



# Elastic App Search

## Getting started with the new self-managed version

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Nick Chow | Senior Product Manager

Diane Tetrault | Director Product Marketing

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**Nick Chow**  
Senior Product Manager  
Elastic



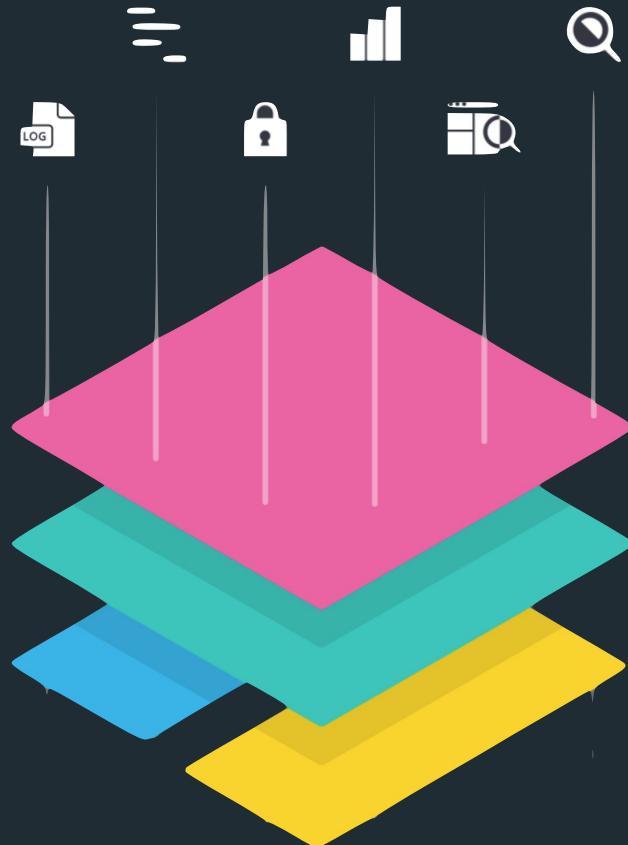
**Diane Tetrault**  
Director Product Marketing  
Elastic

# Housekeeping & Logistics

- Chat with us in the zoom chat
- **Recording** will be available after the webinar

**Search Solutions** powered by  
Swiftype are a vertical slice  
through the Elastic Stack

Adding value by abstracting  
away optimizations for  
case-specific work





## Elastic Site Search

Create and manage a tailored search experience for your website with world-class relevance, intuitive customization, and rich analytics.

Introducing Swiftype Conversion

Swiftype can track how search queries lead to any action you want — like reading an article or anything else you might imagine.

Get Started Hide This

Customize your search



## Elastic Enterprise Search

Instantly search across all the tools you use at work, including Dropbox, Salesforce, G Suite, Office 365, Zendesk, and more.

Recently Updated by You

KM World Notes

GOOGLE DOC Last updated 5 min ago

Current Active Accounts

GOOGLE DOC Last updated 10 min ago

Sprint Planning

31 items

Quin Hoxie, Brian Stevenson and 6 more

View on Google Calendar

Single letter search analytics

Submitted by Capsule Support

Hello! I've been going through our analytics and I was wondering about these single letter searches that result in no click-through:

Imgix - Proposals

4/11/17 at 3:00pm

31 items

HELPSCOUT ACTIVE Last updated 16 hours ago



## Elastic App Search

A powerful set of APIs and developer tools designed for developers building rich, user-facing search applications.

Analytics

Total Queries 2,021

Total Queries with No Results 251

Analytics

2,021

251

app-prod-35

Overview

Analytics

Query Tester

Documents

Schema

API Logs

SEARCH SETTINGS

Synonyms

Result Pinning

Weights & Boosts

ACCESS

API Keys



# Elastic App Search

Built on Elasticsearch and the Elastic Stack

**A powerful set of APIs and developer tools designed for developers building rich, user-facing search applications**

## Out-of-the box features include:

Optimized relevance for search use cases

Typo-tolerance

Relevance tuning

First-party API Clients and robust APIs

Detailed API Logs & Analytics

Automatic Scaling & Operational Support

The image shows a split-screen view. On the left is the Elastic App Search UI, and on the right is a car rental application interface.

**Elastic App Search UI (Left):**

- Left sidebar: Overview, Analytics, Query Tester, Documents, Schema, API Logs, SEARCH SETTINGS, Curations, Relevance Tuning, ACCESS, Credentials.
- Curations page: Curated Results for "sedan".
- Curations table: ID, make, model, year, tags. One row is highlighted: 66867a, BMW, 335i, 2017, child safe, power steering.
- Organic search table: ID, Score, year, make, model. Several rows are listed.

**Car Rental Application (Right):**

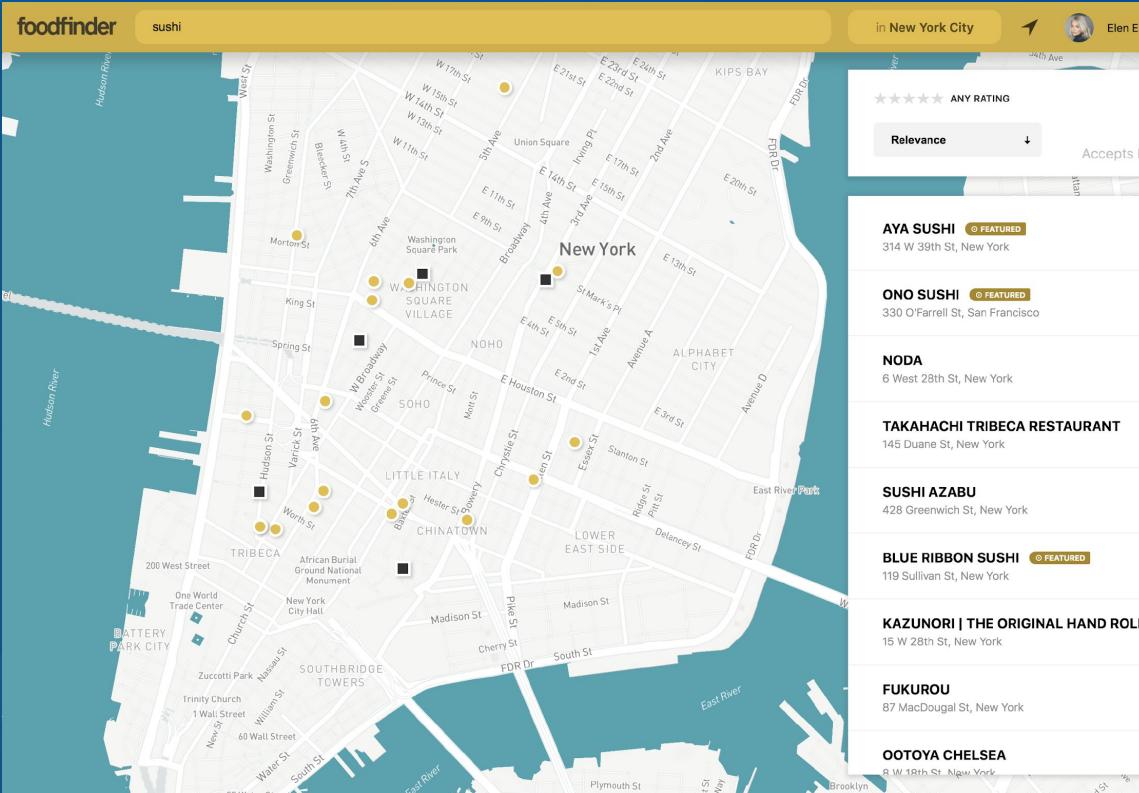
- Search bar: sedan.
- Results table:
 

