

The babel-malagasy package*

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1 Introduction

babel-malagasy completes Malagasy (BCP 47 tag `mg`) support in the `babel` system. It does *not* reimplement a language definition file: current `babel` already provides a Malagasy locale (dates, month/weekday names, from the Unicode CLDR) reachable with `\babelprovide`, but ships that locale’s captions (“Chapter”, “Contents”, ...) empty. This package fills them in with reviewed Malagasy terms using `\setlocalecaption`, the officially documented mechanism for this exact situation (see the `babel` manual and “Using `\babelprovide` to modify or extend locales” at <https://latex3.github.io/babel/>).

Usage

```
\usepackage{babel} % or \usepackage[main=...]{babel}
\usepackage{babel-malagasy}
...
\selectlanguage{malagasy}
\foreignlanguage{malagasy}{...}
```

Status (v0.1.0), verified in this environment (pdfTeX, TeX Live 2023, babel v24.1):

- **IMPLEMENTED / TESTED:** loading the locale, `\today` (via CLDR month names), and all 21 standard captions.
- **EXPERIMENTAL / NOT VERIFIED:** hyphenation. No statistically generated patterns exist for Malagasy in `hyph-utf8` at the time of writing. A manual `\hyphenation` exception list is loaded, but a `\showhyphens` test during development did not clearly confirm it is honoured for the `malagasy` language slot in this `babel` version (some ini-only locales without compiled patterns may fall back to whatever patterns happen to be active). Treat hyphenation of Malagasy text with this package as unreliable until this is investigated further.
- **NOT VERIFIED:** behaviour together with other ini-only languages loaded via `provide=*` at the `babel` package-option level; this environment’s TeX Live install lacks several contributed language collections (e.g. `babel-french`’s

*This file has version number ?, last revised ?.

`french` option itself errors here as “Unknown option”), so a full three-language French/Malagasy/English test could not be completed. `\babelprovide[import]{malagasy}` together with `english` *was* verified to work.

2 Implementation

2.1 Identification

```
1 \*package\
2 \NeedsTeXFormat{LaTeX2e}[1994/06/01]
3 \ProvidesPackage{babel-malagasy}
4 [2026/08/29 v0.1.0 Completes Malagasy captions for babel]
```

2.2 Loading babel and the Malagasy locale

We require `babel` itself (a document may already have loaded it with other languages; `\RequirePackage` is a no-op in that case) and then import the Malagasy CLDR locale data that `babel` already ships. `import` is the standard `\babelprovide` key for reading an existing `.ini` locale rather than defining a new one from scratch.

```
5 \RequirePackage{babel}
6 \babelprovide[import]{malagasy}
```

2.3 Hyphenation minima

`\providehyphenmins` is a real, documented `babel` core command (defined in `babel.sty`); it is safe to call even though no Malagasy patterns are loaded. Its actual signature takes the language name and a single two-digit token (left and right hyphenation minima concatenated), not three separate braced arguments as some legacy `.ldf` files’ documentation might suggest – calling it as `{malagasy}{2}{2}` was tried first and produced a “Missing `\begin{document}`” error, because the stray third `{2}` was left sitting in the preamble; see `docs/linguistic-policy.md`.

```
7 \providehyphenmins{malagasy}{22}
```

2.4 Captions

Each call below is the officially documented `\setlocalecaption{<locale>}{<caption name>}{<value>}` command; using it is exactly what `babel` itself suggests when a caption is unset (a warning we saw ourselves while testing: “`\contents not set for 'malagasy'`”. Please, `\setlocalecaption{malagasy}{contents}{..}`). The caption names (`preface`, `ref`, `abstract`, ...) are `babel`’s own internal names, taken from its `ini` file schema, not invented here. Sources and confidence levels for each Malagasy string are in `data/captions.csv` and `docs/linguistic-policy.md`.

```
8 \setlocalecaption{malagasy}{preface}{Teny fanolorana}
9 \setlocalecaption{malagasy}{ref}{Bibliografia}
10 \setlocalecaption{malagasy}{abstract}{Famintinana}
11 \setlocalecaption{malagasy}{bib}{Bibliografia}
12 \setlocalecaption{malagasy}{chapter}{Toko}
13 \setlocalecaption{malagasy}{appendix}{Fanampiny}
14 \setlocalecaption{malagasy}{contents}{Fanoroan-takila}
```

```

15 \setlocalecaption{malagasy}{listfigure}{Lisitry ny sary}
16 \setlocalecaption{malagasy}{listtable}{Lisitry ny tabilao}
17 \setlocalecaption{malagasy}{index}{Fanondroana}
18 \setlocalecaption{malagasy}{figure}{Sary}
19 \setlocalecaption{malagasy}{table}{Tabilao}
20 \setlocalecaption{malagasy}{part}{Fizarana}
21 \setlocalecaption{malagasy}{encl}{Rakitra atovana}
22 \setlocalecaption{malagasy}{cc}{Kopia}
23 \setlocalecaption{malagasy}{headto}{Ho an'i}
24 \setlocalecaption{malagasy}{page}{Takila}
25 \setlocalecaption{malagasy}{see}{Jereo}
26 \setlocalecaption{malagasy}{also}{Jereo koa}
27 \setlocalecaption{malagasy}{proof}{Porofa}
28 \setlocalecaption{malagasy}{glossary}{Rakibolana}

```

2.5 Weekday names

babel’s Malagasy ini data already includes weekday names (`days.wide.mon`, etc., used internally for calendar-aware features), but there is no standard `babel user` command that prints “the weekday of today” the way `\today` prints the date – this is true of every `babel` locale, not specific to Malagasy. We therefore provide one small, clearly non-core convenience macro, taking an ISO weekday number (1 = Monday), using the same Malagasy weekday names already verified for `\today` support (tenymalagasy.gov.mg): Alatsinainy, Talata, Alarobia, Alakamisy, Zoma, Sabotsy, Alahady.

```

29 \newcommand*{\malagasyweekdayname}[1]{%
30   \ifcase#1\relax
31     \or Alatsinainy\or Talata\or Alarobia\or Alakamisy%
32     \or Zoma\or Sabotsy\or Alahady%
33   \fi
34 }

```

2.6 Hyphenation exceptions (experimental)

See the status note above: this is a manually reviewed exception list for the words used in the test corpus and example document, loaded while `malagasy` is the selected language so the exceptions land on the right `\language` exception table. It is *not* a substitute for real patterns and its effect was not conclusively confirmed by testing (see `testfiles/hyphenation.lvt`).

```

35 \AtBeginDocument{%
36   \bgroup
37   \ifx\selectlanguage\undefined\else\selectlanguage{malagasy}\fi
38   \hyphenation{
39     tra-no ra-no o-lo-na ta-ny se-ko-ly bo-ky sa-ry
40     fam-pia-na-ra-na fi-ka-ro-ha-na fa-na-bea-za-na
41     fam-pan-dro-so-a-na fi-fan-drai-sa-na
42     fa-na-tan-te-ra-ha-na
43     in-for-ma-ti-ka al-go-rit-ma ma-te-ma-ti-ka
44     sta-tis-ti-ka pro-gra-ma tek-no-lo-jia
45     mpia-na-tra mpam-pia-na-tra o-ni-ver-si-te
46   }%
47   \egroup

```

```
48 }  
49 </package>
```