



# 옵저버빌리티 - **APM** 기능 소개

## End to End Observability with Elastic APM

Astin Choi  
Solutions Architect

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# 엘라스틱 플랫폼

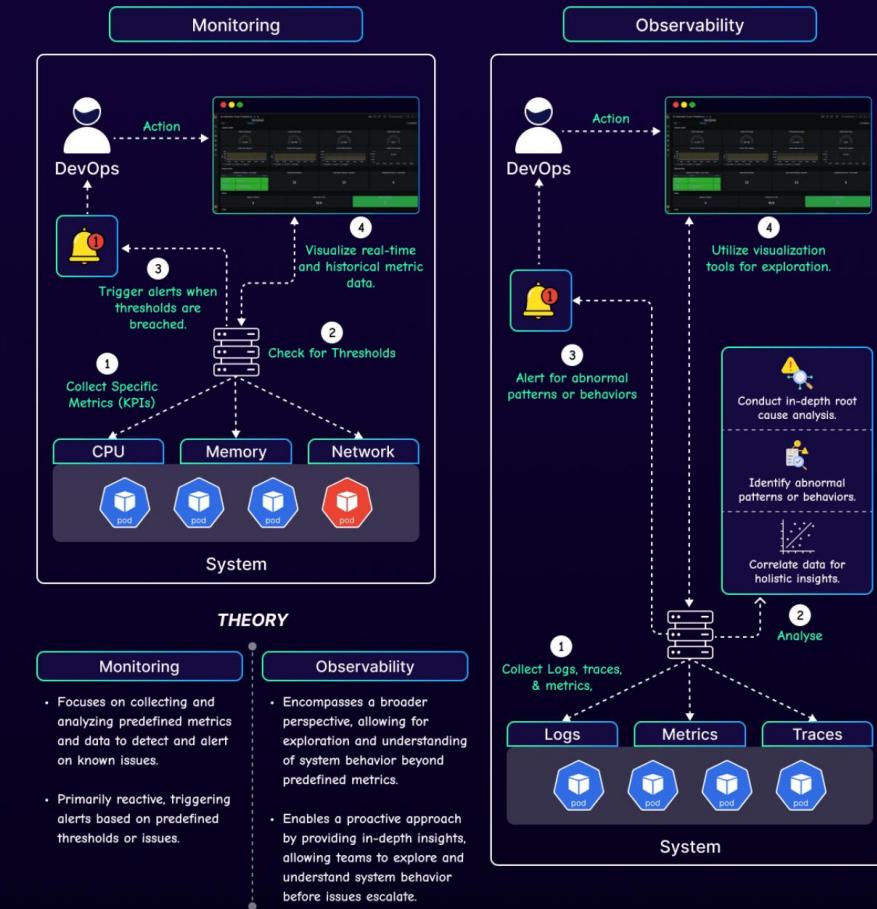


# 엘라스틱 플랫폼

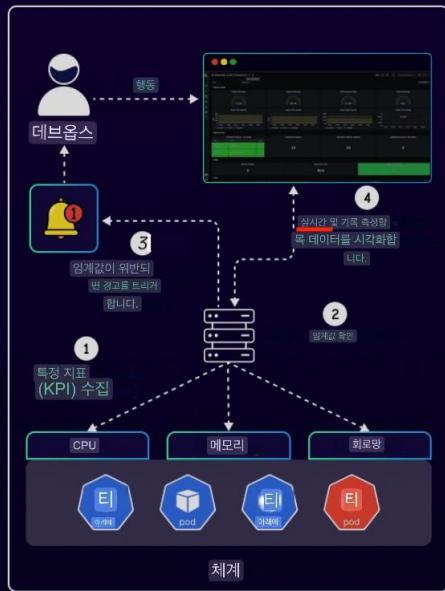




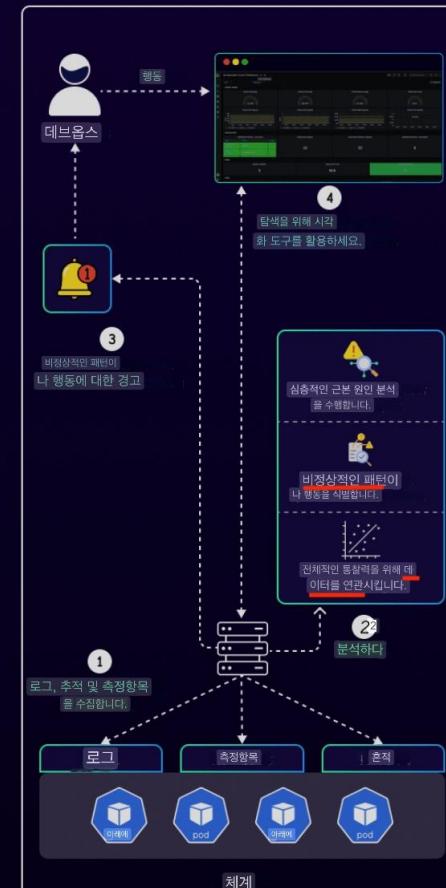
## OBSERVABILITY VS. MONITORING



## 모니터링



## 관찰 가능성



# 엘라스틱 옵저버빌리티

한 플랫폼, 한 데이터 저장소에서 모두 해결



온-프램, 멀티 및 하이브리드 클라우드 등 다양한 환경 지원

- 로그 분석
- 인프라 모니터링
- 애플리케이션 성능 모니터링 (APM)
- 엔드유저 모니터링 (RUM)

로그

메트릭

트레이스



퍼블릭  
클라우드



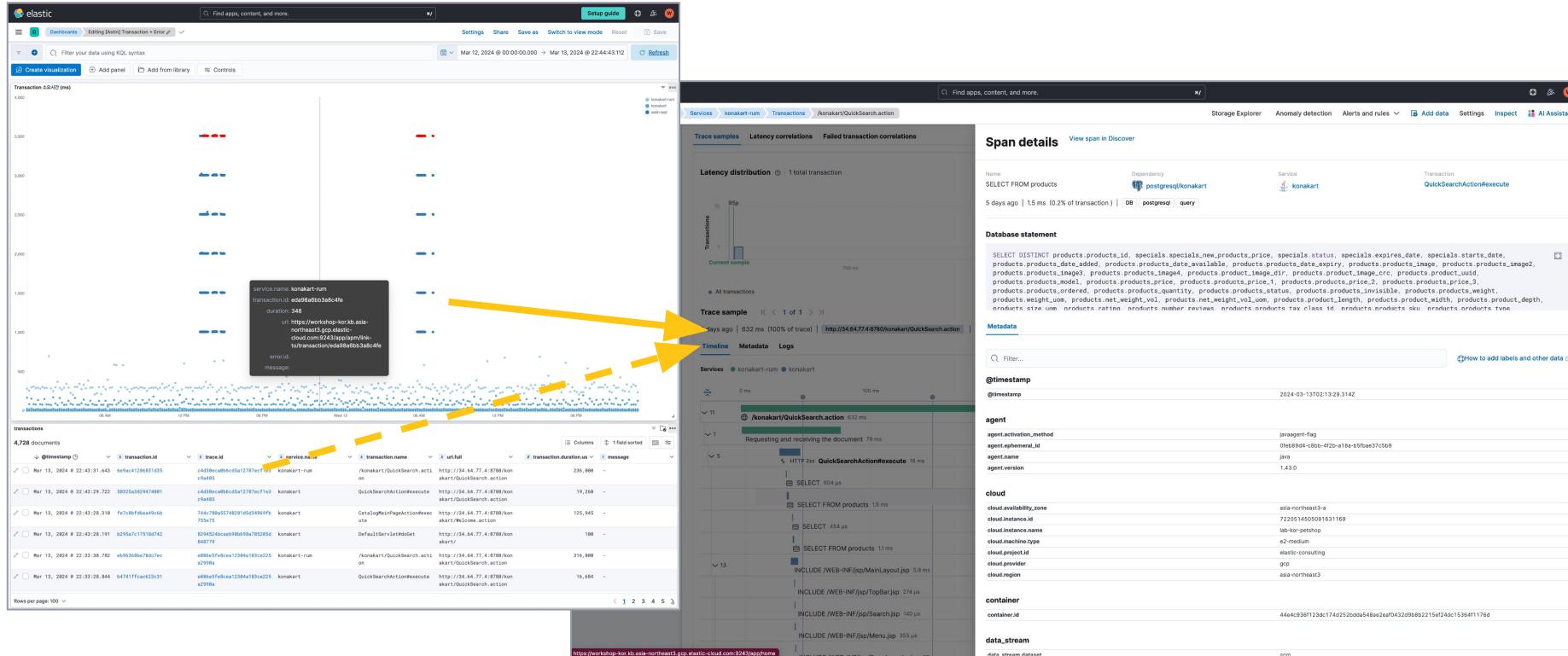
하이브리드



온프램

사례

# S전자 - 실시간 트랜잭션 스캐터플롯



BCR Gates Open  
(last 10 minutes)



PAX Count  
(last minute)



