VTAM Installation Verification (VSE & MVS)

Verify the VTAM definitions by entering the following VTAM console command:

```
CONSOLE ENTRY: V NET,ACT,ID=ATOAPPL

EXPECTED RESULT:

IST097I   VARY ACCEPTED
IST093I   ATOAPPL ACTIVE

CONSOLE ENTRY: D NET,ID=NETATO0,E

EXPECTED RESULT:

IST097I   DISPLAY ACCEPTED
IST075I   NAME = NETATO0, TYPE = APPL 762
IST486I   STATUS= CONCT, DESIRED STATE= CONCT
IST861I   MODETAB=ATOMOD USSTAB=***NA*** LOGTAB=***NA***
IST934I   DLOGMOD=ATODLOG
    etc.
```

Figure 19. VTAM Installation Verification

7.2. CICS Installation Verification (VSE & MVS)

Verify the CICS definitions by entering the following CICS transaction command:

```
CICS ENTRY: CEMT I NETNAME(NETATO*)

EXPECTED RESULT:

I NETNAME(NETATO*)
STATUS:  RESULTS - OVERTYPE TO MODIFY
     Net(NETATO0 )           Pri( 000 ) Pag Ins Ati Tti
        Ter(ATO0) Rel Cre
     :
     Net(NETATO9 )           Pri( 000 ) Pag Ins Ati Tti
        Ter(ATO9) Rel Cre
```

Figure 20. CICS Installation Verification

7.3. IMS Installation Verification

Check the IMS definitions as follows:

```
ENTER IN IMS: /DIS NODE NETATO1 NETATO2

RESULTAT:

NODE-SUB TYPE  CID      RECD  ENQCT   QCT   SENT
NETATO1  SLU2  00000000    0      0     0      0  IDLE
NETATO2  SLU2  00000000    0      0     0      0  IDLE
```

Figure 21. IMS Installation Verification

7.4. VSE CICS Installation Verification

Execute the job ATOIVP as shown in figure 22 in order to verify the correct ***masc-ato*** installation. Before you run the job compare the "APPLID=" parameter in the PROLOG statement to the "APPLID" parameter in your SIT definitions of the corresponding CICS. Also the "NETNAME=" parameter in the PROLOG statement has to correspond to the CICS TCT network name.

Under VSE with VAE it is the task of ***masc-ato*** to establish the connection to VTAM. That is why it is necessary to start the ***masc-ato*** job in the same region as VTAM.

```
* $$ JOB JNM=ATOIVP
* $$ LST CLASS=L
* $$ LST CLASS=L,LST=01E
// JOB ATOIVP
// OPTION LOG,PARTDUMP
// LIBDEF
*,SEARCH=(userlib.ATO410),CATALOG=userlib.ATO410
// OPTION CATAL
   ACTION CLEAR
   PHASE  ATOIVP,*
// EXEC ASSEMBLY
        PROLOG
DIALOG=ATOIVP,NETNAME=NETATO1,APPLID=DBDCCICS
MAP0    MAP KEY=CLEAR
        MAPEND
MAP1    MAP LASTMAP=YES,DATA='CESF LOGOFF'
        MAPEND
        EPILOG
        END
/*
// EXEC LNKEDT
// ASSIGN SYS001,01E
// EXEC ATO,PARM='DIALOG=ATOIVP'
/*
/&
* $$ EOJ
```

Figure 22. VSE CICS Installation Verification

The first step exits the "Good Morning" transaction by entering the CLEAR key. The second step logs off from CICS. This job must end with RC=0.

In order to test the LOGTERM function, supplement the PROLOG command with the parameter LOGTERM according to the "ATO *User's Guide*".

The user exit ATOEXI has to be generated according to your needs, prior to the use of #VARn# variables in the FILL DATA parameter.

This concludes the installation of ATO for VSE. The "ATO *User's Guide*" will provide you with detailed explanations and the correct use of the ATO commands, as well as a couple of informative examples.

7.5. MVS CICS Installation Verification

Execute the job ATOIVP as shown in figure 23 in order to verify the correct ***masc-ato*** installation. Before you run the job compare the "APPLID=" parameter in the PROLOG statement to the "APPLID" parameter in your SIT definitions of the corresponding CICS. Also the "NETNAME=" parameter in the PROLOG statement has to correspond to the CICS TCT network name.

```
//ATOIVP  JOB  (ACCNT),'ATO-IVP',CLASS=A,MSGCLASS=X,
//           MSGLEVEL=(1,1)
//STEP1 EXEC PROC=ATORUN,DIALOG=ATOIVP
//GEN.ATOCTL DD *
       PROLOG
DIALOG=ATOIVP,NETNAME=NETATO1,APPLID=DBDCCICS
MAP0   MAP KEY=CLEAR
       MAPEND
MAP1   MAP LASTMAP=YES,DATA='CESF LOGOFF'
       MAPEND
       EPILOG
       END
/*
//RUN.ATORDR DD *
/*
```

Figure 23. MVS CICS Installation Verification

The first step exits the "Good Morning" transaction by entering the CLEAR key. The second step logs off from CICS. This job must end with RC=0.

In order to test the LOGTERM function, supplement the PROLOG command with the parameter LOGTERM according to the "***masc-ato*** *User's Guide*".

The user exit ATOEXI has to be generated according to your needs, prior to the use of #VARn# variables in the FILL DATA parameter.

You may also verify the correct installation by using the PROLOG LOGTERM function. See the "*User's Guide*" on how to implement and run this feature.

This concludes the installation of ***masc-ato*** for MVS. The "***masc-ato*** *User's Guide*" will provide you with detailed explanations and the correct use of the ***masc-ato*** commands, as well as a couple of informative examples.

7.6. IMS Installation Verification

Execute job ATOIVPI according to figure 24 in order to verify the correct installation. Compare first the "APPLID=" name with the "APPLID" statement of your IMS definitions and set the "NETNAME=" parameter to the defined IMS terminal name.

```
//ATOIVPI JOB  (ACCNT),'ATO-IVP',CLASS=A,MSGCLASS=X,
//           MSGLEVEL=(1,1)
//STEP1 EXEC PROC=ATORUN,DIALOG=ATOIVPI
//GEN.ATOCTL DD *
       PROLOG DIALOG=ATOIVPI,NETNAME=NETATO1,APPLID=IMS
MAP0   MAP KEY=CLEAR
       MAPEND
MAP1   MAP LASTMAP=YES,DATA='/RCLSDST'
       MAPEND
       EPILOG
       END
/*
//RUN.ATORDR DD *
/*
```

Figure 24. IMS Installation Verification

In the first step, CLEAR serves to leave the "IMS connection message" transaction. The second step signs-off from IMS. This job has to end with RC=0.

To check the LOGTERM function add the parameter LOGTERM to the PROLOG macro as describes in the "*User's Guide*'.

Before using the #VARn# variables in the FILL-DATA parameter, the user exit ATOEXI has to be generated according to your needs.

This concludes the ***masc-ato*** installation. The use of this product is described in the "*User's Guide*" with detailed explanations and some examples.