It's 2018. Why aren't you using Azure Search?

Bryan Soltis
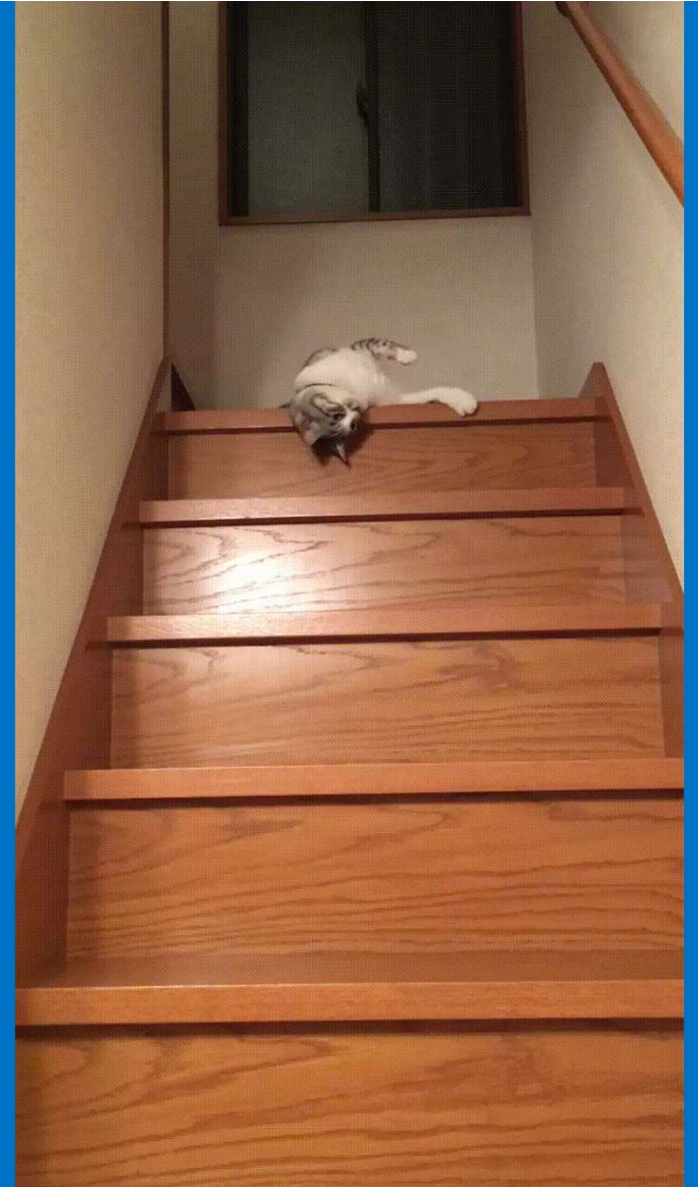Kentico Technical Evangelist
Microsoft Azure MVP

Does you current search not fit your needs?

Are users not able to find what they want?

Why hosted search?

- Search can be complex

- Requires constant rebuilding / tuning

- Needs to be industry / site / context specific

- Difficult to predict load

- If it doesn't work, you'll know really fast

- It's a lot harder than it should be

Creating Indexes

- Data hosted in Azure

- Push / Pull Model
  - Push - SDK / REST APIs
  - Pull - Indexers (SQL Database / VM SQL / Document DB)

- Can have up to 1000 fields in each index

- Field Properties
  - Key, Searchable, Sortable, Filterable, Retrievable, Suggestions, Analyzer, Synonym Mapping

- Partitions
  - Provides index storage and I/O for read/write operations (Scale Up)

- Replicas
  - Instance of the search service / copies of the indexes (Scale Out)

Searching data

- Full-text queries
  - Prefix matching

- Syntax
  - Simple query syntax for full-text

- Search=* (all fields) / Specific columns

- Data Types
  - Edm.String
  - Colleciton(Edm.String)
  - Edm.Boolean
  - Edm.Int32
  - Edm.Int64
  - Edm.Double
  - Edm.DateTimeOffset
  - Edm.GeographyPoint

Past the TOC

- Facets
  - Schema-driven
  - Define columns to categorize
    - Facet=Rating,value:1|2|3|4
- Filters
  - Used with facets
  - Operators
- Scoring Profiles
  - Weighting
  - Distance
- Highlighting
- Synonym mapping
- Suggestions vs Autocomplete
- Cognitive Search

Analyzing Your Data

- Power BI Content Pack
  - Free!
  - Contains major data points

- Search Reports
  - Most Common Search Queries
  - Searches Over Time
  - Number of Searches

- Indexing Reports
  - Indexing Requests
  - Documents Indexed
  - 503s Report

- Service Reports
  - Results Over Time

Some real stuff

Pricing

F Free	B Basic	S Standard	S2 Standard	S3 Standard	S3 High-density
3 Indexes	**15** Indexes	**50** Indexes	**200** Indexes	**200** Indexes	**1000** Indexes/Partition*
50 MB Storage	2 GB Storage	25 GB/Partition* Storage	100 GB/Partition* Storage	200 GB/Partition* Storage	200 GB/Partition* Storage
Shared Resources	Dedicated Resources	Dedicated Resources	Dedicated Resources	Dedicated Resources	Dedicated Resources
None Scaling	Up to 3 search units Scaling	Up to 36 search units Scaling	Up to 36 search units Scaling	Up to 36 search units Scaling	Up to 36 search units Scaling
	Up to 3 replicas Load Balancing	Up to 12 replicas Load Balancing	Up to 12 replicas Load Balancing	Up to 12 replicas Load Balancing	Up to 12 replicas Load Balancing
		Up to 12 partitions Partitions	Up to 12 partitions Partitions	Up to 12 partitions Partitions	Up to 3 partitions Partitions
					✓ High-density enabled Built for SAAS developers

Azure Search Service Limits
https://docs.microsoft.com/en-us/azure/search/search-limits-quotas-capacity

Learn more

- Azure Search
  https://azure.microsoft.com/en-us/services/search/

- Azure Search Documentation
  https://docs.microsoft.com/en-us/azure/search/

- Integrating Azure Search with Kentico
  https://devnet.kentico.com/articles/integrating-azure-search-with-kentico

- Azure Search Roadmap
  https://azure.microsoft.com/en-us/roadmap/?query=azure+search/

- Azure Search Performance and Optimization Considerations
  https://docs.microsoft.com/en-us/azure/search/search-performance-optimization

- Lucene query syntax in Azure Search
  https://docs.microsoft.com/en-us/rest/api/searchservice/lucene-query-syntax-in-azure-search

Want to know Kentico Cloud?

- Cloud-based content

- Flexible Plans

- Any technology / any platform

- Microservice-powered

- Azure-hosted

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Start Using Azure Search!

- Scalable
- Flexible
- Powerful
- Make you apps faster
- Simplify your development
- 100% Azure
- Microservices = the future