DAR: Institutional Repository Integration in Action

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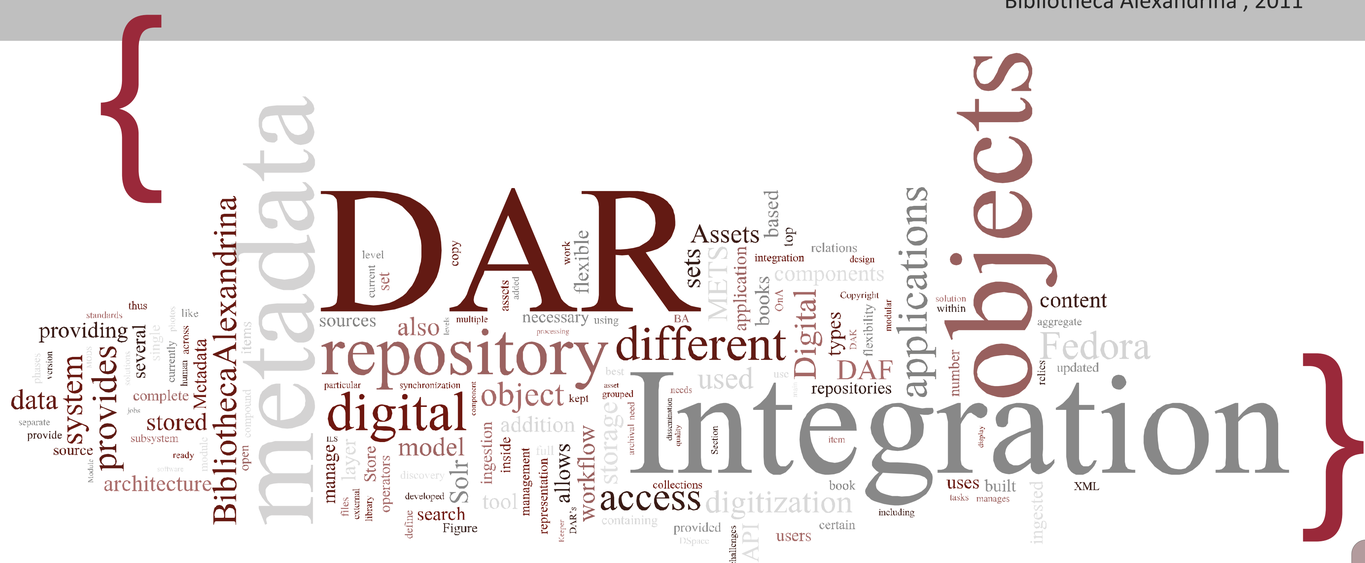