BCR Scans  
(last hour)



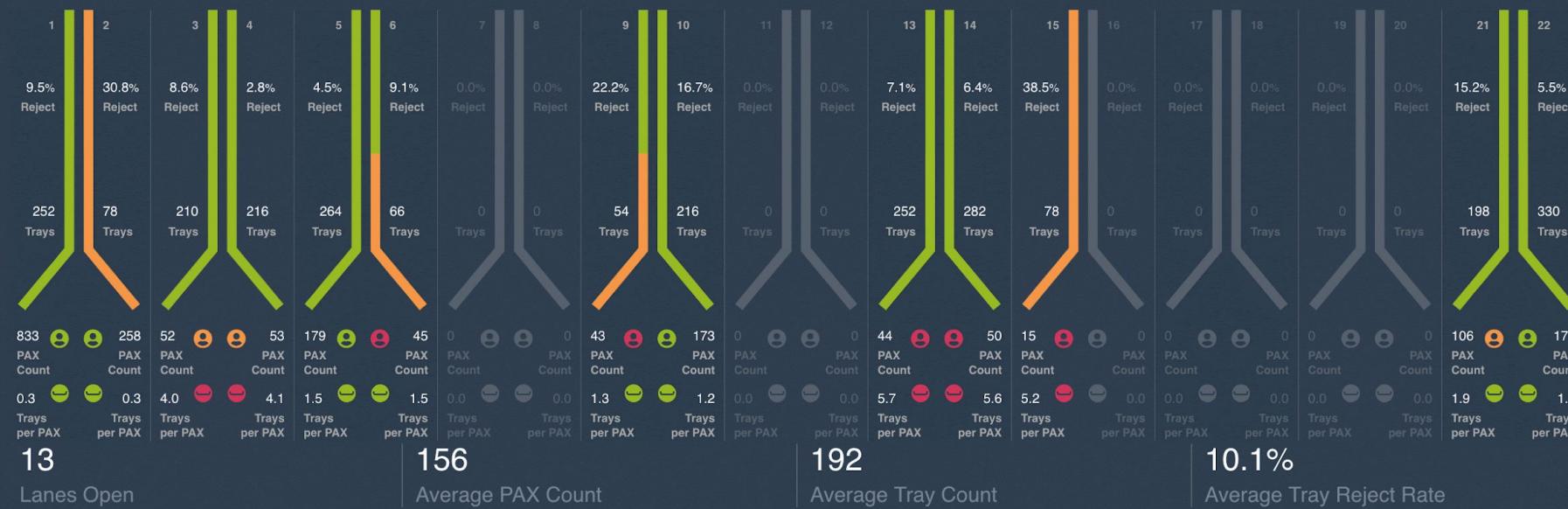
IDL Occupancy  
(last 5 minutes)



Projected Queue Time  
(next minute)



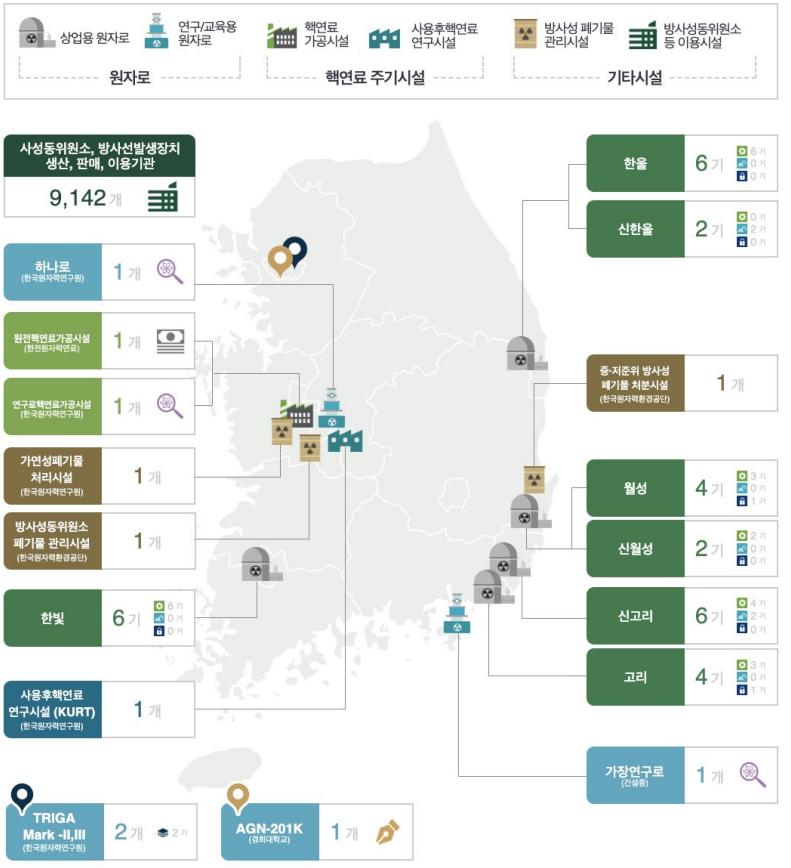
Lane Usage  
(projected hour)



