BEFORE THE UNITED STATES FEDERAL TRADE COMMISSION

In the Matter of

MICROSOFT CORPORATION, a corporation.

FILE NO. 012 3240

AGREEMENT CONTAINING CONSENT ORDER

COMMENTS OF CATAVAULT ON THE AGREEMENT CONTAINING THE CONSENT ORDER

SEPTEMBER 5, 2002

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PREFACE

On August 9, 2002, one day after the United States Federal Trade Commission ("FTC") settlement was announced, *The Wall Street Journal* published an article entitled, "Microsoft Settles U.S. Charges Passport Service Misled Public." In that article, Catavault took note of the following, "Asked at a news conference Thursday whether rival services such as those linked to the Liberty Alliance, a consortium of blue-chip companies originally organized by Microsoft rival Sun Microsystems Inc., would be affected, FTC Chairman Timothy Muris answered, 'If I were them, I'd read the order carefully.'"¹ Accordingly, pursuant to the thirty-day public comment period on the proposed Consent Order between the FTC and Microsoft Corporation, this document sets forth Catavault's comments on the proposed Consent Order. Specifically, the Consent Order is a good baby step, but the complaint and investigation failed to go far back enough. Moreover, the Consent Order settlement fails to go forward enough to sufficiently safeguard consumer choice and technological innovation, which in an open and efficient market, serves as the most effective safeguards regarding the security, privacy and functionality of the online identification and authentication sector and Single Sign-on (which is collectively referred to herein simply as "SSO").

INTEREST OF THE COMMENTER

Given the significance that Microsoft has placed on its .Net Passport (which is referred to herein simply as "Passport"), Catavault, a software company addressing SSO unfortunately has found itself in the cross-hairs of the most powerful software company in the world, since Microsoft is continuing its anticompetitive and recidivistic behavior in the SSO market as demonstrated by the structure of its Passport SSO service which has been bolted into Windows XP since its commercial launch on October 25, 2001.

Microsoft's anticompetitive actions and recidivistic behavior have directly and proximately caused injury to consumers and injury to competition, including Catavault's business and property. Catavault's injuries are the kind that the antitrust laws were intended to prohibit, and therefore constitute antitrust injury.

While these comments were prepared by Krishna Narine, Esq., of Schiffrin & Barroway in Bala Cynwyd, Pennsylvania, with the entrepreneurs who had managed Catavault, Catavault had previously worked to promote vigorous competition in computer industry platforms and gateways with our antitrust counselors from Morgan, Lewis & Bockius including Willard K. Tom, Esq. in Washington, D.C. and Julian M. Joshua, Esq. in Brussels.

INTRODUCTION

As stated in the "Promoting Competition, Protecting Consumers: A Plain English Guide to Antitrust Laws" booklet that the FTC has published on its Web site: "The FTC is a consumer protection agency with two mandates under the FTC Act: to guard the marketplace from unfair methods of competition, and to prevent unfair or deceptive acts or practices that harm consumers... When the Commission succeeds in doing both its jobs, it protects consumer sovereignty -- the freedom to choose goods and services in an open marketplace at a price and quality that fit the consumer's needs -- and fosters opportunity for businesses by ensuring a level playing field among competitors."²

The operative term in the first sentence above from the FTC's booklet is the word "and" – that the FTC's mission is to achieve both mandates. It seems that the crux of the FTC Complaint and

Consent Order was almost exclusively focused on the mandate of preventing "unfair or deceptive acts or practices that harm consumers," and essentially has ignored the mandate to "to guard the marketplace from unfair methods of competition." In order to truly understand the significance that the world's largest software company has placed on the SSO market and thus Passport, it is even more important that the FTC focus on both guarding the marketplace from unfair methods of competition, AND preventing unfair or deceptive acts or practices that harm consumers.

According to Bill Gates, Chairman of the Board and Chief Software Architect of Microsoft, in his *New York Times* bestseller *Business* @ *The Speed of Thought*, "For years and years enthusiasts have been saying that the Internet will happen 'tomorrow.' You're going to keep reading prognostications that the big change will happen in the next twelve months. This is just baloney. The social adaptations that have to occur take years, and the infrastructure has to be built out. But when the social and technical changes reach critical mass, the change will be quick and irreversible... As I said in *The Road Ahead*, we always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten. Don't let yourself be lulled into inaction."³

Catavault respectfully urges the FTC not to be lulled into inaction here when it comes to reevaluating the Passport Consent Order settlement and strengthening the Passport Consent Order settlement to ensure that Microsoft's predatory practices do not continue to violate the letter of the law as well as the spirit of the FTC's mandate to guard the marketplace from unfair methods of competition and to prevent unfair or deceptive acts that harm consumers. By accepting this settlement as is in its current form, the FTC will enable Microsoft to continue leveraging its monopoly to the detriment of both consumers and competitors – thus providing Microsoft with gaping "windows" of opportunities to continue circumventing the law and grow ever stronger.

Catavault concurs with Mr. Gates' assessment about the Internet, that when social and technical changes reach critical mass, the changes will be irreversible, and one can argue that the changes have now happened, albeit changes are still occurring, all the while Microsoft continues to maintain, leverage and extend its monopoly power. Catavault furthermore argues that Mr. Gates' analysis transcends the current day complaints surrounding Passport's critical mass by a variety of concerned constituents in a variety of forums, including a coalition of consumer groups led by the Electronic Privacy Information Center ("EPIC") and competitors such as Catavault.

Passport is a long-term play for Microsoft. Hence, its significance today (over the last two to three years) pales in comparison to Passport's significance tomorrow (over the next ten years) if the FTC does not greatly broaden the scope of its Consent Order settlement. Unfortunately, this whole scenario with the 2001-2002 investigation of Microsoft by the FTC is strikingly déjà vu to when the FTC launched its investigation of Microsoft's business practices over a decade ago; this 1990 investigation was the genesis of the landmark antitrust case that the United States Department of Justice filed against Microsoft in October 1997. As such, we respectfully urge the FTC to reconsider the security, privacy, functionality, consumer choice, technological innovation, and competitive landscape implications of Passport that go way beyond the Consent Order announced on August 8, 2002 since Passport's significance has arguably already become quick and irreversible.

In order to understand Microsoft's business strategy, one needs to look no further than its corporate slogan, "Where do you want to go today?" Today, primarily speaking, there are disconnected "islands" or "silos" of information/applications that are distinct, accessed and used in a distributed computing environment. By bolting Passport into XP and thus ensuring the dominance of Passport as a middleware springboard foundation to the new distributed computing environment, Microsoft very adeptly ensures that its platform dominance and monopoly in the OS is extended to other applications (instant messaging, digital imaging, streaming media, browser, etc). With both the non-distributed and distributed applications that exist and will be brought to market, Microsoft will continue to promote and preferentially channel Microsoft's end users to Microsoft applications. Thus, Microsoft creates a virtuous cycle of value creation for Microsoft's competitors - for example, Netscape and Catavault.

Microsoft, the largest, most powerful and wealthiest software company in the world, with approximately \$40 billion in cash reserves, fully recognizes that, because of the network characteristics of the industry, only subtle uses of its monopoly position are necessary in order to gain an unwarranted, but insuperable dominance in this field. Microsoft predicated its future survival and necessary business strategies on Passport on March 19, 2001 with its "HailStorm" announcement. HailStorm was meant to shift Microsoft from a software company to a Web services company whereby its software would work in a distributed computing environment. As reported in *The Wall Street Journal* on September 20, 2001, Microsoft changed the name of HailStorm to ".Net My Services" - possibly because they realize that its very name - HailStorm - has strong whiffs of antitrust violations. Please see Appendix 1 for a graphic example of how Catavault interprets the meaning behind Microsoft Passport.

According to Mr. Gates on March 19, 2001, "At the heart of 'HailStorm's' architecture is a version of Microsoft's popular Passport authentication technology enabling easy access to favorite sites..."⁴ Mr. Gates went further to say that, "Passport is achieving very significant critical mass. All Hotmail users, of course, get a Passport. There are many third-party Web sites that we are working with to make sure that they get people to use Passport as part of their authentication. In fact, that was part of the relationship we had with people like eBay and many others, is to say, let's get Passport, so you only have to log in one time, and you get exactly what you want there. So it's our goal to have virtually everybody who uses the Internet to have one of these Passport connections."⁵ Consequently, when Microsoft announced that the heart of HailStorm was based on Passport, Microsoft drove a stake through the heart of Catavault, a complementary and competitive SSO service to Passport.

OVERVIEW – CATAVAULT'S BACKGROUND, EXPERTISE & EXPERIENCE

PINvault.com Inc. doing business as Catavault was incorporated in 1999 under the laws of the State of Delaware with its principal place of business in Conshohocken, Pennsylvania. Catavault is a small, privately held software company that facilitates SSO; SSO eliminates the need for consumers and businesses to manage multiple and unique user names, passwords and PINs ("Authentication Credentials").

Catavault's SSO service was built and operated on the fundamental tenets of privacy, security and user experience. Catavault's "plain English" privacy policies and processes were audited by both BBBOnLine and TRUSTe. In fact, TRUSTe has pointed to Catavault as a "model citizen" when other third party Web businesses have needed assistance on developing and implementing an effective privacy policy and articulating it in plain English. Additionally, as part of Catavault's Errors and Omissions insurance policy coverage on its SSO service, Catavault's security was audited and successfully passed the several inspections by IBM's Internet Emergency Response Service and others.

Catavault is a pioneer in the SSO sector: CNN Headline News had called Catavault – "one site that can get you in everywhere..."⁶ *BusinessWeek* had called Catavault, "An Open Sesame for the Whole Web."⁷ For more detailed information on Catavault's applications and functionality as they have been licensed to clients such as Time Warner Cable's Road Runner, please see "The Catavault Technical White Paper" which can be downloaded at www.catavault.com/whitepaper.

From August 2000 to April 2002, Catavault's patent pending server-side and client-side SSO software (which ran on Linux, MySQL and PHP) powered the "All Access Pass to the Internet." Catavault enabled users to access more than 3,500 sites ranging from Amazon.com to ZDNet, a couple of orders of magnitude more than Microsoft's Passport currently enables access to, without the need to remember all of their Authentication Credentials for those sites. In contrast, according to Microsoft's testimony in April 2002 in Federal Court, "there are 147 live Passport-enabled Web sites on the Internet today (61 of which are non-Microsoft sites)."⁸ Another way to look at this statistic is that 58.5% of the sites (i.e., Hotmail, MSN MoneyCentral, MSN Messenger, etc.) that interoperate with Passport are Microsoft sites and 41.5% are non-Microsoft sites (eBay, Monster.com, Starbucks.com, etc.). However, as previously stated by Mr. Gates, "There are many third-party Web sites that we are working with to make sure that they get people to use Passport as part of their authentication."⁹

Catavault's software was agnostic in terms of operating system, device, browser, schema, service provider, etc. Unlike Passport which is only accessible from a personal computer ("PC"), Catavault was accessible from a PC, personal digital assistant ("PDA"), mobile phone and settop box, so users could access their information from any device, at any time and from anywhere.

In September 2002, a new chapter in the SSO sector arose when Microsoft initially announced its Internet Trust Network initiative (later renamed TrustBridge) and six days thereafter, Sun Microsystems announced its Liberty Alliance initiative. Both of these efforts were positioned as means by which third party sites could "federate" with one another and interoperate with SSO functionality. Although Microsoft's September 20, 2001 announcement that a future version of Passport will be "federated," and thus may be interoperable with rivals' services, Catavault has argued that this in no way alters the extremely serious concerns articulated herein and in Catavault's other antitrust and public policy lobbying efforts, among others, regarding Microsoft.¹⁰

In January 2002, Catavault published its views on federated frameworks of SSO in its "Open Sesame White Paper - Single Sign-on: Online Identity & Authentication Federations" which can be downloaded at www.catavault.com/opensesame. Additionally, given Catavault's SSO technology, intellectual property and market expertise, as well as Catavault's other assets, Catavault joined the Liberty Alliance in January 2002 as one of its forty-two Sponsor Members along with AOL Time Warner, Bell Canada, NTT DoCoMo, Sun Microsystems, and VeriSign. Since then, Catavault has worked with the Liberty Alliance in developing its identity, profile, and authentication specifications and standards to facilitate federated network identity. It is

important to note that the Liberty Alliance does not have any commercially available and/or deployed services as of today. It is Catavault's belief that this emerging "federation" along with Microsoft's TrustBridge may take five or more years to really implement and move away from the competitive and judicial dynamics of Sun v. Microsoft and/or AOL (Netscape) v. Microsoft. Moreover, the Liberty Alliance is never going to offer a commercially available service, but instead the Liberty Alliance will offer frameworks for bilateral agreements among parties to share network identity between one another, and thus in theory, facilitate SSO. Catavault was the only sponsor member of the Liberty Alliance that has had a singular corporate mission and core competence in SSO and has commercially launched a SSO service for both businesses and consumers.

