

No. _____

**UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT**

MIKE HARRIS AND JEFF DUNSTAN, INDIVIDUALLY AND ON BEHALF
OF A CLASS OF SIMILARLY SITUATED INDIVIDUALS.,

Plaintiffs-Respondents,

v.

COMSCORE, INC.,

Defendant-Petitioner,

On Appeal from the United States District Court
for the Northern District of Illinois

**COMSCORE'S PETITION FOR LEAVE TO
APPEAL CLASS CERTIFICATION ORDER PURSUANT TO
FEDERAL RULE OF CIVIL PROCEDURE 23(f)**

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April 16, 2013

CORPORATE DISCLOSURE STATEMENT

Defendant-Petitioner comScore, Inc. has no parent corporation, and no publicly held corporation owns 10% or more of its stock.

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INTRODUCTION

In this high-stakes case, the district court has certified a worldwide class—tens of millions of people—consisting of everyone who has downloaded defendant comScore’s software through a third party since 2005. Each is theoretically eligible to recover significant statutory damages. No privacy case of anything approaching this size has ever been certified, for the simple reason that the individualized issues inherent in cases of this type make them particularly unsuited to class treatment. Indeed, the two class representatives’ cases themselves suffer from failures of proof on the threshold issue of whether they even downloaded comScore’s software, a prerequisite to membership in the class.

Both the Supreme Court and this court have repeatedly admonished district courts to conduct a “rigorous” examination of all disputed facts relevant to class certification before granting certification. Instead of following this admonition, the district court effectively shifted the burden to comScore to show that a class should not be certified. In so doing, the district court delayed rulings on key threshold questions such as whether classwide injuries exist, whether comScore’s broad disclosures are legally adequate, and even whether it is possible to identify who is actually in the class, suggesting that such rulings can be handled later.

The district court’s erroneous construction of the law has the potential to change the course of class action practice in data privacy cases like this one. It also calls into question the adequacy of the terms of use employed by almost any Internet company. Unless this Court accepts this appeal, however, the district court’s decision might well evade review. Class certification has suddenly turned these two plaintiffs’ dubious lawsuits into a single case with enormous potential damages. The district judge stated on the record from the outset that he wants the parties to settle the case, and for comScore, a publicly traded company, the risks of proceeding against a gigantic class—no matter how specious the asserted claims might be—cannot be ignored. This is precisely the type of situation for which Fed. R. Civ. P. 23(f) was designed.

QUESTIONS PRESENTED

1. Whether a district court can certify a class while leaving open key questions about whether the class does in fact satisfy Rule 23's commonality, typicality, ascertainability, and predominance requirements.
2. Whether the district court erred in certifying this class action when the class representatives are subject to dispositive defenses inapplicable to the rest of the class.
3. Whether Rule 23 and the due process clause permit certification of a class whose membership cannot be corroborated by any objective criteria.
4. Whether, after the Supreme Court's decision in *Comcast v. Behrend*, class certification requires a showing that damages are capable of measurement on a classwide basis.
5. Whether this case should be dismissed in favor of arbitration, in light of the district court's new ruling—reversing its previous position—that the class agreed to terms of use that include an arbitration clause.

RELIEF SOUGHT

This Court should accept review of the district court's order granting class certification and, following briefing on the merits, reverse or vacate that order. In the alternative, the Court should remand with instructions that the case be dismissed in favor of arbitration in Virginia.

FACTUAL BACKGROUND¹

comScore. comScore, a publicly traded, leading Internet company, measures consumers' online behavior. Its data is used by thousands of companies to inform their advertising and marketing decisions, from where to spend their ad dollars to how to design their sites. The primary way that comScore gathers data is via individuals ("panelists") who—somewhat like families who have their TV-watching habits tracked by ratings companies—sign up to run comScore's software on their computers in exchange for incentives such as free software, sweepstakes participation, points programs, the planting of trees, and the ability to influence the

¹ The Order granting Class Certification is attached as an Addendum to this Petition. Citations to A__ refer to the Appendix to Petition filed concurrently herewith.

operation of websites across the Internet.² This data is then aggregated and anonymized by comScore to create market reports which are distributed to comScore's customers.

Every prospective panelist who downloads a third-party partner's software offered in conjunction with comScore's software is presented with broad disclosure by a clickwrap agreement that the district court referred to as the Downloading Statement.³ The Downloading Statement says:⁴

In order to provide this free download, RelevantKnowledge software, provided by TMRG, Inc., a comScore, Inc. company, is included in this download. This software allows millions of participants in an online market research community to voice their opinions by **allowing their online browsing and purchasing behavior to be monitored, collected, aggregated, and once anonymized, used to generate market reports which our clients use to understand Internet trends and patterns and other market research purposes. The information which is monitored and collected includes internet usage information, basic demographic information, certain hardware, software, computer configuration and application usage information about the computer on which you install RelevantKnowledge.** We may use the information that we monitor, such as name and address, to better understand your household demographics; for example, we may combine the information that you provide us with additional information from consumer data brokers and other data sources in accordance with our privacy policy. We make commercially viable efforts to automatically filter confidential personally identifiable information and to purge our databases of such information about our panelists when inadvertently collected. **By clicking Accept, you acknowledge that you are 18 years of age or older, an authorized user of this computer, and that you have read, agreed to,**

² comScore also obtains the data it uses in other ways. For example, a panelist may sign up to take surveys without installing comScore's software on her computer. A151. A prospective panelist may also visit a comScore-owned website, sign up to be a panelist, and download comScore's software. A153. Additionally, comScore may send an invitation to a prospective panelist to join a special panel. *Id.*

³ A clickwrap agreement is a common type of software license agreement. The user is presented a disclosure or link to terms, and is typically required to agree to the terms before the download can begin. Courts routinely uphold clickwrap agreements as valid. *See Sherman v. AT&T, Inc.*, No. 11 C 5857, 2012 WL 1021823, at *3 (N.D. Ill. Mar. 26, 2012) (holding clickwrap agreement valid); *see also ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996) (discussing validity of shrinkwrap agreements).

⁴ This Downloading Statement is associated with comScore's largest brand, "RelevantKnowledge." As is standard in the market research industry, comScore maintains several different brands to limit the amount of bias in its collected data. Each serves a specific purpose. A152. The Downloading Statement does not vary materially across brands.

and have obtained the consent to the terms and conditions of the Privacy Statement and User License Agreement from anyone who will be using the computer on which you install this application.

A82-A109 (emphasis added). In order to continue with the installation of comScore’s software, a prospective panelist must click the “Accept” button when presented with the Downloading Statement. The “Accept” button is not pre-selected. The prospective panelist must actively position her pointer over the “Accept” button to agree.⁵ A10.

As the language quoted above reflects, the Downloading Statement expressly states that the user has “read, agreed to, and . . . obtained the consent to the terms and conditions of [comScore’s] Privacy Statement and User License Agreement,” or “ULA”. The Downloading Statement typically presents a link to the ULA, and the ULA is also available on each brand’s webpage. The ULA sets forth in explicit, detailed, and comprehensible fashion the nature of comScore’s monitoring. For example, it informs consumers that:

- “Our application may collect general hardware, software, computer configuration an application usage information about the computer on which you install our application”
- “[O]ur application may report on devices connected to your computer and your network, such as the type of printer or router you may be using.”
- “Once you install our application, it monitors all of the Internet behavior that occurs on the computer on which you install the application, including both your normal web browsing and the activity that you undertake during secure sessions, such as filling a shopping basket, completing an application form or checking your online accounts.”
- “Our application may also collect information regarding the cookies that exist on your computer.”
- “[W]e make commercially viable efforts to automatically filter confidential personally identifiable information such as UserID, password, credit card numbers, and account numbers. Inadvertently, we may collect such information

⁵ If the consumer chooses “Decline,” comScore’s software is not installed, but the consumer’s download of the partner’s software in many cases is not affected. There are hundreds of thousands of consumers who click “Decline” (demonstrating that the consumer explicitly chose not to consent to the terms disclosed by comScore). A139.

about our panelists; and when this happens, we make commercially viable efforts to purge our database of such information.”

- “Our application will review the content of all web pages you visit and select e-mail header information from web based emails.”
- “The software will collect information on the types of applications you use and general statistics on how you use them.”

The ULA also contains forum selection and arbitration clauses. The forum selection clause provides that any court proceeding against comScore must take place in the appropriate state or federal court in Fairfax County, Virginia. The arbitration clause states that any dispute as to the terms of the Downloading Statement and ULA is subject to mandatory arbitration in the same location under the rules of the American Arbitration Association.

The Downloading Statement and ULA have been vetted by privacy advocates and auditors, and reflect industry best practices. The Downloading Statement was created in conjunction with TRUSTe, a leading online privacy advocate and creator of the Trusted Download Program (“TDP”). A5-A6. The TDP program “included a broad range of stakeholders in its development, including industry (AOL, CNET, Verizon, Computer Associates, Yahoo!), independent think tanks and advocates such as the Center for Democracy and Technology,” and when launched, was endorsed by FTC Chairman Jon Leibowitz. A2-A3. comScore’s ULA and business practices are audited annually under the WebTrust criteria, which examine such topics as whether the terms set out in the ULA accurately reflect the actual practices, and whether there are practices not disclosed in the ULA. (*See generally*, <http://www.webtrust.org>, www.ftc.gov/bcp/icpw/comments/webtrust.htm).

In conducting its business, comScore goes to great lengths to protect panelists’ sensitive personally identifiable information. For example, comScore’s technicians have developed a state-of-the-art filtering process, referred to in-house as “fuzzification,” to obscure sensitive information, such as Social Security numbers, credit card numbers, and passwords *before* it leaves the panelist’s computer. A43. To accomplish this, comScore uses a computational technique that searches for text patterns associated with sensitive data and then replaces some or

all of the data with zeros or x's and cryptographically hashes other data. A43; A161. In some instances—due, for example, to irregularities in how websites are built and maintained—sensitive data may evade the fuzzification process and reach comScore's servers. A166. This potential for the inadvertent collection of sensitive data is disclosed in the ULA. As explained in the ULA, comScore's employees continuously search through the data collected by comScore's servers to locate and obscure any sensitive data that comScore's software inadvertently collected. A43. The results of these efforts are used to improve comScore's filtering process.⁶ *Id.* Although sensitive data may from time to time inadvertently arrive at comScore's servers, it does not go further. It remains there until it is obscured.

Jeff Dunstan and Mike Harris. In August 2011, Mike Harris and Jeff Dunstan brought this action, alleging that comScore collects information about consumers' Internet activity without their consent. Harris claims to have downloaded the developmental Mac-based version of comScore's software in March 2010, but he does not recall downloading the third-party software offered with comScore's software or recall reviewing comScore's terms of service. A142-A143. Harris does not show up in comScore's records as having ever downloaded the software; claims to have "thrown away" the computer on to which he allegedly downloaded the software (rendering verification of his claims impossible); and had an entry of "zero" downloads in his profile on the site from which he says he downloaded comScore's software.

The other named plaintiff is Jeff Dunstan. His name, too, does not appear in comScore's records. Examination of his computer shows that someone downloaded a Windows-based version of comScore's software onto it in or around September of 2010. Dunstan testified that

⁶ comScore also validates and improves its fuzzification process through two additional methods. First, before any software updates or patches are pushed to panelists, comScore runs the new code through a comprehensive list of quality control checks, including running the new code on secure websites. A162; A170-A171. Additionally, comScore employs a team of "Mystery Shoppers" who input sensitive information into various websites to determine whether the data is being properly fuzzified. A162. If it is determined that data is not being properly fuzzified, the information regarding the data and website are sent to comScore's programmers so that they can address the issue. A170-A171.

he has no memory of downloading comScore's software or the third party software bundled with comScore software. A147. As the district court acknowledged, "Dunstan's wife had access to his computer at the time of the download, and may have been the one who initiated the download." Add. at 5.

District Court Proceedings. Early in the case, comScore moved to dismiss the Complaint for improper venue, citing the ULA's forum-selection clause, noting that everyone who downloads its software must click "Accept" to acknowledge, among other things, that he or she has, in the words of the Downloading Statement, "read [and] agreed to . . . the terms and conditions of the . . . User License Agreement" The district court denied the motion, ruling that the forum selection clause could not be enforced, because of the allegations in the complaint that plaintiffs never agreed to comScore's terms of service. Dkt. No. 31.

When presented with plaintiffs' motion for class certification, however, the district court reversed course. It held that class certification is proper primarily because everyone who downloads the software "obviously" agrees to the terms of the Downloading Statement and/or the ULA. Add. at 9. (It so ruled despite the fact that the named plaintiffs themselves continue to claim they never agreed to the terms. Dkt. No. 169 at ¶¶ 66, 70.) The district court's certification decision (discussed in more detail where relevant *infra*) also:

- noted that the class and subclass being certified "are not limited by geography and likely include plaintiffs from all 50 states, and even some foreign countries";
- found it "likely" that the question of whether comScore's data collection exceeds the scope of consent will be resolved on a classwide basis, but stated that if it cannot, "the court may reevaluate its class certification decision";
- asserted that the bulk of the class membership will "likely" be determined by comScore's records, but stated that if that does not turn out to be true, "the court can consider at that time whether to limit the class definition";
- found it "unlikely" that the statute of limitations defense would require individual adjudication, and "likely" that few class members had knowledge of what information comScore collects outside the limitations period; and

- asserted that a new Supreme Court decision describing the need to measure damages on a classwide basis “does not bind this court” because the opinion of the dissenting justices suggested that the ruling on damages was dicta.

ARGUMENT

I. Review Is Warranted Because The Certification Decision Is Manifestly Erroneous With Regard To Fundamental Issues Of Class Action Law

A district court has discretion in class certification decisions, but if “the district court bases its discretionary decision on an erroneous view of the law or a clearly erroneous assessment of the evidence, then it has necessarily abused its discretion.” *Messner v. Northshore Univ. Healthsystem*, 669 F.3d 802, 811 (7th Cir. 2012). *See also Reliable Money Order, Inc. v. McKnight Sales Co.*, 704 F.3d 489, 498 (7th Cir. 2013) (“Abuse of discretion results when a district court commits legal error or makes clearly erroneous factual findings.”)

Here the district court’s decision suffers from a number of separate defects, but many are connected by a single thread. When evaluating whether to allow a case to proceed as a class action, district courts “must engage in a ‘rigorous analysis’—sometimes probing behind the pleadings—before ruling on certification.” *Damasco v. Clearwire Corp.*, 662 F.3d 891, 896 (7th Cir. 2011) (citing *Wal-Mart Stores, Inc. v. Dukes*, 131 S.Ct. 2541, 2551 (2011)). This rigorous analysis includes “mak[ing] whatever factual and legal inquiries are necessary under Rule 23,” and “[i]f some of the determinations required by Rule 23 cannot be made without a look at the facts, then the judge must undertake that investigation.” *Spano v. Boeing Co.*, 633 F.3d 574, 583 (7th Cir. 2011) (quoting *Szabo v. Bridgeport Machines, Inc.*, 249 F.3d 672, 676 (7th Cir. 2001)).

Certification in this case was not based on the required rigorous analysis. Instead of making the necessary factual determinations prior to certification, the district court avoided the analysis, or deferred those determinations until later points in the proceedings. That is not permissible. “[A]ctual, *not presumed*, conformance” with Rule 23’s prerequisites is essential. *General Tel. Co. v. Falcon*, 457 U.S. 147, 160 (1982) (emphasis added). “[A] court may not simply assume the truth of the matters as asserted by the plaintiff.” *Messner*, 669 F.3d at 811. Instead, a plaintiff has the burden of proving “each disputed requirement” of Rule 23 by a

“preponderance of evidence.” *Id.* A “provisional” approach—postponing evidentiary and legal determinations, and placing undue reliance on potential re-definitions of the class—is not proper. *American Honda Motor Co., Inc. v. Allen*, 600 F.3d 813, 817 (7th Cir. 2010). The certification that resulted from this flawed process is defective, and warrants 23(f) review.

1. Commonality. The district court’s primary basis for finding Rule 23’s “common question” requirement satisfied—that “each Class member agreed to a form contract (made up of the ULA and the Downloading Statement), as has each Subclass member (the Downloading Statement only)” —is mystifying. Earlier in the case the court asserted *precisely the opposite* as justification for denying comScore’s Motion To Dismiss, which sought to invoke the ULA’s forum-selection and arbitration clauses. In that Order the court chose to “take the plaintiffs’ word for it” that they “*did not agree to comScore’s Terms of Service*” Dkt. No. 31 at pp. 4-5 (emphasis added).

The premise of that prior ruling—which barred comScore from enforcing the ULA’s forum-selection and arbitration clauses—was that the issue of consent was an individual one to be determined by the circumstances of each class member’s download experience. Now that the district court has reversed course for purposes of class certification and ruled that common treatment is fine because “[m]ost obviously, each Class member agreed to a form contract (made up of the ULA and the Downloading Statement), as has each Subclass member (the Downloading Statement only),” only two conclusions are possible. If the class members did indeed accept the form contract, they are bound by its terms and the case should be dismissed in favor of arbitration in Virginia. If instead agreement cannot be presumed, then the case is not suitable for class treatment and certification must be reversed.⁷ *See Lieschke v. RealNetworks, Inc.*, Nos. 99C7274, 99C7380, 2000 WL 198424 at *3 (N.D. Ill. Feb. 11, 2000).

⁷ Plaintiffs have been all over the map regarding whether they agreed to comScore’s terms. For example, their original and amended Complaints allege that they “did not agree to comScore’s Terms of Service.” Dkt. No. 1 at ¶¶ 69, 73. They swore to the same assertions in their Interrogatory responses. A115; A125-A126. In their class certification briefing, however, the plaintiffs decided to argue the opposite: “Each turns on a common set of terms (*i.e.* the dialog boxes and ULA presented to each and

On the critical question whether comScore’s software does anything that exceeds the consent obtained from the proposed class, the district court conceded that “comScore is correct that” the answer “may depend on the behavior of each individual plaintiff.” Add. at 11. This is because, “[f]or example, OSSProxy will not collect credit card numbers from plaintiffs who never input credit card numbers into their computers, nor will it collect the contents of iTunes playlists from plaintiffs who do not use the iTunes software.” *Id.* But the district court pressed ahead with certification nonetheless, stating that “[i]f litigation on the merits reveals that OSSProxy has not exceeded the scope of the plaintiffs’ consent in a way common to the entire class, and if the court finds it necessary to evaluate whether individual plaintiffs engaged in behavior subjecting them to OSSProxy’s unauthorized collection of their information, the court may reevaluate its class certification decision.” Add. at 11, n.4.⁸

This conditional certification simply put off until a later time the required inquiry into the factual and legal requirements of Rule 23. As justification, the district court cited Fed. R. Civ. P. 23(c)(1)(C), which provides that “[a]n order that grants or denies class certification may be altered or amended before final judgment.” Add. at 11, n.4. But “Rule 23(c)(1) merely authorizes amending the certification order on the basis of new facts that emerge in the course of the litigation; it presupposes a valid order.” *Isaacs v. Sprint Corp.*, 261 F.3d 679, 682 (7th Cir. 2001). Indeed, “Rule 23(f) would be nullified if the appealability of an order granting class

every Class member during the installation process) and the uniform functionality of OSSProxy” (Dkt. No. 154 at 29); “Rule 23 commonality and typicality exist because plaintiffs and each Class member downloaded OSSProxy from one of comScore’s bundling partners, each was presented with a form ULA, *each accepted the ULA through the same online process*, and each was subjected to the same ‘core’ tracking software.” (Dkt. No. 184 at 1-2, emphasis added.)

⁸ The district court also asserted that some “potential violations” are necessarily common, such as the allegation that the scope of consent is somehow exceeded by the sale of panelist’s data. comScore’s disclosure on that issue is clear and explicit (data is “used to generate market reports which our clients use to understand Internet trends and patterns and other market research purposes”). But beyond that, as the district court was informed but ignored, the issue is not even “common” to *either* named plaintiff, let alone the class as a whole. Dunstan and Harris’ data was never sold to anyone. A173 at ¶ 5.

certification were destroyed by a judge’s statement that he might change it.” *Id.* The district court should not have certified the class in the face of uncertainty about whether the key question in the case is in fact a classwide one.

2. Typicality. The district court’s treatment of the serious “typicality” issues in this case constituted an abrogation of its responsibilities. To possess a claim against comScore in this action, an individual must, in the words of the class definition, have “downloaded and installed comScore’s tracking software” But on that basic, threshold issue, the claims of both named plaintiffs are fatally flawed. Dunstan testified that he does not remember downloading the software, and, as the district court acknowledged, it might in fact have been his wife who did so (making Dunstan not a class member). A147. Harris said that he did download the software but did not recall seeing the terms of service which would have been part of the downloading process. A142-A143. He was unable to produce a computer that showed any evidence of ever having the software on it. comScore’s records show no sign of him. On top of that, the “MacUpdate” website from which he claims to have downloaded the software shows “zero” as the number of downloads for his account. When at his deposition Harris disclosed that he had used an external hard drive to back up his computer’s hard drive, he was unable to produce it. When served with an interrogatory asking what happened to the hard drive, he responded:

Plaintiff states that he has no specific recollection of destroying or disposing of the external hard drive, but that he ceased using it as a data storage medium because he no longer had any use for it.

A133. At any trial comScore will have a field day attacking Dunstan’s and Harris’s claims that they downloaded comScore’s software at all. Their circumstances are anything but “typical.”

The district court brushed aside these important issues in inexplicable fashion. It asserted that “[a]ll of these arguments are based on speculation. ComScore provides no actual evidence showing that Harris and Dunstan did not download OSSProxy.”⁹ Add. at 12. Setting aside for a

⁹ The district court also *incorrectly* asserted—twice—that Dunstan had testified that he downloaded comScore’s software. Add. at 12. That is incorrect—Dunstan provided no such testimony.

moment the impermissible burden-shifting and the seeming demand that comScore use evidence to prove a negative (how is comScore supposed to show that Harris and Dunstan did not do something, other than pointing to the *lack* of evidence?) the court's analysis misses the point. The question at this stage is not whether Dunstan and Harris in fact downloaded the software. It is whether the serious questions about whether they did so make them subject to individualized defenses that render them atypical class representatives. Plainly they do. Accordingly, class treatment is not permissible. *See, e.g., CE Design Ltd. v. King Architectural Metals, Inc.*, 637 F.3d 721, 726 (7th Cir. 2011) ("The presence of even an arguable defense peculiar to the named plaintiff or a small subset of the plaintiff class may destroy the required typicality of the class as well as bring into question the adequacy of the named plaintiff's representation."); *In re Schering Plough Corp. ERISA Litig.*, 589 F.3d 585, 598 (3d Cir. 2009) ("[i]t is well-established that a proposed class representative is not 'typical' under Rule 23(a)(3) if the representative is subject to a unique defense that is likely to become a major focus of the litigation.") (internal quotation marks omitted); *Broussard v. Meineke Discount Muffler Shops, Inc.*, 155 F.3d 331, 342 (4th Cir. 1998) ("[W]hen the defendant's affirmative defenses . . . may depend on facts peculiar to each plaintiff's case, class certification is erroneous.") (internal quotation marks omitted); *Wu v. MAMSI Life & Health Ins. Co.*, 269 F.R.D. 554, 562 (D. Md. 2010) (finding certification improper where defenses would turn on individual inquiries and facts peculiar to each claimant).

Another way to understand the problem is this: "The premise of the typicality requirement is simply stated: as goes the claim of the named plaintiff, so go the claims of the class." *Sprague v. Gen. Motors Corp.*, 133 F.3d 388, 399 (6th Cir. 1998). If, as is quite possible, Dunstan or Harris loses his case because he cannot even establish that he downloaded comScore's software, will the result decide the claims of absent class members? Obviously not, and for that reason the typicality requirement is not satisfied, and no class can be certified.

When asked whether he or Lori Baxter, Dunstan's wife, downloaded the software package, Dunstan answered, "I don't remember downloading it." A147. The district court's findings on this question were clearly erroneous.

Finally, even if none of these problems existed, the ruling would still be unsustainable because the court impermissibly shifted the burden of proof to comScore to prove that Harris and Dunstan did not download the software. That runs afoul of the rule that a plaintiff has the burden of proving “each disputed requirement” of Rule 23 by a “preponderance of the evidence,” *Messner*, 669 F.3d at 811, and is emblematic of the district court’s erroneous approach.

3. Ascertainability. The district court’s casual and misguided analysis of Rule 23’s ascertainability requirement suffered from shortcomings similar to those that infected its treatment of commonality and typicality: failure to engage on the actual question presented, reliance on conjecture rather than evidence, and the improper deferral of important determinations.

The core ascertainability question in this case—in light of the class definition and the district court’s rejection of any concern about the lack of evidence of downloads by Dunstan and Harris—is that a person need only say “I downloaded your product” to become a member of the class. It is improper to allow class membership to be established only by alleged class members’ assertions without corroboration. That “would amount to no more than ascertaining by potential class members’ say so.” *Marcus v. BMW of N. Am., LLC*, 687 F.3d 583, 594 (3d Cir. 2012). *See also Sadler v. Midland Credit Mgmt., Inc.*, No. 06 C 5045, 2008 WL 2692274, at *6 (N.D. Ill. July 3, 2008) (denying class certification when defendant “would be required to evaluate the individual facts of each account” in its records).

The court purported to deal with this problem by opining, with no adequate evidentiary basis, that “the bulk of the class membership will *likely* be determined by comScore’s records” Add. at 16 (emphasis added). Then the court hedged, however, asserting that “[i]f further litigation reveals that the portion of the class asserting membership by affidavit is excessively large, the court can consider at that time whether to limit the class definition to only those whose downloading of OSSProxy is reflected in comScore’s records.” *Id.*

The district court’s decision to “wait and see” is improper. It undertook no rigorous analysis as required under *Damasco*, no investigation as required under *Spano*, and made no

effort to look beneath the surface of the complaint as required under *Szabo*. The record cited by the district court does not support its conclusion regarding comScore’s ability to ascertain the bulk of the class, and its conclusion is wrong.¹⁰ The district court engaged in no effort to determine the facts on this question, as required by this Court. *See Messner*, 669 F.3d at 811 (“On issues affecting class certification, however, a court may not simply assume the truth of the matters as asserted by the plaintiff. If there are material factual disputes, the court must ‘receive evidence . . . and resolve the disputes before deciding whether to certify the class.’” (quoting *Szabo*, 249 F.3d at 676)). Had the district court raised this issue prior to issuing its decision or required the plaintiffs to satisfy their burden by presenting specific evidence, it would have learned that comScore possesses email addresses for *fewer than 3%* of its panelists who joined through third-party programs (and thus fall within the definition of the class). The district court also appears to have been oblivious to the fact that its own suggested methodology for determining class membership (checking comScore’s records) would not even turn up *the two named plaintiffs*. No trace of either man appears in comScore’s records. Thus the district court’s backup plan—narrowing the class to individuals listed in comScore’s records—would *exclude the class representatives themselves*. The availability of that option therefore cannot salvage certification, and the district court was wrong to rely on it.

4. Predominance. The district court’s conclusion that classwide questions predominate over individualized ones was manifestly erroneous. The district court wrote that “[t]he issue of whether each individual plaintiff downloaded OSSProxy will be determined primarily by comScore’s records, and if substantial individual adjudication is necessary the court will consider appropriate class limitations.” Add. at 16. We have already explained that there is no adequate evidentiary basis for (or truth to) the assertion that comScore’s records will show

¹⁰ The deposition testimony relied upon by the district court simply states that comScore has panelists’ email addresses, if those panelists provide the address during registration, update their address on comScore’s website, or provide an email address in response to a survey. A154-A155.

whether an individual downloaded the product; that if this is the test, then the named plaintiffs themselves flunk it; and that kicking the can down the road by gesturing towards some future possible class limitation cannot save certification here. Whether the individual downloaded the product is an individual one, plain and simple, and it is critical.

The district court also wrote that “the issues of whether plaintiffs consented to OSSProxy’s data collection, the scope of that consent, and whether comScore exceeded that consent can all be determined on a class basis, as described [earlier in its Opinion].” Add. at 16-17. Not only are those allegations of consent-violations not common for the reasons we recount above—they are also completely without merit. As this Court can determine from a simple review of the Downloading Statement and the ULA (and as the district court should have determined, had it engaged in any assessment of the merits as they bear on certification), consent was not exceeded even if plaintiffs’ factual claims are true.¹¹

In addressing another individualized issue, the statutes of limitations, the district court engaged in rampant and unfounded conjecture. The CFAA, SCA, and ECPA all have two-year statutes of limitations, subject to discovery rules in the statutes. Because plaintiffs sought to certify a class of people who downloaded comScore’s software as early as 2005, the class would include millions of people whose claims would be outside the statute of limitations, unless they have a discovery claim. This means that the court would have to hold mini-trials to determine when each person knew or should have known about her claim.

¹¹ Selling data collected does not violate the agreement, in which comScore explicitly discloses that it will “generate market reports which our clients use.” Collecting information about iTunes playlists resident on the computer and browsing history resident on the computer is in no way inconsistent with an agreement in which the user is informed, among other things, that comScore’s software “monitors all of the Internet behavior that occurs on the computer”; “may collect general hardware, software, computer configuration an application usage information about the computer”; may “report on devices connected to your computer and your network”; and may collect “information regarding the cookies that exist on your computer.” And obscuring credit card numbers and the like by automatically replacing them with x’s and y’s is entirely consistent with the agreement, in which comScore states that it “makes commercially viable efforts to automatically filter” such data. These artificial distinctions between “filtering” and “obscuring/fuzzifying,” or “selling” and “generating reports for clients” are not legitimate bases for claims of statutory violations. They are lawyers’ semantic quibbles, invented for a lawsuit.

The district court, however, declared that “the statute of limitations issue is unlikely to present significant difficulties” because it is only an issue for people who downloaded comScore’s software before August 23, 2009 (two years before the case was filed); comScore’s data collection is ongoing, so all who still have the software on their computer are within the limitations period; and it is “unlikely” that any of the remaining people would know what information comScore collects, and thus discover their claims, unless they analyzed the computer code itself. “Few potential class members likely fall into this category.” Add. at 17.

The district court had before it *no* evidence concerning how many people downloaded comScore’s software prior to August 2009, or how many of those still have the software on their computers. Its assertions on those points were cut from whole cloth and were discussed by neither plaintiffs nor comScore in the class certification briefing. At a minimum the court was required to make evidentiary findings on this important question. If it had, it would have learned that approximately two-thirds of all panelists uninstall the software within 30 days, and that of the approximately ten million machines in the U.S. that have downloaded the software since 2005, fewer than 450,000 showed any activity during the last full month for which data is available. So, here again, the district court speculated rather than demanding evidence, and turned out to be factually incorrect.

Nor can the district court assume away the presence of individualized statute of limitations defenses by asserting that it is “unlikely” that any plaintiffs had sufficient knowledge to trigger the limitations period, and that few potential class members “likely” did. First, people can easily determine what information comScore collects because it is clearly laid out in the Terms of Service and ULA. There is no need to look at the source code to figure this out. And of course the lawyers who brought this case did not have access to the source code before filing suit, and did not need to analyze it to decide that they had a claim. The Complaint itself, for example, relied on a *New York Times* article from 2010 (one of many articles written about comScore’s software since 2005) to describe the information comScore collects. Dkt. No. 1 at ¶¶ 28-29. Contrary to the district court’s musings, people who downloaded comScore’s software

between 2005 and August 23, 2009 would not need to analyze the code to be on notice. The statute of limitations defense remains an individualized issue that precludes class certification.

On this topic one other point bears mention. The Rules Enabling Act and fundamental principles of due process preclude class adjudication that would entail “sacrificing procedural fairness” and “abridg[ing]” the “substantive right” of defendants to raise and present evidence on every available defense. *Amchem Prods., Inc. v. Windsor*, 521 U.S. 591, 613, 615 (1997) (citing 28 U.S.C. § 2072(b)). As the Supreme Court said in *Dukes*, because “the Rules Enabling Act forbids interpreting Rule 23 to ‘abridge, enlarge or modify any substantive right,’ a class cannot be certified on the premise that [a defendant] will not be entitled to litigate its statutory defenses to individual claims.” *Dukes*, 131 S. Ct. at 2561. But that seems to be the premise on which the district court’s statute of limitations (and class membership) rulings are based.

Finally, the district court addressed the issue of damages. In so doing, the district court confidently asserted that the U.S. Supreme Court’s approach to damages in its recent *Comcast Corp. v. Behrend* decision, 133 S. Ct. 1426 (2013), “is merely dicta and does not bind this court”—citing to the dissenting justices’ characterization of the majority opinion. That bold assumption is, at a minimum, a reason for this Court to grant Rule 23(f) review. It is also wrong. The Court in *Behrend* reversed the certification of a class under Rule 23(b)(3) through what it described as “the straightforward application of class-certification principles” precisely because the plaintiffs’ damages model fell “far short of establishing that damages are capable of measurement on a classwide basis. Without presenting another methodology, respondents cannot show Rule 23(b)(3) predominance: Questions of individual damage calculations will inevitably overwhelm questions common to the class.”¹² *Behrend*, 133 S. Ct. at 1433.

¹² See also *Behrend*, 133 S. Ct. at 1435 n.6 (noting the plaintiff’s failure to “establish[] the requisite commonality of damages.”) (emphasis added.) While the *Behrend* decision is too recent to have generated judicial interpretation, commentators largely agree as to its holding. Even on a leading blog authored by co-counsel for the *Behrend* plaintiffs, it is described thus: “*Holding: The class action was improperly certified under Rule 23(b)(3). The Third Circuit erred in refusing to decide whether the plaintiff class’s proposed damages model could show damages on a classwide basis. Under proper*

* * * * *

The district court’s errors in assessing the certification motion were fundamental, clear, and worthy of review. As the Supreme Court recently re-emphasized, “the class action is an exception to the usual rule that litigation is conducted by and on behalf of the individual named parties only. To come within the exception, a party seeking to maintain a class action must affirmatively demonstrate his compliance with Rule 23. The Rule does not set forth a mere pleading standard,” the Court explained. “Rather, a party must not only be prepared to *prove* that there are *in fact* sufficiently numerous parties, common questions of law or fact, typicality of claims or defenses, and adequacy of representation, as required by Rule 23(a). The party must also satisfy *through evidentiary proof* at least one of the provisions of Rule 23(b).” *Behrend*, 133 S. Ct. at 1432 (emphasis added; internal citations and quotation marks omitted).

Indeed, “Rule 23(b)(3)’s predominance criterion is even more demanding than Rule 23(a). Rule 23(b)(3), as an adventuresome innovation, is designed for situations in which class-action treatment is not as clearly called for. That explains Congress’s addition of procedural safeguards for (b)(3) class members beyond those provided for (b)(1) or (b)(2) class members (*e.g.*, an opportunity to opt out), and the court’s duty to take a close look at whether common questions predominate over individual ones.” *Id.* Unfortunately, the district court did not take that close look in this case. We respectfully submit that it now falls to this Court to do so, and that the certification order will not be able to survive it.

II. Review Is Warranted Because The Certification Decision Has Transformed This Litigation Into A Single High-Stakes Roll Of The Dice

As this Court has explained, “a grant of class status can put considerable pressure on the defendant to settle, even when the plaintiff’s probability of success on the merits is slight. Many corporate executives are unwilling to bet their company that they are in the right in big-stakes

standards, the model was inadequate and the class should not have been certified.” See <http://www.scotusblog.com/case-files/cases/comcast-v-behrend/>.

litigation, and a grant of class status can propel the stakes of a case into the stratosphere.” *Blair v. Equifax Check Servs, Inc.*, 181 F.3d 832, 834 (7th Cir. 1999). For that reason this Court has repeatedly stated that a Rule 23(f) appeal should be accepted when certification raises the stakes of the litigation so substantially that the defendant will feel pressure to settle—especially when the district court’s decision to grant class status is questionable. *See, e.g., Reliable Money Order*, 704 F.3d at 497.¹³

Simply put, “[e]ven if a class’s claim is weak, the sheer number of class members and the potential payout that could be required if all members prove liability might force a defendant to settle a meritless claim in order to avoid breaking the company.” *Messner*, 669 F.3d at 825. As this Court has observed, such pressure to settle can be quite unfair to defendants: “some plaintiffs or even some district judges may be tempted to use the class device to wring settlements from defendants whose legal positions are justified” *Blair*, 181 F.3d at 834.

In this case, what would otherwise be a pair of almost comically infirm claims—one from a plaintiff who doesn’t even remember if he downloaded comScore’s product and another from a plaintiff for whom no record of downloading exists and who “threw away” the relevant computer, neither of whom had any private data shared with anyone—has suddenly become a matter in which involving millions of people across the world, and theoretical damages in the hundreds of millions of dollars. It is, in the words of plaintiffs’ counsel, “the largest privacy case ever certified on an adversarial basis.”¹⁴ Even a small risk of an adverse verdict in these circumstances is one that any rational actor, including comScore, must hesitate to accept.

¹³ *See also McReynolds v. Merrill Lynch, Pierce, Fenner & Smith, Inc.*, 672 F.3d 482, 484 (7th Cir. 2012); *Messner*, 669 F.3d at 825; *Kohen v. Pacific Inv. Mgmt. Co. LLC*, 571 F.3d 672, 677-78 (7th Cir. 2009); *In re Bridgestone/Firestone, Inc.*, 288 F.3d 1012, 1015-16 (7th Cir. 2002); *West v. Prudential Sec., Inc.*, 282 F.3d 935, 937 (7th Cir. 2002); *Isaacs*, 261 F.3d at 681 (7th Cir. 2001).

¹⁴ “Massive Class Certified in ComScore User Privacy Suit,” *Law360*, available at http://www.law360.com/privacy/articles/430164?nl_pk=2c8217c0-1547-4284-8fd8-7f5d488dc2bf&utm_source=newsletter&utm_medium=email&utm_campaign=privacy.

This is also a case in which, for whatever reasons, the district judge has expressed a desire for a settlement from the outset of the case.¹⁵ Against this backdrop, and in light of the way that the district court appears to have been all too ready to move quickly past (or kick down the road) the many obstacles to class treatment, comScore must now turn to this Court to review the certification order, lest it never be reviewed.

CONCLUSION

This Court should accept review of the district court's order granting class certification and, following briefing on the merits, reverse or vacate that order. In the alternative, the Court should remand with instructions that the case be dismissed in favor of arbitration in Virginia.

¹⁵ MR. SOMVICHIAN [prior counsel for comScore]: I'm done, Your Honor.

THE COURT: I would encourage that you discuss settlement of this case as promptly as possible in order to evaluate the risks of going forward with this litigation. I am going to set the schedule that will be adhered to on December 20th, and we will move forward to get this litigation resolved. (November 15, 2011, A176.)

THE COURT: So we are back where we are. And let me ask, though, have you had any settlement discussions --

MR. STACK [new counsel for comScore]: No.

THE COURT: -- with the new counsel coming in? I thought we'd have a refreshing new approach. (March 15, 2012, A179.)

THE COURT: All right. And then how about this deadline for plaintiffs to file their supplemental motion for class certification? Can you get that in by December 14?

MR. BALABANIAN [plaintiffs' counsel]: That -- is there any way we could have until the end of that month?

THE COURT: All right. December 31. And we will set the case for a further status to see where we are -- because at that point, you can perhaps even start focusing on settlement -- January 10. Are you available January 10, 2013, at 9:00 a.m. (July 26, 2012, A184.)

THE COURT: Yes. All other court dates are stricken at this point, and you should proceed forward and hopefully complete the discovery. And then I really do want you to focus on discussing settlement, see if you can work something out. Okay? (July 26, 2012, A184.)

Respectfully submitted,

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Dated: April 16, 2013

ADDENDUM

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

MIKE HARRIS and JEFF DUNSTAN,)
)
 Plaintiffs,)
)
 v.) No. 11 C 5807
)
 COMSCORE, INC.,)
)
 Defendant.)

MEMORANDUM OPINION AND ORDER

JAMES F. HOLDERMAN, Chief Judge:

In their Second Amended Complaint, plaintiffs Mike Harris and Jeff Dunstan allege, as individuals and on behalf of a class of similarly situated individuals, that comScore, Inc. (“comScore”) improperly obtained and used personal information from their computers after they downloaded and installed comScore’s software. (Dkt. No. 169.) They assert violations of the Stored Communications Act (“SCA”), 18 U.S.C. § 2701(a)(1), (2) (Count I), the Electronic Communications Privacy Act (“ECPA”), 18 U.S.C. § 2511(1)(a), (d) (Count II), and the Computer Fraud and Abuse Act (“CFAA”), 18 U.S.C. § 1030(a)(2)(C) (Count III). They also assert a claim for common law unjust enrichment (Count IV). Currently pending before the court is plaintiffs’ motion for class certification (Dkt. No. 152), which requests that the court certify the following class and subclass:

Class: All individuals who have had, at any time since 2005, downloaded and installed comScore’s tracking software onto their computers via one of comScore’s third party bundling partners.

Subclass: All Class members not presented with a functional hyperlink to an end user license agreement before installing comScore’s software onto their computers.

For the reasons explained below, that motion is granted in part and denied in part.

BACKGROUND¹

Defendant comScore, Inc. collects data about the activities of consumers on the internet, analyzes the data, and sells it to its clients. (Dkt. No. 140, at 2.) ComScore gathers its data through a program called OSSProxy, which, if installed on a computer, constantly collects data about the activity on the computer and sends it back to comScore's servers. (Dkt. No. 155, Ex. C, at 3-6.) The OSSProxy software collects a variety of information about a consumer's computer, including the names of every file on the computer, information entered into a web browser, including passwords and other confidential information, and the contents of PDF files. (*Id.*) ComScore has been using OSSProxy in its current form, aside from immaterial variations, since 2005. (*See* Dkt. No. 155, Ex. A, at 194:8-195:16 (explaining that in 2005 comScore stopped routing the information from the consumers' computers through proxy servers).)

One primary way that comScore distributes OSSProxy is through cooperation with "bundlers" who provide free digital products to consumers on the internet. (Dkt. No. 155, Ex. D, at 6.) During the process of downloading the bundlers' free software, the consumer has the opportunity to download OSSProxy. (*See id.*) The process by which OSSProxy is presented to the consumer is "materially identical," regardless of which bundler provides the digital product the consumer is downloading. (*Id.*) Specifically, during the installation of the free digital product, the consumer is presented with a short statement ("the Downloading Statement") regarding OSSProxy under one of several brand names, including "RelevantKnowledge, PremierOpinion, PermissionResearch, OpinionSquare, and MarketScore." (*Id.* at 9-10; Dkt. No. 180 ¶ 34.) A

¹ The parties do not dispute the key facts relevant to the class certification motion, nor do they request an evidentiary hearing. The court therefore determines that an evidentiary hearing is unnecessary. *See* Fed. R. Civ. P. 43(c).

representative Downloading Statement reads as follows:

In order to provide this free download, RelevantKnowledge software, provided by TMRG, Inc., a comScore, Inc. company, is included in this download. This software allows millions of participants in an online market research community to voice their opinions by allowing their online browsing and purchasing behavior to be monitored, collected, aggregated, and once anonymized, used to generate market reports which our clients use to understand Internet trends and patterns and other market research purposes. The information which is monitored and collected includes internet usage information, basic demographic information, certain hardware, software, computer configuration and application usage information about the computer on which you install RelevantKnowledge. We may use the information that we monitor, such as name and address, to better understand your household demographics; for example, we may combine the information that you provide us with additional information from consumer data brokers and other data sources in accordance with our privacy policy. We make commercially viable efforts to automatically filter confidential personally identifiable information and to purge our databases of such information about our panelists when inadvertently collected. By clicking Accept you acknowledge that you are 18 years of age or older, an authorized user of the computer on which you are installing this application, and that you have read, agreed to, and have obtained the consent of all computer and TV users to the terms and conditions of the Privacy Statement and User License Agreement.

(*Id.* at 10.) In general, underneath that message, the consumer is offered a link to the “Privacy Statement and User License Agreement” (the “ULA”)² and two boxes reading “Accept” and “Decline.” (*Id.*) The consumer must check either “Accept” or “Decline” before he may click “Next” to proceed with downloading the free digital product. (*Id.*) OSSProxy will download and install on the consumer’s computer only if the consumer checks “Accept.” (*Id.*) The free digital product will download and install regardless of which box the consumer checks, although that fact is not apparent to the consumer. (*Id.*)

The ULA, which is materially identical regardless of which bundler provides the digital

² One of comScore’s partners offering the free digital products failed to offer a link to the ULA for a short period of time. Consumers who downloaded that product are part of the proposed Subclass, which includes all downloaders of comScore’s tracking software who were not presented with a functional hyperlink to the ULA.

product the consumer is downloading, contains terms governing which information OSSProxy will collect from the consumer's computer and how that information will be used. (Dkt. No. 155, Ex. A, at 127:10-12; 134:6-18.) Significantly, the ULA indicates that it is an agreement between the consumer and a "sponsor"—usually another company connected in some way with comScore—but, in most cases, also states that comScore will use the information collected. (*See* Dkt. No. 155, Ex. I, at 1, 6.) The plaintiffs allege that comScore has exceeded the scope of the consumer's consent to monitoring in the ULA by, among other things:

- designing its software to merely "fuzzify" or "obscure" confidential information collected, rather than "mak[ing] commercially viable efforts to automatically filter" that information (Dkt. No. 154, at 13-14);
- failing to "make commercially viable efforts to purge" confidential information that it does collect from its database (Dkt. No. 154, at 15-16);
- intercepting phone numbers, social security numbers, user names, passwords, bank account numbers, credit card numbers, and other demographic information (Dkt. No. 155, Ex. C, at 2-6);
- intercepting the previous 25 websites accessed by a consumer before installation of comScore's software, the names of every file on the consumer's computer, the contents of iPod playlists on the computer, the web browsing history of smartphones synced with the computer, and portions of every PDF viewed by the user during web browsing sessions (*Id.*);
- selling the data collected from the consumer's computer (Dkt. No. 154, at 24.)

(*See also* Dkt. No. 169 ¶¶ 35-63.)

Named plaintiffs Jeff Dunstan and Mike Harris each downloaded and installed OSSProxy onto their computers after downloading a free digital product offered by one of comScore's bundlers. (Dkt. No. 155, Ex. P, No. 1; Dkt. No. 155, Ex. Q, No. 1.) Harris downloaded OSSProxy on March 9, 2010, immediately noticed it, and tried to remove it. (Dkt. No. 176, Ex. P, at 83:14-16; 98:18-99:15; 103:24-104:10.) Harris asserts that he downloaded OSSProxy from the website

macupdate.com. (Dkt. No. 176, Ex. P, at 71:15-18.) Harris's profile on that website indicates that he never downloaded any programs (Dkt. No. 176, Ex. Q (listing the number of downloads as zero)), but he may have downloaded the program without logging into his account (*See* Dkt. No. 185 ¶¶ 5-8). Harris no longer has the computer he used to download the OSSProxy software. (Dkt. No. 176, Ex. P, at 43:19-44:4.)

Dunstan downloaded comScore's OSSProxy software in September of 2010. (Dkt. No. 176, Ex. S, No. 6.) Dunstan alleges that OSSProxy caused his computer to lock up and interfered with his internet access. (*Id.*) Dunstan used a program called "PC Tools Spyware Doctor" to remove OSSProxy within about one day of downloading it. (*Id.*; Dkt. No. 176, Ex. T, No. 6.) Dunstan's computer may have been infected by viruses at the time that he downloaded OSSProxy, which may also have contributed to his computer problems. (*See* Dkt. No. 176, Ex. U.) Dunstan's wife had access to his computer at the time of the download, and may have been the one who initiated the download. (Dkt. No. 176, Ex. V., at 26:7-18.)

LEGAL STANDARD

The plaintiffs bear the burden of demonstrating that class certification is appropriate. *Oshana v. Coca-Cola Co.*, 472 F.3d 506, 513 (7th Cir. 2006). Class certification under Rule 23 involves two steps. First, the plaintiff's claim must satisfy the numerosity, commonality, typicality, and adequacy of representation requirements of Rule 23(a). *Id.* In addition to the four explicit requirements listed in Rule 23(a), during the first step "[t]he plaintiff must also show that the class is indeed identifiable as a class," a requirement known as the "ascertainability" requirement. *Id.* At the second step, the claim must meet one of the conditions of Rule 23(b). *Id.* Here, the plaintiffs are proceeding under Rule 23(b)(3), which provides that a class action may be

maintained if “the court finds that the questions of law or fact common to class members predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.” Fed. R. Civ. P. 23(b)(3).

ANALYSIS

For the reasons explained below, the court determines that the plaintiffs proposed Class and Subclass cannot be certified with respect to the plaintiffs’ claims for state law unjust enrichment. *See* Fed. R. Civ. P. 23(c)(4) (allowing the court to certify a class action with respect to only particular issues). Specifically, the unjust enrichment claims do not satisfy the requirement of Rule 23(b)(3) that a class action be superior to other available methods for fairly and efficiently adjudicating the controversy.³ The court will first explain why the common law unjust enrichment claims cannot be certified, before explaining why the remaining claims can be certified for class treatment.

I. Unjust Enrichment

As many courts in this district have recognized, unjust enrichment claims are generally unsuitable for class actions because they “pose insurmountable choice-of-law problems.” *In re Aqua Dots Prods. Liab. Litig.*, 270 F.R.D. 377, 386 (N.D. Ill. 2010) (Coar, J.). The cause of those problems is that “the law of unjust enrichment varies too much from state to state to be amenable to national or even to multistate class treatment.” *Id.*; *see also Vulcan Golf, LLC v. Google Inc.*, 254 F.R.D. 521, 533 (N.D. Ill. 2008) (Manning, J.) (collecting cases). As a result, “federal courts have generally refused to certify a nationwide class based upon a theory of unjust enrichment.”

³ The plaintiffs do not contend that the class should be certified under one of the other provisions of Rule 23(b), so the court need not address them.

Thompson v. Jiffy Lube Int'l, Inc., 250 F.R.D. 607, 626 (D. Kan. 2008).

The choice-of-law problem is present here, because the proposed Class and Subclass are not limited by geography and likely include plaintiffs from all 50 states, and even some foreign countries. The plaintiffs propose no solution to allow the court to manage the variety of laws that may be applicable to the Class, other than to suggest that the court certify two subclasses under California and Illinois law. (Dkt. No. 184, at 19.) That solution is plainly inadequate in light of the geographical diversity of the plaintiffs and the variation in applicable law. Accordingly, the court determines that the plaintiffs have not met their burden of establishing that a class action is the superior method for fairly and efficiently adjudicating this controversy. *See* Fed. R. Civ. P. 23(b)(3). The court therefore denies the class certification motion with respect to the unjust enrichment claims.

II. Certification of the Federal Statutory Claims

Each of the other three claims alleged in Counts I, II, and III of plaintiffs' Second Amended Complaint rely on federal statutes that provide protection against the unauthorized interception of information from the plaintiffs' computers. As relevant here, the SCA provides a private action against any person who

- (1) intentionally accesses without authorization a facility through which an electronic communication service is provided; or
- (2) intentionally exceeds an authorization to access that facility; and thereby obtains, alters, or prevents authorized access to a wire or electronic communication while it is in electronic storage in such system.

18 U.S.C. § 2701(a). The ECPA does the same with respect to any person who

- a) intentionally intercepts, endeavors to intercept, or procures any other person to intercept or endeavor to intercept, any wire, oral, or electronic communication; [or]

...

(d) intentionally uses, or endeavors to use, the contents of any wire, oral, or electronic communication, knowing or having reason to know that the information was obtained through the interception of a wire, oral, or electronic communication in violation of this subsection

18 U.S.C. § 2511(1)(a). Finally, the Computer Fraud and Abuse Act creates a private right of action against “[w]hoever . . . intentionally accesses a computer without authorization or exceeds authorized access, and thereby obtains . . . information from any protected computer.” 18 U.S.C. § 1030(a)(2)(C). Each of the three statutes provides an exception to liability if the person obtaining the information has the consent of the computer user. *See* 18 U.S.C. § 2701(c); 18 U.S.C. § 2511(2)(c); 18 U.S.C. § 1030(e)(6).

The court will now address in turn each of the requirements for class certification of those federal statutory claims.

A. Numerosity

Rule 23(a)(1)’s requirement that the class be “so numerous that joinder of all members is impracticable is plainly met here. The total number of computers reporting data to comScore each year with the OSSProxy program has run into the hundreds of thousands each year since 2008. (Dkt. No. 155, Ex. B, No. 7.) In addition, evidence shows that OSSProxy was installed on millions of computers between 2008 and 2011. (*Id.*) ComScore does not dispute that the number of potential class members easily satisfies the numerosity requirement.

B. Commonality

Next, the plaintiffs must satisfy Rule 23(a)(2)’s requirement that “there are questions of law or fact common to the class.” The plaintiffs need not establish multiple common questions at this stage, because “for purposes of Rule 23(a)(2) even a single common question will do.”

Wal-Mart Stores, Inc. v. Dukes, 131 S. Ct. 2541, 2556 (2011) (citation, quotation marks, and alterations omitted). In addition, “what matters to class certification is not the raising of common ‘questions’—even in droves—but, rather the capacity of a classwide proceeding to generate common answers apt to drive the resolution of the litigation.” *Id.* at 2551 (citation, quotation marks, and alteration omitted).

Here, the plaintiffs raise a variety of common questions that can be resolved on a classwide basis. Most obviously, each Class member agreed to a form contract (made up of the ULA and the Downloading Statement), as has each Subclass member (the Downloading Statement only). It is well established that “claims arising from interpretations of a form contract appear to present the classic case for treatment as a class action.” *Keele v. Wexler*, 149 F.3d 589, 594 (7th Cir. 1998) (citation and quotation marks omitted); *accord Lifanda v. Elmhurst Dodge*, No. 99-cv-5830, 2001 WL 755189, at *3 (N.D. Ill. July 2, 2011) (Hibbler, J.) (“Courts in this Circuit have repeatedly held that ‘claims arising out of form contracts are particularly appropriate for class action treatment.’” (citations omitted)). Thus, for example, the question of whether comScore is a party to the ULA and the Downloading Statement in light of the fact that it is not listed as a contracting party can be resolved consistently for the entire class. Similarly, the question of what rights comScore has under the ULA and the Downloading Statement as a third-party beneficiary to use the information OSSProxy collects is common to the entire class. Yet another common question is the scope of the consent the plaintiffs granted to comScore by agreeing to the ULA and the Downloading Statement.

ComScore contends that the scope of consent will vary for each plaintiff depending on his subjective understanding of the agreement and the surrounding circumstances. (Dkt. No. 177, at

15.) In support, comScore notes that at least under the ECPA, consent need not be explicit, but can also be implied from the surrounding circumstances. *See Shefts v. Petrakis*, 758 F. Supp. 2d 620, 630 (C.D. Ill. 2010) (citing *Williams v. Poulos*, 11 F.3d 271, 281 (1st Cir. 1993)). But that rule has no place where a party manifested consent through the adoption of a form contract. *See Nat'l Prod. Workers Union Ins. Trust v. Cigna Corp.*, 665 F.3d 897, 901 (7th Cir. 2011) (“In assessing whether contracting parties have mutually assented to a contract, Illinois courts have long cautioned that the parties’ subjective intentions are irrelevant. Rather, courts must evaluate mutual assent based on the objective conduct of the parties.” (citation omitted)); *Boundas v. Abercrombie & Fitch Stores, Inc.*, 280 F.R.D. 408, 413-14 (N.D. Ill. 2012) (Feinerman, J.) (“Where there are objective indicia of the contract’s terms . . . the manner in which parties become aware of a contractual opportunity and their subjective perceptions of the resulting contract are not relevant.”). Here, each Class member engaged in a substantively identical process to download OSSProxy, as did each Subclass member (aside from not being presented with a link to the ULA). The scope of the plaintiffs’ consent here is determined by that identical process, the ULA, and the Downloading Statement, and is therefore common across the Class and Subclass, respectively.

Another common issue is whether OSSProxy’s data collection violates the terms of the ULA and the Downloading Statement. The OSSProxy software operates in a substantively identical fashion on all computers, regardless of the brand name under which it is distributed or the operating system of the computer. (Dkt. No. 155, Ex. A, at 91:8-92:9; Dkt. No. 155, Ex. C, at 2.) Thus, the software attempts to collect the same information from all computers, and the question of whether that collection exceeds the scope of consent is common to all plaintiffs.

ComScore points out that OSSProxy will not collect certain categories of data from

plaintiffs who never input data in those categories into their computers. (Dkt. No. 177, at 16.) For example, OSSProxy will not collect credit card numbers from plaintiffs who never input credit card numbers into their computers, nor will it collect the contents of iTunes playlists from plaintiffs who do not use the iTunes software.

ComScore is correct that the question of whether OSSProxy's data collection exceeds the scope of consent in certain respects may depend on the behavior of each individual plaintiff. But other potential violations of the scope of consent are common to all plaintiffs regardless of individual behavior, such as the allegation that OSSProxy collects the names of every file located on a user's computer and the names of the 25 websites the user visited prior to downloading OSSProxy, or the allegation that OSSProxy exceeds the scope of consent by selling the data it collects. Moreover, the plaintiffs need prove only one incident of OSSProxy exceeding the scope of the consent to establish violations of the ECPA, the SCA, and the CFAA. It is thus likely that this issue will also be resolved on a classwide basis.⁴ The plaintiffs have demonstrated ample issues common to the entire class to satisfy Rule 23(a)(2).

C. Typicality

Next, the plaintiffs must demonstrate that "the claims or defenses of the representative parties are typical of the claims or defenses of the class." The typicality requirement is closely related to commonality, and a "plaintiff's claim is typical if it arises from the same event or practice or course of conduct that gives rise to the claims of other class members and his or her

⁴ If litigation on the merits reveals that OSSProxy has not exceeded the scope of the plaintiffs' consent in a way common to the entire class, and if the court finds it necessary to evaluate whether individual plaintiffs engaged in behavior subjecting them to OSSProxy's unauthorized collection of their information, the court may reevaluate its class certification decision. *See* Fed. R. Civ. P. 23(c)(1)(C) ("An order that grants or denies class certification may be altered or amended before final judgment.").

claims are based on the same legal theory.” *Keele*, 149 F.3d at 595. Here, the plaintiffs assert that both Dunstan and Harris downloaded the OSSProxy software onto their computers after downloading a free digital product from one of comScore’s bundling partners. Both used a substantively identical process to download OSSProxy, except that Harris was not presented with a functioning hyperlink to the ULA, while Dunstan was. According to the plaintiffs, Harris’s claims are thus typical of the Subclass, while Dunstan’s are typical of the Class.

