

VisualAge Windows Runtime Component

Release 8.1.3

November 2013



IKAN Solutions N.V.
Kardinaal Mercierplein 2
B-2800 Mechelen
BELGIUM

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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 *VisualAge on Windows* as Generator environment.
For more detailed information, refer to the *Installation and Setup Guide*.
2. Create the MetaSuite Generator Dictionary for VisualAge on Windows.
For more detailed information, refer to the *Generator Manager User Guide*.

About This Manual

This guide describes how to install the MetaSuite VisualAge Windows 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.

MetaSuite Generator Runtime Installation

3.1. Runtime Components

Refer to the *Generator Manager User Guide* to set up a working environment and to generate any COBOL applications.

```
COBOL sources:      MS*813.cbl
COBOL DLL:          MS*813.dll
Windows scripts:   mkrts813.cmd
                   mkcob.cmd
                   mkcobdb2.cmd
```

3.2. Install Runtime

Copy all COBOL .cbl files from the `x:\installdirectory\GENVisualAge_Windows\SYSTEM` to `x:\installdirectory`.

The following file is optional, and is used for SQLCODE handling when SQL SourceFiles are used:

```
MSD2X813.cbl      DB2/NT SQLCODE handling
```

If your COBOL compiler supports 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), the following four runtime modules can be used:

```
MSA2U813.cbl
MSE2U813.cbl
MSU2A813.cbl
MSU2E813.cbl
```

Note: If the list of these files (and optionally your optional SQLCODE handling program) can not be found in `x:\installdirectory\GENVisualAge_Windows\SYSTEM`, the following procedures must be executed to recreate the list of files:

```
cd x:\installdirectory\GENVisualAge_Windows\SYSTEM
mkrts813
```

Compile a MetaSuite Generator Program

x:\installdirectory\GENVisualAge_Windows\SYSTEM contains mk*.cmd which can be used to (pre-)compile a MetaSuite Generator program.

4.1. Compilation

```
cd x:\installdirectory\GENVisualAge_Windows\MGL
MKCOB MXL-name
```

Following procedure will be executed:

```
del %1.exe
del %1.obj
del %1.adt
cob2 -g"NODATA" %1.mgl %1.exe
if %ERRORLEVEL% == 8 notepad %1.lst
```

4.2. Pre-compilation

When your MetaSuite program accesses a RDBMS SourceFile, the generated program must be pre-compiled before compilation. Pre-compilation is dependent of the type of RDBMS that will be accessed.

DB2/NT

```
cd x:\ installdirectory\GENVisualAge_Windows\MGL
mkcobdb2 MXL-name
```

Following procedure will be executed:

```
rem to be tested and completed
del %1.exe
del %1.def
del %1.obj
copy %1.mgl %1.sqb
db2 db2start
cob2 -qNOADATA %1.mgl %1.exe
if %ERRORLEVEL% == 8 notepad %1.lst
db2 bind %1.bnd blocking all datetime iso isolation cs
db2 connect reset
db2 db2stop
```

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\GenVisualAge_Windows\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.

Please refer to *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

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

```
rem Win/NT-95 Runscript For ex0-0001
del ex0.log
del ex0.lst
del ex0.d01
set dd_PPTIPT=NUL
set dd_PPTLID=NUL
set dd_PPTF01=employee-master
set dd_PPTLOG=ex0.log
set dd_PPTLST=ex0.lst
set dd_PPTTD01=ex0.d01
ex0.exe (+D+S5)
echo %errorlevel%
```

RDBMS Run Considerations

Users can set only 1 runtime variable on the command for security reasons. The following example will set the password:

```
XXXXXXXX.exe SYS-DB-PASSWORD = 'password'
```

6.1. DB2/NT

DB2/NT users should supply the following MetaSuite Generator application runtime variable in the PPTIPT file to connect to a specific database:

```
SYS-DB-CONNECT = 'server'
```