masc-oas

Online Archive for SAP
Installation Guide
***
MVS
Version 2.1.0

MOAS-IN210-1-E

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Additional sets of this documentation can be ordered by using the enclosed form.

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CICS	International Business Machines Corporation
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masc-oas	***masc ag***
MVS	International Business Machines Corporation
R/2	SAP AG, D-Walldorf
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ILLUSTRATION DIRECTORY

1. *masc-oas* DOCUMENTATION OVERVIEW

The following documentation and manuals are available for the ***masc-oas*** product:

- `MOAS-HO210-1-E` ***masc-oas*** "Online Archive for SAP*:* ***Handout***"
- `MOAS-GI210-1-E` ***masc-oas*** "Online Archive for SAP*:* ***General Information***"
- `MOAS-UG210-1-E` ***masc-oas*** "Online Archive for SAP*:* ***User's Guide***"
- `MOAS-IN210-1-E` ***masc-oas*** "Online Archive for SAP*:* ***Installation Guide***"

A complete set of the ***masc-oas*** documentation is included with the software package. Additional sets can be obtained by using the enclosed order request form.

2. INTRODUCTION

This manual describes the installation of ***masc-oas*, the Online Archive for SAP.**

Readers of this publication should have a basic knowledge of the functions of the operating system. Knowledge of the TP monitor (CICS or IMS) and SAP systems are an advantage.

A detailed checklist for the installation of ***masc-oas*** is to be found in chapter '10. Installation Checklist ' of this manual.

3. INSTALLATION OF *masc-oas*

This chapter contains all necessary steps for the installation of the ***masc-oas*** product.

3.1. Preliminary

masc-oas is implemented within several systems. They are:

- Operating system: MVS or VSE
- TP monitor: CICS or IMS
- SAP R/2 Rel 4.3 or 5.0

There follows a description of all necessary steps for the implementation of ***masc-oas*** into these systems. For queries about the details of the systems please refer to the appropriate supplier's publications.

The installation jobs supplied correspond with the usual syntax conventions. Installation specific JCL parameters (such as for SMS) are to be added or amended by the person performing the installation.

As the installations and processing jobs for SAP releases R/2 4.3 and R/2 5.0 occasionally differ widely from each other, it was necessary to provide separate installation procedures for the relevant SAP installation sections and indexing of document archives. Please use the appropriate implementation procedures or chapters which correspond with your SAP release.

3.2. Preparation prior to Installation

Define a ***masc-oas*** product **ALIAS** in accordance with your installation requirements and your naming conventions. A separate user catalogue for the ***masc-oas*** datasets is not necessary.

The following illustration contains an example of a 'DEFINE ALIAS' Job.

Please amend the following JCL statements prior to execution:

<**UCAT**>	Name of the user catalogue for ***masc-oas***.
<**MCAT**>	Name of the master catalogue of your installation.
<**PWUPDATE**>	Password of the master catalogue.

```
//DEFALIAS JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: DEFINE AN ALIAS FOR MASC-OAS
//* ****************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS
//*
//*       2.) <UCAT>     = NAME OF USERCATALOG FOR MASC-OAS
//*
//*       3.) <MCAT>     = NAME OF MASTERCATALOG USED BY
//*                        YOUR INSTALLATION
//*
//*       4.) <PWUPDATE> = UPDATE-PASSWORD FOR MASTERCATALOG
//* ****************************************************************
//*
//DEFINE   EXEC PGM=IDCAMS,REGION=1024K
//SYSPRINT DD  SYSOUT=*
//SYSIN    DD  *
     DEFINE  ALIAS  (NAME(OAS)                    -
                     RELATE(UCAT.<UCAT>)          -
                     )                            -
                    CATALOG(MCAT.<MCAT>/<PWUPDATE>)
/*
```

Illustration 1: Setting up an ALIAS for ***masc-oas***

3.3. Loading the Installation Dataset

A dataset which contains all the required JCL for the installation is supplied with the ***masc-oas*** cassette. By using the following sample JCL this dataset is loaded from the cassette.

Please amend the following JCL statements prior to execution:

<**UNIT**>	Unit name of your MVS installation for cassette (e.g. CTAPE)
<**PREFIX**>	High level qualifiers of the dataset names for the ***masc-oas*** product dataset in accordance with your standards (e.g.. OAS.ORIG210)
<**VOLSER**>	Volume name, on which the dataset <**PREFIX**>.CNTL is to be created.

The **OASINST** job creates and loads the installation dataset.

```
//OASINST JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: UNLOAD THE MASC-OAS 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-OAS
//*                      PRODUCT DATASETS ON TARGET SYSTEM.
//*       4.) <VOLSER> = VOLUME SERIAL FOR THE MASC-OAS PRODUCT
//*                      DATASETS ON TARGET SYSTEM.
//* ****************************************************************
//*
//UNLOAD   EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//IN       DD  DSN=OAS.V210.CNTL,DISP=OLD,LABEL=(1,SL),
//             UNIT=<UNIT>,VOL=SER=OAS210
//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
/*
```

Illustration 2: Loading the ***masc-oas*** installation dataset

3.4. Overview of the *masc-oas* product datasets

The following illustration shows all datasets contained on the cassette together with their physical name and a short description.

Tape Dataset Name	**Beschreibung**	**File Nr.**

OAS.V210.CNTL	***masc-oas*** Installation jobs	1
OAS.V210.ASM	***masc-oas*** Assembler sources	2
OAS.V210.MACLIB	***masc-oas*** Macros	3
OAS.V210.LOAD	***masc-oas*** Load modules	4
OAS.V210.LMOASC43	***masc-oas*** SAP Objects Rel. 4.3 (CICS) Base	5
OAS.V210.LMOASI43	***masc-oas*** SAP Objects Rel. 4.3 (IMS) Base	6
OAS.V210.LMOASC50	***masc-oas*** SAP Objects Rel. 5.0 (CICS) Base	7
OAS.V210.LMOASI50	***masc-oas*** SAP Objects Rel. 5.0 (IMS) Base	8
OAS.V210.LMxxyC43	***masc-oas*** SAP Objects Rel. 4.3 (CICS) Archive xxy	9
OAS.V210.LMxxyI43	***masc-oas*** SAP Objects Rel. 4.3 (IMS) Archive xxy	10
OAS.V210.LMxxyC50	***masc-oas*** SAP Objects Rel. 5.0 (CICS) Archive xxy	11
OAS.V210.LMxxyI50	***masc-oas*** SAP Objects Rel. 5.0 (IMS) Archive xxy	12

Illustration 3: Overview of the ***masc-oas*** product datasets

xxy is the name of an archive that you can download and install together with the base installation of ***masc-oas***. The SAP objects of the archive BSF for CICS and SAP 5.0 reside on dataset OAS.V210.LMBSFC50 and are file number 11 on the tape.

If you are installing now or later an additional archive, you may copy from cassette only the archive specific SAP objects, i.e., the one of the files 9 to 12 that corresponds to your environment.

3.5. Loading the *masc-oas* Product Datasets

By using the **OASLOAD** job in the following illustration, the ***masc-oas*** product datasets are loaded. An example of this job is provided on dataset **<PREFIX>.CNTL.**

The following table shows which datasets you should load for your environment:

File Name	**File Nr**	**CICS SAP 4.3**	**CICS SAP 5.0**	**IMS SAP 4.3**	**IMS SAP 5.0**
OAS.V210.ASM	2	YES	YES	YES	YES
OAS.V210.MACLIB	3	YES	YES	YES	YES
OAS.V210.LOAD	4	YES	YES	YES	YES
OAS.V210.LMOASC43	5	**Base**	NO	NO	NO
OAS.V210.LMOASI43	6	NO	NO	**Base**	NO
OAS.V210.LMOASC50	7	NO	**Base**	NO	NO
OAS.V210.LMOASI50	8	NO	NO	NO	**Base**
OAS.V210.LMxxyC43	9	**Archive xxy**	NO	NO	NO
OAS.V210.LMxxyI43	10	NO	NO	**Archive xxy**	NO
OAS.V210.LMxxyC50	11	NO	**Archive xxy**	NO	NO
OAS.V210.LMxxyI50	12	NO	NO	NO	**Archive xxy**

Please amend the following JCL statements prior to execution:

<**UNIT**>	Unit name of your MVS Installation for cassette (e.g. CTAPE)
<**PREFIX**>	High level qualifiers of the dataset name for the ***masc-oas*** product datasets in accordance with your standards (e.g. OAS.ORIG210) Since SYSIN refers to member $COPY with the same prefix, please adjust this in case the prefix chosen now is different than in the preceding step
<**VOLSER**>	Volume name, on which the corresponding dataset is to be created
<ARCHIVE>	Name of the archive that is to be installed

The **OASLOAD** job creates and loads all necessary datasets. According to the table above you can choose to execute only those job steps that load the datasets for your environment, e.g., for archive BSF with SAP 4.3 and CICS the files 2 - 4, 5, and 9.

```
//OASLOAD JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: UNLOAD THE MASC-OAS 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-OAS
//*                      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-OAS PRODUCT
//*                      DATASETS ON TARGET SYSTEM.
//*       5.) ARCHIVE  = NAME OF THE ARCHIVE
//* ****************************************************************
//UNLOAD   PROC UNIT=CTAPE,             <-- PLEASE ADJUST
//             VOLSER=,                 <-- PLEASE ADJUST
//             PREFIX='OAS.V210',       <-- PLEASE ADJUST
//             ARCHIVE=BSF              <-- PLEASE ADJUST
//* ****************************************************************
//* UNLOAD FILE 2 ASM    (MASC-OAS ASSEMBLER SOURCES)
//* ****************************************************************
//UNLOAD2  EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//IN       DD  DSN=OAS.V210.ASM,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(2,SL)
//OUT      DD  DSN=&PREFIX..ASM,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($COPY),DISP=SHR
//* ****************************************************************
//* UNLOAD FILE 3 MACLIB (MASC-OAS MACROS)
//* ****************************************************************
//UNLOAD3  EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//IN       DD  DSN=OAS.V210.MACLIB,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(3,SL)
//OUT      DD  DSN=&PREFIX..MACLIB,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=9040,RECFM=FB,LRECL=80),
//             SPACE=(CYL,(1,1,5),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DSN=&PREFIX..CNTL($COPY),DISP=SHR
//* ****************************************************************
//* UNLOAD FILE 4 LOAD   (MASC-OAS LOAD MODULES)
//* ****************************************************************
//UNLOAD4  EXEC PGM=IEBCOPY
//SYSPRINT DD  SYSOUT=*
//IN       DD  DSN=OAS.V210.LOAD,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(4,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 5 MASC-OAS SAP OBJECTS REL 4.3   CICS    Basis
//* ****************************************************************
//UNLOAD5  EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LMOASC43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(5,SL)
//SYSUT2   DD  DSN=&PREFIX..LMOASC43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 6 MASC-OAS SAP OBJECTS REL 4.3   IMS     Basis
//* ****************************************************************
//UNLOAD6  EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LMOASI43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(6,SL)
//SYSUT2   DD  DSN=&PREFIX..LMOASI43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 7 MASC-OAS SAP OBJECTS REL 5.0   CICS    Basis
//* ****************************************************************
//UNLOAD7  EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
```

```
//SYSUT1   DD  DSN=OAS.V210.LMOASC50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(7,SL)
//SYSUT2   DD  DSN=&PREFIX..LMOASC50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ********************************************************************
//* UNLOAD FILE 8 MASC-OAS SAP OBJECTS REL 5.0   IMS     Basis
//* ********************************************************************
//UNLOAD8  EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LMOASI50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(8,SL)
//SYSUT2   DD  DSN=&PREFIX..LMOASI50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ********************************************************************
//* UNLOAD FILE 9 MASC-OAS SAP OBJECTS REL 4.3   CICS    Archive xxy
//* ********************************************************************
//UNLOAD9  EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.C43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(9,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.C43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ********************************************************************
//* UNLOAD FILE 10 MASC-OAS SAP OBJECTS REL 4.3   IMS     Archiv xxy
//* ********************************************************************
//UNLOAD10 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.I43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(10,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.I43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ********************************************************************
//* UNLOAD FILE 11 MASC-OAS SAP OBJECTS REL 5.0   CICS    Archiv xxy
//* ********************************************************************
//UNLOAD11 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.C50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(11,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.C50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ********************************************************************
//* UNLOAD FILE 12 MASC-OAS SAP OBJECTS REL 5.0   IMS     Archiv xxy
//* ********************************************************************
//UNLOAD12 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.I50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(12,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.I50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//         PEND
//GO       EXEC UNLOAD
//*
/* EOJ
```

Illustration 4: Loading the ***masc-oas*** product datasets

3.6. Conversion of Assembler Sources

The following ***masc-oas*** programs' source code is supplied on the **<PREFIX>.ASM** dataset:

ARCMD	The ARCMD assembler program serves to initiate the system commands from a batch job. The ***masc-oas*** product utilising ARCMD then initiates the OASM transaction in the TP monitor.
OASEXIT	The assembler program OASEXIT is a user exit and runs within the TP monitor. After the start of a batch document request the exit receives control. The users of ***masc-oas*** can satisfy their security and accounting needs with the aid of OASEXIT.

Only the **ARCMD** program requires explicit assembling and linking. The entire JCL for assembly and link is already contained in the source member. Please amend the job to your requirements and then execute it. The entire source code of the ARCMD program, as well as explanations by the author, can be found in **Appendix A** of this manual.

Note:

The program **ARCMD** must be linked with **Authorisation Code 1** into an **APF-authorised Library.**

For the **OASEXIT** program an executable load module is supplied. However, should you amend the source code, then the program must be assembled afresh. The entire source code of the OASEXIT program, as well as information about the available calling parameters can be found in **Appendix B** of this manual.

3.7. Amendments for JES3

The ***masc-oas*** programs are supplied for running the application under JES2. Should JES3 be used in your installation then the ***masc-oas*** OASBATCH load module has to be amended with the job **JES3MOD**. For this job an example is available on the dataset **<PREFIX>.CNTL** .

Note:

Should your installation use other settings for **INTRDR** or **NODE** , then these values can be amended both under JES2 as well as JES3 by using the job **JES3MOD**.

Please adjust the following JCL statements prior to execution:

<**PREFIX**>	High level qualifiers of the dataset name for the ***masc-oas*** product dataset in accordance with to your standards (e.g. OAS.ORIG210)

The **JES3MOD** job changes the load module of the program OASBATCH and has to terminate with a **RC=00** return code.

```
//JES3MOD JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: CHANGE SPOOLOPEN PARMS OF OASBATCH FOR USE WITH JES3   */
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PREFIX> = HIGHLEVEL-QUALIFIERS FOR THE MASC-OAS
//*                      DATASETS ON TARGET SYSTEM.
//* ********************************************************************
//* CHANGE VALUES AND THEIR DISPLACEMENTS IN PGM OASBATCH
//* ********************************************************************
//*
//* OFFSET  VARIABLE  DEFAULT
//* ------  --------  -------
//* DEF     JESRDR    INTRDR
//* DF7     JESNODE   LOCAL
//*
//* IN JES3, THE CORRECT VALUE FOR JESNODE IS 'ANYLOCAL'.
//* WITH THIS PTF, THE VARIABLE JESNODE IN PGM OASBATCH
//* WILL BE CHANGED FROM 'LOCAL' TO 'ANYLOCAL'.
//* JESRDR REMAINS ON THE STANDARD-VALUE 'INTRDR'.
//* IF YOUR JES-RDR HAS ANOTHER NAME, PLEASE CHANGE THE VARIABLE
//* JESRDR IN PGM OASBATCH ACCORDINGLY.
//* ********************************************************************
//*
//OASPTF  EXEC PGM=IMASPZAP
//SYSLIB   DD  DSN=<PREFIX>.LOAD,DISP=SHR
//SYSPRINT DD  SYSOUT=*
//SYSIN    DD  *
  NAME   OASBATCH  OASBATCH
  VER    000DEF    C9D5E3D9C4D94040
  REP    000DEF    C9D5E3D9C4D94040
  VER    000DF7    D3D6C3C1D3404040
  REP    000DF7    C1D5E8D3D6C3C1D3
/*
```

Illustration 5: Amending of the ***masc-oas*** OASBATCH program for JES3

3.8. Generating the *masc-oas* Batch JCL

IMS users will adjust the batch jobs later. Please continue in the following chapter

3.8.1. Creation of the ESDS Files

For the ***masc-oas*** online/batch interface, the JCL to be executed has to be stored on an ESDS file. The **DEFBJCL** job in the following illustration creates the necessary ESDS files. An example of this job is available on the **<PREFIX>.CNTL** dataset.

Note:

The **DEFBJCL** job has to be executed for every online environment in which ***masc-oas*** is to be applied. In order to avoid confusion, we advise the use of the high level qualifiers of the appropriate TP monitors.

Please amend the following JCL statements prior to execution:

<**DCDATA**>	High level qualifiers of the ESDS files for the ***masc-oas*** batch JCL in accordance with your standards (e.g. DBDCCICS.DATA).
<**VOLSER**>	Volume name, on which the ESDS files are created.

The **DEFBJCL** job from ***masc-oas*** creates the required ESDS file and must terminate with the return code **RC=00**.

```
//DEFBJCL JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: DEFINITION OF ESDS USED BY MASC-OAS
//* ********************************************************************
//*
//*  1. DELETE / DEFINE ESDS FOR BATCH-JCL USED BY MASC-OAS        */
//*
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <DCDATA> = HIGHLEVEL-QUALIFIERS FOR THE MASC-OAS
//*                      PRODUCT BATCHJCL ON YOUR SYSTEM.
//*       3.) <VOLSER> = VOLUME SERIAL FOR THE MASC-OAS PRODUCT
//*                      BATCHJCL ON YOUR SYSTEM.
//* ********************************************************************
//*
//DEFBJCL EXEC PGM=IDCAMS
//SYSPRINT DD  SYSOUT=*
//SYSIN    DD  *
   DELETE         (<DCDATA>.OASBJCL)              -
                  CLUSTER  PURGE
   IF LASTCC LE 8 THEN SET MAXCC = 0
   DEFINE CLUSTER (                               -
                  NAME(<DCDATA>.OASBJCL)          -
                  NONINDEXED                      -
                  RECORDS( 050 100 )              -
                  RECORDSIZE( 080 080 )           -
                  SHAREOPTIONS( 2 3 )             -
                  REUSE                           -
                  SPEED                           -
                  NOWRITECHECK                    -
                  VOLUMES(<VOLSER>)               -
                  )                               -
          DATA    (                               -
                  NAME(<DCDATA>.OASBJCL.D)        -
                  CNVSZ( 080 )                    -
                  )
/*
```

Illustration 6: Creation of the ***masc-oas*** batch JCL file

3.8.2. Generating the JCL

With the **GENBJCL** job in the following illustration the executing JCL is generated for each TP monitor. An example of this job is available on the **<PREFIX>.CNTL** dataset.

Prior to the execution of the job, a few indications/instruction about your systems environment have to be entered in the **JCLPARMS** member on the dataset **<PREFIX>.ASM** (see the following illustration)

```
* ************************************************************** *
* INPUT-VALUES FOR BATCHJOB-GENERATION USED BY                   *
* MASC-OAS, ONLINE-ARCHIVE FOR SAP                               *
* ************************************************************** *
DBDCCICS BATCHJCL JOBID=JOBNAME,               *JOBNAME OF BATCHJOB    X
              ACCT=#ACCT,                      *VALID ACCOUNT          X
              COMMENT='MASC-OAS',              *COMMENT IN JOB-STMT    X
              CLASS=C,                         *JOB-EXECUTION CLASS    X
              MSGCLS=X,                        *MESSAGE-CLASS          X
              PROC=PROCNAME,                   *NAME OF SAP-PROCEDURE  X
              CICSJOB=DBDCCICS,                *JOBNAME OF USED CICS   X
              APFLIB=ANY.AUTHORIZED.LIBRARY    *WHERE TO FIND ARCMD
       END ,                     END OF PARAMETERS
```

Illustration 7: Input parameters for the generation of the ***masc-oas*** batch JCL

Please amend the following statements in the **JCLPARMS** member prior to the execution of the **GENBJCL.** Various parameters are required for the different online environments, so we recommend that the **JCLPARMS** member is created under the high level qualifiers of the appropriate TP monitor, in order to avoid any confusion.

1.	**DBDCCICS**	APPLID of the online environment. This data serves only as commentary!
1.	**JOBID**	Job name under which the document search is executed on your system..
2.	**ACCT**	Account under which the document search is executed on your system.
3.	**COMMENT**	Remarks, which are inserted in the job statement of the document search.(e.g. 'MASC-OAS').
4.	**CLASS**	Execution class for the document search on your system.(e.g.. 'C').
5.	**MSGCLS**	Message class parameter for the document search on your system. (e.g. ‘X’)
6.	**PROC**	Procedure name of the SAP batch procedure on your system. (e.g. SAPBTCHP)
7.	**CICSJOB**	Job name of the CICS on which the document search was initiated.
8.	**APFLIB**	Name of the library in which the ***masc-oas*** program ARCMD was linked. See chapter '3.6. Conversion of Assembler Sources'

With the **GENBJCL** job the batch JCL necessary for the execution of a document search is created. This must have been previously generated for every online system that uses ***masc-oas.*** As a rule it is sufficient to execute this job once per online environment, namely at the installation of ***masc-oas.***

Please amend the following JCL statements prior to execution of GENBJCL:

PRODHLQ	High level qualifiers of the ***masc-oas*** product datasets, as they have been set up by you (e.g. OAS.ORIG210).
DCDATA	High level qualifiers of the ***masc-oas*** batch JCL files that have been set up in the previous installation step (e.g. DBDCCICS.DATA).
INPDSN	Complete dataset name of library in which the **JCLPARMS** member is set up as described above.(e.g. DBDCCICS.OASSRC.ASM).
SYSDA	Unit name of your MVS installation for the creation of work space (e.g. SYSDA or VIO)

The **GENBJCL** job generates the batch JCL required by the ***masc-oas*** online/batch interface and should be terminated with a return code **RC=00**. A return code RC=04 can also be valid, please note however the MNote messages of the generation.

```
//GENBJCL JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ************************************************************
//* DOC: GENERATE BATCH-JCL USED BY MASC-OAS
//* ************************************************************
//*
//*  1. RUN PROCEDURE GENERJCL FOR EVERY ONLINE-ENVIRONMENT      */
//*     USED WITH MASC-OAS                                       */
//*
//* ************************************************************
//* NOTE: PLEASE ADJUST PARAMETERS ON EXEC GENERJCL STATEMENT
//*
//* ------------------------------------------------------------
//*
//GENERJCL PROC  PRODHLQ=,         HLQ OF MASC-OAS PRODUCT-DATASETS
//             DCDATA=,            HLQ OF ESDS-FILE OASBJCL
//             INPDSN=,            DSNAME OF INPUT-MEMBER BATCHJCL
//             SYSDA=              VALUE FOR SYSDA-PARAMETER
//* ------------------------------------------------------------------
//*
//* COPY INPUT-MEMBER BATCHJCL WITH INPUT-PARAMETERS
//*
//COPY     EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=&INPDSN(JCLPARMS),DISP=SHR
//SYSUT2   DD  DSN=&&ASMINP,DISP=(NEW,PASS),
//             UNIT=&SYSDA,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=800),
//             SPACE=(TRK,(1,1))
//SYSIN    DD  DUMMY
//*
//* ASSEMBLY OF INPUT-MEMBER &&ASMINP
//*
//ASM      EXEC PGM=IEV90,REGION=1024K,
//             PARM='DECK,NOOBJECT,LIST,XREF(FULL),ALIGN'
//SYSPRINT DD  SYSOUT=*
```

```
//SYSLIB   DD  DSN=&PRODHLQ..MACLIB,DISP=SHR      <=== MASC-OAS MACLIB
//*        DD  DSN=SYS1.MACLIB,DISP=SHR
//*        DD  DSN=SYS1.AMODGEN,DISP=SHR
//SYSUT1   DD  UNIT=&SYSDA,SPACE=(1700,(400,400))
//SYSUT2   DD  UNIT=&SYSDA,SPACE=(1700,(400,400))
//SYSUT3   DD  UNIT=&SYSDA,SPACE=(1700,(400,400))
//SYSIN    DD  DSN=&&ASMINP,DISP=(OLD,DELETE)
//SYSPUNCH DD  DSN=&&JCLDS,DISP=(NEW,PASS),
//             UNIT=&SYSDA,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=800),
//             SPACE=(TRK,(1,1))
//*
//* IDCAMS REPRO OF GENERATED MASC-OAS BATCH-JCL ON ESDS
//*
//REPRO    EXEC PGM=IDCAMS
//*
//SYSPRINT DD  SYSOUT=*
//SYSOUT   DD  SYSOUT=*
//INDD     DD  DSN=&&JCLDS,DISP=(OLD,DELETE)
//OUTDD    DD  DSN=&DCDATA..OASBJCL,DISP=SHR
//SYSIN    DD  DUMMY
//*
//* IDCAMS REPRO OF GENERATED MASC-OAS BATCH-JCL ON SYSOUT=*
//*
//PRINT    EXEC PGM=IDCAMS
//*
//SYSPRINT DD  SYSOUT=*
//SYSOUT   DD  SYSOUT=*
//INDD     DD  DSN=&DCDATA..OASBJCL,DISP=SHR
//OUTDD    DD  SYSOUT=*
//SYSIN    DD  DUMMY
//        PEND
//* -- END OF PROCEDURE ----------------------------------------------
//*
//* EXECUTE INSTREAM-PROCEDURE GENERJCL
//*
//STEP1    EXEC GENERJCL,PRODHLQ=OAS.ORIG210,
//             DCDATA=DBDCCICS.DATA,
//             INPDSN=DBDCCICS.OASSRC.ASM,
//             SYSDA=SYSDA
//REPRO.SYSIN  DD *
   REPRO                 -
         REUSE           -
         INFILE(INDD)    -
         OUTFILE(OUTDD)
/*
//PRINT.SYSIN  DD *
   REPRO                     -
         INFILE(INDD)        -
         OUTFILE(OUTDD)
/*
/*EOF
```

Illustration 8: Generating the ***masc-oas*** batch JCL

Following the generation of the batch JCL, they are output with the step PRINT on SYSOUT=*. Should the generated job not correspond with your standards, then you can amend it to your requirements by making the appropriated changes in the PUNCH statements in the **BATCHJCL** assembler macro on the **<PREFIX>.MACLIB** dataset.

