Returns
modellist data item
or fail

Description

This function creates a modellist data item, which contains a list of individual model data items.

Example

```
myml:= modellistmanager();
mymm:= modelmanager();
mod1:= mymm.fluxdensity(iquv=[1,0,0,0.2]);
mod2:= mymm.image(images='fld1.im', complist='fld.cl');
list:= myml.modellist(source1='3C273',model1=mod1,source2='3C84',model2=mod2);
```

Create a modellist data item list containing the model data items mod1 and mod2.

1.6.6 maskmanager - Tool

Package	synthesis
Module	map

Data manager for mask items
include "maskmanager.g"

Constructors

maskmanager	Create a mask data manager

Functions

boxmask	Create a mask data item from a pixel box
exprmask	Create a mask data item from a LEL expression
fromimage	Create a mask data item by defining mask interactively from a viewer
mask	Create a mask data item as defined in a mask image
regionmask	Create a mask data item as defined by a region
thresholdmask	Create a mask data item as defined by regions from thresholding an ima

Overview of maskmanager tool functions

A mask data item is an item container representing different forms of masks. It represents also the different ways masks can be made or addressed. The mask data manager allows the creation of mask data items of the following types:

- boxmask - a mask data item for a mask created from a specified box described by its blc and trc.
- exprmask - a mask data item representing a mask which represent regions expressed by a LEL expression.
- fromimage - a mask data item created interactively by the user using a viewer display of a given image and mask image.
- mask - a mask data item created from an existing mask image.
- mask - a mask data item represented by a region, as created by a regionmanager tool
- threshold - a mask data item represented by thresholding a given image

maskmanager - Constructor

Package	synthesis
Module	map
Tool	maskmanager

Create a mask data manager

Synopsis
maskmanager()

Arguments

Returns
maskmanager tool
or fail

Description

Constructs a mask data manager, which can be used to create mask data items of the enumerated types. The default mask data manager is called dmk, and is created when the the file maskmanager.g is included.

Example

```
mymm := maskmanager()
```

This creates a mask manager called mymm.

---

maskmanager.boxmask - Function

Package	synthesis
Module	map
Tool	maskmanager

Create a mask data item from a pixel box

Synopsis
boxmask(blc, trc, value)

Arguments

blc	Bottom left corner of box Allowed:Vector of 2 integers Default:[]
trc	top right corner of box Allowed:Vector of 2 integers Default:[]
value	value of the mask in box Allowed:Float Default:1.0

Returns
mask data item
or fail

Description

This function creates a mask data item which represent a mask over a pixel box as described by its blc and trc.

Example

```
mymm:= maskmanager();
item1:= mymm.image(blc=[10, 20], trc=[40, 50], value=1.0);
```

Create a mask data item item1 from the blc and trc specified

---

maskmanager.exprmask - Function

Package	synthesis
Module	map
Tool	maskmanager

Create a mask data item from a LEL expression

Synopsis
exprmask(expr)

Arguments

expr	LEL expression AllowedLEL expression

Returns
mask data item
or fail

Description

This function creates a mask data item which represents a mask region as defined by the LEL expression

Example

```
mymm:= maskmanager();
item2 := mymm.exprmask(expr='"3C273XC1.clean">0.5')
```

Create a mask data item item2 which represents the region where 3C273XC1.clean is greater than 0.5Jy.

---

maskmanager.fromimage - Function

Package	synthesis
Module	map
Tool	maskmanager

Create a mask data item by defining mask interactively from a viewer

Synopsis
fromimage(image, maskimage)

Arguments

image	name of image to be used in viewer Allowed String Default ''
maskimage	name of maskimage Allowed String Default ''

Returns
mask data item
or fail

Description

This function creates a mask data item from an interactive definition of mask regions on the viewer by the user. This function will bring the viewer with the reference image (calling interactivemask tool). The user should click on the left hand menu on the region button of choice (last 2 buttons on left hand menu), then draw the region of choice and double click inside. This box or polygon region can be dragged around by using the left mouse and double clicked any place where its to be selected. The user can click on the 'refresh' button to see what mask region has been defined. The user can 'add' or 'remove' regions till the 'Done with masking' button is pressed. If the maskimage is the name of an existing mask image then the user can update that mask.

Example

```
mymm:= maskmanager();
item3 := mymm.fromimage(image='3C273XC1.clean', maskimage='3C273XC1.clean.mask');
```

Create a mask data item item3 from regions interactively defined on a viewer.

---

maskmanager.mask - Function

Package	synthesis
Module	map
Tool	maskmanager

Create a mask data item as defined in a mask image

Synopsis
mask(mask)

Arguments

mask	name of mask image Allowed String Default: ''

Returns
mask data item
or fail

Description

This function creates a mask data item from a mask image

Example

```
mymm:= maskmanager();
item4 := mymm.fromimage(mask='3C273XC1.clean.mask');
```

Create a mask data item item4 from a mask image.

---

maskmanager.regionmask - Function

Package	synthesis
Module	map
Tool	maskmanager

Create a mask data item as defined by a region

Synopsis
regionmask(region, value)

Arguments

region	name of a region Allowed any valid region Default unset
value	value to set mask to Allowed float Default 1.0

Returns
mask data item
or fail

Description

This function creates a mask data item from a region

Example

```
mymm:= maskmanager();
item5 := mymm.regionmask(region=drm.quarter());
```

Create a mask data item item5 from the inner quarter region created by the default region manager.

---

maskmanager.thresholdmask - Function