

Medialogix

FOTOWARE DIGITAL ASSET

MANAGEMENT

Service Definition Document

Contents

Company Overview.....	3
System Architecture Overview	3
System Architecture Diagram	4
Software Modules Explained	4
FotoStation Pro Client (Client Application).....	4
Medialogix Pixel Desktop (Client/Server Application).....	4
FotoWeb	5
Medialogix PDF+ module for FotoWeb 8	6
Reakt module for FotoWeb 8	6
AVIS Module	6
MIT (Public Upload Module)	6
Medialogix Pixel Mobile - Policing (Apple/Android devices).....	7
Medialogix Pixel Mobile – Clinical Uploader (Apple/Android devices)	7
Index Manager (Server Application).....	8
Color Factory (Server Application).....	9
Support and Incident Reporting	9
PROFESSIONAL SERVICES.....	10
Onsite Engineering	10
Software Development.....	10
Training	10
Fully Managed Service.....	10
Intellectual Property Rights	10

Company Overview

Medialogix has supplied and supported government and public sector organisations with Digital Asset Management (DAM) and Digital Evidence Management (DEM) solutions since 2003.

Medialogix supply and support Fotoware software as well as developing their own products and have extensive experience of integrating their solutions within organisational architectures. They also have experience providing bespoke developments to enhance workflows and increase efficiencies. Medialogix are a Technology Partner of Fotoware and Microsoft Silver partner offering a range of on-premises, cloud and hybrid solutions.

We specialise in implementing solutions for Policing, Healthcare, Education and News Media Publishing sectors.

Fotoware is a Norwegian software company which, in the space of 25 years, has become a world-leading provider of Digital Asset Management (DAM) solutions. Fotoware was founded by Ole Christian Frenning (former press photographer 1974-1985 and photo editor of Aftenposten 1985-1991) and Anders Bergman (former leader of development at Hasselblad Electronic Imaging 1985 - 1994) in 1997 and was one of the first in the world to offer a DAM system.

Fotoware is a financially solid company that has enjoyed a AAA credit rating since 2005. See our online business report by Dun & Bradstreet. Fotoware is a private limited company based in Oslo, Norway and was founded in 1997.

Fotoware is a Microsoft Gold Cloud Platform partner. This is the highest tier cloud platform partnership and reinforces Fotoware's credibility as a stable and secure software vendor.

More than 200,000 users and 4,000 customers in a wide range of industries worldwide use Fotoware today.

System Architecture Overview

Fotoware have created suite of asset management products that are available as on premise, cloud based or hybrid solutions that are scalable according to individual requirements.

Fotoware software is accessed using a browser to the web interface for majority of the tasks. The software enables users on the network to manage, search and process images in the DAM system. The complex issues of preparation and management of assets prior to use is catered for automatically by the server products.

