Localization with Sisulizer

Jaakko Salmenius

ヤーコ　サルメニウス

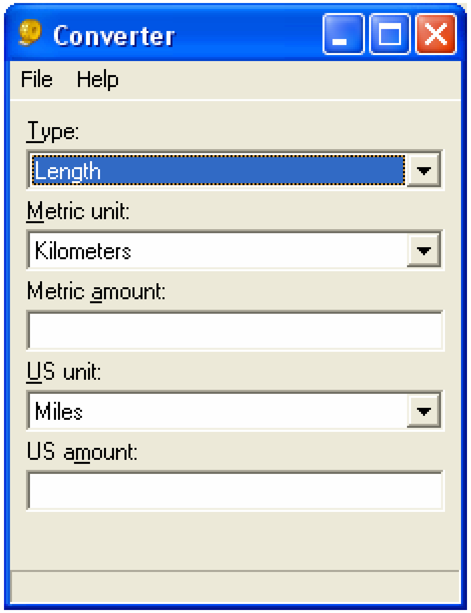
Sisulizer Ltd.

Today’s Agenda

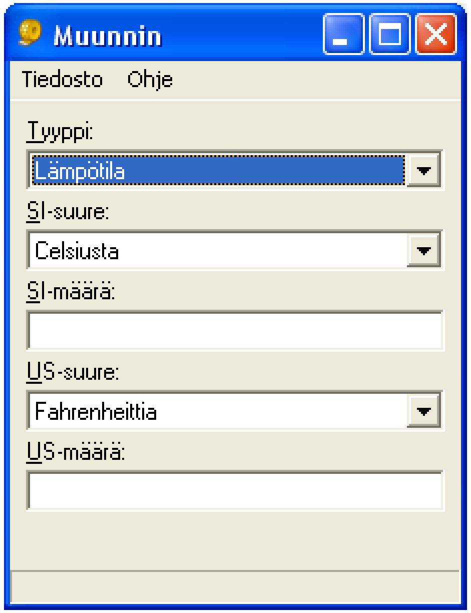
- Localization process
- Importing
- Exchanging
- Translation memory
- HTML localization
- Windows application localization
- XML localization
- Database localization
- Q&A.

What is Localization?

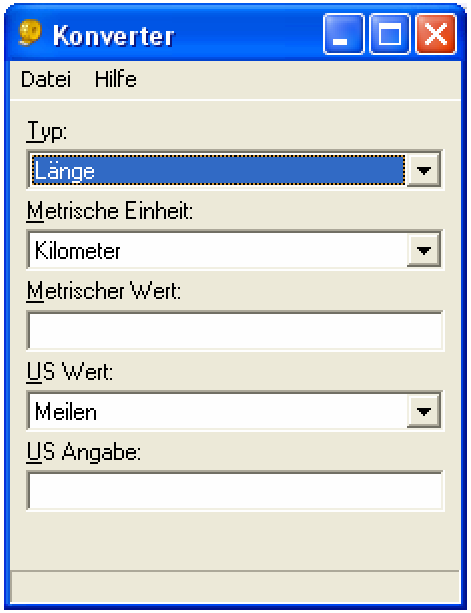
- Adapting software, file or data to another culture.
  - Mostly translation
    - User interface, online helps, documentation, web pages
  - Sometimes some functional differences
    - Bank procedures, address formats, etc.



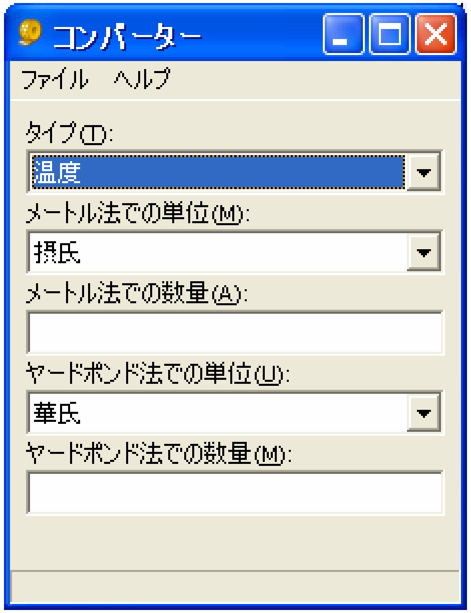
Type: Length
Metric unit: Kilometers
Metric amount:
US unit: Miles
US amount:



Tyyppi: Lämpötila
SI-suure: Celsiusta
SI-määrä:
US-suure: Fahrenheittia
US-määrä:



