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

- 4 android.view.View
  - 4 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

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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. If true, the image will be cropped android:cropToPadding setCropToPadding(boolean) to fit within its padding. An optional argument to supply a android:maxHeight setMaxHeight(int) maximum height for this view. An optional argument to supply a android:maxWidth setMaxWidth(int) maximum width for this view. Controls how the image should be android:scaleType setScaleType(ImageView.ScaleType) resized or moved to match the size of this ImageView. Sets a drawable as the android:src setImageResource(int) content of this ImageView.

setColorFilter(int,PorterDuff.Mode)

Set a

for the image.

tinting color

Inherited XML [Expand]
Attributes

▶ From class android.view.View

android:tint

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. ColorFilter () Returns the active color filter for this ImageView. getCropToPadding () boolean Return whether this ImageView crops to padding. Drawable getDrawable () Return the view's drawable, or null if no drawable has been assigned. getImageAlpha () Returns the alpha that will be applied to the drawable of this ImageView. getlmageMatrix () Return the view's optional matrix. getMaxHeight () The maximum height of this view. getMaxWidth () 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) Generate the new Drawable state for this view. onInitializeAccessibilityEvent (AccessibilityEvent event) void Initializes an AccessibilityEvent with information about this View

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which is the event source.

onInitializeAccessibilityNodeInfo (AccessibilityNodeInfo info) Initializes an AccessibilityNodeInfo with information about this void 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) 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. final void setColorFilter (int color) Set a tinting option for the image. setColorFilter (ColorFilter cf) Apply an arbitrary colorfilter to the image. setColorFilter (int color, PorterDuff.Mode mode) 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) Sets a drawable as the content of this ImageView. setImageLevel (int level) Sets the image level, when it is constructed from a void LevelListDrawable. void setImageMatrix (Matrix matrix) setImageResource (int resId) Sets a drawable as the content of this ImageView. void setImageState (int[] state, boolean merge)

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void setImageURI (Uri uri)

Sets the content of this ImageView to the specified Uri.

setMaxHeight (int maxHeight)

An optional argument to supply a maximum height for this view.

setMaxWidth (int maxWidth)

An optional argument to supply a maximum width for this view.

setScaleType (ImageView.ScaleType scaleType)

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

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.

onAttachedToWindow () void

This is called when the view is attached to a window.

on Detached From Window ()void

This is called when the view is detached from a window.

onDraw (Canvas canvas)

Implement this to do your drawing.

onMeasure (int widthMeasureSpec, int heightMeasureSpec)

void Measure the view and its content to determine the measured width and the measured height.

setFrame (int I, int t, int r, int b)

Assign a size and position to this view.

verifyDrawable (Drawable dr)

boolean

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**

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).

#### **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 <u>baseline</u> (/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).

#### **Related Methods**

setBaselineAlignBottom(boolean)

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## 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 <u>cropToPadding</u> (/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 <u>maxHeight</u> (/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 <u>maxWidth</u> (/reference/android/R.attr.html#maxWidth).

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## 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	<b>Value Description</b>
matrix	0
fitXY	1
fitStart	2
fitCenter	3
fitEnd	4
center	5
centerCrop	6
centerInside	7

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

#### **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 <u>tint</u> (/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 presrve 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.

#### Raturne

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

## See Also

setImageAlpha(int)

## public <u>Matrix</u> **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 not 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 <u>Canvas</u> (/reference/android/graphics/Canvas.html) necessitates that a View return true if it uses the methods internally without passing the <u>CLIP\_TO\_LAYER\_SAVE\_FLAG</u> (/reference/android/graphics /Canvas.html#CLIP\_TO\_LAYER\_SAVE\_FLAG).

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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 <u>Drawable.jumpToCurrentState()</u> (/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 <u>Drawable (/reference/android/graphics/drawable /Drawable.html)</u> 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 <u>getDrawableState()</u> (/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 <u>Drawable</u> 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(Accessibility
    super.onInitializeAccessibilityEvent(event);
    event.setPassword(true);
}
```

If an <u>View.AccessibilityDelegate (/reference/android</u> /<u>view/View.AccessibilityDelegate.html</u>) has been specified via calling

# setAccessibilityDelegate(AccessibilityDelegate) (/reference /android

/view/View.html#setAccessibilityDelegate(android.view.View.AccessibilityDeleg
ate)) 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** (<u>AccessibilityNodeInfo</u> info)

Added in API level 14

Initializes an <a href="AccessibilityNodeInfo">AccessibilityNodeInfo</a> (/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 <a href="View.AccessibilityDelegate">View.AccessibilityDelegate</a> (/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(andro id.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.Acc essibilityEvent)).

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

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

If an <a href="View.AccessibilityDelegate">View.AccessibilityDelegate</a> (/reference/android /view.AccessibilityDelegate.html) has been specified via calling setAccessibilityDelegate(AccessibilityDelegate) (/reference /android

/view/View.html#setAccessibilityDelegate(android.view.View.AccessibilityDeleg ate)) its onPopulateAccessibilityEvent(View,

AccessibilityEvent) (/reference/android

/view/View.AccessibilityDelegate.html#onPopulateAccessibilityEvent(android.vi
ew.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 <a href="MeasureSpec">MeasureSpec</a> (/reference/android/view/View.MeasureSpec.html) and <a href="RelativeLayout">RelativeLayout</a> (/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 <a href="mailto:setBaselineAlignBottom(boolean">setBaselineAlignBottom(boolean)</a> (/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  $\underline{\sf SRC\_ATOP}$  (/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

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, <u>PorterDuff.Mode</u> mode)

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 <u>SRC\_ATOP</u>

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** (<u>Drawable</u> 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 <u>LevelListDrawable</u> (/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** (<u>Uri</u> 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 <a href="mailto:setAdjustViewBounds">setAdjustViewBounds</a> (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  $100 \times 100$  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  $100 \times 100$  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 <a href="mailto:onDraw(android.graphics.Canvas">onDraw(android.graphics.Canvas</a>) (/reference/android /view/View.html#onDraw(android.graphics.Canvas)), however it may be called any time before the first onDraw -- including before or after <a href="mailto:onMeasure(int, int">onMeasure(int, int)</a>) (/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 <a href="measure(int, int)">measure(int, int)</a>

<u>(/reference/android/view/View.html#measure(int, int))</u> and should be overriden 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 <a href="mailto:onMeasure(int, int">onMeasure(int, int)</a>) (/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

<u>View.MeasureSpec</u>.

heightMeasureSpec vertical space requirements as imposed by the

parent. The requirements are encoded with

View.MeasureSpec.

protected boolean **setFrame** (int I, 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**

- 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** (<u>Drawable</u> dr)

Added in <u>API level 1</u>

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.

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