

## TS-564

### ENABLING INTERNATIONAL CHARACTER SUPPORT IN THE SAS SYSTEM

Currently the SAS System cannot directly read or display national characters that are not included in the default Western (or Latin 1) ANSI character set.

Historically, Windows fonts (including SAS Monospace), contained those characters required by a single code page. With Windows 95, there is a new type of character set called Windows Glyph List 4 (WGL4 for short). This character set contains all characters used by the majority of European languages and supports several code pages: Cyrillic, Greek, Latin 2 and Turkish. These new WGL4 fonts, also called Big Fonts, included with Windows 95 are Arial, Courier New and Times New Roman.

Unfortunately, Version 6.X of the SAS System does not utilize big fonts. Version 7, however, will provide a method to handle the WGL4 character set and will support fonts based on that character set. This will allow customers to read data files containing Greek, Cyrillic or Turkish characters as well as other national language specific characters.

Until the release of Version 7, there is a workaround for enabling national character support. These methods will force the operating system to use the selected scripted versions of the fonts listed in the font substitution sections below.

This workaround is only necessary when reading or creating files with national characters not found in the default Windows ANSI Latin 1 character set. To view the characters available in each font, use the Character Map found in the Accessories program group.

### WINDOWS 95 MODIFICATIONS

To change Windows 95, edit the Win.ini file to add or modify this section:

```
[FontSubstitutes]
Arial,0=Arial,238
Times New Roman,0=Times New Roman,238
Courier New,0=Courier New,238
etc...
```

NOTE: The numbers represent the font's script. For example:

The number 238 represents the Central European script.

The number 162 represents the Turkish script.

The number 161 represents the Greek script.

The number 0 represents the Western (Latin 1) script.

When using EIS or AF applications, it may be necessary to add the following line to your config.sas file:

```
- fontalias 'Courier' 'Courier New' 'Times' 'Times New Roman' 'Helvetica' 'Arial CE'
```

## **WINDOWS NT MODIFICATIONS**

To Change Windows NT, the following substitutions must be added as string values to the registry using a registry editor. (Always make a backup copy of the system registry before making any changes!)

[HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\ FontSubstitutes]

“Arial,0”= “Arial,162”

“Times New Roman,0”= “Times New Roman,162”

“Courier New,0”= “Courier,162”

etc...

If you wish to merge your desired substitutions into the registry complete the following steps:

1. Create a text file with the following:

### **REGEDIT4**

[HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\ FontSubstitutes]

“Arial,0”= “Arial,161”

“Times New Roman,0”= “Times New Roman,161”

“Courier New,0”= “Courier,161”

2. Save the file with an .REG extension.
3. Open Explorer and double click on the created file. This will then merge file’s contents with your registry.

When using EIS or AF applications, it may be necessary to add the following line to your config.sas file:

- fontalias ‘Courier’ ‘COURIER NEW’ ‘Times’ ‘TIMES NEW ROMAN’ ‘Helvetica’ ‘ARIAL CE’

Once the changes have been made, the PC must then be rebooted.

Please remember these changes are global and will affect all applications.