In response, comScore provides a list of “unique problems” it believes arise in Harris’s and Dunstan’s cases, making them atypical. (Dkt. No. 177, at 28-29.) Most of those problems relate to the issue of whether Harris and Dunstan actually downloaded the OSSProxy software. Specifically, despite Harris’s and Dunstan’s testimony that they downloaded OSSProxy, comScore notes that neither Dunstan nor Harris specifically remembers downloading the free digital product accompanying OSSProxy. (Dkt. No. 176, Ex. P, at 85:24-86:25; 91:2-9; 95:16-96:6; Dkt. No. 176, Ex. V, at 26:7-9; 30:6-24; 33:9-22.) In addition, Harris no longer owns the computer he used to download OSSProxy, and his account on macupdate.com does not reflect the download,⁵ leaving no way to verify his testimony. (Dkt. No. 176, Ex. P, at 43:19-44:4; Dkt. No. 176, Ex. Q.) Dunstan, on the other hand, testified that his wife used the same computer he did (Dkt. No. 176, Ex. V, at 26:10-18), and comScore suggests that his wife may actually have downloaded the software, rather than him.

All of these arguments are based on speculation. ComScore provides no actual evidence showing that Harris and Dunstan did not download OSSProxy. Harris’s and Dunstan’s testimony

⁵ As mentioned above, Harris need not have been logged in to download the software (*see* Dkt. No. 185 ¶¶ 5-8), so the absence of a record of the download associated with his account does not show that he did not download the software.

that they downloaded OSSProxy is thus unrefuted, and provides ample evidence that their claims are typical.

Next, comScore points out that Harris had OSSProxy installed on his computer for only a short period. (Dkt. No. 176, Ex. P, at 103:24-104:10.) That fact is irrelevant to Harris's ability to represent the class, however, for the ECPA, the SCA, and the CFAA do not require a violation to last for any particular length of time, and comScore does not explain how the length of a violation might be relevant.

Finally, comScore points to Dunstan's and Harris's testimony that they each had problems with their computers apart from the OSSProxy software (from viruses or age), and that OSSProxy thus did not cause any decline in the performance of Dunstan's and Harris's computers. (Dkt. No. 176, Ex. P, at 109:12-25; Dkt. No. 176, Ex. V, at 40:16-22; 62:8-11.) That testimony is relevant, if at all, only to the question of damages, and does not significantly alter the typicality of Dunstan's and Harris's claims. *Radmanovich v. Combined Ins. Co. of Am.*, 216 F.R.D. 424, 432 (N.D. Ill. 2003) (Alesia, J.) (stating that "the mere existence of factual differences will not preclude class certification" so long as "the class members share the same essential characteristics").

D. Adequate Representation

The fourth requirement under Rule 23(a) is that the named plaintiffs will "fairly and adequately protect the interests of the class." To meet that requirement, the plaintiffs must show that "(1) the representative does not have conflicting or antagonistic interests compared with the class as a whole; (2) the representative is sufficiently interested in the case outcome to ensure vigorous advocacy; and (3) class counsel is experienced, competent, qualified and able to conduct the litigation vigorously." *Matthews v. United Retail, Inc.*, 248 F.R.D. 210, 215 (N.D. Ill. 2008)

(Castillo, J.) (citation and quotation marks omitted).

ComScore does not dispute that the adequacy requirement is met. In addition, the court is not aware that Harris and Dunstan have any conflicting interests, Harris and Dunstan have vigorously participated in this case thus far, and class counsel are qualified to represent the class. The court determines that the adequacy requirement is met.

E. Ascertainability

In addition to the four explicit requirements listed in Rule 23(a), “[t]he plaintiff must also show that the class is indeed identifiable as a class.” *Oshana*, 472 F.3d at 513; *see also Simer v. Rios*, 661 F.2d 655, 669 (7th Cir. 1981) (“It is axiomatic that for a class action to be certified a ‘class’ must exist.”). “An identifiable class exists if its members can be ascertained by reference to objective criteria.” *Lau v. Arrow Fin. Servs., LLC*, 245 F.R.D. 620, 624 (N.D. Ill. 2007) (Guzman, J.) (citation and quotation marks omitted). The Third Circuit has explained the purposes of the ascertainability requirement:

The ascertainability requirement serves several important objectives. First, it eliminates serious administrative burdens that are incongruous with the efficiencies expected in a class action by insisting on the easy identification of class members. Second, it protects absent class members by facilitating the best notice practicable under Rule 23(c)(2) in a Rule 23(b)(3) action. Third, it protects defendants by ensuring that those persons who will be bound by the final judgment are clearly identifiable.

Marcus v. BMW of N. Am., LLC, 687 F.3d 583, 593 (3d Cir. 2012) (citations and quotation marks omitted).

Here, the parties agree that comScore possesses contact information, in the form of e-mail addresses, for some portion of the proposed Class and Subclass. (Dkt. No. 177, at 27; Dkt. No. 152, at 19 n.27.) That portion of the proposed Class and Subclass, at least, is readily ascertainable.

For the rest of the Class and Subclass, comScore asserts that the only way to determine class membership is to require each alleged class member to submit an individual affidavit, which comScore will be entitled to challenge. ComScore asserts that this process would be unwieldy.

ComScore is correct that it is sometimes improper to allow class membership to be established only by the assertion of alleged class members without the corroboration of any of the defendant's records. *Marcus*, 687 F.3d at 594 (“We caution, however, against approving a method that would amount to no more than ascertaining by potential class members’ say so.”); *Sadler v. Midland Credit Mgmt., Inc.*, No. 06 C 5045, 2008 WL 2692274, at *6 (N.D. Ill. July 3, 2008) (Pallmeyer, J.) (denying class certification when defendant “would be required to evaluate the individual facts of each account” in its records); *see also Clavell v. Midland Funding LLC*, No. 10–3593, 2011 WL 2462046, at *4 (E.D. Pa. June 21, 2011); *In re Wal-Mart Stores, Inc. Wage & Hour Litig.*, No. C 06–2069, 2008 WL 413749, at *8 (N.D. Cal. Feb. 13, 2008); *Deitz v. Comcast Corp.*, No. C 06–06352, 2007 WL 2015440, at *8 (N.D. Cal. July 11, 2007). In cases in which the burden of an affidavit procedure is likely to be minimal, however, courts have allowed portions of a class to establish class membership by affidavit or claim form. *Boundas*, 280 F.R.D. at 417 (“[A]nybody claiming class membership on that basis will be required to submit an appropriate affidavit, which can be evaluated during the claims administration process if Boundas prevails at trial.”); *see also Carrera v. Bayer Corp.*, No. 08-4716, 2011 WL 5878376, at *4 (D.N.J. Nov. 22, 2011). As a leading treatise explains: “Methods of claim verification may also vary with the ease of documenting claims by individual members, and also with the size of the claims involved. A simple statement or affidavit may be sufficient where claims are small or are not amenable to ready verification.” Alba Conte & Herbert B. Newberg, 3 *Newberg on Class Actions* § 10:12 (4th ed. rev.

2012).

Here, the bulk of the class membership will likely be determined by comScore's records, making evaluation of any additional plaintiffs claiming membership by affidavit manageable. If further litigation reveals that the portion of the class asserting membership by affidavit is excessively large, the court can consider at that time whether to limit the class definition to only those whose downloading of OSSProxy is reflected in comScore's records. *See Shvartsman v. Apfel*, 138 F.3d 1196, 1201 (7th Cir. 1998) (appropriate for district court to limit definition of class).

F. Rule 23(b)(3): Predominance and Superiority

Finally, the plaintiffs here must establish that "the questions of law or fact common to class members predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy." Fed. R. Civ. P. 23(b)(3). Rule 23(b)(3) "tests whether proposed classes are sufficiently cohesive to warrant adjudication by representation," and is "far more demanding" than Rule 23(a)'s commonality requirement. *Amchem Prods., Inc. v. Windsor*, 521 U.S. 591, 623 (1997).

Most of the issues that comScore alleges require individual adjudication and make administration of a class action infeasible have already been addressed. The issue of whether each individual plaintiff downloaded OSSProxy will be determined primarily by comScore's records, and if substantial individual adjudication is necessary the court will consider appropriate class limitations. The issue thus presents no obstacle to class adjudication. In addition, the issues of whether plaintiffs consented to OSSProxy's data collection, the scope of that consent, and whether

comScore exceeded that consent can all be determined on a class basis, as described above.⁶

ComScore also asserts that the statutes of limitations present individual issues that preclude class certification. The CFAA, SCA, and ECPA all have two-year statutes of limitations that do not begin to run until a plaintiff discovers the potential violation. *See* 18 U.S.C. § 1030(g) (CFAA); 18 U.S.C. § 2707(f) (SCA); 18 U.S.C. § 2520(e) (ECPA). ComScore argues that adjudication of most plaintiffs' claims will thus require a case-by-case determination of when they discovered comScore's violation.

In practice, however, the statute of limitations issue is unlikely to present significant difficulties. First, the issue only arises for plaintiffs who downloaded OSSProxy before August 23, 2009 (two years before this suit was filed). Second, comScore's data collection is ongoing, so even among those plaintiffs, all those who still have OSSProxy installed on their computer (or who had it installed at any time after August 23, 2009) are within the limitations period. Third, it is unlikely that any of the remaining plaintiffs were sufficiently aware of OSSProxy's operations to trigger the limitations period. Violations of the ECPA, SCA, and CFAA require only collecting information without the plaintiffs' consent. No plaintiff would be aware of the information OSSProxy was collecting unless he analyzed the computer code of the program itself. Few potential class members likely fall into this category. The statute of limitations issue thus does not provide reason to deny class certification. *Cf. In re Monumental Life Ins. Co.*, 365 F.3d 408, 420 (5th Cir. 2004) (Smith, J.) (holding that the limitations issue does not preclude class certification in a civil rights

⁶ ComScore also asserts that the SCA applies only to "a facility through which an electronic communication service is provided," 18 U.S.C. § 2701(a)(1), and that personal computers are not such "facilities." (Dkt. No. 177, at 26.) The plaintiffs concede that every member of the proposed Class and Subclass downloaded OSSProxy to his personal computer. (Dkt. No. 184, at 15.) The issue of whether personal computers are "facilities" under the SCA, which the court need not resolve at this time, is thus common to the entire class.

case when “[d]oubtless most class members . . . remain unaware of defendants’ discriminatory practices” because “[t]o hold that each class member must be deposed as to precisely when, if at all, he learned of defendants’ practices would be tantamount to adopting a per se rule that civil rights cases involving deception or concealment cannot be certified outside a two- or three-year period”).

In addition, comScore asserts that the issue of whether each individual plaintiff suffered damage or loss from comScore’s actions precludes certification. That argument has no applicability to the ECPA or SCA claims, both of which provide for statutory damages. 18 U.S.C. § 2520(c); 18 U.S.C. § 2707(c). The CFAA is different, however, in that it grants a civil action only to “[a]ny person who suffers damage or loss.”⁷ 18 U.S.C. § 1030(g). In addition, in this case, the plaintiffs must satisfy the requirement of 18 U.S.C. § 1030(c)(4)(A)(i)(I) that each actionable offense lead to a “loss to 1 or more persons during any 1-year period . . . aggregating at least \$5,000 in value.”⁸

The Seventh Circuit has recently reiterated that individual factual damages issues do not provide a reason to deny class certification when the harm to each plaintiff is too small to justify resolving the suits individually:

⁷ Under the CFAA, damage means “any impairment to the integrity or availability of data, a program, a system, or information,” 18 U.S.C. § 1030(e)(8), while loss refers to “any reasonable cost to any victim, including the cost of responding to an offense, conducting a damage assessment, and restoring the data, program, system, or information to its condition prior to the offense, and any revenue lost, cost incurred, or other consequential damages incurred because of interruption of service.” 18 U.S.C. § 1030(e)(11).

⁸ 18 U.S.C. § 1030(g) provides that “[a] civil action for a violation of this section may be brought only if the conduct involves 1 of the factors set forth in subclauses (I), (II), (III), (IV), or (V) of subsection (c)(4)(A)(i).” Subclause (I) is the only subclause conceivably applicable. The court need not decide at this stage whether 18 U.S.C. § 1030(c)(4)(A)(i)(I) allows class plaintiffs to aggregate their damages to meet the \$5000 requirement.

A class action is the more efficient procedure for determining liability and damages in a case such as this, involving a defect that may have imposed costs on tens of thousands of consumers yet not a cost to any one of them large enough to justify the expense of an individual suit. If necessary a determination of liability could be followed by individual hearings to determine the damages sustained by each class member But probably the parties would agree on a schedule of damages The class action procedure would be efficient not only in cost, but also in efficacy, if we are right that the stakes in an individual case would be too small to justify the expense of suing, in which event denial of class certification would preclude any relief.

Butler v. Sears, Roebuck & Co., 702 F.3d 359, 362 (7th Cir. 2012) That rationale is applicable here as well, where it is far more efficient to resolve all of the common issues in a single proceeding, and then to hold individual hearings on damages if necessary, than it would be to litigate all of the common issues repeatedly in individual trials. *Id.* at 363 (“The only individual issues—issues found in virtually every class action in which damages are sought—concern the amount of harm to particular class members. It is more efficient for the [common questions] to be resolved in a single proceeding than for [them] to be litigated separately in hundreds of different trials”).⁹ The requirements of Rule 23(b)(3) are met as well.

CONCLUSION

For the reasons explained above, the plaintiffs’ motion for class certification (Dkt. No. 152) is granted in part and denied in part. The court hereby certifies the following Class and

⁹ The Supreme Court recently reversed a grant of class certification where “[q]uestions of individual damage calculations will inevitably overwhelm questions common to the class.” *Comcast Corp. v. Behrend*, No. 11-864, 2013 WL 1222646 (U.S. Mar. 27, 2013). The Supreme Court’s holding came from its assumption, uncontested by the parties, that Rule 23(b)(3) requires that damages must be measurable based on a common methodology applicable to the entire class in antitrust cases. That assumption, even assuming it is applicable to privacy class actions in some way, is merely dicta and does not bind this court. *See id.* at *9 (Ginsburg and Breyer, JJ., dissenting) (“[T]he decision should not be read to require, as a prerequisite to certification, that damages attributable to a classwide injury be measurable on a class-wide basis.” (citation and quotation marks omitted)).

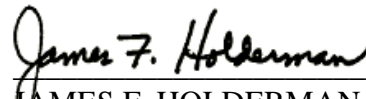
Subclass for purposes of resolving plaintiffs' SCA, ECPA, and CFAA claims:

Class: All individuals who have had, at any time since 2005, downloaded and installed comScore's tracking software onto their computers via one of comScore's third party bundling partners.

Subclass: All Class members not presented with a functional hyperlink to an end user license agreement before installing comScore's software onto their computers.

The court denies class certification for purposes of resolving the plaintiffs' common law unjust enrichment claims. A status hearing is set for 4/18/13 at 9:00 am to set further dates.

ENTER:



JAMES F. HOLDERMAN

Chief Judge, United States District Court

Date: April 2, 2013

No. _____

**UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT**

MIKE HARRIS AND JEFF DUNSTAN, INDIVIDUALLY AND ON BEHALF
OF A CLASS OF SIMILARLY SITUATED INDIVIDUALS.,

Plaintiffs-Respondents,

v.

COMSCORE, INC.,

Defendant-Petitioner,

On Appeal from the United States District Court
for the Northern District of Illinois

**APPENDIX TO COMSCORE'S PETITION FOR LEAVE TO
APPEAL CLASS CERTIFICATION ORDER PURSUANT TO
FEDERAL RULE OF CIVIL PROCEDURE 23(f)**

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April 16, 2013

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**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

MIKE HARRIS and JEFF DUNSTAN,
individually and on behalf of a class of
similarly situated individuals

Plaintiff,

v.

COMSCORE, INC., a Delaware corporation

Defendant.

CASE NO. 1:11-cv-5807

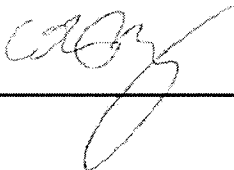
Judge Holderman

Magistrate Judge Kim

EXPERT WITNESS REPORT OF COLIN O'MALLEY

I have prepared this Expert Witness Report pursuant to Fed. R. Civ. P. 26(a)(2)(B) for the purpose of summarizing my forthcoming expert opinion testimony to be offered in the above-captioned case.

Dated: November 30, 2012



Colin O'Malley

Background:**Education:**

- Stuyvesant High School, New York City
- Bachelor of Science, double major in Economics and Human & Organizational Development, Vanderbilt University

Experience:

I have been a product manager and an executive operating in the online privacy space for nine years. Over that time, I have designed best practice disclosure systems across a range of technologies and have engaged with stakeholders in industry, government, think tanks, and independent researchers around the world on this topic.

In 2003, I joined TRUSTe, the leading provider of privacy seals for websites on the internet¹ as a product manager. While at TRUSTe, I developed standards for consumer disclosure in the email marketing space for an accreditation service named Bonded Sender, which was developed in partnership with IronPort Systems. Bonded Sender was acquired by Return Path, a global leader in email services, and lives on today under a new brand as the leading whitelist program for commercial email senders that adhere to strong privacy practices.² I went on to lead the development of a seal program for email senders that could adhere to TRUSTe's strict privacy principles, called the Email Privacy Seal.³

In 2006, I led TRUSTe's development of the first privacy accreditation program for the consumer software industry, the Trusted Download Program ("TDP").⁴ This program included a broad range of stakeholders in its development, including industry (AOL, CNET, Verizon, Computer Associates, Yahoo!), independent think tanks and advocates such as the Center for Democracy and Technology. The program focused on:

1. A high bar of consumer disclosure, including key statements that would need to be elevated out of privacy policies and terms and conditions to more prominent placements in the pre-installation experience;
2. A prior consent requirement for advertising and tracking software;

¹ TRUSTe provides numerous services relating to consumer and website privacy, and has worked with companies such as Apple, AT&T, Cisco, Disney, eBay, HP and Intuit. Additional information can be found at www.truste.com. Additional information regarding privacy seals can be found at www.truste.com/products-and-services/enterprise-privacy/TRUSTed-websites.

² <http://www.returnpath.com/solution-silo/certification-eq/>

³ Additional information can be found at www.truste.com/products-and-services/enterprise-privacy/TRUSTed-email.

⁴ Additional information can be found at <http://www.truste.com/products-and-services/enterprise-privacy/TRUSTed-downloads>.

3. Tight controls for the distribution practices of program participants, including accountability for bad behavior detected across software bundling partners; and
4. A list of prohibited activities that all program participants would need to forswear.

TDP was launched to great acclaim, with Federal Trade Commissioner Jon Leibowitz appearing at the launch event, and TRUSTe quickly received applications from many of the leading advertising and research supported applications on the internet. It was in this capacity that I first became familiar with comScore applications, including their disclosures and the advanced steps the company has pursued to ensure consistent privacy practices across their distribution network.

I joined the TRUSTe executive team as Vice President of Strategic Partnerships and Programs after the launch of TDP, and the successful execution and market adoption across these privacy programs lead to TRUSTe's first round of venture capital, with Accel partners contributing \$10 million.

In 2009, I left TRUSTe and co-founded Better Advertising (now 'Evidon'), another company focused on the privacy market for companies willing to adhere to best practices in consumer disclosure online. At Evidon, I have served as Chief Strategy Officer, leading Sales, Product Design, and Policy at various stages of the company's development. The company is backed by Warburg Pincus. Over a three year period Evidon became the leading technology provider for companies that sought to come into compliance with the enhanced disclosure requirements of the Self-Regulatory Principles for Online Behavioral Advertising,⁵ and the leading provider of ePrivacy Directive compliance services, which require companies to gain full consent for a wide range of tracking purposes. Evidon's clients include many of the leading marketers, publishers, and ad networks in the industry and its consumer disclosure technologies are served on top of 2 billion advertisements online every day.

Over the course of my nine years building technical systems in the online privacy space, I have regularly reached out to many of the leading voices in the privacy community to better understand their position on the issues and to ensure that the privacy systems I have built for my companies have a full picture of their compliance requirements. I have also become a public voice and educator on these issues.

My outreach has included:

- The Federal Trade Commission, including multiple Commissioners, the Chairman, the CTO, and staff
- Members of Congress
- Center for Democracy and Technology (CDT)
- Future of Privacy Forum (FPF)

⁵ Additional information can be found at www.aboutads.info.

- Staff from the European Commission
- The Information Commissioner and staff in the UK
- Which! (Consumer advocates in the UK)
- International Chamber of Commerce
- Data Protection Commissioner of Ireland and staff
- CNIL (French DPA)
- The Spanish Data Protection Agency
- Bavarian State Office for Data Protection
- The Japanese Ministry of Internal Affairs and Communications

My industry outreach has included regular speaking appearances and training programs at industry events, including the International Association of Privacy Professionals.

Recent bylines:

- AdMonsters: 'The Pragmatist's Guide to Compliance with the ePrivacy Directive'
 - <http://www.admonsters.com/blog/pragmatist's-guide-compliance-eprivacy-directive>
- Econsultancy: 'EU e-Privacy Directive: Don't Call it a Cookie Law' (5/2012)
 - <http://econsultancy.com/us/blog/9879-eu-e-privacy-directive-don-t-call-it-a-cookie-law>
- AOP: 'The Difference Between Consent and Opt-In' (4/2012)
 - <http://www.ukaop.org.uk/news/eu-privacy-directive-consent-opt-in-cookies-evidon3549.html>
- AOP: 'Why The Cookie Audit Rush?' (3/2012)
 - <http://www.ukaop.org.uk/news/how-to-run-a-cookie-audit3502.html>

My CV is attached to this report as Appendix A. I am being compensated at a rate of \$275 per hour for my work on this matter. I have not testified as an expert witness, either at deposition or trial, in the past four years.

Bases for Opinion

A list of the documents I reviewed while preparing my report is provided in Appendix B.

Opinion

It is my opinion that comScore's practices related to privacy disclosures and obtaining consent from users meet and exceed industry standards. Although it is impossible for any company to ensure that all users carefully consider privacy disclosures, and that all such users provide their consent in considered response to those disclosures, comScore has taken all commercially reasonable steps necessary to facilitate such careful consideration.

comScore Disclosures; Background and Assessment

comScore's Relevant Knowledge is a research application that tracks consumer behavior, including the pages viewed on the internet and setting and application use across the operating system, in order to generate aggregated reports on general consumer trends. comScore does not offer any data service that would allow clients to target an individual, but nonetheless, the fact that individuals must be tracked to generate aggregated reports has required that comScore's software to monitor and collect a large amount of data. One of the central tenets of good privacy practice, and something that I have included in all of the disclosure systems I have designed over the last nine years, is the importance of providing clear and prominent notice when a company intends to collect and use a consumer's information in material ways that a typical consumer would not expect. Only when practices are held out in the light of day can consumers properly evaluate them. comScore has understood this well throughout the time that I have engaged with them, beginning in 2006.

When TRUSTe was designing the program requirements for the Trusted Download Program, we expected that applications like Relevant Knowledge would seek certification. Early on in the policy drafting process, we decided on a model that included the following core components:

- A '**Primary Notice**,' that would include the core components of the value proposition for the consumer in an unavoidable location, and for those 'Certified Tracking Software' applications like Relevant Knowledge, the notice would also include details regarding any collection, use, or transfer of PII.
- Users must be provided with a means to provide their **consent** having seen the Primary Notice, and we itemized specific requirements to ensure that language was direct, clear, and without any marketing gimmicks that might confuse or otherwise force unintended consent. Certified Tracking Software was subjected to additional requirements to ensure that the 'accept' button would not be the default option, to ensure that impatient consumers would have to pause and evaluate the value proposition before proceeding, and that the 'decline' option would be presented with equal prominence.
- Managing a large network of marketing partners online can be challenging for any business, and many large and reputable firms have struggled to do this effectively. But in the software distribution market, with applications that have potentially broad privileges on a consumer's machine, we felt at TRUSTe that we needed application owners to take accountability for the practices of their partners, particularly where the core privacy principles of the program were concerned. To this end, we created a section of the principles that we called '**Third Party Distribution/Affiliate Practices**,' that applied specifically to 'Certified Advertising Software' and 'Certified Tracking Software.' In this section, we included unprecedented requirements, including complete transparency for TRUSTe into the

individual partners and how each of them manage the installation process, and subjecting this list of partners to deep and ongoing scrutiny.

- Our requirements also included a long list of **'Prohibited Activities,'** including violations of the consumer's privacy rights or security settings and a range of potentially unscrupulous business practices. No application would be permitted to engage in these activities, with or without consumer consent.

comScore Disclosures

Relevant Knowledge is typically offered to a user in connection with the downloading of a partner's application. In this example, I will assess Relevant Knowledge as it appears in a bundle with the 'MP3 Cutter' application. It is my understanding and, accordingly I have assumed that, the process and disclosures are materially identical across all partner bundles.

Step 1: Consumer downloads MP3 Cutter

The consumer finds the MP3 Cutter application online and elects to download it.

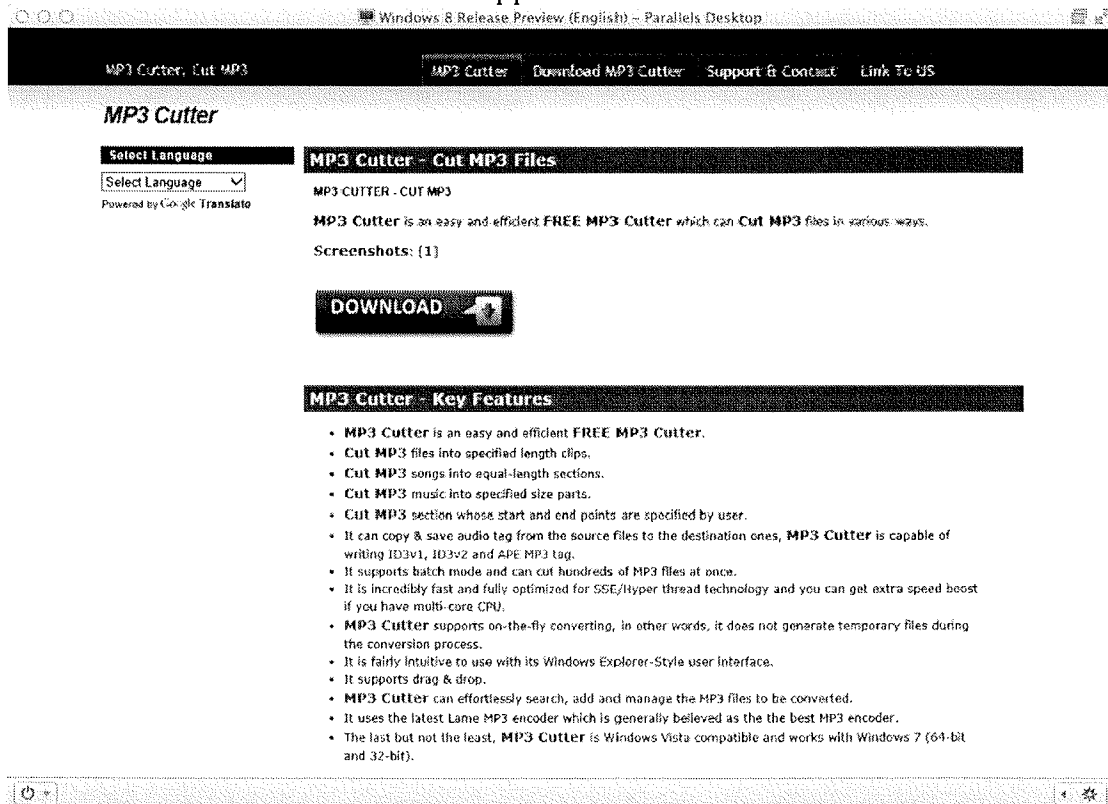


Image: MP3 Cutter download button

Step 2: Consumer begins MP3 Cutter installation

Once the download of MP3 Cutter is complete, the consumer finds the installation file and clicks to begin the installation process.

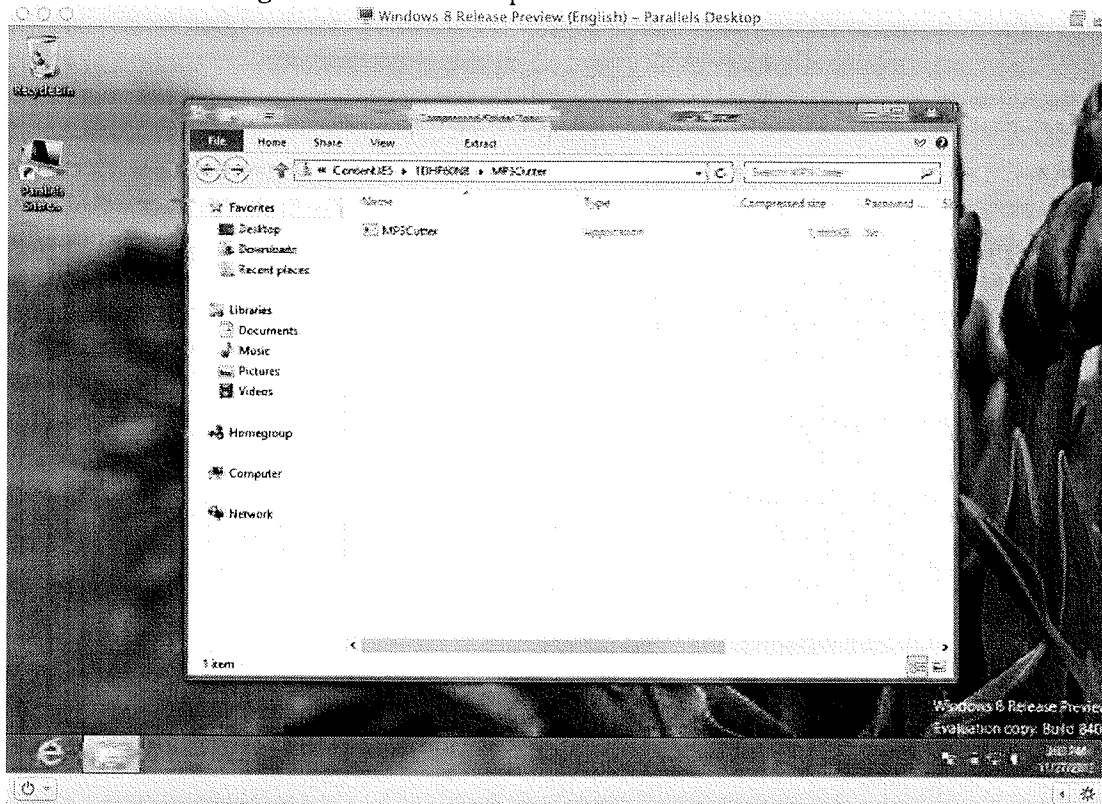


Image: MP3 Cutter installation file

Step 3: MP3 Cutter installer disclosure, including comScore ‘WatchDog’ reference, as explained below.

As the MP3 Cutter installation begins, MP3 Cutter has a chance to provide a disclosure to the consumer. In this case, comScore has worked with their partner to include a reference to their WatchDog application. WatchDog was created by comScore in order to meet the requirements of TDP. The sole purpose of WatchDog is to ensure that all consumers see the same comScore disclosures, that they are never hidden from view, and that consent is always properly obtained across their partner network. This purpose is accomplished through the use of a small application that is able to monitor the disclosure being presented—to assure that the approved disclosure is being presented in its entirety—and that each consumer selects the “accept” option. If WatchDog detects that either of these events did not occur, then the comScore software will not be installed. The WatchDog thus acts as a privacy security offering, and is one example of comScore going beyond TRUSTe requirements.

The MP3 Cutter reference does not mention WatchDog or comScore by name, as this would likely confuse the consumer, but it mentions that the application is from a partner, that its purpose is to verify acceptance of disclosures, and that it will be promptly removed. This disclosure is presented wherever possible before WatchDog is installed, in keeping with best practices.

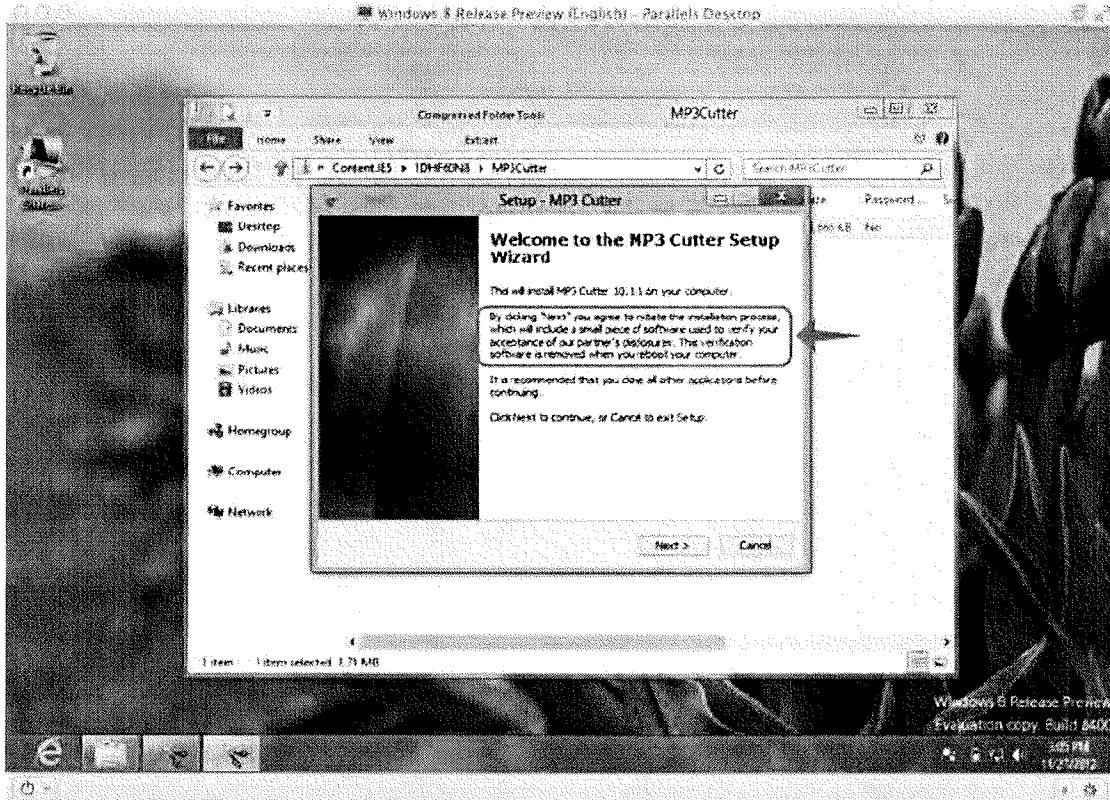


Image: MP3 Cutter disclosure with comScore WatchDog reference (orange highlights for effect, not in original)

Step 4: MP3 Cutter Terms

MP3 Cutter then presents it's terms of service to the consumer and requests consent.

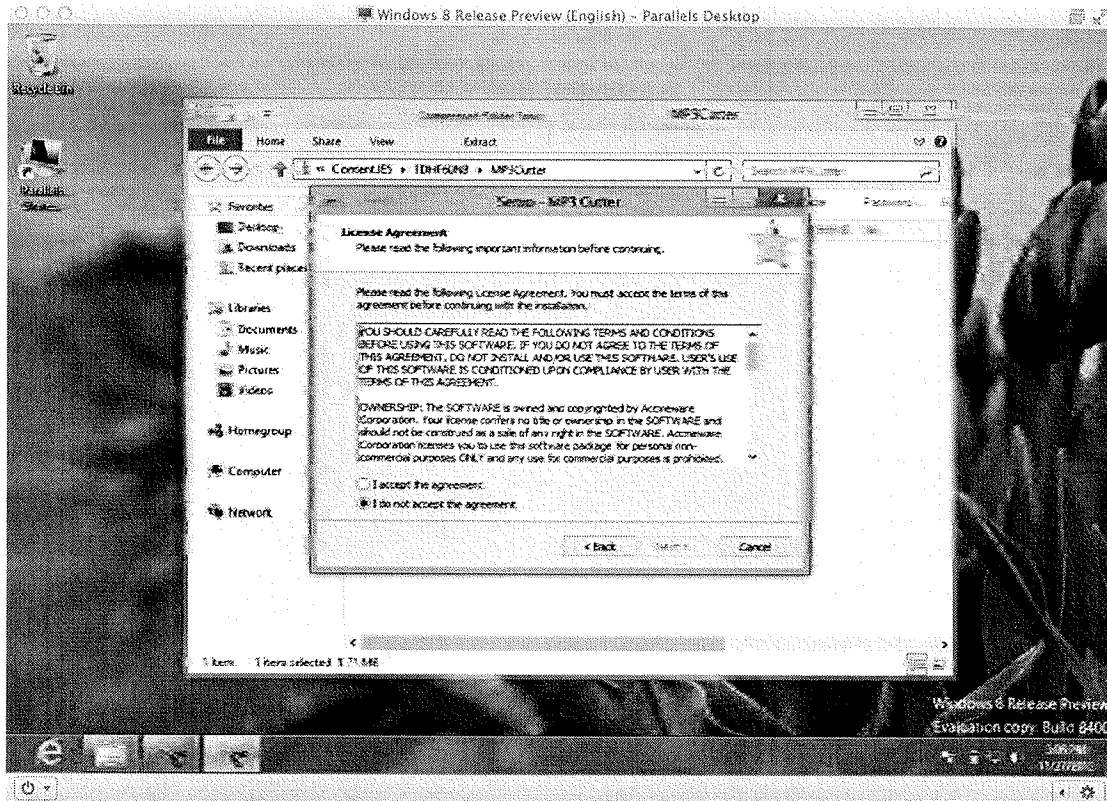


Image: MP3 Cutter terms of service with consent dialogue

Step 5: Relevant Knowledge Primary Notice

With the MP3 Cutter disclosures complete, Relevant Knowledge now presents its Primary Notice, which is the most important dialogue to the user. This notice was originally drafted in conjunction with TRUSTe, and as such is fully compliant with TRUSTe's Trusted Download Program requirements, and accomplishes several important things:

1. **Headline:** The consumer is informed that MP3 Cutter is part of a software bundle.
2. **Value Proposition Presented:** Relevant Knowledge is described, including the company behind the application and the core business model and value proposition.
3. **Tracking Disclosed:** A complete description of the tracking that will take place is provided, including how the data will be used.
4. **All Essential Information Immediately Visible:** Enough information is provided to outline the core value proposition without requiring the

consumer to advance to any secondary screen or having to scroll to see additional information beyond that which is immediately visible in the Primary Notice.

5. **Additional Legal Documents Immediately Accessible:** Links are provided to the Privacy Policy and User License Agreement for more detailed information.⁶
6. **No Bias Towards 'Accept':** 'Accept' is NOT highlighted as a default option or otherwise marketed in any way as a more desirable option than 'Decline.'
7. **User Must Make an Active Decision:** The 'Next' button is not active until the user selects Accept or Decline, so the impatient consumer that simply wants to hit 'Enter' will not be able to proceed without making a decision.
8. **Decline is a Viable Option:** If the consumer elects to Decline, Relevant Knowledge will not be installed, and MP3 Cutter will remain on their machine. They are not forced to agree to Relevant Knowledge terms to obtain MP3 Cutter. This again exceeds the requirements of TRUSTe's Trusted Download Program.

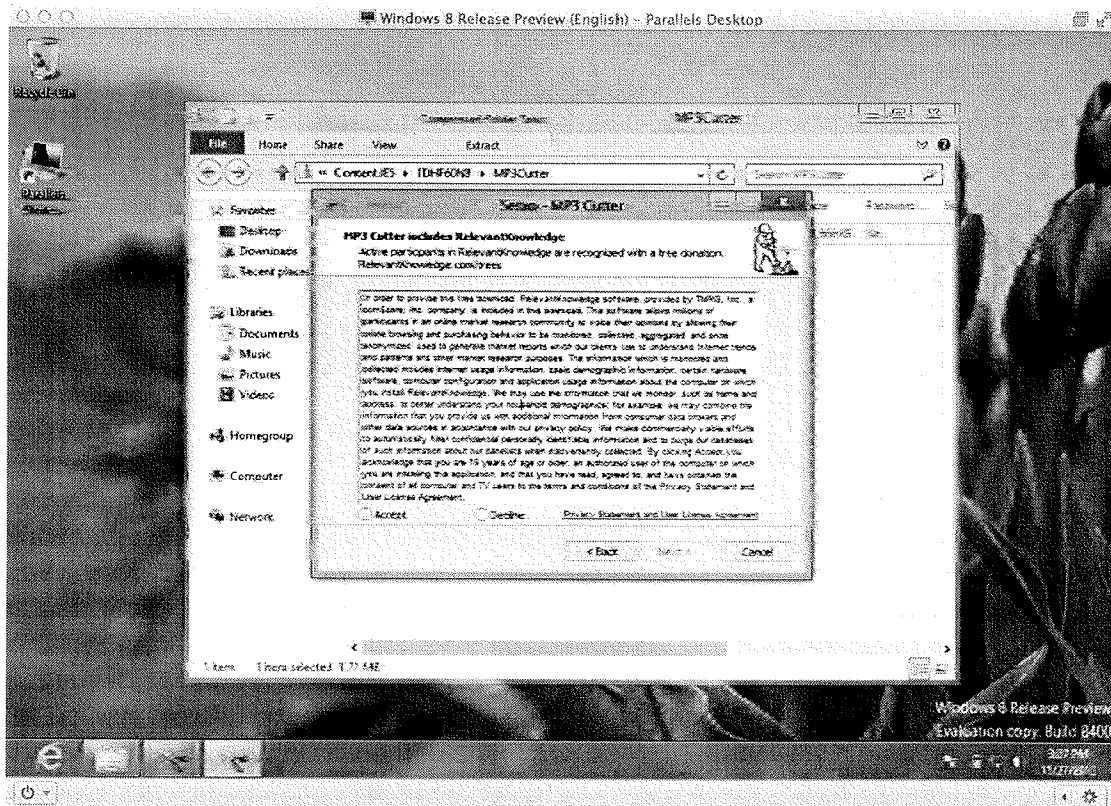


Image: Relevant Knowledge Primary Notice⁷

⁶ It is my understanding that one of comScore's partners inadvertently failed to include a link to comScore's Privacy Policy and User License Agreement in the Primary Notice for a short period of time. Such a link is not required to obtain adequate consent from a user, and comScore corrected the issue in partnership with its partner as soon as it was made aware of the issue.

⁷ The notice as reproduced here is smaller than actual size.

Relevant Knowledge is only installed if the user accepts the terms and clicks 'Next.'

In summary, the notice adheres to best practices as outlined by TRUSTe's Trusted Download Program, and exceeds them in several critical places where comScore has innovated to increase confidence that consumer consent is legitimately obtained.

The Relevant Knowledge Notice Assessed Against Digital Advertising Alliance Online Behavioral Advertising Standards

The Digital Advertising Alliance⁸ ("DAA") is a trade association that is operated in coordination with the major sector based associations across the online marketing ecosystem, including the IAB, DMA, AAAA, ANA, AAF, NAI, and the BBB. In 2009, the DAA released a set of standards for consumer privacy in the online behavioral advertising space ("OBA") that is notable for its broad adoption (more than 1 trillion notices served every month⁹) and governmental support, including the FTC¹⁰ and the White House.¹¹ The principles, titled Self-Regulatory Principles for Online Behavioral Advertising,¹² are useful for assessing the sufficiency of notice, because they are reasonably specific about where and how notice should be provided, and when additional consent mechanisms should be in place.

To be clear, comScore does not engage in behavioral advertising with data collected through Relevant Knowledge, so I intend to use these principles as a reference point only, without implying that the program imposes direct requirements on comScore.

The DAA's principles require that third parties collecting information about consumers across websites (and for the purpose of behavioral advertising), provide notice to consumers when this data collection and use is taking place in an easily visible location, and a means to control the tracking activity.

In addition, the DAA creates a category of company called 'Service Providers' with a scope that is similar to TRUSTe's 'Certified Tracking Software.'

A Service Provider is defined as an entity to the extent that it collects and uses data from all or substantially all URLs traversed by a web browser across Web sites for Online Behavioral Advertising in the course of its activities as a provider of Internet access service, a toolbar, an Internet browser, or comparable desktop application or client software and not for its other applications and activities.

⁸ <http://www.aboutads.info>

⁹ <http://adage.com/article/digital/daa-takes-aim-microsoft-congressional-hearing/235688/>

¹⁰ http://www.imediaconnection.com/article_full.aspx?id=30430

¹¹ <http://www.prnewswire.com/news-releases/white-house-doc-and-ftc-commend-daas-self-regulatory-program-to-protect-consumer-online-privacy-140170013.html>

¹² <http://www.aboutads.info/resource/download/seven-principles-07-01-09.pdf>

Service Providers have important additional requirements, and while again, comScore does not use Relevant Knowledge data for OBA, and therefore does not meet the definitional threshold, the standards are instructive.

In particular, Service Providers must:

- Adhere to **strict prior consent**. The DAA requires that companies in this category refrain from using data for itemized purposes until consent has been granted. comScore uses this model explicitly through the tightly controlled consent process discussed in the previous section.¹³
- **Honor a high bar for Consent**, which is defined as follows:

The term Consent means an individual's action in response to a clear, meaningful and prominent notice regarding the collection and use of data [for Online Behavioral Advertising purposes].

comScore's notice, as described above, clearly meets this requirement.

- Allow the consumer to **withdraw consent at any time**.¹⁴ comScore adheres to this principle by combining visual reminders that the application is running and/or resident on the consumer's computer, and also by ensuring that it is visible wherever possible in the add/remove programs section of the operating system, as seen below.

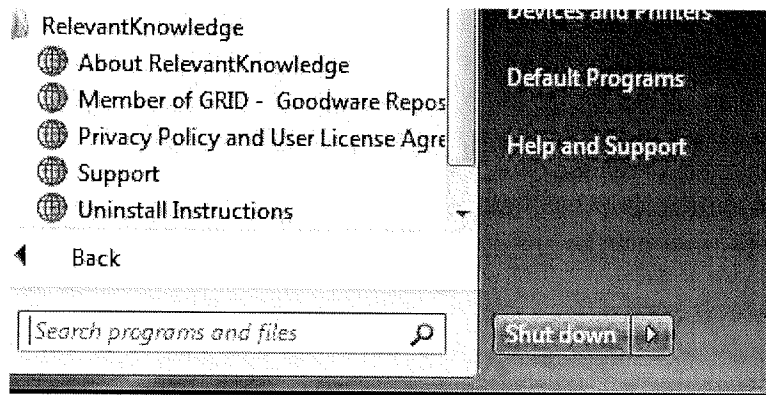


Image: Relevant Knowledge in the Start Menu

¹³ III. Consumer Control: B. Service Provider Consent for Behavioral Advertising: 1. Consent to Collection and Use

¹⁴ III. Consumer Control: B. Service Provider Consent for Behavioral Advertising: 2. Withdrawing Consent

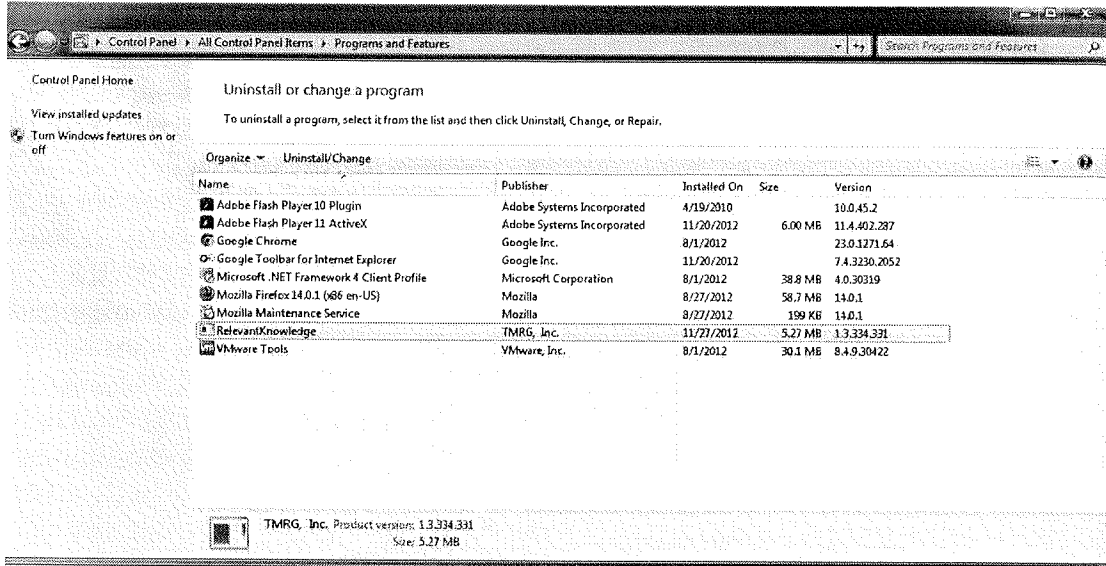


Image: Relevant Knowledge in Add/Remove Programs

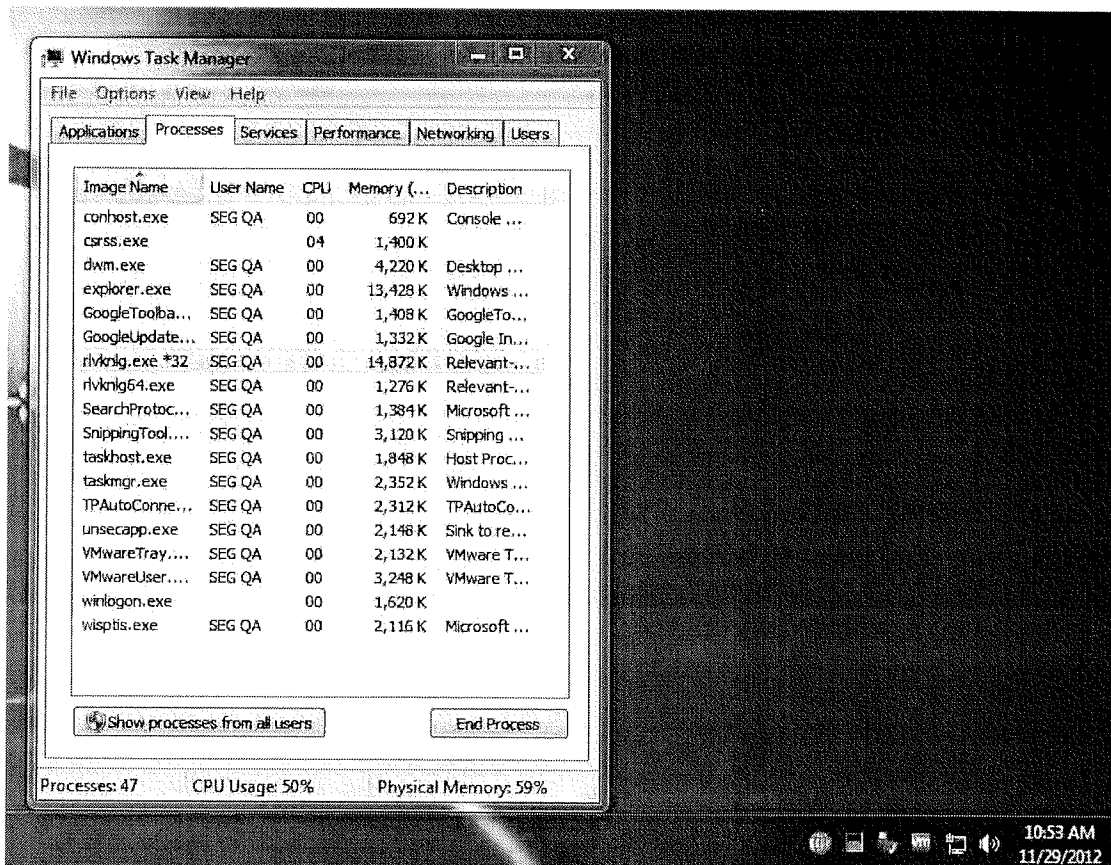


Image: Relevant Knowledge in Task Manager

- Adhere to specific requirements to anonymize and secure consumer data,¹⁵ through the use of comScore’s fuzzification process.¹⁶
 1. *Alter, anonymize, or randomize (e.g., through “hashing” or substantial redaction) any PII or unique identifier in order to prevent the data from being reconstructed into its original form in the ordinary course of business.*
 2. *Disclose in the notice set forth in II.A.1 the circumstances in which data that is collected and used for Online Behavioral Advertising is subject to such a process.*
 3. *Take reasonable steps to protect the non-identifiable nature of data if it is distributed to non-Affiliates including not disclosing the algorithm or other mechanism used for anonymizing or randomizing the data, and obtaining satisfactory written assurance that such entities will not attempt to re-construct the data and will use or disclose the anonymized data only for purposes of Online Behavioral Advertising or other uses as specified to users. This assurance is considered met if a non-Affiliate does not have any independent right to use the data for its own purposes under a written contract.*
 4. *Take reasonable steps to ensure that any non-Affiliate that receives anonymized data will itself ensure that any further non-Affiliate entities to which such data is disclosed agree to restrictions and conditions set forth in this subsection. This obligation is also considered met if a non-Affiliate does not have any independent right to use the data for its own purposes under a written contract.*

Relevant Knowledge Compared to Other Commercial Examples

Relevant Knowledge uses a prior consent model that compares favorably to similar methods used by many of the leading companies conducting business on the internet. In this section, I will examine a series of examples from companies in related industries and assess how they meet the eight criteria that we outlined for Relevant Knowledge above.

¹⁵ IV. Data Security: C. Service Provider Treatment of Online Behavioral Advertising Data

¹⁶ It is my understanding that comScore’s fuzzification process is the subject of a separate expert report, and thus will not be covered here in great detail. My understanding of the process is that when comScore’s software is able to identify PII, the software affects changes to that data prior to the data being sent to comScore’s servers. Additionally, comScore takes steps to assure that any data collected is transmitted at the same level of security to which the underlying data was subject. Thus, data collected from secure pages will be transmitted across a secure (https) connection back to comScore’s servers, even if the data has previously been hashed or otherwise redacted. It is also my understanding that this process is completely controlled by comScore, and does not rely in any amount of the efforts of their distribution network.

A. Microsoft's Silverlight

Silverlight is a multimedia playing application that allows the consumer to playback certain forms of audio and video content. Certain information is presumably collected by Microsoft about the consumer's computer and the content they are viewing to properly maintain the service, though this is not immediately clear in the portion of the notice that is immediately viewable. Microsoft does disclose that they will update the application automatically without necessarily notifying the consumer.

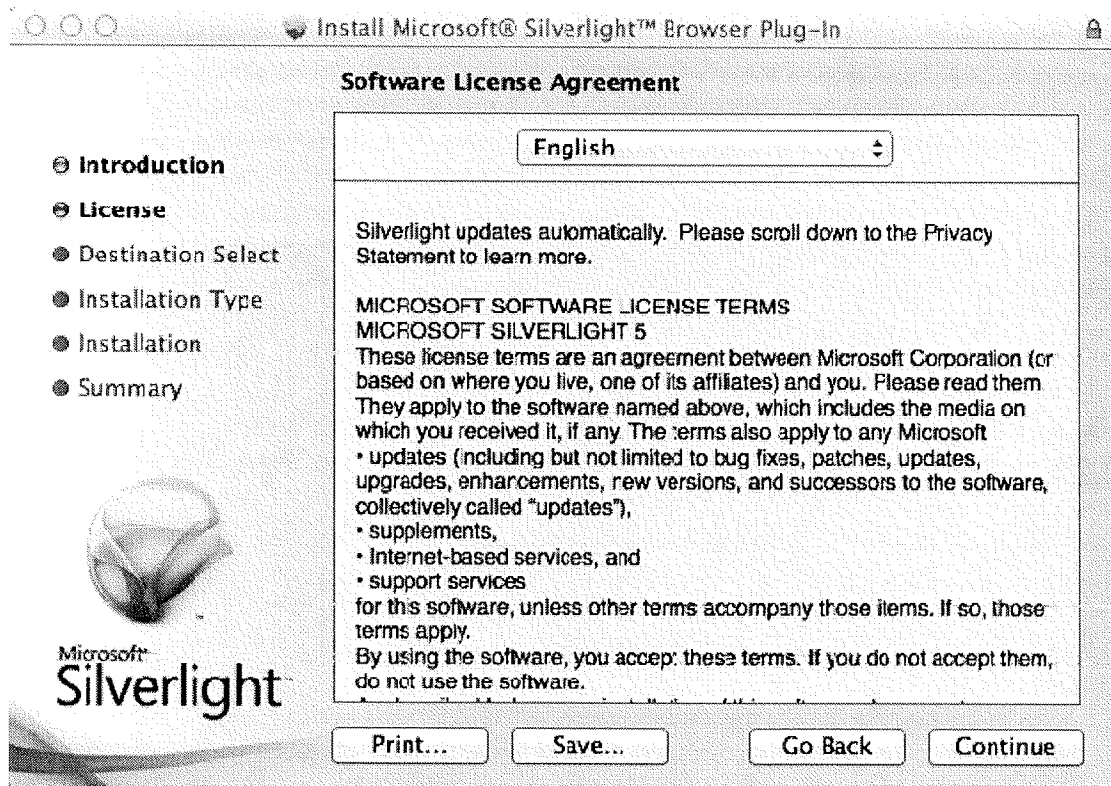


Image: Microsoft Silverlight notice

1. **Headline:** Clearly states the name of the application and the company behind it.
2. **Value Proposition Presented:** The disclosure does not include a description of the behavior of the application or the underlying business model.
3. **Tracking Disclosed:** No tracking is disclosed.
4. **All Essential Information Immediately Visible:** No, and it is clear that additional information is hidden beneath the fold.
5. **Additional Legal Documents Immediately Accessible:** No, and in particular, there is no Privacy Policy link.
6. **No Bias Towards 'Accept':** Yes.

7. **User Must Make an Active Decision:** Yes.
8. **Decline is a Viable Option:** No, if you do not accept by selecting 'Continue,' you will not receive the application.

B. Adobe Reader

Adobe Reader is a free application that allows the consumer to read PDF documents.

