

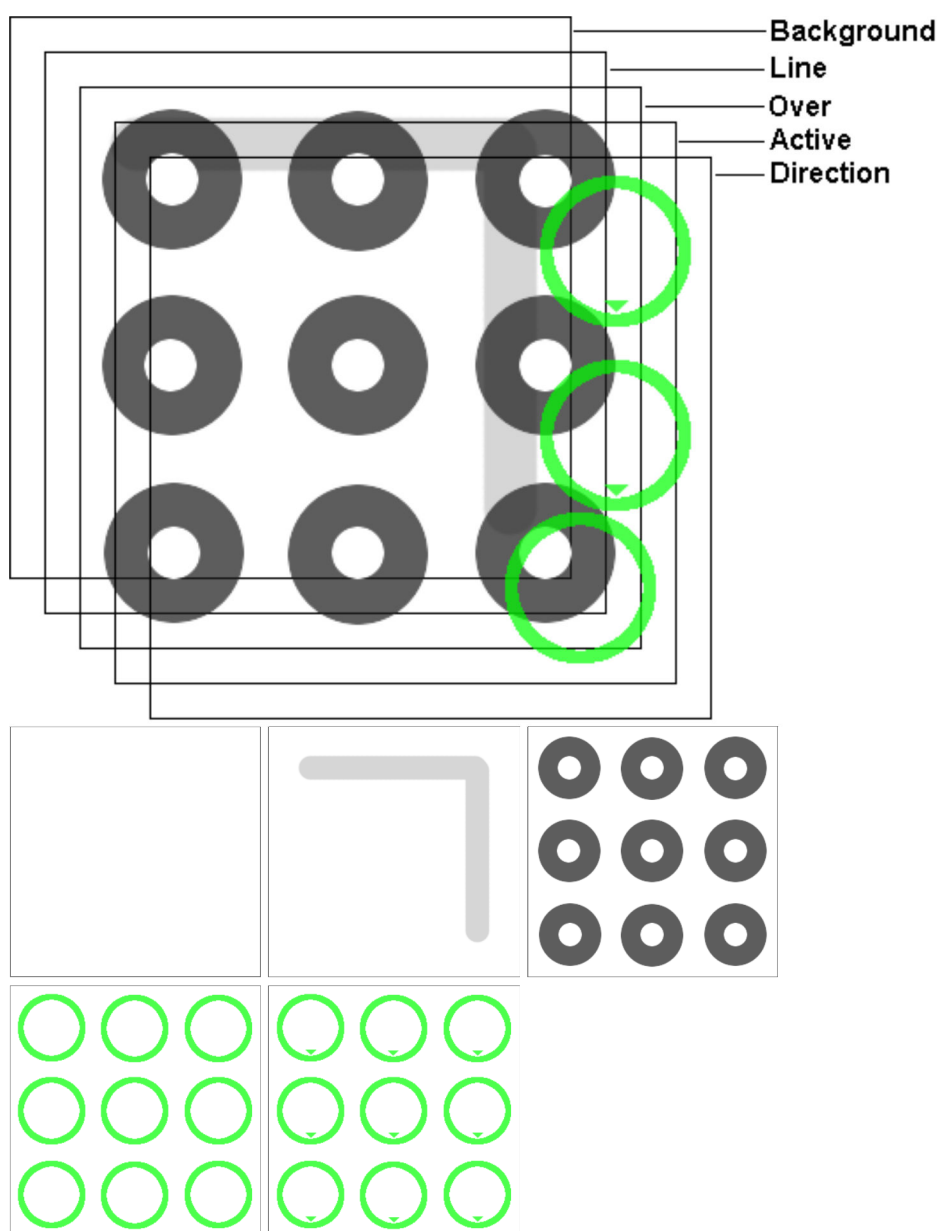
## Introduction

In AndroidLock XT 2.0 it is possible to create custom themes to match your background or Winterboard theme.

Creating new themes is simple and does not require any programming skills, the only needed tools are an image editor and a text editor.

