

Software Globalization Guide

Introduction

Whether you are trying to release a multilingual product in order to increase your global market share and ROI or you are trying to increase your company's global operational efficiencies by developing multilingual applications, Software Globalization is a requirement to make either a reality. Software Globalization is a comprehensive service offering, consisting of both Internationalization and Localization. GPI works in over 100 languages including:

Arabic	Basque	Catalan	Chinese Simplified
Chinese Traditional	Czech	Danish	Dutch
Finnish	French	German	Greek
Hebrew	Hungarian	Indonesian	Italian
Japanese	Korean	Norwegian	Polish
Portuguese	Russian	Slovenian	Spanish
Swedish	Thai	Turkish	Vietnamese

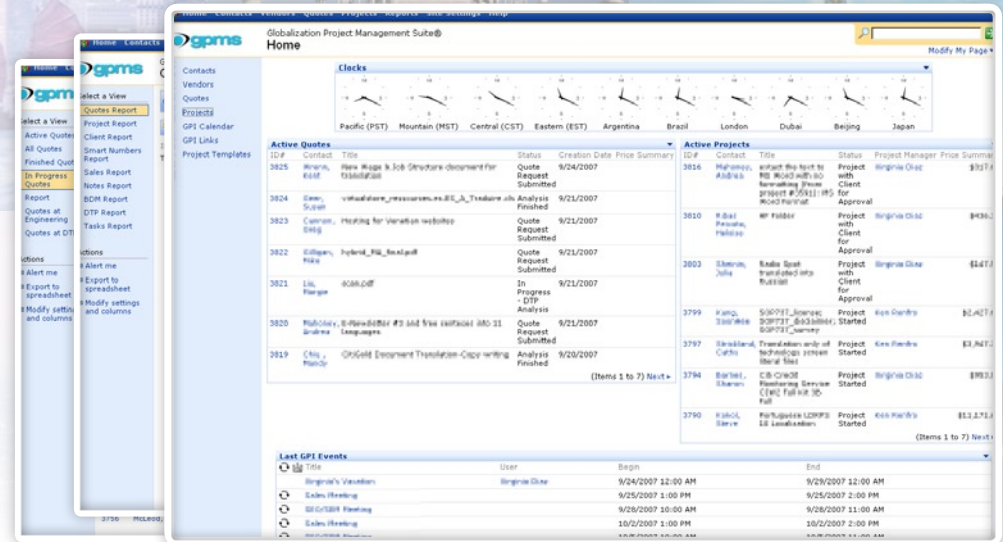
Software Globalization (G11N) = Internationalization (I18N) + Localization (L10N)

Software Globalization (G11N) is defined as the process of internationalizing and localizing your software, and may include other aspects of creating global applications such as:

- Global product marketing programs
- Target markets analysis
- Establishing multilingual support capabilities

Internationalization (I18N) is defined as the process of developing a program core whose feature design and code do not make assumptions based on a single language or locale and whose source base simplifies the creation of different language editions of a program.

I18N and L10N definitions from Nadine Kano's book, *Developing International Software* (Microsoft Press).



Globalization Project Management Suite®

Localization (L10N) is defined as the process of adapting a program for a specific international market, which includes translating the user interface, resizing dialog boxes, customizing features, and testing results to ensure the program still works. This guide book deals primarily with Software Localization.



















All translation projects are completed by professional native-speakers working in teams and utilizing state-of-the-art linguistic tools to ensure quality, consistency and cost-effectiveness of all work.

All projects are assigned a Globalization Services Team (GST) consisting of a Project Manager, Lead Translators, Editors & Copy Writers, Desktop Publishers, Internationalization Engineers, Localization Engineers, Software Architects and Developers.



















GPI's teams will utilize our own Globalization Project Management Suite® (GPMS) and Globalization Services Information Intranet® (GSII) to handle all aspects of project management and global collaborations.



FINALIST
GSII was chosen as one of five finalists for the 2003 Software and Information Industry Association's (SIIA) 18th Annual Codie Awards for the Best Enterprise Portal Platform.

