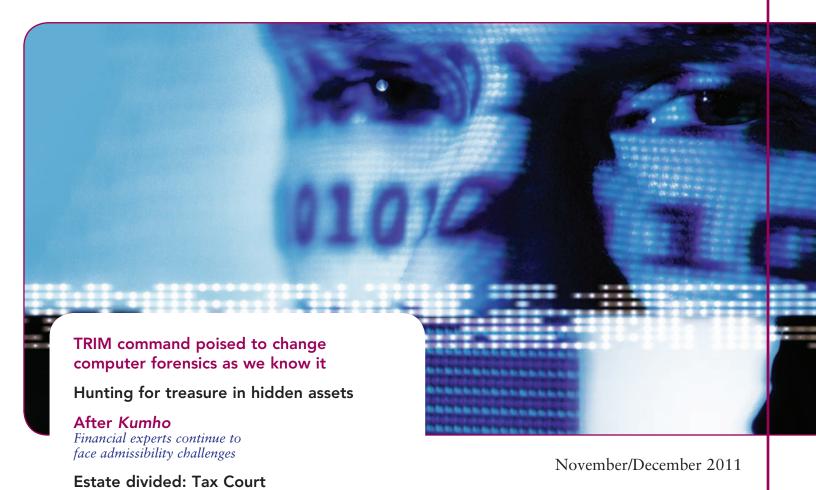
## - Advocate's EDGE



rejects fractional ownership claim

# TRIM command poised to change computer forensics as we know it

Over the past decade, attorneys have come to recognize the valuable role computer forensics play in recovering key financial information and other evidence from hard drives. Computer forensics evolve at a fast pace, though, and today's whiz-bang tools could be rendered as useful as a floppy disc when new technology is fully adopted.

The increasing availability of the TRIM command in computer operating systems illustrates this phenomenon. It can make recovering critical evidence harder, and as such it's poised to dramatically reshape the field of computer forensics.

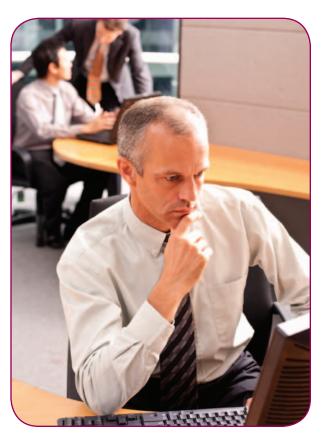
#### WHEN DELETED DATA ISN'T

You've probably heard by now that no digital file is ever truly deleted. On most computers, when a user deletes information, that information isn't immediately erased. Instead of deleting the data when, for example, users empty their recycle bins, the computer marks it for deletion.

This means that the space the information occupies on the hard drive is available to be overwritten by new data. But overwriting can take time. Until the old data is completely replaced, experts can locate fragments of deleted files and possibly reassemble them so they can be used as evidence.

## WHEN DELETED DATA REALLY IS

With the TRIM command, "delete" actually means "delete." TRIM is designed to improve computer performance, in part by changing how the deletion function operates. Instead of marking space as available, TRIM purges data immediately, regardless of whether the user has overwritten it with fresh data. And the deleted data is purged *completely* — not even remnants are left behind for experts to subsequently dig up and reassemble.



TRIM has been flying under the radar to some extent because the command only works on operating systems that use solid-state drives (SSDs), as opposed to traditional hard drives that are composed of spinning disks and read/write heads. SSDs have no moving parts and are faster at reading and writing data, booting up, and searching and transferring files. They also require less energy, create less heat and are more rugged — and therefore more portable — than hard drives.

The major deterrent to SSD adoption thus far has been the high cost, but prices have begun to drop. As the use of SSDs becomes more widespread, more users will have access to the TRIM command and its drop-dead deletions. Currently, the MacBook Air features an SSD, and Windows 7 and Mac OS X Lion support TRIM on SSDs.

## **WORKING AROUND TRIM**

The emergence of the TRIM command does not, as some have claimed, herald the end of computer forensics as a litigation weapon. It's true that the growing use of TRIM will prevent forensic experts from digging up the ostensibly deleted data that can linger on traditional hard drives. But experts will continue to be able to recover other crucial evidence from SSDs. Evidence can still be found, for example, in Internet and operating system caches, password-protected files, and logs.

What also hasn't changed is the need for attorneys to get their forensic experts involved as soon as possible. Whether solid-state or hard, drives should be imaged early on to preempt the corruption of data, which can occur simply by searching and reviewing files. With a comprehensive image, an expert can

examine all of the spreadsheets, documents and other files, as well as the accounting and database systems that so often contain relevant evidence.

It's worth pointing out one other significant implication of the TRIM command. Because it can kick in not only when data is deleted but also when a user formats an SSD, attorneys can no longer argue that the deletion of data alone indicates guilt. The deletion may have resulted from an innocent act.

