

DCOS Workshop: “The Intersection of Open ICT Standards, Development, and Public Policy”

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Agenda

- ECIS Overview
- The European Commission's 2004 Decision and subsequent litigation
- Other critical barriers to competition remain and new ones (involving the internet) are being created
- What should governments do?

ECIS - Overview

- An international non-profit association founded in 1989 that endeavours to promote a favourable environment for interoperable ICT solutions
- Actively promotes interoperability, open standards, and robust competition on the merits, and consumer choice before European, international and national fora, including the EU institutions and WIPO
- Broad membership base

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Campaigning for an open and
interoperable ICT ecosystem



Interoperability policy

- Key issues ECIS is actively involved with include the promotion of:
 - Open standards
 - Case: OpenDocument Format (“ODF”)
 - Open standard-setting
 - Ensuring that standard-setting processes are not misused
 - Open source
 - Encouraging the growth of European open source development
 - Competitive ICT environments
 - Identifying and working with regulators to remedy market failure and barriers to competition

Campaigning for open standards

- Open standards should be the basis for ensuring interoperability in the ICT industry
 - Standards-based development allows focus to be put on developing innovative new features, and not in reverse-engineering for the purpose of enabling interoperability
 - Open standards based interoperability permits
 - new players to enter the market
 - competition on the merits
 - consumer choice and robust competition
- Experience demonstrates the damage which can result when vendors fail to support or abuse open standards

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The European Commission's Decision
24 March 2004

(Case COMP/C-3/37.792 Microsoft)



The March 2004 Decision

- The European Commission - with the unanimous support of all member states - finds that Microsoft has abused its monopoly and is ordered to pay fines of Euro 497 million:
 - Tying Windows Media Player (“WMP”) with Windows
 - Refusing to supply certain interface specifications necessary to allow non-Microsoft servers to achieve full interoperability with Microsoft desktops and Microsoft servers
- Microsoft ordered to introduce a WMP-free version of Windows
- Microsoft ordered to disclose complete and accurate specifications of certain Windows client and server protocols, and permit implementation on RAND terms

September 2007: Court of First Instance Judgement

- 392: In that regard, the Court finds first, that, in light of the very narrow technical and privileged links that Microsoft has established between its Windows client PC and work group server operating systems, and of the fact that Windows is present on virtually all client PCs installed within organisations, the Commission was correct to find, at recital 697 to the contested decision, that Microsoft was able to impose the Windows domain architecture as the 'de facto standard for work group computing'
- 1152: Although generally, standardisation may effectively present certain advantages, it cannot be allowed to be imposed unilaterally by an undertaking in a dominant position by means of tying.

Interoperability abuse

- Microsoft has a market share of about 95% in PC operating systems
- Microsoft relies broadly upon proprietary interoperability methods and stopped disclosing interoperability information (protocol specifications) necessary for competing workgroup server operating systems to interoperate with Windows PCs and with Microsoft servers
 - The industry norm is to rely on open standards to make such information available, and usually for no royalty
- Interoperability disclosure requested is limited in scope
 - It does not extend to API's, code or porting

Interoperability Inequality; Competitive Effects

- Consequences of interoperability non-disclosure
 - Competing workgroup server OS vendors cannot achieve full interoperability with Windows clients
 - Ability to achieve such interoperability is necessary to compete effectively
 - Hence, Microsoft's refusal to supply the interoperability information is eliminating competition on the workgroup server OS market and allowing Microsoft to use its desktop monopoly to do this
 - Result: Lack of real consumer choice

Other critical barriers to competition barriers remain and new ones (involving the internet) are being created



