

public class **ImageView**
 extends [View](#)

Summary: [Nested Classes](#) | [XML Attrs](#) | [Inherited XML Attrs](#) | [Inherited Constants](#) | [Inherited Fields](#) | [Ctors](#) | [Methods](#) | [Protected Methods](#) | [Inherited Methods](#) | [\[Expand All\]](#)

Added in **API level 1**

[java.lang.Object](#)

↳ [android.view.View](#)

↳ android.widget.ImageView

► Known Direct Subclasses

ImageButton, QuickContactBadge

► Known Indirect Subclasses

ZoomButton

Class Overview

Displays an arbitrary image, such as an icon. The ImageView class can load images from various sources (such as resources or content providers), takes care of computing its measurement from the image so that it can be used in any layout manager, and provides various display options such as scaling and tinting.

Summary

Nested Classes

enum [ImageView.ScaleType](#) Options for scaling the bounds of an image to the bounds of this view.

XML Attributes

Attribute Name	Related Method	Description
android:adjustViewBounds	setAdjustViewBounds(boolean)	Set this to true if you want the ImageView to adjust its bounds to preserve the aspect ratio of its drawable.
android:baseline	setBaseline(int)	The offset of the baseline within this view.
android:baselineAlignBottom	setBaselineAlignBottom(boolean)	If true, the image view will be baseline

		aligned with based on its bottom edge.
android:cropToPadding	setCropToPadding(boolean)	If true, the image will be cropped to fit within its padding.
android:maxHeight	setMaxHeight(int)	An optional argument to supply a maximum height for this view.
android:maxLength	setMaxLength(int)	An optional argument to supply a maximum width for this view.
android:scaleType	setScaleType(ImageView.ScaleType)	Controls how the image should be resized or moved to match the size of this ImageView.
android:src	setImageResource(int)	Sets a drawable as the content of this ImageView.
android:tint	setColorFilter(int,PorterDuff.Mode)	Set a tinting color for the image.

Inherited XML Attributes [\[Expand\]](#)

► From class android.view.View

Inherited Constants [\[Expand\]](#)

► From class android.view.View

Inherited Fields [\[Expand\]](#)

► From class android.view.View

Public Constructors

ImageView (Context context)

ImageView (Context context, AttributeSet attrs)

ImageView (Context context, AttributeSet attrs, int defStyle)

Public Methods

```
final void clearColorFilter ()
    getAdjustViewBounds ()
    boolean    True when ImageView is adjusting its bounds to preserve the aspect
                ratio of its drawable
    getBaseline ()

    int    Return the offset of the widget's text baseline from the widget's top
            boundary.

    getBaselineAlignBottom ()
    boolean    Return whether this view's baseline will be considered the bottom of the
                view.
    getColorFilter ()
    ColorFilter    Returns the active color filter for this ImageView.
    getCropToPadding ()
    boolean    Return whether this ImageView crops to padding.
    getDrawable ()
    Drawable    Return the view's drawable, or null if no drawable has been assigned.
    getImageAlpha ()
    int    Returns the alpha that will be applied to the drawable of this ImageView.
    getImageMatrix ()
    Matrix    Return the view's optional matrix.
    getMaxHeight ()
    int    The maximum height of this view.
    getMaxWidth ()
    int    The maximum width of this view.
    getScaleType ()
    ImageView.ScaleType    Return the current scale type in use by this ImageView.
    hasOverlappingRendering ()
    boolean    Returns whether this View has content which overlaps.
    invalidateDrawable (Drawable dr)
    void    Invalidates the specified Drawable.
    jumpDrawablesToCurrentState ()
    void    Call Drawable . jumpToCurrentState ( ) on all Drawable objects
            associated with this view.
    onCreateDrawableState (int extraSpace)
    int[]    Generate the new Drawable state for this view.
    onInitializeAccessibilityEvent (AccessibilityEvent event)
    void    Initializes an AccessibilityEvent with information about this View
            which is the event source.
```

```

        onInitializeAccessibilityNodeInfo (AccessibilityNodeInfo info)
void    Initializes an AccessibilityNodeInfo with information about this
        view.
        onPopulateAccessibilityEvent (AccessibilityEvent event)
        Called from
void    dispatchPopulateAccessibilityEvent (AccessibilityEvent)
        giving a chance to this View to populate the accessibility event with its
        text content.
        onRtlPropertiesChanged (int layoutDirection)
void    Called when any RTL property (layout direction or text direction or text
        alignment) has been changed.
        setAdjustViewBounds (boolean adjustViewBounds)
void    Set this to true if you want the ImageView to adjust its bounds to
        preserve the aspect ratio of its drawable.
        setAlpha (int alpha)
void    This method was deprecated in API level 16. use #setImageAlpha(int)
        instead
        setBaseline (int baseline)
void    Set the offset of the widget's text baseline from the widget's top
        boundary.

        setBaselineAlignBottom (boolean aligned)
void    Set whether to set the baseline of this view to the bottom of the view.
        setColorFilter (int color)
final void    Set a tinting option for the image.
        setColorFilter (ColorFilter cf)
void    Apply an arbitrary colorfilter to the image.
        setColorFilter (int color, PorterDuff.Mode mode)
final void    Set a tinting option for the image.
        setCropToPadding (boolean cropToPadding)
void    Sets whether this ImageView will crop to padding.
        setImageAlpha (int alpha)
void    Sets the alpha value that should be applied to the image.
        setImageBitmap (Bitmap bm)
void    Sets a Bitmap as the content of this ImageView.
        setImageDrawable (Drawable drawable)
void    Sets a drawable as the content of this ImageView.
        setImageLevel (int level)
void    Sets the image level, when it is constructed from a
        LevelListDrawable.
void    setImageMatrix (Matrix matrix)
        setImageResource (int resId)
void    Sets a drawable as the content of this ImageView.
void    setImageState (int[] state, boolean merge)
    
```

```

void setImageURI(Uri uri)
    Sets the content of this ImageView to the specified Uri.
void setMaxHeight(int maxHeight)
    An optional argument to supply a maximum height for this view.
void setMaxWidth(int maxWidth)
    An optional argument to supply a maximum width for this view.
void setScaleType(ImageView.ScaleType scaleType)
    Controls how the image should be resized or moved to match the size of
    this ImageView.
void setSelected(boolean selected)
    Changes the selection state of this view.
void setVisibility(int visibility)
    Set the enabled state of this view.
    
```

