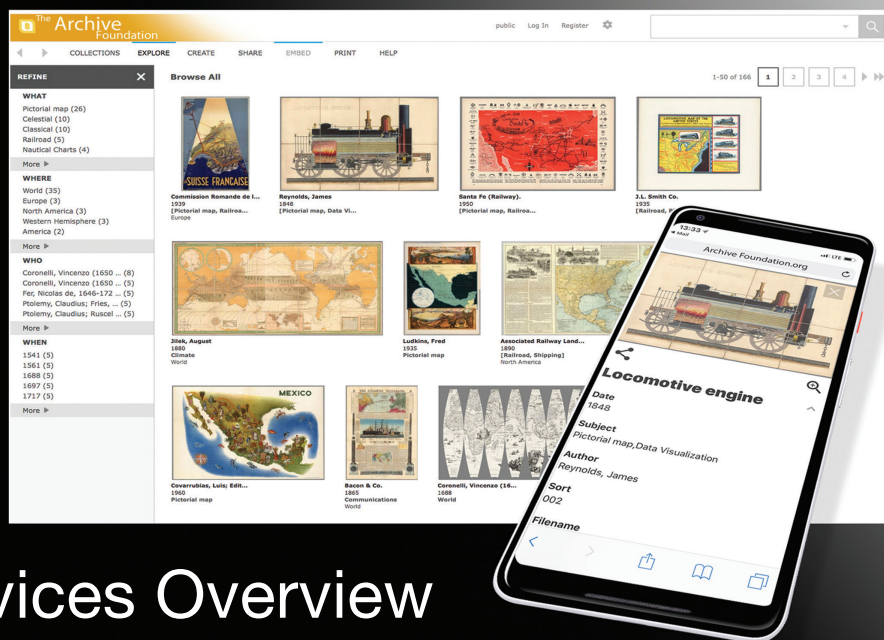


# LUNA

## Product & Services Overview



## Beyond Digital Asset Management

LUNA makes it easy to organize, manage, and preserve digital assets, curate collections, and deliver content to targeted audiences or the general public. LUNA is comprised of a complete set of tools that can be distributed across multiple roles within any size organization. A choice of two LUNA Viewers serve as the front end for the LUNA toolset. Both offer an unprecedented way to distribute digital content for expanded audience accessibility.

**Now with collection sharing** – LUNA Admins can easily Share and Receive LUNA and IIIF enabled collections.

LUNA's visually powerful web-based platform provides an appealing alternative to other digital asset management systems that focus primarily on managing metadata at the expense of the assets themselves.

## In This Document:

### ■ The LUNA Toolset

#### Backend Tools

- LUNA Library & Uploader
- LUNA Collection Manager & Template Builder
- LUNA Administrator
- **New:** LUNA Sharing

#### Frontend Viewers

- LUNA Viewer
- LUNA Aversal Viewer

### ■ LUNA Software & Service Options

- LUNA Software Licensing
- LUNA Technical Support
- LUNA Implementation Services
- LUNA Training Services

