

Constructing a digital museum with a large-scale archive for endangered languages

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Goals of the Museum

- To design a prototype of the web-based museum for endangered languages and cultures that is easily updatable, and serves as a basis of collaborative research.
- To provide a forum in which the local people can exhibit their language products.
- To encourage the local people to have a wider access to language resources and help them to preserve the language and culture of the local community.

Design of the Museum

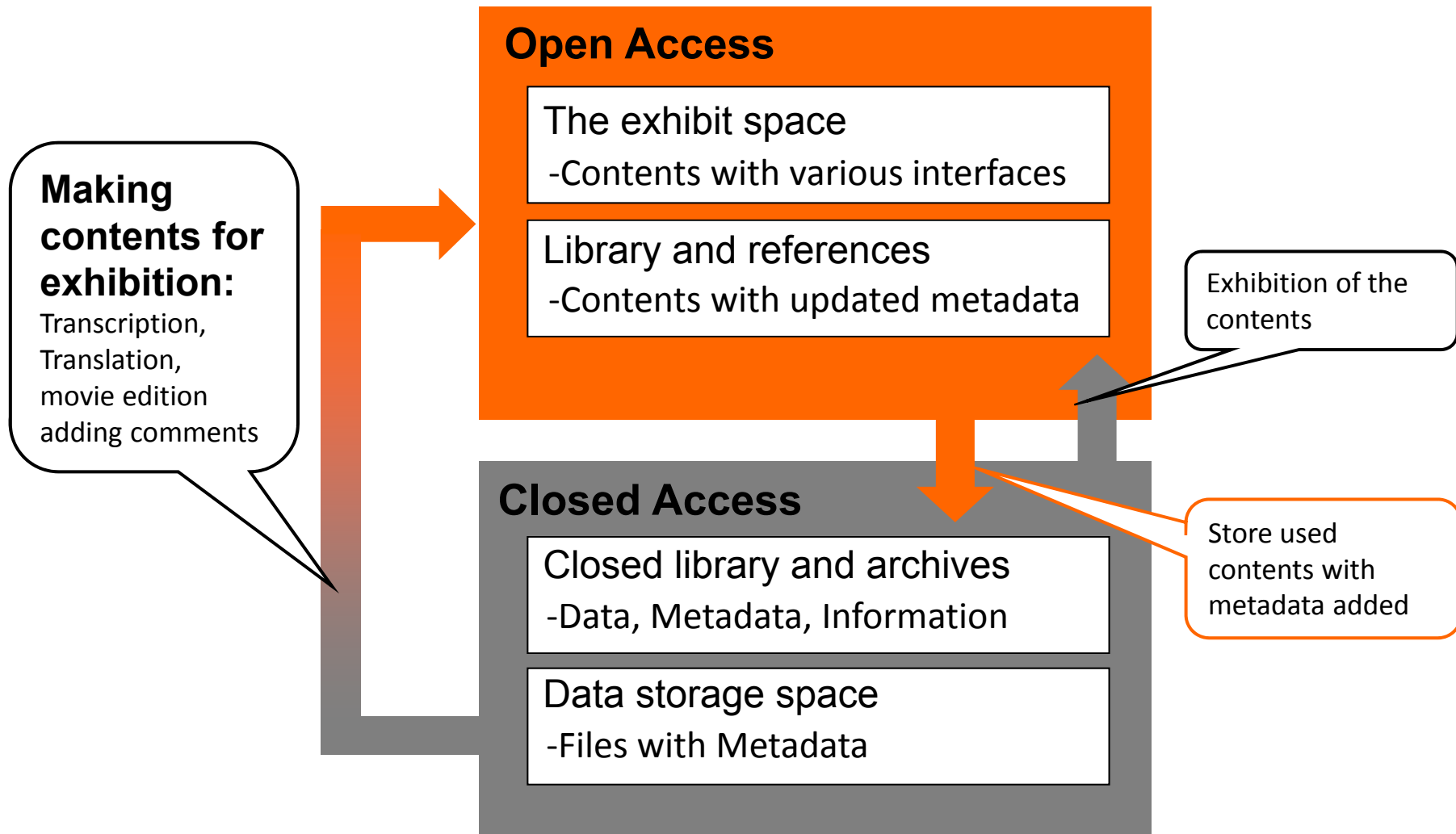
- Four layered web-based museum
 - Open space:
 - The exhibit space
 - Library and references
 - Closed space:
 - Closed library and archives
 - Data storage space

Spaces with closed access

- Closed library and archives:
 - Accessed only by closed members.
 - Files with transcription and other updated archiving information are stored here.
- Data Storage Space:
 - Accessed only by our research group.
 - Raw data files with basic meta-data are stored here.
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Why 'museum'?