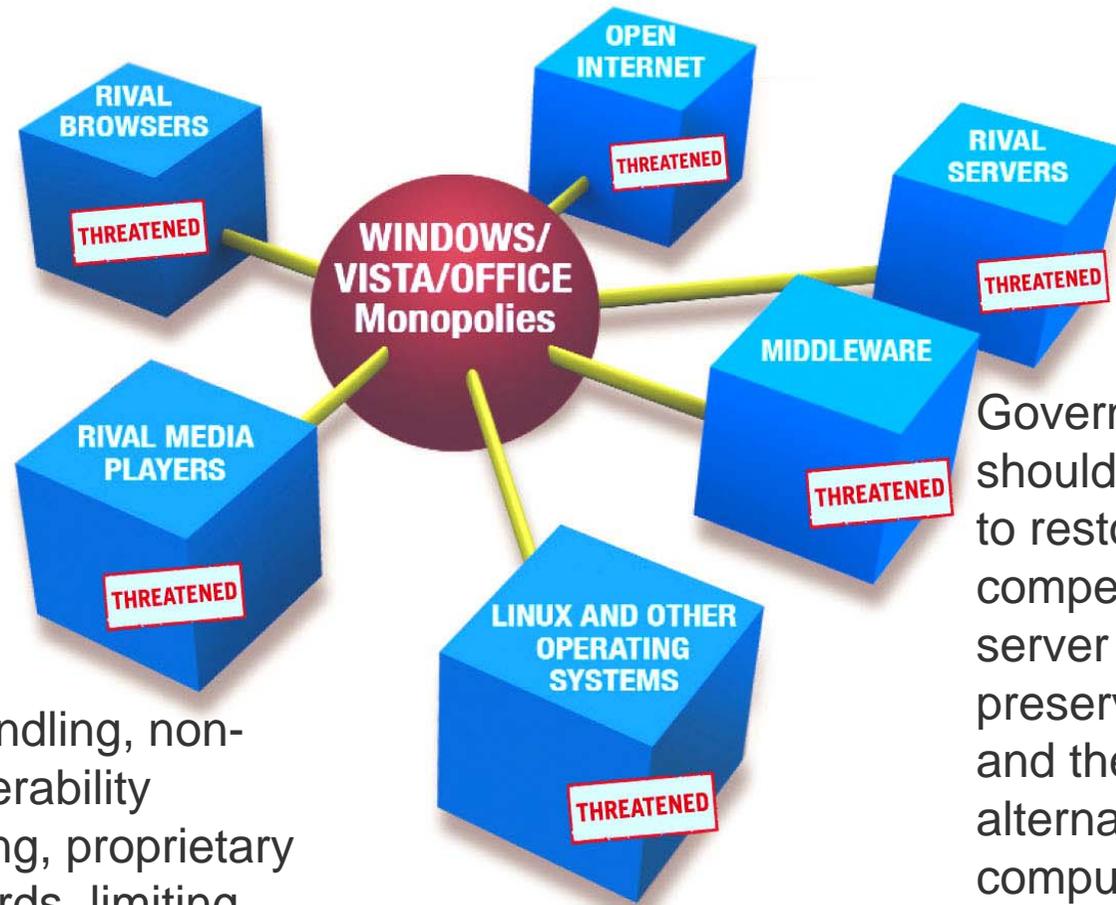
The 2006 ECIS Complaint and Supplement

- Filed in February 2006, amended in July and supplemented in December to reflect recent developments
- Complaint focuses on Microsoft's abusive behaviour with regard to
 1. PC Productivity Applications (Microsoft Office)
 2. Client and server email, calendaring and team collaboration software (e.g. Outlook/Exchange)
 3. Internet, i.e. Web Servers (IIS - Internet Information Services)
- Claimed abuses include refusals to supply interoperability information, tying and price tying
 - Builds on the precedents established by the 2004 Decision and confirmed by the 2007 CFI judgment

Substance of the new complaint

- The ECIS complaint focuses on three types of products: Microsoft Office, Microsoft Outlook / Exchange/ Sharepoint, and Internet and web applications
 - Microsoft Office
 - Microsoft Outlook and Microsoft Exchange. Outlook and Exchange interoperate in proprietary ways not available to competitors. Goal: allow substitute products at either end with full interoperability.
 - Web Server is a server application, that is given privileged access to the Microsoft desktop. Goal: to allow equal access, where possible based on open internet standards.

Microsoft Strategy: Preserve and extend its monopolies by eliminating platform threats



Governments should take action to restore competition in the server market and preserve Linux and the Internet as alternative computing platforms

Exclusion tools: bundling, non-disclosure of interoperability information, price tying, proprietary extensions of standards, limiting document interchangeability

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Internet dependency on undisclosed proprietary connections -- Examples

MSFT



Proprietary protocols, proprietary formats,
E.g., Web services with proprietary extensions

Internet consists of
connected servers

MSFT

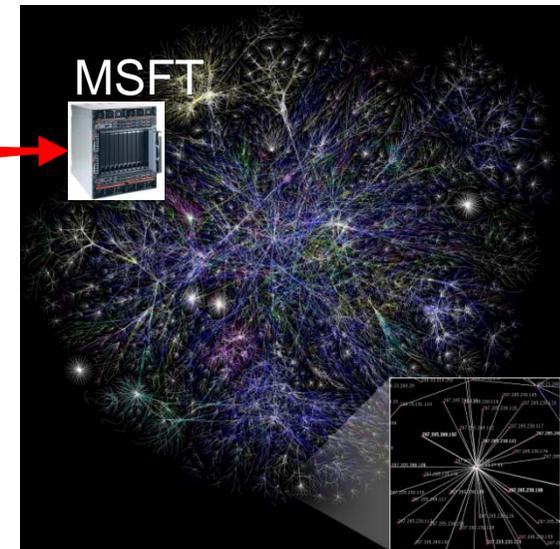


MSFT SharePoint has privileged
communication with Internet Explorer
(ASP.Net does as well)

MSFT



MSFT Silverlight – Streamed better
with Windows Server. Proprietary
programming model based on
proprietary languages and runtime.



Microsoft makes Windows
client and servers “better
together” to exclusion of
competitors (partly by subverting
standards and then refusing to
disclose proprietary linkages).

