# Add text and emoji standardized variation sequences for 96 symbols

Roozbeh Pournader and Doug Felt, Google Inc. August 23, 2016

### **Proposal**

The authors propose that both text and emoji variation sequences be defined for the characters listed at the end of this proposal. This is a total of 96 characters, resulting in 192 new sequences.

Apart from the three characters mentioned in the Background section, these are all the characters with Emoji\_Presentation=Yes (and no existing standardized variation sequences) that were unified with Webdings and Wingdings symbols. See section 7 in L2/12-368 for a draft mapping between Webdings/Wingdings symbols and Unicode characters.

### **Background**

At UTC meeting #145, the UTC document L2/15-301, "A proposal for 278 standardized variation sequences for emoji", was discussed and approved. The document added variation sequences for 139 characters that were dual-use as both emoji and text.

That document listed characters that had a default display of text according to UTR #51. But there are also dual-use characters that have a default display of emoji, which that document missed. These dual-source characters exist in both the original Japanese carriers emoji sets (hence the default display of emoji) and the Wingdings/Webdings fonts (hence the text use).

Additionally, six sequences (for three characters) are proposed based on draft 1 of UTR #51 version 4.0, since they are used in emoji zwj sequences.

Accepting this proposal would vastly improve both document stability for existing documents partially encoded in Webdings/Wingdings symbol character set and data interchangeability between platforms:

1. Automatic Systems that convert such legacy documents (especially PowerPoint presentations) to Unicode would be able to assume with a much higher level of confidence that the original intent of the authors of the document will be kept. For example, an existing document that includes an hourglass character (U+23F3) as 0x36 with an explicit Webdings font, when converted to Unicode,

could be converted to proper Unicode by mapping all cases of a 0x36 character displayed in Webdings font to <U+23F3 U+FE0E>, a guaranteed text-style representation of an hourglass. Such text-style presentation would then be able to be carried in plain text operations without suddenly becoming a colorful hourglass.

2. More platforms supporting these variation sequences would lead to clearer specification of intent by the sender and a higher chance the receiver sees something close to what the sender intended.

An idea proposed by Mark Davis, that the authors considered but do not necessarily recommend, would be adding variation sequences for all characters that have the emoji property (minus skin tone modifiers and regional indicators). Such addition of the sequences could be handled editorially in different ways, one being the removal of all explicitly-listed emoji and text variation sequences from StandardizedVariants.txt and instead defining that all such possible sequences are valid (for other alternatives, see L2/16-315, under "Variation Selectors"). We think that the addition of variation sequences for all emoji characters is a valid idea, but it's hard for us to imagine people wanting to differentiate some of the "emoji-only" characters in text mode. For example, it may not be desirable to define variation sequences for both U+1F34E RED APPLE and U+1F34F GREEN APPLE.

Another question would be where the data would live in the future. The data could continue to live in StandardizedVariants.txt file or be separated and become a part of emoji data. The authors do not have a strong opinion on the choice, but understand that keeping the data in StandardizedVariants.txt has the benefit of reducing changes to existing tools, while moving the data to a separate data file maintained with UTR #51 has the benefit of being able to update the data more frequently.

