

# *White Paper*

## **Integrity and Reliability = Trustworthy Accounting Are you sure you're balanced?**

A white paper discussing the importance of cross-checks and integrity routines in modern business and accounting systems

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June 21, 2004

# Executive Summary

## EXECUTIVE SUMMARY:

Recent accounting scandals, highlighted by cases at Enron, Arthur Andersen, WorldCom and Qwest, have emphasized the need for corporate governance, especially responsible corporate accounting. Interest in corporate responsibility will remain high, according to US attorney Gordon Davidson<sup>1</sup>, and the recent 'Accounting Industry Reform Act' (US) means tougher corporate accounting regulations.

Integrity and reliability are increasingly an essential part of all business components - in people, transactions, and software. Microsoft recently addressed the issue with its 'Trustworthy Computing Initiative'<sup>2</sup>. It is essential that businesses not only use responsible accounting methods, but also that they can rely on those methods to be accurate.

Small and mid-sized businesses must know the limitations of their current accounting software; understand the possible ramifications of system accounting balance failure; and take steps to guarantee the integrity, reliability, and accuracy of their systems.

This white paper highlights the need to recognize problematic software accounting methods; minimizing errors in account balance integrity, ledgers and sub ledgers; and reducing the need for expensive rectification, thus avoiding serious legal ramifications.

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<sup>1</sup> Fenwick & West, a Palo Alto California-based law firm

<sup>2</sup> <http://www.microsoft.com/mscorp/innovation/twc/>

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## **Background**

Not so long ago - in the closing years of the last century - computerized accounting software seemed to be the solution to the problem of the escalating expense of retaining a staff of full-time accountants and bookkeepers.

After all, computer systems could automatically process all entries to ledgers, track debits and credits, and provide balanced 'books' at the end of the year. It seemed logical to take advantage of this new automation, and decrease manual accounting expenses by using cheaper - but less accounting-educated - data entry staff.

A manual accounting system usually entailed the monthly balancing of the general ledger to ensure that debit balances equal credit balances, and the financial statements were prepared using the trial balance amounts. Computerized accounting systems usually give trial balance as a built-in report, and most packages will not allow posting of an entry to the general ledger until the debit and credit balances are equal. All these actions are intended to ensure the integrity of the accounting structures.

But despite all this computerized tracking, the reality of ensuring 'balanced books' - defined here to include trial balances, control accounts and sub ledgers - has often proven to be very unbalanced indeed.

### **How did this happen?**

Back in the 1980's, when computer use was still rare - at least in most mid sized businesses - well-trained bookkeepers would keep meticulous books, doing regular monthly balancing. Even where computer software was being used, there was still the same level of discipline, with errors caught by the end of the month at the latest.

By the 1990's, a new staffing trend followed the introduction of second-generation automation. Employers spent large amounts of money on new computer accounting systems, and then tried to recoup some of that expense by hiring people with reasonable keyboard skills as opposed to expensive bookkeeping abilities. Often, these new employees would lack full understanding of the necessary controls in accounting. Data would be entered without any regard to its accuracy in relation to ledger balancing.

## **Result**

Because most small to mid-sized businesses don't have dedicated Chief Financial Officers or Controllers on staff, they rely instead on contract accounting at year-end. When data errors are not caught and rectified within a short period of time, days (or weeks) of detailed backtracking may be required to unearth the mistakes. Expensive hours are wasted, paid out by the business to the contract specialist hired to sort out where and when the incorrect entries were made. In some extreme cases, this might mean tracking back through 12 - 14 months worth of data entry. Repercussions can include mounting financial accounting expenses, and possible legal or taxation problems.

## Strategy

Accounting software providers often attest to the invulnerability of their own software system. It is true that a closed software system - with no input from third party software - may effectively ensure accounting integrity (assuming it has no "bugs"). However, in today's business, data input frequently includes information from other software systems. Businesses use other software packages which "interface" with their own accounting software, or add-ons designed specifically for the accounting package but not developed by the same vendor. It is this input, unverified and untracked, which jeopardises the integrity of the system.

Once the inaccurate integration process has caused an out-of-balance situation, trying to reconcile and identify the cause, weeks or months later - when the out of balance situation is finally discovered - is time- and cost-consuming. 'Solutions' to date have consisted mostly of 'patches' and much manual checking, and re-checking, for errors in accounting system integrity.

Overall, this is an expensive, laborious, and unacceptable long-term approach to ensuring the integrity of accounting structures.

### A Better Way

The preferred approach is to build integrity and reliability into the entire software accounting system, taking into account commonly encountered third party input.

