When the data elements inside COMAD collections are displayed in the provenance browser they seem to be arbitrarily ordered, both in the dependency history view and the collection history view. It would be helpful to have these data and collection elements ordered according to their sequence in the data stream (as recorded in the trace file).

Consider an invocation of the Gblocks actor. It takes a collection of biological (e.g., protein) sequences and outputs another collection of sequences, where each output protein sequence corresponds to one input (those segments of the input sequences not aligned reliably between the input sequences having been removed from the outputs). If the sequences represented in the dependency history were ordered then clicking on the third input protein sequence and then the third output sequence displayed in the dependency history view would give one a before-and-after view of that sequence. As it is, it's difficult finding the corresponding sequences in the input and outputs.

The same holds for the collection history view. In addition, if the collections themselves were ordered according to trace order, then incremental buildup of the collections when stepping through the actor invocations would more closely represent the construction of the collection stream during workflow execution.