Electric Paper
INFORMATIONSSYSTEME

New TeleForm Add-Ons
Five fabulous Extensions

Electric Paper is the leading European system integrator for data and document capturing systems based on the OpenText TeleForm architecture. This architecture allows for the expansion and addition of functionalities through so-called add-ons. While we developed many specific add-ons based on user-criteria, we have a couple of repetitive requests which lead to more productized offerings.

These Add-Ons are running with TeleForm version 16 and higher.

Smart Form Aligner

AN EXTENSION THAT USES THE LATEST COMPUTER VISION (CV) TECHNOLOGY TO CAPTURE IMAGES OF TRADITIONAL TELEFORM FORMS FROM PHONE CAMERA PHOTOS

THE ADD-ON

Allows processing of photos taken with mobile devices (e.g. mobile or table cameras) of tradional TeleForm forms. The Smart Form Aligner (SFA) intelligently optimizes the image to make it interpretable in TeleForm. Various techniques are automatically combined and applied to achieve high image quality as with conventional scans!

Functions

- Enables photo-JPG processing, allowing customers to simply use their mobile cam to scan and upload paper forms to TeleForm
- It doesn't depend on a certain mobile app – photos taken from the mobiles native cam app will do
- The SFA finds the form in the image through intensive use of computer vision (CV), intelligently removes shadows and bi-tonalizes the image automatically so that it becomes legible
- Applied image optimisation methods, including perspective image correction, cropping, shadow removal, bi-tonalisation and virtual drop-out, prepare the image for the subsequent OCR
- SFA supports all input channels connected to TeleForm e.g. input channels, e.g. hotfolder, image import from directories, e-mail inbox, Web-Capture and Auto Batch Creation
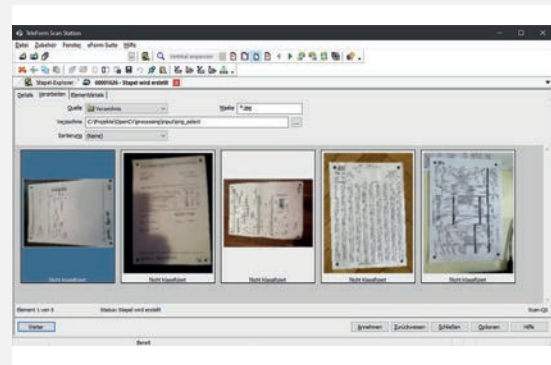

Image: Importing various form photos from directory. Of course, other sources like receiving images from WebCapture, ABC / BHF and E-Mail attachments are supported as well.
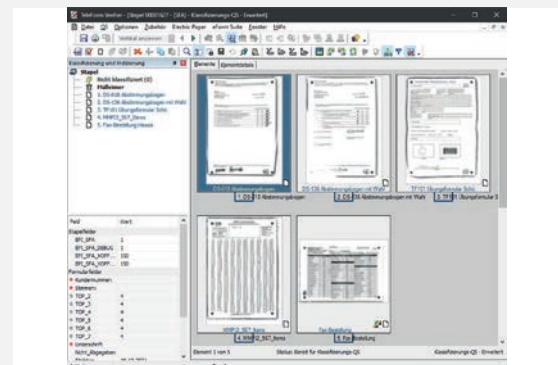

Image: Showing the results of the image pre-processing in TeleForm classification QC. All forms were successfully classified by TeleForm Reader.

MultiStream-Processing [Colour/Binary (b/w)]

AN EXTENSION THAT ENABLES THE CAPTURE OF TWO IMAGES IN ONE SCAN PROCESS RUN

THE ADD-ON

With the new Multi Stream Option (MSO), two optimised images can be generated from one scan. An optimal image for better recognition and a colour image for faster and easier verification of questionable items in TeleForm Verifier, as well as enhanced quality for all subsequent workflows and archiving.

Functions

- Process multi-stream binary image (black and white) for the best possible recognition results of barcodes, check mark elements (OMR), machine writing (OCR) and handwriting (ICR) in the Tele-Form Reader

- Ease verification work of questionable items in TeleForm Verifier showing the Multi Stream color image

- The Multi Stream color image also replicates the original much better for archival purposes

- It works with any device (not vendor specific) that can deliver the images to TeleForm in file pairs:

