

## Study shows real-world ODF/OOXML interoperability is not great

Via [Doug Mahugh](#) at Microsoft comes [this study](#) (Shah & Kesan 2008) on interoperability of word processing applications using the Open Document Format and Office Open XML.

After outlining some possible approaches to testing conformance of applications against the standards and pointing out what a gargantuan task that would be, they settle on a pragmatic approach: **test interoperability with the dominant application for each format**.

This research tested the interoperability for ODF and OOXML document formats based on a reference implementation approach. For ODF, the test documents are developed in OpenOffice, which is currently the dominant implementation for ODF. For OOXML, the test documents are developed in Microsoft Office 2007 for Windows. These are not reference implementations in a true sense, because they do not perfectly implement the standard. However, they act as de facto reference implementations, because they are the dominant implementations that all developers seek compatibility with.

This makes perfect sense for real-world testing. The results are interesting and unsurprising ([to me, at least](#)). Basically the best interoperability is between Microsoft Office Word and OpenOffice.org Writer – even when they are reading each other's formats. I reckon that would be because the OOo team have invested person-decades of effort in reverse engineering the Word document model, and Writer is more or less able to deal with Word docs. The document serialization format is not that relevant. It's the document models that count. And some of the applications they test are not really even word processors.

This paper makes a great case that it is interop that counts and the goes on to show how poor interop really is.

Unfortunately, this study didn't get as far as looking at styles compatibility as that's one area where there are some frustrating problems but also great opportunities to help in interoperability. If you [use styles](#) then at least the semantics and structure of documents can be preserved even if page fidelity is not.

And there's a way to **improve interoperability**. You don't have to leave users to their own devices, you can advise them of which features of which applications to use for particular tasks. This is what we try to do on the [ICE project](#). We provide [templates](#) and [advice](#) to help people create interoperable documents.

Inspired by this paper, I'm off to start work on a paper looking at **proactive interoperability**, by helping users to pick features that **will** interoperate. As noted in this study there's not much out there to choose from apart from Writer and Word. That's why we will continue to work with Writer and Word looking for practical solutions.

Shah, R.C. & Kesan, J.P., 2008. Lost in Translation: Interoperability Issues for Open Standards - ODF and OOXML as Examples by Rajiv Shah, Jay Kesan. In *The proceedings of the 36th Research Conference on Communication, Information and Internet Policy (TPRC), Arlington, VA Sept. 26-28, 2008*. Available at: <http://ssrn.com/abstract=1201708> [Accessed August 10, 2008].