Protected Methods

```

drawableStateChanged()
void This function is called whenever the state of the view changes in
    such a way that it impacts the state of drawables being shown.
void onAttachedToWindow()
    This is called when the view is attached to a window.
void onDetachedFromWindow()
    This is called when the view is detached from a window.
void onDraw(Canvas canvas)
    Implement this to do your drawing.
void onMeasure(int widthMeasureSpec, int heightMeasureSpec)
    Measure the view and its content to determine the measured
    width and the measured height.
boolean setFrame(int l, int t, int r, int b)
    Assign a size and position to this view.
boolean verifyDrawable(Drawable dr)
    If your view subclass is displaying its own Drawable objects, it
    should override this function and return true for any Drawable it
    is displaying.
    
```

Inherited Methods

[Expand]

- ▶ From class android.view.View
- ▶ From class java.lang.Object
- ▶ From interface android.graphics.drawable.Drawable.Callback
- ▶ From interface android.view.KeyEvent.Callback
- ▶ From interface android.view.accessibility.AccessibilityEventSource

XML Attributes

android:adjustViewBounds

Set this to true if you want the ImageView to adjust its bounds to preserve the aspect ratio of its drawable.

Must be a boolean value, either "true" or "false".

This may also be a reference to a resource (in the form "@[package:] type:name") or theme attribute (in the form "[package:] [type:]name") containing a value of this type.

This corresponds to the global attribute resource symbol [adjustViewBounds](/reference/android/R.attr.html#adjustViewBounds) (</reference/android/R.attr.html#adjustViewBounds>).

Related Methods

[setAdjustViewBounds\(boolean\)](#)

android:baseline

The offset of the baseline within this view. See {see android.view.View#getBaseline} for details

Must be a dimension value, which is a floating point number appended with a unit such as "14.5sp". Available units are: px (pixels), dp (density-independent pixels), sp (scaled pixels based on preferred font size), in (inches), mm (millimeters).

This may also be a reference to a resource (in the form "@[package:] type:name") or theme attribute (in the form "[package:] [type:]name") containing a value of this type.

This corresponds to the global attribute resource symbol [baseline](/reference/android/R.attr.html#baseline) (</reference/android/R.attr.html#baseline>).

Related Methods

[setBaseline\(int\)](#)

android:baselineAlignBottom

If true, the image view will be baseline aligned with based on its bottom edge.

Must be a boolean value, either "true" or "false".

