



TIS GRUPA

TIS eSIG CLINICAL CENTRE

Case Study

Introduction:

TIS Group are proud to share details of this active TIS eSIG Project with you. The Project includes Clients latest digital transformation to digitalise external contracting and internal consent/reporting documents using eSigning – creating signed documents in digital form with the use of certificates and/or digital signatures as needed.

Client:

The client, herein named as 'The Clinical Centre', comprises 15+ clinics with over 2.000 beds. It serves over 100.000 patients each year. Technology stack consists of several solutions by various vendors.

Challenge:

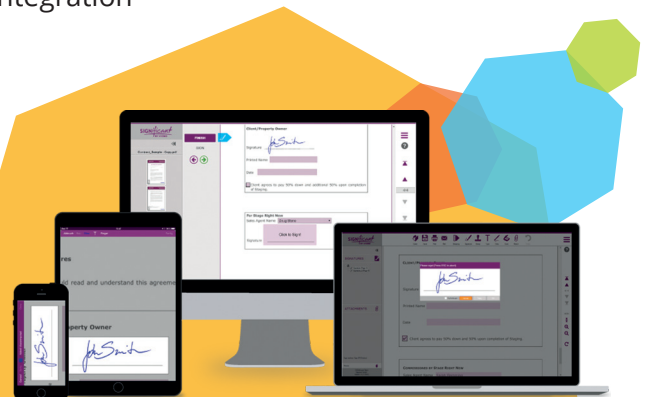
Establish a single digital signing platform so that all applications (clinical and business) can connect and share seamlessly with relevant protections, authorizations and permissions in place. Furthermore, all signed documents has to be stored in a Central Document Archive System.

Solution:

TIS eSIG - multi-platform digital signature solution. E-signing is possible by digital certificate, handwriting and HTML5 signature.

The project aims:

- Establishment of the TIS eSIG digital signing platform, to enable the signing of documents with a digital certificate or digital signature on a dedicated signpad
- Implementation of the signing process with one or two signatures per document
- Preparation of instructions for document submission to the client's systems
- Assisting of the client to ensure adequate legacy systems / digital signature platform integration

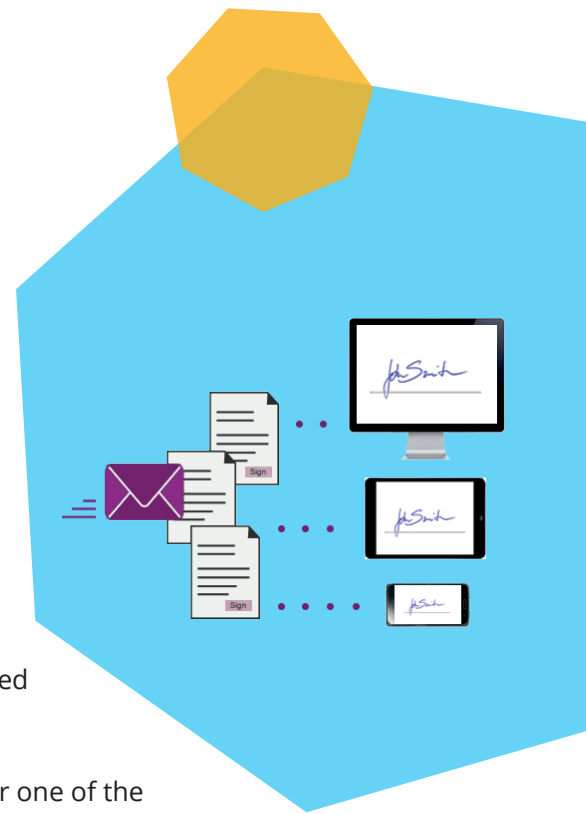


Document flow:

Baseline scenario - signing of the document by the Clinical Center user
The user in the Clinical Centre system (any clinical or business application) prepares a document that requires the signature of the responsible person (e.g. a doctor). In the clinic, he chooses the process for signing the document and the method of signing - certificate or digital signature. The document is reviewed and signed.

