

SortedStorageAgent

Adopted By: Classes used to implement various inspectors in TTools.

Declared In: SortedStorageAgent.h

Protocol Description

SortedStorageAgent is a protocol describing the methods that a SortedStorage's *agent* is expected to respond to. These methods encompass functionality that is specific to particular set of records that will be kept in a SortedStorage.

The functionality that the protocol requires relates to two things: sorting and hierarchical display. Only one method in the protocol is necessary to implement sorting; that is the **compare:with:sender:** method. The other methods are all concerned with hierarchical display in browsers. This protocol is an extremely close analog to the SortedListAgent protocol.

Method Types

Sorting

- compare:with:sender:

Hierarchical display

- displayStringFor:sender:

- titleOfColumn:

- isLeaf:sender:

- subdirectoryFor:sender:

Instance Methods

compare:with:sender:

- (int)**compare:(void *)***first with:(void *)second sender:sender*

Returns a negative number to indicate that *first* < *second*; returns 0 to indicate that *first*==*second*. Returns a positive number to indicate that *first*>*second*. For instance, StringAgent's implementation just returns strcmp([first stringValue], [second stringValue]). If you can bend your mind around it, consider that ClassAgent's implementation of this method returns strcmp([first name], [second name]). Note the use of class methods - *first* and *second* can be any object, even a class object.

displayStringFor:sender:

- (const char *)**displayStringFor:(void *)***anElement sender:sender*

Returns the string to use while displaying *anElement* in a browser.

isLeaf:sender:

- (BOOL)**isLeaf:**(void *)*anElement* **sender:***sender*

Returns YES to indicate that *anElement* has no sub-nodes in the file browser. Returns NO to indicate that it does.

subdirectoryFor:sender:

- (id)**subdirectoryFor:**(void *)*anElement* **sender:***sender*

Returns a SortedStorage (or subclass thereof) containing the sub-nodes of *anElement*. This is less likely to happen for the SortedStorage class than it is for the SortedList; nevertheless, like all the other methods in this protocol, they operate similarly to the SortedListAgent analog.

titleOfColumn:

- (const char *)**titleOfColumn:**(int)*col*

Returns a read-only string indicating the title of the next browser column. Note that this works only if the browser is set up to ask for titles.