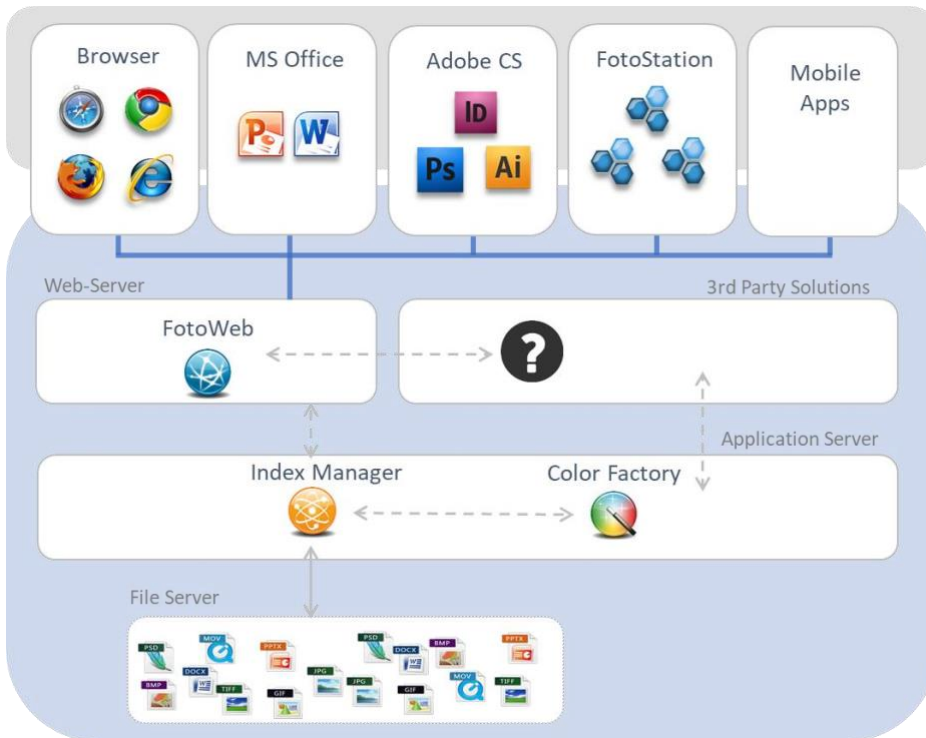
The software provides the following functionality.

- Imaging workstation software for the administration and viewing of imagery
- Server software for the creation of a media database and workflow
- Fast indexing and searching of assets
- A local intranet website(s) which is searchable by authorised persons
- Integration with Third Party systems using a RESTful API
- Conversion and migration of legacy assets
- Allowing 3rd party access via secure links

Uploading of media files to the server can be carried out using either web-based interfaces or client-side software depending on local requirements and preferences. Metadata associated with the media files is

ingested on input either automatically or manually depending on configuration and workflow. Medialogix have also created desktop modules and mobile phone/tablets apps for specific tasks within the police and healthcare environments.

System Architecture Diagram



This is a high-level overview of the architecture. More detailed diagrams and information can be provided on request.

Software Modules Explained

This section briefly details the software components and their application:

FotoStation Pro Client (Client Application)

A client application designed for those who deal with digital image files and other multimedia files in the course of their work. Already used by many photographers and administrators, FotoStation is the de-facto standard for imaging browsing. Allows users to acquire images from cameras and scanners, view images on the screen with a wide range of different viewing options, add text information (metadata), edit images and manipulate image files, apply automated actions to batch process images and for the searching and retrieval of files. Allows printing of media files on photographic printers and minilabs.

FotoStation Pro also allows for ODBC data connections to be established to other data sources (ODBC) to allow for integration to other systems for the purpose of data retrieval, and a whole host of other useful functions.

Medialogix Flex Companion Desktop (Client/Server Application)

The Desktop Uploader minimises the impact of uploading large volumes of data through the web. This was developed to enable users to quickly upload images into the central Digital Evidence Management System. Although web technology allows for uploading of larger file sizes (GB) this can have a significant impact on internal networks and critical systems. Sometimes web browsers can time out or crash and others require the users to stay logged in during the upload process.

The Desktop Uploader enables efficient file ingestion and metadata entry for the user by uploading files in the background, at a predefined frequency and time according to network priorities. With these policies the uploader can protect your network and ensure data integrity from the point of ingestion to the DAM/DEMS.

One of the great advantages is the background services which allow uploading large volumes at the end of the shift pattern, when multiple police staff start uploading. The background services allow the user to complete the upload process by selecting files and attaching metadata and then can log off the machine to go home. If the user remains logged into the computer unnecessarily it can be a security risk. A confirmation email to the user is sent once the upload job has completed.

Other features include database lookup and mapping of metadata fields from 3rd party systems such as Socrates. This can also interact with Artificial Intelligence (AI) Cognitive services either on the client side or server side for auto tagging of files.

The desktop uploader maintains the evidential integrity of the file by recording an audit trail of the hash values of the file through each step of the workflow. A working copy is created for day to day use and the original master is securely stored in a separate storage area.

