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Messaging Work Bench Instructions

Edmond Scientific Company

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By
Edmond Scientific Company
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John E. Bryson, Secretary

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Patrick D. Gallagher, Under Secretary for Standards and Technology and Director

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Messaging Work Bench: Summary and Guide

Written by Ioana Singureanu

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EDMOND SCIENTIFIC COMPANY

We engineer solutions.

4000 Legato Road, Suite 1100
Fairfax, Virginia 22033

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I. READ ME

Please read the following instructions before attempting to use the Messaging Workbench (MWB) to edit the profile created for the “NCPDP SCRIPT Implementation Guide: Version 10.6” NEWRX (“New Prescription”) and RXHRES(“Prescription History Response”) message structures

Pre-Requisites

Before proceeding, you must install the Messaging Workbench from the “[Documents and Presentations](#)” page of the [HL7 Implementation/Conformance Work Group](#) web site.

The screenshot shows the HL7 International website interface. The main content area is titled "Implementation / Conformance" and contains a table of documents. The first row of the table is highlighted with a red box.

Type	Name	Size	Author	Modified	
	MWB 6.8 Patch 1 (Patch Only)	3.12 Mb		Mar 2, 2011 2:13 PM	[Properties]
	IHE Terminology v09	1.03 Mb	Frank Oemig	Jan 9, 2011 11:18 PM	[Properties]
	DMP for ICWG	74K	ICWG	Nov 20, 2010 4:15 AM	[Properties]
	IHE Terminology v06	1012K	Frank Oemig	Jun 18, 2009 2:31 AM	[Properties]
	605 conformance documentation v07	173K		Jun 12, 2009 2:47 AM	[Properties]
	605 conformance documentation v06	129K	Frank Oemig	May 22, 2009 4:55 AM	[Properties]
	MWB Release 6.8	66.74 Mb		Sep 22, 2008 9:28 AM	[Properties]

Figure 1: Messaging Workbench Installation download page

Using the Messaging Work Bench (MWB) to Maintain Profiles and Libraries

The “*NCPDP SCRIPT Implementation Guide: Version 10.6*” describes the content and business rules regarding electronic prescribing and medication reconciliation.

In order to support automatic testing and to create a consolidated description of the message structures requested, our team used the Messaging Work Bench (MWB) to create message profiles and made them available in native Messaging

Workbench MWB format as well as a Detailed Analysis Report. The files supporting NCPDP SCRIPT are:

1. ***script-newrx.mwb***. This file contains the message profile for the ***NEWRX*** ***structure*** in the native MWB format.
2. ***script-rxhres.mwb*** This file contains the message profile for the ***RXHRES*** ***structure*** in the native MWB format.
3. ***DT2-5-1_ELR.mdf***. This new library file contains the constrained data types specified by the ERL Implementation Guide along with the unconstrained HL7 Version 2.5.1 default use cases. Both data types are used throughout the ERL Implementation Guide. It also specifies the additional datatypes required to support the composite fields specified in NCPDP SCRIPT guide.

