

# NSImage

**Inherits From:** NSObject  
**Declared In:** appkit/NSImage.h

## Initializing a New NSImage Instance

- (id)**init** Initializes the new NSImage without setting its size.
- (id)**initWithReferencingFile:**(NSString \*)*filename* Initializes the new NSImage from the data in *filename*. The file is assumed to persist and may be reread later if the NSImage is resized or otherwise modified.
- (id)**initWithContentsOfFile:**(NSString \*)*filename* Initializes the new NSImage from the data in *filename*.
- (id)**initWithPasteboard:**(NSPasteboard \*)*pasteboard* Initializes the new NSImage with the data in *pasteboard*.
- (id)**initWithData:**(NSData \*)*data* Initializes the new NSImage from *data*.
- (id)**initWithSize:**(NSSize)*aSize* Initializes the new NSImage to the specified size.

## Setting the Size of the Image

- (void)**setSize:**(NSSize)*aSize* Sets the size of the image to *aSize* in base coordinates.
- (NSSize)**size** Returns the size of the image.

## Referring to Images by Name

- (BOOL)**setName:**(NSString \*)*name* Assigns *name* to be the receiver's name. Returns NO if *name* is already in use; otherwise, returns YES.
- (NSString \*)**name** Returns the receiver's name.
- + (id)**imageNamed:**(NSString \*)*name* Returns the NSImage object having *name*. Searches the main bundle for the image if necessary.

## Specifying the Image

- (void)**addRepresentation:**(NSImageRep \*)*imageRep* Adds *imageRep* to the receiver's list of representations.
- (void)**addRepresentations:**(NSArray \*)*imageRepArray* Adds the *imageReps* from *imageRepArray* to the receiver's list of representations.
- (void)**lockFocus** Prepares for drawing in the best representation.
- (void)**lockFocusOnRepresentation:**(NSImageRep \*)*imageRep* Prepares for drawing in *imageRep*.
- (void)**unlockFocus** Balances a previous **lockFocus** or **lockFocusOn:**.

## Using the Image

- (void)**compositeToPoint:**(NSPoint)*aPoint*  
**operation:**(NSCompositingOperation)*op* Composites the image to *aPoint* using the operation *op*.
- (void)**compositeToPoint:**(NSPoint)*aPoint*  
**fromRect:**(NSRect)*aRect*  
**operation:**(NSCompositingOperation)*op* Composites the *aRect* portion of the image to *aPoint* using the operation *op*.
- (void)**dissolveToPoint:**(NSPoint)*aPoint*  
**fraction:**(float)*aFloat* Composites the image to *aPoint* using the **dissolve** operator. *aFloat* is a value from 0.0 to 1.0 that determines how much of the resulting composite comes from the receiver.
- (void)**dissolveToPoint:**(NSPoint)*aPoint*  
**fromRect:**(NSRect)*aRect*  
**fraction:**(float)*aFloat* Composites the *aRect* portion of the image to *aPoint* using the **dissolve** operator. *aFloat* is a value from 0.0 to 1.0 that determines how much of the resulting composite comes from the

receiver.

## Choosing Which Image Representation to Use

- (void)**setPrefersColorMatch:**(BOOL)*flag* Determines whether color matches are preferred.
- (BOOL)**prefersColorMatch** Returns whether color matches are preferred.
- (void)**setUsesEPSOnResolutionMismatch:**(BOOL)*flag* Sets whether to use EPS representations on mismatch.
- (BOOL)**usesEPSOnResolutionMismatch** Returns whether to use EPS representations on mismatch.
- (void)**setMatchesOnMultipleResolution:**(BOOL)*flag* Sets whether resolution multiples match.
- (BOOL)**matchesOnMultipleResolution** Returns whether resolution multiples match.

## Getting the Representations

- (NSImageRep \*)**bestRepresentationForDevice:**(NSDictionary \*)*deviceDescription* Returns the best representation for the device described by *deviceDescription*. If *deviceDescription* is **nil**, the current device is assumed. See **NSGraphics.h** for appropriate dictionary keys and values.
- (NSArray \*)**representations** Returns an array of all the representations.
- (void)**removeRepresentation:**(NSImageRep \*)*imageRep* Removes *imageRep* from the receiver's list of representations.

## Determining How the Image is Stored

- (void)**setCachedSeparately:**(BOOL)*flag* Sets whether representations are cached separately.
- (BOOL)**isCachedSeparately** Returns whether representations are cached separately.
- (void)**setDataRetained:**(BOOL)*flag* Sets whether image data is retained by the object after the image is cached.
- (BOOL)**isDataRetained** Returns whether image data is retained.
- (void)**setCacheDepthMatchesImageDepth:**(BOOL)*flag* Sets whether the default depth limit applies to caches.

- (BOOL)**cacheDepthMatchesImageDepth** Returns whether the default depth limit applies to caches.

## Determining How the Image is Drawn

- (BOOL)**isValid** Returns YES to indicate that the receiver's image is valid.
- (void)**setScalesWhenResized:**(BOOL)*flag* If flag is YES, representations are scaled to fit.
- (BOOL)**scalesWhenResized** Returns whether representations are scaled to fit.
- (void)**setBackgroundColor:**(NSColor \*)*aColor* Sets the background color of the image to *aColor*.
- (NSColor \*)**backgroundColor** Returns the background color of the image.
- (BOOL)**drawRepresentation:**(NSImageRep \*)*imageRep*  
    **inRect:**(NSRect)*aRect* Overridden to have *imageRep* draw the representation in *aRect*.
- (void)**recache** Invalidates caches of all representations, so they will be redrawn.

## Assigning a Delegate

- (void)**setDelegate:**(id)*anObject* Makes *anObject* the delegate of the NSImage.
- (id)**delegate** Returns the delegate of the NSImage.

## Producing TIFF Data for the Image

- (NSData \*)**TIFFRepresentation** Returns a data object containing TIFF for all representations, using their default compressions.
- (NSData \*)**TIFFRepresentationUsingCompression:**(NSTIFFCompression)*comp*  
    **factor:**(float)*aFloat* Returns a data object containing TIFF for all the representations.

## Managing NSImageRep subclasses

- + (NSArray \*)**imageUnfilteredFileTypes** Returns an array of file types recognized by the NSImage without filtering. This list comes from all registered NSImageReps.
- + (NSArray \*)**imageUnfilteredPasteboardTypes** Returns an array of pasteboard types recognized by the NSImage.

## Testing Image Data Sources

- + (BOOL)**canInitWithPasteboard:**(NSPasteboard \*)*pasteboard*  
Returns YES if the receiver can create a representation from *pasteboard*; otherwise, returns NO.
- + (NSArray \*)**imageFileTypes**  
Returns an array of supported image data file types.
- + (NSArray \*)**imagePasteboardTypes**  
Returns an array of supported pasteboard types.

## Methods Implemented by the Delegate

- (UIImage \*)**imageDidNotDraw:**(id)*sender*  
**inRect:**(CGRect)*aRect*  
Responds to message that *image* couldn't be composited into *aRect*.