Developing a Standards-Based Localization Service Bus at Intel

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Intro

Intel's in-house localization group recently embarked on a major project that will revolutionize their internal service provision. Intel partnered with CNGL/ADAPT to design the data model and architecture for a modular, extensible, vendor-agnostic, and future-proof I18n/L10n service bus. This presentation details how the proposed data model and the overall bus architecture benefit from the use of a metadata-rich message (workflow token) format that is largely informed by recent standards such as CMIS 1.1, ITS 2.0, XLIFF 2.0, and XLIFF 2.1. Modularity of the above-mentioned standards offers a robust match for a generalized and abstracted BPM bus solution connecting a number of messaging brokers, grouping Content Management Systems, Code Control Repositories, and I18n/L10n services that cover code scanning, pseudo-translation, machine translation, etc.

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Intel's in-house localization group recently embarked on a major project that will revolutionize their internal service provision. Intel partnered with **CNGL/ADAPT** to design the **data model** and **architecture** for a **modular**, **extensible**, **vendor-agnostic**, and **future-proof I18n/L10n service bus**. This presentation details how the proposed **data model** and the overall **bus architecture** benefit from the use of a **metadata-rich message** (**workflow token**) format that is largely informed by recent standards such as **CMIS 1.1**, **ITS 2.0**, **XLIFF 2.0**, and **XLIFF 2.1**. **Modularity of** the above-mentioned **standards** offers a robust match for a **generalized and abstracted BPM bus** solution connecting a number of **messaging brokers**, grouping **Content Management Systems**, **Code Control Repositories**, and **I18n/L10n services** that cover **code scanning**, **pseudo-translation**, **machine translation**, etc.

Key terms

- **Intel** + **CNGL/ADAPT**
- **data model** + **architecture**
- **modular**, **extensible**, **vendor-agnostic**, and **future-proof**
- **I18n/L10n service bus**
- **data model**
- **bus architecture**
- **metadata-rich message** format – **workflow token**
- **CMIS 1.1**
- **ITS 2.0**
- **XLIFF 2.0**, and [**XLIFF 2.0** + **ITS 2.0** =] **XLIFF 2.1**
- **modularity of standards**
- **generalized and abstracted BPM bus** solution
- **messaging brokers**
- **Content Management Systems, Code Control Repositories**
- **I18n/L10n services**
    - **code scanning**, **pseudo-translation**, **machine translation**, etc. [**FHQT**]

Modularity

- **data model** + **architecture**
- **modular** + **extensible** = **vendor-agnostic** + **future-proof**
- **I18n/L10n service bus**
- **data model IS modular TO ALLOW the architecture to be a modular bus architecture**
- **metadata-rich message** format = bus **workflow token**

Key standards

- It is a cutting edge **R&D project** in **content lifecycle management** that **has to include L10n transformations** in any business, not just multinationals
- **Not** an ERP integration project, so we don't mention REST, UBL etc. in any detail
- **I18n/L10n service bus**
- **CMIS 1.1**
  - Content Management Interoperability Services
  - **CMIS servers and clients** for **compliance** and **abstraction**
  - **+ ITS 2.0** on the CMS side
- **ITS 2.0** serves as the **bridge between** [monolingual] **content** and **bitext**
- **XLIFF 2.0**, and [**XLIFF 2.0** + **ITS 2.0** =] **XLIFF 2.1**
- **Hence** any of the 19 ITS data categories **CAN be managed throughout the content lifecycle**
- **modularity of standards**
  - CMIS mirror **CAN start with basic features** and get expanded
  - **Any** of the 19 **ITS** [meta]data **categories CAN** be introduced **independently**
  - **XLIFF 2 core** is small and tight
    - **8+1 modules CAN be introduced independently**
    - **Modules CAN** be **ignored** by **Agents** that **do NOT support them**

Diagrams

Q&A

At the end of the whole session..

Thanks a million for your attention

dF & Loïc

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