# **CSA** Research

This report "Re-Assessing Translation Proxy Solutions" (Aug 18) is subject to CSA Research's standard <u>terms of</u> <u>use</u>. Unauthorized reproduction and distribution are strictly prohibited.

# **Re-assessing Translation Proxy Solutions**

By Donald A. DePalma, Arle Lommel, and Benjamin B. Sargent

August 2018

Search for "translation proxy" and you may turn up negative articles from technology providers. Early deployments gave it an enduring reputation as a substandard, "not real localization" approach for websites or apps. However, two decades of experience demonstrates that such software has earned its place in the pantheon of useful localization technology. In fact, it turned out to be an easy, replicable choice for many common use cases, and serves very well as a permanent solution for enterprise customers.

### What This Research Covers

In this report, we: 1) define translation proxy; 2) revisit the myths, 3) identify scenarios where proxies should always be considered or generally avoided), and 4) offer a representative list of providers.

### **Related Research**

- "Using Proxy Servers to Make Website Globalization Easier"
- "Taking the Plunge: Why Develop Software?"
- "11 Mistakes LSPs Make in Technology Adoption"
- "Translation Management at the Crossroads"

### Contents

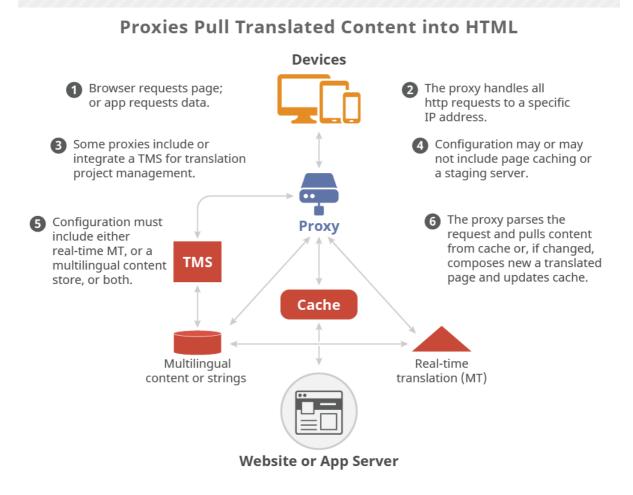
| What Is Translation Proxy?                      | .3 |
|---|----|
| Proxy Is a Good Choice in a Range of Situations | .5 |
| In Other Situations, Proxies Should Be Avoided  | .6 |
| Sources of Translation Proxy Solutions          | .7 |

### What Is Translation Proxy?

Proxy refers to a specific method of managing an http request. The proxy sits between the requesting device and the server that will fulfill the request. Proxies are used for many IT purposes, including security and privacy. In the case of translation, a proxy typically grabs the visible text from the other code on a web page and substitutes matching strings or segments in a different language. In practice, this approach allows a single-language website to be served to a browser in a different language, while retaining all the same layout, JavaScript, and other functions. It may also swap out images, video, links, or style sheets.

**Note**: A translation proxy can function as a content connector, application programming interface (API), or as a translation management system (TMS). It responds to requests by pulling a payload of encoded content such as HTML, XML, or JSON, then modifying the data and sending it on.

- Translation proxies link to multilingual data stores, machine translation engines, or both. In some cases, the proxy pulls translated strings from a multilingual human-translated string table, database, code repository, or TMS. In other cases, it submits new content to an MT engine, piping the real-time output directly back into the HTML, as it sends the requested page to the browser. The difference between pulling translation from a repository versus a real-time engine pertains only to the first page request for new or updated content. After that, a server-side cache fulfills each subsequent request for that page (Figure 1).
- **Caching keeps language versions in sync.** Not all apps lend themselves to page caching but most websites do. Caching, which temporarily stores a page in memory to load faster, is also used by translation proxies to keep the previous version of a page live while updates go through one or more human touches to translate or validate MT output. Once the translation shows as complete in the data store, the proxy triggers a cache refresh. The cache may be hosted on the user's own server infrastructure or it may take advantage of edge services, such as a content delivery network. Hosting cached pages around the world results in faster load times especially critical for mobile device users, the primary target in many markets.