This may also be a reference to a resource (in the form "@[package:] type:name") or theme attribute (in the form "[package:] [type:]name") containing a value of this type.

This corresponds to the global attribute resource symbol [baselineAlignBottom](/reference/android/R.attr.html#baselineAlignBottom) (</reference/android/R.attr.html#baselineAlignBottom>).

Related Methods

[setBaselineAlignBottom\(boolean\)](#)

android:cropToPadding

If true, the image will be cropped to fit within its padding.

Must be a boolean value, either "true" or "false".

This may also be a reference to a resource (in the form "@[*package*:] *type*: *name*") or theme attribute (in the form "[*package*:] [*type*:] *name*") containing a value of this type.

This corresponds to the global attribute resource symbol [cropToPadding](/reference/android/R.attr.html#cropToPadding) (</reference/android/R.attr.html#cropToPadding>).

Related Methods

[setCropToPadding\(boolean\)](#)

android:maxHeight

An optional argument to supply a maximum height for this view. See {see android.widget.ImageView#setMaxHeight} for details.

Must be a dimension value, which is a floating point number appended with a unit such as "14.5sp". Available units are: px (pixels), dp (density-independent pixels), sp (scaled pixels based on preferred font size), in (inches), mm (millimeters).

This may also be a reference to a resource (in the form "@[*package*:] *type*: *name*") or theme attribute (in the form "[*package*:] [*type*:] *name*") containing a value of this type.

This corresponds to the global attribute resource symbol [maxHeight](/reference/android/R.attr.html#maxHeight) (</reference/android/R.attr.html#maxHeight>).

Related Methods

[setMaxHeight\(int\)](#)

android:maxWidth

An optional argument to supply a maximum width for this view. See {see android.widget.ImageView#setMaxWidth} for details.

Must be a dimension value, which is a floating point number appended with a unit such as "14.5sp". Available units are: px (pixels), dp (density-independent pixels), sp (scaled pixels based on preferred font size), in (inches), mm (millimeters).

This may also be a reference to a resource (in the form "@[*package*:] *type*: *name*") or theme attribute (in the form "[*package*:] [*type*:] *name*") containing a value of this type.

This corresponds to the global attribute resource symbol [maxWidth](/reference/android/R.attr.html#maxWidth) (</reference/android/R.attr.html#maxWidth>).

Related Methods

[setMaxWidth\(int\)](#)

android:scaleType

Controls how the image should be resized or moved to match the size of this ImageView.

Must be one of the following constant values.

Constant	Value	Description
matrix	0	
fitXY	1	
fitStart	2	
fitCenter	3	
fitEnd	4	
center	5	
centerCrop	6	
centerInside	7	

This corresponds to the global attribute resource symbol [scaleType](#) (</reference/android/R.attr.html#scaleType>).

Related Methods

[setScaleType\(ImageView.ScaleType\)](#)

android:src

Sets a drawable as the content of this ImageView.

May be a reference to another resource, in the form "[@\[+\]\[package:\]type:name](#)" or to a theme attribute in the form "["?\[package:\]\[type:\]name](#)".

May be a color value, in the form of "[#rgb](#)", "[#argb](#)", "[#rrggbb](#)", or "[#aarrggbb](#)".

This corresponds to the global attribute resource symbol [src](#) (</reference/android/R.attr.html#src>).

Related Methods

[setImageResource\(int\)](#)

android:tint

Set a tinting color for the image.

Must be a color value, in the form of "[#rgb](#)", "[#argb](#)", "[#rrggbb](#)", or "[#aarrggbb](#)".

This may also be a reference to a resource (in the form "[@\[package:\]type:name](#)") or theme attribute (in the form "["?\[package:\]](#)

[*type*:]*name*") containing a value of this type.

This corresponds to the global attribute resource symbol [tint](#) ([/reference/android/R.attr.html#tint](#)).

Related Methods

[setColorFilter\(int,PorterDuff.Mode\)](#)

Public Constructors

public **ImageView** ([Context](#) context) Added in [API level 1](#)

public **ImageView** ([Context](#) context, [AttributeSet](#) attrs) Added in [API level 1](#)

public **ImageView** ([Context](#) context, [AttributeSet](#) attrs, int defStyle) Added in [API level 1](#)

Public Methods

public final void **clearColorFilter** () Added in [API level 1](#)

public boolean **getAdjustViewBounds** () Added in [API level 16](#)

True when ImageView is adjusting its bounds to preserve the aspect ratio of its drawable

Related XML Attributes

[android:adjustViewBounds](#)

Returns

whether to adjust the bounds of this view to preserve the original aspect ratio of the drawable

See Also

[setAdjustViewBounds\(boolean\)](#)

public int **getBaseline** () Added in [API level 1](#)

Return the offset of the widget's text baseline from the widget's top boundary.

