

# Installation and Setup Guide

MetaSuite 8.1.3

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# About this Manual

This manual is the *Installation and Setup Guide* for MetaSuite 8.1.3.

It is intended for MetaSuite Managers and provides information about MetaSuite installation and setup procedures.

## 1.1. Related Publications

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"> <li>• BS2000/OSD Runtime Component</li> <li>• DOS/VSE Runtime Component</li> <li>• Fujitsu Windows Runtime Component</li> <li>• MicroFocus Windows Runtime Component</li> <li>• MicroFocus UNIX Runtime Component</li> <li>• OS/390 and Z/OS Runtime Component</li> <li>• OS/400 Runtime Component</li> <li>• VisualAge Windows Runtime Component</li> <li>• VisualAge UNIX Runtime Component</li> <li>• VMS Runtime Component</li> </ul>
User Guides	<ul style="list-style-type: none"> <li>• INI Manager User Guide</li> <li>• Installation and Setup Guide</li> <li>• Introduction Guide</li> <li>• MetaStore Manager User Guide</li> <li>• MetaMap Manager User Guide</li> <li>• Generator Manager User Guide</li> </ul>
Technical Guides	<ul style="list-style-type: none"> <li>• ADABAS File Access Guide</li> <li>• IDMS File Access Guide</li> <li>• IMS DLI File Access Guide</li> <li>• RDBMS File Access Guide</li> <li>• XML File Access Guide</li> <li>• Runtime Modules</li> <li>• User-defined Functions User Guide</li> </ul>

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.

<b>MetaSuite Database Interfaces</b>	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.
<b>MetaMap Manager</b>	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).
<b>MetaStore Manager</b>	MetaStore Manager is a tool that provides metadata maintenance and documentation services.
<b>Generator Manager</b>	The Generator Manager is the system administration tool. All kinds of basic functionalities and customization possibilities are supported by this tool.

# Requirements for Installing MetaSuite

The MetaSuite installation requires an administrator account within Windows XP, Windows Vista or Windows Seven to make all necessary registry changes during the installation process.

## 2.1. Hardware Requirements

The following hardware requirements apply for a MetaSuite installation:

- CPU: Pentium Processor or higher
- System RAM: Minimum of 2 GB
- Hard disk space: Minimum of 100 MB of free disk space for storage of MetaSuite software files

## 2.2. Software Requirements

The following software requirements apply for a MetaSuite installation:

- Operating System:
  - Windows XP
  - Windows Vista
  - Windows Seven
- One of following relational databases should be connectable in read-write mode:
  - Oracle
  - SQLServer
  - Sybase
  - Informix
  - DB2/zOS
  - DB2/LUW
  - ADABAS/D
  - Red Brick
  - Microsoft Access
  - SQLAnywhere
  - Total

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# MetaSuite Main Installation Using the Installation Wizard

This section describes the installation procedures for MetaSuite 8.1.3.

For more information on the new features introduced with this release, refer to the document *MetaSuite Release Notes*.

## 3.1. Installing MetaSuite

1. Log on to Windows with Administrator rights.

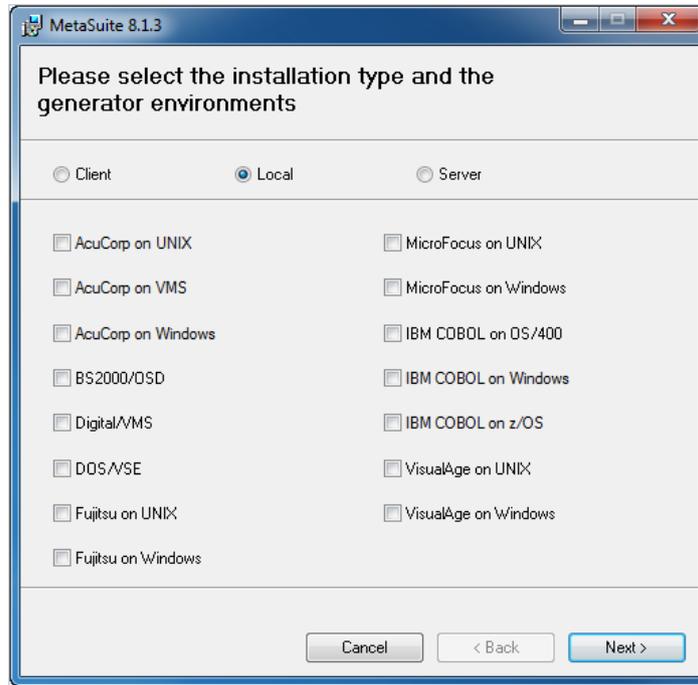
2. Load the MetaSuite installation CD.

