
OBJECTWINDOW

By Becky Burwell and Ron Kaplan

This document last edited in March, 2024.

An "object window" is a window that contains a sequence of arbitrary image objects arranged either vertically or horizontally. The `OBJECTWINDOW` package provides the functions for creating such a window, adding objects and manipulating them in various ways, and invoking their `IMAGEFNS` functions according to mouse or other signals.

An object window is created by the function `OBJ.CREATEW`:

`(OBJ.CREATEW WINDOWTYPE REGION/WINDOW TITLE BORDERSIZE NOOPENFLG SEPDIST BOXFN DISPLAYFN
BUTTONINFN HARDCOPYFN HCPYHEADING)` [Function]

The arrangement of objects is determined by the obligatory `WINDOWTYPE`, either `VERTICAL` or `HORIZONTAL`. The other arguments are optional. `REGION/WINDOW`, `TITLE`, `BORDERSIZE`, and `NOOPENFLG` are passed to `CREATEW` to create the window. If `REGION/WINDOW` is a window, it is converted to an object window with `TITLE`. Otherwise, a new window with region `REGION/WINDOW` if non-NIL. The objects in the window will be separated (vertically or horizontally) by `SEPDIST` points, defaulting to 0. The arguments `BOXFN`, `DISPLAYFN`, and `BUTTONINFN` are provided as default functions if it is convenient to insert objects whose `IMAGEFNS` are not fully fleshed out. `HARDCOPYFN` overrides the default hardcopy function for the window, and `HCPYHEADING` is used instead of `TITLE` for hardcopy output.

`(OBJ.WINDOWP WINDOW)` [Function]

True if `WINDOW` is an object window.

`(OBJ.ADDTOW WINDOW OBJECT)` [Function]

Adds `OBJECT` at the end of the object sequence in `WINDOW`.

`(OBJ.ADDMANYTOW WINDOW OBJECTS)` [Function]

Equivalent to calling `OBJ.ADDTOW` for each object in `OBJECTS`.

`(OBJ.INSERTOBJECTS WINDOW NEWOBJECTS OLDOBJECT WHERE)` [Function]

Inserts `NEWOBJECTS` at position `WHERE` (`BEFORE` or `AFTER`) with respect to `OLDOBJECT`.

`(OBJ.CLEARW WINDOW)` [Function]

Clears the visible objects in `WINDOW`.

`(OBJ.DELFROMW WINDOW OBJECT)` [Function]

OBJECT is removed from WINDOW.

(OBJ.REPLACE WINDOW OLD.OBJECT NEW.OBJECT DONT.REDISPLAY.FLG) [Function]

Replaces OLD.OBJECT with NEW.OBJECT in WINDOW, redisplaying the visible objects unless DONT.REDISPLAY.FLG.

(OBJ.FIND.REGION WINDOW SEARCHOBJECT) [Function]

Returns the region in WINDOW occupied by SEARCHOBJECT.

(OBJ.MAP.OBJECTS WINDOW MAPFN) [Function]

Applies MAPFN to each object OBJ in WINDOW. If MAPFN returns an image object, that object replaces OBJ in WINDOW.

(OBJ.OBJECTS WINDOW) [Function]

Returns the list of objects in WINDOW.