



Localization & Internationalization SIG Meeting

Internationalizing The DCMI Metadata Registry

DC-2003: Supporting Communities of
Discourse and Practice
Seattle, Washington
September 2003

Harry Wagner
OCLC Office of Research

永森光晴 (Mitsuharu Nagamori)
University of Tsukuba



Agenda

- Registry overview
- Current status
- Internationalization (i18n) requirements & approach
- The centralized Registry model
- The distributed Registry model
- i18n aspects of the distributed Registry
- The DCMI translation tool
- Internationalization: early efforts
- Internationalization: translation tool
- Property Editor



Working Group Overview

- Established December 1999
- Chairs:
 - Rachel Heery, UKOLN
 - Harry Wagner, OCLC
- Mission:
 - Authoritative source of in-depth information about the DCMI vocabulary and the relationship between terms in that vocabulary
 - Format suitable for both humans and applications
- Consensus-driven activity involving the interests of a variety of participants, working and interest groups and related activities



Current Status

- Current charter completed May 2003
- Web interface
 - Multilingual search and navigate
 - International support for 23 languages
- Application interface
 - Web services architecture
 - Registry contents provided via application API in all supported languages
- Administration module
 - Import & manage metadata resources & translations
 - Administer inter-registry cooperation
 - Property file editor
- Architecture evolving: centralized -> distributed



Requirements & Approach

Requirements

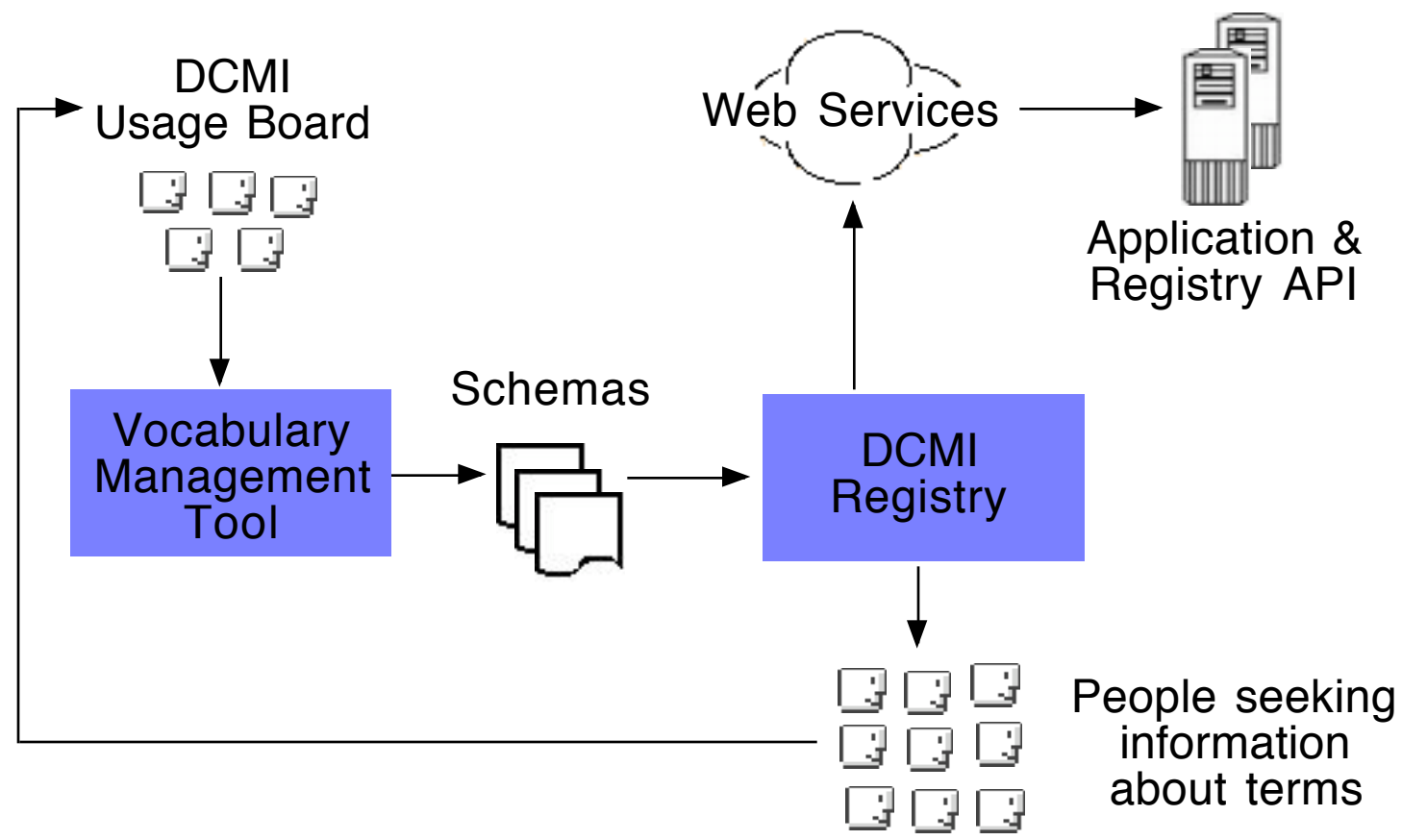
- Conference meetings & Mailing list discussions
- [Versioning the Dublin Core across Multiple Languages and Over Time](#)
- [A Multilingual Metadata Schema Registry Based on RDF Schema](#)

