



Translating documentation with cloud tools and scripts

**Using cloud tools and scripts to translate,
review and update documents**

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How it started

- ♦ “Nim for Python Programmers”
- ♦ <https://github.com/nim-lang/Nim/wiki/Nim-for-Python-Programmers>
- ♦ Original written in English translated into Spanish
- ♦ GitHub Wiki page, written in Markdown format
- ♦ Community driven, updates in English

How it normally goes

- You clone/ copy the wiki page into a new version in your native language
- You start to manually translate each line
- It is a manual process
- Once the original document is updated, you start to pick and move each update to the translated document
- Prone to errors
- Make updates difficult

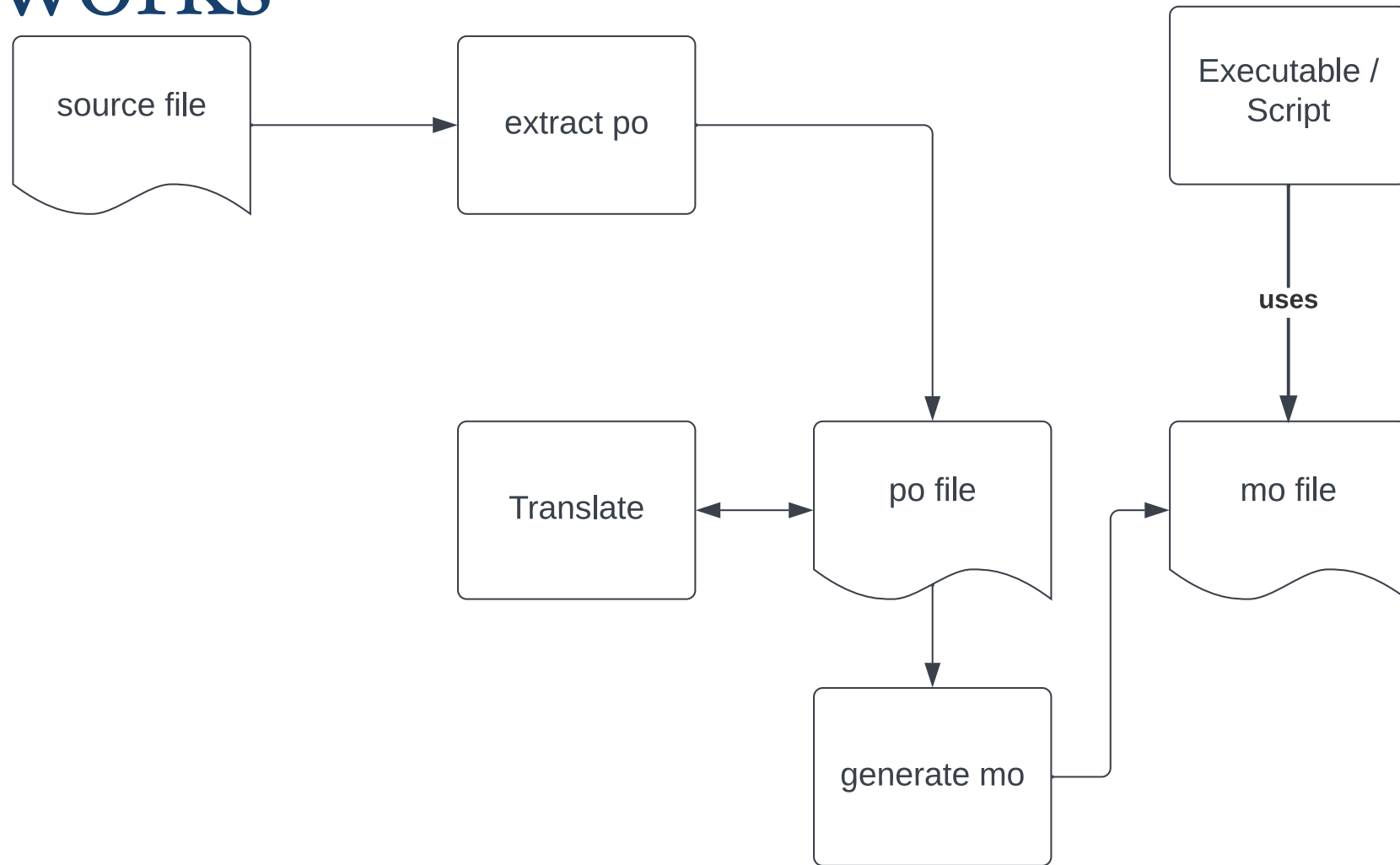
Looks like an old problem

- Same issues as translation of strings in programs
- GNU Gettext could be used to solve these issues
- It extracts strings from source files
- Create a portable object file (PO)
- Clear, simple, text format
- Rich eco system with multiple tools
- Adopted by multiple projects
- Human readable format

```
#: Nim-for-Python-Programmers.md:block 1 (header)
msgid "Table Of Contents"
msgstr "Índice"
```

```
#: Nim-for-Python-Programmers.md:block 2 (table)
msgid "[Comparison](#Comparison)"
msgstr "[Comparação](#Comparison)"
```

