

The Battle for Interoperability

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What 17 years of hacking Samba can do to a sane programmer



Exploring the SMB protocol



Microsoft?

Timeline of the EU anti-trust case against Microsoft

(plus a few anecdotes to keep it interesting)

The Letter (September 1998)

..."the complete information required to allow Sun [...] to provide native support for the complete set of Active Directory technologies on Solaris".

Letter from Richard Green to Paul Maritz

The Complaint (December 1998)

... "the Commission order Microsoft to disclose and make available for use sufficient interface information to provide equality of attachment from the server environment to the Microsoft desktop (irrespective of whether the desktop is already part of a network which includes Microsoft server products)"

Sun complaint to European Commission

The Investigation (1999 to 2004)

..."demand was no more reasonable than a demand by Ford that DaimlerChrysler provide it with the blueprints for the newest engine created for use in Mercedes-Benz automobiles so Ford could copy that engine for use in its automobiles"

Microsoft submission October 2003

The Decision (March 2004)

“Microsoft should be ordered to disclose complete and accurate specifications for the protocols used by Windows work group servers in order to provide file, print and group and user administration services to Windows work group networks.”

EC Decision (page 278)

The Appeal (June 2004)

...”The Commissions decision undermines the innovative efforts of successful companies, imposing significant new obligations on successful companies to license their proprietary technology to competitors, and restrict companies ability to add innovative improvements to their products....”

Microsoft press release, June 2004

Settlements (2003-2007)

“We are pleased that we have been able to resolve a portion of our pending legal issues with Microsoft,”

Joseph A. LaSala, Jr., Novell

“Total Value of Settlements : 3600.7 million”

ECIS settlement table 2007

The CFI Hearing (April 2007)



The Judgement (September 2007)

“the Court rejects Microsoft's argument ...”

Announcement of CFI judgement

The WSPP Agreement (December 2007)

“Today the Protocol Freedom Information Foundation (PFIF), a non-profit organization created by the Software Freedom Law Center, signed an agreement with Microsoft to receive the protocol documentation needed to fully interoperate with the Microsoft Windows workgroup server products”

PFIF Announcement by Samba Team

Public Release (February 2008)

“These steps represent an important step and significant change in how we share information about our products and technologies,” ...

Steve Ballmer, Microsoft

The MCPP/WSPP Protocols

ADA1	CPSP	EERR	GSSA	MQQB	OXCMail	OXOJRNl	OXWOAB	RDPEFS	SFU	W32T
ADA2	CRTD	EFSR	H245	MQQP	OXCMsG	OXOMsG	OXWOOF	RDPEGDI	SIP	WCCE
ADA3	CSRA	EMF	HCEP	MQRR	OXCNOTIF	OXONOTE	OXWUMS	RDPELE	SMB	WDV
ADLS	CSSP	EMFPLUS	ICPR	MQSD	OXCPERM	OXOPFFB	PAC	RDPEMC	SMB2	WDVME
ADSC	CSVP	EMFSPOOL	IISS	MSB	OXCPRPT	OXOPOST	PAN	RDPEPC	SMTP	WDVRN
ADTG	DCOM	ERREF	IKEE	MSBD	OXCROPS	OXORMDR	PAR	RDPEPNP	SNTP	WDVRV
ADTS	DFSC	EVEN	IKEY	MSRP	OXCRPC	OXORMMS	PASS	RDPEPS	SOH	WDVSE
AIPS	DFSNM	EVEN6	IMSA	MWBE	OXCSpAM	OXORSS	PATCH	RDPERP	SPNG	WINSRA
APDS	DFSRH	FASP	IOI	MWBF	OXcStOR	OXORULE	PCQ	RDPEsc	SRPL	WKST
ASP	DHCPE	FAX	IRDA	NLMP	OXCSYNc	OXOSFLD	PEAP	RDPEsP	SRVS	WMF
BKRP	DHCPM	FPSE	IRP	NNS	OXCTABL	OXOSMIME	PKCA	RDPEXPS	SSDP	WMHTTP
BKUP	DHCPN	FRS1	KILE	NNTP	OXDISCO	OXOSMMS	PLA	REF	SSTP	WMI
BPAU	DLTCS	FRS2	LCID	NRBF	OXDOCO	OXOSRCH	PNPR	RMPR	SYS	WMIO
BPCR	DLTM	FSCC	LLTD	NRLS	OXDSCLI	OXOTASK	PNRP	RMPRS	TAIL	WMLOG
BPDP	DLTW	FSRM	LSAD	NRPC	OXGLOS	OXOUM	POP3	RNAP	TDS	WMSP
BRWS	DMRP	GLOS	LSAT	N RTP	OXIMAP4	OXPFoAB	PPPI	RPCE	TERE	WPRN
BRWSA	DNSP	GDPC	MAIL	NSPI	OXLDAP	OXPHISH	PROTO	RPCH	TIPP	WSH
CAB	DOCO	GPEF	MCI	NTHT	OXMSG	OXPOP3	PSDP	RPCL	TNAP	WSMAN
CER	DPDX	GPFR	MCIS	OAUT	OXMVMBX	OXPROPS	RA	RPRN	TRP	WSMV
CHAP	DPSP	GPIE	MMSP	OCSP	OXOAB	OXPROTO	RAI	RRP	TSCH	WSP
CMOM	DRM	GPIPSEC	MNPR	OCSPA	OXOABK	OXPSVAL	RAP	RSMP	TSGU	WSRM
CMP	DRSR	GPOL	MQBR	OXABREF	OXOABKT	OXREF	RASA	RSP	TSTS	WSSFO
CMPO	DSML	GPPREF	MQCN	OXBBODY	OXOCAL	OXRTFCP	RCMP	RTSP	TVTT	WSSO
CMRP	DSSP	GPREG	MQDS	OXCDATA	OXOCFG	OXRTFEX	RDC	SAMR	UCODEREF	WSUSSS
COM	DTCLU	GPSB	MQMA	OXcETf	OXOCNTC	OXSHARE	RDPBCGR	SAMS	UNMP	WUSP
COMA	DTCM	GPSCR	MQMP	OXCFOLD	OXODLGT	OXSMTP	RDPEA	SCMR	V4OF	XJRNl
COMEV	DTCO	GPSI	MQMQ	OXCFXICS	OXODOC	OXTNEF	RDPECLIP	SDP	VDS	XLOGIN
COMT	DTYP	GPWL	MQMR	OXcICAL	OXOFLAG	OXWAVLS	RDPEDYC	SECO	VUVP	XWDVSEC

Working with Microsoft (September 2008)

“We were very surprised by the extraordinary degree of effort that Microsoft put into this single vendor plug fest”

Andrew Bartlett, AD plugfest trip report

Patents

“Microsoft further warrants that it will not assert any patent claims other than Subject Patent Claims against Licensee or any third party for developing, making, using or Distributing any Implementation.”

PFIF/WSPP Agreement 6.2(b)

Interesting Side Effects

What happens when the worlds best funded software company learns to write test suites and documentation?

A Huge Opportunity

- We have 5 years (or more?)
 - Guaranteed documentation of Microsoft protocols
 - Well defined patent boundaries
 - Good support from Microsoft engineers
- What can you do?
 - Grab this opportunity!
 - Start a project to implement a new protocol
 - Get involved in an existing project
 - Write a test suite

An Important Lesson

The FOSS community has played an important role in one of the biggest lawsuits in history – and won.

We don't need to fear the lawyers any more, as long as we aren't in a hurry!

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SFLC

plus many, many others