Car Model	Price	Mileage	Dealer Rating	Distance
BMW 335i	\$126.05 Per day	Unlimited	5 stars	1.2 mi
Toyota Camry	\$126.05 Per day	625 Free Miles	4 stars	.8 mi
Nissan Altima	\$126.05 Per day	Unlimited	4 stars	1.4 mi
Lexus IS350	\$126.05 Per day	Unlimited	4 stars	2.1 mi



# Use Cases

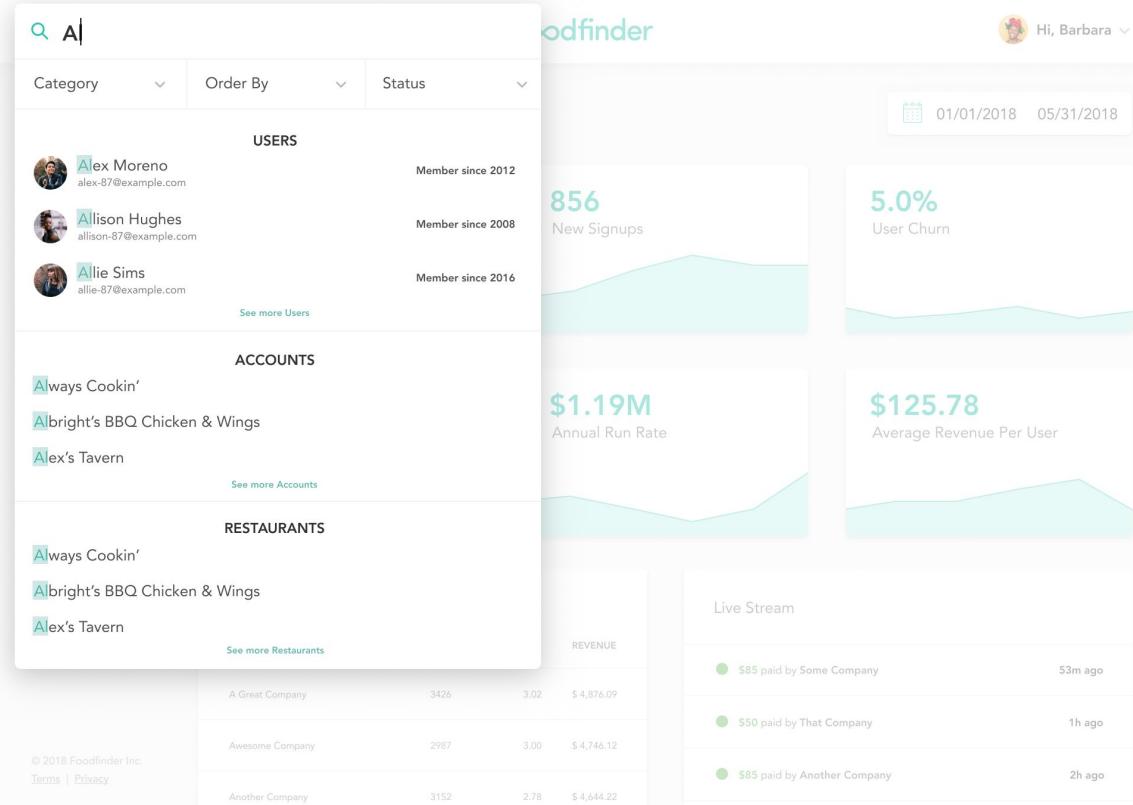
- **Geo Search**
- Internal Search
- SaaS / Web Apps
- Ecommerce





# Use Cases

- Geo Search
- **Internal Search**
- SaaS / Web Apps
- Ecommerce



The screenshot displays the Foodfinder application interface, which integrates search, user management, account details, and real-time data visualization.

**Search:** A search bar at the top contains the letter 'A'.

**Users:** A list of users with their names, email addresses, and member since dates.

**Accounts:** A list of accounts with names: 'Always Cookin'', 'Albright's BBQ Chicken & Wings', and 'Alex's Tavern'.

**Restaurants:** A list of restaurants with names: 'Always Cookin'', 'Albright's BBQ Chicken & Wings', and 'Alex's Tavern'.

**Metrics:** Real-time metrics on the right side include '856 New Signups', '5.0% User Churn', '\$1.19M Annual Run Rate', and '\$125.78 Average Revenue Per User'.

