NS_DEV_DOCFOR:objc_class:NXEPSImageRep;, NXEPSImageRep

Inherits From: NXImageRep : Object

Declared In: appkit/NXEPSImageRep.h

Class Description

An NXEPSImageRep is an object that can render an image from encapsulated PostScript code (EPS). The size of the object is set from the bounding box specified in the EPS header comments. Other information about the image should be supplied using inherited NXImageRep methods.

Like most other kinds of NXImageReps, an NXEPSImageRep is generally used indirectly, through an NXImage object.

Instance Variables

None declared in this class.

Method Types

Initializing a new NXEPSImageRep instance
- initFromSection:
- initFromFile:
- initFromStream:

Creating a List of NXEPSImageReps
+ newListFromSection:
+ newListFromSection:zone:
+ newListFromFile:
+ newListFromFile:zone:
+ newListFromStream:
+ newListFromStream:zone:

Copying and freeing an NXEPSImageRep
- copyFromZone:
- free

Getting the rectangle that bounds the image
- getBoundingBox:

Getting image data
- getEPS:length:

Drawing the image
- prepareGState
- drawIn:
- draw

Archiving
- read:
- write:

Instance Methods

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-newListFromFile:];, newListFromFile:

+ (List *)**newListFromFile:**(const char *)*filename*

Creates one new NXEPSImageRep instance for each EPS image specified in the *filename* file, and returns a List object containing all the objects created. If no NXEPSImageReps can be created (for example, if *filename* doesn't exist or it doesn't contain EPS code or data that can be filtered to EPS), **nil** is returned. The List should be freed when it's no longer needed.

Each new NXEPSImageRep is initialized by the **initFromFile:** method, which reads a minimal amount of information about the image from the header comments in the file. The PostScript code will be read when it's needed to render the image.

The EPS format doesn't support more than one image per file. If *filename* contains EPS code, the List returned will be a list of one.

See also: + **newListFromFile:zone:**, - **initFromFile:**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-newListFromFile:zone:];, newListFromFile:zone:

+ (List *)**newListFromFile:**(const char *)*filename* **zone:**(NXZone *)*aZone*

Returns a List of new NXEPSImageRep instances, just as **newListFromFile:** does, except that the NXEPSImageReps and the List object are allocated from memory located in *aZone*.

See also: + **newListFromFile:**, - **initFromFile:**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-newListFromSection:];, newListFromSection:

+ (List *)**newListFromSection:**(const char *)*name*

Creates one new NXEPSImageRep instance for each image specified in the *name* section of the _ _EPS segment in the executable file or in the *name* file in the application bundle, and returns a List object containing all the objects created. If not even one NXEPSImageRep can be created (for example, if the *name* section doesn't exist or it doesn't contain EPS code or data that can be filtered to EPS), **nil** is returned. The List should be freed when it's no longer needed.

Each new NXEPSImageRep is initialized by the **initFromSection:** method, which reads a minimal amount of information about the image from the EPS header comments. The PostScript code will be read only when it's needed to render the image.

The EPS format doesn't support more than one image per file. If the *name* section or file contains EPS code, the List returned will be a list of one.

See also: + **newListFromSection:zone:**, - **initFromSection:**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-newListFromSection:zone:];, newListFromSection:zone:

+ (List *)**newListFromSection:**(const char *)*name* **zone:**(NXZone *)*aZone*

Returns a List of new NXEPSImageRep instances, just as **newListFromSection:** does, except that the List object and the NXEPSImageReps are allocated from memory located in *aZone*.

See also: + **newListFromSection:**, - **initFromSection:**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-newListFromStream:];, newListFromStream:

+ (List *)**newListFromStream:**(NXStream *)*stream*

Creates one new NXEPSImageRep instance for each image that can be read from *stream*, and returns a List object containing all the objects created. If not even one NXEPSImageRep can be created (for example, if the *stream* doesn't contain EPS code or data that can be converted to EPS), **nil** is returned. The List should be freed when it's no longer needed.

The data is read and each new object initialized by the **initFromStream:** method.

See also: + **newListFromStream:zone:**, - **initFromStream:**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-newListFromStream:zone:];, newListFromStream:zone:

+ (List *)**newListFromStream:**(NXStream *)*stream* **zone:**(NXZone *)*aZone*

Returns a List of new NXEPSImageRep instances, just as **newListFromStream:** does, except that the List object and the NXEPSImageReps are allocated from memory located in *aZone*.

See also: + **newListFromStream:**, - **initFromStream:**

Instance Methods

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-copyFromZone:];, copyFromZone:

- **copyFromZone:**(NXZone *)*zone*

Returns a new NXEPSImageRep instance that's an exact copy of the receiver. The new object will have its own copy of the image data. It doesn't need to be initialized. Both object and data are allocated from *zone*.