Windows Server Growth

- ECIS does not believe Windows Server growth is due solely, or even largely, to innovation
- Without MSFT clients (Windows client and Office), Windows Server is not that interesting
- Windows clients and Windows servers contain vast tracts of “zombie code” useless unless connected together – they are designed to inter-leverage each other
- MSFT claims 73% of developers are developing for proprietary .Net compared to “less than 30%” for standard/open Java
- Consumers should be able to choose servers based on the merits and not be forced to choose Microsoft's products because of interoperability

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Progression of Control

Internet consists of connected servers

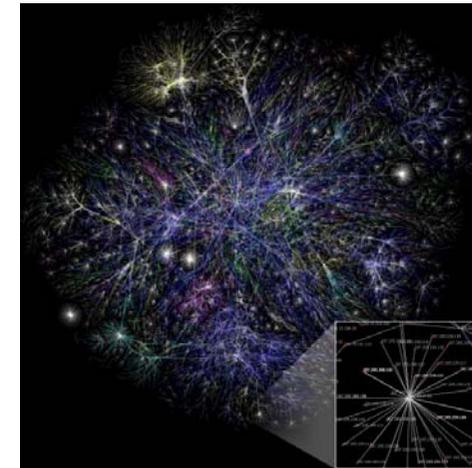
Personal Computers



Departmental Servers



Enterprise Servers



<p><u>Microsoft Windows Share</u></p>	<p>~95%</p>	<p>~70% by volume, from 0% in 1993. (1) ~40% by revenue, from 0% in 1993.</p>	<p>At least 51% of Fortune 1000 Internet Application Servers (Java/Apache next, 12%); Outside enterprise Windows is overtaking Java/Apache</p>
<p><u>Microsoft Market Growth</u></p>	<p>Some geographies saturated, but volume and revenue still increasing</p>	<p>Fastest growing. Most other platforms declining, except Linux (but Windows growing faster AND on much larger base). MS Server and Tools – 19 consecutive quarters of double digit growth (2)</p>	<p>Microsoft IIS shows significant growth and is ubiquitous. Outside enterprise, Apache still leads, but trending down. (Not counting anything with only a few % points of mkt share – source NetCraft)</p>

Conclusion:

- Open standards are the preferred means to achieve interoperability. Open standards are the technological “cornerstones” upon which the Internet, as we know it today, has been built.
- Windows Vista, Office 2007, and Server 2008 implement proprietary standards, and are intended to maintain Microsoft’s desktop and monopolies and extend them to the Server and the Internet.
- Anti-trust regulators (because of Microsoft’s dominance) must force Microsoft to disclose the secret links that exclude competition if there is going to be an open internet.
- Government procurement agencies should buy software compliant with open standards.

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Back-up



ECJ Jurisprudence

- A company enjoying a dominant position (i.e., Microsoft) is under a **special responsibility** not to engage in conduct that may distort competition.

Legal Terms

- A dominant position under Article 82 of the Treaty has been defined by the Court of Justice of the European Communities as:

“a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, its customers and ultimately of the consumers.”

Technical Terms

- Protocol:
 - The purpose of a protocol is interoperability.
 - An agreement (sequence and meaning) between communicating parties (e.g., a server and a PC client) on how communications will proceed between them.
 - Usually become industry standards
 - TCP/IP: Transmission Control Protocol / Internet Protocol
 - MIT Kerberos: Security
 - Documented in the form of "specifications"
- Specification:
 - A description of the protocol at the conceptual level of what the software product must achieve
- Implementation:
 - Actual code that will run on the computer

Technical Terms (2)

- Extensible Application Markup Language (XAML):
 - a user interface markup language to define UI elements, data binding, eventing, and other features
 - XAML is based on XML but is not itself a standard.
 - XAML is not open
 - No formal specification or test suite (that we know of).
 - XAML is “borrowed” from other standards (like SVG).
 - Microsoft could have used existing standards but chose not to.
 - XAML is a proprietary Microsoft control point.
- XAML Browser Applications (XBAP):
 - XAML Browser Applications (XBAPs) are programs that are hosted inside a web browser such as Firefox or Internet Explorer.
 - Hosted applications run in a partial trust sandbox environment, and are not given full access to the computer's resources and not all Windows Presentation Foundation functionality is available.
 - The hosted environment is intended to protect the computer from malicious applications. Although one gets the perception of the application running in the browser, it actually runs in an out-of-process executable different from the browser.

Technical Terms (3)

- Silverlight:
 - Silverlight is a web-based subset of Windows Presentation Foundation. It is a cross-platform, cross-browser XAML-based WPF technology that provides features such as video, vector graphics, and animations to Microsoft and Apple operating systems including Windows Vista, Windows XP, and Mac OS X.
 - Specifically, it is currently provided as an add-on for Mozilla Firefox, Internet Explorer 6 and above, and Apple Safari. Silverlight and WPF only share the XAML presentation layer.
 - These extensions allow browsers to use Silverlight's graphics capabilities. The browser extensions are similar to Adobe Flash.