- Metadata updating through exhibition at the Museum



Our previous work

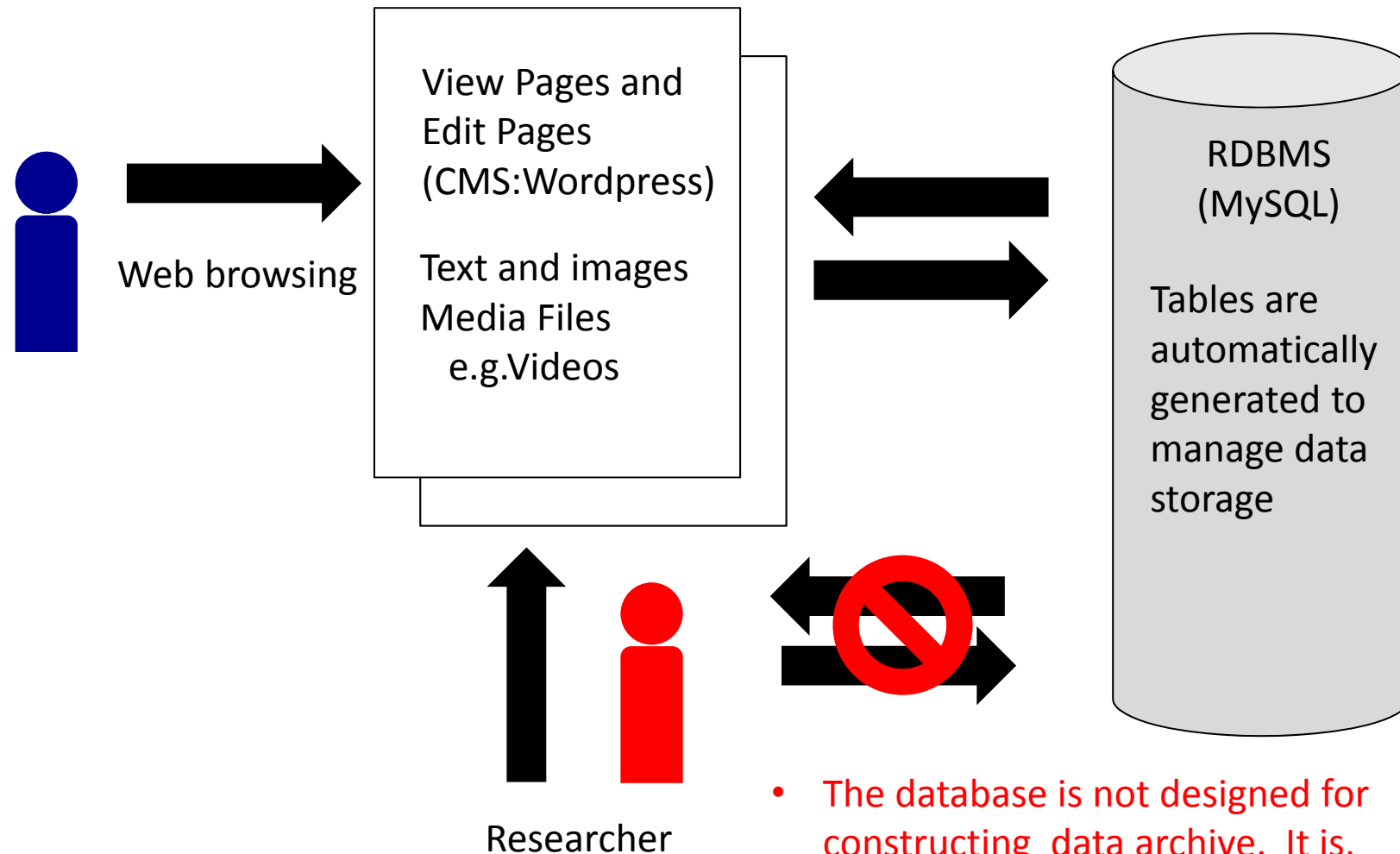
- Prototype of our Digital Museum: Ikema-Nishihara
 - Metadata updating through exhibition
 - Movie contents with subtitles

But

- No online database. External hard disk drives were used to store data.
- Sharing of data was done offline.