Indeed, it is computer integrity and reliability that Microsoft recently addressed in part of its 'Trustworthy Computing Initiative': "As computers become increasingly central to how people work and live, it becomes increasingly essential that they perform as expected. Users look for a consistently trouble-free computing experience."

### The Ideal

In an ideal world, the accounting system would identify inaccurately integrated data as it occurs, or at the next possible occasion. For transactions posted within the integral accounting package, the warning (of inaccurate data input) would happen automatically; if the situation was caused by external, third party software, a trustworthy system should still identify the problem, and give the user a timely warning. (It is worth noting that it is not always transaction flow – internal or

external - which causes error; problems may arise as a result of a technical person making 'modifications' directly into the database.)

Unfortunately, these necessary, and anticipated, checks and balances, while taken for granted by the software user, often do not work adequately. Many a business has found itself having to waste resources in backtracking to discover the cause and timing of a system accounting error.

## **Method**

Logically, those checks and balances are installed in the main software accounting system - and proven, and thus accepted, as an integral, trustworthy part of the software package.

For example, a company's manufacturing division enters incorrect data gathered on its Excel spreadsheet, which is third party software. With under-performing software, this erroneous data is not caught prior to entry nor realized afterwards. This may go unnoticed for months. In the preferred system, the main accounting software will catch the incorrect entry. It will do this by making its own check of all entries, including those incoming from third party sources, and alerting the user to an incorrect entry. It should not allow further entries until all accounts are correctly balanced. It should alert the next user and identify the incorrect entry or entries.

## **Availability**

A search through current software products yields few examples of systems meeting these 'Trustworthy Accounting' requirements. Those that do match up to the guidelines are usually, with a few exceptions, in the high-end marketplace. However, as businesses realize the necessity of adhering to high standards of corporate responsibility, the need for reliable software tangentially increases.

This general summary of available software should be used only as a basis for more detailed, in-depth corporate research.

## **High-end:**

Software which fits the 'ideal' profile is available for high-end users. Systems such as those provided by, for example SAP, can check automatically for continuing integrity of the accounting systems at frequent, pre-determined times.

**API:**

An API - Application Programming Interface – may be used to enhance accounting system integrity. The interface is installed on the accounting software system, and then programmed by company or vendor employees, to integrate information from 3<sup>rd</sup> party systems (as opposed to having those systems simply “dump” data into the accounting system’s database). This forces the 3<sup>rd</sup> party transactions to conform to the accounting system’s business rules. While use of an API is recommended, for many small to mid-sized businesses it is not readily available in the accounting systems in use.

**Mid-range:**

While accepting that 100% trustworthiness is unlikely to be achieved by any technology, some mid-sized systems do offer account balance integrity. For example, Blue Link Elite 10 offers the functionality and capabilities normally found only in high-end ERP products, in tracking and preventing out of balance situations even when externally generated.

**Low-range:**

In general, entry-level systems do not offer many options for ensuring sophisticated account balance integrity.

## Conclusion

Integrity and reliability will increasingly be used to measure the adequacy of a software system.

Logically, integrity checks should be continuous and comprehensive, and address all areas throughout the software system. Not having this is like putting an expensive alarm system in your home, and then leaving the vulnerable ground floor kitchen and the ravine-facing back bedrooms out of the alarm loop.

Availability of adequate software systems will not be a problem. Developers are continually improving performance and capabilities, and price is stable. However, in keeping with Microsoft's policy for computing trustworthiness, the small to mid sized business owner will need to look beyond basic computer requirements, and consider the integral reliability of the entire business-wide software system.

The responsible business will recognize the limitations of its current accounting software, and will seek checks and balances throughout the entire system. This will minimize the accounting integrity errors which can lead to system accounting balance failure, with its attendant serious legal ramifications, and additional accounting expenses.

## Resources

White paper on Trustworthy computing

[http://www.microsoft.com/mscorp/innovation/twc/twc\\_whitepaper.asp](http://www.microsoft.com/mscorp/innovation/twc/twc_whitepaper.asp)

MS trustworthy computing website <http://www.microsoft.com/mscorp/innovation/twc/>

Gates Initial Letter to Staff on TWC <http://www.wired.com/news/business/0,1367,49826,00.html>

Tech learns lessons of accounting woes

[http://news.com.com/2100-1017\\_3-947332.html](http://news.com.com/2100-1017_3-947332.html)

Corporate Governance: How to say 'No' and still get lunch

<http://www.empireclubfoundation.com/details.asp?SpeechID=1881&FT=yes>