# **Installation Instructions**

# **Additional Fonts**

## **Overview**

**SAS Client-side Components, Volume 3** CD contains TrueType fonts for use with your SAS software. This document describes the procedures necessary to install these fonts to where your software can use them. It is divided into two parts; "Server Installation" contains the steps required to install the fonts to a SAS Server, while "Mid-tier and Client Installation" describes how to make the fonts available to Java applications.

The fonts included in Additional Fonts are described in the following table.

Font Name	Font File Name	Size
Albany AMT (regular)	saswalr.ttf	166K
(bold)	saswalb.ttf	168K
(italic)	saswali.ttf	177K
(bold italic)	saswalbi.ttf	171K
Cumberland AMT (regular)	saswcur.ttf	122K
(bold)	saswcub.ttf	119K
(italic)	saswcui.ttf	145K
(bold italic)	saswcubi.ttf	133K
Thorndale AMT (regular)	saswthr.ttf	207K
(bold)	saswthb.ttf	188K
(italic)	saswthi.ttf	194K
(bold italic)	saswthbi.ttf	183K
Monotype Sorts	sasgsort.ttf	81K
Symbol MT	sasgsymb.ttf	122K
Monotype Sans WT SC	sasssans.ttf	34636K
Monotype Sans WT TC	sastsans.ttf	29556K
Monotype Sans WT J	sasjsans.ttf	27262K
Monotype Sans WT K	sasksans.ttf	28173K
Thorndale Duospace WT SC	sassserf.ttf	41043K
Thorndale Duospace WT TC	sastserf.ttf	35571K
Thorndale Duospace WT J	sasiserf.ttf	35786K
Thorndale Duospace WT K	saskserf.ttf	34802K

### Server Installation

#### **Windows**

- 1. Insert the **SAS Client-side Components Volume 3** CD into your CD-ROM drive. Select the language you want to run in and click **OK**.
- 2. When the SAS Software Navigator opens, select Additional Fonts from the tree in the left-hand pane.
- 3. Click **Install** in the Windows row of the Installation table to install the fonts.
- 4. Find the location for the fonts folder for SAS Foundation. This is typically in the location !SASROOT\core\resource. You can find this location by examining the -FONTSLOC setting in your SASV9.CFG file located in !SASROOT\en.
- 5. Copy the \*.ttf files to the location specified by -FONTSLOC.
- 6. Copy the \*.sasxreg files to !SASROOT\core\sasinst\registry.
- 7. Copy monotype.sas to !SASROOT.
- 8. Run monotype.sas as follows:

```
sas monotype.sas -sysparm "!SASROOT\core\sasinst\registry\"
```

**Note:** Include the final backslash after registry or monotype.sas will fail. Example command:

```
sas monotype.sas -sysparm "c:\program files\sas\sas
9.1\core\sasinst\registry\"
```

#### **UNIX**

- 1. Insert the **SAS Client-side Components Volume 3** CD into your CD-ROM drive. Run setup. sh from the root of the CD.
- 2. Select the language you want to run in and click **OK**.
- 3. When the SAS Software Navigator opens, select Additional Fonts from the tree in the left-hand pane.
- 4. Click Install in the row of the Installation table that matches your platform to install the fonts.
- 5. Copy the \*.ttf files to !SASROOT/misc/fonts.
- 6. Copy the \*.sasxreq files to !SASROOT/install/registry/en.
- 7. Copy monotype.sas to !SASROOT.
- 8. Run monotype.sas with the following command:

```
sas monotype.sas -sysparm "!SASROOT/install/registry/en/"
```

**Note:** Include the final backslash after registry or monotype.sas will fail. Example command:

```
sas monotype.sas -sysparm
"/usr/local/SAS 9.1/install/registry/en/"
```

#### z/OS

Additional Fonts will be installed on z/OS by applying SAS Service Pack 2 or any later service pack to any SAS 9.1.3 installation. They are also included in any new SAS 9.1.3 system installed from media at SP2. They can be further installed to an existing SAS 9.1.3 system with a newly licensed product installed from a media at SP2.