Afterwards the job **GENBJCL** must be executed again!

However, it is **not necessary** to rerun the job **DEFBJCL**, as the REUSE Parameter is used.

Note:

In this context please pay particular attention to the rules of the Userid job assignment:

As ***masc-oas*** uses the 'CICS/JES spool interface', the job for document search is assigned the Userid of the CICS to be invoked. However we recommend, particularly in RACF environments, the use of a **SURROGATE User,** or analogues functions of other security systems. Another option lies in the statement 'USER= & PASSWORD=' parameters in the job card of the ***masc-oas*** batch JCL. To use this see the earlier description in this chapter concerning the adaptation of the assembler macro BATCHJCL.

The complete source code of the **BATCHJCL** assembler macro can be found in **Appendix C** of this manual.

4. INTEGRATION IN SAP ENVIRONMENT

This Chapter describes all steps necessary for the integration of ***masc-oas*** in your SAP environment

4.1. Overview of the *masc-oas* objects

4.1.1. *masc-oas* Database Files

masc-oas uses the following database files to store all necessary information concerning the archived documents:

YYJB	Secondary index dataset of document archives
YYJC	'Transfer' database for the transfer of the documents located in batch from the batch to the SAP system.
YYJD	Master index dataset with the document headings of the archives BSF, VAV, and EAM
YYJE	Document positions of the archives BSF, VAV, and EAM
YYJR	Master index dataset with the Kostenrechnung-Einzelposten of the archive KEK
YYJS	Secondary index dataset of archive KEK

The database files used by ***masc-oas*** are genuine SAP databases and can therefore be used by all SAP supported database systems. In the following chapters there are instructions and procedures for the physical definition of ***masc-oas*** database files.

4.1.2. *masc-oas* SAP objects

All SAP objects which are required for the application of ***masc-oas***

- Reports
- Tables
- Domains

are supplied for the SAP releases **R/2 4.3** and **R/2 5.0**.

The following SAP objects are implemented by ***masc-oas*** for use with SAP R/2:

Reports:				
YYAGEFRM	YYDELOAS	YYDSPOAS	YYOPEOAS	YYRENOAS
For IMS environment, also report YYOASJCL is loaded.				
Globals:				
YYJDKYL	YYJEKYL	YYJDLN	YYJELN	
Tables:				
YYJB	YYJC	YYJD	YYJE	YYJR
YYJS				
T9YYN	T9YYB	T9YYK		
Domänen:				
DSIND	YYJCFILL			
Documentation:				
TBT9YYK	FTT9YYK*			
Dynpros:				
MSTT9YYK1000				

Illustration 9: Directory of SAP objects for ***masc-oas*** for R/2

4.2. Integration into SAP Rel. 4.3

4.2.1. MODCBDT

The databases required by ***masc-oas*** have to be defined in your SAP system using the assembler macro **MODCBDT.** In the following illustration the source code of the **OASCBDT** defines all ***masc-oas*** required database files. This member is available as an example on the dataset **<PREFIX>.ASM**. The MACRO and MEND statements are commented to allow you to integrate the definitions of the new files as Copybook into your existing MODCBDT.

Note:
The **SAPCBDT** load module has to be recreated for each SAP system in which ***masc-oas*** is to be used.

Please amend the following statements prior to the assembling of MODCBDT:

<**ACCESS**>	Access method used by your database system (e.g. VSAM).
<**INDEX**>	Number of a control block index in accordance with your standards (for SAP 4.3, numbers between 240 and 255 are valid)

The **OASCBDT** member contains all necessary information for the definition of the ***masc-oas*** databases. For a detailed description of the MODCBDT macro as well as their conversion and application, please refer to the appropriate SAP literature.

```
*        MACRO
*        MODCBDT
* ********************************************************************
* DOC: DEFINITION OF MASC-OAS DATABASES INTO SAP-ENVIRONMENT
*      THE FOLLOWING DEFINITIONS ARE FOR USE WITH R/2 5.0
* ********************************************************************
* NOTE: PLEASE CHANGE THE FOLLOWING:
*
*       1.) INSERT THIS EXAMPLE INTO YOUR SOURCE-CODE OF MODCBDT
*           ACCORDING TO YOUR REQUIREMENTS.
*
*       2.) <ACCESS> = DEFINITION OF USED ACCESS-METHOD (EG. 'VSAM')
*
*       3.) <INDEX>  = DEFINITION OF A CONTROL-BLOCK-INDEX NUMBER,
*                      FOLLOWING YOUR INSTALLATION RULES (EG. '901')
*
* ********************************************************************
**********************************************************************
*** SECONDARY INDEX, USED BY MASC-OAS, ONLINE-ARCHIVE FOR SAP       ***
**********************************************************************
YYJB     RCBDS TYPE=ENTRY,                                            *
               APPL=*,                                                *
               ACCMETH=<ACCESS>,                                      *
               CBTYPE=FILE,                                           *
               FTYPE=KS,                                              *
               DLIORG=HISAM,                                          *
               CBIND=(<INDEX>),                                       *
               COMP=NO,                                               *
               OPENOPT=I,                                             *
               SLEN=51,                                               *
               RFORM=FIX,                                             *
               KLEN=42,                                               *
               KPOS=4
**********************************************************************
*** BATCH/ONLINE-TRANSF.-DB, USED BY MASC-OAS, ONLINE-ARCHIVE F. SAP***
**********************************************************************
YYJC     RCBDS TYPE=ENTRY,                                            *
               APPL=*,                                                *
               ACCMETH=<ACCESS>,                                      *
               CBTYPE=FILE,                                           *
               FTYPE=KS,                                              *
               DLIORG=HISAM,                                          *
               CBIND=(<INDEX>),                                       *
               COMP=NO,                                               *
               OPENOPT=I,                                             *
               SLEN=4000,                                             *
               RFORM=VAR,                                             *
               KLEN=29,              (SAP 4.3:  KLEN=27)              *
               KPOS=4                (SAP 4.3:  KPOS=6)
**********************************************************************
*** PRIMARY INDEX, USED BY MASC-OAS, ONLINE-ARCHIVE FOR SAP         ***
**********************************************************************
YYJD    RCBDS TYPE=ENTRY,                                             *
               APPL=*,                                                *
               ACCMETH=<ACCESS>,                                      *
               CBTYPE=FILE,                                           *
               FTYPE=KS,                                              *
               DLIORG=HISAM,                                          *
               CBIND=(<INDEX>),                                       *
               COMP=YES,                                              *
               OPENOPT=I,                                             *
               SLEN=220,                                              *
               RFORM=VAR,                                             *
```

```
               KLEN=28,                                                 *
               KPOS=6
*********************************************************************
*** SECONDARY INDEX, USED BY MASC-OAS, ONLINE-ARCHIVE FOR SAP       ***
*********************************************************************
YYJE    RCBDS TYPE=ENTRY,                                             *
               APPL=*,                                                *
               ACCMETH=<ACCESS>,                                      *
               CBTYPE=FILE,                                           *
               FTYPE=KS,                                              *
               DLIORG=HISAM,                                          *
               CBIND=(<INDEX>),                                       *
               COMP=YES,                                              *
               OPENOPT=I,                                             *
               SLEN=252,                                              *
               RFORM=VAR,                                             *
               KLEN=36,                                               *
               KPOS=6
*********************************************************************
*** PRIMARY INDEX, USED BY MASC-OAS, ONLINE-ARCHIVE FOR SAP (KEK)   ***
*********************************************************************
YYJR    RCBDS TYPE=ENTRY,                                             *
               APPL=*,                                                *
               ACCMETH=<ACCESS>,                                      *
               CBTYPE=FILE,                                           *
               FTYPE=KS,                                              *
               DLIORG=HISAM,                                          *
               CBIND=(<INDEX>),                                       *
               COMP=YES,                                              *
               OPENOPT=I,                                             *
               SLEN=197,                                              *
               RFORM=VAR,                                             *
               KLEN=24,                                               *
               KPOS=6
*********************************************************************
*** SECONDARY INDEX, USED BY MASC-OAS, ONLINE-ARCHIVE FOR SAP (KEK) ***
*********************************************************************
YYJS   RCBDS TYPE=ENTRY,                                             *
               APPL=*,                                                *
               ACCMETH=<ACCESS>,                                      *
               CBTYPE=FILE,                                           *
               FTYPE=KS,                                              *
               DLIORG=HISAM,                                          *
               CBIND=(<INDEX>),                                       *
               COMP=NO,                                               *
               OPENOPT=I,                                             *
               SLEN=56,                                               *
               RFORM=FIX,                                             *
               KLEN=45,                                               *
               KPOS=6
*        MEND
```

Illustration 10: Defining the ***masc-oas*** databases for a SAP environment

4.2.2. SAPLIMU Import

The **LOADSAP** job in the following illustration imports all SAP objects required by ***masc-oas*** into the appropriate SAP systems. For this job there is an example available on the <**PREFIX**>**.CNTL** dataset.

Note:

The **LOADSAP** job has to be executed for each SAP system in which ***masc-oas*** is to be used.

Please note that all SAP objects with the same name will be overwritten during import.

Please amend the following JCL statements prior to execution:

<PREFIX>	High level qualifiers of dataset names for the ***masc-oas*** product datasets in accordance with your standards (Example OAS.ORIG210).
<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)

The **LOADSAP** job imports all SAP objects which are required by ***masc-oas*** and has to terminate with a **RC=00** return code.

```
//LOADSAP  JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: IMPORT ALL SAP-OBJECTS USED BY MASC-OAS
//* ****************************************************************
//*
//*  1. IMPORT OF SAP-OBJECTS USED BY MASC-OAS
//*
//* ****************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <PREFIX> = HIGHLEVEL-QUALIFIERS FOR THE MASC-OAS
//*                      PRODUCT DATASETS ON YOUR SYSTEM.
//*       4.) <LIMU>   = NAME OF THE DATASET CONTAINING THE SAP OBJECTS
//*                      FOR YOUR ENVIRONMENT AND SAP RELEASE.
//* ****************************************************************
//*
//IMPORT   EXEC PROC=<PROC>,PRTCL='*'
//SAPR02I  DD  DSN=<PREFIX>.<LIMU>,DISP=SHR
//LIST1SO  DD  SYSOUT=*
//SYSIN    DD  *
$SAPLIMU EXEC
$        GO
IMPORT
LANGUAGE='D,E,F'
/*
```

Illustration 11: Importing ***masc-oas*** SAP objects

Note:
In IMS environments this job can also be started as BMP in order not to interrupt the online service.

4.3. Integration into in SAP Rel. 5.0

4.3.1. File control blocks

In order to load the databases and to integrate them into the system, it is necessary to define the file control blocks.

We recommend the definition in client 00.

In order to define the file control blocks either choose SAP transaction TM67 or enter DDIC and press PF19 afterwards.

Note:
The file control blocks have to be defined for each SAP system where ***masc-oas*** will be used.

Please make the entries for the ***masc-oas*** databases adjusting them to your requirements:

```
   Data Dictionary, File Control Blocks         Change: 07.03.1995 USER01
   ------------------------------------------------------------------------
   Name........ YYJB      Authoriz.... _        Type........ F    File Type.... K
   Descript.... Secondary index masc-oas (Archive BSF, VAV, EAM)
   Rec.Length.. 51        DB system... VSAM     Standard-DB  VSAM
   Key Length.. 42        Key Begin... 4        Levels...... _    Record Type. _
   Doc.Key Ln.. _         Doc.Reserve. _    _   Compression  _    Open Option. I
   Applicatn... *         DB Name..... _        Dynamic..... _    Fixed Length X
   Contain.Gr.. _         ContainerLng _        Minimum lng. _    Mini System _
   CSAP-Reserve _    _    CSAP value.. 0        CSAP active. X    Cold start.. 0 0
   ADABAS:                PrefetchBeg. _        Prefetch No. _

   BS2 Form.... ISAM      Buffer No... _        No. Blocks.  _    Freespace.. 15
   DL1 Form.... HISM      Segment Name  _       Key Name.... _
   Index....... 900    _      _      _      _      _      _      _     _     _
   Index(Docum) _      _      _      _      _      _      _      _     _     _
   Index D-M-S  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _ _ _ _ _ _

   Entry is completely new, status=USR
  Dynamic..... _
--------------------------------------------------------------------------------
   Name _
   I110 Attention:  This entry does not yet exist -> PF1
   OK _      PF: 2=Select 13=Activate 21=Exceptions ...                1 -44153
```

Illustration 12: File Control Block YYJB

```
   Data Dictionary, File Control Blocks         Change: 07.03.1995 USER01
   ------------------------------------------------------------------------
   Name........ YYJC      Authoriz.... _        Type........ F    File Type.... K
   Descript.... Transfer file masc-oas
   Rec.Length.. 3983      DB system... VSAM     Standard-DB  VSAM
   Key Length.. 29        Key Begin... 4        Levels...... _    Record Type. _
   Doc.Key Ln.. _         Doc.Reserve. _    _   Compression  _    Open Option. I
   Applicatn... *         DB Name..... _        Dynamic..... _    Fixed Length _
   Contain.Gr.. _         ContainerLng _        Minimum lng. _    Mini System _
   CSAP-Reserve _    _    CSAP value.. 0        CSAP active. X    Cold start.. 0 0
   ADABAS:                PrefetchBeg. _        Prefetch No. _

   BS2 Form.... ISAM      Buffer No... _        No. Blocks.  _    Freespace.. 15
   DL1 Form.... HISM      Segment Name  _       Key Name.... _
   Index....... 901    _      _      _      _      _      _      _     _     _
   Index(Docum) _      _      _      _      _      _      _      _     _     _
   Index D-M-S  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _ _ _ _ _ _

   Entry is completely new, status=USR
  Dynamic..... _
--------------------------------------------------------------------------------
   Name _
   I110 Attention:  This entry does not yet exist -> PF1
   OK _      PF: 2=Select 13=Activate 21=Exceptions ...                1 -44153
```

Illustration 13: File Control Block YYJC

```
   Data Dictionary, File Control Blocks         Change: 07.03.1995 USER01
   ------------------------------------------------------------------------
   Name........ YYJD      Authoriz.... _        Type........ F    File Type.... K
   Descript.... Primary index masc-oas (Archive BSF, VAV, EAM)
   Rec.Length.. 220       DB system... VSAM     Standard-DB  VSAM
   Key Length.. 28        Key Begin... 6        Levels...... _    Record Type. _
   Doc.Key Ln.. _         Doc.Reserve. _    _   Compression  G    Open Option. O
   Applicatn... *         DB Name..... _        Dynamic..... _    Fixed Length _
   Contain.Gr.. _         ContainerLng _        Minimum lng. _    Mini System. _
   CSAP-Reserve _    _    CSAP value.. 0        CSAP active. X    Cold start.. 0 0
   ADABAS:                PrefetchBeg. _        Prefetch No. _

   BS2 Form.... ISAM      Buffer No... _        No. Blocks.  _    Freespace.. 15
   DL1 Form.... HIDM      Segment Name  _       Key Name.... _
   Index....... 902    _      _      _      _      _      _      _     _     _
   Index(Docum) _      _      _      _      _      _      _      _     _     _
   Index D-M-S  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _ _ _ _ _ _

   Entry is completely new, status=USR
  Dynamic..... _
------------------------------------------------------------------------------
   Name _
   I110 Attention:  This entry does not yet exist -> PF1
   OK _      PF: 2=Select 13=Activate 21=Exceptions ...                1 -44153
```

Illustration 14: File Control Block YYJD

```
   Data Dictionary, File Control Blocks         Change: 07.03.1995 USER01
   ------------------------------------------------------------------------
   Name........ YYJE      Authoriz.... _        Type........ F    File Type.... K
   Descript.... Document positions masc-oas (Archive BSF, VAV, EAM)
   Rec.Length.. 252       DB system... VSAM     Standard-DB  VSAM
   Key Length.. 36        Key Begin... 6        Levels...... _    Record Type. _
   Doc.Key Ln.. _         Doc.Reserve. _    _   Compression  G    Open Option. O
   Applicatn... *         DB Name..... _        Dynamic..... _    Fixed Length _
   Contain.Gr.. _         ContainerLng _        Minimum lng. _    Mini System. _
   CSAP-Reserve _    _    CSAP value.. 0        CSAP active. X    Cold start.. 0 0
   ADABAS:                PrefetchBeg. _        Prefetch No. _

   BS2 Form.... ISAM      Buffer No... _        No. Blocks.  _    Freespace.. 15
   DL1 Form.... HIDM      Segment Name  _       Key Name.... _
   Index....... 903    _      _      _      _      _      _      _     _     _
   Index(Docum) _      _      _      _      _      _      _      _     _     _
   Index D-M-S  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _ _ _ _ _ _

   Entry is completely new, status=USR
  Dynamic..... _
------------------------------------------------------------------------------
   Name _
   I110 Attention:  This entry does not yet exist -> PF1
   OK _      PF: 2=Select 13=Activate 21=Exceptions ...                1 -44153
```

Illustration 15: File Control Block YYJE

```
  Data Dictionary, File Control Blocks         Change: 07.03.1995 USER01
  ------------------------------------------------------------------------
  Name........ YYJR      Authoriz.... _        Type........ F    File Type.... K
  Descript.... Primary index masc-oas (Archive KEK)
  Rec.Length.. 197       DB system... VSAM     Standard-DB  VSAM
  Key Length.. 24        Key Begin... 6        Levels...... _    Record Type. _
  Doc.Key Ln.. _         Doc.Reserve. _    _   Compression  G    Open Option. O
  Applicatn... *         DB Name..... _        Dynamic..... _    Fixed Length _
  Contain.Gr.. _         ContainerLng _        Minimum lng. _    Mini System ._
  CSAP-Reserve _    _    CSAP value.. 0        CSAP active. X    Cold start.. 0 0
  ADABAS:                PrefetchBeg. _        Prefetch No. _

  BS2 Form.... ISAM      Buffer No... _        No. Blocks.  _    Freespace.. 15
  DL1 Form.... HIDM      Segment Name  _       Key Name.... _
  Index....... 904    _      _      _      _      _      _      _     _     _
  Index(Docum) _      _      _      _      _      _      _      _     _     _
  Index D-M-S  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _ _ _ _ _ _

  Entry is completely new, status=USR
 Dynamic..... _
------------------------------------------------------------------------
  Name _
  I110 Attention:  This entry does not yet exist -> PF1
  OK _      PF: 2=Select 13=Activate 21=Exceptions ...                1 -44153
```

Illustration 16: File Control Block YYJR

```
  Data Dictionary, File Control Blocks         Change: 07.03.1995 USER01
  ------------------------------------------------------------------------
  Name........ YYJS      Authoriz.... _        Type........ F    File Type.... K
  Descript.... Secondary index masc-oas (Archive KEK)
  Rec.Length.. 56        DB system... VSAM     Standard-DB  VSAM
  Key Length.. 45        Key Begin... 6        Levels...... _    Record Type. _
  Doc.Key Ln.. _         Doc.Reserve. _    _   Compression  _    Open Option. I
  Applicatn... *         DB Name..... _        Dynamic..... _    Fixed Length X
  Contain.Gr.. _         ContainerLng _        Minimum lng. _    Mini System _
  CSAP-Reserve _    _    CSAP value.. 0        CSAP active. X    Cold start.. 0 0
  ADABAS:                PrefetchBeg. _        Prefetch No. _

  BS2 Form.... ISAM      Buffer No... _        No. Blocks.  _    Freespace.. 15
  DL1 Form.... HISM      Segment Name  _       Key Name.... _
  Index....... 905    _      _      _      _      _      _      _     _     _
  Index(Docum) _      _      _      _      _      _      _      _     _     _
  Index D-M-S  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _  _ _ _ _ _ _ _ _

  Entry is completely new, status=USR
 Dynamic..... _
------------------------------------------------------------------------
  Name _
  I110 Attention:  This entry does not yet exist -> PF1
  OK _      PF: 2=Select 13=Activate 21=Exceptions ...                1 -44153
```

Illustration 17: File Control Block YYJS

4.3.2. SAPLIMU Import

The **LOADSAP** job in the following illustration imports all SAP objects required by ***masc-oas*** into the appropriate SAP systems. For this job there is an example available on the **<PREFIX>.CNTL** dataset.

Note:

The **LOADSAP** job has to be executed for each SAP system in which ***masc-oas*** is to be used.

Please note that all SAP objects with the same name will be overwritten during import.

