

Third Party Transcription and Real-Time Translation

AI Transparency Technical Note

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At Cisco, we appreciate that Artificial Intelligence (AI) can be leveraged to power an inclusive future for all. We also recognize that by applying this technology, we have a responsibility to mitigate potential harm. That is why Cisco adheres to our [Responsible AI Framework](#) (the “Framework”), which is based on six principles of Transparency, Fairness, Accountability, Privacy, Security and Reliability. Cisco translates these principles into product development requirements, which ultimately form part of the product development lifecycle alongside our Security by Design, Privacy by Design, and Human Rights by Design processes.

Accordingly, Webex by Cisco (Webex) features that leverage AI are built with transparency, fairness, accountability, privacy, security, and reliability at their core. Each feature powered by AI undergoes an AI Impact (AI) Assessment – a best-in-class review of how the technical underpinnings of the functionality measure against the Framework Principles.

Third-Party Transcription and Real-Time Translation services within Webex that leverage third-party technologies (Third-Party Transcription and Real-Time Translation) was built with the Framework Principles at the center of how we deliver the AI-powered technology. This Technical Note describes more information about the feature and how Cisco responsibly leverages AI deliver the functionality.

Feature Overview

Third-Party Transcription and Real-Time Translation is available for customers who seek to leverage closed captioning in languages that are currently not supported by Cisco's In-House transcription services (English, Spanish, French, German, and Italian). The feature is available as closed captioning and real-time translation.

Closed Captioning for Webex Meetings and Webinars is provided by Third-Party Transcription and Real-Time Translation in eight languages including Chinese (Traditional and Simplified), Dutch, Hindi, Japanese, Korean, Polish, and Portuguese, and real-time translation is provided in over 100 caption languages. Supported languages are listed in [Webex Help Center](#).

For Webex Meetings and Webinars, administrators must enable the add-on feature. A host under that license, once enabled by the administrator, can select the spoken language and meeting attendees can select their own caption language for translations. A meeting or webinar can use a maximum of five unique caption languages at the same time. Currently, recording transcripts are only provided in English.

Closed Captioning for Webex Events and Vidcast is provided by Third-Party Transcription and Real-Time Translation in English, and real-time translation is provided in 35 caption languages. Supported languages are listed in [Webex Help Center](#), as well as [Vidcast translated captions](#).

For Webex Events and Vidcast, administrators must enable the add-on feature, while offline transcription is available via the Media Center. Translation is enabled by turning on the closed captioning and real-time translation feature while uploading an offline video. This will allow closed captioning and translations for the video to be used for streaming. Webex Events and Vidcast only support English.

Third-Party Transcription and Real-Time Translation is currently available free in Webex Events, and as a paid add-on feature in Webex Meetings, Webex Webinars, and Vidcast. The feature is also compatible with Cisco Devices.

Model Overview

Introduction

Third-Party Transcription and Real-Time Translation is currently powered by third-party technologies provided by Microsoft Azure and Google. By leveraging third parties to provide transcription services in additional languages, as well as translations capability, Cisco offers a more inclusive, accessible, and engaging experience to users.

The following references provide more details about these third-party technologies:

[Microsoft Azure AI Speech to text](#)

[Microsoft Azure AI Translator](#)

[Google Cloud Translation](#)

[Google Cloud Speech-to-Text](#)

[Microsoft Azure Speech to text Transparency Note](#)

[Microsoft Responsible AI Standard](#)

[Google AI Responsibility](#)

Model Architecture

Third-Party Transcription and Real-Time Translation leverages Google and Microsoft technologies to provide translation and transcription using text and audio of speech. When Third-Party Transcription and Real-Time Translation is used during a meeting, the third parties will process but not store the transcript and audio information to provide transcription and translation. The figure below shows the data flow for Third-Party Transcription and Real-Time Translation. Vidcast leverages the same transcription and cloud services for recorded content.