Typ: Länge
Metrische Einheit: Kilometer
Metrischer Wert:
US Wert: Meilen
US Angabe:



タイプ(T): 温度
メートル法での単位(M): 摂氏
メートル法での数量(A):
ヤードポンド法での単位(U): 華氏
ヤードポンド法での数量(M):

Requirements for Localization

- Software has been properly internationalized (I18N)
  - Strings are in the resources and not hard coded

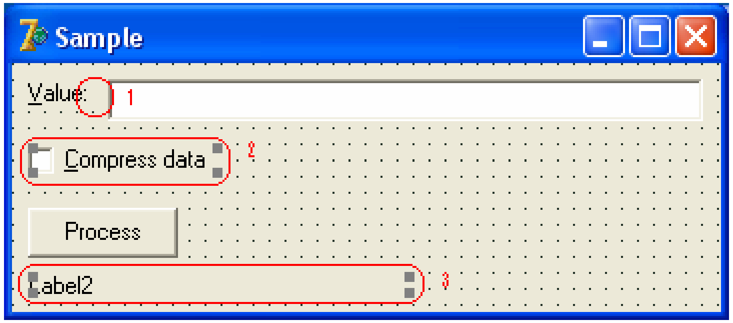
```
ShowMessage(“Hello World”);
->
ShowMessage(LoadString(ID_HELLO));
```

  - Code uses proper API calls
  - Code handles strings properly
    - Either uses Unicode or enables multibyte handling
  - User interface is easily localizable

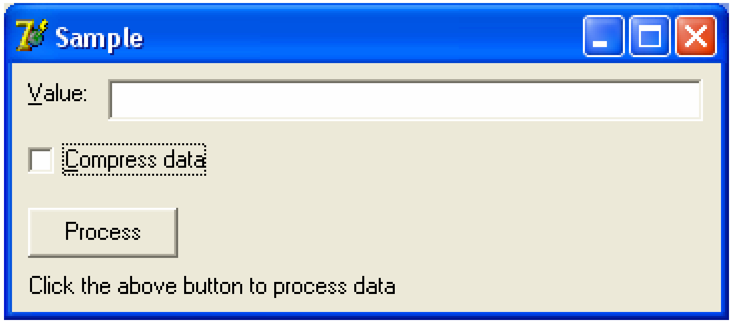
User Interface Reworking

- English is very compact language
  - In most cases translations are longer than the original text
  - This means that translations do not fit their places

The form below contains such cases

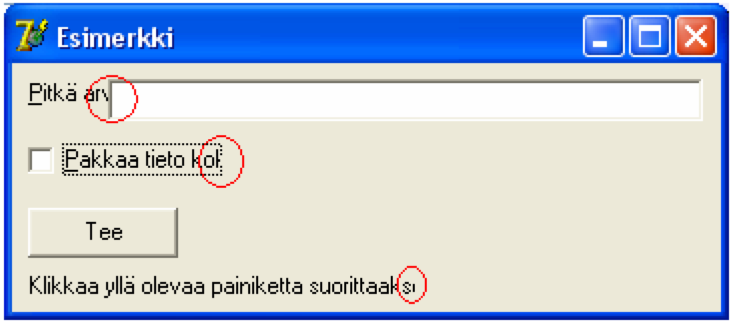


When run in English it looks good



Click the above button to process data

But when run in Finnish some text is cut

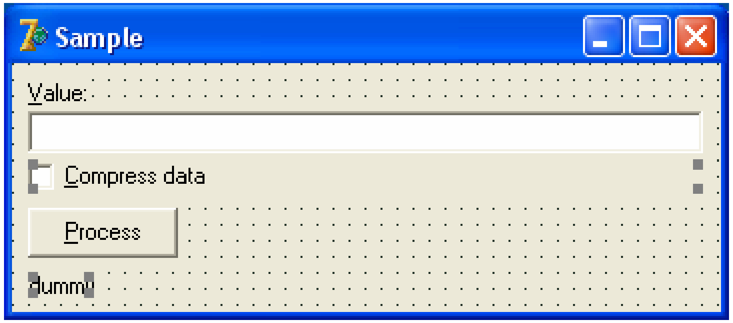


Klikkaa yllä olevaa painiketta suorittaaksi

User Interface Reworking (2)

- There is an easy solution to design user interface such way that clipping is very unlikely