FotoWeb

FotoWeb allows users to manage all their digital assets which includes images, PDFs, spreadsheets, PowerPoint, Word documents as well as support for the playback and streaming of audio and video files.

It's a server component that allows for the distribution and sharing of media using the web/intranet. Files may be collected into albums which may be shared with other users. Invitation email links can be sent which link back to a particular album.

FotoWeb enables full control of user permissions and restrictions for the management of sensitive information.

As more and more people work remotely, the online commenting and annotations features in FotoWeb 8.0 help users interact and discuss specific files or collections.

As an extension to FotoWeb, plugins allow access to media files from directly within the interfaces of InDesign, Illustrator, Adobe Photoshop, MS Word and MS PowerPoint. Users can search and 'drag & drop' content directly into the above-mentioned applications.

FotoWeb can also be used to publish content to a Content Management System (CMS). FotoWeb will keep track of all published assets in a CMS giving total control. The "Selection Widget" allows users to easily select and prepare pictures for publish in the CMS.

Single Sign On (SSO) to manage access and leverage the convenience of automatic login. SSO can be employed with SAML2, OneLogin, Okta, VMWare, Active Directory, Azure AD. Multi-factor authentication can also be used if available from the identity provider.

The FotoWeb RESTful Application Programming Interface (API) is the recommended API for integrations with FotoWeb. Medialogix are experienced at integrating Fotoware with Police case management systems and hospital PAS and Electronic Patient Record (EPR) systems.

The API can also be used for the following purposes:

- Building custom user interfaces
- Building custom mobile apps

- Automating workflow
- Analytics

These are only examples. Any application that needs to read data from a FotoWeb server and/or update some of this data can make use of the FotoWeb API.

Medialogix PDF+ module for FotoWeb 8

The PDF+ module for FotoWeb 8 creates PDF files of albums within user-defined templates designed using MS Word templates. This is particularly useful for compiling formal case reports with images embedded within the document. These documents can be witness statements, albums for court presentations and much more. The PDF documents can either be printed or electronically transferred to a different system.

Reakt module for FotoWeb 8

Reakt plugin works using the FotoWeb API module and Azure Cognitive services to deliver advanced workflow management functions and automated tagging of metadata using AI. To use Azure Cognitive services, you must have a valid subscription with Microsoft. Other features include notifications to users when files arrive in their “basket” for review or approval.

AVIS Module

This module connects to digital interview recording devices and ingests the video, audio and document files into the Fotoware system. It also transforms all the metadata so it's fully searchable in Fotoware. This was originally developed for Gwent Police and currently they are the main user. At the time of writing, they have automatically transferred over 14,000 digital interview recordings into Fotoware using this module. The module can be used to connect to other systems which generate digital evidence files and metadata and ingest it into Fotoware without any user intervention. It can also be used in conjunction with our Public Upload Module whereby it “pulls” files from the public upload portal.

The future potential of this product is to ingest data and files from future technologies, such as driverless cars, virtual reality and implant technology.

MIT (Public Upload Module)

The MIT web application provides organisations with the capability of accepting external files from the public through a controlled process.

Clinicians access a web application and create an email or text message request for a patient to upload photographs and/or video. The request can be personalised by using predesigned upload templates that may ask a patient for additional details about their medical condition relative to the photographs, for example size, recent changes, pain, swelling etc. The clinician also has the option of sending the request at a scheduled time.

The patient then receives the request and logs into the system on a web browser (mobile compatible) using a unique link generated by the system. The patient uploads their files into the application and completes the template with the details as requested before submitting the request.

All received requests are then scanned and securely transferred into the organisation where they are then sent to your DAM system.

The same application can be used in policing and other environments which require sending requests to members of the public for digital media files.

