Azure Search: Single and Ready to Mingle

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Agenda

- Overview

- Indexes

- Searching

- Advanced Features

- Analyzing Data

- Pricing

- Learn more

eHarmony   Home   My Matches   Wh

Azure Search from Seattle, WA

Send a Smile

Questions

Azure answered these questions:

Your first kiss was:

Why Azure Search?

- Search can be complex

- Requires constant rebuilding

- Requires constant tuning

- Needs to be industry / site / context specific

- Difficult to predict load

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

Azure Search

- SaaS Platform

- Released in 2014

- HTTPS / API-only service
  - API Keys

- Cloud hosted indexes

- Low administration
  - All systems maintained by Microsoft

- Plans
  - Free/ Basic / Standard S1,S2,S3

- Availability
  - 14 Regions / Data Centers

- Scalable
  - Multiple tiers
  - Configurable via Preview portal

- Analytics

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

Searching

- Single index only

- Full-text queries
  - Prefix matching

- Syntax
  - OData syntax for Boolean
  - Simple query syntax for full-text

- Search=* (all fields) / Specific columns

- Scoring
  - Scoring Profiles
  - Field weighting
  - Custom functions

- Azure Search SDK / REST API

Advanced Features

- Highlighting
  - highlight=[field name]

- Facets
  - Schema-driven
  - Define columns to categorize
    - Facet=Rating,value:1|2|3|4

- Filters
  - Used with facets
  - Operators

- Suggestions
  - Auto-complete
  - Fuzzy / Infix

- Analyzers
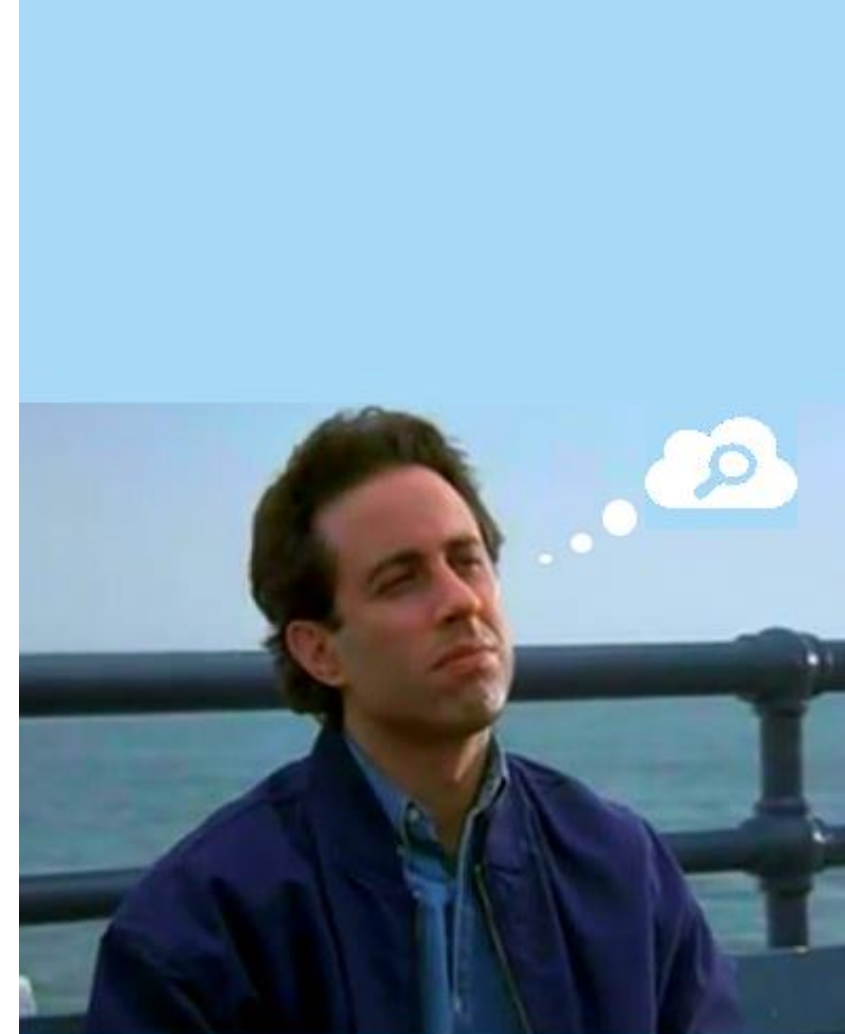
- CORS
  - None / All / Custom