With respect to Catavault's SSO solution, Catavault worked with both affiliated Sites, like Passport's model, as well as non-affiliated Sites, unlike Passport's model. It was Catavault's belief that the open model of working with both affiliated and non-affiliated Web sites was arguably very important in terms of providing maximum utility to users; this utility was the strategy we used to help drive adoption and usage of Catavault's inclusive approach. However, Catavault's strategy proved unsuccessful against a monopolist which had bolted Passport into various applications and services such as MSN Money Central and MSN Hotmail, signaled its intentions to own the SSO sector and then bolt its proprietary SSO service into its Windows XP operating system. Please see Appendix 2 illustrating Microsoft's anticompetitive actions to give birth to Passport.

Despite Catavault's arguably superior features and functionality of its services, Catavault, the quintessential "David" has been injured by Microsoft, the quintessential "Goliath." Just like Mr. Gates believes that "the central role played by intellectual property protection" is "providing an incentive for Microsoft to invest capital, time and energy in software development," Catavault's shareholders and managers invested their capital, time and energy to develop a superior SSO service.¹¹ However, Microsoft's anticompetitive actions forced Catavault to wind down its operations in April 2002 because of the anticompetitive steps that Microsoft has taken, and continues to take, to ensure that Passport becomes the dominant occupant of the SSO sector.

CATAVAULT'S PUBLIC POLICY CAMPAIGNS, LOBBYING INITIATIVES AND GOVERNMENTAL SUPPORT

On July 24, 2001, CNN Money reported that Senator Charles Schumer of New York "asked Microsoft to delay the release of Windows XP,... and urged the state attorneys general involved in the case to seek a court order blocking the release until the anticompetitive questions are addressed. Schumer said he believes two New York state-based companies, Eastman Kodak and AOL Time Warner, would be unfairly hurt by the new operating system, which integrates features such as instant messaging, streaming media and digital photography capabilities... In a press conference Tuesday morning, Schumer urged government officials to take swift action preventing Windows XP, in its current form, from being distributed. 'If we wait too long, Windows XP will be out, and smaller companies that don't have the leverage or financing of Microsoft will be forced into years of litigation that alone could drive them out of business,' Schumer said. 'You can't just un-ring a bell,' he added."¹²

Upon learning of Senator Schumer's position from this story, Catavault recognized that it was indeed one of those small companies that could be the small "poster-company" driven out of business as Senator Schumer remarked above. Specifically, it was Catavault's extreme concern

that if these two corporate behemoths, AOL Time Warner and Kodak, would be adversely affected by Microsoft, Catavault analyzed how "adversely affected" it would be as the quintessential David, in its fight against the quintessential Goliath, Microsoft. As such, Catavault then started lobbying the United States Senate Judiciary Committee in support of Senator Schumer's position that the launch of Windows XP should be delayed until anticompetitive issues were adequately addressed. Specifically, Catavault argued that while digital imaging, instant messaging and streaming media all are important issues to Kodak and AOL Time Warner, the real keystone to Microsoft's "HailStorm" initiative and full utilization of Windows XP is the Microsoft Passport identification and authentication service, a key issue for Catavault.

While Catavault's lobbying efforts with the Senate Judiciary Committee were happening concurrently with EPIC filing its complaint and complaint supplement with the FTC in July and August 2001, Catavault was not involved with EPIC and the FTC then, due to Catavault's limited resources (people, time, money). Specifically, Catavault's small staff of ten people, both full-timers and part-timers, were spread very thin in managing the day to day operations of Catavault and also lobbying Congress, among many other duties.

In addition to Catavault's lobbying efforts with the Senate Judiciary Committee, Catavault's legal counsel reached out to the United States Department of Justice and various states' attorney generals with respect to Catavault's concerns over Passport and how it was bolted into Windows XP. During the course of several meetings, phone calls and emails during the Fall of 2001, Catavault's legal counsel, Mr. Tom, at Morgan, Lewis & Bockius, drafted what we believed was an equitable conduct remedy whereby consumers would receive a "Ballot Screen" in order to select which SSO service (and other software such as browsers, media players, instant messaging, etc.) that they would want to use going forward when launching Windows XP.

Given Catavault's unique position with respect to the SSO sector, our pending patent rights that our legal counsel, Morgan, Lewis & Bockius believes covers Passport, in whole or in part, and our competitive and complementary position vis-a-vis Microsoft in general, Catavault was invited to testify in front of the United States Senate Judiciary Committee on September 19, 2001 along with AOL Time Warner, Kodak and Microsoft to discuss online identity and authentication, digital imaging and Internet competition in general. Unfortunately, the awful events of September 11, 2001 canceled those Hearings, and Catavault was unable to argue its position that consumers should have a choice in selecting their SSO service provider.

In October 2001, Catavault received support for its proposed Ballot Screen conduct remedy by various members of Congress. Please see Appendix 3 for a letter from Senator Arlen Specter of Pennsylvania to Assistant Attorney General Charles James, United States Department of Justice, in support of Catavault's Ballot Screen conduct remedy regarding the Microsoft antitrust settlement. Additionally, please see Appendix 4 for a letter from Congressman Robert A. Brady, Congressman Robert A. Borski, Congressman Chaka Fattah and Congressman Joseph M. Hoeffel, all from Pennsylvania, to Assistant Attorney General Charles James, United States Department of Justice, in support of Catavault's Ballot Screen conduct remedy regarding the Microsoft Attorney General Charles James, United States Department of Justice, in support of Catavault's Ballot Screen conduct remedy regarding the Microsoft antitrust settlement.

On February 14, 2002, the United States Department of Justice made available to the United States District Court for the District of Columbia forty seven Tunney Act comments received

during the sixty-day public comment period relating to the Revised Proposed Final Judgment in the Microsoft antitrust case. These published comments represent the comments characterized as "major" in the Joint Status Report submitted to the Court on February 8, 2002:

Total number of Tunney Act comments filed by interested parties: 33,867¹³ Total number of published comments characterized as "major": 47 (less than 0.1% of all comments)

Please see Appendix 5 for Catavault's Tunney Act comments. Additionally, one can view the following link - http://www.usdoj.gov/atr/cases/ms-major.htm - to see an alphabetical list of the 47 "major" Tunney Act comments including Catavault's along with AOL Time Warner, Novell, Palm, Red Hat, RealNetworks, SBC Communications, Sony, Sun Microsystems, The New York Times, etc.

AUTHENTICATION CREDENTIALS HISTORICAL FRAMEWORK - ATMs

In order to understand the significance of Passport for Microsoft, it helps to take a step backwards and look at the historical framework for SSO. The proliferation of user names, PINs (personal identification numbers) and passwords (collectively referred to as "Authentication Credentials" hereafter) is a relatively recent phenomenon stemming from the tremendous growth of high technology dating back to the mid-1980s. Many consumers received their first PIN in the 1980s when they received their first ATM (automated teller machines) card. At that time, consumers were often randomly assigned four digit PINs, yet sometimes they could request a personalized PIN, depending whether their bank offered that customization option.

The days of remembering just one or two Authentication Credentials for all applications did not last very long. Given the short time period that it took to gain widespread penetration and usage of ATMs, banks aggressively promoted bank-by-phone services. In some circumstances, banking by phone utilized a consumer's existing ATM PIN, however, sometimes consumers needed to get another PIN. With the advent of many new high tech products and services during the past twenty years, including, for example, computerized banking, wireline and wireless telecommunications and primarily the Internet, consumers have witnessed a proliferation of services and applications, both offline and online, that require unique Authentication Credentials.

HISTORICAL FRAMEWORK – THE INTERNET

The need for common SSO services arose from the open, democratic nature of the Web. Many Web sites, services and applications (collectively referred to as "Sites" hereafter) require that users register to view the site through a unique set of Authentication Credentials. In the absence of a standard authentication procedure, Sites independently created their own requirements for access. Technology, and not common sense, provided most of the rules for formatting; thus causing some Sites to use minimum and maximum character length, some Sites to use case sensitive parameters and/or some Sites to require a combination of letters and numbers. *The New York Times*, for example, requires a Member ID of five to fifteen characters, and a password that is a minimum of five characters in length¹⁴ For American Express, the rules are more stringent for its User ID:

- Must be greater than 5 characters in length.
- Must contain at least one letter.
- Must not contain spaces.

And that's just for the User ID. The password for American Express:

- Must be between six and eight characters in length.
- Must contain at least one letter and one number.
- Must not contain spaces or special characters.¹⁵

With thousands of Sites, each one demanding a different format, there was a clear need for solutions that would create an "open sesame" for the Web. This open sesame solution serves as a master key that would unlock most, if not all, of the doors that people are enabled to access on a daily basis, and free them from the cumbersome task of managing and using their Authentication Credentials each time that they visit various Sites.

Boston Globe columnist John Powers articulated the problem of disconnected "islands" of content, commerce and application Web sites: "I am the Man of 1,000 Passwords, and I'll be damned if I can remember more than three of them. Actually, I can remember more than three. I just can't remember which goes with what. Is **** the password for my Fidelity account or my Marriott Rewards account or my United Airlines Mileage Plus account? And I won't even talk about personal identification numbers."¹⁶

ATM ANALOGY – A LACK OF SHORT-TERM INTEROPERABILITY & HIGH FEES

As discussed, on September 21, 2001, Microsoft announced its TrustBridge SSO federation initiative (renamed from Internet Trust Network) whereby, "Microsoft is inviting the entire industry, including Web sites, enterprises and competing service operators, to participate in the creation of the broader Internet trust network, which will work a manner similar to that of the ATM network created by the banking industry."¹⁷

While this ATM analogy seems plausible in theory, one would be remiss in not addressing the practical shortcomings of the ATM network comparison because of some primary issues: 1) the long time period for ATMs to become ubiquitous and interoperable, and 2) the resulting high costs of ATM usage passed onto consumers who have become dependent on ATMs.

Given the historical context previously discussed with ATMs providing consumers with their first PIN, one also has to remember that when ATMs were originally introduced, interoperability, or the lack thereof, was big issue between various bank ATMs offering differing services such as Girard Bank's "George" and Bank of America's "Versateller." Accordingly, one was most likely unable to use competing bank's ATMs because of nascent, disparate, emerging and geographically dispersed networks such as Cirrus, NYCE, and Plus. Moreover, the business interoperability issues such as ownership of the account holder relationship precluded various banks from working together. While technical interoperability issues were solved over time, consumers liked the convenience afforded by ATMs which were becoming much more ubiquitous, and consequently consumers became dependent on ATMs. As such, when financial services institutions started limiting the number of monthly transactions and charging excessive fees for using "foreign" ATMs from another bank, consumers were harmed.

The "federated" approaches outlined by Microsoft's TrustBridge and the Liberty Alliance are very ambitious, and as such, consumer choice and technological innovation may benefit in the long-run. However, ambitious initiatives such as multiple federations take a long time to implement and may already be technologically grounded with unilaterally set standards that may or may not be acceptable to competitive businesses, Sites, authentication services and federations. Additionally, as larger players set their goals on dominating the SSO sector, smaller

companies will arguably find it harder to secure funding, access distribution channels, acquire customers and compete; thus, technological innovation may be stifled which in turn may cause consumer harm with more limited choices.

The consequence to the average consumer is that there will be a time lag for any federated solution to provide real consumer utility across a broad number of third party Sites. Moreover, just as banks started charging its account holders high ATM fees, the same is arguably true in the online identification and authentication sector. For example, "Microsoft is betting that consumers find passwords and data access so painful that they will pay for tools that let them regain control. The company said it will charge between \$20 and \$40 a year for core HailStorm [renamed .Net My Services] services such as identity management and electronic alerts."¹⁸

At the HailStorm announcement on March 19, 2001, Robert Muglia, Microsoft's then Group Vice President, Net Services (currently Mr. Muglia is Senior Vice President, Enterprise Storage Division), and a member of Microsoft's Business Leadership Team, stated, "And with the meltdown of the dot-com space there is no question that today's Internet business model needs a reboot. As we move forward into this next era, we look at the things that 'HailStorm' is providing, and underneath HailStorm is a set of technologies, it's a set of user-centric services. But if we just go out with the technology base, we will not do the things that are necessary to help enable the industry and create the kind of opportunity for businesses to thrive. So while 'HailStorm' is a bold new kind of services platform, it brings with it a traditional, maybe oldfashioned or perhaps the right word these days is a 'retro' business model. The business model, the core idea here, is that we think that there's value we can provide to end users in the services we're delivering, and we think that users will be willing to pay for those services. And so this idea of subscriptions and having users pay subscriptions to utilize these services is core to the business model that Microsoft is putting forward with 'HailStorm' and we'll be using across our product line. But I think that more than that, the thing that goes with that is it's an opportunity for the entire industry to rethink their business models. Everyone knows it needs to change, so how is it going to change? And you look out there and you look at the services that are being delivered to consumers on the Internet today, and there's a lot of value to those services. And as we move to a Web Services model, where all of these things are tied together in a cohesive way, the value to those consumers increases dramatically."¹⁹

However, given the high profile announcements by members of Microsoft's Business Leadership Team, (which is composed of high ranking officers and managers of the Microsoft Corporation including Mr. Gates and Steve Ballmer, Chief Executive Officer) about Passport, it is curious that in Direct Testimony in April 2002, David Cole, Senior Vice President, Services Platform Division, Microsoft, stated "There is no basis for Mr. Schwartz's [referring to the April 2002 Direct Testimony of Jonathan Schwartz, Chief Strategy Officer, Sun Microsystems] speculation that Microsoft 'in the future plans to charge [customers] for each transaction' consummated using a Passport 'wallet.' (Schwartz Direct ¶ 110.) This is not now, and to my knowledge never has been, our plan."²⁰ This claim that Microsoft will not charge for Passport is erroneous and misleading given the statements above by Microsoft officials. Microsoft has effectively played both sides of the fence here in that they have given away their SSO software to consumers and businesses for its SSO service, albeit there is greater functionality, but a vicious cycle occurs here which is the converse of the positive feedback cycle. Then as there is attrition in the SSO market and Catavault has withered on the vine, Microsoft is then able to start

charging sometime in the future when consumers and businesses are hooked on Passport and there is no effective substitute. As such, the FTC needs to be cognizant of this since consumers will be harmed through higher prices if the Consent Order fails to go forward enough to safeguard consumer choice and technological innovation, which serve as much more effective and efficient checks and balances regarding the security, privacy, functionality, and competitive landscape of the SSO sector.

