

EXHIBIT A**Wed, 22 Oct 2008****A year since Microsoft's EU appeal failed***A Trip report for CIFS Conference and AD Plugfest, Sep-Oct 2008.***Introduction**

Over the 2 weeks at the end of September 2008, I attended two interoperability events in the US, one in Santa Clara and another on Microsoft's campus in Redmond.

This has been an amazing year of changes for those of us with an interest in interoperability with Microsoft, and these two events are an excellent example of the change in practice.

In short, Microsoft organised an industry plug fest for CIFS and AD technologies and then invited the Samba Team to it's home campus for a week of hands on testing with their engineers. This follows up on documentation of over 100 protocols delivered, well over 100 requests for clarification answered, Samba code debugged and fortnightly conference calls held.

Their salespeople will still complete furiously, and I'm sure the patent saber-rattling will continue, but for a short time (Microsoft is still appealing the fine, and will some day seek to be excused from oversight), we have a beachhead at Redmond, and a department committed to providing the Free Software community with answers or clarification on any reasonable interoperability question.

The Free Software community still does not have perfect interoperability with Microsoft's products - far from it - but the bottleneck is our own pace of implementation and comprehension, not missing documentation or the difficult task of network analysis so often required in the past.

Background

In September 2007 Microsoft lost it's appeal of the 2004 anti-trust Decision by the European Commission. As a result, Microsoft was required to make protocol documentation available to competitors. The EU mandated a set of minimum terms (now known as the WSPP) that the Samba Team (and others) would be able to access the documentation under. By early 2008 the Free Software community gained access to this documentation under NDA, and by May 2008 Microsoft made all their protocol documentation public.

Nobody in the Free Software community expected this - it is only natural to assume that a company as opposed to Free Software as Microsoft would put in the bare minimum of resources into assisting

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its competitors.

Instead, I work regularly with a team of enthusiastic engineers who clearly want us to succeed, while the documentation isn't always complete, these engineers do everything they can to provide us with the information we need.

Members of the Samba Team (and any other Free Software developer who signs a subcontractor agreement with the Protocol Freedom Information Foundation - PFIF) are treated as premium support customers by Microsoft for this purpose.

The trip

Two plug fests were held in Santa Clara and Redmond in late September and early October 2008. The plug fests were a direct result of the recent EU anti-trust rulings against Microsoft and the subsequent WSPP protocol documentation agreements.

The plug fests demonstrate the huge success of the WSPP agreement, and in particular Microsoft's willingness to put in extraordinary efforts to assist WSPP licensees in their usage of the released protocol documentation.

SNIA Plug fest

The first plug fest was held as part of the SNIA Storage Developer 2008 conference in Santa Clara, California. Microsoft sponsored the CIFS plug fest, which allowed all companies to participate without charge, which is in contrast to previous SNIA plug fests that have had significant costs for attendees.

This is in stark contrast to the participation by Microsoft at some previous SNIA events before the WSPP agreement was reached. Microsoft didn't attend at all in some years, and when they did attend in recent years the people involved were junior test engineers or were under strict instructions not to discuss the most important technical details with members of the Samba Team.

Also in attendance were well over 40 CIFS engineers, from a dozen companies (at least). As most CIFS servers are also AD clients, my primary task at the event was to test Samba4's AD server against AD clients from EMC, NetApp, Likewise and Apple, showing that Samba4's AD server is in pretty good shape, but also finding a number of bugs and missing features.

AD plug fest

The really important event was the Active Directory plug fest on Microsoft campus in Redmond. As the developer who has taken the day-to-day lead in the WSPP relationship I asked Microsoft to organize

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this event directly after the SNIA event to give myself and others on the Samba Team an opportunity to work directly with the Active Directory product team, to try to accelerate the development of the Samba implementation of Active Directory server.