Returns

the offset of the baseline within the widget's bounds or -1 if baseline alignment is not supported.

public boolean **getBaselineAlignBottom** () Added in [API level 11](#)

Return whether this view's baseline will be considered the bottom of the view.

See Also

[setBaselineAlignBottom\(boolean\)](#)

public [ColorFilter](#) **getColorFilter** ()

Added in [API level 16](#)

Returns the active color filter for this ImageView.

Returns

the active color filter for this ImageView

See Also

[setColorFilter\(android.graphics.ColorFilter\)](#)

public boolean **getCropToPadding** ()

Added in [API level 16](#)

Return whether this ImageView crops to padding.

Related XML Attributes

[android:cropToPadding](#)

Returns

whether this ImageView crops to padding

See Also

[setCropToPadding\(boolean\)](#)

public [Drawable](#) **getDrawable** ()

Added in [API level 1](#)

Return the view's drawable, or null if no drawable has been assigned.

public int **getImageAlpha** ()

Added in [API level 16](#)

Returns the alpha that will be applied to the drawable of this ImageView.

Returns

the alpha that will be applied to the drawable of this ImageView

See Also

[setImageAlpha\(int\)](#)

public [Matrix](#) **getImageMatrix** ()

Added in [API level 1](#)

Return the view's optional matrix. This is applied to the view's drawable when it is drawn. If there is no matrix, this method will return an identity matrix. Do not change this matrix in place but make a copy. If you want a different matrix applied to the drawable, be sure to call setImageMatrix().

public int **getMaxHeight** ()

Added in [API level 16](#)

The maximum height of this view.

Related XML Attributes

[android:maxHeight](#)

Returns

The maximum height of this view

See Also

[setMaxHeight\(int\)](#)

public int **getMaxWidth** ()

Added in [API level 16](#)

The maximum width of this view.

Related XML Attributes

[android:maxWidth](#)

Returns

The maximum width of this view

See Also

[setMaxWidth\(int\)](#)

public [ImageView.ScaleType](#) **getScaleType** ()

Added in [API level 1](#)

Return the current scale type in use by this ImageView.

Related XML Attributes

[android:scaleType](#)

See Also

[ImageView.ScaleType](#)

public boolean **hasOverlappingRendering** ()

Added in [API level 16](#)

Returns whether this View has content which overlaps.

This function, intended to be overridden by specific View types, is an optimization when alpha is set on a view. If rendering overlaps in a view with $\alpha < 1$, that view is drawn to an offscreen buffer and then composited into place, which can be expensive. If the view has no overlapping rendering, the view can draw each primitive with the appropriate alpha value directly. An example of overlapping rendering is a TextView with a background image, such as a Button. An example of non-overlapping rendering is a TextView with no background, or an ImageView with only the foreground image. The default implementation returns true; subclasses should override if they have cases which can be optimized.

The current implementation of the `saveLayer` and `saveLayerAlpha` methods in [Canvas](#) ([/reference/android/graphics/Canvas.html](http://reference.android.graphics/Canvas.html)) necessitates that a View return true if it uses the methods internally without passing the `CLIP_TO_LAYER_SAVE_FLAG` ([/reference/android/graphics/Canvas.html#CLIP_TO_LAYER_SAVE_FLAG](http://reference.android.graphics/Canvas.html#CLIP_TO_LAYER_SAVE_FLAG)).

Returns

true if the content in this view might overlap, false otherwise.

public void invalidateDrawable ([Drawable](#) dr) Added in [API level 1](#)

Invalidates the specified Drawable.

Parameters

dr the drawable to invalidate

public void jumpDrawablesToCurrentState () Added in [API level 11](#)

Call [Drawable.jumpToCurrentState\(\)](#) ([/reference/android/graphics/drawable/Drawable.html#jumpToCurrentState\(\)](#)) on all Drawable objects associated with this view.

public int[] onCreateDrawableState (int extraSpace) Added in [API level 1](#)

Generate the new [Drawable](#) ([/reference/android/graphics/drawable/Drawable.html](#)) state for this view. This is called by the view system when the cached Drawable state is determined to be invalid. To retrieve the current state, you should use [getDrawableState\(\)](#) ([/reference/android/view/View.html#getDrawableState\(\)](#)).