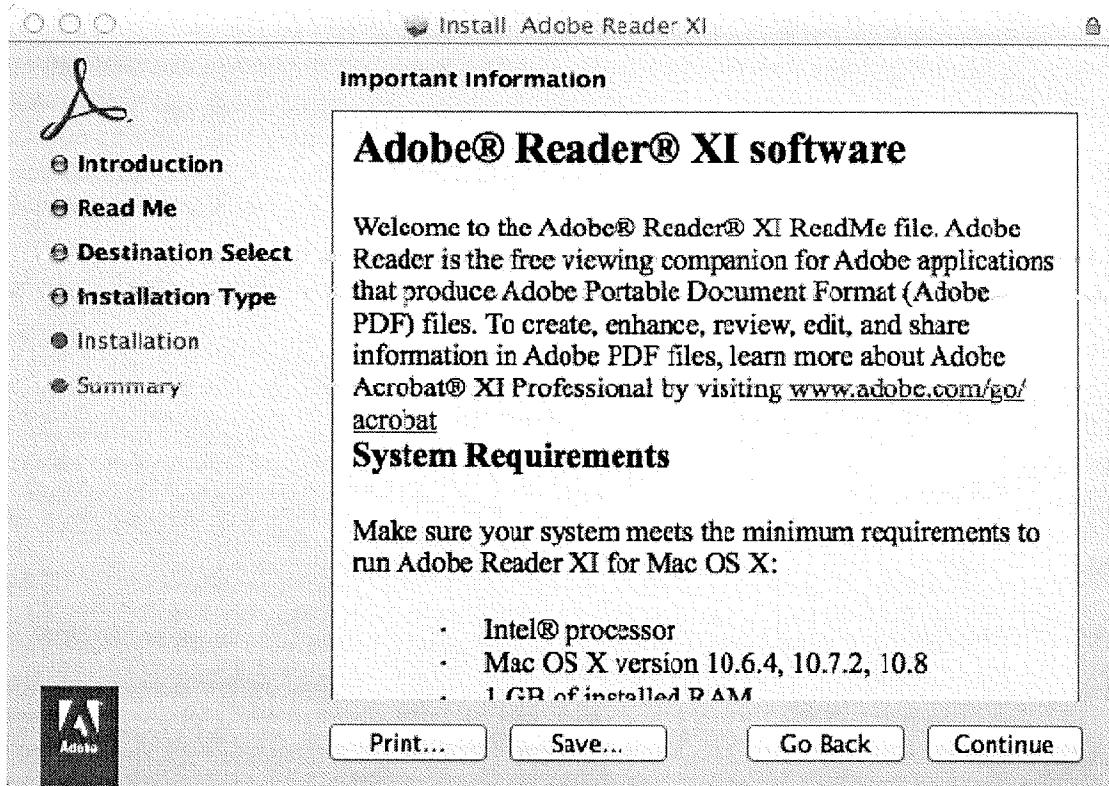


Image: Adobe Reader notice page 1

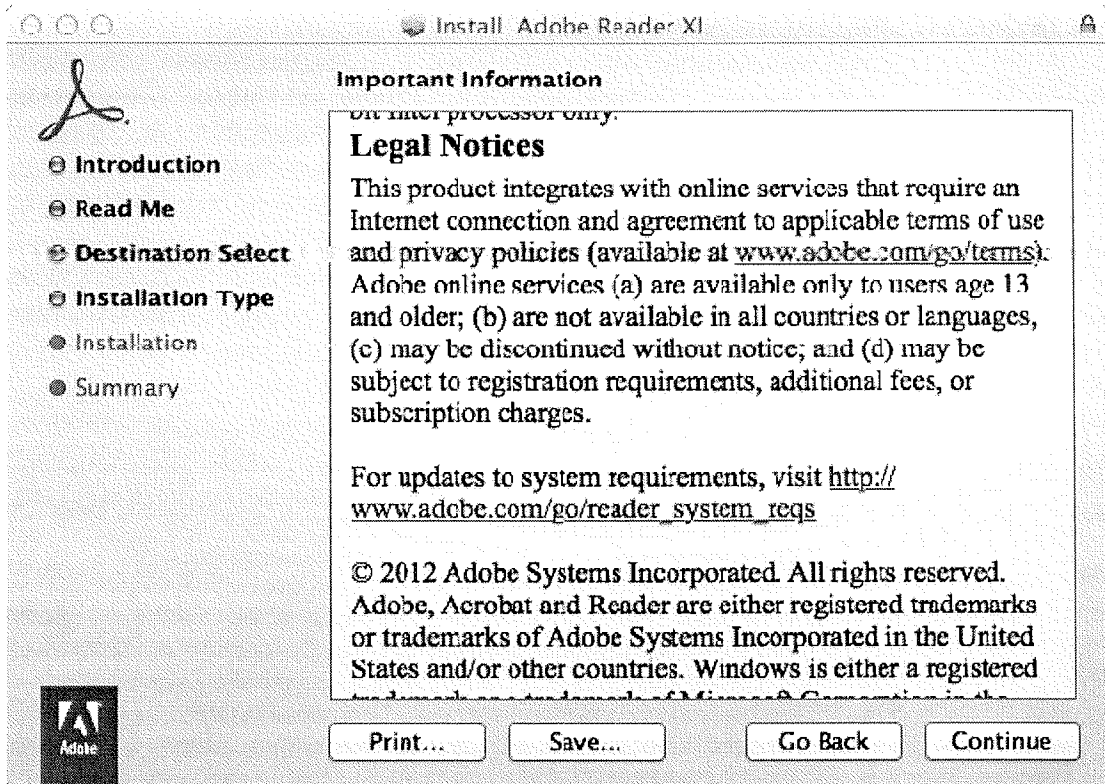


Image: Adobe Reader notice page 2, after scroll

1. **Headline:** Adobe and Adobe reader are clearly declared.
2. **Value Proposition Presented:** The core function of the application is clearly disclosed at the top of the first paragraph.
3. **Tracking Disclosed:** No, though it's possible that no tracking takes place other than what a consumer would expect from a similarly situated application.
4. **All Essential Information Immediately Visible:** Yes.
5. **Additional Legal Documents Immediately Accessible:** No, as legal links like the "Terms" page are hidden beneath the fold and a scroll is required.
6. **No Bias Towards 'Accept':** Yes
7. **User Must Make an Active Decision:** Yes
8. **Decline is a Viable Option:** No

C. Reuter's Cookie Consent in the UK

As a result of the ePrivacy Directive, websites in the UK are required by law to obtain consent from each consumer in order to track them for a variety of common commercial purposes, including research, ongoing product improvement, analytics, and behavioral advertising. As a result, companies like Reuters have developed disclosure systems that ensure

each consumer sees the requisite information and has the ability to revoke consent if they are inclined. The particular interface shown below is provided by my company, Evidon.

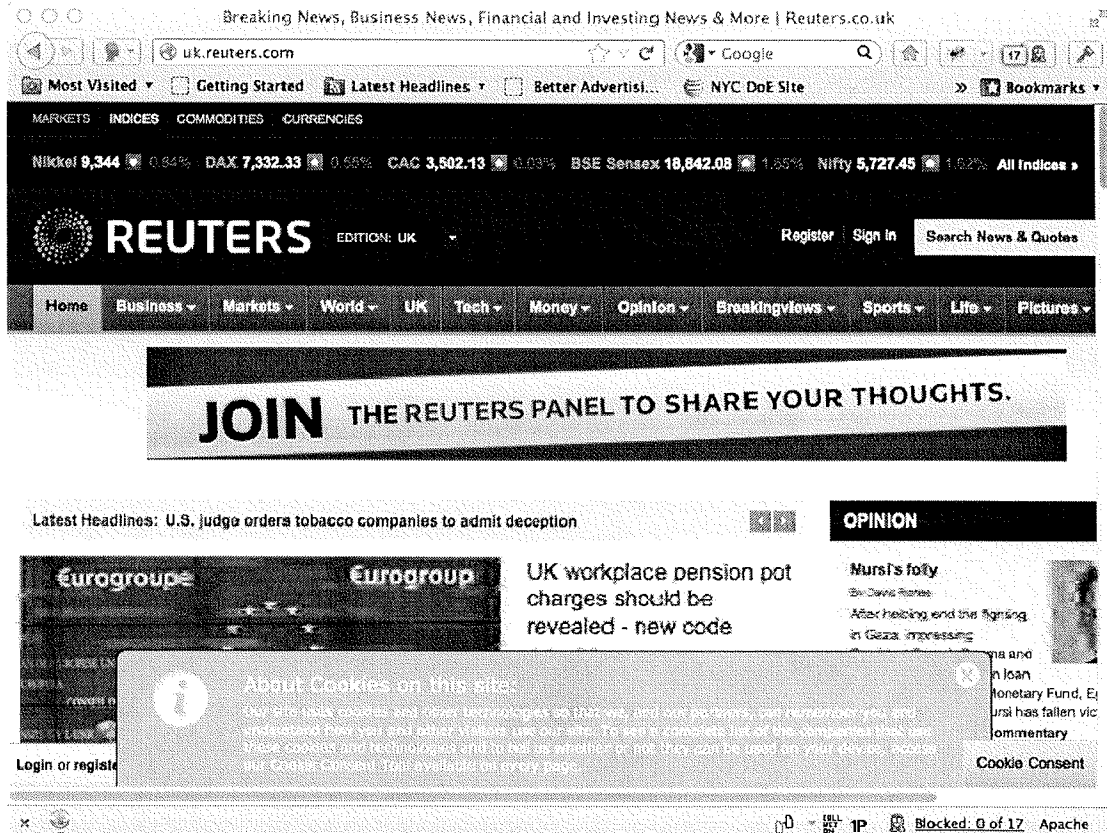


Image: Reuters UK consent interface

1. **Headline:** Properly notifies the consumer that the notice pertains to cookies.
2. **Value Proposition Presented:** Quickly summarized in a short paragraph.
3. **Tracking Disclosed:** Yes.
4. **All Essential Information Immediately Visible:** Yes.
5. **Additional Legal Documents Immediately Accessible:** The 'Cookie Consent' button contains additional legal documents.
6. **No Bias Towards 'Accept':** There is a clear bias towards 'Accept,' as this is an implied consent model that presumes the consumer's consent unless it is revoked through the 'Cookie Consent' button.
7. **User Must Make an Active Decision:** Yes, as the consumer must continue to use the site, having seen the value proposition, and its included tracking.
8. **Decline is a Viable Option:** Yes, as the consumer can withdraw consent through the 'Cookie Consent' button.

D. BBC Cookie Consent in the UK

The BBC has developed a consent interface for their website that is similar to Reuters to meet the requirements of the ePrivacy Directive in the UK.

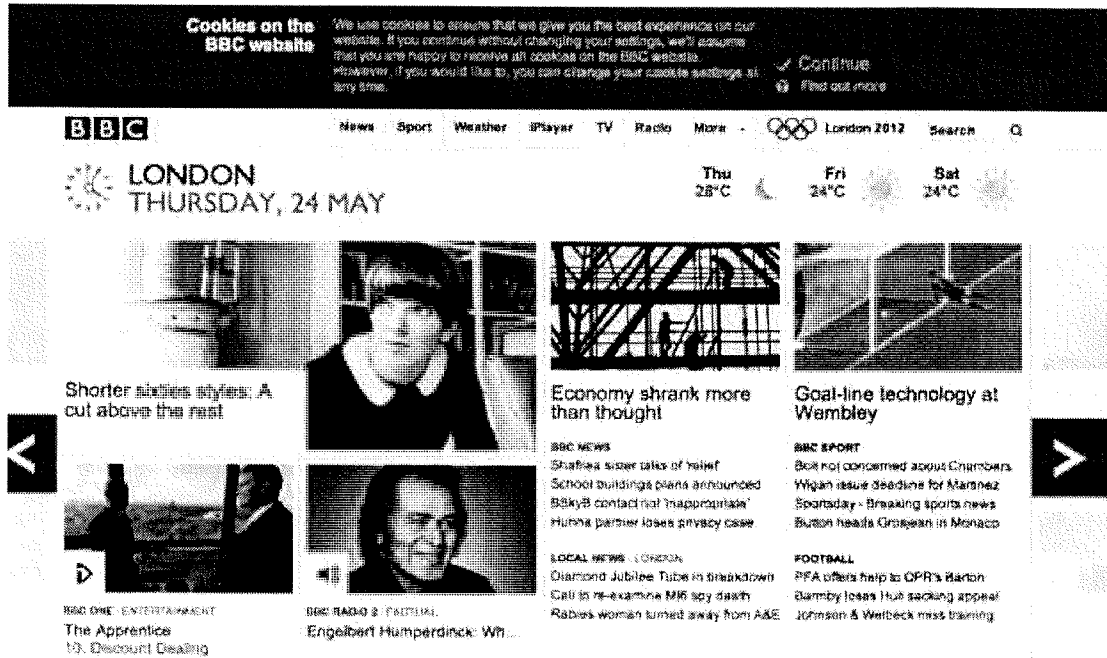


Image: BBC consent interface

1. **Headline:** Properly notifies the consumer that the notice pertains to cookies.
2. **Value Proposition Presented:** Quickly summarized in a short paragraph.
3. **Tracking Disclosed:** Yes.
4. **All Essential Information Immediately Visible:** Yes.
5. **Additional Legal Documents Immediately Accessible:** The 'Find out more' link will take the consumer to additional legal documents.
6. **No Bias Towards 'Accept':** There is a clear bias towards 'Accept,' as this is an implied consent model that presumes the consumer's consent unless it is revoked through the 'Change your cookie settings' link.
7. **User Must Make an Active Decision:** Yes, as the consumer must continue to use the site, having seen the value proposition, and it's included tracking.
8. **Decline is a Viable Option:** Yes, as the consumer can withdraw consent through the 'Change your cookie settings' link.

E. Chase Credit Card Agreement

Chase provides an online application process for credit cards. Once the account is established, Chase has the right to track the consumer's use of the card for a variety of purposes, ranging from security to marketing, and the application is also a financial contract in a tightly regulated industry. The image below is taken from the section of the application that presents core terms along with the 'Submit' button to proceed with the application, with the consumer presumed to have understood the terms.

Chase Credit Card Application

applynow.chase.com/FlexApp/Sec/term/IntApp.BanCell-FH

Chase Freedom Credit Card | Chase.com

Chase Credit Card Application

Pricing & Terms [Print](#)

Please take a moment to carefully review the Pricing & Terms below.

PRICING INFORMATION

| INTEREST RATES AND INTEREST CHARGES | |
|---------------------------------------|--|
| Purchase Annual Percentage Rate (APR) | 0% Intro APR for the first 15 billing cycles that your Account is open. After that, 12.99% to 22.99% , based on your creditworthiness. These APRs will vary with the market based on the Prime Rate. ¹ |
| Balance | 0% Intro APR for the first 15 billing cycles that your Account is open. |

AUTHORIZATION

- I certify that I have read and agree to all terms, conditions, authorizations and disclosures provided with this credit application and that all information provided is true and correct.
- I understand that balance transfers will be applied to my account and exit to my designated payee(s) 15 days after my account is opened. During this time period, I may cancel or modify my balance transfer request by calling the number on the back of my card.
- I agree that to service and manage any of my account(s) Chase, its representatives JPMorgan Chase Bank, N.A. representatives, and/or affiliates, may contact me at any telephone number I provide or any number where Chase believes it may reach me. This may include calls or text messages to mobile, cellular, or similar devices and calls or text messages using automatic telephone dialing systems and/or pre-recorded messages.
- As the Primary Cardmember, you will be liable for all account balances. Your Authorized User will not have financial responsibility for the account. For Authorized Users, this account will be reported to the credit reporting agencies as an Authorized User's account. This could potentially impact Authorized Users credit score. All correspondence including statements and notifications will be sent to the address listed on the account.
- I understand that the terms of my account, including the APRs, are subject to change. Any such changes will be made in accordance with the Cardmember Agreement.

I have read and agree to all of the above statements. (You must check this box to submit your application.)

READ THE PRICING AND TERMS ABOVE FOR IMPORTANT INFORMATION ABOUT RATES, FEES AND OTHER COSTS. PLEASE CHECK YOUR ANSWERS CAREFULLY BEFORE SUBMITTING YOUR APPLICATION. DO NOT SUBMIT MORE THAN ONE APPLICATION.

SUBMIT

For Bank Use Only [Help details](#)

Image: Chase Credit Card Terms

1. **Headline:** Very clear.
2. **Value Proposition Presented:** Yes.
3. **Tracking Disclosed:** Not entirely clear.
4. **All Essential Information Immediately Visible:** No, most of the core terms lie in the scroll box, hidden from immediate view.
5. **Additional Legal Documents Immediately Accessible:** Yes.
6. **No Bias Towards 'Accept':** No, as you must accept to proceed.
7. **User Must Make an Active Decision:** Yes.

8. Decline is a Viable Option: No.

F. Nickelodeon

Nickelodeon operates a website that is designed to cater to both children and their parents, and as such, it is subject to additional scrutiny and legal requirements, including those imposed by the Children’s Online Privacy Protection Act (“COPPA”). Here I’ll assess their quality of notice using the Relevant Knowledge standard in two forms, one for the DAA’s OBA program, and then consent as the consumer registers and Nickelodeon establishes its COPPA compliance.

- i) **OBA Compliance:** The first time a consumer arrives on the Nickelodeon homepage, Nickelodeon allows a series of third party companies to drop cookies and use related technologies that may be used for online behavioral advertising. As a result of this tracking activity, the DAA would require that Nickelodeon include notice on the page with a link to an opt-out tool. Nickelodeon satisfies this requirement by including a link with an icon using the text ‘Ad Choices’ at the bottom of the page, visible after a full scroll. When a consumer clicks through on this link, they are taken to a page operated by Nickelodeon’s parent company, Viacom, where the tracking activity is disclosed and a further link is provided to a site operated by a third brand, this time the DAA, where an opt-out can be processed.



Image: Nickelodeon initial homepage

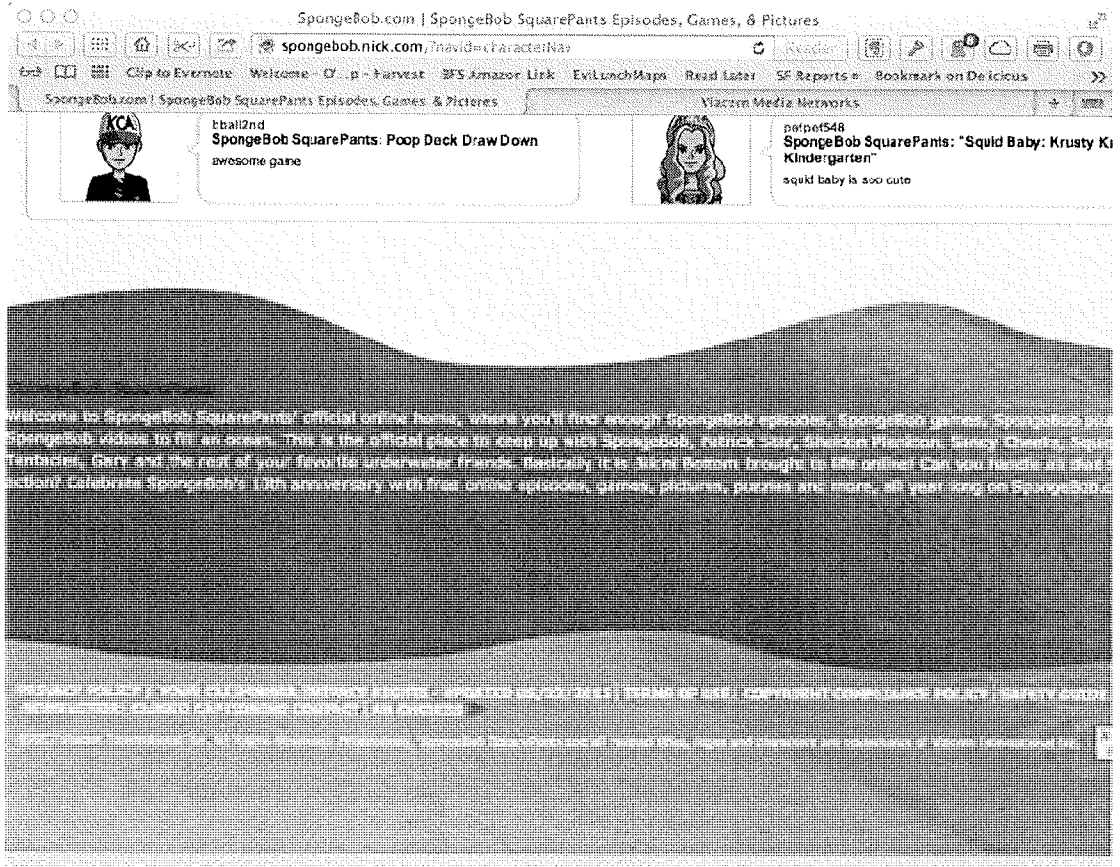


Image: Nickelodeon homepage, beneath the fold, showing 'Ad Choices' link in footer

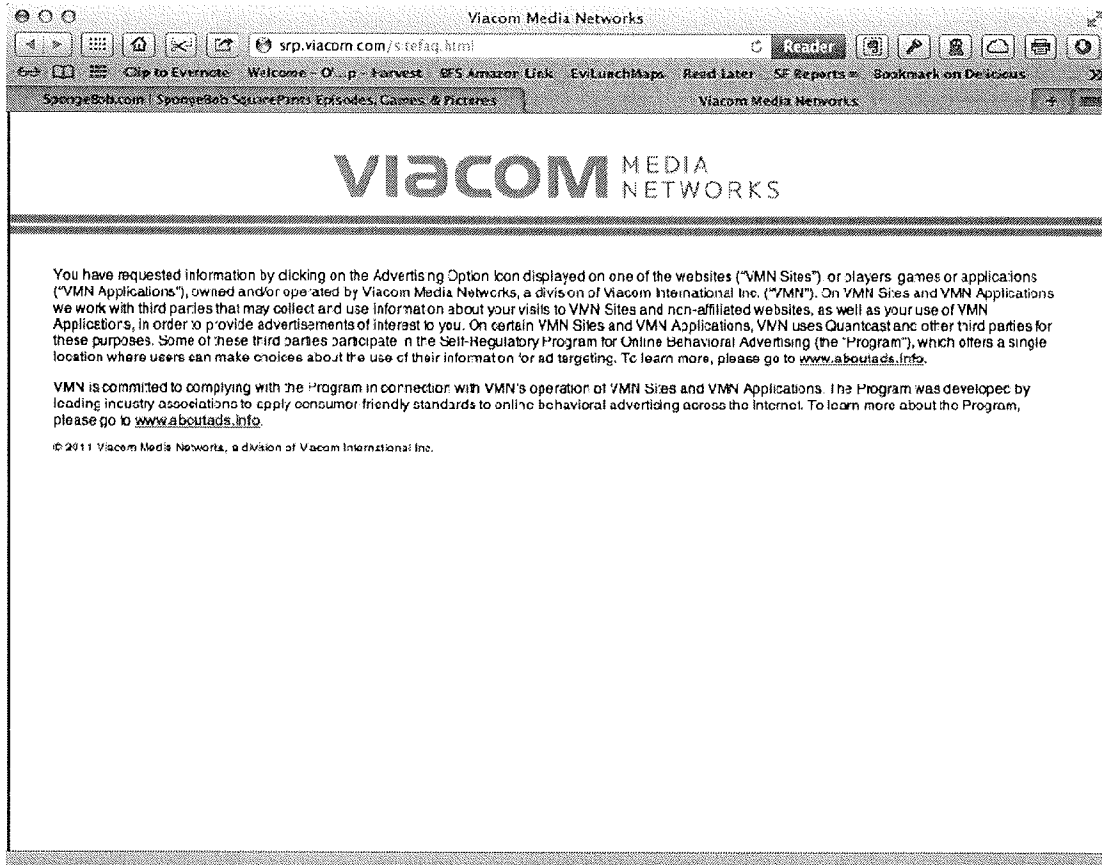


Image: Nickelodeon parent company, Viacom Media Networks OBA Compliance page

1. **Headline:** Ad Choices, which is not entirely clear to the consumer.
2. **Value Proposition Presented:** Yes, but only after an initial click.
3. **Tracking Disclosed:** Yes, but only after an initial click.
4. **All Essential Information Immediately Visible:** No.
5. **Additional Legal Documents Immediately Accessible:** No.
6. **No Bias Towards 'Accept':** No, Nickelodeon is not using a consent standard, and tracking will continue unless the consumer objects.
7. **User Must Make an Active Decision:** No.
8. **Decline is a Viable Option:** Yes, as the consumer can opt-out.

ii) **Site Registration:**

To establish a registered account and 'Join the Club' at Nickelodeon, consumers fill out a form online. The form includes critical fields, including the birthday of the user, which allows the site to comply with legal requirements imposed by COPPA, and asks the consumer to confirm that they have read two separate legal documents, the 'Privacy Policy/Your California Privacy Rights,' and 'Terms of Use.'

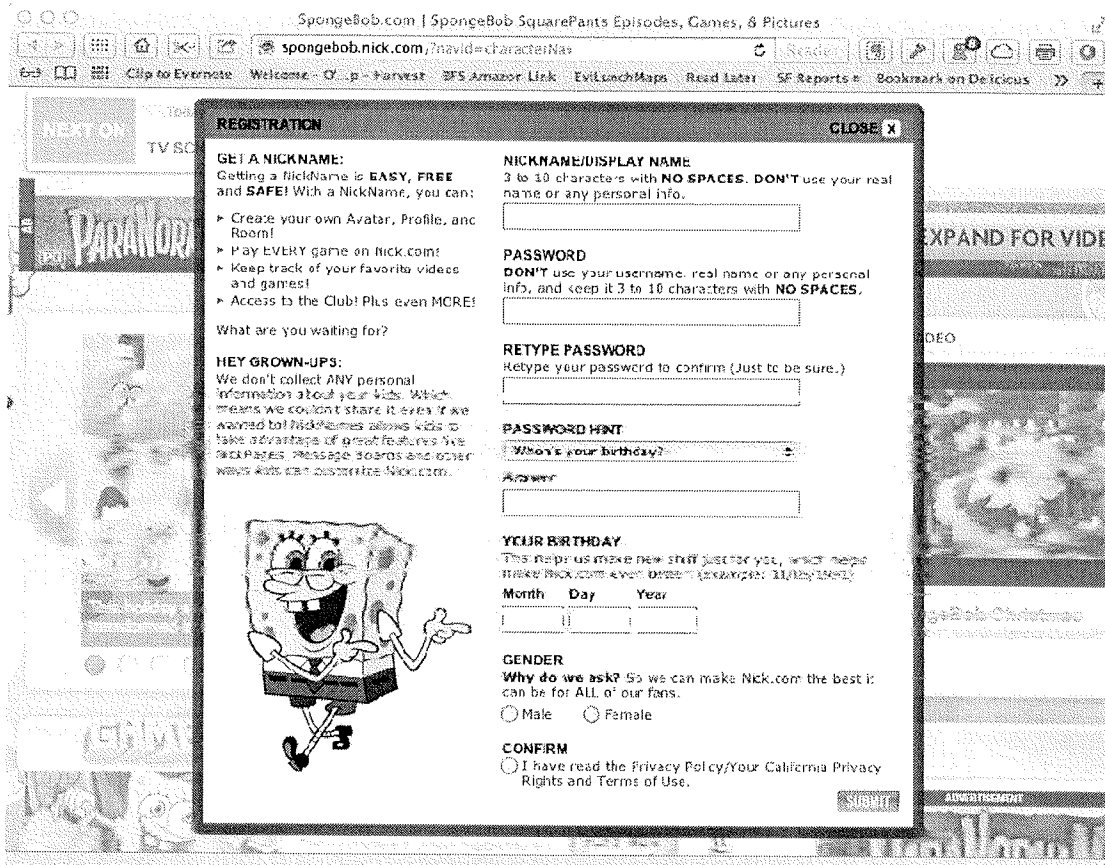


Image: Nickelodeon registration form

1. **Headline:** Very clear.
2. **Value Proposition Presented:** Yes.
3. **Tracking Disclosed:** No, though the site tracking implemented by Nickelodeon may be less relevant in this context.
4. **All Essential Information Immediately Visible:** Yes.
5. **Additional Legal Documents Immediately Accessible:** Yes.
6. **No Bias Towards 'Accept':** No, as there is no alternative to 'I have read the Privacy Policy,' etc. This form moves beyond a bias, and forces the user to tell Nickelodeon the answer it wants to hear.
7. **User Must Make an Active Decision:** Yes.
8. **Decline is a Viable Option:** No, as above.

G. US Department of Homeland Security Global Entry Program Consent for Monitoring

The GOES system is a US Federal Government initiative to provide for expedited border crossing for registered citizens, among other priorities. The US Department of Homeland Security is responsible for the system, and monitors its use in various ways to guard against misuse and for other security purposes. It is possible that this monitoring could lead to a

direct legal or security-oriented action against the user of the site. With the stakes this high, the Department determined that it should request consumer consent.

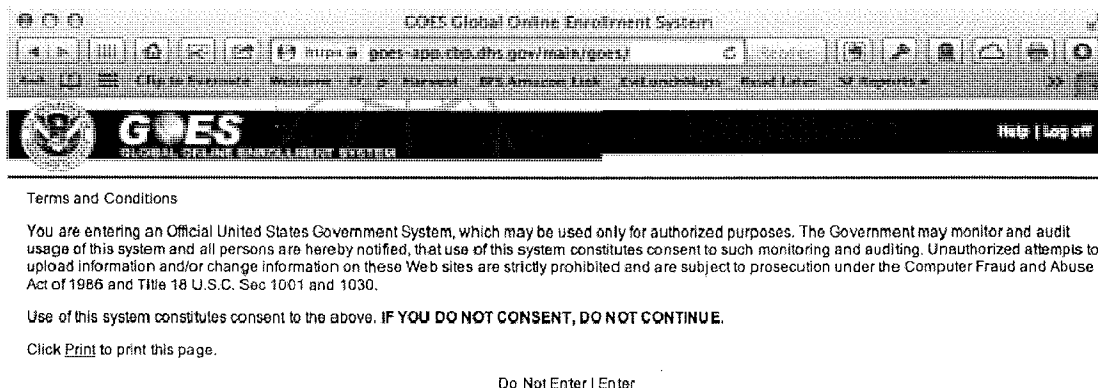


Image: GOES notice page 1

1. **Headline:** Unclear, as this is really a consent for tracking interface rather than a traditional "Terms and Conditions" document.
2. **Value Proposition Presented:** No.
3. **Tracking Disclosed:** Yes.
4. **All Essential Information Immediately Visible:** No. In particular, the Department never discloses what kind of information will be collected and what purposes the information will be used for.
5. **Additional Legal Documents Immediately Accessible:** No.
6. **No Bias Towards 'Accept':** No, as this is another example where 'Accept' is the ONLY option.
7. **User Must Make an Active Decision:** Yes.
8. **Decline is a Viable Option:** No.

H. Safeway Loyalty Program Registration

A Safeway club card is part of a loyalty program that includes significant tracking activity. Safeway will track all of the consumer's purchases once they establish their club account, and will use this data to, among other things, send the consumer individualized marketing materials.

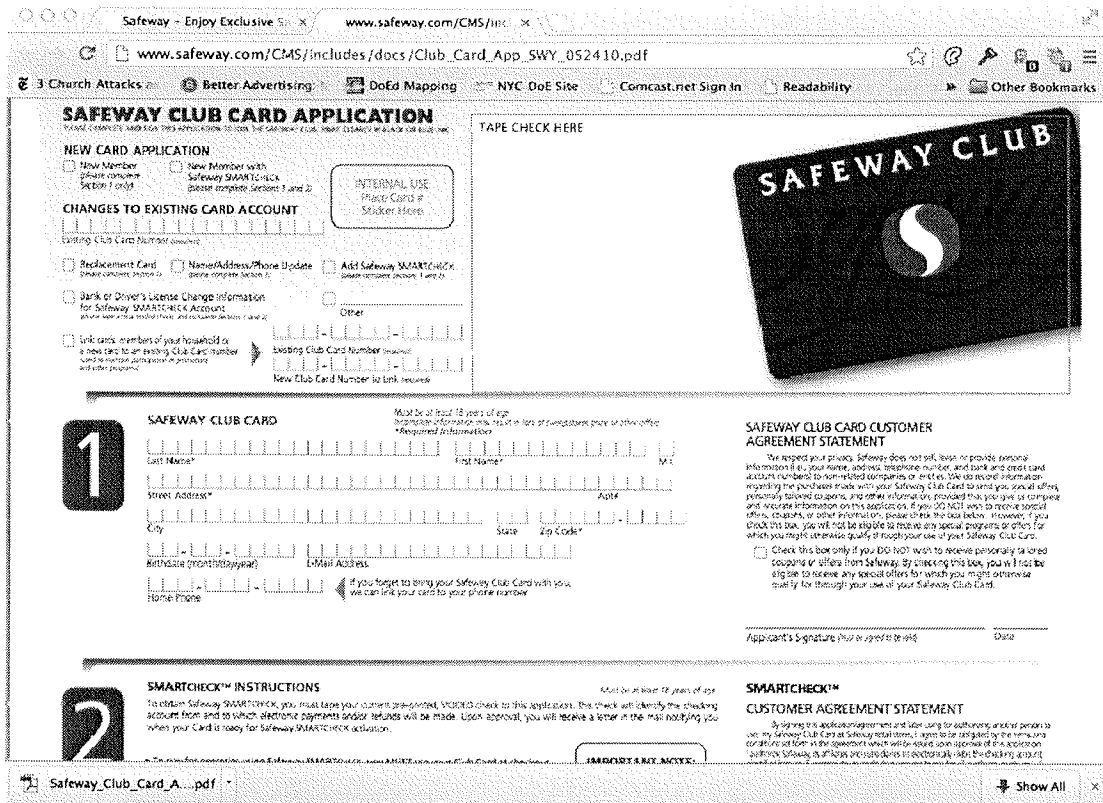


Image: Safeway Club Card Application

1. **Headline:** Very clear.
2. **Value Proposition Presented:** Yes.
3. **Tracking Disclosed:** Yes.
4. **All Essential Information Immediately Visible:** Yes.
5. **Additional Legal Documents Immediately Accessible:** No, though this is difficult to accomplish in an offline form.
6. **No Bias Towards 'Accept':** No, as the consumer's consent is presumed unless they check 'Do Not wish to receive ...' box.
7. **User Must Make an Active Decision:** Yes, as you must fill out the form.
8. **Decline is a Viable Option:** Yes.

I. Apple Location-based Service Enablement Disclosure

Apple prompts the user whenever an application in iOS (the Apple mobile operating system) would like to use specific location information about the consumer. Precise location information is a very sensitive category of data according to many privacy advocates and trade associations alike, so whereas iOS regularly provides information about the consumer's device to application owners without consent (time, browser, version of the operating system, language, etc.), Apple has built a unique consent experience where specific location information is requested. In this case,

we are seeing the consent interface in a situation where an application also owned by Apple (Safari), is requesting location information.

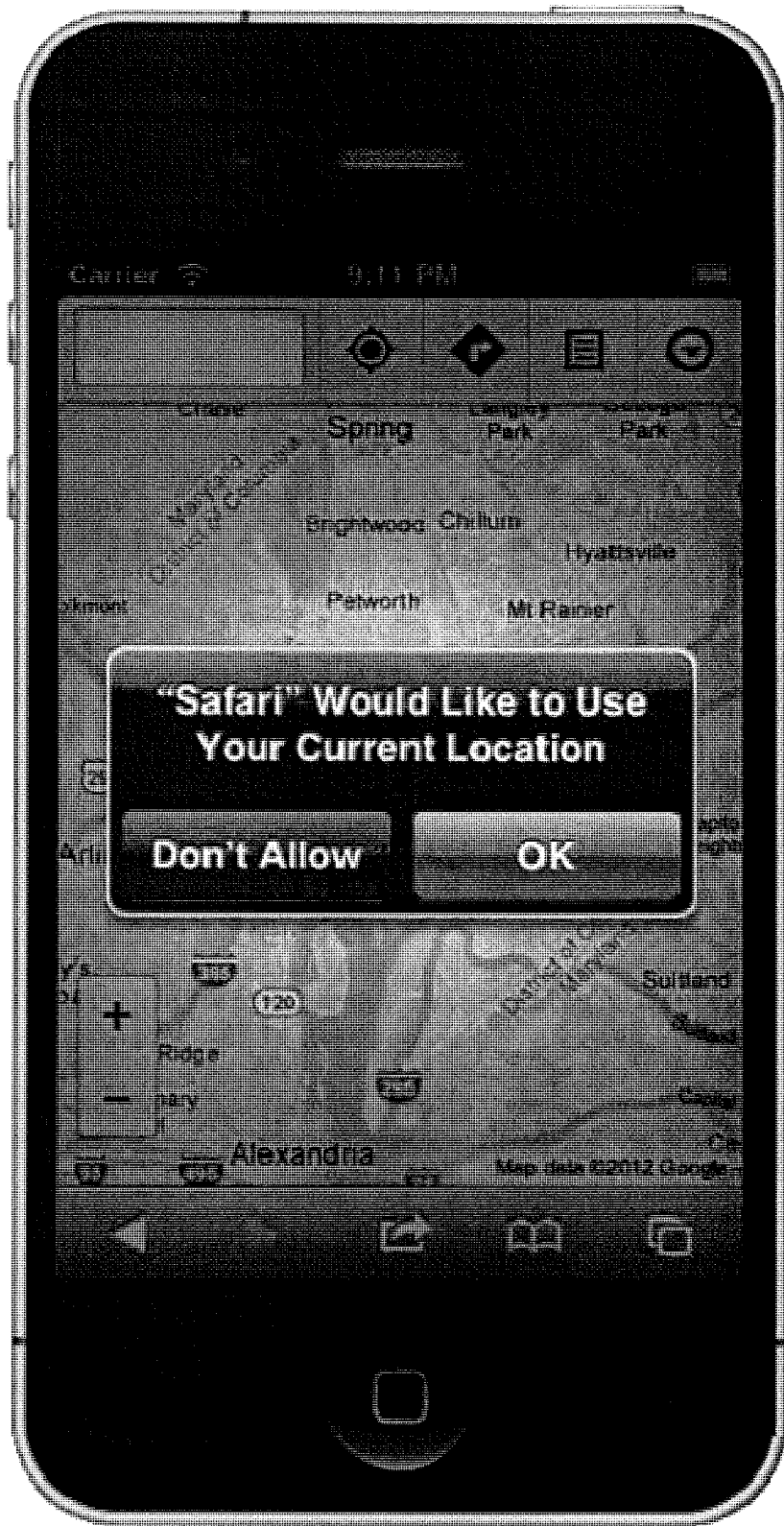


Image: Safari Location "Pop"

1. **Headline:** Very clear.
2. **Value Proposition Presented:** No, there is no written context, though these alerts are shown as 'just in time' notices, meaning that they are prompted by the application's real time request for location information. In many cases, the consumer is therefore able to infer the context and overall value proposition.
3. **Tracking Disclosed:** Yes.
4. **All Essential Information Immediately Visible:** Yes.
5. **Additional Legal Documents Immediately Accessible:** No.
6. **No Bias Towards 'Accept':** No, as 'Ok' is the highlighted option.
7. **User Must Make an Active Decision:** Yes.
8. **Decline is a Viable Option:** Yes.

J. Google Toolbar Disclosure

- i) Google Toolbar creates an embedded Google search interface in your browser and includes tie-ins to many other Google services. When you install the toolbar, Google also attempts adjust important settings within your browser, including your default search engine and your homepage.

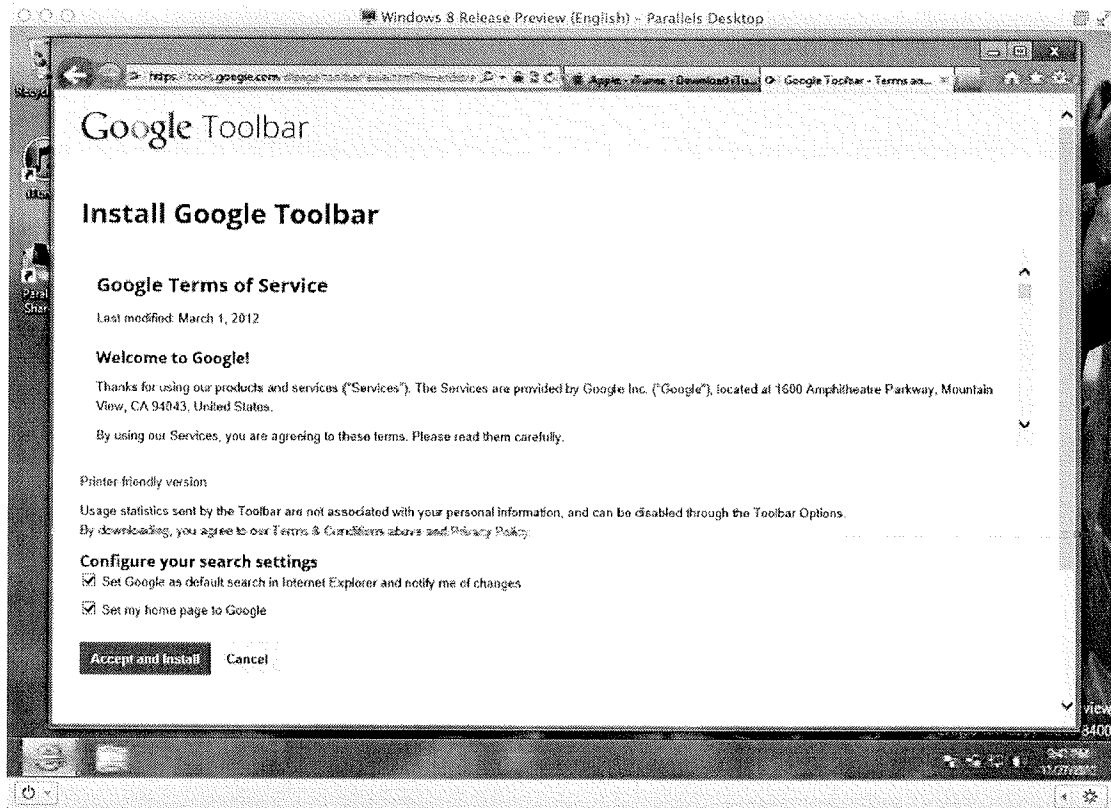


Image: Google Toolbar adds +1

1. **Headline:** Very clear.
 2. **Value Proposition Presented:** No.
 3. **Tracking Disclosed:** Not clearly. The language mentions that usage statistics will be sent, but they are not described and their uses are not mentioned.
 4. **All Essential Information Immediately Visible:** No, and all core terms within the Terms of Service are hidden beneath the fold.
 5. **Additional Legal Documents Immediately Accessible:** Yes.
 6. **No Bias Towards 'Accept':** No, as 'Accept and Install' is marketed with a significantly enhanced blue button background.
 7. **User Must Make an Active Decision:** Yes.
 8. **Decline is a Viable Option:** No, as the 'Accept and Install' option is the only option that will allow the installation to proceed.
- ii) Once the toolbar is installed, Google attempts to enable 'enhanced features.' This will include additional tracking and the linking of information collected with account the consumer has with other services operated by Google. Since Google operates many popular and highly personal services, like Gmail, Calendar, Drive, +1, YouTube, etc., the privacy implications of this change are potentially significant.

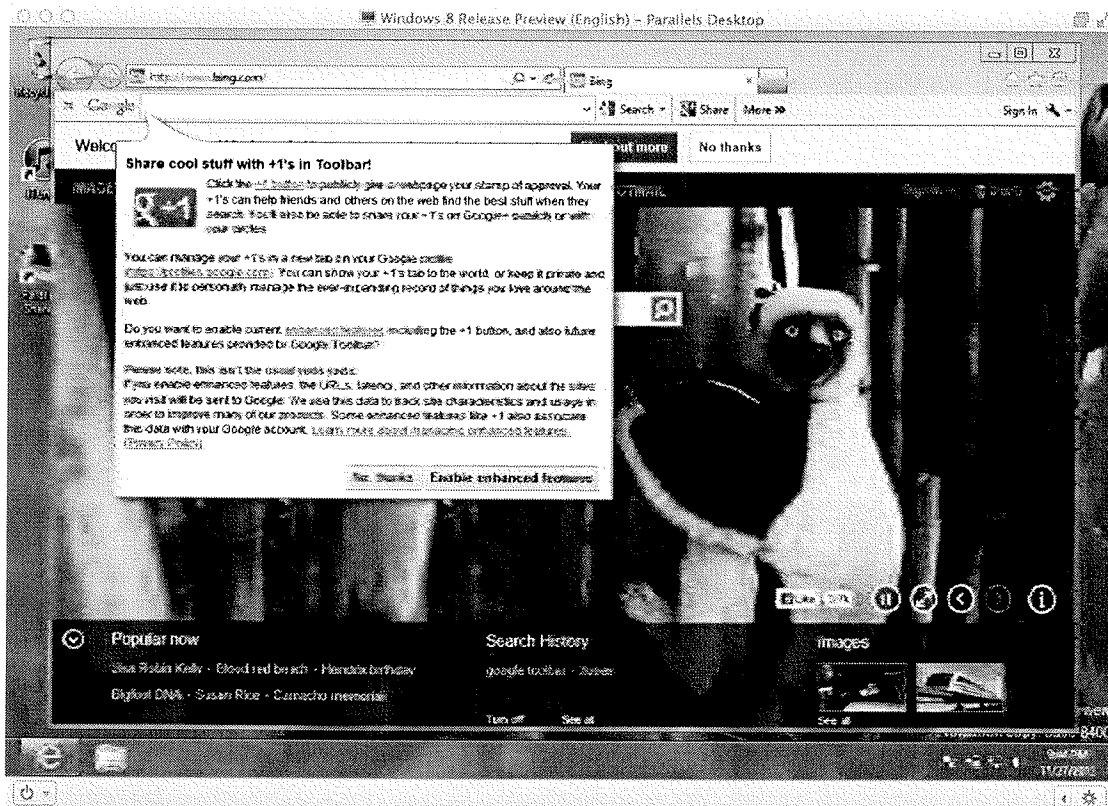


Image: Google Toolbar adds +1

1. **Headline:** No, as 'Share cool stuff ...' is clearly marketing oriented.
2. **Value Proposition Presented:** Yes.
3. **Tracking Disclosed:** Yes.
4. **All Essential Information Immediately Visible:** Yes.
5. **Additional Legal Documents Immediately Accessible:** Yes.
6. **No Bias Towards 'Accept':** Not entirely, as 'Enable ...' appears to be bolded to guide the consumer.
7. **User Must Make an Active Decision:** Yes.
8. **Decline is a Viable Option:** Yes.

APPENDIX A

Curriculum Vitae

Colin O'Malley

Chief Strategy Officer

Evidon, Inc.

28 West 44th Street, Suite 800

New York, New York 10036

(917) 262-2530

colin.omalley@gmail.com

Colin O'Malley is the Chief Strategy Officer for Evidon, Inc. In his current position, he works with companies to ensure their compliance with online privacy standards such as the Self-Regulatory Principles for Online Behavioral Advertising. Evidon's customers include WPP, Publicis, Dentsu, AmEx, Bank of America, Adobe, Procter & Gamble, and Ford. Prior to co-founding Evidon, he served on the executive team for TRUSTe, another leader in internet privacy. He is regularly sought after as a speaker and trainer regarding internet privacy issues.

Education

Vanderbilt University, 1995-1999

Bachelors of Science, Economics/Human and Organizational Development

Experience

Evidon, Inc., 2009-present

Chief Strategy Officer

Manages product strategy, including next generation ad technology executions and mobile implementations as well as policy outreach with regulators and trade associations like the IAB, DAA, MMA, and FTC, and across Europe. Recognized thought leader in the United States and European Union markets, authoring bylines for the trade publications and a frequent press referral. Oversaw embedding of privacy tags in advertisements that serve 2 billion times a day. Acquired and grew Ghostery, a browser extension with an opt-in panel of more than 7 million monthly users. Built long term relationships with many of the largest global agencies and brands (WPP, Publicis, Dentsu, American Express, Bank of America, Adobe, P&G, Ford, Walmart, Akamai).

TRUSTe, 2003-2009

Vice President of Strategic Partnerships and Programs

Spearheaded the rollout of commercial accreditation programs in web privacy, commercial email, downloadable software, and behavioral targeting markets. Carried revenue lines, managed P&L, built teams, and was a featured public face at industry events and government forums. Launched Trusted Download Program and Email Privacy Seal. Co-developed Bonded Sender Program.

Live Oak School, 2005-2008

Board Member

Served as a board member for a private, progressive K-8 day school with 230 students.

Vocab Vitamins, 2003-2007

Chief Executive Officer

Served as CEO for an online vocabulary service based on the classic word of the day mailing list concept with over 50,000 registered subscribers.

NetCreations, 1999-2002

Manager of Product Development

Managed product development at a permission email marketing firm that pioneered commercial applications of the double opt-in process. NetCreations was acquired by Return Path.

Publications

- 1) C. O'Malley, *ePrivacy – easy as one, two, three*, Fourth Source, September 7, 2012, available at <http://www.fourthsource.com/general/eprivacy-easy-as-one-two-three-10452>.
- 2) C. O'Malley, *EXPERT COMMENT: Evidon on the No-Nonsense Route to ePrivacy Compliance*, Strategy Eye, August 31, 2012, available at <http://www.strategyeyedigitalmedia.com/article/2012/08/31/expert-comment-evidon-on-the-no-nonsense-route-to-eprivacy-co/>.
- 3) C. O'Malley, *A Shorthand Guide to Compliance with the ePrivacy Directive*, admonsters, July 27, 2012, available at <http://www.admonsters.com/blog/shorthand-guide-compliance-eprivacy-directive>.
- 4) C. O'Malley, *The Pragmatist's Guide to Compliance with the ePrivacy Directive*, admonsters, June 27, 2012, available at <http://www.admonsters.com/blog/pragmatist%E2%80%99s-guide-compliance-eprivacy-directive>.
- 5) C. O'Malley, *How to Roll Out Cookie Consent*, iMedia Connection, June 12, 2012, available at <http://www.imediaconnection.com/content/32036.asp>.
- 6) C. O'Malley, *How to... Find Out Who's Tracking Your Website*, iMedia Connection, May 22, 2012, available at <http://www.imediaconnection.com/content/31819.asp>.
- 7) C. O'Malley, *EU e-Privacy Directive: Don't Call It a Cookie Law*, Econsultancy, May 16, 2012, available at <http://econsultancy.com/us/blog/9879-eu-e-privacy-directive-don-t-call-it-a-cookie-law>.
- 8) C. O'Malley, *The Difference Between Consent and Opt-in*, Association of Online Publishers, April 17, 2012, available at <http://www.ukaop.org.uk/news/eu-privacy-directive-consent-opt-in-cookies-evidon3549.html>.

- 9) C. O'Malley, *Understanding Tracking on Your Site*, iMedia Connection, April 3, 2012, available at <http://www.imediaconnection.com/content/31277.asp>.
- 10) C. O'Malley, *Why the Cookie Audit Rush?*, Association of Online Publishers, March 7, 2012, available at <http://www.ukaop.org.uk/news/how-to-run-a-cookie-audit3502.html>.
- 11) C. O'Malley, *Preparing for the EU Privacy Directive*, Association of Online Publishers, February 28, 2012, available at <http://www.ukaop.org.uk/news/eu-privacy-directive-publishers3403.html>.
- 12) C. O'Malley, *EU Privacy Directive—What's on the Slate for 2012*, Association of Online Publishers, March 15, 2012, available at <http://www.ukaop.org.uk/news/evidon-eu-privacy-directive-colin-omalley3277.html>.
- 13) C. O'Malley, *Cookie Law Update: Regulators Weigh In and Implied Consent Lives*, Chinwag, January 17, 2012, available at <http://chinwag.com/blogs/colin-omalley>.
- 14) C. O'Malley, *The Regulatory Crescendo in Europe*, Evidon Blog, December 21, 2011, available at <http://blog.evidon.com/2011/12/21/the-regulatory-crescendo-in-europe/>.
- 15) C. O'Malley, *The Privacy Icon Isn't an On/Off Switch*, Digiday, September 28, 2011, available at <http://www.digiday.com/platforms/the-privacy-icon-isnt-an-onoff-switch/>.
- 16) C. O'Malley, *Self-Regulation Solves the Do Not Track Problem*, IAB, February 23, 2011, available at <http://www.iab.net/iablog/2011/02/self-regulation-solves-the-do-.html>.

APPENDIX B

MATERIALS CONSIDERED

| |
|---|
| Complaint filed August 23, 2011 (Dkt. No. 1) |
| Answer filed December 13, 2011 (Dkt. No. 59) |
| Expert Report of Don Waldhalm dated September 17, 2012 |
| RelevantKnowledge Privacy Policy and User Licensing Agreement, accessed Oct. 25, 2012, available at http://www.relevantknowledge.com/RKPrivacy.aspx |
| Sample Disclosure Dialog Boxes (Ex. A to comScore's Supplemental Response to Harris's First Set of Interrogatories) |
| Self-Regulatory Principles for Online Behavioral Advertising, available at http://www.aboutads.info/resource/download/seven-principles-07-01-09.pdf |
| Michael Learmonth, <i>Online Ad Industry Takes Aim at Microsoft in Congressional Hearing</i> , Ad Age Digital, June 28, 2012, available at http://adage.com/article/digital/daa-takes-aim-microsoft-congressional-hearing/235688/ . |
| Brad Berens, <i>FTC Chair Calls for Ad Transparency</i> , iMedia Connection, November 4, 2011, available at http://www.imediaconnection.com/article_full.aspx?id=30430 |
| White House, DOC and FTC Commend DAA's Self-regulatory Program to Protect Consumer Online Privacy, PR Newswire, February 23, 2012, available at http://www.prnewswire.com/news-releases/white-house-doc-and-ftc-commend-daas-self-regulatory-program-to-protect-consumer-online-privacy-140170013.html |
| MP3 Cutter installation process, http://www.mp3-cutter-splitter.com/index.html . |
| Microsoft Silverlight installation process, http://www.microsoft.com/silverlight/ |
| Adobe Reader installation process, http://get.adobe.com/reader/ |
| Reuters webpage, uk.reuters.com |
| BBC webpage, http://www.bbc.co.uk/news/uk/ |
| Chase Credit Card Application, https://applynow.chase.com/FlexAppWeb/renderApp.do?CELL=6H90&PROMO=DF01&SPID=DVW6 |
| Nickelodean webpage, http://spongebob.nick.com/ |
| Viacom Media Networks webpage, http://srp.viacom.com/sitefaq.html |
| Department of Homeland Security, Global Online Enrollment System webpage, https://goes-app.cbp.dhs.gov/main/goes |
| Safeway Club Card Application, http://www.safeway.com/CMS/includes/docs/Club_Card_App_SWY_052410.pdf |
| Install Google Toolbar webpage, https://tools.google.com/dlpage/toolbar/eula.html?hl=en&brand=GGHP& |

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

MIKE HARRIS and JEFF DUNSTAN, individually
and on behalf of a class of
similarly situated individuals

Plaintiff,

v.

COMSCORE, INC., a Delaware corporation

Defendant.

CASE NO. 1:11-cv-5807

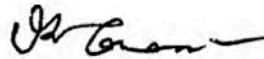
Judge Holderman

Magistrate Judge Kim

EXPERT WITNESS REPORT OF ROBERTO TAMASSIA

I have prepared this Expert Witness Report pursuant to Fed. R. Civ. P. 26(a)(2)(B) for the purpose of summarizing my forthcoming expert opinion testimony to be offered in the above-captioned case.

Dated: November 30, 2012



Roberto Tamassia

Qualifications

I am the Plastech Professor of Computer Science and the Chair of the Department of Computer Science at Brown University. I am also the Director of Brown's Center for Geometric Computing. My research interests include information security, cryptography, analysis, design, and implementation of algorithms, graph drawing and computational geometry. I have published six textbooks and more than 250 research articles and books in the above areas and have given more than 70 invited lectures worldwide. I am an AAAS Fellow and IEEE Fellow, and I have received a Technical Achievement Award from the IEEE Computer Society for pioneering the field of graph drawing. I am listed among the 360 most cited computer science authors by Thomson Scientific, Institute for Scientific Information (ISI). I serve regularly on program committees of international conferences. My research has been funded by ARO, DARPA, NATO, NSF, and several industrial sponsors (including Google, Microsoft, NetApp, and Sun Microsystems). I received my Ph.D. degree in electrical and computer engineering from the University of Illinois at Urbana-Champaign in 1988. My CV is included as an appendix to this report. See Appendix A.

I am being compensated at a rate of \$400 per hour for my work on this matter. I have not testified as an expert witness, either at deposition or trial, in the past four years.

Basis for Opinion

My opinion is based on the following sources of information:

1. Review of selected technical documentation of the comScore software.
2. Inspection of portions of the comScore software related to obfuscation methods. No forensic analysis of the software was performed.
3. A four-hour meeting with comScore executives (Chief Technology Officer, Senior VP of Technology, and Director of Technology) on November 2, 2012 in Reston, VA, where I was given a presentation of the architecture of the comScore software, a technical explanation of the obfuscation methods employed by the software and a demonstration of the software being installed, running, and being uninstalled on a Windows machine. At this meeting, I asked many questions on the design and operation of the software, focusing on the how user information is captured, obfuscated, transmitted and aggregated.
4. Review of court documents, including the Complaint, Answer, and the expert report written by Donald Waldhalm on behalf of the plaintiffs in this case, dated September 17, 2012.
5. Review of portions of the comScore 2011 annual report (SEC form 10-K) related to the technology used by comScore to collect, filter, and store user data.
6. Review of media articles about the comScore software, as listed in the Section entitled Media Sources of this report.
7. A list of the documents I considered while preparing my report is provided in Appendix D.

Opinion

The architecture of the comScore software and the methods employed by the software to handle user information meets commercially viable standards. Overall I believe that the software follows standard practices for protecting sensitive information and explicitly and persistently reveals its presence to the user. Also, uninstalling the software can be easily accomplished.

In particular, it is my opinion that the steps comScore takes to protect and “filter” or refrain from collecting [users' sensitive] data” are reasonable, technically sound, and meet commercially viable standards. See Expert Report of Donald Waldhalm, pg. 5.

At the Class Certification hearing I will be prepared to explain the process by which the comScore software is installed on a user's computer, the operation of the comScore software once installed, how the comScore software obfuscates potentially sensitive user data, how data is transmitted and stored by the comScore software, and how the comScore software can be uninstalled and removed from the user's computer.

The following sections provide more details of my evaluation of the comScore software.

Installation

I was given a demonstration of how a computer user installs the comScore software, specifically the RelevantKnowledge version of it, on a Windows machine in conjunction with the installation of another application downloaded by the user.

It is a standard practice in the software industry to offer two or more software products to a user at one time. For example, the download web page for the Windows version of the popular Adobe Acrobat Reader software (version 11.0) may offer to install at the same time also the Google Chrome browser and the Google Toolbar for Internet Explorer.

Following standard industry conventions, the installation process of the comScore software displayed a dialog box containing Disclosures and a link to the User License Agreement (ULA), and asked the user to explicitly accept the ULA. The ULA makes it clear that the software performs an extensive tracking of the user's computer activities, including access to websites over secure connections, and collection of information about the user's household. The statements in the Disclosures and ULA are in plain language that should be easily understood by users. I did not detect any attempt to deceive the user about the scope of the tracking and information collection activities.

For example, the ULA states in part:

Once you install our application, it monitors all of the Internet behavior that occurs on the computer on which you install the application, including both your normal web browsing and the activity that you undertake during secure sessions, such as filling a shopping basket, completing an application form or checking your online accounts. Our application may also collect information regarding the cookies that exist on your computer. We may use the information we monitor, such as name and address, for the

purpose of better understanding your household demographics; however we make commercially viable efforts to automatically filter confidential personally identifiable information such as UserID, password, credit card numbers, and account numbers. Inadvertently, we may collect such information about our panelists; and when this happens, we make commercially viable efforts to purge our database of such information.

