

The issues with Adobe-Japan-1 in Glyphs 3

- Tested in Glyphs 3.0.4 (3098) [Test file](#)
(<https://app.box.com/s/c3ax1amm6b61bmb72s3ydjwp2ogrie6n>).
- The “Resources” folder in discussion is this one:
Glyphs 3.app/Contents/Frameworks/GlyphsCore.framework/Versions/A/Resources

1. GSUB table fault

If there is no OT features in Font Info (expected in AJ1*), Glyphs needs to use the GSUB file present in Resources.

gsubAdobe-Japan1-3.txt
gsubAdobe-Japan1-3+.txt
gsubAdobe-Japan1-4.txt
gsubAdobe-Japan1-5.txt
gsubAdobe-Japan1-6.txt

At present, Glyphs ignores them and the resulting OTF has no features.

* fail-safe idea: if the AJ1 ROS is set, it may be better for Glyphs to not generate any features at all in Font Info. If the user wants a custom GSUB, they can embed their own in the Resources file, or use other means (the kind of people who want custom is usually a foundry with their own engineer).

🔗 GSUB file inconsistency

CMap file present in the Resources folder is based on the JIS2004 standard, and the GSUB file needs to follow that too.

At present, the GSUB file in the Resources folder contains the GSUB file for the older JIS1990 standard. It needs to be replaced by the JIS2004 version.

Fault in the Adobe-Japan1-3 GSUB

Glyphs 3 lets you choose *Adobe-Japan1-3* and *Adobe-Japan1-3+*. The difference is JIS1990 or 2004 (+ seemingly the latter). However, the CMap file in the Resource folder is for JIS2004. Only one will suffice, and JIS1990 can be thrown away.

How to distinguish JIS1990 and JIS2004 GSUBs

- If the aalt feature lists "jp04" feature, the GSUB is for the old one, JIS1990.
- If the aalt feature lists "jp09" feature, the GSUB is for the new one, JIS2004.

2. cmap table fault

Glyphs needs to use the CMap file present in the Resources folder:

cmapAdobe-Japan1.txt

At present, Glyphs 3 ignores the CMap and only uses the app's default encoding for cmap table.

AJ1 glyph name differences in Glyphs 2 and 3

Between Glyphs v2.6.7 and v3.0.4, the following glyph names have changed and need to be reflected in the CMap file.

v2.6.7-1357	v3.0.4-3098
circumflex	circumflexcomb
macron	macroncomb
ring	ringcomb
cedilla	cedillacomb
dieresis.full	dieresis
lu-cy	Yu-cy
la-cy	Ya-cy
iu-cy	yu-cy
ia-cy	ya-cy
meizieraSquare	meiziEra
taisyoueraSquare	taisyouEra
syouwaeraSquare	syouwaEra
heiseieraSquare	heiseiEra
meizieraSquare.vert	meiziEra.vert
taisyoueraSquare.vert	taisyouEra.vert
syouwaeraSquare.vert	syouwaEra.vert
heiseieraSquare.vert	heiseiEra.vert
quotedblsharpright	quotedoubleprime
cid12233	whiteDiamondInSquare
cid12244	diamondTarget
mediumCircle	mediumWhiteCircle
beta.RomanSupp	beta-latin
chi.RomanSupp	chi-latin
reiwaeraSquare	reiwaEra
reiwaeraSquare.vert	reiwaEra.vert

3. Should Glyphs prescribe width and spacing setting?

There are glyphs that should be of certain width (for example: 0, 333, 500, 1000), and some double-coded diacritics, and the most ideal behaviour is for Glyphs to make sure of that when AJ1 is selected. Given that some foundries draw in higher UPM, the values shouldn't be baked based on 1000.

This wasn't the case in G2 as I understand, and not super-critical. It's probably not hard to solve in other ways, like template or script.