Release Notes

Release 8.1

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METASUITE

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Table of Contents

Common Changes

.NET look and feel used for the GUI applications

Support for Windows

The following Windows operating systems are supported:

- Windows XP
- Windows Vista
- Windows 7

Undo feature

Single-level undo feature at field level (Pressing Esc while editing returns the initial value).

Improved file path handling

Unknown or inaccessible folders, referred to by the INI manager, can be replaced "on the fly" at the moment these paths are used.

"File change" monitoring

The configuration files and the model being edited are monitored for external changes. If such a change is detected, the file can be reloaded, or the change can be ignored. A setting is provided to specify whether this choice is pre-defined or to be made by the user.

Association

- MetaStore Manager is associated with MDL files.
  It will open these files from a windows shell (explorer). MetaStore Manager is also associated with CBL, CPY, PCB, XSD and other collectable types.
- MetaMap is associated with MSM files.

Migration of the MetaStore repository

This repository is not upgraded. If previous data is needed, it can be transferred using the MDL import/export as the MDL format has not changed.

HELP functionality

Improved input validation: warning and error icons at the right of the input field.

Further explanation is provided by means of a tooltip.

INI Manager

General

- Improved arrangement of the INI Manager GUI: MetaStore Manager Settings, MetaMap Manager Settings, ...
- When the INI file changes, other running MetaSuite applications automatically prompt a message asking for the reload of the modified INI file.

Data profiles

Every field type that is collected by MetaStore Manager has to be described. In version 7, this description was done within the MC_TYPES.INI file. This file had to be changed by means of a text editor.

In version 8.1. this file can be opened using the new "profiles" functionality in the INI Manager.

Default Folders

- File name casing of MDL and MSM files can be set.
- Default folders can be used in a folder name: <Ins>, <Gen> and <Doc> can be used.
- Macros can be used for indicating the paths of the default folders:
  - <Ins> = the MetaSuite installation path of the client or stand-alone installation.
  - <Exe> = the MetaSuite installation path of the server or stand-alone installation.
  - <Doc> = the folder "%My Documents%\MetaSuite"
  - <Gen> = the generator name, indicated in the MetaMap Manager settings, or, if this name is not defined, the generator for which one is generating in MetaMap Manager.

MetaStore Manager Settings

- The version number of a collected or imported file can be set by means of a setting within the "INI Manager".
- Field uniqueness enforced on Group Field, Record or File level.
- New option to collect or not to collect 'FILLER' fields.
- New option to handle the file version when collecting a file that exists already in the MetaStore Dictionary.
- New option to handle the file version when importing a file that exists already in the MetaStore Dictionary.

MetaMap Manager Settings

- New option that indicates whether the suggestion list for the structured editor should be opened automatically or not.
- New option that indicates whether to use Visual Styles or not in Windows Vista or Windows Seven.

- New option that indicates whether the suggestion list should be put on the left hand side or on the right hand side of the structured editor.
- The export of SQL-type target files can be arranged differently.
  In the previous version, numeric fields were compressed (packed). Now a flag can be set or unset in order to change that behavior.
- In the previous version, Null settings were not exported. Now a flag can be set or unset in order to change that behavior.

MetaStore Manager

General

- New docking functionality (DockPanelSuite 2.2 - mimics the VisualStudio.NET docking, giving more workspace flexibility than in the previous versions).
- MSBSTORE (MetaStore batch utility):
  - The utility has been extended with collect capabilities.
  - The INI file can be used as a parameter in order to limit the number of parameters in the MSBSTORE command.

Field Property Changes

- Field property “DBNAME” is changed into “NULL” for all data types, except for ADABAS and IMS fields.
- The “Advanced” tab has been removed. Instead, two frames have been created on the Technical tab: the “Standard” field properties and “content-related” field properties.
- New field attributes. These attributes are controllable using the context menus in the tree navigator and record field grid:
  - Auto Position: The position value can be (re)calculated automatically.
  - Auto Size (applies to files, records and fields): The object size can be calculated as a sum of the sizes of all its subfields. This flag is enabled by default for all new fields and records.
  - Auto Layout (function, context menu): Enables auto positioning for all subfields, and auto sizing for the selected parent.
  - The “Redefined” flag: Declares that the field has the same offset as one or more other fields. Setting this flag will ensure that the redefining field will follow the redefined field’s starting position (or offset).
- Field name uniqueness
  During the collection of a file description, version 8.1 enforces unique field names in:
  - Files,
  - Records (all fields in the record), or
  - Group fields.

  The default is “all fields in the record are unique”. This value can be changed in the INI Manager.

XML and XSD

- XML files, records and fields have new XML-related properties such as Attribute or Group flags, “XPATH”, “Format Mask” and “XML declaration”.

- XSD source collect is improved:
    - automatic record level detection
    - collection of the new properties during the XSD collect.

Unicode Support

- New field type: National. This field type can contain Unicode strings or Unicode Date fields.
- New field type: Printed Numeric National.
  This field is the Unicode variant of the field type “Printed Numeric”.
- Virtual decimal separators are allowed in the edit mask.
- Collecting National items: GROUP-USAGE National and PICTURE N can be collected.
- Numeric national items automatically get a pre-defined edit mask.

MetaMap Manager

General

- New docking mechanism: gives more workspace flexibility than in the previous versions.
- New models (MSM) are saved in readable XML format.
- External array keys can be overridden by the sort keys (Access keys enhancement).
- Auto position and auto size features added for work fields.
- Source and target files can be moved up and down.

Tree Structure for All Objects

A common tree structure has been implemented in version 8.1 for all types of interfaces and objects.

- Interfaces:
  - MetaMap Tree View
  - Matching Wizard
  - Mapping Wizard
- Objects:
  - Source files
  - Target files (more than one level of subfields is now allowed)
  - Workfields (more than one level of subfields is now allowed)

The possibility to remove all subfields of a target file or work field structure has been added.

