

# **IDA Understanding**

# Actionable insights from unstructured documents

IDA Understanding is designed to **automatically deliver actionable insights from unstructured documents**, such as generating summaries and performing questionanswering. Unlike a chat application, these insights are produced through mass processing and can be seamlessly integrated into subsequent processes and applications, such as enterprise content management.

# **KEY FEATURES**

#### Prompting in natural language

IDA Understanding automatically executes a list of prompts on input documents, writing answers in the documents' metadata. These prompts can be written in natural language and can include summaries or questions.

#### Automatic table of contents

IDA Understanding includes an **AI agent** for the automatic generation of tables of contents, aiding users in the structured organization of lengthy documents. In collaboration with a Large Language Model (LLM), the agent initially divides the document into manageable sections to create concise content summaries for each page. Subsequently, it compiles a table of contents for the entire document.

#### Easy deployment and integration

IDA is deployed either **on-premises** or in a **(private) cloud** as a Java application or containerization using Docker.

### SYSTEM REQUIREMENTS

The **IDA Server** is required to process input documents and provides a browser interface.

#### For 64-bit systems

Linux: Ubuntu 18.04 - 25.10, Debian 11, 12; CentOS 8, Red Hat 8.x, 9; LEAP 15.x, SLES 15 SP 4-6 Windows: 10, 11 Windows Server: 2016, 2019, 2022 Docker

At least 12 GB hard disk storage

At least 16 GB RAM

The gRPC API (alternatively REST API) facilitates swift integration.

#### Leveraging unmatched OCR quality

IDA Understanding is based on **IDA Recognition**, an optical (OCR) and intelligent (ICR) character recognition engine that delivers outstanding results even when dealing with the most difficult scenarios. IDA Recognition captures machine-printed and handwritten text, checkboxes, tables, and historical scripts, even in poor-quality scans with rotated or skewed print. Having high-quality input data is crucial for subsequent tasks as it directly affects output quality.

## How does it work?

IDA Understanding is **best suited for handling unstructured documents** that lack fixed layouts or data points, such as contracts or cover letters.

Like **LLM Entity Extraction**, IDA Understanding uses large language models. However, instead of extracting data based on keywords, it extracts or generates information based on prompts.

IDA Understanding is particularly useful when content isn't explicitly stated in documents, whereas LLM Entity Extraction focuses on finding entities and highlighting them in their original positions.

#### SYSTEM REQUIREMENTS

To utilize large language models (LLMs) on-premises, a dedicated server, referred to as the **LLM Server**, is necessary:

#### For 64-bit systems

- Docker (Ubuntu-based)
- At least 40 GB GPU memory (can be spread out across multiple GPUs)
- At least 6.5 GB hard disk storage
  + at least 20 GB for LLM
- At least 64 GB RAM

The required hard disk storage and the necessary RAM depend significantly on the models intended to run on the LLM Server. Note that a CPU-only mode is not possible.

The LLM Server can also connect to **OpenAl models**, which can make extensive hardware setups redundant.

| LLM Generative   |       | write | write_json_pai_file |  |                               |                   |  |
|--|-------|-------|---------------------|--|-------------------------------|-------------------|--|
| LLM Configuration  |       | {}    | CLASSI              | FICATION (0)   | ENTITIES ( 0 )                | UNDERSTANDING (1) |  |
|  |       |       | ✓ LLM Anträ         | ige  |                               |                   |  |
| Query List   |       |       | Label               | Result   |                               |                   |  |
| Query  |       |       | Summary             | The case involves the Secretary of Homeland Security's decision to revoke initial approval of<br>a visa petition that a U.S. citizen filed on behalf of her noncitizen spouse. The court held<br>that revocation of an approved visa petition under §155 based on a sham-mariage<br>determination by the Secretary is the kind of discretionary decision that falls within the<br>purview of §1252(a)(2)(B)(iii), which strips federal courts of jurisdiction to review certain<br>discretionary agency decisions. |                               |                   |  |
| e.g., 'grantor', This label is used in the paiFile alongside the processed llm query output. | ↑ ↓ - |       | Involved parties    | The parties involved in the case are:- Amina Bouarfa, a U.S. citizen, who is the petitioner<br>Alejandro Mayorkas, Secretary of Homeland Security, who is the respondent.  |                               |                   |  |
| Prompt   |       |       | Majority<br>opinion | Justice Jackson authored the majority opinion.   |                               |                   |  |
| e.g., 'summarize the content of the provided document'                                       |       |       | Final decision      | Affirmed   |                               |                   |  |
|  | -     |       | Date                | The decision was put   | blished on December 10, 2024. |                   |  |
|  |       |       |                     |  |                               |                   |  |

Input: List of prompts for court opinions

Output: Metadata in IDA Web Client

For more information, please refer to the software documentation.