#### Figure 1: Translation Proxies Swap Out Content in HTTP Server Responses

Source: CSA Research

- Advanced configurations include a staging server. Some deployments rely on a staging server to detect and translate new or changed content before publishing. That event triggers a translation workflow prior to the source language going live. In application environments that don't cache static pages, staging allows for testing as developers add new features or backend data sources. As staging increases cost and effort, companies that can do so often skip these steps. Caching, staging, and MT all effectively prevent the unwanted appearance of untranslated content the "bleed-through" that plagued proxy solutions in the past.
- Advanced features include editing in an in-context preview format. Systems with an onboard TMS may allow direct editing of content. However, for sites with

long-form content or high update volume, users may export content using XLIFF or TMX, translate in other tools, and then re-import to the onboard TMS or data store.

Note: Translation proxies that rely on another application for the multilingual data store can be considered a connector or API. If the store is part of the proxy system, then it meets the basic criteria for application-oriented TMS ("Translation Management at the Crossroads"). Some TMSes offer proxy servers as a type of connector or deployment option; for example, OneLink is one of eight components in GlobalLink Suite, the modular but comprehensive TMS from Translations.com. Other developers add TMS functions as their proxy product matures; Easyling added a translation environment and Smartling added that plus support for other content types, eventually becoming a comprehensive system.

### **Proxy Is a Good Choice in a Range of Situations**

Translation proxies can be good in a range of situations. Here are four scenarios where CSA Research recommends translation technology buyers always consider the proxy solution as an option:

- Complex environments with multiple content sources. Such applications benefit from the single connection point that a proxy provides. Sites mixing static and dynamic content mean that translators can't see the context of a given string. Integrating at the repository level with multiple data, content, and code sources would require development, implementation, and maintenance of multiple connectors. A proxy can process all content, including strings, data, labels, documents, SEO, and other readable elements from one location: your HTTP server. Using a proxy, teams avoid managing and troubleshooting multiple integration points, each of which may be "owned" by a different executive, with a different budget, sometimes in a different organization.
- Older, proprietary, or legacy software lacking connectors or APIs. Web-based applications, including brand sites, may rely on backend systems that do not support localization. In these cases, even if a CMS with good support is also present, global teams can consider a proxy solution for the entire site to avoid the pain of integrating a required but problematic sub-element of the architecture. For

organizations managing legacy code, the less you touch it, the better. Proxies offer an important option for companies looking to avoid unnecessary code maintenance cycles and forced platform upgrades.

- Time-critical applications. There are environments where a simple plug-in content connector can be up and running in minutes or hours. But far more situations exist where a proxy solution will be immediately functional. Companies with an e-commerce offering may suddenly discover the opportunity to sell in more languages for them, every day of delay represents lost revenue. In these cases, a proxy solution is a no-brainer it's the non-proxy solutions that must offer a compelling story here about how seamless it will be to start selling today.
- **Transitional systems that don't warrant traditional investment in integration.** Rapid development environments where the data, application, and presentation layers are all moving targets. Development teams and marketing organizations may be in temporary architectures where the time and effort required for API-level or connector integrations are not warranted, because they add code and complexity. When backend systems are still being built or swapped out, proxy represents an abstraction layer for arms-length localization, reducing drags on code velocity and budget spend. Proxy may be ideal for cutting edge teams where it's just not worth doing something permanent, yet, or ever.

# In Other Situations, Proxies Should Be Avoided

A connector or API-level integration works as well as a proxy, or better, in many deployment scenarios. When your existing tools support the traditional approach and your team already knows how to get it working and keep it going, decision-makers should still go the extra mile to evaluate proxy solutions. Your organization may discover that a state-of-the-proxy solution brings extra benefits, such as lower cost of deployment and maintenance, or better analytics. However, situations certainly exist that do not lend themselves at all to a proxy solution. Here are some where you can justifiably skip the subject altogether.

• When proxy expertise is not available. Like any technology, proxies require specific technical know-how and ongoing attention. If your organization cannot access and retain an expert to oversee the implementation, either on staff or

through a vendor, then it won't be a good solution in the short or the long term. This is not an issue if you have a technology or services partner with availability and the requisite knowledge and skills. If you can't afford to keep an expert involved, or build the expertise in-house, then proxy is not for you.

