Tawtheeq Enterprise 2.0 EDMS Technical Specifications

Tawtheeq document management system is based on an n-tier architecture that completely separates the server's environment from the client's for superior security and scalability.

The core EDMS and imaging functions are embedded inside an XML web service built with.

Net technology to provide standardization and dependability in addition to a very high security level. Tawtheeq appears as a standard web site to client machines, all upgrades and maintenance are done on the server side.

Tawtheeq is fully multi lingual with on-the-fly switching between interface languages. Tawtheeq is a scalable system designed to be implemented to small and medium organizations as well as large enterprises with its high performance repositories.

Your long term investment is secure, Tawtheeq is an open system that relies on no proprietary technologies. Data is saved in industry standard formats.

Clients can interface with the system using standard web browsers to enter and retrieve documents from a modern, state-of the art AJAX / HTML5 web interface, all with no need for software installation on their machines.

Major changes / enhancements in Tawtheeq 2.0

- Completely redesigned AJAX / HTML5 user interface and experience with multiple themes and individual user profiles.
- A new, ribbon based. Windows desktop client.
- Vastly enhanced scalability.
- Server-side imaging capabilities
- 64 bits architecture.
- Full native support of PDF files.
- PDF/A standard support.
- Tawtheeq Drive: the ability to browse in and save to Tawtheeq repositories from any Windows application, just like standard disc drives.
- Native mobile devices (iOS and Android) interfaces.
- Physical paper tracking module to handle paper documents storage and management.
- Server-side powered MS-Office documents viewer.
- Digital signature support for MS-Office and PDF files
- System monitoring dashboard.

Document Capture

- Tawtheeq accepts any type of electronic documents (Image, voice, video,
- spreadsheets, …).
- Batch scanning support, the system can create a new record for each document and sense page separators.
- Page insert / delete / reorder.
- Supports industry standard scanners (Simplex/Duplex/Color/Mono…)
- Drag and Drop, Copy and Paste archiving for electronic documents.
- Upload documents/files using HTTP protocol directly from various clients, such as web browsers, desktop applications, email clients etc..
- Monitor folders for automatic acquisition of files.

Document Storage

- Tawtheeq uses industry standard file formats for image files and metadata files.
- Support of two sided, multipage files and multi files documents, files and pages can be arranged at will. Documents / Files can be assigned different security levels and Access Control Lists (ACLs).
- Support of document aging: documents are assigned a certain lifespan after which they are automatically purged or exported from the system.
- User-definable delete sequences to apply chain of approval to the deleted documents/files before purging from the system

Indexing

- Users can freely define metadata entry forms with no limits on number of indexing fields. Field types can be (among others) : text, numeric, date, logical, counters, drop down list, related sets of drop down lists …
- Default values and validation rules can be defined for metadata fields.
- Documents are grouped in folders in a multi level tree structure with security settings for each folder.
- Files in each document can be further categorized into categories.
- Multiple sets of indexing fields (Document types) for each individual archive.
- Index each type of document with its custom design document type profile.
- User definable document title for easy browsing and searching.
- Multi-level, user-definable folder structure that can be used to organize documents and to limit accessibility and provide fast locating and retrieval for documents.

Document Viewing

- Support of all major raster image formats.
- Support for firewall / enterprise secure environments, Tawtheeq delivers image files to web browser clients as pure HTML files, no need for any special installations on the client's machine to display files.
- Free zoom / Magnifying lens and scale to grey for B/W documents.
- Thumbnail views of image files for web browser as well as data acquisition application clients.
- Print / Fax / Email files directly from within Tawtheeq .

Image Editing

- Image editing functions:
   Pen / Eraser / Free Text / Color chooser
- An extensive set of image manipulation functions

EMail and fax archiving

- Archive email messages directly. Tawtheeq connects to POP3/SMTP or IMAP servers to receive and send emails. Messages can be routed within the system according to sender, subject or special keywords.

- Extracts and map email message components (From, to, subject …) to metadata
- fields.
- Tawtheeq accepts and route incoming faxes to different users according to the administrator settings.

Search and retrieval
- Special emphasis on Arabic language peculiarities like ignoring Hamzas, Diacritics,Kashidas, Alef Maksoura and Taa Marbouta in search operations.
- A very flexible and advanced query builder that provides complex logical queries: with any combination of "and" / "or" / "not" operators.
- Every user can store his or her queries to run it again at any time.
- Any metadata field or group of fields can be searched. Approximate and wildcard searches are supported.
- Documents could be retrieved from either the document's metadata or from tags
- attached individually to each file.
- Document searchable metadata include system fields such as creator / date of creation and document identification number.
- Search results can be exported to delimited files.
- A simple "Google" like web search page that enables anybody to find documents without any prior knowledge of Tawtheeq .

