Embedding Fonts in Reconstructed Documents

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Introduction

This document discusses the behaviour of Microsoft® Word and PowerPoint when a specified font is not available on the machine when it is opened. A mechanism to avoid font substitution by allowing fonts to be embedded within PowerPoint is described.

The Problem

When a document is reconstructed from a PDF, Solid Framework will specify a font for each part of the document.

But what happens if the document is then opened on a machine that does not have the specified font installed?

Word and PowerPoint will both substitute the specified font with one that is considered to be similar. Sometimes this substitution is imperfect which can result in the same documents appearing significantly different when opened on two different machines – one with the specified font available, and one without.

An example of this can be seen in the following two screenshots. The document was converted on Linux and the Word document now contains references to DejaVu Sans.
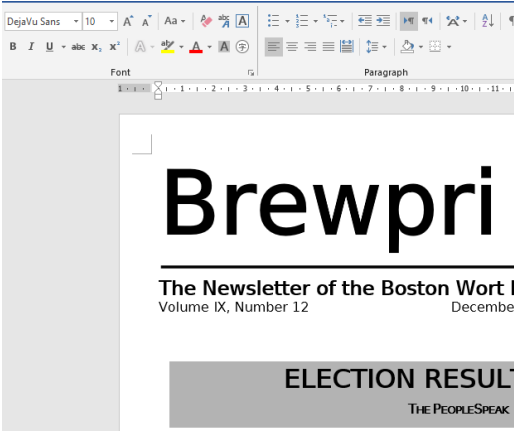

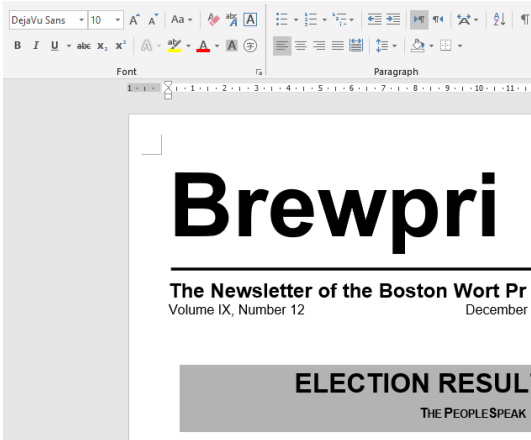*Figure 1 - Document opened on machine with DejaVu Sans Installed.*

Figure 2 -The same document opened on machine without DejaVu Sans installed.

The Solution – Embedded Fonts

Microsoft recognised this issue and allows fonts to be embedded in the document. This causes the files to be significantly larger, but results in a consistent appearance of the document.

This option is now available when reconstructing to PowerPoint.

It is not currently available when reconstructing to Word.

The option is selected as follows:

```
converter->SetEmbedFontMode(EmbedFontMode::EmbedEditableFonts);
```

Q: Can all fonts be embedded?

A: Because of licensing restrictions not all fonts can be embedded. Whether or not a file can be embedded can be seen by looking at the properties of the font file.
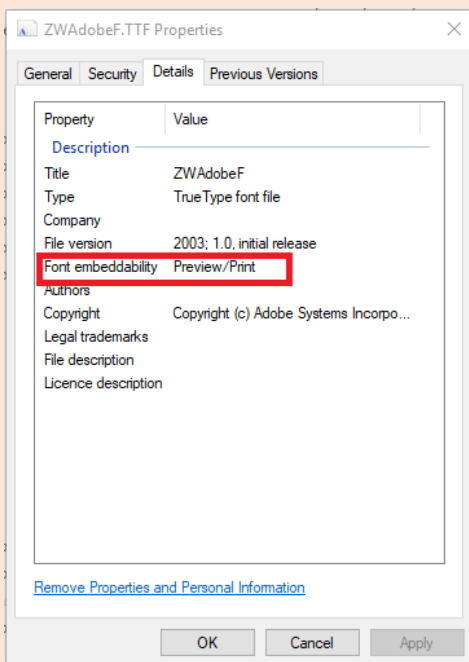

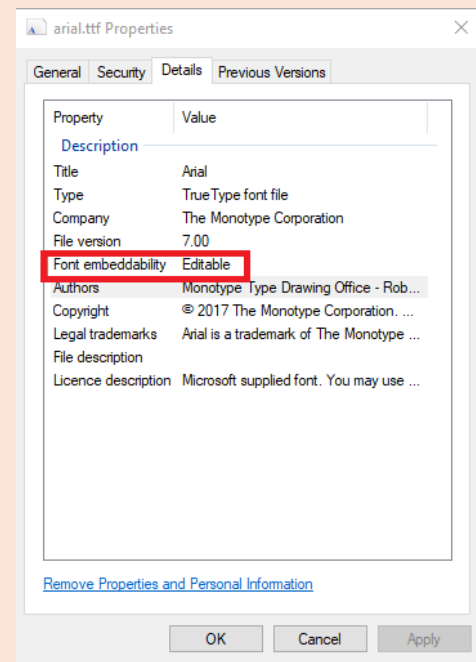*Figure 3- Example of an editable font. This could be embedded.*

Figure 4 - Example of a font that cannot be embedded.

Summary and Recommendation

If it is important to you that all the viewers see the same reconstructed document in the same way, then embedding fonts is one way to do so. However, not all fonts can be embedded, and doing so significantly increases the size of the document.