Approach

- Ground-up approach
- Recruit help from i18n community
- Encode UI & translations into UTF-8 Unicode
- Assign xml:lang attribute (RFC 3066 codes) to all text literals
 - ISO 639 language code
 - ISO 3166 country code

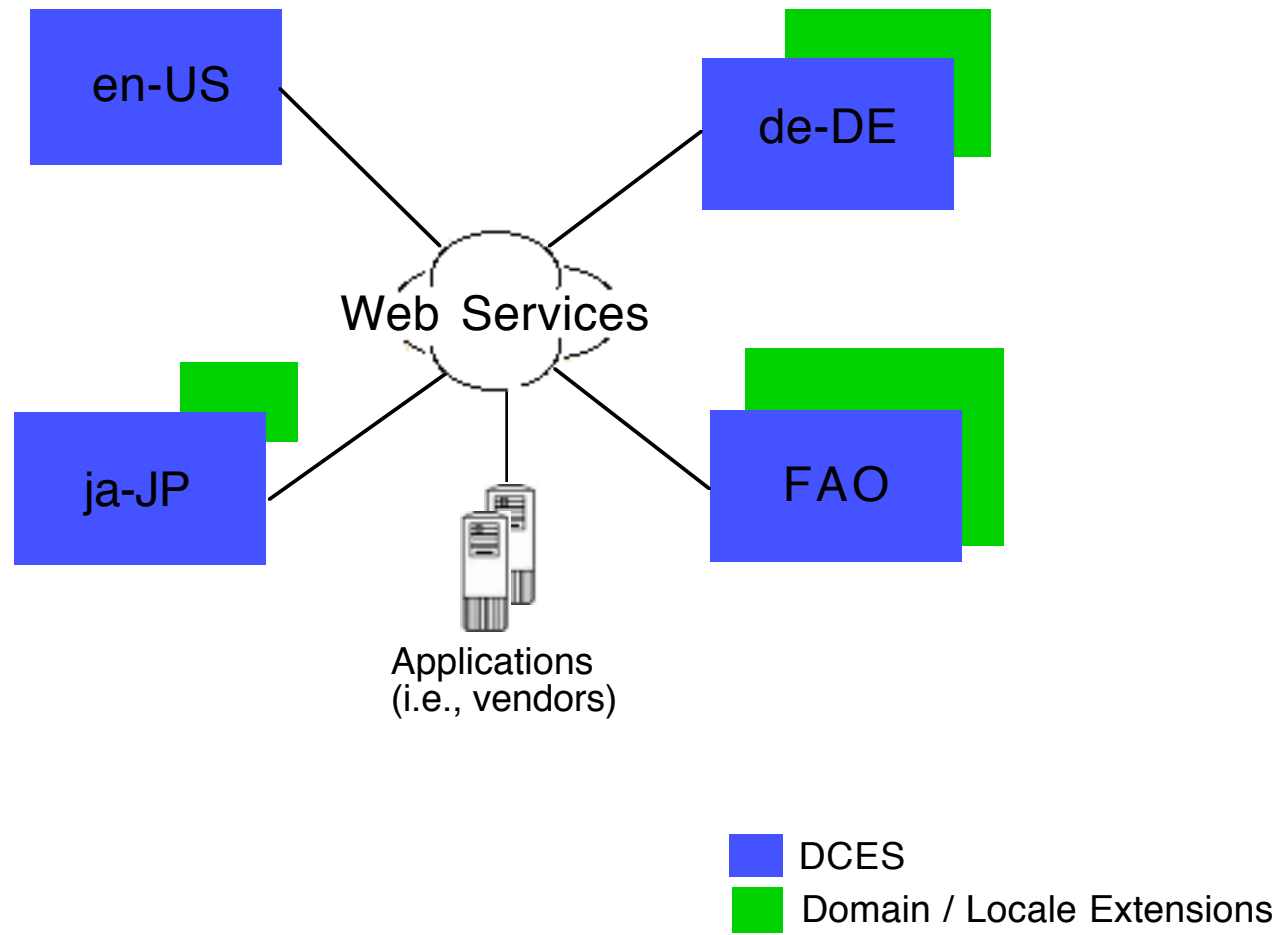


Centralized Registry Model





Distributed Registry Model (Overview)





i18n Aspects of The Distributed Registry

- Distributed Registries are owned and maintained by the communities in which they serve
- Each Registry will include additional terms, schemas and other metadata important to its community of practice
- Administrators will need help in the form of tools and expertise to facilitate the translation and encoding process
- Localization & Internationalization SIG is both positioned and skilled to take a leading role in providing requirements for tool development and recommendations for “best practices”
- Closer alliance with the Registry WG