PASSPORT'S BIRTH

According to Media Metrix, an online audience ratings measurement firm now owned by ComScore Networks, Microsoft gave birth to Passport which instantly became a top 20 Web site overnight from a standing start in July 1999. This was unprecedented then and still is today. Passport was born when Microsoft tied Money Central and Hotmail to Passport. Specifically, Microsoft converted all of the Authentication Credentials of its MSN Money Central and MSN Hotmail users, among other Microsoft services, without its users' express knowledge, permission or understanding of Microsoft's long-term intentions with their personal data in Passport. According to Gartner, a research company, even as recently as October 12, 2001, "Users of Microsoft's e-mail, Internet service provider (ISP) and instant-messaging services are automatically registered for a Passport, but most do not even realize they are registered [for Passport]."²¹

From its inception, Microsoft strategically and tactically sought to maintain, leverage and extend its monopoly in desktop operating systems and office applications to the nascent SSO sector. According to a Microsoft Press Release on October 11, 1999, "Microsoft Passport is the first example of a 'megaservice' available for businesses from Microsoft. Megaservices are a new breed of service that extend the web's capabilities by directly linking applications, services and devices with one another over the Internet."²²

It is Catavault's argument that the FTC was remiss in not investigating Passport from its inception as part of the investigation initiated by EPIC. In order to effectively promote an open and efficient SSO market that is characterized by online privacy, security, functionality, competitive dynamics and consumer choice, the FTC must take into account the "historical" perspective regarding Microsoft's anticompetitive actions.

JUDGE JACKSON'S FINDINGS OF FACT

On November 5, 1999, the United States District Court for the District of Columbia, Honorable Thomas Penfield Jackson, issued his Findings of Fact in United States v. Microsoft Corporation, Civil Action No. 98-1232 and 98-1233 (TPJ), a consolidated civil antitrust action brought by the Department of Justice and attorneys general of 20 states, including California, Connecticut, Iowa, Minnesota, New York and the District of Columbia. ("U.S. v. Microsoft"). Judge Jackson concluded that Microsoft was guilty of holding monopoly power. He rejected most of Microsoft's proclaimed "facts." On June 28, 2001, the United States Court of Appeals for the District of Columbia Circuit issued an opinion affirming in part, reversing in part and remanding the District Court's rulings. (United States of America v. Microsoft Corporation, 253 F3d 34 (D.C.Cir. 2001)).

Judge Jackson's 412th and final paragraph was the most powerful of all to any regulatory or judicial body charged with upholding and enforcing antitrust laws. "Most harmful of all is the message that Microsoft's actions have conveyed to every enterprise with the potential to innovate in the computer industry. Through its conduct toward Netscape, IBM, Compaq, Intel and others, Microsoft has demonstrated that it will use its prodigious market power and immense profits to harm any firm that insists on pursuing initiatives that could intensify competition against one of Microsoft's core products. Microsoft's past success in hurting such companies and stifling innovation deters investment in technologies and businesses that exhibit the potential to threaten Microsoft. The ultimate result is that some innovations that would truly benefit consumers never occur for the sole reason that they do not coincide with Microsoft's self-interest."²³

Unfortunately, Catavault is one such firm that sought to market innovative technologies which offered consumer choice and which did not coincide with Microsoft's self-interest.

Moreover, the District Court further found that Microsoft "engaged in a concerted series of actions designed to protect the applications barrier to entry, and hence its monopoly power...Many of these actions harmed consumers in ways that are immediate and easily discernible. They have also caused less direct, but nevertheless serious and far-reaching, consumer harm by distorting competition."²⁴

Accordingly, when Microsoft destroyed Netscape as a potential rival platform, it did more than achieve dominance in browsers. It eliminated an open and competitive market in which rival applications developers could ensure the survival of their applications programs and services by playing Microsoft off against Netscape. If Netscape and/or other browser/middleware platform software had survived as a serious competitor to Microsoft, competitive pressures would have forced one or more platforms to carry Catavault, because doing so would have provided a competitive advantage. The platform itself would have become more attractive if, through accessing Catavault, users were freed from cumbersome authentication procedures on a much larger number of sites. That competitive pressure is now gone. Thus, Catavault's current damages, including loss of value for its business assets such as intellectual property, among others, flows directly from Microsoft's earlier unlawful acts against Netscape.

Microsoft has engaged in a series of anticompetitive activities to protect its valuable Windows monopoly against potential competitive threats, and to extend its operating system monopoly into other software markets. Microsoft's conduct includes agreements tying other Microsoft software products to Microsoft's Windows operating system; exclusionary agreements precluding companies from distributing, promoting, buying, or using products of Microsoft's competitors, which may include Catavault's SSO software; and exclusionary agreements restricting other companies from providing services or resources to Microsoft's software competitors or potential competitors, possibly including Catavault. Microsoft also uses its control and proprietary information concerning the Windows operating system to disadvantage applications competitors who must design their software to interface with the operating system and rely on its established interfaces through successive new and improved versions of Windows such as Windows 98, Windows Millennium, Windows XP, etc.

THIS IS DÉJÀ VU

The 2001-2002 investigation of Microsoft by the FTC is strikingly déjà vu to when the FTC launched its investigation of Microsoft's business practices over a decade ago; this 1990

investigation was the genesis of the landmark antitrust case that the United States Department of Justice filed against Microsoft in October 1997. Moreover, the FTC's Consent Order from August 2002 is strikingly similar to the Consent Order that the United States Department of Justice and Microsoft entered into in July 1994, and which went into effect in 1995. In this 1994 settlement, the United States Department of Justice agreed to drop its antitrust action, and Microsoft agreed to œase certain business practices. Nevertheless, the vaguely worded decree enabled Microsoft to develop "integrated products."²⁵

In February 1995, "Federal District Court Judge Stanley Sporkin, after reviewing the consent decree, rules that it [the Consent Agreement] is an 'ineffective remedy' to constrain Microsoft."²⁶ However, in typical Microsoft fashion, there were a lot of legal wranglings, motions and court proceedings which were really delay tactics that Microsoft used that provided giant "windows" of opportunities for Microsoft to launch its own "Internet tidal wave" against any company that stood in its "mission critical" path. Specifically, by leveraging Windows 95 monopoly, Microsoft bolted the Internet Explorer browser into Windows 95 to extinguish Netscape's competitive browser. To the credit of Microsoft's business acumen or manipulation as some have argued, Microsoft even worked in conjunction with the United States Department of Justice, from time to time, to overturn court judgments against Microsoft.

However, in October 1997, the United States Department of Justice filed a motion in Federal District Court charging Microsoft with violating the 1994 Consent Agreement and asking the court to order Microsoft to cease tying (used interchangeably with bolting) its "separate" browser to Windows and forcing PC makers (used interchangeably with original equipment manufacturers or OEMs) to choose its browser. Microsoft insisted that the two products are "integrated." Microsoft continued to file appeal after appeal, and on May 12, 1998, the Court of Appeals ruled that Microsoft should not be stopped from shipping Windows 98 with Internet Explorer bolted into Windows 98 in June 1997. After settlement talks between the United States Department of Justice and Microsoft broke off six days later on May 18, 1998, the DOJ and attorneys general from twenty states filed a lawsuit against Microsoft alleging antitrust violations.²⁷

This chain of events is unfortunately very similar to what has transpired with Microsoft, the Department of Justice and the FTC over the last year. For example, there are similarities to Senator Schumer calling for the delay of the launch of Windows XP until competitive tying issues are resolved (with digital imaging, streaming media, instant messaging and SSO), but tragic world events played into Microsoft's hands and Congress was unable to deal with the Microsoft monopoly issue and the launch of Windows XP since its attention was diverted to homeland security following the terrorist attacks on September 11, 2002.

MICROSOFT SETTLES FEDERAL TRADE COMMISSION COMPLAINT REGARDING PASSPORT

Microsoft had previously criticized the formal complaint filed by privacy groups such as EPIC. Specifically, in typical business and legal form for Microsoft, the company had previously argued that "...the formal complaint by privacy groups was 'replete with factual errors, misrepresentations and speculations that demonstrate fundamental misunderstandings of [Microsoft's] products, services and technologies."²⁸

According to the FTC and Microsoft, the proposed consent agreement is "for settlement purposes only and does not constitute an admission of a law violation."²⁹ However, whether or not Microsoft admitted liability is not the relevant issue; Microsoft settled these claims because of many reasons, including, but not limited to, the seriousness of the FTC's claims, the veracity of the FTC's claims, the potential impact that this Complaint could have had if it was that much broader, the potential impact that the Consent Order could have had if it was that much broader and/or stricter, as Catavault [has argued that it should have been], and the impact that this arguably "measure of good faith" on Microsoft's behalf serves as a public goodwill gesture to Judge Colleen Kollar-Kotelly who is now presiding over the final penalty stages of U.S. v. Microsoft in Federal District Court in Washington, D.C.

According to CNN Money, "We cooperated fully with the FTC in a very thorough review, which included issues that are legally novel and technologically complex," stated Bradford Smith, Microsoft's Senior Vice President and General Counsel. "Consistent with our heightened security obligations, we accept responsibility for the past and will focus on living up to this high level of responsibility in the future," Smith added.³⁰ "Alluding to Microsoft's long and bitter struggle against antitrust regulators, Mr. Smith said that its cooperation with the Federal Trade Commission in this case represented 'a more constructive public dialogue with government."³¹

On August 8, 2002, Microsoft proudly proclaimed on its Web site that "The Federal Trade Commission (FTC) in Washington, D.C. announced today an agreement with Microsoft concerning the Passport authentication service." The press release in which this was announced was in the format of an interview with Mr. Smith, Microsoft's Senior Vice President and General Counsel, and Brian Arbogast, Corporate Vice President, .NET Core Services Platform, who is in charge of Microsoft Passport, conducted by Microsoft's public relations division called "PressPass," and posted on the Microsoft Web site.

In the Microsoft press release, Mr. Smith said the following, "We appreciate that governments will continue to consider Internet security and privacy a high priority, and we share that priority. In the end, we believe that a coordinated response to online security and privacy issues offers the greatest hope for promoting trust online and for fostering the growth of a vibrant online economy. Industry and government will be most successful in promoting and protecting online security and privacy if these efforts are grounded in dialog and cooperation. The agreement with the FTC reflects this principle."³² The irony of this statement is that Mr. Smith continues to represent, expressly or by implication, just like the FTC claimed Microsoft did on other matters regarding Passport, that there exists a "vibrant online economy," that in economic theory would offer consumer choice and technological innovation in areas such as SSO.

However, in truth and in fact, with respect to the strategic importance that Microsoft has placed on SSO with Passport, there is no such vibrant online economy because of Microsoft's anticompetitive actions towards others including Netscape in the browser war and Catavault in the SSO war, among other wars with other competitors in other sectors. As Judge Jackson ruled in his Findings against Microsoft, "The ultimate result is that some innovations that would truly benefit consumers never occur for the sole reason that they do not coincide with Microsoft's selfinterest."³³ When Mr. Smith argues that the agreement with the FTC reflects the principle of "dialog and cooperation," he is again representing, expressly or by implication, that this settlement with the FTC will really be mutually beneficial to all relevant constituents, when in truth and in fact, this settlement will not.