All actions (Open properties, Remove object, ...) can be performed from within the different interfaces.

Unicode

- The COBOL type “NATIONAL” can be collected from copybooks and be used in the generated COBOL. NATIONAL is a subset of UTF-16, restricted to 2 bytes.
- The data type “Printed Numeric National” is now supported for Unicode fields that contain numeric content.
- The property “CCSID” is supported on MetaSuite level, File level, Record level and Field level.
- Lower level objects inherit the CCSID property from the higher level objects.

Messages and Errors

- Errors in command procedures are detected on load and marked in the tree view
- Syntax errors will be displayed in the yellow area underneath the structured editor window.

Structured Editor

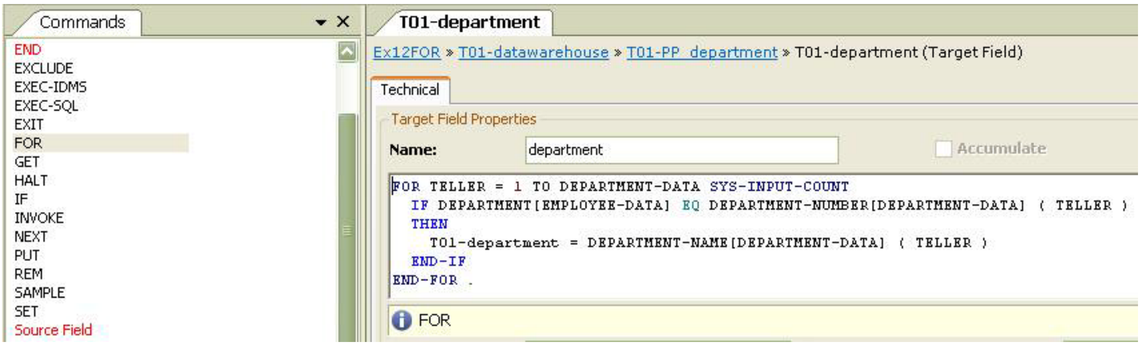
- Object Usage Tracking:
  - Fields, records and files can be referred to on different locations.
  - When the object name changes, or the object is deleted, messages will be shown for all affected locations.
- When pointing at a field or other object, the full object description is displayed in the yellow area underneath the structured editor window.
- Validation while typing:
  - In order to facilitate the editing process, the objects that can be selected from the tree window will be displayed in boldface. Tree navigator context hint for valid click-inserts.
  - The command window is constantly updated while editing.
- Live correctness check, following the user's modifications.
- On-the-fly casing corrections of reserved words.
- Look-ahead parser selection by using the arrow keys and the TAB button.
- Support of all new generator functions, such as SUBSTRING, REPLACE, LENGTH, SYSTEM-FUNCTION ….
- PUT target-record is a synonymous for PUT (target-record).
- Improved FUNCTION statement.
- External Arrays can be accessed randomly.
- When adding a Source Field, Target Field or Workfield, a pop-up window listing all available items is displayed.
  Two extra options are available at the top right of the pop-up window for selecting the required item:
  - Show all: displays all available fields for all categories
  - Indentation: sort all displayed fields per structure instead of alphabetically

- Keyed navigation:
  The UP and DOWN buttons go up and down until an alphabetical character has been entered. Next, the UP and DOWN buttons navigate within the commands list (the look-ahead parser) until a command has been selected by clicking or by means of the TAB key.

- DO xxx FOR x = start to end BY -1
  The step value can be negative.

- CASE ... END-CASE
  The CASE-block can be terminated by means of `END-CASE`.
  IF and CASE remain mutual exclusive.

- FOR ... END-FOR
  The FOR-block can be terminated by means of END-FOR.



Ex12FOR » T01-datawarehouse » T01-PP_department » T01-department (Target Field)

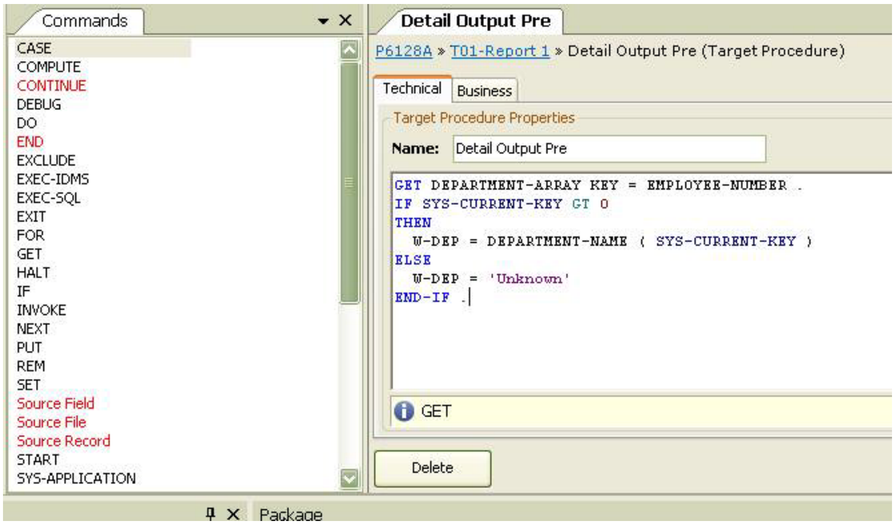
Target Field Properties

Name: department

```
FOR TELLER = 1 TO DEPARTMENT-DATA SYS-INPUT-COUNT
  IF DEPARTMENT[EMPLOYEE-DATA] EQ DEPARTMENT-NUMBER[DEPARTMENT-DATA] ( TELLER )
  THEN
    T01-department = DEPARTMENT-NAME[DEPARTMENT-DATA] ( TELLER )
  END-IF
END-FOR .
```

FOR

- IF ... THEN ... ELSE ... END-IF
  The IF-block can be terminated by means of END-IF.
- SYS-CURRENT-KEY
  Can also be used in non-array procedures. It contains the search index after a GET statement. This allows you to avoid creating variables as placeholder for the GET result.