### LOOKING FORWARD

The full impact of the TRIM command on computer forensics is yet unknown. But to ensure your clients recover all available evidence to support their case, be sure to work with an experienced expert who's familiar with the latest technological developments.

## Hunting for treasure in hidden assets

Suppose you represent a company whose biggest customer, a family-owned manufacturing business, has just filed for bankruptcy. The business owes your client nearly \$200,000, but the owner pleads poverty, claiming that other creditors have already cleaned him out. Your client suspects he's not telling the truth and is, in fact, hiding assets.

Enter the forensic accountant. These financial experts use several techniques to uncover and demonstrate the existence of assets, including performing net worth analysis and reviewing tax returns. All of these tools can help in a variety of litigation contexts — fraud investigations, shareholder disputes, divorce and business valuation.

## **NET WORTH ANALYSIS**

Net worth analysis entails looking at changes in a person's worth and reconciling those changes with



income and expenses. The first step is to reconstruct this data, which may involve some detective work.

Experts search for clues in a variety of places, including bank records, real estate and court filings, payroll records, expense reports, phone bills, insurance documents, and credit reports. Employment and loan applications also can provide a wealth of information, including current and previous residences, family members' names, and previous jobs. Experts then interview peo-

ple such as the subject's accountants, former spouses, former business partners and real estate agents.

Once they collect the financial data, forensic experts typically use three methods to detect hidden assets:

1. Asset. This method compares the subject's net assets at the beginning and end of the year, adding known income and subtracting known expenses. A result other than zero indicates income from unknown sources.

Experts search for clues in a variety of places, including bank records, real estate and court filings, payroll records, expense reports, phone bills, insurance documents, and credit reports.

2. Expenditures. An expert using this method looks for discrepancies between the subject's expenditures and his or her sources of funds, including salaries, commissions, investment dividends, inheritances, loans, gifts, and cash on hand at the beginning of the year. If the subject's spending exceeds the available funds, an unknown source of funds exists.



Complicating matters, however, is the fact that many people pay cash for expenses such as entertainment and meals and don't keep the receipts. And if it appears that the subject is using skimmed funds to pay for cash items, a more in-depth investigation will be necessary.

3. Bank deposits. This method relies on the assumption that all money is either spent or deposited. The expert starts with net deposits to all accounts during the year and adds cash expenditures to arrive at total receipts for the year. If that amount exceeds funds from known sources, the difference represents an unknown source of funds.

## **REVIEWING TAX RETURNS**

Typically, experts also must review several years of tax returns for specific items and general trends. Of particular interest are:

- Income from wages,
- Interest and dividends,
- Taxable refunds of state and local taxes,
- Retirement plan distributions,
- Alternative minimum tax (AMT), and
- Income tax refund amount.

Tax return schedules also can contain a wealth of information. For example, Schedule A (itemized deductions) covers real estate and personal property taxes. The expert checks that reported

amounts correspond to the underlying property. If they don't, further investigation may lead to undisclosed assets. Entries regarding state and local taxes may reveal income (or income-producing property) in other states. Experts can also glean critical information from Schedules B (interest and ordinary dividends), C (profit or loss from business), D (capital gains and losses), and E (supplemental income and loss).

## WRONG AND RIGHT

The existence of a previously unacknowledged source of funds doesn't necessarily mean the subject is wrongfully concealing assets. However, when experts find an unexplained gap, they know that the subject's financials merit further investigation. And this can help your clients recover what's rightfully theirs.

## After Kumho

## Financial experts continue to face admissibility challenges

In 1999, the U.S. Supreme Court's decision in Kumho Tire Co. v. Carmichael clarified that the Daubert criteria for admissibility of expert testimony applies to all types of experts. Since then, PricewaterhouseCoopers (PwC) has regularly examined written opinions that address challenges to financial expert witnesses. Its latest study looks at 6,141 Daubert challenges in federal and state courts from 2000 to 2010 and sheds light on some of the factors that determine the admissibility of expert testimony.

## DIFFERENT RESULTS FOR DIFFERENT EXPERTS

The number of *Daubert* challenges to financial experts increased every year from 2001 through 2009, but dropped 11% from the previous year in 2010. Of these experts, 52% were admitted, 28% were completely excluded and 17% were partially excluded. Judges didn't issue a decision in 3% of the challenges.

Certain types of financial experts were challenged and excluded more often than others. Economists, accountants and appraisers were challenged most frequently — representing 55% of all challenges to financial experts. The PwC study attributed this to the fact that these experts are retained as witnesses more commonly than other types of financial experts, including statisticians, financial analysts, finance professors and business consultants.



But economists, accountants and appraisers were also more likely to *survive* a challenge than other types of financial expert witnesses. During the period 2000 to 2010, 53% of challenges to other financial experts were successful, a significantly higher success rate than those for accountants (42%), economists (40%) and appraisers (34%).