The full text of the ULA is attached to this report as Appendix B.

Additionally, the Disclosures for RelevantKnowledge state, in part:

The information which is monitored and collected includes internet usage information, basic demographic information, certain hardware, software, computer configuration and application usage information about the computer on which you install RelevantKnowledge. We may use the information that we monitor, such as name and address, to better understand your household demographics; for example, we may combine the information that you provide us with additional information from consumer data brokers and other data sources in accordance with our privacy policy. We make commercially viable efforts to automatically filter confidential personally identifiable information and to purge our databases of such information about our panelists when inadvertently collected.

Several examples of the Disclosures presented to users are attached to this report as Appendix C. Based upon my observations of the demonstration, a user cannot download the comScore software without agreeing to the Disclosures and ULA. If a user selects "No" when presented with the dialog box requesting acceptance of the Disclosures and ULA, the comScore installation process does not run. Thus, it appears that all users who successfully install the comScore software have clicked "Yes" and agreed to the Disclosures and ULA. Moreover, every user who provides his or her email address during installation of comScore's software is sent an email that includes the ULA.

Operation

In the demonstration, the running of the comScore software on the machine was persistently indicated to the user by means of a prominent icon in the notification area of the Windows taskbar. This feature constantly reminds the user that the comScore software is running. Clicking on the icon displays further information about the software, provides a link to the ULA, and gives instructions on how to uninstall it.

Uninstallation

Once launched, the uninstallation program appeared to properly remove all components of the comScore software from the machine, including registry keys. Based upon my observations of the demonstration and the documentation I have reviewed, comScore's software can be uninstalled in a manner consistent with other Windows-based software—through the Add/Remove function provided as a part of the Windows operating system.

Obfuscation

The comScore software analyzes web pages accessed by the user and related web form data to detect various types of sensitive data (e.g., credit card number, date of birth). The software uses a computational technique called “regular expressions” to check for the presence of text patterns associated with sensitive data. This approach is efficient and follows standard practice.

Once it is identified, sensitive data is transformed by an obfuscation process that aims to remove detailed information while preserving more general information of statistical significance. For example, social security numbers are completely removed; the month and day are removed from dates of birth (in most cases the year is also removed); and for credit card numbers, only the first seven digits are kept while the remaining eight to nine digits are removed. In addition, the technique of cryptographic hashing is used to map other sensitive data items to numeric values called digests that have the following properties: (1) with very high probability, the digests are uniquely associated with the items; (2) it is computationally infeasible to reconstruct the items from the digests.

Based upon the documentation I have reviewed and the interviews conducted with comScore technical employees, it is my understanding that the obfuscation process is run keeping all data in internal memory, which is the right approach for computational tasks that handle sensitive information. This is because the complete, unobfuscated sensitive data never leaves a user's computer. Examples of the categories of user sensitive data that are obfuscated before leaving the user's computer would include (but not be limited to): social security numbers, credit card numbers, and dates of birth. Overall, I found the detection and obfuscation methods employed, including the use of regular expressions and cryptographic hashing, appropriate and commercially reasonable for the purpose of privacy protection. Moreover, I found the efforts to filter sensitive information out of information collected by the comScore software to meet commercially viable standards.

Data Transmission and Storage

After obfuscation, the sanitized user data is uploaded to the comScore servers, encrypted, and stored in a collection of files and in a database.

The transmission method used for uploading is the same as the page download method employed by the user: data retrieved by the user from a secure (https) connection is uploaded using a secure connection while data originating from a standard (not secured) connection (http) is uploaded via a standard connection. Also, standard data encryption practices and state-of-the-art encryption algorithms are employed (e.g., AES encryption) to protect the user data stored at the servers.

The user data stored at the comScore servers is further reviewed to detect the presence of any sensitive data that may have escaped the obfuscation phase. This detection step is effectively performed by a team of comScore employees who sift through the collected data. Detected items are then subject to manual obfuscation. Also, the detection results are used to improve the algorithms employed client-side by the software to identify sensitive data.

In my opinion, this additional effort to detect obfuscate sensitive data on comScore's servers is commercially viable and protective of the user data considering both the purpose of the comScore software, the security measures in place with respect to comScore's servers, and the nature of the data.

Media Sources

1. About Relevant Knowledge, Ghacks blog post, 2009. URL: <http://www.ghacks.net/2009/05/18/about-relevant-knowledge/>
2. Exclusive: Privacy lawsuit targets comScore, Reuters, 2011. URL: <http://www.reuters.com/article/2011/08/23/us-comscore-lawsuit-idUSTRE77M76O20110823>
3. How ComScore can track your mouse clicks, The Register, 2008. URL: http://www.theregister.co.uk/2008/05/12/inside_comscore/
4. Class action tests commercial use of spyware for target marketing, Faruki Ireland & Cox P.L.L., 2011. URL: <http://businesslitigationinfo.com/data-security/archives/class-action-tests-commercial-use-of-spyware-for-target-marketing/>

APPENDIX A

Curriculum Vitae

Roberto Tamassia

Department of Computer Science
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<http://www.cs.brown.edu/people/rt/>

(November 30, 2012)

Brief Biography

Roberto Tamassia is the Plastech Professor of Computer Science and the Chair of the Department of Computer Science at Brown University. He is also the Director of Brown's Center for Geometric Computing. His research interests include information security, cryptography, analysis, design, and implementation of algorithms, graph drawing and computational geometry. He has published six textbooks and more than 250 research articles and books in the above areas and has given more than 70 invited lectures worldwide. He is an AAAS Fellow and IEEE Fellow and the recipient of a Technical Achievement Award from the IEEE Computer Society for pioneering the field of graph drawing. He is listed among the 360 most cited computer science authors by Thomson Scientific, Institute for Scientific Information (ISI). He serves regularly on program committees of international conferences. His research has been funded by ARO, DARPA, NATO, NSF, and several industrial sponsors. He received the Ph.D. degree in electrical and computer engineering from the University of Illinois at Urbana-Champaign in 1988.

Education

- 88 Ph.D. in Electrical and Computer Engineering, University of Illinois at Urbana-Champaign.
Advisor: Franco P. Preparata. Thesis Topic: "Dynamic Data Structures for Two-Dimensional Searching."
- 84 "Laurea" (M.S.) in Electrical Engineering, University of Rome "La Sapienza."
Advisor: Carlo Batini. Thesis Topic: "Layout Algorithms and Tools."

Current Professional Appointments

- 09- Plastech Professor of Computer Science, Brown University
- 07- Chair, Department of Computer Science, Brown University
- 00- Director, Center for Geometric Computing, Brown University

Previous Professional Appointments

- 98–09 Professor of Computer Science, Brown University
- 99–01 Adjunct Professor Department of Computer Science Johns Hopkins University
- 93–98 Associate Professor, Department of Computer Science, Brown University
- 88–93 Assistant Professor, Department of Computer Science, Brown University
- 92 Visiting Associate Professor, Dipartimento di Informatica e Sistemistica, University of Rome “La Sapienza”
- 92 Visiting Associate Professor, Istituto di Analisi dei Sistemi ed Informatica, Italian National Research Council
- 88–89 Affiliated Research Faculty, Computer Learning Research Center, The University of Texas at Dallas
- 86–88 Research Assistant, Coordinated Science Laboratory, University of Illinois at Urbana-Champaign
- 85 Fulbright Grantee, Coordinated Science Laboratory, University of Illinois at Urbana-Champaign
- 84–85 Research Associate, Dipartimento di Informatica e Sistemistica, University of Rome “La Sapienza”

Awards and Honors

- 12- *AAAS Fellow*
- 09- *IEEE Fellow*
- 06- *Highly Cited Researcher in Computer Science*, Thomson Scientific, Institute for Scientific Information (ISI). Listed among the 319 most cited computer science authors worldwide.
- 06 *Technical Achievement Award*, IEEE Computer Society. Citation: “For pioneering the field of graph drawing and for outstanding contributions to the design of graph and geometric algorithms.”
- 06 Award for Technological Innovation, Brown University
- 97–98 Biographee in *Who’s Who in the East*
- 90–92 ACM lecturer
- 87 AICA (Italian Association for Computer Science) Award for Best Research Work in Computer Science, for the paper “On Embedding a Graph in the Grid with the Minimum Number of Bends”
- 85 Fulbright Grantee
- 84 Graduation *cum laude*, University of Rome, “La Sapienza”

Teaching

- 06– CS 166 Introduction to Computer Systems Security (Brown University)
<http://www.cs.brown.edu/courses/cs166/>
- 89–05 CS 252 Computational Geometry (Brown University)
<http://www.cs.brown.edu/courses/cs252/>
- 88–06 CS 16 Algorithms and Data Structures (Brown University)
<http://cs16.net/>
- 92 Computational Geometry (University of Rome)
- 84–85 Data Structures and Pascal Programming (University of Rome)

Consulting to Industry

- 00–03 Algomagic Technologies, Inc.
- 91–93 Arthur Andersen & Co., Chicago, Illinois
- 89 Cadre Technologies, Inc., Providence, Rhode Island
- 88 Digital Equipment Corporation, Colorado Springs, Colorado
- 85 Datamat, S.p.A., Rome, Italy
- 85 ENIDATA, S.p.A., Milan, Italy
- 84 Data Base Informatica, S.p.A., Rome, Italy
- 83 ISDOS, Inc., Ann Arbor, Michigan

Government Review Boards and Committees

- National Science Foundation, panelist and reviewer
- Army Research Office, reviewer
- Natural Sciences and Engineering Research Council of Canada, reviewer
- Ontario Council on Graduate Studies, appraiser
- Australian Research Council, reviewer
- Australian Academy of Science, reviewer
- Italian Ministry of Education, University and Scientific Research, member of Board of Experts

Research Interests

- Information Security
- Cryptography
- Analysis and Design of Algorithms
- Graph Drawing
- Computational Geometry
- Computer Science Education

Research Grants and Corporate Gifts

- 12–17 National Science Foundation, “Moving Objects Databases for Exploration of Virtual and Real Environments,” IIS–1212508, , PI, \$250,000.
- 12–16 National Science Foundation, “Privacy-Preserving Distributed Storage and Computation,” CNS–1228485, PI, \$400,169.
- 12 NetApp, \$40,000
- 10–15 National Science Foundation, “Towards Trustworthy Interactions in the Cloud,” CNS–1012060, PI (with Anna Lysyanskaya and Rodrigo Fonseca), \$1,000,000.
- 10 NetApp, \$40,000
- 09 Google, \$50,000 (with John Tyler)
- 09 NetApp, \$40,000
- 08–11 National Science Foundation, “Algorithms for Graphs on Surfaces,” CCF–0830149, PI, \$199,999.
- 07–10 National Science Foundation, “Trust Management for Open Collaborative Information Repositories: The CalSWIM Cyberinfrastructure,” OCI–0724806 (with Cristina Lopes, Michael T. Goodrich and Stanley Grant), co-PI,\$1,090,465.
- 07–09 National Science Foundation, “Privacy Management, Measurement, and Visualization in Distributed Environments,” IIS-0713403, PI, \$224,995.
- 07 IAM Technology, Inc., \$37,500
- 03–08 National Science Foundation, “Context-Aware Computing with Applications to Public Health Management,” IIS-0324846, \$399,000. (This medium ITR project is in collaboration with Isabel F. Cruz and Peter Scheuermann, and has an overall funding of \$2M.)
- 03–06 National Science Foundation, “An Algorithmic Approach to Cyber-Security,” CCR-0311510, \$100,000.
- 06 IAM Technology, Inc., \$131,000.
- 03–06 National Science Foundation, “The Brown Internet Computing Laboratory,” EIA-0303577 (with Steven P. Reiss, Eliezer Upfal, Maurice Herlihy, and Shriram Krishnamurthi), \$640,000.
- 05 IAM Technology, \$32,500.
- 03–04 Sun Microsystems, \$20,000.
- 03–04 National Science Foundation, “Teaching Data Structures to the Millennial Generation,” DUE–0231202, \$124,999.
- 04 IAM Registry Corporation, \$30,000.
- 03 Sun Microsystems (with Thomas W. Doepfner), \$20,000.
- 01–04 National Science Foundation, “Graph Visualization and Geometric Algorithm Design,” CCR–0098068 (with Michael T. Goodrich), \$400,000.
- 00–03 Defense Advanced Research Projects Agency, “Efficient and Scalable Infrastructure Support for Dynamic Coalitions,” F30602–00–2–0509 (with Michael T. Goodrich and Robert F. Cohen), \$1,497,376.

- 98–02 National Science Foundation, “Geometric Algorithm Design and Implementation,” CCR–9732327, \$230,991.
- 97–03 National Science Foundation, “A Networked Computing Environment for the Manipulation and Visualization of Geometric Data,” Research Infrastructure Grant CDA-97-03080 (with Lawrence B. Wolff et al.), \$1,226,127.
- 99 Microsoft Research, \$8,000.
- 96 Tom Sawyer Software, Inc., \$40,000.
- 95–01 Army Research Office, “Applicable and Robust Geometric Computing” (with P. Agarwal, R. Kosaraju, M. T. Goodrich, F. P. Preparata, and J. S. Vitter), DAAH04–96–1–0013, \$4,484,247.
- 95–98 National Science Foundation, “Graph Drawing,” CCR–9423847, \$225,107.
- 94–95 NATO Scientific Affairs Division, “Algorithms for Graph Connectivity” (with G. Di Battista and A. Kanevsky), \$6,000.
- 93–96 Army Research Office, “High Performance Algorithms for Computational Geometry” (with Jeffrey S. Vitter), DAAH04–93–G–0134, \$65,000.
- 91–94 National Science Foundation, “Algorithmic Issues in High Performance Computing” (with Jeffrey S. Vitter), CCR–9007851, \$346,802.
- 91–93 Army Research Office, “Algorithmic Issues in High Performance Computing” (with Jeffrey S. Vitter), DAAL03–91–G–0035, \$150,000.
- 91–93 Office of Naval Research and Defense Advanced Research Projects Agency, “High-Performance Design Environments” (with E. Charniak, T.W. Doepfner, J. Hughes, P.C. Kanellakis, P.N. Klein, D.P. Lopresti, F.P. Preparata, S.P. Reiss, J.E. Savage, A. van Dam, P. Van Hentenryck, J.S. Vitter, P. Wegner, F.K. Zadeck, and S.B. Zdonik), N00014–91–J–4052, ARPA order 8225, \$2,654,835.
- 91–93 NATO Scientific Affairs Division, “Algorithms for Graph Connectivity” (with G. Di Battista and A. Kanevsky), \$6,708.
- 91 AT&T Foundation, “Parallelism in Instructional Computing,” \$10,000
- 91 Cadre Technologies, Inc., \$10,000
- 89 Cadre Technologies, Inc., \$25,000

Postdoctoral Associates and Research Associates

Bernardo Palazzi (January 2007 – April 2010)

Luca Vismara (May 1996 – December 1997, June 2000 – August 2003)

Michael Shin (February 2002 – May 2002)

David Emory (July 2001 – August 2002)

Andrea Carmignani (February 2001 – July 2001)

Ulrik Brandes (July 1999 – December 1999)

Ashim Garg (January 1986 – August 1997)

Giuseppe Liotta (May 1995 – October 1996)

Maurizio Pizzonia (May 1998 – December 1998)

Graduate Students

Olya Ohrimenko (Ph.D., current)
James Kelley (Ph.D., current)
Duy A. Nguyen (Sc.M., 2012)
Charalampos Papamantou (Ph.D., 2011)
Daniel J. Rosenberg (Sc.M., 2010)
Yash Thakore (Sc.M., 2010)
Juexin Wang (Sc.M., 2010)
Danfeng Yao (Ph.D., 2007)
Nikos Triandopoulos (Ph.D., 2006)
James Baker (Ph.D., on leave)
Galina Shubina (Ph.D., on leave)
Mehmood Ahmad (Sc.M., on leave)
Sean Cannella (Sc.M., 2004)
Stina S. Bridgeman (Ph.D., 2001)
Lixin Pang (Sc.M., 2000)
Sumi Yunsun Choi (Sc.M., 1999)
Baolin Yang (Sc.M., 1998)
Luis D. Lejter (Sc.M., 1997)
Robinson Mason (Sc.M., 1997)
Ashim Garg (Ph.D., 1995)
Yi-Jen Chiang (Ph.D., 1995)
Sairam Subramanian (Ph.D., 1994)
Robert F. Cohen (Ph.D., 1992)
Sumeet K. Singh (Sc.M., 1991)

Steering Committees and Advisory Boards

Graph Drawing Symposium (GD), Steering Committee Founding Member and Chair.

Workshop on Algorithms and Data Structures (WADS), Steering Committee Member.

Electronic Journal of the Argentine Society for Informatics and Operations Research (SADIO),
Advisory Board Member.

Program Committees

ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (GIS), November 2012, Redondo Beach, California.

ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (GIS), November 2011, Chicago, Illinois.

Symposium on Graph Drawing (GD), September 2011, Eindhoven, The Netherlands.

Conference on Email and Anti-Spam (CEAS), September 2011, Perth, Australia.

IEEE Pacific Visualization Symposium (PacificVis), March 2011, Hong Kong

Workshop on Algorithm Engineering and Experimentation (ALENEX), January 2011, San Francisco, California.

ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (GIS), November 2010, San Jose, California.

Conference on Email and Anti-Spam (CEAS), July 2010, Redmond, Washington.

ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (GIS), November 2009, Seattle, Washington.

Symposium on Graph Drawing (GD), September 2009, Chicago, Illinois.

Conference on Email and Anti-Spam (CEAS), July 2009, Mountain View, California.

ACM International Symposium on Advances in Geographic Information Systems (GIS), November 2008, Los Angeles, California.

Conference on Email and Anti-Spam (CEAS), August 2008, Mountain View, California.

Workshop on Algorithm Engineering (WAE), Provincetown, Massachusetts, May 2008.

Symposium on Graph Drawing (GD), September 23–26, 2007, Sydney, Australia.

Conference on Email and Anti-Spam (CEAS), August 2–3, 2007, Mountain View, California.

Workshop on Algorithms and Data Structures (WADS), July 30—August 1, 2007, Ottawa, Canada

IEEE International Conference on Data Engineering (ICDE), April 16–20, 2007, Istanbul, Turkey.

International Workshop on Constraint Programming for Graphical Applications, September 25, 2006, Nantes, France

European Symposium on Algorithms (ESA), September 11–13, 2006, Zürich, Switzerland.

Workshop on Visualization for Computer Security (VizSEC), October 26, 2005, Minneapolis, Minnesota.

Workshop on Algorithm Engineering and Experimentation (ALENEX), January 22, 2005, Vancouver, Canada. (co-chair)

Symposium on Graph Drawing (GD), September 29–October 2, 2004, New York, New York.

Symposium on Graph Drawing (GD), September 21–24, 2003, Perugia, Italy.

Workshop on Algorithms and Data Structures (WADS), July 30—August 1, 2003, Ottawa, Canada

Symposium on Graph Drawing (GD), August 26–28, 2002, Irvine, California.

International Symposium on Algorithms and Computation (ISAAC), November 21–23, 2002, Vancouver, Canada.

Workshop on Algorithms and Data Structures (WADS), August 8–10 2001, Providence, Rhode Island. (co-chair)

Symposium on Graph Drawing (GD), September 20–23, 2000, Colonial Williamsburg, Virginia.

Workshop on Algorithm Engineering (WAE), September 5–8, 2000, Saarbrücken, Germany.

Sixth Annual International Computing and Combinatorics Conference (COCOON), July 26–28, 2000, Sydney, Australia.

Italian Conference on Algorithms and Complexity (CIAC), March 1–3, 2000, Rome, Italy.

6th Workshop on Algorithms and Data Structures (WADS), August 12–14, 1999, Vancouver, Canada. (co-chair)

International Computing and Combinatorics Conference (COCOON '99), July 1999, Tokyo, Japan.

Workshop on Algorithm Engineering and Experimentation (ALENEX), January 15–16, 1999, Baltimore, Maryland.

International Symposium on Algorithms and Computation (ISAAC), December 14–16, 1998, South Korea.

Symposium on Graph Drawing (GD), August 13–15, 1998, Montréal, Canada.

Symposium on Graph Drawing (GD), September 18–20, 1997, Rome, Italy.

5th Workshop on Algorithms and Data Structures (WADS), August 6–8, 1997 in Halifax, Canada. (co-chair)

24th International Colloquium on Automata, Languages and Programming (ICALP), July 7–11, 1997, Bologna, Italy.

Workshop on Orders, Algorithms and Applications (ORDAL), August 5–9 1996, Ottawa, Canada.

Workshop on Advanced Visual Interfaces (AVI), May 27–29, 1996, Gubbio, Italy.

Symposium on Graph Drawing (GD), September 20–22, 1995, Passau, Germany.

4th Workshop on Algorithms and Data Structures (WADS), August 16–18, 1995, Kingston, Ontario, Canada.

Graph Drawing (GD, DIMACS Workshop), October 10–12, 1994, Princeton, New Jersey. (co-chair)

10th ACM Annual Symposium on Computational Geometry, June 6–8 1994, Stony Brook, New York.

26th ACM Symposium on Theory of Computing (STOC), May 23–25, 1994, Montréal, Canada.

Graph Drawing (GD, ALCOM Workshop), September 25–29, 1993, Paris, France.

3rd Workshop on Algorithms and Data Structures (WADS), August 11–13 1993, Montréal, Canada.

19th Workshop on Graph-Theoretic Concepts in Computer Science (WG), June 16–18, 1993, Utrecht, the Netherlands.

2nd Workshop on Algorithms and Data Structures (WADS), August 14–16, 1991, Ottawa, Canada.

Other Committees

Excursions in Algorithmics: A late festschrift for Franco P. Preparata, October 27–28, 2006 Providence, Rhode Island. Co-organizer.

7th Workshop on Algorithms and Data Structures (WADS 2001), August 8–10 2001, Providence, Rhode Island. Conference Chair.

3rd CGC Workshop on Computational Geometry, October 11–12, 1998, Providence, Rhode Island, Workshop Co-Chair.

Dagstuhl Workshop on Graph Algorithms and Applications, July 27–31, 1998, Dagstuhl, Germany, Workshop Co-Chair.

Working group on Computational Geometry, *ACM Workshop on Strategic Directions in Computing Research*, Cambridge, June 14–15, 1996, Working Group Chair.

Dagstuhl Workshop on Graph Algorithms and Applications, May 11–17, 1996, Dagstuhl, Germany, Workshop Co-Chair.

Graph Drawing (GD '94, DIMACS Workshop), October 10–12, 1994, Princeton, New Jersey, Workshop Co-Chair.

Work Meeting on Graph Drawing, June 3–5 1992, Marino (Rome), Italy, Workshop Co-Chair.

Editorships

96– *Journal of Graph Algorithms and Applications*, editor-in-chief

95–06 *Computational Geometry: Theory and Applications*, editor

96–01 *IEEE Transactions on Computers*, associate editor

Theoretical Computer Science, *Excursions in Algorithmics: A Collection of Papers in Honor of Franco P. Preparata*, vol. 408, no. 2–3, 2008, co-guest editor.

ACM Journal of Experimental Algorithmics, Special Issue on selected papers presented at the *2005 Workshop on Algorithm Engineering and Experimentation*, vol. 12, 2008, co-guest editor.

International Journal of Computational Geometry and Applications, Special Issue on selected papers presented at the *1997 CGC Workshop on Computational Geometry*, vol. 13, no. 1, guest editor.

Journal of Graph Algorithms and Applications, Special Issue on Selected Papers from the *1998 Dagstuhl Seminar on Graph Algorithms and Applications* vol. 5, no. 5, 2001, co-guest editor.

Algorithmica, Special Issue on selected papers presented at the *1996 Dagstuhl Seminar on Graph Algorithms and Applications*, vol. 26, no. 1, 2000, co-guest editor.

Computational Geometry: Theory and Applications, Special Issue on Geometric Representations of Graphs, vol. 9, no. 1–2, 1998, co-guest editor.

Journal of Computer and System Sciences, Special Issue on selected papers presented at the 26th ACM Symposium on Theory of Computing (STOC '94), vol. 55, no. 1, 1997, co-guest editor.

Algorithmica, Special Issue on Graph Drawing, vol. 16, no. 1, 1996, co-guest editor.

Invited Lectures

- 04/12 Stevens Institute of Technology, Hoboken, New Jersey
- 01/12 NetApp, Waltham, Massachusetts
- 06/11 University of Rome Tre, Italy
- 03/11 University of Rome Tre, Italy
- 11/09 CRA-W/CDC Workshop on Computational Geometry, Medford, Massachusetts
- 11/09 Northwestern University, Evanston, Illinois
- 06/09 University of Rome Tre, Italy
- 06/09 University of Milan Bicocca, Italy
- 03/09 University of Rome Tre, Italy
- 12/08 Rutgers University
- 09/08 *Symposium on Graph Drawing*, Heraklion, Greece
- 06/08 Yahoo! Research, Mountain View, California
- 11/07 *NSF Workshop on Algorithms, Combinatorics, and Geometry*, Denton, Texas
- 12/05 University of Rome Tre, Italy
- 03/04 Purdue University
- 12/03 University of Rome Tre, Italy
- 09/03 *European Symposium on Algorithms*, Budapest, Hungary
- 5/02 *NSF/CBMS Regional Research Conference in Mathematical Sciences on Geometric Graph Theory*, University of North Texas, Denton
- 7/99 *VIII Encuentros de Geometria Computacional*, Castellon, Spain
- 12/98 *International Symposium on Algorithms and Computation*, Taejon, Korea
- 10/98 Washington University, St. Louis, Missouri
- 9/98 Worcester Polytechnic Institute, Massachusetts
- 7/98 University of Konstanz, Germany
- 7/98 *DIMACS Program on Network Visualization*
- 6/97 *Workshop on Geometric Computing*, Sophia-Antipolis, France
- 2/97 Purdue University
- 12/96 AT&T Laboratories, Murray Hill, New Jersey

- 8/96 *Eight Canadian Conference on Computational Geometry*, Ottawa, Canada
- 8/96 *Workshop on Orders, Algorithms and Applications (ORDAL '96)*, Ottawa, Canada
- 6/96 *SIAM Discrete Mathematics Conference*, Baltimore, Maryland
- 12/95 University of Seville, Spain
- 9/95 *International Workshop on Constraints for Graphics and Visualization*, Marseilles, France
- 2/95 Tufts University
- 1/95 University of Rome Tor Vergata, Italy
- 10/94 *IEEE Symposium on Visual Languages (VL '94)*, St. Louis
- 7/94 *Workshop on Orders, Algorithms and Applications (ORDAL '94)*, Lyon, France
- 6/94 *Sixth Australasian Workshop on Combinatorial Algorithms*, Darwin, Australia
- 6/94 Griffith University, Brisbane, Australia
- 6/94 University of Newcastle, Australia
- 4/94 *892nd Meeting of the American Mathematical Society*, Brooklyn, New York
- 2/94 *Second Italian Conference on Algorithms and Complexity (CIAC '94)*, Rome, Italy
- 12/93 University of Rome La Sapienza, Italy
- 10/93 State University of New York at Buffalo
- 11/92 Dartmouth College
- 8/92 *Fourth Canadian Conference on Computational Geometry*, St. John's, Newfoundland
- 7/92 Fujitsu Laboratories, Numazu, Japan
- 7/92 Fujitsu Laboratories, Tokio, Japan
- 6/92 University of Rome "Tor Vergata"
- 5/92 Johns Hopkins University
- 3/92 International Computer Science Institute, University of California, Berkeley
- 3/92 *ALCOM Final Project Workshop*, Utrecht, the Netherlands
- 2/92 Italian National Research Council, Rome
- 11/91 University of Texas at Dallas
- 8/91 *ALCOM Summer School on Efficient Algorithm Design*, Aarhus, Denmark
- 7/91 *Algorithms on Combinatorial Structures: International Symposium*, Curtin University, Perth
- 6/91 University of Rome, "La Sapienza"
- 3/91 Texas A&M University
- 3/91 University of Texas at Austin
- 12/90 *23rd Midwest Theory Consortium*, Northwestern University
- 11/90 State University of New York, Stony Brook

11/90 Tulane University
 11/90 Louisiana State University
 11/90 University of Texas at Dallas
 7/90 Italian National Research Council, Pisa
 7/90 University of Rome, “La Sapienza”
 5/90 *Conference on Computer Graphics in Pure Mathematics*, Iowa City
 4/90 *14th Computational Geometry Day*, New York University
 11/89 University of Texas at Dallas
 10/89 *DIMACS Workshop on Geometric Complexity*, Princeton University
 10/89 Columbia University
 7/89 *Australasian Conference on Combinatorics and Computing*, Brisbane
 6/89 University of Passau
 3/89 IBM T.J. Watson Research Center
 11/88 Carleton University
 11/88 University of Texas at Dallas
 10/88 Dartmouth College
 7/88 University of Rome, “La Sapienza”
 5/88 University of Michigan
 4/88 University of Texas at Dallas
 3/88 University of Ottawa
 12/87 Italian National Research Council, Rome
 7/87 University of Rome, “La Sapienza”
 2/87 McGill University
 6/86 University of Rome, “La Sapienza”
 10/85 University of Illinois at Urbana-Champaign

Professional Societies

American Association for the Advancement of Science (AAAS), Fellow

Association for Computing Machinery (ACM)

Institute of Electrical and Electronic Engineers (IEEE), Fellow

Patents

R. Tamassia and N. Triandopoulos, *Efficient Content Authentication In Peer-To-Peer Networks*, United States Patent no. 7,974,221, 2011.

M. T. Goodrich and R. Tamassia, *Efficient authenticated dictionaries with skip lists and commutative hashing*, United States Patent no. 7,257,711, 2007.

Publications

Books

1. M. T. Goodrich, R. Tamassia and M. H. Goldwasser, *Data Structures and Algorithms in Python*, Wiley, 2013 (to appear).
2. M. T. Goodrich, R. Tamassia and D. Mount, *Data Structures and Algorithms in C++, Second Edition*, Wiley, 2011.
3. M. T. Goodrich and R. Tamassia, *Introduction to Computer Security*, Addison-Wesley, 2011.
4. M. T. Goodrich and R. Tamassia, *Data Structures and Algorithms in Java, Fifth Edition*, Wiley, 2010.
5. M. T. Goodrich and R. Tamassia, *Data Structures and Algorithms in Java, Fourth Edition*, Wiley, 2005.
6. M. T. Goodrich and R. Tamassia, *Data Structures and Algorithms in Java, Third Edition*, Wiley, 2004.
7. M. T. Goodrich, R. Tamassia and D. Mount, *Data Structures and Algorithms in C++*, Wiley, 2003.
8. M. T. Goodrich and R. Tamassia, *Algorithm Design*, Wiley, 2002.
9. M. T. Goodrich and R. Tamassia, *Data Structures and Algorithms in Java, Second Edition*, Wiley, 2001.
10. G. Di Battista, P. Eades, R. Tamassia, and I. G. Tollis, *Graph Drawing*, Prentice-Hall, 1999.
11. M. T. Goodrich and R. Tamassia, *Data Structures and Algorithms in Java*, Wiley, 1998.

Edited Books

12. R. Tamassia (Ed.), *Handbook of Graph Drawing and Visualization*, CRC Press, 2013 (to appear).
13. F. Dehne, J.-R. Sack, and R. Tamassia (Eds.), *Algorithms and Data Structures* (Proceedings of WADS '01), *Lecture Notes in Computer Science*, vol. 2125, Springer-Verlag (2001).
14. F. Dehne, A. Gupta, J.-R. Sack, and R. Tamassia (Eds.), *Algorithms and Data Structures* (Proceedings of WADS '99), *Lecture Notes in Computer Science*, vol. 1663, Springer-Verlag (1999).
15. F. Dehne, A. Rau-Chaplin, J.-R. Sack, and R. Tamassia (Eds.), *Algorithms and Data Structures* (Proceedings of WADS '97), *Lecture Notes in Computer Science*, vol. 1272, Springer-Verlag (1997).
16. R. Tamassia and I.G. Tollis (Eds.), *Graph Drawing* (Proceedings of GD '94), *Lecture Notes in Computer Science* vol. 894, Springer-Verlag (1995).

Journals

17. M. T. Goodrich, R. Tamassia, and N. Triandopoulos, “Efficient Authenticated Data Structures for Graph Connectivity and Geometric Search Problems,” *Algorithmica*, vol. 60, no. 3, pp. 505–552, 2011.
18. G. Trajcevski, R. Tamassia, I. F. Cruz, P. Scheuermann, D. Hartglass, C. Zamierowski, “Ranking continuous nearest neighbors for uncertain trajectories,” *Vldb J.* vol. 20, no. 5, pp. 767–791, 2011.
19. R. Tamassia, D. Yao, and W. Winsborough, “Independently Verifiable Decentralized Role-Based Delegation,” *IEEE Transactions on System, Man and Cybernetics*, vol. 40, no. 6, pp. 1206–1219, 2010.
20. A. Lysyanskaya, R. Tamassia and N. Triandopoulos, “Authenticated Error-Correcting Codes with Applications to Multicast Authentication,” *ACM Transactions on Information and System Security*, vol. 13, no. 2, 2010.
21. D. Yao and R. Tamassia, “Compact and Anonymous Role-Based Authorization Chain,” *ACM Transactions on Information and System Security*, vol. 12, no. 3, article 15, pp. 1–27, 2009.
22. D. Yao, K. Frikken, M. Atallah, and R. Tamassia, “Private Information: To Reveal or Not To Reveal,” *ACM Transactions on Information and System Security*, vol. 12, no. 1, article 6, pp. 1–27, 2008.
23. M. T. Goodrich, R. Tamassia, and D. Yao, “Notarized Federated Identity Management for Increased Trust in Web Services,” *Journal of Computer Security*, vol. 16, no. 4, pp. 399–418, 2008.
24. T. M. Chan, M. T. Goodrich, S. R. Kosaraju and R. Tamassia, “Optimizing area and aspect ratio in straight-line orthogonal tree drawings,” *Computational Geometry: Theory and Applications* vol. 23, no. 2, pp. 153–162, 2002.
25. S. Bridgeman and R. Tamassia, “A User Study in Similarity Measures for Graph Drawing,” *Journal of Graph Algorithms and Applications*, Special Issue on Selected Papers from the 2000 Symposium on Graph Drawing, M. Kaufmann, ed., vol. 6, no. 3, pp. 225–254, 2002.
26. A. Garg and R. Tamassia, “On the Computational Complexity of Upward and Rectilinear Planarity Testing,” *SIAM J. Computing*, vol. 31, no. 2, pp. 601–625 (2001).
27. G. Di Battista, R. Tamassia, and L. Vismara, “Incremental Convex Planarity Testing,” *Information and Computation*, vol. 166, pp. 1–33 (2001).
28. R. Tamassia and L. Vismara, “A case study in Algorithm Engineering for Geometric Computing,” *Int. J. Computational Geometry & Applications*, vol. 11, no. 1, pp. 15–70 (2001).
29. G. Di Battista, A. Garg, G. Liotta, A. Parise, R. Tamassia, E. Tassinari, F. Vargiu and L. Vismara, “Drawing Directed Acyclic Graphs: An Experimental Study,” *Int. J. Computational Geometry & Applications*, vol. 10, no. 6, pp. 623–648 (2000).
30. S. Bridgeman and R. Tamassia, “Difference Metrics for Interactive Orthogonal Graph Drawing Algorithms,” *Journal of Graph Algorithms and Applications*, special issue on selected papers from the 1998 Symposium on Graph Drawing, G. Liotta and S. Whitesides eds., vol. 4, no. 3, pp. 47–74 (2000).
31. L. Vismara, G. Di Battista, A. Garg, G. Liotta, R. Tamassia and F. Vargiu, “Experimental Studies on Graph Drawing Algorithms,” *Software Practice and Experience*, special issue on Discrete Algorithms Engineering, K. Weihe and D. Wagner, eds., vol. 30, pp. 1235–1284 (2000).
32. S. Bridgeman, G. Di Battista, W. Didimo, G. Liotta, R. Tamassia, and L. Vismara, “Turn-Regularity and Optimal Area Drawings of Orthogonal Representations,” *Computational Geometry: Theory and Applications*, vol. 16, no. 1, pp. 53–93 (2000).
33. R. Tamassia, I. G. Tollis, and J. S. Vitter, “A Parallel Algorithm for Planar Orthogonal Grid Drawings,” *Parallel Processing Letters*, vol. 10, no. 1, pp. 141–150 (2000).

34. S. Bridgeman, A. Garg, and R. Tamassia, "A Graph Drawing and Translation Service on the World Wide Web," *Int. J. Computational Geometry & Applications*, vol. 9, no. 4–5, pp. 419–446 (1999).
35. G. Barequet, C. A. Duncan, M. T. Goodrich, S. S. Bridgeman, and R. Tamassia, "Geometric Computing over the Internet," *IEEE Internet Computing*, vol. 3, no. 2, pp. 21–29 (1999).
36. R. Tamassia, "Advances in the Theory and Practice of Graph Drawing," *Theoretical Computer Science*, special issue on selected papers from the ORDAL '96 Workshop, I. Rival, ed., vol. 217, no.2, pp. 235–254 (1999).
37. J. E. Baker, I. F. Cruz, G. Liotta, and R. Tamassia, "Visualizing Geometric Algorithms over the Web," *Computational Geometry: Theory and Applications*, vol. 12, no. 1–2, pp. 125–152 (1999).
38. G. Di Battista, R. Tamassia, and L. Vismara, "Output-Sensitive Reporting of Disjoint Paths," *Algorithmica*, vol. 23, no. 4, pp. 302–340 (1999).
39. O. Devillers, G. Liotta, F. P. Preparata, and R. Tamassia, "Checking the Convexity of Polytopes and the Planarity of Subdivisions," *Computational Geometry: Theory and Applications*, vol. 11, no. 3–4, pp. 187–208 (1998).
40. G. Liotta, F. P. Preparata, and R. Tamassia, "Robust Proximity Queries: an Illustration of Degree-driven Algorithm Design," *SIAM J. Computing*, vol. 28, no. 3, pp. 864–889 (1998).
41. M.T. Goodrich and R. Tamassia, "Dynamic Trees and Dynamic Point Location," *SIAM Journal on Computing*, vol. 28, no. 2, pp. 612–636 (1998).
42. P. Bertolazzi, G. Di Battista, C. Mannino, and R. Tamassia, "Optimal Upward Planarity Testing of Single-Source Digraphs," *SIAM Journal on Computing*, vol. 27, no. 1, pp. 132–169 (1998).
43. R. Tamassia, "Constraints in Graph Drawing Algorithms," *Constraints*, vol. 3, no. 1, pp. 89–122 (1998).
44. G. Kant, G. Liotta, R. Tamassia, and I.G. Tollis, "Area Requirement of Visibility Representations of Trees," *Information Processing Letters*, vol. 62, no. 2, pp. 81–88 (1997).
45. R.F. Cohen and R. Tamassia, "Combine and Conquer," *Algorithmica*, vol. 18, pp. 51–73 (1997).
46. M.T. Goodrich and R. Tamassia, "Dynamic Ray Shooting and Shortest Paths via Balanced Geodesic Triangulations," *J. Algorithms*, vol. 23, pp. 51–73 (1997).
47. G. Di Battista, A. Garg, G. Liotta, R. Tamassia, E. Tassinari and F. Vargiu "An Experimental Comparison of Four Graph Drawing Algorithms," *Computational Geometry: Theory and Applications*, vol. 7, no. 5–6, pp. 303–325 (1997).
48. Y.-J. Chiang and R. Tamassia, "Optimal Shortest Path and Minimum-Link Path Queries Between Two Convex Polygons inside a Simple Polygonal Obstacle," *Int. J. Computational Geometry & Applications*, vol. 7, no. 1-2, pp. 85–121 (1997).
49. R. Tamassia et al. "Strategic Directions in Computational Geometry," *ACM Computing Surveys*, vol. 28, no. 4 (1996).
50. A. Garg, M. T. Goodrich and R. Tamassia, "Planar Upward Tree Drawings with Optimal Area," *Int. J. Computational Geometry & Applications*, vol. 6, no. 3, pp. 333–356 (1996).
51. R. Tamassia "Data Structures," *ACM Computing Surveys*, 50th Anniversary Symposium on Perspectives in Computer Science, vol. 28, no. 1, pp. 23–26 (1996).
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APPENDIX B



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The protection of your privacy is one of our top priorities. While voluntary participation in our program will allow us to send you periodic surveys and track information about your online activities such as where you surf and the transactions that you make, the personally identifiable information you provide to us will NOT be used by us, or anyone with whom we do business, to advertise or market products or services to you!

About Our Trees for Knowledge Campaign

Worldwide carbon dioxide emissions have more than doubled over the last 10 years, and too much carbon dioxide in the atmosphere may be one of the major causes of global warming. But planting trees can help reduce the effects of carbon dioxide. That's why comScore has partnered with Trees for the Future to establish our Trees for Knowledge campaign. Since 1988, Trees for the Future has helped thousands of communities in Central America, Africa, and Asia improve their livelihoods and their environment by planting nearly 50 million trees. Working with Trees for the Future, we have donated millions of trees on behalf of members of our research community, so that we are not only improving the Internet, we're improving the environment as well.

PRIVACY POLICY, USER LICENSE AGREEMENT, AND PATENT NOTICE

Before joining our program, enjoying the benefits of this program, and installing our application, you must review and agree to the terms and conditions below and provide and obtain consent to this agreement from anyone who will be using the computers on which you install this application. By installing our application, you agree to be bound by this privacy policy & user license agreement, including the storage of the market research information provided by you on our computer systems in the United States.

Requirements for participation:

In order to participate in this program, you must:

- Be at least 18 years of age and capable of entering into a binding agreement;
- Be the parent or legal guardian of anyone under 18 having access to such computer;

- Own or control the computers that you allow to be configured to use this system;
- If your household subscribes to a TV service, be the TV service subscriber for your household, or be authorized to enter into this agreement on behalf of that TV service subscriber;
- Not be employed or related to an individual employed by an unaffiliated market research company; and
- Acknowledge and agree to allow the software to operate as described herein, including allowing the software to automatically upgrade provided that any such upgrades do not change the functionality of the software beyond what is described in this privacy policy and user license agreement.

Please note: many companies restrict the installation of software onto work computers. Before you install this software onto a work computer, please check your company's software installation policy.

What information is collected?

Basic Demographic Information: When you sign up for this program, we may obtain your contact information and some basic demographic information about you using a questionnaire, information from companies through which you obtained or inquired about this program, or the application that you install onto your computer and allow to track your Internet usage.

Survey response information: Once you agree to participate in this program, we may notify you of survey opportunities through e-mail, pop-ups, toast windows, U.S. mail, and other means. If you elect to participate in a survey, we require that you provide complete and accurate information about yourself and your household. The survey opportunities that we provide to you may be related to other information that we collect. For example, we may provide you with a survey asking you about the quality of your user experience at a particular website.

Computer hardware, software, and other configuration information: Our application may collect general hardware, software, computer configuration and application usage information about the computer on which you install our application, including such data as the speed of the computer processor, its memory capacities and Internet connection speed. In addition, our application may report on devices connected to your computer and your network, such as the type of printer or router you may be using.

TV and Mobility Data: Your TV Data includes items such as the channels and programs you watch and record, when the TV and set-top box are turned on and off, the on-demand programming you order, the interactive TV applications you use and other similar information. Your Mobility Data includes information about your use of your mobile device, such as the type and configuration of your mobile phone, the websites you visit on your device, the date and time of those visits and use, as well as other similar information.

Your agreement to participate on this panel includes your agreement that we may collect your TV Data and Mobility Data directly from your TV and Mobility service providers and you expressly authorize those service providers to supply that information to us on your behalf. You also agree that we may integrate that information with the other data you provide us and that we obtain about you as part of this research community.

Internet usage information: Once you install our application, it monitors all of the Internet behavior that occurs on the computer on which you install the application, including both your normal web browsing and the activity that you undertake during secure sessions, such as filling a shopping basket, completing an application form or checking your online accounts. Our application may also collect information regarding the cookies that exist on your computer. We may use the information that we monitor, such as name and address, for the purpose of better understanding your household demographics; however we make commercially viable efforts to automatically filter confidential personally identifiable information such as UserID, password, credit card numbers, and account numbers. Inadvertently, we may collect such information about our panelists; and when this happens, we make commercially viable efforts to purge our database of such information.

Our application will review the content of all web pages you visit and select e-mail header information from web based emails. We may provide our clients with information allowing them to verify the context and location in which their content was displayed on individual web pages. In addition to information collected through our application, we may also collect data about your Internet use from third-parties, including search engines, email providers, social networks and other application service providers whose Internet sites you visit.

How is the information collected?

This application monitors your Internet usage by transmitting to our servers information about the web pages that you visit and the actions that you take

while online.

Consequently, the software may communicate with our servers while you are connected to but not browsing the Internet. Such communications could include the transmission of collected data as outlined in this privacy policy, or it could include incoming instructions for our software. For example, our servers need to tell our software about survey opportunities, so that we can provide you with invitations where you can take a survey in exchange for sweepstake entries, cash, or other prizes.

In addition, we may ask for information about you using surveys, for which participation is completely voluntary. We may also combine the information that you provide us with information obtained from other sources (such as consumer preference reporting companies, credit reporting agencies and companies that collect TV viewing information) using confidential matching procedures. In these cases, we will: (i) provide a data match processor with only the personal information necessary to perform a match and, infrequently, to assist us performing statistical analyses; (ii) establish procedures and legal obligations that prohibit use of the information received for any other purpose or disclosure of this information to anyone else; and (iii) require destruction of the received information after completion of the match and analysis. You also agree that we may use the information we have collected from you to identify your use of search engines, email providers, social networks and other application service providers whose Internet sites you visit. Your agreement to this policy shall serve as your consent to allow us to request data about your online activities from these third-parties and to combine that information with the information that you provide us directly or through the software.

You further agree that we may use third party service providers to obtain other on-line data, TV viewing, or mobile usage information and that we may integrate such data with the data that you provide us as part of this research community, provided that the acquisition and processing of such information adheres to the privacy principles included in this privacy policy and user license agreement.

The software will collect information on the types of applications you use and general statistics on how you use them. So, for instance, you may open a word processor, and our software would collect information on what type of word processing software that you are using, and how long the word processor was open, but it would not have any knowledge of what was typed in the word processor.

Your information is stored in the United States where our central database is operated. The data protection and other laws of other countries may differ from those of the United States. Your information may be processed outside of the United States, provided that the data protection laws of such processing location affords similar if not more protections than those afforded in the United States for the processed data.

How is the collected information used?

Market Research Reports: Applying concepts similar to those used by television-rating services, we use the information collected through our application and your survey responses, combined with information from other sources, to make statistically-based projections about current and future Internet user behavior and, more generally, to extrapolate data about potential economic trends. For certain commercial customers, we may provide individual-level information. We make this data available so that these customers may enhance their own understanding of Internet usage and online commercial trends. In all cases, we make commercially viable efforts to automatically filter confidential personally identifiable information such as UserID, password, credit card numbers, and account numbers from the data being provided.

Our customers use our market research reports to: (i) modify online services and offerings; (ii) make more effective use of online data to understand both online and offline commercial behavior; and (iii) discern general economic trends and the business performance of specific entities for a wide range of business purposes including, but not limited to, identifying financial investment opportunities and understanding the value and interest in certain business enterprises.

By Service Providers: From time to time, we may share your contact information with those third parties who help us deliver this program to you (for example, companies that administer incentive programs). When we do this, we provide only the necessary information for the service provider to perform its assigned function, and we contractually prohibit the use or disclosure of this information to anyone else unless you authorize it.

As Required by Law: In rare cases, and as is done by any other business, if we are compelled to disclose certain information through a valid legal process such as a court order, subpoena, or a search warrant, we would do so. However, we would comply by providing only the minimum information necessary.

How is the information secured?

Safeguards: We have implemented a variety of safeguards (including physical, digital, and legal protections) focused on ensuring that the information collected through this program is protected from unauthorized use, modification, or disclosure. For example, any secure information collected by our application is encrypted before it is sent to our servers. Moreover, our employees are subjected to periodic evaluation and investigation, are contractually restricted on their use and access to personally identifiable information, and are educated and retrained as needed on internal security policies and procedures.

If you would like to access, modify, and/or request deletion of the personally identifiable profile information submitted by you as part of this program, you may complete a support form on our website, or e-mail our support staff at the e-mail address provided below.

Does the application use cookies?

We do not use our cookies to store or acquire data about you; however, we do use cookies to assist us in conducting occasional diagnostic tests to ensure that our system is functioning correctly.

What privacy commitments are made relating to specific participant benefits?

Please refer to our program's web site, which lays out the privacy commitments that we make for the various participant benefits we offer. The terms of these commitments are incorporated into this agreement. Please note that each incentive program may have its own set of rules applicable to that particular offering; these rules are made available to you before you choose to participate.

What if I wish to stop participating in this program?

Resignation: You may resign at any time by contacting us at the support address listed below or by selecting the "Terminate all Services" link from the Members section on your panel's web page (where applicable).

Removing our Application: You may remove our application using the Windows Add/Remove Programs function (known as "Programs and Features" in Vista and Windows 7). Alternatively, you may e-mail our support staff at the e-mail address provided below and request removal instructions. Please be sure to follow this same removal procedure on all of the computers from which you wish to remove this application. Removing the application will stop tracking of your online browsing and purchasing behavior, but unless you resign from all services in accordance with the procedure stated above, you may be contacted for administrative purposes or for special participant opportunities. After you remove our application from a computer, all settings we have made to your computer will be deactivated.

Use of Third Party Programs to Remove our Software: Please note that use of third party programs to remove this application may cause instability in your system and to your Internet connection. We reserve the right to repair any of its settings that are partially removed, to minimize potential instability. In fact, our software will inspect itself and make repairs when necessary. This action is not done to try and stop you from uninstalling our software, it is only done to assure that our software is operating properly on your computer and does not cause technical problems. This ability to upgrade or repair corrupted files in no way impedes your ability to delete the program. Once the program has been uninstalled through the Windows Add/Remove Programs function, the application will be removed, so that no updates or repairs may be made. So, should you wish to resign, we ask that you use the instructions provided above.

Stop Participating in Surveys: You may contact us at the support address listed below to alter how you receive, or to completely stop receiving, surveys; or you can edit your survey preferences at the Members section on your panel's web page (where applicable).

Please note: we may continue to use information collected prior to resignation, but all such information remains fully subject to, and governed by, the agreement effective at the time of your resignation.

What is the policy regarding children?

All persons installing this application must be at least 18 years old and must be the parent or legal guardian of any minor that may use a computer with this application installed. However, all household Internet behavior may be used by us in developing the statistical projections. This program complies with all applicable U.S. data gathering rules, including the Children's Online Privacy Protection Act (COPPA).

How will I be notified of changes to this Agreement?

If we change our practices in how we handle personally identifiable information, or if we materially change other aspects of our program, including but not limited to any changes to the scope or nature of incentives provided, we will post these changes on our website, and the changes will be effective immediately upon such posting. If you do not agree with any of the changes, you may remove our application as described above.

What are my obligations as a participant?

As a participant, you agree to:

- Allow this program to collect and use information obtained from you and related to you and your household's Internet use as described in this agreement;
- Make reasonable efforts to ensure that any other person who uses such computers and uses the TV services available to your household is aware of and agrees to the terms of this agreement;
- Accept automatic changes to your system settings that are made solely to ensure compatibility between your computer system and this program and periodic software upgrades;
- Receive administrative e-mails, including e-mails sent to: (i) inform you about upgrades, or issues related to basic program/application function or disruptions; (ii) provide notification about awards and special participant opportunities; (iii) request updated demographic information or information regarding usage of the application; and
- Regularly visit and review the agreement posted on this website, so that you are aware of any changes made to this agreement.

As a participant, you agree not to:

- Use this program in any way that: (i) harms or harasses others; (ii) violates any federal, state or local laws or ordinances; (iii) violates or infringes on the rights of any third parties including, but not limited to, copyright, trademark, patent, trade secret, rights of privacy or publicity or other proprietary right; or (iv) interferes with or disrupts this program;
- Attempt to reverse engineer, decompile, or disassemble the program;
- Sign up for more than one account; and
- Attempt to defeat or circumvent our application, it being your responsibility to remove this application as instructed in this agreement or express by an authorized service representative.

What is our commitment to participants?

We commit to making commercially reasonable efforts to do the following:

- Only use information obtained from or about you as described in this agreement;
- From time to time, commission the services of third parties to verify that this program is keeping its privacy commitments to you; and
- Provide customer support when you experience problems with this program, on the condition that you provide requested information about the problems experienced and the conditions of your computer environment, and agree to take reasonable efforts to follow the instructions supplied by our support staff.

Patent Notice

Our application incorporates and implements patented technologies. For more information visit <http://www.comscore.com/patents>.

What are the other legal terms and conditions of participating in this program?

Governing Law: You agree that any dispute or claim arising out of this program or agreement shall be settled by binding arbitration in Fairfax County, Virginia under the American Arbitration Association Rules. The proceedings shall be conducted and all evidence shall be offered in the English language.

Regardless of any law to the contrary, any claim against us must be filed within one year of the time such claim arose, otherwise such claim will be barred forever. We agree that regardless of any law to the contrary, that the arbitrator shall have no authority to award, punitive or exemplary damages against any party to this agreement.

Notwithstanding the above, we may apply to any court of competent jurisdiction for a temporary restraining order or other interim relief, as necessary without breach of this agreement and without abridgment of the powers of the arbitrator.

THIS AGREEMENT SHALL BE GOVERNED BY THE LAWS OF THE COMMONWEALTH OF VIRGINIA, WITHOUT REGARD TO CONFLICTS OF LAWS PROVISIONS AND SUCH LAW SHALL BE APPLIED BY THE ARBITRATOR TO THE MERITS OF ANY DISPUTE OR CLAIM. FOR ANY NON-ARBITRAL ACTION OR PROCEEDING ARISING OUT OF OR RELATED TO THIS PROGRAM OR THIS AGREEMENT, SOLE AND EXCLUSIVE JURISDICTION SHALL RESIDE WITH THE APPROPRIATE STATE COURT LOCATED IN FAIRFAX COUNTY, VIRGINIA OR FEDERAL COURT LOCATED IN ALEXANDRIA, VIRGINIA.

While this program is available on the Internet to international users, the program is and remains a U.S. offering and all use of the information collected and shall remain subject to U.S. law and practice. International users must take this into account and should consult their local laws and independently determine whether participation is desired given these facts.

TMRG, Inc., complies with the U.S.-EU Safe Harbor Framework and the U.S.-Swiss Safe Harbor Framework as set forth by the U.S. Department of Commerce regarding the collection, use, and retention of personal information from European Union member countries and Switzerland. TMRG, Inc. has certified that it adheres to the Safe Harbor Privacy Principles of notice, choice, onward transfer, security, data integrity, access, and enforcement. To learn more about the Safe Harbor program, and to view TMRG, Inc.'s certification, please visit <http://export.gov/safeharbor/>.

Fraud: Any attempt by a participant to undermine the legitimate operation of the panel is a violation of criminal and civil laws and should such an attempt be made, TMRG, Inc. reserves the right to seek damages from any such respondent to the fullest extent permitted by law. Multiple accounts are not permitted; participants are limited to signing up for a maximum of one account.

Third Party Rights: This agreement shall not create any rights or remedies in any parties other than the parties to the agreement and no person shall assert any rights as a third party beneficiary under this agreement.

Assignment: You may not assign this agreement or any rights or obligations under this agreement without our prior written approval.

Waiver: The failure of us to exercise or enforce any right or provision of the Agreement shall not constitute a waiver of such right or provision.

Severability: If any provision of this agreement is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. In any event, the remaining provisions shall be enforced.

Indemnity: You agree to defend, indemnify and hold our company and our affiliates, officers, directors, and employees harmless from and against any and all claims, losses, damages, liabilities and costs including without limitation, reasonable attorney's fees, arising out of or relating to your breach of this Agreement or misuse of this program.

Disclaimers of Warranty: YOU ACKNOWLEDGE THAT THIS PROGRAM AND ALL SOFTWARE, CHANGES TO YOUR COMPUTER, FUNCTIONS, MATERIALS AND INFORMATION MADE AVAILABLE AS PART OF THIS PROGRAM ARE PROVIDED 'AS IS.' OUR COMPANY, ITS SERVICE PROVIDERS, AND AFFILIATES DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

UNDER NO CIRCUMSTANCES WILL OUR COMPANY, ITS SERVICE PROVIDERS OR AFFILIATES BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES THAT RESULT FROM THE USE OF, OR INABILITY TO USE, THE PROGRAM, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES RESULTING IN ANY WAY FROM THIS PROGRAM. THE TERMS OF THIS SECTION WILL SURVIVE ANY TERMINATION OF THIS AGREEMENT. IN JURISDICTIONS WHICH RESTRICT LIMITATION OF LIABILITY OR DISCLAIMER OF WARRANTY PROVISIONS, OUR COMPANY'S LIABILITY WILL BE LIMITED TO THE GREATEST EXTENT PERMITTED BY LAW. THIS LIMITATION WILL APPLY REGARDLESS OF THE FAILURE OF THE ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.

Third Party Products and Services: We neither endorse nor accept responsibility for any third party materials accessed through the Internet.

ENTIRE AGREEMENT: This Agreement constitutes the entire agreement between sponsor and you with respect to the subject matter contained in the Agreement.

This Agreement is effective as of October 13, 2011.

Whom can I contact if I have additional questions?

The program sponsor is TMRG, Inc., a Delaware, U.S.A. corporation. If you have any questions about the above Privacy Statement & User License Agreement, our practices or your interactions with this site and this program, you may contact the program sponsor at:

privacy@tmrginc.com
Privacy Office
11950 Democracy Drive
Suite 600
Reston, VA 20190

For any support issues, please contact: support@tmrginc.com.