	Localization Kit Review 	Project Kick-Off 	Subject Matter Training and Research 	Glossary Development 	Cultural Correctness Assessment 	Translation, Editing and Proofreading 
						
Team	<ul style="list-style-type: none"> Account Manager Project Manager Lead Translators Editors & Copy Writers Desktop Publishers Localization Engineers Internationalization Engineers QA-Testers 	<ul style="list-style-type: none"> Account Manager Project Manager Lead Translators Editors & Copy Writers Desktop Publishers Localization Engineers Internationalization Engineers QA-Testers 	<ul style="list-style-type: none"> Account Manager Project Manager Lead Translators Editors & Copy Writers Desktop Publishers Localization Engineers Internationalization Engineers QA-Testers 	<ul style="list-style-type: none"> Account Manager Project Manager Lead Translators Editors & Copy Writers Desktop Publishers Localization Engineers Internationalization Engineers QA-Testers 	<ul style="list-style-type: none"> Account Manager Project Manager Lead Translators Editors & Copy Writers Desktop Publishers Localization Engineers Internationalization Engineers QA-Testers 	<ul style="list-style-type: none"> Account Manager Project Manager Lead Translators Editors & Copy Writers Desktop Publishers Localization Engineers Internationalization Engineers QA-Testers
Tasks	<ul style="list-style-type: none"> The final set of source files or Localization Kit is reviewed confirming all information in the quote. The files are prepared in order to utilize a translation memory tool workflow and preserve any mark-up/formatting code in order to ensure time- and cost-effectiveness, especially with documentation desktop publishing related activities. 	<ul style="list-style-type: none"> A Project "Kick-Off" includes and confirms the following: <ul style="list-style-type: none"> ✓ The project team ✓ Project schedules ✓ Project specifications ✓ Workflow requirements ✓ Communication channels ✓ Review & approval opportunities 	<ul style="list-style-type: none"> Your GPI Globalization Services Team (GST) will review/study any reference materials provided, including source files, demos and general client information. On larger projects, there may be client specific training related to the subject matter of the application. 	<ul style="list-style-type: none"> GPI develops and maintains client specific glossaries, leveraging from any existing client glossaries, reference materials and the latest industry-specific dictionaries. 	<ul style="list-style-type: none"> Before the actual translation begins, the source UI, HELP and Documentation contents and overall UI design are reviewed for basic cultural correctness and customizations that may be required. 	<ul style="list-style-type: none"> Translation is performed by a base translation/copy writing team, and edited/proofread by a second linguistic team. All translations are completed by human translators, utilizing translation memory technologies that ensure an efficient and consistent translation.
Quality Assurance	 <p>GPI follows a comprehensive, customizable and fully documented Quality Control Process. Each step in our translation workflow includes a series of checklist-based quality audits to ensure the accuracy of the translation and desktop publishing. Our clients' QA and workflow processes can also be easily incorporated into our workflow.</p>			 <p>Clients are given an opportunity to review and approve at several stages in the UI, Help and documentation localization process.</p>		 <p>Clients are given an opportunity to review and approve at several stages in the UI, Help and documentation localization process.</p>

Please note: The translation process shown here represents a basic software, help and documentation localization workflow adhering to both GPI's documented Quality Assurance Process and Global Best Practices for producing multilingual software applications. GPI's translation process is routinely customized to align with our clients' development, document authoring, content management, quality assurance and publishing workflows.

Localization of all Graphics 	Format Verification and Desktop Publishing 	Localization of any Multimedia 	QA / Testing 	Delivery to Client 	Final Edits and Archiving of Files 
					