3. Select the required folder in function of your operating system.

If the installer prefers a 32-bits 'x86' architecture, use the `<CD>:\setupx86` installation. If all users have a 64-bit processor then the `<CD>:\setupx64` installation can be started.

Next, click the setup executable.

The following screen is displayed:

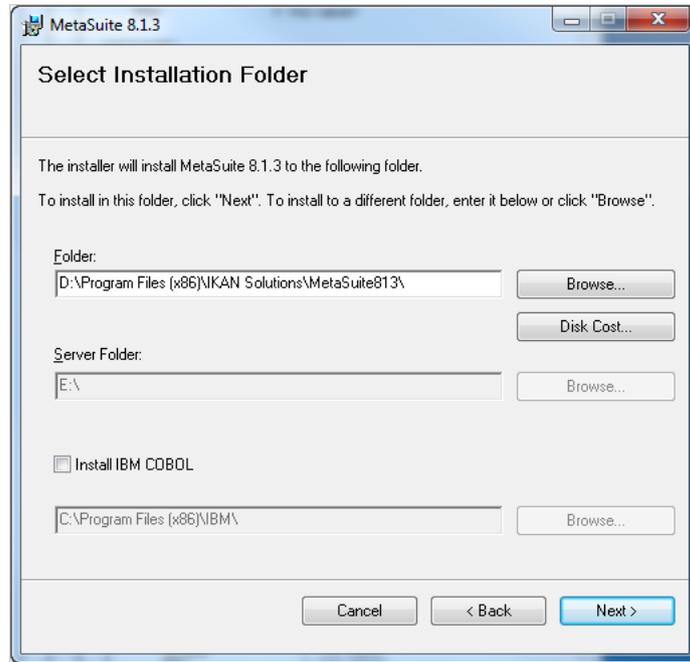


4. Select the type of installation and the Generator environment, and click *Next*.

The following options are available:

Option	Description
Local	Select this option to perform a standard installation on your local machine. This option is advised, when you are working as a single user.
Server	Select this option to perform the Server installation of MetaSuite. the MetaSuite Server will act as a file server. The client-server is advised, when you are working in a group.
Client	Select this option to perform the Client installation. This installation must be performed on all clients (and optionally on the server). All execution will be done on the client once one of the MetaSuite components is run.

The following screen is displayed appears:



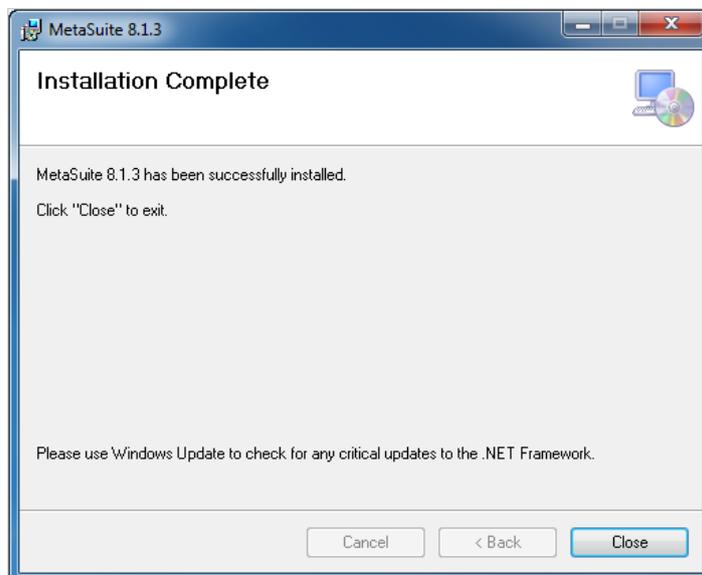
5. Select the folder where you want to install MetaSuite. In case of a CLIENT installation, you should also specify the SERVER installation folder.
6. If you also want to install COBOL, select the *Install IBM COBOL* option and, underneath, select the folder where you want to install COBOL.

