Content Management System for Aviation

Born out of Airframe and Engine OEM requirements for authoring, revisioning and distribution / publishing of Digital Documents, AeroSoft in 2008 licensed technology and commercial rights of an established product suite in aviation and is continuing its enhancements, development, and marketing as DigiDOC™.

The DigiDOC™ suite is highly flexible and customizable. It enables the airline or MRO to assemble an electronic repository environment that is particularly geared towards their customized needs with full integration with either AeroSoft's DigiMAINT™ or WebPMI™ MRO / M&E solutions. More importantly DigiDOC™ is more widely being integrated with Best-of-Breed alternative MRO / M&E Systems.

Electronic Documents On Demand

In order to meet strict regulatory needs, customer demands, and financial goals, maintaining modern aircraft requires that the MRO team has real time access to accurate documentation.

... Our Solution

DigiDOC™ elements have been installed in major airlines, OEMs and MRO’s and consists of the following application elements:

- **DigiDOC™ CMS** - is a virtual content management system built and based on XML and Java, which deploys integration and process control over the Internet through a ‘logical document’ concept.
- **DigiDOC™ ATA** - is a CMS extension to support full scope of ATA iSPEC 2200 specification, with ability to manage locally authored content, merge OEM and local content and publish and distribute merged content.
- **DigiDOC™ IETP** - enables data to be distributed, published and viewed in multiple formats and on multiple devices.
- **DigiDOC™ MRM** – is an extension to support integration with MRO/M&E systems.

Scenarios of how to use the DigiDOC™ suite:

- Manage enterprise-wide aviation digital document content.
- Distribute electronically OEM publication data within your MRO organization.
- Manage enterprise specific content (Customer Originated Changes) and approval process.
- Enhance enterprise with a full scoped Job Card production system.
- Integrate all three main products to allow creation and management of supplements provided by the operator.

What’s in DigiDOC™?

DigiDOC™ is a globally recognized and installed Digital Document Content Management Solution. It includes:

Interactive Electronic Technical Manuals (IETP)

- **DigiDOC™ IETP** provides both standalone and web delivery of OEM Technical Manuals, e.g. AMM, FIM, IPC and WDM.
- Standalone CD / DVD solution or EFB can be used in remote locations or locations with limited Internet access.
- Publish to EFB.
- IETM is able to display browser native graphic formats like GIF, PNG and JPG. For non-native advanced graphic formats like CGM and TIFF, customer can use build in IETM builder CGM / TIFF to GIF conversion and loose ‘enhanced' features like hot spots

Local Editing of Original Manufacturer Data - “Green Pages”

- “Green Pages” can be used to add airline specific engineering data to the OEM manuals or make company specific changes.
- XML authoring toolkit provides advantages against proprietary formats like reusable content, search, compare, and more.
- DigiDOC™ supports XMetaL, EPIC and other editors.
- Supplemental data can be attached to primary technical information and can include pictures, movies, maintenance tips, best practice information, etc.
- Annotations can be used to collect information from the shop floor and make contents on both approved and in-work technical content.
- The Local Edit Solution is coupled with the IETM Solution to provide a full technical content solution for the airline.
- The solution includes a full revision analysis feature that allows engineering / technical publication to review the changes from the manufacturer on-line and make change impact decisions and resolutions quickly and efficiently.

Maintenance Requirement Management App. (MRMA)

- Manage Airline Approved Maintenance Programs (AAMP) interfaced to the OEM’s Maintenance Planning Document (MPD) revisions.
- The AAMP is defined by the airline and approved by the Regulatory Agency. This AAMP is based on the OEM’s MPD and fine-tuned by the operator.
- The MRMA Solution provides an efficient interface for managing the AAMP by the airline including the impact analysis of the OEM’s MPD revisions.
- The OEM’s MPD is digitally imported into the system and Engineering is provided a user interface to update, add, and approve maintenance requirements subject to review by the Regulatory Agency.
- The solution also provides a revision analysis tool for identifying changes to the OEM’s MPD and providing an online review and resolution tool for quick and efficient program updates.
- The DigiDOC™ solution allows for the export of the AAMP for loading into the M&E system.
- This capability reduces re-authoring and errors, and facilitates traceability back to the airline Maintenance Program and OEM’s MPD.
High level functions and advantages of AeroSoft’s DigiDOC™

- ATA iSPEC2200, S1000D and DITA capable with full SGML, XML, .PDF support and provision for paper / image management.
- Common XML Repository / Virtual Folder structure for all reusable and derivative documents.
- Anchor and Minimum Revisable Unit (MRU) Management
- AMM, IPC, WDM, TSM, FIM / FRM, Task Card Manual, MPD, Job Cards, SB / AD etc. but also Flight Manuals (FCOM, QRH, AFM et al).
- OEM and Official Airline Revision Management.
- Incremental Revisions / Temporary Revisions.
- Customer Originated Change Management, Local authoring / Customization.
- Maintenance Planning Program Management and Authoring.
- Workflow and Impact Analysis.
- Customizable meta-data for tracking ‘change authority’ / ‘revision history’ audit trail.
- Web / Intranet / Internet as well as media based distribution including EFB publishing.
- XML Authoring, Graphics editing.
- Data extraction and integration into MRO / M&E Systems via SOAP, URL, XML:
  - Job Card to Work Package links
  - IPC initial and revision loading into Part Masters
  - SB/AB notification
  - MPD Change management
  - Electronic Compliance / Signature
  - Airplane modification status
- Automated Job Card Generation.
- 3-D security ‘matrix’.
- Digital Signatures.
- Supplementary data management – All corporate documents authored and revised with MS Office Applications can be managed and ‘attached’ to XML based documents.
- SB/AD to EO generation
- PDF to XML migration