Kepler - Bug #1990

DataType of EML for KEPLER

02/25/2005 06:10 PM - Jing Tao

Status:	Resolved	**Start date:**	02/25/2005
Priority:	Normal	**Due date:**	
Assignee:	Jing Tao	**% Done:**	0%
Category:	general	**Estimated time:**	0.00 hour
Target version:	1.0.0alpha6	**Spent time:**	0.00 hour
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Description

The Datatype really should be determined in EML from the measurementScale and domain (numericDomain and nonNumericDomain). Using the storage type was a hack that we kept in from our earlier Monarch code -- its very unreliable, and is optional, which is why we at times have trouble. I think I wrote about this in a bug for Kepler, but I can't find it.

The default Ptolemy types are fairly coarse grained, so we should get fairly far by something simple:

MeasurementScale	numberType	Type
nominal	N/A	string
ordinal	N/A	string
interval/ratio	natural	int or long (depending on bounds)
interval/ratio	whole	int or long (depending on bounds)
interval/ratio	integer	int or long (depending on bounds)
interval/ratio	real	double
datetime		?

In the above, you can use bounds and precision to help fine tune which of the numeric types to use.

In implementing this, its probably best to separate out the type inference code from the rest as much as possible -- a separate method at a minimum, a separate class possibly. Keep in mind that this code is probably going to be somewhat related to semantic type checking that Shawn is working on.

History

#1 - 03/25/2005 05:04 PM - Jing Tao

Add new classes - NumericDomain, TextDomain, DatTimeDomain and EnumericDomain which extends from Domain Interface. In this domain object, numberType and bounds is assigned. Base on assigned numberType, bounds and dataType info in configure file, a DataTypeResovler will return a dataType(through a map like above table) in domain object. So after passing metadata, a domain object will be gotten and the domain object will have the data type information.

#2 - 03/27/2013 02:18 PM - Redmine Admin

Original Bugzilla ID was 1990