How it works



Markdown files

- ♦ The initial challenge was to support markdown files or to create po files from a markdown source
- ♦ After testing multiple packages, mdpo was chosen.
- ♦ <https://github.com/mondeja/mdpo>
- ♦ Written in Python
- ♦ Can translate markdown to po and vice-versa

po files

- It would be great to be able to open and manipulate these files in Python
- Polib does exactly this
- <https://github.com/izimobil/polib/>
- It can open, filter and update a po file
- Handy to check untranslated strings

The cloud

- We can now easily extract untranslated strings from the po file
- It is cheap to translate strings
- Boto3 with AWS Translate
- Not free, but most of the time it should fit on free tier usage

```
po = polib.pofile(FILE)
for entry in po.untranslated_entries():
    print(entry.msgid, entry.msgstr)
    response = client.translate_text(
        Text=entry.msgid,
        TerminologyNames=[],
        SourceLanguageCode=SOURCE_LANGUAGE,
        TargetLanguageCode=TARGET_LANGUAGE,
        Settings={
            'Formality': 'FORMAL',
            'Profanity': 'MASK'
        })
    entry.msgstr = response["TranslatedText"]
po.save()
```


poedit

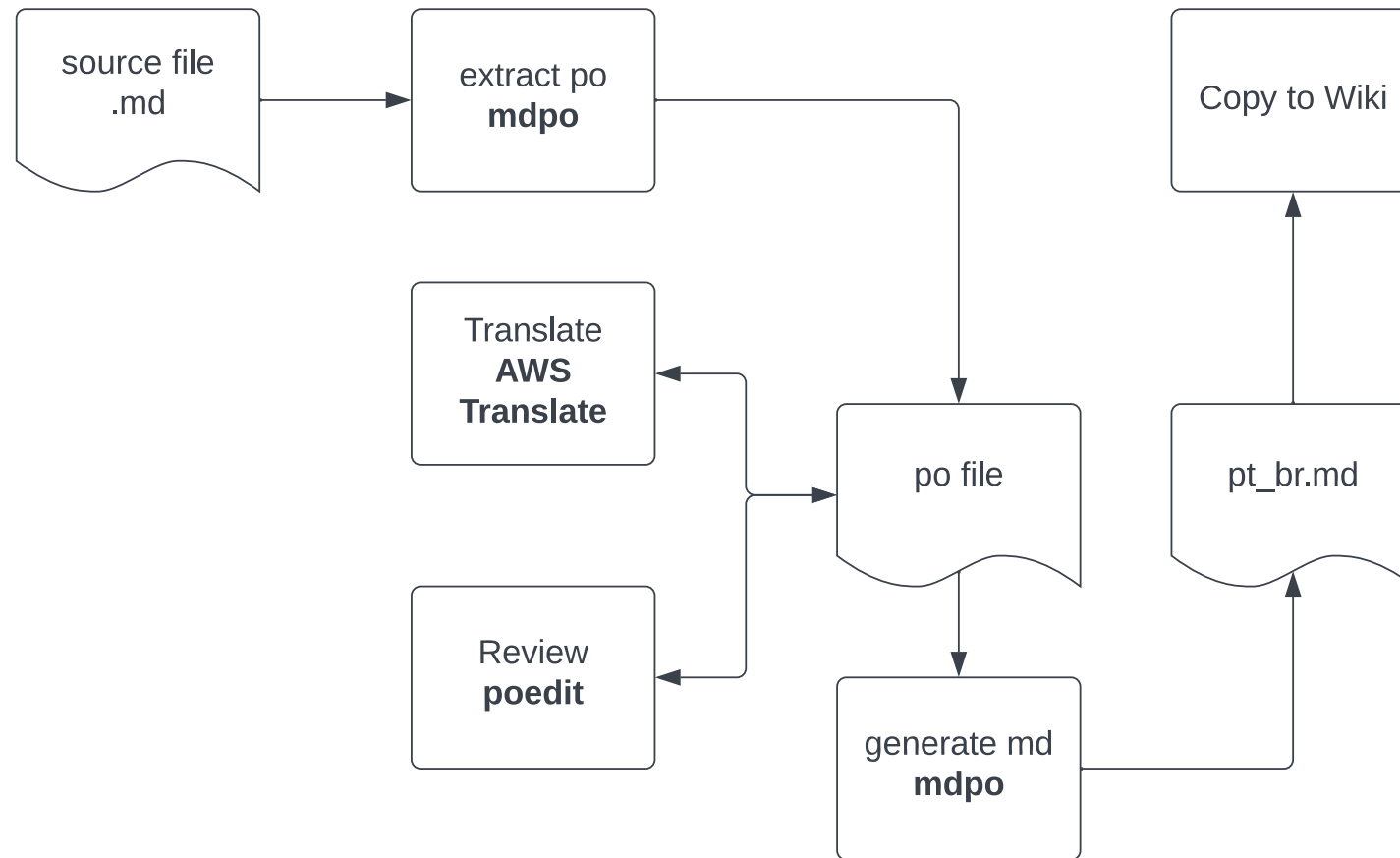
pt_BR.po - Poedit

File Edit View Translation Go Help

Open Save Validate Update from Code

Source text — English	Translation — Portuguese (Brazil)	ID	Suggestions
Table Of Contents	Índice	1	Notas: Ctrl+1 • 100%
[English Version](https://github.com/nim-lang/Nim/wiki/Nim-for-Python-Programm...)	[Versão em Inglês](https://github.com/nim-lang/Nim/wiki/Nim-for-Python-Program...)	2	
[Spanish Version](https://github.com/nim-lang/Nim/wiki/Nim-for-Python-Programm...)	[Versão em Espanhol](https://github.com/nim-lang/Nim/wiki/Nim-for-Python-Progr...)	3	
Comparison	Comparação	4	
Notes:	Notas:	5	
Python anonymous function (lambdas) are known to be slow compared to normal fu...	Sabe-se que as funções anônimas do Python (lambdas) são lentas em comparação co...	6	
Python Regex claims to be PCRE compatible, but in practice PCRE Regexes may not ...	O Python Regex afirma ser compatível com PCRE, mas na prática os PCRE Regexes p...	7	
Python "multi-line" anonymous functions may require using `;` and Linters/IDE may ...	As funções anônimas "de várias linhas" do Python podem exigir o uso de `;` e o Linte...	8	
Variables	Variáveis	9	
Creating a new variable uses `var` or `let` or `const`. Nim has immutability and comp...	A criação de uma nova variável usa `var` ou `let` ou `const`. Nim tem imutabilidade e...	10	
[For advanced users, it is possible to skip variable Auto-Initialization.](https://nim-la...	[Para usuários avançados, é possível ignorar a inicialização automática de variáveis.] (...)	11	
Variable Naming	Nomeação de variáveis	12	