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**Note:** This option is only available if you select a COBOL Generator environment on the previous screen.

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7. Click *Next* to start the installation process.
8. When the installation is finished, the following screen is displayed.



9. Click *Close*.

MetaSuite has been successfully installed on your system.

## 3.2. Installing Fujitsu Runtime

If Fujitsu Runtime is not yet installed on your system, you can install it using the MetaSuite Installation Wizard.

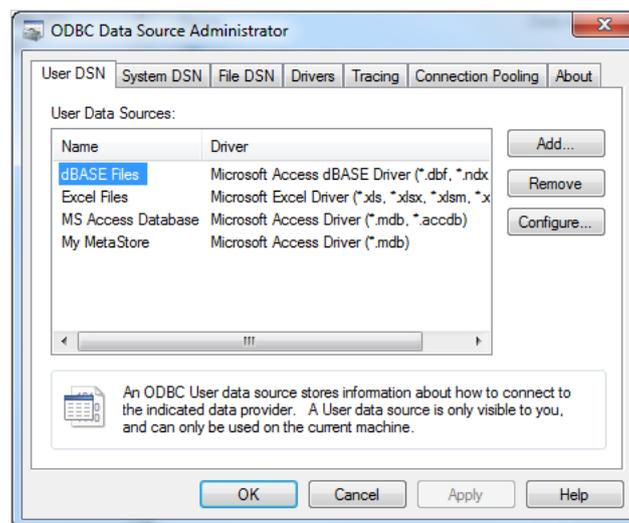
1. Log on to Windows with Administrator rights.
2. Load the MetaSuite installation CD.
3. Run the.exe file.
  - On a Windows XP machine (or older):
    1. Execute <CD>:\Runtime Setup - Fujitsu Cobol 5.0\SetupFujitsuCOBOLRunTime.exe
    2. Follow the instructions of the Setup Menu.
  - On a Windows Vista, Seven or Eight machine:
    1. Execute <CD>:\Runtime Setup - Fujitsu Cobol 10.0\FujitsuNetCOBOL.exe
    2. Follow the instructions of the Setup Menu.
    3. Copy <CD>:\Runtime Setup - Fujitsu Cobol 10.0\PPTGEN.EXE to the MetaSuite installation folder.

# Defining the ODBC Link

1. Open the ODBC administrator.

Via the Windows *START* menu, select *Control Panel*. In this panel, click *Administrative Tools*. Choose *Data Sources (ODBC)*.

**Important remark:** When setting up a 32 bit ("x86" architecture) MetaSuite on a 64 bit Windows installation, the program (`installationdrive`):\Windows\SysWOW64\odbcad32.exe has to be executed in stead.



2. Add a new data source, and enter all properties on the ODBC set-up screen:

- Default DSN = *My MetaStore*
- Default database name = *Metasuit*

3. If required, enter the password.

By default the password is left empty.

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# Customizing the MetaSuite INI Settings

The MetaSuite INI Manager allows customizing the MetaSuite INI Settings using a user-friendly GUI. These settings are saved in the default INI file called *MetaSuite.ini* or in a user-specific INI file (User Profile). The default *MetaSuite.ini* file is stored in the `AppData\Roaming\MetaSuite` folder.

The user can load the default *MetaSuite.ini* file or a customized User Profiles from within the MetaStore Manager and the MetaMap Manager. Refer to the *MetaStore Manager User Guide* or the *MetaMap Manager User Guide* for a description of how to load another User Profile.

