

# Microsoft® Translator Hub

## Where language meets the world

Bridging languages, cultures and technology

Microsoft Translator Hub empowers businesses and communities to build, train, and deploy customized automatic language translation systems—bringing better and specialized translation quality to established languages, as well as the many languages of the world that are not yet supported by major translation providers.

Until now, automatic language translation has been at the behest of a few major providers. As a result, the number of covered languages is limited to less than 100, compared to the more than 7,000 languages currently in use around the world. This both limits the native speakers' access to the global knowledge base and puts increasing pressure on the adoption of non-indigenous languages—simply because that is what is most readily available with today's technology.

Microsoft Translator Hub enables the development of custom language translation between virtually any pair of languages via cloud and web services. Microsoft Translator Hub opens doors to a broader number of languages, reducing the barriers to translation by empowering communities and businesses to create, improve, and deploy custom translation systems.

This helps increase public access to global information, while having the added benefit of sharing local knowledge about a smaller language's culture with the rest of the world, ensuring the long-term vibrancy of smaller languages for future generations.

With Microsoft Translator Hub, researchers and language preservationists can easily build translations between related languages, and can tap into the power of Microsoft Translator to improve their own translation system. Organizations can build customized translations that are scoped to their company's offerings and terminology, by combining some of their own existing translation data with the big data from Microsoft's Bing search engine. The new systems are then deployed into a private space, where invited members and reviewers can help to refine the system's accuracy.

"Our goal is to further scientific research, enable equality in education, and improve human-technology interactions. What can be more natural than learning and experiencing technology in your own language?"

**Kristin M. Tolle**  
Director, Microsoft Research  
Connections and Clinical Associate  
Professor, University of Washington  
School of Public Health

*Pictured: Kristin Tolle with Kabita  
Nayaju, student, Kathmandu University*



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## How Microsoft Translator Hub Works:

Powered by Windows Azure™, Microsoft Translator Hub is an extension of the Microsoft Translator platform and service. You can build a superior translation system easily, within a private website, by combining your translated documents with the power of Microsoft Translator's big data back end. Once you are satisfied with your translation, you may share it publicly on the web.

The process for translating from one language to another can be broken down into four basic steps: setting up a project; uploading data; training a system to translate from one language to the other; and deploying the resulting system. Within each of these steps, there are several activities that need to be completed, and once you've signed in, more detailed instructions will be provided, as well as tutorial videos, to help guide you through the process.

Microsoft Translator Hub uses a set of documents that you provide to learn your language, style, and terminology. These are commonly referred to as parallel documents, which is the same document written in two languages: the language you are translating from (the source document), and the language you are translating to, (the target language). Together, the two languages are described as a language pair.

Using your parallel documents, Microsoft Translator Hub is trained to learn how words, phrases, and sentences are commonly translated. Microsoft Translator Hub also learns how to process the appropriate context depending on the surrounding phrases; for example, a particular word may not always translate the same way. It will also learn how verbs are conjugated and nouns inflected, depending on the context of the surrounding text. Then invited reviewers will make recommendations on the results of the training output as to how to further refine the translation. This process can be repeated as necessary until an acceptable level of quality has been achieved, and the translation system is ready for deployment.

Once deployed, these services are web-accessible using the standard Microsoft Translator APIs—HTTP, AJAX, and SOAP interfaces as well as a web page widget.

Use of Microsoft Translator Hub is free.

Get started with Microsoft Translator Hub:

<http://hub.microsofttranslator.com>

## How to get started:

Getting started with your language translation is easy, and you need not be a linguist or machine translation expert. Learn more by visiting <http://hub.microsofttranslator.com>

## About Microsoft Translator:

Microsoft Translator is a translation portal and web service that powers many translation scenarios, such as the Microsoft Translator Hub. Microsoft's goal is to create the simplest, most intuitively integrated and useful translation services available to end users, developers, webmasters and businesses—while making ongoing improvements to translation quality. For more information visit [www.microsofttranslator.com/user](http://www.microsofttranslator.com/user)