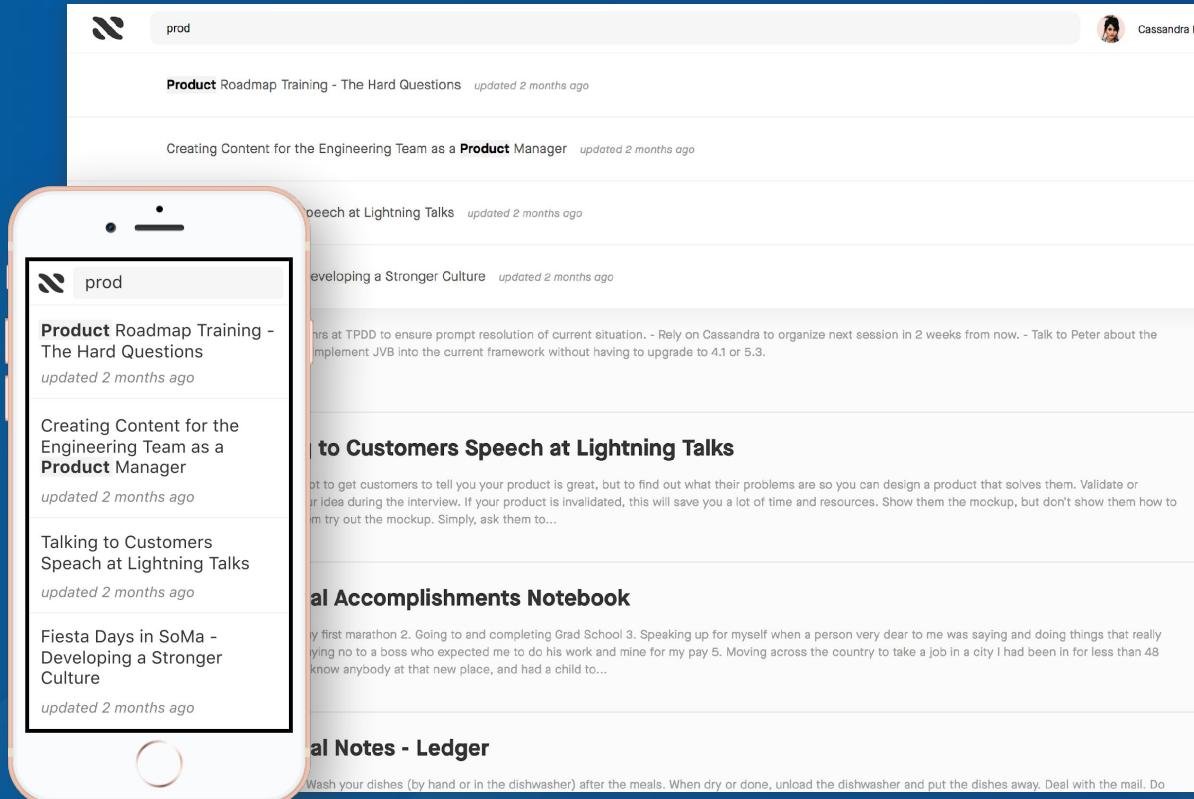
**Live Stream:** A section showing recent payments: '\$85 paid by Some Company' (53m ago), '\$50 paid by That Company' (1h ago), and '\$85 paid by Another Company' (2h ago).

**REVENUE:** A table showing revenue data for companies: A Great Company (3426, 3.02, \$4,876.09), Awesome Company (2987, 3.00, \$4,746.12), and Another Company (3152, 2.78, \$4,644.22).

**Footer:** © 2018 Foodfinder Inc. [Terms](#) | [Privacy](#)

# Use Cases

- Geo Search
- Internal Search
- **SaaS / Web Apps**
- Ecommerce



The image displays a composite view of a mobile application and a web application interface, both showing a list of notes.

**Mobile Application (iPhone):**

- Product** Roadmap Training - The Hard Questions updated 2 months ago
- Creating Content for the Engineering Team as a **Product Manager** updated 2 months ago
- Talking to Customers Speach at Lightning Talks updated 2 months ago
- Fiesta Days in SoMa - Developing a Stronger Culture updated 2 months ago

**Web Application (Laptop):**

- Product** Roadmap Training - The Hard Questions updated 2 months ago
- Creating Content for the Engineering Team as a **Product Manager** updated 2 months ago
- Talking to Customers Speach at Lightning Talks updated 2 months ago
- Developing a Stronger Culture updated 2 months ago
- Hours at TPDD to ensure prompt resolution of current situation. - Rely on Cassandra to organize next session in 2 weeks from now. - Talk to Peter about the implementation of JVB into the current framework without having to upgrade to 4.1 or 5.3.

**Notes:**

- Talking to Customers Speach at Lightning Talks**

It's great to get customers to tell you your product is great, but to find out what their problems are so you can design a product that solves them. Validate or validate your idea during the interview. If your product is invalidated, this will save you a lot of time and resources. Show them the mockup, but don't show them how to implement it. Simply, ask them to...
- Personal Accomplishments Notebook**

My first marathon 2. Going to and completing Grad School 3. Speaking up for myself when a person very dear to me was saying and doing things that really annoyed me. Saying no to a boss who expected me to do his work and mine for my pay 5. Moving across the country to take a job in a city I had been in for less than 48 hours at that new place, and had a child to...
- Personal Notes - Ledger**

Wash your dishes (by hand or in the dishwasher) after the meals. When dry or done, unload the dishwasher and put the dishes away. Deal with the mail. Do...

# Use Cases

- Geo Search
- Internal Search
- SaaS / Web Apps
- **Ecommerce**

Gallivant WOMEN MEN SALE HOME

short sleeve

Sort by relevance

Showing 1 - 20 out of 160 for: short sleeve

**FILTER RESULTS** Reset

**DEPARTMENT**

Men 160

**CATEGORY**

Category	Count
Shirts	83
Shorts	29
Sweatshirts And Sweatpants	15
Bags	11
Sweaters	9

