GlassFish ESB v2.2 Notes

HL7 v2 Handling

Notable improvements in BPEL Mapper

Michael Czapski, January 2010

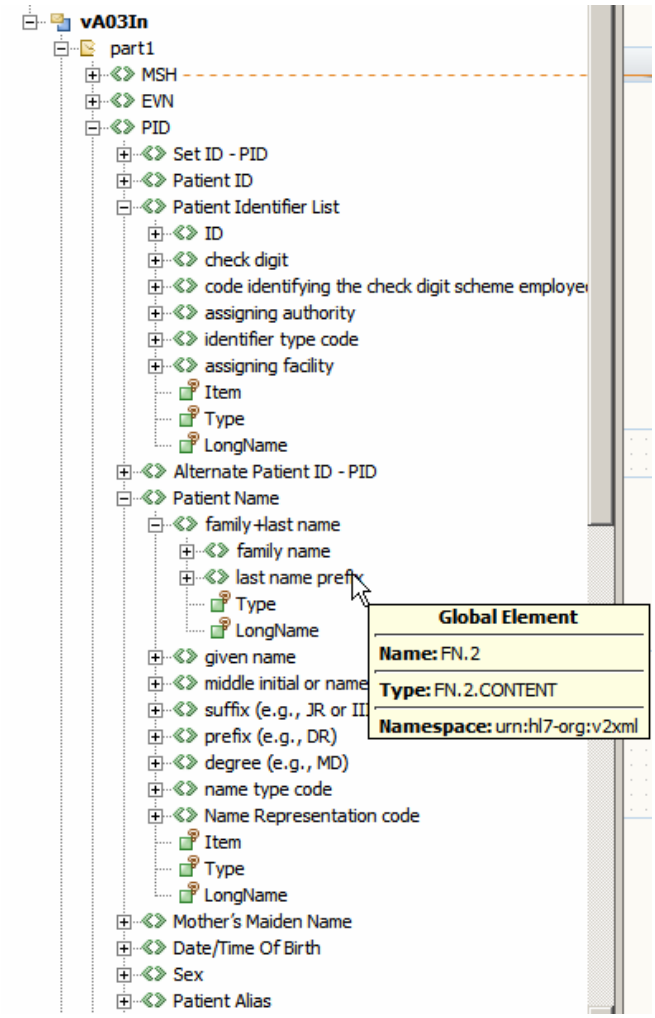
GlassFish ESB v2.2 was released in late December/early January 2010. This release brings a number of design-time improvements in handling HL7 v2 messages. Some of these have been on my and other people's wish lists for years.

HL7 v2 structure nodes use full names, rather then acronyms like MSH.1.
In BPEL, mapping can be performed at message, segment, component, subcomponent and field level.

These improvements are, in my view, noteworthy.

Let me elaborate.

Rather then being represented by HL7 v2 Segment and position in the segment, components, subcomponents and fields are now represented with full names in the BPEL Mapper.



These who are attached to the old, cryptic, positional representation can still get FN.2 if they need to.

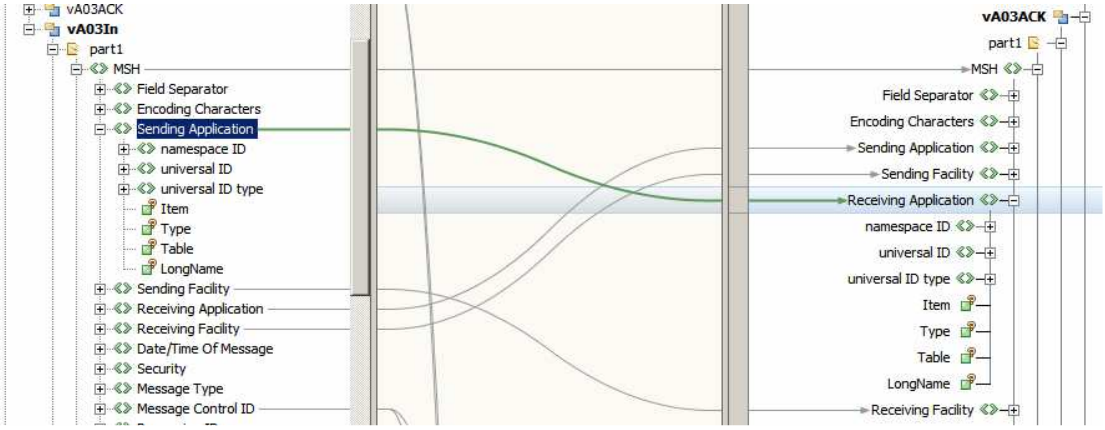
I would prefer the two to be combined into something like “FN.2 last name prefix”, but I will settle for the new representation if I can’t have both.