    > TeleForm Scan Station
    > Remote Capture Station
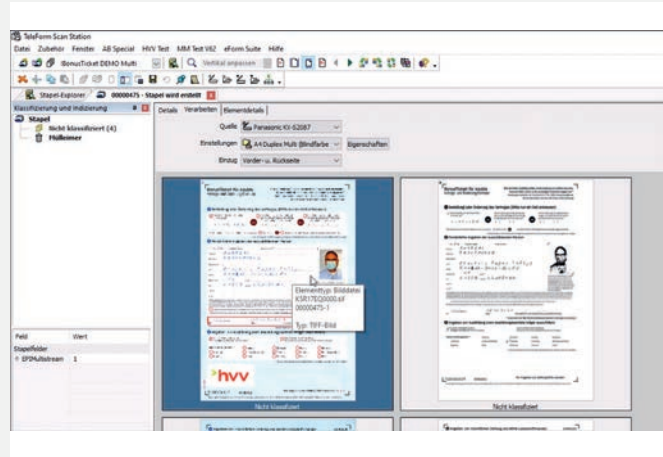   > TeleForm Web Capture
    > Hotfolder (AutoBatchCreation)

Image: Handling the multistream images in TeleForm Scan Station. Note that TeleForm Remote Capture Station and ABC / BHF are supported as well.
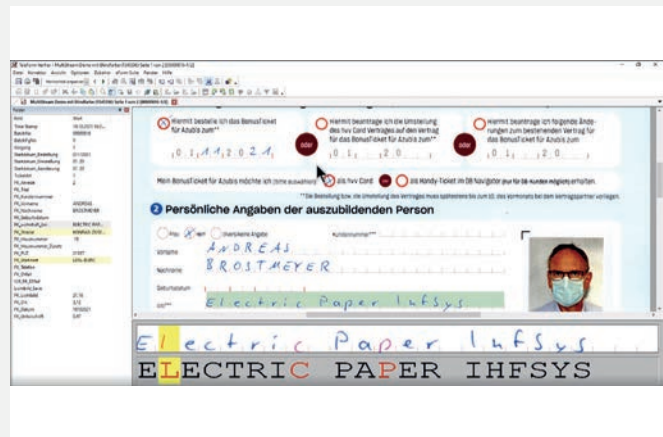

Image: Using the color image in TeleForm eases the verification process of questionable items.

TeleForm

Cloud OCR

THIS EXTENSION OPENS TELEFORM TO NEW CLOUD-BASED ARTIFICIAL INTELLIGENCE (AI) SERVICES, THAT BOOST OCR AND ICR RECOGNITION RESULTS.

THE ADD-ON

With new AI and ML based OCR technology in the cloud, efficient, economical recognition and capture of handwritten text in forms becomes a reality. Based on the new approach, recognition rates of up to 100% can be achieved, depending on the context!

Functions

- Greatly enhances OCR and ICR results through cloud-based AI and ML image processing, reducing the time needed and overall cost for data capture

- Also works very well with single and multiline handwritten text from TeleForm image zones allowing the capturing of data content that wasn't possible before

- Supports more than 60 languages for data recog- nition

- The TeleForm Reader extension sends context-free image snippets of TeleForm form fields to the cloud OCR through a secure https online connection

- Cloud processing setting options available for global, US and the EU endpoints
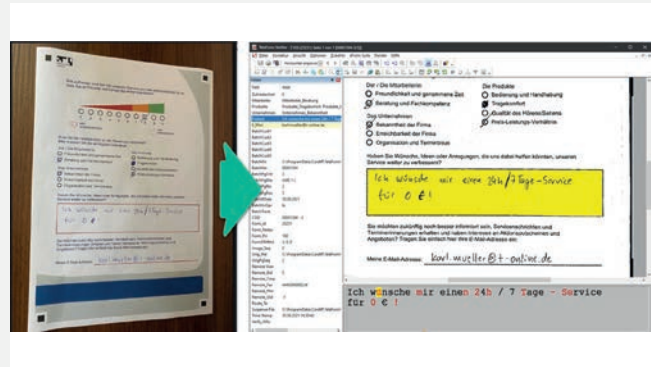