See also: - **copy** (Object)

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-draw];, draw

- (BOOL)**draw**

Draws the image at (0.0, 0.0) in the current coordinate system on the current device. This method returns YES if successful in rendering the image, and NO if not.

An NXEPSImageRep draws in a separate PostScript context and graphics state. Before the EPS code is interpreted, all graphics state parametersÐwith the exception of the CTM and deviceÐare set to the Window Server's defaults and the defaults required by EPS conventions. If you want to change any of these defaults, you can do so by implementing a **prepareGState** method in an NXEPSImageRep subclass. The **draw** method invokes **prepareGState** just before sending the EPS code to the Window Server. For example, if you need to set a transfer function or halftone screen that's specific to the image, **prepareGState** is the place to do it.

See also: - **drawAt:** (NXImageRep), - **drawIn:**, - **prepareGState**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-drawIn:];, drawIn:

- (BOOL)**drawIn:**(const NXRect *)*rect*

Draws the image so that it fits inside the rectangle referred to by *rect*. The current coordinate system is translated and scaled so the image will appear at the right location and fit within the rectangle. The **draw** method is then invoked to produce the image. This method returns the value returned by the **draw** method, which indicates whether the image was successfully drawn.

The coordinate system is not restored after it has been altered.

See also: - **draw**, - **drawAt:** (NXImageRep)

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-free];, free

- **free**

Deallocates the NXEPSImageRep.

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-getBoundingBox:];, getBoundingBox:

- **getBoundingBox:**(NXRect *)*theRect*

Provides the rectangle that bounds the image. The rectangle is copied from the ª%%BoundingBox:º comment in the EPS header to structure referred to by *theRect*. Returns **self**.

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-getEPS:length:];, getEPS:length:

- **getEPS:**(char **)*theEPS* **length:**(int *)*numBytes*

Sets the pointer referred to by *theEPS* so that it points to the EPS code. The length of the code in bytes is provided in the integer referred to by *numBytes*. Returns **self**.

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-init];, init

Generates an error message. This method can't be used to initialize an NXEPSImageRep. Use one of the other **init**... methods instead.

See also: - **initFromSection:**, - **initFromFile:**, - **initFromStream:**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-initFromFile:];, initFromFile:

- **initFromFile:**(const char *)*filename*

Initializes the receiver, a newly allocated NXEPSImageRep object, with the EPS image found in the *filename* file. Some information about the image is read from the EPS header comments, but the PostScript code won't be read until it's needed to render the image.

If the new object can't be initialized for any reason (for example, *filename* doesn't exist or doesn't contain EPS code), this method frees it and returns **nil**. Otherwise, it returns **self**.

This method is the designated initializer for NXEPSImageReps that read EPS code from a file.

See also: + **newListFromFile:**, - **initFromSection:**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-initFromSection:];, initFromSection:

- **initFromSection:**(const char *)*name*

Initializes the receiver, a newly allocated NXEPSImageRep object, with the image found in the *name* section in the _ _EPS segment of the application executable or the *name* file in the application bundle. Some information about the image is read from the EPS header comments, but the PostScript code won't be read until it's needed to render the image.

If the new object can't be initialized for any reason (for example, the *name* section doesn't exist or doesn't contain EPS code), this method frees it and returns **nil**. Otherwise, it returns **self**.

This method is the designated initializer for NXEPSImageReps that read image data from the _ _EPS segment.

See also: + **newListFromSection:**, - **initFromFile:**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-initFromStream:];, initFromStream:

- **initFromStream:**(NXStream *)*stream*

Initializes the receiver, a newly allocated NXEPSImageRep object, with the EPS image read from *stream*. If the new object can't be initialized for any reason (for example, *stream* doesn't contain EPS code), this method frees it and returns **nil**. Otherwise, it returns **self**.

This method is the designated initializer for NXEPSImageReps that read image data from a stream.

See also: + **newListFromStream:**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-prepareGState];, prepareGState

- **prepareGState**

Implemented by subclasses to initialize the graphics state before the image is drawn. The **draw** method sends a **prepareGState** message just before rendering the EPS code. This default implementation of the method does no initialization; it simply returns **self**.

See also: - **draw**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-read:];, read:

- **read:**(NXTypedStream *)*stream*

Reads the NXEPSImageRep from the typed stream *stream*.

See also: - **write:**

NS_DEV_DOCFOR:objc_method:[NXEPSImageRep-write:];, write:

- **write:**(NXTypedStream *)*stream*

Writes the NXEPSImageRep to the typed stream *stream*.

See also: - **read:**