Parameters

extraSpace if non-zero, this is the number of extra entries you would like in the returned array in which you can place your own states.

Returns

Returns an array holding the current [Drawable](#) state of the view.

public void onInitializeAccessibilityEvent
([AccessibilityEvent](#) event) Added in [API level 14](#)

Initializes an [AccessibilityEvent](#) ([/reference/android/view/accessibility/AccessibilityEvent.html](#)) with information about this View which is the event source. In other words, the source of an accessibility event is the view whose state change triggered firing the event.

Example: Setting the password property of an event in addition to properties set by the super implementation:

```
public void onInitializeAccessibilityEvent(AccessibilityEvent event) {
    super.onInitializeAccessibilityEvent(event);
    event.setPassword(true);
}
```

If an [View.AccessibilityDelegate](#) ([/reference/android/view/View.AccessibilityDelegate.html](#)) has been specified via calling

[setAccessibilityDelegate\(AccessibilityDelegate\)](#) ([/reference/android/view/View.html#setAccessibilityDelegate\(android.view.View.AccessibilityDelegate\)](#)) its [onInitializeAccessibilityEvent\(View, AccessibilityEvent\)](#) ([/reference/android/view/View.AccessibilityDelegate.html#onInitializeAccessibilityEvent\(android.view.View, android.view.accessibility.AccessibilityEvent\)](#)) is responsible for handling this call.

Note: Always call the super implementation before adding information to the event, in case the default implementation has basic information to add.

Parameters

event The event to initialize.

public void **onInitializeAccessibilityNodeInfo**
([AccessibilityNodeInfo](#) info)

Added in [API level 14](#)

Initializes an [AccessibilityNodeInfo](#) ([/reference/android/view/accessibility/AccessibilityNodeInfo.html](#)) with information about this view. The base implementation sets:

- [setParent\(View\)](#),
- [setBoundsInParent\(Rect\)](#),
- [setBoundsInScreen\(Rect\)](#),
- [setPackageName\(CharSequence\)](#),
- [setClassName\(CharSequence\)](#),
- [setContentDescription\(CharSequence\)](#),
- [setEnabled\(boolean\)](#),
- [setClickable\(boolean\)](#),
- [setFocusable\(boolean\)](#),
- [setFocused\(boolean\)](#),
- [setLongClickable\(boolean\)](#),
- [setSelected\(boolean\)](#),

Subclasses should override this method, call the super implementation, and set additional attributes.

If an [View.AccessibilityDelegate](#) ([/reference/android/view/View.AccessibilityDelegate.html](#)) has been specified via calling [setAccessibilityDelegate\(AccessibilityDelegate\)](#) ([/reference/android/view/View.html#setAccessibilityDelegate\(android.view.View.AccessibilityDelegate\)](#)) its [onInitializeAccessibilityNodeInfo\(View, AccessibilityNodeInfo\)](#) ([/reference/android/view/View.AccessibilityDelegate.html#onInitializeAccessibilityNodeInfo\(android.view.View, android.view.accessibility.AccessibilityNodeInfo\)](#)) is

responsible for handling this call.

Parameters

info The instance to initialize.

public void onPopulateAccessibilityEvent
([AccessibilityEvent](#) event)

Added in [API level 14](#)

Called from

[dispatchPopulateAccessibilityEvent\(AccessibilityEvent\)](#)

([/reference/android](#)

[/view/View.html#dispatchPopulateAccessibilityEvent\(android.view.accessibility](#)

[.AccessibilityEvent\)\)](#) giving a chance to this View to populate the

accessibility event with its text content. While this method is free to modify event attributes other than text content, doing so should normally be performed in

[onInitializeAccessibilityEvent\(AccessibilityEvent\)](#)

([/reference/android](#)

[/view/View.html#onInitializeAccessibilityEvent\(android.view.accessibility.AccessibilityEvent\)\)](#).