Security
- Security model based on Users/Groups, each user or group could be assigned permissions to do specific operations or view certain documents.
- Accounts expiry date.
- Password encryption for added security.
- Documents and tree folders have distinct security levels. Parts of the archive can be hidden from certain users according to their security level.
- System administrators can hide or display certain metadata fields from certain users according to their security level.
- Administrators can watch certain users/groups, operations or folders.
- Passwords can be periodically changed. Tawtheeq alerts users when the password is due to be changed.
- E-Mail notifications and reminders for failed logins attempts, password expiration,…
- Security profiles for various system objects: (applications, folders, documents and files). Administrators can grant or deny the privilege of any operation (new, edit, delete, print …) to any profile.
- Audit trail: full logging of system activities according to the system manager wishes. All user activities can be monitored.

Disaster recovery
- Reconstruct archiving repositories from document storage area if the database is corrupted for any reason.

Integration API

- An advanced API that consists of dozens of functions implemented in a fully documented and easy to use programming interface.
- Developers can use XML Web Services APIs or .Net Object to communicate with
- Tawtheeq Server.
- Sample code in many programming languages.
- System integrators can build entire client applications.

Versioning

- Version management for tracking document revisions.
- Versioning support for image as well as electronic documents.
- Check-in and check-out documents for collaborative work.

Customized buttons and validation scripts

- Post-edit and Pre-edit server side programmable scripts.
- System integrators can use this module to interact with third party databases or external applications to allow foreign keys import.

Annotations

- Annotations can be added to any image on a separate layer without affecting the original image. Images can be printed with or without annotations according to security privileges.
- Each annotation could have its own security level and access privileges, so annotations could be used to hide parts of the document from unauthorized users (redaction). Security is maintained on web browser viewing by "burning" the annotations on the downloaded copy of the document (while keeping the original one intact).
- Documents could be printed with or without annotation layer.
- Annotation types: Line, Rectangle, Circle, Highlight, Stamps (freely definable), Free text.
- Support of multimedia (audio and video) annotations.
- Search for any text in annotations.
- Annotations can be permanently burned on the original image.

Native mobile device interface

- Use Tawtheeq from native iOS and Android interfaces.
- Search, list, and display files and documents.
- Share Tawtheeq documents using the default device share options.
- Capture files from the device camera or gallery into Tawtheeq .
- Routing and internal email from within the mobile interface.

Add-on optional modules

Advanced document capture – A (ADCA-20)

- Scanner sharing
  - Routing scanned documents to any indexing workstation to leverage the performance of industrial high speed scanners by distributing the indexing workload to multiple workstations.
  - Scanner operators can select to route documents to a certain user or all users for indexing.
  - Auto naming of scanned documents with prefix letters and numeric counters.
- Shortcut tables: quick replacements for user-defined frequently used texts to accelerate data entry.
- Zone OCR:
  - Metadata entry fields can be filled automatically from text areas located on defined parts of the page for batch scanning.
  - Text areas can be saved in templates for different types of documents.
  - Multiple templates could be defined for each archive.
- Zone Barcode: Similar functionality of Zone OCR.

Advanced document capture – B (ADCB-20)

- Data Import
  - Import documents and indexes from standard delimited text files.
  - No need of any knowledge of the internal database details of Tawtheeq .
  - Easy data transfer from legacy systems.
  - An easy to use wizard interface guides users through the necessary steps of import operations.
  - Data import templates could be saved and reused.
- Productivity reports
  - Assess data entry operators' productivity with detailed reports on documents / files / pages scanned or entered in any time interval.

Advanced Security (ASF-20)

- Hide documents based on certain values in their indexing fields. (example: hide all documents that have the type "invoice" from unprivileged users.
- Restrict login times for certain users or groups.
- Security policies for user accounts (password age, formation, …)
- Encrypt files to prevent unauthorized access to the physical storage repository.
- Electronic signatures support. Users can insert electronic signatures on documents to ensure authenticity.
- Digital Signatures support for PDF and MS Office document with PKI certificates.

Full text search (FTS-20)
- Automatically OCR scanned documents and add results to the full text archive.
- Tawtheeq supports full text indexing of many file types: Text, HTML, Microsoft Office documents, PDF ….
- Users can search for any word inside the documents text directly without any need to enter metadata or do any document structuring.
- Hits highlight for search results for image documents.

HTTPS protocol support (HTTP-20)
- Secure communication between clients and the server using Secure Sockets Layer.