Please amend the following JCL statements prior to execution:

<PREFIX>	High level qualifiers of dataset names for the ***masc-oas*** product datasets in accordance with your standards (Example OAS.ORIG210).
<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)

The **LOADSAP** job imports all SAP objects which are required by ***masc-oas*** and has to terminate with a **RC=00** return code.

```
//LOADSAP  JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: IMPORT ALL SAP-OBJECTS USED BY MASC-OAS
//* ****************************************************************
//*
//*  1. IMPORT OF SAP-OBJECTS USED BY MASC-OAS
//*
//* ****************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <PREFIX> = HIGHLEVEL-QUALIFIERS FOR THE MASC-OAS
//*                      PRODUCT DATASETS ON YOUR SYSTEM.
//*       4.) <LIMU>   = NAME OF THE DATASET CONTAINING THE SAP OBJECTS
//*                      FOR YOUR ENVIRONMENT AND SAP RELEASE.
//* ****************************************************************
//*
//IMPORT   EXEC PROC=<PROC>,PRTCL='*'
//SAPR02I  DD  DSN=<PREFIX>.<LIMU>,DISP=SHR
//LIST1SO  DD  SYSOUT=*
//SYSIN    DD  *
$SAPLIMU EXEC
$        GO
IMPORT
LANGUAGE='D,E,F'
/*
```

Illustration 18: Importing ***masc-oas*** SAP objects

Note:
In IMS environments this job can also be started as BMP in order not to interrupt the online service.

4.3.3. RCBDT Generation

For the generation of the RCBDT on the dataset **<PREFIX>.CNTL**, member **OASSGENE** is provided as an example.

Please amend the following JCL statement prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)

<**UNIT**>	Unit for Work datasets
<**DATASET**>	Dataset where the generated member should be written

```
//OASSGENE JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: THIS JOB CREATES RCBDT FROM DATA DICTIONARY
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>    = PROCEDURE-NAME OF YOUR SAP-PROCEDURE
//*
//*       3.) <UNIT>    = UNIT FOR WORK DATASETS
//*
//*       4.) <DATASET> = DATASET WHERE TO PLACE THE GENERATED MEMBER
//*
//* ********************************************************************
//*
//SGENE   EXEC PROC=<PROC>,PRTCL='*'
//ATABUTI  DD  DUMMY
//SAPO01O  DD  DSN=&&SAPO01,DISP=(NEW,PASS),
//             UNIT=<UNIT>,
//             SPACE=(CYL,(10,5))
//LIST1SO  DD  SYSOUT=*
//SYSIN    DD  *
$ OPEN SEQFILE=SAPO01 OUTPUT
$SAPREPU EXEC
$        GO
REPU     SUBMIT   REPORT=<INLINE>
REPORT SRCGEN.
SUBMIT RSSRCGEN
  WITH SIM      INCL 'N'
  WITH LOWTAB   INCL 'T    '
  WITH HIGHTAB  INCL 'T999 '
  WITH GLOBALS  INCL 'X'
  WITH AUTOLIMU INCL ' '
  WITH CMDFILE  INCL ' '.
/*
//UPDATE  EXEC PGM=IEBUPDTE,PARM=NEW
//SYSPRINT DD  DUMMY
//SYSUT1   DD  DUMMY
//SYSUT2   DD  DSN=<DATASET>,DISP=SHR
//SYSIN    DD  DSN=&&SAPO01,DISP=OLD
```

Abbildung 19: OASSGENE: Generating the RCBDT

The member RCBDT that is generated by this job can now be used to assemble and link the module SAPCBDT.

4.4. Adjustments in SAP (Rel. 4.3 and 5.0)

4.4.1. SAPSYGU

Following the definition of the ***masc-oas*** databases by using SAPCBDT, the job control statements for the physical creation of the ***masc-oas*** database files can be generated from the SAP system by using the **SAPSYGU** program.

For a detailed description of the **SAPSYGU** program and its application please refer to the appropriate SAP literature . You can find a sample job with the name **OASSYGDB** on **<PREFIX>.CNTL**.

Please amend the following JCL statement prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)
<UNIT>	Unit for Work datasets
<PREFIX>	Prefix for member names
<DS-PREFIX>	Prefix for dataset names
<VOLSER>	Volume for dataset allocation
<DATASET>	Dataset where the generated member should be written

```
//OASSYGU  JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: THIS JOB CREATES MEMBERS FOR SAP SYSTEM GENERATION
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>      = PROCEDURE-NAME OF YOUR SAP-PROCEDURE
//*
//*       3.) <UNIT>      = UNIT FOR WORK DATASETS
//*
//*       4.) <PREFIX>    = PREFIX FOR MEMBER NAMES
//*
//*       5.) <DS-PREFIX> = PREFIX FOR DATASET NAMES
//*
//*       6.) <VOLSER>    = VOLUME SERIAL FOR DATASET ALLOCATION
//*
//*       7.) <DATASET>   = DATASET WHERE TO PLACE THE GENERATED MEMBER
//*
//* ********************************************************************
//*
//SYGU    EXEC PROC=<PROC>,PRTCL='*'
//SAPO01O  DD  DSN=&&SAPO01,DISP=(NEW,PASS),
//             UNIT=<UNIT>,
//             SPACE=(CYL,(10,5))
//LIST1SO  DD  SYSOUT=*
//SYSIN    DD  *
$ INSTALLATION
$SAPSYGU EXEC
$        GO
*--------------------------------------------------------------------*
```

```
TYPE=DB
*-------------------------------------------------------------*
UNIT=3390
CATALOG=NO
ICF=YES
ALLOCATION=ALL,SUBALLOCATION
MEMBER-NAME-PREFIX=<PREFIX>
*DYNAMIC-DATABASE-ALLOCATION=YES
*-------------------------------------------------------------*
DATA-SET-PREFIX=ALL,<DS-PREFIX>
VOLUMES=ALL,(<VOLSER>)
CYL=YYJB,(050 20)
CYL=YYJC,(005 05)
CYL=YYJD,(050 20)
CYL=YYJE,(050 20)
CYL=YYJR,(050 20)
CYL=YYJS,(050 20)
/*
//UPDATE  EXEC PGM=IEBUPDTE,PARM=NEW,COND=(0,NE)
//SYSPRINT DD  DUMMY
//SYSUT1   DD  DUMMY
//SYSUT2   DD  DSN=<DATASET>,DISP=SHR
//SYSIN    DD  DSN=&&SAPO01,DISP=OLD
```

Abbildung 20: OASSYGDBE: SAPSYGU

4.4.2. VSFOYYJS

Following the definition of the ***masc-oas*** databases in the SAP system, they have to be 'formatted' before use using the **VSFOYYJS** job described in the following illustration for CICS installations, IMS users please use job **VSFOYYJI**. For these jobs there are examples available on the <**PREFIX**>**.CNTL** dataset.

Note:

The **VSFOYYJS/I** job has to be executed for each SAP system in which ***masc-oas*** is to be used.

Please amend the following JCL statement prior to execution:

<**PROC**>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)
<**LS-PSB**>	(IMS only!) Name of the PSB for "load sequential"

The **VSFOYYJS** job or **VSFOYYJI** job respectively 'formats' the ***masc-oas*** introduced SAP databases and has to terminate with a **RC=00** return code.

```
//VSF0YYJS JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ******************************************************************
//* DOC: DEFINITION OF MASC-OAS DATABASES
//* ******************************************************************
//*
//*  1. SAP-VSFO ON ALL YYJ*-FILES USED BY MASC-OAS               */
//*
//* ******************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
```

```
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//* ********************************************************************
//*
//*
//*   FORMATTING ALL SAP-DB'S USED BY MASC-OAS                 /*
//*
//VSFOYYJS EXEC PROC=<PROC>,PRTCL='*'
//SYSIN    DD  *
$SAPVSFO EXEC
$        GO
YYJB     FORMT RESET
YYJC     FORMT RESET
YYJD     FORMT RESET
YYJE     FORMT RESET
YYJR     FORMT RESET
YYJS     FORMT RESET
/*
```

Illustration 21: Formatting of ***masc-oas*** databases

```
//VSFOYYJI JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: DEFINITION OF MASC-OAS DATABASES
//* ********************************************************************
//*
//*  1. SAP-VSFO ON ALL YYJ*-FILES USED BY MASC-OAS               */
//*
//*  USE THIS JOB FOR TP-MONITOR IMS
//*  ------------------------------
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <LS-PSB> = LOAD-SEQUENTIAL PSB-NAME
//* ********************************************************************
//*
//*
//*   FORMATTING ALL SAP-DB'S USED BY MASC-OAS                 /*
//*
//VSFOYYJI EXEC PROC=<PROC>,PRTCL='*',PSB=<LS-PSB>
//SYSIN    DD  *
$SAPVSFO EXEC
$        GO
YYJB     FORMT
YYJC     FORMT
YYJD     FORMT
YYJE     FORMT
YYJR     FORMT
YYJS     FORMT
/*
```

Illustration 22: 'Format' of the ***masc-oas*** datenbases for IMS/DB

4.4.3. Amending the SAP Batch Procedure

In a further step the ***masc-oas*** database files have to be integrated into the SAP batch procedure. Please insert the definitions shown in the following illustration into the SAP batch procedures of the SAP systems which are to use ***masc-oas*** .

Please amend the following statement prior to the insertion of the definitions:

<DCDATA>	High level qualifiers of the database files for the ***masc-oas*** product databases in accordance with your standards (Example DBDCCICS.DATA).

```
//YYJB     DD  DSN=<DCDATA>.YYJB,DISP=SHR
//YYJC     DD  DSN=<DCDATA>.YYJC,DISP=SHR
//YYJD     DD  DSN=<DCDATA>.YYJD,DISP=SHR
//YYJE     DD  DSN=<DCDATA>.YYJE,DISP=SHR
//YYJR     DD  DSN=<DCDATA>.YYJR,DISP=SHR
//YYJS     DD  DSN=<DCDATA>.YYJS,DISP=SHR
```

Illustration 23: Defining the ***masc-oas*** database files in the SAP batch procedures

Note:

Only the SAP database files from ***masc-oas*** have to be inserted. The OASBJCL batch JCL-File is used exclusively within ***masc-oas*** and does not have to be known by the SAP system.

For a more detailed description of the SAP batch procedure and its use please refer to the appropriate SAP literature.

4.5. Maintenance of Tables Entries in R/2 5.0

4.5.1. CAL Table

IMS users please skip this chapter

The ABAP's supplied with ***masc-oas*** use the RCALL interface, which is made available by ABAP/4. Use of this interface demands, that the called programs along with their calling parameters are inserted into the **CAL** table using the SAP **TM31** transaction. The following illustration shows the **OASBATCH** program to be entered, together with its parameters. Please also make this entry. We recommend definition in the **client 00**.

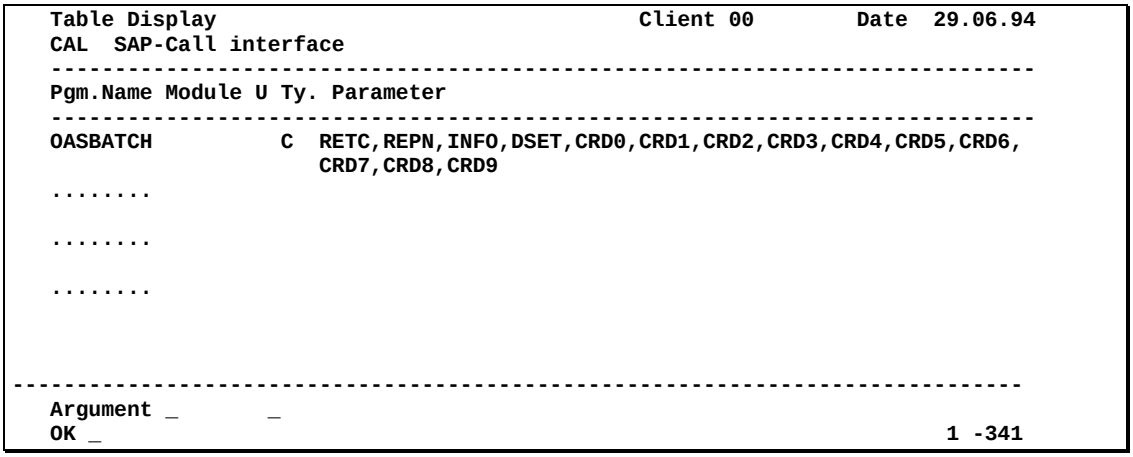

Illustration 24: Entries in table CAL for ***masc-oas***

4.5.2. STC Table

Using the SAP **TM31** transaction, the SAP transactions supplied with ***masc-oas*** have to be entered into the SAP **STC** table, so that they can be called. The following illustration shows the transactions to be inserted together with their parameters. Please make this entry. We recommend definition in **client 00**.

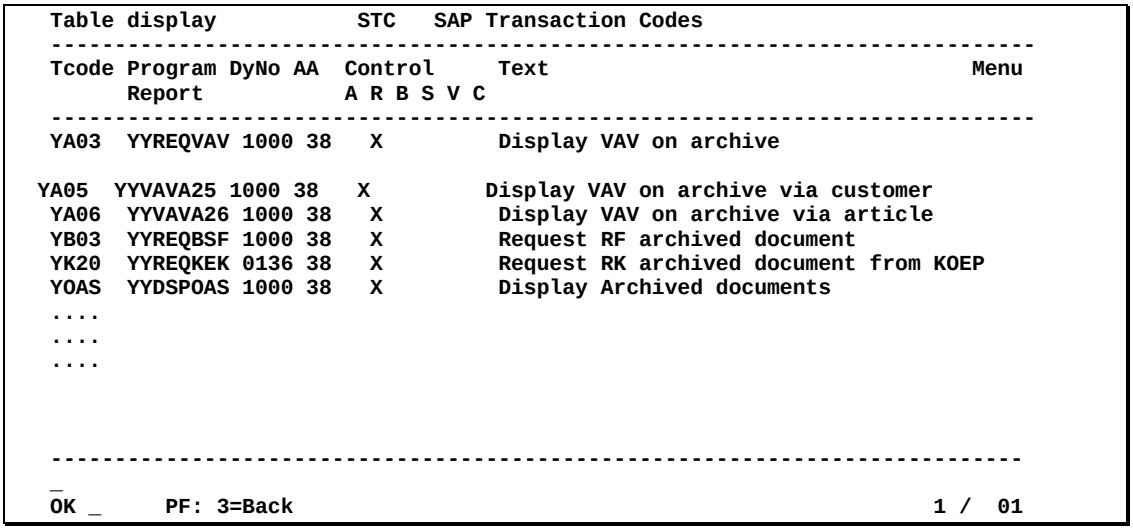

Illustration 25: Entries in table STC for ***masc-oas***

4.5.3. Creating *masc-oas* Tables

The tables **T9YYB**, **T9YYN**, and **T9YYK** are created in the client 00 during loading of the SAP objects for ***masc-oas***. For the use of ***masc-oas***, these tables have to be recreated in the clients provided for ***masc-oas***. Please use the following procedures for this purpose:

1. Executing the **TM33** transaction, **function EQ** with the **00 reference client.**
2. Executing the **TM33** transaction, **function CP,** continue until the confirmation message: **'00 Strings copied from client 00'** appears.

4.5.4. Table 9YYK

In the table 9YYK, the age of the document positions is stored.

If age 0 is entered into the table, no document positions at all are considered for the short-info. With age x, only the data of document positions with age less than x are taken into the short info.

Valid ages are 00 to 10.

When the data of document positions aare not taken into the short-info because of their age, they also don't appear on the respective displays. However, you can see the whole document calling it from the archive (PF2=Select). In order to maximize the information available when you can't see the whole document, some values like total amount of the document, total VAT, or the total number of document positions can be seen in the short-info of the document heading.

When maintaining table 9YYK using TM31, you see something like the following:

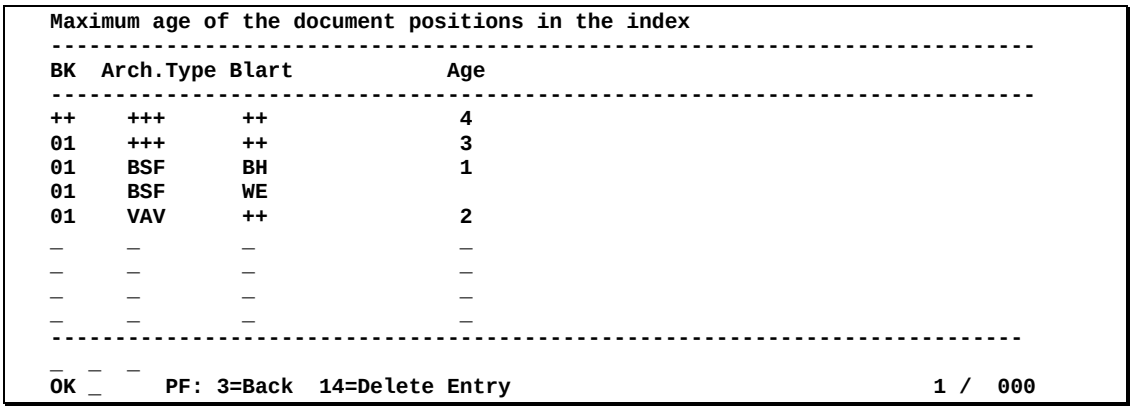

Illustration 26: Table 9YYK

In the example above, all documents older than 4 years won't have any document positions stored in the short-info. For Company 01, the age is 3 years. For archive BSF, document type BH will have only the document headings for documents older than 1 year, whereas document type WE will never have document positions in the short-info. For archive VAV, Company 01 will only have document positions that are younger than 2 years.

Note:
The example above is **no recommendation at all** but serves only as an example to show and explain the possible entries. Table 9YYK has to be adjusted in any case to your environment!

5. INTEGRATION IN A CICS ENVIRONMENT

This chapter describes all steps necessary for the integration of ***masc-oas*** into your CICS environment.

Note:

The following definitions and amendments have to be executed in every CICS environment in which ***masc-oas*** is to be used.

5.1. Amending CICS Startup Procedure

5.1.1. DFHRPL

The following statement has to be added into the **DFHRPL** concatenation within the CICS startup procedure in order to make the ***masc-oas*** load library known to CICS:

Please amend the following JCL statement prior to insertion:

<**PREFIX**>	High level qualifiers of dataset name for the ***masc-oas*** product datasets in accordance with your standards (e.g. OAS.ORIG210)

```
//DFHRPL   DD  DSN=...
//         DD  DSN=<PREFIX>.LOAD,DISP=SHR
//         DD  DSN=...
```

Illustration 27: Concatenation of ***masc-oas*** load library within DFHRPL

5.1.2. Entries for the *masc-oas* Files

To make the ***masc-oas*** databases and the batch JCL file recognisable by CICS, the following statements have to be inserted into the CICS startup procedure:

Prior to insertion please amend the following JCL statement:

<DCDATA>	High level qualifiers of database files for the ***masc-oas*** product databases in accordance with your standards (Example DBDCCICS.DATA).

```
//* ****************************************************************
//* DOC: DEFINITION OF MASC-OAS DATABASES AND BATCH-JCL-FILE
//* ****************************************************************
//*
//YYJB     DD  DSN=<DCDATA>.YYJB,DISP=SHR
//YYJC     DD  DSN=<DCDATA>.YYJC,DISP=SHR
//YYJD     DD  DSN=<DCDATA>.YYJD,DISP=SHR
//YYJE     DD  DSN=<DCDATA>.YYJE,DISP=SHR
//YYJR     DD  DSN=<DCDATA>.YYJR,DISP=SHR
//YYJS     DD  DSN=<DCDATA>.YYJS,DISP=SHR
//OASBJCL  DD  DSN=<DCDATA>.OASBJCL,DISP=SHR
//*
```

Illustration 28: Definition of ***masc-oas*** databases and the batch JCL files into the CICS startup

5.2. Inserting the CICS Entries

For the insertion of the CICS entries there is an example of the corresponding assembler macros on the **<PREFIX>.ASM** dataset. Of course the corresponding definitions can also be defined manually using RDO or assembly and migration of the assembler sources.

5.2.1. FCT Entries

The **OASFCT** assembler macro in the following illustrations contains all required entries for the ***masc-oas*** data files : **OASBJCL**, **YYJB**, **YYJC, YYJD, YYJE, YYJR, and YYJS**.

```
* FCT COPYBOOK, MASC-OAS, ONLINE-ARCHIVE FOR SAP
*
* ****************************************************************
*
* THIS MEMBER CONTAINS ALL FCT-ENTRIES
* USED BY MASC-OAS, ONLINE-ARCHIVE FOR SAP
*
* ****************************************************************
*
        DFHFCT TYPE=DATASET,                                          X
               DATASET=OASBJCL,                                       X
               ACCMETH=(VSAM),                                        X
               SERVREQ=(READ,BROWSE),                                 X
               RECFORM=(FIXED,BLOCKED),                               X
               LSRPOOL=1,                                             X
               STRNO=1
        DFHFCT TYPE=DATASET,                                          X
               DATASET=YYJB,                                          X
               ACCMETH=(VSAM),                                        X
               SERVREQ=(READ,BROWSE),                                 X
               RECFORM=(FIXED,UNBLOCKED),                             X
               LSRPOOL=NONE,                                          X
               BUFND=3,                                               X
               BUFNI=2,                                               X
```

```
               STRNO=5
        DFHFCT TYPE=DATASET,                                          X
               DATASET=YYJC,                                          X
               ACCMETH=(VSAM),                                        X
               SERVREQ=(READ,BROWSE),                                 X
               RECFORM=(VARIABLE,UNBLOCKED),                          X
               LSRPOOL=NONE,                                          X
               BUFND=3,                                               X
               BUFNI=2,                                               X
               STRNO=5
        DFHFCT TYPE=DATASET,                                          X
               DATASET=YYJD,                                          X
               ACCMETH=(VSAM),                                        X
               SERVREQ=(READ,BROWSE),                                 X
               RECFORM=(VAR,UNBLOCKED),                               X
               LSRPOOL=NONE,                                          X
               BUFND=3,                                               X
               BUFNI=2,                                               X
               STRNO=5
        DFHFCT TYPE=DATASET,                                          X
               DATASET=YYJE,                                          X
               ACCMETH=(VSAM),                                        X
               SERVREQ=(READ,BROWSE),                                 X
               RECFORM=(VAR,UNBLOCKED),                               X
               LSRPOOL=NONE,                                          X
               BUFND=3,                                               X
               BUFNI=2,                                               X
               STRNO=5
        DFHFCT TYPE=DATASET,                                          X
               DATASET=YYJR,                                          X
               ACCMETH=(VSAM),                                        X
               SERVREQ=(READ,BROWSE),                                 X
               RECFORM=(VAR,UNBLOCKED),                               X
               LSRPOOL=NONE,                                          X
               BUFND=3,                                               X
               BUFNI=2,                                               X
               STRNO=5
        DFHFCT TYPE=DATASET,                                          X
               DATASET=YYJS,                                          X
               ACCMETH=(VSAM),                                        X
               SERVREQ=(READ,BROWSE),                                 X
               RECFORM=(FIXED,UNBLOCKED),                             X
               LSRPOOL=NONE,                                          X
               BUFND=3,                                               X
               BUFNI=2,                                               X
               STRNO=5
```

Illustration 29: FCT entries for ***masc-oas***

5.2.2. PCT Entries

The **OASPCT** assembler macro in the following illustration contains all required entries for the ***masc-oas*** **OASM t**ransaction.

```
* PCT COPYBOOK, MASC-OAS, ONLINE-ARCHIVE FOR SAP
*
* ****************************************************************
*
* THIS MEMBER CONTAINS ALL PCT-ENTRIES
* USED BY MASC-OAS, ONLINE-ARCHIVE FOR SAP
*
* ****************************************************************
*
OASM     DFHPCT TRANSID=OASM,PROGRAM=OASFIMSG,TYPE=ENTRY,TWASIZE=0,    X
               EXTSEC=NO,TRANSEC=1,RSL=PUBLIC
```

Illustration 30: PCT entries for ***masc-oas***

5.2.3. PPT Entries

The **OASPPT** assembler macro in the following illustration contains all required entries for the ***masc-oas*** programs.

```
* PPT COPYBOOK, MASC-OAS, ONLINE-ARCHIVE FOR SAP
*
* ****************************************************************
*
* THIS MEMBER CONTAINS ALL PPT-ENTRIES
* USED BY MASC-OAS, ONLINE-ARCHIVE FOR SAP
*
* ****************************************************************
*
OASBATCH DFHPPT TYPE=ENTRY,PGMLANG=ASSEMBLER,PROGRAM=OASBATCH
OASEXIT  DFHPPT TYPE=ENTRY,PGMLANG=ASSEMBLER,PROGRAM=OASEXIT
OASFIMSG DFHPPT TYPE=ENTRY,PGMLANG=ASSEMBLER,PROGRAM=OASFIMSG
```

Illustration 31: PPT entries for ***masc-oas***

5.2.4. SIT Entries

masc-oas utilises the 'CICS/JES spool interface' for the reading of the document archives. Therefore CICS has to be admitted to the interface with the following entry in the SIT.

```
SPOOL=YES
```

Illustration 32: SIT entry for ***masc-oas***

6. INTEGRATION IN AN IMS ENVIRONMENT

This chapter describes all steps necessary for the integratin of ***masc-oas*** into your IMS environment.

