Optimization Techniques in Unicode Tamil Font Development

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Abstract

The Unicode encoding has removed the major constraints of the 8 bit encoding schemes and offers plenty of scope for innovation from the Font Developer's angle. At the same time the font developers have to face the challenges of the operating systems in implementing various language related rules. Though the Unicode frame work appears to be very rigid, there are plenty of innovations possible with little extra effort. These innovations will result in considerable improvement in productivity in Multilingual composing and processing.

This paper deals with some of innovative use of Unicode technology in the following areas:

- a) Optimization of font file size.
- b) Handling multiple languages
- c) Scientific Publishing of Tamil Books.
- d) Handling Grantha Scripts from Culverts.
- e) Optimum use of GSUB/GPOS rules for aestheticsand efficiency.

This paper is the result of the various trials conducted while developing the Unicode Investigation programs for 3 different Unicode schemes on behalf of Tamil Virtual University.