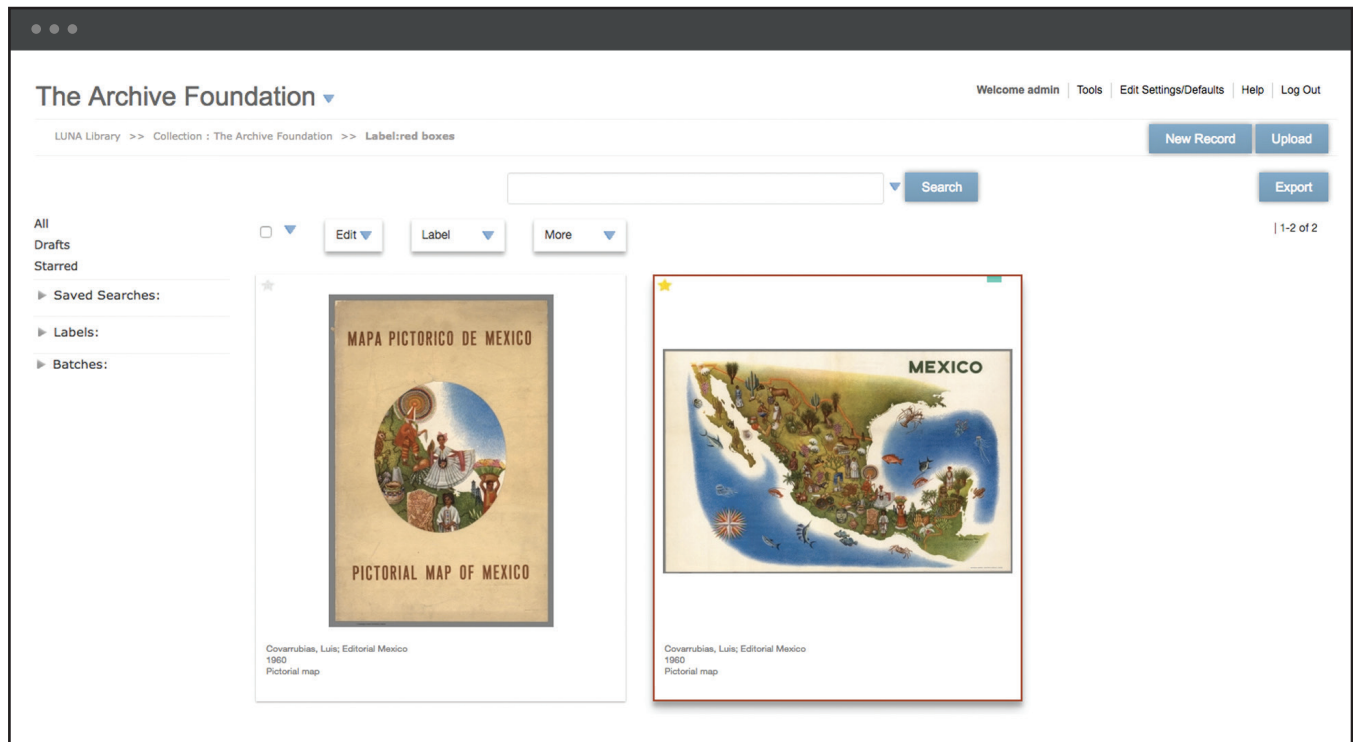
### ■ LUNA Technical Overview & Diagram

- LUNA Technical Overview
- Supported Media
- LUNA Flexibility and Supported APIs
- LUNA Content and Collaboration
- LUNA Diagram

# LUNA Library & Uploader

## Easily Manage Your Assets

Typical user role: cataloger, subject specialist, media processing technician, photographer



The LUNA Library, combined with the LUNA Uploader, provides a flexible staging environment for importing new content, creating and editing metadata records, adding items to collections, and managing authorities.

The Library is the core of the LUNA toolset and provides a simple, powerful tool for working with all types of media items. Permitted users can assign labels, save searches, work with technical metadata, batch import data and media, and bulk edit records.

Use the Uploader to add data and media directly to a collection, or upload it to the system and assign to collection(s) later. Once media items are in the system, the Library supports QC and departmental review.

### The LUNA Library supports:

- Google Cloud Vision API
- Google Cloud Storage API
- Export of collection(s) record metadata as a .csv file
- Batch ingest and export of source image files including JPEG2000
- Ingest of 16-bit image files
- BookReader media processing for discovery and delivery of compound objects
- Custom thumbnail selection for audio, video, and PDF media file browsing
- Item Level Restrictions

# LUNA Collection Manager

## Curate Your Content

Typical user role: cataloger, subject specialist, curator, webmaster

The Collection Manager is where metadata templates are managed and where LUNA Viewer properties are assigned. Create as many collections and metadata templates as you need, and easily modify or repurpose them.