CATAVAULT'S REVIEW OF PROPOSED CONSENT ORDER SETTLEMENT

With respect to the proposed Consent Order, the FTC claimed in paragraphs 6, 11, 15 and 19 of the 21 paragraph Complaint against Microsoft in July 2001, that Microsoft "represented, expressly or by implication" various aspects of the security, privacy and functionality of Passport as described herein. For example, the FTC claimed that Microsoft represented, expressly or by implication "that purchases made at a Passport Express purchase site with Passport Wallet are safer or more secure than purchases made at the same Passport Express Purchase site without using the Passport Wallet." The FTC complaint continued that "In truth and in fact, purchases made a Passport Express Purchase site with Passport Wallet are not, for most consumers, safer or more secure than purchases made at the same Passport Express Purchase site without using the Passport Express Purchase site with Passport Wallet are not, for most consumers, safer or more secure than purchases made at the same Passport Express Purchase site without using the Passport Express Purchase site with Passport Wallet."

These claims which were settled in the Consent Order announced August 8, 2002, transcend the claims of Catavault regarding Microsoft's anticompetitive behavior regarding market signaling and market expectations, among others. Specifically, in addition to falsely representing, expressly or by implication, these security, privacy and functionality issues, Microsoft also signaled the market, leveraged its installed user base through network effects or the positive feedback cycle that Microsoft often refers to network effects with, and created false expectations among the following constituents, including, but not limited to: third party sites that license Passport's software and services, third party sites that are prospective licensees of Passport's software and services and/or competitive single sign-on/e-wallet software and services, end user consumers, the financial community including investors and analysts, industry analysts, entrepreneurs, software developers, the press, and competitive single sign-on/e-wallet companies such as Catavault.

PASSPORT'S STATISTICS – CORPORATE ACCOUNTABILITY

On November 5, 2001, Microsoft's David Cole, Senior Vice President of the MSN and Personal Services Group, presented at the Goldman, Sachs Software Retreat in Carlsbad, California, and stated the following, "First of all, I think people understand Passport is our identity and authentication system that we currently run on the Web at very, very high scale now on top of Windows 2000 and SQL Server. I think our numbers that we're quoting are somewhere in the neighborhood of 200 million Passports that we host today with 3.5 billion authentications per month, which is a pretty high scale environment for doing authentication."³⁴

On April 18, 2002, in Mr. Cole's written direct testimony in Federal court, Mr. Cole used virtually the same exact statistics from November 5, 2001 when he stated that "Passport was initially launched in 1999 and, with more than 200 million accounts performing more than 3.5 billion authentications each month, is one of the most popular online authentication services in existence today."³⁵

By way of background, Mr. Cole's current auspices include managing Passport; according to his Direct Testimony in April 2002, "In that position [SVP, MSN and Personal Services Group], I am responsible for the MSN network of Internet services, which includes the MSN.com Internet portal and MSN Internet access service. I also am responsible for several of Microsoft's .NET services, such as .NET Alerts and .NET Passport."³⁶ Mr. Cole also stated, "I also am a member of Microsoft's Business Leadership Team the group of senior executives at Microsoft [including Mr. Gates, Mr. Ballmer, Mr. Muglia and Mr. Cole, among others] responsible for broad strategic and business planning for the entire company."³⁷

In Mr. Gates' *New York Times*' bestseller, *Business @ The Speed of Thought* book, Mr. Gates spoke about the importance of accurate numbers, "Whatever else you do, if you don't understand what's happening in your business factually and you're making business decisions based on anecdotal data or gut instinct alone, you'll eventually pay a big price. Microsoft is a product company, and I care deeply about product development. But anyone who has participated in a budget review with the executive committee at Microsoft knows that we insist on having accurate numbers and insightful analysis of those numbers. Numbers give you the factual basis for the directions in which you take your products. Numbers tell you in objective terms what customers like and what customers don't like. Numbers help you identify your highest priorities so that you can take fast tactical or strategic action."³⁸

Given the importance that Mr. Gates places on having accurate quantitative statistics and analysis, it is ironic then that Mr. Cole is quoting the same user statistics for Passport over a five month period. One has to believe that the number of Passport users has increased substantially from November 5, 2001 (Mr. Cole's presentation to Goldman, Sachs), just eleven days after the launch of Windows XP, which has Passport bolted into the Operating System, and April 18, 2002 (Mr. Cole's Direct Testimony in Federal Court), some five and one half months after the "neighborhood" numbers of 200 million users and 3.5 billion monthly authentications were originally quoted.

One also finds it arguably curious that Microsoft has not publicly updated the number of registered Passport users because Microsoft knows full well that network effects (used interchangeably with the "positive feedback cycle," or "virtuous cycle") have kicked in, and Microsoft is ergo reticent about acknowledging how powerful Passport has become after it was bolted into Windows XP.

Even as of September 5, 2002, Microsoft still has documentation on its Passport Web site quoting the same 200 million users and 3.5 billion authentications each month. It is troubling that Microsoft has not released updated numbers since November 2001, shortly after Windows XP was launched with Passport bolted into the monopoly operating system. Given the fact that users are prompted to sign up for a Passport when they start using Windows XP, it is not rocket science to assume that the Passport user base would have grown dramatically. (See next section on Passport's Dominance for more details on how Passport is bolted into Windows XP.) For example, on January 7, 2002, just two months after Windows XP's launch, Microsoft announced that they had already sold 17 million copies of the XP software.³⁹ One could deduce that many of those XP users were converted into additional Passport users.

Moreover, in a press release on July 18, 2002, Microsoft announced "Solid fiscal year 2002 results" driven by "strong customer demand for Windows XP…" According to the press release, "The fourth quarter capped a great year for Microsoft, with solid revenue growth, successful product launches and our continued focus on managing costs. Robust customer demand for Windows® XP and other desktop software enabled us to deliver strong operating results this quarter, in spite of continued uncertainty in the technology markets," said John Connors, Senior Vice President and Chief Financial Officer at Microsoft (Mr. Connors is also a member of the Microsoft Business Leadership Team). "While the current environment remains challenging, we're making important investments in product development, marketing and in our sales force that will position us for success in the current year and beyond."⁴⁰

The FTC should not accept the Consent Order settlement as is without a clear understanding as to why Microsoft, a numbers driven company, omitted material quantitative and statistical updates that Microsoft clearly has. Failure to address this issue may have lulled the FTC into inaction with regard to deeper analysis in this all important area of SSO. Because of this material omission(s) and/or arguably misleading statement(s) about Passport's statistics and thus Passport's significance in the marketplace, the FTC should request, receive and publish accurate and up to date quantitative statistics and analysis on Passport since in the words of Mr. Gates, "numbers help you identify your highest priorities so that you can take fast tactical or strategic action." Without accurate information on the size and growth patterns of Passport, the FTC cannot make a well-informed and effective decision.

PASSPORT'S DOMINANCE

According to *The Wall Street Journal* article on about the FTC settlement with Microsoft on August 8, 2002, "More than 200 million people have signed up for Passport accounts, which are difficult to avoid when using Microsoft's flagship Windows XP operating system. The software prompts consumers: 'You need a Passport to use Windows XP Internet communications features (such as instant-messaging, voice chat and video), and to access Net-enabled features.' Passport is integral to Microsoft's most important upcoming technology services, including its .NET initiative."⁴¹

In the State of New York et al. v. Microsoft Corporation, the Direct Testimony of both John Borthwick, Vice President, AOL Advanced Services, AOL and Jonathan Schwartz, Chief Strategy Officer, Sun Microsystems, supports this statement from *The Wall Street Journal*.

On April 3, 2002, Mr. Borthwick stated: "Passport represents a critical bridge for Microsoft to use the desktop to sign people into this new world of services, or more specifically, Microsoft's services, because authentication and authorization represent an opportunity to form a direct relationship with customers that can include a payment capability...Windows XP is one of the foundations for the .NET strategy...Windows XP includes Passport – Microsoft's identity/authentication/authorization software - and aggressively promotes it at every turn, thereby helping Microsoft gain control over the manner in which most users would access and sign into services...To that end, Windows XP promotes Passport repeatedly. For example, when starting up a computer that runs Windows XP for the first time, the user is prompted to create a users account – an identity for that user on the operating system...If the user initially declines to sign up for Passport, Microsoft will repeatedly prompt the user with the 'Add your .NET Passport to Windows' message in the lower right corner of the desktop. In addition to Windows XP, users are prompted to sign up for Passport in a myriad of different places on the PC. A user who starts MSN Explorer, signs up for a Hotmail account, tries to use Windows Messenger, shops for music online, or accesses the photo imaging/printing service on Windows XP...will be asked to sign up for Passport."42

On April 8, 2002, Mr. Schwartz stated: "Microsoft drives adoption of .NET Passport accounts in a number of ways. For example, end-users of Microsoft's Web-based email services, Hotmail and MSN mail, are automatically registered with .NET Passport. Further, upon installation, Windows XP automatically prompts users to enroll in .NET Passport by suggesting that a .NET Passport account is required to use the Internet communications features of Windows XP."⁴³

In Mr. Cole's Direct Testimony on April 18, 2002 in the State of New York et al. v. Microsoft Corporation, Mr. Cole tried to rebut allegations made by Mr. Schwartz, "Contrary to Mr. Schwartz's suggestion, this balloon does not suggest that a Passport account is required to access the Internet. (See Schwartz Direct ¶ 108 & Figure 9.) It instead accurately states that a Passport is needed to use certain 'Windows XP Internet communications features,' such as Windows XP's instant messaging service. (The full message states: 'You've just connected to the Internet. You need a Passport to use Windows XP Internet communications features (such as instant messaging, voice chat, and video), and to access .NET-enabled services on the Internet. Click here to set up your Passport now.')'⁴⁴

PASSPORT REQUIREMENTS, REPRESENTATIONS, EXPRESS AND BY IMPLICATION

Microsoft has continued to represent, expressly or by implication, that you need a Passport to "experience" Windows XP. Microsoft may claim that the message above is clear that one does not need a Passport to use Windows XP, but that is just a ridiculous assertion when it comes to the average consumer understanding that there is a requirement for getting a Passport. In truth and in fact, Microsoft made a concerted effort from the very beginning of Passport with tying it to Money Central and Hotmail and then requiring it for use with the Windows XP operating system.

By way of background into Microsoft's thinking, in a speech at WinHEC, the Windows Hardware Engineering Conference on April 7, 1999 in Los Angeles, Mr. Cole stated the following, "What it comes right down to is making things just work. That's a term that I can't remember if I coined it at the company, or maybe Steve Ballmer did, I'm not sure. I sat my team down, we had a team meeting the other day and talked about Consumer Windows and what we're going to do, and it all comes down to making it just work for consumers. Consumers like the convenience of being able to do e-mail, write their letters, pay bills online. You know, consumers are kind of lazy, too. They don't want to have to work very hard to get convenience, which makes sense. You want convenience to be convenient to have. So we've got to make things just work to do that.⁴⁵ Mr. Cole went further in his presentation and referred to making Windows have a very "consumerable" type of experience. Accordingly, given this consumer mandate to just make it work from Messrs. Cole and Ballmer, it is reasonably safe to argue that Microsoft knows full well how consumers behave in front of their PC at their home or office, and that when presented with repeated prompts to sign up for a Passport since "You need a Passport to use Windows XP...", the average consumer wants Windows to work and will therefore sign up for a Passport, if for no other reason to stop the repeated Passport balloon sign-up prompts from happening.

\$11,000 FINE PER DAY PENALTY

Depending upon how the Consent Order is enforced, the \$11,000.00 per day fine could ludicrous. Microsoft has approximately \$40 billion in cash reserves, and assuming that Microsoft's average interest/investment yield is 10%, then Microsoft generates approximately \$450,000.00 every hour, of every day, in terms of interest accruals, not including its additional monthly profits averaging \$1 billion and the interest thereon. In order for the fine to have teeth, one thought is for the FTC to be "creative," and in the event that Microsoft violates the Consent Order, the FTC could impose its statutory fine and charge Microsoft \$11,000.00 for each violation per day, per affected consumer (which Microsoft claims is more than 200 million people).

FEDERAL GOVERNMENT'S SSO (E-AUTHENTICATION) INITIATIVE

Ironically for timing reasons including the fact that just three days after Catavault shut down its online operations due to capital constraints and the fact that Microsoft has been found guilty of numerous antitrust violations, on April 18, 2002, *The Seattle Times* reported that the United States Federal government "might use Microsoft's Passport technology to verify the online identity of America's citizens, federal employees and businesses, according to the White House technology czar."