The information in this dashboard is sample data only

## 대한민국 원자력·방사선 안전규제 주요현황

### 2021년 국내 원자력 및 방사선 규제대상 시설·기관 현황



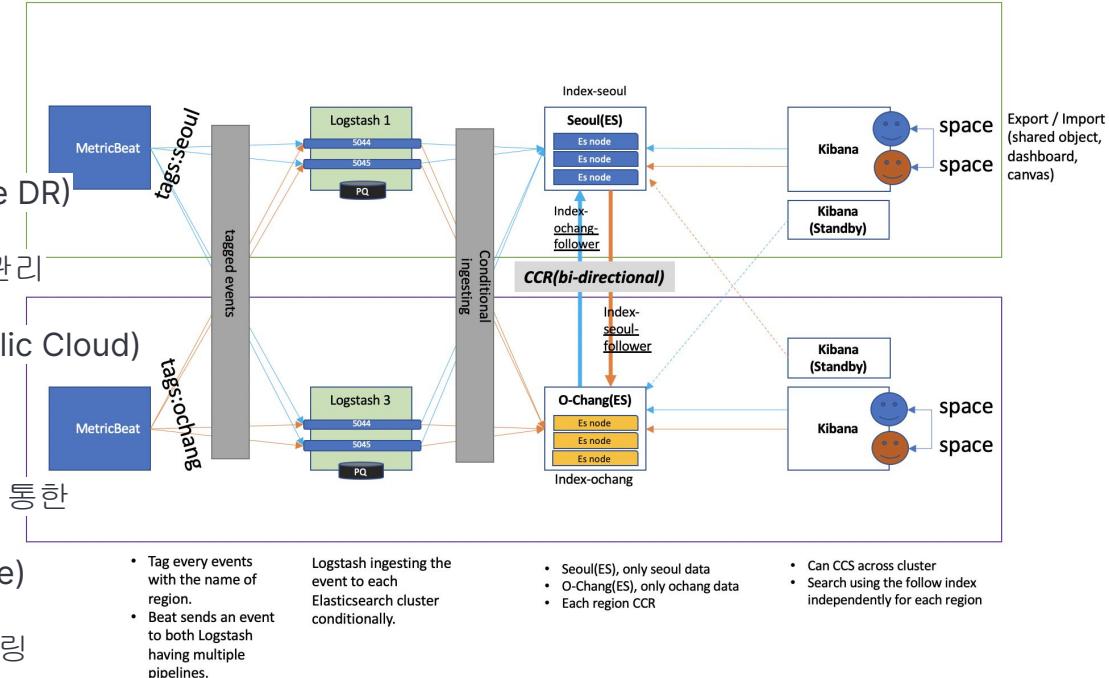
## 원자력안전규제기관 한눈에 보기



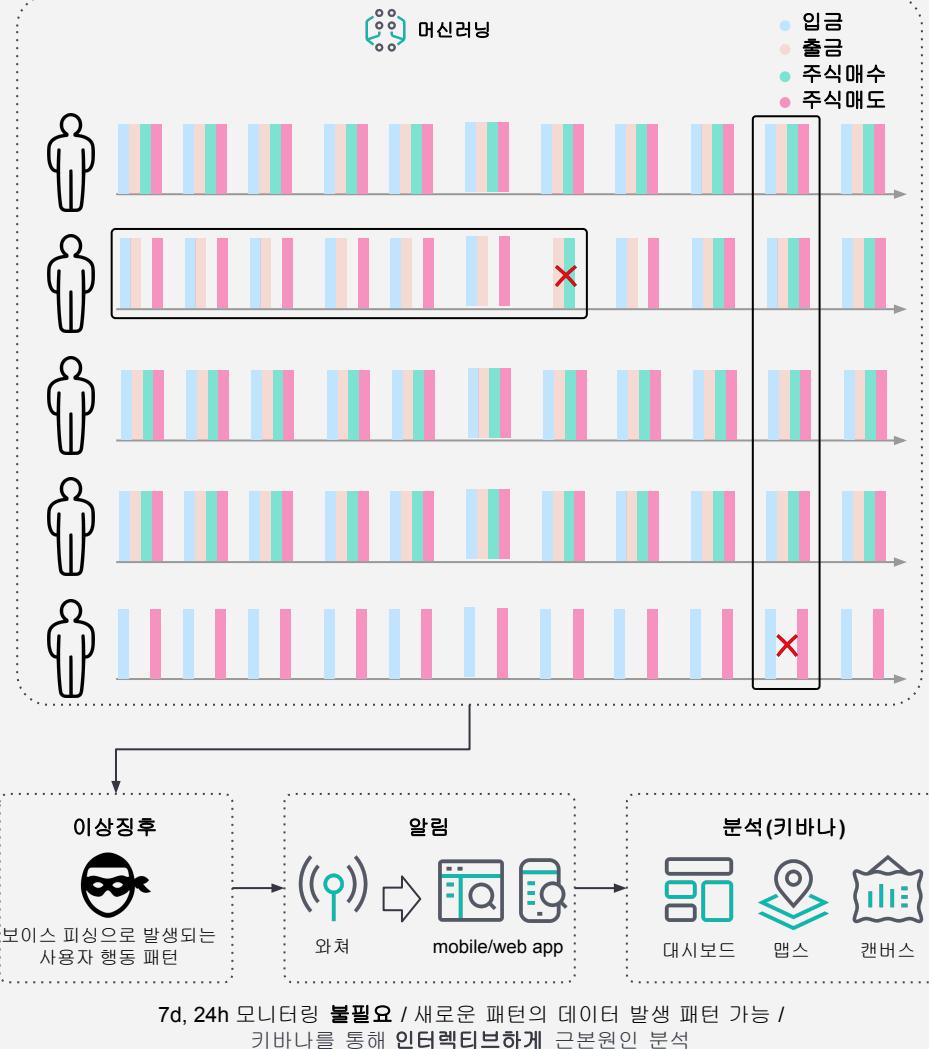
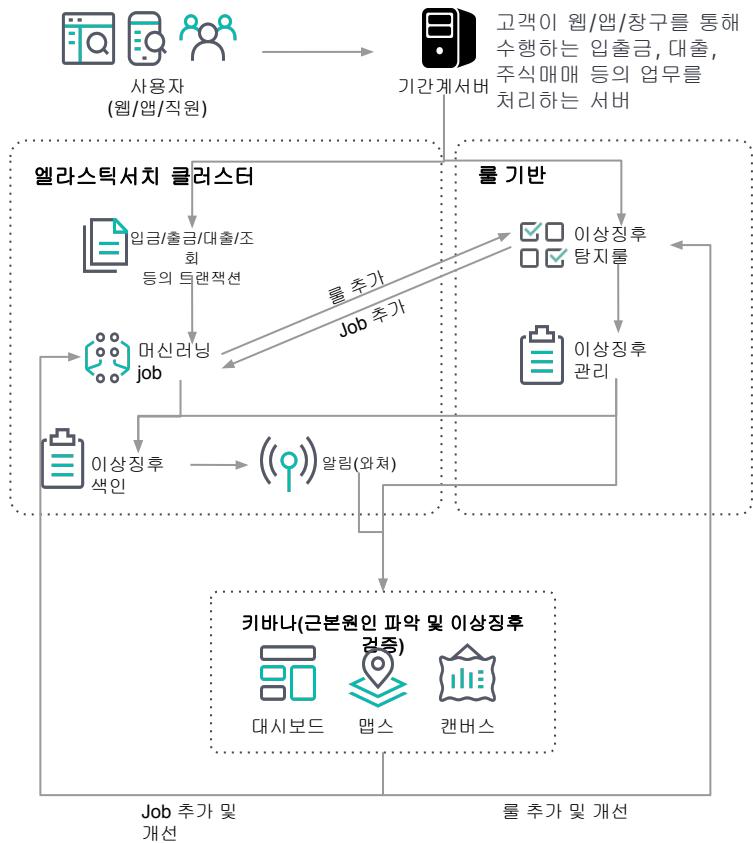
### 해외 주요국

	미국	프랑스	일본	캐나다
예산	약 8억 4400만 달러 (한화 약 9,541억원)	약 6,577만 유로 (한화 약 881억원)	약 728억 엔 (한화 약 7,406억원)	약 1억 4,375만 캐나다 달러 (한화 약 1,311억원)
인력	2,868 FTE	529명	1,089명	913 FTE

- 서울/오창 데이터 센터 인프라 모니터링
- 800여대 이상의 인프라 로그 실시간 수집
- CCR 기능을 통한 실시간 로그 Sync (Active DR)
- Ingest Manager 를 통한 수집 Agent 원격관리
- Hybrid 환경 (On-prem/Private Cloud/Public Cloud)  
통합 모니터링
- Index Lifecycle Management 기능 적용을 통한  
데이터 관리 (Hot/Warm/Cold Architecture)
- Drill down 기능을 통한 통합 인프라 모니터링



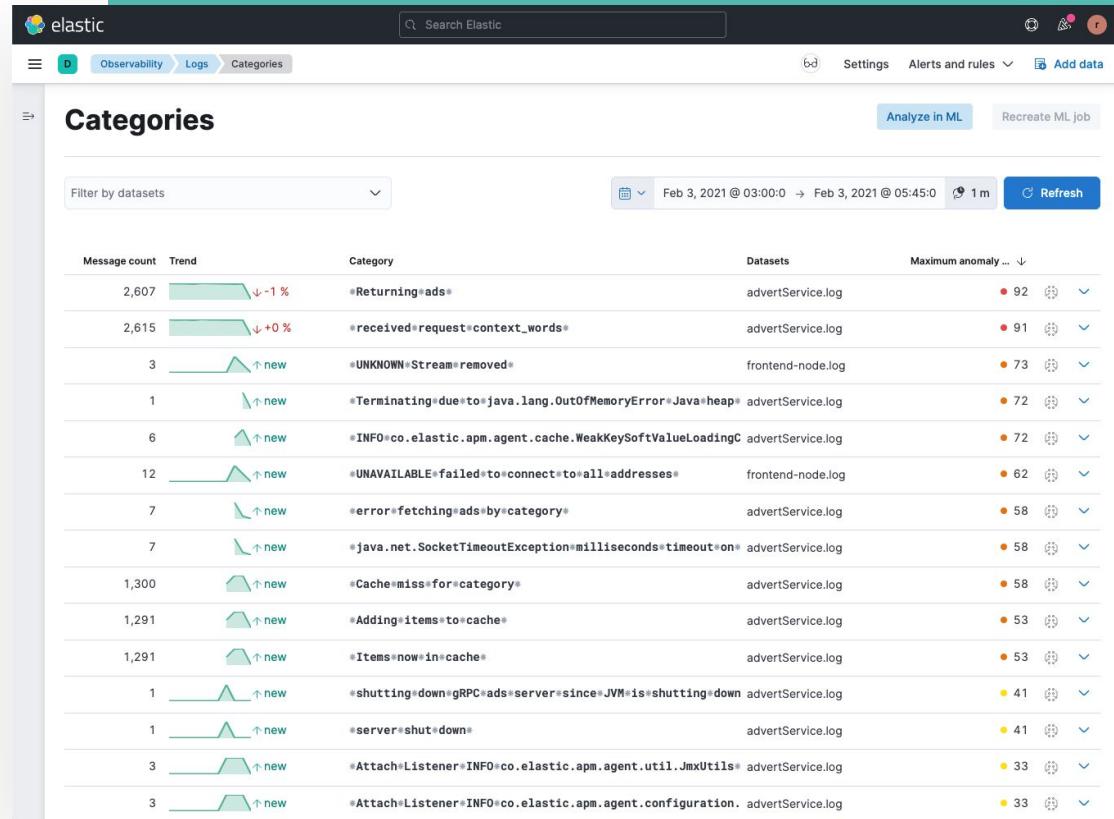
# S증권



# 주요 기능

## 로그 분석

- 하이브리드 클라우드를 위한 확장 가능한 중앙 집중식 로그 모니터링
- 로그 분류와 머신 러닝을 기반으로 한 로그 패턴 분석 및 이상 징후 탐지
- 클러스터 통합 검색을 통한 강력한 로그 검색 지원
- 데이터 계층을 통해 성능과 스토리지를 효율적으로 최적화



# 비용 효율적인 데이터 보관 /w data tiers

응답 시간

보유기간 (일반 기준)

하드웨어

Tier 1  
실시간

Lowest  
(밀리초~초)

~7일

SSDs

Tier 2  
실시간 /  
단기간

Lower  
(초)

7~30일

HDDs

Tier 3  
중기간

Lower  
(초)

30~90일

HDDs

Tier 4  
장기간

Slowest  
(초~분)

