**Engineer** Data

# Moved every string into a content tree

Moved every user-facing string out of Python into a content tree of 874 files across three languages, after finding dead translations nobody could see were dead and a check silently grading a third of the achievements.

August 2026

**874**

content files, and the dead translations they exposed

**Situation.** Every user-facing string in the generator — every achievement, every review, every section heading, every summary, in three languages — lived inside Python source. That makes editing a sentence a code change, makes reviewing a translation a diff against source, and makes it impossible to tell at a glance whether a language is complete. It also hides the failure mode that matters: a translation can be present, wrong, and unreachable at the same time.

**Task.** The strings had to move out of code into a content tree that can be counted, compared across languages, and checked without running the renderer.

**Action.** The result is 874 files under a content directory, organised by kind and then by language: achievements, reviews, summaries, titles, companies, regions, categories, services, profiles, references and cover-letter fragments. Tab-separated files where the unit is a line with an identifier, individual files where the unit is a paragraph. The loader reads them at build time and the database is assembled from them, so the tree is the source and the database is derived. Two findings came directly out of being able to count. Some translated strings no longer had any English counterpart — dead entries that nothing rendered and nobody could have noticed while they were embedded in code, because an unreferenced dictionary key looks exactly like a referenced one. And a content check that was supposed to grade every achievement was reading only the subset it could resolve, grading thirty-seven of ninety-three and reporting success. Making the corpus a directory made both of these visible as a mismatch in file counts.

**Result.** The prose is now editable without touching code and comparable across languages by counting. The cost is that adding a language is now unambiguous rather than gradual — the tree makes an incomplete language obvious, which is the point, but it also means partial translations cannot be shipped quietly while they are being finished.

### Bring this experience to your project

Use “Moved every string into a content tree” as a starting point for a similar challenge in your organisation. The services behind this work are available for your project. Data taken out of something ageing and into something supported, with the business still running while it happens.

**Explore our services** Get in touch →

### Look behind the result

Read the situation, decisions and result in this example. We can discuss which parts transfer to your constraints and which need another approach. Moved every string into a content tree — 874 content files, and the dead translations they exposed

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## Are your translations quietly falling behind?

Talk through your project with the engineer responsible for delivery. We agree the scope, price basis and handover in writing before work begins.

Role context: Database Engineer. It draws on Backend Engineering, Data Governance, Migrations & Modernization, Python, Internationalization and Documentation. And while you are here, we are rather good at Backend & API Development, Internationalization & Localization, Database Migration & Modernization and Data Governance & Quality.

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## One piece of **a longer record** — and it is all on this site.

Every entry is written the same way: the situation, the task, what we did and what changed.

**See the whole record**

### Define the improvement you need

Bring a representative dataset, the questions it must answer and the current bottleneck. We can agree how to measure quality, throughput and recovery.

**See what it costs** Get in touch →

# Are your translations quietly falling behind?

Ask about the decisions behind “Moved every string into a content tree”. You will speak with the people who can explain the work and assess your own project.

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