The article also reported that at the Microsoft Government Leaders Conference in April 2002, which was attended by leaders of 75 countries including Mark Forman, Associate Director of Information Technology and E-Government, Executive Office of the President, Office of Management and Budget, who was a featured speaker at the conference, "...[Bill] Gates reiterated the goal, saying he expects governments in many countries will find it difficult getting to 'critical mass' with authentication systems they develop on their own. He said some governments may opt to use companies such as Microsoft or America Online as 'the bank' that registers people for online usage." Moreover, the article reported on September 30, 2002, "the government plans to begin testing [SSO] Web sites where businesses can pay taxes and citizens can learn about benefits and social services." Additionally, the article stated that Mr. Forman oversees the "government's purchases of \$100 billion worth of technology this year and next."⁴⁶

Notwithstanding that Catavault had just started to wind down its online operations in April 2002 due to capital constraints, as previously described, Catavault decided to try and pursue the Federal government as a client given Catavault's SSO technology, intellectual property and market expertise, as well as Catavault's other assets that its management and shareholders had invested in creating. While Catavault does not believe that the Federal government should rely solely on one vendor for SSO (or E-Authentication as Mr. Forman refers to it), Catavault does believe that governments should opt to use private sector companies with an installed user base and "vault" (or bank as Mr. Gates has referred to it) that registers people for online usage. (Additionally, when it comes to security vulnerabilities, the Federal Government also relies very heavily on the Windows Operating systems and suite of Office productivity applications such as Word, Excel and PowerPoint. As such, layering in another critical level for SSO with Microsoft Passport is just adding another security and privacy vulnerability to the Federal government's internal risk assessment.)

Due to the fact that time was of the essence for Catavault given its financial predicaments compounded with the Federal government's accelerated timeframe in deploying SSO technology across its constituents, Senator Rick Santorum of Pennsylvania reached out on Catavault's behalf to Mr. Forman in support of Catavault's efforts to become a selected vendor for the E-Authentication Gateway initiatives. Please see Appendix 6 for a copy Senator Santorum's letter.

Since that letter, Catavault has been undergoing a slow wind down and asset liquidation, all the while its managers are seeking paid employment elsewhere, notwithstanding the high profile in the SSO sector. During this time period, because Catavault has the resolve to help the Federal government, Catavault has continued to try to meet with different government officials, including Mr. Forman, a few times, and Catavault has since responded to the General Catavault's Reponses to the E-Authentication Initiative Request for Information dated July 12, 2002, GSA RFI No. T02-ALD-001.

However, due to Microsoft's anticompetitive behavior, Catavault has been handicapped in its abilities to earn the business, albeit Catavault is confident that it has the intellectual property, software, and market expertise to help the Federal government develop and implement its E Authentication initiative. Catavault has the resolve to be a going concern, but Catavault just does not have the resources, and this should matter to the FTC since this is a real world "case study" illustrating how Microsoft's anticompetitive and deceptive actions regarding Passport will adversely affect consumers through a lack of choice and a stifling of technological innovation.

SETTLEMENT MILESTONES - WINDOWS XP SERVICE PACK 1

In August 2002, Microsoft touted the "Microsoft Settlement Program Milestones" on its Web site, and proudly stated, "On November 6, 2001, Microsoft entered into a proposed settlement with the U.S. Department of Justice and nine State Attorneys General, which was designed to resolve the remaining liability findings in the government antitrust lawsuit. Although the proposed consent decree has not been entered by the District Court, Microsoft agreed to abide by its terms pending approval. Since November, Microsoft has been engaged in extensive efforts to meet the milestones established under the consent decree, many of which will be reached in the coming weeks." One such milestone includes, "The release to manufacturing of Windows XP Service Pack 1 and Windows 2000 Professional Service Pack 3, both of which will include new mechanisms that computer manufacturers and consumers can use to add and remove access to certain Windows features and easily set defaults for competing software."⁴⁷

According to a Microsoft Press Release on August 30, 2002, "In addition to the traditional service pack updates, Windows XP SP1 [Service Pack 1] delivers the required changes of the proposed consent decree signed with the U.S. Department of Justice and nine state attorneys general. The changes allow both computer manufacturers and users to remove end-user access to Microsoft® Internet Explorer browser software, Windows MediaTM Player, Windows Messenger, Outlook® Express and Microsoft's Java virtual machine. This is just one of many components of the compliance effort undertaken by Microsoft since the consent decree was signed in November 2001."⁴⁸

In fact, even before August 2002, Microsoft had been touting the Windows XP Service Pack 1 as a measure of good faith on its behalf, possibly to influence the FTC's investigation and settlement negotiations along with other pending antitrust remedy proceedings. According to CNN Money on May 24, 2002, "...The service pack will roll up about a dozen or so critical security problems that have already been patched in XP and accompanying programs like Windows Messenger instant messaging, he said. The software also changes the Passport settings so that they don't pop up soliciting registration until a user accesses a service that requires Passport, such as Hotmail, Microsoft Network or Windows Messenger. Passport allows users to enter their personal information once and have it accessible by multiple Web sites and services, rather than the user having to enter that data for each new service they sign up for."⁴⁹

While we think that Microsoft's settlement milestones are a step in the right direction, Catavault has grave concerns over these milestones because of the following:

First, Microsoft released to 10,000 beta testers a beta version of Windows XP called Service Pack 1 at the end of May 2002, a full seven months after Windows XP hit the market with much fanfare supported through a \$250 million marketing budget.

Second, Microsoft plans a full release of the Windows XP Service Pack 1 on September 9, 2002 (ironically, the day on which public comments on the FTC settlement with Microsoft regarding Passport are due), more than ten full months after Windows XP commercially launched.

Third, with respect to the first and second points above, Pandora's Box was already opened in October 2001 with the official release of Windows XP and Microsoft bolting in Passport to Windows XP; thus millions of end users have started using XP and in turn Passport. Moreover, one can argue that Pandora's Box was opened much earlier than October 2001 given all of the pre-hype surrounding the launch of Windows XP, and the notions dating back to at least March 2001 when Microsoft announced its new central business strategy called HailStorm (.Net My Services), the "heart" of which was Passport.

Fourth, the fact is that Original Equipment Manufacturers (OEMs) are a sub-optimal source to serve as an adequate check and balance on Microsoft's anti-competitive actions. For example, the provisions that allow OEMs to have greater freedom to select which software to use and not to use do absolutely nothing to protect consumer choice and technological innovation. Thus, providing the OEMs greater freedom as a conduct remedy against Microsoft is meaningless today given consolidation in the PC industry, slumping PC sales, depressed PC margins, and the fact that the OEMs do not want to bite the hand that feeds them - Microsoft. Moreover, the OEMs know very well that small companies such as Catavault cannot afford to compete against Microsoft, both in terms of operations and marketing. Case in point, Windows XP launched on time because Microsoft lobbied that XP would help revive slumping PC sales, and Microsoft spent approximately \$250 million just on marketing for XP. As such, OEMs do not necessarily want to bet on smaller players which find themselves in the cross-hairs of Microsoft - thus consumer choice and technological innovation are still harmed.

IT'S NO LAUGHING MATTER

Mr. Gates, one of the wealthiest people in the world due to the enormous success of his Microsoft Corporation, attracts a lot of attention from many of Microsoft's constituents including journalists, customers, competitors, industry pundits, financial analysts, investment bankers, government officials, lawyers and philanthropists. Even comedians such as Robin Williams, who according to HBO, "is the Academy Award®-winning actor/writer/comedian/free spirit," have a "wealth" of information to choose from when it comes to Bill Gates and Microsoft. For example, on July 14, 2002, in the opening minutes of his one hundred minute live comedy routine, Robin Williams reflected on the following comedic vignette, which was greeted with laughter by the audience, regarding Bill Gates and Microsoft:

"... on the dollar bill, instead of In God We Trust, in Gates we trust."

Williams then continues with the following mock dialogue between a United States Senator and Bill Gates.

[Senator]: "Mr. Gates, when did you realize that you were creating a monopoly?"

[Gates]: "Monopoly is just a game, Senator. I am trying to control the f***ing world. Don't you see Windows Millennium, it's all leading to information technology. Soon it will be Total Information Technology, TIT. When you're sucking on the TIT, I have you by the motherboard. Don't be afraid."⁵⁰ Maybe that is why Mr. Gates' favorite game growing up, according to his father, was Risk, "the board game in which armies are pitted against each other and players attempt to occupy territories and control entire continents. The victor rules the world."⁵¹

According to French journalist and playwright Nicolas Chamfort, "The most completely lost of all days is the one on which we have not laughed." While Mr. Williams comments above on the Microsoft antitrust saga are amusing, it does not mitigate the seriousness of the illegal and anticompetitive activities of Microsoft Corporation against its competitors.

CONCLUSION

Judge Jackson's Findings that "most harmful of all is the message that Microsoft's actions have conveyed to every enterprise with the potential to innovate in the computer industry" epitomize Catavault's experience in trying to build and sustain a successful business in the SSO sector. If the Consent Order is accepted as is, the result will be a further weakening of effective competition in the SSO market, a reduction in consumer choice and less technological innovation, generally speaking and specifically to SSO functionality. As such, we respectfully request that pursuant to the thirty-day public comment period on the proposed Consent Order between the FTC and Microsoft Corporation, that the FTC rethink the significance of the SSO market and Passport's monopolization thereof. Microsoft should not be able to continue garnering and benefiting from its ill-gotten gains as a monopolist. Specifically, the Consent Order is a good baby step, but the complaint and investigation failed to go far back enough. Moreover, the Consent Order settlement fails to go forward enough to sufficiently safeguard consumer choice and technological innovation, which in an open and efficient market, serves as the most effective safeguards regarding the security, privacy and functionality of the SSO market.

ENDNOTES

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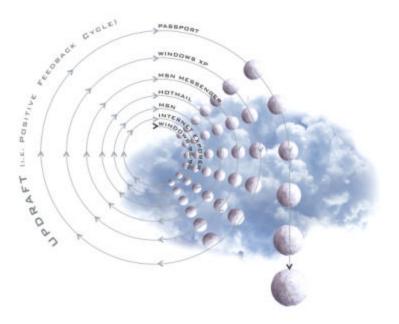
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Appendix 1 - Microsoft HailStorm Has Strong Whiffs of Antitrust Violations



Microsoft's HailStorm Initiative

"The world of operating systems becomes more homogenous over time. Today something like 85 percent of the computers on the planet run the same operating system [Microsoft's]. There is sort of a positive feedback cycle here. If you get more applications, it gets more popular, if it gets more popular, it gets more applications."

--Bill Gates keynote address, Conference on Internet and Society at Harvard in May 1996; World War 3.0 by Ken Auletta.

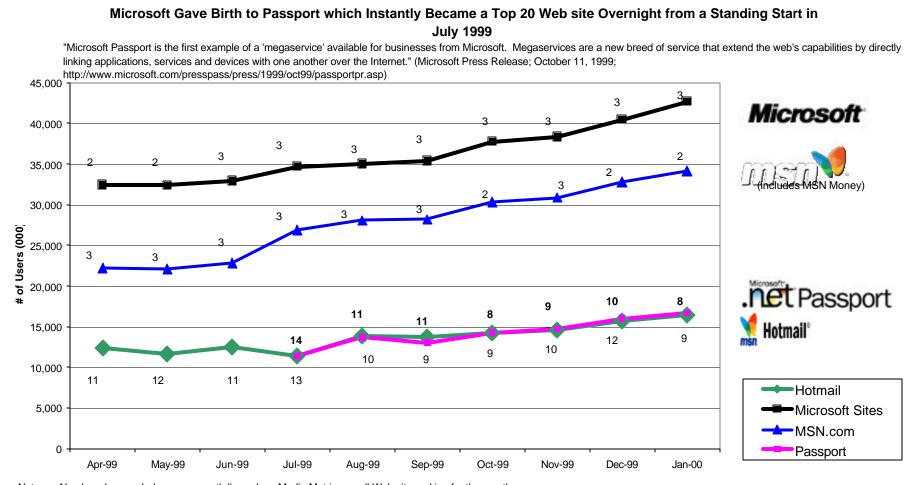
On June 28, 2001, the District of Columbia Court of Appeals unanimously held that Microsoft engaged in unlawful monopolization. Notwithstanding Judge Jackson's ruling and the appellate ruling, Microsoft prominently announced its major corporate initiative called "HailStorm" in March 2001; the very choice of HailStorm as a name serves as a metaphor for a "positive feedback cycle" in Bill Gates' opinion or "network effects" and "increasing returns" in an antitrust perspective.

The heart of HailStorm is based on .Net Passport, Microsoft's proprietary online identification and authentication service. This market signaling transcends into Microsoft's strategy and tactics to gain market advantage in new sectors using .Net Passport. .Net Passport is the exclusive online identification and authentication service on Windows XP. Accordingly, .Net Passport will be the de facto online identification and authentication service which will limit consumer choice and undermine innovation.

As reported in *The Wall Street Journal* on September 20, 2001, Microsoft changed the name of HailStorm to ".Net My Services" - possibly because they realize that its very name - HailStorm - has strong whiffs of antitrust violations.

Note: In its natural weather-related occurrence, hail stones are large frozen raindrops produced by intense thunderstorms. As the frozen drops fall, liquid water freezes onto them forming ice pellets that continue to grow as more and more droplets accumulate. Upon reaching the bottom of the cloud [symbolic for the Internet], some of the ice pellets are carried by the updraft back up to the top of the cloud. As the ice pellets once again fall through the cloud, another layer of ice is added and the hail stones grow even larger. Typically the stronger the updraft, the more times hail stones repeat this cycle and consequently, the larger the hail stones grow. Once the hail stones become too heavy to be supported by the updraft, they fall out of the cloud toward the surface. The hail stones reach the ground as ice since they are not in the warm air below the thunderstorm long enough to melt before reaching the ground. And as one knows, you should take cover from a hail storm...