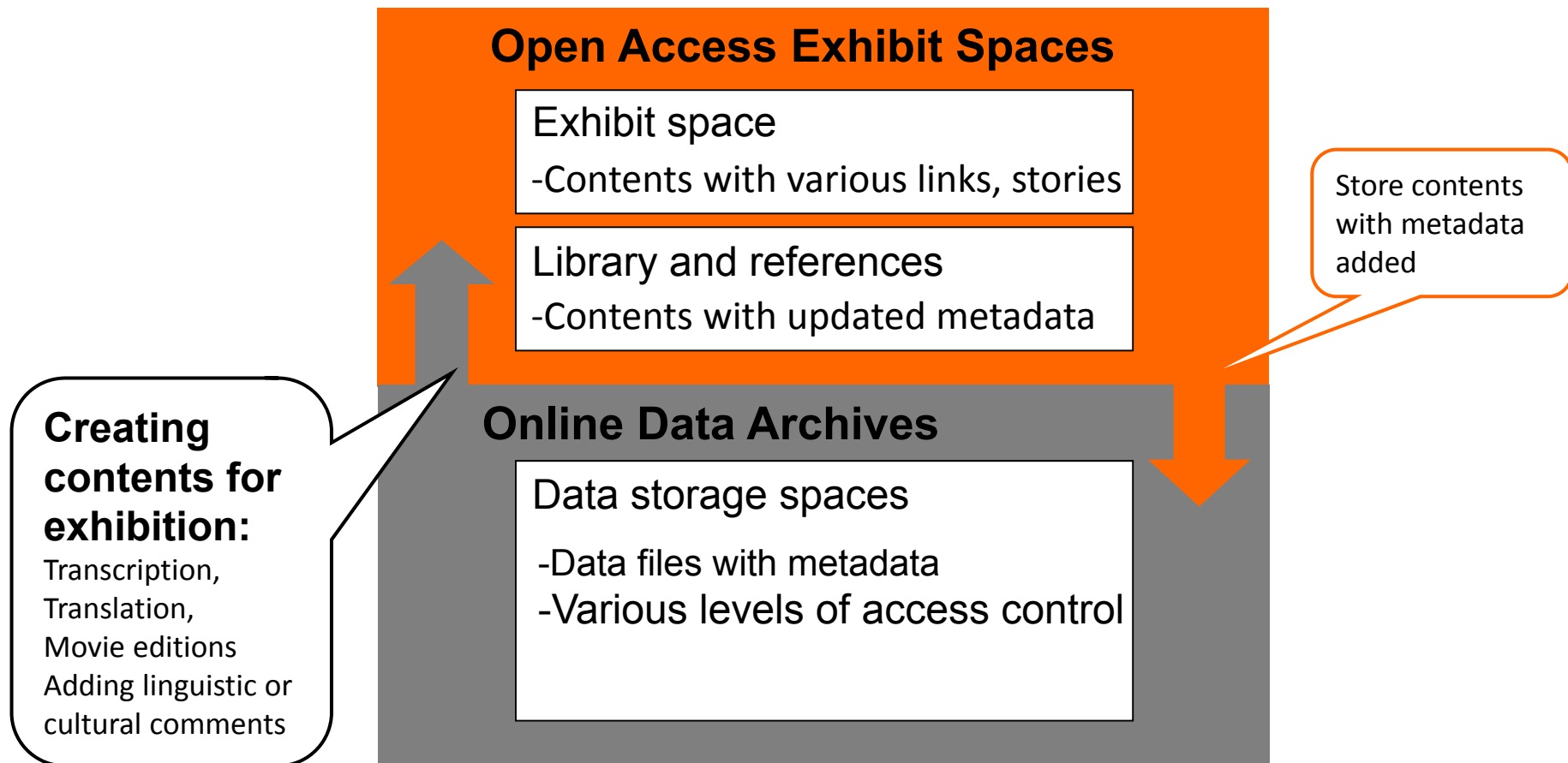
[Cf. Takubo, Yukinori \(forthcoming\), Takubo, Y and T. Motoki
http://Kikigengo.jp](#)

