Wallpaper image crashing Android phones
1 June 2020, by Peter Grad

A noted tech information leaker Ice Universe this weekend posted a warning about an image that if set as wallpaper will soft-brick Samsung and Google Pixel phones. Soft-bricking triggers Android devices to continuously loop an action or freeze the unit. This generally requires a factory reset.

The image, a seemingly innocuous sunset (or dawn) sky above placid waters, may be viewed without harm. But if loaded as wallpaper, the phone will crash.

The fault does not appear to have been maliciously created. Rather, according to developers following Ice Universe's Twitter thread, the problem lies in the way color space is handled by the Android OS.

The image was created using the RGB color space to display image hues, while Android 10 uses the sRGB color space protocol, according to 9to5Google contributor Dylan Roussel. When the Android phone cannot properly convert the Adobe RGB image, it crashes.

Attempts to fix the problem by restarting the phone in Safe Mode and holding the volume button on start-up did not succeed.

The problem was replicated on devices by Google, Samsung, OnePlus and Nokia running Android 10.

WARNING!!
Never set this picture as wallpaper, especially for Samsung mobile phone users!
It will cause your phone to crash!
Don't try it!
If someone sends you this picture, please ignore it.

A picture may be worth a thousand words, but apparently one image is worth potentially thousands of headaches for Android users recently.

The image may be installed without problem on a Pixel 4 XL running Android 11, which appears to properly convert Adobe RGB colors.

The sRGB (standard Red Green Blue) format was designed in 1996 to codify a spectrum of colors that would be viewed the same on monitors, printers and the Internet. Two years later, Photoshop was born and, soon after, its own RGB specifications were created.

The sRGB format is the standard color profile for most software. But Adobe RGB is often viewed as generating colors that create more polished prints. Although both formats accommodate a large portion (but not the entirety) of the color spectrum, with both handling the same number of colors—16.7 million—Adobe allows the display of brighter and dimmer versions of each individual color than...
sRGB does.

Ice Universe said Samsung was informed of the bug last month and is working on an update.

The warning posted by Ice Universe ironically prompted some in the Android community to go out of their way to install the image to see what happens, and wound up suffering crashes. One flabbergasted Twitter user commented to Ice Universe, "You asked people to not set this as their wallpaper with a warning, and all of a sudden everybody is trying it. What a stupid world [we] are living in."

The bug is reminiscent of a similar situation four years ago. An MP4 video file played on iPhones running iOS 10.1 caused the devices to crash 10 seconds after playing. Recovery was possible only after a hard reset.

Another comparable problem arose recently when it was discovered that a text message containing the emoji for the Italian flag and a Pakistani Sindhi character caused Apple iPhones running iOS 13 to crash. Also affected were Macs, Apple Watch and iPads.

According to Ice Universe, Samsung contacted him saying they are resolving the issue and urging everyone to be patient. "Just wait for the subsequent firmware update and do not take the risk," he said Samsung tweeted.

More information:
twitter.com/UniverseIce/status/1266943909499826176

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