6.1. Amending the Control Region

If your IMS system works with DYNAMIC ALLOCATION, then the databases of ***masc-oas*** have to be integrated into the DYNALLOC member. Please add the entries for YYJB, YYJC, YYJD, YYJE, YYJR, and YYJS.

In the other case, please add the following statements to the JCL for the IMS Control Region in order to define the ***masc-oas*** databases to IMS:

Please amend the following JCL statement:

<DCDATA>	High level qualifiers of the database files for the ***masc-oas*** product databases in accordance with your standards (Example PSAP.DATA).

```
//* ******************************************************************
//* DOC: DEFINITION OF MASC-OAS DATABASES
//* ******************************************************************
//*
//YYJB     DD  DSN=<DCDATA>.YYJB,DISP=SHR
//YYJC     DD  DSN=<DCDATA>.YYJC,DISP=SHR
//YYJD     DD  DSN=<DCDATA>.YYJD,DISP=SHR
//YYJE     DD  DSN=<DCDATA>.YYJE,DISP=SHR
//YYJR     DD  DSN=<DCDATA>.YYJR,DISP=SHR
//YYJS     DD  DSN=<DCDATA>.YYJS,DISP=SHR
//*
```

Illustration 33: Definition of the ***masc-oas*** databases for IMS

6.2. Embedding of the *masc-oas* databases

6.2.1. Generating the DBD

The dataset **<PREFIX>.ASM** contains the sample assembler macros **DBDYYJB, DBDYYJC, DBDYYJD, DBDYYJE, DBDYYJR,** and **DBDYYJS** that serve to make all necessary entries for the ***masc-oas*** databases.

Please amend the following parameters:

<**PRE**>	System prefix
<**3390**>	Unit

```
*********************************************************************
* MASC-OAS:  <PRE>YYJB                                               *
* SECONDARY INDEX FOR ARCHIVES BSF, EAM, VAV                         *
*********************************************************************
         DBD   NAME=<PRE>YYJB,                                       *
               ACCESS=(HISAM,VSAM)
         SPACE 3
         DATASET DD1=<PRE>YYJB,                                      *
               DEVICE=<3390>,                                        *
               SIZE=4096
         SPACE 3
         SEGM  NAME=YYJB1,                                           *
               PARENT=0,                                             *
               BYTES=051,                                            *
               PTR=T
         SPACE 3
         FIELD NAME=(YYJB1K,SEQ,U),                                  *
               BYTES=042,                                            *
               START=005,                                            *
               TYPE=C
         SPACE 3
         DBDGEN
         FINISH
         END
```

Illustration 34: DBDYYJB: DBD for YYJB

```
*********************************************************************
* MASC-OAS:  <PRE>YYJC                                               *
* TRANSFER FILE                                                      *
*********************************************************************
         DBD   NAME=<PRE>YYJC,                                       *
               ACCESS=(HISAM,VSAM)
         SPACE 3
         DATASET DD1=<PRE>YYJC,                                      *
               DEVICE=<3390>,                                        *
               SIZE=4096
         SPACE 3
         SEGM  NAME=YYJC1,                                           *
               PARENT=0,                                             *
               BYTES=(04000,00033)                                   *
               PTR=T
         SPACE 3
         FIELD NAME=(YYJC1K,SEQ,U),                                  *
               BYTES=029,                                            *
               START=005,                                            *
               TYPE=C
         SPACE 3
         DBDGEN
         FINISH
         END
```

Illustration 35: DBDYYJC: DBD for YYJC

```
*********************************************************************
* MASC-OAS:  <PRE>YYJD                                               *
* DOCUMENT HEADERS FOR ARCHIVES BSF, EAM, VAV                        *
*********************************************************************
         DBD   NAME=<PRE>YYJD,                                       *
```

```
              ACCESS=(HISAM,VSAM)
         SPACE 3
         DATASET DD1=<PRE>YYJD,                                        *
               DEVICE=<3380>,                                          *
               SIZE=4096
         SPACE 3
         SEGM  NAME=YYJD1,                                             *
               PARENT=0,                                               *
               BYTES=(00220,00034),                                    *
               PTR=T
         SPACE 3
         FIELD NAME=(YYJD1K,SEQ,U),                                    *
               BYTES=028,                                              *
               START=007,                                              *
               TYPE=C
         SPACE 3
         DBDGEN
         FINISH
         END
```

Illustration 36: DBDYYJD: DBD for YYJD

```
*********************************************************************
* MASC-OAS:  <PRE>YYJD                                              *
* DOCUMENT POSITIONS FOR ARCHIVES BSF, EAM, VAV                     *
*********************************************************************
         DBD   NAME=<PRE>YYJE,                                         *
               ACCESS=(HISAM,VSAM)
         SPACE 3
         DATASET DD1=<PRE>YYJE,                                        *
               DEVICE=<3390>,                                          *
               SIZE=4096
         SPACE 3
         SEGM  NAME=YYJE1,                                             *
               PARENT=0,                                               *
               BYTES=(00252,00042),                                    *
               PTR=T
         SPACE 3
         FIELD NAME=(YYJE1K,SEQ,U),                                    *
               BYTES=036,                                              *
               START=007,                                              *
               TYPE=C
         SPACE 3
         DBDGEN
         FINISH
         END
```

Illustration 37: DBDYYJE: DBD for YYJE

```
*********************************************************************
* MASC-OAS:  <PRE>YYJR                                              *
* PRIMARY INDEX masc-oas (ARCHIVE KEK)                              *
*********************************************************************
         DBD   NAME=<PRE>YYJR,                                         *
               ACCESS=(HISAM,VSAM)
         SPACE 3
         DATASET DD1=<PRE>YYJR,                                        *
               DEVICE=<3380>,                                          *
               SIZE=4096
         SPACE 3
         SEGM  NAME=YYJR1,                                             *
               PARENT=0,                                               *
               BYTES=(00197,00030),                                    *
               PTR=T
         SPACE 3
         FIELD NAME=(YYJR1K,SEQ,U),                                    *
               BYTES=024,                                              *
               START=007,                                              *
               TYPE=C
```

```
         SPACE 3
         DBDGEN
         FINISH
         END
```

Illustration 38: DBDYYJR: DBD for YYJR

```
*********************************************************************
* MASC-OAS:  <PRE>YYJS                                               *
* SECONDARY INDEX FOR ARCHIVE KEK                                    *
*********************************************************************
         DBD   NAME=<PRE>YYJS,                                       *
               ACCESS=(HISAM,VSAM)
         SPACE 3
         DATASET DD1=<PRE>YYJS,                                      *
               DEVICE=<3390>,                                        *
               SIZE=4096
         SPACE 3
         SEGM  NAME=YYJS1,                                           *
               PARENT=0,                                             *
               BYTES=056,                                            *
               PTR=T
         SPACE 3
         FIELD NAME=(YYJS1K,SEQ,U),                                  *
               BYTES=045,                                            *
               START=007,                                            *
               TYPE=C
         SPACE 3
         DBDGEN
         FINISH
         END
```

Illustration 39: DBDYYJS: DBD for YYJS

6.2.2. Amending the online PSB

For the amending of the online PSB, the assembler macro **OASPSB** is provided. It is shown in the following illustration:

Please amend the following parameters:

<**PRE**>	System prefix

```
*********************************
*PSB-NAME     : PPPENTR          *
*********************************
*
*
*********************************************************************
* PLEASE ADD THE FOLLOWING ENTRIES TO YOUR PSB
* REPLACE <PRE> BY YOUR SYSTEM PREFIX
*********************************************************************
*
*** DB PCB : <PRE>YYJB
         PCB   TYPE=DB,                                              *
               DBDNAME=<PRE>YYJB,                                    *
               PROCOPT=A,                                            *
               KEYLEN=040
*
         SENSEG NAME=YYJB1,                                          *
               PARENT=0
*
*** DB PCB : <PRE>YYJC
         PCB   TYPE=DB,                                              *
```

```
               DBDNAME=<PRE>YYJC,                                        *
               PROCOPT=A,                                                *
               KEYLEN=027
*
         SENSEG NAME=YYJC1,                                              *
               PARENT=0
*
*** DB PCB : <PRE>YYJD
         PCB   TYPE=DB,                                                  *
               DBDNAME=<PRE>YYJD,                                        *
               PROCOPT=A,                                                *
               KEYLEN=026
*
         SENSEG NAME=YYJD1,                                              *
               PARENT=0
*
*** DB PCB : <PRE>YYJE
         PCB   TYPE=DB,                                                  *
               DBDNAME=<PRE>YYJE,                                        *
               PROCOPT=A,                                                *
               KEYLEN=034
*
         SENSEG NAME=YYJE1,                                              *
               PARENT=0
*
*** DB PCB : <PRE>YYJR
         PCB   TYPE=DB,                                                  *
               DBDNAME=<PRE>YYJR,                                        *
               PROCOPT=A,                                                *
               KEYLEN=022
*
         SENSEG NAME=YYJR1,                                              *
               PARENT=0
*
*** DB PCB : <PRE>YYJS
         PCB   TYPE=DB,                                                  *
               DBDNAME=<PRE>YYJS,                                        *
               PROCOPT=A,                                                *
               KEYLEN=043
*
         SENSEG NAME=YYJS1,                                              *
               PARENT=0
```

Illustration 40: PSB entries for YYJB, YYJC, YYJD, YYJE, YYJR, and YYJS

6.2.3. Additional steps

Afterwards, there follows an ACBGEN and the other online changes.

6.3. Integration in the IMS batch environment

In at least one BMP-PSB, the database YYJC should be contained with PROC-Option=A.

If the PSBs are generated via table TPSB, it should be adjusted using TM31 as follows:

```
Pflegen ATAB-Tabelle   PSB    PSB-TCP - Tabelle
PSB-Name   Mode   Gsam   Datenbank   Processing Options   HSSR Applications
                                      GO     A      L/LS   PCB
-------------------------------------------------------------------------
SAPREPU    BMP     _      YYJC        1      1      _      _    _
```

Illustration 41: TPSB entry for YYJC

6.4. Amending the batch JCL for IMS

The batch JCL that is used to find a document on the archive is on a report with the name YYOASJCL. Please amend it to conform to your standard in order for it to run in your environment.

Please note that all variables starting with %% will be filled with the right values before the job is submitted. Please do not change these strings! After the SUBMIT %%REPORT further statements are included by the ABAP in order to find the right document. Also, the point at the end is inserted by the ABAP.

```
//BMREPUE  JOB 112233,'masc-oas',
//             CLASS=A,MSGLEVEL=(1,1),MSGCLASS=X
//* ------------------------------------------------------------
//* JOB THAT WILL BE SUBMITTED BY MASC-OAS TO ACCESS THE ARCHIVE
//*
//* PLEASE DO NOT CHANGE THE VARIABLES THAT START WITH %%
//* THEY WILL BE REPLACED BY MASC-OAS
//* ------------------------------------------------------------
//REPU      EXEC PROC=SAPBMP,
//               PSB=SAPREPU,
//               IN=SAPREPU,
//               PRTCL='*'
//IMSLOGR   DD   DSN=IMSVS.IMSLOG,DISP=SHR
//IMSERR    DD   SYSOUT=*
//SYSPRIN   DD   SYSOUT=*
//SAPROLL   DD   DSN=&&ROLB,DISP=(NEW,PASS)
//SAPB01I   DD   DISP=SHR,DSN=%ç%ARCHIV
//SAPS01I   DD   DISP=SHR,DSN=%ç%ARCHIV
//SAPV01I   DD   DISP=SHR,DSN=%ç%ARCHIV
//SAPV01O   DD   DSN=&&SAPV01,DISP=(NEW,PASS),
//               SPACE=(CYL,(1,1)),UNIT=SYSDA
//SYSIN     DD   *
$ MANDANT %%MAND
$ SYNCFREQ 10
$ BASCHKP
$SAPREPU EXEC
$       GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT %%REPORT
```

Illustration 42: YYOASJCL: Batch JCL for IMS

7. IMPLEMENTATION OF DOCUMENT ARCHIVES

The following chapter describes the indexing of document archives and the integration into your SAP environment.

7.1. Preliminary

masc-oas permits the access to document archives through the use of index datasets. These are created on the basis of the original SAP document archives. The indexing run from ***masc-oas*** is designed in such a way that basically no interrupts or changes to the existing reorganisation procedures are necessary. Equally it is always possible to index any number of older document archives at a later stage and thus make them available to the SAP user under ***masc-oas*** .

Note:

For technical reasons the indexing runs have to be executed per client and indvidually for each logical SAP archive (BSF, VAV,...) .

Obviously, the index dataset can be reorganised. It is thus possible to remove documents of older document archives from the index, or to update the index when datasets and archive tapes are merged from several tapes (e.g.. monthly archives bound into a yearly archive). Please note in this context Chapter '9. Reorganising the Data Index' of this manual.

7.2. Embedding within Document Reorganisation

The following illustrations shows the standard document reorganisation within a SAP environment. Basically, it need not be changed for the application of ***masc-oas***.

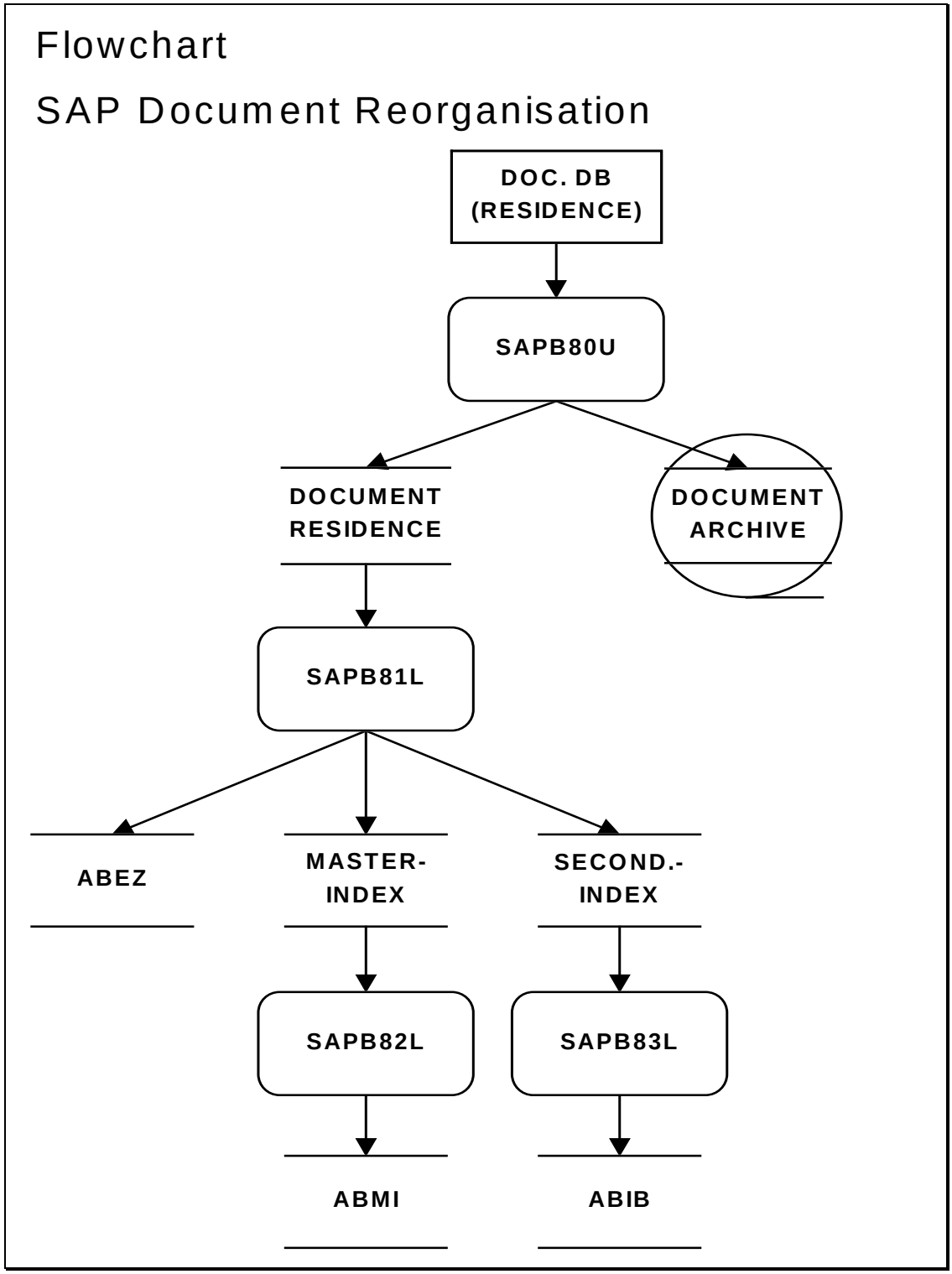

Illustration 43: SAP Document Reorganisation; Flowchart

masc-oas processes the document archive created during document reorganisation and from it creates the index dataset. The following illustration shows the flow of such an indexing run.

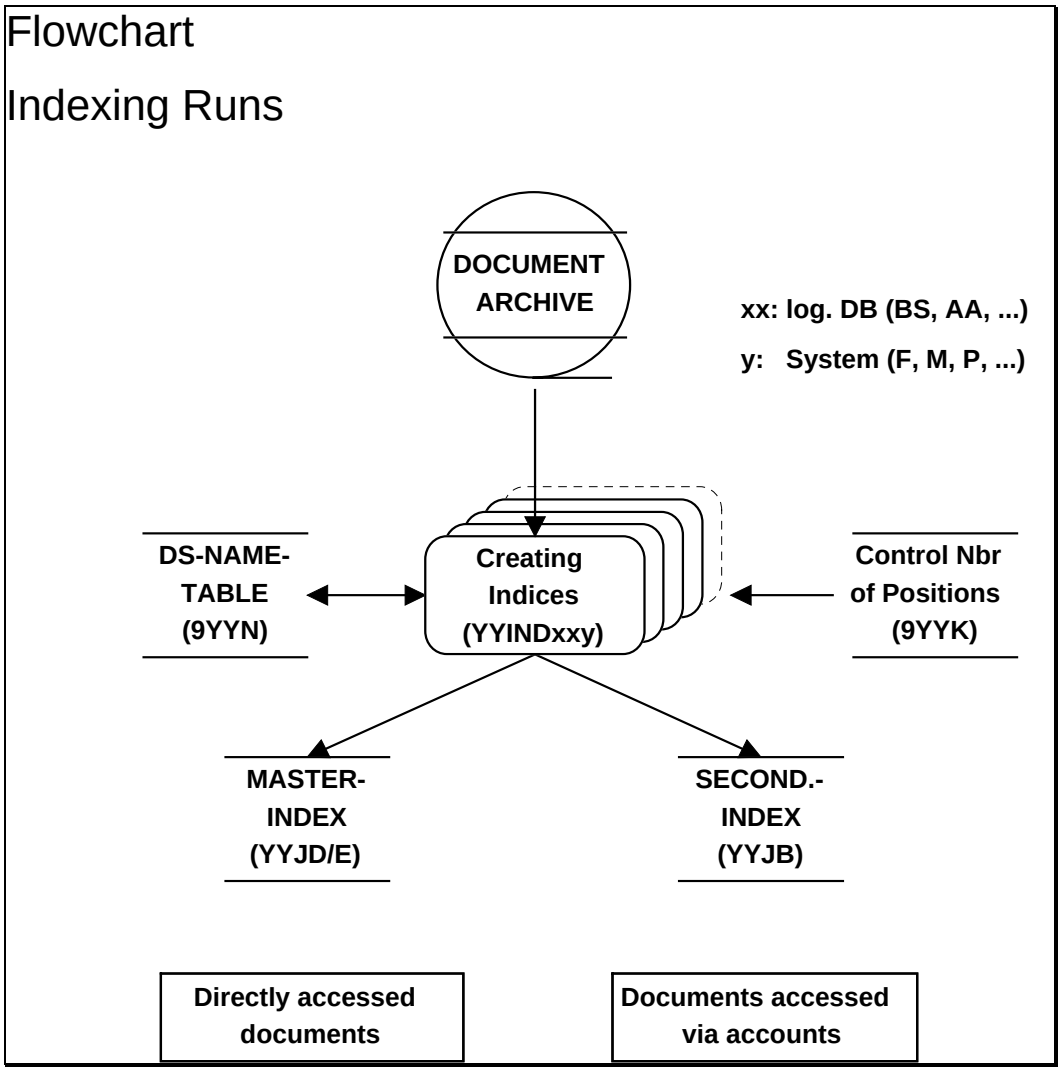

Illustration 44: ***masc-oas*** Indexing Runs; Flowchart

For a more detailed description of the indexing procedure, please refer to the explanations given in the other ***masc-oas*** manuals.

7.3. Archive BSF

The following paragraphs contain the necessary jobs for the indexing of the BSF document archive for implementation with the SAP systems R/2 4.3 or 5.0.

7.3.1. Loading the product datasets for archive BSF

If you already loaded the datasets for archive BSF during the installation of the base part of ***masc-oas***, please skip this chapter and continue with "Loading the SAP objects".

The job **OASLOADA** in the following illustration loads all ***masc-oas*** product datasets for one archive. A sample job is provided on the dataset **<PREFIX>.CNTL**.