Our previous work

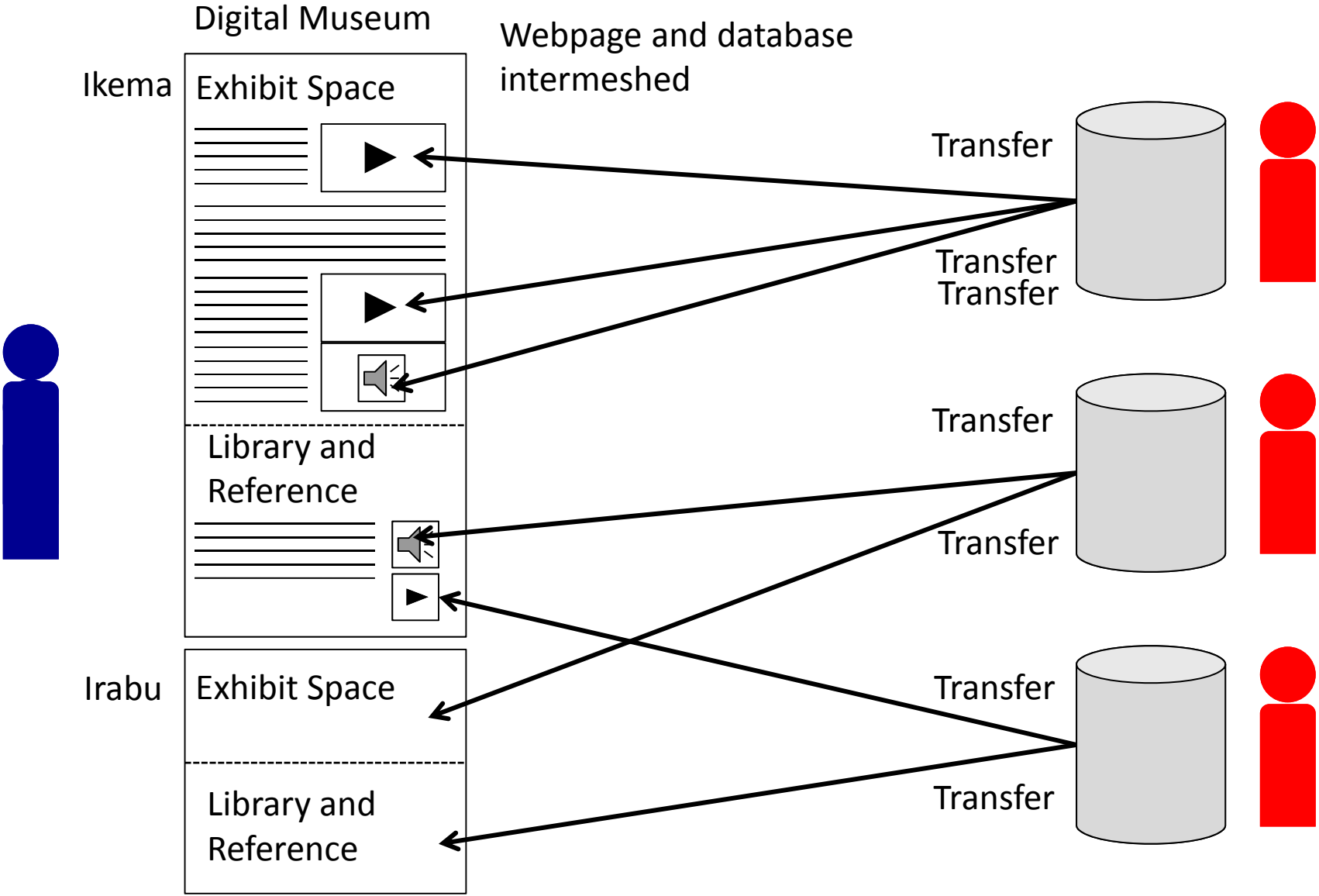


- The database is not designed for constructing data archive. It is, therefore, difficult to manage individual files.

