
Digital Signature Capture System for Video Conferencing Applications DSCS-VC

Problem

As the use of Video Conferencing has become more prevalent for Criminal Justice agencies, these agencies are realizing; a reduction in costs, an increase in safety, and faster processing by not having to transport defendants for proceedings such as bail, preliminary arraignments, and other court proceedings. However, there is one area that the majority of agencies have not realized a savings, paper work. Often the answer to processing the documentation needed in these proceedings is to use fax machines to send paper copies back and forth and then follow up with the hard copies at a later date. There are a number of inherent inefficiencies in using fax for documentation purposes, specifically:

- **Time to Fax** – it can take upwards of 5-10 minutes just to fax the documents to one side or the other depending on the amount of documentation and number of times it needs to go back forth. This can turn a 2-3 minute proceeding into 15 to 20 minutes.
- **Document Transport** - once the fax copies are sent back and forth, often the original copies need to be transported to the court or other agency.
- **Data Entry** – After the documents are received, someone needs to enter the information and documents into a document management system or other electronic repository.

Potential

Adding digital signature capabilities to Video Conferencing proceedings can significantly reduce the amount of time needed to complete proceedings, provide the ability to process more caseloads, reduce backlogs, and move defendants/inmates out of the prisons freeing up bed space and saving money. Examples:

- **Time Savings** – In a typical bail hearing using video conferencing and fax it can take 5-15 minutes for the hearing due to faxing documents, utilizing digital signatures, it can be reduced to as little as 3 minutes. One jurisdiction is using video for negotiated guilty pleas. In the past they would have to bring the defendant to court and the proceeding would last 5 to 10 minutes, however, there was the need; to transport the defendant, house the defendant until it was time for the hearing, transport back and forth if the case was continued, etc. Now they can have the hearing, have the document signed by all interested parties (defendant, prosecuting attorney, defense attorney, judge) in less than 5 minutes with the defendant never leaving the prison.
- **Cost Savings** – In addition to the transportation savings (depending on the distance from a Court to Prison it can cost up to \$100/inmate/trip) there is potential savings in releasing defendants from prison (average cost per defendant per day in the US ranges from \$80-\$150). Often defendants sit in prison simply because of the backlog of court cases. One jurisdiction that is utilizing digital signatures over video estimates that they are saving \$40,000 per week with the system.

Possibilities

There are a number of companies that offer software with the ability to capture signatures digitally. These software systems range from the simply capturing a single signature on a device to full-fledged workflow applications which allow the tracking of signatures throughout a specified workflow.

The systems are robust and effective in providing the ability to capture digital or electronically signed documents. However, the major drawback is that they are set up for asynchronous communication. The typically scenario involves asking a person, via email or text, to sign a document and then have the application move it to the next person, notified via email or text, and so on until it is complete. It then sits in a repository for someone to manage, file, confirm, and or add additional information. The issue with this process in the Criminal Justice System is that the purpose of having a Video Conference is to have synchronous communication with the Judge, Defendant, Defense Attorney, and Prosecuting Attorney. Furthermore, providing the ability for defendants to receive, view, and process text or email is certainly not in the security interests of the facility they are housed in. The systems need to be synchronous communication with minimal to no action from the defendant other than signing the document.

Digital Signature Capture System

The Digital Signature Capture System for Video Conferencing Applications is designed to enable documents to be signed by individuals while in a video call. Applications include Bail, Preliminary Arraignment, Negotiated Guilty Pleas, Grand Jury Testimony, Witness Testimony, etc. It is a web based application that can easily be integrated with existing case and document management systems and available in the cloud or on premise.

Basic Functionality

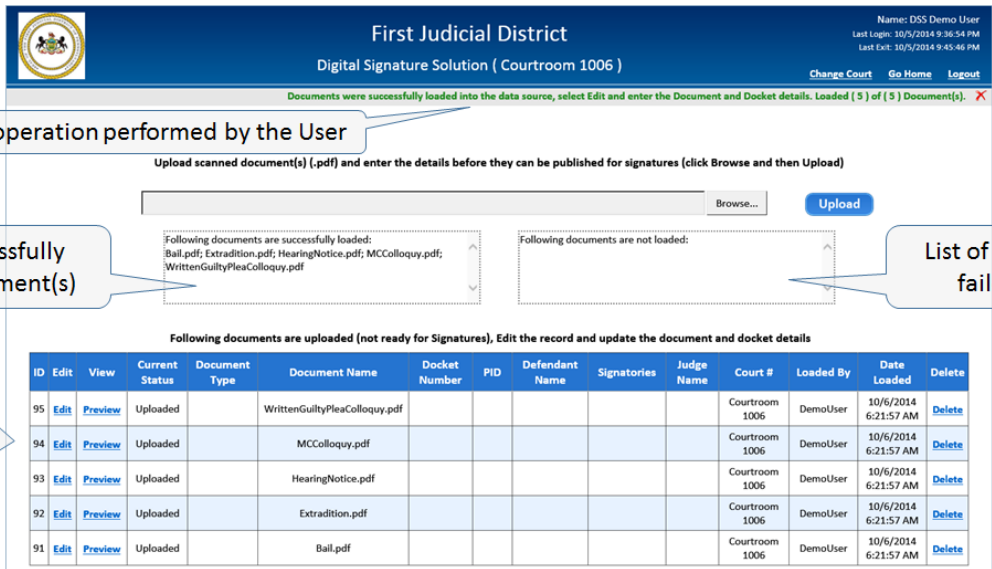
The system has the following capabilities and process flow:

