|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NM |  | 6.4.4.3 | apkn Function | ed | Add more description after text “*Function:* Applies kerning adjustments to glyphs that have fixed advance widths by default but have been adjusted to proportional widths by application of the 'palt' feature.”This addition clarifies the relationship of ‘kern’, ‘palt’ and ‘apkn’ | *Function:* Applies kerning adjustments to glyphs that have fixed advance widths by default but have been adjusted to proportional widths by application of the 'palt' feature. For example, Japanese fonts typically contain proportional Latin glyphs (that are kerned by default using the ‘kern’ feature), and monospaced Japanese and other full-width glyphs (that are not kerned by default). The monospaced glyphs can be adjusted to proportional widths, and then some of those glyph pairs can be kerned further, using the ‘palt’ and ‘apkn’ features. In this way the ‘kern’ feature can be reserved for use with the default proportional glyphs, and the ‘apkn’ feature can be reserved for the default monospaced glyphs, separating them as “kerned by default” and “only set proportionally and kerned optionally”. |  |
| NM |  | 6.4.4.3 | apknRecommended Implementation | ed | Add clarity | *Recommended implementation:* The font kerns Kanji, Kana, Latin, punctuation, or other glyphs that have fixed-width metrics by default if those glyphs are to be kerned when set proportionally, or are adjusted to proportional widths by the 'palt' feature. Any glyphs kerned by the ‘apkn’ feature must not also be kerned by the ‘kern’ feature—the two kerning features are mutually exclusive. |  |
| NM |  | 6.4.4.3 | apknRecommended Implementation | ed | Add clarity, delete “strongly recommended” in favor of “required” | For glyphs that have fixed widths by default but can be set proportionally as an option, or that can have metrics adjusted by the 'palt' feature, it is required that those glyphs not be kerned with other glyphs using the 'kern' feature; these should only be kerned by application of this feature. |  |
| NM |  | 6.4.4.3 | apknUI suggestion | ed | Add clarity | *UI suggestion:* This feature should be off by default. If the font used for a text run implements the 'palt' feature, the ‘palt’ feature should also be applied. If 'palt' has been activated for a run, then this feature may be automatically activated, but the UI should also provide a way for a user optionally to deactivate the feature while 'palt' is still activated. Note that in some fonts, some of the normally monospaced glyphs do not change width when set proportionally. These glyphs will not be affected by the ‘palt’ feature, but should be kerned if applicable by the ‘apkn’ feature.To support kerning of all glyphs in all fonts, applications should apply ‘kern’, ‘palt’ and ‘apkn’ to the runs. To support only kerning of default proportional glyphs, in fonts that implement the ‘apkn’ feature, applications should apply ‘kern’ to the runs. This is simpler than what applications must do to support this with fonts that do not support ‘apkn’— they would apply ‘palt’ together with ‘kern’ only on glyphs that are normally set monospaced (such as those whose characters are normally upright in vertical text). |  |
| NM |  | 6.4.4.3 | apknFeature Interaction | ed | Add clarity | *Feature interaction:* Should only be implemented in fonts that also implement the 'palt' feature, which this feature is intended to complement. This feature should only be activated on a text run if 'palt' has been activated, but activation when that feature has been applied is optional and should be under user control. If activated on a run and later the 'palt' feature is deactivated for that run, then this feature should also be deactivated, as the kerning adjustments applied by this feature would not be appropriate for glyphs with fixed-width metrics (excepting the cases mentioned above where the proportional and fixed-widths are the same).In the recommended implementation for this feature, it acts only on characters that have fixed-width glyphs by default but that acquire proportional widths by application of the 'palt' feature on the run. As a result, it can be deactivated on any text run that does not have 'palt' activated without any need to scan lookup tables to determine which glyphs do or do not require deactivation. |  |
| NM |  | 6.4.4.3 | kern | ed | Add clarity to exception to default for CJK section | An exception to default activation can apply for CJK text. If a text run is formatted with a font that implements the 'palt' feature, this feature should not be activated by default to glyphs covered by 'palt' lookups unless the 'palt' feature has been activated. (Glyphs covered by 'palt' lookups will have fixed-width metrics by default, and the kerning adjustments applied by this feature would be inappropriate for glyphs with fixed-width metrics.) An application can scan the coverage tables of 'palt' lookups to determine glyphs to be excluded from default activation, but this list will not be exhaustive—some full-width glyphs do not change width when set proportionally, or being included in kerning pairs with other glyphs in a proportional run. The font can include such full-width glyphs in the ‘apkn’ feature without also including them in ‘palt’. Alternately, an application can use the East Asian Width property, defined in Unicode Standard Annex #11, East Asian Width [41], to determine characters likely to have fixed-width glyphs by default. Specifically, Unicode characters with East\_Asian\_Width property values Wide or Fullwidth may be assumed to have default fixed-width metrics in fonts that implement 'palt', and therefore excluded from default activation of the 'kern' feature. |  |
|  |  |  |  |  |  |  |  |