New feature: Adding a large scale online database



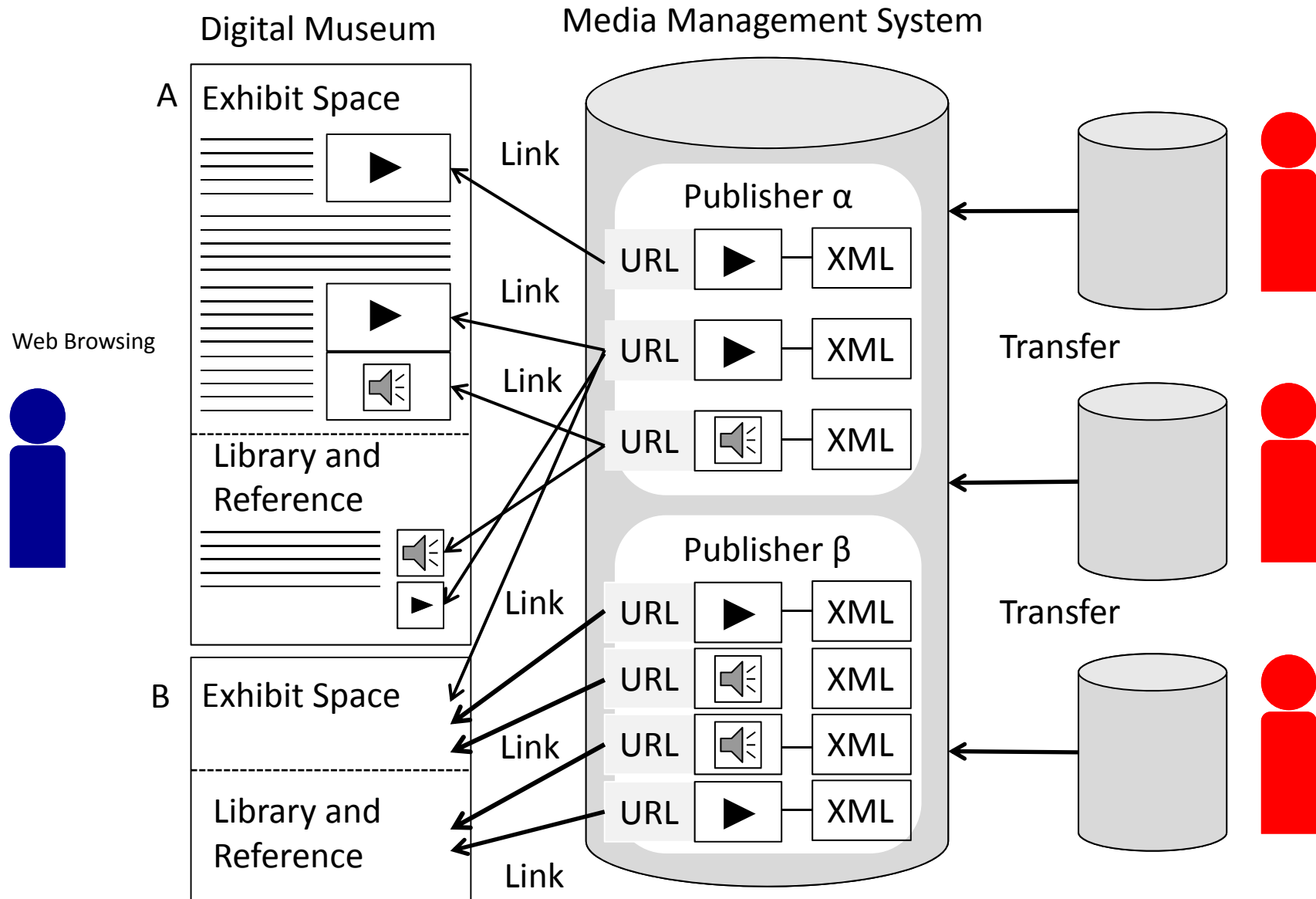
Implementation before



Kaltura: An open source online media management system

- Publishers
 - can create channels for various purposes, e.g. languages, research groups, etc.
- Media management platform
 - account management, e.g. role restriction
 - Fine-grained access control
 - Media management, media players, streaming
 - Allows various search: descriptions, tags, categories, references