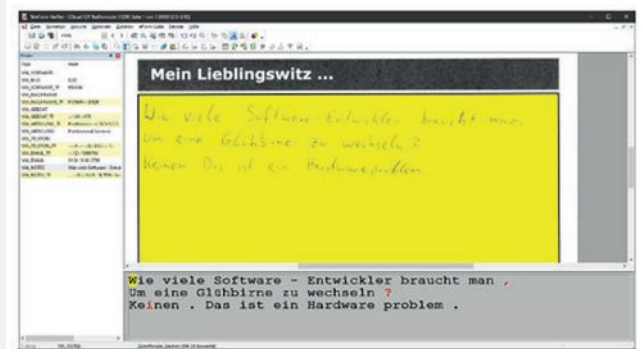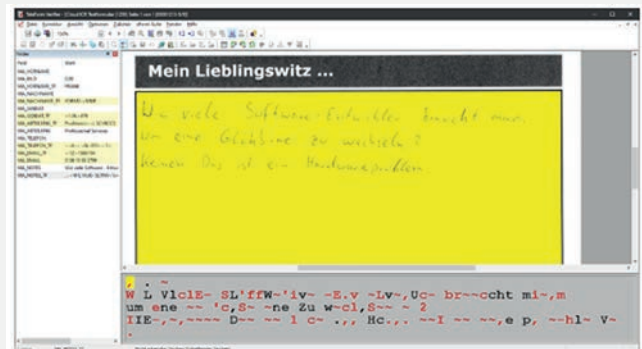Image: Sample result from Cloud OCR recognition of handwriting.

Image: Reading multiple lines of handwritten text with Cloud OCR. Showing results (see the screenshot below) in comparison to TeleForm default recognition engine (compare with screenshot above).

TeleForm

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eForm Suite

ELECTRONIC FORMS IN HTML, PDF AND PAPER - HYBRID WITH TELEFORM

THE ADD-ON

The eForm Suite doubles the value of your TeleForm solution by enhancing TeleForm with several functions for the hybrid capturing of paper and eForms.

Functions

- eForm creation, publishing and processing seamlessly, modularly integrated with TeleForm

- Simple but flexible job profile-based generation of intelligent e-Forms in HTML5 and PDF format

- Different rendering modes: layout-faithful or display-responsive with CSS theming incl. dynamic tables and auto-grow text input fields (HTML)

- Digital data processing with HTML and PDF e-forms enables faster access to data, improved customer experience (UX) and at the same time ensures time and cost savings

- Support for all major mobile devices and HTML5-enabled platforms, browsers and operating systems

- Intelligent input support ensures highest data quality and 100% valid data right from the start

- High security through encrypted data transmission, including SSL and integrated public/private key data encryption for on- and offline applications
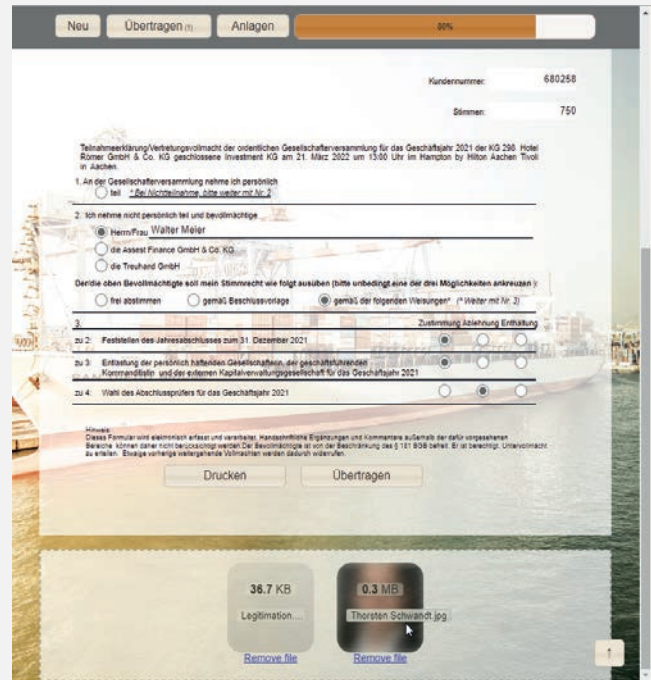

Image: Example of a TeleForm form as HTML5 Single Page Application, which includes the upload function attachments in eForm Suite highlights.
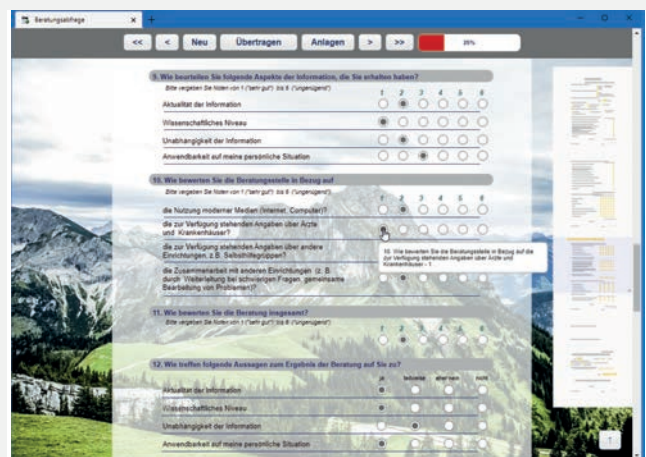

Image: Illustration of some of the many HTML features of eForms rendering: customizable UI themes and image backgrounds, transparency effects, a progress indicator for form filling, a minimap (shown on the right), and the „Back to top" feature as a navigation aid in forms.