+ SHOW MORE

**ON SALE**

**PRICE** \$0 - \$999

**COLORS**

Color	Count
Navy	18
White	18
Black	10
British Khaki	8
Stone	8

+ SHOW 95 MORE

**SIZE**

Size	Count
Large	98
Medium	98
X Large	98
Xx Large	89
Small	77

+ SHOW 85 MORE

**RATING**

Rating	Count
★☆☆☆☆ and up	160
★☆☆☆ and up	160

  
Short-sleeve shirt in chambray  
\$75.00

  
Short-sleeve printed camp-collar shirt  
\$75.00

  
Short-sleeve printed camp-collar shirt  
\$75.00

  
Short-sleeve printed camp-collar shirt  
\$75.00

  
Wallace & Barnes short-sleeve slubby twill workshirt  
\$69.50

  
Wallace & Barnes short-sleeve slubby twill workshirt  
\$69.50

  
Short-sleeve shirt in stretch white poplin  
\$54.50  
★★★★★

  
Short-sleeve Secret Wash shirt in Springfield floral  
\$59.50

  
Short-sleeve garment-dyed shirt in Irish linen  
\$75.00  
★★★★★

  
Stretch short-sleeve shirt in light wash chambray  
\$69.50  
★★★★★

  
Short-sleeve carnation print shirt with camp collar  
\$59.50

  
Short-sleeve Baird McNutt Irish linen shirt  
\$85.00



# What's New App Search: now with more flexibility

## Two deployment options to suit your needs

### SaaS

Highly available hosted service

- Fully managed by Elastic
- Predictable monthly fee
- Auto-scaling
- Maintenance-free
- No need to worry about sizing or infrastructure

Ideal for everyone. Provides hands-free App Search solution. Great for getting started quickly, rapid rollout.

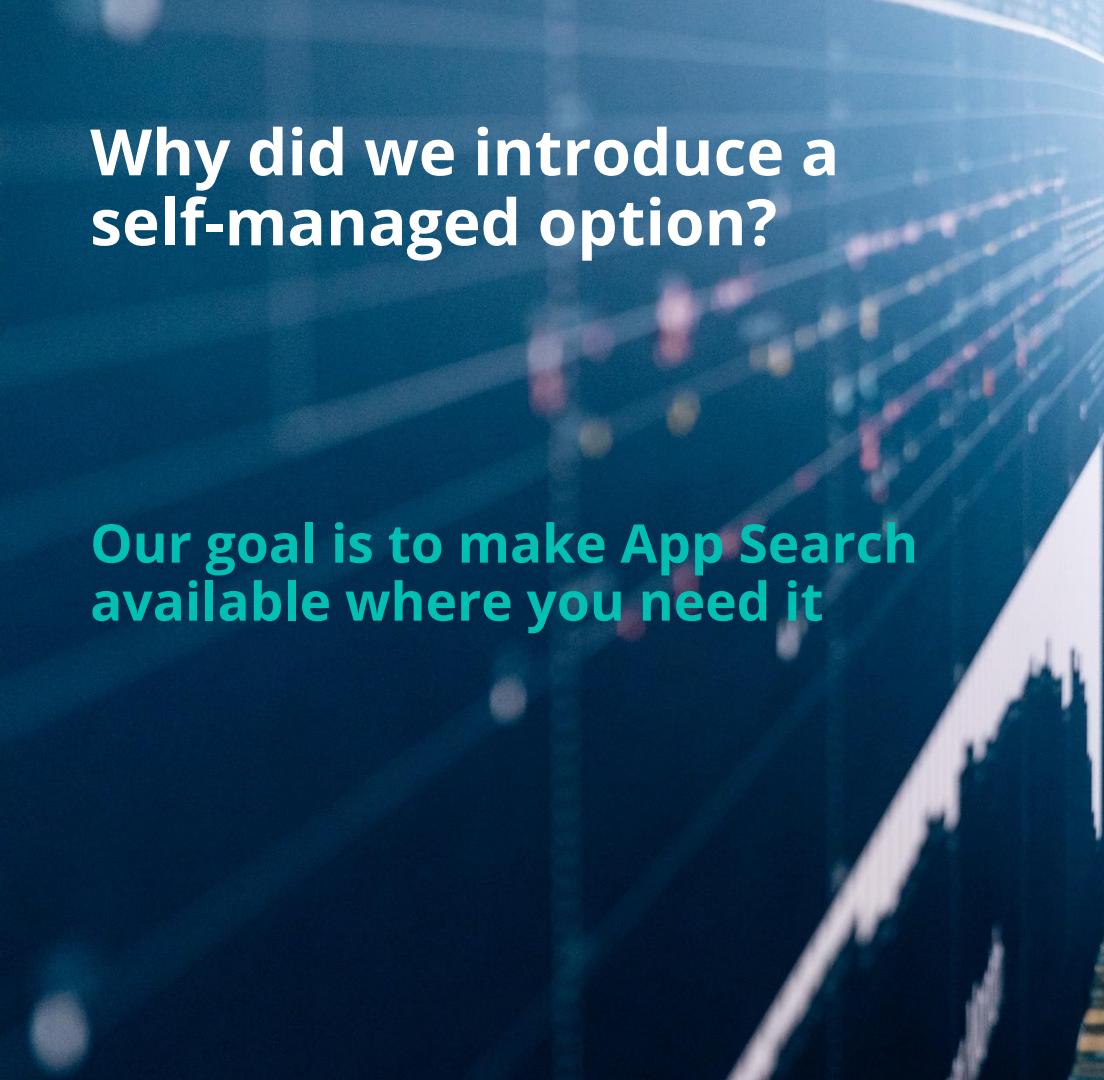
### Self-Managed

**NEW**

Now available for download

- Feature parity with SaaS version
- You manage the underlying Elasticsearch infrastructure and hardware.
- FREE, alongside the default deployment of the Elastic Stack (7.2+)
- Easy to download and deploy for proof of concept and testing
- Manage own upgrades and scaling

Ideal for those who want to manage their own infrastructure and control the scale of their own search experiences



# Why did we introduce a self-managed option?

**Our goal is to make App Search available where you need it**

We know that not every organization is ready for cloud

- Regulatory requirements
- Company policies
- Data location concerns
- Preference for testing and trialling
- Or any other number of reasons



# App Search Self-managed Licensing

App Search inherits features from the underlying Elasticsearch instance.

Of note:

	Gold	Platinum
Cross Cluster Replication		✓
Security: Audit Logging	✓	✓
Security: Encryption at Rest, SAML		✓
Alerting	✓	✓
Support	✓	✓



# What's Next

- Client libraries and integrations
- Query results management
- Meta-engines
- User-experience improvements



# Typical Deployment Sizes and Scaling

It depends!