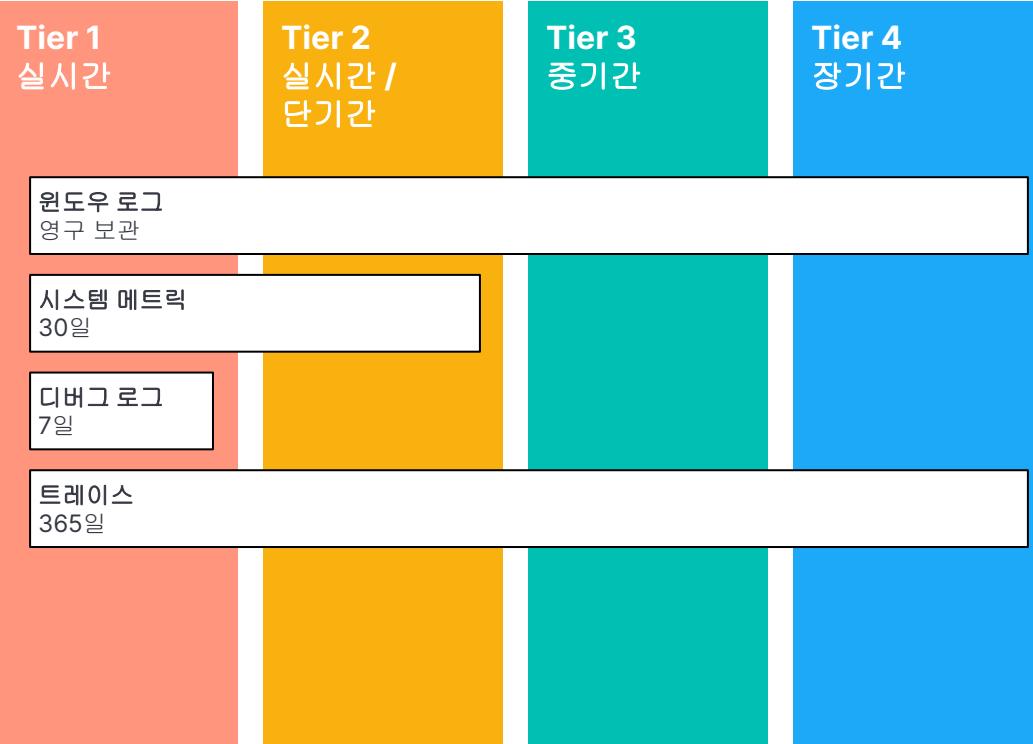
90일~

Blob 스토리지  
(S3 등)

# 비용 효율적인 데이터 보관

데이터 종류별로 사용자 정의  
가능

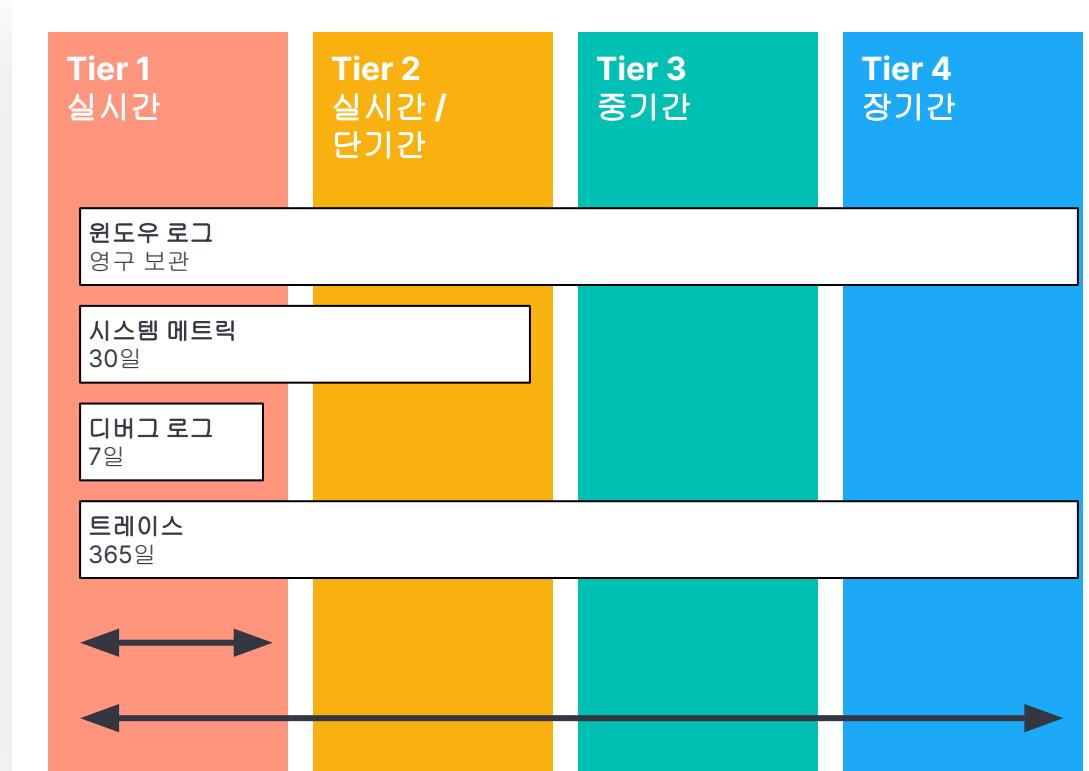
- 데이터를 계층 이동시 소스별로  
사용자 정의 가능
- 보관 주기 무제한