LP 1142

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Read our [ULA and Privacy Policy](#) or [Sweeps Rules](#)

APPENDIX C

Exhibit A

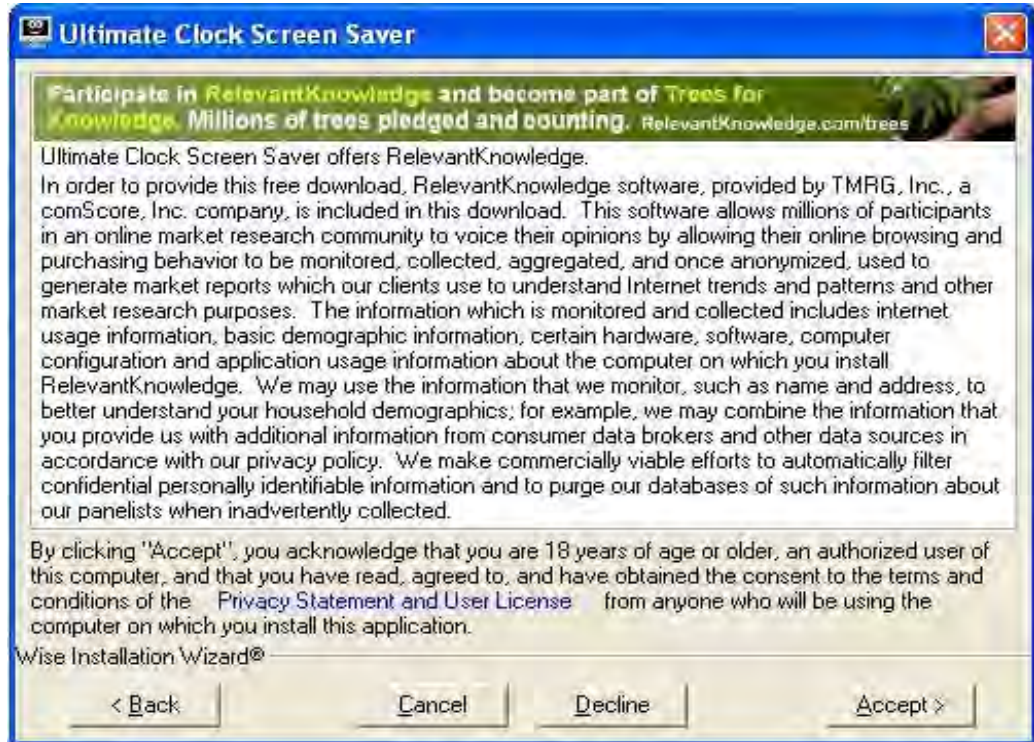
678Soft



AccmeWare



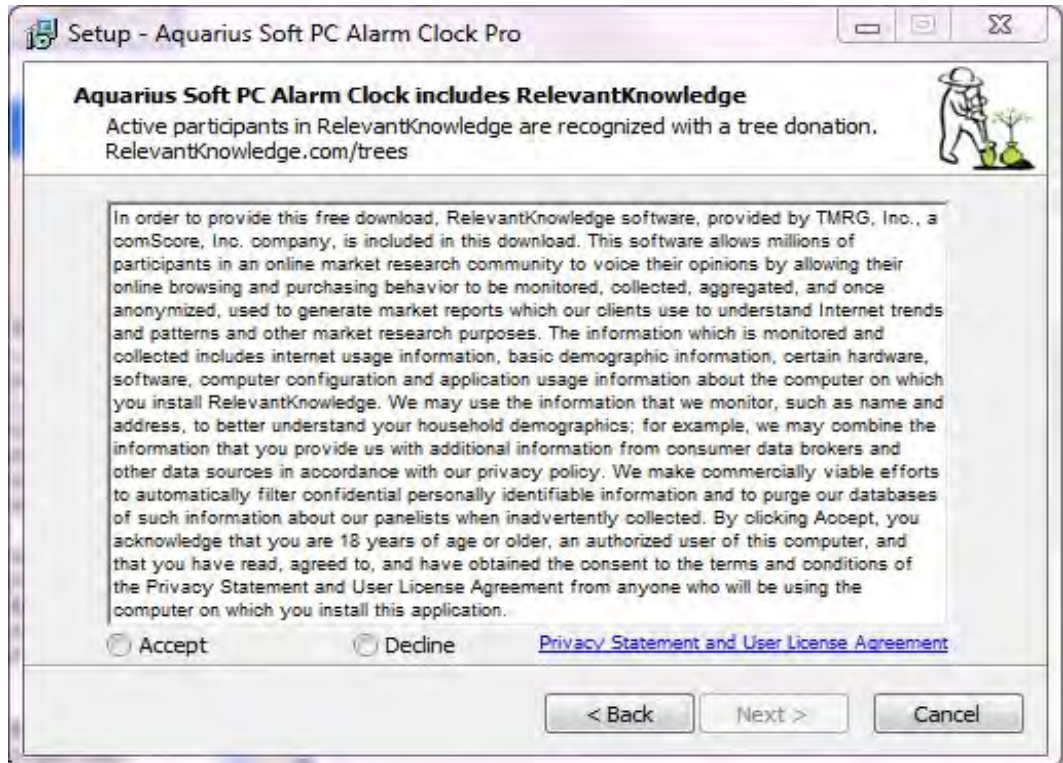
Acez



A1 Software

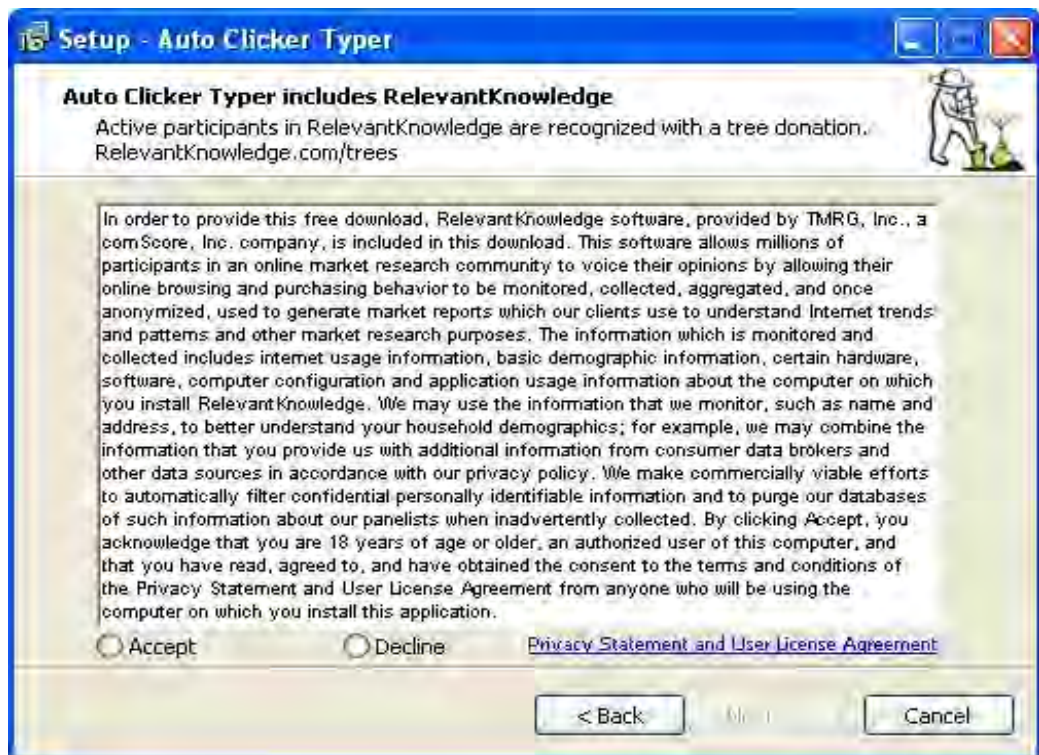


AquariusSoft
-Test Bundle in QA



* As of 10/3/2011: In QA and will roll out once it is approved

ASoftwarePlus



Beneton Software



Chit Chat



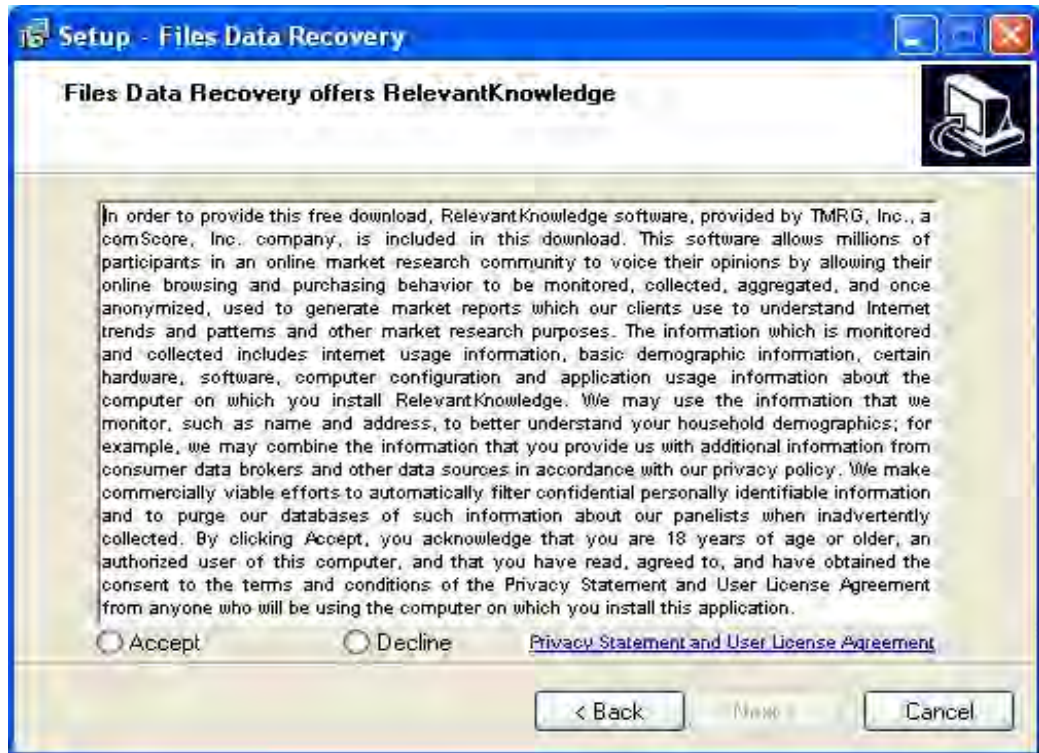
ChrisPC



Cliprex



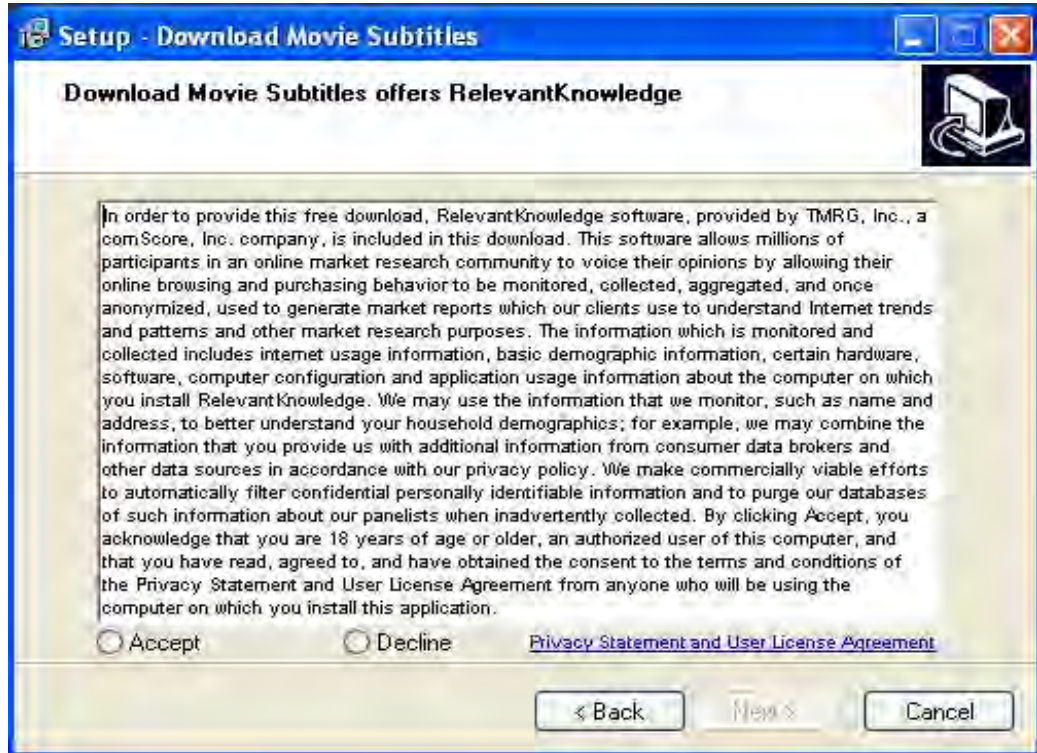
Data & Files



Digital Liquid



DMS



EIPC

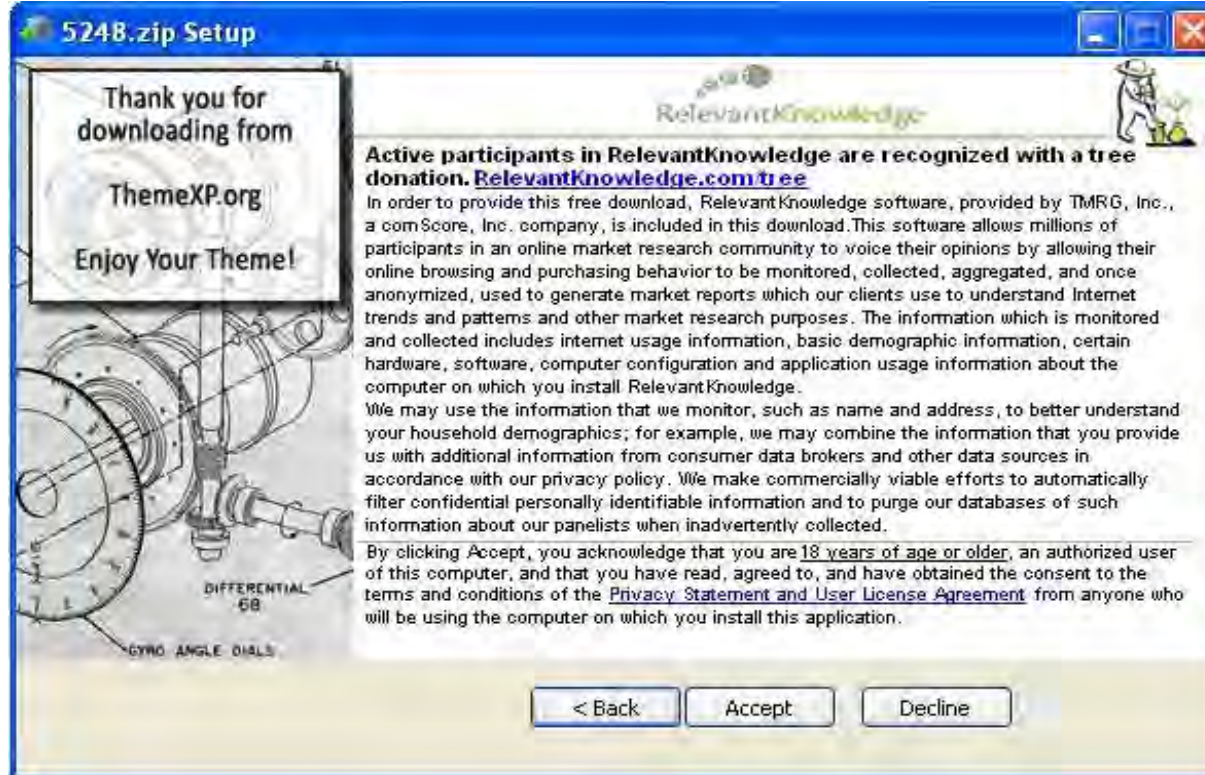


EtExchange



Falco Software



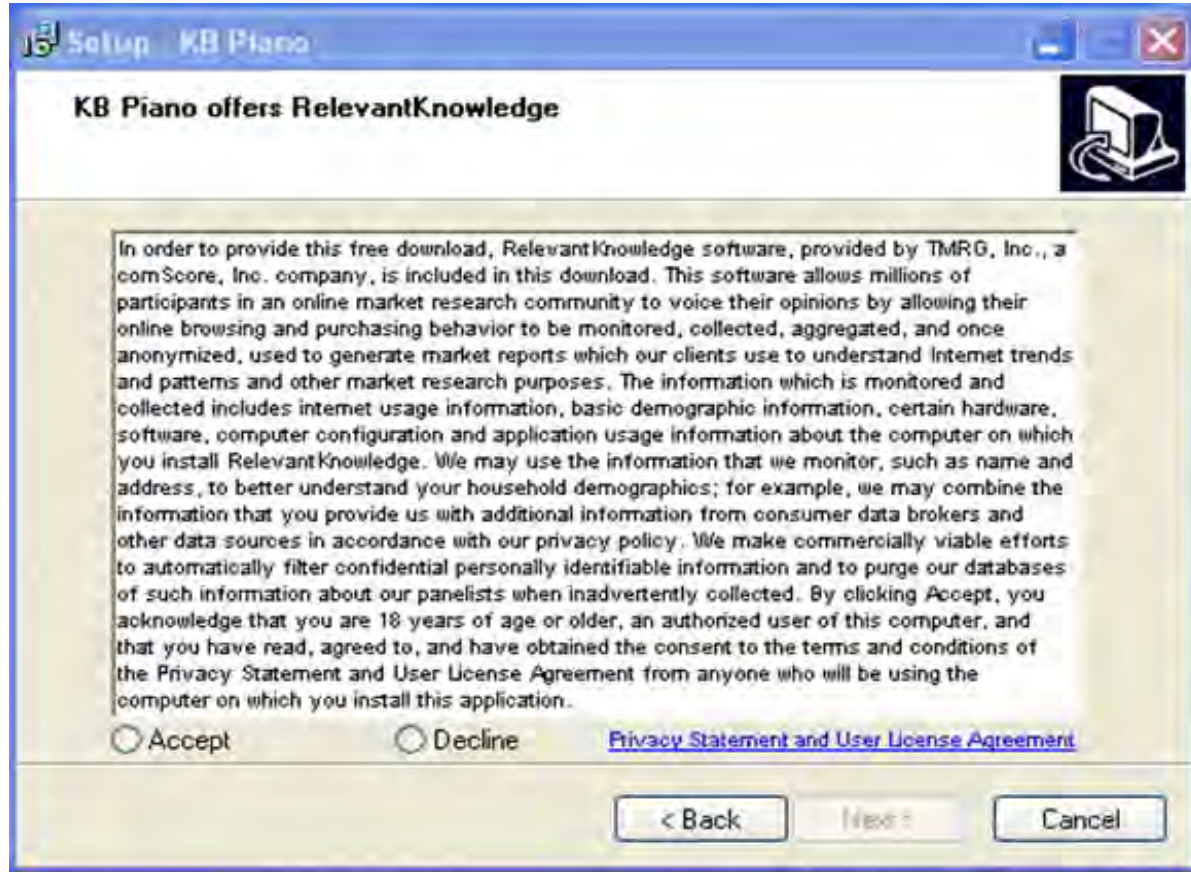


FreakyBurn



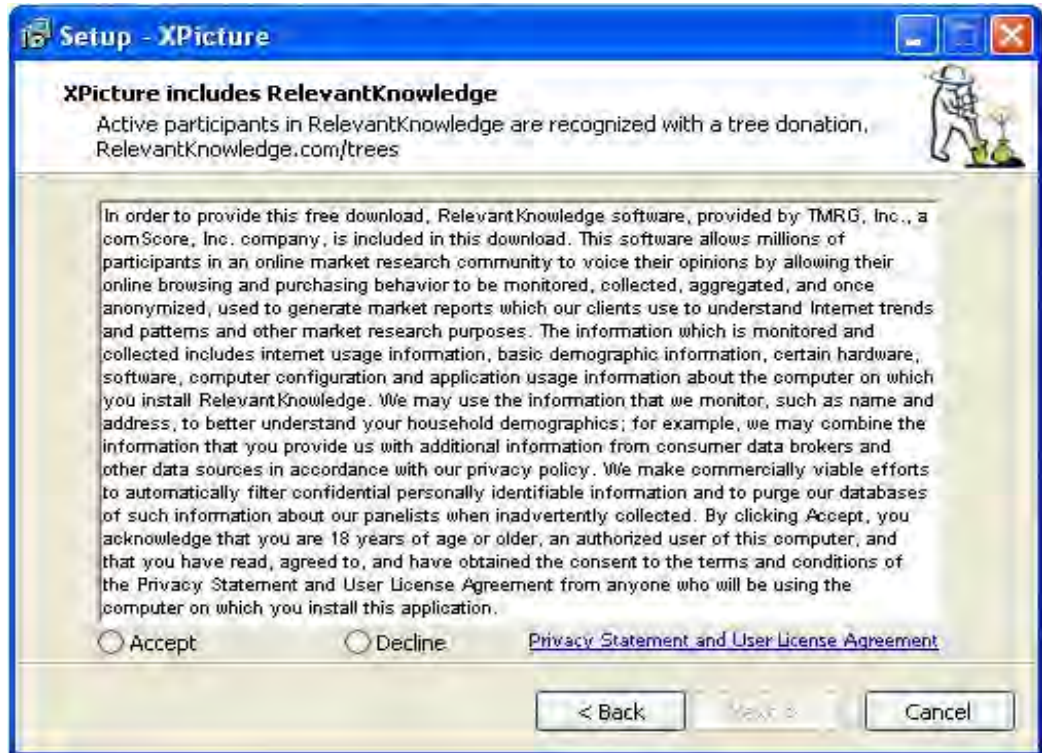
Freeway





* Screenshot taken from last QA submission

Goztun



GuitarFX
- Waiting for test bundle

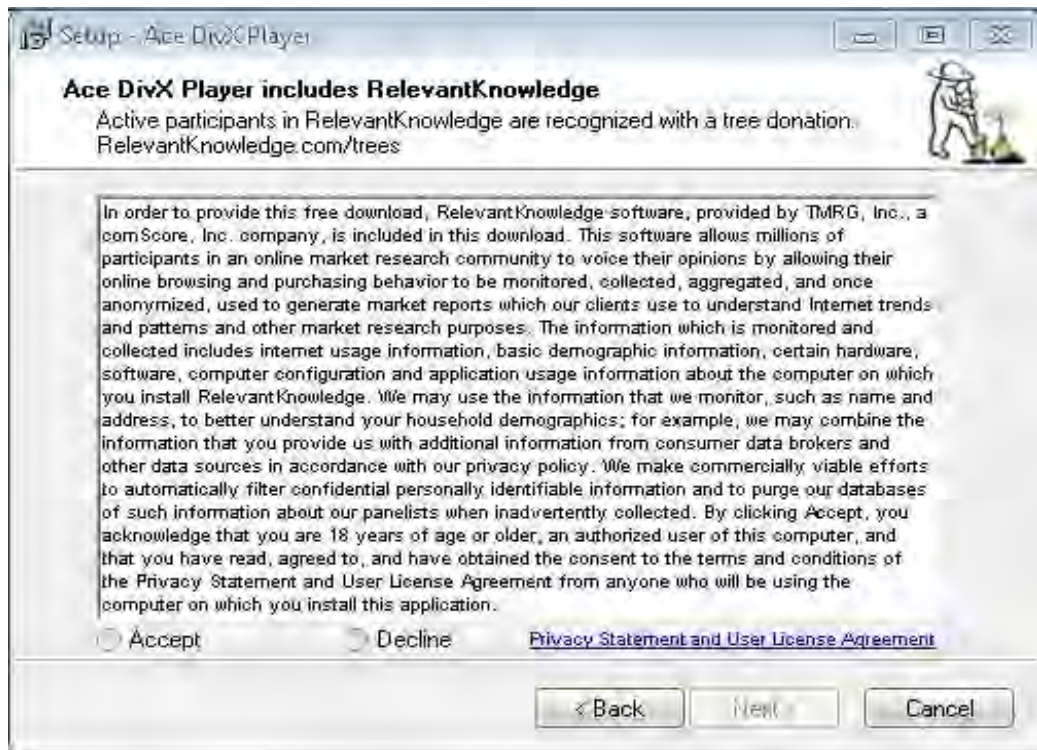


* As of 10/3/2011: In QA and will roll out once it is approved

Guppy Games



GustoSoft



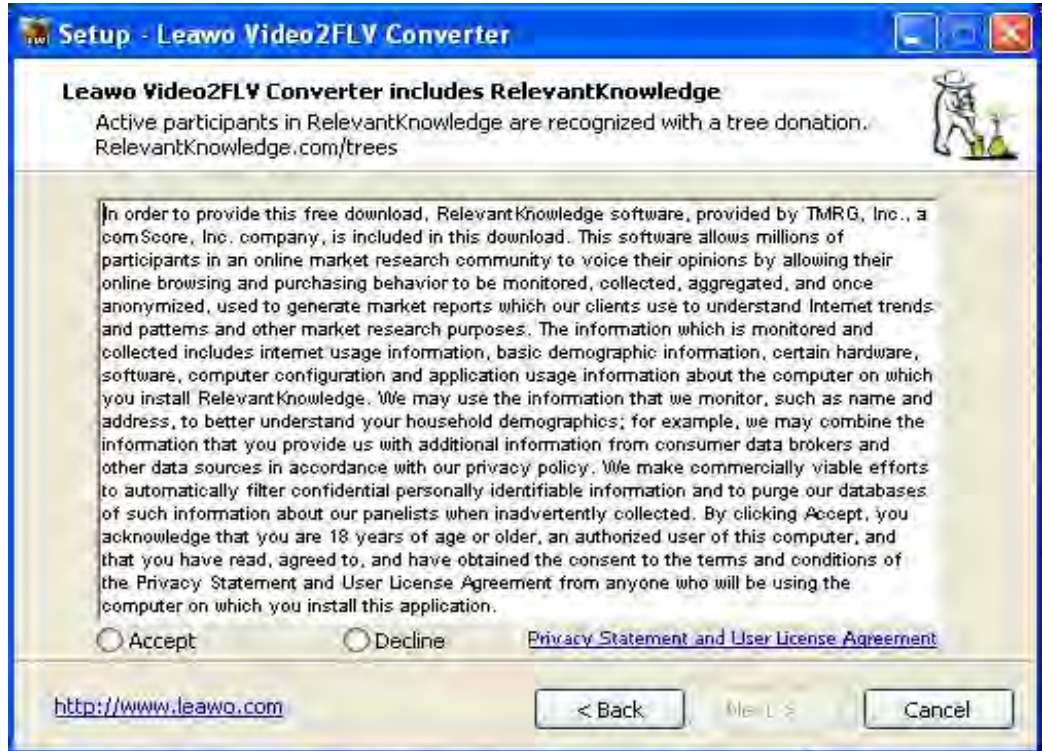
KC Software

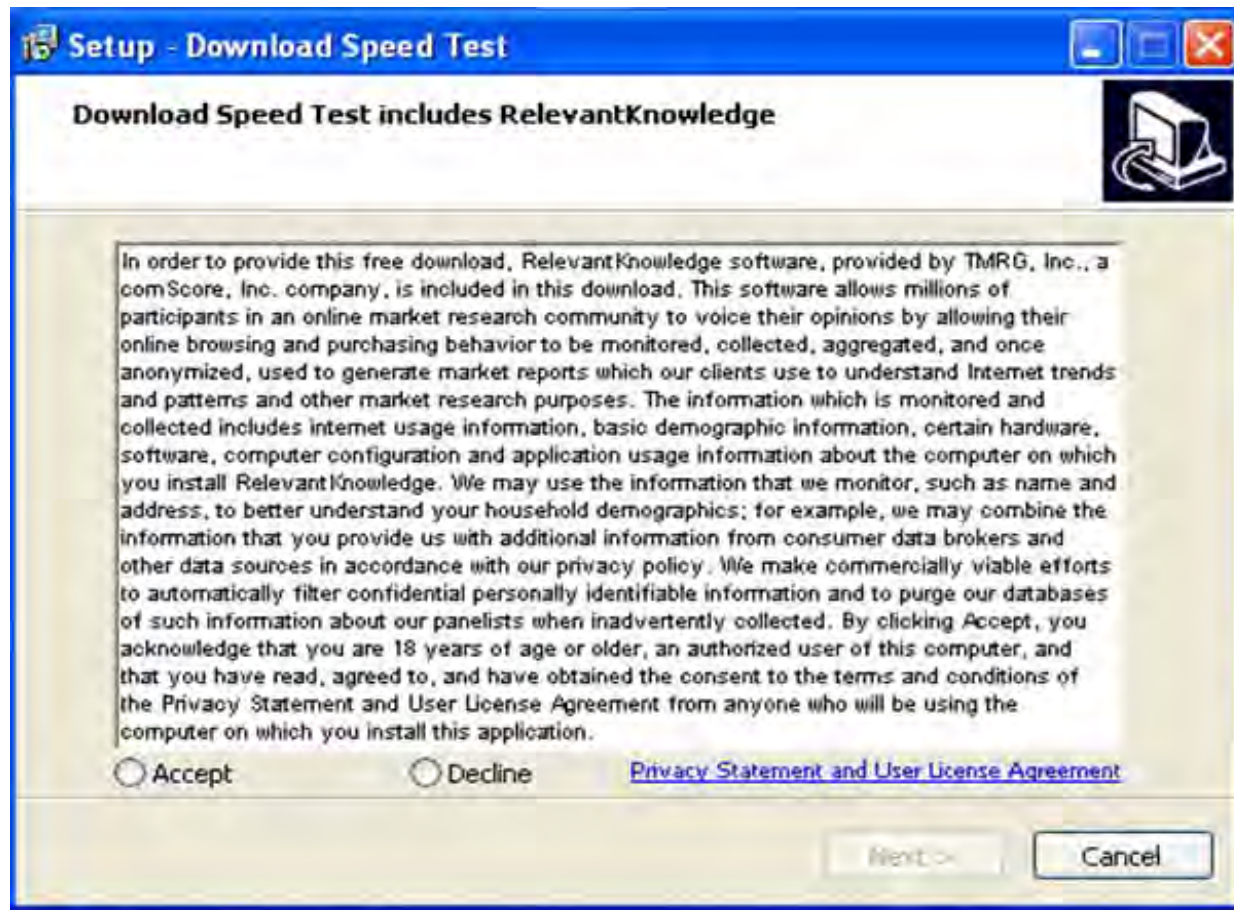


King Sedco



Leawo





* Screenshot taken from last QA submission

MediaProSoft



MP4 Player



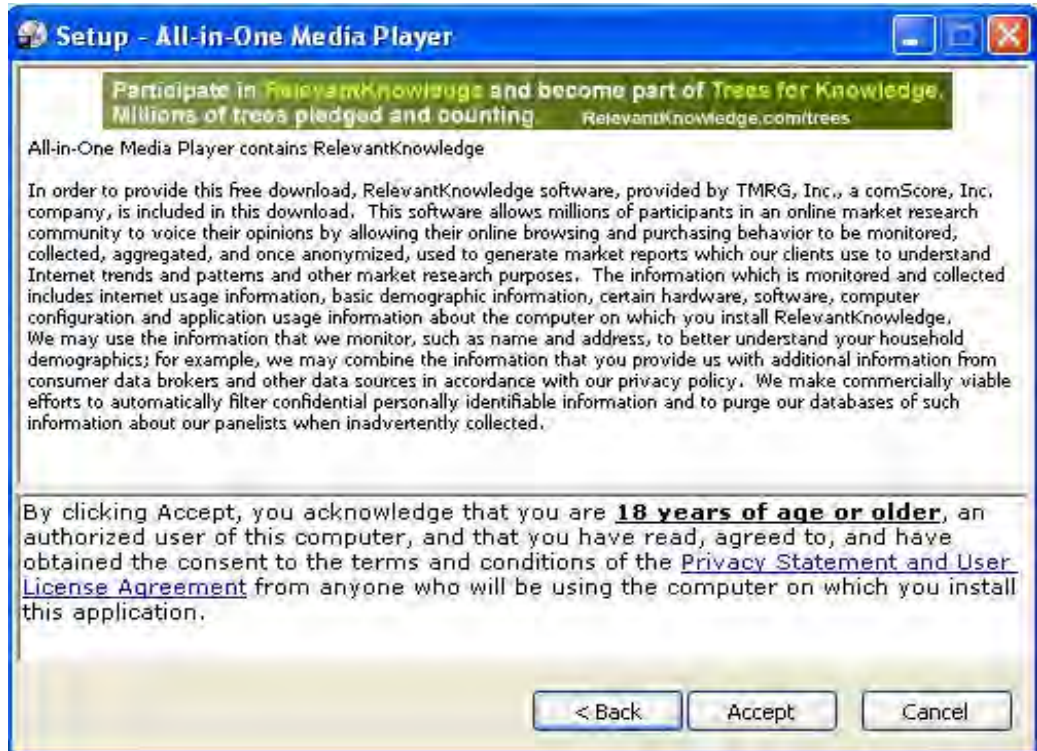
NeoSoft



Network467



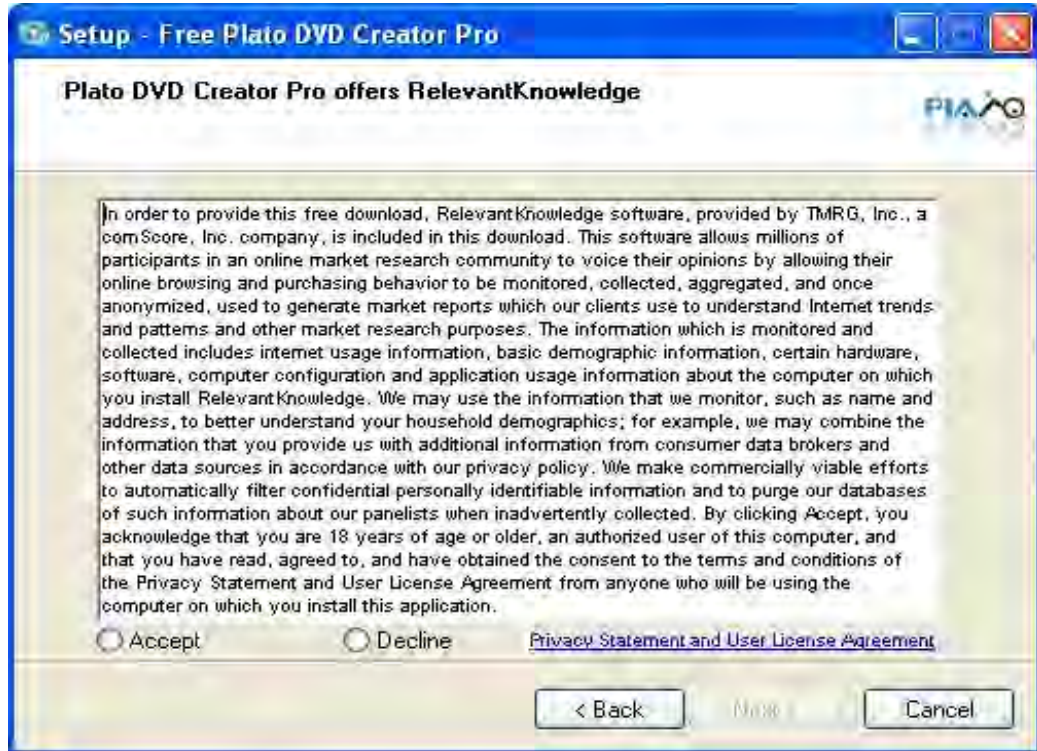
NPS Software



OurScreenSavers

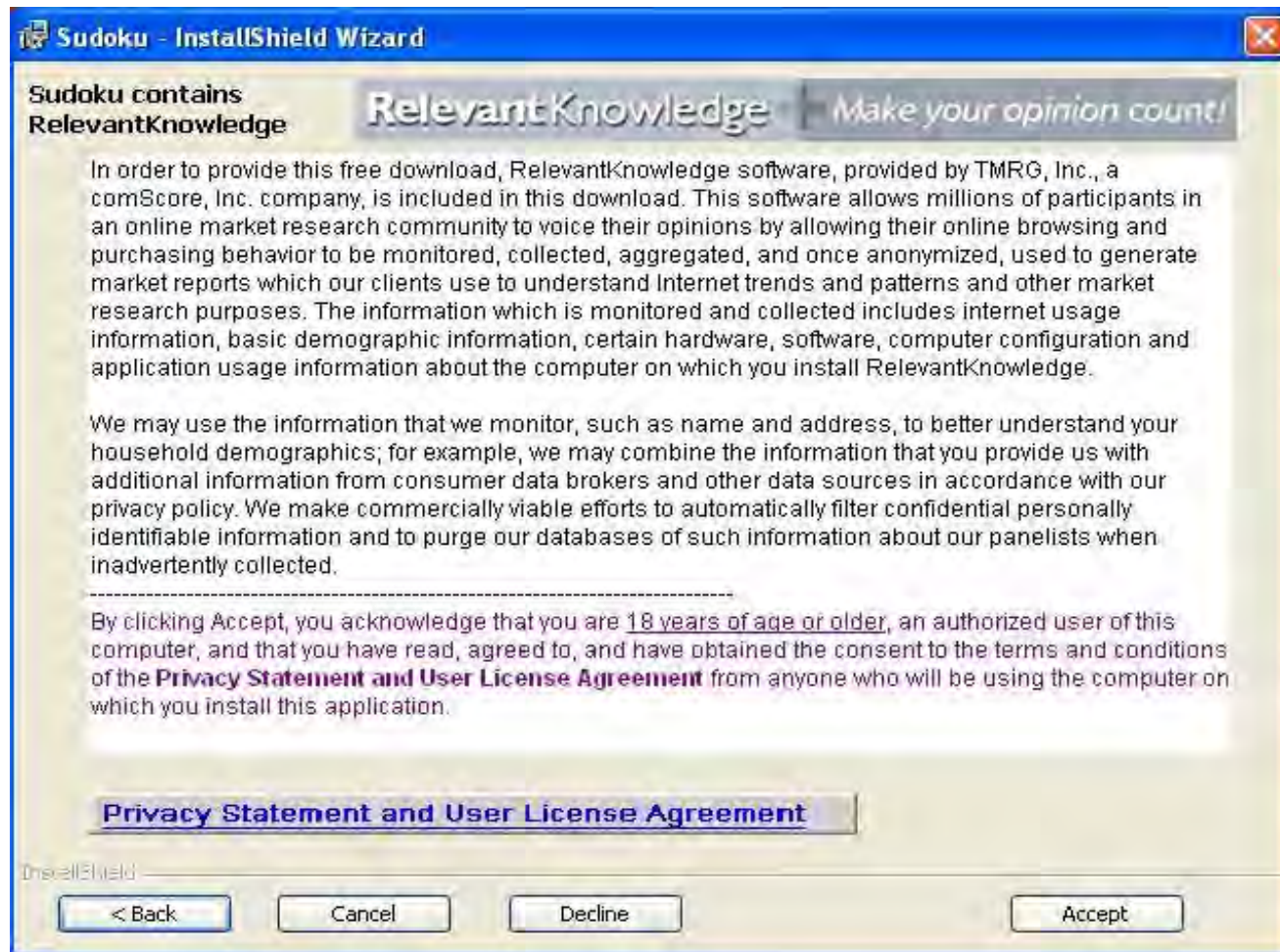


Plato

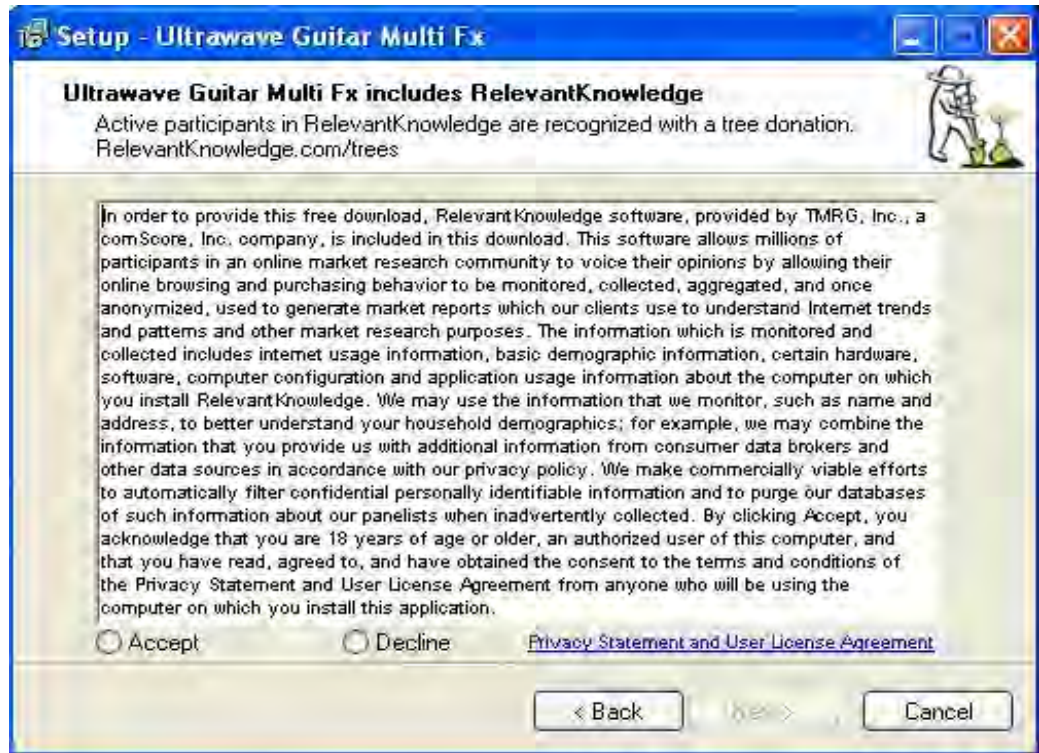


RisingResearch

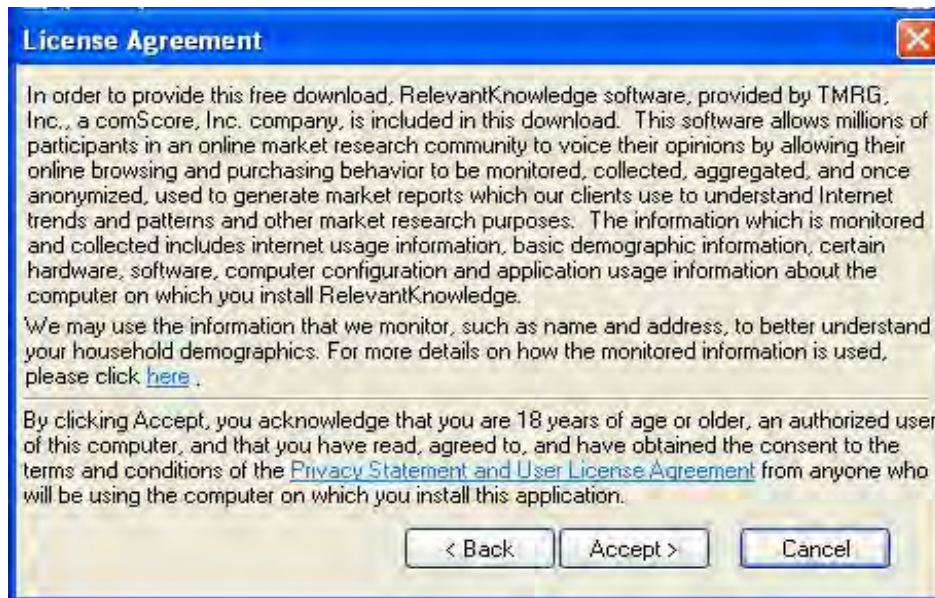




UltraWave Guitar

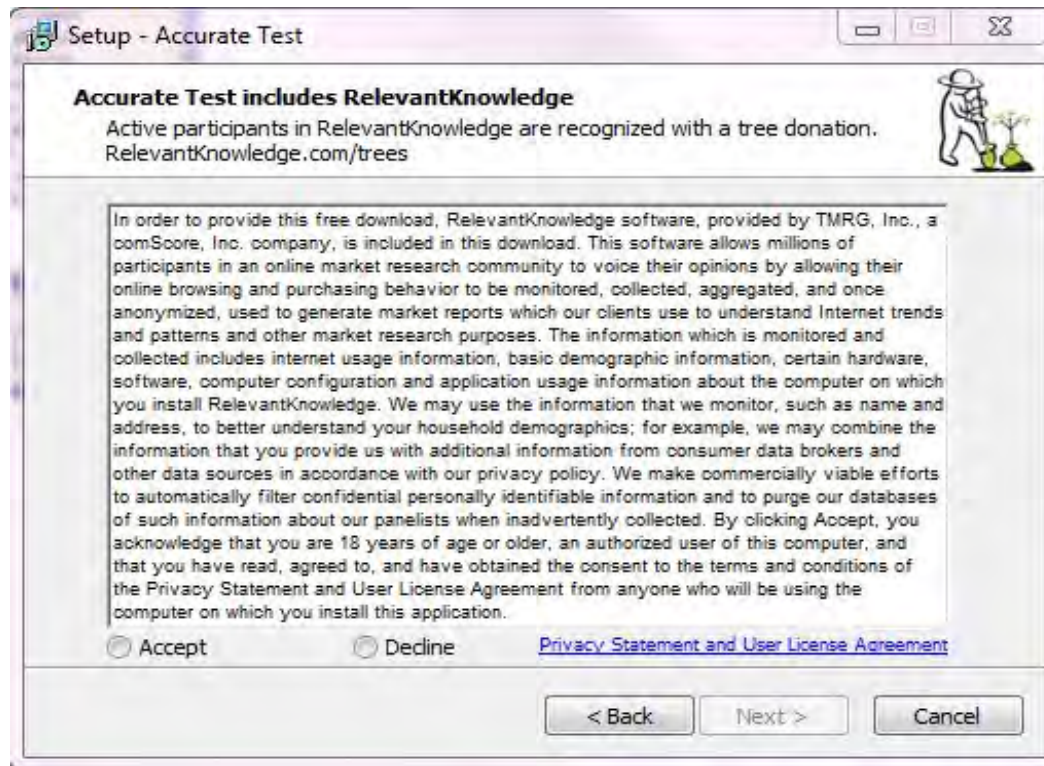


Whitepaw



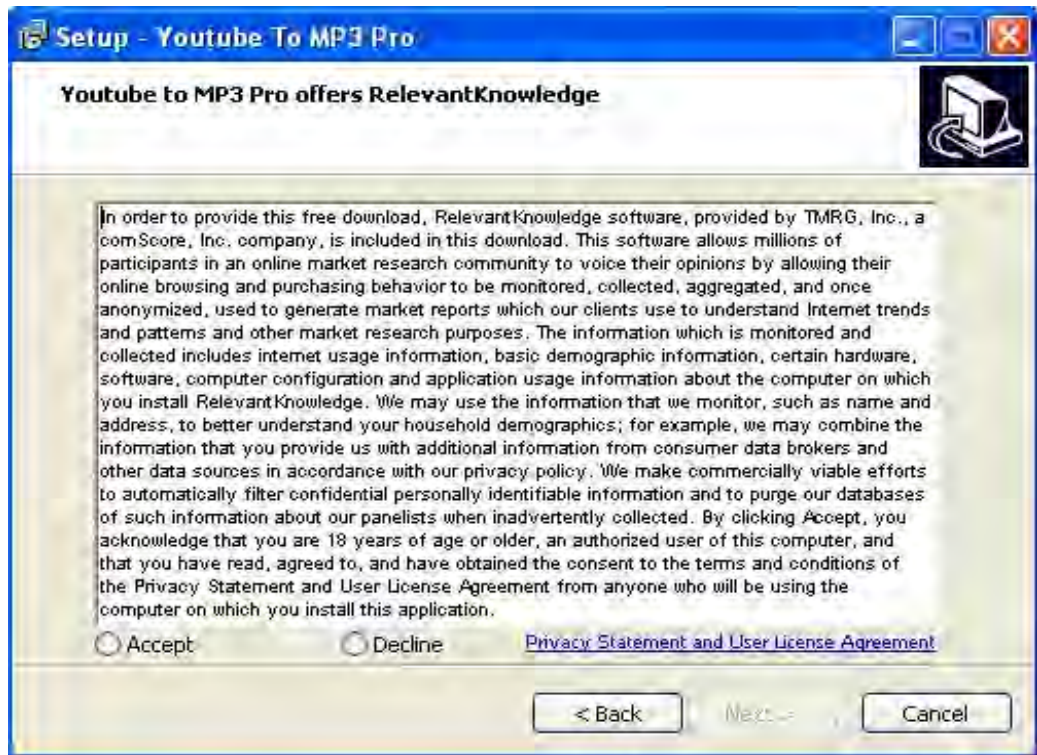


WordOfMouth
- Test Bundle in QA



* As of 10/3/2011: In QA and will roll out once it is approved

Ytmp3Pro



ZXT



PremierOpinion

Cyzeal



Morpheus





APPENDIX D

MATERIALS CONSIDERED

| |
|---|
| Complaint filed August 23, 2011 (Dkt. No. 1) |
| Answer filed December 13, 2011 (Dkt. No. 59) |
| Expert Report of Don Waldhalm dated September 17, 2012 |
| RelevantKnowledge Privacy Policy and User Licensing Agreement, accessed Oct. 25, 2012, available at http://www.relevantknowledge.com/RKPrivacy.aspx (Appendix B) |
| Content ID Data Structure, CS0015963 |
| ContentID XML Format Specification section from comScore wiki, CS0015898-CS0015919 |
| Fuzzification Rules sections from comScore wiki, CS0015929-CS0015943 |
| comScore Media Metrix Blueprint |
| Sample Disclosure Dialog Boxes (Ex. A to comScore's Supplemental Response to Harris's First Set of Interrogatories) (Appendix C) |
| About Relevant Knowledge, Ghacks blog post, 2009, available at: http://www.ghacks.net/2009/05/18/about-relevant-knowledge/ |
| Exclusive: Privacy lawsuit targets comScore, Reuters, 2011, available at: http://www.reuters.com/article/2011/08/23/us-comscore-lawsuit-idUSTRE77M76O20110823 |
| How ComScore can track your mouse clicks, The Register, 2008, available at: http://www.theregister.co.uk/2008/05/12/inside_comscore/ |
| Class action tests commercial use of spyware for target marketing, Faruki Ireland & Cox P.L.L., 2011, available at: http://businesslitigationinfo.com/data-security/archives/class-action-tests-commercial-use-of-spyware-for-target-marketing/ |
| Installation process for the Beneton Movie GIF software, available at: http://benetonsoftware.com/Beneton_Movie_GIF.php |
| comScore source code |
| 2011 comScore Annual Report (SEC Form 10-K), available at http://ir.comscore.com/sec.cfm?SortOrder=Type%20Ascending&DocType=&DocTypeExclude=&Year= |

**IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION**

| | | |
|--|---|---------------------------------|
| MIKE HARRIS and JEFF DUNSTAN, |) | |
| individually and on behalf of a class of |) | |
| similarly situated individuals, |) | Case No. 1:11-cv-5807 |
| |) | |
| Plaintiffs, |) | [Hon. James F. Holderman] |
| v. |) | |
| |) | [Magistrate Judge Young B. Kim] |
| COMSCORE, INC., a Delaware |) | |
| corporation, |) | |
| |) | |
| Defendant. |) | |
| _____ |) | |

**PLAINTIFF JEFF DUNSTAN’S RESPONSES TO
DEFENDANT COMSCORE, INC.’S FIRST SET OF INTERROGATORIES**

Plaintiff Jeff Dunstan (“Dunstan” or “Plaintiff”) provides the following answers to Defendant comScore, Inc.’s (“comScore” or “Defendant”) First Set of Interrogatories:

Answers to Interrogatories

1. Identify every Communication and Document You viewed or relied upon in downloading third-party software you allege was bundled with comScore Software, including all websites, webpages, advertisements, or solicitations.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it is overly broad (it requires Plaintiff to identify potentially dozens of individual webpages that he viewed while browsing the World Wide Web (“WWW”) for photo-cropping software¹ in September 2010), unduly burdensome (it seeks information that was ephemerally stored on his computer in September 2010) and seeks information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence (the individual webpages viewed by Plaintiff in search of photo-cropping software are not relevant to the class certification analysis). Plaintiff further

¹ Plaintiff initially believed that comScore’s software was bundled with free greeting card template software that he downloaded. After further investigation, it appears that comScore’s software was bundled with photo-cropping software.

objects to this Interrogatory on the basis that the information sought is within Defendant's possession, custody or control, and is easily discoverable from Defendant's own records or the records of its agents or bundling partners (through the bundling partners' web server logs, comScore's server logs, or both).

Subject to and without waiving these objections, Plaintiff states that in or around September 2010 he searched the WWW for photo-cropping software to assist in the creation of holiday greeting cards. After extensive searching, Plaintiff discovered software entitled "Photo Cutter" on a third-party website.

* * * * *

2. Identify every Communication and Document You viewed Referring or Relating To any terms or conditions of service, privacy agreements, or other agreements Related To the third-party software bundled with comScore Software or the comScore Software You allege was downloaded and installed on Your computer.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it is unduly burdensome (it seeks information that, by comScore's own admission, could only have been briefly displayed to Plaintiff during the installation process in September 2010). Plaintiff further objects to this Interrogatory on the basis that the information sought is within Defendant's possession, custody or control, and is easily discoverable from Defendant's own records or the records of its agents or bundling partners (through the bundling partners' web server logs, comScore's server logs, or both).

Subject to and without waiving these objections, Plaintiff states that, to the best of his knowledge, he did not view any terms or conditions of service, privacy agreements, or other similar agreements, nor was the existence of comScore's software disclosed to him at any time.

* * * * *

3. Describe in detail all Facts Related To the download and installation of third-party software You allege was bundled with comScore Software to Your computer, including description and identification of all websites, webpages, advertisements, solicitations, download prompts, download agreements, service agreements, terms and conditions, or other agreements You viewed during download and installation.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it is overly broad (it requires Plaintiff to identify potentially dozens of individual webpages that he viewed while browsing the WWW for photo-cropping software in September 2010), and is unduly burdensome (it seeks information that was ephemerally stored on his computer in September 2010). Plaintiff further objects to this Interrogatory on the basis that the information sought is within Defendant's possession, custody or control, and is easily discoverable from Defendant's own records or the records of its agents or bundling partners (as comScore purports to obtain consent from potential panelists, ostensibly records of such should be in its possession).

Subject to and without waiving these objections, Plaintiff states that his answers to Interrogatory Nos. 1, 2 and 5 are responsive to this Interrogatory.

* * * * *

4. Describe in detail the system configuration of Your computer at the time You contend the comScore software was installed on Your computer, including but not limited to describing the operating system, processor, memory, display, hard drive, manufacturer, and model number.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it is unduly burdensome (it seeks information about the configuration of Plaintiff's computer from an exact point in time in September 2010). Plaintiff further objects to this Interrogatory on the basis that it seeks information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence.

Subject to and without waiving these objections, Plaintiff states that the system configuration of his current computer, which is substantially identical to its configuration at the

time comScore's software was installed, is as follows:

Make: Acer

Model: Veriton M410

Operating System: Microsoft Windows XP Professional, SP 3

Memory: 2.19 GHZ, 3.25 GB Ram

Display: ATI X1250 Radeon

Hard drive: ST3160815A Barracuda 7200.10 Ultra ATA/100 160-GB Hard Drive

* * * * *

5. State all Facts Related to Your contention that You did not agree to comScore's Terms of Service.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it is unduly burdensome (it seeks information that, by comScore's own admission, could only have been briefly displayed to Plaintiff during the installation process in September 2010). Plaintiff further objects to this Interrogatory on the basis that the information sought is within Defendant's possession, custody or control, and is easily discoverable from Defendant's own records or the records of its agents or bundling partners (as comScore purports to obtain consent from potential panelists, ostensibly records of such should be in its possession).

Subject to and without waiving these objections, Plaintiff states that, to the best of his knowledge, in or around September of 2010, Plaintiff downloaded and installed photo cropping software that, unbeknownst to him, was bundled with comScore's software. At no point during the download process of that photo cropping software did Plaintiff view any terms or conditions of service, privacy agreements, or other agreements related to comScore software, nor did Plaintiff agree to the download of comScore software, or any other software (aside from the photo cropping software).

* * * * *

6. Describe all Facts Related To Your efforts to remove comScore Software from Your computer, including but not limited to describing the amount of time You contend the comScore software was installed on Your computer.

ANSWER: Plaintiff states that, to the best of his knowledge, in or around September of 2010, he downloaded and installed photo-cropping software that, unbeknownst to him, was bundled with comScore’s software. Almost immediately after the download, Plaintiff’s computer began malfunctioning. In particular, access to the WWW became intermittent and his computer started locking up in such a way that he could no longer operate it in any meaningful manner. After restarting the computer into Safe Mode, Plaintiff navigated to the Control Panel, opened the Add or Remove Programs tool and noticed that ‘RelevantKnowledge’ software had been installed on his computer. At the same time, Plaintiff’s firewall detected the re-routing of his Internet traffic to comScore’s servers. After much struggle, Plaintiff was eventually able to browse the WWW to perform a search for a product to remove RelevantKnowledge. Plaintiff discovered a software product—PC Tools Spyware Doctor—which was marketed as a tool capable of removing RelevantKnowledge. After purchasing, installing, and running PC Tools Spyware Doctor, the software detected and removed RelevantKnowledge. Once PC Tools Spyware Doctor removed RelevantKnowledge, Plaintiff’s computer returned to normal functionality. In sum, Plaintiff spent approximately ten (10) hours fixing the damage caused to his computer by comScore’s software.

* * * * *

7. If You contend that comScore sold personal information collected by comScore Software from Your computer, Describe all Facts related to that contention.

ANSWER: Plaintiff objects to this Interrogatory to the extent it seeks disclosure of information protected by the attorney client privilege and the attorney work product doctrine.

Plaintiff also objects to this Interrogatory on the basis that the information sought is within Defendant's possession, custody or control, and is easily discoverable from Defendant's own records or the records of its agents or bundling partners (comScore utilizes sophisticated technologies capable of examining information collected from panelists' computers).

Subject to and without waiving such objections, pursuant to Fed. R. Civ. P. 33(d), Plaintiffs state that the documents bearing Bates Nos. Harris-Dunstan 0016 – Harris-Dunstan 0087 produced in response to comScore's First Set of Requests for Production of Documents are responsive to this Interrogatory.

* * * * *

8. State all Facts and Identify all Documents that You contend support a grant of class certification in this matter.

ANSWER: Plaintiff objects to this Interrogatory to the extent it seeks disclosure of information protected by the attorney client privilege and the attorney work product doctrine. Plaintiff also objects to this Interrogatory on the basis that it calls for a conclusion of law. Plaintiff further objects to this Interrogatory on the basis that it is premature inasmuch as Dunstan has not yet moved for class certification, class discovery is not completed, the class discovery cut-off has not passed, and comScore has yet to produce documents for inspection.

Subject to and without waiving these objections, Plaintiff states that comScore has indicated that the number of putative class members ranges between 377,090 and 560,025 individuals (from 2008 through 2011). Paragraphs 74 – 83 of Plaintiffs' Class Action Complaint, (Dkt. No. 1), explains the reasons that Plaintiff contends class certification is warranted in this matter. Additionally, Plaintiff's counsel is adequate, *see* Bates Nos. 0552 – 0557, and Plaintiff was subjected to comScore's systematic and continuous surreptitious data collection practices, and the panelist software damaged his computer, which caused him legal damage.