LUNA makes it easy to maintain data structure and consistency. New metadata templates can be created from scratch, or modified using the Dublin Core template that comes bundled with LUNA. LUNA templates support repeating fields, MARC record mapping, and local authorities.

The Collection Manager also makes it easy to manage which collection properties are visible to end-users in the LUNA Viewer. Adjust the field mappings for category browsing and faceting, the search and display preferences for a record and embedded metadata, and the sort order and display defaults for collections delivered through the Viewer.

### **The LUNA Collection Manager includes:**

- Search and Display options for embedded EXIF, IPTC, and XMP metadata
- A relay button for flexibility with e-commerce or user feedback options
- OAI-PMH compatibility with Dublin Core metadata mapping

# LUNA Administrator

## Manage Workflow & Access Permissions

Typical user role: System Admin, User Access Manager

The LUNA toolset now provides complete transparency between tasks and allows the Admin to navigate throughout the complete toolset using a single login.

In the Administrator, different access levels can be assigned to each tool. The Administrator gives your organization virtually unlimited flexibility in distributing the LUNA toolset and customizing your collection building workflow.

LUNA's integration with Active Directory, LDAP, and OpenLDAP provides an easy solution for organizations with an existing authentication system. The Administrator also allows organizations to create end-user accounts and limit access by IP or IP ranges.

### **The LUNA Administrator supports:**

- Shibboleth authentication
- Detailed usage reports through Google Analytics
- RESTful API (LUNA Record Data API for source-data integration)
- JSON API (LUNA Viewer API) for dynamic discovery

### **LUNA Sharing supports:**

- Share and Receive LUNA collections
- Create collection groupings through Categorization
- Further enhance collection offerings and LUNA delivery as enabled by the IIF Activity Stream