Reworked form



Sample

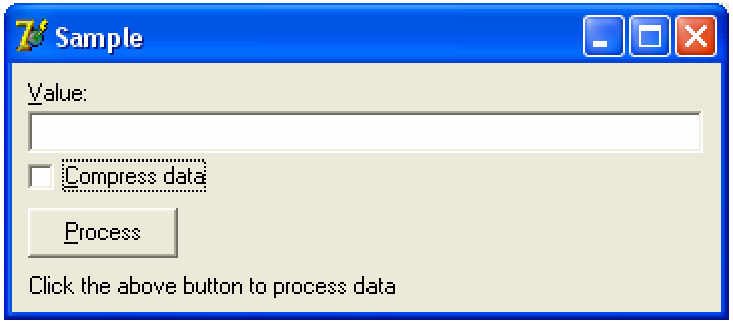
Value:

□ Compress data

Process

dummy

This works fine in English



Sample

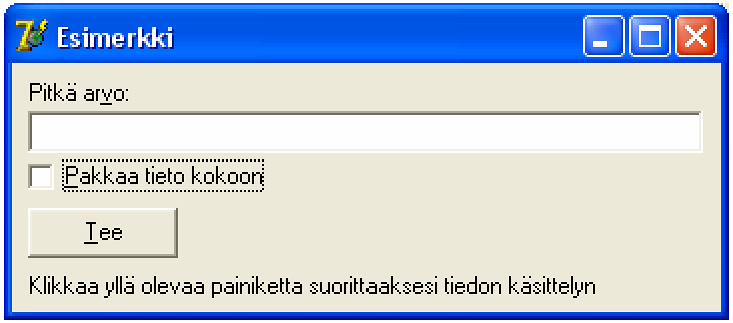
Value:

□ Compress data

Process

Click the above button to process data

Works fine in Finnish and other languages



Esimerkki

Pitkä arvo:

□ Pakkaa tieto kokoon

Tee

Klikkaa yllä olevaa painiketta suorittaaksesi tiedon käsittelyn

Localization Process in Sisulizer

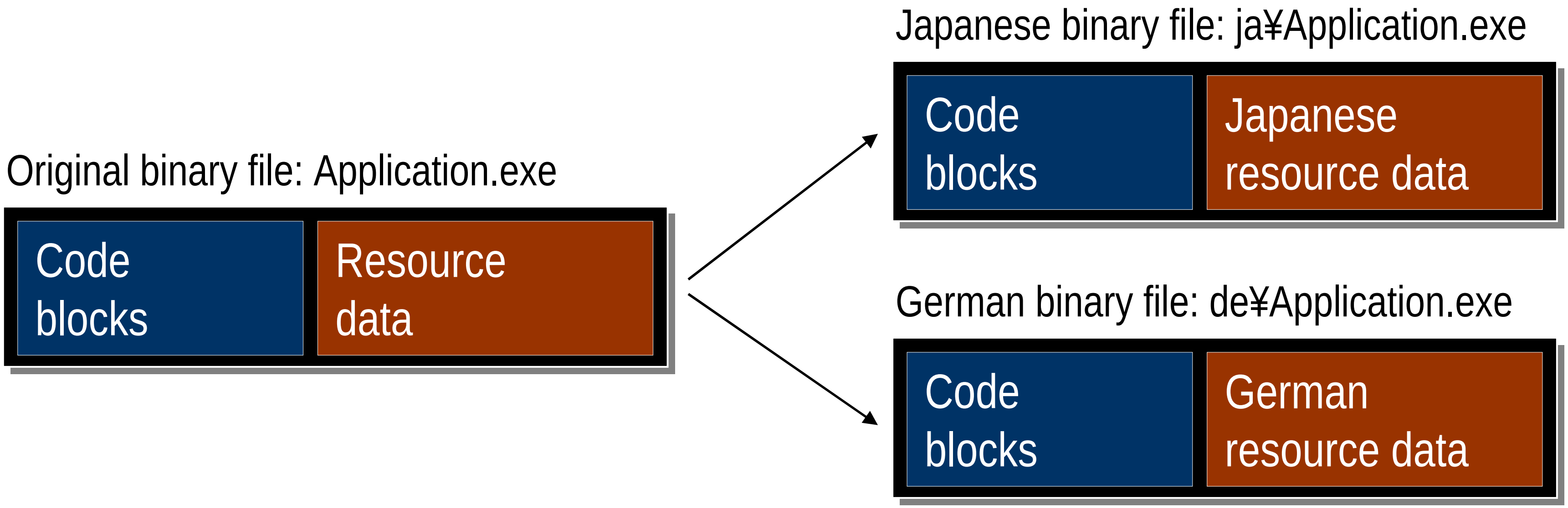
- Three simple steps
- 1. Scan
  - Sisulizer reads the original file and extracts data that needs to be translated.
- 2. Translate
  - Translator uses Sisulizer to enter translations.
- 3. Build
  - User uses Sisulizer to create localized files.
  - They are identical to the original files except strings and possible user interface have been translated.