- 1) Capability to load any document into the system, could be scanned document, pdf, or any document that can be retrieved from a computer or server.
- 2) Ability to define what signatures are needed and where they are placed in the document.
- 3) Ability to stage documents prior to a proceeding. For example, for court proceedings, an authorized user could load all documents on the schedule for the day.
- 4) Provides workflow for signatures. For example when the document is loaded, the user indicates who needs to sign the document, i.e Defense, Defendant, Prosecution, Judge, etc. The application then takes care of the process for each party to sign and places the signature in the correct locations with any relevant information from the case management system.
- 5) Integrates with Case Management Systems by utilizing a key field such as case number. When a document is loaded and case number assigned, any relevant information, such as defendant name, DOB, charges, etc can be loaded from the case management system into the document for signature.
- 6) Integrates with Document Management Systems. Once the workflow is complete, the document is reviewed and then sent electronically to a document management system via a web service.

Work Flow

The basic work flow is:

- 1) Load Document(s) – Clerk or other user chooses document(s) from PC or network drive for processing



First Judicial District
Digital Signature Solution (Courtroom 1006)

Name: DSS Demo User
Last Login: 10/5/2014 9:36:54 PM
Last Exit: 10/5/2014 9:45:46 PM

Documents were successfully loaded into the data source, select Edit and enter the Document and Docket details. Loaded (5) of (5) Document(s).

Upload scanned document(s) (.pdf) and enter the details before they can be published for signatures (click Browse and then Upload)

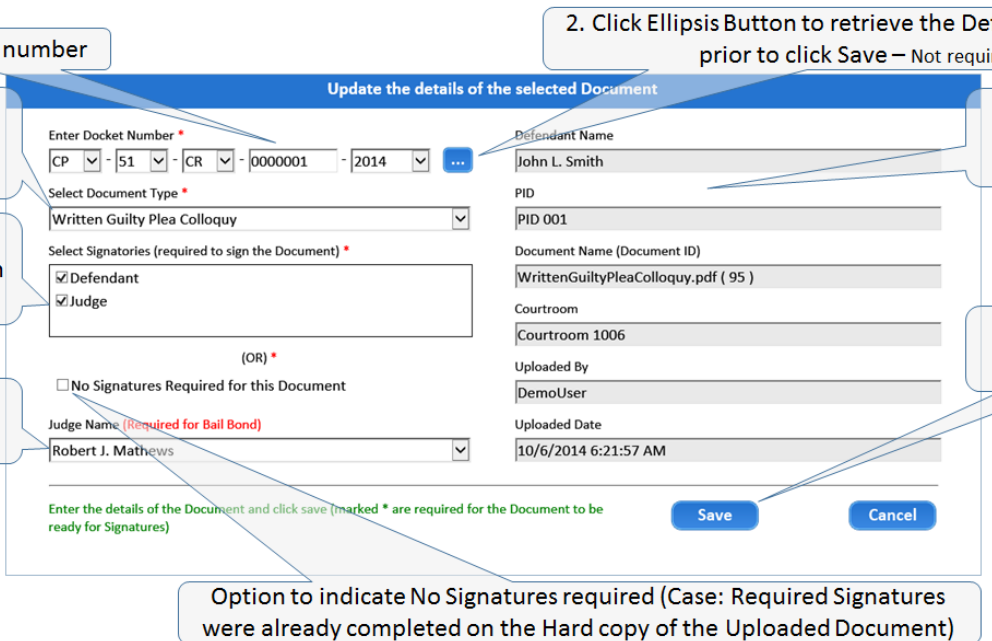
Following documents are successfully loaded:
Bail.pdf; Extradition.pdf; HearingNotice.pdf; MCColloquy.pdf; WrittenGuiltyPleaColloquy.pdf

Following documents are not loaded:

Following documents are uploaded (not ready for Signatures). Edit the record and update the document and docket details

| ID | Edit | View | Current Status | Document Type | Document Name | Docket Number | PID | Defendant Name | Signatories | Judge Name | Court # | Loaded By | Date Loaded | Delete |
|----|----------------------|-------------------------|----------------|---------------|-------------------------------|---------------|-----|----------------|-------------|------------|----------------|-----------|----------------------|------------------------|
| 95 | Edit | Preview | Uploaded | | WrittenGuiltyPleaColloquy.pdf | | | | | | Courtroom 1006 | DemoUser | 10/6/2014 6:21:57 AM | Delete |
| 94 | Edit | Preview | Uploaded | | MCColloquy.pdf | | | | | | Courtroom 1006 | DemoUser | 10/6/2014 6:21:57 AM | Delete |
| 93 | Edit | Preview | Uploaded | | HearingNotice.pdf | | | | | | Courtroom 1006 | DemoUser | 10/6/2014 6:21:57 AM | Delete |
| 92 | Edit | Preview | Uploaded | | Extradition.pdf | | | | | | Courtroom 1006 | DemoUser | 10/6/2014 6:21:57 AM | Delete |
| 91 | Edit | Preview | Uploaded | | Bail.pdf | | | | | | Courtroom 1006 | DemoUser | 10/6/2014 6:21:57 AM | Delete |

- 2) Define Document(s) – define the type of document, assign case number, define who needs to sign



Update the details of the selected Document

1. Enter Docket number
2. Click Ellipsis Button to retrieve the Defendant details prior to click Save – Not required
3. Select the Document Type
4. Select who is required to Sign the Document
5. Select Judge Name
- 2a. Verify the Defendant details
6. Click Save

Enter Docket Number *
CP - 51 - CR - 0000001 - 2014

Defendant Name
John L. Smith

Select Document Type *
Written Guilty Plea Colloquy

Select Signatories (required to sign the Document) *
 Defendant
 Judge

(OR) *
 No Signatures Required for this Document

Judge Name (Required for Bail Bond)
Robert J. Mathews

PID
PID 001

Document Name (Document ID)
WrittenGuiltyPleaColloquy.pdf (95)

Courtroom
Courtroom 1006

Uploaded By
DemoUser

Uploaded Date
10/6/2014 6:21:57 AM

Enter the details of the Document and click save (marked * are required for the Document to be ready for Signatures)

Save Cancel

Option to indicate No Signatures required (Case: Required Signatures were already completed on the Hard copy of the Uploaded Document)



- 3) Place Video Call – with defendant
- 4) Display Document on Video Call – from PC in Court Room

The screenshot shows the 'First Judicial District Digital Signature Solution (Courtroom 1006)' interface. A table lists document details for ID 95, Document Type 'Written Guilty Plea Colloquy', Docket Number 'CP-51-CR-0000001-2014', PID 001, Defendant Name 'John Smith', Judge Name 'Robert J. Mathews', and Court # 'Courtroom 1006'. A document preview window is open, showing a form titled 'COMMONWEALTH V. _____ TERM, NO. _____' with fields for 'PERSONAL' information like name, address, age, and education. A 'Publish' button is visible next to a 'Select KIOSK Terminal' dropdown menu.

To Preview (As a Full Screen)

Document Preview (within the Screen)

1. Select the Far End Video Unit

2. Click Publish, (Far End can then Sign the Document)

- 5) Sign Document – Defendant, Judge - Defendant signs, then Judge or other parties as needed

The first screenshot shows the 'Far End Video Unit Signature Pad' with a handwritten signature 'John Smith' and a 'Signature' label. The second screenshot shows the 'Acceptance of the Defendant Signature' screen, which includes a table with document details and a 'Go To: Judge Signature' button. Below the table, a document preview window shows the signed document with fields for 'Print Name' (John Smith) and 'Sign Name' (John Smith) dated 10/6/2014. A 'Reject Signature' button is also present.

Far End Video Unit Signature Pad

Published Document details

Signature

Acceptance of the Defendant Signature

Navigation for the Next Action


Status of the Defendant Signature completion

Defendant Signature along with the Defendant Name and Date of Signature

Option to Reject the Defendant Signature (if Signature is not up to the User satisfaction)



- 6) Review Document – Clerk or other user reviews to ensure all information and signatures are correct
- 7) Transmit – document is electronically sent to Document Management system



First Judicial District

Digital Signature Solution (Courtroom 1006)

Name: DSS Demo User
Last Login: 10/5/2014 9:36:54 PM
Last Exit: 10/5/2014 9:45:46 PM

[Change Court](#) [Go Home](#) [Logout](#)

1. Select the Document to be Transmitted to DMS

Following Documents are ready to be Transmitted, select the Documents and click Transmit

| ID | View | Document Type | Docket Number | PID | Defendant Name | Signatories | Judge Name | Court # | Loaded By | Date Loaded | Transmit Ready Date |
|--|-------------------------|------------------------------|-----------------------|---------|----------------|------------------------------------|-------------------|----------------|-----------|----------------------|----------------------|
| <input checked="" type="checkbox"/> 95 | Preview | Written Guilty Plea Colloquy | CP-51-CR-0000001-2014 | PID 001 | John Smith | Defendant (Signed); Judge (Signed) | Robert J. Mathews | Courtroom 1006 | DemoUser | 10/6/2014 6:21:57 AM | 10/6/2014 7:35:12 AM |

2. Click Transmit