The following table shows which datasets you need to load for your environment:

File-Name	File-Nr	CICS SAP 4.3	CICS SAP 5.0	IMS SAP 4.3	IMS SAP 5.0
OAS.V210.LMBSFC43	9	**YES**	NO	NO	NO
OAS.V210.LMBSFI43	10	NO	NO	**YES**	NO
OAS.V210.LMBSFC50	11	NO	**YES**	NO	NO
OAS.V210.LMBSFI50	12	NO	NO	NO	**YES**

Please amend the following JCL statements before execution:

<**UNIT**>	Unit name of your MVS Installation for cassette (e.g. CTAPE)
<**PREFIX**>	High level qualifiers of the dataset name for the ***masc-oas*** product datasets in accordance with your standards (e.g. OAS.ORIG210) Since SYSIN refers to member $COPY with the same prefix, please adjust this in case the prefix chosen now is different than in the preceding step
<**VOLSER**>	Volume name, on which the corresponding dataset is to be created
<ARCHIVE>	Name of the archive that is to be installed: BSF

The job **OASLOADA** creates and loads all datasets. Referring to the table above you can choose to only execute the job steps that load datasets for your environment.

```
//OASLOADA JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: UNLOAD THE MASC-OAS 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-OAS
//*                      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-OAS PRODUCT
//*                      DATASETS ON TARGET SYSTEM.
//*       5.) ARCHIVE  = NAME OF THE ARCHIVE
//* ****************************************************************
//UNLOAD   PROC UNIT=CTAPE,             <-- PLEASE ADJUST
//             VOLSER=,                 <-- PLEASE ADJUST
//             PREFIX='OAS.V210',       <-- PLEASE ADJUST
//             ARCHIVE=BSF              <-- PLEASE ADJUST
//*
//* ****************************************************************
//* UNLOAD FILE 9 MASC-OAS SAP OBJECTS REL 4.3   CICS    Archive
//* ****************************************************************
//UNLOAD9  EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.C43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(9,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.C43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 10 MASC-OAS SAP OBJECTS REL 4.3   IMS     Archiv
//* ****************************************************************
//UNLOAD10 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.I43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(10,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.I43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 11 MASC-OAS SAP OBJECTS REL 5.0   CICS    Archiv
//* ****************************************************************
//UNLOAD11 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.C50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(11,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.C50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 12 MASC-OAS SAP OBJECTS REL 5.0   IMS     Archiv
//* ****************************************************************
//UNLOAD12 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.I50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(12,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.I50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//         PEND
//GO       EXEC UNLOAD
//*
/* EOJ
```

Illustration 45: Loading the ***masc-oas*** product datasets

7.3.2. Loading the SAP objects for archive BSF

All objects needed to use archive BSF of ***masc-oas***:

- Reports
- Tables
- Domains

are delivered for SAP releases **R/2 4.3** and **R/2 5.0**.

The following SAP objects are implemented for use with archive BSF:

Reports:				
YYANZBSF	YYARCBSF	YYBSFSHI	YYINDBSF	YYPREBSF
YYREQBSF	YYSUBBSF			
Documentation:				
REYYANZBSF	REYYINDBSF	REYYREQBSF		

Illustration 46: SAP objects for ***masc-oas*** archive BSF

7.3.3. SAPLIMU Import

The job **LOADSAP** in the following illustration imports all SAP objects needed by archive BSF of ***masc-oas*** in corresponding SAP systems. An example for this job is provided on the dataset <**PREFIX**>**.CNTL**.

Note:

The job **LOADSAP** has to be executed for each SAP system where ***masc-oas*** should be used.

Please note that SAP objects with the same names are overwritten during IMPORT.

Please amend the following statements before execution:

<**PREFIX**>	High-Level Qualifiers of the dataset names of the ***masc-oas*** product datasets according to your standards (e.g. OAS.ORIG210).
<**PROC**>	Procedure name of the SAP batch procedure in your system (e.g. SAPBTCHP)

The job **LOADSAP** imports all SAP objects needed by ***masc-oas*** in the languages D, E und F. If you don't want to install all languages, please remove the corresponding language code from the Language Statement after the IMPORT.

The job should end with a return-code **RC=00**.

```
//LOADSAP  JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: IMPORT ALL SAP-OBJECTS USED BY MASC-OAS
//* ********************************************************************
//*
//*  1. IMPORT OF SAP-OBJECTS USED BY MASC-OAS
//*
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
```

```
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <PREFIX> = HIGHLEVEL-QUALIFIERS FOR THE MASC-OAS
//*                      PRODUCT DATASETS ON YOUR SYSTEM.
//*       4.) <LIMU>   = NAME OF THE DATASET CONTAINING THE SAP OBJECTS
//*                      FOR YOUR ENVIRONMENT AND SAP RELEASE.
//* ****************************************************************
//*
//IMPORT   EXEC PROC=<PROC>,PRTCL='*'
//SAPR02I  DD  DSN=<PREFIX>.<LIMU>,DISP=SHR
//LIST1SO  DD  SYSOUT=*
//SYSIN    DD  *
$SAPLIMU EXEC
$        GO
IMPORT
LANGUAGE='D,E,F'
/*
```

Illustration 47: Import of the ***masc-oas*** SAP objects for R/2 5.0

7.3.4. *masc-oas* Datenbases for archive BSF

masc-oas utilizes the following databases to store all necessary information about the documents of archive BSF:

YYJB	Secondary index dataset of document archives
YYJC	'Transfer' database for the transfer of the documents located in batch from the batch to the SAP system.
YYJD	Master index dataset with the document headings
YYJE	Document positions

If you did not allocate these datasets during the installation of the base modules and integrate them into your SAP, please do so now. The description of the necessary steps can be found above.

7.3.5. SAP Tables

7.3.5.1. Table STC

Using the SAP **TM31** transaction, the SAP transactions supplied with ***masc-oas*** have to be entered into the SAP **STC** table, so that they can be called. The following illustration shows the transactions to be inserted together with their parameters. During the base installation we recommended to already make the entry for YB03. Please check if the entry is made correctly or make if now as shown in the following illustration. We recommend definition in **client 00**.

```
Table display          STC   SAP Transaction Codes
------------------------------------------------------------------------------
Tcode Program DyNo AA  Control     Text                                  Menu
      Report           A R B S V C
------------------------------------------------------------------------------
YB03  YYREQBSF 1000 38   X         Request RF archived document
....
....
....



------------------------------------------------------------------------------
_
OK _     PF: 3=Back                                                 1 /  01
```

Illustration 48: Entries in table STC for ***masc-oas*** archive BSF

7.3.5.2. Table 9YYK

Table 9YYK determines the age after which only document headings will be stored in the short-infos.

The table 9YYK is described in detail during base installation. Please adjust it before indexing archive BSF according to your requirements.

7.3.6. Indexing with SAP R/2 4.3

7.3.6.1. Amending the Job Control Statements

The **INDXBSF4** job in the following illustration indexes the original SAP BSF document archive for use with ***masc-oas.*** For this job there is an example available on the **<PREFIX>.CNTL** dataset.

The processing within the **INDXBSF4** job is structured such that in a first step the physical dataset name of the archive tape is established and then in a second step the index datasets are created.

Note:

The **INDXBSF4** job must, for SAP technical reasons, be executed **for each client** to achieve complete indexing of the SAP BSF document archive

Please note in this context also that **a subsequent amending of the physical dataset name** requires an amendment to the index entries in ***masc-oas*** . For this purpose there is the **reorganisation program for index datasets** available (see Chapter '9. Reorganising the Data Index').

Please amend the following JCL statements prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)

<ARCHIV>	Dataset name of the SAP archive tape which is to be indexed for use with ***masc-oas*** (Example SAP.DATA.SAVE). Apart from the physical dataset name, the logical generation name (e.g. (-5))can also be given.
<MAND>	Specifying the client for which the indexing is to be executed (e.g. 001)

The **INDXBSF4** job creates the index dataset required by ***masc-oas*** for the BSF document archive and has to terminate with a **RC=00** return code.

```
//INDXBSF4 JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ******************************************************************
//* DOC: INDEXING OF SAP DOCUMENT ARCHIVE FOR USE WITH MASC-OAS
//*      THE FOLLOWING JOB IS FOR USE WITH R/2 4.3
//* ******************************************************************
//*
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//*
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS */
//*
//* ******************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <ARCHIV> = DATASET-NAME OF THE SAP DOCUMENT ARCHIVE
//*                      TO BE INDEXED. (GDG'S ALLOWED)
//*       4.) <MAND>   = VALUE OF MANDANT TO BE PROCESSED.
//* ******************************************************************
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//* ******************************************************************
//FINDDSN  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
//LIST0SO  DD  DSN=&&DSETNAM,
//             UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=133,BLKSIZE=133),
//             SPACE=(500,(500,250)),
//             DISP=(NEW,PASS)
//LIST1SO  DD  SYSOUT=*
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT YYOPEOAS USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 079
       WITH SY-PRINT INCL '21XX X XPRT1       LIST1SX'
       WITH DY/ARCHN INCL '01'.
/*
//* ******************************************************************
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS */
//* ******************************************************************
//ARCHIVE  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//LIST1SO  DD  SYSOUT=*
//SPOL0SI  DD  DSN=&&DSETNAM,DISP=(OLD,DELETE)
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
```

```
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=YYPREBSF
/*
```

Illustration 49: Indexing the SAP BSF Document Archive for ***masc-oas*** using R/2 4.3

7.3.6.2. Amending the Processing Parameters in R/2 4.3

The structure of the ***masc-oas*** indexing ABAPs permits various selection options in the creation of the secondary indices (YYJB). Thus, for example, only those documents which point to resident accounts will be added to the index. Therefore the bit sequences of the segment control in the 'SELECT-OPTIONS' of the Indexing ABAPs are important.

Note:

In the supplied version of the ***masc-oas*** indexing ABAPs, only documents that point to at least one resident account are taken into consideration in the set up of the secondary indices.

When you want to make any changes to the segment control, then these can be coded in the **YYPREBSF** request-ABAP. For a description of the segment control please refer to the available SAP system documentation with the DOKA transaction. Ask for the system documentation for the table field SKSB-SGCTL, LIFB-SGCTL and KUNB-SGCTL respectively.

7.3.7. Implementation with SAP R/2 5.0

7.3.7.1. Amending the Job Control Statements

With the **INDXBSF5** job in the following illustration the original SAP BSF document archive is indexed for use with ***masc-oas***. For this job there is an example available on the **<PREFIX>.CNTL** dataset.

Prior to the initial use of the **INDXBSF5** job, a selection variant has to be set up in the SAP system for the ABAP **YYINDBSF.** For this, please call the TM38 transaction and set up a variant analogous to the following illustration. For a detailed description of the procedure we refer you to the appropriate SAP literature.

Note:
Please note that the selection at X - Doc. residence ***must not be selected*** in order to index the archive and not the residence.

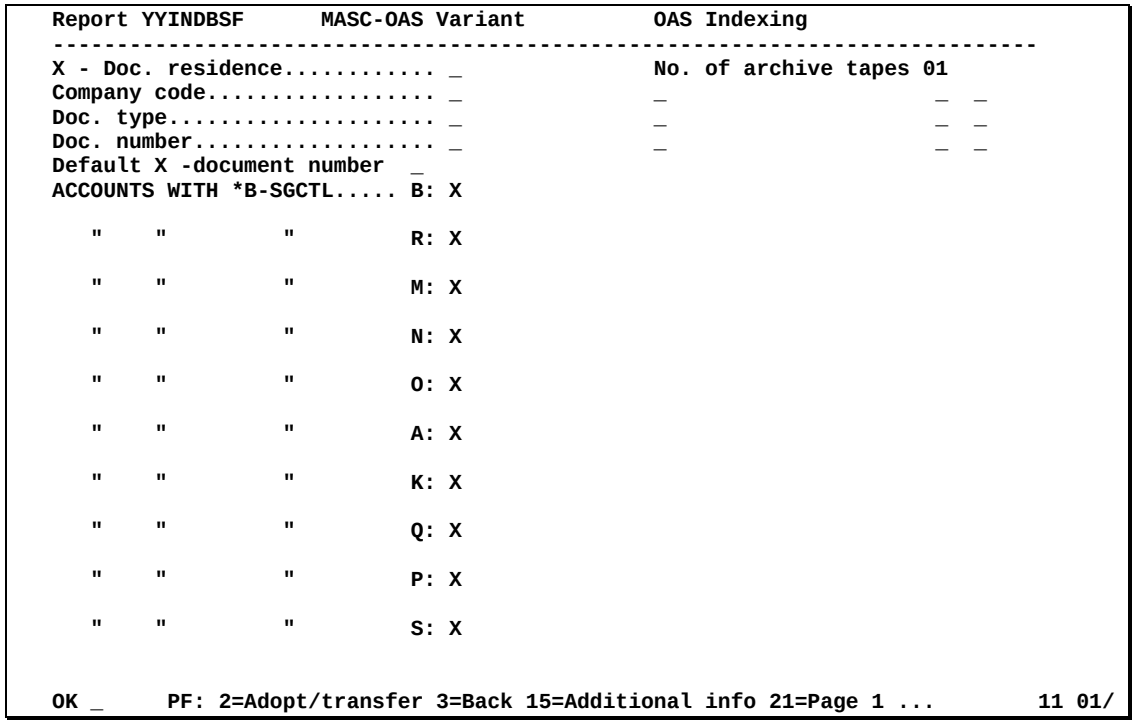

Illustration 50: Execution variant for the indexing of BSF Document Archives using SAP R/2 5.0

Note:

The selection variant must be set up for each client for which documents are to be indexed.

Processing within the **INDXBSF5** job is structured in such a way that the physical dataset name of the archive tape is established in a first step and then in a second step the index datasets are created.

Note:

The **INDXBSF5** job has, for SAP technical reasons, to be individually executed for **each client** in order to achieve complete indexing of the SAP BSF document archive.

Please note in this context also that a **subsequent change of the physical dataset name** requires a change in the index entries in ***masc-oas***. For this purpose there is the **reorganisation program for the index datasets** available (see Chapter '9. Reorganising the Data Index').

Please amend the following JCL statements prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)
<ARCHIV>	Dataset name of the SAP archive tape, which is to be indexed for use with ***masc-oas*** (Example SAP.DATA.SAVE). Apart from the physical dataset name, the logical generation name (e.g. (-5)) can also be entered.

<MAND>	Name of client, for which indexing is to be executed (e.g. 001).
<VAR>	Name of the variant with which indexing is to be executed (e.g. B001MASC).

The **INDXBSF5** job creates the index datasets required by ***masc-oas*** for the BSF document archive and must terminate with a **RC=00** return code.

```
//INDXBSF5 JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ******************************************************************
//* DOC: INDEXING OF SAP DOCUMENT ARCHIVE FOR USE WITH MASC-OAS
//*      THE FOLLOWING JOB IS FOR USE WITH R/2 5.0
//* ******************************************************************
//*
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//*
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS */
//*
//* ******************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <ARCHIV> = DATASET-NAME OF THE SAP DOCUMENT ARCHIVE
//*                      TO BE INDEXED. (GDG'S ALLOWED)
//*       4.) <MAND>   = VALUE OF MANDANT TO BE PROCESSED.
//*                      TO BE INDEXED. (GDG'S ALLOWED)
//*       5.) <VAR>    = VARIANT-CLASS TO BE PROCESSED.
//* ******************************************************************
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//* ******************************************************************
//FINDDSN  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
//LIST0SO  DD  DSN=&&DSETNAM,
//             UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=133,BLKSIZE=133),
//             SPACE=(500,(500,250)),
//             DISP=(NEW,PASS)
//LIST1SO  DD  SYSOUT=*
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ OPEN-BEGIN
$ADYP INPUT
$UTAB INPUT
$ OPEN-END
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT YYOPEOAS USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 079
   WITH SY-PRINT INCL '31       BTCHREPUYYOPEOAS00LIST1SX      '.
/*
//* ******************************************************************
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS */
//* ******************************************************************
//ARCHIVE  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//LIST1SO  DD  SYSOUT=*
//SPOL0SI  DD  DSN=&&DSETNAM,DISP=(OLD,DELETE)
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
```

```
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ OPEN-BEGIN
$ABEZ INPUT
$ADYP INPUT
$UTAB INPUT
$KUNA INPUT
$LIFA INPUT
$SKSA INPUT
$ATAB OUTPUT
$YYJB OUTPUT
$YYJD OUTPUT
$YYJE OUTPUT
$ OPEN-END
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<VAR>.
/*
```

Illustration 51: Indexing the SAP BSF Document Archive for ***masc-oas*** using R/2 5.0

7.3.7.2. Amending the Selection Variant in R/2 5.0

The structure of the ***masc-oas*** indexing ABAPs allows for various selection option in the set up of the secondary indices (YYJB). For example only those documents which point to resident accounts can be taken into account in the creation of the secondary indices. Therefore the bit sequences of the segment control in the execution option of the indexing ABAPs are important.

Note:

In the supplied version of the ***masc-oas*** indexing ABAPs only documents which point to at least one resident account are taken into account in the setting up of the secondary indices.

Should you want to make changes to the segment control, then these can be coded in the execution variant of the indexing ABAPs YYINDBSF. For a description of the segment control please refer to the available documentation of the SAP system under the transaction DOKA. Along with it, please request the system documentation for the table field SKSB-SGCTL or LIFB-SGCTL and KUNB-SGCTL.

7.4. Archive VAV

The following paragraphs contain the necessary jobs for the indexing of the VAV document archive for implementation with the SAP systems R/2 4.3 or 5.0.

7.4.1. Loading the product datasets for archive VAV

If you already loaded the datasets for archive VAV during the installation of the base part of ***masc-oas***, please skip this chapter and continue with "Loading the SAP objects".

The job **OASLOADA** in the following illustration loads all ***masc-oas*** product datasets for one archive. A sample job is provided on the dataset **<PREFIX>.CNTL**.

The following table shows which datasets you need to load for your environment:

File-Name	File-Nr	CICS SAP 4.3	CICS SAP 5.0	IMS SAP 4.3	IMS SAP 5.0
OAS.V210.LMVAVC43	9	**YES**	NO	NO	NO
OAS.V210.LMVAVI43	10	NO	NO	**YES**	NO
OAS.V210.LMVAVC50	11	NO	**YES**	NO	NO
OAS.V210.LMVAVI50	12	NO	NO	NO	**YES**

Please amend the following JCL statements before execution:

<**UNIT**>	Unit name of your MVS Installation for cassette (e.g. CTAPE)
<**PREFIX**>	High level qualifiers of the dataset name for the ***masc-oas*** product datasets in accordance with your standards (e.g. OAS.ORIG210) Since SYSIN refers to member $COPY with the same prefix, please adjust this in case the prefix chosen now is different than in the preceding step
<**VOLSER**>	Volume name, on which the corresponding dataset is to be created
<ARCHIVE>	Name of the archive that is to be installed: VAV

The job **OASLOADA** creates and loads all datasets. Referring to the table above you can choose to only execute the job steps that load datasets for your environment.

```
//OASLOADA JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: UNLOAD THE MASC-OAS 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-OAS
//*                       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-OAS PRODUCT
//*                       DATASETS ON TARGET SYSTEM.
//*       5.) ARCHIVE  = NAME OF THE ARCHIVE
//* ****************************************************************
//UNLOAD   PROC UNIT=CTAPE,             <-- PLEASE ADJUST
//             VOLSER=,                 <-- PLEASE ADJUST
//             PREFIX='OAS.V210',       <-- PLEASE ADJUST
//             ARCHIVE=BSF              <-- PLEASE ADJUST
//*
//* ****************************************************************
//* UNLOAD FILE 9 MASC-OAS SAP OBJECTS REL 4.3   CICS    Archive
//* ****************************************************************
//UNLOAD9  EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.C43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(9,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.C43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 10 MASC-OAS SAP OBJECTS REL 4.3   IMS     Archiv
//* ****************************************************************
//UNLOAD10 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.I43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(10,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.I43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 11 MASC-OAS SAP OBJECTS REL 5.0   CICS    Archiv
//* ****************************************************************
//UNLOAD11 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.C50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(11,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.C50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 12 MASC-OAS SAP OBJECTS REL 5.0   IMS     Archiv
//* ****************************************************************
//UNLOAD12 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.I50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(12,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.I50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//         PEND
//GO       EXEC UNLOAD
//*
/* EOJ
```

Illustration 52: Loading the ***masc-oas*** product datasets

7.4.2. Loading the SAP objects

All objects needed to use archive VAV of ***masc-oas***:

- Reports
- Tables
- Domains

are delivered for SAP releases **R/2 4.3** and **R/2 5.0**.

The following SAP objects are implemented for use with archive VAV:

Reports:				
YYANZVAV	YYARCVAV	YYINDVAV	YPREVAV	YYREQVAV
YYSUBVAV	YYVAVA25	YYVAVA26	YYVAVINC	

Illustration 53: SAP objects for ***masc-oas*** archive VAV

7.4.3. SAPLIMU Import

The job **LOADSAP** in the following illustration imports all SAP objects needed by archive VAV of ***masc-oas*** in corresponding SAP systems. An example for this job is provided on the dataset **<PREFIX>.CNTL**.

Note:

The job **LOADSAP** has to be executed for each SAP system where ***masc-oas*** should be used.

Please note that SAP objects with the same names are overwritten during IMPORT.

Please amend the following statements before execution:

<PREFIX>	High-Level Qualifiers of the dataset names of the ***masc-oas*** product datasets according to your standards (e.g. OAS.ORIG210).
<PROC>	Procedure name of the SAP batch procedure in your system (e.g. SAPBTCHP)

The job **LOADSAP** imports all SAP objects needed by ***masc-oas*** in the languages D, E und F. If you don't want to install all languages, please remove the corresponding language code from the Language Statement after the IMPORT.

The job should end with a return-code **RC=00**.

```
//LOADSAP  JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: IMPORT ALL SAP-OBJECTS USED BY MASC-OAS
//* ****************************************************************
//*
//*  1. IMPORT OF SAP-OBJECTS USED BY MASC-OAS
//*
```

```
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <PREFIX> = HIGHLEVEL-QUALIFIERS FOR THE MASC-OAS
//*                      PRODUCT DATASETS ON YOUR SYSTEM.
//*       4.) <LIMU>   = NAME OF THE DATASET CONTAINING THE SAP OBJECTS
//*                      FOR YOUR ENVIRONMENT AND SAP RELEASE.
//* ********************************************************************
//*
//IMPORT   EXEC PROC=<PROC>,PRTCL='*'
//SAPR02I  DD  DSN=<PREFIX>.<LIMU>,DISP=SHR
//LIST1SO  DD  SYSOUT=*
//SYSIN    DD  *
$SAPLIMU EXEC
$        GO
IMPORT
LANGUAGE='D,E,F'
/*
```

Illustration 54: Import of the ***masc-oas*** SAP objects for archive VAV

7.4.4. *masc-oas* Datenbases for archive VAV

masc-oas utilizes the following databases to store all necessary information about the documents of archive VAV:

YYJB	Secondary index dataset of document archives
YYJC	'Transfer' database for the transfer of the documents located in batch from the batch to the SAP system.
YYJD	Master index dataset with the document headings
YYJE	Document positions

If you did not allocate these datasets during the installation of the base modules and integrate them into your SAP, please do so now. The description of the necessary steps can be found above.

7.4.5. SAP Tables

7.4.5.1. Table STC

Using the SAP **TM31** transaction, the SAP transactions supplied with ***masc-oas*** have to be entered into the SAP **STC** table, so that they can be called. The following illustration shows the transactions to be inserted together with their parameters. During the base installation we recommended to already make all entries required by archive VAV. Please check if all entries are made correctly or make them now as shown in the following illustration. We recommend definition in **client 00**.

```
Table display          STC   SAP Transaction Codes
------------------------------------------------------------------------------
Tcode Program DyNo AA  Control     Text                                  Menu
      Report           A R B S V C
------------------------------------------------------------------------------
YA03  YYREQVAV 1000 38   X         Display VAV on archive

YA05  YYVAVA25 1000 38   X        Display VAV on archive via customer
 YA06  YYVAVA26 1000 38   X         Display VAV on archive via article
 ....
 ....
 ....



------------------------------------------------------------------------------
_
OK _     PF: 3=Back                                                1 /  01
```

Illustration 55: Entries in table STC for ***masc-oas*** archive VAV

7.4.5.2. Table 9YYK

Table 9YYK determines the age after which only document headings will be stored in the short-infos.

