

# DECOS ENTERPRISE SEARCH

**Abstract**

The Why and How of Enterprise Search

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DEFINING TOMORROW

## Executive Summary

In the current fast paced world, getting to the right information quickly is becoming ever more critical to decision making, and with the exponential growth in data collected and stored, this has become more and more challenging.

Data around us is present in various forms and formats and comes to us through heterogeneous sources. Searching this data quickly and accurately to get to the required information may turn out to be a big challenge, especially if the data is unorganised or is distributed.

Collating these different sources and making them searchable becomes the premise of a Search Application. An effective enterprise search application should be able to provide relevant search results from the desired sources through a simple and intuitive UI.

In the context of an organisation where data is spread across various storage locations and distributed sources, such an Enterprise Search application brings great value.

This case study in the next few pages looks at how our Enterprise Search solution gives information from distributed data sources in the hands of information workers, while working within the boundaries of the organization's security.

## Background

According to a [Forbes](#) report, Data is growing faster than ever before and by the year 2020, about 1.7 megabytes of new information will be created every second for every human being on the planet.

In present day organisations, one of the key critical success factors is “data”. Organisations today generate, receive and store GB's of data every day, which is stored in various forms across the enterprise such as emails, files, databases, cloud, etc. Getting to an information to take informed decision; decision makers need to get to this information fast. However, this may not be possible, as this data is mostly stored in a distributed way, and even if it is centrally organised the sheer volume of it can itself pose a challenge in finding the right information.

## What is Enterprise Search?

Simply put, it is an application through which users can search for information from various collated sources that are distributed across the enterprise basis their authentication and authorization, these data sources are organised or indexed in such a way that accessing information is faster. These indexes are constantly updated to keep the search results accurate, this process of constantly updating the index is called “Crawling”. Crawler(s) constantly crawl the data source(s) to check for new data or modified data. Once a crawler gets updated information about a given data it passes this information to the Indexer, which updates the relevant indexes with the new information. When a user searches for an information, the search component looks for matches in the index and serves them to the user as search results.

Some of the traits that a good Enterprise Search solution must have are as below,

**Scalable:** The solution must be scalable and should have the ability to add multiple data sources on demand.

**Data Source Plugins:** The application should be able to adapt to the needs of the organisation; enough plugins and connectors should be available to search heterogenous data sources.

**Security:** Using the enterprise Active Directory or LDAP and existing information access policies the solution should work within the boundaries of the information security structure defined by the organisation.

**Intuitive UI:** There should be a simple and intuitive UI for searching and filtering search results.

**Reliability:** With frequent changes to the actual data, the application should be reliable enough to keep track of these data changes and keep the index updated.

**Adaptability:** It should also have the ability to adapt to the users search behavior over time.

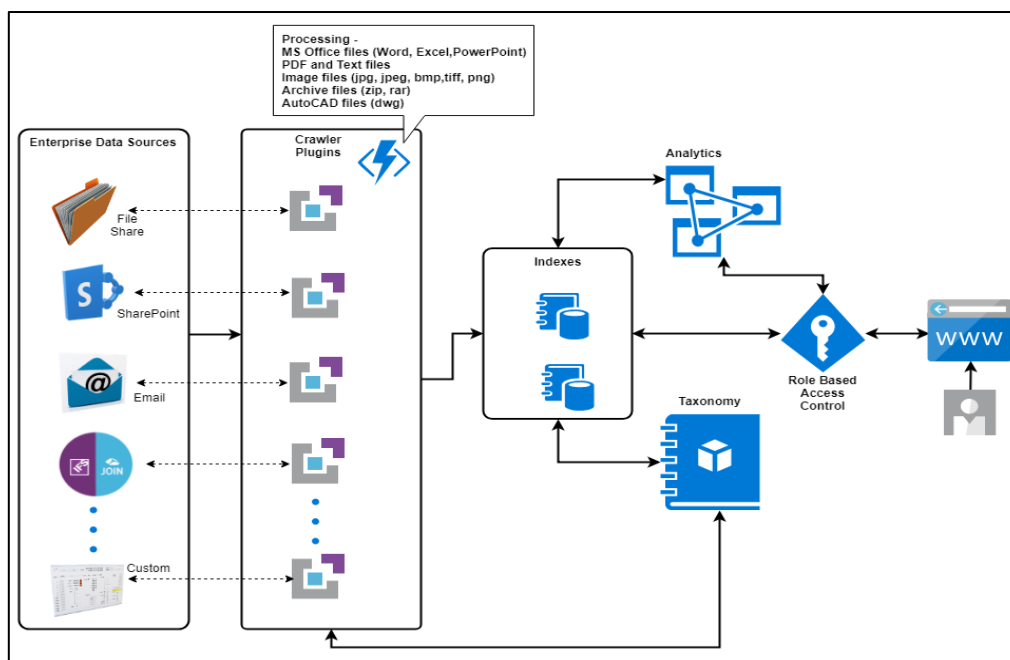
**Analytics:** Provide analysis of top queries, user behavior, document classification (Taxonomy<sup>#</sup>).

*<sup>#</sup>Taxonomy for search engines refers to classification methods that improve relevance in search. Taxonomies of entities are tree structures whose nodes are labelled with entities likely to occur in a web search query. Searches use these trees to match keywords from a search query to keywords from answers.*

## Our Solution

Our enterprise search solution is capable of crawling and indexing multiple enterprise type sources (such as File Servers and SharePoint) with plugins and assimilate information for searchability and quick access. Built upon industry leading Optical Character Recognition (OCR) and search libraries, our solution crawls and indexes information from different data sources, types, and formats. It allows users to refine their search using advanced filters and taxonomy. Has the ability to use organisation's security settings permissions to access information and provide analytics on search.

### Architecture Overview



### Salient Features

- Content (Taxonomy) & Authentication Based Search
- Ability to customize Document Classifications
- Advanced Search Options (with / without keywords)
- Filter Options (Date Modified Range, Author etc.)
- Optimizing search results based on user search behaviour
- Fail-safe Crawling and Indexing
- On Premise solution (keeping information safe within the organisation)
- Multi-Geo location indexing available (via NTLS / WAN)
- Folder / Directory Exclusion
- Document Tagging (Useful / Not Useful)
- File Download (based on authorization)
- Analytics
- Responsive User Interface (Mobile friendly)

- Supported File Types
  - MS Office files (Word, Excel, PowerPoint)
  - PDF and Text files
  - Image files (jpg, jpeg, bmp, tiff, png)
  - Archive files (zip, rar)
  - AutoCAD files (dwg)

### List of Connectors

- Available
  - File Storage
  - SharePoint (On Premise & SharePoint Online)
- Planned
  - Database
  - Email
  - Custom Applications

## Conclusion

Our solution offers a great combination of functionality and performance. It caters to organisations who need the ability to search their distributed data stores independently or integrate the search capability with their existing applications. Continuous customer feedback allows us to refine our solution to better suite their needs, we provide the flexibility to customize our solution to specific requirements that our customers come up with.

As organisations today compete to deliver more and more, taking data-driven decisions is becoming a key success factor for them. Our solution helps turn the data present with them into information they can use and ultimately bringing in enough benefits to justify the cost of procurement of the solution.

For further information, or a formal discussion of your plans to use Decos Enterprise Search Solution, contact us at [info@decos.in](mailto:info@decos.in).

## About Us

We are leading technology solutions and services organization specializing in digitalizing the world by bringing information close to people. We extract knowledge from structured and unstructured content and present it to you through our search solution.

Visit us at [www.decosindia.com](http://www.decosindia.com) or email us at [info@decos.in](mailto:info@decos.in).