

# 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.