Scan

- Sisulizer knows files formats!
- It can read over 50 different file formats
  - Application files: .exe, .dll, .jar, …
  - Source code files: .c, .cpp, .java, …
  - Resource files: .rc, .rss, .resx, .properties, …
  - Software project files: .sln, .csproj, .jpx, …
  - Document files: .html, .chm, …
  - Data files: .xml, .ini, …
  - Databases: Access, SQL Server, Oracle, MySQL, …
- Sisulizer stores the scanned data into its own XML based project format (.slp)
  - Sisulizer isolates translator for the original file format

Localized Binary Files

- Sisulizer creates a copy of the original binary file and replaces the resource data with the translated data.



Japanese binary file: ja¥Application.exe

Code blocks

Japanese resource data

Original binary file: Application.exe

Code blocks

Resource data

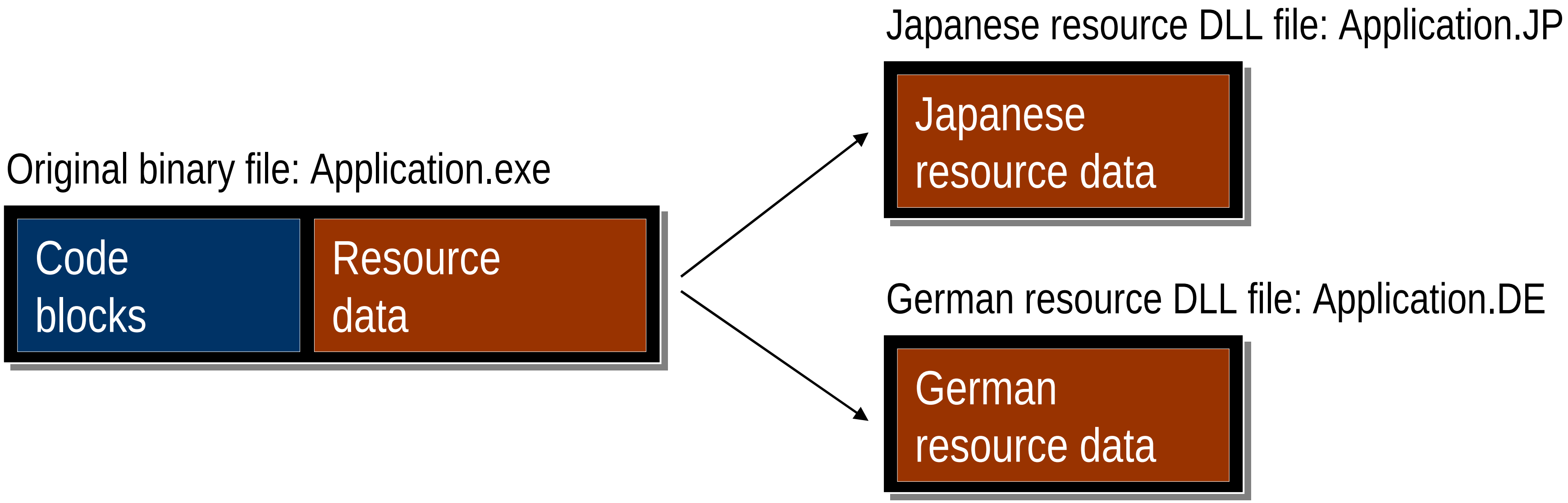
German binary file: de¥Application.exe

Code blocks

German resource data

Localized Resource DLL Files

- Sisulizer creates a resource only DLL files that contain the translated resource data.



