



University of Toronto: Islandora update

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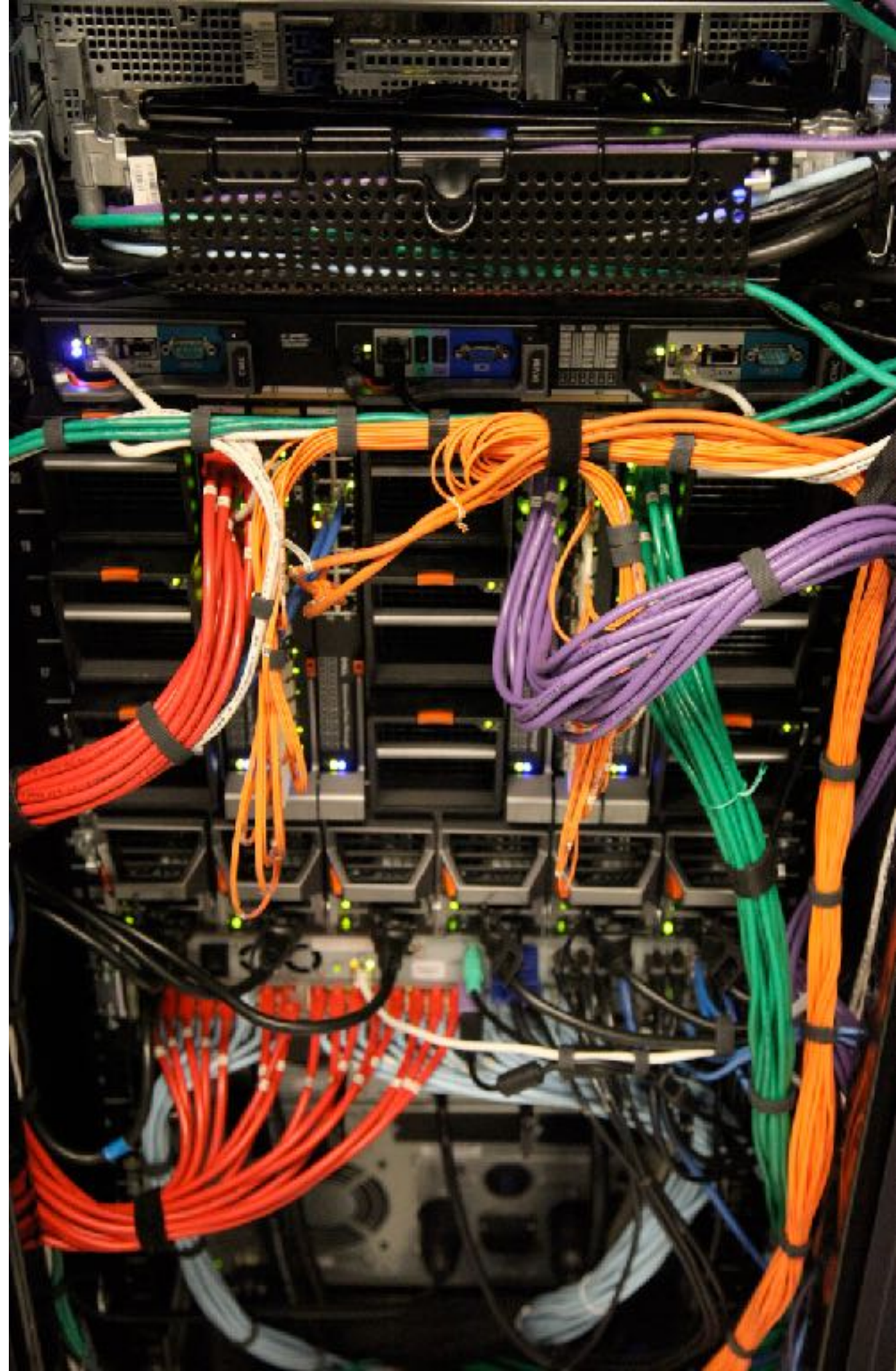
A brief history....