The *MetaSuite.ini* file and User Profiles contain settings for the following MetaSuite components:

- MetaStore Manager
- MetaMap Manager
- Generator Manager

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**Note:** Although it is possible to edit the *MetaSuite.ini* file and customized User Profiles with a text editor like Notepad, it is recommended to use the INI Manager in order to avoid syntax errors and omissions.

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1. Start the *MetaSuite INI Manager* by selecting *INI Manager* from the MetaSuite shortcut menu or by double-clicking the *IniManager.exe* file in the MetaSuite installation folder.
2. Select the Data Source Name specified in the previous step.
3. Save the INI file.

For more information about the INI manager settings, refer to *INI Manager User Guide*.

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# The Generator Dictionary File

The Generator Dictionary contains default values used for transforming the MetaMap Models into COBOL Source Code.

1. Start the MetaSuite Generator Manager via the *START* menu.
2. Select the *Create Dictionary* tab page, define the dictionary properties and click the *Create* button.

The Dictionary file for the default generator you selected when customizing the INI settings (see previous chapter) will be created. The header of the window displays the currently selected Generator, e.g., MetaSuite Generator Manager - Fujitsu\_Windows.

If a Dictionary already existed for the environment, the Dictionary will be overwritten and a backup file will be generated.

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**Note:** If, during the installation procedure, you selected more than one Generator environment on the *Installation type and generator environments* window ([MetaSuite Main Installation Using the Installation Wizard](#) (page 4)), you will also need to create a Dictionary for each of the other Generator environments.

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3. In the panel at the bottom of this window, fill out the customer name and license key, and click the *Apply* button.

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**Note:** The license key needs to be applied for each Generator environment you installed.

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4. If required, create the Dictionaries and add the license keys for the other Generator environments you installed.

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**Note:** This step can be skipped and be deferred to a later time, but you will not be able to use a Generator environment until a Dictionary has been created for it.  
Also note that you cannot apply a license key unless a Dictionary has been created for its Generator environment.

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- 4.1. Click the *Select Other Generator* icon in the left column, select another installed Generator and click *OK*.

4.2. Change the settings as required by the environment targeted by that Generator and click the *Create* button.

4.3. Fill out the customer name and license key, and click the *Apply* button.

For more information on how to create the Generator Dictionary File, refer to the *Generator Manager User Guide*.

# Installing the Run-time Modules

**Note:** For a quick installation, this step can be skipped.

MetaSuite Run-time Modules are called by the generated MetaSuite programs.

All run-time modules have a name beginning with *MS* and ending with a 3-digit version number, such as *MSIMS813*.

Since this chapter describes the run-time modules in general, the version numbers in the program names have been replaced by three asterisks (\*\*\*)

IKAN Solutions delivers the source codes, which must be compiled and linked before use.

The compile and link procedure is called *mkrts813*. It can be found in the MetaSuite system folder and is self-explanatory.

The following table provides an overview of the available modules.

Module name	Function	Description
MSA2U***	Converting ASCII to Unicode	This module performs a conversion from an ASCII-based character field into a Unicode-based character sequence.
MSASC***		This module performs a conversion from an EBCDIC-based character field into an ASCII-based character sequence.
MSBIN***		This module performs a conversion from a hexadecimal sequence into a character field.
MSCAL***		This module performs a calculation of an editable numeric value.
MSCCX***	Concatenation run-time module	This module performs string concatenations. It is called when the AND function is executed.
MSCIX***	Run-time parameter I/O module	This module opens, reads and closes the file with link-name <i>PPTIPT</i> . This file is used for transferring run-time parameters to the main program.
MSDBX***	De-blanker run-time module	Numeric data has both leading and trailing blanks stripped. Alphanumeric data has trailing blanks stripped. The resulting strings are concatenated in the user supplied buffer.
MSDCX***	Date arithmetic run-time module	This module calculates the difference between 2 DATE fields, and adds or subtracts days from a certain date.