* * * * *

9. Identify all class members and potential class members that You are aware of.

ANSWER: Plaintiff objects to this Interrogatory on the basis that the information sought is within Defendant's possession, custody or control, and is easily discoverable from within Defendant's own records or the records of its agents or bundling partners (presumably comScore possesses information identifying every active and former panelist). Plaintiff further objects to this Interrogatory on the basis that it is premature inasmuch as Dunstan has not yet moved for class certification, class discovery is not completed, the class discovery cut-off has not passed, and comScore has yet to produce documents for inspection.

Subject to and without waiving his objections, Plaintiff states that, aside from Plaintiff Harris, he is not currently aware of the identity of the members of the putative class.

* * * * *

10. Describe all Facts Related To the manner in which You became involved in this matter.

ANSWER: Plaintiff objects to this Interrogatory to the extent it seeks disclosure of information protected by the attorney client privilege and the attorney work product doctrine. Plaintiff further objects to this Interrogatory on the basis that it seeks information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence.

* * * * *

11. Describe in Detail all actual damages that You contend You suffered as a result of the comScore software that You allege was downloaded and installed on Your computer.

ANSWER: Plaintiff objects to this Interrogatory to the extent that it calls for a conclusion of law.

Subject to and without waiving this objection, Plaintiff states that he suffered actual damages in the form of monies paid to purchase the software that was required to detect and remove comScore's software from his computer. Plaintiff further states that he seeks (i) statutory damages pursuant to Defendant's violation of 18 U.S.C. § 2707(c) and 18 U.S.C. § 2520, (ii) an award of punitive damages where applicable, and (iii) reasonable attorneys' fees and other litigation costs reasonably incurred.

As to Objections:

Dated: April 9, 2012

JEFF DUNSTAN, individually, and on behalf of
all others similarly situated,

By: /s/ Chandler R. Givens
One of Their Attorneys

Jay Edelson (jedelson@edelson.com)
Rafey S. Balabanian (rbalabanian@edelson.com)
Ari J. Scharg (ascharg@edelson.com)
Chandler R. Givens (cgivens@edelson.com)
EDELSON MCGUIRE LLC
350 North LaSalle Street, Suite 1300
Chicago, Illinois 60654
Tel: (312) 589-6370
Fax: (312) 589-6378

DECLARATION

I, Jeff Dunstan, declare under penalty of perjury that the foregoing *Plaintiff Jeff Dunstan's Responses to Defendant comScore, Inc.'s First Set of Interrogatories* is true and correct.

Executed on April 6, 2012 at Bakersfield, California.

Jeff Dunstan  _____

CERTIFICATE OF SERVICE

I, Chandler R. Givens, an attorney, hereby certify that on April 9, 2012, I served the above and foregoing *Plaintiff Jeff Dunstan's Responses to Defendant comScore, Inc.'s First Set of Interrogatories* by causing true and accurate copies of such paper to be transmitted to the persons shown below via electronic mail.

Paul F. Stack
Mark William Wallin
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Attorneys for Defendant comScore, Inc.

/s/ Chandler R. Givens _____
Chandler R. Givens

**IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION**

| | | |
|--|---|---------------------------------|
| MIKE HARRIS and JEFF DUNSTAN, |) | |
| individually and on behalf of a class of |) | |
| similarly situated individuals, |) | Case No. 1:11-cv-5807 |
| |) | |
| Plaintiffs, |) | [Hon. James F. Holderman] |
| v. |) | |
| |) | [Magistrate Judge Young B. Kim] |
| COMSCORE, INC., a Delaware |) | |
| corporation, |) | |
| |) | |
| Defendant. |) | |
| _____ |) | |

**PLAINTIFF MIKE HARRIS’S RESPONSES TO
DEFENDANT COMSCORE, INC.’S FIRST SET OF INTERROGATORIES**

Plaintiff Mike Harris (“Harris” or “Plaintiff”) provides the following answers to Defendant comScore, Inc.’s (“comScore” or “Defendant”) First Set of Interrogatories:

Answers to Interrogatories

1. Identify every Communication and Document You viewed or relied upon in downloading third-party software you allege was bundled with comScore Software, including all websites, webpages, advertisements, or solicitations.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it is overly broad (it requires Plaintiff to identify potentially dozens of individual webpages that he viewed while browsing the World Wide Web (“WWW”) for screensaver software approximately two (2) years ago), unduly burdensome (it seeks information that was ephemerally stored on his computer approximately two (2) years ago) and seeks information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence (the individual webpages viewed by Plaintiff in search of screensaver software are not relevant to the class certification analysis). Plaintiff further objects to this Interrogatory on the basis that the information sought is within Defendant’s possession, custody or control, and is easily discoverable from Defendant’s own

records or the records of its agents or bundling partners (through the bundling partners' web server logs, comScore's server logs, or both).

Subject to and without waiving these objections, Plaintiff states that, to the best of his knowledge, in or around March of 2010 he searched the website www.macupdate.com for a free screensaver depicting a peaceful scene.

* * * * *

2. Identify every Communication and Document You viewed Referring or Relating To any terms or conditions of service, privacy agreements, or other agreements Related To the third-party software bundled with comScore Software or the comScore Software You allege was downloaded and installed on Your computer.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it is unduly burdensome (it seeks information that, by comScore's own admission, could only have been briefly displayed to Plaintiff during the installation process approximately (2) years ago). Plaintiff further objects to this Interrogatory on the basis that the information sought is within Defendant's possession, custody or control, and is easily discoverable from Defendant's own records or the records of its agents or bundling partners (through the bundling partners' web server logs, comScore's server logs, or both).

Subject to and without waiving these objections, Plaintiff states that, to the best of his knowledge, he does not recall viewing any terms or conditions of service, privacy agreements, or other similar agreements, nor does he recall the existence of comScore's software disclosed to him at any time.

* * * * *

3. Describe in detail all Facts Related To the download and installation of third-party software You allege was bundled with comScore Software to Your computer, including description and identification of all websites, webpages, advertisements, solicitations, download prompts, download agreements, service agreements, terms and conditions, or other agreements You viewed during download and installation.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it is overly broad (it requires Plaintiff to identify potentially dozens of individual webpages that he viewed while browsing the WWW for screensaver software approximately (2) years ago), and is unduly burdensome (it seeks information that was ephemerally stored on his computer approximately (2) years ago). Plaintiff further objects to this Interrogatory on the basis that the information sought is within Defendant's possession, custody or control, and is easily discoverable from within Defendant's own records or the records of its agents or bundling partners (as comScore purports to obtain consent from potential panelists, ostensibly records of such should be in its possession).

Subject to and without waiving these objections, Plaintiff states that his answers to Interrogatory Nos. 1, 2 and 5 are responsive to this Interrogatory.

* * * * *

4. Describe in detail the system configuration of Your computer at the time You contend the comScore software was installed on Your computer, including but not limited to describing the operating system, processor, memory, display, hard drive, manufacturer, and model number.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it is unduly burdensome (it seeks information about the configuration of Plaintiff's computer from an exact point in time in March of 2010). Plaintiff further objects to this Interrogatory on the basis that it seeks information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence.

Plaintiff states that in or around August of 2010 he discarded the computer used to download the free screensaver that, unbeknownst to him, was bundled with comScore's software. Notwithstanding, Plaintiff states that the system configuration of his discarded computer, which is substantially identical to its configuration at the time comScore's software

was installed, is as follows:

Model: iMac4, 1, BootROM IM41.0055.B08, Intel Core Duo, 1.83 GHz, 1 GB

Graphics: ATI Radeon X1600, ATY, RadeonX1600, PCIe, 128 MB

Memory Module: BANK 0/DIMM0, 512 MB, DDR2 SDRAM, 667 MHz

Memory Module: BANK 1/DIMM1, 512 MB, DDR2 SDRAM, 667 MHz

AirPort: spairport_wireless_card_type_airport_extreme (0x14E4, 0x89), 4.80.46.0

Bluetooth: Version 1.7.9f12, 2 service, 1 devices, 1 incoming serial ports

Network Service: AirPort, AirPort, en1

Serial ATA Device: WDC WD1600JS-40NGB2, 149.05 GB

Parallel ATA Device: MATSHITADVD-R UJ-846

* * * * *

5. State all Facts Related to Your contention that You did not agree to comScore's Terms of Service.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it is unduly burdensome (it seeks information that, by comScore's own admission, could only have been briefly displayed to Plaintiff during the installation process approximately two (2) years ago). Plaintiff further objects to this Interrogatory on the basis that the information sought is within Defendant's possession, custody or control, and is easily discoverable from Defendant's own records or the records of its agents or bundling partners (as comScore purports to obtain consent from potential panelists, ostensibly records of the same should exist within its possession).

Subject to and without waiving his objections, Plaintiff states that, in or around March of 2010, Plaintiff downloaded and installed a free screensaver that, unbeknownst to him, was bundled with comScore's software. To the best of his knowledge, Plaintiff does not recall being presented with any terms or conditions of service, privacy agreements, or other agreements

during the download and installation process, nor does Plaintiff recall agreeing to the download of comScore software, or any other software (aside from the free screensaver).

* * * * *

6. Describe all Facts Related To Your efforts to remove comScore Software from Your computer, including but not limited to describing the amount of time You contend the comScore software was installed on Your computer.

ANSWER: Plaintiff states that, to the best of his knowledge, in or around March of 2010, Plaintiff downloaded and installed a free screensaver that, unbeknownst to him, was bundled with comScore’s software. Some time after the free screensaver was installed, Plaintiff noticed that the menu extras on his menu bar had shifted locations. Upon inspection, Plaintiff realized that a new, transparent menu extra was added to his menu bar. Plaintiff states that he could not have noticed this new menu extra if its presence had not shifted the placement of adjacent menu items. After discovering the menu extra, Plaintiff conducted research on the WWW to determine what the item was. Plaintiff’s research revealed that the menu extra indicated that PremierOpinion—comScore’s software—was operating on his computer. Plaintiff then spent several hours attempting to remove PremierOpinion manually because he was concerned that the software’s uninstaller would not fully remove the software (due to the fact it had been installed on his computer without his knowledge). Unable to manually remove the software, Plaintiff ultimately used the PremierOpinion uninstaller. In sum, Plaintiff spent two (2) – three (3) hours attempting to remove comScore’s software.

* * * * *

7. If You contend that comScore sold personal information collected by comScore Software from Your computer, Describe all Facts related to that contention.

ANSWER: Plaintiff objects to this Interrogatory to the extent it seeks disclosure of information protected by the attorney client privilege and the attorney work product doctrine.

Plaintiff further objects to this Interrogatory on the basis that it is unduly burdensome (it requires Plaintiff to identify information that is not within Plaintiff's possession, custody or control).

Plaintiff also objects to this Interrogatory on the basis that the information sought is within Defendant's possession, custody or control, and is easily discoverable from Defendant's own records or the records of its agents or bundling partners (comScore utilizes sophisticated technologies capable of examining information collected from panelists' computers).

Subject to and without waiving such objections, pursuant to Fed. R. Civ. P. 33(d), Plaintiffs state that the documents bearing Bates Nos. Harris-Dunstan 0016 – Harris-Dunstan 0087 produced in response to comScore's First Set of Requests for Production of Documents are responsive to this Interrogatory.

* * * * *

8. State all Facts and Identify all Documents that You contend support a grant of class certification in this matter.

ANSWER: Plaintiff objects to this Interrogatory to the extent it seeks disclosure of information protected by the attorney client privilege and the attorney work product doctrine. Plaintiff also objects to this Interrogatory on the basis that it calls for a conclusion of law. Plaintiff further objects to this Interrogatory on the basis that it is premature inasmuch as Harris has not yet moved for class certification, class discovery is not completed, the class discovery cut-off has not passed, and comScore has yet to produce documents for inspection.

Subject to and without waiving these objections, Plaintiff states that comScore has indicated that the number of putative class members ranges between 377,090 and 560,025 individuals (from 2008 through 2011). Paragraphs 74 – 83 of Plaintiffs' Class Action Complaint, (Dkt. No. 1), explains the reasons that Plaintiff contends class certification is warranted in this matter. Additionally, Plaintiff's counsel is adequate, *see* Bates Nos. 0552 – 0557, and Plaintiff

was subjected to comScore's systematic and continuous surreptitious data collection practices.

* * * * *

9. Identify all class members and potential class members that You are aware of.

ANSWER: Plaintiff objects to this Interrogatory on the basis that the information sought is within Defendant's possession, custody or control, and is easily discoverable from within Defendant's own records or the records of its agents or bundling partners (presumably comScore possesses information identifying every active and former panelist). Plaintiff further objects to this Interrogatory on the basis that it is premature inasmuch as Dunstan has not yet moved for class certification, class discovery is not completed, the class discovery cut-off has not passed, and comScore has yet to produce documents for inspection.

Subject to and without waiving his objections, Plaintiff states that, aside from Plaintiff Dunstan, he is not currently aware of the identity of the members of the putative class.

* * * * *

10. Describe all Facts Related To the manner in which You became involved in this matter.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it seeks disclosure of information protected by the attorney client privilege and the attorney work product doctrine. Plaintiff further objects to this Interrogatory on the basis that it seeks information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence.

* * * * *

11. Describe in Detail all actual damages that You contend You suffered as a result of the comScore software that You allege was downloaded and installed on Your computer.

ANSWER: Plaintiff objects to this Interrogatory to the extent that it calls for a conclusion of law.

Subject to and without waiving this objection, Plaintiff states that he seeks (i) statutory damages pursuant to Defendant's violations of 18 U.S.C. § 2707(c) and 18 U.S.C. § 2520, (ii) an award of punitive damages where applicable, and (iii) reasonable attorneys' fees and other litigation costs reasonably incurred. Plaintiff's investigation continues and he reserves the right to supplement his answer to this Interrogatory as appropriate.

As to Objections:

Dated: April 9, 2012

MIKE HARRIS, individually, and on behalf of all others similarly situated,

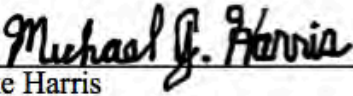
By: /s/ Chandler R. Givens
One of Their Attorneys

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EDELSON MCGUIRE LLC
350 North LaSalle Street, Suite 1300
Chicago, Illinois 60654
Tel: (312) 589-6370
Fax: (312) 589-6378

DECLARATION

I, Mike Harris, declare under penalty of perjury that the foregoing *Plaintiff Mike Harris's Responses to Defendant comScore, Inc.'s First Set of Interrogatories* is true and correct.

Executed on April 8, 2012 at Chicago, Illinois.



Mike Harris

CERTIFICATE OF SERVICE

I, Chandler R. Givens, an attorney, hereby certify that on April 9, 2012, I served the above and foregoing *Plaintiff Mike Harris's Responses to Defendant comScore, Inc.'s First Set of Interrogatories* by causing true and accurate copies of such paper to be transmitted to the persons shown below via electronic mail.

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Attorneys for Defendant comScore, Inc.

/s/ Chandler R. Givens _____
Chandler R. Givens

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION**

| | | |
|--|---|---------------------------------|
| MIKE HARRIS and JEFF DUNSTAN, individually and on behalf of a class of similarly situated individuals, |) | |
| |) | Case No. 1:11-cv-5807 |
| Plaintiffs, |) | [Hon. James F. Holderman] |
| v. |) | |
| |) | [Magistrate Judge Young B. Kim] |
| COMSCORE, INC., a Delaware corporation, |) | |
| |) | |
| Defendant. |) | |
| |) | |

**PLAINTIFF MIKE HARRIS'S RESPONSES TO
DEFENDANT COMSCORE, INC.'S SECOND SET OF INTERROGATORIES**

Plaintiff Mike Harris ("Harris" or "Plaintiff") provides the following answers to Defendant comScore, Inc.'s ("comScore" or "Defendant") Second Set of Interrogatories:

Answers to Interrogatories

12. Is the EXTERNAL HARD DRIVE still in existence as a DATA storage medium? If your answer is "yes," please IDENTIFY each PERSON that has care, custody or control of the EXTERNAL HARD DRIVE. If your answer is "no," please state the DATE that the EXTERNAL HARD DRIVE (i) ceased to exist as a DATA storage medium and/or (ii) was destroyed or disposed. DESCRIBE in detail the circumstances under which the EXTERNAL HARD DRIVE (i) ceased to exist as a DATA storage medium and/or (ii) was destroyed or disposed of. If your answer is "I do not know," please state the DATE and place where you last recall having care, custody or control of the EXTERNAL HARD DRIVE.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it is unduly burdensome and seeks information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence.

Subject to and without waiving these objections, Plaintiff states that he does not know the circumstances under which the external hard drive ceased to exist as a data storage medium and/or was destroyed or disposed of. Plaintiff states further that, to the best of his recollection, he wiped the data from the external hard drive and last had care, custody or control over it in or

around August 2010, when it was located in his apartment.

* * * * *

13. If the EXTERNAL HARD DRIVE is no longer in your control, but data that you had placed on the hard drive was transferred to another medium, state the date that all or any portion of the data was transferred, along with the identity of each person who at any time had care, custody or control over all or any part of the transferred DATA and describe the transferred DATA over which that person had care, custody or control.

ANSWER: Plaintiff objects to this Interrogatory on the basis that is overly broad (it requires Plaintiff to identify potentially hundreds of individual files that he maintained on his external hard drive approximately two (2) years ago), and seeks information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence (the individual files maintained on his external hard drive are not relevant or reasonably calculated to the class certification analysis).

Subject to and without waiving these objections, Plaintiff states that in or around August 2010, he transferred certain "Windows-compatible" files that were maintained on his external hard drive to the hard drive in his Toshiba laptop. Plaintiff states further that he was the only person that had care, custody or control over his external hard drive when he transferred the data.

* * * * *

14. If the EXTERNAL HARD DRIVE was destroyed or disposed, state why it was destroyed or disposed.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it seeks information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence.

Subject to and without waving these objections, Plaintiff states that he has no specific recollection of destroying or disposing of the external hard drive, but that he ceased using it as a data storage medium because he no longer had any use for it.

* * * * *

15. If DATA was removed or wiped from the EXTERNAL HARD DRIVE, state the IDENTITY of each PERSON who participated in the removal or wiping of such DATA and describe in detail the procedure by which such DATA was removed. Specifically, DESCRIBE the equipment and software used to remove or wipe such DATA from the EXTERNAL HARD DRIVE and the owner of such equipment and software.

ANSWER: Plaintiff objects to this Interrogatory on the basis that it seeks information that is not relevant or reasonably calculated to lead to the discovery of admissible evidence.

Subject to and without waiving his objections, Plaintiff states that he was the only person who participated in the removal or wiping of data on the external hard drive. Plaintiff states further that, to the best of his recollection, he used the Macintosh Operating System's Disk Utility Program to wipe the data from the external hard drive.

As to Answers:

Dated: September 13, 2012

MIKE HARRIS, individually, and on behalf of all others similarly situated,

By: Michael J. Harris

As to Objections:

Dated: September 13, 2012

MIKE HARRIS, individually, and on behalf of all others similarly situated,

By: [Signature]
One of His Attorneys

DECLARATION

I, Mike Harris, declare under penalty of perjury that the foregoing *Plaintiff Mike Harris's Responses to Defendant comScore, Inc.'s Second Set of Interrogatories* is true and correct.

Executed on September 13, 2012 at Chicago, Illinois.



Mike Harris

CERTIFICATE OF SERVICE

I, Rafey S. Balabanian, an attorney, hereby certify that on September 14, 2012, I served the above and foregoing *Plaintiff Mike Harris's Responses to Defendant comScore, Inc.'s Second Set of Interrogatories* by causing true and accurate copies of such paper to be transmitted to the persons shown below via electronic mail, and further by causing true and accurate copies of such paper to be placed in postage prepaid envelopes addressed to the persons shown below, and by causing such envelopes to be deposited in the United States Mailbox located at 350 North LaSalle Street, Chicago, Illinois on September 14, 2012.

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Attorneys for Defendant comScore, Inc.



Rafey S. Balabanian

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

| | | |
|---------------------------------|---|------------------|
| MIKE HARRIS and JEFF DUNSTAN, |) | |
| individually and on behalf of a |) | |
| class of similarly situated |) | |
| individuals, |) | |
| |) | |
| Plaintiffs, |) | |
| |) | |
| -vs- |) | No. 1:11-cv-5807 |
| |) | |
| COMSCORE, INC., a Delaware |) | Judge Holderman |
| corporation, |) | |
| |) | Magistrate Judge |
| |) | Kim |
| Defendant. |) | |
| _____ |) | |

The deposition of COLIN O'MALLEY, called by the Plaintiffs for examination, pursuant to notice and pursuant to the Federal Rules of Civil Procedure for the United States District Courts pertaining to the taking of depositions, taken before Liza M. Perez, Certified Shorthand Reporter and Notary Public within and for the County of Cook and State of Illinois, at 350 North LaSalle Street, 13th Floor, Chicago, Illinois, commencing at the hour of 9:44 a.m. on the 13th day of December, A.D., 2012.

Deposition of Colin O'Malley, 12/13/12

1 APPEARANCES:
 2 EDELSON MCGUIRE, LLC, By
 3 MR. BEN THOMASSEN
 4 350 North LaSalle Street, 13th Floor
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 4 (312) 589-6378 (Facsimile)
 bthomassen@edelson.com
 5
 6 On behalf of the Plaintiffs;
 7
 8 QUINN, EMANUEL, URQUHART & SULLIVAN, LLP, By
 9 MR. STEPHEN A. SWEDLOW
 10 500 West Madison Street, Suite 2450
 Chicago, Illinois 60661
 (312) 705-7400
 (312) 705-7401 (Facsimile)
 11 stephenswedlow@quinnemanuel.com
 12 On behalf of the Defendant.

13 Also Present:
 14 Mr. Tom Cushing, comScore
 Mr. Amir Missaghi, Edelson McGuire
 Mr. Rafey Balabanaian, Edelson McGuire

15 * * * *

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1 (Whereupon, O'Malley Deposition
 2 Exhibit No. 1 was marked for
 3 identification, LMP.)
 4 (Witness duly sworn.)
 5 MR. THOMASSEN: Good morning, Mr. O'Malley.
 6 My name is Ben.
 7 Do you mind if I call you Colin throughout
 8 today?
 9 THE WITNESS: Please.
 10 MR. THOMASSEN: Feel free to call me Ben.
 11 The record should reflect that this is a
 12 deposition of one of comScore's experts produced for
 13 class certification in the matter of Mike Harris and
 14 Jeff Dunstan versus comScore, Incorporated.
 15 COLIN O'MALLEY,
 16 called as a witness herein, having been first duly
 17 sworn, was examined and testified as follows:
 18 DIRECT EXAMINATION
 19 BY MR. THOMASSEN:
 20 Q. Mr. O'Malley -- Colin. I guess I'm probably
 21 going to refer to you as Mr. O'Malley no matter what.
 22 Have you ever been deposed before?
 23 A. No.
 24 Q. Okay. Let me just explain a few things about

1 INDEX
 2
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 4 WITNESS DX
 COLIN O'MALLEY
 5 By Mr. Thomassen 4
 6
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 8 EXHIBITS
 9 O'MALLEY
 10 DEPOSITION EXHIBIT MARKED FOR ID
 11 No. 1 4
 No. 2 47
 12 No. 3 47
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 No. 6 116
 14 No. 7 126
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1 how today is going to go just so you're aware.
 2 The first rule about what we're doing here is
 3 that we have to do everything verbally. The reason
 4 for that is that the court reporter is here and she's
 5 typing down everything we say, so she can't type down
 6 when you nod your head in response to one of my
 7 questions or shrug your shoulders or things like that.
 8 So you just need to answer verbally, okay?
 9 A. Yes.
 10 Q. I'll be asking you questions today. You'll
 11 be providing answers; you've just been sworn in so you
 12 are obliged to answer truthfully. Do you understand
 13 that?
 14 A. Yes.
 15 Q. As I'm asking questions, again, because the
 16 court reporter is here taking down everything we say,
 17 it's important we don't talk over each other. So I
 18 ask that you wait for me to finish a question before
 19 you start answering it, even if you anticipate where
 20 I'm going with it. And then I'll do the same thing
 21 with you; I'll try not to cut you off when you're
 22 giving answers. Does that make sense?
 23 A. Understood.
 24 Q. I'm going to presume that you understand all

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1 A. Based on my conversations with comScore, that
 2 is my understanding.
 3 Q. And the same with the values throughout this
 4 table?
 5 A. Correct.
 6 Q. Okay. You can add something.
 7 A. Well, again, this is data that comScore has
 8 generated for me based on my request for comScore to
 9 help me understand, again, the acceptance rates for
 10 the -- or the consent rates of users that have a
 11 chance to review the disclosures. And I made that
 12 request because I wanted to understand whether or not
 13 it appeared that consumers were, in fact, taking
 14 advantage of the opportunity to read those
 15 disclosures. And that can be broadly measured by
 16 looking at the extent which we're taking some kind of
 17 action one way or the other. And to the extent that
 18 there is diversity in the responses, I've seen
 19 disclosures, as I describe in this report and over the
 20 course of the last ten years professionally, in a wide
 21 array of contexts, and one of the ways that we often
 22 measure the extent to which the disclosures are, in
 23 fact, being interacted by most consumers are these
 24 acceptance rates. And in particular, if you find

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1 accept rates that are well in excess of 90 percent,
 2 that is often an indication that they are not truly
 3 being read, not truly being engaged with.
 4 And the acceptance rate that we're seeing
 5 here which are below half are a strong indication, in
 6 my view, that, in fact, consumers are engaging with
 7 these disclosures and taking constructive actions with
 8 them. And the fact that as we're seeing here, you
 9 know, hundreds of thousands of folks are reading the
 10 disclosures and then deciding not to install is an
 11 indication that the value proposition is, in fact,
 12 being adequately disclosed and that the consumers have
 13 the right and are exercising the right in significant
 14 number to decline as a result. And on the flip side,
 15 of course, the reverse is also true.
 16 Q. But you explained to me that the CS Installs
 17 column has to do with the number of successful
 18 installs after someone has already affirmatively
 19 consented to the installation of the software?
 20 A. Correct.
 21 Q. And you explained that the CS Install column,
 22 the numbers -- that incomplete installs could be from
 23 any number of reasons, technological, conflicts with
 24 the person's computer, things of that nature; is that

Page 80

1 correct?
 2 A. That's right.
 3 Q. Okay. Just so I'm perfectly clear, the
 4 CS Attempts column means that people have given their
 5 affirmative consent to go forward with the
 6 installation, yes?
 7 A. Yes.
 8 Q. Okay. In your view, what percentage -- you
 9 gave a 90 percent threshold as being indicative of
 10 there being no actual choice by a consumer.
 11 MR. SWEDLOW: I'll just object as
 12 mischaracterization. He said well in excess of
 13 90 percent.
 14 MR. THOMASSEN: I'm sorry. I was halfway
 15 through whatever I was saying, so...
 16 MR. SWEDLOW: Well --
 17 MR. THOMASSEN: Let me just start over. I'll
 18 ask a new question.
 19 BY MR. THOMASSEN:
 20 Q. You indicated that a 90 percent accept rate
 21 would be indicative of there being no choice on behalf
 22 of the consumer; is that correct?
 23 MR. SWEDLOW: Objection, mischaracterization
 24 of prior testimony, but you're free to answer his

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1 question.
 2 THE WITNESS: No. So what I said was that
 3 we'd look at these rates as a criteria for evaluating
 4 whether or not the true choice is being granted, and
 5 that a rate in excess of 90 percent would be an
 6 indication that they may not be -- that consumers may
 7 not, in fact, be making a true decision. But I would
 8 not draw any kind of fixed conclusion without
 9 investigating for more context based on a 90 percent
 10 rate. I would say that would be a threshold for
 11 evaluation.
 12 BY MR. THOMASSEN:
 13 Q. Okay. Great. Thanks.
 14 So apart from O'Malley Exhibit 4, was there
 15 anything that's not present on the materials
 16 considered list in your expert report that you
 17 considered in generating your expert opinion?
 18 A. No other specific materials that I can
 19 recall, but, of course, I've been a professional in
 20 the industry for ten years and so there's a body of
 21 knowledge that comes from that work.
 22 Q. Each of the things in the materials
 23 considered list, though, did you specifically rely on
 24 in generating your expert report?

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

MIKE HARRIS and JEFF DUNSTAN,)
individually and on behalf of a class)
of similarly situated individuals,)
Plaintiffs,)
vs.) No. 1:11-cv-5807
COMSCORE INC., a Delaware corporation)
Defendant.)

The deposition of MICHAEL J. HARRIS, called by the Defendant for examination, taken pursuant to notice, agreement and by the provisions of the Rules of Civil Procedure for the United States District Courts pertaining to the taking of depositions, taken before DEBORAH HABIAN, CSR No. 084-002432, a Notary Public within and for the County of Cook, State of Illinois, and a Certified Shorthand Reporter of said State, at the offices of Quinn Emanuel Urquhart & Sullivan, 500 West Madison Street, Suite 2450, Chicago, Illinois, on Friday, the 13th day of July, 2012, at 9:23 a.m.

Job No: 26294

| | | |
|---|--|---|
| 2 | <p>1 A P P E A R A N C E S</p> <p>2 on behalf of the Plaintiffs;</p> <p>3 EDELSON MCGUIRE, LLC</p> <p>4 350 North LaSalle Street, 13th Floor</p> <p>5 Chicago, Illinois 60654</p> <p>6 (312) 589-6370</p> <p>7 BY: JAY EDELSON, ESQ.</p> <p>8 jedelson@edelson.com</p> <p>9 CHANDLER GIVENS, ESQ.</p> <p>10</p> <p>11 on behalf of the Defendant.</p> <p>12 QUINN EMANUEL URQUHART & SULLIVAN, LLP</p> <p>13 500 West Madison Street, Suite 2450</p> <p>14 Chicago, Illinois 60661</p> <p>15 BY: ANDREW H. SCHAPIRO, ESQ.</p> <p>16 andschapiro@quinnemanuel.com</p> <p>17 STEPHEN SWEDLOW, ESQ.</p> <p>18 stephenswedlow@quinnemanuel.com</p> <p>19 LAURA NORRIS, ESQ.</p> <p>20 lauranorris@quinnemanuel.com</p> <p>21</p> <p>22 STACK & O'CONNOR, CHARTERED</p> <p>23 140 South Dearborn Street, Suite 411</p> <p>24 Chicago, Illinois 60603-5232</p> <p>25 (312) 782-0690</p> <p>BY: PAUL F. STACK, ESQ.</p> <p> pstack@stacklaw.com</p> <p>ALSO PRESENT:</p> <p>JOE BEILE, Videographer</p> | 4 |
| 3 | <p>1 MICHAEL J. HARRIS</p> <p>2 I N D E X</p> <p>3 WITNESS: PAGE</p> <p>4 MICHAEL J. HARRIS</p> <p>5 Exam by Mr. Schapiro 6</p> <p>6</p> <p>7 E X H I B I T S</p> <p>8 DEFENDANT'S DESCRIPTION PAGE</p> <p>9 Exhibit 1 Chandler Gives e-mail to 13</p> <p>10 Mike Harris, e-mail address</p> <p>11 wcitymike@rcn.com</p> <p>12 Exhibit 2 8/23/11 engagement letter 17</p> <p>13 between Edelson McGuire</p> <p>14 and Mike Harris</p> <p>15 Exhibit 3 Plaintiff's Response to 20</p> <p>16 Interrogatories</p> <p>17 Exhibit 4 3/13/10 post by Wcitymike 48</p> <p>18 on Ask MetaFiler</p> <p>19</p> <p>20 Exhibit 5 Mike Harris's Supplemental 56</p> <p>21 Responses to comScore's</p> <p>22 Interrogatories</p> <p>23 Exhibit 6 Mike Harris's posts, 66</p> <p>24 Wcitymike on Mac Update</p> <p>25</p> | 5 |
| 2 | <p>1 MICHAEL J. HARRIS</p> <p>2 (Continuing)</p> <p>3 E X H I B I T S</p> <p>4 DEFENDANT'S DESCRIPTION PAGE</p> <p>5 Exhibit 7 Mac Update site description of 71</p> <p>6 the Secret Land Screensaver</p> <p>7 Bates HARRIS-DUNSTAN 004</p> <p>8</p> <p>9 Exhibit 8 3/12/10 Mike Harris posts 66</p> <p>10 Wcitymike on Mac Update</p> <p>11 re troubleshooting</p> <p>12</p> <p>13 Exhibit 9 Mac Update printout with 92</p> <p>14 Roro01 comments</p> <p>15</p> <p>16 Exhibit 10 Complaint 102</p> <p>17</p> <p>18</p> <p>19 INSTRUCTIONS NOT TO ANSWER:</p> <p>20 Page 17, Line 24</p> <p>21 Page 25, Line 12</p> <p>22 Page 33, Line 23</p> <p>23</p> <p>24</p> <p>25</p> | 4 |

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1 **MICHAEL J. HARRIS**

2 A. Without seeing those particular

3 screensavers do that thing, yes. With the exception of

4 the Secret Land Screensaver.

5 **Q. So the Secret Land Screensaver you say you**

6 **did download, correct?**

7 A. Yes.

8 **Q. Why don't you tell us about that. You**

9 **found it -- you downloaded it from the Mac Update site,**

10 **correct?**

11 A. Correct.

12 **Q. And it was this Version 1.1, correct?**

13 A. I have no knowledge of that.

14 **Q. Well, at the end of your comment it says**

15 **in small letters "Version 1.1," correct?**

16 A. Correct.

17 **Q. Any reason to believe that you downloaded**

18 **a different version?**

19 A. I -- no particular reason that I can think

20 of.

21 **Q. Was this an important event in your life?**

22 A. What?

23 MR. EDELSON: Objection.

24 BY MR. SCHAPIRO:

25 **Q. Was this an important event in your life,**

83

1 **MICHAEL J. HARRIS**

2 **downloading the Secret Land Saver -- the Secret Land**

3 **Screensaver?**

4 MR. EDELSON: Objection. Vague.

5 THE WITNESS: Should I still answer?

6 MR. EDELSON: Yes.

7 THE WITNESS: Okay.

8 It would really depend on your definition

9 of the word "important."

10 BY MR. SCHAPIRO:

11 **Q. You don't remember all the details,**

12 **correct?**

13 A. Correct.

14 **Q. And you downloaded it on March 9th,**

15 **correct, 2010?**

16 A. Yes.

17 **Q. And when you downloaded it, what happened?**

18 A. Um....

19 **Q. Actually, let me take it one step at a**

20 **time. What did you do to download it?**

21 A. I would have clicked on -- I seem to re-

22 -- and this may be because this particular, as you can

23 see, it says "Has been discontinued," but I seem to

24 remember on a normal Mac Update web page with a

25 functioning program there being a "download now" link.

84

1 **MICHAEL J. HARRIS**

2 I would have clicked on that.

3 **Q. And do you recall what color the "download**

4 **now" button was?**

5 A. I don't think that it was a button. I

6 think it was a text link. I don't recall the color.

7 **Q. And --**

8 A. As I said, they've changed their layout

9 since that time.

10 **Q. And are you confident that that's how --**

11 **that you would have clicked something that had the text**

12 **"download now" to download it?**

13 A. It was about two years ago. I'm

14 relatively confident, yes.

15 **Q. And then what happened?**

16 A. It would have downloaded a file --

17 **Q. Well, I'm sorry to interrupt, but if you**

18 **could just clarify for us when you say "would have" or**

19 **"did" to the extent that you're talking about your**

20 **general practices or things that you actually remember,**

21 **that would be helpful.**

22 MR. EDELSON: And objection. The -- if

23 you ask the question, he should be allowed to answer the

24 question fully. A few times you've asked a question and

25 then immediately withdrawn it or interrupted him in the

85

1 **MICHAEL J. HARRIS**

2 middle. So I would ask that you have the courtesy -- if

3 you withdraw a question immediately, that's fine, but

4 once he starts answering it, unless he's answering

5 something, you know, that's totally off point, let him

6 finish and then you can clarify.

7 MR. SCHAPIRO: I want only to be

8 courteous, but if I want to withdraw a question, I, of

9 course, am going to withdraw a question, and if I think

10 it's efficient to try and modify something or point

11 something out because I think it's going to save us a

12 little time...

13 MR. EDELSON: Well, you may not interrupt

14 him unless you think he is saying something that's

15 inappropriate. That I believe is improper. I --

16 MR. SCHAPIRO: Are you done?

17 MR. EDELSON: Go ahead.

18 BY MR. SCHAPIRO:

19 **Q. You can answer.**

20 A. Could you repeat the original question?

21 **Q. I can't remember what it was.**

22 **(Counsel reviewing Livenote transcript.)**

23 BY MR. SCHAPIRO:

24 **Q. I think my question was just: "And then**

25 **what happened?" But let me frame the question properly**

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1 **MICHAEL J. HARRIS**
2 **online browsing and purchasing behavior to be monitored,**
3 **collected and once anonymized, used to create market**
4 **reports, materials and other forms of analysis that may**
5 **be shared with our clients to help our clients**
6 **understand Internet trends and patterns and other market**
7 **research purposes. The information which is monitored**
8 **and collected, includes Internet usage information,**
9 **basic demographic information, certain hardware,**
10 **software, computer configuration and application usage**
11 **information about the computer on which you install**
12 **PremierOpinion. We may use the information that we**
13 **monitor such as name and address to better understand**
14 **your household demographics for example we may combine**
15 **the information that you provide us with additional**
16 **information from consumer data brokers and other data**
17 **sources in accordance with our privacy policy. We make**
18 **commercially viable efforts to automatically filter**
19 **confidential personally identifiable information and to**
20 **purge our databases of such information about our**
21 **panelists when inadvertently collected."**
22 **And then the -- Roro, just to finish,**
23 **writes "The developer should have made this CLEAR," in**
24 **all caps, "in the product description above," referring**
25 **to presumably, the top of the page, "yet he didn't**

95

1 **MICHAEL J. HARRIS**
2 **mention it at all."**
3 **Did I read that correctly?**
4 A. **Aside from him saying "The Sting" before**
5 **the quote, I think you did.**
6 **Q. Yes, the subject line says "The Sting."**
7 **Did you use --**
8 A. I'm sorry, not -- I don't mean to quibble,
9 **but just because it's a court proceeding and all that,**
10 **to be really pedantic, I don't think the comments**
11 **actually have subject lines. It's just the first thing**
12 **he typed.**
13 **Q. I see.**
14 A. But it -- I admit it's a pedantic point.
15 **I'm just -- you know.**
16 **Q. Did you see these terms of services -- do**
17 **you recall one way or another whether you saw the terms**
18 **of service that Roro reproduces here during the course**
19 **of your -- before or during the course of your**
20 **installation of the software?**
21 MR. EDELSON: Objection. Lacks
22 **foundation. Assumes facts not in evidence.**
23 BY MR. SCHAPIRO:
24 **Q. You may answer.**
25 A. I don't recall one way or the other.

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1 **MICHAEL J. HARRIS**
2 **Q. Now, Mr. --**
3 A. I'm sorry. I'd like to amend that. I
4 Don't recall one way or the other, but I
5 **strong-- -- I have a strong feeling that I did not, but I**
6 **cannot say that with a hundred percent certainty.**
7 **Q. Mr. Harris, I think we left off when you**
8 **said that the -- this unusual process had begun on your**
9 **computer. Remember that? And you were saying you**
10 **didn't remember exactly how the Mac was configured, but**
11 **you were recreating it?**
12 A. I'm sorry, sir. I don't understand the
13 **question.**
14 **Q. Before we went to Roro's comment, we were**
15 **talking about what happened when you installed the**
16 **screensaver, correct?**
17 A. I think you had asked me what -- what --
18 **you were talking -- you were -- "download now" link and**
19 **then what form it arrived, zip or image, is that what**
20 **you're referring to? Or...**
21 **Q. Yeah.**
22 A. Okay.
23 **Q. And then you referred to the "cloaked**
24 **custom installation application," correct?**
25 A. Yes.

97

1 **MICHAEL J. HARRIS**
2 **Q. So I'd like you to just continue telling**
3 **us what happened as best you can remember.**
4 A. Are you asking from -- from bare memory or
5 **are you asking from -- in terms of what I can remember**
6 **from after looking at these documents?**
7 **Q. Thanks. Why don't you give us both?**
8 A. Okay. In terms of bare memory, I have
9 **very little memory of these specific events having been**
10 **two years in the past. From what I remember, it was**
11 **that a menu extra showed up and -- on my menu bar.**
12 And by "show up," I think that probably
13 **deserves better clarification because it was a white**
14 **star on a white menu bar, and I would not have noticed**
15 **its installation except for the fact that it displaced a**
16 **menu extra, causing a white gap on the bar, which is**
17 **something that doesn't actually occur on a Macintosh.**
18 **They're all right justified. So when I noticed that**
19 **unusual behavior, I clicked on the white space and, you**
20 **know, saw the information.**
21 I presume at that time the comment
22 **actually describes much of what I tried to do, the**
23 **comment history: "If you try to quit this menu extra**
24 **using tools such as Activity Monitor the application**
25 **will restore because on installation this screensaver's**

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

MIKE HARRIS and JEFF)
DUNSTAN, individually and)
on behalf of a class of) No. 1:11-cv-5807
similarly situated)
individuals,)
Plaintiffs,)
vs.)
COMSCORE, INC., a)
Delaware corporation,)
Defendant.)

THE VIDEOTAPED DEPOSITION OF JEFFREY DUNSTAN

August 8, 2012

Chicago, Illinois

9:37 a.m.

REPORTED BY:
SHERI E. LISS
JOB NO: 26487

| | | | |
|---|---|---|---|
| 2 | <p>1 DEPOSITION OF JEFFREY DUNSTAN</p> <p>2 The videotaped deposition of JEFFREY</p> <p>3 DUNSTAN, called by the Defendant for examination,</p> <p>4 taken pursuant to the Code of Civil Procedure and</p> <p>5 the Rules of the Supreme Court of the State of</p> <p>6 Illinois pertaining to the taking of depositions for</p> <p>7 the purposes of evidence, taken before Sheri E.</p> <p>8 Liss, CSR NO. 084-002600, a Certified Shorthand</p> <p>9 Reporter within and for the State of Illinois,</p> <p>10 Registered Professional Reporter, Certified Realtime</p> <p>11 Reporter, at the offices of Quinn Emanuel Urquhart &</p> <p>12 Sullivan, LLP, 500 West Madison Street, Suite 2450,</p> <p>13 Chicago, Illinois, on August 8, 2012 at the hour</p> <p>14 9:37 o'clock a.m.</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> | 4 | |
| 3 | <p>1 DEPOSITION OF JEFFREY DUNSTAN</p> <p>2 APPEARANCES:</p> <p>3 On behalf of the Plaintiffs:</p> <p>4 EDELSON MCGUIRE, LLC</p> <p>5 350 North LaSalle Street, 13th Floor</p> <p>6 Chicago, Illinois 60654</p> <p>7 BY: JAY EDELSON, ESQ.</p> <p>8 jedelson@edelson.com</p> <p>9 CHANDLER GIVENS, ESQ.</p> <p>10 BEN THOMASSEN, ESQ.</p> <p>11</p> <p>12 On behalf of the Defendant:</p> <p>13 QUINN EMANUEL URQUHART & SULLIVAN, LLP</p> <p>14 500 West Madison Street, Suite 2450</p> <p>15 Chicago, Illinois 60661</p> <p>16 (312) 705-7400</p> <p>17 BY: STEPHEN SWEDLOW, ESQ.</p> <p>18 stephenswedlow@quinnemanuel.com</p> <p>19 ANDREW H. SCHAPIRO, ESQ.</p> <p>20 andyschapiro@quinnemanuel.com</p> <p>21 LAURA NORRIS, ESQ.</p> <p>22 lauranorris@quinnemanuel.com</p> <p>23</p> <p>24</p> <p>25</p> | <p>1 DEPOSITION OF JEFFREY DUNSTAN</p> <p>2 APPEARANCES (continued):</p> <p>3 DEPUTY GENERAL COUNSEL AND</p> <p>4 PRIVACY OFFICER FOR COMSCORE</p> <p>5 11950 Democracy Drive, Suite 600</p> <p>6 Reston, Virginia 20190-5624</p> <p>7 (703) 438-2000</p> <p>8 BY: THOMAS S. CUSHING, III, ESQ.</p> <p>9 tcushing@comscore.com</p> <p>10</p> <p>11 ALSO PRESENT:</p> <p>12 JACK YAMIN, Edelson McGuire Summer Associate</p> <p>13 JEREMY MANGAN, Videographer</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> | 5 |
| 3 | <p>1 DEPOSITION OF JEFFREY DUNSTAN</p> <p>2 I N D E X</p> <p>3</p> <p>4 JEFFREY DUNSTAN</p> <p>5 EXAMINATION PAGE</p> <p>6 By Mr. Swedlow 7, 65</p> <p>7</p> <p>8 E X H I B I T S</p> <p>9 NO. DESCRIPTION MARKED/REFERRED TO</p> <p>10 Exhibit 1 Document ^ CK 12</p> <p>11 Exhibit 2 Answers to Interrogatories 18</p> <p>12 Exhibit 3 Confirmation of order for 20</p> <p>13 PC Tools Spy Doctor.</p> <p>14 Exhibit 4 Document 33</p> <p>15 Exhibit 5 Resumé 34</p> <p>16 Exhibit 6 Document 36</p> <p>17 Exhibit 7 Computer log 38</p> <p>18 Exhibit 8 Receipt for PC Tools 41</p> <p>19 Spyware Doctor</p> <p>20 Exhibit 9 Document 46</p> <p>21 Exhibit 10 Screen shot of desktop 50</p> <p>22 Exhibit 11 Screen shot of desktop 51</p> <p>23 Exhibit 12 Post on SeaMonkey about 57</p> <p>24 cookies</p> <p>25 Exhibit 13 Attachment to post on 58</p> <p>SeaMonkey about cookies</p> <p>Exhibit 14 Google search of TurkeyWorm 63</p> | <p>1 DEPOSITION OF JEFFREY DUNSTAN</p> <p>2 I N D E X</p> <p>3</p> <p>4 JEFFREY DUNSTAN</p> <p>5 EXAMINATION PAGE</p> <p>6 By Mr. Swedlow 7, 65</p> <p>7</p> <p>8 E X H I B I T S</p> <p>9 NO. DESCRIPTION MARKED/REFERRED TO</p> <p>10 Exhibit 1 Document ^ CK 12</p> <p>11 Exhibit 2 Answers to Interrogatories 18</p> <p>12 Exhibit 3 Confirmation of order for 20</p> <p>13 PC Tools Spy Doctor.</p> <p>14 Exhibit 4 Document 33</p> <p>15 Exhibit 5 Resumé 34</p> <p>16 Exhibit 6 Document 36</p> <p>17 Exhibit 7 Computer log 38</p> <p>18 Exhibit 8 Receipt for PC Tools 41</p> <p>19 Spyware Doctor</p> <p>20 Exhibit 9 Document 46</p> <p>21 Exhibit 10 Screen shot of desktop 50</p> <p>22 Exhibit 11 Screen shot of desktop 51</p> <p>23 Exhibit 12 Post on SeaMonkey about 57</p> <p>24 cookies</p> <p>25 Exhibit 13 Attachment to post on 58</p> <p>SeaMonkey about cookies</p> <p>Exhibit 14 Google search of TurkeyWorm 63</p> | 5 |

| | | | |
|---|--|---|--|
| 6 | <p>1 DEPOSITION OF JEFFREY DUNSTAN</p> <p>2 THE VIDEOGRAPHER: We are now on the</p> <p>3 record. This marks the beginning of Videotape No. 1</p> <p>4 in the deposition of Jeff Dunstan in the matter of</p> <p>5 Mike Harris and Jeff Dunstan versus Comscore, Inc.,</p> <p>6 in the U.S. District Court for the Northern District</p> <p>7 of Illinois, Eastern Division, case</p> <p>8 No. 1:11-cv-5807. This deposition is being held at</p> <p>9 500 West Madison Street, Chicago, Illinois, on</p> <p>10 August 8, 2012. And the time is now 9:37 a.m.</p> <p>11 Will the attorneys please identify</p> <p>12 themselves.</p> <p>13 MR. SWEDLOW: Steven Swedlow on behalf</p> <p>14 of Comscore, along with Andy Schapiro, Laura Norris</p> <p>15 and Tom Cushing.</p> <p>16 MR. EDELSON: Jay Edelson on behalf of</p> <p>17 the Plaintiff Class. And if I knew I had to</p> <p>18 remember everybody's names at the firm, I would have</p> <p>19 prepared. Chandler Givens and Ben Thomassen and</p> <p>20 Jack Yamin. I should say Jack Yamin is a law</p> <p>21 student, is a summer associate, so he is not here in</p> <p>22 the capacity of an attorney.</p> <p>23 (Whereupon, the witness was</p> <p>24 sworn.)</p> <p>25</p> | 8 | <p>1 DEPOSITION OF JEFFREY DUNSTAN</p> <p>2 MR. SWEDLOW: I don't understand what --</p> <p>3 he is's not supposed to give --</p> <p>4 MR. EDELSON: There may be instances,</p> <p>5 for example, if you ask for privileged information</p> <p>6 that there would be an instruction not to answer.</p> <p>7 MR. SWEDLOW: I'm not done with the</p> <p>8 guidelines.</p> <p>9 MR. EDELSON: I apologize.</p> <p>10 MR. SWEDLOW: I think that it is</p> <p>11 unobjectionable to say that he's supposed to give</p> <p>12 full, complete and honest answers and I am allowed</p> <p>13 to know if there is some reason he can't. Then when</p> <p>14 we get to privileged communications, I'll explain</p> <p>15 that to him. I also said at the beginning you could</p> <p>16 change or add anything you wanted.</p> <p>17 MR. EDELSON: And that's the only reason</p> <p>18 I jumped in. So when your colleague gave</p> <p>19 instructions, he didn't say your attorney can add to</p> <p>20 it. And so if you're saying for the record that I</p> <p>21 have the right to do that, I feel I have to object.</p> <p>22 But if you just want to give your own instructions,</p> <p>23 I'll wait until the end. I wasn't being difficult.</p> <p>24 I just wanted clarity in the record.</p> <p>25 MR. SWEDLOW: If I say that you have the</p> |
| 7 | <p>1 DEPOSITION OF JEFFREY DUNSTAN</p> <p>2 JEFFREY DUNSTAN,</p> <p>3 having been first duly sworn, was examined and</p> <p>4 testified as follows:</p> <p>5 EXAMINATION</p> <p>6 BY MR. SWEDLOW:</p> <p>7 Q. Good morning. Could you please state</p> <p>8 and spell your name for the record.</p> <p>9 A. Jeff Dunstan, J-e-f-f, then</p> <p>10 D-u-n-s-t-a-n.</p> <p>11 Q. Have you ever been deposed before?</p> <p>12 A. No.</p> <p>13 Q. I'm going to give you some instructions</p> <p>14 and guidelines for the deposition. If you don't</p> <p>15 understand them or if your attorney wants to add to</p> <p>16 those, you'll get that chance. The first guideline</p> <p>17 or rule is that I'm going to ask questions and</p> <p>18 you're expected to answer fully, completely and</p> <p>19 honestly to the best of your abilities.</p> <p>20 Is there any reason why you can't</p> <p>21 give full and complete and honest answers today?</p> <p>22 A. No.</p> <p>23 Q. The second guideline --</p> <p>24 MR. EDELSON: Objection. That's not a</p> <p>25 proper guideline.</p> | 9 | <p>1 DEPOSITION OF JEFFREY DUNSTAN</p> <p>2 opportunity to add to it you feel like you must</p> <p>3 object to the first one? I don't even understand.</p> <p>4 Are we going to do this all day? I was trying to</p> <p>5 give him unobjectionable guidelines and as soon as I</p> <p>6 finished the first one you objected.</p> <p>7 MR. EDELSON: Right. And I explained</p> <p>8 why, because it wasn't accurate. But again, if</p> <p>9 you're saying -- I'll wait until the end. You can</p> <p>10 do the whole thing and I don't have a need to</p> <p>11 supplement things, they're your instructions and I</p> <p>12 don't have a problem. I was doing it just for</p> <p>13 completeness of the record.</p> <p>14 BY MR. SWEDLOW:</p> <p>15 Q. You're obligated under the rules of the</p> <p>16 court to give full and complete and honest answers</p> <p>17 to each question that I ask here today. If your</p> <p>18 attorney wants to object to some question that I've</p> <p>19 asked, you still have to answer the question unless</p> <p>20 he instructs you not to answer the question.</p> <p>21 Do you understand that guideline?</p> <p>22 A. I understand that.</p> <p>23 Q. I'm going to try to let you finish your</p> <p>24 answers and I would like you to let me finish my</p> <p>25 questions because the court reporter is recording</p> |

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1 DEPOSITION OF JEFFREY DUNSTAN
 2 them stop doing this and acknowledgment that what
 3 they did was wrong.
 4 **Q. What is it that you believe they did**
 5 **wrong?**
 6 A. They invaded my computer.
 7 **Q. Do you specifically recall downloading**
 8 **the Photo Cutter software?**
 9 A. No, I don't.
 10 **Q. Is it correct to assume that both you**
 11 **and your wife, Lori, use the same computer -- excuse**
 12 **me, used the same computer in September of 2010?**
 13 A. It's possible.
 14 **Q. I'm asking if she did use the same**
 15 **computer in 2010. And what I mean by that is**
 16 **whatever computer you believe was invaded, did Lori**
 17 **also use that computer in 2010?**
 18 A. She did.
 19 **Q. What Internet Explorer or web browser do**
 20 **you use?**
 21 A. SeaMonkey.
 22 **Q. Just so I make sure we're saying the**
 23 **same thing, you use SeaMonkey to surf the Web?**
 24 A. Correct.
 25 **Q. That's instead of Internet Explorer?**

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1 DEPOSITION OF JEFFREY DUNSTAN
 2 A. Correct.
 3 **Q. Or Firefox?**
 4 A. Or Firefox, or Opera or Chrome.
 5 **Q. How long have you been using SeaMonkey**
 6 **to explore -- surf the Web?**
 7 A. SeaMonkey is the next generation of
 8 Mozilla and I've used Mozilla probably for eight
 9 years, 10 years, something like that.
 10 **Q. Do you also use Internet Explorer?**
 11 A. No, not if I could avoid it.
 12 **Q. Do you know if your wife uses Internet**
 13 **Explorer?**
 14 A. I've told her not to.
 15 **Q. Do you know if she has?**
 16 A. Not for quite a while.
 17 **Q. Do you know if she used Internet**
 18 **Explorer back in September of 2010?**
 19 A. No, I had asked her to stop using it way
 20 before then.
 21 **Q. Did anyone else use your computer, the**
 22 **one --**
 23 A. No.
 24 **Q. Let me finish the question for the**
 25 **record.**

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1 DEPOSITION OF JEFFREY DUNSTAN
 2 -- the one that is at issue in this
 3 case back in September of 2010?
 4 A. No.
 5 MR. EDELSON: Objection. Foundation.
 6 BY MR. SWEDLOW:
 7 **Q. On the Exhibit 1, it says "Jeff Dunstan"**
 8 **and then it says "TurkeyWorm@Earthlink.net."**
 9 **Do you see that?**
 10 A. Yes.
 11 **Q. Is that your e-mail address?**
 12 A. Yes.
 13 **Q. Have you also had or currently have an**
 14 **e-mail address of TurkeyWorm@GMail.com?**
 15 A. Yes.
 16 **Q. Have you also had an or have an e-mail**
 17 **TurkeyWorm@Gleep.com?**
 18 A. Yes. Many, many, many years ago.
 19 **Q. Have you also had an e-mail or currently**
 20 **have an e-mail TurkeyWorm@Hotmail.com?**
 21 A. Yes.
 22 **Q. Have you ever had an e-mail**
 23 **TurkeyWorm@Yahoo.com?**
 24 A. No.
 25 **Q. Have you ever had a Yahoo e-mail**

29

1 DEPOSITION OF JEFFREY DUNSTAN
 2 account?
 3 A. I do. Yes.
 4 **Q. You do have a --**
 5 A. I do have a -- yes.
 6 **Q. What is your Yahoo e-mail address?**
 7 A. JeffD9X18@yahoo.com.
 8 **Q. Have you ever had an e-mail address that**
 9 **includes as the name "I'm so taken"?**
 10 A. No.
 11 **Q. Has anybody named Jeannie Holmes used**
 12 **your computer in your house?**
 13 A. No.
 14 **Q. Do you know a Jeannie Holmes?**
 15 A. No.
 16 **Q. Do you know one way or another whether**
 17 **you or Lori Baxter downloaded the Photo Cutter**
 18 **application?**
 19 MR. EDELSON: Objection. Foundation.
 20 BY THE WITNESS:
 21 A. I don't remember downloading it.
 22 BY MR. SWEDLOW:
 23 **Q. I'm going to ask you a series of**
 24 **questions that should be answered by "I don't**
 25 **remember downloading it," but I'm going to ask more**

30

1 **DEPOSITION OF JEFFREY DUNSTAN**
2 **specifically.**
3 MR. EDELSON: Objection. That's an
4 improper leading of the witness.
5 BY MR. SWEDLOW:
6 **Q. Do you remember what first appeared when**
7 **the Photo Cutter application was initially**
8 **downloaded on your computer?**
9 A. No.
10 **Q. Do you recall what appeared next after**
11 **the Photo Cutter icon appeared on your screen?**
12 A. No.
13 **Q. Do you know what appeared on any screen**
14 **at any time during any portion of the Photo Cutter**
15 **download?**
16 A. No.
17 **Q. Do you recall any aspect of any screen**
18 **that was shown during the download of the Relevant**
19 **Knowledge software?**
20 A. Say that one again.
21 **Q. Do you recall any screen that was**
22 **displayed at any point during the download of the**
23 **Relevant Knowledge software?**
24 A. No.
25 **Q. Have you ever uninstalled any other**

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1 **DEPOSITION OF JEFFREY DUNSTAN**
2 **program from your computer without purchasing**
3 **software to do it?**
4 A. Yes.
5 **Q. Do you understand generally how to**
6 **uninstall a computer -- excuse me. Scratch that.**
7 **Do you understand generally how to**
8 **uninstall a program from your computer?**
9 A. There are sometimes multiple ways to do
10 that.
11 **Q. Do you know how to do it within the**
12 **Windows operating system?**
13 A. Yes.
14 **Q. Do you have an understanding of the**
15 **function Add Or Remove Programs being the way to do**
16 **that?**
17 A. Yes.
18 **Q. Did you attempt to remove the Relevant**
19 **Knowledge program through the Add or Remove?**
20 A. Yes.
21 **Q. What happened when you tried to do that?**
22 A. I believe it appeared to be removed.
23 **Q. Was this before or after you purchased**
24 **the PC Tools Spyware Doctor anti-virus program?**
25 A. That would have been before.