Alternative scenario - signing of the document by the Clinic Center user and a third party
The user prepares a document that requires the signature of the responsible person (e.g. a doctor) and a third party (e.g. a patient). In the clinic, he chooses the process for signing the document and the method of signing - certificate or digital signature. The responsible person reviews the document and signs it with a certificate or digital signature. The document is then signed by a third party who always signs with an advanced digital signature (on the signpad).

Negative scenario - the document is not signed within the allotted time or one of the signatories refuses to sign the document
The signing platform interrupts the signing of the document and provides the source applications with information about the revocation of the document (status = "revoked"). Simultaneously, it also provides information by e-mail to the client's administrator. It then saves the unsigned document to the unsigned documents folder in Central Document Archive System.



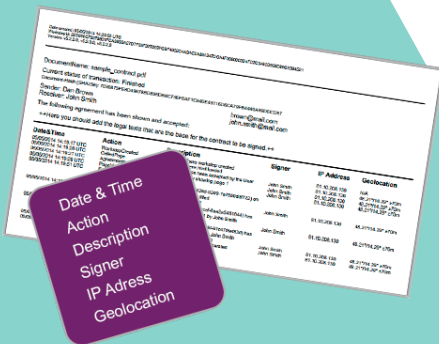
Negative scenario - the document is sent for signature changes (change of signatory or document)

A document that has already been sent for signing is changed in the source system, the source system forwards it again for signing (the source system document has the same document ID):

- The original document has not yet been signed (for this document ID, the source application has the status = "in signing")
The signature platform rejects the forwarded document and requests the annulment of the original document. The source application cancels the original document and then forwards the corrected document to the signature platform.
- The original document has already been signed but has not yet been submitted for safekeeping
The signature platform accepts the amended document and allows signing (the date of signing on this document will be later, the last signed document will supercede previous versions).

c) The original document has already been signed and deposited
The signing platform does not have a document with this document ID in the signing process (the document has already been stored and the signing process has been completed).
The signature platform accepts the amended document and allows signing (same as in case b).

Due to the possibility of re-signing and storing the same document, TIS eSIG adds **TIMESTAMP** to the name of each document when saved in Central Document Archive System .



Signing process:

The intended Signing Process, customized for the Client, enables:

- Execution by one or two signatories (multistage, multilocation signing with greater than 2 parties may also be implemented)
- The document is first signed by the doctor (internal signatory) and then by the patient (external signatory)
- Execution can be via a digital certificate or as a digital signature on the signpad
- External signatory execution is always performed as a digital signature on the signpad
- Each signatory can sign the document in one or more places in the document (signing in several places is sometimes required on complex documents).

The systems will send different types of documents for signing:

- Outpatient and discharge documentation
 - Document of variable length, signature always on the back
 - One signature
 - Handwritten signature is provided (on the signpad)
- Patient consent
 - Fixed form
 - Two signatures typical

The key results of this project:

The medical staff always prepare the entire document on a computer in one of the existing clinical or business systems and then submits the signing request and PDF document to the TIS eSIG signature platform. Before submitting the document for the signing process, the source system determines the number of signatories and specific signatories and prepares the document accordingly so that the document can be forwarded to the right person in the signing process.

The signatory must be known in advance and determined by the system that generates the document. There is no Per Procuracionem signing (one party signing on behalf of another), each signatory signs with his / her own certificate / signature. In the event that the signatures of the alternates are required, this is detected by the source system and alternative signatories are set up.

The TIS eSIG signing platform retrieves the document displayed on a signature pad or in a workstation viewer (for a signature with a qualified digital certificate). Here the document can first be browsed and viewed and then signed.

After the signing process is completed (all necessary signatures are collected), the signing platform saves the document in the Central Document Archive System and provides a status report (completed document signed) to the clinic's system that requested the signing.