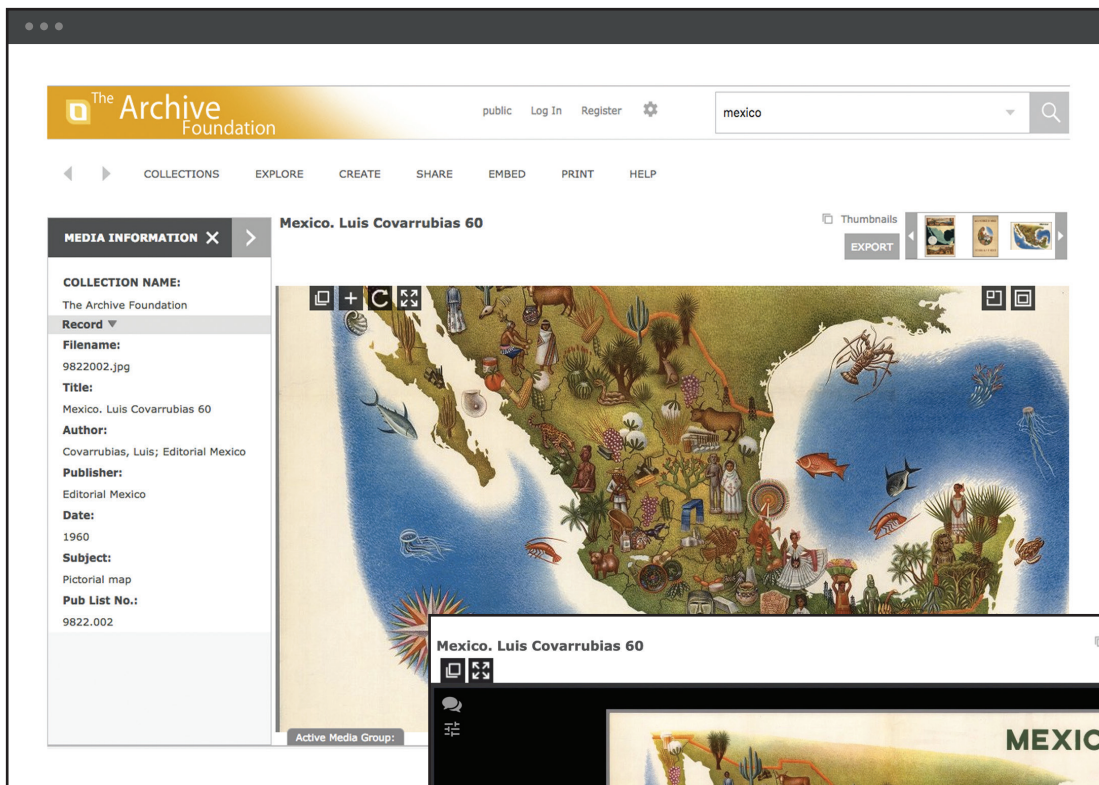
## The LUNA Toolset

- LUNA Library & Uploader
- LUNA Collection Manager
- LUNA Administrator
- LUNA Viewers
  - The LUNA Viewer
  - The LUNAversal Viewer

## LUNA Viewers

Typical user role: focus on Access – Marketing and Publications; Internal or Remote Teams; On-campus students, faculty, and researchers; Private or Public Discovery

The LUNA Viewers are the end-user's front end for the LUNA toolset. They offer an unprecedented way to distribute the digital content that you've organized into collections. We pay attention to the end-user experience and have designed an interface that not only enables users to find specific items, but also encourages them to discover and enjoy new content.



Detail View



Mirador Detail View

## The LUNA Viewer

### Feature Rich for Research

With the LUNA Viewer, users easily search or browse still images, audio, video, PDF, and BookReader media, from one or many collections simultaneously. Users can continuously zoom on high-resolution images and book pages, and easily play back audio and video.

Media Groups provide users with an easy way to organize saved searches into dynamic slideshow presentations either within LUNA or through PowerPoint export. Sharing is easy through URL linking or as embeddable web widgets. Content added through MyUploads integrates with LUNA Viewer Media Groups and is also available in the LUNA Library for assigning to collections.

#### **The LUNA Viewer includes:**

- Faceted searching and category browsing
- Built-in SEO – public LUNA collections receive maximum exposure
- Georeferencer integration with Klokan technologies
- Related media discovery
- Theme selection expansion to include new white theme
- Increased image interoperability with IIIF – International Image Interoperability Framework

#### **LUNA's Mirador Detail View (LUNA Beta) supports:**

- Open SeaDragon for smooth zooming
- Open Annotations supported at the collection level

## The LUNAversal Viewer

### New Responsive Delivery Option for Expanded Audience Accessibility

LUNA (v7.4) introduces the LUNAversal Viewer building upon LUNA as a IIIF image server while adding a responsive delivery option to the LUNA Toolset. The new LUNAversal Viewer aims to meet Section 508 guidelines for web accessibility further enhancing the LUNA viewer experience.

#### **New LUNAversal Viewer:**

- Responsive – UI built for expanded delivery to audiences on mobile platforms
- Minimalist Design – Intuitive Navigation and Discovery – Search and Display targeted collections/facets/related media/media groups
- Best Practices – The LUNAversal Viewer utilizes IIIF for image delivery – Built upon an enhanced version of the LUNA Viewer API
- Provides an opportunity to further customize the viewer for LUNA clients
- Web Accessibility Compliance – Introduces standard keyboard commands for navigation



## LUNA Software Licensing

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Our clients choose LUNA because they need a system that can do more. In order to provide the best solution for your organization we have many options to choose from:

### **LUNA Hosted Service**

There's no need for a software license with this SaaS offering. We offer the LUNA toolset hosted with Google Cloud Platform's Google Computer Engine. Starting with 250 GB of storage, LUNA Hosted Service now features:

- High-performance virtual machines
- Global load balancing
- Compliance and security

### **Digitize + Deliver**

Imaging Services now include LUNA Delivery for the project duration

### **LUNA Solo**

This affordable hosted solution scales for individuals and small organizations that require one, five, or ten user accounts.