- **2014-2015**
Launch of Collections U of T.
2 sub-sites had official launches: Canadian Necrology and Samizdat.
- **Fall 2015**
Experienced number of issues (repeated AJAX errors when ingesting material, slow load time).
- **2016**
Rebuild Collections U of T and migrate sites over to new infrastructure



Server Redundancy and Architectural Rebuild

- Multiple Fedora and GSearch servers proxied by HAProxy
- Replacement of Mulgara with Fuseki triplestore using Smithsonian Trippi-SPARQL connector
- SolrCloud instead of single Solr instance
- Multiple public Drupal, Djatoka and Loris instances proxied by Varnish with Directors vmod



Drupal Development Workflow and Pipeline

- Replace Drupal git repository with version-controlled drush Makefiles
- Allows for easy upgrades and patching instead of forking
- Makefile tested on development server is built by Jenkins and published as a tarball on Nexus Repository
- Chef configuration management scripts download and deploy tarball to production servers



Migration and Verification Scripts

- All servers are fully defined as Chef scripts making scaling and tracking changes easy
- Objects are migrated from old Fedora repository on a per site basis using SPARQL queries
- Logwatch is used to scan backend services for 4xx and 5xx errors allowing us to find problematic and missing objects and correct them



Iterative testing phases

- Upgrade to v7.x-1.7
- Development of comprehensive testing procedures and documentation based on Florida Virtual Campus (FVL) testing template
- Separation of testing phases
 - (1) basic system configuration
 - (2) user functionality
- Assignment of priority of testing for specific functionality (high, medium, low)