The table 9YYK is described in detail during base installation. Please adjust it before indexing archive VAV according to your requirements.

7.4.6. Indexing with SAP R/2 4.3

7.4.6.1. Amending the Job Control Statements

The **INDXVAV4** job in the following illustration indexes the original SAP VAV document archive for use with ***masc-oas.*** For this job there is an example available on the **<PREFIX>.CNTL** dataset.

The processing within the **INDXVAV4** job is structured such that in a first step the physical dataset name of the archive tape is established and then in a second step the index datasets are created.

Note:

The **INDXVAV4** job must, for SAP technical reasons, be executed **for each company code** to achieve complete indexing of the SAP VAV document archive

Please note in this context also that **a subsequent amending of the physical dataset name** requires an amendment to the index entries in ***masc-oas*** . For this purpose there is the **reorganisation program for index datasets** available (see Chapter '9. Reorganising the Data Index').

Please amend the following JCL statements prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)

<ARCHIV>	Dataset name of the SAP archive tape which is to be indexed for use with ***masc-oas*** (Example SAP.DATA.SAVE). Apart from the physical dataset name, the logical generation name (e.g. (-5))can also be given.
<MAND>	Specifying the client for which the indexing is to be executed (e.g. 001)

Note:
Please adjust in the request ABAP YYPREVAV the company code to your requirements before execution of the job.

The **INDXVAV4** job creates the index dataset required by ***masc-oas*** for the VAV document archive and has to terminate with a **RC=00** return code.

```
//INDXVAV4 JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ******************************************************************
//* DOC: INDEXING OF SAP DOCUMENT ARCHIVE FOR USE WITH MASC-OAS
//*      THE FOLLOWING JOB IS FOR USE WITH R/2 4.3
//* ******************************************************************
//*
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//*
//*  2. BUILD INDEX-ENTRIES FOR DATABASE VAV FOR USE WITH MASC-OAS */
//*
//* ******************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <ARCHIV> = DATASET-NAME OF THE SAP DOCUMENT ARCHIVE
//*                      TO BE INDEXED. (GDG'S ALLOWED)
//*       4.) <MAND>   = VALUE OF MANDANT TO BE PROCESSED.
//* ******************************************************************
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//* ******************************************************************
//FINDDSN  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
//LIST0SO  DD  DSN=&&DSETNAM,
//             UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=133,BLKSIZE=133),
//             SPACE=(500,(500,250)),
//             DISP=(NEW,PASS)
//LIST1SO  DD  SYSOUT=*
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT YYOPEOAS USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 079
       WITH SY-PRINT INCL '21XX X XPRT1       LIST1SX'
       WITH DY/ARCHN INCL '01'.
/*
//* ******************************************************************
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS */
//* ******************************************************************
//ARCHIVE  EXEC PROC=<PROC>,PRTCL='*'
```

```
//ATABUTO  DD  DUMMY
//LIST1SO  DD  SYSOUT=*
//SPOL0SI  DD  DSN=&&DSETNAM,DISP=(OLD,DELETE)
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=YYPREVAV
/*
```

Illustration 56: Indexing the SAP VAV Document Archive for ***masc-oas*** using R/2 4.3

7.4.7. Implementation with SAP R/2 5.0

7.4.7.1. Amending the Job Control Statements

With the **INDXBSF5** job in the following illustration the original SAP VAV document archive is indexed for use with ***masc-oas***. For this job there is an example available on the **<PREFIX>.CNTL** dataset.

Processing within the **INDXBSF5** job is structured in such a way that the physical dataset name of the archive tape is established in a first step and then in a second step the index datasets are created.

Note:

The **INDXVAV5** job has, for SAP technical reasons, to be individually executed for **each company code** in order to achieve complete indexing of the SAP VAV document archive.

Please note in this context also that a **subsequent change of the physical dataset name** requires a change in the index entries in ***masc-oas***. For this purpose there is the **reorganisation program for the index datasets** available (see Chapter '9. Reorganising the Data Index').

Please amend the following JCL statements prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)
<ARCHIV>	Dataset name of the SAP archive tape, which is to be indexed for use with ***masc-oas*** (Example SAP.DATA.SAVE). Apart from the physical dataset name, the logical generation name (e.g. (-5)) can also be entered.
<MAND>	Name of client, for which indexing is to be executed (e.g. 001).
<VAR>	Name of the variant with which indexing is to be executed (e.g. B001MASC).

The **INDXVAV5** job creates the index datasets required by ***masc-oas*** for the VAV document archive and must terminate with a **RC=00** return code.

```
//INDXVAV5 JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ******************************************************************
//* DOC: INDEXING OF SAP DOCUMENT ARCHIVE FOR USE WITH MASC-OAS
//*      THE FOLLOWING JOB IS FOR USE WITH R/2 5.0
//* ******************************************************************
//*
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//*
//*  2. BUILD INDEX-ENTRIES FOR DATABASE VAV FOR USE WITH MASC-OAS */
//*
//* ******************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <ARCHIV> = DATASET-NAME OF THE SAP DOCUMENT ARCHIVE
//*                      TO BE INDEXED. (GDG'S ALLOWED)
//*       4.) <MAND>   = VALUE OF MANDANT TO BE PROCESSED.
//*                      TO BE INDEXED. (GDG'S ALLOWED)
//* ******************************************************************
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//* ******************************************************************
//FINDDSN  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
//LIST0SO  DD  DSN=&&DSETNAM,
//             UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=133,BLKSIZE=133),
//             SPACE=(500,(500,250)),
//             DISP=(NEW,PASS)
//LIST1SO  DD  SYSOUT=*
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ OPEN-BEGIN
$ADYP INPUT
$UTAB INPUT
$ OPEN-END
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT YYOPEOAS USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 079
   WITH SY-PRINT INCL '31       BTCHREPUYYOPEOAS00LIST1SX      '.
/*
//* ******************************************************************
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS */
//* ******************************************************************
//ARCHIVE  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//LIST1SO  DD  SYSOUT=*
//SPOL0SI  DD  DSN=&&DSETNAM,DISP=(OLD,DELETE)
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ OPEN-BEGIN
$ADYP INPUT
$UTAB INPUT
$ATAB OUTPUT
$YYJB OUTPUT
$YYJD OUTPUT
$YYJE OUTPUT
```

```
$ OPEN-END
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=YYINDVAV.
/*
```

Illustration 57: Indexing the SAP VAV Document Archive for ***masc-oas*** using R/2 5.0

7.5. Archive KEK

The following paragraphs contain the necessary jobs for the indexing of the KEK document archive for implementation with the SAP systems R/2 4.3 or 5.0.

7.5.1. Loading the product datasets for archive KEK

If you already loaded the datasets for archive KEK during the installation of the base part of ***masc-oas***, please skip this chapter and continue with "Loading the SAP objects".

The job **OASLOADA** in the following illustration loads all ***masc-oas*** product datasets for one archive. A sample job is provided on the dataset **<PREFIX>.CNTL**.

The following table shows which datasets you need to load for your environment:

File-Name	File-Nr	CICS SAP 4.3	CICS SAP 5.0	IMS SAP 4.3	IMS SAP 5.0
OAS.V210.LMKEKC43	9	**YES**	NO	NO	NO
OAS.V210.LMKEKI43	10	NO	NO	**YES**	NO
OAS.V210.LMKEKC50	11	NO	**YES**	NO	NO
OAS.V210.LMKEKI50	12	NO	NO	NO	**YES**

Please amend the following JCL statements before execution:

<**UNIT**>	Unit name of your MVS Installation for cassette (e.g. CTAPE)
<**PREFIX**>	High level qualifiers of the dataset name for the ***masc-oas*** product datasets in accordance with your standards (e.g. OAS.ORIG210) Since SYSIN refers to member $COPY with the same prefix, please adjust this in case the prefix chosen now is different than in the preceding step
<**VOLSER**>	Volume name, on which the corresponding dataset is to be created
<ARCHIVE>	Name of the archive that is to be installed: KEK

The job **OASLOADA** creates and loads all datasets. Referring to the table above you can choose to only execute the job steps that load datasets for your environment.

```
//OASLOADA JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: UNLOAD THE MASC-OAS 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-OAS
//*                      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-OAS PRODUCT
//*                      DATASETS ON TARGET SYSTEM.
//*       5.) ARCHIVE  = NAME OF THE ARCHIVE
//* ****************************************************************
//UNLOAD   PROC UNIT=CTAPE,             <-- PLEASE ADJUST
//             VOLSER=,                 <-- PLEASE ADJUST
//             PREFIX='OAS.V210',       <-- PLEASE ADJUST
//             ARCHIVE=BSF              <-- PLEASE ADJUST
//*
//* ****************************************************************
//* UNLOAD FILE 9 MASC-OAS SAP OBJECTS REL 4.3   CICS    Archive
//* ****************************************************************
//UNLOAD9  EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.C43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(9,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.C43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 10 MASC-OAS SAP OBJECTS REL 4.3   IMS     Archiv
//* ****************************************************************
//UNLOAD10 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.I43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(10,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.I43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 11 MASC-OAS SAP OBJECTS REL 5.0   CICS    Archiv
//* ****************************************************************
//UNLOAD11 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.C50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(11,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.C50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 12 MASC-OAS SAP OBJECTS REL 5.0   IMS     Archiv
//* ****************************************************************
//UNLOAD12 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.I50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(12,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.I50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//         PEND
//GO       EXEC UNLOAD
//*
/* EOJ
```

Illustration 58: Loading the ***masc-oas*** product datasets

7.5.2. Loading the SAP objects

All objects needed to use archive KEK of ***masc-oas***:

- Reports
- Tables
- Domains

are delivered for SAP releases **R/2 4.3** and **R/2 5.0**.

The following SAP objects are implemented for use with archive KEK:

Reports:
YYANZKEK YYARCKEK YYINDKEK YYOPEKEK YYREQKEK YYSUBKEK

Illustration 59: SAP objects for ***masc-oas*** archive KEK

7.5.3. SAPLIMU Import

The job **LOADSAP** in the following illustration imports all SAP objects needed by archive KEK of ***masc-oas*** in corresponding SAP systems. An example for this job is provided on the dataset **<PREFIX>.CNTL**.

Note:

The job **LOADSAP** has to be executed for each SAP system where ***masc-oas*** should be used.

Please note that SAP objects with the same names are overwritten during IMPORT.

Please amend the following statements before execution:

<PREFIX>	High-Level Qualifiers of the dataset names of the ***masc-oas*** product datasets according to your standards (e.g. OAS.ORIG210).
<PROC>	Procedure name of the SAP batch procedure in your system (e.g. SAPBTCHP)

The job **LOADSAP** imports all SAP objects needed by ***masc-oas*** in the languages D, E und F. If you don't want to install all languages, please remove the corresponding language code from the Language Statement after the IMPORT.

The job should end with a return-code **RC=00**.

```
//LOADSAP  JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ******************************************************************
//* DOC: IMPORT ALL SAP-OBJECTS USED BY MASC-OAS
//* ******************************************************************
//*
//*  1. IMPORT OF SAP-OBJECTS USED BY MASC-OAS
//*
//* ******************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
```

```
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <PREFIX> = HIGHLEVEL-QUALIFIERS FOR THE MASC-OAS
//*                      PRODUCT DATASETS ON YOUR SYSTEM.
//*       4.) <LIMU>   = NAME OF THE DATASET CONTAINING THE SAP OBJECTS
//*                      FOR YOUR ENVIRONMENT AND SAP RELEASE.
//* ********************************************************************
//*
//IMPORT   EXEC PROC=<PROC>,PRTCL='*'
//SAPR02I  DD  DSN=<PREFIX>.<LIMU>,DISP=SHR
//LIST1SO  DD  SYSOUT=*
//SYSIN    DD  *
$SAPLIMU EXEC
$        GO
IMPORT
LANGUAGE='D,E,F'
/*
```

Illustration 60: Import of the ***masc-oas*** SAP objects for archive KEK

7.5.4. *masc-oas* Datenbases for archive KEK

masc-oas utilizes the following databases to store all necessary information about the documents of archive KEK:

YYJR	Master index dataset with the cost accounting line items
YYJS	Secondary index dataset for the cost accounting line items

If you did not allocate these datasets during the installation of the base modules and integrate them into your SAP, please do so now. The description of the necessary steps can be found above.

7.5.5. SAP Tables

7.5.5.1. Table STC

Using the SAP **TM31** transaction, the SAP transactions supplied with ***masc-oas*** have to be entered into the SAP **STC** table, so that they can be called. The following illustration shows the transactions to be inserted together with their parameters. During the base installation we recommended to already make all entries required by archive KEK. Please check if all entries are made correctly or make them now as shown in the following illustration. We recommend definition in **client 00**.

```
Table display          STC   SAP Transaction Codes
------------------------------------------------------------------------------
Tcode Program DyNo AA  Control     Text                                  Menu
      Report           A R B S V C
------------------------------------------------------------------------------
YK20  YYREQKEK 0136 38   X         Anfordern RK-Archiv-Beleg von KOEP
....
....
....



------------------------------------------------------------------------------
_
OK _     PF: 3=Back                                              1 /  01
```

Illustration 61: Entries in table STC for ***masc-oas*** archive KEK

7.5.6. Indexing with SAP R/2 4.3

7.5.6.1. Amending the Job Control Statements

The **INDXKEK4** job in the following illustration indexes the original SAP KEK document archive for use with ***masc-oas.*** For this job there is an example available on the **<PREFIX>.CNTL** dataset.

The processing within the **INDXKEK4** job is structured such that in a first step the physical dataset name of the archive tape is established and then in a second step the index datasets are created.

Note:

The **INDXKEK4** job must, for SAP technical reasons, be executed **for each client** to achieve complete indexing of the SAP KEK document archive

Please note in this context also that **a subsequent amending of the physical dataset name** requires an amendment to the index entries in ***masc-oas*** . For this purpose there is the **reorganisation program for index datasets** available (see Chapter '9. Reorganising the Data Index').

Please amend the following JCL statements prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)
<ARCHIV>	Dataset name of the SAP archive tape which is to be indexed for use with ***masc-oas*** (Example SAP.DATA.SAVE). Apart from the physical dataset name, the logical generation name (e.g. (-5))can also be given.
<MAND>	Specifying the client for which the indexing is to be executed (e.g. 001)
Control cards	INTERVAL=1000: Determines how often a message is written to the log to indicate how many records are already indexed. BELEGART INCL'(xx,yy)': Determines which document types are considered for indexing.

The **INDXKEK4** job creates the index dataset required by ***masc-oas*** for the KEK document archive and has to terminate with a **RC=00** return code.

```
//INDXKEK4 JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: INDEXING OF SAP DOCUMENT ARCHIVE FOR USE WITH MASC-OAS
//*      THE FOLLOWING JOB IS FOR USE WITH R/2 4.3
//* ********************************************************************
//*
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//*
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS */
//*
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <ARCHIV> = DATASET-NAME OF THE SAP DOCUMENT ARCHIVE
//*                      TO BE INDEXED. (GDG'S ALLOWED)
//*       4.) <MAND>   = VALUE OF MANDANT TO BE PROCESSED.
//* ********************************************************************
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//* ********************************************************************
//FINDDSN  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//SAPV01I  DD  DSN=<ARCHIV>,DISP=SHR
//LIST0SO  DD  DSN=&&DSETNAM,
//             UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=133,BLKSIZE=133),
//             SPACE=(500,(500,250)),
//             DISP=(NEW,PASS)
//LIST1SO  DD  SYSOUT=*
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT YYOPEKEK USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 079
       WITH SY-PRINT INCL '31       BTCHREPUYYOPEKEK00LIST1SX      '.
/*
//* ********************************************************************
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS */
//* ********************************************************************
//ARCHIVE  EXEC PROC=<PROC>,PRTCL='*'
//LIST1SO  DD  SYSOUT=*
//SPOL0SI  DD  DSN=&&DSETNAM,DISP=(OLD,DELETE)
//SAPV01I  DD  DSN=<ARCHIV>,DISP=SHR
//ABAT1SO  DD  DSN=&&RECSEL,SPACE=(CYL,(50,20)),UNIT=SYSDA
//SORTIN   DD  DSN=&&RECSEL,VOL=REF=*.ABAT1SO
//SORTOUT  DD  DSN=&&RECSEL,VOL=REF=*.ABAT1SO
//ABAT1SI  DD  DSN=&&RECSEL,VOL=REF=*.ABAT1SO
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT KEKLOAD.
SUBMIT YYINDKEK USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 132
       WITH SY-PRINT INCL '31       BTCHREPUYYINDKEK00LIST1SX      '.
       WITH INTERVAL INCL '1000'
       WITH BELEGART INCL '(AA,ZZ)'.
```

```
/*
```

Illustration 62: Indexing the SAP KEK Document Archive for ***masc-oas*** using R/2 4.3

7.5.7. Indexing with SAP R/2 5.0

7.5.7.1. Amending the Job Control Statements

The **INDXKEK5** job in the following illustration indexes the original SAP KEK document archive for use with ***masc-oas.*** For this job there is an example available on the **<PREFIX>.CNTL** dataset.

The processing within the **INDXKEK5** job is structured such that in a first step the physical dataset name of the archive tape is established and then in a second step the index datasets are created.

Note:

The **INDXKEK5** job must, for SAP technical reasons, be executed **for each client** to achieve complete indexing of the SAP KEK document archive

Please note in this context also that **a subsequent amending of the physical dataset name** requires an amendment to the index entries in ***masc-oas*** . For this purpose there is the **reorganisation program for index datasets** available (see Chapter '9. Reorganising the Data Index').

Please amend the following JCL statements prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)
<ARCHIV>	Dataset name of the SAP archive tape which is to be indexed for use with ***masc-oas*** (Example SAP.DATA.SAVE). Apart from the physical dataset name, the logical generation name (e.g. (-5))can also be given.
<MAND>	Specifying the client for which the indexing is to be executed (e.g. 001)
Control cards	INTERVAL=1000: Determines how often a message is written to the log to indicate how many records are already indexed. BELEGART INCL'(xx,yy)': Determines which document types are considered for indexing.

The **INDXKEK5** job creates the index dataset required by ***masc-oas*** for the KEK document archive and has to terminate with a **RC=00** return code.

```
//INDXKEK5 JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: INDEXING OF SAP DOCUMENT ARCHIVE FOR USE WITH MASC-OAS
//*      THE FOLLOWING JOB IS FOR USE WITH R/2 5.0
```

```
//* ********************************************************************
//*
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE
//*
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS
//*
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <ARCHIV> = DATASET-NAME OF THE SAP DOCUMENT ARCHIVE
//*                      TO BE INDEXED. (GDG'S ALLOWED)
//*       4.) <MAND>   = VALUE OF MANDANT TO BE PROCESSED.
//* ********************************************************************
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//* ********************************************************************
//FINDDSN  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//SAPV01I  DD  DSN=<ARCHIV>,DISP=SHR
//LIST0SO  DD  DSN=&&DSETNAM,
//             UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=133,BLKSIZE=133),
//             SPACE=(500,(500,250)),
//             DISP=(NEW,PASS)
//LIST1SO  DD  SYSOUT=*
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT YYOPEKEK USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 079
       WITH SY-PRINT INCL '31       BTCHREPUYYOPEKEK00LIST1SX      '.
/*
//* ********************************************************************
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS */
//* ********************************************************************
//ARCHIVE  EXEC PROC=<PROC>,PRTCL='*'
//LIST1SO  DD  SYSOUT=*
//SPOL0SI  DD  DSN=&&DSETNAM,DISP=(OLD,DELETE)
//SAPV01I  DD  DSN=<ARCHIV>,DISP=SHR
//ABAT1SO  DD  DSN=&&RECSEL,SPACE=(CYL,(50,20)),UNIT=SYSDA
//SORTIN   DD  DSN=&&RECSEL,VOL=REF=*.ABAT1SO
//SORTOUT  DD  DSN=&&RECSEL,VOL=REF=*.ABAT1SO
//ABAT1SI  DD  DSN=&&RECSEL,VOL=REF=*.ABAT1SO
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT KEKLOAD.
SUBMIT YYINDKEK USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 132
       WITH SY-PRINT INCL '31       BTCHREPUYYINDKEK00LIST1SX      '.
       WITH INTERVAL INCL '1000'
       WITH BELEGART INCL '(AA,ZZ)'.
/*
```

Illustration 63: Indexing the SAP KEK Document Archive for ***masc-oas*** using R/2 5.0

7.6. Archive EAM

The following paragraphs contain the necessary jobs for the indexing of the EAM document archive for implementation with the SAP systems R/2 4.3 or 5.0.

7.6.1. Loading the product datasets for archive EAM

If you already loaded the datasets for archive EAM during the installation of the base part of ***masc-oas***, please skip this chapter and continue with "Loading the SAP objects".

The job **OASLOADA** in the following illustration loads all ***masc-oas*** product datasets for one archive. A sample job is provided on the dataset **<PREFIX>.CNTL**.

The following table shows which datasets you need to load for your environment:

File-Name	File -Nr	CICS SAP 4.3	CICS SAP 5.0	IMS SAP 4.3	IMS SAP 5.0
OAS.V210.LMEAMC43	9	**YES**	NO	NO	NO
OAS.V210.LMEAMI43	10	NO	NO	**YES**	NO
OAS.V210.LMEAMC50	11	NO	**YES**	NO	NO
OAS.V210.LMEAMI50	12	NO	NO	NO	**YES**

Please amend the following JCL statements before execution:

<**UNIT**>	Unit name of your MVS Installation for cassette (e.g. CTAPE)
<**PREFIX**>	High level qualifiers of the dataset name for the ***masc-oas*** product datasets in accordance with your standards (e.g. OAS.ORIG210) Since SYSIN refers to member $COPY with the same prefix, please adjust this in case the prefix chosen now is different than in the preceding step
<**VOLSER**>	Volume name, on which the corresponding dataset is to be created
<ARCHIVE>	Name of the archive that is to be installed: EAM

The job **OASLOADA** creates and loads all datasets. Referring to the table above you can choose to only execute the job steps that load datasets for your environment.

```
//OASLOADA JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: UNLOAD THE MASC-OAS 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-OAS
//*                      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-OAS PRODUCT
//*                      DATASETS ON TARGET SYSTEM.
//*       5.) ARCHIVE  = NAME OF THE ARCHIVE
//* ****************************************************************
//UNLOAD   PROC UNIT=CTAPE,             <-- PLEASE ADJUST
//             VOLSER=,                 <-- PLEASE ADJUST
//             PREFIX='OAS.V210',       <-- PLEASE ADJUST
//             ARCHIVE=BSF              <-- PLEASE ADJUST
//*
//* ****************************************************************
//* UNLOAD FILE 9 MASC-OAS SAP OBJECTS REL 4.3   CICS    Archive
//* ****************************************************************
//UNLOAD9  EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.C43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(9,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.C43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 10 MASC-OAS SAP OBJECTS REL 4.3   IMS     Archiv
//* ****************************************************************
//UNLOAD10 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.I43,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(10,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.I43,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 11 MASC-OAS SAP OBJECTS REL 5.0   CICS    Archiv
//* ****************************************************************
//UNLOAD11 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.C50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(11,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.C50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//* ****************************************************************
//* UNLOAD FILE 12 MASC-OAS SAP OBJECTS REL 5.0   IMS     Archiv
//* ****************************************************************
//UNLOAD12 EXEC PGM=IEBGENER
//SYSPRINT DD  SYSOUT=*
//SYSUT1   DD  DSN=OAS.V210.LM&ARCHIVE.I50,DISP=OLD,
//             UNIT=&UNIT,VOL=(,RETAIN,,,SER=OAS210),LABEL=(12,SL)
//SYSUT2   DD  DSN=&PREFIX..LM&ARCHIVE.I50,DISP=(NEW,CATLG,DELETE),
//             DCB=(BLKSIZE=32760,RECFM=VB,LRECL=8300),
//             SPACE=(CYL,(1,1),RLSE),UNIT=SYSDA,VOL=SER=&VOLSER
//SYSIN    DD  DUMMY
//*
//         PEND
//GO       EXEC UNLOAD
//*
```

Illustration 64: Loading the ***masc-oas*** product datasets

7.6.2. Loading the SAP objects

All objects needed to use archive EAM of ***masc-oas***:

- Reports
- Tables
- Domains

are delivered for SAP releases **R/2 4.3** and **R/2 5.0**.

