What's the Difference Between 2FA and MFA?

ALL 2FA ARE MFA, BUT NOT ALL MFA ARE 2FA!

You know how the Star Wars versus Star Trek debate is like “comparing apples and oranges”? Well, the same concept applies when trying to compare Two-Factor Authentication (2FA) with Multi-Factor Authentication (MFA).

Yes, there are some similarities, but there are some fundamental differences as well — and it’s the distinctions that tell the story. You see, all 2FA are MFA, but not all MFA are 2FA! Let’s take a closer look:

**What is Two-Factor Authentication (2FA)?**
2FA combines something you know, like a password, with something you have, such as a mobile phone. 2FA obliges you use both elements to authenticate your identity.

**What is multi-factor authentication (MFA)?**
MFA takes this one step further by combining something you know, something you have, and something that is unique to your physical being — like your retina or fingerprint. You need all of them to authenticate your identity.
The Confusing Part

To make things more confusing, technically the ‘multi’ in MFA refers to more than one factor. So in this sense, MFA could have two factors, three factors, four factors...or more.

The simplest way to wrap your head around this is to remember that 2FA will always and only have two factors, whereas MFA can have two or more factors (often three as in the example above).

What’s Ahead

Obviously, MFA — provided that it relies on 3 or more factors — is a more robust authentication model than 2FA. But 2FA is easier for end users and less costly (i.e. end users/businesses don’t need to purchase retina scanners, etc.).

However, the recent revelation that all 3 billion Yahoo email accounts were hacked in 2013 will probably speed up the transition from 2FA to MFA.

What Do You Think?

What do you think the future holds for 2FA and MFA? One is more practical, while the other is more secure. Where is the right balance — especially since, as you know, the harder or more time consuming it is for end users to do something, the less likely they are to do it (which of course drives you crazy, but that’s life in the IT world!). Please share your insights and advice below.