A reasonable production deployment could look like:

2 x App Search nodes @ 4GB RAM

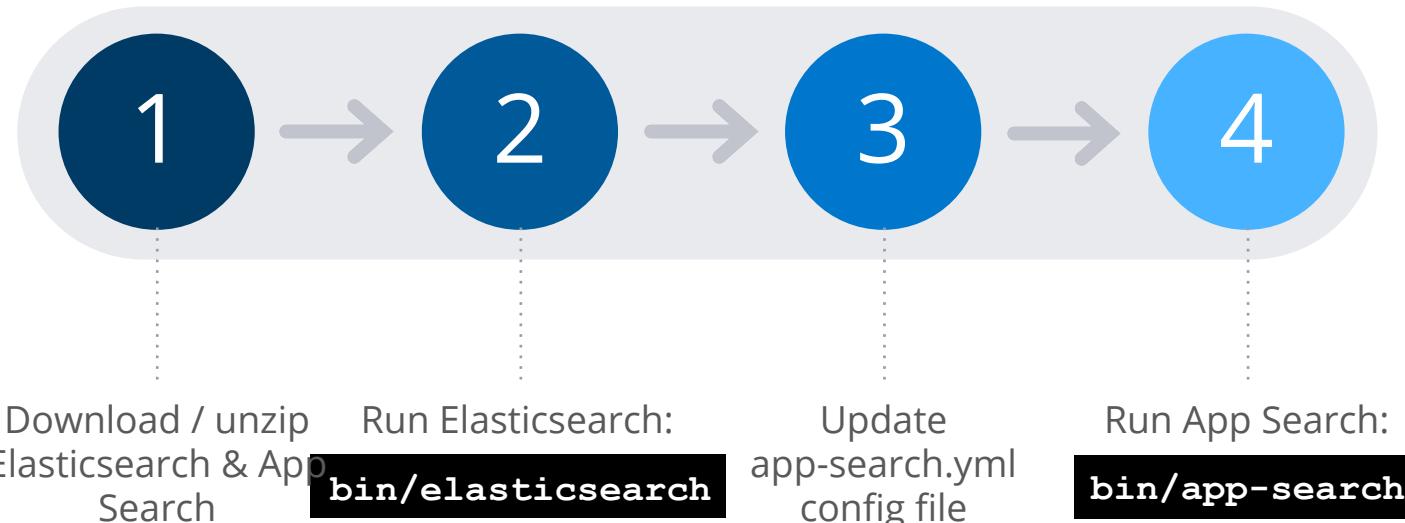
3 x Elasticsearch nodes @ 4+GB RAM

Defer to Elasticsearch best-practices for cluster sizing,  
except 2.5x the data size.

# Demo Time



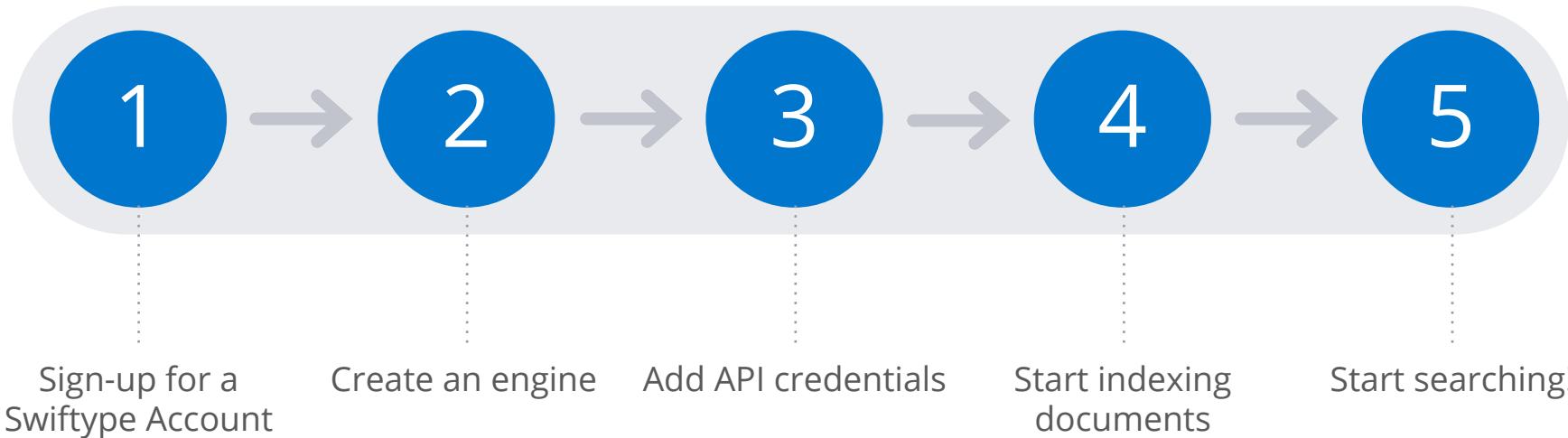
# Getting Started with App Search Self-managed





# Get started with App Search Service

Getting started with our free trial could not be easier





# Thank You

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- Learn more about App Search or get started:  
[www.elastic.co/products/app-search](https://www.elastic.co/products/app-search)
- Read the App Search self-managed GA announcement:  
[www.elastic.co/blog/elastic-app-search-7-2-0-released](https://www.elastic.co/blog/elastic-app-search-7-2-0-released)
- You'll receive an email with the recording



# Questions?

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# SUPPORTING SLIDES

# Add Search to any application

Use App Search to add powerful search, effortlessly

- SaaS / web applications
- Advanced ecommerce
- Mobile apps
- Geo search
- Application dashboards
- Internal search
- Self-service / case deflection
- Marketplaces
- And more

The screenshot displays the App Search interface with the following sections:

- Engine Overview:** Shows Total Queries (Last 7 days) and Total Operations (Last 7 days) with line charts. A tooltip for the A3R Total Queries chart indicates a peak of 600 on June 5, 2019.
- Relevance Tuning:** Set field weights and customize boosting. It shows a table for the "marketing-website" index with fields like title (TEXT, weight 1.9), sections (TEXT, weight 1.9), and body (TEXT, weight 1.9). It also shows a "Boosts" section for the sections field.
- Preview:** Shows search results for the query "search". The first result is a document with a score of 72.7, containing fields title, body, sections, guide\_identifier, and url. The second result is a document with a score of 72.7, containing fields title, body, sections, guide\_identifier, and url. The third result is a document with a score of 69.09, containing fields title, is\_product\_page, body, sections, and guide\_identifier.