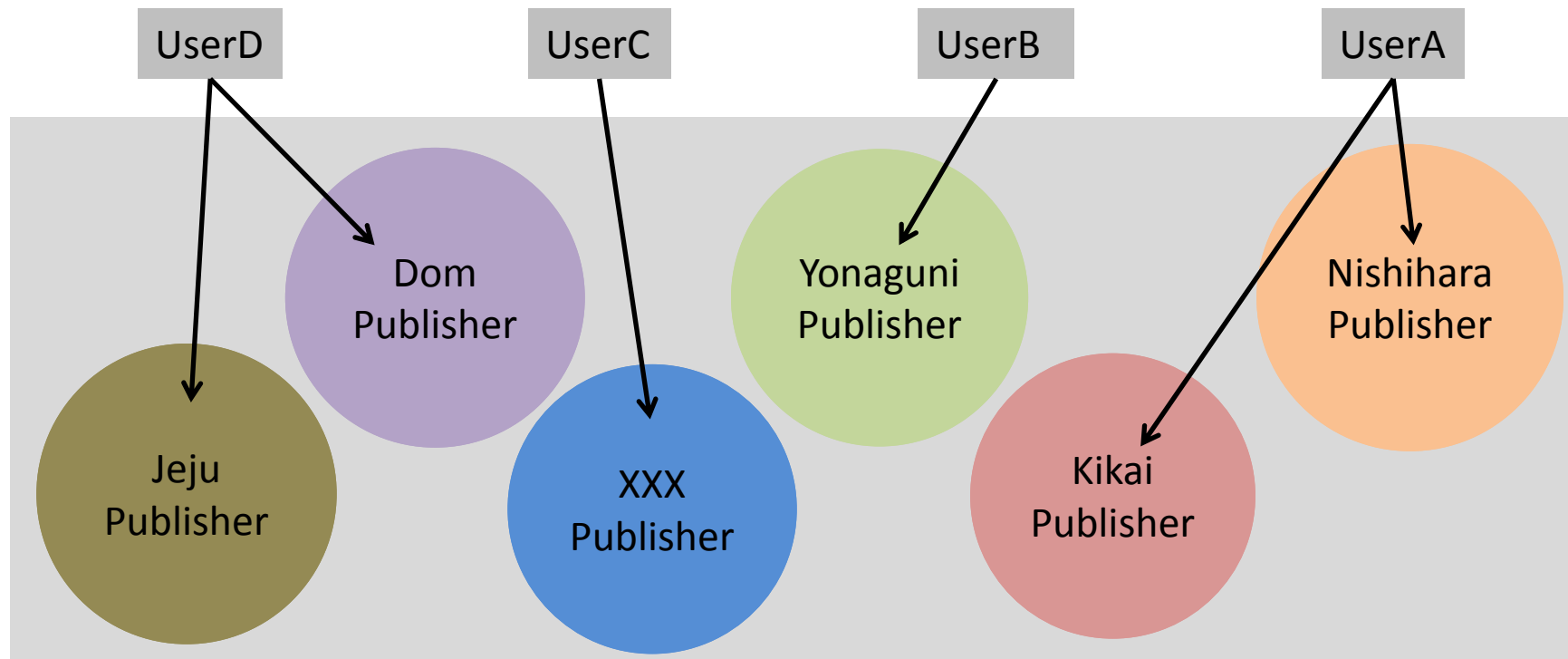
Implementation after



Kultura:

Access control by Publishers

- A registered member of a publisher A can have access to the media files and the meta data in A, depending on the assigned role of the membership
 - e.g. can upload, edit, or only view and get a link URL of a media file
- Non-members cannot access the contents of a publisher



Kaltura: Entries

Edit Entry - I0045V_keitoo7_kub

Metadata

Name: I0045V_keitoo7_kub

Description: 若いころ友達とたきぎとりに山に行った話。


Tags: tamunu ✕

Categories: ✎ Enter category names

Reference ID:

Thumbnails
Access Control
Scheduling
Flavors
Captions
Advertisements
Related Files
Users

Entry ID: 0_a00ctkwh



Preview & Embed Clip This Trim This

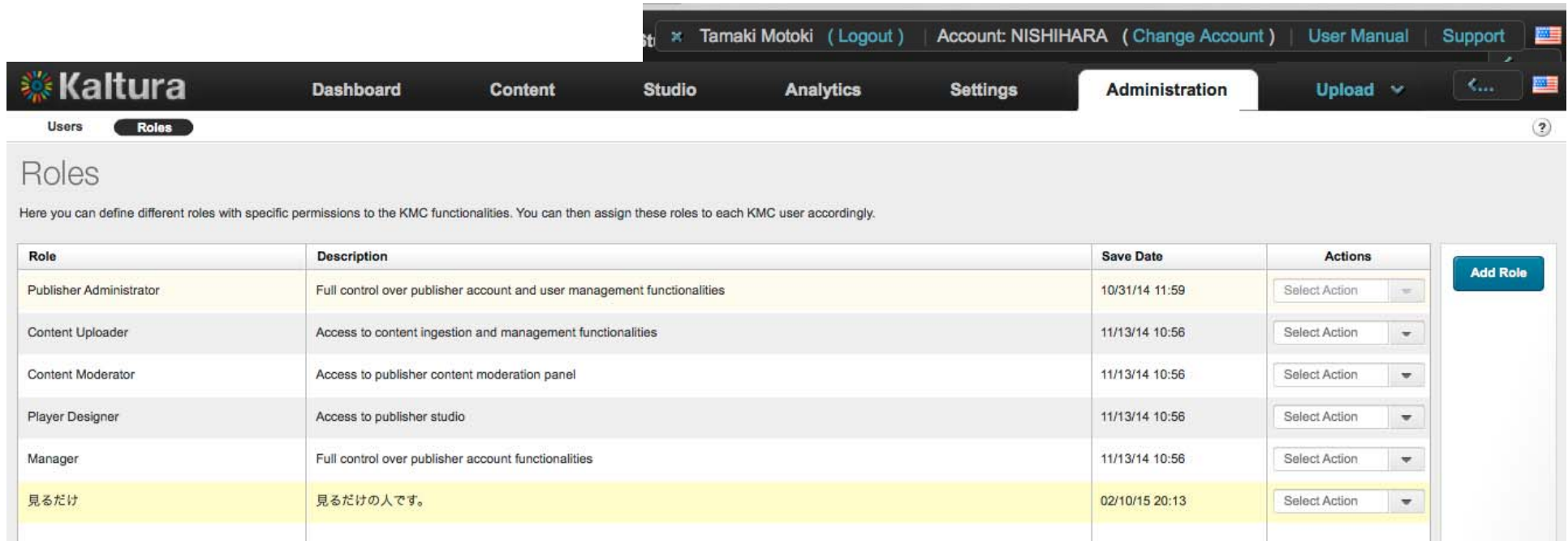
Creator: ytakubo@bun.kyoto-u.ac.jp
Created on: 01/02/2015