Example: Adding formatted date string to an accessibility event in addition to the text added by the super implementation:

```
public void onPopulateAccessibilityEvent(AccessibilityEvent event) {
    super.onPopulateAccessibilityEvent(event);
    final int flags = DateUtils.FORMAT_SHOW_DATE | DateUtils.FORMAT_SHOW_TIME;
    String selectedDateUtterance = DateUtils.formatDate(mCurrentDate.getTimeInMillis(), flags);
    event.getText().add(selectedDateUtterance);
}
```

If an [View.AccessibilityDelegate](#) ([/reference/android](#)

[/view/View.AccessibilityDelegate.html](#)) has been specified via calling

[setAccessibilityDelegate\(AccessibilityDelegate\)](#) ([/reference](#)

[/android](#)

[/view/View.html#setAccessibilityDelegate\(android.view.View.AccessibilityDelegate\)](#)) its

[onPopulateAccessibilityEvent\(View,](#)

[AccessibilityEvent\)](#) ([/reference/android](#)

[/view/View.AccessibilityDelegate.html#onPopulateAccessibilityEvent\(android.view](#)

[.View, android.view.accessibility.AccessibilityEvent\)\)](#) is responsible for handling this call.

Note: Always call the super implementation before adding information to the event, in case the default implementation has basic information to add.

Parameters

event The accessibility event which to populate.

public void **onRtlPropertiesChanged** (int layoutDirection) Added in [API level 17](#)

Called when any RTL property (layout direction or text direction or text alignment) has been changed. Subclasses need to override this method to take care of cached information that depends on the resolved layout direction, or to inform child views that inherit their layout direction. The default implementation does nothing.

Parameters

layoutDirection the direction of the layout

public void **setAdjustViewBounds** (boolean adjustViewBounds) Added in [API level 1](#)

Set this to true if you want the ImageView to adjust its bounds to preserve the aspect ratio of its drawable.

Note: If the application targets API level 17 or lower, `adjustViewBounds` will allow the drawable to shrink the view bounds, but not grow to fill available measured space in all cases. This is for compatibility with legacy [MeasureSpec](#) (</reference/android/view/View/MeasureSpec.html>) and [RelativeLayout](#) (</reference/android/widget/RelativeLayout.html>) behavior.

Related XML Attributes

[android:adjustViewBounds](#)

Parameters

adjustViewBounds Whether to adjust the bounds of this view to preserve the original aspect ratio of the drawable.

See Also

[getAdjustViewBounds\(\)](#)

public void **setAlpha** (int alpha) Added in [API level 1](#)

This method was deprecated in API level 16.
use `#setImageAlpha(int)` instead

Sets the alpha value that should be applied to the image.

Parameters

alpha the alpha value that should be applied to the image

public void **setBaseline** (int baseline) Added in [API level 11](#)

Set the offset of the widget's text baseline from the widget's top boundary. This value is overridden by the [setBaselineAlignBottom\(boolean\)](#) ([/reference/android/widget/ImageView.html#setBaselineAlignBottom\(boolean\)](/reference/android/widget/ImageView.html#setBaselineAlignBottom(boolean))) property.

Related XML Attributes

[android:baseline](#)

Parameters

baseline The baseline to use, or -1 if none is to be provided.

See Also

[setBaseline\(int\)](#)

public void **setBaselineAlignBottom** (boolean aligned) Added in [API level 11](#)

Set whether to set the baseline of this view to the bottom of the view. Setting this value overrides any calls to setBaseline.

Related XML Attributes

[android:baselineAlignBottom](#)

Parameters

aligned If true, the image view will be baseline aligned with based on its bottom edge.

public final void **setColorFilter** (int color) Added in [API level 8](#)

Set a tinting option for the image. Assumes [SRC_ATOP \(/reference/android/graphics/PorterDuff.Mode.html#SRC_ATOP\)](#) blending mode.

Related XML Attributes

[android:tint](#)

Parameters

color Color tint to apply.

public void **setColorFilter** ([ColorFilter](#) cf) Added in [API level 1](#)

Apply an arbitrary colorfilter to the image.

Parameters

cf the colorfilter to apply (may be null)

See Also

[getColorFilter\(\)](#)

public final void **setColorFilter** (int color, [PorterDuff.Mode](#) mode) Added in [API level 1](#)

Set a tinting option for the image.

Related XML Attributes

[android:tint](#)

Parameters

color Color tint to apply.

mode How to apply the color. The standard mode is [SRC_ATOP](#)

public void **setCropToPadding** (boolean cropToPadding) Added in [API level 16](#)

Sets whether this ImageView will crop to padding.

Related XML Attributes

[android:cropToPadding](#)

Parameters

cropToPadding whether this ImageView will crop to padding

See Also

[getCropToPadding\(\)](#)

public void **setImageAlpha** (int alpha) Added in [API level 16](#)

Sets the alpha value that should be applied to the image.