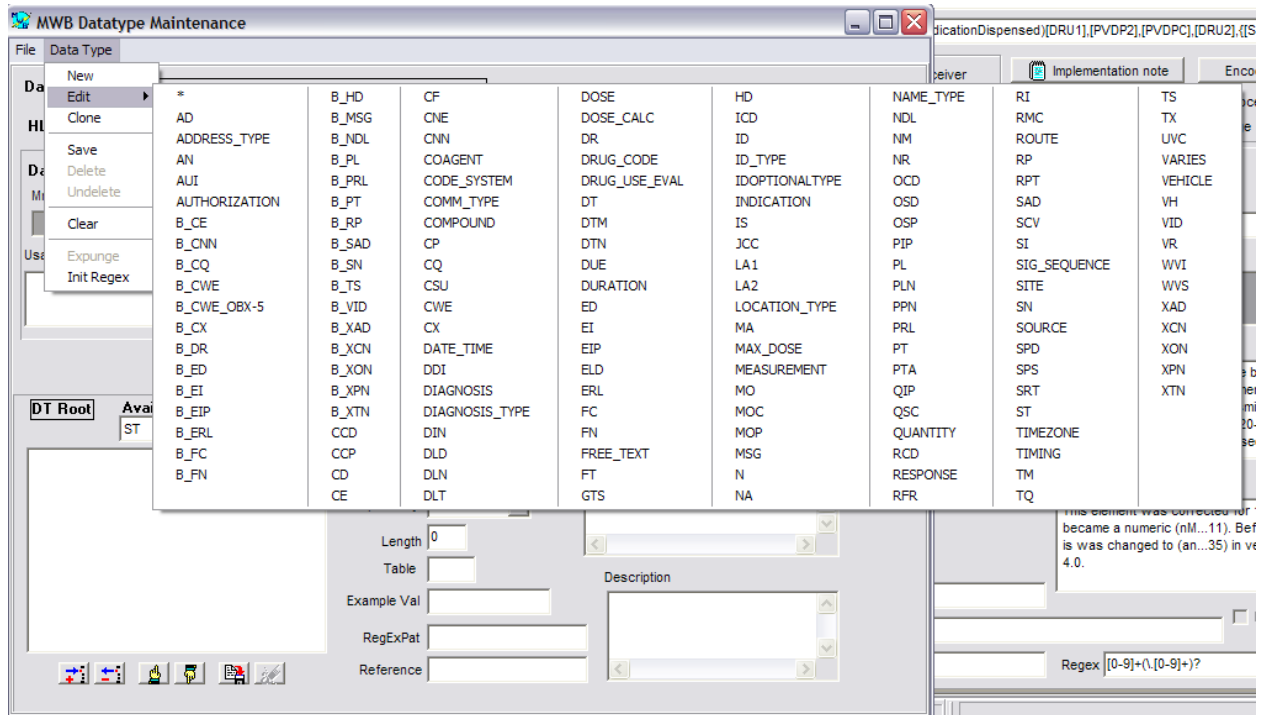


FIGURE 2: DATATYPES EXTENDED FOR HL7 ELR AND NCPDP SCRIPT

How to edit the ELR Profile using the Messaging Workbench

If you need to make adjustments to the profile, proceed using the following steps.

1. Copy the ***DT2-5-1_ELR.mdf*** and the ***HL7TableFile251_ELR.mwt*** files to the **<MWB_Installation_Directory>/Lib** directory (e.g. C:\Program Files\Messaging Workbench\Lib).

2. Rename "DT2-5-1.mdf" to "DT2-5-1.bak".
3. Rename "HL7TableFile251.mwt" to "HL7TableFile251.bak".
4. Rename "DT2-5-1_ELR.mdf" to "DT2-5-1.mdf".
5. Rename "HL7TableFile251_ELR.mwt" to "HL7TableFile251.mwt".
6. Open the *ELR_ORU_R01.mwb* file and edit its contents.
7. When your changes are completed, the XML file is regenerated as follows:
 - Select the "Display Reports" tab
 - From the drop down list, select "Spec XML"