# 끊김없는 검색

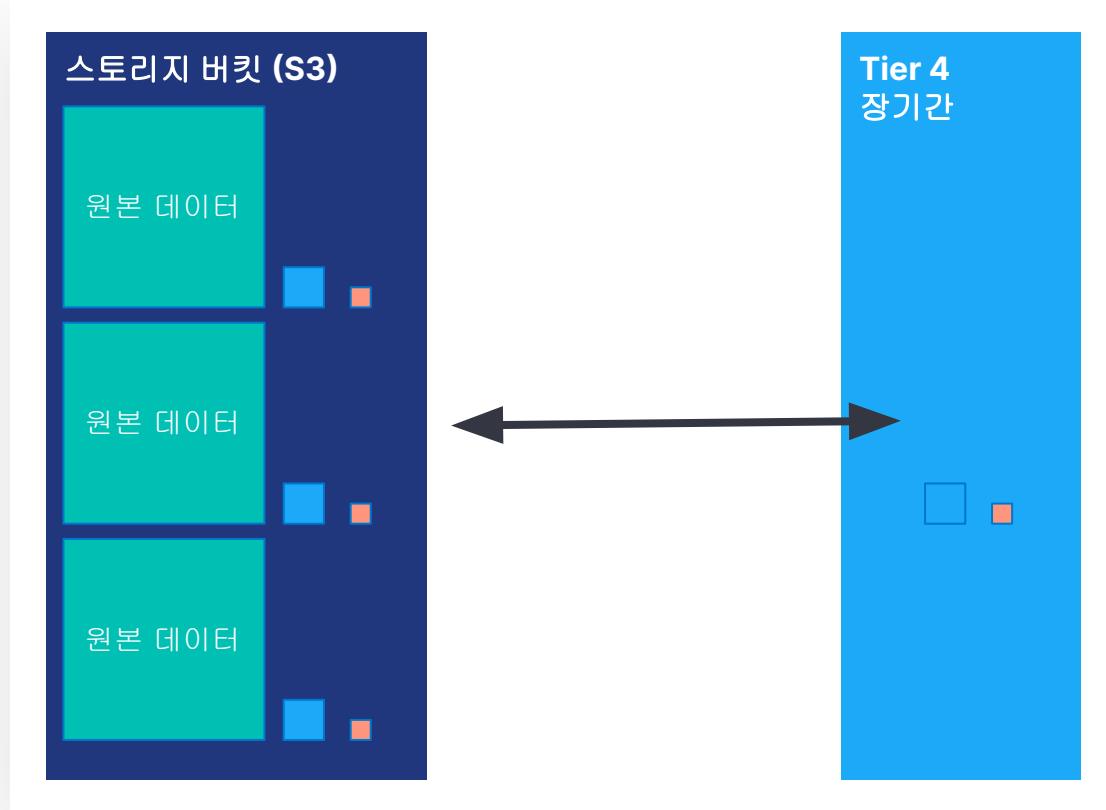
별도 수동 작업 없이

- 전체 데이터에 대한 동일 UX
- 복원 불필요



# 효율적인 과거 데이터 검색

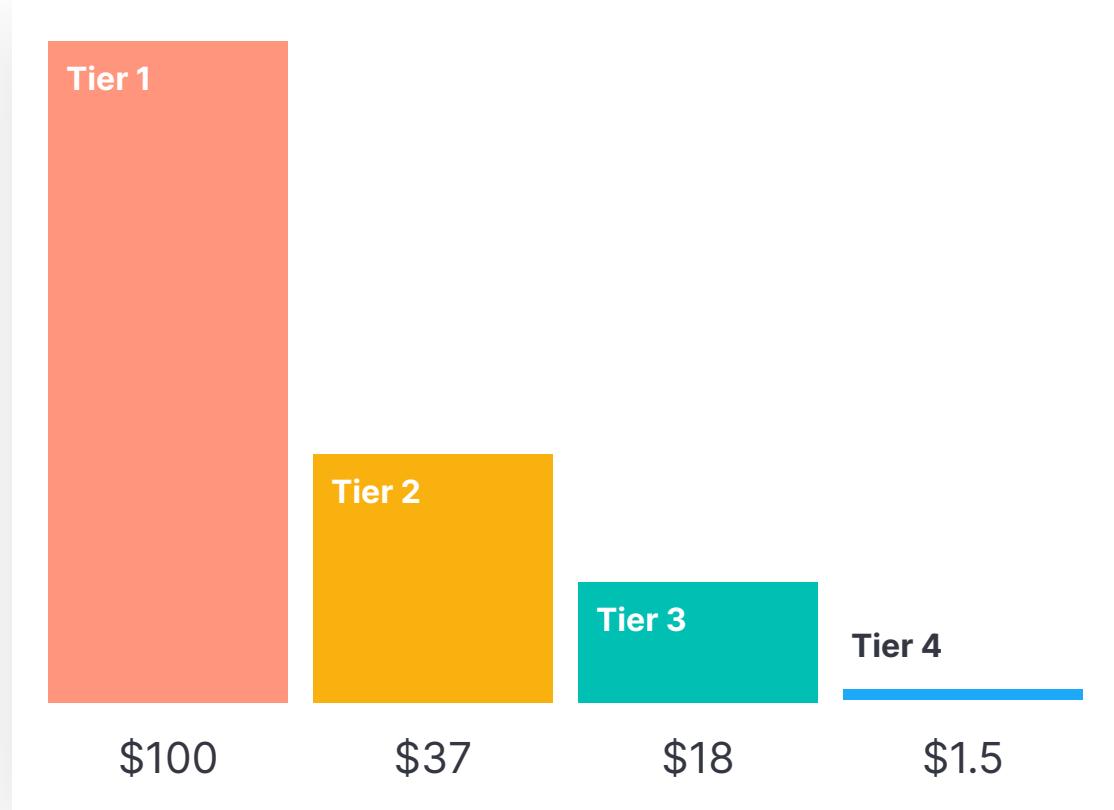
- 필요한 데이터만 로딩
- 로컬 캐시
- 복원 작업 혹은 수동 개입  
불필요
- 다른 접근 방식에 비해 빠른  
쿼리 성능
- 하드웨어 비용 감소
- 오브젝트 스토리지 API 비용  
감소
- 데이터 전송 비용 감소



# 비용 효율적인 데이터 보관

## 계층별 데이터 저장 비용

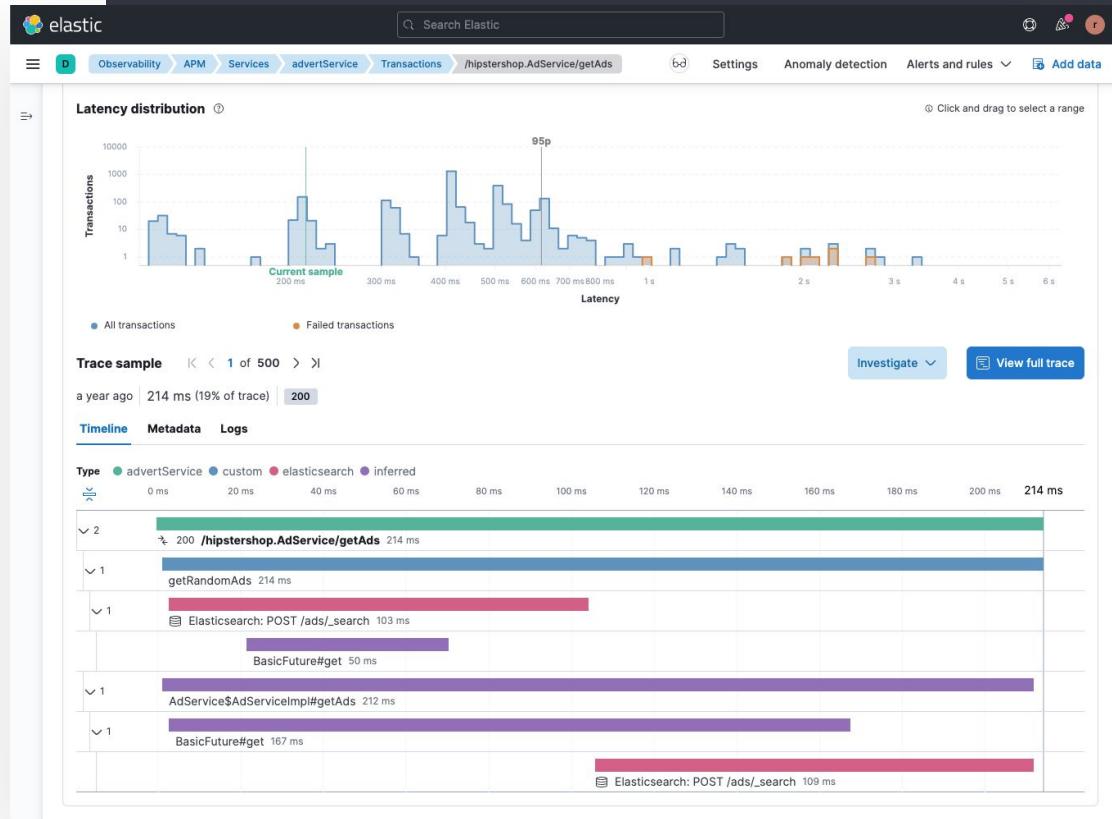
- 지속적으로 비용 감소
- 저렴한 장기 스토리지
- 계층간 유연한 데이터 이동



\*approximation, data from <https://cloud.elastic.co/pricing>

## 앱 성능 모니터링 (APM)

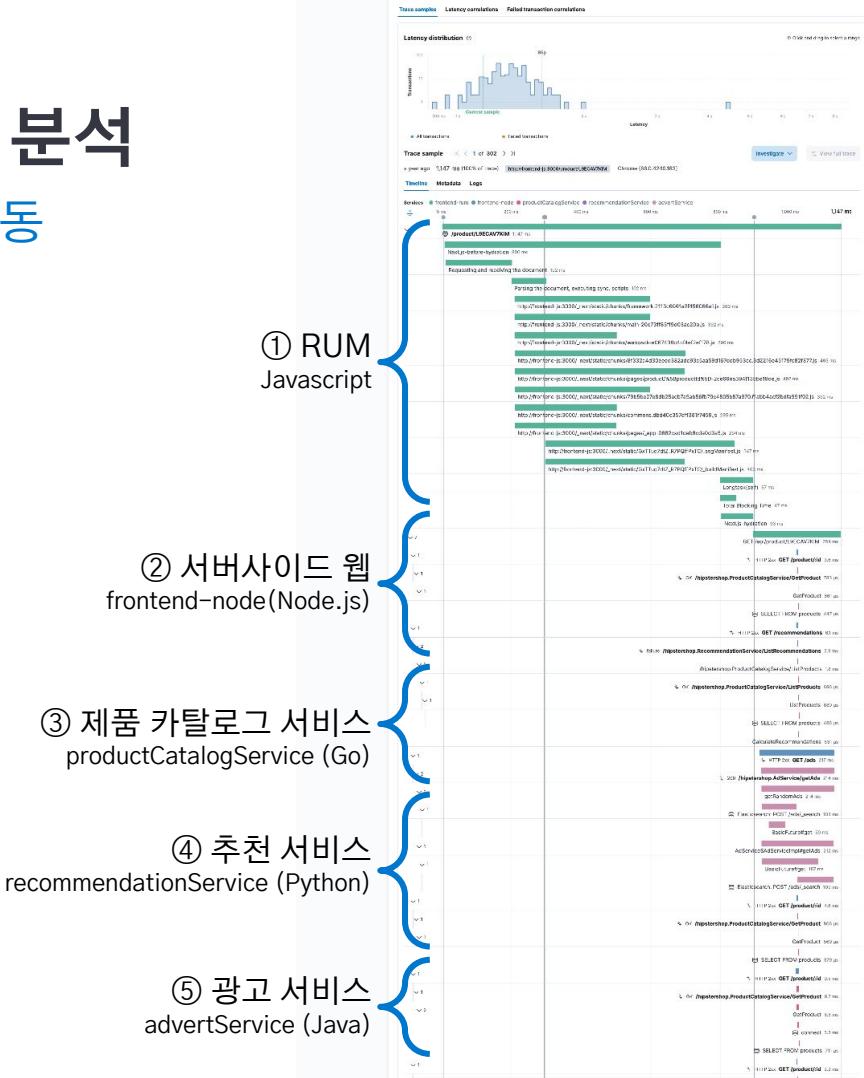
- 엔드투엔드 분산 트레이싱을 통한 코드 품질 향상
- ML 기반 상태 지표와 이상 징후 탐지 기능을 통해 신속한 문제 해결
- 상관 관계 분석을 통해 속도 저하 및 에러 근본 원인 식별
- OpenTelemetry와 엘라스틱 에이전트를 통해 별도의 설정 없이 즉시 사용