Appendix 2 – Passport's Birth By Tying it to MSN Money (formerly Money Central) and Hotmail



Note: Number above or below user growth lines show Media Metrix overall Web site ranking for the month. Source: Media Metrix Top 50 At Home and At Work Digital Media and Web Audience Ratings, April 1999 - January 2000.

Appendix 3 - Letter from Senator Arlen Specter to Assistant Attorney General Charles James in Support of Catavault's Ballot Screen Conduct Remedy Regarding the Microsoft Antitrust Settlement

10/26/2001 17:47 FAX 215 597 0406 ARLEN SPECTER PENNSYLVANI

SPECTER PHILA.

2002

COMMITTEES JUDICIARY APPROPRIATIONS VETERANS' AFFAIRS ENVIRONMENT AND PUBLIC WORKS

United States Senate WASHINGTON, DC 20510-3802

October 26, 2001

Mr. Charles A. James Assistant Attorney General U.S. Department of Justice Antitrust Division Room 3744 950 Pennsylvania Avenue, NW Washington, DC 20530

I am writing you on behalf of one of my constituent companies, Catavault, which has been a pioneer in online user and authentication services since the company was founded in Philadelphia in 1999. It is my understanding that Catavault has submitted a conduct remedy proposal to the Department of Justice to require that a "Ballot Screen," which would allow consumers to select the online identity and authentication that they would like to use, be included on Microsoft Windows XP.

Catavault's "All Access Pass to the Internet" allows users to access more than 3,500 Internet sites through the use of authentication services. In addition, Catavault asserts that its Internet pass enhances consumer accessibility in that the product is compatible with a range of computer devices including, personal computers, PDAs, and mobile phones.

As a long time supporter of high tech companies, I recognize the importance of an environment that stimulates technology-based entrepreneurship and supports the expansion of e-commerce in communities throughout Pennsylvania and the nation. Accordingly, I urge you to ensure that the remedy fosters a competitive marketplace for consumer choice and provides for technological innovation in the area of online identity and authentication. In this light, I request that you give your full and fair consideration of Catavault's proposal to incorporate a "Ballot Screen" into the Microsoft Windows XP format.

Thank you for your prompt attention to this matter.

PRINTED ON RECYCLED PARCA

rlen Specter

A\$/jc

cc: Mr. Daniel J. Bryant, Assistant Attorney General, Office of Legislative Affairs

Appendix 4 - Letter from Congressman Brady, Congressman Borski, Congressman Fattah and Congressman Hoeffel to Assistant Attorney General Charles James in Support of Catavault's Ballot Screen Conduct Remedy Regarding the Microsoft Antitrust Settlement

Congress of the United States

Mashington, DC 20515

October 2, 2001

The Honorable Charles A. James Assistant Attorney General, Antitrust Division United States Department of Justice Room 3744 950 Pennsylvania Avenue, NW Washington, DC 20530

Dear Mr. James

As the parties to the Microsoft case attempt to reach a settlement, we would like to bring to your attention to Catavault, a small Philadelphia-based company that has pioneered online user identification and authentication space.

Catavault's "All Access Pass to the Internet" allows users to access more than 3,500 sites without the need to remember all of their authentication credentials -- such as user names and passwords -- for those sites. The number of sites accessible with Catavault is significantly more than Microsoft's Passport currently accesses. Catavault, unlike Passport, is not only accessible from a personal computer, but is also PDA, Mobile Phone and Set-top Box enabled, so users can access their information from any device, at any time and from anywhere.

We are concerned that Catavault is endangered by barriers that prevent it from competing with Microsoft's Passport. We further believe that any settlement should remove these barriers and allow consumers their choice of online user identification and authentication services. Microsoft recently agreed to change its digital imaging features to provide easier access to digital-imaging software many providers, not just those affiliated with Microsoft. A similar agreement could incorporate Catavault (and other online identity and authentication services) into Windows XP as a complementary and competitive service. This would allow consumers to select which online identity and authentication service they would like and preserve fair competition.

Thank you for your review of this matter. If we can be of assistance in any way, please do not hesitate to contact us.

Sincerely,

ROBERT A. BRADY Member of Congress

BORSKI ROBERT A Member of Congress

CHAKA FATWAH Member of Congress

PRINTED ON RECYCLED PAPER

Appendix 4 (continued) - Letter from Congressman Brady, Congressman Borski, Congressman Fattah and Congressman Hoeffel to Assistant Attorney General Charles James in Support of Catavault's Ballot Screen Conduct Remedy Regarding the Microsoft Antitrust Settlement

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cc: The Honorable Sheryl Walter Acting Assistant Attorney General Office of Legislative Affairs 950 Pennsylvania Avenue, N.W., Room 1145 U.S. Department of Justice Washington, D.C. 20530

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Deborah P. Herman United States Department of Justice 950 Pennsylvania Avenue, NW Washington, DC 20530

Mary Jean Moltenbrey United States Department of Justice 950 Pennsylvania Avenue, NW Washington, DC 20530 Appendix 5 – Catavault's Tunney Act Comments as Characterized as "Major" in the United States Department of Justice Joint Status Report submitted to the Federal Court on February 8, 2002 Regarding The Microsoft Revised Proposed Final Judgment.

BEFORE THE UNITED STATES DEPARTMENT OF JUSTICE

UNITED STATES OF AMERICA	
Plaintiff,	Civil Action No. 98-1232 (CKK) United States District Court for the District of Columbia
V.	
MICROSOFT CORPORATION,	
Defendant.	
STATE OF NEW YORK <i>ex rel</i> . Attorney General ELIOT SPITZER, <i>et al.</i> ,	
Plaintiffs, v.	Civil Action No. 98-1233 (CKK) United States District Court for the District of Columbia
MICROSOFT CORPORATION,	
Defendant.	

COMMENTS OF CATAVAULT ON THE REVISED PROPOSED FINAL JUDGMENT

INTEREST OF THE COMMENTER

Given that Microsoft's .Net Passport is the "heart" of Windows XP, Microsoft's new Operating System that was officially launched on October 25, 2001, Catavault, a software company addressing online identification and authentication, unfortunately finds itself in the cross-hairs of the most powerful software company in the world, since Microsoft has tied its .Net Passport to Windows XP. Pursuant to the Tunney Act, this document sets forth Catavault's comments on the Revised Proposed Final Judgement because we feel that competing products such as Catavault will still unfortunately be set at a disadvantage which is not related to price or quality. If the Revised Proposed Final Judgement is accepted as is, the result will be a weakening of effective competition in the market, a reduction in consumer choice and less technological innovation, generally speaking and specifically to online identification and authentication.

Catavault has developed, commercially licensed and deployed patent pending software that is both complementary and competitive with Microsoft .Net Passport in online identity and authentication services. Although Microsoft's September 20, 2001 announcement that a future version of .Net Passport will be "federated,"¹ and thus may be interoperable with rivals' services, we believe that this in no way alters the extremely serious concerns articulated herein. Moreover, in spite of the Revised Proposed Final Judgement announced between the United States Department of Justice, nine states' Attorneys General and Microsoft Corporation, Catavault believes that this in no way alters the extremely serious concerns articulated herein. As such, Catavault has been encouraged that various states' Attorneys General still have the resolve and resources necessary to continue the fight in ensuring conduct remedies that are timely, effective, certain and practical when it comes to curbing Microsoft's recidivistic behavior.

While these Tunney Act comments were prepared from the heart so to speak of the entrepreneurs managing Catavault, Catavault has been working to promote vigorous competition in computer industry platforms and gateways with our antitrust counselors from Morgan, Lewis

¹ See http://www.microsoft.com/presspass/press/2001/sep01/09-20PassportFederationPR.asp.

and Bockius including Mr. Willard K. Tom based in Washington, D.C. and Mr. Julian M. Joshua based in Brussels.

CATAVAULT OVERVIEW

Catavault is a pioneer in the online user identification and authentication space. Catavault's technology powers the "All Access Pass to the Internet," and it allows users to access more than 3,500 sites ranging from Amazon.com to ZDNet, a couple of orders of magnitude more than Microsoft's .Net Passport currently enables access to, without the need to remember all of their authentication credentials for those sites. Unlike .Net Passport which is only accessible from a PC, Catavault is accessible from a PC, PDA, Mobile Phone and Set-top Box, so users can access their information from any device, at any time and from anywhere. CNN Headline News has called Catavault - "one site that can get you in everywhere..." BusinessWeek has called Catavault, "An Open Sesame for the Whole Web." Despite these arguably superior features of its services, Catavault is severely endangered by the steps Microsoft is taking to ensure that .Net Passport becomes the dominant occupant of the online identity and authentication space. Accordingly, Catavault is endangered by the Revised Proposed Final Judgement. The remedial principle is straightforward enough: the remedy should "unfetter a market from anticompetitive conduct,' . . . 'terminate the illegal monopoly, deny to the defendant the fruits of its statutory violation, and ensure that there remain no practices likely to result in monopolization in the future."² However, in spite of the overwhelming en banc victory on liability, the Revised Proposed Final Judgement does little to ensure that conduct remedies are timely, effective, certain and practical in curbing Microsoft's anti-competitive behavior.

NETWORK CHARACTERISTICS & MICROSOFT'S HAILSTORM STRATEGY

Microsoft fully recognizes that, because of the network characteristics of the industry, only subtle uses of its monopoly position are necessary in order to gain an unwarranted, but insuperable dominance in this field. Indeed, its choice of "HailStorm" as a metaphor speaks volumes. As you may know, with each updraft in the natural weather-related occurrence of a hail storm, hail stones get larger as more water molecules attach to the crystalline structures of

 $[\]frac{2}{2}$ United States v. Microsoft Corp., slip op. at 99-100, No. 00-5212 (D.C. Cir. June 28, 2001), *quoting* Ford Motor Corp v. United States, 405 U.S. 562, 577 (1972); United States v. United Shoe Mach. Corp., 391 U.S. 244, 250 (1968).

the hail stones. Similarly, Microsoft makes its monopoly position more impregnable with every adjacent space it dominates. Each layer creates another multiple-level entry problem for potential competitors, as described in the United States Department of Justice's 1984 Merger Guidelines to which the United States' Federal agencies still refer in non-horizontal matters. Figure 1 is a visual representation of the troubling processes that Catavault sees at work with respect to a monopolist bundling its own applications to its dominant Operating System.

As reported in *The Wall Street Journal* on September 20, 2001, Microsoft changed the name of its HailStorm initiative to ".Net My Services" - possibly because they realized that its very name, HailStorm, has strong whiffs of antitrust violations.

One can argue that network effects require a lock-in mechanism. However, the traditional lockin mechanism is access to complements. Some of the services offered by Catavault and .Net Passport require cooperation from third party Internet site(s). If .Net Passport has a much larger number of users, gained through the use of its operating system monopoly, then why would the sites would want to work with Catavault? If the sites cease to work with Catavault, then why would users find Catavault attractive? These questions and their answers are paramount to understanding how market signaling and network effects work towards the monopolist's advantage when it ties its own applications to its dominant Operating System.

NETSCAPE – FRUITS OF MICROSOFT'S STATUTORY VIOLATIONS

"Most harmful of all is the message that Microsoft's actions have conveyed to every enterprise with the potential to innovate in the computer industry. Through its conduct toward Netscape, IBM, Compaq, Intel and others, Microsoft has demonstrated that it will use its prodigious market power and immense profits to harm any firm that insists on pursuing initiatives that could intensify competition against one of Microsoft's core products. Microsoft's past success in hurting such companies and stifling innovation deters investment in technologies and businesses that exhibit the potential to threaten Microsoft. The ultimate result is that some innovations that would truly benefit consumers never occur for the sole reason that they do not coincide with Microsoft's self-interest."²

 $[\]frac{3}{2}$ Judge Thomas Penfield Jackson's Finding of Fact, 412th and final paragraph, November 5, 1999.

Accordingly, When Microsoft destroyed Netscape as a potential rival platform, it did more than achieve dominance in browsers. It also prevented rival applications developers from playing Microsoft off against Netscape in the battle to ensure the survival of their applications programs and services. If Netscape and/or other browser/middleware platform software had survived as a serious competitor to Microsoft, competitive pressures would have forced one or more platforms to carry Catavault, because doing so would have provided a competitive advantage. The platform itself would have become more attractive if, through accessing Catavault, users were freed from cumbersome authentication procedures on a much larger number of sites. That competitive pressure is now gone. Thus, Catavault's current predicament flows directly from Microsoft's earlier unlawful acts against Netscape.