Other Awesome Things

- Geo-Location

- Media Files
  - Transcripts

- Azure-hosted Data
  - Azure Database
  - Azure Tables

- GitHub Samples

- Custom Analyzers
  - Phonetic
  - Search / Index Specific
  - Prefixes

- Scoring Profiles
  - Tag boosting

- Synonym Maps

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

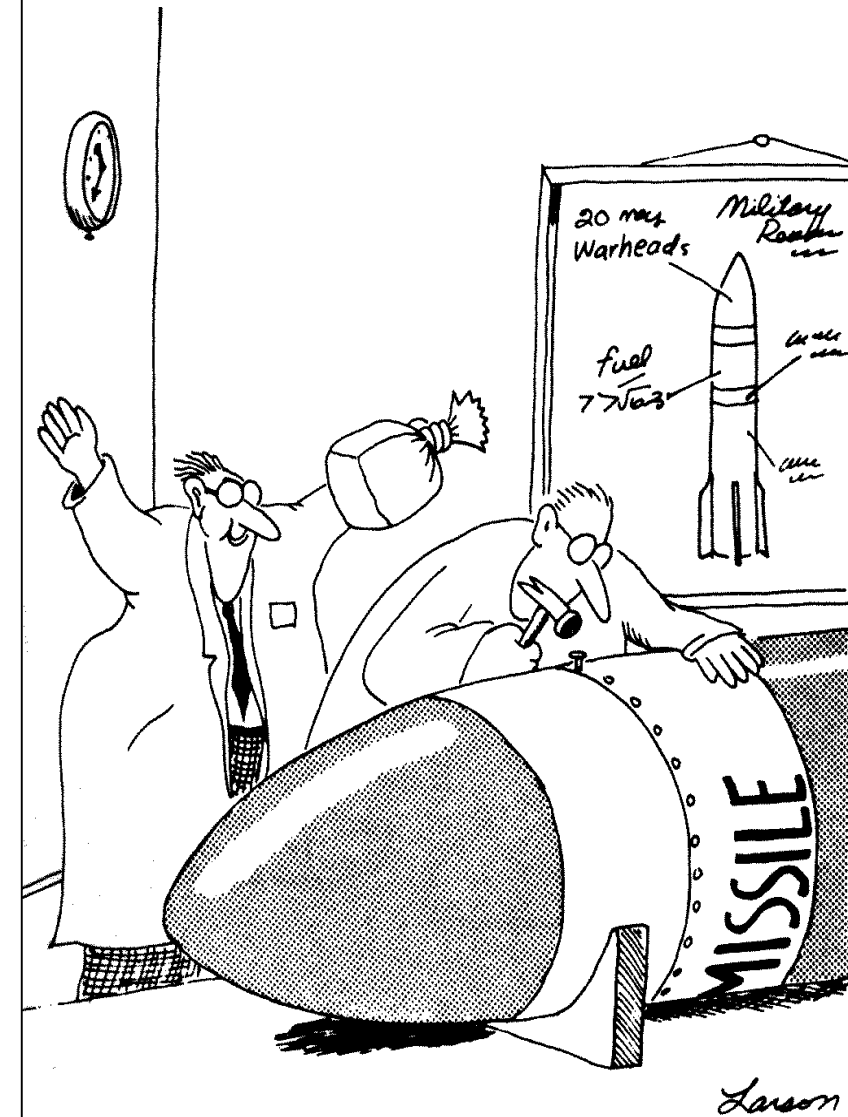|	FREE	BASIC	STANDARD S1	STANDARD S2	STANDARD S3
Storage	50 MB	2 GB per service	25 GB/partition (max 300 GB documents per service)	100 GB/partition (max 1.2 TB documents per service)	200 GB/partition (max 2.4 TB documents per service)
Max Indexes per Service	3	5	50	200	200 or 1000 / partition in High Density[3] mode
Documents Hosted [2]	10,000 Documents	1 million	15 million/partition (Up to 180 million documents per service)	60 million/partition (Up to 720 million documents per service)	120 million/partition (Up to 1.4 billion documents per service) or 1m / index in High Density[3] mode
Scale Out Limits	N/A	Up to 3 units per service (Max 1 partition; max 3 replicas)	Up to 36 units per service (Max 12 partitions; max 12 replicas)	Up to 36 units per service (Max 12 partitions; max 12 replicas)	Up to 36 units per service (Max 12 partitions; max 12 replicas) Up to 12 Replicas in High Density[3] mode
Data Transfer	Standard Rates Apply	Standard Rates Apply	Standard Rates Apply	Standard Rates Apply	Standard Rates Apply
Price per Unit	Free	$0.101/hr	$0.336/hr	$1.344/hr	$2.688/hr

	FREE	BASIC	STANDARD S1	STANDARD S2	STANDARD S3
Storage	50 MB	2 GB per service	25 GB/partition (max 300 GB documents per service)	100 GB/partition (max 1.2 TB documents per service)	200 GB/partition (max 2.4 TB documents per service)
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Data Transfer	Standard Rates Apply	Standard Rates Apply	Standard Rates Apply	Standard Rates Apply	Standard Rates Apply
Price per Unit	**Free**	**~$75.15/mo**	**~$249.99/mo**	**~$999.94/mo**	**~$1,999.88/mo**

Learn More

- **What is Azure Search?**
  https://azure.microsoft.com/en-us/documentation/articles/search-what-is-azure-search/

- **Azure search – Helpful resources**
  http://devslice.net/2015/01/azure-search-helpful-resources/

- **Service limits in Azure Search**
  https://azure.microsoft.com/en-us/documentation/articles/search-limits-quotas-capacity/

- **Azure Search Service REST API**
  https://msdn.microsoft.com/en-us/library/azure/Dn798927.aspx

- **Channel 9 Azure Search Videos**
  https://channel9.msdn.com/Search?term=Azure_Search

- **Microsoft Virtual Academy**
  https://www.microsoftvirtualacademy.com/search/SearchResults.aspx?q=Azure_Search

- **PostMan**
  https://www.getpostman.com/

- **Azure Search Power BI**
  http://blogs.msdn.com/b/powerbi/archive/2016/01/19/visualizing-azure-search-data-with-power-bi.aspx

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