BlueSSIS HL7 Notes

To set up a basic HL7 v2 Messaging Scenario

(1) We create a variable to hold the HL7 Message, and then populate that using a BlueSSIS +File task (though you will receive it from MLLP). We then call a data-flow.

🖓 Integration Services Project1 - Microsoft Visual Studio	
<u>File Edit View Telerik Project Build Debug Data SSIS Tools Test Analyze Window H</u> elp	
🛅 - 🛅 - 🎯 🚽 👹 🐁 🛍 🛝 🔊 - 🔍 - 💭 - 🖏 I 🕨 Development - Default 🔹 📸 GetFilter 🔹 🖏	🔆 된 🖸 👻
Variables - # × Start Page HLTV2Example.dtsx [Design]* - ×	Solution Explorer - Solution 'Integration Services Project1' (1 4 ×
🖥 📲 🔣 🗷	
Name Scope Data Type V	Solution 'Integration Services Project1' (1 project)
I HL7 HL7V2Example String	- Data Sources
	- Data Source Views
	En SSIS Packages
BlueSSIS +File	
Lo_ Lot row lask	
	Properties 👻 🕂 🗙
Q. Connection Managers	ADTA01.txt Connection +
ADTA01.txt	8 2 🖻
	ConnectionManagerType FILE
	ConnectionString C:\Users\Ben\Desktop\ADTA01.
Find Results 1 + 4 ×	DelayValidation False
	Description
	Expressions
	FileUsageType 0
	Name ADTA01.txt
	SupportsDTCTransactions False
	Name
	specifies the name of the object.
Ready	

(2) In the data-flow, we use a BlueSSIS +Xml Source Adapter. We select the source variable, and then click the Edit Mapping... button to configure the mapping.

🕱 Xml Source Mapping Conf	iguration Form	X
Configuration		
Source document variable :	@HL7 The variable containing the document to transform	•
On error :	Fail	
	Edit Mapping	
?	ОК Са	ncel

(3) We click on the Edit Source Schema link on the map editor, and that then shows the schema editor. The following form should be displayed (or you can select it from the Tools menu).



(4) Click the HL7 Option, then import the schema for ADT^A01, version 2.4.

Import HL7 Schema
This form allows you to import HL/7 schemas for use with IntegratorComponents.
v2.X v3.0 (2009)
Standard Schema
Specify version : 2.4
and message : ADT_A01
O From Instance
Specify a sample instance file :
Browse
HL/7 Version : Auto
✓ Treat repeating structures generically
This determines whether you see repeating elements or specific instances in the Xml representation, and is really down to personal preference
<u>View HL7 v2.x file as Xml</u>
OK Cancel

(5) You'll be returned to the schema editor. Save and Close.

BlueSSIS Schema Editor : Source : ADT_	401	
<u>File E</u> dit <u>I</u> nsert <u>T</u> ools <u>H</u> elp		
Constant Sohema Image: Sohema Image: Sohema Image: Sohema MSH Image: Sohema Sohema Image: Sohema MSH Image: Sohema	<2ml version="1.0" encoding="uff-16"?> cos schema xmlns xs="http://www.w3.org/2001/XMLSchema"> cos schema xmlns xs="http://www.w3.org/2001/XMLSchema"> cos schema tname="ADL"> cos chema tname="ADL"> cos chema tname="ADL"> cos chema tname="ADL" cos schema tname="POL" type="MRIType" /> cos schema tname="POL" type="PIDType"/> cos schema tname="PIDT" type="PIDType"/> cos sc	Schema Include/Import Settings ImportedSchema IncludedSchema BenentFormDeft None Encoding Default Exploit2MLHead HL7Version 2.4 IsRlatFileSchema HL7_v2x RootBement ADT_A01 TargetNamespac
ConversaliDType SendingFacility	/> ox:element minOccurs="0" maxOccurs="1" name="EncodingCharacters" /> ox:element minOccurs="0" maxOccurs="1"	Element FormDefault Specifies the default form for elements in this schema

- (6) The mapper will now offer to generate the output columns. Don't let it do this, or you will end up with thousands!
- (7) Click the Edit Destination Schema link on the right hand side of the mapper, and then add a new column called MessageId. OK. Now drag a link from the MessageControlId field in the left hand tree. We've now defined an output column that will contain this data.



(8) Repeat as necessary for all the other fields you want. As you'll see, there are also lots of 'functoids' in the panel that you can use to perform mapping tasks, such as arithmetic, database lookups, string mappings, summations etc. Just drag to a functoid, and then drag an output link from the functoid. Functoids can be chained together as required. (9) Time to test. We add a BlueSSIS +Expression shape with the following script (generated using the Insert Token link) :

7 Expression Configuration	X
Expression :	2
alert([MessageId]);	
Store result in : e.g. @LoopVar + 1, or Input.Trim(), or (int)Now.Subtract([DateOfBirth]).TotalDays / 365.25	Insert token OK Cancel

(10)We run on a test file, and get the following :

X	J
00668805	
ОК	

If you have any further queries please don't hesitate to contact me.

Thanks,

Ben Jackson

benj@bluehub.co.uk