32

1 DEPOSITION OF JEFFREY DUNSTAN
2 **Q. When you say "it appeared to be**
3 **removed," did it function as if it was removed also?**
4 A. I don't remember.
5 **Q. Did you have any problems after you used**
6 **the Microsoft Add or Remove function to remove the**
7 **Relevant Knowledge program?**
8 A. Yes.
9 **Q. What is the problem?**
10 A. Upon starting my computer the next time,
11 my server was hijacked again.
12 **Q. What do you mean your server was**
13 **hijacked again?**
14 A. It would not go to my ISP server. It
15 was being -- and the computer came up saying some
16 words to the effect another server is interrupting.
17 I could not get on the Internet. I do not remember
18 the exact words.
19 **Q. Did you have anti-virus software already**
20 **on your computer when you purchased the Spyware**
21 **Doctor?**
22 A. Yes.
23 **Q. Did you attempt to use that anti-virus**
24 **software to remove this program?**
25 A. I don't remember.

33

1 DEPOSITION OF JEFFREY DUNSTAN
2 **Q. Handing you what's been marked as**
3 **Exhibit 4. It's a multi-page document.**
4 **(Whereupon, Dunstan Exhibit 4**
5 **marked as requested.)**
6 **(Whereupon, the document was**
7 **tendered.)**
8 BY MR. SWEDLOW:
9 **Q. It's also labeled Exhibit A on the top.**
10 **I want you to turn to the third**
11 **page in the document, so it's the fourth total page**
12 **if you include the page that says Exhibit A. And**
13 **there should be something midway down the page that**
14 **says "A, Software Plus."**
15 **Do you see that?**
16 A. Okay. Yes.
17 **Q. Do you recall ever seeing this window on**
18 **your computer?**
19 A. No.
20 **Q. Can you say one way or another whether**
21 **this window ever appeared on your computer?**
22 A. No.
23 **Q. Where do you currently work?**
24 A. Sears in Bakersfield.
25 **Q. Did you work at Sears in Bakersfield in**

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

| | | |
|-------------------------------|---|--------------------|
| MIKE HARRIS and JEFF DUNSTAN, |) | |
| individually and on behalf of |) | |
| a class of similarly situated |) | |
| individuals, |) | |
| |) | |
| Plaintiffs, |) | |
| vs. |) | Case No. 1:11-5807 |
| |) | |
| COMSCORE, INC., a Delaware |) | |
| corporation, |) | |
| |) | |
| Defendant. |) | |

*** CONFIDENTIAL -- ATTORNEYS' EYES ONLY ***

The 30(b)(6) deposition of COMSCORE, INC. by MICHAEL BROWN, called for examination, taken pursuant to the Federal Rules of Civil Procedure of the United States District Courts pertaining to the taking of depositions, taken before JENNIFER L. WIESCH, CSR No. 84-4528, a Notary Public within and for the County of Will, State of Illinois, and a Certified Shorthand Reporter of said state, at 350 North LaSalle Street, Suite 1300, Chicago, Illinois, on the 15th day of August, A.D. 2012, at 9:36 a.m.

Job No: 26674

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|---|--|---|
| 2 | <p>1 A P P E A R A N C E S:</p> <p>2 On behalf of Plaintiffs:</p> <p>3 EDELSON McGUIRE, LLC</p> <p>4 350 North LaSalle, Suite 1300</p> <p>5 Chicago, Illinois 60654</p> <p>6 BY: RAFEY S. BALABANIAN, ESQ.</p> <p>7 rbalabanian@edelson.com</p> <p>8 CHANDLER GIVENS, ESQ.</p> <p>9 cgivens@edelson.com</p> <p>10 BEN THOMASSEN, ESQ.</p> <p>11 bthomassen@edelson.com</p> <p>12</p> <p>13 On behalf of Defendant:</p> <p>14 QUINN EMANUEL URQUHART & SULLIVAN, LLP</p> <p>15 500 West Madison Street, Suite 2450</p> <p>16 Chicago, Illinois 60661</p> <p>17 312-705-7400</p> <p>18 BY: ANDREW SCHAPIRO, ESQ.</p> <p>19 andyschapiro@quinnemanuel.com</p> <p>20 ROBYN M. BOWLAND, ESQ.</p> <p>21 robynbowland@quinnemanuel.com</p> <p>22</p> <p>ALSO PRESENT:</p> <p>23 MR. THOMAS S. CUSHING III,</p> <p>comScore Deputy General Counsel and</p> <p>24 Privacy Officer;</p> <p>25 MR. AMIR MISSAGHI, Summer Associate.</p> | 4 |
| 3 | <p>1 I N D E X</p> <p>2 Examination Page</p> <p>3 MICHAEL BROWN</p> <p>4 Examination By Mr. Balabanian 5</p> <p>5</p> <p>6 E X H I B I T S</p> <p>7 Number Description Page</p> <p>8 Brown Exhibit</p> <p>9 Exhibit 1 comScore, Inc. vs. The Nielsen 14</p> <p>Company (US), LLC and NetRatings,</p> <p>10 LLC, Defendants' Brief in</p> <p>Opposition to Plaintiff comScore's</p> <p>11 Motion for Proposed Claim</p> <p>Constructions and Partial Summary</p> <p>12 Judgment of Infringement, 39 pages</p> <p>13 Exhibit 2 Harris & Dunstan vs. comScore, 21</p> <p>Inc., Plaintiffs' Revised Notice</p> <p>14 of Rule 30(b)(6) Deposition of</p> <p>Defendant comScore, Inc., 6 pages</p> <p>15</p> <p>16 Exhibit 3 comScore Software Distribution 98</p> <p>Program Software Bundle Guidelines</p> <p>17 For New Partner, Bates Nos.</p> <p>CS0016693 through CS0016705</p> <p>18 Exhibit 4 Exhibit A, PremierOpinion Terms of 116</p> <p>Service, 2 pages</p> <p>19</p> <p>20 Exhibit 5 XML file containing different 127</p> <p>pieces of the Terms of Service or</p> <p>URL agreement for multiple brands</p> <p>21 in multiple languages, 24 pages</p> <p>22 Exhibit 6 Various contents, Bates Nos. 163</p> <p>CS0015891 through CS0016005</p> <p>23</p> <p>24 Exhibit 7 comScore Ticket No. 22, Bates No. 203</p> <p>CS0016053</p> <p>25 Exhibit 8 comScore Ticket No. 180, Bates No. 212</p> | 5 |

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|----|---|----|--|
| 66 | <p>1 MICHAEL BROWN</p> <p>2 can you -- would -- who is who? Who are you</p> <p>3 referring to as we? I'm sorry.</p> <p>4 Q. Is it through the research program that</p> <p>5 comScore is able to gather digital data and provide</p> <p>6 analytics to businesses about that digital data?</p> <p>7 A. That is one method.</p> <p>8 Q. Okay. What's another method, or what are</p> <p>9 all the methods, I should say?</p> <p>10 A. So there are some clients that ask us to</p> <p>11 install equipment at their data center and to run</p> <p>12 our software and analytics on the equipment, on the</p> <p>13 data that they have, for example.</p> <p>14 Q. Okay.</p> <p>15 A. That's one example. There's also things</p> <p>16 called JICs for joint industry consortiums,</p> <p>17 primarily outside the United States. They ask us to</p> <p>18 help organize a research effort for them that</p> <p>19 doesn't require use of panelists. An example of</p> <p>20 that is the GSM, a project in the UK.</p> <p>21 Q. Do all panelists have comScore's software</p> <p>22 installed on their systems?</p> <p>23 A. No.</p> <p>24 Q. Can you be a panelist without having</p> <p>25 comScore's software installed on your system?</p> | 68 | <p>1 MICHAEL BROWN</p> <p>2 ways in which you can be a panelist, an individual</p> <p>3 can be a panelist?</p> <p>4 A. Not that I know of.</p> <p>5 Q. Okay. Do you know if comScore has any</p> <p>6 subsidiary corporations, companies?</p> <p>7 A. Yeah.</p> <p>8 Q. You do know that?</p> <p>9 A. Uh-huh, I do.</p> <p>10 Q. Do you know -- do you know how many</p> <p>11 subsidiaries comScore has?</p> <p>12 A. I do not know the exact count.</p> <p>13 Q. Do you have an estimate?</p> <p>14 A. I know it's a few.</p> <p>15 Q. What's your understanding of what a</p> <p>16 subsidiary is?</p> <p>17 A. A wholly owned company.</p> <p>18 Q. Do you understand that they have some</p> <p>19 type of relationship with comScore?</p> <p>20 MR. SCHAPIRO: Who?</p> <p>21 MR. BALABANIAN: The subsidiaries.</p> <p>22 BY THE WITNESS:</p> <p>23 A. Yes.</p> <p>24 BY MR. BALABANIAN:</p> <p>25 Q. Okay. Can you name for me all the</p> |
| 67 | <p>1 MICHAEL BROWN</p> <p>2 A. Yes.</p> <p>3 Q. How would you be that type of panelist?</p> <p>4 A. They would be a survey panelist.</p> <p>5 Q. So they've agreed to take part of surveys</p> <p>6 that comScore provides them?</p> <p>7 A. Yes.</p> <p>8 Q. Okay. And so panelists -- is it correct</p> <p>9 to say that panelists are either individuals who</p> <p>10 have comScore's software deployed on their system</p> <p>11 and as well as individuals who have agreed to take</p> <p>12 part in surveys that comScore has provided or</p> <p>13 provides?</p> <p>14 MR. SCHAPIRO: Objection, misstates his prior</p> <p>15 testimony.</p> <p>16 BY MR. BALABANIAN:</p> <p>17 Q. Well, then what is it? How many</p> <p>18 different ways can you be a panelist?</p> <p>19 A. You can either be a panelist with</p> <p>20 software on your machine, or you can be a panelist</p> <p>21 where you're just taking surveys.</p> <p>22 Q. So there's two types of panelists, right?</p> <p>23 A. Two broad categories of panelist.</p> <p>24 Q. Okay. And aside from those two ways in</p> <p>25 which you can be a panelist, are there any other</p> | 69 | <p>1 MICHAEL BROWN</p> <p>2 subsidiaries you know of?</p> <p>3 A. I believe one of them is ARS. Another</p> <p>4 one is Carmenere Holdings, NedStat, The Market</p> <p>5 Research Group is --</p> <p>6 Q. TMRG?</p> <p>7 A. It stands for The Market Research Group.</p> <p>8 Q. Okay.</p> <p>9 A. VoiceFive. Those are the ones I recall</p> <p>10 off the top of my head, sir.</p> <p>11 Q. Is CreativeKnowledge a subsidiary of</p> <p>12 comScore?</p> <p>13 A. I believe so.</p> <p>14 Q. How about Knowledge Networks, Inc.?</p> <p>15 A. I believe so.</p> <p>16 Q. I don't think this is, but Sears Holding</p> <p>17 Management Com -- Corp., is that a subsidiary?</p> <p>18 A. I don't think so.</p> <p>19 Q. Any others --</p> <p>20 MR. SCHAPIRO: Well, eventually that would</p> <p>21 have a conflict. Doesn't Dunstan work at Sears?</p> <p>22 MR. BALABANIAN: He does. It's over. Move to</p> <p>23 disqualify.</p> <p>24 BY THE WITNESS:</p> <p>25 A. So I don't know, sir.</p> |

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|----|--|----|--|
| 82 | <p>1 MICHAEL BROWN</p> <p>2 A. No.</p> <p>3 Q. Okay. So other than them being</p> <p>4 identified in the terms of service, what are the</p> <p>5 other ways you think they own it?</p> <p>6 A. From conversations with internal legal.</p> <p>7 Q. But you've never seen a contract between</p> <p>8 comScore and TMRG with respect to PermissionResearch</p> <p>9 software?</p> <p>10 A. I have not.</p> <p>11 Q. Is PermissionResearch software that's</p> <p>12 exclusive -- that brand, excuse me, is that</p> <p>13 exclusive to TMRG?</p> <p>14 A. I'm sorry, I didn't follow the question.</p> <p>15 Can you repeat?</p> <p>16 Q. Is the PermissionResearch brand of</p> <p>17 software, is that exclusive to TMRG, or do other</p> <p>18 subsidiaries own that as well?</p> <p>19 A. I believe it's exclusive.</p> <p>20 Q. Okay. Do you know who owns</p> <p>21 RelevantKnowledge -- withdraw that question. You</p> <p>22 don't have to answer that.</p> <p>23 Do you know how many different brands of</p> <p>24 OSSProxy there are?</p> <p>25 A. I do not recall the exact count.</p> | 84 | <p>1 MICHAEL BROWN</p> <p>2 brand?</p> <p>3 A. It's common practice in the market</p> <p>4 research to have multiple brands to make sure that</p> <p>5 you do not have too much bias in your data.</p> <p>6 Q. What do you mean by to make sure you</p> <p>7 don't have too much bias? Bias from who?</p> <p>8 A. So may I give you an analogy?</p> <p>9 Q. Sure.</p> <p>10 A. Thank you.</p> <p>11 Q. Answer however you want.</p> <p>12 A. So much like if you're doing an election</p> <p>13 polling, you don't want to go to one location to ask</p> <p>14 what their opinions are on something, because you'd</p> <p>15 be biased to their -- to that location specific</p> <p>16 opinions, and they may be varying over the United</p> <p>17 States. It's also -- you want to have -- reduce</p> <p>18 bias by having different value propositions for</p> <p>19 those panelists, so you don't get all of one type of</p> <p>20 people; for example, RelevantKnowledge, we do trees,</p> <p>21 we plant trees if they become a panelist. Survey</p> <p>22 opinion -- I'm sorry, OpinionSquare is for people</p> <p>23 that like to take surveys and help influence the</p> <p>24 internet. And those are examples of different</p> <p>25 panelists coming together to try to reduce bias.</p> |
| 83 | <p>1 MICHAEL BROWN</p> <p>2 Q. Do you have an estimate?</p> <p>3 A. Yes.</p> <p>4 Q. What's your estimate?</p> <p>5 A. About ten to 12.</p> <p>6 Q. Can you list for me, as best you can, all</p> <p>7 the different brands?</p> <p>8 A. Sure.</p> <p>9 Q. Go for it.</p> <p>10 A. Okay. PermissionResearch,</p> <p>11 RelevantKnowledge, KN Connection, 88Circle,</p> <p>12 OpinionSquare, PremierOpinion. Those are the ones I</p> <p>13 can recall names off the top of my head, sir.</p> <p>14 Q. What about MarketScore?</p> <p>15 A. That is a nonactive brand.</p> <p>16 Q. It's not an active brand?</p> <p>17 A. That is correct.</p> <p>18 Q. When was that brand in existence?</p> <p>19 A. I'm going to give you an approximate</p> <p>20 date --</p> <p>21 Q. Sure.</p> <p>22 A. -- if that's acceptable. Approximately</p> <p>23 2001 to 2006 maybe. Those are approximate dates. I</p> <p>24 do not recall specific dates.</p> <p>25 Q. Do you know why it's no longer an active</p> | 85 | <p>1 MICHAEL BROWN</p> <p>2 Q. So do some of the brands have to do with</p> <p>3 survey panelists as opposed to software panelists?</p> <p>4 A. As you requested earlier, all questions</p> <p>5 have been answered with requests to software, all</p> <p>6 those are survey -- or, sorry, are software</p> <p>7 panelists.</p> <p>8 Q. Okay.</p> <p>9 A. We do have the option to survey.</p> <p>10 Q. Do you know whether MarketScore was</p> <p>11 discontinued because it was detected by antivirus</p> <p>12 software?</p> <p>13 A. That was not the reason.</p> <p>14 Q. Okay. What about e-Trends, is that a</p> <p>15 brand?</p> <p>16 A. It's not an active brand.</p> <p>17 Q. When was that brand in existence?</p> <p>18 A. e-Trends, I'm not 100 percent certain of</p> <p>19 the start date because that brand was under</p> <p>20 existence under a separate company, from</p> <p>21 MediaMetrix, and came to us through our acquisition</p> <p>22 of assets in the summer of 2002, so the start date</p> <p>23 I'm not sure on. It was in operation probably, I</p> <p>24 think, up until about two years ago.</p> <p>25 Q. Okay. Why was it discontinued?</p> |

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| 106 | <p>1 MICHAEL BROWN</p> <p>2 Q. -- subsidiaries -- go ahead.</p> <p>3 A. The wording you're using is not the same</p> <p>4 words I would use. There is registration sites that</p> <p>5 execute QA's prescribed process --</p> <p>6 Q. Okay.</p> <p>7 A. -- if things have been completed, as in</p> <p>8 the viewing of the terms of service, some of the</p> <p>9 privacy disclosures, even for any information that's</p> <p>10 captured about like, for example, their name,</p> <p>11 address, those all have to happen -- those are</p> <p>12 all -- happen, and the disclosure happens first.</p> <p>13 After that is completed, then the install the</p> <p>14 software is driven through the web page to install</p> <p>15 in a machine, similar in the manner of how you would</p> <p>16 install the Google toolbar off of its website.</p> <p>17 Q. And do you know who -- which websites</p> <p>18 allow for direct registration like you just talked</p> <p>19 about?</p> <p>20 A. If we walk through that list of the ones</p> <p>21 you enumerated earlier, I could tell you which ones</p> <p>22 are which.</p> <p>23 Q. RelevantKnowledge?</p> <p>24 A. No.</p> <p>25 Q. OpinionSquare?</p> | 108 | <p>1 MICHAEL BROWN</p> <p>2 A. Uh-huh.</p> <p>3 Q. -- and then what was the third method?</p> <p>4 A. We would ship them a CD, and there would</p> <p>5 be an installer executable that would ask them</p> <p>6 information that was substantially different than</p> <p>7 the third-party application provider process,</p> <p>8 because there was nothing bundled with it, it was</p> <p>9 just our installer, so it was a -- and then you had</p> <p>10 in that terms of service, disclosure, name and</p> <p>11 address, and then you have the software install.</p> <p>12 Q. You said you'd send them a CD, you'd send</p> <p>13 who, panelists?</p> <p>14 A. Yeah.</p> <p>15 Q. Okay. Was there any monitoring of that</p> <p>16 installation process through a CD?</p> <p>17 A. Yeah.</p> <p>18 Q. Who would monitor it?</p> <p>19 A. The -- may I elaborate just slightly</p> <p>20 on --</p> <p>21 Q. Sure.</p> <p>22 A. e-Trends panelists were recruited through</p> <p>23 an RDD, random digit dialing, approach where you</p> <p>24 would call up someone in house and say, Would you</p> <p>25 like to participate in the e-Trends research</p> |
| 107 | <p>1 MICHAEL BROWN</p> <p>2 A. I'm sorry, let me be clear.</p> <p>3 Q. I'm sorry.</p> <p>4 A. RelevantKnowledge is through the</p> <p>5 third-party application provider process, so it's</p> <p>6 not done through the website. Just --</p> <p>7 Q. Got it.</p> <p>8 A. -- didn't want noted, this could be</p> <p>9 unclear.</p> <p>10 Q. Got it. Appreciate that. OpinionSquare?</p> <p>11 A. OpinionSquare is done through the</p> <p>12 website.</p> <p>13 Q. Okay. Direct registration?</p> <p>14 A. Direct website registration process.</p> <p>15 Q. Okay. PermissionResearch?</p> <p>16 A. Website.</p> <p>17 Q. MarketScore when it was in existence?</p> <p>18 A. I believe that supported both.</p> <p>19 Q. Both. e-Trends when it was in existence?</p> <p>20 A. It had a third option that was not</p> <p>21 discussed, so it did use the permission -- it did</p> <p>22 use the website as the primary method.</p> <p>23 Q. Uh-huh. And then what was -- so there</p> <p>24 was three methods; there was the website, there was</p> <p>25 through a third-party bundling partner --</p> | 109 | <p>1 MICHAEL BROWN</p> <p>2 program? If they did, they would say yes, they</p> <p>3 would give us an address, we would ship them a CD,</p> <p>4 we would monitor to see if they installed the</p> <p>5 software. And if they did, we would do a call back.</p> <p>6 That is the monitoring --</p> <p>7 Q. Okay.</p> <p>8 A. -- I was referring to in that statement.</p> <p>9 Q. Was OSSProxy the only software on the CD,</p> <p>10 or was there other software?</p> <p>11 A. As I said earlier, there was an</p> <p>12 installer --</p> <p>13 Q. Okay.</p> <p>14 A. -- and then there was OSSProxy.</p> <p>15 Q. Okay. Anything else?</p> <p>16 A. Not that I recall. Well, probably an</p> <p>17 icon and installed an INF to launch the installer,</p> <p>18 which is a standard practice in CDs, probably of</p> <p>19 some other files but.</p> <p>20 Q. Okay. Did we talk about Shoppers'</p> <p>21 Hotline Wired?</p> <p>22 A. We did not.</p> <p>23 Q. So e-Trends had three ways that was --</p> <p>24 A. That's correct.</p> <p>25 Q. And those were the only three ways that a</p> |

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| 158 | <p>1 MICHAEL BROWN</p> <p>2 Q. Well, it says what it says, so I'll just</p> <p>3 read on.</p> <p>4 A. Thank you.</p> <p>5 Q. "As a participant, you agree to allow</p> <p>6 this program to collect and use information obtained</p> <p>7 from you and related to you and your household's</p> <p>8 internet use as described in this agreement." Did I</p> <p>9 read that accurately?</p> <p>10 A. You did.</p> <p>11 Q. And is that a true statement?</p> <p>12 A. Yes.</p> <p>13 Q. Okay. If you skip down to 11 underscore</p> <p>14 one underscore four --</p> <p>15 A. Yes.</p> <p>16 Q. -- it says, "Accept automatic changes to</p> <p>17 your system settings that are made solely to ensure</p> <p>18 compatibility between your computer system and this</p> <p>19 program, and periodic software upgrades." Do you</p> <p>20 see where I read that from?</p> <p>21 A. I do.</p> <p>22 Q. Did I read it accurately?</p> <p>23 A. You did.</p> <p>24 Q. What is meant by accept automatic</p> <p>25 changes?</p> | 160 | <p>1 MICHAEL BROWN</p> <p>2 demographic information or information regarding</p> <p>3 usage of the application; and of any changes made to</p> <p>4 this agreement." Did I read that all accurately,</p> <p>5 sir?</p> <p>6 A. Yes.</p> <p>7 Q. Okay. So does comScore have the ability</p> <p>8 to send administrative e-mails to panelists?</p> <p>9 A. Yes.</p> <p>10 Q. Okay. And panelists with the software</p> <p>11 installed on their systems have the ability to</p> <p>12 receive administrative e-mails or other e-mails from</p> <p>13 comScore?</p> <p>14 A. That's unclear, sir.</p> <p>15 Q. Well, one of the commitments as a</p> <p>16 panelist is to receive administrative e-mails --</p> <p>17 A. That is correct.</p> <p>18 Q. -- correct?</p> <p>19 Okay. So comScore has the ability to</p> <p>20 send e-mails to its panelists, right?</p> <p>21 A. That is correct.</p> <p>22 Q. Okay. Do you know whether comScore does</p> <p>23 send e-mails to its panelists?</p> <p>24 A. It does.</p> <p>25 Q. In what instances does it send e-mails?</p> |
| 159 | <p>1 MICHAEL BROWN</p> <p>2 A. So, for example, when the software is</p> <p>3 installed, we add it to the Windows registry on</p> <p>4 the -- what's called the run line, so it starts up</p> <p>5 every time that the computer is booted --</p> <p>6 Q. Okay.</p> <p>7 A. -- and installs services, et cetera.</p> <p>8 Q. And that was an automatic change that was</p> <p>9 implemented?</p> <p>10 A. Yes.</p> <p>11 Q. Which build of software, do you know?</p> <p>12 A. I do not. I'm sorry, sir, I don't recall</p> <p>13 the exact --</p> <p>14 Q. That's fine.</p> <p>15 A. -- build number when that started to</p> <p>16 occur.</p> <p>17 Q. I would have questioned all your other</p> <p>18 testimony if you knew it.</p> <p>19 The next paragraph, 11 underscore one</p> <p>20 underscore five, says, "Receive administrative</p> <p>21 e-mails, including e-mails sent to inform you about</p> <p>22 upgrades, or issues related to basic</p> <p>23 program/application functions or disruptions;</p> <p>24 provide notification about awards and special</p> <p>25 participant opportunities; request updated</p> | 161 | <p>1 MICHAEL BROWN</p> <p>2 A. To invite them to participate in a</p> <p>3 survey, to tell them if they won a prize, those are</p> <p>4 some of the instances.</p> <p>5 Q. Do panelists give comScore their e-mail</p> <p>6 addresses?</p> <p>7 A. Yes.</p> <p>8 Q. During the registration process?</p> <p>9 A. That is one place they can.</p> <p>10 Q. Does the software collect that</p> <p>11 information as well that's running on the system?</p> <p>12 A. No.</p> <p>13 Q. Okay. I should ask a different question.</p> <p>14 How are the ways in which comScore obtains e-mails</p> <p>15 from its panelists --</p> <p>16 A. That is used in reference to 11, one,</p> <p>17 one?</p> <p>18 Q. No, just --</p> <p>19 A. Or more specifically 11, one, five?</p> <p>20 Q. Yeah. Well, I'm just saying how does --</p> <p>21 how does -- panelists provide their e-mails in the</p> <p>22 registration process, that's one way comScore gets</p> <p>23 e-mails?</p> <p>24 A. Correct.</p> <p>25 Q. Are there other ways it gets e-mails?</p> |

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| 162 | <p>1 MICHAEL BROWN</p> <p>2 A. Users can go afterwards and go to the</p> <p>3 website and provide the e-mail update -- provide</p> <p>4 their e-mail information or update their</p> <p>5 information --</p> <p>6 Q. Okay.</p> <p>7 A. -- after the fact --</p> <p>8 Q. Okay.</p> <p>9 A. -- or they can do it through as part of a</p> <p>10 survey, so it's not --</p> <p>11 Q. Okay.</p> <p>12 A. -- limited exclusively to just the</p> <p>13 registration process.</p> <p>14 Q. Okay. What about former panelists, does</p> <p>15 comScore maintain e-mails of its former panelists?</p> <p>16 A. Yes.</p> <p>17 Q. Is that information ever purged from the</p> <p>18 system?</p> <p>19 A. I'm not certain.</p> <p>20 Q. But to your knowledge, it does maintain</p> <p>21 those e-mails?</p> <p>22 A. Yes.</p> <p>23 Q. Okay.</p> <p>24</p> <p>25</p> | 164 | <p>1 MICHAEL BROWN</p> <p>2 first document start and end and the second document</p> <p>3 pick up?</p> <p>4 A. Sorry, yeah, just there's a -- the first</p> <p>5 part of the document of this stack of paper is</p> <p>6 referring to items with regard to collection of</p> <p>7 information from the OSSProxy software, and that</p> <p>8 goes up through Bates number -- from 15891 and then</p> <p>9 ends on page Bates numbered 15987.</p> <p>10 Q. Okay.</p> <p>11 A. The document starting on 15988 describes</p> <p>12 our backup tape operations and how our backup</p> <p>13 servers are operating.</p> <p>14 Q. Okay. Well, let's just focus for now</p> <p>15 on --</p> <p>16 A. This is the only reason I identified</p> <p>17 that, sir.</p> <p>18 Q. I understand. Yeah, if I said this was</p> <p>19 identified as comScore's wiki by your lawyers, would</p> <p>20 that ring a bell at all?</p> <p>21 A. Both these documents are on the wiki,</p> <p>22 yes.</p> <p>23 Q. Okay.</p> <p>24 A. They are not -- it is not the complete</p> <p>25 set of information on the wiki, however.</p> |
| 163 | <p>1 MICHAEL BROWN</p> <p>2 (WHEREUPON, a certain document was</p> <p>3 marked Brown Exhibit 6, for</p> <p>4 identification.)</p> <p>5 BY MR. BALABANIAN:</p> <p>6 Q. Mr. Brown, I've handed you what's been</p> <p>7 marked as Brown Exhibit 6. It's a voluminous</p> <p>8 document, and you can take some time to look at it.</p> <p>9 I'm going to ask you some questions about all of it,</p> <p>10 but I'm going to skip a number of pages, but I will</p> <p>11 tell you which pages to go to. There are Bates</p> <p>12 numbers at the bottom of it, so it's somewhat easy</p> <p>13 to navigate through.</p> <p>14 A. Thank you for letting me review that,</p> <p>15 sir.</p> <p>16 Q. Sure. Do you know what Brown Exhibit 6</p> <p>17 is, Mr. Brown?</p> <p>18 A. It's a couple different documents</p> <p>19 covering what I would say is radically different</p> <p>20 areas.</p> <p>21 Q. Okay. Thank you for that detailed</p> <p>22 description.</p> <p>23 A. Okay.</p> <p>24 Q. Let's try to break it up. Why do you say</p> <p>25 it's a couple different documents? Where does the</p> | 165 | <p>1 MICHAEL BROWN</p> <p>2 Q. What is the wiki?</p> <p>3 A. What is a wiki, or what is the wiki?</p> <p>4 Q. What is the wiki? You said they're on</p> <p>5 the wiki, what's the wiki?</p> <p>6 A. First, let me just start off with: A</p> <p>7 wiki is a piece of software. We specifically use a</p> <p>8 version of wiki provided by Atlassian. And it's a</p> <p>9 way for people to collaborate and put information</p> <p>10 available for other people in the organization to</p> <p>11 see that, so you can go ahead and do a search on the</p> <p>12 wiki and find information if you need to try to</p> <p>13 understand something.</p> <p>14 Q. Okay.</p> <p>15 A. So we have a wiki, and the software</p> <p>16 engineering teams put some of this information here,</p> <p>17 and then the data center operations team put the</p> <p>18 backup stuff.</p> <p>19 Q. Okay. So 15891 to 15987 is items of data</p> <p>20 that's collected by OSSProxy, is that what you said?</p> <p>21 A. I may have said that, and perhaps I was</p> <p>22 maybe unclear. There's information here about</p> <p>23 configuration information as well.</p> <p>24 Q. Okay.</p> <p>25 A. So there's information talking about the</p> |

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION

MIKE HARRIS and JEFF DUNSTAN, x
individually and on behalf of :
a class of similarly situated :
individuals, :
: :
: :
Plaintiffs, : Case No. 1:11-5807
vs. : Hon. James F. Holderman
: :
COMSCORE, INC., a Delaware :
corporation, :
: :
: :
Defendant. x

Wednesday, September 12, 2012

Reston, Virginia

DEPOSITION OF:

YVONNE BIGBEE,

a witness, called for oral examination by counsel for
plaintiffs in the above-captioned matter, pursuant to
Notice and agreement of the parties as to time and date,
held at the offices of ComScore, Inc., 11950 Democracy
Drive, Suite 600, Reston, Virginia 20191, beginning at
approximately 9:30 o'clock, a.m., before Patricia Klepp,
RMR, a court reporter and Notary Public in and for the
Commonwealth of Virginia, when were present on behalf of
the respective parties:

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| Page 2 | Page 4 |
| <p>1 APPEARANCE OF COUNSEL: 2 For the Plaintiffs: 3 EDELSON McGUIRE, LLC 4 BY: BEN THOMASSEN, ESQUIRE 5 CHANDLER R. GIVENS, ESQUIRE 6 350 North LaSalle, Suite 1300 7 Chicago, Illinois 60654 8 (312) 589-6370 9 E-Mail: bthomassen@edelson.com 10 cgivens@edelson.com 11 For the Defendant: 12 QUINN, EMANUEL, URQUHART & SULLIVAN, LLP 13 BY: STEPHEN A. SWEDLOW, ESQUIRE 14 ROBYN M. BOWLAND, ESQUIRE 15 500 West Madison Street, Suite 2450 16 Chicago, Illinois 60661 17 (312) 705-7400 18 E-Mail: stephenswedlow@quinnemanuel.com 19 robynbowland@quinnemanuel.com 20 --continued-- 21 22</p> | <p>1 I-N-D-E-X 2 Witness: Page: 3 YVONNE BIGBEE 4 Examination by Mr. Thomassen 5 5 Lunch recess 112 6 Examination by Mr. Thomassen (resumed) 113 7 - 0 - 8 Exhibits: (Included in transcript) Page: 9 Deposition Exhibit No. 1 77 10 Deposition Exhibit No. 2 96 11 Deposition Exhibit No. 3 100 12 Deposition Exhibit No. 4 107 13 Deposition Exhibit No. 5 113 14 Deposition Exhibit No. 6 116 15 Deposition Exhibit No. 7 120 16 Deposition Exhibit No. 8 122 17 Deposition Exhibit No. 9 126 18 Deposition Exhibit No. 10 128 19 Deposition Exhibit No. 11 130 20 Deposition Exhibit No. 12 132 21 Deposition Exhibit No. 13 135 22 Deposition Exhibit No. 14 141</p> |
| Page 3 | Page 5 |
| <p>1 APPEARANCE OF COUNSEL: (cont) 2 For the Defendant: 3 THOMAS S. CUSHING III, ESQUIRE 4 Deputy General Counsel and Privacy Officer 5 comScore, Inc. 6 11950 Democracy Drive, Suite 600 7 Reston, Virginia 20190-5624 8 (703) 438-2000 9 E-Mail: tcushing@comscore.com 10 - 0 - 11 12 13 14 15 16 17 18 19 20 21 22</p> | <p>1 PROCEEDINGS 2 Thereupon, 3 YVONNE BIGBEE, 4 a witness, was called for examination by counsel for the 5 plaintiffs, and after having first been duly sworn by 6 the Notary Public, was examined and testified as 7 follows: 8 EXAMINATION BY COUNSEL FOR PLAINTIFFS 9 BY MR. THOMASSEN: 10 Q. Good morning. 11 A. Good morning. 12 Q. The record should reflect that this is the 13 oral deposition of Yvonne Bigbee, taken pursuant to 14 notice, in the Dunstan v. comScore matter, Case 15 No. 11-CV-5807 in the Northern District of Illinois. 16 Now, you've just been sworn in. Is this your 17 first deposition? 18 A. Yes, it is. 19 Q. Okay. Before we get started, I'll go over a 20 few ground rules that will help us today. 21 The first and most important is that you have 22 to give verbal answers to all my questions, and the</p> |

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1 If you need me to repeat it, I'm happy to
 2 repeat it back to you.
 3 Do you understand?
 4 A. Please.
 5 Q. Okay. So as director of technology, how did
 6 you -- what were your roles with respect to OSSProxy, to
 7 the testing of it?
 8 A. I was responsible for making sure that each
 9 release, the scope of each release was tested according
 10 to requirements and the software itself is deployed to
 11 production on time, on schedule.
 12 Q. How often was there -- and I apologize if I
 13 get the terms wrong -- how often was there a new release
 14 of OSSProxy?
 15 A. That varies, depending on the scope. So a
 16 release schedule, on average, is about three or four
 17 times a year.
 18 Q. So does that mean three or four times a year,
 19 a new version of OSSProxy would be released?
 20 A. An update to the software would be released.
 21 Q. And that would go out to panelists who have
 22 the software installed in their computers?

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1 A. Yes.
 2 Q. Okay. And you also talked about the
 3 deployments of the software.
 4 Is the deployment related to these three or
 5 four releases throughout the year?
 6 A. Yes.
 7 Q. So is that ensuring that the software is
 8 properly deployed to panelists' computers?
 9 A. Yes.
 10 Q. Okay. Now, we are talking about your
 11 experiences in 2008, but is it your understanding that
 12 that same release cycle happens currently?
 13 A. Very similarly, yes.
 14 Q. So around three to four releases a year that
 15 update the OSSProxy software?
 16 A. Yes.
 17 Q. Okay. You mentioned mobile products. What
 18 did that involve, your oversight of the mobile products?
 19 A. We have a mobile panel that we recruit that
 20 installs, very similar to -- the process is very similar
 21 to our PC meters, if you will, where a piece of software
 22 is installed on users' phones once they join the panel.

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1 Q. And it has the same general function as the PC
 2 software you were just mentioning?
 3 A. No. Can you define "general"?
 4 Q. What was -- what did the mobile products do?
 5 A. They monitor -- it depends on which mobile
 6 product.
 7 Q. Give -- how about you give me an example.
 8 A. Okay. So for the RIM meter, for example, for
 9 the BlackBerry, our software would record the URL of the
 10 surfing session from the user.
 11 Q. And that's something that someone would sign
 12 up for separate from the PC software that we were
 13 talking about?
 14 A. Yes.
 15 Q. Okay. Now, earlier, you mentioned that in
 16 your role as a QA manager, you made sure that accurate
 17 data is stored during the registration process; is that
 18 right?
 19 A. I believe so.
 20 Q. What -- when you said that, what data were you
 21 referring to, in terms of ensuring its accuracy?
 22 A. The self-reported data that the panelists

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1 would go and type in from their browser when they sign
 2 up.
 3 Q. That would be information that they actually
 4 enter?
 5 A. Yes, during the registration process.
 6 Q. Okay. So how would you ensure that it was
 7 accurate?
 8 A. Our test team would mimic the process of a
 9 panelist and actually go to our website and type in
 10 information, mimicking a panelist, and ensure that, in
 11 our database, that same exact data entered would be
 12 stored in the database.
 13 Q. Okay. So after you were -- how long were you
 14 the director of technology?
 15 A. Two years.
 16 Q. And then you said you were promoted?
 17 A. Yes.
 18 Q. To what?
 19 A. VP of technology.
 20 Q. And that was in 2010?
 21 A. Yes.
 22 Q. Okay. What were your roles as VP of

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| Page 26 | Page 28 |
| <p>1 technology -- or let me ask a different question. 2 Is that your current role today? 3 A. No. 4 Q. Okay. What were your roles as VP of 5 technology? 6 A. As VP of technology, I oversaw development and 7 testing of our -- of OSSProxy. 8 Q. The testing aspect of your job, was that the 9 same testing? 10 A. Same as before. 11 Q. Okay. Now, what about the development? 12 A. The development of -- I managed the 13 development team that was responsible for writing the 14 code, changes for our meters. 15 Q. And how -- so the development team was -- can 16 you explain to me what they were responsible for? I 17 know you just answered that a little bit, but can you 18 explain a little bit more? 19 A. They are the engineers that are responsible 20 for writing the code changes for our software based on 21 requirements received from various business units within 22 comScore.</p> | <p>1 a new code for that. 2 BY MR. THOMASSEN: 3 Q. Is it accurate to say that you would be -- you 4 had oversight over all updates that were made to the 5 OSSProxy software? 6 MR. SWEDLOW: What time frame are you talking 7 about? 8 BY MR. THOMASSEN: 9 Q. As direct -- VP of technology in 2010. 10 A. Yes. As of 2010, yes. 11 Q. Okay. And then you said your role -- you got 12 a new position since then? 13 A. Yes. 14 Q. Okay. Was that a promotion? 15 A. Yes. 16 Q. When was that? 17 A. March 1, 2012. 18 Q. Oh, congratulations. 19 A. Thank you. 20 Q. What were you promoted to? 21 A. SVP of technology. 22 Q. Senior vice president?</p> |
| Page 27 | Page 29 |
| <p>1 Q. What sort of requirements are you talking 2 about? 3 A. Some could be business-related, such as 4 collecting -- let me give you an example ... URL 5 information from a new browser that's come to the 6 market, like Chrome, for example, so we would have to 7 make code changes for collection. 8 Q. Okay. Any other kind of code changes? 9 A. Anything that's related to our meter is 10 responsible from the development team, so ... 11 Q. So you described to me and I think I 12 understand why the meter or OSSProxy would change if a 13 new browser came out. Why else would OSSProxy have to 14 change? 15 MR. SWEDLOW: I'll object to vague, but you 16 should answer. 17 A. It could be a lot of reasons. It could change 18 because we found a performance issue or -- internally 19 during testing, or if we wanted to improve the look of 20 our meter to the user. 21 For example, if we wanted to enhance the icon 22 that was in the user's history, we would have to deploy</p> | <p>1 A. Senior vice president. 2 Q. And how did your roles change as senior vice 3 president of technology? 4 A. I am now responsible for an additional 5 technology development team who is responsible for the 6 registration process of our software. 7 Q. Development relating to the registration 8 process? 9 A. Correct. 10 Q. So can you list out for me all the things 11 that -- these general groups that you have oversight 12 over, what are they, as senior vice president of 13 technology? 14 A. Okay. And most recently, I've just acquired 15 three more groups. That was back in June, so do you 16 want me to describe all of them or -- 17 Q. Sure. 18 A. -- just back in 2012, when I was promoted? 19 Q. How about -- let me start this way. 20 Are you still the senior vice president of 21 technology? 22 A. Yes, I am today.</p> |

8 (Pages 26 to 29)

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| Page 54 | Page 56 |
| <p>1 HTTPS post data?</p> <p>2 A. No. We exclude sites such as edu, for</p> <p>3 example.</p> <p>4 Q. Okay. Excluding site-specific information,</p> <p>5 such as dot-edu, does comScore collect all HTTPS post</p> <p>6 data for dot-com sites, for example?</p> <p>7 A. No. It depends on the rule, so I don't want</p> <p>8 to say all.</p> <p>9 Q. Is there an instance where there's HTTPS data</p> <p>10 from one web page that a panelist viewed where comScore</p> <p>11 would capture some, but not all, of the post data from</p> <p>12 that page?</p> <p>13 A. Yes.</p> <p>14 Q. Can you give me an example?</p> <p>15 A. It depends on the MIME type of the post data.</p> <p>16 Q. Okay.</p> <p>17 A. So if it's not a MIME type text<slash><star>,</p> <p>18 for example, we would not collect the post data.</p> <p>19 Q. Is that an example -- do you have an</p> <p>20 example -- and I might just be running close to my</p> <p>21 limits of understanding, here, but the -- was that an</p> <p>22 example of HTTPS -- let me start over.</p> | <p>1 collect it, or is it programmed to not collect it?</p> <p>2 A. It's programmed not to collect it.</p> <p>3 Q. I understand. How about things on --</p> <p>4 regarding the same HTTPS/HTML post data, are things like</p> <p>5 user names collected by comScore software?</p> <p>6 A. It's fuzzified before collection.</p> <p>7 Q. So -- and we will talk more about</p> <p>8 fuzzification in just a few minutes, but user names are</p> <p>9 collected in some form by the software?</p> <p>10 MR. SWEDLOW: I'll object as asked and</p> <p>11 answered. I ask you not to say the word fuzzified</p> <p>12 in the answer.</p> <p>13 MR. THOMASSEN: I understand what she's</p> <p>14 saying.</p> <p>15 MR. SWEDLOW: Well, then I'm going to object</p> <p>16 as asked and answered.</p> <p>17 BY MR. THOMASSEN:</p> <p>18 Q. You can answer.</p> <p>19 A. Can you repeat the question?</p> <p>20 Q. Sure. I asked you whether user names were</p> <p>21 collected, and you said, well, they're fuzzified.</p> <p>22 Is that fuzzified information still sent up to</p> |
| Page 55 | Page 57 |
| <p>1 Can you give me an example of HTTPS/HTML post</p> <p>2 data where some, but not all, of the data is collected?</p> <p>3 A. (Pause.)</p> <p>4 Okay. If you were online taking an online</p> <p>5 survey, depending on how their survey is rendered, if</p> <p>6 the URL of the survey is included in our collection</p> <p>7 rule, if the response of the page is text<slash><star>,</p> <p>8 and if a user does type in, yes, I'm a Democrat, yes, I</p> <p>9 will be voting in this election, accept, enter, that</p> <p>10 data will be sent up --</p> <p>11 Q. Okay.</p> <p>12 A. -- if it is because it was in the form of HTML</p> <p>13 and the URL is -- matches our rule.</p> <p>14 However, on the same web page, visible to the</p> <p>15 user, there could be background calls that is coded on</p> <p>16 the web page, invisible to the user, but just internal</p> <p>17 to that survey web post, to kind of serve as an internal</p> <p>18 ping, hey, I'm version XXX, here's the time stamp of the</p> <p>19 machine, for example.</p> <p>20 And that, if that was sent up via an</p> <p>21 application/json call, we would not collect that.</p> <p>22 Q. Is it not collected because the software can't</p> | <p>1 comScore server?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. How about things like passwords, same</p> <p>4 process?</p> <p>5 A. Same process.</p> <p>6 Q. Credit card numbers?</p> <p>7 A. Fuzzification is applied.</p> <p>8 Q. And then the fuzzified information --</p> <p>9 A. Fuzzified data is sent up.</p> <p>10 Q. Right. And Social Security numbers?</p> <p>11 A. Same process.</p> <p>12 MR. THOMASSEN: Okay. This would be actually</p> <p>13 a good place for me to take a break, mostly because</p> <p>14 I have to use the restroom.</p> <p>15 MR. SWEDLOW: I object.</p> <p>16 (Whereupon, a recess was taken.)</p> <p>17 MR. THOMASSEN: Back on.</p> <p>18 BY MR. THOMASSEN:</p> <p>19 Q. Before we move on, is it accurate to say that</p> <p>20 all HTTP and HTTPS page data is collected unless</p> <p>21 specified by a rule file to not collect it?</p> <p>22 A. No. Everything is dictated in the rules file</p> |

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| Page 58 | Page 60 |
| <p>1 on what to collect.</p> <p>2 Q. Okay.</p> <p>3 A. So there's not a blanket collect everything</p> <p>4 that's written in the code.</p> <p>5 Q. So is it right that for any -- when collecting</p> <p>6 page data from any given HTTP or HTTPS page, whether or</p> <p>7 not a particular piece of data is collected is dependent</p> <p>8 on a rule file?</p> <p>9 A. Yes.</p> <p>10 Q. And the rule file will tell comScore software</p> <p>11 to either collect all of the data, some of the data or</p> <p>12 none of the data?</p> <p>13 A. Yes.</p> <p>14 Q. All right. So I want to talk for a while</p> <p>15 about fuzzification, which we brought up earlier.</p> <p>16 Can you -- you mentioned earlier, but can you</p> <p>17 generally describe for me now what fuzzification</p> <p>18 involves?</p> <p>19 A. Sure. There are two types of fuzzification.</p> <p>20 One is page data fuzzification, and the second is post</p> <p>21 data fuzzification.</p> <p>22 The general idea behind fuzzification is, we</p> | <p>1 Q. So would you say that hashing is synonymous</p> <p>2 with fuzzification?</p> <p>3 A. No.</p> <p>4 Q. So how is hashing different than</p> <p>5 fuzzification?</p> <p>6 A. Hashing is just one form of fuzzification.</p> <p>7 Q. So if I were to say this string has been</p> <p>8 hashed, would I also be saying that this string has been</p> <p>9 fuzzified?</p> <p>10 A. Yes.</p> <p>11 Q. Okay. And X-ing out, that is also a form of</p> <p>12 fuzzification?</p> <p>13 A. Yes.</p> <p>14 Q. So let's take a credit card number, for</p> <p>15 example. They are 14 digits long, I think?</p> <p>16 A. Sixteen.</p> <p>17 Q. Sixteen digits long? Are credit card numbers</p> <p>18 ever X-ed out?</p> <p>19 A. Yes.</p> <p>20 Q. How many of the credit card numbers would be</p> <p>21 X-ed out?</p> <p>22 A. We -- I believe we keep the first six or</p> |
| Page 59 | Page 61 |
| <p>1 look for patterns in the data that could be sensitive,</p> <p>2 and we either hash the data or X out enough of the</p> <p>3 string where it is no longer personally identifiable.</p> <p>4 Q. So you talked about two things there, hashing</p> <p>5 and then X-ing out. Those are different things?</p> <p>6 A. Yes.</p> <p>7 Q. Can you describe what hashing is?</p> <p>8 A. It is -- hashing is -- there's a mathematical</p> <p>9 formula, where we take the string itself and apply this</p> <p>10 algorithm to it, and then the outcome is an 18-digit</p> <p>11 long string of numbers that kind of represents an</p> <p>12 original string, but it's completely different.</p> <p>13 Q. I understand. Is there one hashing formula</p> <p>14 that applies to all data that is hashed?</p> <p>15 A. Yes.</p> <p>16 Q. Okay. Now, what about X-ing out; what is</p> <p>17 that?</p> <p>18 A. Where we actually take the string; instead of</p> <p>19 applying the hashing algorithm, we just replace the</p> <p>20 digits with X.</p> <p>21 Q. Is that the same thing as zeroing?</p> <p>22 A. Yes, same concept.</p> | <p>1 seven. I don't -- it's either six or seven, I'm not</p> <p>2 exactly sure, and the rest of the 16 digits after the</p> <p>3 sixth or seventh digits are X-ed out.</p> <p>4 Q. Okay. And after a portion of the credit card</p> <p>5 number is X-ed out, is that value then sent to comScore?</p> <p>6 A. Yes.</p> <p>7 Q. So that X-ed out value, I'll call it, is not</p> <p>8 additionally hashed?</p> <p>9 A. No.</p> <p>10 Q. Okay. Is there one -- I'm going to call it a</p> <p>11 zeroing formula, that applies to all credit card</p> <p>12 numbers, for example?</p> <p>13 MR. SWEDLOW: Are you talking about hashing?</p> <p>14 MR. THOMASSEN: No, I'm talking about zeroing</p> <p>15 or X-ing.</p> <p>16 MR. SWEDLOW: Oh, X-ing, right.</p> <p>17 A. If it's a 16-digit number, we assume that it's</p> <p>18 a credit card number. The same logic would apply to</p> <p>19 that 16-digit number.</p> <p>20 BY MR. THOMASSEN:</p> <p>21 Q. Is it correct to say that all 16-digit credit</p> <p>22 card numbers collected by comScore are X-ed out as</p> |

16 (Pages 58 to 61)

| | |
|---|---|
| Page 62 | Page 64 |
| <p>1 opposed to hashed?</p> <p>2 A. I believe so, if it's a credit card number.</p> <p>3 Q. Okay.</p> <p>4 A. Some account numbers could be 16 digits.</p> <p>5 Q. Okay. How about, if you know, things like</p> <p>6 user names? Are they hashed or zeroed?</p> <p>7 A. User names are hashed.</p> <p>8 Q. And that, to your knowledge, applies for all</p> <p>9 user names?</p> <p>10 A. In the post data, yes.</p> <p>11 Q. In the post data. How about Social Security</p> <p>12 numbers?</p> <p>13 A. Social Security numbers should be X-ed out.</p> <p>14 Q. Do you know what -- how many digits of a</p> <p>15 Social Security number would be X-ed out, if you know?</p> <p>16 A. That one I'm not familiar.</p> <p>17 Q. That's fine. How about e-mail addresses?</p> <p>18 A. I believe that is hashed, but I'm not</p> <p>19 100 percent sure.</p> <p>20 Q. Okay. How about things like street addresses?</p> <p>21 A. I do not believe that one is hashed.</p> <p>22 Q. Or zeroed?</p> | <p>1 BY MR. THOMASSEN:</p> <p>2 Q. How about encryption? Is that -- does</p> <p>3 comScore ever encrypt post data?</p> <p>4 A. During transmission, yes.</p> <p>5 Q. Is encryption a separate process from</p> <p>6 fuzzification?</p> <p>7 A. Yes.</p> <p>8 Q. So it is not correct to say that if</p> <p>9 information is encrypted, it's also considered</p> <p>10 fuzzified?</p> <p>11 MR. SWEDLOW: Can you read that back?</p> <p>12 (Whereupon, the court reporter read the</p> <p>13 requested portion of the proceedings.)</p> <p>14 A. Correct.</p> <p>15 BY MR. THOMASSEN:</p> <p>16 Q. So it's -- so the words encryption and</p> <p>17 fuzzified are not used interchangeably; they mean</p> <p>18 different things?</p> <p>19 A. Yes.</p> <p>20 Q. Okay. How does comScore determine whether or</p> <p>21 not it's properly fuzzifying information?</p> <p>22 A. We have the Mystery Shop program --</p> |
| Page 63 | Page 65 |
| <p>1 A. Or zeroed.</p> <p>2 Q. So it's not -- you do not believe street</p> <p>3 addresses are fuzzified, in other words?</p> <p>4 A. Correct.</p> <p>5 Q. How about names -- how about first names?</p> <p>6 Sorry.</p> <p>7 A. If it's in the post data, it is hashed.</p> <p>8 Q. And I'm assuming last names as well?</p> <p>9 A. Yes.</p> <p>10 Q. How about date of birth?</p> <p>11 A. I'm not sure.</p> <p>12 Q. Bank account numbers?</p> <p>13 A. I know it's fuzzified. I don't know if we</p> <p>14 hash or zero; I'm not 100 percent sure.</p> <p>15 Q. That's fair. How about routing numbers, if</p> <p>16 you know?</p> <p>17 A. I don't.</p> <p>18 Q. That's fine.</p> <p>19 A. It depends on the pattern.</p> <p>20 Q. Mm hmm.</p> <p>21 (Whereupon, a discussion was held off the</p> <p>22 record.)</p> | <p>1 Q. Okay.</p> <p>2 A. -- that checks for fuzzification.</p> <p>3 Q. Any other ways?</p> <p>4 A. We have the QA test team, that every release</p> <p>5 cycle, we go through a regression test script.</p> <p>6 Q. Can you tell me what that means?</p> <p>7 A. They -- it's a test plan that the test team</p> <p>8 will execute against features of our software to make</p> <p>9 sure that it's functioning properly, to make sure that</p> <p>10 fuzzification is applied correctly, to make sure that</p> <p>11 the upgrade mechanism is working properly.</p> <p>12 So those would be on -- as part of the test</p> <p>13 plan.</p> <p>14 Q. Okay. Any other ways?</p> <p>15 A. Those are the two that I can think of at the</p> <p>16 moment.</p> <p>17 Q. Okay. You mentioned a while ago that comScore</p> <p>18 fuzzifies what it considers to be sensitive information;</p> <p>19 is that right?</p> <p>20 A. Correct.</p> <p>21 Q. How does comScore determine what is or is not</p> <p>22 sensitive information?</p> |

17 (Pages 62 to 65)

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| Page 66 | Page 68 |
| <p>1 A. We look for patterns in the data. So in the 2 example of a 16-digit consecutive numeric number, we 3 assume that that's a credit card number.</p> <p>4 Q. Okay. Let me ask this a different way. 5 How is the determination made at the outset 6 that information should be fuzzified? So, for example, 7 comScore fuzzifies credit card numbers; at some point, 8 it was determined that credit card numbers are something 9 that should be fuzzified. How is that determination 10 made?</p> <p>11 A. It is made on the user's machine, while our 12 software is running.</p> <p>13 Q. Okay. Let me -- I'm trying to find out how 14 comScore determines that things like names, e-mails, 15 dates of birth, credit card numbers, Social Security 16 numbers are sensitive information that should be 17 fuzzified.</p> <p>18 MR. SWEDLOW: And I'm going to provide you a 19 an instruction. 20 To the extent that comScore makes that 21 decision based upon the advice of counsel, 22 including that guy over there, who's your in-house</p> | <p>1 Q. What happens when the Mystery Shopper program 2 determines that information is not properly being 3 fuzzified?</p> <p>4 A. They will report the incident to the QA team 5 to reproduce. Then the QA team will, when possible, 6 make a rules change to update our fuzzification logic to 7 enhance the new pattern.</p> <p>8 Q. How is fuzzification logic updated? 9 A. By a rules file.</p> <p>10 Q. And those are rules files that are referenced 11 by the OSSProxy software? 12 A. Yes.</p> <p>13 Q. Okay. At what point is a JIRA ticket opened 14 about a problem like we're discussing now? 15 A. A JIRA ticket is logged when a code change is 16 required by the development team.</p> <p>17 Q. So who would initially open a JIRA ticket, if 18 that's the right word? 19 A. For this particular incident? 20 Q. Yes. 21 A. Most of the time, it would be done by the QA 22 team, after reproducing the problem.</p> |
| Page 67 | Page 69 |
| <p>1 counsel, I'm going to instruct you not to answer, 2 because that communication and the product of that 3 communication is protected from disclosure.</p> <p>4 I want you to answer the question, but I want 5 you to understand my instruction. 6 Are you okay with what I'm saying? 7 MR. THOMASSEN: Yes.</p> <p>8 A. I think I'm not going to answer it, based 9 on --</p> <p>10 MR. SWEDLOW: What I just said? 11 A. -- attorney-client privilege. 12 MR. SWEDLOW: Yes. 13 So I'll just make the statement that the 14 determination of what is sensitive and what isn't 15 sensitive includes the attorney advice. 16 MR. THOMASSEN: Okay. 17 BY MR. THOMASSEN: 18 Q. How does -- so you mentioned that the Mystery 19 Shopper program is one way that comScore determines that 20 it's properly fuzzifying information that should be 21 fuzzified; right? 22 A. Correct.</p> | <p>1 Q. So the Mystery Shopper program team, for lack 2 of a better term, would not open the JIRA ticket -- 3 A. Correct. 4 Q. -- in this instance. 5 A. Correct. I'm not aware of Mystery Shoppers 6 opening tickets in JIRA projects. 7 Q. Do you know about how long, on average, it 8 takes -- in an instance like this, where the Mystery 9 Shopper program identifies that information is not being 10 properly fuzzified, how long does it take for the rule 11 file to be changed? 12 A. The rules file can be updated at any time. 13 Are you asking me how long from discovery? Can you be 14 more specific? I don't understand what you're asking. 15 Q. That's exactly what I'm asking, how long -- 16 from the moment the problem is discovered till the 17 moment the problem is solved by updating the rules file, 18 how much time passes, on average? 19 MR. SWEDLOW: I'll object, but if you have 20 an -- on average -- 21 A. I don't know; it depends. It's a 22 case-by-case; I don't know.</p> |

18 (Pages 66 to 69)

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION

MIKE HARRIS and JEFF DUNSTAN, x
individually and on behalf of :
a class of similarly situated :
individuals, :
: :
: :
Plaintiffs, : Case No. 1:11-5807
vs. : Hon. James F. Holderman
: :
COMSCORE, INC., a Delaware :
corporation, :
: :
: :
Defendant. x

Friday, September 14, 2012

Reston, Virginia

DEPOSITION OF:

RANDALL LYNN McCASKILL,

a witness, called for oral examination by counsel for
plaintiffs in the above-captioned matter, pursuant to
Notice and agreement of the parties as to time and date,
held at the offices of comScore, Inc., 11950 Democracy
Drive, Suite 600, Reston, Virginia 20191, beginning at
approximately 9:35 o'clock, a.m., before Patricia Klepp,
RMR, a court reporter and Notary Public in and for the
Commonwealth of Virginia, when were present on behalf of
the respective parties:

| | |
|--|---|
| Page 2 | Page 4 |
| <p>1 APPEARANCE OF COUNSEL: 2 For the Plaintiffs: 3 EDELSON McGUIRE, LLC 4 BY: CHANDLER R. GIVENS, ESQUIRE 5 BEN THOMASSEN, ESQUIRE 6 350 North LaSalle, Suite 1300 7 Chicago, Illinois 60654 8 (312) 589-6370 9 E-Mail: cgivens@edelson.com 10 bthomassen@edelson.com 11 For the Defendant: 12 QUINN, EMANUEL, URQUHART & SULLIVAN, LLP 13 BY: ROBYN M. BOWLAND, ESQUIRE 14 500 West Madison Street, Suite 2450 15 Chicago, Illinois 60661 16 (312) 705-7400 17 E-Mail: robynbowland@quinnemanuel.com 18 --continued-- 19 20 21 22</p> | <p>1 I-N-D-E-X 2 Witness: Page: 3 RANDALL LYNN McCASKILL 4 Examination by Mr. Givens 6 5 - 0 - 6 7 Exhibits: (Included in transcript) Page: 8 Deposition Exhibit No. 1 13 9 Deposition Exhibit No. 2 16 10 Deposition Exhibit No. 3 19 11 Deposition Exhibit No. 4 21 12 Deposition Exhibit No. 5 25 13 Deposition Exhibit No. 6 28 14 Deposition Exhibit No. 7 31 15 Deposition Exhibit No. 8 32 16 Deposition Exhibit No. 9 37 17 Deposition Exhibit No. 10 41 18 Deposition Exhibit No. 11 49 19 Deposition Exhibit No. 12 54 20 Deposition Exhibit No. 13 65 21 Deposition Exhibit No. 14 71 22 Deposition Exhibit No. 15 77 23 Deposition Exhibit No. 16 80 24 Deposition Exhibit No. 17 82 25 Deposition Exhibit No. 18 86 26 Deposition Exhibit No. 19 87 27 - 0 - 28 29 30 31 32</p> |
| Page 3 | Page 5 |
| <p>1 APPEARANCE OF COUNSEL: (cont) 2 For the Defendant: 3 THOMAS S. CUSHING III, ESQUIRE 4 Deputy General Counsel and Privacy Officer 5 comScore, Inc. 6 11950 Democracy Drive, Suite 600 7 Reston, Virginia 20190-5624 8 (703) 438-2000 9 E-Mail: tcushing@comscore.com 10 - 0 - 11 12 13 14 15 16 17 18 19 20 21 22</p> | <p>1 PROCEEDINGS 2 Thereupon, 3 RANDALL LYNN McCASKILL, 4 a witness, was called for examination by counsel for the 5 plaintiffs, and after having first been duly sworn by 6 the Notary Public, was examined and testified as 7 follows: 8 EXAMINATION BY COUNSEL FOR PLAINTIFFS 9 BY MR. GIVENS: 10 Q. Good morning, Mr. McCaskill. 11 A. Good morning. 12 Q. Is this your first time sitting for a 13 deposition? 14 A. Yes. 15 Q. Are you aware of why you're here this morning? 16 A. Yes. 17 Q. Are you generally familiar with the lawsuit? 18 A. Generally. 19 MS. BOWLAND: One second. 20 Okay -- no, I'm sorry. 21 Go ahead answer that question; I apologize. 22 A. Yes, generally.</p> |

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| Page 46 | Page 48 |
| <p>1 A. Say that again, please?</p> <p>2 Q. If you discover that information isn't</p> <p>3 properly being fuzzified by the production version of</p> <p>4 OSSProxy but requires a software change, how long does</p> <p>5 that process generally take?</p> <p>6 A. Depends on if it is irrelevant information,</p> <p>7 just stuff that's -- that it may wait for the next</p> <p>8 release; if it is something that is high -- you know,</p> <p>9 like Social Security number, something high -- you know,</p> <p>10 really important, then we can do a patch build, and it</p> <p>11 can -- it will be done within less than a week.</p> <p>12 Q. It can be done within less than a week?</p> <p>13 A. If it's high priority, yes.</p> <p>14 Q. On average, how long does it take?</p> <p>15 A. On average -- we don't do -- we don't have</p> <p>16 this problem, where things are being sent out -- you</p> <p>17 know, where things are being caught and not fuzzified</p> <p>18 and can't be handled with regular expression, so there's</p> <p>19 not enough information to say on average.</p> <p>20 I mean, I can't think of the last time it</p> <p>21 happened, so in general, we fuzzify everything pretty</p> <p>22 cleanly, and -- we've got it now so that everything can</p> | <p>1 (Whereupon, Deposition Exhibit No. 11 was</p> <p>2 marked for identification.)</p> <p>3 BY MR. GIVENS:</p> <p>4 Q. I am handing you what's been marked as</p> <p>5 McCaskill Exhibit 11. Take a moment to review it.</p> <p>6 A. (Reading.)</p> <p>7 All right, I have read it. I don't have a lot</p> <p>8 of memory of it.</p> <p>9 Q. We're looking at Bates No. 2687; it's a JIRA</p> <p>10 ticket, the title is, "Chrome - email address and</p> <p>11 password not fuzzified on Geico." It was created by</p> <p>12 Michiko Chand, and it's been assigned to you,</p> <p>13 Randy McCaskill.</p> <p>14 A. And it's assigned to me because of the project</p> <p>15 default, not because I actually worked on it, so ...</p> <p>16 Q. Do you see where it says "Priority," there?</p> <p>17 A. Yes.</p> <p>18 Q. It says low priority; correct?</p> <p>19 A. Yes, but we don't really use priority so much</p> <p>20 in the system, so ...</p> <p>21 Q. What's the default priority?</p> <p>22 A. I have no idea. Probably normal, but I -- we</p> |
| Page 47 | Page 49 |
| <p>1 be done via rule base, so it's -- this stuff just</p> <p>2 doesn't come up very often.</p> <p>3 Q. Is there a record of patch releases of</p> <p>4 OSSProxy?</p> <p>5 A. I don't understand what your question is.</p> <p>6 There's -- you've already, I think, seen the</p> <p>7 wiki; we have our builds, there. Is that what you're</p> <p>8 referring to?</p> <p>9 Q. Well, it sounds like to me there's a</p> <p>10 difference between releasing a new build and releasing a</p> <p>11 patch; is that correct?</p> <p>12 A. Only in the version. The versioning -- a</p> <p>13 patch doesn't have a new ... our versions exist of four</p> <p>14 numbers, so it's 1.3., a number, and a build number.</p> <p>15 The last, you know, bit is the build number.</p> <p>16 So a patch would have an updated build number,</p> <p>17 but the other three numbers would be the same.</p> <p>18 Q. I understand.</p> <p>19 A. So the versioning would be different, but it</p> <p>20 would still go through regression, maybe a short version</p> <p>21 of regression if it's a minor patch, you know, if it's</p> <p>22 limited in scale.</p> | <p>1 don't really use them. It's -- most of them -- I think</p> <p>2 almost everything is normal priority, unless somebody</p> <p>3 got bored and changed it, so ...</p> <p>4 Q. So you think Michiko was bored when she said</p> <p>5 it's a low priority?</p> <p>6 A. I don't know who -- I mean, again, I don't see</p> <p>7 here who said it that way, but I -- it's -- I -- I don't</p> <p>8 even look at what the priority is when I look at a</p> <p>9 ticket, so ...</p> <p>10 Q. Okay. Can you describe what's happening in</p> <p>11 this ticket?</p> <p>12 A. It looks like Geico on Vista and Chrome is</p> <p>13 sending the post data in a different format than they do</p> <p>14 in IE, so the website is sending data differently,</p> <p>15 specifically for Chrome, and somehow it was not going</p> <p>16 through the fuzzification logic because of that.</p> <p>17 That's what it looks like. I am still -- I</p> <p>18 really don't remember full details on this one, so I am</p> <p>19 just -- this is what I get from what I am reading, not</p> <p>20 from what I remember.</p> <p>21 Q. I understand. Do you see where it says Fix</p> <p>22 Versions, in the top left, and next to it, it says,</p> |

13 (Pages 46 to 49)

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1 "OSSProxy 1.3.329"?
 2 A. Yes.
 3 Q. What is that referring to?
 4 A. That is what version of OSSProxy should have
 5 gotten fixed. That version -- the version in which the
 6 fix was first deployed.
 7 Q. So then this issue was discovered on a
 8 different version of OSSProxy; is that correct?
 9 MS. BOWLAND: Objection; calls for
 10 speculation.
 11 A. Yes, I don't know; they don't say.
 12 BY MR. GIVENS:
 13 Q. Well, let's walk through this. If the fixed
 14 version is OSSProxy 1.3.329, then the bug must have been
 15 discovered in a prior version; is that right?
 16 MS. BOWLAND: Objection; calls for
 17 speculation.
 18 A. It could have been; again, I don't know.
 19 It's -- the comments are vague in places, so I don't --
 20 I really don't know; I don't trust it.
 21 BY MR. GIVENS:
 22 Q. You don't trust it?