FuzzySearch

THIS EXTENSION TURN DORMANT DATASETS INTO AUTOMATICALLY APPLICABLE PROCESS KNOWLEDGE THROUGH INTELLIGENT CONTEXTUALIZATION

THE ADD-ON

Achieve higher process automation rates with Fuzzy Search by making decisions based on contextual data that can already act in an automated way in the TeleForm Reader run and ensure fewer system queries. Manual review and correction time is also significantly reduced because instead of tediously searching for answers yourself, you will quickly find and apply the appropriate information with the error-tolerant data search.

Functions

- Achieve higher process automation rates through automatic decisions based on contextual data, greatly reduces the manual verification and correction time

- Instead of searching tediously, Fault-tolerant data search allows you to find and use the right information quickly, increasing efficiency in TeleForm capturing and also greatly enhances the Verifying-UX

- Integration of existing databases is possible

- Automatically search through large amounts of data, finding the needle in the haystack without a hassle, utilizing the easy-to-use FuzzySearch filter-dialog UI, that will save you lots of time in verification

- FuzzySearch also helps for duplicate checks and avoidance and therefore raises the overall captured data quality

- Provided as a 64-Bit Server solution with a .NET/COM/REST API object interface for easy and flexible integration in custom projects
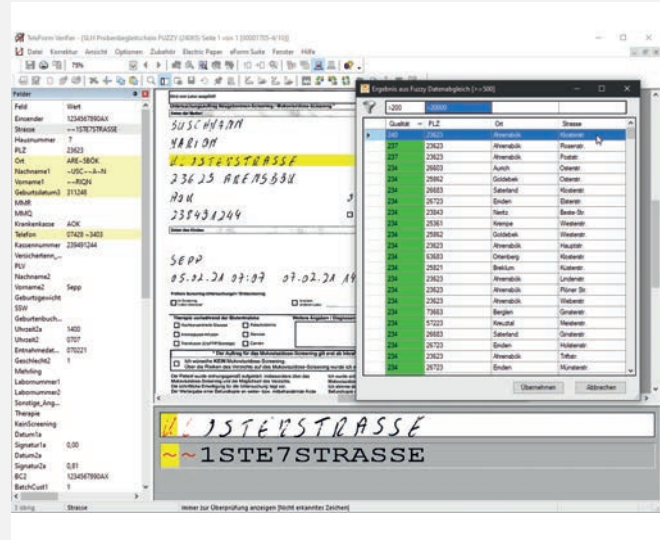

Image: FuzzySearch as integrated in TeleForm Verifier, allowing the user to easily select the most likely data from the database to speed up the data capturing process. Not seen in this picture: The prior recognition process in TeleForm Reader, backed up by FuzzySearch, already corrected half of the field-rejects automatically, reducing the number of elements to look at in TeleForm Verifier.
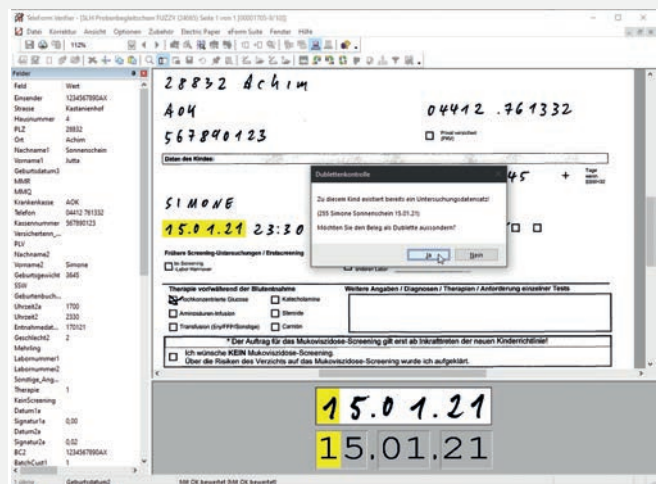

Image: Showing a custom integration of a duplicate check. It prevents from unnecessary cost that rise through duplicates in subsequent backend system processes.

DO YOU WANT TO LEARN MORE ABOUT THE ADD-ONS?
WE WOULD LOVE TO HEAR FROM YOU. PLEASE CONTACT US.