Parameters

alpha the alpha value that should be applied to the image

See Also

[getImageAlpha\(\)](#)

public void **setImageBitmap** ([Bitmap](#) bm) Added in [API level 1](#)

Sets a Bitmap as the content of this ImageView.

Parameters

bm The bitmap to set

public void **setImageDrawable** ([Drawable](#) drawable) Added in [API level 1](#)

Sets a drawable as the content of this ImageView.

Parameters

drawable The drawable to set

public void **setImageLevel** (int level) Added in [API level 1](#)

Sets the image level, when it is constructed from a [LevelListDrawable](#) (</reference/android/graphics/drawable/LevelListDrawable.html>).

Parameters

level The new level for the image.

public void **setImageMatrix** ([Matrix](#) matrix) Added in [API level 1](#)

public void **setImageResource** (int resId) Added in [API level 1](#)

Sets a drawable as the content of this ImageView.

This does Bitmap reading and decoding on the UI thread, which can cause a latency hiccup. If that's a concern, consider using [`setImageDrawable\(android.graphics.drawable.Drawable\)`](#) ([/reference/android/widget/ImageView.html#setImageDrawable\(android.graphics.drawable.Drawable\)](#)) or [`setImageBitmap\(android.graphics.Bitmap\)`](#) ([/reference/android/widget/ImageView.html#setImageBitmap\(android.graphics.Bitmap\)](#)) and [`BitmapFactory`](#) ([/reference/android/graphics/BitmapFactory.html](#)) instead.

Related XML Attributes

[`android:src`](#)

Parameters

resId the resource identifier of the drawable

public void **setImageState** (int[] state, boolean merge) Added in [API level 1](#)

public void **setImageURI** ([Uri](#) uri) Added in [API level 1](#)

Sets the content of this ImageView to the specified Uri.

This does Bitmap reading and decoding on the UI thread, which can cause a latency hiccup. If that's a concern, consider using [`setImageDrawable\(android.graphics.drawable.Drawable\)`](#) ([/reference/android/widget/ImageView.html#setImageDrawable\(android.graphics.drawable.Drawable\)](#)) or [`setImageBitmap\(android.graphics.Bitmap\)`](#) ([/reference/android/widget/ImageView.html#setImageBitmap\(android.graphics.Bitmap\)](#)) and [`BitmapFactory`](#) ([/reference/android/graphics/BitmapFactory.html](#)) instead.

Parameters

uri The Uri of an image

public void **setMaxHeight** (int maxHeight) Added in [API level 1](#)

An optional argument to supply a maximum height for this view. Only valid if [`setAdjustViewBounds\(boolean\)`](#) ([/reference/android/widget/ImageView.html#setAdjustViewBounds\(boolean\)](#)) has been set to true. To set an image to be a maximum of 100 x 100 while preserving the original aspect ratio, do the following: 1) set `adjustViewBounds` to true 2) set `maxWidth` and `maxHeight` to 100 3) set the height and width layout params to `WRAP_CONTENT`.

Note that this view could be still smaller than 100 x 100 using this approach if the original image is small. To set an image to a fixed size, specify that size in the layout params and then use [`setScaleType\(android.widget.ImageView.ScaleType\)`](#) ([/reference/android/widget/ImageView.html#setScaleType\(android.widget.ImageView.ScaleType\)](#)) to determine how to fit the image within the bounds.

Related XML Attributes

[android:maxHeight](#)

Parameters

maxHeight maximum height for this view

See Also

[getMaxHeight\(\)](#)

public void **setMaxWidth** (int maxWidth)

Added in [API level 1](#)

An optional argument to supply a maximum width for this view. Only valid if [setAdjustViewBounds\(boolean\)](#) ([/reference/android/widget/ImageView.html#setAdjustViewBounds\(boolean\)](#)) has been set to true. To set an image to be a maximum of 100 x 100 while preserving the original aspect ratio, do the following: 1) set adjustViewBounds to true 2) set maxWidth and maxHeight to 100 3) set the height and width layout params to WRAP_CONTENT.

Note that this view could be still smaller than 100 x 100 using this approach if the original image is small. To set an image to a fixed size, specify that size in the layout params and then use [setScaleType\(android.widget.ImageView.ScaleType\)](#) ([/reference/android/widget/ImageView.html#setScaleType\(android.widget.ImageView.ScaleType\)](#)) to determine how to fit the image within the bounds.

Related XML Attributes

[android:maxWidth](#)

Parameters

maxWidth maximum width for this view

See Also

[getMaxWidth\(\)](#)

public void **setScaleType** ([ImageView.ScaleType](#) scaleType)

Added in [API level 1](#)

Controls how the image should be resized or moved to match the size of this ImageView.