P6128A » T01-Report 1 » Detail Output Pre (Target Procedure)

Target Procedure Properties

Name: Detail Output Pre

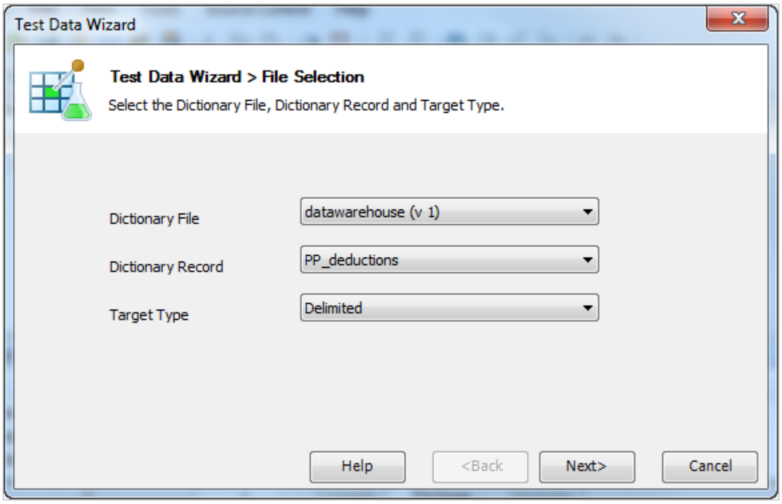
```
GET DEPARTMENT-ARRAY KEY = EMPLOYEE-NUMBER .
IF SYS-CURRENT-KEY GT 0
THEN
  W-DEP = DEPARTMENT-NAME ( SYS-CURRENT-KEY )
ELSE
  W-DEP = 'Unknown'
END-IF .
```

GET

- SYS-RANDOM-KEY and GET ... KEY = RANDOM
  Can be used in order to get a random element from an external array.
- USER-FUNCTIONS and SYSTEM-FUNCTIONS
  Users can create their own COBOL functions in order to program obfuscation algorithms, to call customer-specific modules, etc.

Test Data Wizard

The Test Data Wizard has been developped in order to easen the creation of test data.


Test Data Wizard

Test Data Wizard > File Selection

Select the Dictionary File, Dictionary Record and Target Type.

Dictionary File	datawarehouse (v 1)
Dictionary Record	PP_deductions
Target Type	Delimited

Compile and package scripts

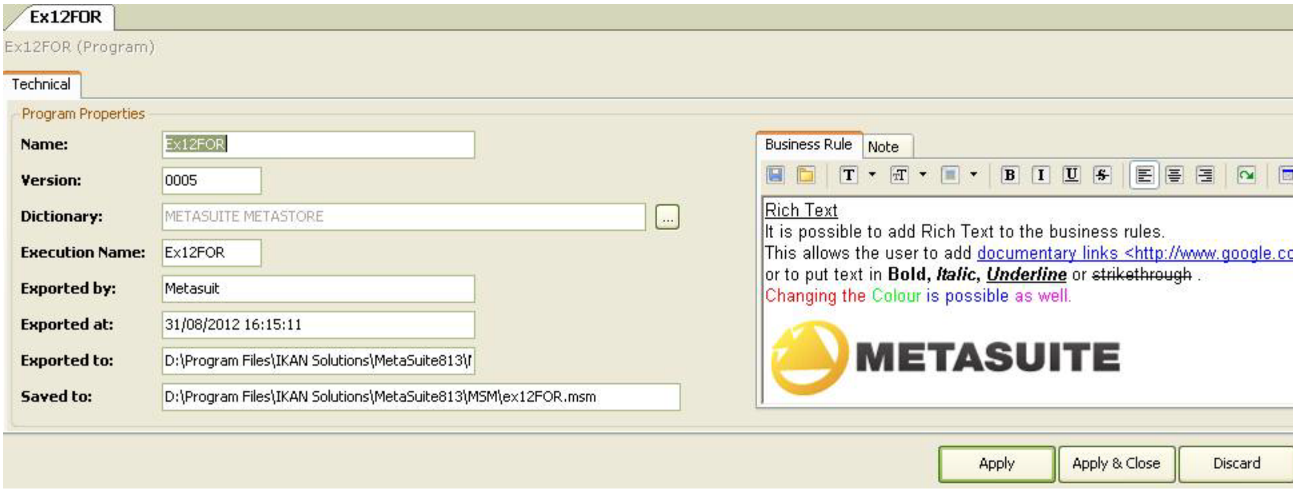
Additional parameters have been added for the compile and package scripts.

SQL

Support of SQL columns starting off with a number.

Notes and Business Rules (MetaMap and MetaStore)

- Rich Text supported, allowing you to add pictures, hyperlinks, colored text, ...


Ex12FOR

Ex12FOR (Program)

Technical

Program Properties

Name:	Ex12FOR
Version:	0005
Dictionary:	METASUITE METASTORE
Execution Name:	Ex12FOR
Exported by:	Metasuit
Exported at:	31/08/2012 16:15:11
Exported to:	D:\Program Files\IKAN Solutions\MetaSuite813\I
Saved to:	D:\Program Files\IKAN Solutions\MetaSuite813\MSM\ex12FOR.msm

Business Rule | Note

Rich Text
It is possible to add Rich Text to the business rules.
This allows the user to add documentary links <http://www.google.cc
or to put text in **Bold**, ***Italic***, ***Underline*** or ~~strikethrough~~ .
Changing the Colour is possible as well.