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1 A. Well, the comments are -- the information in
 2 here -- well, I guess they're talking build number,
 3 so -- yes, all they're talking about is build number, so
 4 this is -- may be all one release. I don't know. It's
 5 not -- it's not well defined here, so ...
 6 Q. Look at the comment from Michiko Chand at the
 7 bottom of the page on September 28, 2010. She writes,
 8 "Re- Tested with Chrome 5 + Build 327 - issue still
 9 occurs."
 10 A. So if 327 -- if she's talking about Release
 11 327, well that predates the fix version, so it's like I
 12 don't -- I'm not sure; why would she keep saying still
 13 occurred at that point, so that's why I'm saying the
 14 version number -- I'm not sure if she's talking about a
 15 build number or the release number.
 16 If she's talking about a build number, well
 17 then it could all be the same release, so I'm not really
 18 sure; I'd have to dig more to understand what she's
 19 saying here.
 20 Q. If you look at the comment -- the very last
 21 comment in this document, by Maureen Henderson, she
 22 writes, "Also tested this with Chrome 8 on XP 32-bit

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1 with proxy build 329.328 and pointed to test rules 1,
 2 10, 23 and 32. Verified that the email address and
 3 password fields were fuzzified for all Post data."
 4 A. Right.
 5 Q. There she refers to Build 329.328.
 6 A. So why was it retested with 327? I don't
 7 know.
 8 That ... I mean, that 329 matches the 329 that
 9 should be the fixed version, so that's correct; it's
 10 just the intermediate comments I don't understand.
 11 Again, since -- the problem is, since the
 12 build number and the release number are so close, it
 13 gets a little confusing about whether it's referring to
 14 a build or a release, because it's -- 329.328 -- 329
 15 is -- 1.329 is -- that is the release; 328 is the build.
 16 So with the build and the release numbers
 17 being so close, it gets confusing on which one they're
 18 referring to.
 19 I think they're referring to -- they refer to
 20 builds, so that would mean only the last octet, which
 21 would still be -- or the last, you know, number, so it's
 22 still within 329 release.

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1 Q. So then this issue, e-mail address and
 2 passwords not being fuzzified on the Geico website,
 3 would that be affecting current panelists at the time
 4 this ticket was written?
 5 MS. BOWLAND: Objection; calls for
 6 speculation.
 7 A. I don't know. I don't know if it was in
 8 production or not; they don't say.
 9 (Whereupon, Deposition Exhibit No. 12 was
 10 marked for identification.)
 11 BY MR. GIVENS:
 12 Q. I am handing you what's been marked as
 13 McCaskill Exhibit 12. Take a moment to review it,
 14 please.
 15 A. (Reading.)
 16 Okay, I think I understand it.
 17 Q. We are looking at Bates No. 3011; it's a JIRA
 18 ticket, and the title is, "fuzzification enhancements,"
 19 this created September of 2008. Can you describe to me
 20 what's happening in this ticket?
 21 MS. BOWLAND: Objection; calls for
 22 speculation.

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION

MIKE HARRIS and JEFF DUNSTAN, x
individually and on behalf of :
a class of similarly situated :
individuals, :
: :
Plaintiffs, : Case No. 1:11-5807
vs. : Hon. James F. Holderman
: :
COMSCORE, INC., a Delaware :
corporation, :
: :
Defendant. x

Thursday, September 13, 2012

Reston, Virginia

DEPOSITION OF:

MICHIKO AVANTIKA CHAND,

a witness, called for oral examination by counsel for
plaintiffs in the above-captioned matter, pursuant to
Notice and agreement of the parties as to time and date,
held at the offices of comScore, Inc., 11950 Democracy
Drive, Suite 600, Reston, Virginia 20191, beginning at
approximately 9:30 o'clock, a.m., before Patricia Klepp,
RMR, a court reporter and Notary Public in and for the
Commonwealth of Virginia, when were present on behalf of
the respective parties:

Page 2

1 APPEARANCE OF COUNSEL:
 2 For the Plaintiffs:
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 18 --continued--
 19
 20
 21
 22

Page 3

1 APPEARANCE OF COUNSEL: (cont)
 2 For the Defendant:
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 10 - 0 -
 11
 12 I-N-D-E-X
 13 Witness: Page:
 14 MICHIKO AVANTIKA CHAND
 15 Examination by Mr. Givens 4
 16 - 0 -
 17
 18 Exhibits: (Included in transcript) Page:
 19 Deposition Exhibit No. 1 31
 20 Deposition Exhibit No. 2 35
 21 - 0 -
 22

Page 4

1 PROCEEDINGS
 2 Thereupon,
 3 MICHIKO AVANTIKA CHAND,
 4 a witness, was called for examination by counsel for the
 5 plaintiffs, and after having first been duly sworn by
 6 the Notary Public, was examined and testified as
 7 follows:
 8 EXAMINATION BY COUNSEL FOR PLAINTIFFS
 9 BY MR.GIVENS:
 10 Q. Good morning.
 11 A. Good morning.
 12 Q. Is this your first time sitting for a
 13 deposition, Michiko?
 14 A. Yes.
 15 Q. Fine. Well, just a couple of quick ground
 16 rules. This is just a conversation, but unlike most
 17 conversations, Patricia is going to be typing everything
 18 we say, so everything that you respond to my questions
 19 has to be verbal. So you can't shrug your shoulders, or
 20 nod your head, or stick out your tongue at me, because
 21 that won't get picked up. So if you can, please try to
 22 remember to do that. If not, I'll try to remind you.

Page 5

1 I'm going to presume you understand all my
 2 questions. If not, just ask me to verify, and I'm happy
 3 to do that anytime.
 4 If you ever want to take a break, get a glass
 5 of water, go to the restroom, just let me know, that's
 6 fine; I only ask that if I have a question pending, that
 7 you answer the question that's pending first, and then
 8 we'll take break.
 9 Is there any reason why this morning you can't
 10 give full, truthful testimony? Are you on any
 11 medications?
 12 A. No.
 13 Q. Okay. So just to start with, can you tell me
 14 what your role is, here at comScore?
 15 A. I am a quality assurance manager.
 16 Q. How long have you been the QA manager?
 17 A. Since April this year.
 18 Q. April of this year?
 19 A. Yes.
 20 Q. And what is your job description?
 21 A. I work on the Windows meter, CPROXY, and I
 22 also oversee the automation of some of the testing that

| | |
|---|---|
| Page 22 | Page 24 |
| <p>1 A. Yes.</p> <p>2 Q. Can you explain to me in general, if a user is</p> <p>3 browsing the internet, how that information is</p> <p>4 collected?</p> <p>5 A. It's collected in XML format, and it depends</p> <p>6 on what the user is doing on the internet.</p> <p>7 Q. Can you elaborate?</p> <p>8 A. If he visits a page, like CNN.com, we log that</p> <p>9 he visited CNN.com.</p> <p>10 Q. You log the URL?</p> <p>11 A. Yes.</p> <p>12 Q. And that information is sent to comScore</p> <p>13 servers?</p> <p>14 A. Yes.</p> <p>15 Q. How is it sent to comScore servers?</p> <p>16 A. It's posted by OSSProxy.</p> <p>17 Q. XML post?</p> <p>18 A. Yes.</p> <p>19 Q. Does that happen in realtime?</p> <p>20 A. Yes.</p> <p>21 Q. How about page data; how is that collected?</p> <p>22 A. It's collected for some pages.</p> | <p>1 type, it will be collected.</p> <p>2 Q. Thank you. When that key word is detected and</p> <p>3 the information is collected, the page data, is certain</p> <p>4 personally identifiable information fuzzified before</p> <p>5 it's sent to comScore servers?</p> <p>6 A. Yes.</p> <p>7 Q. How do you parse through the page data to</p> <p>8 figure out what's personally identifiable information?</p> <p>9 MS. BOWLAND: Objection.</p> <p>10 A. It's done in the code somewhere; I'm not sure</p> <p>11 how.</p> <p>12 BY MR. GIVENS:</p> <p>13 Q. You didn't develop the code?</p> <p>14 A. No.</p> <p>15 Q. If I said that comScore uses regular</p> <p>16 expressions to find those strings, does that sound</p> <p>17 right?</p> <p>18 A. Yes.</p> <p>19 Q. Do you know of any instances where comScore</p> <p>20 has known that personally identifiable information was</p> <p>21 not being fuzzified and being sent to comScore servers?</p> <p>22 A. Yes.</p> |
| Page 23 | Page 25 |
| <p>1 Q. How do you determine which pages information</p> <p>2 is collected from?</p> <p>3 A. It's based on key words, and if it's a secure</p> <p>4 page, then we collect the page data.</p> <p>5 Q. What if it's not secure?</p> <p>6 A. Only if there is a key word match would we</p> <p>7 collect the page.</p> <p>8 Q. How do you determine the key words?</p> <p>9 A. It comes from requirements.</p> <p>10 Q. If OSSProxy detects a predefined key word,</p> <p>11 what information is then collected?</p> <p>12 A. The page data.</p> <p>13 Q. All of the page data?</p> <p>14 A. Yes.</p> <p>15 Q. What if it's a different MIME type? What if</p> <p>16 it's ASP or CSS? There's a question coming.</p> <p>17 (Whereupon, a discussion was held off the</p> <p>18 record.)</p> <p>19 BY MR. GIVENS:</p> <p>20 Q. Do the same rules apply? Key words are</p> <p>21 detected, and then information is collected?</p> <p>22 A. If there is a key word for that specific MIME</p> | <p>1 Q. Do you know of any instances where comScore</p> <p>2 has known that personally identifiable information is</p> <p>3 being collected and not fuzzified, and it's continuing</p> <p>4 to let that happen?</p> <p>5 A. No.</p> <p>6 Q. Are you familiar with the Mystery Shopper</p> <p>7 program?</p> <p>8 A. Not much.</p> <p>9 Q. What are comScore's procedures for determining</p> <p>10 whether or not personally identifiable information is</p> <p>11 correctly being fuzzified?</p> <p>12 A. Like ...</p> <p>13 MS. BOWLAND: Objection; vague.</p> <p>14 A. Yes, a little more details, please.</p> <p>15 BY MR. GIVENS:</p> <p>16 Q. You don't make the objections; just to be</p> <p>17 clear.</p> <p>18 Within comScore, how do employees determine</p> <p>19 whether or not personally identifiable information is</p> <p>20 being correctly fuzzified that's collected from HTTP</p> <p>21 HTML page data?</p> <p>22 A. From a QA perspective?</p> |

Page 26

1 Q. Yes.
 2 A. We do tests every time a build is put out.
 3 Q. What do those tests entail?
 4 A. We visit secure sites, we make what the user
 5 would do and then check that the data is being
 6 fuzzified.
 7 Q. And if it's not being fuzzified, then what do
 8 you do?
 9 A. We take steps to correct it.
 10 Q. What steps do you take to correct it?
 11 A. We check if it's a code change that's needed,
 12 or is it a rule change, and then we accordingly take the
 13 steps to correct it.
 14 Q. In what scenarios would a rule change be
 15 needed?
 16 A. If something on the site changed
 17 significantly, and then we -- sometime it's a rule
 18 change.
 19 Q. In what situations would a code change be
 20 needed?
 21 A. If it's a new MIME type or something which is
 22 new to Proxy.

Page 27

1 Q. If a code change is needed to fuzzify
 2 personally identifiable information, how long would it
 3 take to implement that change?
 4 MS. BOWLAND: Objection; vague.
 5 THE WITNESS: Yes.
 6 BY MR. GIVENS:
 7 Q. You've determined that personally identifiable
 8 information is not being correctly fuzzified, but it
 9 requires a code change to fix.
 10 How long would it take to implement that code
 11 change?
 12 A. It depends on the extent of the code change.
 13 Q. On average, how long would it take?
 14 A. I cannot -- I mean, cannot say it like that;
 15 it really depends on the extent of the code change.
 16 Q. Could it be changed in a day?
 17 A. No.
 18 Q. Could it be changed in a week?
 19 A. Yes.
 20 Q. Could it be changed and then deployed to
 21 panelists in a week?
 22 A. Yes.

Page 28

1 Q. The discussion we've just had about the
 2 collection of HTTP HTML page data, do the same rules
 3 apply if it's HTTPS HTML page data?
 4 MS. BOWLAND: Objection; vague.
 5 BY MR. GIVENS:
 6 Q. You just described the process of how
 7 personally identifiable information is fuzzified and
 8 then sent to comScore servers in situations when a user
 9 is on an HTTP HTML website. Do those rules apply
 10 equally if the user is on a secure site, HTTPS?
 11 A. Do you mean the rules of fuzzification?
 12 Q. Yes.
 13 A. Yes.
 14 Q. Okay. Let's talk about the process for
 15 capturing HTTP HTML post data.
 16 How does OSSProxy want HTTP HTML post data to
 17 collect?
 18 MS. BOWLAND: Objection.
 19 A. Yes, a little more detail.
 20 BY MR. GIVENS:
 21 Q. What HTTP HTML post data does OSSProxy
 22 collect?

Page 29

1 A. If it's typed text HTML, it will collect it.
 2 Q. It will collect all post data?
 3 A. Yes.
 4 Q. Does it fuzzify all post data?
 5 A. Yes.
 6 Q. Is there any post data that's not fuzzified?
 7 A. All post data goes through a fuzzification
 8 route.
 9 Q. That didn't answer my question.
 10 So is all post data fuzzified?
 11 A. Yes.
 12 Q. All right.
 13 MR. GIVENS: Let's take a quick five-minute
 14 break.
 15 (Whereupon, a recess was taken.)
 16 MR. GIVENS: Back on.
 17 BY MR. GIVENS:
 18 Q. Okay. Before we took a break, we were
 19 discussing fuzzification of post data, and you said that
 20 all post data is fuzzified.
 21 A. Yes.
 22 Q. Are there -- there's no instances when post

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

MIKE HARRIS and JEFF DUNSTAN,
individually and on behalf of a class of
similarly situated individuals

Plaintiff,

v.

COMSCORE, INC., a Delaware corporation

Defendant.

CASE NO. 1:11-cv-5807

Chief Judge Holderman

Magistrate Judge Kim


DECLARATION OF MICHAEL BROWN

I, Michael Brown, hereby declare and state based upon my personal knowledge as follows:

1. I am the Chief Technology Officer ("CTO") at comScore, Inc. ("comScore") and have held that position since February 2011. Prior to being named CTO, I held various positions in the technology group since comScore's founding in 1999, and I was the chief architect of the comScore software.
2. My current office is located at comScore's offices in Reston, Virginia.
3. On or about November 2011, I directed comScore employees to search comScore's backend servers for information related to Plaintiff Mike Harris ("Harris"). I also conducted several searches personally.
4. Despite exhaustive efforts, comScore was unable to locate any data or other indication that Harris downloaded comScore's software in or around March of 2010, or at any other time.

5. In order to ensure proper statistical analysis, an individual must be a comScore panelist for more than thirty days before his or her data is used in any of comScore's syndicated reports sold to clients.
6. Panelists who installed software in conjunction with a third party partner software offering, and who uninstall comScore's software less than thirty days after installation, actually cost comScore money due to recruitment costs associated with comScore's third party partner program and infrastructure.
7. As part of its business model, comScore offers rewards programs to certain panelists.
8. Under one rewards program, panelists are provided points for various tasks (such as taking a survey) that can then be traded in for prizes from the reward catalogue.
9. comScore's panelists have claimed over 113,000 prizes, valued at close to \$2 million, as part of this rewards program over the past three years.
10. comScore's panelists have also converted over 2.5 million "tokens," which are incentives that can be redeemed for reward points or other prizes, over the past three years.
11. These panelists must take an active step to claim a prize under comScore's rewards program. Thus, panelists cannot be "unaware" of their status as a panelist and collect rewards.
12. comScore provides additional incentives to panelists, including sweepstakes and incentives offered for unique events.
13. I hereby declare under the penalty of perjury that all statements made herein are true and correct.

Executed this 26th day of February, 2013.



Michael Brown
Chief Technology Officer, comScore, Inc.

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

JEFF DUNSTAN, individually and on
behalf of a class of similarly
situated individuals,

Plaintiffs,

vs.

comSCORE, INC., a Delaware corp.,

Defendant.

No. 11 C 5807

Chicago, Illinois
November 15, 2011
9:59 o'clock a.m.

TRANSCRIPT OF PROCEEDINGS
BEFORE THE HONORABLE JAMES F. HOLDERMAN

APPEARANCES:

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1 with me, counsel, after I have ruled? Go ahead, say whatever
2 you want to say. I am happy to sit here and take up the time
3 of the other lawyers who are waiting to have their cases
4 called.

5 MR. SOMVICHIAN: No, Your Honor.

6 THE COURT: Go ahead and make any further argument
7 you want to make.

8 MR. SOMVICHIAN: Your Honor, I'm not here to argue
9 with you. I just -- I'm surprised that in both instances,
10 there wasn't full briefing on an issue. I understand your --

11 THE COURT: You've had full opportunity. What else
12 would you want to have told me?

13 MR. SOMVICHIAN: We laid out our arguments in the
14 papers.

15 THE COURT: Was there anything else you wanted to
16 have told me?

17 MR. SOMVICHIAN: No.

18 THE COURT: Then you had a full opportunity to brief,
19 did you not?

20 MR. SOMVICHIAN: Yes.

21 THE COURT: Then what's your problem?

22 MR. SOMVICHIAN: I am just surprised by the process,
23 Your Honor, but we'll move forward.

24 THE COURT: Well, what causes you surprise? Aren't
25 you from Virginia?

1 MR. SOMVICHIAN: No, Your Honor.

2 THE COURT: Isn't your client in Virginia?

3 MR. SOMVICHIAN: Yes.

4 THE COURT: And didn't you extol the virtues of the
5 rocket docket in Virginia?

6 MR. SOMVICHIAN: Yes.

7 THE COURT: What else would you like?

8 MR. SOMVICHIAN: I'm done, Your Honor.

9 THE COURT: I would encourage that you discuss
10 settlement of this case as promptly as possible in order to
11 evaluate the risks of going forward with this litigation.

12 I am going to set the schedule that will be adhered
13 to on December 20th, and we will move forward to get this
14 litigation resolved.

15 MR. SOMVICHIAN: Very good.

16 MR. EDELSON: Thanks, Your Honor.

17 MR. SCHARG: Thank you, Your Honor.

18 THE COURT: Thank you for coming in.

19 MR. HUDSON: Thank you, Your Honor.

20 (Proceedings concluded.)

21

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C E R T I F I C A T E

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I, Colleen M. Conway, do hereby certify that the foregoing is a complete, true, and accurate transcript of the proceedings had in the above-entitled case before the HONORABLE JAMES F. HOLDERMAN, Chief Judge of said Court, at Chicago, Illinois, on November 15, 2011.

/s/ Colleen M. Conway, CSR, RMR, CRR

11/17/11

Official Court Reporter
United States District Court
Northern District of Illinois
Eastern Division

Date

09:20:43

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

JEFF DUNSTAN, individually and on
behalf of a class of similarly
situated individuals,)
Plaintiffs,)
vs.)
comSCORE, INC., a Delaware corp.,)
Defendant.)

No. 11 C 5807
Chicago, Illinois
March 15, 2012
9:20 o'clock a.m.

TRANSCRIPT OF PROCEEDINGS
BEFORE THE HONORABLE JAMES F. HOLDERMAN

APPEARANCES:

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Colleen M. Conway, Official Court Reporter

09:20:16 1

(Proceedings in open court:)

09:20:16 2

THE CLERK: 11 C 5807, Dunstan versus comScore,

09:20:20 3

motions to withdraw and scheduling conference.

09:20:28 4

MR. STACK: Good morning, Your Honor.

09:20:28 5

Paul Stack for the defendant.

09:20:30 6

THE COURT: Good morning.

09:20:32 7

MR. SCHAPIRO: Andrew Schapiro for the defendant.

09:20:36 8

THE COURT: Good morning.

09:20:36 9

MR. HUDSON: Good morning, Your Honor.

09:20:36 10

Leonard Hudson, local counsel for the defendant.

09:20:38 11

THE COURT: Good morning.

09:20:40 12

MR. BALABANIAN: Good morning, Your Honor.

09:20:40 13

Rafey Balabanian and Benjamin Thomassen on behalf of

09:20:44 14

the plaintiffs.

09:20:44 15

THE COURT: Good morning.

09:20:46 16

MR. BALABANIAN: Good morning.

09:20:46 17

THE COURT: All right. Any objection to the motions

09:20:48 18

to withdraw?

09:20:52 19

MR. SCHAPIRO: No.

09:20:52 20

MR. STACK: No.

09:20:54 21

MR. BALABANIAN: No.

09:20:54 22

THE COURT: Okay. Nobody is objecting. All right.

09:20:56 23

Plaintiffs' counsel and defense counsel are just coming in.

09:20:58 24

All right. All right. Those are granted and the appearances

09:21:02 25

are in.

Colleen M. Conway, Official Court Reporter

APPEARANCES (Continued):

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Colleen M. Conway, Official Court Reporter

09:21:02 1

Let me just thank you for submitting the Form 52. I

09:21:08 2

appreciate the time and effort that you have put into it.

09:21:16 3

I understand that we want to focus on the class

09:21:22 4

discovery, and you anticipate that that would close by

09:21:30 5

September 14th. And so we will set that as a class discovery

09:21:34 6

closing date.

09:21:36 7

And then you wanted to submit a supplemental class

09:21:46 8

certification motion on October 15, 2012. Why don't you -- we

09:21:54 9

will go ahead and set that date.

09:21:56 10

And then I am going to set the case for a further

09:22:00 11

status on October 18th, Thursday, October 18th, 2012. We will

09:22:04 12

be in a better posture at that point for setting further dates.

09:22:14 13

But in the interim, you have agreed that with regard

09:22:18 14

to the class discovery, that plaintiffs are to submit the

09:22:22 15

plaintiffs' class-related expert reports by -- the way you put

09:22:28 16

it, it was two months before the class-based discovery

09:22:32 17

deadline, which, of course, we agreed and you agreed was

09:22:34 18

September 14th, so that would be July 15 for those reports, and

09:22:40 19

then one month after that for the defense would be August 15th.

09:22:44 20

And then you will go ahead and wrap up the class

09:22:50 21

discovery and we will set the case, as I said, for a further

09:22:52 22

status in October, October 18th, at 9:00 a.m.

09:23:00 23

We are going to hold off on setting further dates in

09:23:02 24

the case at this time because I am hoping that after you

09:23:08 25

complete the class discovery that you might be able to work

Colleen M. Conway, Official Court Reporter

09:23:12 1 something out, and I'd like to pause and see if we can.
 09:23:16 2 I also want to ask, because I know document number 2
 09:23:20 3 in this case was the plaintiffs' motion for class
 09:23:24 4 certification, and it was filed kind of as a preemptive motion
 09:23:30 5 for the purpose of securing the position of the class
 09:23:38 6 representatives, and so let me ask, is there any position on
 09:23:46 7 the part of the defense that you would agree that you would not
 09:23:52 8 take any further action to try to pick off any of the class
 09:23:58 9 members?

09:24:02 10 MR. STACK: No. We hadn't agreed to that. I -- that
 09:24:04 11 thought hasn't entered my mind, honestly.

09:24:06 12 THE COURT: Okay. Well, then -- okay. I understand.
 09:24:10 13 The motion for class certification, the relief sought, is to
 09:24:16 14 enter and reserve ruling on the motion for class certification,
 09:24:20 15 allow for and schedule discovery to take place on class-wide
 09:24:24 16 issues, grant the plaintiffs leave to file a memorandum in
 09:24:28 17 support of its motion at the conclusion of class discovery,
 09:24:32 18 grant the plaintiffs' class certification motion after full
 09:24:36 19 briefing, and provide all other relief that the Court deems
 09:24:40 20 appropriate.

09:24:42 21 My feeling is what we have already done is granted 1,
 09:24:50 22 2, and 3, and we are going to hold off on 4. And so -- and 5.
 09:24:58 23 And so it seems to me we can resolve that motion that way.

09:25:02 24 Is there any objection to that?

09:25:04 25 MR. STACK: I don't see any, no.

Colleen M. Conway, Official Court Reporter

09:26:22 1 Administrative Office looks at motions pending on a judge's
 09:26:26 2 calendar --

09:26:26 3 MR. STACK: Yes.

09:26:26 4 THE COURT: -- for a long period of time and when
 09:26:28 5 they really should be dealt with, and I think I can deal with
 09:26:32 6 this one. I am going to grant 1, 2, and 3. I am going to
 09:26:36 7 enter and reserve ruling on the motion for class certification.

09:26:38 8 MR. STACK: Okay.

09:26:38 9 THE COURT: Allow the schedule, allow the memorandum.
 09:26:42 10 And then they also want me to grant it later, but I will hold
 09:26:44 11 off on that.

09:26:46 12 MR. STACK: Okay.

09:26:46 13 THE COURT: Okay? I am not trying to --

09:26:48 14 MR. STACK: It's just the word "granting" that kind
 09:26:50 15 of --

09:26:50 16 THE COURT: I know. You hate the word -- yeah, the
 09:26:52 17 title of the motion and the word "granting," but --

09:26:54 18 MR. STACK: It might -- I wonder, as an alternative,
 09:26:56 19 would it make sense, if it would help the Court, if the Court
 09:26:58 20 entered and continued the motion until the 12th?

09:27:02 21 THE COURT: No, because the computer only
 09:27:04 22 recognizes --

09:27:04 23 MR. STACK: Got it.

09:27:04 24 THE COURT: -- "grant" or "deny."

09:27:04 25 MR. STACK: Okay.

Colleen M. Conway, Official Court Reporter

09:25:06 1 MR. BALABANIAN: No. I think that would be fine,
 09:25:08 2 Your Honor.

09:25:08 3 THE COURT: Okay. All right. Well, then the motion,
 09:25:12 4 which is titled the Motion for Class Certification, is granted
 09:25:16 5 and the relief sought in the request, subparagraphs 1, 2, and
 09:25:24 6 3, is granted. 4 and 5 are denied at this time because we
 09:25:32 7 haven't completed the full briefing, and we will, and we will
 09:25:36 8 take action from that point.

09:25:38 9 MR. STACK: Yeah. Your Honor, I am a little
 09:25:40 10 embarrassed, since I don't have the motion in front of me.

09:25:42 11 THE COURT: Okay. Well, number 1 is "enter and
 09:25:44 12 reserve ruling on the motion for class certification." That's
 09:25:48 13 relief number 1.

09:25:48 14 MR. STACK: Okay.

09:25:50 15 THE COURT: Relief number 2 is to "allow for and
 09:25:54 16 schedule discovery to take place on a class-wide basis." We
 09:25:58 17 have done that.

09:25:58 18 MR. STACK: Okay.

09:25:58 19 THE COURT: Number 3, to "grant the plaintiffs leave
 09:26:02 20 to file a memorandum in support of its motion for class
 09:26:04 21 certification after the class-wide discovery."

09:26:06 22 MR. STACK: Okay.

09:26:06 23 THE COURT: So, to some extent, it is a preemptive
 09:26:12 24 motion. And perhaps you realize, Mr. Stack, having clerked for
 09:26:20 25 a judge of the Court of Appeals, that sometimes the

Colleen M. Conway, Official Court Reporter

09:27:04 1 THE COURT: So what I am going to say is I am going
 09:27:06 2 to grant the relief sought --

09:27:08 3 MR. STACK: Okay.

09:27:08 4 THE COURT: -- in paragraphs 1, 2, and 3. Deny the
 09:27:10 5 relief sought in paragraphs 4 and 5 at this time.

09:27:14 6 MR. STACK: Okay.

09:27:14 7 MR. SCHAPIRO: And we'll make sure to warn our
 09:27:16 8 clients, and then when --

09:27:18 9 THE COURT: Yes. When --

09:27:18 10 MR. STACK: We'll talk to them together.

09:27:20 11 THE COURT: When they pick up the docket, they should
 09:27:22 12 go back to document number 2 and see actually what was that
 09:27:24 13 relief that was sought. Okay?

09:27:26 14 MR. STACK: Okay.

09:27:26 15 THE COURT: So we are back where we are. And let me
 09:27:28 16 ask, though, have you had any settlement discussions --

09:27:30 17 MR. STACK: No.

09:27:30 18 THE COURT: -- with the new counsel coming in? I
 09:27:32 19 thought we'd have a refreshing new approach.

09:27:34 20 MR. STACK: Oh, I think we're still sitting down and
 09:27:38 21 talking about discovery, Your Honor. I think before we really
 09:27:40 22 get in any kind of discussion, I think people have to really
 09:27:44 23 know what happened and --

09:27:44 24 THE COURT: Yeah.

09:27:46 25 MR. STACK: You know,

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09:27:46 1 who-got-to-the-intersection-first sort of thing.
 09:27:48 2 THE COURT: It's a little more complicated than that,
 09:27:50 3 but --
 09:27:50 4 MR. STACK: It is a little more complicated, but I
 09:27:52 5 think that's what we're doing right now. But we seem to be
 09:27:56 6 getting along pretty well on the issue of discovery.
 09:27:58 7 THE COURT: Okay. All right. Thank you.
 09:28:02 8 MR. BALABANIAN: Thank you, Your Honor.
 09:28:02 9 MR. STACK: Thank you, Your Honor.
 09:28:02 10 THE COURT: Appreciate it.
 11 (Proceedings concluded.)
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C E R T I F I C A T E

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 5 I, Colleen M. Conway, do hereby certify that the
 6 foregoing is a complete, true, and accurate transcript of the
 7 proceedings had in the above-entitled case before the
 8 HONORABLE JAMES F. HOLDERMAN, Chief Judge of said Court, at
 9 Chicago, Illinois, on March 15, 2012.
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 11

| | |
|--|-----------------|
| <u>/s/ Colleen M. Conway, CSR, RMR, CRR</u> | <u>04/08/13</u> |
| Official Court Reporter United States District Court Northern District of Illinois Eastern Division | Date |

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

JEFF DUNSTAN and MIKE HARRIS,
individually and on behalf of
a class of similarly situated
individuals,

Plaintiffs,

vs.

comSCORE, INC., a Delaware corp.,
Defendant.

No. 11 C 5807
Chicago, Illinois
July 26, 2012
9:20 o'clock a.m.

TRANSCRIPT OF PROCEEDINGS
BEFORE THE HONORABLE JAMES F. HOLDERMAN

APPEARANCES:

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00:01:10 1 discovery deadline, and I just want to know why. I want to be
00:01:15 2 able to set some firm dates. We can keep the dates if they're
00:01:20 3 already firm and we can get everything done. But I just really
00:01:25 4 want to know why it is you weren't able to.
00:01:27 5 MR. BALABANIAN: My apologies, Your Honor.
00:01:29 6 We've had a couple big issues, and it has to do
00:01:31 7 mainly with the document production. The document production
00:01:34 8 has moved slower than we would have liked.
00:01:36 9 There's two kind of components to it, Your Honor.
00:01:39 10 The first is the source code that we've been examining for some
00:01:42 11 time, which was actually produced pursuant to this Court's
00:01:45 12 order.
00:01:45 13 THE COURT: Right. And I thought you got that on a
00:01:48 14 disk some time ago.
00:01:50 15 MR. STACK: January, Your Honor.
00:01:52 16 THE COURT: Mr. Stack says January.
00:01:54 17 MR. STACK: Yeah, early January.
00:01:55 18 THE COURT: And I --
00:01:56 19 MR. BALABANIAN: It wasn't --
00:01:57 20 THE COURT: -- find him to be a credible person.
00:01:59 21 MR. BALABANIAN: Sure. We didn't get all of it at
00:02:01 22 the time that we initially were ordered to get it, but,
00:02:04 23 regardless, we've still been -- we've been going through it and
00:02:06 24 our expert's been going through it from the day that we got it,
00:02:09 25 and we haven't been --

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(Proceedings in open court:)

THE CLERK: 11 C 5807, Dunstan versus comScore,
motion to modify scheduling order.

MR. BALABANIAN: Good morning, Your Honor.
Rafey Balabanian and Ari Scharg appearing on behalf
of the plaintiff.

MR. SCHAPIRO: Andrew Schapiro for defendant.

MR. STACK: Your Honor, Paul Stack for defendant.

THE COURT: Good morning.

I have reviewed the motion. I have reviewed the
response. Basically, the response position is there is no
reason to extend the discovery. I went back and double-checked
the motion.

But let me hear from plaintiffs' counsel basically in
reply.

MR. BALABANIAN: Sure. Thank you, Your Honor.

Your Honor, the first thing that I would take issue
with in the response is simply the fact that we didn't meet and
confer on these issues.

THE COURT: Okay. Wait. Time out. I just want to
know the reasons. Frankly --

MR. BALABANIAN: Sure.

THE COURT: -- I am not finding any bad faith on
anybody's part, or I am not accepting any representations that
somebody was dilatory or not. I mean, you missed the expert

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00:02:09 1 THE COURT: Approximately six months.
00:02:10 2 MR. BALABANIAN: And we haven't been through it
00:02:12 3 completely. As far as the -- and we're not through it yet.
00:02:15 4 THE COURT: Okay.
00:02:15 5 MR. BALABANIAN: Our expert has made great headway,
00:02:18 6 and I do believe that, you know, we'll meet the extended
00:02:21 7 deadline, should the Court agree to it.
00:02:23 8 But, frankly, the source code has been a major, major
00:02:28 9 point of work that has been ongoing since we received it.
00:02:31 10 There's been no bad faith. We haven't been sitting on it.
00:02:33 11 It's been with our expert in Florida since we received it.
00:02:37 12 Separately, the document production has slowed us
00:02:41 13 down in a lot of ways. The document production was originally
00:02:43 14 due on March 23rd. Judge Kim ordered that it be produced then.
00:02:47 15 It wasn't produced then. Judge Kim admonished the defendants
00:02:51 16 for not doing so.
00:02:52 17 It wasn't until April the 13th that they actually
00:02:55 18 produced the documents, which was five days before our
00:02:59 19 scheduled deposition. It wasn't enough time. There was over
00:03:02 20 10,000 pages of documents; and if you printed them out, it's
00:03:05 21 over a million.
00:03:05 22 We've been meet-and-conferring on continuously
00:03:09 23 regarding the document production. Frankly, we moved to compel
00:03:11 24 on that, and we just got a ruling from Judge Kim on that on
00:03:14 25 June -- on July the 5th. But Judge Kim acknowledged --

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00:03:16 1 THE COURT: Right.

00:03:17 2 MR. BALABANIAN: -- that we were waiting on his

00:03:19 3 ruling, in large part to see how we wanted to proceed with

00:03:21 4 discovery.

00:03:22 5 The 30(b)(6) deposition is coming up on August the

00:03:24 6 15th, Your Honor.

00:03:25 7 THE COURT: And you are going to be able to keep

00:03:26 8 that?

00:03:26 9 MR. BALABANIAN: We are keeping that, but that

00:03:29 10 certainly affects our ability to provide expert reports.

00:03:31 11 Now, we didn't miss the deadline. The deadline was

00:03:34 12 Monday, the 16th. We filed our motion on that date. So, I

00:03:39 13 mean, we didn't -- I'm just saying we didn't blow it.

00:03:41 14 THE COURT: I guess it depends on the definition of

00:03:43 15 "missed."

00:03:44 16 MR. BALABANIAN: Well, it is a different standard, I

00:03:46 17 think, if the deadline had passed and we were filing it after

00:03:48 18 the deadline, Your Honor.

00:03:49 19 But, regardless, the 30(b)(6) deposition we've been

00:03:51 20 trying to take for some time, and the documents have slowed us

00:03:55 21 down on our ability to do so. We have some issues with how

00:03:58 22 they were produced. We don't believe that they were OCR'd

00:04:01 23 correctly.

00:04:02 24 We've had two meet-and-confers in the last two days

00:04:04 25 with Ms. Bowland, Mr. Schapiro's associate, on the issue.

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00:05:25 1 seems to me, from reviewing the materials, that perhaps we were

00:05:29 2 too optimistic in setting the deadlines the first time and

00:05:33 3 this -- I have a lot of concern, though, about the fact that

00:05:36 4 your expert has been diligently working with the source code

00:05:40 5 for six months and still hasn't figured it out.

00:05:42 6 MR. BALABANIAN: Well, I didn't say he hasn't figured

00:05:45 7 it out.

00:05:45 8 THE COURT: Oh, okay.

00:05:46 9 MR. BALABANIAN: He hasn't been through all of it.

00:05:47 10 THE COURT: He hasn't been able to get through all of

00:05:50 11 it.

00:05:50 12 MR. BALABANIAN: But we've gotten -- we believe we've

00:05:52 13 gotten the bulk of what we need for purposes of class

00:05:55 14 certification, certainly.

00:05:56 15 THE COURT: Already?

00:05:57 16 MR. BALABANIAN: Well, I can't say --

00:05:59 17 THE COURT: Okay.

00:05:59 18 MR. BALABANIAN: -- that because we have a 30(b)(6)

00:06:01 19 coming up on August the 15th, and it's the first one, Judge.

00:06:04 20 THE COURT: I understand. All right. Let me hear

00:06:06 21 briefly, because I've got a lot of other lawyers on other

00:06:08 22 things, let me hear briefly from comScore, whoever wants to

00:06:13 23 speak.

00:06:13 24 MR. STACK: Go ahead.

00:06:14 25 MR. SCHAPIRO: Your Honor, there are really two

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00:04:09 1 We're still not through the impasse.

00:04:11 2 We've asked them to be allowed to inspect their

00:04:15 3 documents on site through their Jira system, which Judge Kim

00:04:17 4 acknowledged might possibly be the best way to do this.

00:04:19 5 Judge Kim did deny our motion to compel further

00:04:22 6 production of the documents, i.e. we asked that they be

00:04:25 7 produced in the ordinary course of business. Judge Kim found

00:04:27 8 them to be produced sufficiently, but certainly at the hearing

00:04:31 9 acknowledged that the dismissal would be without prejudice and

00:04:35 10 we would be able to go back to him and talk to him about why

00:04:38 11 we're still having problems going through the documents, and we

00:04:41 12 are. We have a status hearing with him today, and we plan to

00:04:43 13 bring up the issue.

00:04:45 14 So, you know, there's a lot of reasons why the

00:04:49 15 discovery should be extended modestly and all of the deadlines.

00:04:54 16 And I did -- the defendants quote me in their

00:04:57 17 response brief that at the last hearing, I said the parties

00:04:59 18 were diligent in meet-and-conferring. That's true. We've met

00:05:02 19 and conferred over 20 times on this case because we found that

00:05:05 20 the defendants have not -- the defendant has not complied with

00:05:09 21 their discovery obligations. We've won on some issues and

00:05:15 22 we've lost on some issues, but the idea that there's been bad

00:05:18 23 faith or that we've been sitting on our hands --

00:05:20 24 THE COURT: As I said, I am not finding any bad faith

00:05:22 25 or dilatory conduct on anybody's part at this point. It just

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00:06:15 1 issues as we see it. There's the expert deadline and the

00:06:19 2 request to move back the class certification deadline. And we

00:06:24 3 were surprised when we didn't get an expert report on July

00:06:27 4 16th. We were expecting it, and we were ready to have a quick

00:06:30 5 turnaround under the schedule.

00:06:31 6 THE COURT: Uh-huh.

00:06:32 7 MR. SCHAPIRO: The plaintiffs had mentioned in front

00:06:34 8 of Judge Kim back on July 5th that they might be seeking to

00:06:37 9 extend the deadline for class discovery. We hadn't heard

00:06:40 10 anything about the expert report. And Judge Kim told them on

00:06:43 11 that day that any motions about scheduling needed to come to

00:06:45 12 Your Honor.

00:06:46 13 THE COURT: Right.

00:06:46 14 MR. SCHAPIRO: So we weren't totally taken by

00:06:49 15 surprise at the request to extend the deadline for class

00:06:52 16 discovery, but we thought we were going to get an expert report

00:06:54 17 on July 16th. And for the reasons Your Honor has stated, we --

00:06:59 18 we're still a little bit puzzled as to why they don't have it,

00:07:02 19 because that is really going to just be, as we understand it,

00:07:05 20 at least primarily, an analysis of the source code.

00:07:08 21 THE COURT: Right.

00:07:08 22 MR. SCHAPIRO: I don't know --

00:07:09 23 THE COURT: Well, he hasn't been through it. You now

00:07:11 24 know.

00:07:12 25 MR. SCHAPIRO: We now know he hasn't been through it.

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00:07:13 1 THE COURT: Right.
 00:07:13 2 MR. SCHAPIRO: There are two things that we've
 00:07:15 3 learned that -- and I don't know whether there are other things
 00:07:16 4 going on in the background to it. We just wanted to alert the
 00:07:19 5 Court to. There are two plaintiffs in this -- two named
 00:07:21 6 plaintiffs in this action, as Your Honor --
 00:07:23 7 THE COURT: Right.
 00:07:23 8 MR. SCHAPIRO: -- knows. We learned that one of them
 00:07:27 9 threw away his computer. And we have no record that he ever
 00:07:30 10 downloaded our software.
 00:07:31 11 THE COURT: Which one threw away his computer?
 00:07:33 12 MR. SCHAPIRO: Mr. Harris.
 00:07:34 13 THE COURT: Oh.
 00:07:35 14 MR. SCHAPIRO: And we have no record that he ever
 00:07:37 15 even downloaded our software.
 00:07:39 16 THE COURT: Oh.
 00:07:39 17 MR. SCHAPIRO: The second plaintiff, Mr. Dunstan, is
 00:07:41 18 the one who says that after he downloaded our software, his
 00:07:44 19 computer started to operate slowly or poorly. So we've asked
 00:07:47 20 for his anti-virus logs, because it sounded as if he has a
 00:07:51 21 virus. When we asked for that, Mr. Dunstan said: I withdraw
 00:07:55 22 my claim about the computer being slowed down and having to buy
 00:08:00 23 anti-virus software.
 00:08:01 24 So I don't know whether there are other things going
 00:08:05 25 on behind the scenes -- I wouldn't want to speculate -- that

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00:09:23 1 Jira tickets are internal documents that comScore
 00:09:25 2 keeps when they make changes to the software or to their
 00:09:29 3 product, so if there's a tweak here or a tweak there or a
 00:09:32 4 complaint.
 00:09:33 5 THE COURT: Okay.
 00:09:34 6 MR. SCHAPIRO: So while, in some ways, the number
 00:09:37 7 might sound large, the vast bulk of it is a set of these
 00:09:41 8 tickets, which are written on on almost a daily or even more
 00:09:45 9 frequent basis. That's where we are.
 00:09:47 10 THE COURT: Okay.
 00:09:48 11 MR. BALABANIAN: Judge, if I could just make two
 00:09:50 12 minor points?
 00:09:50 13 THE COURT: Okay.
 00:09:51 14 MR. BALABANIAN: The notion --
 00:09:52 15 THE COURT: Let me ask the permission of everybody
 00:09:53 16 else in the courtroom, too.
 00:09:56 17 No. Go ahead. I'm joking.
 00:09:56 18 MR. BALABANIAN: Judge --
 00:09:58 19 THE COURT: It's their time.
 00:09:59 20 MR. BALABANIAN: -- Mr. Schapiro wants to make much
 00:10:00 21 of the fact that my client, Dunstan, trashed his computer.
 00:10:03 22 That's been known since the beginning of this lawsuit. It was
 00:10:05 23 well before --
 00:10:05 24 MR. SCHARG: Mike Harris.
 00:10:06 25 MR. BALABANIAN: Excuse me. Mike Harris. It was

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00:08:07 1 might also be slowing things down here. But I do want to flag
 00:08:10 2 that for the Court.
 00:08:10 3 MR. BALABANIAN: Your Honor, could I just say one
 00:08:12 4 thing in response to that, please?
 00:08:13 5 THE COURT: Well, let me make sure that he is done.
 00:08:15 6 MR. BALABANIAN: Excuse me.
 00:08:16 7 THE COURT: Anything further?
 00:08:17 8 MR. SCHAPIRO: So, as I said, you know, there are
 00:08:19 9 these two questions about the class cert. and the expert
 00:08:22 10 report. I don't want to overreach, but I do feel that having
 00:08:28 11 missed the deadline and not even asked -- I don't see even
 00:08:33 12 explicitly in their motion for the extension of class discovery
 00:08:36 13 a request to extend the separate deadline for the expert
 00:08:41 14 report. I think the Court would be within its power to say
 00:08:44 15 that it missed the time for the expert report, and that's that,
 00:08:47 16 but, of course, I don't want to overreach.
 00:08:49 17 THE COURT: Yes, they made a -- the plaintiffs'
 00:08:52 18 counsel just said extend everything 60 days.
 00:08:55 19 MR. SCHAPIRO: So that's what we have, Your Honor.
 00:08:58 20 The only other thing I would say is that with regard
 00:09:01 21 to the statements in some of the document -- the papers before
 00:09:05 22 Your Honor about millions of pages of discovery, 95% -- not
 00:09:12 23 only was that all requested by the plaintiffs and -- but 95% of
 00:09:16 24 what we've provided is in the form of something called Jira
 00:09:19 25 tickets, J-i-r-a. They wanted our Jira tickets.

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00:10:08 1 well before this lawsuit was ever filed. It was approximately
 00:10:10 2 a year before the lawsuit was ever filed.
 00:10:12 3 With respect to Mr. Dunstan's claim, it's true, we
 00:10:15 4 are going to drop the subclass that seeks damages for what the
 00:10:18 5 software did to the computer.
 00:10:20 6 THE COURT: Okay.
 00:10:20 7 MR. BALABANIAN: But I will say that we are going to
 00:10:22 8 be moving for leave to amend, and we will be doing so by
 00:10:25 9 Monday, Your Honor, to add a claim for trespass to chattel and
 00:10:28 10 to refine the class.
 00:10:29 11 THE COURT: On a class basis?
 00:10:31 12 MR. BALABANIAN: Yes, Your Honor.
 00:10:32 13 THE COURT: Okay. All right. Well, I am not giving
 00:10:34 14 you permission now.
 00:10:35 15 MR. BALABANIAN: Sure.
 00:10:35 16 THE COURT: You can go ahead and prepare it and
 00:10:37 17 notice it up, and we will address it.
 00:10:41 18 Let me say this, because I don't want to take too
 00:10:44 19 much more time. We're going to waste our 60 days if we don't
 00:10:47 20 go ahead and use it. It seems to me that no one is
 00:10:52 21 substantially harmed if we grant this additional time. As I
 00:10:57 22 said, I don't find any bad faith on anybody's part or any
 00:11:00 23 dilatory conduct on anybody's part. I believe that the
 00:11:04 24 circumstances just require additional time.
 00:11:08 25 And so here's the new schedule. Plaintiffs' 26(a)(2)

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00:11:15 1 disclosures on class certification issues are due September 17,
 00:11:19 2 2012. The deadline for defendant's 26(a)(2) disclosures are
 00:11:29 3 October 15, 2012.
 00:11:32 4 Can you make that or do you want more time?
 00:11:37 5 MR. SCHAPIRO: If we could have until the end of
 00:11:38 6 October, Your Honor?
 00:11:39 7 THE COURT: All right. Well, October 31.
 00:11:41 8 MR. SCHAPIRO: That would be great. Thank you.
 00:11:42 9 THE COURT: All right. And then with regard to the
 00:11:46 10 deadline for class-based discovery, can we complete that by the
 00:11:53 11 end of November, November 30th?
 00:11:57 12 MR. BALABANIAN: I think so, yes.
 00:11:58 13 THE COURT: What?
 00:11:59 14 MR. BALABANIAN: Yes, Your Honor.
 00:11:59 15 THE COURT: All right. And then how about this
 00:12:04 16 deadline for plaintiffs to file their supplemental motion for
 00:12:08 17 class certification? Can you get that in by December 14?
 00:12:21 18 MR. BALABANIAN: That -- is there any way we could
 00:12:23 19 have until the end of that month?
 00:12:24 20 THE COURT: All right. December 31. And we will set
 00:12:29 21 the case for a further status to see where we are -- because at
 00:12:36 22 that point, you can perhaps even start focusing on
 00:12:41 23 settlement -- January 10. Are you available January 10, 2013,
 00:12:47 24 at 9:00 a.m. --
 00:12:47 25 MR. BALABANIAN: Yes, Your Honor.

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00:13:31 1 at this point, and you should proceed forward and hopefully
 00:13:34 2 complete the discovery. And then I really do want you to focus
 00:13:38 3 on discussing settlement, see if you can work something out.
 00:13:41 4 Okay?
 00:13:41 5 MR. BALABANIAN: Thank you for your time, Your Honor.
 00:13:43 6 MR. SCHAPIRO: Thank you.
 00:13:44 7 MR. STACK: Thank you.
 00:13:45 8 MR. SCHARG: Thank you, Your Honor.
 9 THE COURT: Thank you.
 10 (Proceedings concluded.)
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00:12:48 1 THE COURT: -- for status?
 00:12:49 2 MR. SCHAPIRO: January is open, Your Honor.
 00:12:50 3 MR. STACK: Yes, Your Honor.
 00:12:50 4 THE COURT: Okay. All right. These are the new
 00:12:52 5 dates.
 00:12:53 6 Now, I don't want you to leave the courtroom until
 00:12:56 7 you promise me that this is it. No more extensions. We're
 00:13:00 8 going to do this. Can we --
 00:13:00 9 MR. BALABANIAN: I promise.
 00:13:01 10 THE COURT: -- do this?
 00:13:02 11 MR. BALABANIAN: I promise.
 00:13:03 12 THE COURT: Okay. Defense counsel?
 00:13:04 13 MR. SCHAPIRO: Certainly, Your Honor.
 00:13:05 14 MR. STACK: Yes, Your Honor.
 00:13:06 15 THE COURT: I get it from everybody.
 00:13:07 16 MR. STACK: Yeah, no problem.
 00:13:08 17 THE COURT: Okay. All right. These are the dates.
 00:13:09 18 They are now drying in concrete. And we will see you in
 00:13:15 19 January. I will look forward to the materials that will be
 00:13:19 20 filed, and I will see you on January 10th of 2013.
 00:13:22 21 MR. SCHAPIRO: So the intervening conference, which
 00:13:24 22 is on the schedule for -- I can't remember -- September, that's
 00:13:28 23 off?
 00:13:28 24 MR. BALABANIAN: Yes.
 00:13:29 25 THE COURT: Yes. All other court dates are stricken

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C E R T I F I C A T E

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 5 I, Colleen M. Conway, do hereby certify that the
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 7 proceedings had in the above-entitled case before the
 8 HONORABLE JAMES F. HOLDERMAN, Chief Judge of said Court, at
 9 Chicago, Illinois, on July 26, 2012.
 10
 11
 12 /s/ Colleen M. Conway, CSR,RMR,CRR 07/31/12
 13 Official Court Reporter Date
 14 United States District Court
 15 Northern District of Illinois
 16 Eastern Division
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