Variables can be multi-line without "escaping" them or using parentheses. This is us...	As variáveis podem ter várias linhas sem "escapar" delas ou usar parênteses. Isso é ú...	13	

Putting it all together



Result

github.com/nim-lang/Nim/wiki/Nim-for-Python-Programmers-PT_BR#indice

25:00 - Time to foc... H | Hemingway Editor | Compiler Explorer | Aprende a program... | Mapa-plnrcft-SECR... | Home | Van Dale | AWS Skill Builder

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Nim for Python Programmers PT_BR

Nilo Menezes edited this page 31 minutes ago · 1 revision

Índice

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Comparação	Objetos	[Eu tenho que conhecer C?](#do -eu tenho que saber-c)	[Tuplas nomeadas](#named -tuple-1)
Variáveis	<code>self.__init__()</code>	Strings, F-Strings	Listas
[Nomeando de variáveis](#variable -naming)	[Espaçamento consistente](#consistent -spacing)	Escopo	[Argumentos mutáveis](#mutable -arguments)
Imports	Intervalos	[Operações com cadeias de caracteres](#string -ops)	List Comprehensions
<code>try/import/except</code>	[Verificações estática de limites](#static -bounds-check)	[Coalescência nula](#null -coalescência)	[with Gerenciador de Contextos](#with -context-manager)
Matrizes	Fatias	Tuplas	[Dict Comprehensions](#Dict -Compreensões)
[Set Comprehensions](#Set -Compreensões)	[Lendo e gravando arquivos](#Reading -and-writing-files)	Decoradores	Lambdas
Conjuntos	JSON	[Map e filter](#map -filter)	[Indentação opcional](#Optional -Indentação)
Dicionários	CamelCase	DocStrings	[Importar arquivos Nim em Python](#Import -Nim-files-on-Python)
[Operadores ternários](#Ternary -operadores)	Testes unitários	[def x proc/func](#def -vs-procfunc)	[Autoexecução do módulo principal](#Self -Execução do módulo principal)
[Sintaxe Python para Nim](#Python -Syntax-for-NIM)	[Publicar no PYPI](#Publish para PYPI)	[Compilação silenciosa](#Silent -Compilação)	[Ajuda do compilador](#Compiler -Help)

Intro

Getting Started

- Install
- Docs
- Curated Packages
- Editor Support
- Unofficial FAQ
- Nim for C programmers
- Nim for Python programmers
- Nim for TypeScript programmers
- Nim for D programmers
- Nim for Java programmers
- Nim for Haskell programmers

Developing

- Build
- Contribute
- Creating a release
- Compiler module reference
- Constants defined by the compiler
- Debugging the compiler
- Travis CI/Circle CI/Appveyor
- GitLab CI setup
- Standard library and the JavaScript backend

Misc

- Organizations using Nim
- Feature suggestions
- Common Criticisms
- Tips and Tricks
- Community Projects
- IRC guidelines
- Lesser known Nim features
- Aprende Nim em 5 Minutos (Spanish)

Translation Project

- https://github.com/lskbr/nim_for_python_programmers
- Beta page:
- https://github.com/nim-lang/Nim/wiki/Nim-for-Python-Programmers-PT_BR

Thank you

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