Mapping

- "Live" lists:
  - The mapping wizard not only shows the mappings, but also the current relations between source and target fields.
  - Data changes in other forms are reflected immediately.
- The complete file tree is displayed for mapping, not only the top level fields.

- When the mapping is done by means of a formula, a mapping line is shown as well.
- Mappings from within procedures can displayed.
- On-the-fly mappings (target fields using a data source property) can be displayed.
- Mappings overview available.

Procedures

- New type of program procedure: "Read-Write-Cycle".
  This procedure will be executed every read-write-cycle of the main stream, between the sourcefile input and the targetfile detail procedures.
- New type of sourcefile procedure: "First Contact".
  This procedure will be executed when the first valid source record is read.
- Sourcefile procedure name change: FILE INITIAL has been changed into INITIAL SORT.
  If the source file is not sorted, this procedure will be executed only once for backward compatibility reasons.

Generator Manager

General

- SQL dialects DB2_NT, DB2_Unix, DB2_2 have been renamed to DB2_LUW.
- New environment: IBM COBOL on Windows (RDZ).
- Internal calls:
  The runtime modules can be called by means of an internal COBOL call. This means that the runtime modules can be part of the generated source, and will be compiled together with the main program.
- SQL quote setting:
  The QUOTE setting in COBOL and in the SQL statements in the COBOL source might differ. Therefor a new parameter was developed: SQL-QUOTE.
- The generator (msbgen.exe) can be called with full path names.
- The number of fields has been increased to 3650.
- The MIL commands have been adapted in order to display and alter the new generated settings, such as SQL-QUOTE, COBOL call type, CCSID.

Multiple Group Level Support

- Target files
- Work fields
- Source files (already available in previous versions)

Unicode and Foreign Character Set Support

- Field types NATIONAL and PRN-NATIONAL are supported.
  - PRN-NATIONAL can be used to store numeric values.
  - NATIONAL can be used for Unicode character strings and Unicode date fields.
- The generator INI file contains the default CCSIDs for Character fields and Unicode fields.
- Files, records and fields have a CCSID property.
- The CCSID of a field is tested against the field type.
- When assigning a field to another field, the CCSIDs and field types are checked.
  If they do not match, a conversion will be performed automatically:
  - Unicode to non-Unicode,
  - non-Unicode to Unicode,
  - character fields or Unicode fields with CCSID 1 to the same field type, with CCSID 2.
- Some functions are supported on Unicode fields, as well as the matching of Unicode fields with non-Unicode fields.

New or Improved Functions

- The function INSTRING returns the position of a substring within a string.
- The function LENGTH returns the length of a string without the trailing spaces.
- The function SUBSTRING has been improved: the parameters "position" and "size" can be single-occurring numeric fields, and the size parameter can be omitted.
- The function REPLACE replaces the content of a field. Two formats are supported:
  - Replacement of a search-string within a string.
  - Replacement of the content of a string on a fixed position.
- The function REPLACEALL replaces all occurrences of a search string within a string.
- COBOL Functions can be called.
  All COBOL system functions can be used.
- New function MANUAL-INPUT.
  This function asks input from the console, and stores this input in a work or target field.
- Test-related features:
  Some obfuscation functions have been developed to enable the creation of test files. These obfuscation functions can be called by means of the new SYSTEM-FUNCTION command.
- The SYSTEM-FUNCTION and USER-FUNCTION commands facilitate the creation of new functionalities for the MetaSuite generator. SYSTEM-FUNCTION commands are developed by IKAN. USER-FUNCTION commands can be developed by the customer.

External Arrays

- Support of dynamic (sort) keys.
- Random access.

Standard File Support

- Record sequential or line sequential target files:
  The user can choose if he wants to use the default sequential file type on the system that he is generating for, or if he wants to specify the sequential file type explicitly.
- Fixed or variable target files:
  The record format (Fixed/Variable) is taken in account when generating.
- Support of multi-record delimited source files.

Source XML Support

- The use of XPATH is supported.
- Structures ("records") within the XML file can be defined by means of the XPATH.
- The read-and-release behavior of the XML "records" can be triggered by means of the MetaSuite file path.
- XML-NAME support: the field name can differ from the XML node name.
- CDATA support: MetaSuite can read CDATA properties.

Target XML Support

- XML files can be produced by means of the target type XML.
- Newly supported parameters: XML-DECLARATION, XPATH, XML-TYPE, XML-NAME.

- Within a single target file, several XML records can be put, one nested within another, following the XPATH specifications.

MetaSuite Template Language

- Use of local and global variables.
- New DUMP commands.
- Improved handling of string variables.
- New MTL system functions on source files, source records, target files and target records.
- New system fields.

Control Table Improvements

- Source code-control table (GENCTL): new entry for miscellaneous procedures.
- Target code-control table (OUTCTL): new entries for miscellaneous procedures, miscellaneous working storage and miscellaneous linkage code.
- Code-control tables can contain MTL instructions.

Upgrading From Release 7.2.2

Converting the MetaStore Database

There are 2 methods for converting the 7.2.2 MetaStore Database into 8.1.3:

1. Using the MetaStore in Batch
2. Using the MetaStore GUI

Note: For performance reasons, it is recommended to use the batch method. If your MetaStore Database contains a lot of files, the conversion could cause your system to run out of memory.

