

SEEK - Bug #1070

propose a flexible system for transformation steps

05/20/2003 10:16 AM - Matt Jones

Status:	New	Start date:	05/20/2003
Priority:	Immediate	Due date:	
Assignee:	Shawn Bowers	% Done:	0%
Category:	sms	Estimated time:	0.00 hour
Target version:	Unspecified	Spent time:	0.00 hour
Bugzilla-Id:	1070		

Description

In any workflow, linking any two steps is likely to require some sort of transformation to get the outputs of one step to match the inputs of the next. This transformation is sometimes a simple cast (e.g., int -> float), sometimes a more complex cast (e.g., string -> date), sometimes will require more complex processing (e.g., statistical processing), and sometimes will require schema transformations. In all cases, the transformation between step A and step Z can be represented as one or more intermediate transformation steps:

A -> T1 -> T2 -> TN -> Z

Our challenge includes:

- 1) use the SMS to locate candidate transformation steps T1..TN based on type signature and ontologies
- 2) determine how to generate transformation steps automatically for simple transforms such as unit conversions
- 3) create a simple GUI for creating transformation steps that map between two existing steps
- 4) determine the pros and cons of having transformation steps be directly associated with links (e.g., a link property) rather than simply introducing new transform steps that do the same tasks directly into the pipeline

So, the objective of this bug is to:

- 1) propose a flexible system for discovering and generating transformation steps
- 2) identify the suite of complex issues involved in generating a mapping from one step to another (especially when this might require several intermediate steps)
- 3) propose a plan of work for completing this plan

History

#1 - 11/06/2003 08:48 AM - Matt Jones

Reassigning to bowers in light of his work on transformations in the EML unit dictionary and other areas.

#2 - 03/27/2013 02:16 PM - Redmine Admin

Original Bugzilla ID was 1070