A major bugbear for years, for people using SeeBeyond products, was the need to map HL7 at leaf node level. Mapping at a non-leaf node level was not supported. Guess what, it now is supported.

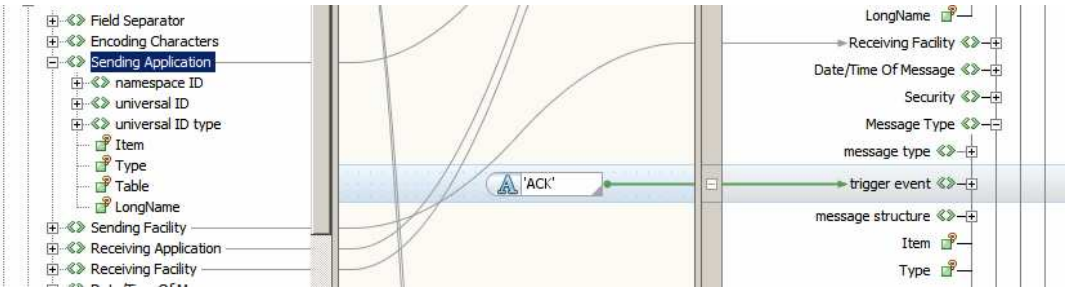
One can map at the message level, as before:

One can map at segment level:

One can map at component level:



One can map at subcomponent level:

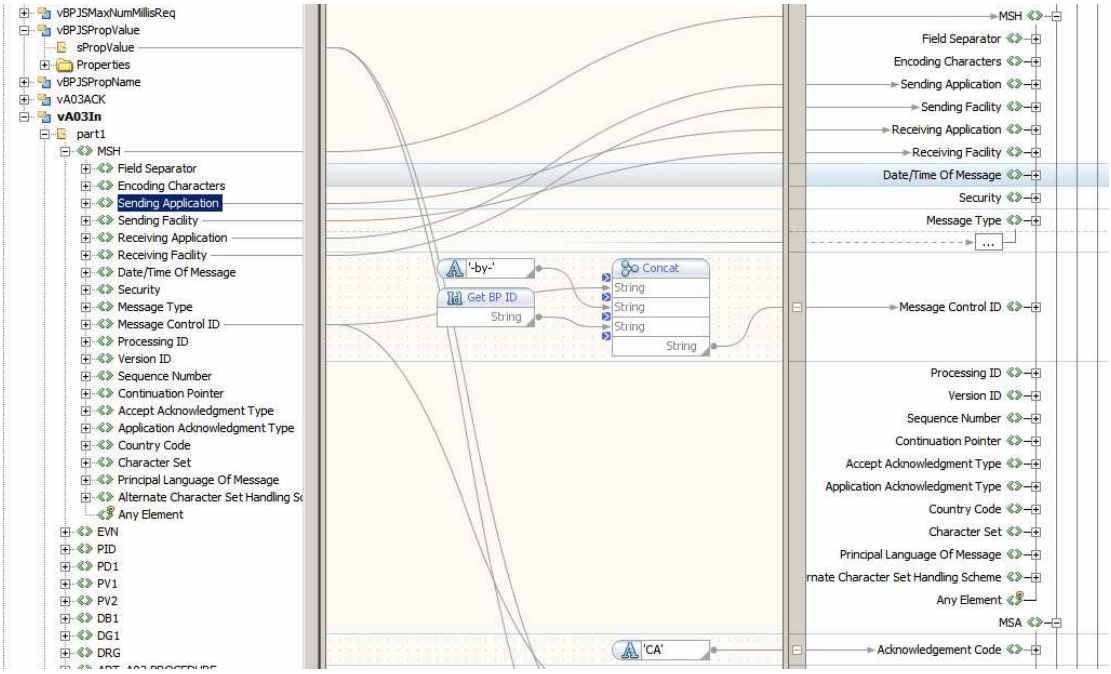


And one can map at the filed / leaf node level as before, all in the one mapping.

Imagine building an explicit HL7 v2 Accept Acknowledgment.

1. Map source MSH segment to target MSH segment
2. Map source MSH-3 and MSH-4 (sending) to target MSH-5 and MSH-6 (receiving)
3. Map source MSH-5 and MSH-6 (receiving) to target MSH-3 and MSH-4 (sending)
4. Map date/time to target MSH-7
5. Map concatenation of source MSH-10 and literal “receiver” to target MSH-10
6. Map literal “CA” to target MSA-1
7. Map source MSH-10 to target MSA-2
8. Map ack message text literal to target MSA-3
9. Map literal “D” to target MSA-5

Without support for non-leaf node mapping this would have taken many individual assignments to maps all necessary fields of source MSH to target MSH. Now it takes as many mappings to accomplish the entire task as listed above – 9.



The design-time performance, when handling HL7 messages, appears to have improved dramatically as well.

I felt that these improvements are noteworthy enough to warrant a mention.