Medialogix Flex Companion Mobile - Policing (Apple/Android devices)

These products are cross platform phone/tablet applications to search, organise and view digital files. With increasing volumes of digital files being created on mobile devices, this app extends Fotoware functionality onto these devices. This mobile app provides more advanced functionality in comparison to the mobile app packaged with FotoWeb. It allows officers to take photos and upload directly into the DAM/DEMS. Allows users to attach metadata and search 3rd party case management systems such as Socrates for metadata.

Medialogix Flex Companion Mobile – Clinical Uploader (Apple/Android devices)

The Clinical Uploader App provides a secure solution for out of hours and offline clinical photography that guides clinicians through the patient photography process using a step by step wizard.

The App allows authorised users to take and upload clinical photographs to the third party hospital central image management system and provides accurate correlation with patient demographic data and also ensures processing in accordance with the consent and permission of patients.

Photographs are categorised into body regions to enable useful identification for comparison and monitoring purposes, and photographs can be marked as 'sensitive' for special processing and access restrictions.

Our carefully considered, easy to use App provides end to end control of the photographic process with full auditability, assurance of correct ID, consent, process and risk management to reduce the workload of clinicians and administrators and significantly reduce the potential for large financial penalties for breaching Data Protection legislation. The App has been designed in conjunction with an industry expert who has 19 years experience in clinical photography and image management.

Process

- User authentication via the hospital AD accounts
- Search for patient via hospital PAS/EPR
- Confirm patient
- Documentation of written consent
- Select body region, take photographs (repeat process until complete)
- Flag any sensitive images that require special processing in the central image management solution
- Click upload button – where connectivity is not available, the data remains in the secure App container until upload prompt appear once connectivity is available
- End to end encrypted image transfer to the central image management solution **Benefits**

Availability of a secure clinical photography solution 'out of hours' for the documentation of trauma and safeguarding cases, second opinions and case discussions.

A clinical photography solution that works securely offline will enable community staff to continue monitoring wounds and pressure ulcers outside of the acute hospital environment in accordance with NICE guidelines.

The App can, in many cases be installed on existing equipment or BYOD and managed through MDM software depending on the organisational preferences.

Workflow efficiencies can be achieved by clinicians using this seamless process supported by a 'wizard' which guides them through the consent and photography process more effectively.

Database administration staff will benefit from consent, ID and photographs entering the workflow in one 'package' saving hours of time identifying images or chasing up consent from loan cameras.

GDPR / Caldicott Compliance

Patient consent is clearly explained within the App and separate options are available for documenting patient consent to the photographs being used for hospital records in support of direct patient care, or for educational purposes.

There is also a facility for documenting that photographs are being taken in the patient's best interests in instances of mental incapacity, and for the documentation of verbal consent in instances of physical disability.

A 'Data Protection by Design' approach ensures that all necessary data relating to the photographs is collected prior to upload to ensure that appropriate access can be configured to allow viewing via the central image management database on a 'need to know' basis as per Caldicott Principle 4.

Security

Patient demographics are accessed via the hospital PAS system. Following the verification process, only minimal patient data is held within the App for correlation purposes.

Images are taken within the App and are all held securely in the App container until 4G or Wifi is available for sending images and data to the third party hospital image database for centralised storage, management and viewing. This means that the App can be used off site, for example in the community setting where 4G may not be available, the images will remain securely in the App container on the encrypted device. Image transfer is carried out following a prompt with end to end encryption as soon as connectivity is available. This process ensures that images are not held in the camera roll or gallery where they may be duplicated in multiple unapproved cloud locations.

Organisational risk of data breaches relating to clinical photography on personal/mobile devices can be minimised and good practice can be promoted through an improved clinical photography facility and a supporting clinical photography policy.

Index Manager (Server Application)

Index Manager provides powerful search engine and real-time indexing for the Fotoware DAM. Indexing of any file type, with rendering of thumbnails and high-definition previews of nearly all image and graphic file formats. Optimized search results can be achieved by fine-tuning queries. Files can be stored anywhere in the network and accessed through a single point of entry. Metadata is embedded into the assets for flexibility - there is no additional metadata to maintain.

