

## Silo - Feature # 740: Support higher order elements (quadrature)

<b>Status:</b>	New	<b>Priority:</b>	Normal
<b>Author:</b>	Mark Miller	<b>Category:</b>	
<b>Created:</b>	06/08/2011	<b>Assigned to:</b>	
<b>Updated:</b>	06/14/2011	<b>Due date:</b>	
<b>Impact:</b>	3 - Medium		
<b>Expected Use:</b>	3 - Occasional		
<b>OS:</b>	All		
<b>Support Group:</b>	Any		
<b>Subject:</b>	Support higher order elements (quadrature)		
<b>Description:</b>	<p>Randy Settgest requested this.</p> <p>We can shoehorn data into Silo by writing each of N related quadrature dofs (degrees of freedom) out using DBPutXxxvar. But, that creates problems downstream in viz. as each element can have its quadrature dofs oriented differently.</p> <p>Would be better to add ability to specify optional arrays that specify quadrature scheme (locations within each of the zoo element types) as well as multiple arrays for each dof of the scheme.</p>		

### History

#### 06/14/2011 01:25 pm - Mark Miller

Its conceivable this could be supported by adding an option, DBOPT\_QUADRATURE\_SCHEME whose value is either an enum (int) to select from among a number of known schemes or maybe a string. That, together with a DBucdvar's @nvars@ member would be sufficient to inform downstream tools that the purpose/intent of the data is.