MARKET EXPECTATIONS STIFLE INNOVATION AND COMPETITION

Moreover, the very public humbling of an 85 percent market share player like Netscape in itself creates market expectations that where Microsoft announces an intention to dominate a strategic space, it will succeed in doing so. .Net Passport occupies a strategic space as the onramp to the Internet as illustrated in Figure 2, and Microsoft has been quite public about that fact as has been reported in articles in *The Industry Standard*.⁴ Consequently, merchants, investors, and other marketplace participants become highly resistant to dealing with Microsoft's competitors in such spaces. For example, Benjamin D. Black, a principal of the Rosewood Venture Group, a U.S. venture capital firm in San Francisco, California has stated, "I still won't invest in companies that are directly in front of Microsoft's development path."⁵ And Stewart Alsop, a general partner of New Enterprise Associates, a Silicon Valley venture capital firm in the U.S., has been quoted as saying, "The most common question for potential investors is: 'What about Windows XP?' You can still compete but if Microsoft's path.'⁶ Thus, in this sense,

⁴ http://www.thestandard.com/article/0,1902,27685,00.html.

 $[\]frac{5}{5}$ The New York Times, September 7, 2001, "Competitors See a Giant That Is Now Largely Unfettered," by Michael Brick.

⁶ *The New York Times*, September 7, 2001, "Pendulum Swings to Microsoft, But the Degree Remains Unclear," by Steve Lohr.

too, Microsoft's earlier unlawful acts against Netscape directly cuts Catavault off from access to important complements.

To that end, one could argue that the competition is ultimately not for the end-user, but for the online service providers who actually pay for online identity and authentication services. Signing up 200 million Hotmail accounts gives Microsoft a huge critical mass of users, but what does it do to get third party sites to work with .Net Passport? To answer this effectively, one must understand that having so many users signals to the marketplace that Microsoft will dominate online identity and authentication services. Moreover, these third party businesses are motivated to work with Microsoft based on the marketing support that Microsoft can provide them – thus creating value propositions from Microsoft's monopoly position. If **h**ird party businesses believe that Microsoft will also succeed in using its Operating System monopoly to push Catavault and/or others aside in terms of subscribers or utilities, then third party firms will not have an incentive to work with Catavault. As former United States Deputy Assistant Attorney General Carl Shapiro has described in his writings, expectations play a very large role in network markets.²

MAKING .NET PASSPORT THE DE FACTO IDENTITY SERVICE IN WINDOWS XP

Microsoft has taken a number of steps to ensure, and to make consumers believe, that having a .Net Passport account is necessary in order to access features of Windows XP and/or other Microsoft goods and services. Indeed, the press, encouraged by Microsoft, has come to the conclusion that Microsoft .Net Passport "will be the exclusive identity service on the new Windows XP operating system. Any XP user who wishes to access key services such as Windows Messenger (for Instant Messaging) will have to register for a Passport."⁸

Microsoft has not achieved its claimed 200 million .Net Passport subscribers by offering a superior service. (Competitive market research indicates that .Net Passport is currently accepted by only about 35-70 sites, most of which are owned by Microsoft, have received

² Speech by Carl Shapiro, Deputy Assistant Attorney General, Antitrust Division, United States Department of Justice. American Law Institute and American Bar Association, "Antitrust/Intellectual Property Claims in High Technology Markets," San Francisco, California, January 25, 1996.

substantial Microsoft investment or partnered with Microsoft in some sort of business arrangement.) Instead, it has done so by these kinds of suggestions of inevitability and by automatically opening .Net Passport accounts for all Hotmail and MSN users, and even hinting at future integration and potential incompatibilities. Thus, in published reports regarding .Net Passport 2.0, it is stated, "...with this release, Hotmail will move to the Passport code base for easier integration."^{θ}

Catavault experienced this directly in early September 2001 when a Catavault employee tried to access the latest release candidate of XP. First, he learned that one could not get the latest preview of XP online without a .Net Passport account.¹⁰ Then, after downloading that version of XP and rebooting, he got a blank desktop, but in the system tray in the bottom right, a message popped up that said:

"Add your .NET Passport to Windows XP!

You've just connected to the Internet. You need a Passport to use Windows

XP Internet communications features (such as instant messaging, voice chat,

and video), and to access .NET-enabled services on the Internet.

Click here to set up your Passport now."

When he clicked, it went to the .NET Passport Wizard to let him sign up for Passport.

Thus, whether or not there are actual incompatibilities, Microsoft has been representing to users that they must sign up for .Net Passport in order to access key XP features or other Microsoft services. In a network business, that may be all Microsoft needs to maintain and extend its dominance to this space as well. These network characteristics undoubtedly underlie some of the "vaporware" aspects of Microsoft's dramatic announcements but slow rollout. We have already mentioned how small the number of third party sites accepting .Net Passport is. In the same vein, ZDNet has reported that American Express has yet to sign a contract with Microsoft for HailStorm services. This despite the fact that Microsoft touted American Express

⁸ Source: http://www.thestandard.com/article/0,1902,27685,00.html, attached.

⁹ Source: http://www.wininformant.com/Articles/Index.cfm?ArticleID=22174, attached.

¹⁰ Source: http://www.microsoft.com/windowsxp/preview/systemreq.asp.

as a partner at the very announcement of the HailStorm initiative, by featuring American Express' Chief Information Officer in that announcement.¹¹

PROPOSED CONDUCT REMEDIES TO CURB ANTI-COMPETITIVE PRACTICES

If there is no efficiency justification for Microsoft's tactics such as bundling and/or market signaling, they may be acts of monopolization in themselves. But regardless of whether they are or not, the current situation flows directly from Microsoft's earlier unlawful acts against Netscape. While one can never know with certainty exactly what that but-for world would have been had Netscape survived, it was reasonably certain that, for some significant period of time, there would have been a competitive struggle between Microsoft and Netscape as alternative nuclei around which other providers of applications and services would coalesce. Both would seek to commoditize the other's space. If Netscape gained the upper hand, multiple operating systems would become available to computer users. If Microsoft gained the upper hand, multiple browsers would become available. Consequently, any remedy for those earlier acts needs to include some kind of mandated intra-system competition to take the place of the competition that would have existed between the two systems to add attractive applications through a "Ballot Screen" with choices for online identity and authentication services such as Catavault.

We have given a great deal of thought to what order language would be needed to implement the concept of a Ballot Screen. Following is the rationale and the result can be found in Figure 3 with the language marked as to revisions. It uses Microsoft's inclusion of middleware products in its operating system software as the benchmark for what types of products should be included, with the slight modification that it remedies the continuing effects of past inclusions as well as remedying the effects of future inclusions. As you will see, there is a provision for approval by some entity, corresponding to Commission approval in the AOL Time Warner order, in order to ensure that the competing products are serious competitors to Microsoft. In the case of online identity and authentication, the seriousness of the competition can be measured by the number of sites, users, and devices accessed by the competitor. These metrics could be written into the order if desired, but in any event the existence of available

¹¹ http://www.zdnet.com/zdnn/stories/news/0,4586,5096385,00.html.

metrics would ensure that the entity charged with approval would have an objective way of exercising that discretion. As you will also see, when we reviewed Judge Jackson's order, we concluded that online identity and authentication service software would fit comfortably into the definition of "middleware," but for the avoidance of doubt, we included it specifically in the list of examples. In addition to offering services via communications interfaces as now occurs, it is entirely possible that in the future, programmers of sites or of programs used to build sites will write software built upon a Catavault platform.

We have also given further thought to the Department of Justice's observation that a possible standard for relief is that it should be aimed at opening the operating system market to competition. After reflection, we believe that our proposed Ballot Screen relief does in fact further that goal, but that such a standard is nonetheless wrong, in spite of that standard appearing in the Department of Justice's September 6, 2001 press release.

The relief we propose does further the goal of operating system competition, because allowing Microsoft to use its operating system monopoly to obtain a dominant position in the authentication gateway to the Internet will mean the creation of yet another applications barrier to entry, because it will be extremely difficult to police the ways in which Passport could be used to favor Windows if a credible threat to Windows arose.

There is, however, a more fundamental issue: the proper standard must be to restore the competitive conditions that would have existed but for the illegal conduct. It is, of course, too late to revive Netscape as a credible threat to Microsoft's operating system monopoly. One approach might be, as the Department of Justice once proposed, to find in Microsoft's applications software -- particularly its dominant Office suite -- a sufficiently dangerous competitive threat to the operating system monopoly. As in the competition between Microsoft and Netscape in the but-for world, the point of that remedy was not to assure ultimate, long-term competition in operating systems. The operating system company might win the competitive struggle, and ultimately maintain its monopoly position through lawful means. The point of the remedy was the competitive struggle itself. That remedy was imperfect, as are all the alternatives. But for better or worse, it is now off the table.

Whatever replaces it, the goal should not be to assure ultimate, long-term competition in operating systems. The but-for world did not do so. Microsoft might well have won the competitive struggle, and maintained its monopoly. The point of the Netscape threat to the operating system monopoly was that Microsoft had to compete with better products and prices, and in the meantime the rest of the computer industry would be vigorously competitive and innovative, and might nurture the next threat to the surviving monopolist. It is the strangling of that dynamic from which the market must be unfettered, and it is Microsoft's freedom from that dynamic that constitutes the "fruits of its statutory violation." At this point in the evolution of the computer industry, after Microsoft's misconduct, it might well be a hopeless task to restore competition in operating systems.

It is not too late, however, to restore the competitive dynamic that ensured that, while Microsoft battles its chief rivals in the most strategic battleground at any given time, innovators in the next strategic space could play one against the other in order to survive. At the moment, the inter-system competition that Netscape represented is gone, and the Department of Justice is no longer seeking to have competition from Microsoft Office take its place. Thus, the temporary stopgap by which the next strategic space can develop must be intra-system competition, or "must-carry." That will revive some of the competitive dynamic that Microsoft has cut off, and allow competition to flourish in - and on the other side of - those gateways.

Ergo, just as Microsoft agreed to change its digital imaging features to give users easier access to digital imaging software from a number of providers such as Kodak, not just those affiliated with Microsoft, so there needs to be a requirement that Microsoft incorporate Catavault (and other online identity and authentication services that may arise) into XP as a complementary and competitive service. Thus, doing some kind of a "Ballot Screen" for consumers to select which online identity and authentication service they would like may be as close as one can get to the competitive landscape that would have existed but for Microsoft's already adjudicated unlawful conduct. In addition, of course, one would need to prohibit Microsoft from introducing incompatibilities, to forbid Microsoft from making use of .Net Passport as a prerequisite to use other Microsoft goods and services, and so forth. Otherwise, the need to sign up with .Net Passport to get the XP preview is likely to continue to be the typical pattern for accessing anything that Microsoft can control or influence.

MICROSOFT'S FEDERATED ANNOUNCEMENT & INTERNET TRUST NETWORK -ITS EFFECTS AND RELATION TO FEAR, UNCERTAINTY & DOUBT

A "Ballot Screen" remedy would be far superior to waiting to see how Microsoft's latest "federated" announcement plays out. As the Department of Justice well knows, a "fear, uncertainty and doubt" strategy relies heavily on the passage of time and the uncertainty of the future. (This is undoubtedly why Microsoft has been making every effort to delay judicial and legislative proceedings in the United States.) As of January 28, 2002, Catavault has neither been invited to any Microsoft developers' conference yet, nor has it learned of any developers' conference yet, albeit Catavault has informed Microsoft about its potential willingness to participate in the conference. Additionally, XP has already been launched with an aggressive marketing campaign and with .Net Passport as the exclusive online identity and authentication service. Net Passport will have a huge user base that will undoubtedly get larger between now and the time that any Microsoft federation conference or any competitive and/or complementary solution such as the Liberty Alliance initiated by Sun Microsystems produces any tangible results in the marketplace. The agenda of the federated conference and other like it such as the Liberty Alliance may be to develop standards for implementation of online user identification and authentication services, and in the case of Microsoft's Internet Trust Network, built upon a technology platform of Microsoft's choosing, regardless of consumer preferences. Following that developers' conference, there may be a long period of back-and-forth over technical standards. Next may come a period in which Microsoft sows uncertainty about the extent to which other services are fully interoperable, perhaps because of peculiarities in Microsoft's implementation of the common standard. During all that time, .Net Passport will become more and more entrenched, regardless of consumers' preferences as to the features and scope of competing online user identification and authentication services.

Industry pundits used to subscribe to the notion that "first mover advantage" was the most important mission of many new technology ventures. However, based on present market conditions, we argue that it has nothing to do with first mover advantage anymore; rather it has everything to do with the concept of "last man standing." Accordingly with over US \$36 billion in cash reserves on hand, Microsoft is well positioned to be the last man standing in many industries including online identity and authentication.

PROBLEMS WITH THE REVISED PROPOSED FINAL JUDGEMENT

While there are many troubling issues with the Revised Proposed Final Judgement, two of the more salient problems for the online identity and authentication sector involve the following terms and provisions:

 OEMs - The fact is that Original Equipment Manufacturers (OEMs) are a sub-optimal source to serve as an adequate check and balance on Microsoft's anti-competitive actions. For example, the provisions that allow OEMs to have greater freedom to select which software to use and not to use do absolutely nothing to protect consumer choice and technological innovation.

