

DOS/VSE Runtime Component

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Introduction

1.1. Related Products

- MetaStore Manager (and the corresponding batch component MSBSTORE)
- MetaMap Manager (and the corresponding batch component MSBMAP)
- Generator Manager (and the corresponding batch component MSBGEN)

1.2. Terminology

MDL	MetaSuite Definition Language
MXL	MetaSuite Export Language
MGL	MetaSuite Generated Language
MRL	MetaSuite Run Language
CBL	COBOL source
COB	COBOL source
SQB	SQL COBOL source
ECO	Embedded SQL COBOL source
<Ins>	MetaSuite installation folder on the client side

1.3. System Requirements

CPU	Pentium Processor or higher
System RAM	Minimum of 96 MB
Hard disk space	Minimum 300 MB of free disk space for storage of MetaSuite software and .NET Framework.

Operating System	<ul style="list-style-type: none">• Windows Vista• Windows Seven• Windows XP with Service Pack 3
Software	<ul style="list-style-type: none">• Microsoft .NET Framework 2.0 (already included in Windows Vista)• File transfer program (e.g. PC Support)• MT9750 terminal emulator

1.4. Pre-installation Requirements

Before installing the runtime component, you must:

1. Install MetaSuite and select *DOS/VSE* as Generator environment.

For more detailed information, refer to the *Installation and Setup Guide*.

2. Create the MetaSuite Generator Dictionary for DOS/VSE.

For more detailed information, refer to the *Generator Manager User Guide*.

About This Manual

This guide describes how to install the MetaSuite DOS/VSE runtime component. More specifically, it describes the installation of the following MetaSuite components:

- Base product
- MetaSuite Database Interfaces

The instructions for these components refer to additional information found in separate documents. Be sure to have those documents available during the installation.

2.1. Prerequisites

Product installers are expected to be familiar with their host operating systems and software installation processes.

2.2. Related Publications

The MetaSuite User and Reference Guides describe the different MetaSuite components and provide examples for using MetaSuite. Those guides should be available for reference during the installation and test procedures described here.

The following table gives an overview of the complete MetaSuite documentation set.

Release Information	Release Notes 8.1.3
Installation Guides	<ul style="list-style-type: none"> • BS2000/OSD Runtime Component • DOS/VSE Runtime Component • Fujitsu Windows Runtime Component • MicroFocus Windows Runtime Component • MicroFocus UNIX Runtime Component • OS/390 and Z/OS Runtime Component • OS/400 Runtime Component • VisualAge Windows Runtime Component • VisualAge UNIX Runtime Component • VMS Runtime Component
User Guides	<ul style="list-style-type: none"> • INI Manager User Guide • Installation and Setup Guide • Introduction Guide • MetaStore Manager User Guide • MetaMap Manager User Guide • Generator Manager User Guide

Technical Guides	<ul style="list-style-type: none"> • ADABAS File Access Guide • IDMS File Access Guide • IMS DLI File Access Guide • RDBMS File Access Guide • XML File Access Guide • Runtime Modules • User-defined Functions User Guide
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If you are unfamiliar with MetaSuite, the following technical description provides you with a brief overview.

The MetaSuite System	MetaSuite is designed for data retrieval, extraction, conversion and reporting. It includes a workstation-based graphical user interface and a mainframe runtime component.
MetaSuite Database Interfaces	MetaSuite can access data from a number of database management systems, using the same commands, program structure and retrieval techniques used for non-database files. Each database interface is available as an optional enhancement to the base product.
MetaMap Manager	MetaMap Manager is the MetaSuite tool used to define models. Such models are intuitively built by describing overall program specifications, input file definitions (data and process) and target file definitions (data and process).
MetaStore Manager	MetaStore Manager is a tool that provides metadata maintenance and documentation services.
Generator Manager	The Generator Manager is the system administration tool. All kinds of basic functionalities and customization possibilities are supported by this tool.

MetaMap Generator Runtime Installation

3.1. DOS/VSE assignments

The following DOS/VSE file ASSGN are set as default in the MetaMap Generator:

PPTLST	SYS006-UR-1403-S	(runstats listing)
PPTLOG	SYS015-DA-3380-PPTLOG	(runstats log
PPTIPT	SYS008-UR-2501-S	(run parameters)
PPTFnn	SYSusr-AS-PPTFnn	(VSAM / SEQ input file)
PPTTFnn	SYStrf-AS-PPTTFnn	(Target Format)
PPTTDnn	SYStrd-AS-PPTTDnn	(Target Data)
PPTRnn	SYSrpt-UR-1403-S	(Report)
SORTWK1	SYSsrt-UT-3380-S-SORTWK1	(Sortwork)
PPTTnn	SYSext-AS-PPTTnn	(Extract file SORT INITIAL)

Where

```
usr = 010, ..., 019
rpt = 020, ..., 029
ext = 030, ..., 039
trf = 040, ..., 049
trd = 050, ..., 059
con = 080, ..., 089
srt = 001
```

These values may optionally being modified by changing code table AU0011:

```
CHANGE DEFAULT QUOTE
DELETE TABLE AU0011
ADD TABLE AU0011 FIXED 24 -
(-
"001010030020040050080", -
"3380", -
"3380", -
"3380", -
"1403", -
"3380", -
"3380"-
)
CHANGE DEFAULT QUOTE
```

"srtusrxtrpttrfrdcon" values are given on the first line of the definition of the code table ("001010030020040050080").