# 분산 트레이싱으로 End-to-End 분석

여러 서비스 트랜잭션을 하나의 trace.id로 연동

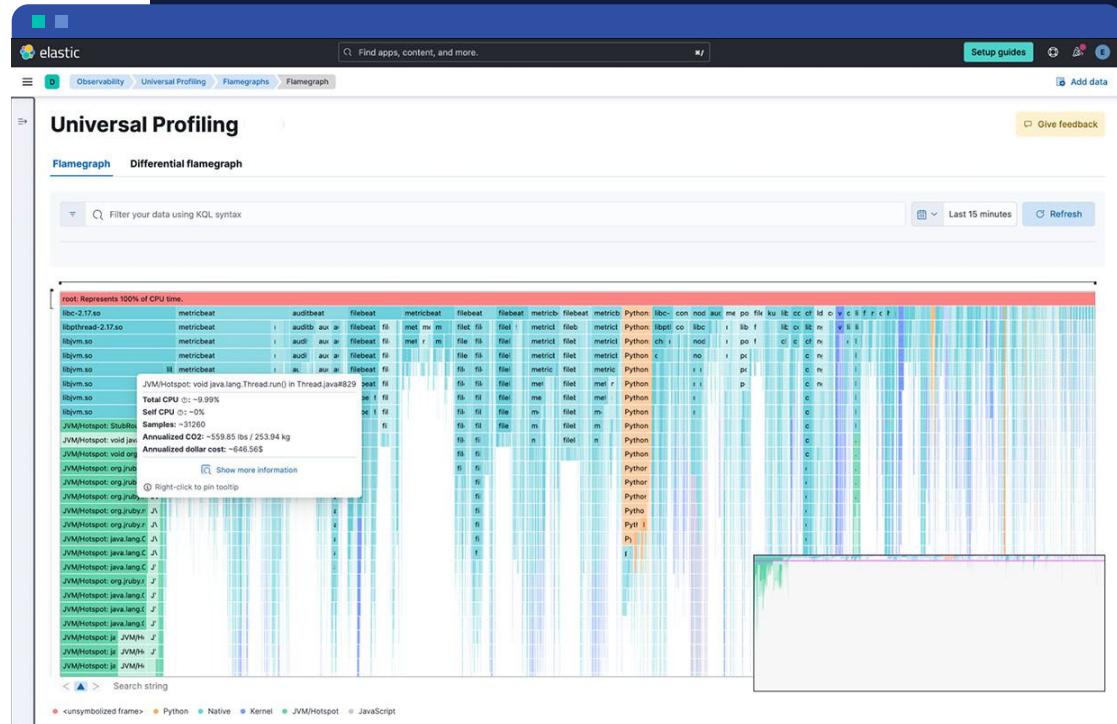
- 사용자 관점에서 하나의 트랜잭션이지만
- MSA 환경에서 다수 서비스로 분리
- 하나의 ‘분산 트레이싱’으로 분석





# 프로파일링

- 다양한 언어와 컨테이너화된 환경 등 전반에서 시스템을 가시화
- 프로덕션 환경에서 낮은 오버헤드로 프로파일링 사용 가능
- 인프라, 앱 등 성능이 나오지 않거나 비효율적인 코드 및 함수 식별
- 컴퓨팅 자원 낭비 제거



# Universal Profiling

[Give feedback](#)[TopN functions](#) [Differential TopN functions](#)

Baseline functions

container.name : "cart-service-v1"

Last 15 minutesϕ

Comparison functions

container.name : "cart-service-v2"

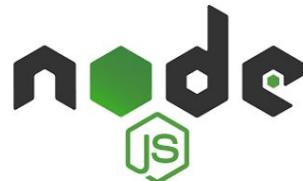
Last 15 minutesϕ

Normalize by Time

Gained overall performance by	Annualized CO2 emission impact	Annualized cost impact	Total number of samples
↑ <b>53.71%</b>	<b>4.68 lbs / 2.12 kg</b> ↑ 2.17 lbs / 0.98 kg (53.71%)	<b>\$44.1</b> ↑ \$20.41 (53.71%)	<b>2,132</b> ↑ 987 (53.71%)

↑	Function	Samples	Self CPU	Total CPU
1	<a href="#">python3.7: lookdict_unicode_nodummy</a> ..../Objects/dictobject.c#854	111	5.21%	5.21%
2	<a href="#">python3.7: _PyType_Lookup</a> ..../Objects/typeobject.c#3085	97	4.55%	5.21%
3	<a href="#">python3.7: _PyObject_GetMethod</a> ..../Objects/object.c#1144	89	4.17%	8.91%
4	<a href="#">Python: flask_route_interest</a> interest.py#31	83	3.89%	62.85%
5	<a href="#">python3.7: _PyEval_EvalCodeWithName</a> ..../Python/ceval.c#3946	66	3.10%	7.65%
6	<a href="#">python3.7: frame_dealloc</a> ..../Objects/frameobject.c#470	60	2.81%	3.47%
7	<a href="#">Python: __getitem__</a> os.py#679	59	2.77%	32.97%
8	<a href="#">Python: encode</a> os.py#752	51	2.39%	9.99%
9	<a href="#">python3.7: PuDict_LoadGlobal</a>	50	2.25%	5.25%

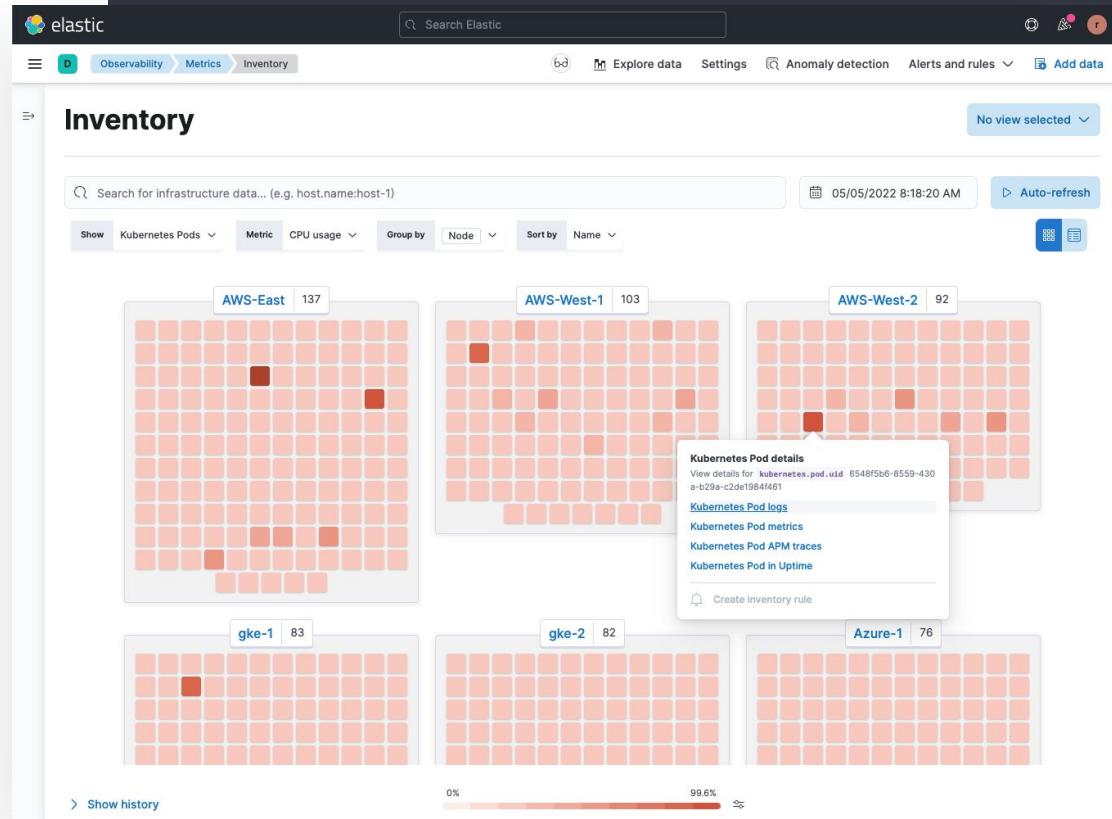
↑	Function	Samples	Self CPU	Total CPU	Diff
1	<a href="#">python3.7: lookdict_unicode_nodummy</a> ..../Objects/dictobject.c#847	70	7.09%	7.29%	
		↑ 36.94% rel ↑ 4.15% abs	(↓ 1.89%)	(↓ 2.09%)	
2	<a href="#">python3.7: _PyType_Lookup</a> ..../Objects/typeobject.c#3074	45	4.56%	7.19%	
		↑ 53.61% rel ↑ 5.27% abs	(↓ <0.01%)	(↓ 1.99%)	
3	<a href="#">Python: flask_route_interest</a> interest.py#27	40	4.05%	21.58%	↓ 1
		↑ 51.81% rel ↑ 4.36% abs	(↓ 0.16%)	(↑ 41.27%)	
4	<a href="#">vmlinux: _raw_spin_unlock_irqrestore</a> vmlinux+0xb6546e	35	3.55%	3.55%	↓ 8
		↑ 16.67% rel ↑ 0.71% abs	(↓ 1.58%)	(↓ 1.58%)	
5	<a href="#">python3.7: _PyObject_GenericGetAttrWithDict</a> ..../Objects/object.c#1235	32	3.24%	8.81%	↓ 11
		↑ 3.03% rel ↑ 0.10% abs	(↓ 1.69%)	(↓ 4.26%)	
6	<a href="#">python3.7: pymalloc_alloc</a> ..../Objects/obmalloc.c#1436	24	2.43%	2.43%	↓ 5
		↑ 46.67% rel ↑ 2.13% abs	(↓ 0.32%)	(↓ 0.32%)	



# Elastic Observability

## 모든 환경에 걸쳐 통합된 가시성

- 온프레姆/클라우드 인프라와 3-티어 아키텍처에 대한 인사이트 제공
- AWS, Azure, Google 상에 존재하는 350개 이상의 통합 제공
- Kubernetes (온프레姆/클라우드 모두 지원)
- 복잡한 환경에서 문제 원인을 빠르게 찾을 수 있음



**Hosts** BETA

Tell us what you think!