## **List of proposed variation sequences**

The full list of proposed additions to StandardizedVariants.txt follows:

```
23E9 FE0E; text style; # BLACK RIGHT-POINTING DOUBLE TRIANGLE
23E9 FE0F; emoji style; # BLACK RIGHT-POINTING DOUBLE TRIANGLE
23EA FE0E; text style; # BLACK LEFT-POINTING DOUBLE TRIANGLE
23EA FE0F; emoji style; # BLACK LEFT-POINTING DOUBLE TRIANGLE
23F3 FE0E; text style; # HOURGLASS WITH FLOWING SAND
23F3 FE0F; emoji style; # HOURGLASS WITH FLOWING SAND
2640 FE0E; text style; # FEMALE SIGN
2640 FE0F; emoji style; # FEMALE SIGN
2642 FE0E; text style; # MALE SIGN
2695 FE0E; text style; # STAFF OF AESCULAPIUS
2695 FE0F; emoji style; # STAFF OF AESCULAPIUS
```

```
2753 FE0E; text style; # BLACK QUESTION MARK ORNAMENT
2753 FE0F; emoji style; # BLACK QUESTION MARK ORNAMENT
1F30D FE0E; text style; # EARTH GLOBE EUROPE-AFRICA
1F30D FE0F; emoji style; # EARTH GLOBE EUROPE-AFRICA
1F30E FE0E; text style; # EARTH GLOBE AMERICAS
1F30E FE0F; emoji style; # EARTH GLOBE AMERICAS
1F30F FE0E; text style; # EARTH GLOBE ASIA-AUSTRALIA
1F30F FE0F; emoji style; # EARTH GLOBE ASIA-AUSTRALIA
1F315 FE0E; text style; # FULL MOON SYMBOL
1F315 FE0F; emoji style; # FULL MOON SYMBOL
1F31C FE0E; text style; # LAST QUARTER MOON WITH FACE
1F31C FE0F; emoji style; # LAST QUARTER MOON WITH FACE
1F378 FE0E; text style; # COCKTAIL GLASS
1F378 FE0F; emoji style; # COCKTAIL GLASS
1F393 FE0E; text style; # GRADUATION CAP
1F393 FE0F; emoji style; # GRADUATION CAP
1F3A7 FE0E; text style; # HEADPHONE
1F3A7 FE0F; emoji style; # HEADPHONE
1F3AC FE0E; text style; # CLAPPER BOARD
1F3AC FE0F; emoji style; # CLAPPER BOARD
1F3AD FE0E; text style; # PERFORMING ARTS
1F3AD FE0F; emoji style; # PERFORMING ARTS
1F3AE FE0E; text style; # VIDEO GAME
1F3AE FE0F; emoji style; # VIDEO GAME
1F3C2 FE0E; text style; # SNOWBOARDER
1F3C2 FE0F; emoji style; # SNOWBOARDER
1F3C4 FE0E; text style; # SURFER
1F3C4 FE0F; emoji style; # SURFER
1F3C6 FE0E; text style; # TROPHY
1F3C6 FE0F; emoji style; # TROPHY
1F3CA FE0E; text style; # SWIMMER
1F3CA FE0F; emoji style; # SWIMMER
1F3E0 FE0E; text style; # HOUSE BUILDING
1F3E0 FE0F; emoji style; # HOUSE BUILDING
1F3ED FE0E; text style; # FACTORY
1F3ED FE0F; emoji style; # FACTORY
1F408 FE0E; text style; # CAT
1F408 FE0F; emoji style; # CAT
1F415 FE0E; text style; # DOG
1F415 FE0F; emoji style; # DOG
1F41F FE0E; text style; # FISH
1F41F FE0F; emoji style; # FISH
1F426 FE0E; text style; # BIRD
```

```
1F426 FE0F; emoji style; # BIRD
1F442 FE0E; text style; # EAR
1F442 FE0F; emoji style; # EAR
1F446 FE0E; text style; # WHITE UP POINTING BACKHAND INDEX
1F446 FE0F; emoji style; # WHITE UP POINTING BACKHAND INDEX
1F447 FE0E; text style; # WHITE DOWN POINTING BACKHAND INDEX
1F447 FE0F; emoji style; # WHITE DOWN POINTING BACKHAND INDEX
1F448 FE0E; text style; # WHITE LEFT POINTING BACKHAND INDEX
1F448 FE0F; emoji style; # WHITE LEFT POINTING BACKHAND INDEX
1F449 FE0E; text style; # WHITE RIGHT POINTING BACKHAND INDEX
1F449 FE0F; emoji style; # WHITE RIGHT POINTING BACKHAND INDEX
1F44D FE0E; text style; # THUMBS UP SIGN
1F44D FE0F; emoji style; # THUMBS UP SIGN
1F44E FE0E; text style; # THUMBS DOWN SIGN
1F44E FE0F; emoji style; # THUMBS DOWN SIGN
