

WE CAN'T PROMISE TO MAKE FILLING IN ONLINE FORMS THIS EXCITING. **BUT WE CAN PROVE WHAT HAPPENED**



## Better Compliance, Paperless for CSR & Substantial Cost Savings

The four main benefits of Codel's online solution....

- **Compliance:** Authentication is possible for every digital interaction between your organisation and your customers, suppliers or partners. For example, information can be 'locked down' from the moment it's entered via a web screen.

- **Paperless for CSR:** "Codel's technology provides a unique mechanism for the securing of digital data that reduces dependency on paper documentation and increases the sustainability of our operations."

Andy Button, Divisional Technology Banking Manager, HSBC

- **Cost:** With a trusted, proven way to verify transactions, organisations can transform the way they interact with customers. The high cost of paper-based transactions can be virtually eliminated, as companies adopt an intervention-free and highly automated environment. The price is very competitive, as low as £0.03p per authenticated on-line form, making it easy to assimilate into the overall cost of delivering products and services.

- **Customer Relationship:** In addition to helping you comply with legislation, Codel improves your relationship with customers. You can show the customer what they agreed to by using Codel as a trusted third party that improves their confidence in your products and services.



## Authenticate On-line Forms for Less Than the Price of a Text! How can you show a customer what they agreed to when they filled out an on-line form and clicked the 'submit' button?

The Financial Services (Distance Marketing Directive) Regulations 2004 make it a legal requirement to be able to prove what a customer agreed to. It is estimated that a staggering 90 per cent of all companies in the UK aren't actually fully compliant and cannot prove satisfactorily that the agreements they store are unchanged (a requirement of the regulation). With Codel on-line form authentication they can, for less than the price of a text message!

### How Does Codel Do This?

**Codel is a web based authentication system that allows data to be established as unchanged.** It takes the content of the on-line form as completed by the customer and gives it a unique fingerprint, known as a Codelmark, which is stored by Codel indefinitely as a means of authenticating the information in the future. Codel has developed a series of tools and procedures for your web developer that make it really easy to integrate their service into your business and processes with typical average integration times being less than a day.

Codel provides a securely-hosted service comprising the following three components: (see: <http://www.codemark.co.uk/uploads/flash/CodelDemo.html>)

- **Creating the Codelmark** Downloaded Software uses a secure hashing algorithm to create a unique fingerprint of the data called a 'Codelmark'. The 'Codelmark' is a unique alphanumeric identifier (normally 64 characters long) created from a file's contents and stored in Codel's database along with details of the registering party and a time and date of registration. Codel never stores the content, i.e. the actual data from which the Codelmark was computed, and the resulting Codelmark cannot be used to recreate the original data. There is therefore no risk of theft or loss of confidentiality. Any change whatsoever in the data contained in the file would produce a distinctly different Codelmark and so, for evidential purposes, it is possible to show authorship of data and authenticity of content at a specific point in time.

- **Registration** The Codelmark is registered and stored indefinitely with Codel's secure repository. Registering data is very simple to do, and can either be done by downloading the software or integrating the Codel interfaces into software applications.

- **Verification Data** can be verified by anyone, free, without the need to download software or sign up for a service. This can be done directly, by submitting a file to Codel's website to find a match, by using the downloaded Codel software or by integrating the Codel service into software applications so that data can be registered and verified automatically.

### Data Cannot be Changed without Detection

It can be proved to legally acceptable standards that any change whatsoever in the data contained in a file registered with Codel would produce a distinctly different Codelmark. Users can be confident that once a file is registered that the file's contents are effectively "locked" and any change to the file's contents will invalidate the file's Codelmark. An attempt to verify a modified file's contents with the Codel system will result in a failure response being returned identifying the fact that the contents of the file are now different from the contents that were originally codelmarked.

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*Andy Button, Divisional Technology Banking Manager, HSBC*



### **Trust is Assured by Creating Audit Trails**

To assure trust in the Codel system, all Codelmarks received in a 24-hour period are put into a daily folder and this folder is itself Codelmarked to create a Master Audit Trail Codelmark.

Every day at midnight, this Master Audit Trail Codelmark (Audit) is created via a strictly controlled process and stored securely.

(NB – these values are also published on Codel’s website.)

If interrogated, Codel can produce all the Codelmarks registered on a specific day, re-compute the Master Audit and prove that the day’s Codelmarks are unaltered by comparing the resultant Master Audit with the value stored by Codel.

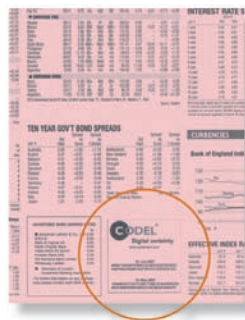
Even this rigorous process for assuring the integrity of stored Codelmark records might be questioned by some, and therefore a further layer of security is added to the process as described below.

### **Trust is Further Assured by Publication of the Audit Trail in the Financial Times**

To show that the Codelmarks cannot have been changed retrospectively either by unauthorised third parties or even by Codel itself, Codel publishes the Audit in the Financial Times every day.

A feature of the hashing algorithm that is used to create a Codelmark is that it can be stored electronically or, if required, published in plain text.

The purpose of publishing the Audit in the FT, is to put it into a widely distributed medium (approximately 500,000 copies) all of which would need to be destroyed before someone who had gained unauthorised access to the Codel database (which is in any event protected by rigorous and robust security mechanisms) could either alter or insert a new record.



The Codel audit-trail as published daily in the Financial Times.

Codel’s Solution is adaptable to meet your changing business needs. From initial proof-of-concept to pilot trials and customisation, the solution can be quickly installed within any IT environment and work across multiple channels managed by your enterprise and your partners. Typical applications might include a company’s own web site, as well as ‘web supermarkets’, brokers, call centres and self-service kiosks.

Codel provides a public record of authentication that its own database is verified for accuracy.

A daily ‘hash’ of all new Codelmarks is created and published in The Financial Times.

This string of numbers and letters can be used to check that all Codelmarks created on a specific date have not been altered.

**Contact Codel for more information.....**

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