Overview  
Alerts  
SLOs  
CasesLogs  
Stream  
Anomalies  
Categories

Infrastructure

Inventory

Metrics Explorer

Hosts BETA

APM

Services

Traces

Dependencies

Synthetics

Monitors

TLS Certificates

Uptime

Uptime Monitors

TLS Certificates

User Experience

Dashboard

Universal Profiling

Stacktraces

Flamegraphs

Functions

X

Search hosts (E.g. cloud.provider:gcp AND system.load.1 &gt; 0.5)

Database Refresh

Host limit 50 100 500

Operating System Any Cloud Provider Any

What are these metrics?

Hosts

10

CPU Usage  
Average

30.1%

Normalized Load  
Average

55.6%

Memory Usage  
Average

20.3%

Disk Space Usage  
Average

0.0%

	Name	CPU usage (avg.) ⓘ	Normalized Load (avg.) ⓘ	Memory Usage (avg.) ⓘ	Memory Free (avg.) ⓘ	Disk Space Usage (avg.) ⓘ	RX (avg.) ⓘ	TX (avg.) ⓘ
Hosts	gke-eden-3-staging-dummy-pod-scaling-44287b2f-fkmj	15.1%	14%	28.4%	12 GB	0%	7.3 Mbit/s	10.4 Mbit/s
APM	gke-eden-3-staging-dummy-pod-scaling-44287b2f-n057	19.3%	29.6%	28.2%	12.1 GB	0%	8.2 Mbit/s	16.5 Mbit/s
Services	gke-eden-3-staging-ssd-3-bc7684a4-2isy	38.7%	80.5%	21%	49.9 GB	0%	24.7 Pbit/s	24.7 Pbit/s
Traces	gke-eden-3-staging-ssd-3-bc7684a4-7rv1	43.3%	81.5%	33.3%	42.2 GB	0%	69.6 Mbit/s	66.5 Mbit/s
Dependencies	gke-eden-3-staging-ssd-3-bc7684a4-8fu8	24.4%	37.8%	12%	55.6 GB	0%	12.4 Pbit/s	35 Mbit/s
Synthetics	gke-eden-3-staging-ssd-3-bc7684a4-dwru0	42.1%	76.8%	18.8%	51.3 GB	0%	70.8 Mbit/s	69 Mbit/s
Monitors	gke-eden-3-staging-ssd-3-bc7684a4-k1d5	36.5%	77.3%	12.5%	53.3 GB	0%	15.9 Mbit/s	27 Mbit/s
TLS Certificates	gke-eden-3-staging-ssd-3-bc7684a4-n2nc	26.5%	39.5%	14.2%	54.3 GB	0%	40.3 Mbit/s	53.2 Mbit/s
Uptime	gke-eden-3-staging-ssd-3-bc7684a4-p7c7	42.4%	85.6%	14.7%	53.9 GB	0%	41 Mbit/s	36.9 Mbit/s
Uptime Monitors	newsletter-5d8746c7bb-f2rc2	0%	0%	0%	0 B	0%	0 bit/s	0 bit/s

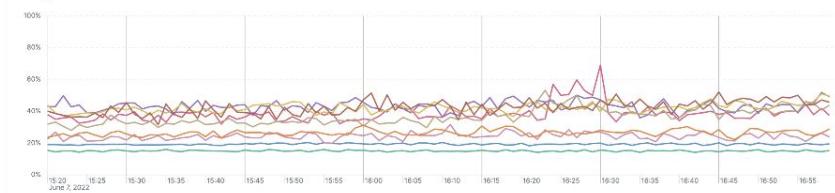
Rows per page: 10 ▾

&lt; 1 &gt;

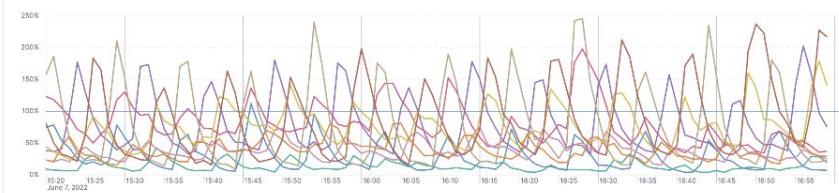
Metrics Logs Alerts

Learn more about metrics ⓘ

CPU Usage



Normalized Load



## 통합 환경으로 사일로 제거

- 모든 비즈니스 및 운영 데이터를 위한 단일 플랫폼
- 메트릭, 로그, 트레이스를 컨텍스트 기반으로 연결해 빠르게 문제 분석
- 업계 유일의 개방형 공통 데이터 모델

```

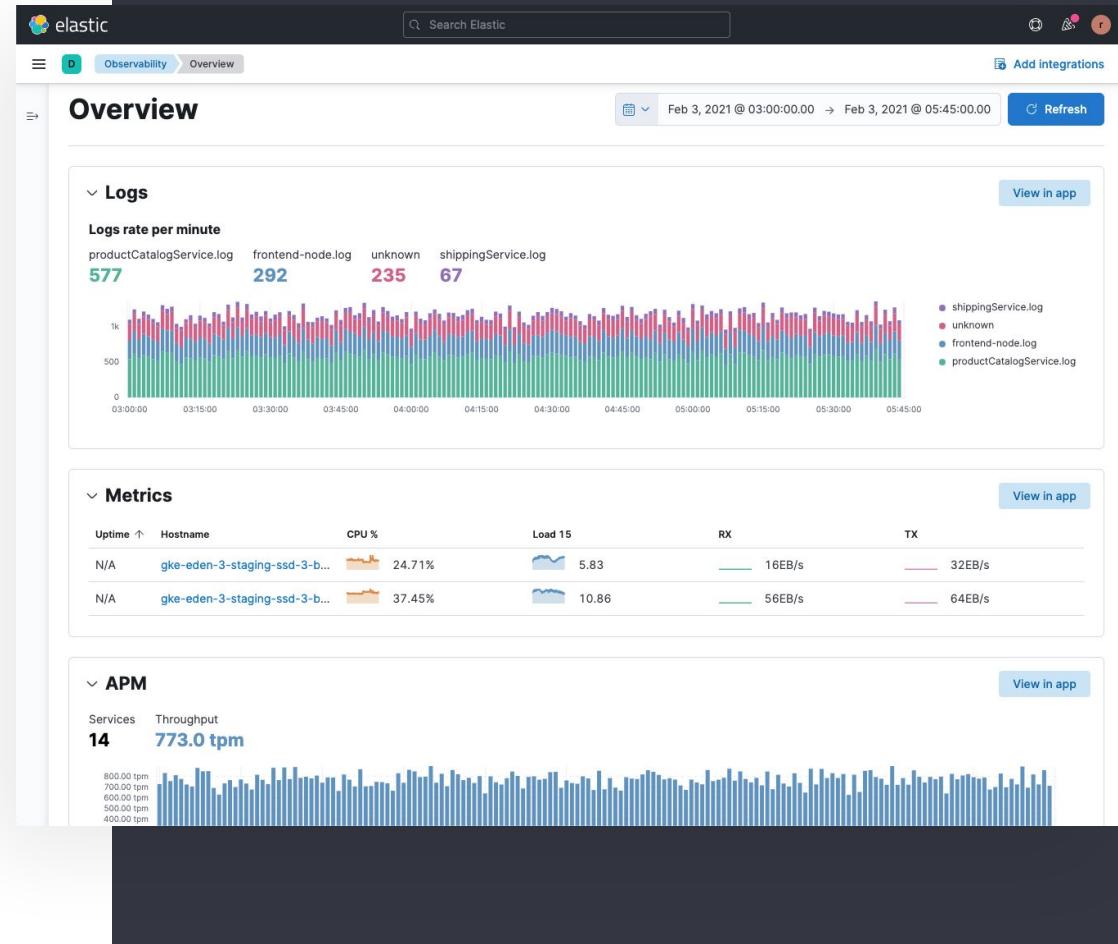
src:10.42.42.42
client_ip:10.42.42.42
apache2.access.remote_ip: 10.42.42.42
context.user.ip:10.42.42.42
src_ip:10.42.42.42