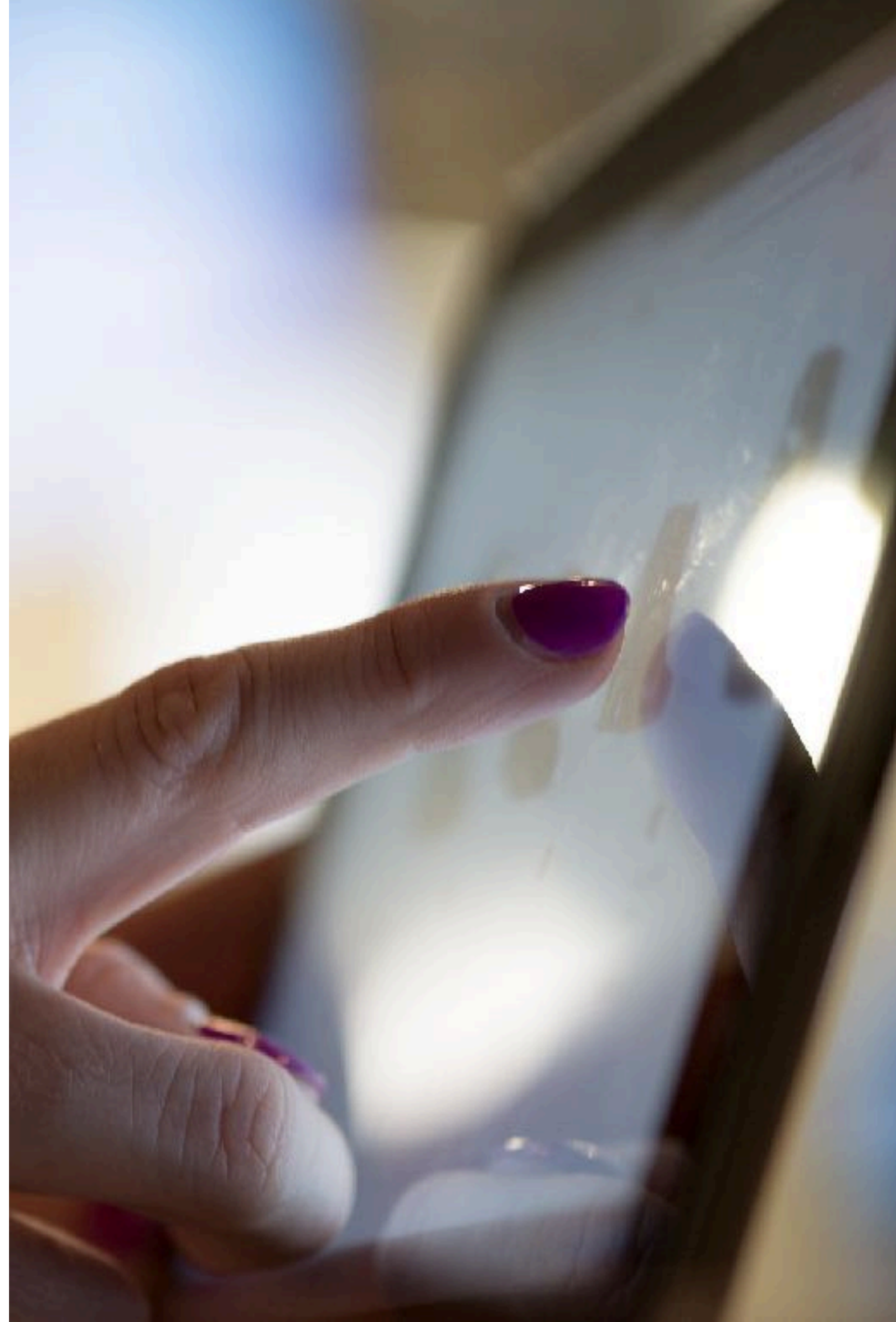
Procedures

- Development of standardized troubleshooting checklist / procedures for admins / project staff to consult prior to escalating issue to developers and DevOps staff



Additional functionality

Mirador IIF viewer



Two APIs



Image API

“get pixels” via a simple, RESTful, web service



Presentation API

Just enough metadata to drive a remote viewing experience



Why International Image Interoperability Framework (IIIF)?

