Package	**display**
Module	**viewer**
Tool	**viewercanvasmanager**

Restore a previously saved state of this `tool`

Synopsis
restoreoptions(setname)

Arguments

setname	name of state to retrieve Allowed:string

Returns
T (success) or F (failure)

Description

This function tries to retrieve a previously saved state (options) of the given name, and if successful, applies them to this Viewercanvasmanager `tool`. The `setname` argument must correspond to a previously saved set of options, otherwise this function will fail.

1.3.3 viewercanvasprintmanager - Tool

Package	**display**
Module	**viewer**

Tool for managing the printing of canvases of Viewerdisplaypanel `tools`
include "viewer.g"

Constructors

viewercanvasprintmanager	Create a Viewercanvasprintmanager `tool`

Functions

done	Close down (destroy) this Viewercanvasprintmanager `tool`
gui	Create a new graphical user interface for this `tool`
type	Return the type of this `tool`
viewer	Return the Viewer `tool` which owns this `tool`
writeps	Write a PostScript file
writexpm	Write an X11 Pixmap file

Description

This `tool` provides services to produce copies of the drawing canvases of Viewerdisplaypanel `tools`. PostScript and bitmap output is available at present.

Graphical User Interface This tool controls two forms of hardcopy output:

PostScript for printing, and X-Windows pixmap format which can be easily converted to GIF, JPEG or other bitmap formats. To initiate printing of what is visible on the Viewerdisplaypanel `tool` simply press the Print... button at the bottom of the window, or select Print manager... from the File menu. This will bring up the GUI for this tool which allows you to set some basic output parameters, most of which are only important for PostScript output (as indicated by the *[PS]* prefix:

- Output file

  This can be left `<unset>`, and the Viewer will automatically create a unique filename for your output. Otherwise, just type in a specific name for your output file.

- [PS] Output media

  You may select to print to A4 or US Letter paper.

- [PS] Orientation

  Selection from portrait or landscape to orient the output on the selected paper.

- [PS] Resolution

  You may choose the resolution of your output here. Bear in mind that the size of the output file for raster images will generally grow as the square of this number, and likewise the speed with which the hardcopy will be generated and printed. For test output, generally leave the resolution quite low, and only increase it to your printer resolution for final hardcopy output. This setting enables you to tune the output to the exact resolution of your hardcopy device.

- [PS] Magnification

  You can scale your output by any factor between 0 and 1.

- [PS] Write EPS format?

  Set this option to True if you want encapsulated PostScript output.

Once you have filled in the desired options, you need to hit one of three buttons at the bottom of the Print manager GUI:

- Save XPM

  This button will write an X-Windows Pixmap copy of the Viewerdisplaypanel `tool` contents to a file on disk. The output will be an *exact* copy of what is displayed on-screen, and then a utility like 'xv' can be used to convert the output file to a GIF file, or a JPEG file, or whatever takes your fancy.

- Save PS

  This button will write a PostScript file which aims to duplicate what is seen on-screen in a higher-resolution mode suitable for printing. Every attempt is made to preserve the aspect ratio of the on-screen display.

- Print

  This button will first write a PostScript file as if the Save PS button had been pressed, and will then bring up a simple window which allows you to direct the output to a printer, to a previewer, or to cancel the operation.

Press Dismiss to cancel printing.

viewercanvasprintmanager - Constructor

Package	**display**
Module	**viewer**
Tool	**viewercanvasprintmanager**

Create a Viewercanvasprintmanager `tool`

Synopsis
viewercanvasprintmanager(displaypanel)

Arguments

displaypanel	The Viewerdisplaypanel `tool` which will use this Viewercanvasprintmanager `tool` Allowed:Viewerdisplaypanel `tool`

Returns
Viewercanvasprintmanager `tool` or fail

Description

This is the only constructor for Viewercanvasprintmanager `tools`. It constructs (creates) a Viewercanvasprintmanager `tool` which can subsequently be used to provide canvas printing facilities to a Viewerdisplaypanel `tool`. **This constructor should not be called by users:** it is called during construction of Viewerdisplaypanel `tools`. The Viewercanvasprintmanager `tool` for a given Viewerdisplaypanel `tool` can be retrieved by calling its canvasprintmanager function.