## Theme layout

The first concept to understand about the themes is that the elements are positioned on different layers, as follows:



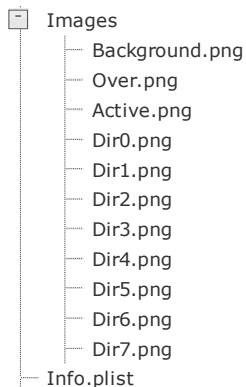
The first layer is the Background layer, it is provided by the theme and in this example it's empty. The second layer is the Line layer. It is drawn internally, the theme doesn't need to provide images for it. The appearance can be customized by setting the line properties (See theme properties). The third layer is the Over layer, it is provided by the theme and is placed over the line. The fourth layer is the Active layer, it is provided by the theme and is shown depending on the user

touch.

The fifth layer is the Direction layer, it is provided by the theme and is the topmost. It is shown depending on the user touch.

## The theme package

A theme is packaged in a directory with a fixed structure:



Here is the description of each file:

File	Description	Required
Info.plist	Property list containing the theme title and other settings	Yes
Background.png	Image of the Background layer	No
Over.png	Image of the Over layer	No
Active.png	Image of the Active layer (drawn partially)	No
DirX.png	Images of the Direction layer (drawn partially)	No

The images filenames are intended for normal pixel density devices.

Every theme should include images optimized for iPhone 4 or other future devices with double pixel density, such images have the same name of the standard resolution with a "@2x" suffix before the extension.

ie. Background.png and Background@2x.png

If AndroidLock XT can't find the correct image for the device it will try to use the other format and will scale it automatically.

## The images

### Full images

The **Background** and **Over** images are shown statically and in full size. Their visibility is not affected by the pattern being drawn.

### Splitted images

The Active and DirX images are not shown enterily. Those images are divided in 9 pieces, one for each area that can be touched to compose the pattern.

In the **Active** image only the piece corresponding to the area being touched is shown. If no point is being touched, no parts of the image appears. This image should be used to highlight the current dot.

The **DirX** images provide the overlays to indicate the direction of successive dots in a pattern. If this feature is being used, all of the 8 files must be present, otherwise they will have no effect. Every image contains the same direction overlay for all the dots, and an image exists for each of the possible directions:

Dir0.png	North
Dir1.png	North-East
Dir2.png	East
Dir3.png	South-East
Dir4.png	South
Dir5.png	South-West

Dir6.png	West
Dir7.png	North-West

To create new images, use the *doc/reference.png* as a reference for the centers and bounds of the touchable areas.

## The property list

The Info.plist file contains the configuration for the theme. This file must be edited with a text editor and NOT with a word processor.

Section	Name	Description
	Title	The theme's title. This is the text that is shown in the theme picker under Settings.
LineStyle	Color	The line color when the pattern is being drawn. See Color Notes.
LineStyle	ColorUnlocked	The line color when the pattern is correct and the device plays the unlock sound. See Color Notes.
LineStyle	ColorWrong	The line color when the pattern is wrong. See Color Notes.
LineStyle	Width	The line width (in points).
LineStyle	Join	The line join style. Possible values are <i>Miter</i> , <i>Bevel</i> and <i>Round</i> . See <a href="#">Quartz 2D Programming Guide</a> to see what they mean.
LineStyle	Cap	The line cap style. Possible values are <i>Butt</i> , <i>Square</i> and <i>Round</i> . See <a href="#">Quartz 2D Programming Guide</a> to see what they mean.
TextStyle	Color	The color of the text (ie. when the max attempts limit is reached). See Color Notes.
Other	AllowDiagonalSegments	Whenever to allow diagonal segments (1) or not (0).
Other	ApplyDirectionOverlayInActiveDot	This parameter specifies if the Direction images should be applied to all the pattern nodes except the last (0), like in the original Android lock, or only in the last node (1).
Other	KeepShowingLastDotAsActive	Whenever to keep showing the last dot of the pattern as still active when finished to draw the pattern (1) or not (0).

### Colors

Colors must be entered in hexadecimal format.

Almost every image editor will show you the hexadecimal value of a color in the color picker.

The value must be entered without the # prefix. In this format 6 digits must be specified.

ie.

**RED** is FF0000

**BLUE** is 0000FF

It is also possible to define a third component, the Alpha, that specifies how much opaque the color is.

In this case a total of 8 digits must be specified.

ie.

**RED 50%** is FF00007F

**BLUE 20%** is 0000FF33

## Packaging the theme

To create redistributable theme packages you basically have to create a Debian package which installs your theme directory in */var/mobile/Library/AndroidLock/Themes*.

## Examples

AndroidLock XT 2.0 includes some Themes which use different configurations and can be used as reference.