OCR and barcode rubber banding (QZNR-20)
- Quick recognition of on-screen areas and pasting the results into indexing fields.
- OCR and barcode capabilities provided on the server side, functionality is available in web and client interfaces.

Advanced Folder Grabber (AFLDG-20)
- Watch multiple file system folders simultaneously to add their contents to Tawtheeq archives.
- Extract file metadata automatically and map them to Tawtheeq indexing fields.
- Automatic extraction and mapping of file systems metadata (Name, date, ….)
- Support of multiple sets of metadata for different file types (HTML, Offfice, Pictures…)

External Arabic OCR support (EOCRA-20)
- Support of Arabic OCR on scanned pages. (Requires third party OCR engine – sold separately).
- Third party OCR engine operation is completely transparent, all OCR operations take place in the background with no need to learn any new user interface or software application.

Internal Arabic OCR Support (IOCRA-20)
- Extract Arabic document without any external OCR engine license.

Server-side OCR service (BGOCR-20)
- Perform all CPU intensive and resource consuming OCR operation to a back-end server.
- A single OCR license, customers do not have to pay licensing fees for each scanning workstation.

Document routing (DR-20)
- Scanned and imported documents can be routed among users in an unlimited number of user definable stages, user roles in the route could be defined by system administrators.

- Routes are represented graphically.
- Multiple actions could be performed by authorized users: create, accept, reject,
- submit,approve,publish.
- Email notification of timed out actions.
- Full audit trail of routing history.
- Delegation of user rights to other users either by the user himself or by the system administrator.
- Full reports on user roles and permitted actions.

CD Publishing module (CD-20)
- Any part of the archive can be exported to a data set that can be browsed using any standard web browser without any software installation.
- XML/JAVA Script technology for offline browsing and search without connection to the archive server.
- Full searching and viewing capabilities.

Customized reporting (CREM-20)
- Customizable and professional looking reports.
- User specific report templates can be saved and later retrieved.
- User definable report queries and fields.
- Export report as PDF or CSV..

Active Directory integration (AD-20)
- Active directory user authentication and single login support.

Oracle Database support (ORCL-20)
- Seamless support of Oracle 9i and later database engines.

Internal email and Collaborative work (IEMS-20)
- Mail messages and attach documents among Tawtheeq users without any external email server.
- Security settings are maintained for documents when mailed among users.
- Documents do not occupy any space when attached to email messages, only shortcuts are copied in the messages.
- Email announcements to entire groups at the same time.

Microsoft Office document viewer (MSODV-20)
- Render MS Office (Word, Excel and PowerPoint) documents on the server side.
- Show and browse the content of MS Office documents without installing any software on the client machines.
- Show MS Office documents in all Tawtheeq interfaces (web, client and iPad).
- Ability to show MS Office documents in any customized interface.

Microsoft Office integration (MSI-20)

- Direct archiving from Microsoft Office applications (MS Word and MS Excel)
- Sophisticated support of Microsoft Outlook, Tawtheeq maps Outlook message components to the archive indexing fields and automatically store messages and attachments in the DMS repository.

Tawtheeq Drive (AMD-20)

- Access Tawtheeq repositories as standard Windows drives.
- Browse, open and save files directly from any Windows application.

Tawtheeq web kit (integration layer) (WBKIT-20)

- Web integration layer application that is used to simplify communication with Tawtheeq Enterprise, by providing high level URL format API.

PDF/A support (PDFA-20)

- Save PDF documents in PDF/A format for long term archiving.
- Save metadata inside PDF/A documents.

Physical paper tracking (PPT-20)

- Manage paper storage locations hierarchy.
- Manage paper documents checking in/out.
- Full security privileges and auditing.
- Extensive reporting.

Monitoring dashboard

- A graphical, interactive dashboard that provides real-time monitoring of the system performance and throughput.
- Fully interactive, Pre-defined and user-defined widgets that display the current system status.
- Multiple types of data display: bar charts, pie charts, graphs,….
- Ability to drill down in widgets to get more details about any piece of data.

Datacenter features:

Disaster Recovery Server (DRSRVR-20)

- Multiple Tawtheeq servers in multiple sites.

Load balancing (CRVR-20)

- Scale Tawtheeq server to multiple processors / cores.
- Scale Tawtheeq server to multiple physical servers.
- Scale Tawtheeq server side Imaging services to multiple processors / cores.
- Scale Tawtheeq server side Imaging services to multiple physical server.

Storage Cabinet Management

- Allocate data storage cabinets on different locations and storage media.
- Supports online and offline cabinets.
- Read only and read/write cabinet.