The following SAP objects are implemented for use with archive EAM:

Reports:				
YYANZEAM	YYARCEAM	YYEAMA23	YYEAMA24	YYEAMA25
YYEAMINC	YYINDEAM	YYSUBEAM		

Illustration 65: SAP objects for ***masc-oas*** archive EAM

7.6.3. SAPLIMU Import

The job **LOADSAP** in the following illustration imports all SAP objects needed by archive EAM of ***masc-oas*** in corresponding SAP systems. An example for this job is provided on the dataset **<PREFIX>.CNTL**.

Note:

The job **LOADSAP** has to be executed for each SAP system where ***masc-oas*** should be used.

Please note that SAP objects with the same names are overwritten during IMPORT.

Please amend the following statements before execution:

<PREFIX>	High-Level Qualifiers of the dataset names of the ***masc-oas*** product datasets according to your standards (e.g. OAS.ORIG210).
<PROC>	Procedure name of the SAP batch procedure in your system (e.g. SAPBTCHP)

The job **LOADSAP** imports all SAP objects needed by ***masc-oas*** in the languages D, E und F. If you don't want to install all languages, please remove the corresponding language code from the Language Statement after the IMPORT.

The job should end with a return-code **RC=00**.

```
//LOADSAP  JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: IMPORT ALL SAP-OBJECTS USED BY MASC-OAS
//* ********************************************************************
//*
//*  1. IMPORT OF SAP-OBJECTS USED BY MASC-OAS
//*
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
```

```
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <PREFIX> = HIGHLEVEL-QUALIFIERS FOR THE MASC-OAS
//*                      PRODUCT DATASETS ON YOUR SYSTEM.
//*       4.) <LIMU>   = NAME OF THE DATASET CONTAINING THE SAP OBJECTS
//*                      FOR YOUR ENVIRONMENT AND SAP RELEASE.
//* ********************************************************************
//*
//IMPORT   EXEC PROC=<PROC>,PRTCL='*'
//SAPR02I  DD  DSN=<PREFIX>.<LIMU>,DISP=SHR
//LIST1SO  DD  SYSOUT=*
//SYSIN    DD  *
$SAPLIMU EXEC
$        GO
IMPORT
LANGUAGE='D,E,F'
/*
```

Illustration 66: Import of the ***masc-oas*** SAP objects for archive EAM

7.6.4. *masc-oas* Datenbases for archive EAM

masc-oas utilizes the following databases to store all necessary information about the documents of archive EAM:

YYJB	Secondary index dataset of document archives
YYJC	'Transfer' database for the transfer of the documents located in batch from the batch to the SAP system.
YYJD	Master index dataset with the document headings
YYJE	Document positions

If you did not allocate these datasets during the installation of the base modules and integrate them into your SAP, please do so now. The description of the necessary steps can be found above.

7.6.5. SAP Tables

7.6.5.1. Table STC

Using the SAP **TM31** transaction, the SAP transactions supplied with ***masc-oas*** have to be entered into the SAP **STC** table, so that they can be called. The following illustration shows the transactions to be inserted together with their parameters. During the base installation we recommended to already make the entry for all transactions used by archive EAM. Please check if the entries are made correctly or make them now as shown in the following illustration. We recommend definition in **client 00**.

```
Table display          STC   SAP Transaction Codes
------------------------------------------------------------------------------
Tcode Program DyNo AA  Control     Text                                  Menu
      Report           A R B S V C
------------------------------------------------------------------------------
YE23  YYEAMA23 1000 38   X         Display EAM on archive

YE24  YYEAMA24 1000 38   X        Display EAM on archive via supplier
 YE25  YYEAMA25 1000 38   X         Display EAM on archive via material
 ....
 ....
 ....



------------------------------------------------------------------------------
_
OK _     PF: 3=Back                                                1 /  01
```

Illustration 67: Entries in table STC for ***masc-oas*** archive EAM

7.6.5.2. Table 9YYK

Table 9YYK determines the age after which only document headings will be stored in the short-infos.

The table 9YYK is described in detail during base installation. Please adjust it before indexing archive EAM according to your requirements.

7.6.6. Indexing with SAP R/2 4.3

7.6.6.1. Amending the Job Control Statements

The **INDXEAM4** job in the following illustration indexes the original SAP EAM document archive for use with ***masc-oas.*** For this job there is an example available on the **<PREFIX>.CNTL** dataset.

The processing within the **INDXEAM4** job is structured such that in a first step the physical dataset name of the archive tape is established and then in a second step the index datasets are created.

Note:

The **INDXEAM4** job must, for SAP technical reasons, be executed **for each client** to achieve complete indexing of the SAP EAM document archive

Please note in this context also that **a subsequent amending of the physical dataset name** requires an amendment to the index entries in ***masc-oas*** . For this purpose there is the **reorganisation program for index datasets** available (see Chapter '9. Reorganising the Data Index').

Please amend the following JCL statements prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)

<ARCHIV>	Dataset name of the SAP archive tape which is to be indexed for use with ***masc-oas*** (Example SAP.DATA.SAVE). Apart from the physical dataset name, the logical generation name (e.g. (-5))can also be given.
<MAND>	Specifying the client for which the indexing is to be executed (e.g. 001)

Note:
Please adjust in the request ABAP YYPREEAM the company code to your requirements before execution of the job.

The **INDXEAM4** job creates the index dataset required by ***masc-oas*** for the EAM document archive and has to terminate with a **RC=00** return code.

```
//INDXEAM4 JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ******************************************************************
//* DOC: INDEXING OF SAP DOCUMENT ARCHIVE FOR USE WITH MASC-OAS
//*      THE FOLLOWING JOB IS FOR USE WITH R/2 4.3
//* ******************************************************************
//*
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE
//*
//*  2. BUILD INDEX-ENTRIES FOR DATABASE EAM FOR USE WITH MASC-OAS
//*
//* ******************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <ARCHIV> = DATASET-NAME OF THE SAP DOCUMENT ARCHIVE
//*                      TO BE INDEXED. (GDG'S ALLOWED)
//*       4.) <MAND>   = VALUE OF MANDANT TO BE PROCESSED.
//* ******************************************************************
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE
//* ******************************************************************
//FINDDSN  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
//LIST0SO  DD  DSN=&&DSETNAM,
//             UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=133,BLKSIZE=133),
//             SPACE=(500,(500,250)),
//             DISP=(NEW,PASS)
//LIST1SO  DD  SYSOUT=*
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT YYOPEOAS USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 079
       WITH SY-PRINT INCL '21XX X XPRT1       LIST1SX'
       WITH DY/ARCHN INCL '01'.
/*
//* ******************************************************************
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS */
//* ******************************************************************
//ARCHIVE  EXEC PROC=<PROC>,PRTCL='*'
```

```
//ATABUTO  DD  DUMMY
//LIST1SO  DD  SYSOUT=*
//SPOL0SI  DD  DSN=&&DSETNAM,DISP=(OLD,DELETE)
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=EAM00010.
/*
```

Illustration 68: Indexing the SAP EAM Document Archive for ***masc-oas*** using R/2 4.3

7.6.7. Implementation with SAP R/2 5.0

7.6.7.1. Amending the Job Control Statements

With the **INDXEAM5** job in the following illustration the original SAP EAM document archive is indexed for use with ***masc-oas***. For this job there is an example available on the **<PREFIX>.CNTL** dataset.

Processing within the **INDXEAM5** job is structured in such a way that the physical dataset name of the archive tape is established in a first step and then in a second step the index datasets are created.

Note:

The **INDXEAM5** job has, for SAP technical reasons, to be individually executed for **each client** in order to achieve complete indexing of the SAP EAM document archive.

Please note in this context also that a **subsequent change of the physical dataset name** requires a change in the index entries in ***masc-oas***. For this purpose there is the **reorganisation program for the index datasets** available (see Chapter '9. Reorganising the Data Index').

Please amend the following JCL statements prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)
<ARCHIV>	Dataset name of the SAP archive tape, which is to be indexed for use with ***masc-oas*** (Example SAP.DATA.SAVE). Apart from the physical dataset name, the logical generation name (e.g. (-5)) can also be entered.
<MAND>	Name of client, for which indexing is to be executed (e.g. 001).
<VAR>	Name of the variant with which indexing is to be executed (e.g. B001MASC).

The **INDXEAM5** job creates the index datasets required by ***masc-oas*** for the EAM document archive and must terminate with a **RC=00** return code.

```
//INDXEAM5 JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//            CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ****************************************************************
//* DOC: INDEXING OF SAP DOCUMENT ARCHIVE FOR USE WITH MASC-OAS
//*      THE FOLLOWING JOB IS FOR USE WITH R/2 5.0
//* ****************************************************************
//*
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE
//*
//*  2. BUILD INDEX-ENTRIES FOR DATABASE EAM FOR USE WITH MASC-OAS
//*
//* ****************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <ARCHIV> = DATASET-NAME OF THE SAP DOCUMENT ARCHIVE
//*                      TO BE INDEXED. (GDG'S ALLOWED)
//*       4.) <MAND>   = VALUE OF MANDANT TO BE PROCESSED.
//*                      TO BE INDEXED. (GDG'S ALLOWED)
//*       5.) <VAR>    = VARIANT-CLASS TO BE PROCESSED.
//* ****************************************************************
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE
//* ****************************************************************
//FINDDSN  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
//LIST0SO  DD  DSN=&&DSETNAM,
//             UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=133,BLKSIZE=133),
//             SPACE=(500,(500,250)),
//             DISP=(NEW,PASS)
//LIST1SO  DD  SYSOUT=*
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ OPEN-BEGIN
$ADYP INPUT
$UTAB INPUT
$ OPEN-END
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT YYOPEOAS USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 079
   WITH SY-PRINT INCL '31       BTCHREPUYYOPEOAS00LIST1SX      '.
/*
//* ****************************************************************
//*  2. BUILD INDEX-ENTRIES FOR DATABASE BSF FOR USE WITH MASC-OAS */
//* ****************************************************************
//ARCHIVE  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//LIST1SO  DD  SYSOUT=*
//SPOL0SI  DD  DSN=&&DSETNAM,DISP=(OLD,DELETE)
//SAPB01I  DD  DSN=<ARCHIV>,DISP=SHR
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
$ OPEN-BEGIN
$ABEZ INPUT
$ADYP INPUT
$ATAB OUTPUT
$YYJB OUTPUT
$YYJD OUTPUT
```

```
$YYJE OUTPUT
$ OPEN-END
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<VAR>.
/*
```

Illustration 69: Indexing the SAP EAM Document Archive for ***masc-oas*** using R/2 5.0

8. INITIALIZE THE TRANSFER DB YYJC

8.1. VSFOYYJC

The ***masc-oas*** **YYJC** 'Transfer' database which holds the requested archive documents should be periodically deleted. To achieve this the **VSFOYYJC** job in the following illustration, which 'formats' the ***masc-oas*** YYJC database is available. We recommend execution of this job immediately after shutdown of CICS. However, should you wish for the requested document archives to reside longer on the 'transfer' database, you have the option to execute the job less frequently in accordance with your requirements. This job is available as an example on the **<PREFIX>.CNTL** dataset.

Note:

During execution of the VSFOYYJC job, the corresponding CICS must not be started, as conflicts could arise with dataset access. Equally, it should be noted, that the jobs VSFOYYJC and SAPTABUB (see the following chapter) have a 1:1 relationship and must therefore always be executed in tandem.

Please amend the following JCL statement prior to execution:

<PROC>	Procedure name of SAP batch procedure on your system (e.g. SAPBTCHP)
<LS-PSB>	(IMS only!) Name of the PSB for "load sequential"

The **VSFOYYCC** job executes SAPVSFO on the ***masc-oas*** YYJC database in a CICS environment, **VSFOYYCI** should be used for IMS.

```
//VSFOYYCC JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: DEFINITION OF MASC-OAS DATABASES
//* ********************************************************************
//*
//*  1. SAP-VSFO ON ALL YYJ*-FILES USED BY MASC-OAS                */
//*
//*  USE THIS JOB FOR TP-MONITOR CICS
//*  -------------------------------
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
```

```
//*                        USED BY YOUR INSTALLATION.
//* ********************************************************************
//*
//*
//*   FORMATTING YYJC
//*
//VSFOYYCC EXEC PROC=<PROC>,PRTCL='*'
//SYSIN    DD  *
$SAPVSFO EXEC
$        GO
YYJC     FORMT RESET
/*
```

Illustration 70: Periodic initialising of ***masc-oas*** YYJC database with VSAM

```
//VSFOYYCI JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: DEFINITION OF MASC-OAS DATABASES
//* ********************************************************************
//*
//*  1. SAP-VSFO ON YYJC
//*
//*  USE THIS JOB FOR TP-MONITOR IMS
//*  ------------------------------
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <LS-PSB> = LOAD-SEQUENTIAL PSB-NAME
//* ********************************************************************
//*
//*
//*   FORMATTING YYJC
//*
//VSFOYYJI EXEC PROC=<PROC>,PRTCL='*',PSB=<LS-PSB>
//SYSIN    DD  *
$SAPVSFO EXEC
$        GO
YYJC     FORMT
/*
```

Illustration 71: Periodic initialising of ***masc-oas*** YYJC database with IMS

8.1.1. SAPTABUB

The ***masc-oas*** ATAB **T9YYB** table usually has to be deleted when the YYJC database is initialised. For this the **SAPTABUB** job in the following illustration, which deletes the entries of the ***masc-oas*** ATAB table T9YYB is available. We recommend execution of this job immediately after the shutdown of CICS, and following the VSFOYYJC job. This job is available as an example on the **<PREFIX>.CNTL** dataset .

Note:

Please note that the jobs SAPTABUB and VSFOYYJC (see previous chapter) have a 1:1 relationship and must therefore always be executed in tandem.

Please amend the following JCL statement prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP).
<MAND>	Name of client for which the entries in the T9YYB table are to be deleted. (e.g. 01).

The **SAPTABUB** job deletes all entries on the ***masc-oas*** ATAB Table T9YYB.

```
//SAPTABUB JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ******************************************************************
//* DOC: INITIALIZE MASC-OAS ATAB-TABLE 01/9YYB
//* ******************************************************************
//*
//*  1. INITIALIZE  ATAB-TABLE 01/9YYB, USED BY MASC-OAS           */
//*
//* ******************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC> = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                    USED BY YOUR INSTALLATION.
//*       3.) <MAND> = VALUE OF YOUR DESIRED MANDANT (EG. 01).
//* ******************************************************************
//*
//INI9YYB  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//CARD0SO  DD  SYSOUT=*
//LIST1SO  DD  SYSOUT=*
//LIST0SO  DD  SYSOUT=*
//SYSIN    DD  *
$SAPTABU EXEC
$        GO
$OPT OPEN OUTPUT
$OPT PRINT ALL
$UPD <MAND>/9YYB
#DEL 01
$ETAB
$ END
/*
```

Illustration 72: Periodic deletion of entries in the ***masc-oas*** T9YYB table

9. REORGANISING THE DATA INDEX

For reorganisation of the ***masc-oas*** index datasets the following points are important:

- Removal of older document archives from the index datasets
- Renaming of already indexed document archives.

To reorganise the ***masc-oas*** index datasets in accordance with the above points, there are the jobs **YYDELOAS** (removal of document archives) and **YYRENOAS** (renaming of document archives) available.

9.1. YYDELOAS

With the **YYDELOAS** job in the following illustration older SAP document archives can be removed from the ***masc-oas*** index datasets and therefore excluded from online access by the user.

Please amend the following JCL statements prior to execution.

<**PROC**>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)
<**ARCHIV**>	Complete physical dataset name of the SAP archive tape which is to be removed from the ***masc-oas*** index datasets. (Example SAP.DATA.SAVE.G00017V00)).
<**MAND**>	Name of client, for which the indexing is to be executed (e.g. 001).

The **YYDELOAS** deletes no longer required document entries from the ***masc-oas*** index datasets and has to terminate in a **RC=00** return code.

```
//YYDELOAS JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: DELETING A SAP DOCUMENT ARCHIVE FROM MASC-OAS INDEXES
//* ********************************************************************
//*
//*  1. DELETE ALL ENTRIES FOR SAP DOCUMENT ARCHIVE TO BE REMOVED  */
//*
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
```

```
//*                       USED BY YOUR INSTALLATION.
//*       3.) <ARCHIV> = DATASET-NAME OF THE SAP DOCUMENT ARCHIVE
//*                       TO BE REMOVED.
//*       4.) <MAND>   = VALUE OF MANDANT TO BE PROCESSED.
//* ****************************************************************
//DELETE   EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//LIST1SO  DD  SYSOUT=*
//SAPF07O  DD  DSN=&&SAPF07,DISP=(NEW,PASS),
//             UNIT=SYSDA,SPACE=(CYL,(10,5))
//SAPF07I  DD  DSN=&&SAPF07,DISP=(SHR,PASS),
//             VOL=REF=*.SAPF07O
//SAPF09O  DD  DSN=&&SAPF09,DISP=(NEW,PASS),
//             UNIT=SYSDA,SPACE=(CYL,(10,5))
//SAPF09I  DD  DSN=&&SAPF09,DISP=(SHR,PASS),
//             VOL=REF=*.SAPF09O
//CARD0SO  DD  SYSOUT=*
//*
//CARD5SI  DD  *
<ARCHIV>
/*
//SYSIN    DD  *
* $ OPEN-BEGIN
* $ADYP INPUT
* $UTAB INPUT
* $ATAB OUTPUT
* $YYJB OUTPUT
* $YYJD OUTPUT
* $YYJE OUTPUT
* $ OPEN-END
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT YYDELOAS USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 079
       WITH SY-PRINT INCL '21XX X XPRT1       LIST1SX'.
/*
//* ****************************************************************
//*  FOR USE WITH SAP R/2 5.0:                                     */
//*  PLEASE REPLACE THE PRECEDING JCL-STATEMENT (WITH ...)         */
//*  BY THE FOLLOWING JCL-STATEMENT (WITHOUT //* OF COURSE)        */
//* ----------------------------------------------------------------
//*    WITH SY-PRINT INCL '31       BTCHREPUYYDELOAS00LIST1SX       '.
//* ----------------------------------------------------------------
```

Illustration 73: Removal of SAP Archive Tapes from the ***masc-oas*** index datasets

9.2. YYRENOAS

With the **YYRENOAS** job in the following illustration, name changes in SAP document archives can be updated in the corresponding ***masc-oas*** index datasets. Simultaneously it is also possible to use this job by merging of archive tapes (e.g. the cumulating of monthly archives into a yearly archive) to update the ***masc-oas*** index datasets without another indexing run (see Chapter 7. Implementation of Document Archives').

Please amend/adjust the following JCL statements prior to execution:

<PROC>	Procedure name of the SAP batch procedure on your system (e.g. SAPBTCHP)
<NEWARC>	New dataset name of the SAP archive tape, which is to replace one or several indexed document archives previously held under ***masc-oas*** . (Example SAP.DATA.SAVE). Apart from the physical dataset name, the logical generation name (e.g. (-5)) can also be given.
<OLDARC>	Complete physical dataset name of the SAP archive tape that is to be renamed in the ***masc-oas*** index datasets. (Example SAP.DATA.SAVE.G00017V00).
<MAND>	Name of mandate, for which the indexing is to be carried out/executed. (e.g. 001).

The **YYRENOAS** job updates the name change of the SAP document archives in the ***masc-oas*** index datasets and has to terminate in a **RC=00** return code.

```
//YYRENOAS JOB (ACCT),'PROGRAMMER-NAME',NOTIFY=USERID,
//             CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* ********************************************************************
//* DOC: CHANGE DATASET NAMES OF SAP DOCUMENTS ARCHIVES ON INDEXES
//* ********************************************************************
//*
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//*
//*  2. CHANGE ALL ENTRIES FOR SAP DOCUMENT ARCHIVE TO BE RENAMED  */
//*
//* ********************************************************************
//* NOTE: PLEASE CHANGE THE FOLLOWING PARAMETERS:
//*
//*       1.) CHANGE THE JOBCARD TO MEET YOUR REQUIREMENTS.
//*
//*       2.) <PROC>   = PROCEDURE-NAME OF THE SAP-PROCEDURE
//*                      USED BY YOUR INSTALLATION.
//*       3.) <NEWARC> = NEW DATASET-NAME OF THE SAP DOCUMENT ARCHIVE.
//*                      (GDG'S ALLOWED).
//*       4.) <OLDARC> = OLD DATASET-NAME OF THE SAP DOCUMENT ARCHIVE
//*                      TO BE RENAMED. (PHYSIC. DATASET-NAME REQ.)
//*       5.) <MAND>   = VALUE OF MANDANT TO BE PROCESSED.
//* ********************************************************************
//*  1. EVALUATE PHYSICAL DATASET NAME OF SAP DOCUMENT ARCHIVE     */
//* ********************************************************************
//FINDDSN  EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//SAPB01I  DD  DSN=<NEWARC>,DISP=SHR
//LIST0SO  DD  DSN=&&DSETNAM,
//             UNIT=SYSDA,
//             DCB=(RECFM=FB,LRECL=133,BLKSIZE=133),
//             SPACE=(500,(500,250)),
//             DISP=(NEW,PASS)
//LIST1SO  DD  SYSOUT=*
//CARD0SO  DD  SYSOUT=*
//SYSIN    DD  *
* $ OPEN-BEGIN
* $ADYP INPUT
* $UTAB INPUT
* $ OPEN-END
```

```
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT YYOPEOAS USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 079
       WITH SY-PRINT INCL '21XX X XPRT1       LIST1SX'
       WITH DY/ARCHN INCL '01'.
/*
//* ****************************************************************
//*  FOR USE WITH SAP R/2 5.0:                                     */
//*  PLEASE REPLACE THE PRECEDING TWO JCL-STATEMENTS (WITH ...)    */
//*  BY THE FOLLOWING JCL-STATEMENT (WITHOUT //* OF COURSE)        */
//* ----------------------------------------------------------------
//*    WITH SY-PRINT INCL '31       BTCHREPUYYOPEBSF00LIST1SX       '.
//* ----------------------------------------------------------------
//* ****************************************************************
//*  2. CHANGE ALL ENTRIES FOR SAP DOCUMENT ARCHIVE TO BE RENAMED  */
//* ****************************************************************
//RENAME   EXEC PROC=<PROC>,PRTCL='*'
//ATABUTO  DD  DUMMY
//LIST1SO  DD  SYSOUT=*
//SPOL0SI  DD  DSN=&&DSETNAM,DISP=(OLD,DELETE)
//CARD0SO  DD  SYSOUT=*
//*
//CARD5SI  DD  *
<OLDARC>
/*
//SYSIN    DD  *
* $ OPEN-BEGIN
* $ADYP INPUT
* $UTAB INPUT
* $ATAB OUTPUT
* $ OPEN-END
$ MANDANT <MAND>
$SAPREPU EXEC
$        GO
REPU SUBMIT REPORT=<INLINE>
REPORT INDEX.
SUBMIT YYRENOAS USER 'SAPREPU' LINE-COUNT 065 LINE-SIZE 079
       WITH SY-PRINT INCL '21XX X XPRT1       LIST1SX'.
/*
//* ****************************************************************
//*  FOR USE WITH SAP R/2 5.0:                                     */
//*  PLEASE REPLACE THE PRECEDING JCL-STATEMENT (WITH ...)         */
//*  BY THE FOLLOWING JCL-STATEMENT (WITHOUT //* OF COURSE)        */
//* ----------------------------------------------------------------
//*    WITH SY-PRINT INCL '31       BTCHREPUYYRENOAS00LIST1SX       '.
//* ----------------------------------------------------------------
```

Illustration 74: Renaming of SAP Document Archives on the ***masc-oas*** index datasets

10. INSTALLATION CHECKLIST

In the following chapter a detailed checklist can be found for the installation of ***masc-oas***, in which all jobs and procedures necessary for the installation are listed.

