

Documents can now be signed online using the **LQ Framework**.

Eliminating the need to print and sign documents, the LQ Framework provides the tools needed to create documents which can be signed using industry standard Internet Explorer technology.

### Document Creation

Documents are created in XHTML format on a server using a template file combined with data from the application database. The documents can be created from a number of alternative sources using LQ functions:

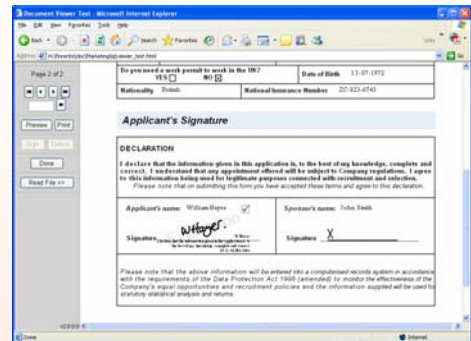
- XML - purpose designed document creation
- PDF - recreates the PDF format in HTML
- TEXT - for simple document formats

The template design supports:

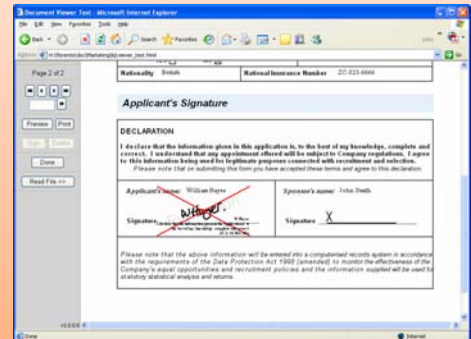
- pagination - document pagination is maintained
- images - images are embedded to eliminate external links

Signature areas are specified by type:

- digitizer - a standard Florentis signature is captured using a digitizer
- hash - the cryptographic method digest is selectable
- eSeal - an image can be used to sign in place of or in addition to capture
- digital - industry standard digital signatures can be applied
- external - an independent signature capture method can be selected  
This can be a non-Florentis capture method or an alternative signing method such as Iris Scan



The screenshot shows a signed HTML document in Internet Explorer. The document is contained within a Viewer page and is displayed in a paginated format.



The second screenshot shows that the document has been altered and the signature is no longer valid.

## Client Functions

Documents are displayed on the client system in Internet Explorer within a Viewer page. The signing process in the Viewer can be scripted using the LQ Wizard Control. The scripting allows interactive instructions to be displayed on the pad's LCD display using pen input, providing features for:

- control - text and graphic display pages provide interactive instructions using checkbox and button controls
- positioning - the paginated document can be positioned on the screen
- markup - additional information can be added to the document
- signing - captures handwritten signatures on the pad
- printing - prints the document in its paginated format
- validation - validates the integrity of a signed document
- submit - submits the signature data to the server for update

Florentis ActiveX components are installed on the client system to provide the signature capture software and digitizer tablet communications.

## Server functions

In addition to providing the document creation functions the LQ Framework provides functions for processing signed documents:

- update - inserts signature data from the client into the document
- check - checks the validity of signatures within a document
- output - for archiving a document can be output to PDF or TIFF image formats

## Capturing Forensic Information

Signatures are collected on a digitizer pad with important forensic information including:

- signatory name
- date and time of signing
- reason for signing
- pen movement data
- digitizer serial number
- machine ID

This information is embedded with the signature in the document and can be viewed and tested at any time to confirm the signing conditions.

## Signature Verification

Tools are available for two types of signature verification chosen to suit the application:

- *static verification* allows comparison of two signatures derived from image or a digitizer pad.
- *dynamic verification* allows comparison of a signature with a registered profile using the pen movement data captured when signing on the digitizer.

These LQ compatible tools are detailed separately.

## Software Requirements

The Client software must be installed on a computer running Microsoft Windows 2000, 2003 or XP with Microsoft Internet Explorer (version 6.x) or later.

Server code can be implemented in Java or .NET applications on Windows. Support is also provided for Linux.

## Signing Device

A suitable digitizer tablet must be installed to provide the mechanism for signing. Any Wintab compliant digitizer may be used, examples include:

- Interlink ePad-ink LCD Signature Pad
- Wacom PenPartner
- MotionTouch LegaPad LCD Signature Pad