Batch Conversion

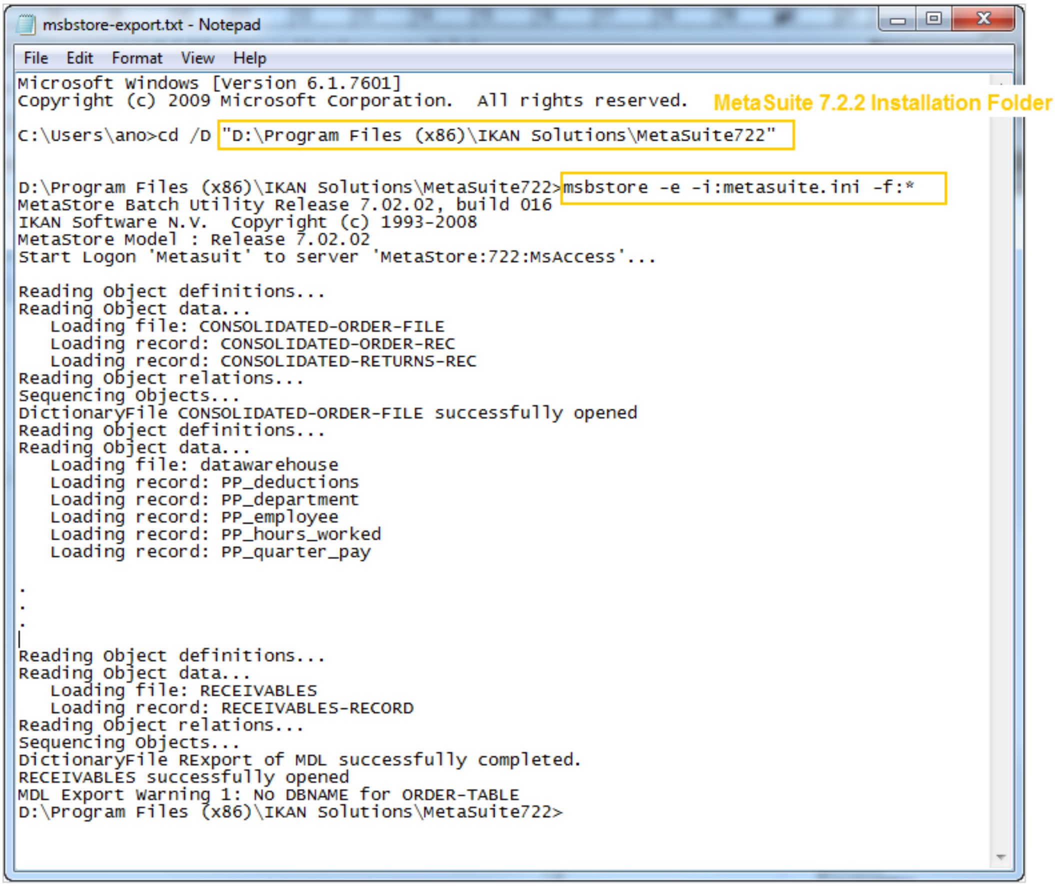
1. Open a command window.
2. Change the directory to the installation directory of *MetaSuite MetaStore 7.2.2*.
3. Enter the export command: `mbstore -e[:version] [options] MetaStore_Filename`

Option	Description
-e[:version]	Export the specified MDL file from the MetaStore. If no version is specified in the MDL file, the latest version will be taken.
MetaStore_Filename	The name of the file that will be exported. If * is used as filename, all existing files in the MetaStore will be exported to DATA.MDL.

For more information on the available options, refer to section *24.4 Optional Parameters Overview* in the *MetaSuite MetaStore Manager User Guide*.

The file `DATA.MDL` has been created in the MetaStore installation folder (or in the location you specified).

Example:


msbstore-export.txt - Notepad
File Edit Format View Help
MetaSuite 7.2.2 Installation Folder

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\ano>cd /D "D:\Program Files (x86)\IKAN Solutions\MetaSuite722"


D:\Program Files (x86)\IKAN Solutions\MetaSuite722>msbstore -e -i:metasuite.ini -f:*
MetaStore Batch Utility Release 7.02.02, build 016
IKAN Software N.V.  Copyright (c) 1993-2008
MetaStore Model : Release 7.02.02
Start Logon 'Metasuit' to server 'MetaStore:722:MsAccess'...

Reading object definitions...
Reading object data...
   Loading file: CONSOLIDATED-ORDER-FILE
   Loading record: CONSOLIDATED-ORDER-REC
   Loading record: CONSOLIDATED-RETURNS-REC
Reading object relations...
Sequencing objects...
DictionaryFile CONSOLIDATED-ORDER-FILE successfully opened
Reading object definitions...
Reading object data...
   Loading file: datawarehouse
   Loading record: PP_deductions
   Loading record: PP_department
   Loading record: PP_employee
   Loading record: PP_hours_worked
   Loading record: PP_quarter_pay