- When there are structural differences in the product or websites. Cases where the language sites would be expected to have major differences in structure. Although minor deviations can be handled effectively by proxies, as the distance increases between corporate and local sites, the suitability of a proxy diminishes.
- Sites where local teams create much of the content. If your organization has strong regional or local teams making day-to-day decisions about content, they may choose whether to translate new content, leave it in the source language, delete it, or insert locally-written copy instead. While the best proxy solutions do allow for local content variations, the cost and complexity of configuration maintenance makes proxy less desirable. For deployments with lots of content variation across multiple markets, a translation proxy is not optimal.

## **Sources of Translation Proxy Solutions**

Develop your own translation proxy at your peril. Translation proxies are enticingly simple, from a development standpoint, but beware. Maintaining and supporting them can be costly ("11 Mistakes LSPs Make in Technology Adoption"). Some companies that initially built their own proxy later switched to using a commercial tool. Language service providers (LSPs) and independent software vendors (ISVs) should develop a new proxy tool only when it provides an enduring differentiation that warrants continued investment ("Taking the Plunge: Why Develop Software?"). Enterprises should almost never develop their own, though exceptional circumstances may exist in some environments.

The range of available solutions includes: 1) commercial technology that is available without translation services; 2) LSPs that offer translation services via proxy-based delivery, as a branded service; and 3) hybrid solutions allowing customers to license the technology and also buy translation services from the same supplier (Table 1).

| Sources of Translation Proxy Solutions |                            |  |
|--|----------------------------|--|
| ISV                                    | Product                    |  |
| Assima                                 | Assima Multilingual Suite  |  |
| Easyling                               | Easyling                   |  |
| LingualSol                             | Linguify                   |  |
| Qordoba                                | Hosted or On-Premise Proxy |  |
| LSP                                    | Branded Service            |  |
| Amplexor (Sajan)                       | SiteSync                   |  |
| Linguaserve                            | Atlas Real Time            |  |
| Lionbridge                             | Translation Proxy          |  |
| Net-translators                        | Net-Proxy                  |  |
| Ulatus                                 | Ulatus TMS                 |  |
| Venga                                  | WebToGlobal                |  |
| Hybrid                                 | Solution                   |  |
| MotionPoint                            | MotionPoint                |  |
| Smartling                              | Global Delivery Network    |  |
| Translations.com                       | OneLink                    |  |

#### Table 1: Representative ISVs and LSPs That Offer Translation Proxy Solutions

Source: CSA Research

Today's leading proxy solutions offer flexibility, configurability, and versatility, addressing many of the issues that previously hampered adoption – for example, most now support international SEO and offer fine-tuned control for mixing local promotions, assets, links, and pages with content translated from a centralized process. More language service providers now have the expertise required for working with proxies. The option has earned its place in global content operations for enterprises and LSPs, and in the stacks of ISVs. It's time to dispel the notion of a translation proxy as a halfway solution. Copyright © 2019 by CSA Research. All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the Publisher.

Permission requests should be addressed to the Permissions Department, CSA Research, 100 Cambridgepark Drive, Cambridge, MA 02140, +1.978.275.0500, Email: info@csaresearch.com. See csa-research.com/More/Media/Citations for usage guidelines.

Trademarks: CSA Research, Global Watchtower, Global DataSet, DataPoint, Globa Vista, LSP Metrix, MarketFlex, Quick Take, TechStack, Technical Take, and TMS Live are trademarks of Common Sense Advisory, LLC. All other trademarks, product names, logos, and brands are the property of their respective owners.

Information is based on the best available resources at the time of analysis. Opinions reflect the best judgment of CSA Research's analysts at the time, and are subject to change.

CSA Research 100 Cambridgepark Drive Cambridge, MA 02140 USA +1.978.275.0500 info@csa-research.com www.csa-research.com

Common Sense Advisory, LLC d/b/a CSA Research is an independent research firm committed to objective research and analysis of the business practices, services, and technology for translation, localization, and interpreting. With its research for both Global Leaders and Industry Providers, CSA Research endeavors to improve the quality and practice of international business, and the efficiency of the online and offline operations that support it.