Module name	Function	Description
MSDMX***	SQLCODE handling module	This module gets the message text from an SQLCODE. If the SQLCODE causes the program to stop, the message text (SQLWARN1,2,3...) will be displayed before stopping. Variants of this module have been developed for other database systems: <ul style="list-style-type: none"> <li>MSDMX*** : DB2 (z/OS &amp; OS-390, DOS/VSE, VMS)</li> <li>MSD2X*** : DB2/2 (Windows)</li> <li>MSD4X*** : DB2/400 (AS/400 &amp; OS/400)</li> <li>MSD6X*** : DB2/6000 (RS/6000 UNIX)</li> <li>MSIFX*** : INFORMIX</li> <li>MSORX*** : ORACLE</li> <li>MSSQX*** : SQL server</li> <li>MSSYX*** : SYBASE</li> </ul>
MSDTX***	Date conversion run-time module	This module converts dates from one format to another.
MSE2U***	Converting EBCDIC to Unicode	This module performs a conversion from an EBCDIC-based character field into a Unicode-based character sequence.
MSEBC***		This module performs a conversion from an ASCII-based character field into an EBCDIC-based character sequence.
MSEOJ***		End of job handling.
MSENX***	File concatenation run-time module	This program is used in Windows and UNIX environments for simulating the OS/390 DD-concatenation. Source file names can be put one after another, delimited by semicolons.
MSHEX***		This module performs a conversion from a character field into a hexadecimal sequence.
MSINI***		Program initialization handling.
MSHFX***	Hexadecimal formatter run-time module	This module produces a printable hex from a passed character string. It calls the following assembler sub-routines: <ul style="list-style-type: none"> <li>MSHXX for hex to clear-text conversion</li> <li>MSPFX for printing</li> </ul> The program does not use the run-time message formatter.
MSHXT***	Hexadecimal formatter run-time module	This run-time module converts a string to a horizontal hexadecimal dump format without translation.
MSHXX***	Hexadecimal formatter run-time module	This run-time module converts a string to a horizontal hexadecimal dump format and then translates the input to printable characters.
MSIMS***	Inquiry of the IMS PCB	This module does an inquiry of the IMS program control block. The <i>CEETDLI</i> and <i>PLITDLI</i> interfaces keep track of calls to and returns from IMS. If you use <i>CBLTDLI</i> or <i>ASMTDLI</i> from a COBOL program and you are using IMS Version 4 Release 1 or IMS Version 3 Release 1 with PTF UN49280, the coordination between Language Environment and IMS condition handling is identical to the handling provided by <i>CEETDLI</i> . <i>MSIMS***</i> makes use of <i>ASMTDLI</i> , the IMS assembler module.

Module name	Function	Description
MSSQX***		
MSLID***	P TTLID formatter module	This module reads the file with link-name <i>PPTLID</i> and puts the first record of that file into the only parameter.
MSLSX***	Run-time messages formatter module	This module writes messages on <i>PPTLOG</i> . It is called by every action that needs to be logged.
MSPFX***	Run-time messages I/O module	The module generates the <i>PPTLST</i> (internal name = <i>APDLST</i> ) file.
MSRNX***	Random number generator run-time module	This module generates a random number. You'll have to provide a random-seed. This can be a time-stamp or something else.
MSRST***	Restart generator	This module simulates the IMS restartability module, but can be used in order to maintain restartability.
MSSPX***	Run-time parameter formatter module	This module reads the <i>PPTIPT</i> file and does the interpretation of the <i>PPTIPT</i> records. It moves the run-time parameter values into the proper zones. While doing so, it uses <i>MSCIX***</i> and <i>MSLSX***</i> .
MSSQX***		SQL error handling module - SQL SERVER
MSSYX***		SQL error handling module - SYBASE
MSSZX***	Sample size run-time module	This module generates a sample size for a sample source file.
MSTDx	Date and time run-time module	This module moves current date to the parameter.
MSTRM***		This module performs the trimming of a string.
MSTRX***		SQL error handling module - TERRADATA
MSU2A***	Converting Unicode to ASCII	This module performs a conversion from a Unicode-based character field into an ASCII-based character sequence.
MSU2E***	Converting Unicode to EBCDIC	This module performs a conversion from a Unicode-based character field into an EBCDIC-based character sequence.

For more information on run-time modules, refer to the *Generator Manager User Guide*.