<ul style="list-style-type: none"> • Account Manager • Project Manager • Lead Translators • Editors & Copy Writers • Desktop Publishers • Localization Engineers • Internationalization Engineers • QA-Testers 	<ul style="list-style-type: none"> • Account Manager • Project Manager • Lead Translators • Editors & Copy Writers • Desktop Publishers • Localization Engineers • Internationalization Engineers • QA-Testers 	<ul style="list-style-type: none"> • Account Manager • Project Manager • Lead Translators • Editors & Copy Writers • Desktop Publishers • Localization Engineers • Internationalization Engineers • QA-Testers 	<ul style="list-style-type: none"> • Account Manager • Project Manager • Lead Translators • Editors & Copy Writers • Desktop Publishers • Localization Engineers • Internationalization Engineers • QA-Testers 	<ul style="list-style-type: none"> • Account Manager • Project Manager • Lead Translators • Editors & Copy Writers • Desktop Publishers • Localization Engineers • Internationalization Engineers • QA-Testers 	<ul style="list-style-type: none"> • Account Manager • Project Manager • Lead Translators • Editors & Copy Writers • Desktop Publishers • Localization Engineers • Internationalization Engineers • QA-Testers
<ul style="list-style-type: none"> • All embedded translatable text such as call-outs and legends are pulled from graphics and translated using the standard translation workflow. • The translated text is then incorporated into the original graphic, adjusting as required, to create a language or "localized" version of the graphic. 	<ul style="list-style-type: none"> • The UI and Help file formats are verified to ensure code or tags have been preserved, and the documentation is desktop published. • Formatting or desktop publishing (DTP) includes formatting the target language documentation to match the original source documents in terms of layout, fonts, graphics, and overall design. 	<ul style="list-style-type: none"> • Many software applications incorporate various multimedia components (Flash intros, video/ audio clips, animations, etc.) that may require localization. • All these Multimedia components are localized according to client specifications. 	<ul style="list-style-type: none"> • GPI provides basic Localization Quality Assurance (QA) as a standard line item for all software projects. • This QA checks the language versions of your software for any cosmetic or linguistic issues, and will help identify basic functionality issues as well. • Typically all testing is client-driven and GPI's professionals can work side by side with your expert users to perform Internationalization (I18N), Localization (L10N) and/or Functionality. • Help and documentation components are tested as well. 	<ul style="list-style-type: none"> • After translation, verification of localized files and desktop publishing, final drafts of all target language files (UI, help, documentation and graphics), matching source language formats and structure, are provided to the client. • Client may review and approve all documentation for both translation accuracy and design correctness. 	<ul style="list-style-type: none"> • Client provides any final comments to the translation and/or formatting. • Comments are incorporated and final documents are produced and redelivered. • GPI ensures the client's Translation Memories and Glossaries are updated with any final linguistic changes and the final project folder, including all source files, are archived.
	 <p>Clients are given an opportunity to review and approve at several stages in the UI, Help and documentation localization process.</p>			 <p>Clients are given an opportunity to review and approve at several stages in the UI, Help and documentation localization process.</p>	

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Software Localization Kit

Getting Started: "Your Source Files"

Clients are asked to provide a complete set of source files, also known as a "Localization Kit".

1. All files in your development environment, specifically Resource files (e.g. RC, RC2, DLG, H, HH, CPP, EXE, DLL, and graphic file formats).
2. All Documentation source files (e.g. FrameMaker, Word, etc.). Includes all templates, books, fonts, original graphics (i.e., Photoshop, Illustrator).
3. All HELP source files (e.g. graphics, RTF, VBS, HTML, CNT/HHK/HHC). Include all templates, fonts, books, original graphics.

These files are analyzed for:

- number of words
- source and target languages
- subject matter
- desktop publishing requirements
- help authoring tool
- software development platform & process
- internationalization requirements
- client review and approval requirements
- client workflow requirements

A comprehensive quotation packet is generated, including all tasks, costs and timelines required to complete the project. Clients are given the opportunity to review and approve every quote.

Questions about your Software Project

1. Please describe your software architecture (all components and Databases, if any)?
2. Does application require any third-party scripts/components? Do you know if they support the target languages into which you want to localize your application?
2. List the development tools and programming languages used in the development of your product(s) (please specify version numbers):
3. Describe all collateral materials (such as documentation and on-line help) that should also be localized. Include authoring development tools used for each.
3. List the platforms under which the localized versions will run:
4. Does your documentation contain screen captures? Can you provide scripts to re-capture those screens?
4. Is all localizable content separated from the code in resource files?
9. Do you want GPI to perform Testing? What level of Testing are you interested in (Internationalization, Localization, Functionality)?
5. If not, in which tiers would we find localizable content (presentation, application, storage)? Should we externalize all localizable content into resource files before localization?
10. Do you have any specific Test Plans and Scripts?