### **On-Premises License**

Purchase a software license to install on your institutional server or on your own cloud instance, on Google Cloud Platform or Amazon Web Services.

### **LUNA for consortia**

Options for centralized or decentralized collection building.

## LUNA Technical Support

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With three levels of support to choose from for your on premises installation, and support bundled with our Hosted Service, we provide the flexibility you need to make your project a success.

### **Standard Technical Support M-F, 7:30am – 4pm PT**

- Email support via web-based ticketing system
- Telephone support
- Software Updates and Upgrades

### **Included for LUNA Solo and Hosted Service Agreements**

- Set-up and maintain the servers and databases to host your collections
- Reliable web access to your collections
- Service monitoring with Nagios - LUNA provides a snapshot every 24 hours and a two-week rollback

### **Customized quotes are available for:**

- Dedicated Server
- Hybrid model for a LUNA Hosted Agreement with On-Premises License
- Backup and Recovery
- On-Premises Remote Console Installation, Support, and Repair
- Supported 3rd party integration and customization for Authentication
- 3rd party source data integration and interoperability
- LUNA Enterprise Performance configuration

# LUNA Training and Implementation Services

## LUNA Training Services

While many of our clients get started as soon as we provide them with login credentials, it is often best to wait until after the collection building training session.

Our client specific training provides a foundation of understanding of the LUNA toolset so our clients can design the optimal workflow for adding content in light of access and discovery options from uploaded batches in the LUNA Library to category browsing and faceting in the LUNA Viewer.

We typically start our new clients off with two training topics; collection building and user administration.

Additional specialized training is available on a wide range of topics including:

- Representing compound media items such as PDFs for BookReader format display.
- Integrating LUNA with the Google Cloud Storage API for source and associated media items.
- Building and managing local authorities
- Adding item level restrictions to collection content
- Collection sharing and categorization
- Enhanced Google Analytics for better usage reporting

## LUNA Implementation Services

Beyond support, we offer a wide range of services to ensure your LUNA implementation is successful.

Customized implementation quotes are available for:

- Consulting services – system design, digitization workflow & project management
- Installation and configuration
- Data design and migration
- API integration services
- Collection creation
- Collection server and database migration
- Custom authentication
- LUNA optimization critique and review
- Collection digitization with LUNA delivery

# LUNA Technical Overview

## Easy to Deploy

Luna's hosting service provides both hardware and support resources so you can focus on managing your media. The server environment is completely virtualized. Servers are monitored internally and every 24 hours a snapshot of your implementation is backed up to another storage device.

## LUNA Toolset

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### Supported Browser Platforms – Web

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<b>LUNA Viewers</b>	Firefox (all platforms)
<b>Uploader</b>	Chrome (Windows & Mac)
<b>Library*</b>	Safari (Windows & Mac)
<b>Collection Manager</b>	IE 8+
<b>Administrator</b>	Microsoft Edge
<b>Publisher</b>	*Firefox and Chrome preferred with Library

## LUNA Viewers

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### Supported Platforms – Mobile

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<b>LUNA Viewer – <i>feature rich for research</i></b>	iOS is preferred (Safari)
<b>LUNAversal Viewer – <i>optimized for mobile</i></b>	iOS and Android

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### On-Premises SERVER REQUIREMENTS

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<b>Supported Platforms</b>	Windows 2000/2003/2008/2012 Linux: Red Hat, Ubuntu (Debian)
<b>Database</b>	MySQL 5+

## Memory

Minimum 4GB not inclusive of the database. Considerations for additional memory are dependent upon amount of content and number of users.

*Ex: LUNA Hosted Service provisions 2 CPU and 7.5 GB of Memory with performance upgrade options available.*

## Hard Drive Free Space

Dependent upon amount of content and source media.