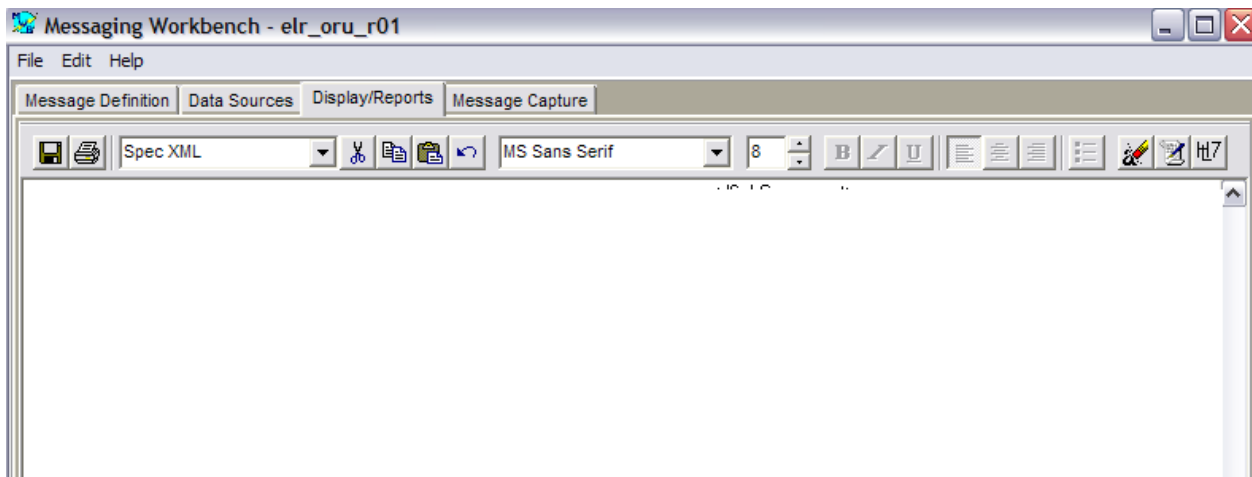


FIGURE 3: DISPLAY REPORTS TAB

- Once the Spec XML generator it display an error message (Fig. 3) . Ignore the error and proceed.

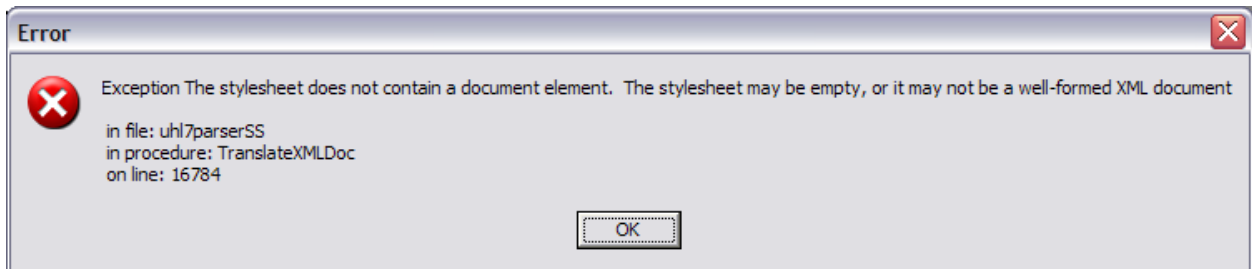


FIGURE 4: REDUNDANT ERROR DIALOG

- Select “Generate HL7 Profile” button then select “No” when prompted to register the profile.



FIGURE 5: REGISTRATION DIALOG

- Select the “Save” button to save the generated XML.

II. OPTIONAL INFORMATION

The following information is intended to fill in gaps in the current MWB. It specifies how to enhance the tools by adding constrained data types and new segment libraries.

NOTE: this information is not required to create new libraries and it is not required to use the libraries [identified](#) in this document.

How to create new data type profiles

The Data Types library must be created before the message profile can use it. Therefore if you need to create data type profiles you should start by editing the data type library that is associated with the HL7 version required by the implementation guide.

Open existing library

- **SELECT →Maint→Datatypes→Add/Edit Datatype file**

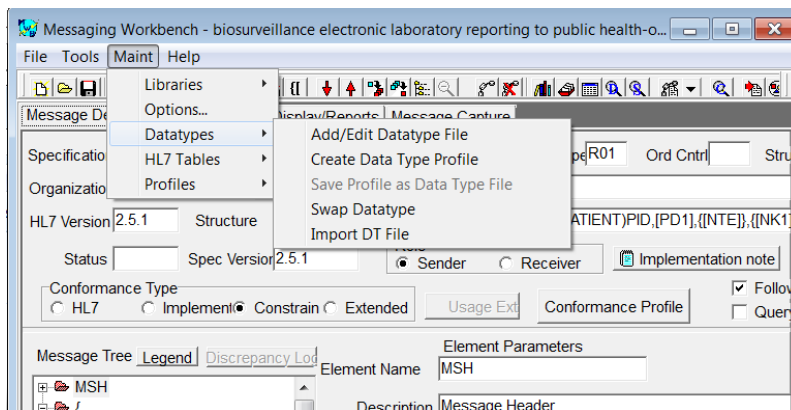


FIGURE 6: "ADD/EDIT DATATYPE FILE"