## **EXCLUSIONS AND THE TYPE OF CASE**

According to the study, certain types of cases are more likely to trigger *Daubert* challenges, too. For example, challenges to financial experts were made most frequently in breach of contract or fiduciary duty cases.

However, the study didn't find significantly different success rates for most cases involving financial experts. Financial experts were successfully challenged at only marginally higher rates in fraud or intellectual property disputes than in cases involving breach of contract or fiduciary duty, antitrust or discrimination.

Economists, accountants and appraisers were more likely to survive a challenge than other types of financial expert witnesses.

## **RELIABILITY MATTERS**

Lack of reliability was the top reason financial experts were excluded — in nearly 70% of exclusions of financial expert testimony — in every year of the study period. On closer look, however, this lack of reliability generally related more to a lack of valid data than the misuse of an otherwise acceptable methodology. That said, methodological flaws caused by the misuse of accepted methods were a more frequent cause of exclusion than the use of novel methodology.

PwC listed several recent cases where courts found fault with the approach taken under the reliability standard. These include cases where financial expert testimony was excluded on the basis of:

- Use of an arbitrary and unreliable method of calculating royalty rates (for example, the 25% rule of thumb) in an intellectual property dispute,
- Inappropriate selection of a growth rate to calculate business interruption loss,
- Insufficient supporting market data when calculating copyright infringement damages,
- Failure to include variables in the calculation of damages,

- Improper use of averages in the calculation of lost earnings,
- Unreliable discounted cash flow (DCF) analysis,
- Failure to consider DCF analysis in business valuation,
- Lack of support for the duration of the damage period, and
- Misuse of the Black-Scholes method of valuation.

By keeping an eye out for these and similar errors by opposing experts, you may be able to persuade the court to exclude their testimony.

## DRAWING CONCLUSIONS

PwC's findings, particularly those related to the factors that cause financial expert testimony to be excluded, drive home the importance of hiring qualified financial experts who are well versed in *Daubert*'s standards. Knowledge of the evidentiary requirements, whether under federal or state law, will reduce the likelihood of an expert offering inadmissible testimony based on unreliable methods or data.

## **EXPERT VS. EXPERT**

The most recent PricewaterhouseCoopers (PwC) study of *Daubert* challenges in federal and state courts found correlations between the frequency of challenges and the expert's side. While plaintiffs' financial experts were challenged much more often than experts for the defense, they were excluded slightly less often than the defense experts.

During the 2000 to 2010 period, 69% of the challenges were brought against plaintiffs' experts. But only 45% of challenged financial experts on the plaintiff side were completely or partially excluded from testifying, vs. 48% of challenged defense-side financial experts. Most recently, in 2010, 46% of plaintiff-side financial expert witnesses were completely or partially excluded. That same year, 60% of defense-side financial experts were completely or partially excluded.

# Estate divided: Tax Court rejects fractional ownership claim

Does the mere execution of grant deeds transferring undivided interests in property create fractional interests? The U.S. Tax Court answered that question recently in *Estate of Adler*, and its decision was bad news for that large estate.

#### **FIVE FRACTIONAL INTERESTS**

In 1965, Axel Adler executed a grant deed transferring undivided one-fifth interests in 1,100 acres of land to each of his five children as tenants-incommon. The deed, however, reserved for Adler "the full use, control, income and possession" of the land during

his natural life. Adler paid his children no rent and was free to alter or improve the property without their consent. He paid all expenses, including taxes, upkeep and maintenance. None of his children lived on the property.

At Adler's death in 2004, the property's fair market value (FMV) was \$6.39 million. The estate reported a one-fifth interest in the land because a daughter had transferred her interest back to it in 1991. It also claimed significant lack of control and marketability discounts based on the fractional interests.

### **TESTAMENTARY TRANSFERS**

The Tax Court considered which value should be included in Adler's estate:

- 1. The value of his claimed fractional interest, with appropriate discounts, or
- 2. The value of the entire property.

It explained that whether property should be valued as a whole or as separate fractional interests depends on *when* the interests are separated. If ownership is split during the decedent's lifetime,



the interest the decedent retained (if any) is valued separately. If the split occurs only at death, the property is valued as a whole, without a discount for fractional ownership.

The court determined that, because Adler retained a life interest in the property by retaining control of it, the ownership wasn't split until his death. In other words, no fractional interests even existed before then, only remainder interests. Because a property interest transferred to separate owners at death isn't valued separately for estate tax purposes, the entire value of the property was includible in the gross estate.

### **ACTIONS SPEAK LOUDLY**

Although Adler purportedly transferred the property to his children with the 1965 grant deed, his actions indicated that he retained full ownership until his death in 2004. If he had, for example, paid FMV rent for the property, the fractional interests might have been created during his lifetime, removing them from his estate and securing discounts for gift tax purposes. But he didn't, and the Tax Court gave greater weight to his actions than to his words.