Transifex Native Content Delivery Service (CDS)
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Introduction

Transifex Native Content Delivery Service (CDS) is a standalone service responsible for storing and serving phrases using Transifex Native SDK calls, as well as API calls to the Transifex application. It works similarly to a CDN and serves all translations from a cache, so that the retrieval is fast.

Based on the above schema, Transifex CDS server is:

- Managing the addition and updates of phrases from your application that is using the Transifex SDK plugin to your Transifex project.
- Feeding your application’s Transifex SDK plugin with translations coming from your Transifex project.
- Making sure that your application has access to the latest available translations from Transifex project.

At Transifex we offer a cloud-based CDS instance that you can use instantly, but you can also install CDS on your own infrastructure to host and store translations at your servers. The Content Delivery Service (CDS), makes sure that your translations are decoupled from Transifex servers and can be used even if your application is not directly connected with Transifex.
How Transifex CDS works

The Content Delivery Service is accommodating two basic functions:

- Sending data from your application to a service for translations (e.g. from Transifex SDK to Transifex TMS application)
- Feeding your application with requested translations

Sending data from your application to Transifex

The Transifex SDK plugin is responsible for detecting and sending the phrases that need translation to the CDS server. At that point the CDS server is responsible for parsing the ICU syntax found in each phrase and changing the phrase to be able to exchange it with an external service as needed.

The phrases are assigned an identifier (ID) based on their source content and stored in a local CDS cache. Finally, the CDS server is sending the processed phrases to the external TMS service using API calls to that service, in this case, Transifex TMS.
Feeding translations to your application

The process of feeding translations back to your application starts with an automatic request from your application’s Transifex SDK. The CDS server processes the request and returns the requested translations back to your application, as a response in JSON format.

If the translations found in the CDS cache are older than a certain threshold (Time to live (TTL) is 90 minutes), after the server responds with the cached translations, it requests any updated translations from the external service, in this case Transifex TMS application.

You can force request latest translations by making an HTTP request to a specific endpoint on CDS. In that case, the CDS server will instantly request the latest translations from the external localization service.
Security

Authentication with Transifex SDK

The Transifex SDK authenticates with the CDS service through a public token. This token is bound to a specific project/resource pair on Transifex, and allows the serving of content (GET requests) for this particular pair.

Additionally it supports a private secret that can be used for pushing content such as source strings, or in general performing other operations that might cause alterations. All API endpoints are authenticated using a Bearer token, provided through an Authorization header.

Authentication with Transifex API

The CDS service authenticates with Transifex API using the same token and secret mention above, via an Authorization header. All requests to the Transifex API endpoints use the same authentication method. The token and secret are generated by Transifex and, in addition to a certain project and resource, they are also bound with a specific Transifex user (the one that created the Transifex Native project).

Performance

The CDS is currently on beta and we are thoroughly testing its performance. It is hosted on a data center in Ireland, so one of the steps we plan to take is to make it truly global by making it possible to serve its content via multiple data centers throughout the world. In addition to that, we plan to make it possible to host the CDS service on your own servers, in case you want to have full control over the infrastructure and data access.
About Transifex Native

Transifex Native is a collection of tools that allow for easy localization of your applications. Install the provided SDK, push or pull content for localization directly with Transifex, without the need for a file.

With this solution, Transifex serves a development environment where parallel development and multiple releases are the norm, perfectly matching the current development flow (Continuous Iteration/Continuous Development). Localization becomes a seamless part of the development cycle. Engineers have no delays or additional steps to manage localization. Transifex Native runs in parallel with minimal supervision.

Learn More
transifex.com/native