.
.
.
|
Reading object definitions...
Reading object data...
   Loading file: RECEIVABLES
   Loading record: RECEIVABLES-RECORD
Reading object relations...
Sequencing objects...
DictionaryFile RExport of MDL successfully completed.
RECEIVABLES successfully opened
MDL Export Warning 1: No DBNAME for ORDER-TABLE
D:\Program Files (x86)\IKAN Solutions\MetaSuite722>
```

4. Check the messages if any.

   Most of the messages are purely informative. You should, however, carefully check any warning or error messages.

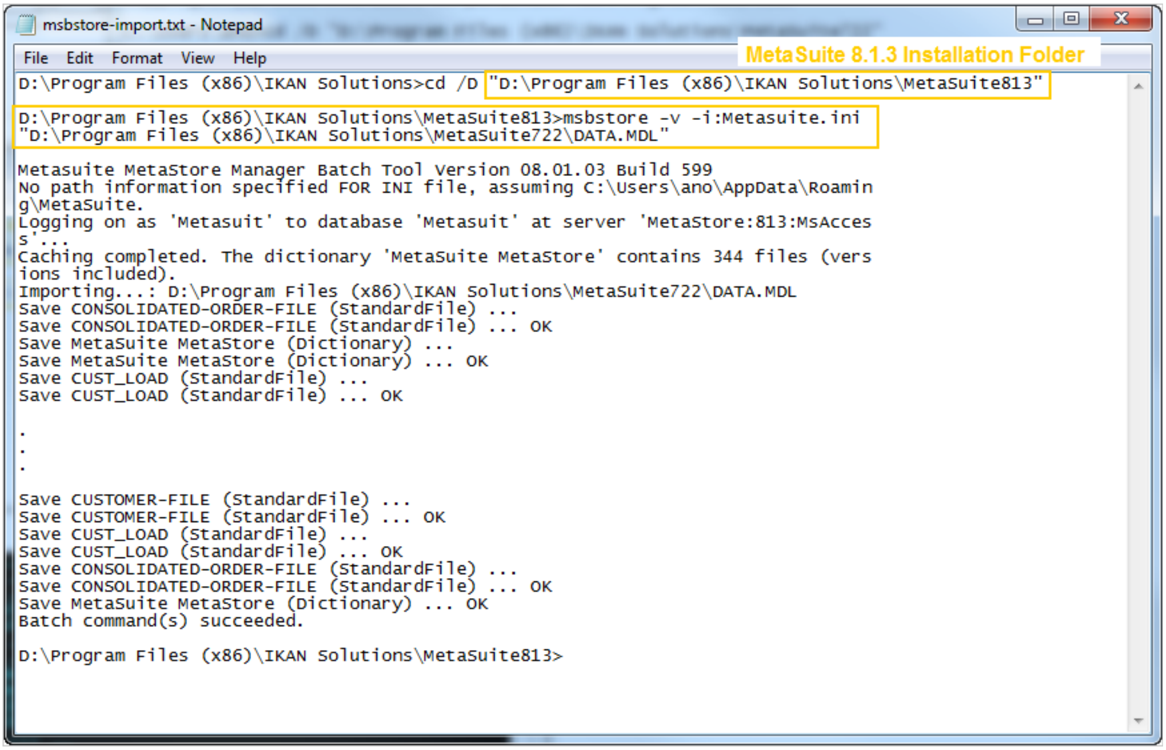
   Next, you have to import the old MetaStore into release 8.1.3.

5. Change the directory to the installation directory of MetaStore 8.1.3.

6. Enter the import command: `mbstore -v[:version | +] [options] MDL_Filename`

   where `MDL_Filename` is the full path name for the file containing the data description in MDL format. In our example: `MetaSuite722\DATA.MDL`.

Example:



msbstore-import.txt - Notepad
File Edit Format View Help
MetaSuite 8.1.3 Installation Folder

```
D:\Program Files (x86)\IKAN Solutions>cd /D "D:\Program Files (x86)\IKAN Solutions\MetaSuite813"

D:\Program Files (x86)\IKAN Solutions\MetaSuite813>msbstore -v -i:Metasuite.ini
"D:\Program Files (x86)\IKAN Solutions\MetaSuite722\DATA.MDL"

Metasuite MetaStore Manager Batch Tool version 08.01.03 Build 599
No path information specified FOR INI file, assuming C:\Users\ano\AppData\Roamin
g\MetaSuite.
Logging on as 'Metasuit' to database 'Metasuit' at server 'MetaStore:813:MsAcces
s'...
Caching completed. The dictionary 'MetaSuite MetaStore' contains 344 files (vers
ions included).
Importing...: D:\Program Files (x86)\IKAN Solutions\MetaSuite722\DATA.MDL
Save CONSOLIDATED-ORDER-FILE (StandardFile) ...
Save CONSOLIDATED-ORDER-FILE (StandardFile) ... OK
Save MetaSuite MetaStore (Dictionary) ...
Save MetaSuite MetaStore (Dictionary) ... OK
Save CUST_LOAD (StandardFile) ...
Save CUST_LOAD (StandardFile) ... OK

.
.
.

Save CUSTOMER-FILE (StandardFile) ...
Save CUSTOMER-FILE (StandardFile) ... OK
Save CUST_LOAD (StandardFile) ...
Save CUST_LOAD (StandardFile) ... OK
Save CONSOLIDATED-ORDER-FILE (StandardFile) ...
Save CONSOLIDATED-ORDER-FILE (StandardFile) ... OK
Save MetaSuite MetaStore (Dictionary) ... OK
Batch command(s) succeeded.