1F453 FE0E; text style; # EYEGLASSES
1F453 FE0F; emoji style; # EYEGLASSES
1F46A FE0E; text style; # FAMILY
1F46A FE0F; emoji style; # FAMILY
1F47D FE0E; text style; # EXTRATERRESTRIAL ALIEN
1F47D FE0F; emoji style; # EXTRATERRESTRIAL ALIEN
1F4A3 FE0E; text style; # BOMB
1F4A3 FE0F; emoji style; # BOMB
1F4B0 FE0E; text style; # MONEY BAG
1F4B0 FE0F; emoji style; # MONEY BAG
1F4B3 FE0E; text style; # CREDIT CARD
1F4B3 FE0F; emoji style; # CREDIT CARD
1F4BB FE0E; text style; # PERSONAL COMPUTER
1F4BB FE0F; emoji style; # PERSONAL COMPUTER
1F4BF FE0E; text style; # OPTICAL DISC
1F4BF FE0F; emoji style; # OPTICAL DISC
1F4CB FE0E; text style; # CLIPBOARD
1F4CB FE0F; emoji style; # CLIPBOARD
1F4DA FE0E; text style; # BOOKS
1F4DA FE0F; emoji style; # BOOKS
1F4DF FE0E; text style; # PAGER
1F4DF FE0F; emoji style; # PAGER
1F4E4 FE0E; text style; # OUTBOX TRAY
1F4E4 FE0F; emoji style; # OUTBOX TRAY
1F4E5 FE0E; text style; # INBOX TRAY
1F4E5 FE0F; emoji style; # INBOX TRAY
1F4E6 FE0E; text style; # PACKAGE
1F4E6 FE0F; emoji style; # PACKAGE
```

```
1F4EA FE0E; text style; # CLOSED MAILBOX WITH LOWERED FLAG
1F4EA FE0F; emoji style; # CLOSED MAILBOX WITH LOWERED FLAG
1F4EB FE0E; text style; # CLOSED MAILBOX WITH RAISED FLAG
1F4EB FE0F; emoji style; # CLOSED MAILBOX WITH RAISED FLAG
1F4EC FE0E; text style; # OPEN MAILBOX WITH RAISED FLAG
1F4EC FE0F; emoji style; # OPEN MAILBOX WITH RAISED FLAG
1F4ED FE0E; text style; # OPEN MAILBOX WITH LOWERED FLAG
1F4ED FE0F; emoji style; # OPEN MAILBOX WITH LOWERED FLAG
1F4F7 FE0E; text style; # CAMERA
1F4F7 FE0F; emoji style; # CAMERA
1F4F9 FE0E; text style; # VIDEO CAMERA
1F4F9 FE0F; emoji style; # VIDEO CAMERA
1F4FA FE0E; text style; # TELEVISION
1F4FA FE0F; emoji style; # TELEVISION
1F4FB FE0E; text style; # RADIO
1F4FB FE0F; emoji style; # RADIO
1F508 FE0E; text style; # SPEAKER
1F508 FE0F; emoji style; # SPEAKER
1F50D FE0E; text style; # LEFT-POINTING MAGNIFYING GLASS
1F50D FE0F; emoji style; # LEFT-POINTING MAGNIFYING GLASS
1F512 FE0E; text style; # LOCK
1F512 FE0F; emoji style; # LOCK
1F513 FE0E; text style; # OPEN LOCK
1F513 FE0F; emoji style; # OPEN LOCK
1F550 FE0E; text style; # CLOCK FACE ONE OCLOCK
1F550 FE0F; emoji style; # CLOCK FACE ONE OCLOCK
1F551 FE0E; text style; # CLOCK FACE TWO OCLOCK
1F551 FE0F; emoji style; # CLOCK FACE TWO OCLOCK
1F552 FE0E; text style; # CLOCK FACE THREE OCLOCK
1F552 FE0F; emoji style; # CLOCK FACE THREE OCLOCK
1F553 FE0E; text style; # CLOCK FACE FOUR OCLOCK
1F553 FE0F; emoji style; # CLOCK FACE FOUR OCLOCK
1F554 FE0E; text style; # CLOCK FACE FIVE OCLOCK
1F554 FE0F; emoji style; # CLOCK FACE FIVE OCLOCK
1F555 FE0E; text style; # CLOCK FACE SIX OCLOCK
1F555 FE0F; emoji style; # CLOCK FACE SIX OCLOCK
1F556 FE0E; text style; # CLOCK FACE SEVEN OCLOCK
1F556 FE0F; emoji style; # CLOCK FACE SEVEN OCLOCK
1F557 FE0E; text style; # CLOCK FACE EIGHT OCLOCK
1F557 FE0F; emoji style; # CLOCK FACE EIGHT OCLOCK
1F558 FE0E; text style; # CLOCK FACE NINE OCLOCK
1F558 FE0F; emoji style; # CLOCK FACE NINE OCLOCK
1F559 FE0E; text style; # CLOCK FACE TEN OCLOCK
```

```
1F559 FE0F; emoji style; # CLOCK FACE TEN OCLOCK
1F55A FE0E; text style; # CLOCK FACE ELEVEN OCLOCK
1F55A FE0F; emoji style; # CLOCK FACE ELEVEN OCLOCK
