What is the difference between a 'skillset' and an 'index' in Azure AI Search?

In Azure AI Search, the difference between a **skillset** and an **index** is as follows:

Skillset

- A **skillset** is a reusable object attached to an **indexer** that defines one or more **AI enrichment steps** or skills applied to content retrieved from external data sources before indexing.
- Skills can include built-in AI functions like OCR, language detection, entity recognition, key phrase extraction, or custom AI processing.
- Skillsets enrich and transform the raw documents into enhanced, structured content in memory, which is then mapped to fields in an index.
- They enable AI-powered content extraction and transformation during the indexing pipeline.
- Skillsets control the data flow through AI processing steps, improving the quality and searchability of the indexed data.
- Configurations in skillsets define how enriched data is output and routed into the index.
- In short, skillsets **process and enrich raw content** during ingestion.

Index

- An **index** is the searchable repository or destination where the processed and enriched content (including raw and transformed fields) is stored and made queryable.
- It contains a schema defining fields, types, and attributes that describe how documents are stored, searched, filtered, and retrieved.
- An index maps closely to the structure of the searchable content and supports search queries including keyword, semantic, or vector search.
- The index holds the final representation of data prepared for efficient searching and retrieval.

Summary

Concept	Purpose	Function
Skillset	AI enrichment pipeline	Processes and enriches raw content through AI skills before indexing.

Concept	Purpose	Function
Index	Searchable content repository	Stores enriched and raw data as search documents, enabling querying.

Thus, the skillset transforms and prepares data, while the index stores and makes that data searchable. [1] [2] [3]

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1. https://learn.microsoft.com/en-us/azure/search/cognitive-search-working-with-skillsets

2. https://learn.microsoft.com/en-us/azure/search/search-indexer-overview

3. https://learn.microsoft.com/en-us/azure/search/search-what-is-an-index

4. https://docs.azure.cn/en-us/search/cognitive-search-tutorial-blob

5. https://bradmcnaughton.com/custom-skill-for-azure-ai-search

6. https://docs.azure.cn/en-us/search/index-projections-concept-intro

7. https://learn.microsoft.com/en-us/answers/questions/1640532/difference-between-azure-ai-studio-preview-indexes

8. https://learn.microsoft.com/en-us/azure/search/cognitive-search-defining-skillset

9. https://www.youtube.com/watch?v=LDW9691PE_U