Related XML Attributes

[android:scaleType](#)

Parameters

scaleType The desired scaling mode.

public void **setSelected** (boolean selected)

Added in [API level 1](#)

Changes the selection state of this view. A view can be selected or not. Note that selection is not the same as focus. Views are typically selected in the context of an AdapterView like ListView or GridView; the selected view

is the view that is highlighted.

Parameters

selected true if the view must be selected, false otherwise

public void **setVisibility** (int visibility)

Added in [API level 1](#)

Set the enabled state of this view.

Parameters

visibility One of [VISIBLE](#), [INVISIBLE](#), or [GONE](#).

Protected Methods

protected void **drawableStateChanged** ()

Added in [API level 1](#)

This function is called whenever the state of the view changes in such a way that it impacts the state of drawables being shown.

Be sure to call through to the superclass when overriding this function.

protected void **onAttachedToWindow** ()

Added in [API level 1](#)

This is called when the view is attached to a window. At this point it has a Surface and will start drawing. Note that this function is guaranteed to be called before [onDraw\(android.graphics.Canvas\)](#) ([/reference/android/view/View.html#onDraw\(android.graphics.Canvas\)](#)), however it may be called any time before the first onDraw -- including before or after [onMeasure\(int, int\)](#) ([/reference/android/view/View.html#onMeasure\(int, int\)](#)).

protected void **onDetachedFromWindow** ()

Added in [API level 1](#)

This is called when the view is detached from a window. At this point it no longer has a surface for drawing.

protected void **onDraw** ([Canvas](#) canvas)

Added in [API level 1](#)

Implement this to do your drawing.

Parameters

canvas the canvas on which the background will be drawn

protected void **onMeasure** (int widthMeasureSpec, int heightMeasureSpec)

Added in [API level 1](#)

Measure the view and its content to determine the measured width and the measured height. This method is invoked by [measure\(int, int\)](#)

([/reference/android/view/View.html#measure\(int, int\)](#)) and should be overridden by subclasses to provide accurate and efficient measurement of their contents.

CONTRACT: When overriding this method, you *must* call [setMeasuredDimension\(int, int\)](#) ([/reference/android/view/View.html#setMeasuredDimension\(int, int\)](#)) to store the measured width and height of this view. Failure to do so will trigger an `IllegalStateException`, thrown by [measure\(int, int\)](#) ([/reference/android/view/View.html#measure\(int, int\)](#)). Calling the superclass' [onMeasure\(int, int\)](#) ([/reference/android/view/View.html#onMeasure\(int, int\)](#)) is a valid use.

The base class implementation of `measure` defaults to the background size, unless a larger size is allowed by the `MeasureSpec`. Subclasses should override [onMeasure\(int, int\)](#) ([/reference/android/view/View.html#onMeasure\(int, int\)](#)) to provide better measurements of their content.

If this method is overridden, it is the subclass's responsibility to make sure the measured height and width are at least the view's minimum height and width ([getSuggestedMinimumHeight\(\)](#) ([/reference/android/view/View.html#getSuggestedMinimumHeight\(\)](#)) and [getSuggestedMinimumWidth\(\)](#) ([/reference/android/view/View.html#getSuggestedMinimumWidth\(\)](#))).

Parameters

- widthMeasureSpec* horizontal space requirements as imposed by the parent. The requirements are encoded with [View.MeasureSpec](#).
- heightMeasureSpec* vertical space requirements as imposed by the parent. The requirements are encoded with [View.MeasureSpec](#).

protected boolean **setFrame** (int l, int t, int r, int b) Added in [API level 1](#)

Assign a size and position to this view. This is called from layout.

Parameters

- l* Left position, relative to parent
- t* Top position, relative to parent
- r* Right position, relative to parent
- b* Bottom position, relative to parent

Returns

true if the new size and position are different than the previous ones

protected boolean **verifyDrawable** ([Drawable](#) dr) Added in [API level 1](#)

If your view subclass is displaying its own `Drawable` objects, it should

override this function and return true for any Drawable it is displaying. This allows animations for those drawables to be scheduled.

Be sure to call through to the super class when overriding this function.

Parameters

dr The Drawable to verify. Return true if it is one you are displaying, else return the result of calling through to the super class.

Returns

boolean If true than the Drawable is being displayed in the view; else false and it is not allowed to animate.