



HATHI TRUST  
RESEARCH CENTER

# Building Collections and Analyzing Data

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# Goals

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- To show the current capability of the HTRC
- To get feedback about additional functionality
- To get feedback on the usefulness of the applications
- To find out more about researchers needs for subcollections



# Agenda

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- Introduction
- Application demos
- Hands on collection building
- Hands on data analysis
- Discussion



# HTRC Applications



HTRC Collection Builder

Login | Selected Items (0)

## Limit your search

Era  
Year  
Topic  
Language  
Source

in **Full Text**

[More options](#)

This is the HTRC demo instance of Blacklight.



HOME

ABOUT

COLLECTION

ALGORITHMS

RESULTS

HELP

LOGOUT

## Welcome to the HathiTrust Research Center!

The HathiTrust Research Center (HTRC) provides research access to the public domain text of the [HathiTrust Digital Library](#). The HTRC is a collaborative research center launched jointly by Indiana University and the University of Illinois, along with the HathiTrust Digital Library, to help meet the technical challenges of dealing with massive amounts of digital text that researchers face by developing cutting-edge software tools and cyberinfrastructure to enable advanced computational access to the growing digital record of human knowledge.

The HTRC provides an infrastructure to search, collect, analyze, and visualize the full text of nearly 3 million public domain works and is intended for nonprofit and educational researchers. Click on the login link to begin. [LOGIN](#)

# HTRC Collection Builder

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- Provides a familiar search interface to the entire HTRC collection
- Allows for fielded and free text searching
- Interface for personalized sub-collections of the data for further processing
  - Creating new subcollection
  - Updating existing subcollections
- Based on the Blacklight open source search interface



# HTRC Interactive Web Interface

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- Provides simple interface to the HTRC infrastructure
  - Manage Collections
  - Submit Algorithms
  - Use Computational resources
  - Manage Jobs
  - View Results



# Infrastructure Components

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- Authentication
- Agent
- Registry
- APIs
  - Data access
  - Solr access
- Secured computational resources



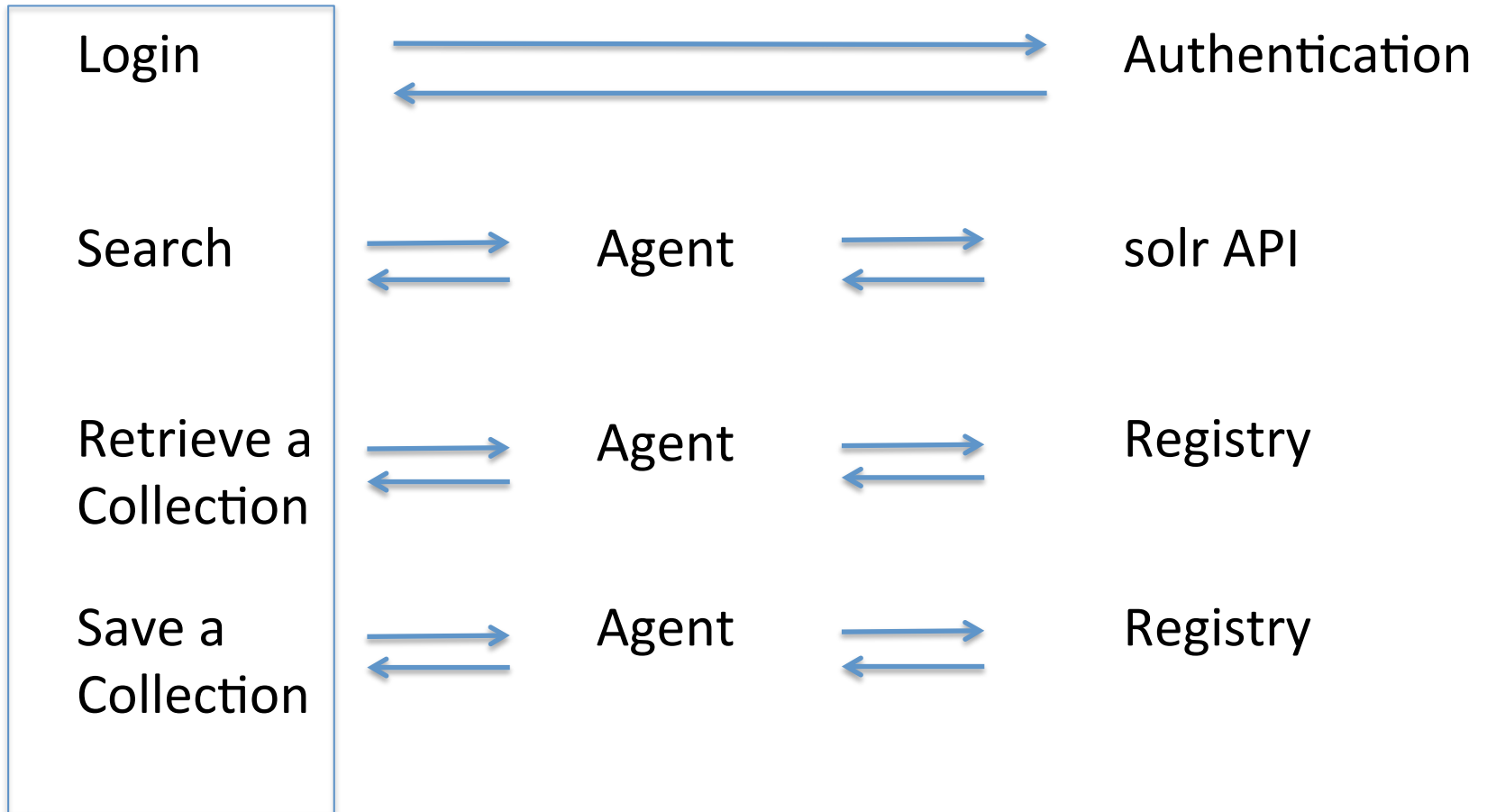
# Collection Builder Demo





# Collection Builder Process Flow

Search  
Application



# Collection Builder Process Flow

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# Build a Collection

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- <http://htrc.mine.nu/blacklight>
- Use Firefox, Safari, Chrome browsers
- Login using the ID provided
- Create a collection to be analyzed
  - Search
  - Create a collection
  - Retrieve the collection
  - Add or remove a volume
  - Save revised collection



# HTRC Web Interface Demo



# Algorithm Process Flow

## HTRC Web Application

Login



Authentication

View Algos  
parameters



Agent



Registry

Submit Algo



Agent



Computation  
Resource

View Job Status



Agent



Registry

View Job Results



Agent



Registry

# Run an Algorithm

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- <http://smoketree.cs.indiana.edu:8999/HTRC-UI-Portal2/LogoutAction>
- Sign on with the IDs provided
- View your collections
- Run an algorithm
  - Word count
  - Simple tag cloud
- Results
  - Job management
  - View Results



# Feedback

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- What worked for you?
- What did not work?
- Where there interactions that were awkward?
- What additional functions would you like to see?
- What types of algorithms do you use in your research?
- What environments do these algorithms require?
- What is the approximate size of the collections you use in your work?
- Were you able to find useful materials for your research? Would subsetting the collection a priori help you find materials?