Thus, providing the OEMs greater freedom as a conduct remedy against Microsoft is meaningless today given consolidation in the PC industry, slumping PC sales, depressed PC margins, and the fact that the OEMs do not want to bite the hand that feeds them - Microsoft.

Moreover, the OEMs know very well that small companies such as Catavault cannot afford to compete against Microsoft, both in terms of operations and marketing. Case in point, Windows XP launched on time because Microsoft lobbied that XP would help revive slumping PC sales, and Microsoft is spending approximately US \$250 million just on marketing for XP. As such, OEMs do not necessarily want to bet on smaller players which find themselves in the cross-hairs of Microsoft - thus consumer choice and technological innovation are still harmed.

 AUTHENTICATION LOOPHOLE - The following provision from the proposed settlement seems to be the veritable loophole large enough to drive a truck through, particularly affecting Catavault and other online identity and authentication services.
J. No provision of this Final Judgment shall:

1. Require Microsoft to document, disclose or license to third parties: (a) portions of APIs or Documentation or portions or layers of Communications Protocols the disclosure of which would compromise the security of anti-piracy, anti-virus, software licensing, digital rights management, encryption or authentication systems, including without limitation, keys, authorization tokens or enforcement criteria; or (b) any API, interface or other information related to any Microsoft product if lawfully directed not to do so by a governmental agency of competent jurisdiction.¹²

Identification and authentication is singled out for a loophole to free Microsoft's .Net Passport from scrutiny and permit Microsoft to bind a universal identification and authentication service utility to its monopoly operating system without scrutiny under the Revised Proposed Final Judgement. By permitting Microsoft to withhold key parts of encryption, digital rights management, authentication, and other security protocols, the Revised Proposed Final Judgement effectively clears the way for the desktop monopolist to the Web-services monopolist in a distributed computing environment. The Revised Proposed Final Judgement could hardly try to place a clearer stamp of approval on an expansion of the scope of an illegally maintained monopoly.

¹² http://www.usdoj.gov/atr/cases/f9400/9462.htm

CONCLUSION

The Revised Proposed Final Judgement agreed to by the United States Department of Justice, the Attorneys General of nine states and Microsoft Corporation does not attain its goals of curbing Microsoft's recidivistic behavior in maintaining and extending its operating system monopoly into Web-services such as online identification and authentication, which Microsoft has bet will be the next gateway to the Internet. Specifically, the Revised Proposed Final Judgement does not provide adequate incentives across constituent bodies and penalties for Microsoft to ensure that the Revised Proposed Final Judgement goals are attained. Moreover, the lenient conduct remedies imposed on Microsoft are essentially a slap on the wrist for its illegal conduct and anti-competitive practices. Unfortunately, technological innovation and consumer choice will continue to be harmed, and this will be exacerbated in challenging economic conditions if the Revised Proposed Final Judgement is accepted as is. As such, the Revised Proposed Final Judgement needs to be revised significantly if it is to have any real impact in the marketplace in curbing Microsoft's recidivistic behavior. Specifically, as it pertains to the heart of Windows XP and Microsoft's goal of dominating online identification and authentication with .Net Passport, we believe quite passionately that implementing a Ballot Screen for users to choose which identification and authentication service that they would like would go a long way to providing a conduct remedy that was more timely, effective and certain.

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Microsoft's HailStorm Initiative

"The world of operating systems becomes more homogenous over time. Today something like 85 percent of the computers on the planet run the same operating system [Microsoft's]. There is sort of a positive feedback cycle here. If you get more applications, it gets more popular, if it gets more popular, it gets more applications." --Bill Gates keynote address, Conference on Internet and Society at Harvard in May 1996; *World War 3.0* by Ken Auletta.

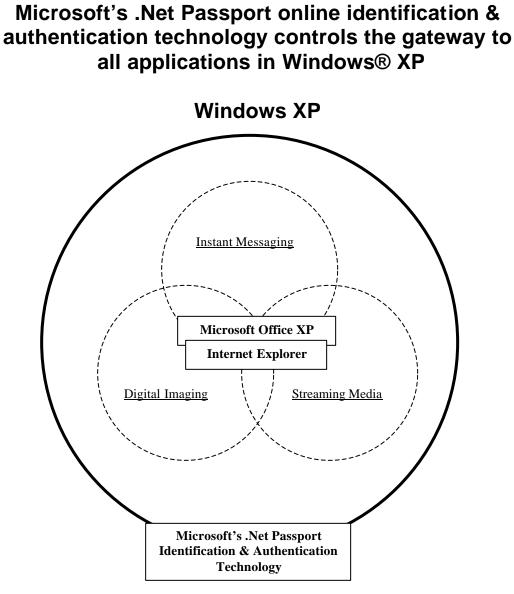
On June 28, 2001, the District of Columbia Court of Appeals unanimously held that Microsoft engaged in unlawful monopolization. Notwithstanding Judge Jackson's ruling and the appellate ruling, Microsoft prominently announced its major corporate initiative called "HailStorm" in March 2001; the very choice of HailStorm as a name serves as a metaphor for a "positive feedback cycle" in Bill Gates' opinion or "network effects" and "increasing returns" in an antitrust perspective.

The heart of HailStorm is based on .Net Passport, Microsoft's proprietary online identification and authentication service. This market signaling transcends into Microsoft's strategy and tactics to gain market advantage in new sectors using .Net Passport. .Net Passport is the exclusive online identification and authentication service on Windows XP. Accordingly, .Net Passport will be the de facto online identification and authentication service which will limit consumer choice and undermine innovation.

As reported in *The Wall Street Journal* on September 20, 2001, Microsoft changed the name of HailStorm to ".Net My Services" - possibly because they realize that its very name - HailStorm - has strong whiffs of antitrust violations.

Note: In its natural weather-related occurrence, hail stones are large frozen raindrops produced by intense thunderstorms. As the frozen drops fall, liquid water freezes onto them forming ice pellets that continue to grow as more and more droplets accumulate. Upon reaching the bottom of the cloud [symbolic for the Internet], some of the ice pellets are carried by the updraft back up to the top of the cloud. As the ice pellets once again fall through the cloud, another layer of ice is added and the hail stones grow even larger. Typically the stronger the updraft, the more times hail stones repeat this cycle and consequently, the larger the hail stones grow. Once the hail stones become too heavy to be supported by the updraft, they fall out of the cloud toward the surface. The hail stones reach the ground as ice since they are not in the warm air below the thunderstorm long enough to melt before reaching the ground. And as one knows, you should take cover from a hail storm...

Catavault's Tunney Act Comments on the Microsoft Revised Proposed Final Judgment http://www.usdoj.gov/atr/cases/ms-major.htm



"It's our goal to have virtually everybody who uses the Internet to have one of these Passport connections..." - Bill Gates

Source: *The Industry Standard* - July 3, 2001 http://www.thestandard.com/article/0,1902,27685,00.html

While digital photography, instant messaging and streaming media all are very important issues to constituents such as Kodak, AOL Time Warner and Real Networks respectively, the backbone to Microsoft's "HailStorm" (renamed .Net My Services) initiative and full utilization of Windows XP is the Microsoft .Net Passport identification and authentication service. Microsoft has stated that .Net Passport will be the exclusive Internet identity service on Windows XP, and Passport will be required to utilize some or all of the features noted above. Thus, even if competition in those areas is assured, Microsoft will still hold the real keys to access and conceivably will be able to use its .Net Passport monopoly to direct traffic away from competing digital photography, instant messaging and streaming media applications.

Notice: Microsoft® and Windows® are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Catavault's Tunney Act Comments on the Microsoft Revised Proposed Final Judgment http://www.usdoj.gov/atr/cases/ms-major.htm

Figure 3 Proposed Order (Marked with changes)

3g. Restriction on <u>BindingIncluding</u> Middleware Products to Operating System Products. Microsoft shall not, in any Operating System Product distributed six or more months after the effective date of this Final Judgment, <u>Bindinclude</u> any Middleware Product to in a Windows Operating System unless:

i. that Operating System also includes at least two (2) comparable Middleware Products offered by non-affiliated firms approved by the [Antitrust Division] [Department of Justice] [Court] [Trustee] or Microsoft demonstrates to the satisfaction of [____] that fewer than two such products exist, in which case Microsoft shall include all that exist. The option of using such non-affiliated products shall be displayed to the user on terms no less favorable than those accorded to the Microsoft products.

ii. Microsoft also offers an otherwise identical version of that Operating System
Product in which all means of End-User Access to thatthose Middleware Products can readily be
removed (a) by OEMs as part of standard OEM pre-installation
kits and (b) by end users using add-remove utilities readily accessible in the
initial boot process and from the Windows desktop.; and

iii. when an OEM removes End-User Access to a Microsoft Middleware Product from any Personal Computer on which Windows is preinstalled, the royalty paid by that OEM for that copy of Windows is reduced in an amount not less than the product of the otherwise applicable royalty and the ratio of the number of amount in bytes of binary code of (a) the Middleware Product as distributed separately from a Windows Operating System Product to (b) the applicable version of Windows.

3g'. Middleware Products Included in Previously Distributed Operating System Products. If Microsoft has, in any Operating System Product distributed less than six months after the effective date of this Final Judgment, included any Middleware Product in a Windows Operating System, it shall within six months after the effective date of this Final Judgment:

i. release a version of its most recent Operating System that includes at least two (2) comparable Middleware Products offered by non-affiliated firms approved by the [Antitrust Division] [Department of Justice] [Court] [Trustee], unless Microsoft demonstrates to the satisfaction of [____] that fewer than two such products exist, in which case Microsoft shall include all that exist. The option of using such non-affiliated products shall be displayed to the user on terms no less favorable than those accorded to the Microsoft products.

ii. offer an otherwise identical version of that Operating System Product in which all means of End-User Access to those Middleware Products can readily be removed (a) by OEMs as part of standard OEM preinstallation kits and (b) by end users using add-remove utilities readily accessible in the initial boot process and from the Windows desktop.

7q. "Middleware" means software that operates, directly or through other software,

between an Operating System and another type of software (such as an application, a server Operating System, or a database management system, including such Operating Systems and database management systems on an Internet site) by offering services via APIs or Communications Interfaces to such other software, and could, if ported to or interoperable with multiple Operating Systems, enable software products written for that Middleware to be run on multiple Operating System Products. Examples of Middleware within the meaning of this Final Judgment include Internet browsers, online identity and authentication service software, e-mail client software, multimedia viewing software, Office, and the Java Virtual Machine. Examples of software that are not Middleware within the meaning of this Final Judgment are disk compression and memory management.

r. "Middleware Product" means

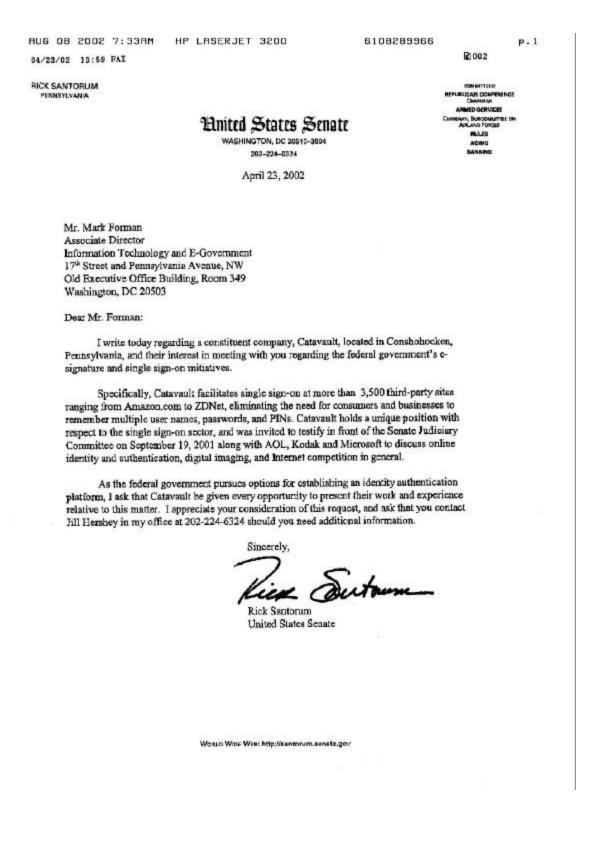
i. Internet browsers, e-mail client software, multimedia viewing software, instant messaging software, online identity and authentication service software, and voice recognition software, or

ii. software distributed by Microsoft that –

(1) is, or has in the applicable preceding year been, distributed separately from an Operating System Product in the retail channel or through Internet access providers, Internet content providers, ISVs or OEMs, and

(2) provides functionality similar to that provided by Middleware offered by a competitor to Microsoft.

Appendix 6 – Letter from Senator Rick Santorum to Mark Forman at the Executive Office of the President, Office of Management and Budget



Catavault's Tunney Act Comments on the Microsoft Revised Proposed Final Judgment http://www.usdoj.gov/atr/cases/ms-major.htm