

## Open Source Software to realize Conversational AI - COTOBA Agent OSS

- COTOBA DESIGN released their core technology as OSS today, focused on industry use -

COTOBA DESIGN [<https://global.cotobadesign.com/>], Tokyo based Conversational AI Product Startup, releases their core technologies as Open Source Software (OSS), entitled “COTOBA Agent OSS.”

This allows you to:

- Embrace industrial conversational AI as a white box: It can utilize sensor information from IoT with external APIs.
- Utilize its secured and scaling-out capabilities: More than 5,000 tests are conducted for large-scale commercial use.
- Commercialize the OSS with MIT license: There is no limitation to copy, modify, merge, publish, distribute and sublicense.

“You can develop your own Siri™ or Alexa™ alternative from scratch with COTOBA Agent OSS for a wide-range of enterprise applications. Those are not chat bots, but voice user interfaces which share your feelings with intelligent real systems such as robots, autonomous vehicles, factory automation controllers, and digital signages.” said Mick Etoh, President and CEO of COTOBA DESIGN. “However, applying such an interactive interface to a full-fledged industrial application is not easy. The dialog engine, which is the core technology of conversational AI, often involves the following problems.”

1. Expandability to industrial applications: Until now, the fundamental functions provided by conversational AI have been input in natural languages such as voice and chat, and it is difficult to integrate with IoT and connect with external APIs, making it difficult to apply in industrial fields.
2. Usability of dialog operation data: The data is not retained by the user companies and cannot be used to improve or market their services.
3. Transparency of technical specifications: The inside is black boxed, so the user companies don't know what's going on, and it's hard to deal with when problems arise.

“To solve these problems, we have released the core technology of dialog agents as open source software, COTOBA Agent OSS. It is designed to be available in multiple languages and is available in Japanese and English at launch.” In addition, he said “by using COTOBA Agent OSS, you can freely implement and execute a dialog agent regardless of cloud or on-premise environments. It is also widely available for commercial use under the MIT license.”

The GitHub repository: <https://github.com/cotobadesign/cotoba-agent-oss>

10 commits   1 branch   0 packages   0 releases   3 contributors

Branch: master   New pull request   Create new file   Upload files   Find file   Clone or download

File	Commit Message	Time
dialogue-engine	modify url	yesterday
nlu	Fix README of nlu.	3 days ago
README.md	modified dialogue->dialog	17 minutes ago
README_ja.md	modify url	yesterday

README.md

## COTOPA Agent dialog engine

COTOPA Agent dialog engine is an AIML dialog description language processing engine written in Python3. Contains programs for building your own interactions using the Artificial Intelligence Markup Language (AIML). The COTOPA Agent dialog engine supports tags defined in the interactive language AIML2.0. In addition, we extend our own extensions, such as tags that handle json, tags that call the REST interface, and tags that use the results of advanced interpretation. The interactive description language can support multilingual input, and the program supports Japanese and English, and it is possible to support multiple languages by adding its own tokenize processing. Please refer to [document site](#) for the COTOPA Agent dialog engine, its functions and details.

## License

This software is released under the MIT License, see LICENSE.

## Contact

- [Web site](#)
- [issue](#) Raise an issue directly

The configuration of the released COTOPA Agent OSS is as follows:

- Dialog Control (Japanese and English): Sample AIML and an AIML interpreter with COTOPA Agent original enhancements for industrial applications.
- Intent Analysis (Japanese and English): Functions of learning and inference of intent interpretation by deep learning, and training data sample (Japanese), models trained with large data sets (Japanese)

COTOPA Agent OSS adapts a rule-based architecture to control dialog and generate responses, and introduces a-stage-of-the-art deep learning technologies to interpret diverse intents to absorb natural language fluctuations in practice that are difficult to achieve with a classical rule-based approach.

The rule base part extends AIML (Artificial Intelligence Markup Language), which is one of the de facto standards that have been in use since the late 1990s.

The COTOPA Agent OSS utilizes the results of the research theme "R & D and Demonstration of Advanced Dialog Agent Technology" commissioned by the Ministry of Internal Affairs and Communications, Japan.

Visit <https://www.cotoba.net/en/> for more information.

“We will end the digital divide, and never leave the weak behind,” CEO concluded.

COTOBA DESIGN aims to realize such a world, and by promoting community formation of conversational AI development through the spread of COTOBA Agent OSS and contributing to the formation of an ecosystem for dialog agent development, operation, and distribution, it will advance to the realization of the content of dialog agents and the distribution mechanism.

#### About COTOBA DESIGN

COTOBA DESIGN is a start-up company on Shibuya Tokyo, Japan which research and develop Conversational AI and related technologies. COTOBA DESIGN provides cloud-based API service to support to run and manage “dialog agents” for commercial service applications.

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