D:\Program Files (x86)\IKAN Solutions\MetaSuite813>
```

The following table provides an overview of the version number that will be assigned to the Dictionary File in a specific situation:

Option	MDL Version Number	MetaStore Version Number	New Version Number
-v	No version specified	Dictionary File not yet in MetaStore	1
	No version specified	y	y
	x	Dictionary File not yet in MetaStore	x
	x	y	x (in all cases)
-v+	No version specified	Dictionary File not yet in MetaStore	1
	No version specified	y	y+1
	x	Dictionary File not yet in MetaStore	x
	x	y	y+1, if x<=y x, if x>y

For more information on the available options, refer to section *24.4 Optional Parameters Overview* in the *MetaSuite MetaStore Manager User Guide*.

7. You can verify the result by exporting the new MetaStore 8.1.3 database and by comparing the 722 and 813 MDL files using a standard comparison tool.

Conversion via the MetaStore GUI

Note: This method is not recommended.

1. Start MetaStore Manager 7.2.2
2. Open all the Files in the MetaStore.
3. Select the Dictionary icon and select *File* > *Export* > *to MDL File*.
4. Specify the name of the MDL file.
5. Start MetaStore Manager 8.1.3
6. Choose *File* > *Import File* and select the exported 722 MDL file.
7. Next, you can verify the result by exporting the new MetaStore 8.1.3 database and by comparing the 722 and 813 MDL files using a standard comparison tool.

Additional Remarks

Field checking has become stricter

The following will be applied:

- The size of the numeric items: 18 digits (COBOL limit).
- The size of printed numeric items is equal to the Edit Mask.
- The size of the Record and the size of the File Description are set automatically.
- Duplicate lines are deleted.

Conversion by means of an SQL scripts is no longer possible

This is because the structure of the 813 database differs too much from the structure of the 722 database. Using a script would also be too dangerous for overlooking incompatibilities.

Converting a Model

Converting your Models is not necessary. You can simply open and save the Models in MetaMap Manager 8.1.3.

The following changes, however, will need your attention:

1. **Target Files now have a Tree structure**

   This was an inevitable change, especially for the support of XML Target Files.

   The difference is as follows:

   - In Release 7.2.2, the structure of the Target Fields depended on their order of definition (i.e., the MDL File order).
   - In Release 8.1.3, the structure of the Target Fields depends on their position and on the hierarchical structure they reside in.

   This new way of working makes more sense, especially for Target Files that are used as Source Files in a next job and for Files with a structure.

   In order to be compatible with release 7.2.2, you should compare (for all Target Definitions) the 722 MDL Files with the 813 MDL Files. If there is a change, you should make a new MDL Definition that reflects the 722 order.

2. **Logical Field Order**

   As a result of this Tree structure described above, all MDL Fields are now put in a logical order, which could result in Fields being swapped in the new release.

   For all Standard File definitions that are used as a Target, we recommend you to check if the Fields are in the logical order.

3. **"Program Initial" has become "Initial Sort"**

   Program Initial Procedures have become Initial Sort Procedures in release 8.1.3.

   This is necessary for reasons of backward-compatibility.

   In case of "no sort", Initial Sort procedures are executed once. This is the same behavior as in release 7.2.2.

4. **The Structured Editor has become stricter**

   Unused Procedures in your Model will be checked as well. The Model can be exported without any problem, but there could be some redundant error messages or warnings.

   To avoid those messages, remove any unused procedure.

5. **Matching Fields**

   In Release 8.1.3, it is mandatory that the matching is done from a Source File "higher" in the Model tree to a Source File "lower" in the Model tree.

   This change has been made for technical reasons.

   When loading older Models, the file order will be adapted automatically. MetaMap will also issue a message if that is the case.

   However, you should check the generated JCL concerning the possible swapped file order.

   A trick to avoid those swapping errors is to use the "External Source" property in the MetaStore database. "External Source" points to the physical Source name. Use this method to ensure that the exported script will contain the physical file names.

   For more information concerning this "External Source" option, refer to the explanation for creating a Dictionary File in the *MetaStore Manager User Guide*.

Converting Customized Generator Tables

Generator Tables

Theoretically, customized Generator tables can be converted in 3 steps:

1. Make a list of all tables you have customized in release 7.2.2
2. For each table in the list, you should compare the versions 7.2.2 and 8.1.3
3. For all tables that differ, you have to apply the difference to the tables in 8.1.3

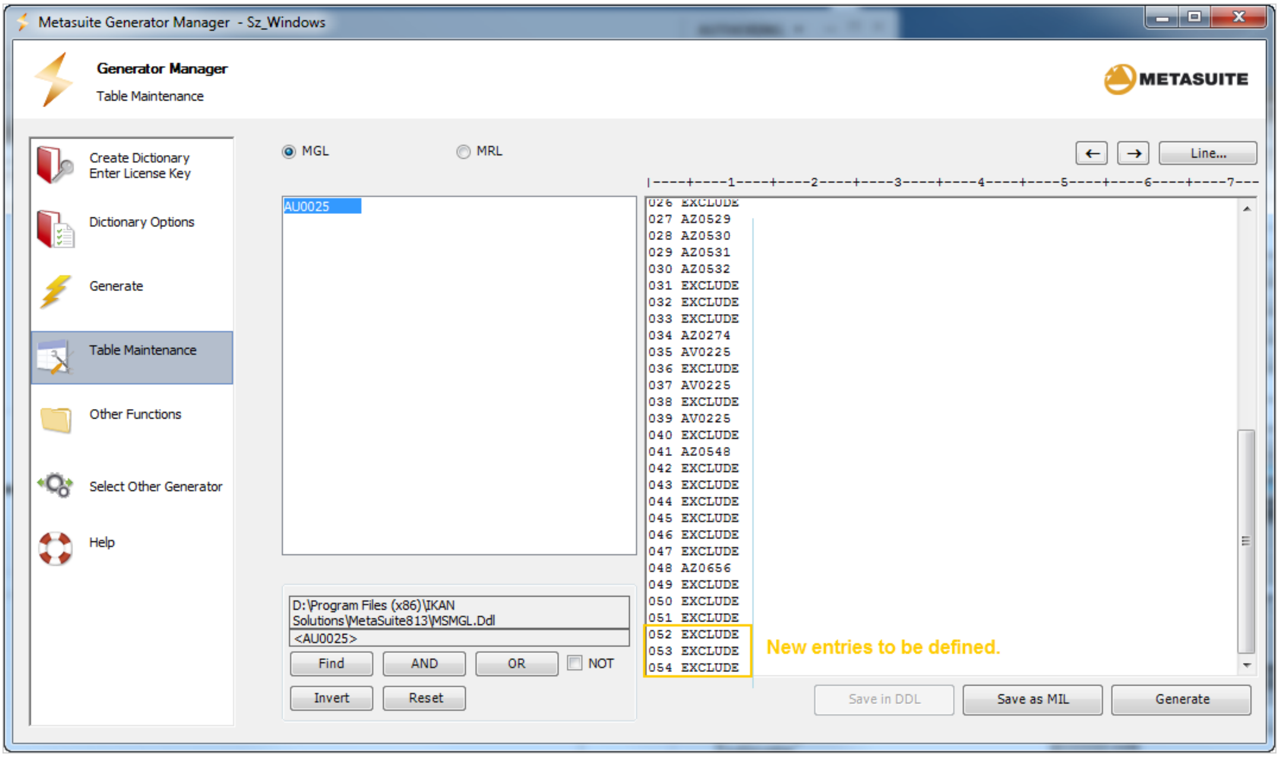
However, it can happen that some tables have been merged using MTL or that tables have been split. The latter can be detected by an MTL call. For tables that have been merged, you should contact MetaSuite Support.

Code-control Tables

New entries have been defined for Code-control Tables, for Source Files as well as for Target Files.

If you have created your own Code-control Tables, you should add those new entries; otherwise the Generator will issue an error message.

Example: Input Control Table - AU0025



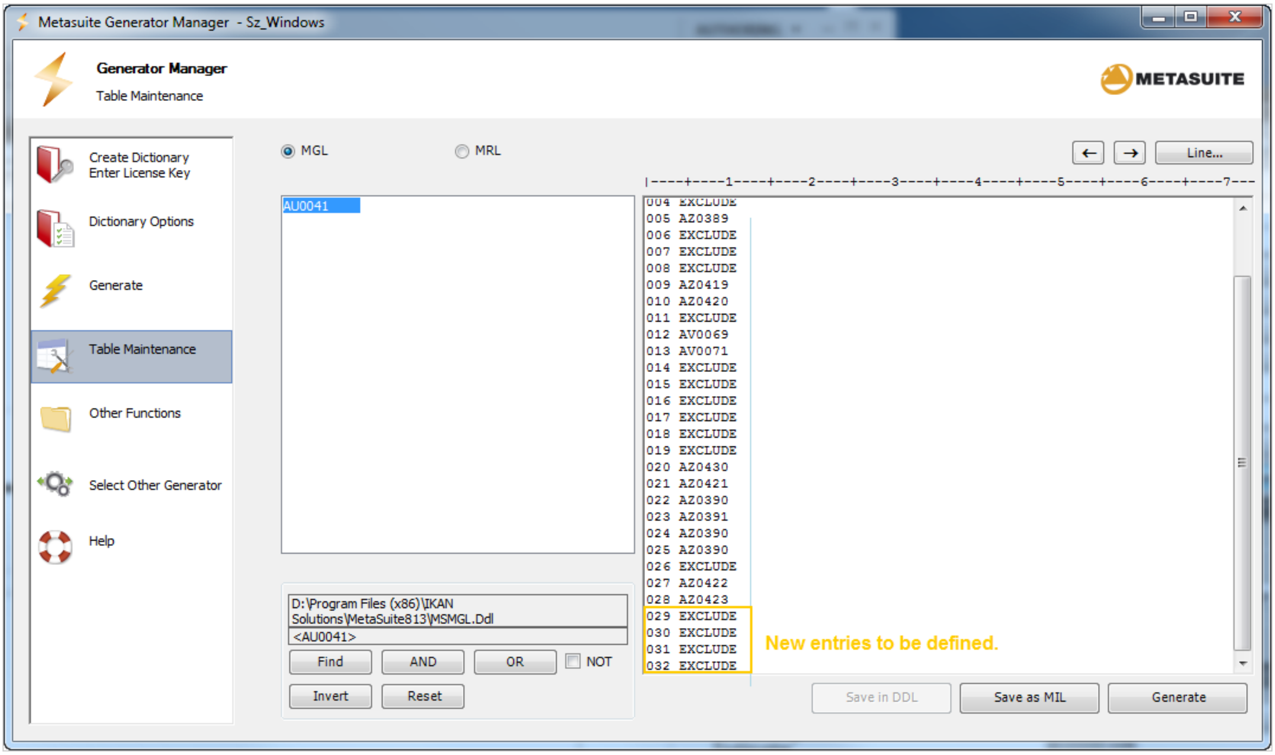
AU0025

D:\Program Files (x86)\IKAN Solutions\MetaSuite813\MSMGL.Ddl
<AU0025>