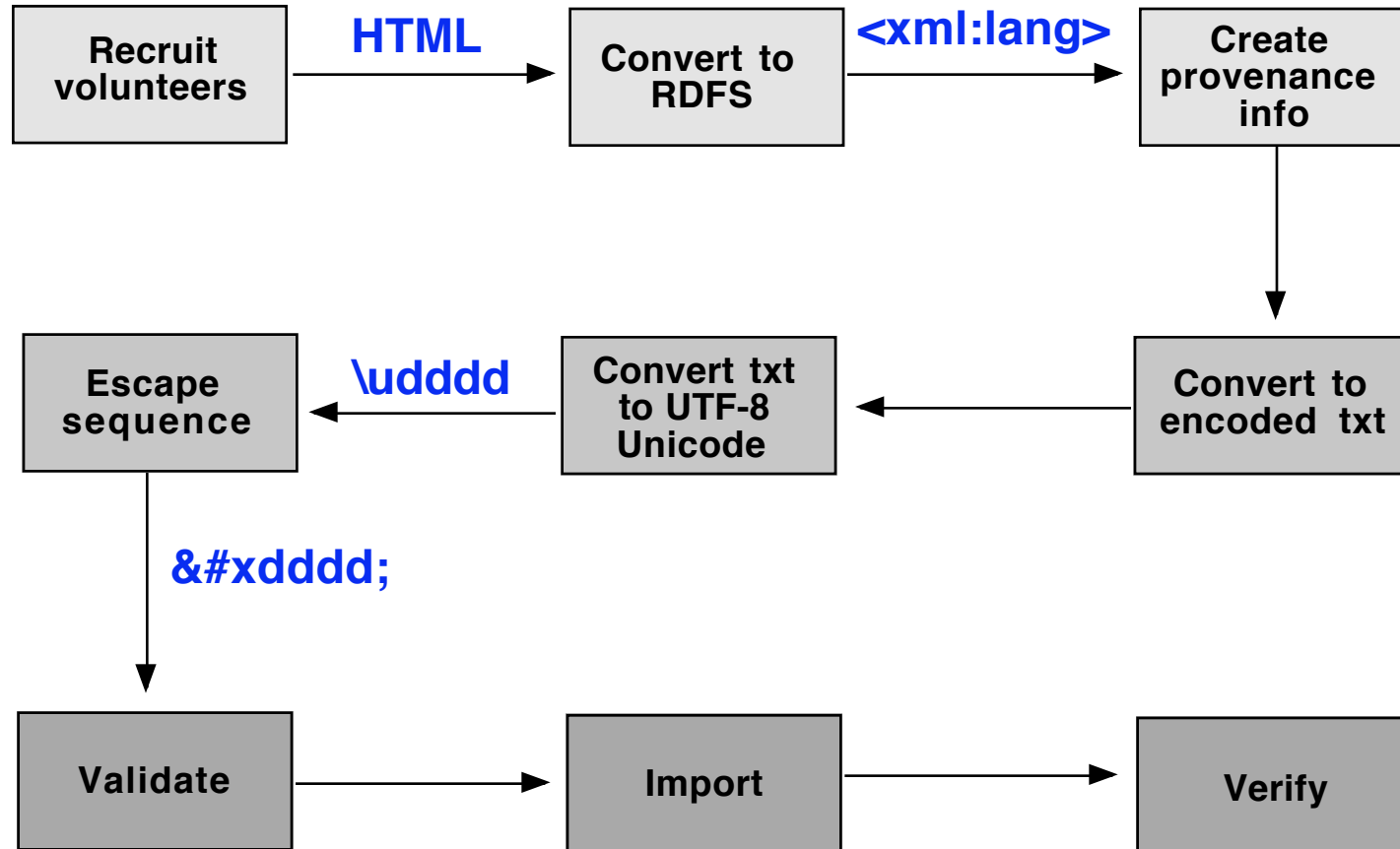


The DCMI Translation Tool

- Companion project to the Registry
- Originally created to:
 - Demonstrate the Registry application interface
 - Provide rudimentary translation services
- Automates much of the effort involved in translating the DCMI vocabulary
- Includes a property file editor for translating the Registry (and Translate Tool) user interface
- Can be expanded to include other vocabularies and user interfaces
- Translate Tool: <http://wip.dublincore.org/translate/>
- DCMI Registry: <http://dublincore.org/dcregistry/>



Internationalization: Early Efforts





Translation Tool: Getting Started

The Dublin Core Translation Tool

Enter your account and password and press the submit button.

Don't have an account? [Click here](#) to create one.

[Click here](#) for help

Account

Password

Submit

Reset

Forgot your password? [Click here](#).

The Dublin Core Translation Tool

Complete this form and press the submit button to create an account.

[Click here](#) for help

Your Name:

Email address:

Account Name:

Password:

Verify

Password:

Submit

Reset

[\[Continue\]](#)



Translation Tool: Options

The Dublin Core Translation Tool

Use this form to select from an existing translation, or start a new one.

[Click here](#) for help

Current translations for this account:

[uri:TS2003524_132621](#) (es-ES)

[Delete]

[uri:TS2003428_155434](#) (fr-FR)

[Delete]

Use this form to start a new Translation:

aa Afar - AD Andorra

Submit

[Property Editor]

The Dublin Core Translation Tool

Select a classification scheme that includes terms you would like to translate.

[Click here](#) for help

uri:TS2003428_155434 fr-FR harry

[Elements](#)

[Element Refinements](#)

[Controlled Vocabulary Terms](#)

[Vocabulary and Encoding Schemes](#)

[\[Back to Start page\]](#)



Translation Tool: Classification Summary

The Dublin Core Translation Tool

Select a term from the list provided.

