YAXT - Feature #309

new idxlist method: xt_idxlist_get_bounding_box

11/26/2012 03:57 PM - Joerg Behrens

Status:	Closed		**Start date:**	11/26/2012
Priority:	Normal		**Due date:**	
Assignee:	Moritz Hanke		**% Done:**	0%
Category:			**Estimated time:**	0:00 hour
Target version:				

Description

Idea: We want to efficiently estimate the overlap between compact index sets. Currently this requires the participating objects to belong to the same compact idxlist class. In other cases objects are used internally in idxvec form which is the least efficient way to work with compact index sets. For these cases we want to construct bounding boxes which describe compact supersets of simple overlap-friendly geometry. These bounding boxes should be defined as Xt_bounds, a new primitive yaxt datatype completely visibility for all classes.

```
//basic type to express narrowness via bounds in one dimension:
typedef struct {int lb; int ub} Xt_bounds;

//idxlist method to get the bounding box:
void xt_idxlist_get_bounding_box(Xt_idxlist idxlist, int ndim,
                                 Xt_int global_size[ndim],
                                 Xt_idx global_start_index,
                                 Xt_bounds bounds[ndim]);
```

History

#1 - 11/30/2012 11:27 AM - Joerg Behrens

- Description updated

#2 - 12/04/2012 02:13 PM - Moritz Hanke

- Status changed from New to Closed

- Assignee set to Moritz Hanke

added routine to idxlist interface and implemented backup solution in xt_idxlist.c