Job	Description	Return Code	CICS	IMS
DEFALIAS	Creation of the ***masc-oas*** product ALIAS	00	YES	YES
OASINST	Loading the installation JCL	00	YES	YES
OASLOAD	Loading the ***masc-oas*** producte datasets	00	YES	YES
ARCMD	Assembling of the ARCMD program	00	YES	NO
OASEXIT	Adjusting and conversion of user exit	00	optional	NO
JES3MOD	Modification for JES3 environments	00	optional	NO
DEFBJCL	DELETE/DEFINE of OASBJCL	00	YES	NO
GENBJCL	Generating ***masc-oas*** batch JCL	04	YES	NO
MODCBDT	Description of ***masc-oas*** datenbases in the SAP system	00	YES	YES
LOADSAP	Loading the ***masc-oas*** SAP objects	00	YES	YES
SAPBTCHP	Modifying of SAP batch procedure	--	YES	YES
SAPSYGU	Execution of SAPSYGU	00	YES	YES
VSFOYYJS/ VSFOYYJI	Formatting of ***masc-oas*** SAP databases	00	YES	YES
Table CAL	Entries in the SAP table CAL	--	YES	NO
Table STC	Entries in the SAP table STC	--	YES	YES
TM33	Creation of ***masc-oas*** tables in the corresponding client	--	YES	YES
Table 9YYK	Adjusting table T9YYK	--	YES	YES
CICS Startup	Entries in the CICS startup procedure	--	YES	NO
FCT-Entries	FCT entries for ***masc-oas***	--	YES	NO

PCT-Entries	PCT entries for ***masc-oas***	--	YES	NO
PPT-Entries	PPT entries for ***masc-oas***	--	YES	NO
SIT-Entries	SIT entries for ***masc-oas***	--	YES	NO
IMS Control-Region	Amend DYNALLOC member or add DD statements	--	NO	YES
DBDYYJx	Generating of the DBDs of the new datebases	--	NO	YES
OASPSB	Amend Online PSB with new DBs	--	NO	YES
ACBGEN	Execute ACBGEN	--	NO	YES
TM31	Integration in Batch	--	NO	YES
YYOASJCL	Adjusting the batch JCL	--	NO	YES
OASLOADA	Loading of the product datasets for an archive	00	(YES)	(YES)
LOADSAP	Loading of the SAP objects for an archive	--	YES	YES
	Check, if all necessary databases are defined	--	YES	YES
Tabelle STC	Check, if all necessary transactions are defined	--	YES	YES
Tabelle 9YYK	Adjust Table T9YYK	--	YES	YES
VSFOYYJS / VSFOYYJI	Format the databases			
INDXBSF4 / INDXBSF5	Indexing of the SAP document archive	00		
VSFOYCC / VSFOYCI	Format datenbase YYJC periodically	00	P	P
SAPTABUB	Delet entries in ***masc-oas*** table T9YYB periodically	00	P	P
YYDELOAS	Remove old document archives from the ***masc-oas*** index datasets	00	P	P
YYRENOAS	Rename document archives in the ***masc-oas*** index datasets	00	P	P
For each additional archive:				
OASLOADA	Loading of the archive specific datasets	00	YES	YES
LOADSAP	Loading of the SAP objects	00	YES	YES
	Check, if all necessary databases are defined		YES	YES

Tabelle STC	Check, if all necessary transactions are defined		YES	YES
Tabelle 9YYK	Adjust Table T9YYK		YES	YES
INDxxy4/5	Indexing of the document archives	00	YES	YES

P: Periodically or on request

APPENDIX A

In this appendix a printout of the ***masc-oas*** assembler program **ARCMD** can be found.

Please note the descriptive comments in the source member.

```
//USERID  JOB (ACCT),'PROG-NAME',NOTIFY=USERID,
//           CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1)
//*
//* THIS PROGRAM MUST BE LINKED WITH AC 1 INTO AN
//* APF-AUTHORIZED LIBRARY.
//* PLEASE REPLACE THE '?' IN STEPS LNKAR AND AMBLIST
//* WITH A VALID DSN-VALUE.
//*
//ASMAR   EXEC PGM=IEV90,
//        PARM='DECK,NOLOAD,NOXREF,NOESD,NORLD'
//SYSIN   DD  *
*********************************************************
*
*   MASC-ARCMD  "ATTENTION ROUTINE COMMAND"
*
*********************************************************
*
*   THIS PROGRAM ALLOWS CUSTOMERS MIGRATING FROM VSE TO MVS
*   TO USE THE VSE/ARCMD IN A MVS ENVIRONEMENT.
*   THE ARCMD USED IN VSE IS DESCRIBED IN IBM FORM SB-ESA1-01,
*   EDITION 03 DECEMBER 1991, J.FREYER IBM-MUNICH, GERMANY
*
*   THE TECHNOLOGY USED IN MVS/ARCMD IS ADAPTED FROM THE
*   IPO1.SAMPLIB(SMFDUMP) WHICH RUNS ON MOST MVS INSTALLATIONS
*   WORLDWILDE.
*
*
*   THE PROGRAM WILL BE STARTED IN VSE AND MVS WITH THE
*   FOLLOWING JCL:
*   // EXEC PGM=ARCMD,PARM='XXXXXXXXXXXXXXXXXXXX'
*
*********************************************************
*   THIS PROGRAMM MAY BE FREELY USED BY ANY CUSTOMER. PLEASE SEND
*   A NOTIFICATION ABOUT YOUR EXPERIENCES IN USING OUR PRODUCT TO:
*
*   MASC AG
*   DEPT. SOFTWARE-SUPPORT
*   BIRKENSTRASSE 49
*   CH-6343 ROTKREUZ
*   SWITZERLAND
*
*   PHONE: +41 (0) 42 64 53 44
*   FAX:   +41 (0) 42 64 53 40
*
*   PROGRAM MATERIAL, COPYRIGHT (C) 1992, WALSER SOFTWARE-SUPPORT AG
*   DOCUMENTATION MATERIAL, COPYRIGHT (C) 1992  MASC AG, SWITZERLAND
*********************************************************
         EJECT
R0       EQU   0
R1       EQU   1
R2       EQU   2
```

```
R3       EQU   3
R4       EQU   4
R5       EQU   5
R6       EQU   6
R7       EQU   7
R8       EQU   8
R9       EQU   9
R10      EQU   10
R11      EQU   11
R12      EQU   12
R13      EQU   13
R14      EQU   14
R15      EQU   15
         PRINT NOGEN
ARCMD    CSECT
         USING *,R10
         SAVE  (14,12),,ARCMD_&SYSDATE
         USING ARCMD,R10
         LR    R10,R15
         ST    R1,ARARG
         SPLEVEL
*
         LA    R3,ARSAVE
         ST    R13,4(R3)
         ST    R3,8(R13)
         LR    R13,R3
         EJECT
*-------------------------------------------
         L     R1,ARARG
         C     R1,=F'0'
         BE    AR008
         L     R15,0(R1)
         SR    R1,R1
         LH    R1,0(R15)
         C     R1,=F'0'
         BE    AR008
         SH    R1,=H'1'
         LA    R2,ARPARM
         EX    R1,AR002
         B     AR003
AR002    MVC   0(0,R2),2(R15)
AR003    DS    0H
*-------------------------------------------
         MODESET MF=(E,ARSUPV)
         SLR   R0,R0
         LA    R1,ARSVCA
         SVC   34
         MODESET MF=(E,ARPROB)
*-------------------------------------------
         STIMER WAIT,BINTVL=ARTIME
         SLR   R15,R15
         B     AR009
*-------------------------------------------
AR008    DS    0H
         WTO   MF=(E,ARMSG)
         STIMER WAIT,BINTVL=ARTIME
         LA    R15,8
         B     AR009
*-------------------------------------------
AR009    DS    0H
         L     R13,4(R13)
         RETURN (14,12),RC=(15)
*-------------------------------------------
ARSVCA   DC    Y(42),Y(00)
ARPARM   DC    256C' '
ARARG    DS    F
ARSAVE   DS    18F
ARTIME   DC    F'3000'       30 SEC
*-------------------------------------------
ARSUPV   MODESET KEY=ZERO,MODE=SUP,MF=L
ARPROB   MODESET KEY=NZERO,MODE=PROB,MF=L
ARMSG    WTO   '*ARCMD: EXEC-PARM NOT GIVEN',MF=L
```

```
*-------------------------------------------
         EJECT
         LTORG
         DROP  R10
         END
/*
//SYSPRINT  DD SYSOUT=*
//SYSLIB    DD DSN=SYS1.MACLIB,DISP=SHR
//          DD DSN=SYS1.AMODGEN,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 DSN=&&DECK,DISP=(,PASS),UNIT=VIO,
//             DCB=(RECFM=FB,LRECL=80,BLKSIZE=400),
//             SPACE=(400,(50,50))
/*
//LNKAR   EXEC PGM=IEWL,COND=(0,NE),
//        PARM='XREF,LIST,LET,CALL,AC=1,AMODE=24,RMODE=24'
//SYSPRINT  DD SYSOUT=*
//SYSUT1    DD UNIT=VIO,SPACE=(1024,(20,20))
//SYSLIN    DD DSN=&&DECK,DISP=(OLD,DELETE)
//SYSLMOD   DD DSN=???.???.LOAD(ARCMD),DISP=SHR
//*
//AMBLIST  EXEC PGM=AMBLIST,COND=(0,NE)
//SYSPRINT DD  SYSOUT=*
//SYSLIB   DD DSN=???.???.LOAD,DISP=SHR
//SYSIN    DD  *
  LISTIDR  TITLE=('LISTIDR MEMBER=ARCMD',1),MEMBER=(ARCMD)
/*
```

APPENDIX B

This appendix contains a printout of the ***masc-oas*** user exit **OASEXIT**, as well as an explanation of the calling parameters.

```
        TITLE 'OASEXIT / MASC-OAS'
* USER-EXIT FOR USE WITH MASC-OAS
* ---------------------------------------------------------------
* ONLINE-ARCHIVE FOR SAP - PROGRAMM OASEXIT
* ---------------------------------------------------------------
* INVOKATION
* ----------
* THIS EXIT WILL BE CALLED BY OASBATCH
* ------------------------------------
* DESCRIPTION
* ------------
* THIS USER-EXIT GIVES THE USERS OF MASC-OAS THE POSSIBILITY TO
* IMPLEMENT THEIR NEEDS OF CODE FOR SECURITY OR STATISTICAL PUR-
* POSES.
* THE USER-EXIT GETS THE FOLLOWING PARMS FROM THE INVOKING PROGRAM:
* INVOC. DATE, INVOC. TIME, MANDANT, BUKR, BLART, BELNR, BLDAT,
* SAP-USERID.
* ---------------------------------------------------------------
* REMARKS
* -------
* THE PROGRAM DELIVERED BY THE ORIGINAL INSTALLATION CONSISTS
* ONLY OF THE CORRECT ADRESSING OF COMMAREA AND 'EXEC CICS RETURN'.
* ---------------------------------------------------------------
* FILES
* -----
* NONE   -  NO FILE-ACCESS NECCESSARY
*
* ---------------------------------------------------------------
* UPDATES
* -------
* TT.MM.JJ/USERID  DESCRIPTION
*
* ---------------------------------------------------------------
        COPY  DFHAID
* ---------------------------------------------------------------
COMMAREA DSECT
COMINFO  DS    CL43
* ---------------------------------------------------------------
OASEXIT  CSECT
* ---------------------------------------------------------------
* REGISTER EQUATES AND USAGE:
*
R1       EQU   1                  RESERVED
R2       EQU   2                  BASE FOR DFHCOMMA
R3       EQU   3                  FIRST BASE REGISTER
R4       EQU   4                  WORK
R5       EQU   5                  WORK
R6       EQU   6                  WORK
R7       EQU   7                  WORK
R8       EQU   8                  WORK
R9       EQU   9                  WORK
R10      EQU   10                 WORK
R11      EQU   11                 USED BY CICS (EIB)
```

```
R12      EQU   12                  USED BY CICS (TCA)
*
*-------------------------------------------------------------------
* ******************************************************************
*    ESTABLISH ADRESSING OF COMMAREA AND MOVE THE VALUES
*    TO OUR OWN AREA
* ******************************************************************
*
         L     R4,DFHEICAP
         USING COMINFO,R4
         MVC   EXITAREA,COMINFO        *MOVE INTO EXITAREA
*
* ******************************************************************
*                              I
*    HERE FOLLOWS YOUR CODE    I
*                              V
* REGISTERS 5 TO 10 MAY BE USED AS WORK REGISTERS
* ******************************************************************
*
*        EXEC  CICS WRITEQ TS QUEUE('CEBROAS3')  X
*              FROM(MESSAGE)                     X
*              LENGTH(MSGLGTH)                   X
*              NOHANDLE
*
* ******************************************************************
*
         EXEC  CICS RETURN
*
* ******************************************************************
*
* ******************************************************************
*    THIS ARE THE FIELDS PASSED FROM MASC-OAS
* ******************************************************************
* TEST-MESSAGE FOR USE WITH WRITEQ TS
*
MESSAGE  DS    0CL73
         DC    CL30'FROM OASBATCH RECEIVED FIELDS:'
EXITAREA DS    0CL43
WSDATE   DS    CL4
WSTIME   DS    CL4
WSMANDAN DS    CL3
WSBUKR   DS    CL2
WSBLART  DS    CL2
WSBELNR  DS    CL8
WSBLDAT  DS    CL8 *DDMMYYYY
WSUNAME  DS    CL12
*
MSGLGTH  DC    H'73'
*
* ******************************************************************
         LTORG
* -------------------------------------------------------------------
         END   OASEXIT
* -------------------------------------------------------------------
```

The user exit OASEXIT receives from ***masc-oas*** the following values for processing:

Field name:	**Format: (Assembler)**	**Brief Text:**	**Description:**
WSDATE	CL4	Date	Date of document search
WSTIME	CL4	Time	Time of document search
WSMANDAN	CL3	Client	The value of the Client from the SAP
WSBUKR	CL2	Account Group	The account group from the SAP system
WSBLART	CL2	Document Type	The document type of the requested document.
WSBELNR	CL8	Document number	The document number of the requested document
WSBLDAT	CL8	Document Date	The document date of the requested document
WSUNAME	CL12	User Name	The SAP user name of the user who requested the document

APPENDIX C

This appendix contains a printout of the ***masc-oas*** assembler macro **BATCHJCL**.

Please note the descriptive comments in the source member.

```
         MACRO
&NAME    BATCHJCL &JOBID=,           JOBNAME WITHOUT SUFFIX            X
               &ACCT=,               ACCOUNT                           X
               &COMMENT=,            COMMENT IN JOB-CARD               X
               &CLASS=,              JOBCLASS                          X
               &MSGCLS=,             MSGCLASS                          X
               &PROC=,               SAP-PROCEDURE                     X
               &CICSJOB=,            NAME OF CICSJOB                   X
               &APFLIB=,             NAME OF APF-AUTH. LIB FOR ARCMD   X
               &DUMMY=               DUMMY PARAMETER
.*********************************************************************
.*                                                                   *
.*   MACRO NAME = BATCHJCL                                           *
.*                                                                   *
.*   DESCRIPTIVE NAME = MASC-OAS - GENERATE BATCH-JCL FOR RETRIEVAL  *
.*                                                                   *
.*   *** COPYRIGHT BY MASC AG, 1994 ***                              *
.*                                                                   *
.*   STATUS = 2.1.0                                                  *
.*                                                                   *
.*   CHANGE ACTIVITY :                                               *
.*                                                                   *
.*  PN= REASON REL YYMMDD HDXIII : REMARKS                           *
.*                                                                   *
.*********************************************************************
.*                                                                   *
.*********************************************************************
.*****         DEFINITION OF LOCAL SET SYMBOLS                 ******
.*********************************************************************
.*
         LCLA  &EXIT               FLAG FOR ERROR-CHECKING
         LCLC  &C                  PARAMETER FOR JOBCLASS
         LCLC  &M                  PARAMETER FOR MSGCLASS
*********************************************************************
.*********************************************************************
.*****         E N T R Y    A N A L Y S I S                    ******
.*********************************************************************
.*
&EXIT    SETA  0
.CHK1    AIF   ('&JOBID' EQ '').ERR1
.CHK2    AIF   ('&ACCT' EQ '').ERR2
.CHK3    AIF   ('&CLASS' EQ '').NOCLAS
&C       SETC  '&CLASS'
.CHK4    AIF   ('&MSGCLS' EQ '').NOMSGC
&M       SETC  '&MSGCLS'
.CHK5    AIF   ('&PROC' EQ '').ERR3
.CHK6    AIF   ('&CICSJOB' EQ '').ERR4
.CHK7    AIF   ('&APFLIB' EQ '').ERR5
.CHKEX   AIF   ('&EXIT' NE '0').EXIT
         AGO   .PUNCH
.*********************************************************************
.* *         PUNCH ALL JOBCARDS                                  * *
```

```
.*********************************************************************
.PUNCH   ANOP
         PUNCH '//&JOBID   JOB '&ACCT','&COMMENT','
         PUNCH '//         CLASS=&C,MSGCLASS=&M,'
         PUNCH '//         MSGLEVEL=(1,1)'
         PUNCH '//*        USER=,PASSWORD='
         PUNCH '//*-------------------------------------------------X
               --*'
         PUNCH '//* AUSFUEHREN EINES ABAPS IM BATCH '
         PUNCH '//* <  >-BEGRIFFE WERDEN VOM ONLINE-ARCHIV ERSETZT '
         PUNCH '//*-------------------------------------------------X
               --*'
         PUNCH '//ABAP00   EXEC PROC=&PROC,PRTCL=''*'' '
         PUNCH '//* '
         PUNCH '//ATABUTO  DD  DUMMY '
         PUNCH '//SAPB01I  DD  DISP=SHR, '
         PUNCH '//             DSN=<ARCHIVE-DSN> '
         PUNCH '//SAPS01I  DD  DISP=SHR, '
         PUNCH '//             DSN=<ARCHIVE-DSN> '
         PUNCH '//SAPV01I  DD  DISP=SHR, '
         PUNCH '//             DSN=<ARCHIVE-DSN> '
         PUNCH '//CARD0SO  DD  SYSOUT=* '
         PUNCH '//SAPV01O  DD DSN=&&SEQFILE,UNIT=SYSDA, '
         PUNCH '//            DCB=(RECFM=VB,LRECL=4096,BLKSIZE=5000), '
         PUNCH '//            SPACE=(CYL,(1,1)), '
         PUNCH '//            DISP=(NEW,PASS) '
         PUNCH '//SYSIN DD * '
         PUNCH '* $ OPEN-BEGIN '
         PUNCH '* $ABEZ INPUT '
         PUNCH '* $ADYP INPUT '
         PUNCH '* $UTAB INPUT '
         PUNCH '* $YYJC OUTPUT '
         PUNCH '* $ OPEN-END '
         PUNCH '$ MANDANT <MANDANT> '
         PUNCH '$SAPREPU EXEC '
         PUNCH '$        GO '
         PUNCH 'REPU SUBMIT REPORT=<INLINE> '
         PUNCH 'REPORT INDEX. '
         PUNCH 'SUBMIT <REPORT> '
         PUNCH '<SAPREPU-VORLAUFKARTEN> '
         PUNCH '/* '
         PUNCH '//* '
         PUNCH '//ARCMD00   EXEC PGM=ARCMD,COND=(00,NE), '
         PUNCH '// PARM=''F &CICSJOB,OASM <USERID> 00 <BELEG>'' '
         PUNCH '//STEPLIB   DD  DSN=&APFLIB,DISP=SHR '
         PUNCH '//SYSUDUMP  DD  SYSOUT=* '
         PUNCH '//* '
         PUNCH '//ARCMD12   EXEC PGM=ARCMD,COND=(00,EQ), '
         PUNCH '// PARM=''F &CICSJOB,OASM <USERID> 12 <BELEG>'' '
         PUNCH '//STEPLIB   DD  DSN=&APFLIB,DISP=SHR '
         PUNCH '//SYSUDUMP  DD  SYSOUT=* '
         PUNCH '//* '
         PUNCH '//ARCMD16   EXEC PGM=ARCMD,COND=ONLY, '
         PUNCH '// PARM=''F &CICSJOB,OASM <USERID> 16 <BELEG>'' '
         PUNCH '//STEPLIB   DD  DSN=&APFLIB,DISP=SHR '
         PUNCH '//SYSUDUMP  DD  SYSOUT=* '
         PUNCH '//* '
         PUNCH '/*EOF '
         AGO .END
.*
.EXIT    ANOP
*********************************************************************
         SPACE 2
         MEXIT
.*
.*********************************************************************
.*****     W A R N I N G      M E S S A G E S                   ******
.*********************************************************************
.*       SEVERITY 4 IS GIVEN IF JOBCARDS ARE LIKELY TO BE
.*       GENERATED WITH MISSING VALUES.
.*
.NOCLAS  ANOP
```

```
&C       SETC  'C'
         MNOTE 4,'JOBCLASS MISSING, '&C' ASSUMED'
         AGO   .CHK4
.NOMSGC  ANOP
&M       SETC  'X'
         MNOTE 4,'JOBCLASS MISSING, '&M' ASSUMED'
         AGO   .CHK5
.*
.*********************************************************************
.*****         E R R O R      M E S S A G E S                  ******
.*********************************************************************
.*       SEVERITY 8 IS GIVEN IF A REQUIRED PARAMETER IS MISSING
.*
.ERR1    MNOTE 8,'*** JOBID MISSING, NO JCL GENERATED ***'
&EXIT    SETA  &EXIT + 1
         AGO   .CHK2
.ERR2    MNOTE 8,'*** ACCOUNT MISSING, NO JCL GENERATED ***'
&EXIT    SETA  &EXIT + 1
         AGO   .CHK3
.ERR3    MNOTE 8,'*** PROCEDURE-NAME MISSING, NO JCL GENERATED ***'
&EXIT    SETA  &EXIT + 1
         AGO   .CHK6
.ERR4    MNOTE 8,'*** CICS JOB-NAME MISSING, NO JCL GENERATED ***'
&EXIT    SETA  &EXIT + 1
         AGO   .CHK7
.ERR5    MNOTE 8,'*** APF-LIBRARY-NAME MISSING, NO JCL GENERATED ***'
&EXIT    SETA  &EXIT + 1
         AGO   .CHKEX
.*
*********************************************************************
.END     ANOP
         MEND
```