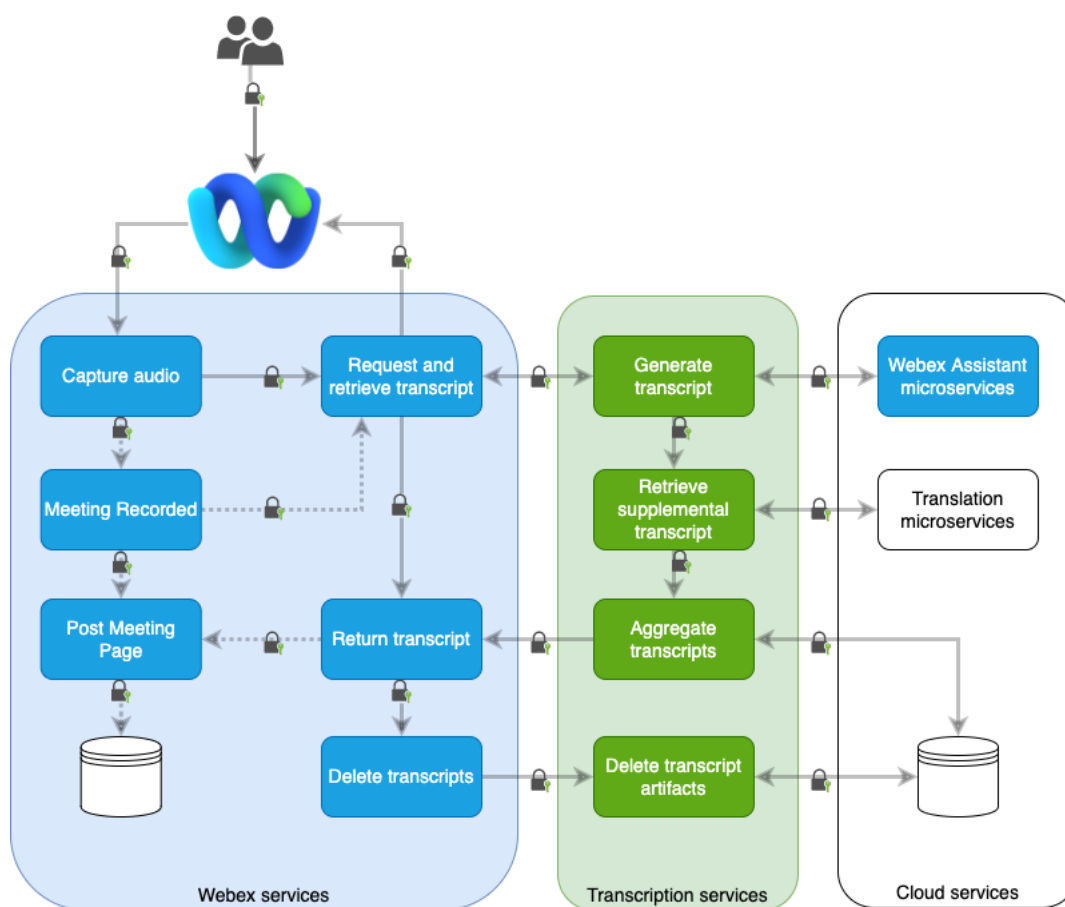


Figure 1: Third-Party Transcription and Real-Time Translation data flow

When a meeting with real-time translation and third-party transcription is being processed, the audio and text is sent securely to “Cloud Services” for Real-Time Translation and Third-Party Transcription, respectively. The resulting transcript is returned and displayed in the Webex App in real time.

Usage Guidelines

Third-Party Transcription and Real-Time Translation cannot be used outside of Webex or Cisco Products.

Model Inputs and Outputs

Typical inputs to Third-Party Transcription and Real-Time Translation model include audio and text. Typical outputs include transcribed or translated text.

Data Sources for Training and Evaluation

Details about the third parties that Cisco uses to deliver Third-Party Transcription and Real-Time Translation can be referenced here:

[Microsoft Responsible AI Standard](#)

[Google AI Responsibility](#)

Model Evaluation and Performance

Cisco frequently assesses and evaluates Third-Party Transcription and Real-Time Translation to maintain and/or improve both performance and accuracy of output. Humans are involved with the review, testing, and quality assurance associated with the deployment of the underlying models.

Safety and Ethical Considerations

Despite the rigorous safety and ethical scrutiny provided by Cisco in delivering the Third-Party Transcription and Real-Time Translation, output of third-party models may contain toxic, harmful, or unsafe content if such content exists in the raw input audio. Cisco takes steps to mitigate safety risks and ensure ethical use when leveraging third-party models. For example.

Cisco third-party vendors, including Microsoft and Google, undergo rigorous reviews, which include security and safety assessments.

Please contact Cisco if you have concerns or feedback about your experience with this feature.

Fairness

To understand more about how the Third-Party Transcription and Real-Time Translation models are trained and evaluated for fairness, please refer to:

[Microsoft Azure Speech to text Transparency Note](#)

[Microsoft Responsible AI Standard](#)

[Google AI Responsibility](#)

Privacy and Security

Cisco addresses processing of and security around personal data, including retention periods for that data, in its Privacy Data Sheets, found on the [Cisco Trust Portal](#). When users opt in to utilize the Third-Party Transcription and Real-Time Translation feature, data may be used for Cisco product improvement. Users may opt-out of data retention without losing the ability to use the feature, moreover, opting out of data retention results in your data not being used for product improvement. For more details, see the Webex Meetings Privacy Data Sheet, Addendum 3, the Webex Events Privacy Data Sheet, and the Vidcast Privacy Data Sheet found on the [Cisco Trust Portal](#).

Google and Microsoft may process, but not store, transcript or audio information to provide transcription and translation.

Updates and Maintenance

Ongoing Webex updates and product release documents include product updates and any improvements in user experience. Webex may also use customer email notifications and Webex Help Center documentation to inform customers of product changes, as well as communicate product updates in blogs and videos.

License

Third-Party Transcription and Real-Time Translation is a paid add-on feature.

References

[RAI Principles](#)

[RAI Framework](#)

[Cisco Trust Portal](#)

[Real-Time Translation Supported Languages](#)

[Vidcast Translated Captions](#)

[Microsoft Azure AI Speech to text](#)

[Microsoft Azure AI Translator](#)

[Google Cloud Translation](#)

[Google Cloud Speech-to-Text](#)

[Microsoft Azure Speech to text Transparency Note](#)

[Microsoft Responsible AI Standard](#)

[Google AI Responsibility](#)