

Static Signature Verifier

The Static Signature Verifier is a component that compares two paper-based handwritten signatures to determine whether they are consistent.

The term “Static Signature” means the graphical image of a handwritten signature. Static signatures are generally obtained by scanning signed paper documents.

Static Signatures should be distinguished from “Dynamic Signatures” which are collected electronically by signing on a suitable Signature Capture Device. Dynamic signatures record the appearance of the signature, and in addition have information about the movement of the pen during the signing process, including the variation of the position and pen pressure with time.

The Static Verifier compares only the image of the signature and is aimed primarily at the verification of paper based signatures such as:

- *Cheques*
- *Documents*
- *Benefit claim forms*
- *Ballot papers*
- *Expense sheets*
- *Finance application forms*

However, it can also be used to verify dynamic signatures by using their image data and ignoring the dynamic information.

Verifier Overview

The verifier is currently supplied in the form of a COM component suitable for integration with applications running on Microsoft Windows systems.

It can handle a wide range of image types, including BMP, GIF, JPG, PNG and TIFF formats.

The component provides a simple programming interface which compares two specified images and returns a verification result of between 0 (inconsistent) and 1 (consistent).



The screenshot shows a demonstration application using the Static Signature Verifier. The Verifier has compared the two signatures and returned a comparison value of 1.0 to indicate the highest possible match



The second screenshot shows the results of comparing signatures from two different users. The value 0 being returned indicates the lowest possible match.

Verifier Overview (continued)

Everyone's signature varies to a certain extent and the verifier is designed to allow some variation. In most cases signatures from the same person will produce a result of 1.0, and signatures from different people will get a result of 0. However, some individuals vary more than others and exceptionally erratic signatories may produce intermediate values. The client system must be designed to take appropriate action based on the result returned weighted according to the sensitivity of the application.

It is the responsibility of the client application to crop the images so that they contain only signature data.

The comparison process may optionally include the 'cleaning' of the image data to remove spurious marks such as speckles and lines.

Evaluation Software

The Static Verifier is available in the form of a simple application which allows signatures to be verified manually and may be used to evaluate the product.

Software Development Kit

The Static Signature Verifier is supplied in the form of a Software Development Kit, including the component and technical documentation. It is suitable for use by any competent Windows developer.

Development Services

eCom can provide highly experienced and proficient development services if required.