# APIs that let you get started in minutes

## Index any JSON object

Index your data with one of many API clients

## API endpoints to ingest data easily

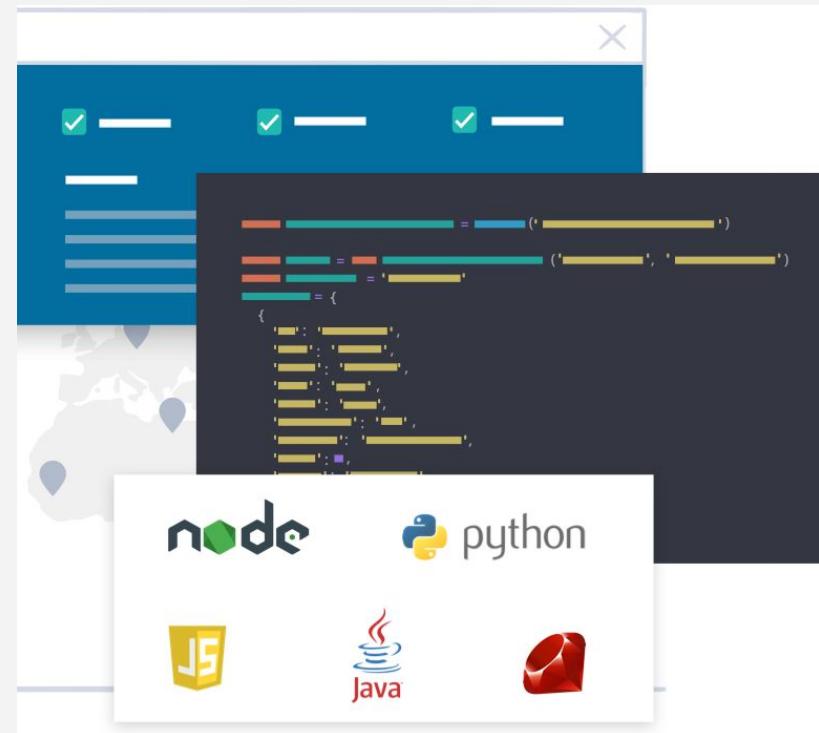
Includes support for Java, JavaScript, Node.js, PHP, Python, Ruby

## Schemaless Indexing

No need to alter your data or specify your schema, it's all done for you at index time

## Support for large files

No document splitting required, with excellent text search performance



# Best-in-class, scalable relevance

## Index once, sort all you want

Filter / sort on a single index, without needing replica indices

## Out-of-the-box support for

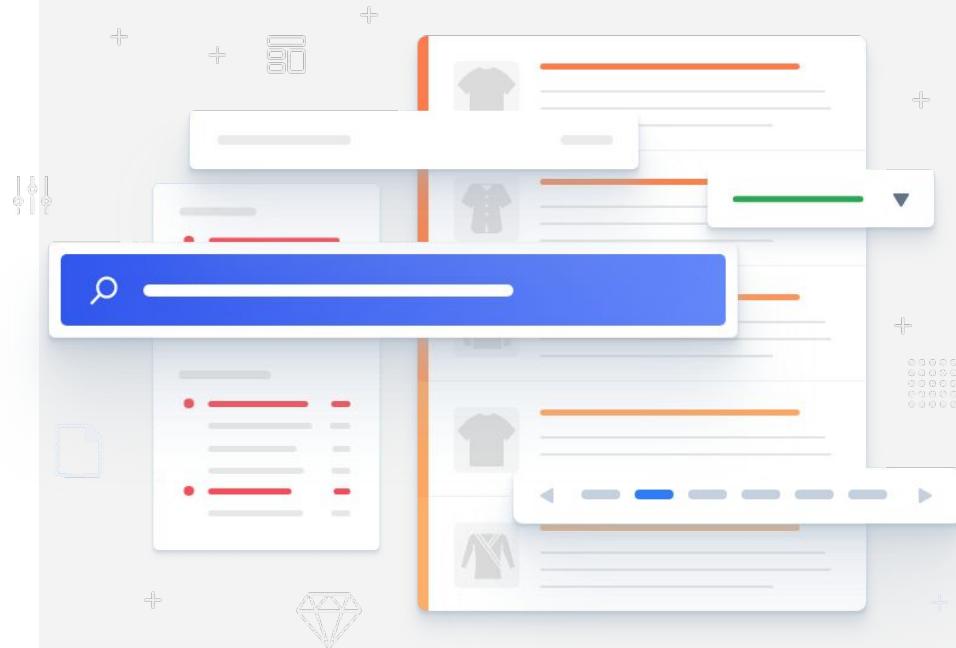
- Spelling correction
- Bigram matching
- Stemming
- Phrase matching
- Language specific models

## Powered by Elasticsearch

All of the incredible speed, scale and best-in-class relevance you need

## Scalable to grow with your business

Deliver relevance at scale, regardless of how many users, documents or queries you have



# Relevance tuning made easy

## Empower business users

User-friendly dashboard to enable them to promote results and tune ranking without intervention or risks

## Intuitive tuning tools

Refine ranking to match your needs using

- **Curatons**
- **Synonym sets**
- **Weights**
- **Boosts**
- **Drag and drop reordering**

The screenshot shows a user interface for managing search relevance. On the left, a sidebar menu includes 'marketing-website' (selected), 'Overview', 'Analytics', 'Query Tester', 'MANAGE' (selected), 'Documents' (selected), 'Schema', 'API Logs', 'SEARCH SETTINGS', 'Synonyms', 'Curations', 'Relevance Tuning' (selected), 'ACCESS', and 'Credentials'. The main content area is titled 'Relevance Tuning' with the sub-instruction 'Set field weights and customize boosting.' Below this is a 'Manage Fields' section with a search bar 'Filter 22 fields...'. The 'title' field is set to a weight of 1.9. Under 'TEXT SEARCH', a toggle switch is set to 'Enabled for queries'. The 'WEIGHT' section shows a slider set to 1.9. The 'BOOSTS' section has an 'Add Boost' button. The 'sections' field is set to a weight of 0. The 'body' field is set to a weight of 1. On the right, a 'Preview' section shows search results for 'search' with a score of 72.7, listing 'title', 'body', 'sections', 'guide\_identific', 'url', and '5 more fields'. Another result for 'guide\_identific' has a score of 69.09 with 'title', 'body', 'sections', 'guide\_identific', 'url', and '5 more fields'. The bottom of the preview section shows 'is\_product\_pa', 'body', 'sections', and 'guide\_identific'.

