

Generating the font entries file and update the mffpcl.pro file

This technical note describes how to generate the font entries file and update the `mffpcl.pro` file.

Problem

If different fonts are referenced in input Printer Control Language (PCL) documents, a few ASCII characters may overlap, spacing may appear incorrect, or the appearance of styles may be different. PCL transformers must be able to properly utilize Unicode font sets, or subsets, to properly process Unicode-encoded PCL documents and produce non-Unicode-dependent PCL files or non-Unicode-transformed documents. The different steps for generating and updating the font entries file, and the error messages you may encounter are described in the next section.

Solution

1. Generate the font entries file

Execute the following command:

```
$DAZEL_HOME/bin/cpm_copy -fontentries <output xml file name> -i <input PCL file> -q
```

Example

```
/home/dazel/bin/cpm_copy -fontentries fonts.xml -i input.pcl -q
```

Execute the above command to get the different fonts referenced in the input `pcl` file. All the font entries are available in the `fonts.xml` file.

NOTE: Set the `DAZEL_HOME` variable correctly before invoking this binary or the system server displays the following error message: `Environment Variable DAZEL_HOME is not set`. If the `DAZEL_HOME` variable does not have the right value, then the following error message is displayed: `Failed to generate the font entries file`.

After successfully executing the above command, the system server displays the following message:

```
Successfully generated the font entries file.
```

Solution

The font entries file is generated.

NOTE: (a) If the `-fontentries` attribute is misspelled, then the `cpm_copy` command displays the following error message:

```
cpm_copy -fontentry o.xml -i 399534.1 -q
This program is not designed to use outside Output Server
Environment.
```

(b) If the specified path for the input file is incorrect, then the `cpm_copy` command displays the following error message:

```
cpm_copy -fontentries o.xml -i 1.pcl -q
Failed to generate the font entries file.
```

(c) If there is any error in generating the output XML file, then the `cpm_copy` command displays the following error message:

```
Failed to generate the font entries file.
```

2. Update the mffpcl.pro file

After successfully generating the font entries XML file, update the `mffpcl.pro` file. This file is located in the `$DAZEL_HOME/etc` directory.

NOTE: Once this information is updated, the font referenced in the `mffpcl.pro` file should be installed using the `setupfont.pl` script.

For example, `perl setupunicode.pl -a helr45.ttf`

Example

```
<font family="Helvetica" serifstyle="SANSSERIF" spacing="PROPORTIONAL"
typeface="24580">
  <face devname="Helvetica" style="UPRIGHT" weight="MEDIUM" width="NORMAL"/>
</font>
<font family="Helvetica" serifstyle="SANSSERIF" spacing="PROPORTIONAL"
typeface="24580">
  <face devname="Helvetica" style="UPRIGHT" weight="BOLD" width="NORMAL"/>
</font>
```

This XML file contains font information between the XML tags `` and ``. One pair of these tags makes one font entry in the `mffpcl.pro` file. One generated output XML file can contain many of these pairs based on the number of fonts used in the input PCL document. All these pairs need to be added to the `mffpcl.pro` file.

NOTE: Before adding the font entries to `mffpcl.pro` file, you need to make a change in the generated output. Inside the ` ... ` tags, locate the `<face ...>` tag. Add two entries, `fontfile="font_file_name"` and `fontfiletype="TrueType"`, in this tag.

Ensure that you specify the font names without any spaces.

Solution

Example

Assuming the `font_file_name` that you are using is `helr45.ttf` (and the font is Helvetica), then the entry to be added in `mffpcl.pro` is `fontfile=helr45`. The second entry is the same for all the pairs.

NOTE: Back up the `mffpcl.pro` file before adding any entries to it.

The complete entry is as follows:

```
<font family="Helvetica" serifstyle="SANSSERIF" spacing="PROPORTIONAL"
typeface="24580">
<face devname="Helvetica" style="UPRIGHT" weight="MEDIUM" width="NORMAL"
fontfile="helr45" fontfiletype="TrueType"/>
</font>
```

NOTE: The name of the "helr45" font file is "helr45.ttf".

Now, you can update the `$DAZEL_HOME/etc/mffpcl.pro` file.

In the `mffpcl.pro` file, search for the `<fontlist>` tag. Place the new font entry after the `<fontlist>` tag, between `<fontlist> ... </fontlist>`.

NOTE: You should copy all the pairs of font tags carefully. If there is any mismatch of tags, the PCL transformer will not work properly.

The `cpmcopy` server must be restarted after updating the `$DAZEL_HOME/etc/mffpcl.pro` file.

Execute the `stop_xform_server.pl` script to stop the `cpmcopy` server. The `cpmcopy` server is started automatically when the next PCL job is submitted.