## VIP Webinar - Arabic Script

Fahd A. Batayneh

## Arabic Script Issues

- Variants
- Diacritics
- Tatweel (Kashidah)
- Numbering


## Variants

- Arabic script variants are characters that almost look alike and/or are almost pronounced alike

- Variants in some Arabic script languages are not considered so in others (e.g. ${ }^{\text {I }}$ )
- Special cases could arise such as the Alf $3 / 4$ hamza of the Jawi language (not in the Unicode table yet)
- Various scenarios implemented amongst different ccTLDs to deal with variants (bundling vs. dropping)


## ... continue (Variants)

- A key recommendation for handling Arabic script variants is to minimize them as much as possible
- Variants within the same Arabic script language are simpler to deal with than with variants amongst different language sets under the same script



## Diacritics

- While not used in writing extensively amongst Arabic script users, they are very essential to the enrichment of the script
- Sometimes can change the meaning of a word if not used كُرة Football (Soccer) ك
- Prohibited at the registration level of IDNs
- IETF is working extensively on this matter since many scripts - including the Latin - use it


## Tatweel (Kashidah)

- Does not change the meaning of the word, but is used as means to enrich the writing the of a word
ســـنغافــورة
سنغافورة
- Agreed upon within the Arabic script community to drop it overall at the registry level


## Numbering Systems

- There exists three main numbering systems for usage with Arabic script IDNs:
।. Western Arabic $\rightarrow 0, \mathrm{I}, 2,3,4,5,6,7,8,9$

2. Eastern Arabic $\rightarrow \cdot, \perp, r, r, \varepsilon, 0,7, \vee, \wedge, q$


- Agreed upon within the Arabic script community to use the Western Arabic numbering system. The other two are strictly prohibited at the registry level
- Jawi community special case is to use the Eastern Arabic $r$ in words that repeat themselves twice
$\rightarrow$ Butterflies