- **SELECT →File →Open**

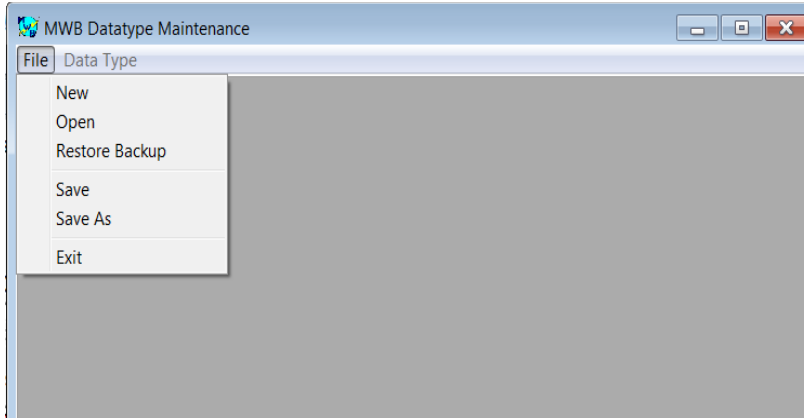


FIGURE 7: OPEN DATA TYPE FILE

- **SELECT**→File →Open→DT2-5-1.mdf

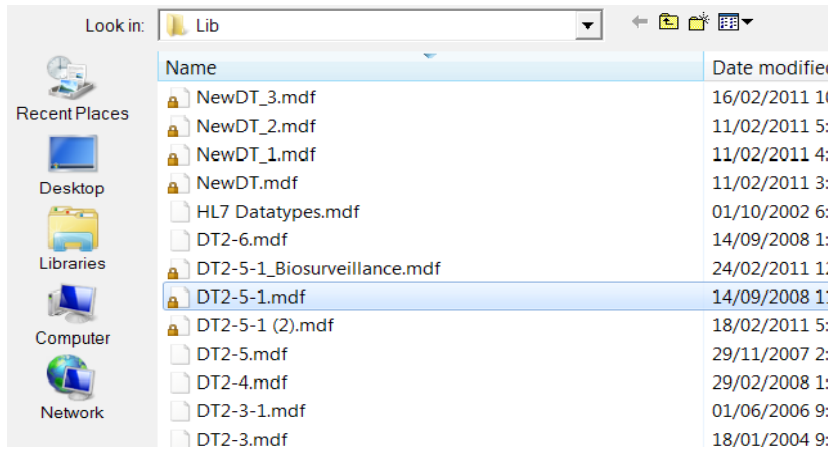


FIGURE 8: SELECT HL7 2.5.1 DATA TYPES

- **Save AS**→DT2-5-1Biosurveillance.mdf

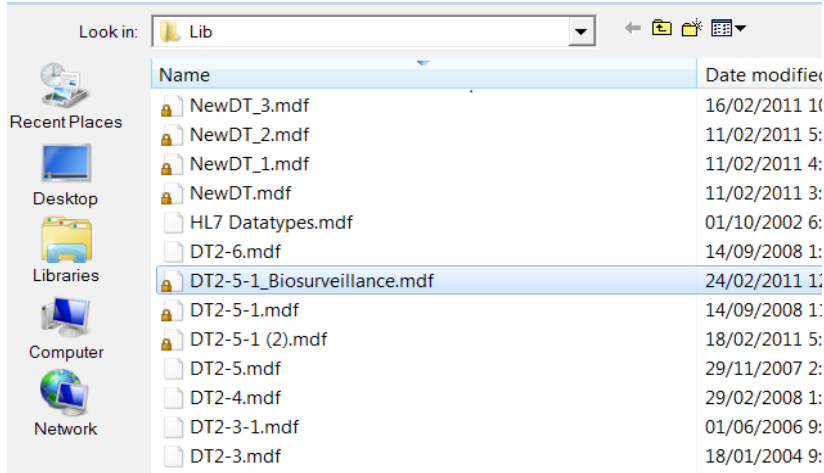


FIGURE 9: SAVE AS DIALOG

Notes:

- a. You will see the resulting (.mdf) file in the library folder

1. Clone data type

- **SELECT Data Type→Clone** to constrain an existing datatype

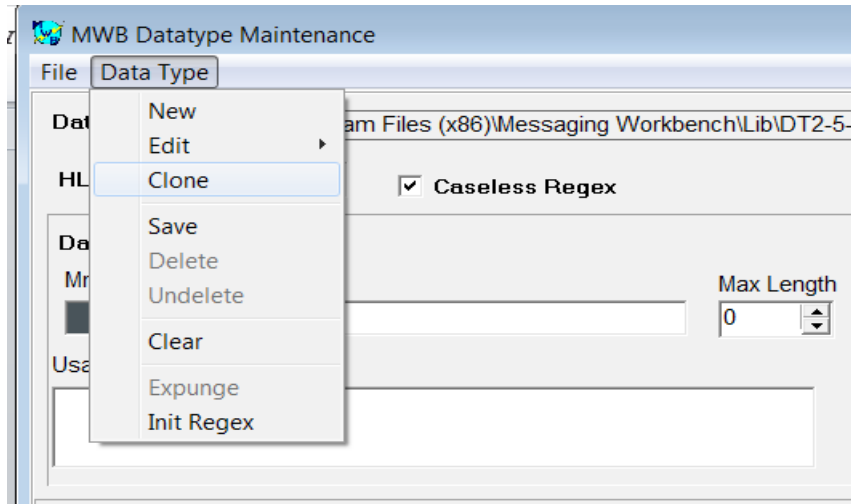


FIGURE 10: CREATE FROM AN EXISTING DATA TYPE

- Enter Mnemonic for new data type
- Enter clone from which data type originates

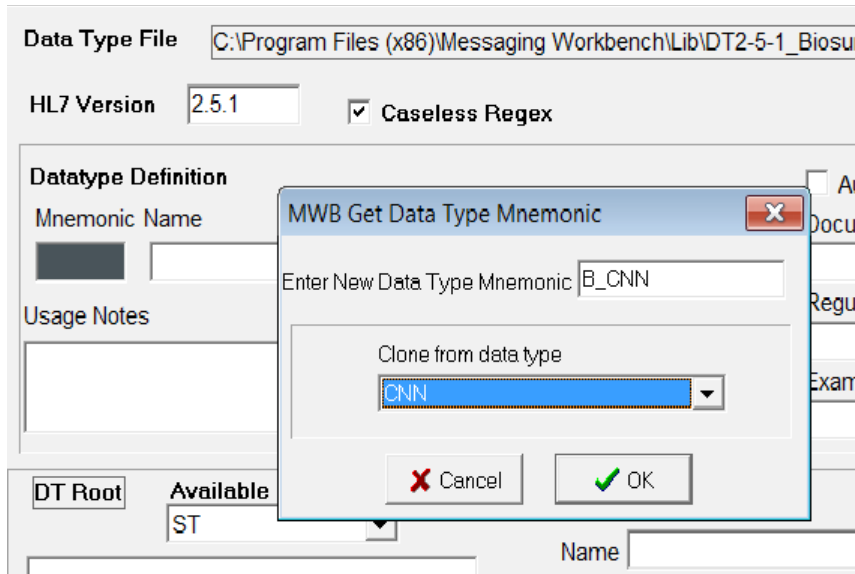


FIGURE 11: ENTER THE NEW DATA TYPE NAME

Note: In order to group constrained data types use the same first letter for all cloned data types (e.g. B_original name = B_CNN). This will facilitate finding the data types more easily when choosing the constrained data type in the specification profile (MWB file).

2. Edit data type

- **Select Data Type → Edit**

The structure in Fig. 12 will be available for edit. You may select each component you wish to edit.