Type: Video **Duration:** 01:52
Moderation: Auto approved
Plays: 14

Save Save & Close ← Previous Entry Next Entry →

Access control

- Closed access by signing into a Kaltura publisher
 - Access control for/over
 - membership (admin, editor, viewer etc.)
 - individual media files or categories over files



The screenshot shows the Kaltura Administration interface. The top navigation bar includes the Kaltura logo, Dashboard, Content, Studio, Analytics, Settings, Administration (selected), and Upload. The user is logged in as Tamaki Motoki (Logout) with the account NISHIHARA (Change Account). The page title is "Roles". Below the title, there is a brief instruction: "Here you can define different roles with specific permissions to the KMC functionalities. You can then assign these roles to each KMC user accordingly." A table lists the roles, and an "Add Role" button is visible on the right.

Role	Description	Save Date	Actions
Publisher Administrator	Full control over publisher account and user management functionalities	10/31/14 11:59	Select Action
Content Uploader	Access to content ingestion and management functionalities	11/13/14 10:56	Select Action
Content Moderator	Access to publisher content moderation panel	11/13/14 10:56	Select Action
Player Designer	Access to publisher studio	11/13/14 10:56	Select Action
Manager	Full control over publisher account functionalities	11/13/14 10:56	Select Action
見るだけ	見るだけの人です。	02/10/15 20:13	Select Action