Japanese resource DLL file: Application.JP

Japanese resource data

Original binary file: Application.exe

Code blocks

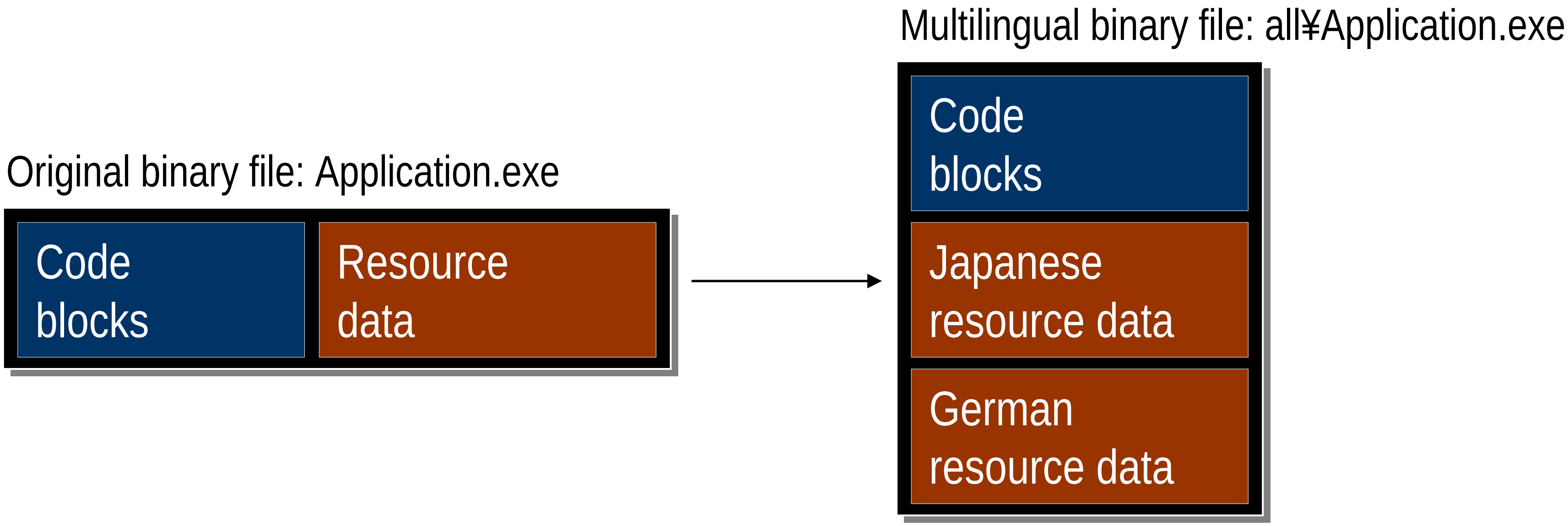
Resource data

German resource DLL file: Application.DE

German resource data

Multilingual Binary File

- Sisulizer creates a copy of the original binary file and adds resource data in all languages that project has.


Multilingual binary file: all¥Application.exe
Original binary file: Application.exe
Code blocks
Resource data
Code blocks
Japanese resource data
German resource data

Translate

- East, fast and safe way to translate projects.
- Translators always have the same user interface no matter what is the original file format.
  - They do not have to know anything about the original file format.
- Multiple ways to translate
  - You can enter translations manually or
  - You can send project to be translated or
  - You can import translations or
  - You can reuse existing translations using translation memory or
  - You can automatically translate using machine translation.

Importing data

- Sisulizer can import existing translations from various sources.
- Glossary files
  - TMX, Excel, text files
- Existing localized files
  - If you already have some localized files you can import its translations
- Database tables

Translation Engines

- Sisulizer translation memory
  - Sisulizer's own translation memory technology
  - Can be used to store translations
    - Save existing translations, import glossaries
  - Data is stored is a database
- 3rd party translation memories
  - Sisulizer has interfaces to 3rd party translation memories
  - TRADOS
- Machine translators
  - Sisulizer has interfaces to machine translator engines
  - WorldLingo

HTML Demonstration

- Select the files you want to localize.
- Sisulizer read the files and shows them in visual editor.
- Entering translation manually.
- Sisulizer creates localized files
  - HTML file
    - Sisulizer translated text but keeps the structure identical
  - Images file
    - You can change the image file to be used in the localized HTML files.

Windows Application Demonstration

- We have an English Windows application
- We want to make a Japanese application
- Using translation memory.

XML Demonstration

- Localizing a sample XML file from English to Japanese
- Importing translations from Excel.

Database Demonstration

- Adding Japanese data to an Access table.
- Exchanging translations with a translator.

.NET Demonstration

- Localizing Converter application from English to Japanese
- Project localization (Converter.csproj)
- Importing existing data from Excel.

Machine Translation Demonstration

- WorldLingo is a server based machine translator
  - Purchase account for WorldLingo service
  - Configure WorldLingo translator in Sisulizer
  - Use translator in Sisulizer.
- Let’s localize a simple HTML file containing text and pictures from English to Japanese.

HTML Help Demonstration

- HTML Help is the online help format of Windows and .NET.
  - HTML Help file (.chm) is a single binary file that contains all online help data
  - HTML files, image files, buttons, topic file and index file
- Select the HTML Help file that you want to localize.
- Sisulizer read the content files from the .chm file and shows them in visual editor
- Sisulizer creates localized .chm files
- Demo.

Q&A