Refer to the *Generator Manager User Guide* for more detailed information on changing MetaSuite code tables.

3.2. Runtime Components

The `x:\installdirectory\GENDOSVSE\system` directory contains the following files:

```
COBOL sources:      MS*813.cbl
VSE JCL:            msrtsc.jcl (compile COBOL runtime)
                   msrtsa.jcl (compile ADABAS runtime
                               for date conversion)
                   mscompc.jcl (compile)
                   mscompa.jcl (compile ADABAS)
                   msrunc.jcl ( example run jcl)
                   msruna.jcl ( example ADABAS run jcl)
```

3.3. DOS/VSE Environment

Create a `METASUIT.VnnRnnMnn.LIBRARY` to hold all objects and phases of the MetaSuite Generator DOS/VSE runtime environment.

3.4. Install Runtime

Use your favorite data transfer mechanism to send the following runtime source components from `x:\directory\GENDOSVSE\system` to a DOS/VSE source directory to contain the MetaSuite runtime support:

```
MS*813.cbl
mscompa.jcl
mscompc.jcl
msrtsa.jcl
msrtsc.jcl
msruna.jcl
msrunc.jcl
```

Compile & Link Runtime

Run the `MSRTSC JCL` file to create and store the MetaSuite Generator runtime modules to the DOS/VSE `OBJ` sub library.

This JCL executes the following commands:

```
* $$ JOB JNM=PPTRTSC , PRI=?, USER=?, FROM=?, SYSID=?, CLASS=?, DISP=?
* $$ LST CLASS=?, DISP=?, DEST=(?,?)
* $$ PUN CLASS=?, DISP=I
// JOB PPTRTSC
// SYSPCH,FED
// OPTION NOLINK,NODUMP,DECK,LIST
// EXEC ASSEMBLY
      PUNCH '* $$ LST CLASS=?,DISP=?,DEST=(?,?)'
      PUNCH '// JOB PPTOBJ'
      PUNCH '// ASSGN SYS???,DISK,VOL=?,SHR'
      PUNCH '// DLBL METASUIT, '**QUAL** .LIBRARY' , ,SD'
      PUNCH '// EXTENT SYS???'
      PUNCH '// EXEC LIBR'
      PUNCH 'ACCESS S=METASUIT.BASE'
      PUNCH 'CATALOG XXXXXXXX.OBJ REPLACE=YES'
```



```

                END
/*
// ASSGN SYS???,DISK,VOL=?,SHR
// DLBL METASUIT, 'METASUIT.V06R00M01.LIBRARY' , ,SD
// EXTENT SYS???,
// LIBDEF SOURCE,SEARCH=(METASUIT.BASE)
// OPTION NOLINK,NODUMP,DECK,LISTX
// EXEC FCOBOL
<include module>
/*
// OPTION NOLINK,NODUMP,DECK,LIST
// EXEC ASSEMBLY
        PUNCH '/+'
        PUNCH '/*'
        PUNCH '/&&'
        END
/*
/&
* $$ EOJ

```

Note:

1. XXXXXXXXX is the program name of the COBOL source to be included at <include module>
2. If your COBOL compiler does not support Unicode (i.e., the Unicode functions "display-of" and "national-of" with the option "second argument" to provide a code page (for example 1208 to do the conversion to or from UTF-8)), some runtime programs can not be compiled.
3. Following COBOL parameters should be set: CBL, CLI, CSY, LIB, OPT, SVP, SXR, VER, FLOW=50

Compile a MetaSuite Generator Program

x:\installdirectory\GENDOSVSE\SYSTEM contains MSCOMP* . JCL which can be used to compile a MetaSuite Generator program.

The following compilation scripts are installed:

```
mscompc.jcl
mscompa.jcl (Adabas)
```

Note: The scripts used in the following sections are for documentary purposes only.