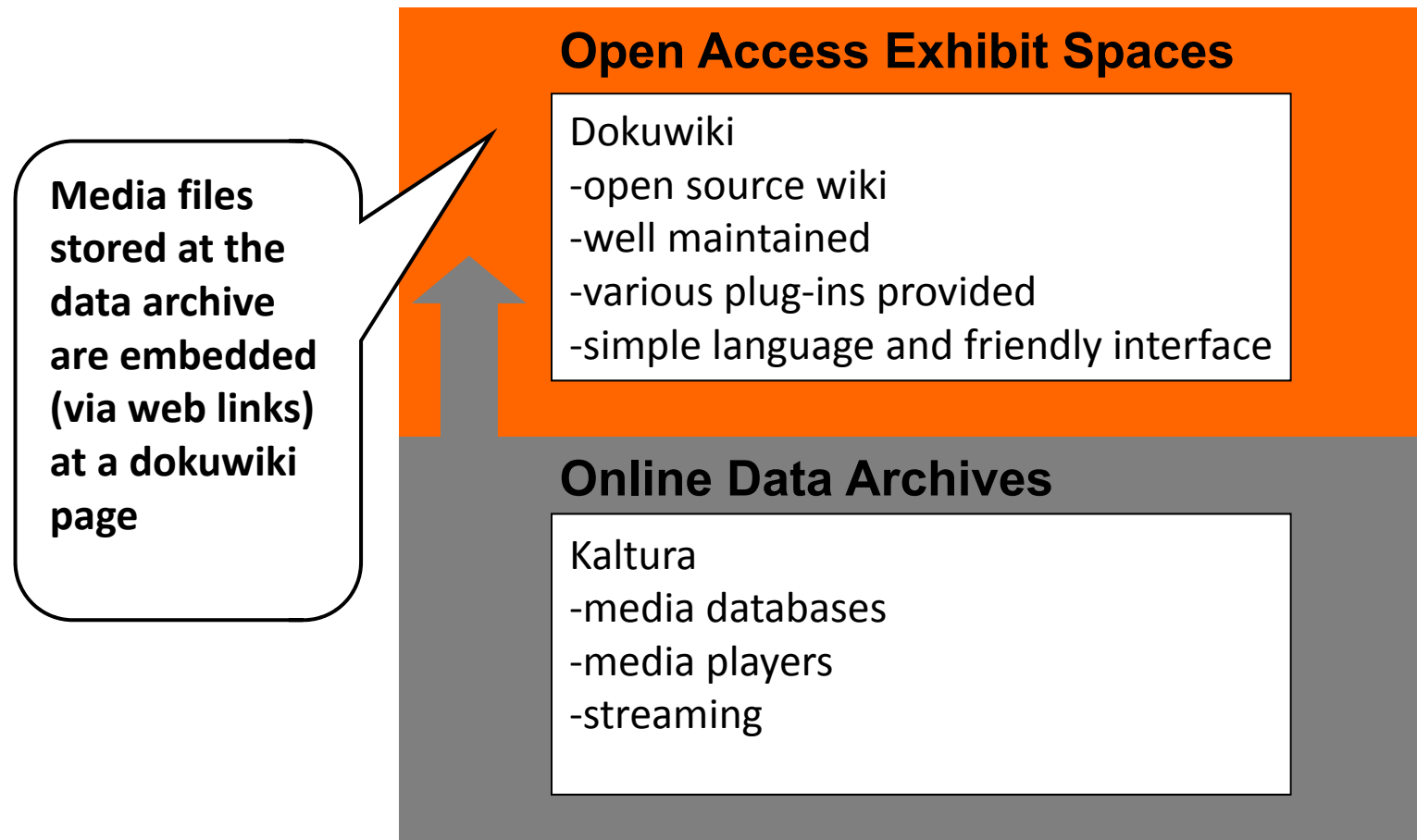
Kaltura: File Search

- IDs
- Categories
- Key words
- Tags

The screenshot displays the Kaltura interface. At the top, the 'Edit Entry - kosodate-dugong' form is visible. The 'Tags' field is circled in red, showing 'story', 'narrative', and 'hanashiro'. The 'Account: NISHIHARA' dropdown in the top navigation bar is also circled in red. Below, the 'Entries' list is shown with search filters 'rated1' and 'kikigengo' circled in red. The 'Filter by Categories' sidebar is also circled in red, showing 'kikigengo' and 'rated1' selected.

Thumbnail	ID	Name	Type	Plays	Created On	Duration	Status	Actions
	0_c9sz4157	kosodate-dugong	Video	2	02/23/15 13:58	14:30	Ready	Select Action
	0_e2sa2az3	mimamibusu_all	Video	3	02/23/15 12:54	13:51	Ready	Select Action
	0_qj@bwxs	myaakuzuki_inyau_s	Video	0	02/23/15 12:01	01:03	Ready	Select Action
	0_tpxy4qc	080708_nakama	Video	12	01/02/15 14:43	01:32:09	Ready	Select Action
	0_q4mkog0	Sample Big Buck Bunny	Video	1	11/13/14 10:57	00:33	Ready	Select Action
	0_w11hhx38	Sample Kaltura Anima	Video	1	11/13/14 10:57	00:05	Ready	Select Action

Current system of the Museum



Comparison with YouTube

- Can maintain the copy rights of the contents for
 - :privacy protection,
 - :limiting access to sensitive contents such religious rituals.
 - :unwanted editing
- Fine-grained and fine-tuned access control.

Metadata

Edit Entry - Kaicho_Naa

Metadata

- Thumbnails
- Access Control
- Scheduling
- Flavors
- Captions
- Advertisements
- Related Files**
- Users

Name: Kaicho_Naa **Title**


Description: 長崎慶長、みどり会会長がさんが名前の付け方を説明している。名づけ。かんぬ **Circumstances**

Tags: nagasaki × narrative × tukanti ×
Participant(s), Language(s), Genre(s), Topic(s)

Categories: public × Nishihara ×
Access control, Place

Reference ID: 10098 **EventID**

Entry ID: 0_nutcrqaq



Preview & Embed **Clip This** **Trim This**

Creator: kajita.shoji.5z@kyoto-u.ac.jp
Created on: 01/28/2015

Type: Video **Duration:** 01:01
Moderation: Auto approved
Plays: 11

Save **Save & Close** **< Previous Entry** **Next Entry >**

Add related files (detailed metadata)

Some Limitations

- No workshops: editing of media files must be done offline
- Search is by exact match only
- Still at an experimental stage
- Cannot replace real database (at least for the time being)

Some applications

- Yonaguni Project: linguists train local people to record and transcribe their speech, or speech by older people
- Miyako High School Project: High school students interview their grand parents and upload the files to a publisher.
- Miyako Project: native speakers of various Miyako dialects make recordings of their own speech and upload the files themselves.

Summary

Large scale online archive:

- Easy to install and set up
- Separate from the exhibition website
- Fine-grained access control
- Useful for the documentation and preservation of endangered languages

References

- Kaltura
<http://corp.kaltura.com/>
- Kikigengo.jp
<https://www.facebook.com/kikigengojp>
- Takubo, Y. and T. Motoki. The Digital Museum Project for the Languages and Cultures of Ryukyu: The Case of Ikema Ryukyuan. World Oral Literature Occasional Lecture Series. University of Cambridge, Cambridge, UK.<http://www.dspace.cam.ac.uk/handle/1810/226634>
Link downloadable from academia.edu
- Takubo, Yukinori (forthcoming) The Digital Museum project for the documentation of endangered languages: The case of Ikema Ryukyuan. Festschrift for John Whitman (forthcoming).

Demonstrations

- Kikigengo.jp
wordpress
[dokuwiki](#)
- [Database page](#)