Microsoft has always seen their Active Directory server implementation as the 'crown jewels', and have in the past fought extremely hard to try to prevent them having to document the protocols in a way that would allow for a competing implementation. Much of the anti-trust trial in Europe centered on the need to document the AD protocols, so the degree of effort they put into an AD plug fest event is a good litmus test for their commitment to their pledge to support interoperability.

As far as we know no other WSPP licensee is currently attempting an AD server implementation so we had the plug fest to ourselves. We had 6 Samba Team members attend the plug fest, led by myself. Others attending were Andrew Tridgell, Ronnie Sahlberg, Stefan (metze) Metzmacher and Rafal Szczesniak.

We were very surprised by the extraordinary degree of effort that Microsoft put into this single vendor plug fest. We were given direct access to the Active Directory product team in Microsoft, plus we had a team of 6 Microsoft engineers working with us full time for the whole week of the plug fest, and were able to call upon additional Microsoft engineers with specialist knowledge in specific areas as needed.

The caliber of the engineers assigned to us was really a surprise. They knew the protocols in great detail, and were extremely helpful in working through test cases (both in their own test suites and ours) and suggesting testing and debugging strategies.

Some of the Microsoft engineers have been actively working with the Samba code base, particularly our test tools, and had prepared for the plug fest by doing extensive testing of Microsoft tools against development versions of Samba4 in the weeks leading up to the plug fest itself.

Ongoing support

The support Microsoft is giving us is not limited to the plug fest itself. As I mention above, I have fortnightly conference calls with Microsoft developers to go through Active Directory interoperability issues. These calls have been ongoing for a few months now, and have helped to solve many tricky protocol problems.

Microsoft has also answered dozens of documentation queries on the cifs-protocol mailing list and in private email from PFIF members (the PFIF is the umbrella organization that signed the WSPP agreement on behalf of the Samba Team).

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However, the WSPP program and Microsoft's new protocol documentation is not just about 'Samba' things - the protocols covered are any that a windows client uses to talk to a windows server. Many other Free Software projects can and should take advantage of the new documentation and clarification process.

See <http://msdn.microsoft.com/en-us/library/cc197979.aspx> for a list of WSPP protocols.

Motivations

It might be reasonable to ask why Microsoft is putting such a strong effort into making the WSPP agreement a success. Obviously the ongoing EU legal appeal regarding the fines levied against Microsoft by the EU could be a motivating factor, but regardless of that motivation the individual engineers we are working with are responding with enthusiasm.

Next Steps

Now that it is clear that the WSPP agreement and the associated documentation is a great success we need to work out how we can take advantage of the situation. It has become very clear this year that the bottleneck now lies with developer resources within the Samba Team to implement all the protocols we need. Over the last 18 months the number of people able to work on the implementation of Active Directory within the Samba Team has dropped significantly. This has left us with myself as the one and only full time developer in the Samba Team working on the AD server implementation. That is not nearly enough.

We need to expand our developer resources considerably or we risk squandering this golden opportunity to establish a competitive implementation of Active Directory, which is a key component needed to compete against Microsoft's rise in the server space.

For Free Software Developers

I strongly encourage anyone who has to work with any product touching Microsoft's server, be it Active Directory, IIS or anything else found in the 'Windows Server' product to become a subcontractor to the PFIF. It is free to join, the only cost has already been paid by the Samba Team. Talk to me or Andrew Tridgell about joining, as there is paperwork involved.

Joining the PFIF (Protocol Freedom Information Foundation) gains Free Software developers access to the public WSPP docs (this program started with these under NDA), but also access to an e-mail address to ask questions about the docs. We have found that this is far more efficient and effective than posting to Microsoft's forums, and Microsoft is even compelled by our contract to respond in a reasonable

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timeframe.

As I mention above, the Samba Team recently ran Microsoft's private conformance tests against Samba4, at a Microsoft-run interop event. While the docs are public, these testsuites and the direct access to engineers are not. These are services only available to WSPP licensees (and the cheapest - free - way to become one of those is to be a PFIF subcontractor).

With thanks to Andrew Tridgell for suggesting I write this, and helping me with some of the text

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