*Ex: image of 20MB processed to create derivatives requires ± 2.5MB of storage space; derivatives plus source storage requires 22.5MB*



## Supported Media and Data Formats

### File Formats

#### ***URL media is now supported in LUNA***

- JPEG 2000; pdf; png; gif; tiff; tif; bmp; jpeg;html
- Native playback for flv; mp4; mp3; m4v (H.264 Codex Only); flv (H.263); and mp3
- Data import formats include UTF-8 encoded .csv, .xml or .mrc (MARC source data)
- Additional file formats supported and will playback in default application (e.g. mov; avi)
- 8bit and 16bit source files

Not supported are RAW and CMYK and 1 bit images like faxes

### Image Processing

#### ***Option to store source image in LUNA***

- Upon upload compressed JPG derivatives and JPEG2000 files created
- Batch processing of up to 120MB source with 1 GB allocated to Tomcat JVM (contact support for larger files)
- Embedded metadata (EXIF, IPTC, XMP) retained in the source and JPG derivatives

### Book Reader Processing

#### ***OCR layer required to support full text searching in LUNA***

- PDF (with OCR layer) and individual images in a folder\*
- PDF/A-2b (version 5-6 compatible)

\*recommended for larger books

### Data Formats

- Support for embedded metadata search and display (EXIF, IPTC, XMP)
- Support for representing a custom data schema in the Collection Manager
- Create and edit descriptive data in the Library's Record Editor
- Batch upload data records & local authorities via .csv spreadsheet
- Batch export of record metadata in .csv or .xml format
- Batch export of images in your choice of file size or source (if available)
- Support for additional custom media item metadata in Media Item Editor

## LUNA Flexibility and Supported APIs

### Flexible

LUNA was built in Java on common open source components including Spring, MySQL, Hibernate, YUI, Solr, and Lucene. LUNA supports industry standards such as Dublin Core, Unicode, OAI-PMH, XML, and JPEG2000. LUNA Record Data API (RESTful API) and LUNA Viewer API (JSON) allows for additional flexibility. LUNA can easily be scaled up to support simultaneous large scale collection builds.

### LUNA Supported APIs

<b>LUNA APIs</b>	<p><b>LUNA</b> Record Data API – RESTful API for source-data integration with the LUNA Library</p> <p>LUNA Viewer API – JSON API for dynamic media discovery</p>
<b>IIIF APIs</b>	<p>IIIF Presentation API - easily represent image (including BookReader) formats with descriptive data in IIIF viewers</p> <p>IIIF Discovery API - for sharing and receiving LUNA and non-LUNA IIIF enabled collections.</p>
<b>Google APIs*</b>	<p>Google Cloud Vision API – works with the LUNA Uploader to provide image analysis for OCR and metadata extraction</p> <p>Google Cloud Storage API – adds preservation repository functionality to LUNA with Nearline or Coldline storage</p> <p><i>*Google Cloud Vision API and Google Cloud Storage API require a Google Service Agreement</i></p>
<b>Flickr</b>	Flickr API – permits end-users to personalize Media Group content in the LUNA Viewer
<b>Klokan</b>	Georeferencer API – A 3rd party add-on that allows you to georeference maps using <i>Georeferencer</i> from Klokan Technologies.

## LUNA Content and Collaboration

### Collections Visibility

LUNA supports cross collection searching and facilitates collection sharing and discovery through features such as our built in OAI-PMH mapping. Use OAI-PMH mapping to easily expose your public LUNA Collections through Library Discovery layers (Ex: OCLC's WorldCat or EBSCO's Discovery Service) and the Digital Public Library of America (DPLA).

### E-Commerce Extensibility

The LUNA Relay button is customizable and permits integration with internal or external fulfillment channels. Alternatively, it can be linked to a form to solicit end-user feedback.

# LUNA Technical Overview & Diagram