# Tools to effortlessly build rich user interfaces

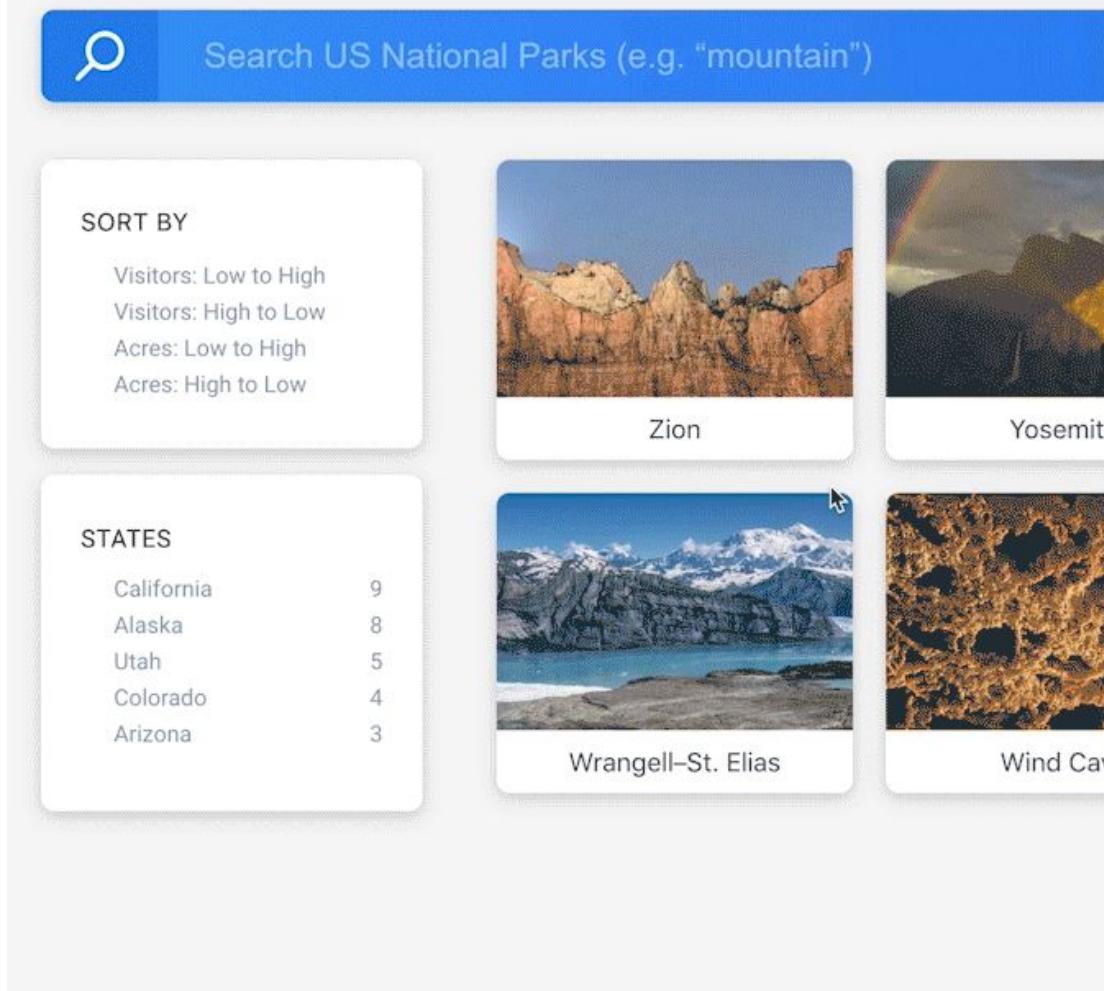
## Search UI

An open source JavaScript UI framework freely available for you to use

## Available out-of-the-box components include:

- **Typo tolerance**
- **Dynamic filtering & facets**
- **Search box display**
- **Global language support**
- **Query suggestions & autocomplete**
- **Search as you type**

## Support for multiple clients



The screenshot shows a search interface for US National Parks. At the top, a search bar contains the placeholder text "Search US National Parks (e.g. 'mountain')". To the left of the search bar is a magnifying glass icon. Below the search bar, there are two sections: "SORT BY" and "STATES".

**SORT BY**

- Visitors: Low to High
- Visitors: High to Low
- Acres: Low to High
- Acres: High to Low

**STATES**

California	9
Alaska	8
Utah	5
Colorado	4
Arizona	3

The interface also displays four cards, each representing a national park with a thumbnail image and the park's name:

- Zion**: Shows a landscape with red rock formations.
- Yosemite**: Shows a landscape with a rainbow in the sky.
- Wrangell-St. Elias**: Shows a landscape with snow-capped mountains and a lake.
- Wind Caves**: Shows a close-up of a rock formation.