You can verify the presence of installed Additional Fonts on any z/OS installation by looking for the presence of the following named datasets:

- &prefix.SASGSORT.TTF
- &prefix.SASGSYMB.TTF
- &prefix.SASJSANS.TTF
- &prefix.SASJSERF.TTF
- &prefix.SASKSANS.TTF
- &prefix.SASKSERF.TTF
- &prefix.SASSSANS.TTF
- &prefix.SASSSERF.TTF
- &prefix.SASTSANS.TTF
- &prefix.SASTSERF.TTF
- &prefix.SASWALB.TTF
- &prefix.SASWALBI.TTF
- &prefix.SASWALI.TTF
- &prefix.SASWALR.TTF
- &prefix.SASWCUB.TTF
- &prefix.SASWCUBI.TTF
- &prefix.SASWCUI.TTF
- &prefix.SASWCUR.TTF
- &prefix.SASWTHB.TTF
- &prefix.SASWTHBI.TTF
- &prefix.SASWTHI.TTF
- &prefix.SASWTHR.TTF

In these examples, &prefix is the high level dataset prefix for the SAS installation.

The files &prefix.SASMONO.TTF and &prefix.SASMONOB.TTF will be found on both upgraded and non-upgraded SAS 9.1.3 installations.

### Mid-tier and Client Installation

#### Windows

The Additional Fonts are installed as part of a planned install that includes SAS Web Report Studio. When they are installed, they are copied to SASHOME/SASAdditionalFonts/1.2. In order to use these fonts, copy all of the font files (\*.ttf) to C:\%SYSTEMROOT%\Fonts.

**Note:** These steps assume that the physical fonts are requested directly by name in the SAS Java applications and NOT via the logical font route which would require putting them in the JRE's lib\fonts\fallback directory.

#### **UNIX**

In order to use Additional Fonts with the X/Motif user interface, a TrueType-compliant X display server such as XFree86 or Xorg on Linux desktops or Hummingbird Exceed on Windows must be used. Alternatively, these fonts can be installed for a TrueType-compliant X font server such as xfs on Linux by your system administrator and used by many users simultaneously.

Commercial X window system display servers which run on Windows, such as Hummingbird's Exceed, have graphical configuration utilities which simplify installation of TrueType fonts. If you are using a Windows-based commercial X window system display server, please refer to the vendor's documentation for how to install new TrueType fonts and make them available.

For most Linux-based desktops, a graphical installation utility is available to simplify installation of TrueType fonts. An example of such utility is Mandrake Control Center on Mandrake Linux.

Use the following steps to install the SAS-supplied TrueType fonts from the command line on a Linux desktop using the XFree86 or Xorg X server.

- 1. Copy the fonts from !SASROOT/misc/fonts to a directory of your choosing. For this example we will refer to this directory as foo.
- 2. In directory foo, run the command

```
ttmkfdir -o fonts.dir
If ttmkfdir is not available, run the command
  mkfontscale
followed by
  mkfontdir
```

3. Add these fonts to your X server's font path using the xset command:

```
xset +fp <supply the full path of directory foo>
```

You can then verify the usability of these newly-installed fonts with the xlsfonts command, as in the following examples:

```
xlsfonts | grep -i thorndale
xlsfonts | grep -i Cumberland
xlsfonts | grep -i "monotype sorts"
xlsfonts | grep -i "monotype sorts"
xlsfonts | grep -i "symbol mt"
xlsfonts | grep -i "monotype sans"
```

To use these fonts within SAS, refer to your SAS documentation chapters titled "Working in the SAS Windowing Environment" and "Customizing the SAS Windowing Environment in UNIX environments" which is found within the online document "Using SAS in UNIX" available through SAS Help.