```
|----+----1----+----2----+----3----+----4----+----5----+----6----+----7---
026 EXCLUDE
027 AZ0529
028 AZ0530
029 AZ0531
030 AZ0532
031 EXCLUDE
032 EXCLUDE
033 EXCLUDE
034 AZ0274
035 AV0225
036 EXCLUDE
037 AV0225
038 EXCLUDE
039 AV0225
040 EXCLUDE
041 AZ0548
042 EXCLUDE
043 EXCLUDE
044 EXCLUDE
045 EXCLUDE
046 EXCLUDE
047 EXCLUDE
048 AZ0656
049 EXCLUDE
050 EXCLUDE
051 EXCLUDE
052 EXCLUDE
053 EXCLUDE
054 EXCLUDE
```

New entries to be defined.

Example: Output Control Table - AU0041



AU0041

D:\Program Files (x86)\IKAN Solutions\MetaSuite813\MSMGL.Ddl
<AU0041>

```
|----+----1----+----2----+----3----+----4----+----5----+----6----+----7---
004 EXCLUDE
005 AZ0389
006 EXCLUDE
007 EXCLUDE
008 EXCLUDE
009 AZ0419
010 AZ0420
011 EXCLUDE
012 AV0069
013 AV0071
014 EXCLUDE
015 EXCLUDE
016 EXCLUDE
017 EXCLUDE
018 EXCLUDE
019 EXCLUDE
020 AZ0430
021 AZ0421
022 AZ0390
023 AZ0391
024 AZ0390
025 AZ0390
026 EXCLUDE
027 AZ0422
028 AZ0423
029 EXCLUDE
030 EXCLUDE
031 EXCLUDE
032 EXCLUDE
```

New entries to be defined.

For more information on the Code-control Tables, refer to the section *11.3 Code-control Tables* in the *Generator Manager User Guide*.