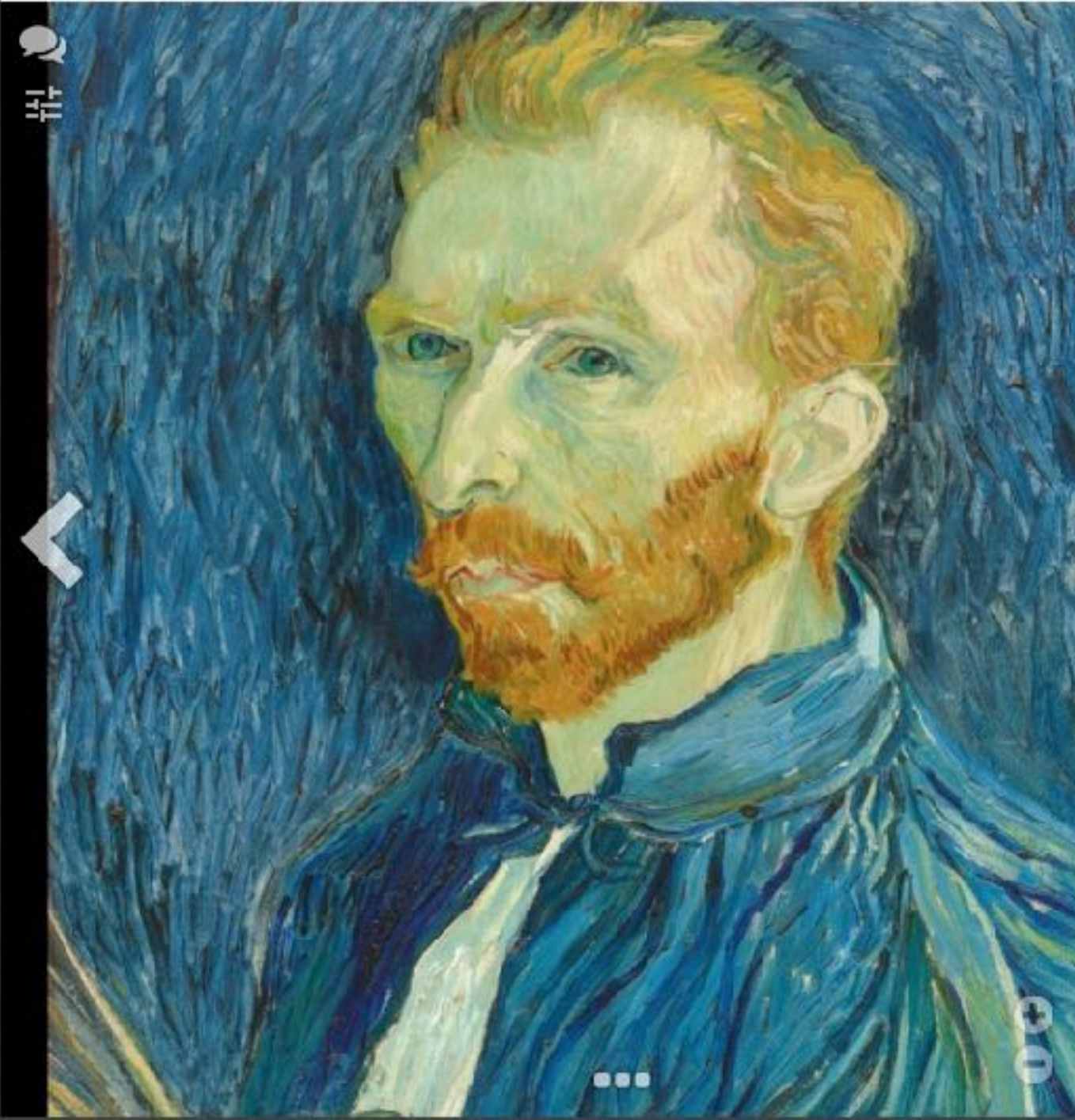
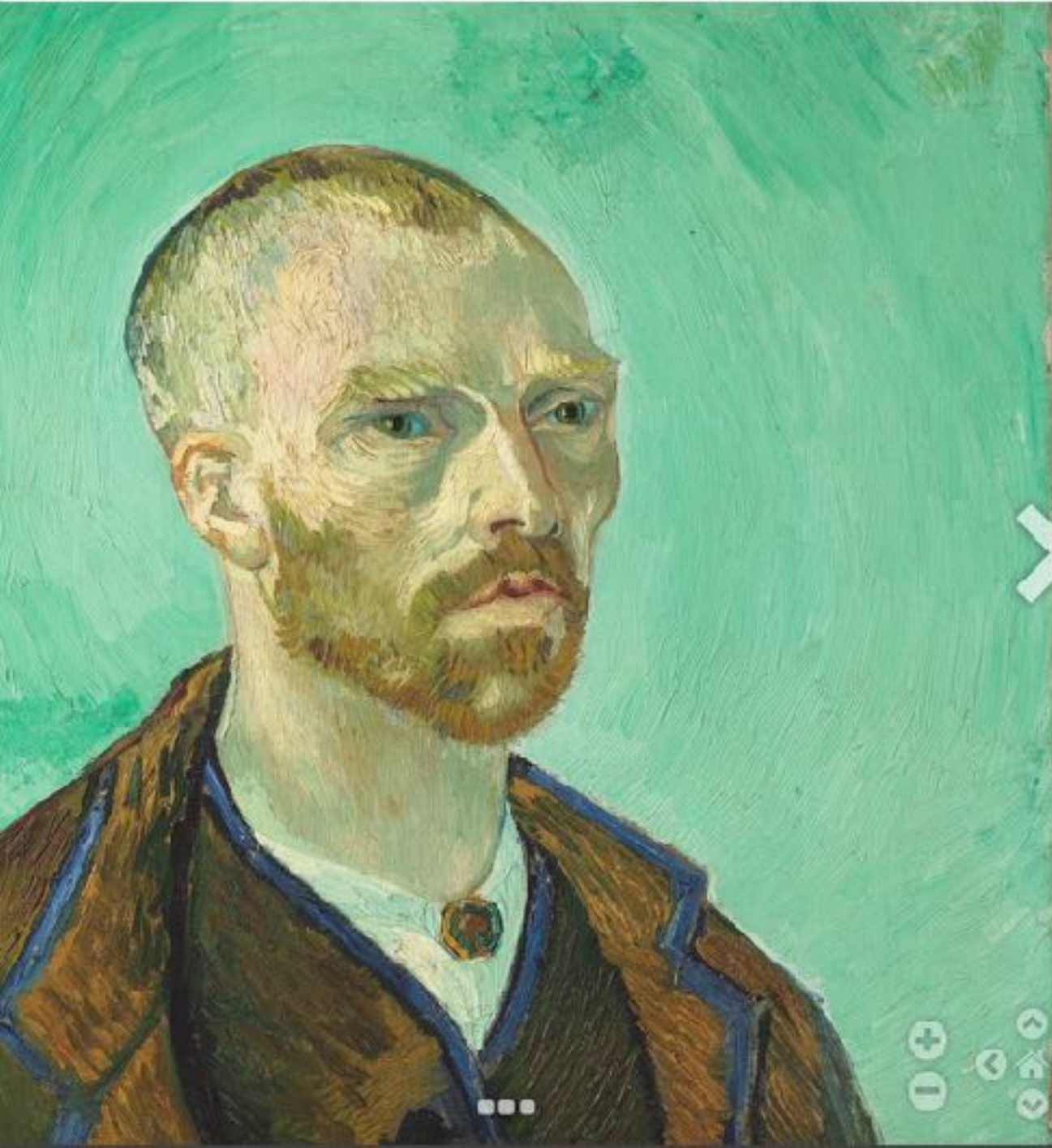
- Rich image delivery
- Avoid data silos
- Facilitate interoperability
- Long-term preservation