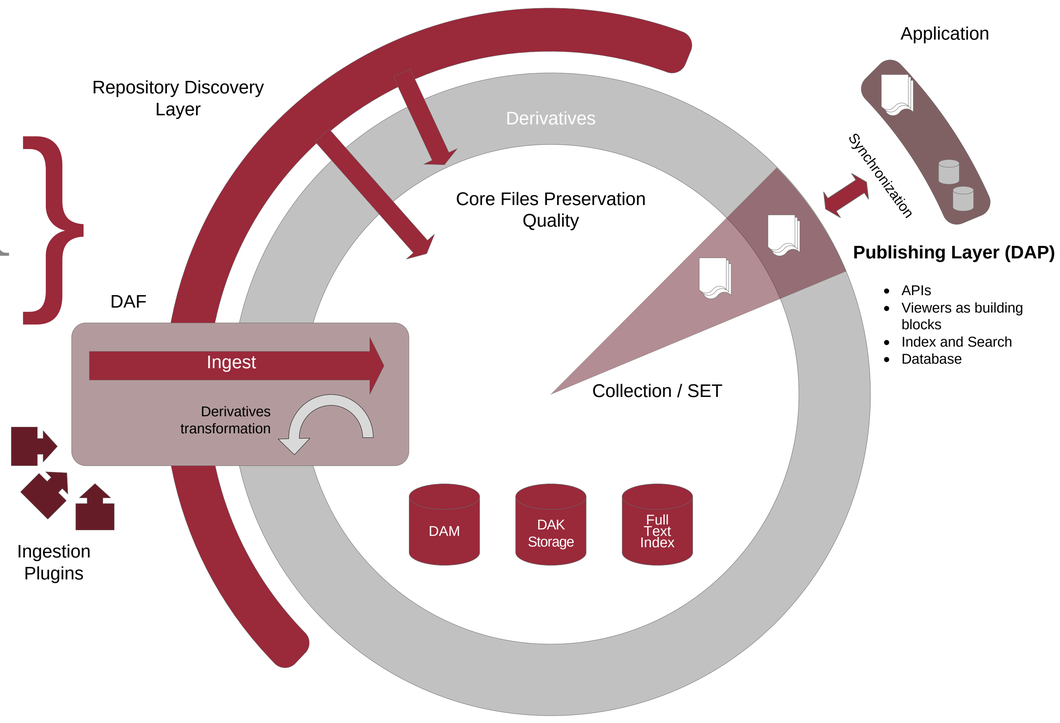
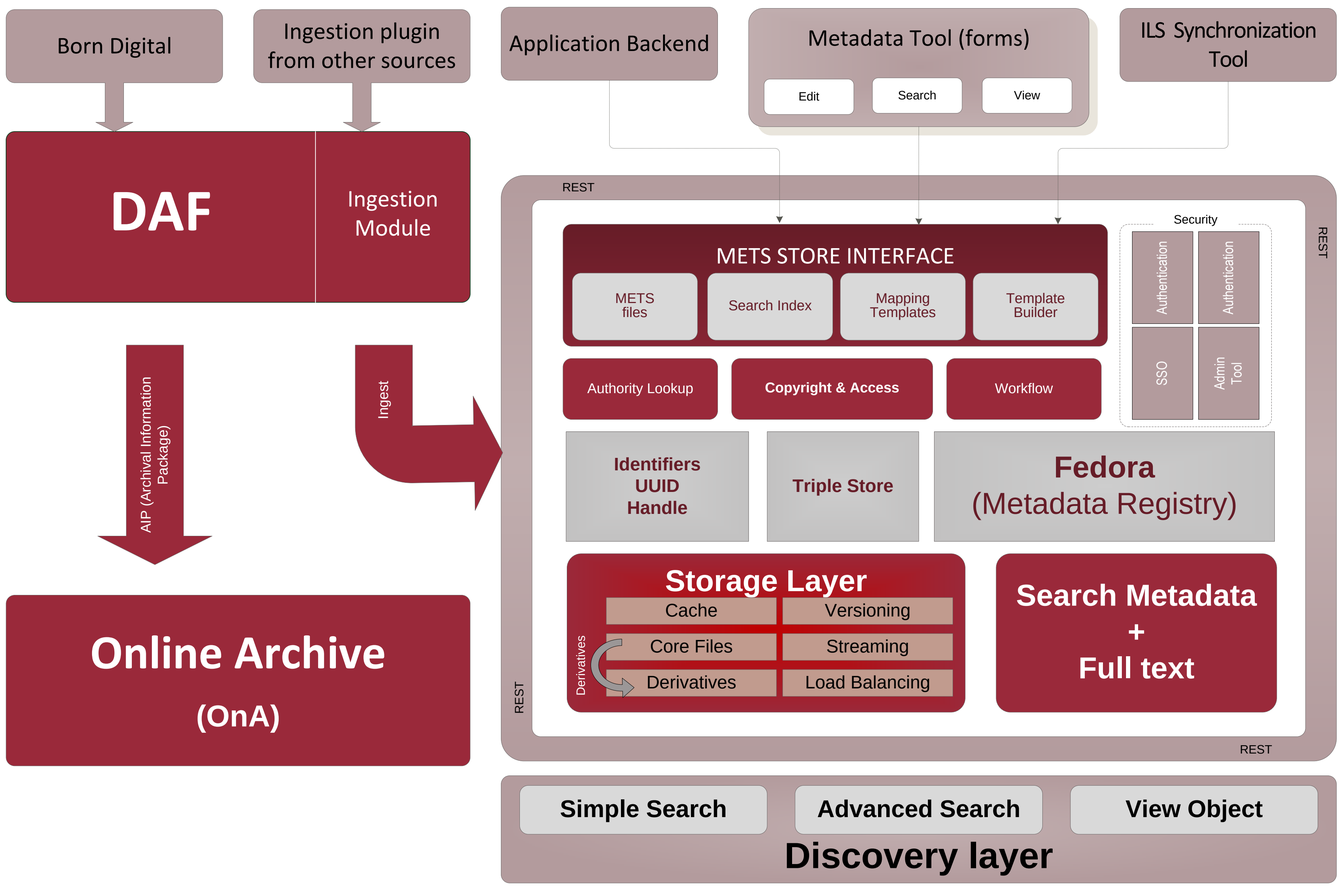
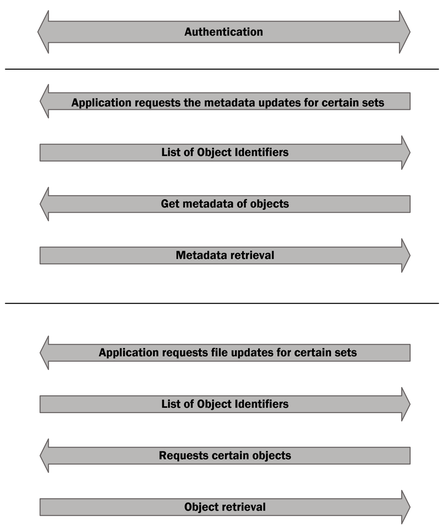