---

viewercanvasprintmanager.type - Function

Package	**display**
Module	**viewer**
Tool	**viewercanvasprintmanager**

Return the type of this `tool`

Synopsis
type()

Returns
'viewercanvasprintmanager'

Description

This function simply returns the string `'viewercanvasprintmanager'`, which can be used to identify this `tool` as a Viewercanvasprintmanager `tool`. It is generally reserved for internal use.

---

viewercanvasprintmanager.viewer - Function

Package	**display**
Module	**viewer**
Tool	**viewercanvasprintmanager**

Return the Viewer `tool` which owns this `tool`

Synopsis
viewer()

Returns
Viewer `tool`

Description

This function simply returns the Viewer `tool` which owns the Viewerdisplaypanel `tool` that constructed and uses this Viewercanvasprintmanager `tool`. It is generally reserved for internal use.

---

viewercanvasprintmanager.done - Function

Package	**display**
Module	**viewer**
Tool	**viewercanvasprintmanager**

Close down (destroy) this Viewercanvasprintmanager `tool`

Synopsis
done()

Returns
T

Description

If you no longer need to use this Viewercanvasprintmanager `tool`, calling this function will free up its resources. Any graphical user interfacesassociated with this `tool` will be removed from the screen.
It is unwise to close down a Viewercanvasprintmanager `tool` by an explicit call to this function. It is generally reserved for internal use by the Viewerdisplaypanel `tool` which uses this Viewercanvasprintmanager `tool`.

---

viewercanvasprintmanager.gui - Function

Package	**display**
Module	**viewer**
Tool	**viewercanvasprintmanager**

Create a new graphical user interface for this `tool`

Synopsis
gui(parent, show, hasdismiss, hasdone, widgetset)

Arguments

parent	parent frame for GUI Allowed:agent or F Default: F
show	map the GUI to the screen immediately? Allowed:Boolean Default: T
hasdismiss	place a 'Dismiss' button in the GUI? Allowed:Boolean Default: F
hasdone	place a 'Done' button in the GUI? Allowed:Boolean Default: F
widgetset	Widgetserver `tool` to use for the GUI Allowed:Widgetserver `tool` Default: unset

Returns
`tool` having Viewerstandardgui interface

Description

Calling this function will create and return a new GUI which can be used to view and edit the printing settings of this Viewercanvasprintmanager `tool`. By judicious use of the function arguments, the graphical user interface can optionally be placed within existing frames, and left off-screen for later use. The interface of the return value conforms to the Viewerstandardgui interface.

---

viewercanvasprintmanager.writeps - Function

Package	**display**
Module	**viewer**
Tool	**viewercanvasprintmanager**

Write a PostScript file

Synopsis
writeps(filename, media, landscape, dpi, zoom, eps)

Arguments

filename	name of file to write Allowed:string or unset Default: unset
media	paper type Allowed:'A4' 'LETTER' Default: 'A4'
landscape	print in landscape mode? Allowed:boolean Default: F
dpi	resolution of output in dots per inch Allowed:integer Default: 100
zoom	scaling of output Allowed:float in (0,1] Default: 1.0
eps	generate encapsulated PostScript output Allowed:boolean Default: F

Returns
fail or name of file written

Description

This function writes a PostScript version of the current view on display in the Viewerdisplaypanel `tool` for which this `tool` provides canvas print management facilities. The PostScript output will have the same aspect ratio as that of the Viewerdisplaypanel `tool` displayed on screen (provided the screen pixel aspect ratio is close to 1.0), but may differ slightly in color use