1F55B FE0E; text style; # CLOCK FACE TWELVE OCLOCK
1F55B FE0F; emoji style; # CLOCK FACE TWELVE OCLOCK
1F55C FE0E; text style; # CLOCK FACE ONE-THIRTY
1F55C FE0F; emoji style; # CLOCK FACE ONE-THIRTY
1F55D FE0E; text style; # CLOCK FACE TWO-THIRTY
1F55D FE0F; emoji style; # CLOCK FACE TWO-THIRTY
1F55E FE0E; text style; # CLOCK FACE THREE-THIRTY
1F55E FE0F; emoji style; # CLOCK FACE THREE-THIRTY
1F55F FE0E; text style; # CLOCK FACE FOUR-THIRTY
1F55F FE0F; emoji style; # CLOCK FACE FOUR-THIRTY
1F560 FE0E; text style; # CLOCK FACE FIVE-THIRTY
1F560 FE0F; emoji style; # CLOCK FACE FIVE-THIRTY
1F561 FE0E; text style; # CLOCK FACE SIX-THIRTY
1F561 FE0F; emoji style; # CLOCK FACE SIX-THIRTY
1F562 FE0E; text style; # CLOCK FACE SEVEN-THIRTY
1F562 FE0F; emoji style; # CLOCK FACE SEVEN-THIRTY
1F563 FE0E; text style; # CLOCK FACE EIGHT-THIRTY
1F563 FE0F; emoji style; # CLOCK FACE EIGHT-THIRTY
1F564 FE0E; text style; # CLOCK FACE NINE-THIRTY
1F564 FE0F; emoji style; # CLOCK FACE NINE-THIRTY
1F565 FE0E; text style; # CLOCK FACE TEN-THIRTY
1F565 FE0F; emoji style; # CLOCK FACE TEN-THIRTY
1F566 FE0E; text style; # CLOCK FACE ELEVEN-THIRTY
1F566 FE0F; emoji style; # CLOCK FACE ELEVEN-THIRTY
1F567 FE0E; text style; # CLOCK FACE TWELVE-THIRTY
1F567 FE0F; emoji style; # CLOCK FACE TWELVE-THIRTY
1F610 FE0E; text style; # NEUTRAL FACE
1F610 FE0F; emoji style; # NEUTRAL FACE
1F687 FE0E; text style; # METRO
1F687 FE0F; emoji style; # METRO
1F68D FE0E; text style; # ONCOMING BUS
1F68D FE0F; emoji style; # ONCOMING BUS
1F691 FE0E; text style; # AMBULANCE
1F691 FE0F; emoji style; # AMBULANCE
1F694 FE0E; text style; # ONCOMING POLICE CAR
1F694 FE0F; emoji style; # ONCOMING POLICE CAR
1F698 FE0E; text style; # ONCOMING AUTOMOBILE
1F698 FE0F; emoji style; # ONCOMING AUTOMOBILE
1F6AD FE0E; text style; # NO SMOKING SYMBOL
1F6AD FE0F; emoji style; # NO SMOKING SYMBOL
```

```
1F6B2 FE0E; text style; # BICYCLE
1F6B2 FE0F; emoji style; # BICYCLE
1F6B9 FE0E; text style; # MENS SYMBOL
1F6B9 FE0F; emoji style; # MENS SYMBOL
1F6BA FE0E; text style; # WOMENS SYMBOL
1F6BA FE0F; emoji style; # WOMENS SYMBOL
1F6BC FE0E; text style; # BABY SYMBOL
1F6BC FE0F; emoji style; # BABY SYMBOL
```

#### References

- 1. Roozbeh Pournader. 2015. "A proposal for 278 standardized variation sequences for emoji." UTC Document Register L2/15-301, The Unicode Consortium. http://www.unicode.org/L2/L2015/15301-emoji-sequences.pdf
- 2. Mark Davis and Peter Edberg. 2016. "Proposed Update Unicode® Technical Report #51, Unicode Emoji." Version 4.0 (draft 1), The Unicode Consortium. <a href="http://www.unicode.org/reports/tr51/tr51-8.html">http://www.unicode.org/reports/tr51/tr51-8.html</a>. Accessed on August 23, 2016.
- 3. Michel Suignard. 2012. "Status of encoding of Wingdings and Webdings Symbols." UTC Document Register L2/12-368, The Unicode Consortium. http://www.unicode.org/L2/L2012/12368-n4384.pdf
- 4. Mark Davis and Peter Edberg, "Handling interaction between UCD and emoji properties." UTC Document Register L2/16-315, The Unicode Consortium. <a href="http://www.unicode.org/L2/L2016/16315-handling-seg-emoji.pdf">http://www.unicode.org/L2/L2016/16315-handling-seg-emoji.pdf</a>