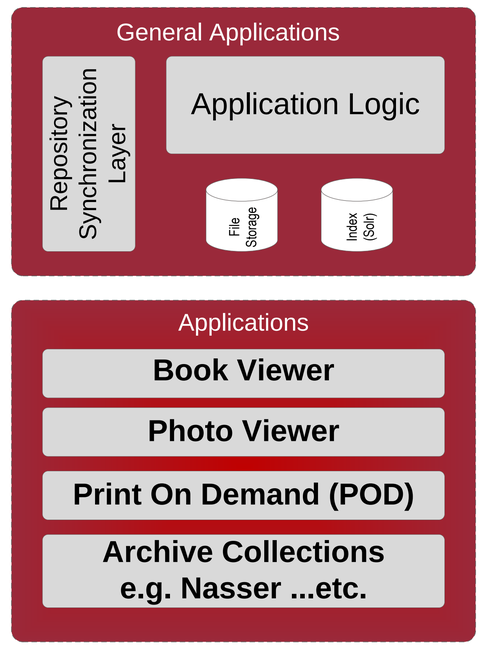


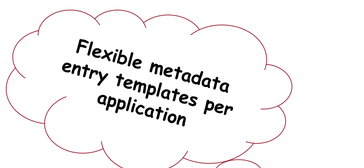
DAR Architecture

The Digital Assets Repository (DAR) is an eco-system of components developed by the International School of Information Science (ISIS) at the Bibliotheca Alexandrina (BA) to create an institutional repository maintaining the Library's digital collections. DAR consists of four main modules: **DAF (Digital Assets Factory)** a flexible management for the digitization workflow, **DAM (Digital Assets Metadata)** a metadata management system based on METS with Fedora inside supporting synchronization with external sources, a **Digital Assets Publishing layer (DAP)** providing a Restful API for building applications on top of the repository and **DAK (Digital Assets Keeper)** a storage layer responsible for caching, versioning and load balancing.









Metadata Management

- The object is described in METS.
- MODS is used for books, 3D objects, monuments, images …etc.
- Fedora as a metadata registry
- Flexible XML metadata templates and dynamic forms: Users see human readable field names with the assistance of authority lists and metadata is translated into MODs
- Edit/Review workflow
- Synchronization Templates for synchronizing metadata with backend administration applications
- Synchronization with ILS (e.g. VTLS), external DBs or repositories.

DAF

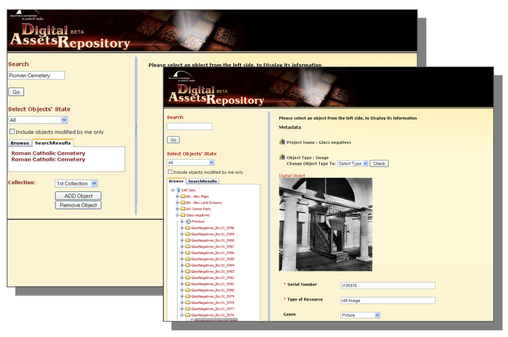
- Flexible workflow definition, including QA and redirects
- Different paths for different media types
- Plug-in based; Integrates with other enterprise tools , ILS and software used for digitization
- Automated and human phases with reporting
- Automated integrity checks at each step of the workflow
- Automated ingestion into the repository and archiving
- Available for download at **http://wiki.bibalex.org/DAFWiki**

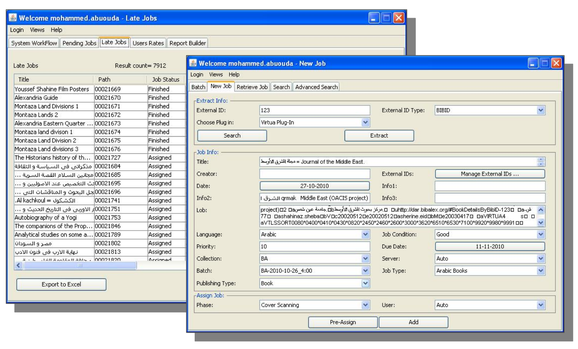
DAR Books

- Social Features:
  - Rating and comments
  - Create your own bookshelves
  - Embedding and sharing: Facebook, ...etc.
- Annotations
  - Sticky Notes
  - Highlight and underline
  - More to come…
- Morphological full text search (5 languages)
- Search results highlighting
- Embeddable book viewer, can be added to any webpage.
- Faceted Search

Application Integration

- REST based API to allow for automated application integration
- Applications have access to sets of objects
- Application queries the API for updated items within its accessible sets of objects
- Updates can be in metadata or content
- The API replies with new or updated objects within the specified period
- The application loads the updated object metadata or content
- More advanced features can be built on top of the API. (e.g. Print on Demand integration)





Copyright and Access Module

- Centralized Access Right module
- Takes into consideration the number of copies allowed for dissemination
- Can define exceptions to override rules (e.g. prevent a certain object from being displayed)
- Defines rights to certain operations (e.g. view, print, …etc) based on the application requesting access

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Digital Asset Factory

Bibliotheca Alexandrina Website: http://www.bibalex.org/
International School of Information Science: http://www.bibalex.org/isis/
Digital Assets Repository DAR: http://dar.bibalex.org/
Digital Assets Factory DAF: http://wiki.bibalex.org/DAFWiki/