[Click here](#) for help

uri:TS2003428_155434 fr-FR harry

- [audience](#)
- ✓ [contributor](#)
- ✓ [coverage](#)
- ✓ [creator](#)
- ✓ [date](#)
- [description](#)
- [format](#)
- [identifier](#)
- [language](#)
- [publisher](#)
- [relation](#)
- [rights](#)
- [source](#)
- [subject](#)
- [title](#)
- [type](#)

[\[Back to Start page\]](#) [\[Back to Summary page\]](#)



Translation Tool: Item Detail

The Dublin Core Translation Tool

Use this form to translate terms. Use the navigation aids to translate other terms in this classification scheme.

uri:TS2003428_155434 fr-FR harry

◆ **http://purl.org/dc/elements/1.1/contributor** ◆

label:	Contributor	<input type="text" value="contributeur"/>
comment:	An entity responsible for making contributions to the content of the resource.	<input type="text" value="Une entité qui a contribué à la création du contenu de la ressource."/>
description:	Examples of a Contributor include a person, an organisation, or a service. Typically, the name of a Contributor should be used to indicate the entity.	<input type="text" value="Exemples de Contributeur incluent une personne, une organisation, ou un service. Typiquement, le nom d'un contributeur devrait être utilisé ici pour désigner l'entité."/>

[\[Back to Start page\]](#) [\[Back to Summary page\]](#)

