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JOB BANK TRANSLATION AUTOMATED TRANSLATION SYSTEM

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Job Bank for Employers

- § Job Bank (www.jobbank.gc.ca) is a free job-posting service provided by the Federal Government to all Canadians. Employers have the option to create a profile; upon approval, they can then post job offers.
- § Job seekers are able to access these positions in two ways. Standard Job Search and Job Matching
- § Several additional tools are available to assist the Job Seeker with their job search; such as resume builder, job alert, job search tips, and career navigator

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Job Bank for Employers

- § Employers can post job advertisements 24 hours a day, 7 days a week using the "Job Bank for Employers" Web site
- § Job offers received by fax, e-mail, Internet and telephone must be published simultaneously in both French and English within 24 business hours
- § 70,356,222 Job Bank Web site visits in 2008-2009
- § 1,138,233 Job Bank employer advertisements posted in 2008-2009

O Depending on Experience :					
Salary from to Hourly 🔻 for					
40.00 hours per week.					
 To be Negotiated (Employer undertakes to ensure compliance with all 					
employment standards statutes)					
Remuneration Based on Commission Only					
(Employer undertakes to ensure compliance with all employment standards statutes)					
Check all that apply: □ Bonus □ Piece Work					
☐ Gratuities ☐ Commission ☐ Other Benefits					
Step 6 of 9: SPECIFY TERMS OF EMPLOYMENT					
 ★ Select one of the following: Permanent © Temporary © Casual © Season 					
★ Select one of the following:					
Time Time Time Check all that apply:					
□ □ □ □ □ □ □ Shift □ □ Overtime					
Yuki & Wolf Writing and Translating (#304488)					
Advertising writer NOC #5121					
Job Advertisement					
SPECIFY OTHER INFORMATION					
If needed, this free-text space is provided for you to include further details about your job ad. This text is fed through a					
machine translation system which will produce a literal					
translation of your wording. All errors and ambiguities contained in the original text will then be reflected directly in					
the translated language. Please follow the helpful hints (below/above) to produce clear and concise sentences.					
1. Write short, complete sentences.					
Avoid abbreviations and acronyms.					
Use capital letters only for proper names, official titles and					
all nouns that should be capitalized (language, place names, days of the week, etc.)					
Avoid typographical and grammatical errors. Use correct					
punctuation and verify that all spaces have been included between words, characters or symbols.					
Please make use of Job Bank's spell-check feature.					
Other Information:					
(max. 300					
char) [0					
CANCEL CONTINUE					
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Todas per week.



Building the Automated Translation System

- § In 2002 rudimentary automated system: very poor results
 - § Estimated cost for human translation of all job offers (450,000 jobs at the time) without relying on technology was \$25 million
- § Requirement and solution studies conducted
- § Recommendations: Job Bank developed pre-translated checklists, an automated system to translate free text and hired a team of posteditors

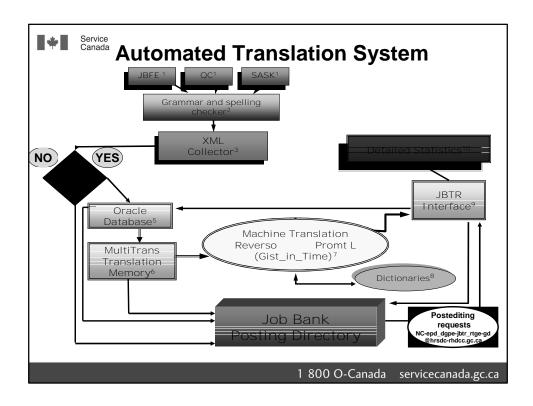
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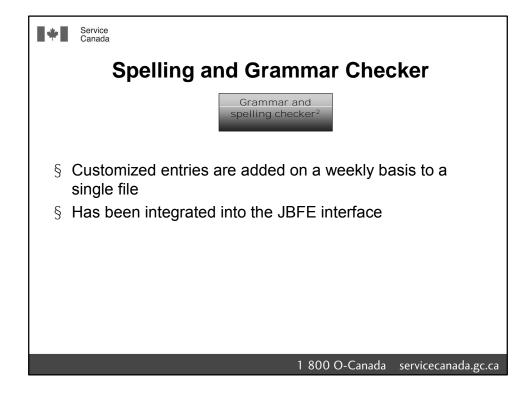


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Integration Steps

- § 2004-2005
 - § NStein, automated translation system
 - § MultiCorpora R&D, Multitrans Pro translation memory
 - § Specialized dictionaries for machine translation continued to the be updated
- § 2006-2007
 - § UltraLingua, Grammatica replaces Wintertree spelling checker
- § 2008 to present
 - § Continued improvements to the automated translation system ensure optimal operation