# Actionable search analytics

## Track query performance

See best and worst performing queries, results gaps, and more, out-of-the-box

## Click-through tracking

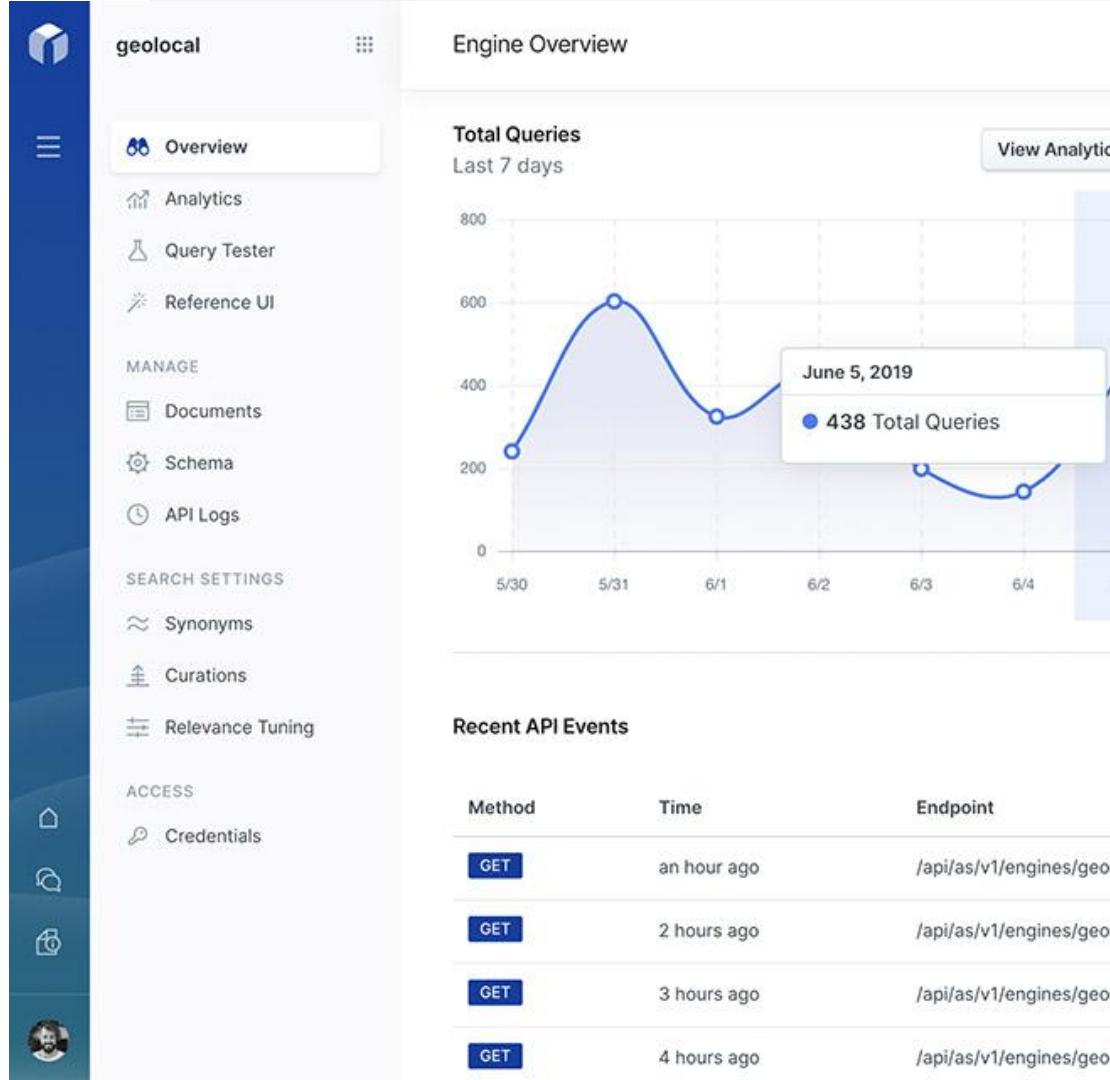
Dig deeper into search behavior and patterns to spot areas for improvement or gain insights into what your users want

## API logs

Monitor the health of your engine and debug problematic requests

## Generous history retention

Customized based on your business needs



# Enterprise-grade security

## Security is in our DNA

Built with your data security in mind

### Including

- **Role based-access control**
- **Data encryption in transit and at rest**
- **SAML based SSO**
- **Granular content permissions**
- **State of the art data centres**
- **SOC2 compliance**

### Highly available

99.999% uptime for hosted App Search Service



## Manage Users & Roles

Define role mappings for federated authentication.

External Attribute	Attribute Value	Role	Engine Access
group	engineering	Admin	All
group	ba	Admin	prod-west admin-search customer-data
group	marketing	Dev	marketing-website

# What's new Search UI: simple, powerful, flexible



Create rich, premium search experiences with just a few lines of code.

## Open source

## Java-script framework

Works with React, with pre-built connectors for App Search

Includes facets, filtering, search bar, results layouts and more

```
npm install react-search-ui search-ui-app-search-connector
```

```
const connector = new AppSearchAPIConnector({
  searchKey: "search-soaewu2ye6uc45dr8mcd54v8",
  engineName: "national-parks-demo",
  hostIdentifier: "host-2376rb"
});

export default function App() {
  return (
    <SearchProvider
      config={{
        apiConnector: connector
      }}
    >
      {() => (
        <div className="App">
          <SearchBox />
          <Results titleField="title" urlField="nps_link" />
        </div>
      )}
    </SearchProvider>
  );
}
```



SearchCo SUPPORT	
<input type="text"/> aut	
Type	Showing results <b>1-10</b> of <b>18</b> for <b>au</b>
All	
Question	
Article	<b>Article</b> Autocomplete
Tutorial	
Sort By	Autocomplete The Autocomplete endpoint supports the same options as the search endpoint. The Autocomplete endpoint supports the same options as the search endpoint. The Autocomplete endpoint supports the same options as the search endpoint.
Relevance	
Updated At	
Question	Can I Show Category Pages in Autocomplete Results? My products have a "tags" field I use to categorize them. Each category has a URL like <a href="http://mysite.com/tags/[tag_name]">http://mysite.com/tags/[tag_name]</a> where [tag_name] is the name of the category. % <a href="http://kb-demo.swiftype.info/questions/98">http://kb-demo.swiftype.info/questions/98</a>
Question	Why don't my result customizations show up in the autocomplete? I customized results in the dashboard for a number of queries. When I type "library" into the search bar, I expect to see the results for "library" in the dashboard. However, the results are not showing up. % <a href="http://kb-demo.swiftype.info/questions/55">http://kb-demo.swiftype.info/questions/55</a>

# Elastic App Search

SaaS/Web Applications  
Advanced Ecommerce  
Mobile Apps  
Geo Search

Application Dashboards

Internal Search

Self-service / case deflection  
Marketplaces