Bijin to omocha no jidōsha ni notta kodomo : hikifuda -- 美人とおもちやの自動車に乗った子供：引札



Mirador

- Open source
- Web-based
- Multi-window viewing platform
- IIIF compatible
- Allows for complex image manipulation and comparison



Capabilities

Image comparison



Image 2



Image 3



Image 4



Image 5



Image 6



Image 7



Image 8



Image 9



Image 10



Image 11



Image 12



Image 13



Image 14



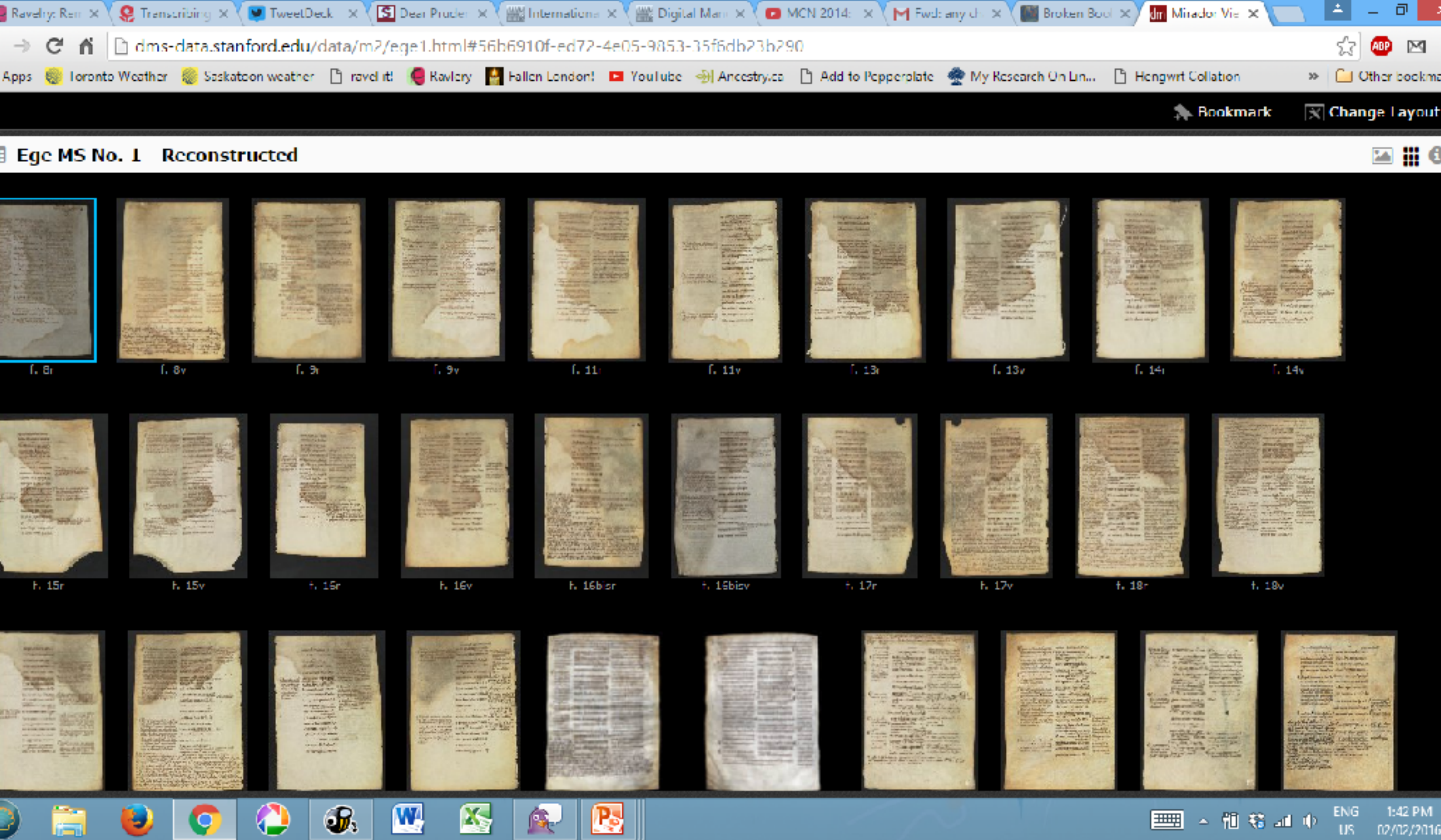
Image 15



Image 16

Capabilities

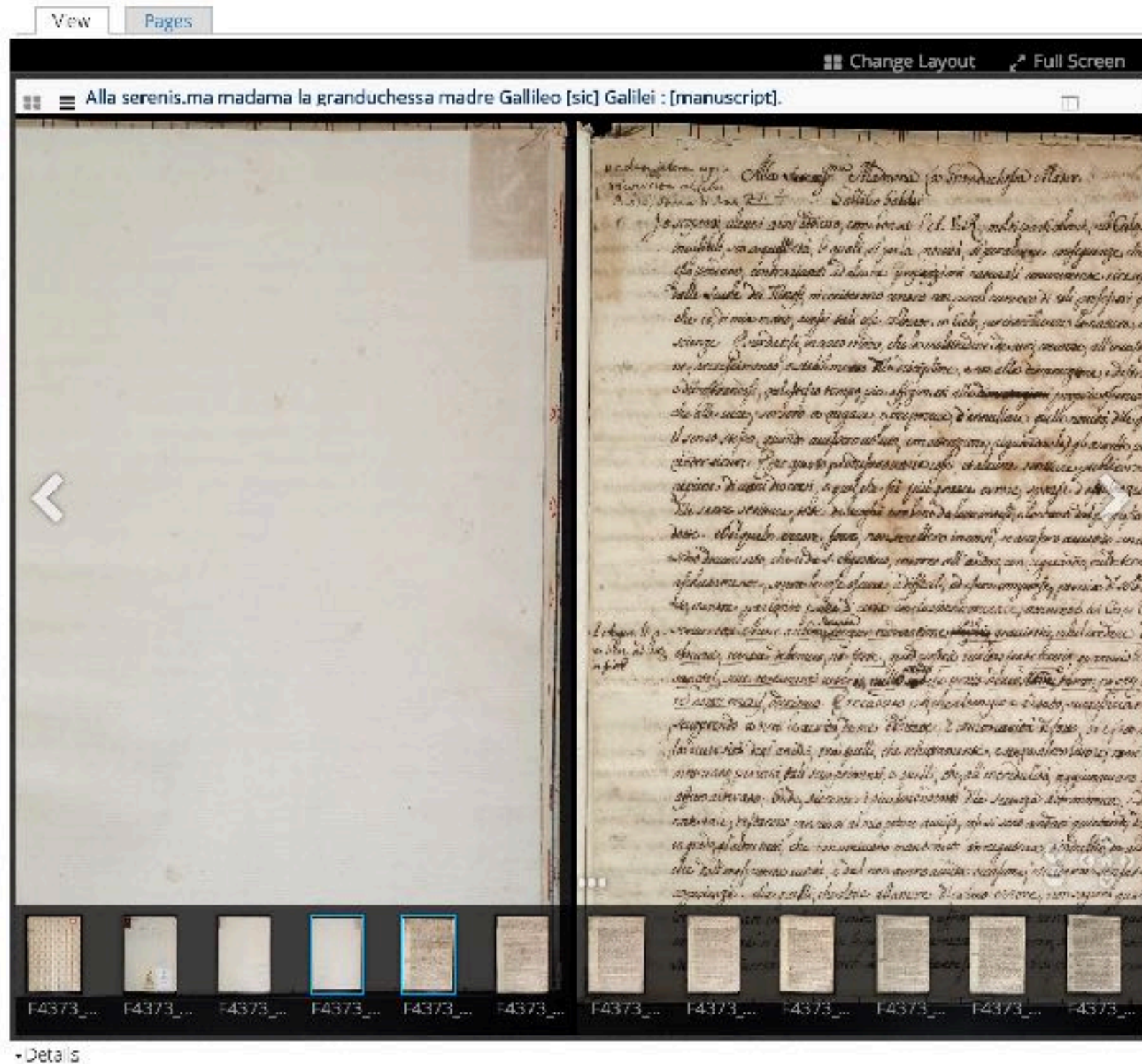
Image manipulation



Capabilities

Image unification

Alla serenissima madama la granduchessa madre Gallileo [sic] Galilei : [manuscript].



Fisher Manuscripts

Image unification



Questions?

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