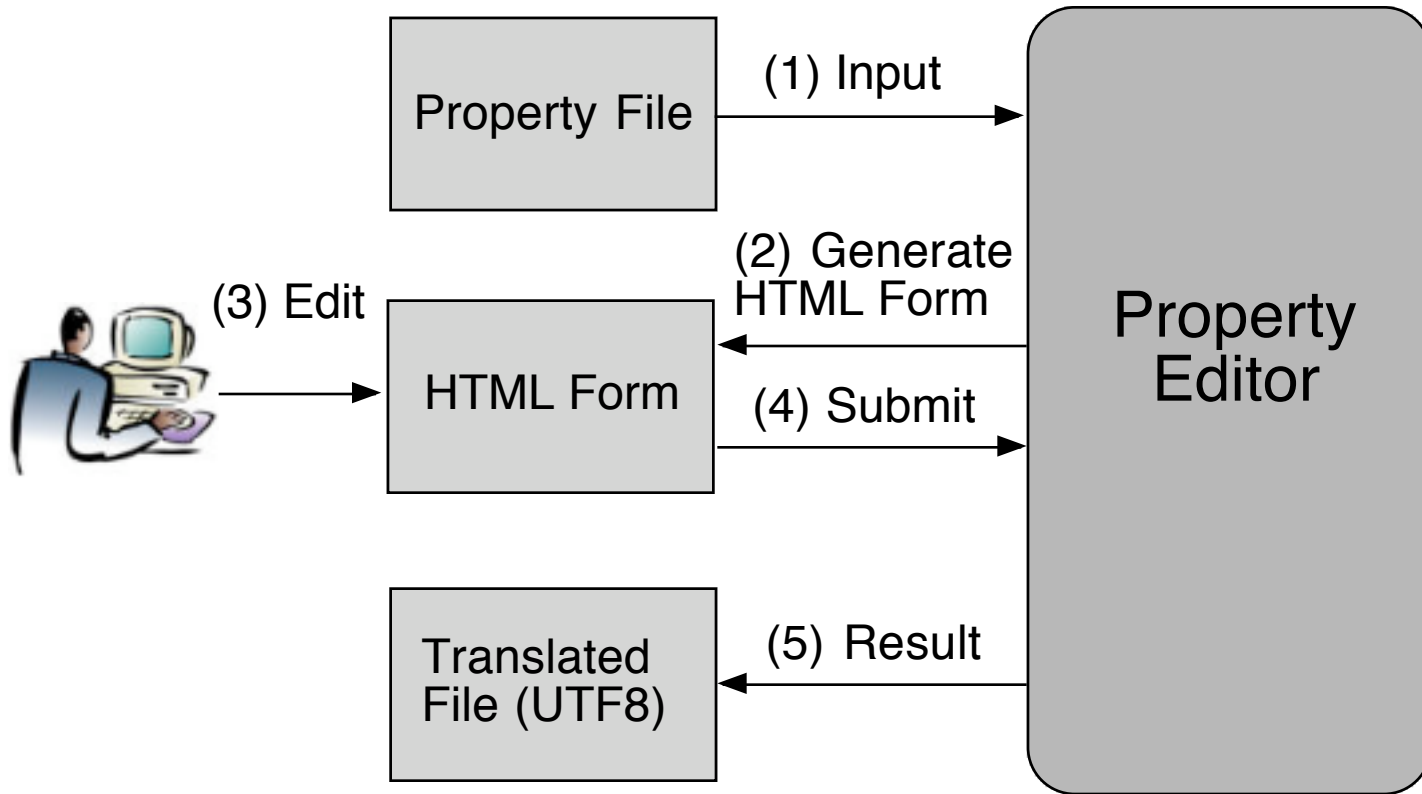


Property Editor: Overview

- DCMI Registry and Translation tool use Java property files for multilingual user interfaces
- Purpose of the property editor is to simplify the creation of Java property files
- key=value
- Unicode escapes are required for non-ASCII characters
- ‘エレメント (element)’ is expressed as
エレメント



Property Editor: System Overview





Property Editor: Getting Started

The Dublin Core Translation Tool

Select a Java property file, then click 'Submit'.

If you don't have any property files for the Translation Tool and the DC Registry, you can get the property files from following links. (Use a right click to save a file to local disk)

- [Translation Tool in English](#)
- [DC Registry User Interfaces in English](#)
- [DC Registry Labels in English](#)

[Click here](#) for help

Property Editor (Java property file editor)

File Name:

[\[Back to Start page\]](#)



Property Editor: Before Translation

Property Editor (Java property file editor)		
Property Name	New Value	Original Value