To comply with enterprise-level requirements, Index Manager can be configured for load balancing and automatic failover to ensure data integrity and 24/7 accessibility. The system is self-healing and automatically optimizes for maximum performance and uptime. All client-server communications can be secured using industry standard encryption to keep your assets safe. All network traffic is encrypted ensuring full security of files. The control over assets availability and sharing managed by the client administrators and allows 24/7 accessibility.

Index Manager takes full advantage of modern multi-core servers and provides very fast indexing, renditions and search services to all the users in your organization.

A single Index Manager Enterprise licence allows an organisation to index 3 million assets. Up to 4 licences can be stacked on a single server giving a total of 12 million files per subscription plan. If you exceed that, just add more index manager licences on a second subscription plan and create a union! A Fotoware DES (Digital Evidence System) licence allows you to install as many instances of the software, thereby giving you the ability to index an unlimited number of files.

Color Factory (Server Application)

Color Factory provides workflow automation and image enhancement for efficient and powerful processing of files and metadata. Automatically enhance image quality without the need of expert software. Sort pictures based on contrast and quality to minimize the amount of manual work. Automate file format conversion, colour space conversion, ICC profile tagging, resizing and output dpi settings to prepare pictures for print. Colour convert PDFs to prepare them for print, using Lino CMS Engine or Adobe Color Engine. Monitor all activity on the server through the Operations Centre. Users can monitor processing queues, the time to process and the number of assets processed in the last 24 hours. Extensive logs provide additional details.

Automate the verification of metadata consistency. Sort assets based on metadata content, automatically add metadata based on rules and filter out files that require manual metadata tagging. Streamline and automate workflows to manage assets. Avoid duplicate content, maintain metadata consistency and purge outdated content automatically, to name a few common operations.

Purging content function allows to comply with MOPI guidelines with processes setup on the system or a list of files for deletion to be sent by another system.

Support and Incident Reporting

Support is available for customers who have purchased support through Medialogix Ltd. Telephone, email and remote-control support is provided as part of the package.

Support is available Monday to Friday 09:00 to 17:30 (excluding public Holidays) and can be accessed by raising a support ticket with our dedicated system. You can do this by sending an email to support@medialogix.co.uk

Extended hours and 24/7 support options are also available.

Support queries include; faults with the system, broken licences, answering technical queries, use of the software and minor configuration changes.

Support **does not** include; software development, design work, major configuration changes, major upgrades, training.

Support queries are logged in Medialogix's support system and are categorised as follows; 'New', 'Open', 'Pending' and 'Solved'.

Note: Please include client email address and telephone number on the support ticket as well as a full description of the support issue.

Clients can expect a maximum 4-hour response time once a ticket has been raised.

Medialogix provide remote access support in agreement with client access protocols.

PROFESSIONAL SERVICES

Onsite Engineering

Onsite Engineering includes upgrading of software or changes to the configuration. It can also be used for updating documentation or consultancy. It does not include software development or redesigning FotoWeb pages.

Software Development

Software development includes development of plugins to the Fotoware system or bespoke development and additional features to existing Medialogix software products.

Training

Training is onsite and is limited to 10 people. We provide training on End User and Administrator training. We can also provide bespoke training packages based on your setup and can provide “train the trainer” training.

Fully Managed Service

This is an optional service where we can provide up to 36 days per year (approx. 3 days per month) to carry out any change requests, monthly health checks and software patches every quarter.

Each day is equivalent to 8 hours, which means a fair use policy of 24 hours per month. Hours can be rolled over within the 12-month contract period.

Intellectual Property Rights

Fotoware Software IPR belongs to Fotoware a.s (Oslo). Medialogix software IPR belongs to Medialogix Ltd. Microsoft Azure and cloud infrastructure IPR belongs to Microsoft.