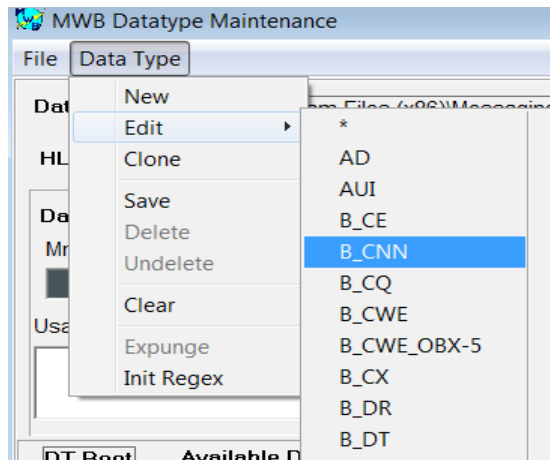


FIGURE 12: SELECT THE DATA TYPE TO EDIT

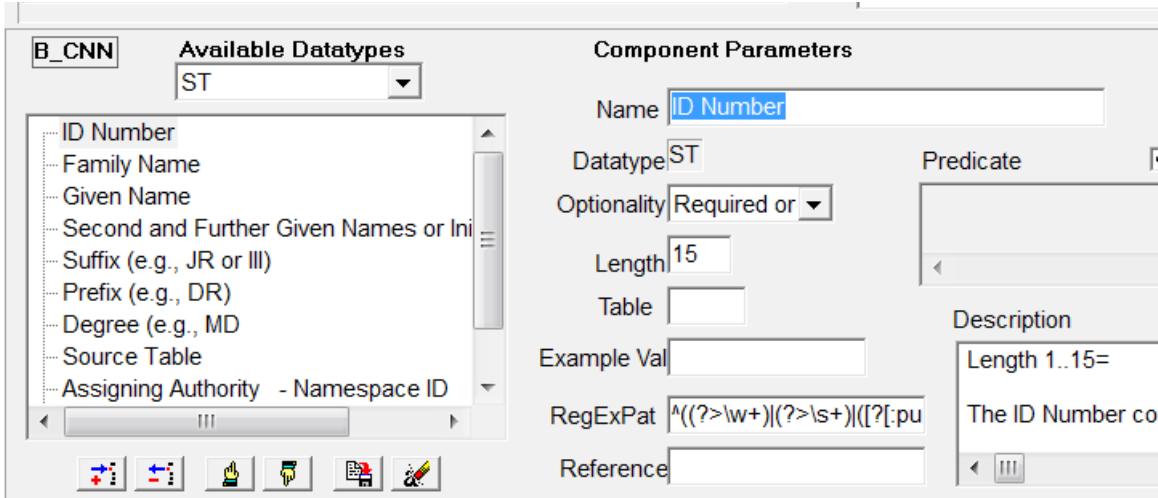


FIGURE 13: DATA TYPE STRUCTURE IN EDIT MODE

Note: For simple data types, it is recommended that you do not create profiles but modify the default profile.

3. Saving data type

To save the datatype incrementally use the button shown in fig.11. After that you need to save the file before closing the datatype maintenance tool.

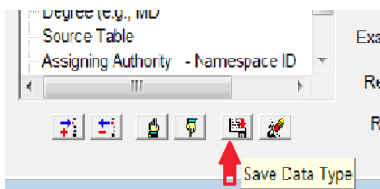


FIGURE 14: SAVE THE NEW DATATYPE

Notes:

- a. Saving of data types occurs on three levels,
 - The second button from the right is *Save Data Type*. be careful as the button beside it is *Clear definition*. This allows you to ou can continue cloning. Note: be careful as the button beside it is *Clear definition*.
 - Before closing the MWB Datatype Maintenance, click File *Save*
 - Before closing the Messaging Workbench, click File *Save*

4. Create a new segment library

- Select **Maint/Libraries/New Library File**. Click the **Add Spec** button, then navigate to the application library **Projects** directory /**Projects** and select the '**ELR_ORU_R01.mwb**' file. The selected file appears on the Source Specifications list.

5. Attach a data type file to the library

- Click on the '**Attach DT**' button, then navigate to the '**DT2-5-1mdf**' file and select it
- Click on the '**Compile**' button to create the new library
- Click on the **Save As** button. Name the File '**HL7 2-5-1.mcf**' and save into the application library directory /**Lib**. Click the '**Done**' key after the file is saved.

6. Add new library file to the list of conformance files

- Click on the Books icon, and in the dialog that appears; add the 'HL7 2-5-1.mcf' file to the list right under the HL72-5-1.mcf. Click OK when done.