all_terms	All terms	All terms
any_term	Any term	Any term
apply	Apply	Apply
case_sensitive	Case sensitive?	Case sensitive?
classes	Classes	Classes
controlledTerms	Controlled Vocabulary Terms	Controlled Vocabulary Terms
display	Display:	Display:
display_results	Display results that match:	Display results that match:
elements	Elements	Elements
encodingSchemes	Vocabulary and Encoding Schemes	Vocabulary and Encoding Schemes
exact_phrase	Exact phrase	Exact phrase
help	Help	Help
items_found	Items Found:	Items Found:



Property Editor: After Translation

Property Editor (Java property file editor)		
Property Name	New Value	Original Value
all_terms	全語句含む	All terms
any_term	いずれかの語句を含む	Any term
apply	Apply	Apply
case_sensitive	大文字と小文字を区別する?	Case sensitive?
classes	クラス	Classes
controlledTerms	の統制語彙用語	Controlled Vocabulary Terms
display	表示	Display:
display_results	検索結果表示	Display results that match:
elements	エレメン	Elements
encodingSchemes	語彙およびコード化形式限定子の要約	Vocabulary and Encoding Schemes
exact_phrase	語句の完全一致	Exact phrase
help	ヘルプ	Help
items_found	Items Found:	Items Found:



Property Editor: Saving Results

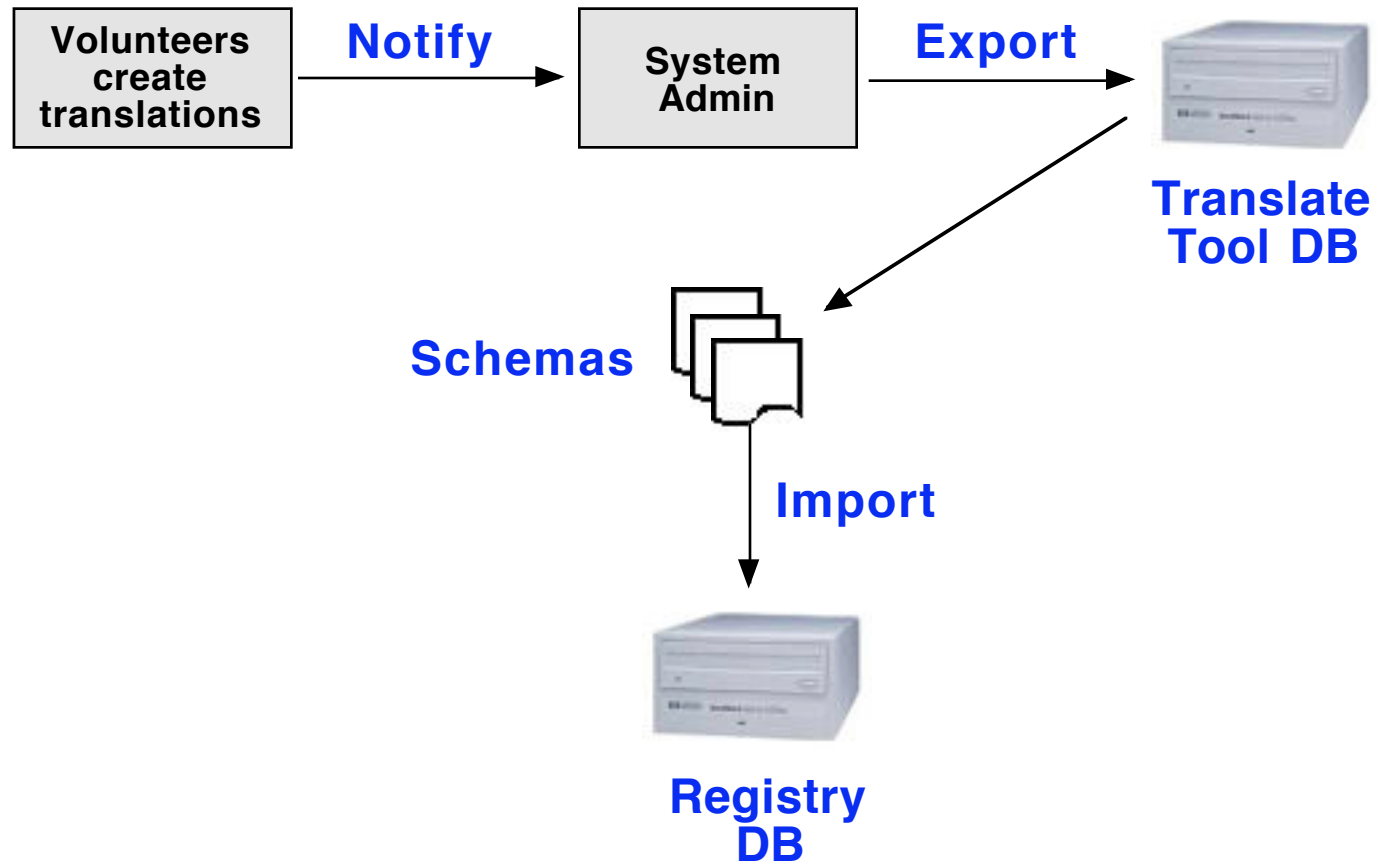
summary_namespaces	Summary of Registered Namespaces	Summary of Registered Namespaces
summary_properties	Summary of Registered Properties	Summary of Registered Properties
summary_qualifiers	Summary of DCMI Element Refinements	Summary of DCMI Element Refinements
summary_schemas	Summary of Registered RDF Schemas	Summary of Registered RDF Schemas
summary_schemes	Summary of DCMI Vocabulary and Encoding Schemes	Summary of DCMI Vocabulary and Encoding Schemes
summary_terms	Summary of DCMI Controlled Vocabulary Terms	Summary of DCMI Controlled Vocabulary Terms
uiLang	ユーザインタフェースの言語:	User interface language:
uiStyle	ユーザインタフェースのスタイル:	User interface style:
xinfo	additional information	additional information
yes	はい	Yes

Save results to local disk.

[\[Select File\]](#) [\[Back to Start page\]](#)



Internationalization: Translation Tool





Conclusion

ありがとう

Mange takk

Благодарность

Gracias

감사합니다.

Thank you

謝謝

Danke

ကျေးဇူးတင်

Dank u

너를 감사하십시오

Merci

لشكر

Být zavázán tebe

谢谢

Ευχαριστίες

고맙습니다.

Grazie

kiitoksia, kiitokset

Obrigado

Translate Tool: <http://wip.dublincore.org/translate/>

DCMI Registry: <http://dublincore.org/dcregistry/>

Harry Wagner

OCLC Office of Research

<http://oclc.org/research/staff/wagner/index.shtm>

永森光晴 (Mitsuharu Nagamori)

University of Tsukuba

<mailto:nagamori@slis.tsukuba.ac.jp>