4.1. Compilation

General

The JCL in mscompc.jcl for a MetaSuite generated program:

```
* $$ JOB JNM=PPTCOMPC,PRI=?,USER=?,FROM=?,SYSID=?,CLASS=?,DISP=?
* $$ LST CLASS=?,DISP=?,DEST=(?,?)
// JOB PPTCOMPC
// ASSGN SYS????,DISK,VOL=?,SHR
// DLBL METASUIT,'**QUAL**'.LIBRARY',,SD
// EXTENT SYS????
// OPTION CATAL
  PHASE program,*
/*
// EXEC FCOBOL
  <include generated application here>
/*
// LIBDEF PHASE,CATALOG=METASUIT.BASE
// LIBDEF OBJ,SEARCH=(...,METASUIT.BASE, ...)
// EXEC LNKEDT
/*
/&
$$ EOJ
```

Note: Following COBOL parameters should be set: CBL CLI,CSY,LIB,OPT,SVP,SXR,VER,FLOW=50

Adabas

The JCL in `mscompa.jcl` for a MetaSuite generated program that accesses Adabas:

```
* $$ JOB JNM=PPTCOMPA,PRI=?,USER=?,FROM=?,SYSID=?,CLASS=?,DISP=?
* $$ LST CLASS=?,DISP=?,DEST=(?,?)
// JOB PPTCOMPA
// ASSGN SYS???,DISK,VOL=?,SHR
// DLBL METASUIT,'**QUAL**.LIBRARY',,SD
// EXTENT SYS???,
// OPTION CATAL
  PHASE program,*
  INCLUDE ADAUSER
/*
// EXEC FCOBOL
<include generated application here>
/*
// LIBDEF PHASE,CATALOG=METASUIT.BASE
// LIBDEF OBJ,SEARCH=(...,METASUIT.BASE, ...)
// EXEC LNKEDT
/*
/&
* $$ EOJ
```

Note: Following COBOL parameters should be set: CBL, CLI, CSY, LIB, OPT, SVP, SXR, VER, FLOW=50

Run a MetaSuite Generator Program

When a MetaSuite Generator program is run, there is a template run script generated as well, which is stored in `x:\installdirectory\GENDOSVSE\MRL\MXL-name.mrl`. You can customize the generation of the template run script by changing the code tables, which are used for the template run script.

Refer to the *Generator Manager User Guide* for more information on how the code tables for the template run scripts are built.

Note: The scripts used in the following sections are for documentary purposes only.

5.1. Example 1

The following is an example run script, which is generated for EX0.MXL.

```
* $$ JOB JNM=EX0 ,PRI=?,USER=?,FROM=?,SYSID=?,CLASS=?,DISP=?
* $$ LST CLASS=?,DISP=?,DEST=(?,?)
* $$ LST CLASS=?,DISP=?,DEST=(?,?) ,LST=cuu
// JOB EX0
// OPTION LOG
// ASSGN SYS???,DISK,VOL=valid,SHR
// DLBL MSLIB,'**MSLIB**',,SD
// EXTENT SYS???,
// ASSGN SYS???,DISK,VOL=valid,SHR
// DLBL USERLIB,'**USERLIB**',,SD
// EXTENT SYS???,
* del EX0.d01
// DLBL PPTF01,'employee-master'
* RECLLEN=00134
// DLBL PPTTD01,'EX0.D01',,VSAM,DISP=(NEW,KEEP),CAT=**CAT**
// DLBL PPTLID,'EX0.LID',,VSAM,DISP=(NEW,KEEP),CAT=**CAT**
// DLBL PPTLOG,'EX0.LOG',,VSAM,DISP=(NEW,KEEP),CAT=**CAT**
// ASSGN SYS006,SYSLST
// LIBDEF PHASE,SEARCH=(**USERLIB**.BASE,**MSLIB**.BASE)
// EXEC EX0,SIZE=**SIZE**
/* /&
* $$ EOJ
```

5.2. Example 2

The following is an example run script, which is generated for a MetaSuite program accessing Adabas

```
* $$ JOB JNM=A,PRI=?,USER=?,FROM=?,SYSID=?,CLASS=?,DISP=?
* $$ LST CLASS=?,DISP=?,DEST=(?,?)
* $$ LST CLASS=?,DISP=?,DEST=(?,?),LST=cuu
// JOB A
// OPTION LOG
// ASSGN SYS???,DISK,VOL=volid,SHR
// DLBL MSLIB,'**MSLIB**',,SD
// EXTENT SYS???)
// ASSGN SYS???,DISK,VOL=volid,SHR
// DLBL USERLIB,'**USERLIB**',,SD
// EXTENT SYS???)
* del A.d01
* RECLen=00023
// DLBL PPTD01,'A.D01',,VSAM,DISP=(NEW,KEEP),CAT=**CAT**
// DLBL PPTLID,'A.LID',,VSAM,DISP=(NEW,KEEP),CAT=**CAT**
// DLBL PPTLOG,'A.LOG',,VSAM,DISP=(NEW,KEEP),CAT=**CAT**
// ASSGN SYS006,SYSLST
*
// EXEC A
/*
/*
ADARUN MODE=SINGLE
ADARUN DBID=nnn
ADARUN SVC=n
ADARUN DE=nnnn
/*
/&
* $$ EOJ
```