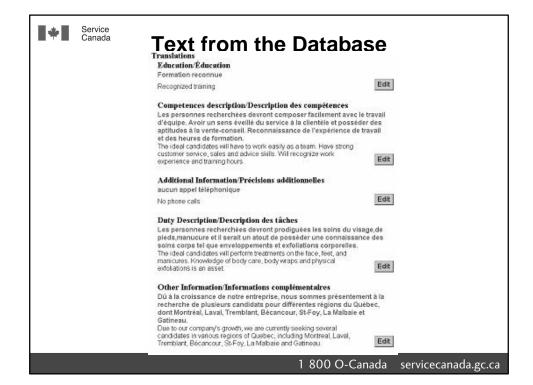




Oracle Database

Oracle Database⁵

- § Archives offers and their post-edited equivalents in a database
- § Automatically posts offers that are identical (100% match) along with their translation
- S Of all offers posted to the JB site, 45% are reproduced by the database





Translation Memory

MultiTrans Translation Memory⁶

- S Consists of one corpus per language pair, created from full sentences extracted from job offers
- § Automatically reproduces translations of repetitive sentences in job offers
- § Approximately 15% of offers posted have been 100% or partially text matched by the Translation Memory
- § New corpora updated every quarter

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promotions and direct sales.

management,

To help one of our customers to promote these services television, internet and soon phone résidentiaux, we are looking for 1 representative of sales to cover the territory of the region of Magog and neighborhood. This representative will have for responsibility for visiting the places of residence of their territory to offer the various services

worldwide, outsourcing sales and marketing forces, events

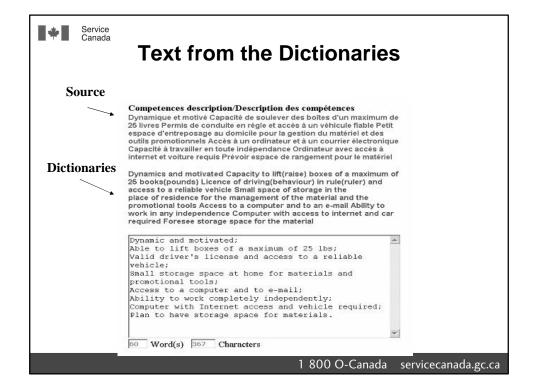
Dictionaries



Dictionaries



- § A multiple dictionary structure of 10 specialized dictionaries (employment-related words and expressions) activated simultaneously; includes a specialized dictionary of geographical names (1200)
- Mistranslated terms are extracted from offers revised by the postediting team and from the National Occupational Classification (NOC) system
- § Idiomatic expressions that cannot be translated literally are added as customized entries
- § Updates sent to Systems as required





Job Bank Translation Revision Interface

JBTR Interface⁹

- § Saves revised texts in a database
- § Option for posteditors to enter suggestions into the Dictionaries from the revision interface
- § Includes links to resources and improvements to the JBTR interface aimed at increasing productivity

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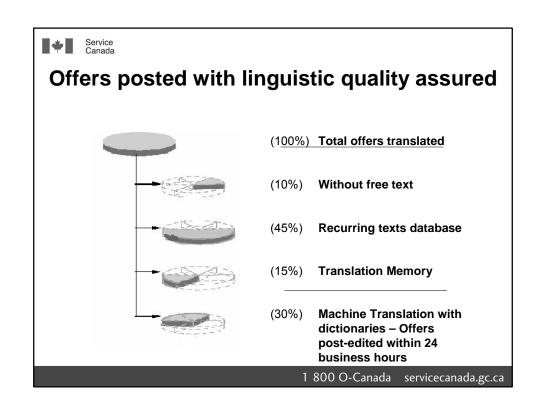


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Evaluation of Machine Translation

- Methodology for evaluating the quality of translated texts
- § Evaluation grid :
 - § Intelligibility (text clarity)
 - § Adequacy (equivalence between texts)
 - § Language quality (spelling, grammar)
 - \S Symbols and typography (" ", (), \$, ...)

Service Canada Evaluation Grid					
	INTELLIGIBILITY	ADEQUACY	LANGUAGE QUALITY	SYMBOLS AND TYPOGRAPHY	
DEFINITION	Clarity, comprehensibility and logic of the text.	Semantic equivalence between the source and target texts.	Respect for spelling, grammar (agreements, conjugations, etc.) and syntax (sentence structure) in the target language.	Respect for typographical rules in the target language: symbols, capitalization, punctuation, date and hour formats, parentheses, quotation marks, currency, etc.	
METHODOLOGY	Read only the target sentence. Answer the following question: Is the text comprehensible at first reading?	Read each sentence, comparing the source and target. Determine the number of ideas in each sentence, count those which are well translated and assign points accordingly.	Read the target sentence. Count the number of spelling, grammar and syntax errors.	Read the target sentence. Count the number of errors.	
SCORING	0 = Incomprehensible text 1 = Certain elements are understandable, but the general meaning is lost 2 = The general meaning is understandable, even if some elements are unlcear 3 = The text perfectly understandable	0 = Nothing is properly translated 1 = A third of the ideas are properly translated 2 = Two-thirds of the ideas are properly translated 3 = All ideas are properly translated	0 = 3 or more errors 1 = 2 errors 2 = 1 error 3 = No errors	0 = 3 or more errors 1 = 2 errors 2 = 1 error 3 = No errors	
WEIGHTING	30%	40%	20%	10%	





Next Steps

- § Ongoing refinements of the dictionaries, translation memory and database
- § Continued improvements to the pre-translated NOC checklists
- § Continued improvements to the translation system to ensure optimal operation

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Questions?