```



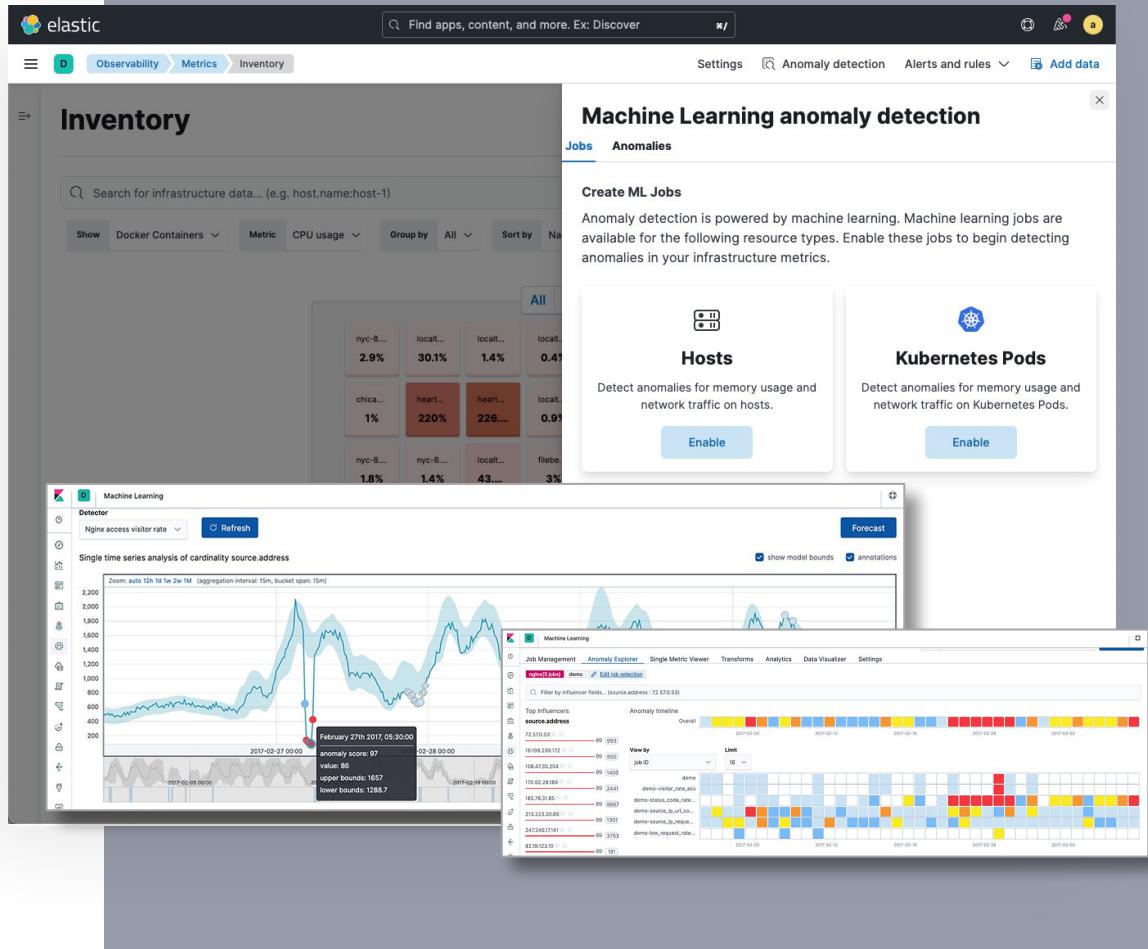
source.ip:10.42.42.42

- 다양한 팀이 협업 할 수 있는 환경



# 실행 가능한 인사이트

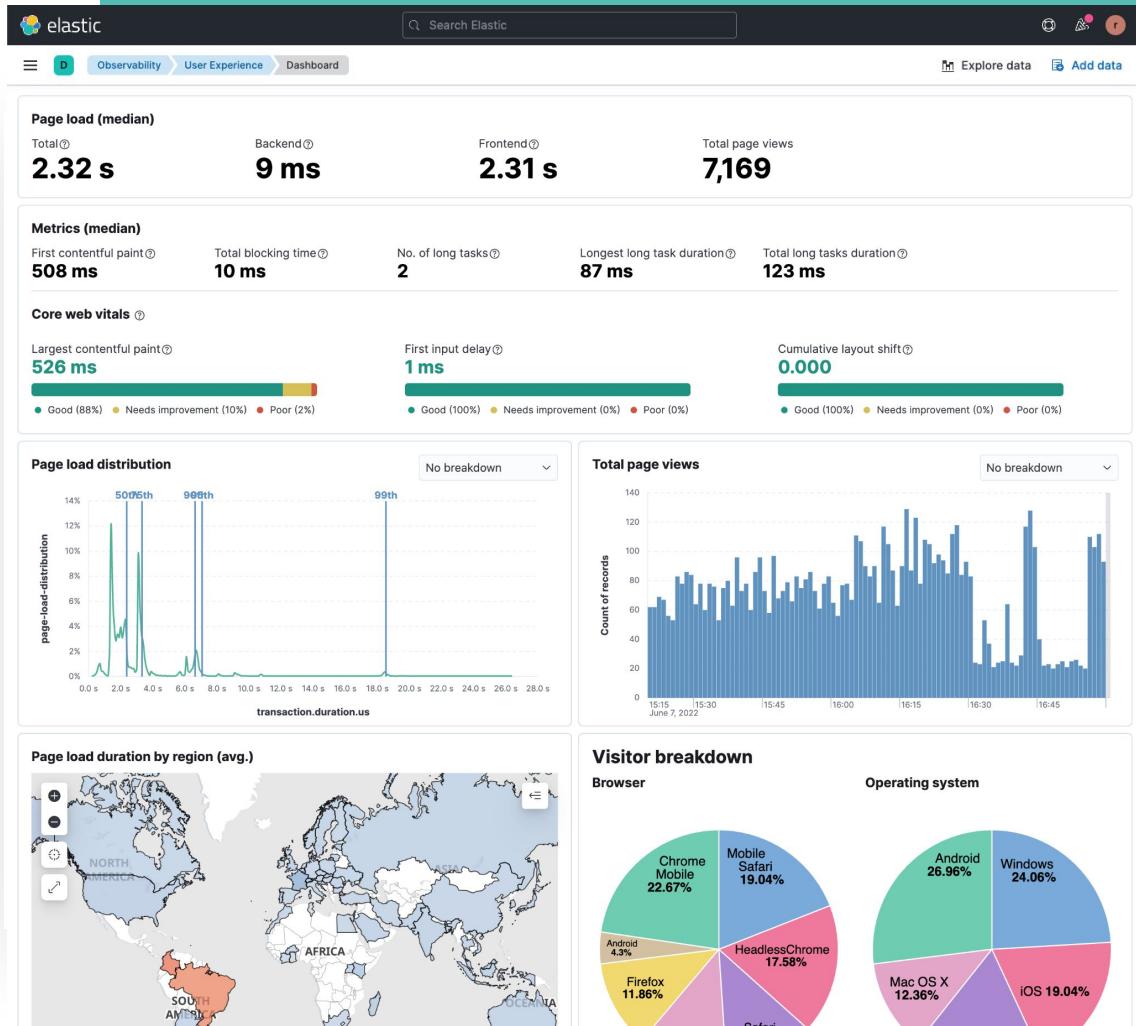
- 코딩이 필요하지 않은 빌트인 머신러닝
- AI를 기반으로 하는 이상 징후 탐지
- 자동화 된 APM 상관관계 생성으로 편리한 근본 원인 분석
- 강력한 검색을 통한 알려지지 않은 불확실한 일(unknown unknowns) 파악
- MTTD와 MTTR 단축



# Elastic Observability

## 사용자 경험 측정 (RUM)

- 시간의 흐름에 따른 인프라, 애플리케이션 및 비즈니스 동향 추적
- 고객 경험을 측정하고 사용자 여정을 능동적으로 파악
- 프런트엔드에서 백엔드까지 한 번에 추적하여 문제 해결
- SLO 설정, SLI 및 SLA 측정



## Error occurrence

 View 19 occurrences in Discover.

a few seconds ago | HeadlessChrome (79.0.3945) | 

[Exception stack trace](#)   [Metadata](#)

### Test CaptureError

webpack:///./src/rum.js in call at line 78

```
73.         featureFlags: ['double-trouble', '4423-hotfix']
74.     }
75. }
76.
77. try {
78.     throw new Error('Test CaptureError')
79. } catch (e) {
80.     apm.captureError(e)
81. }
82.
83.
```

webpack:///webpack/bootstrap b1113b74ced4a8bb4dd9 in this at line 19

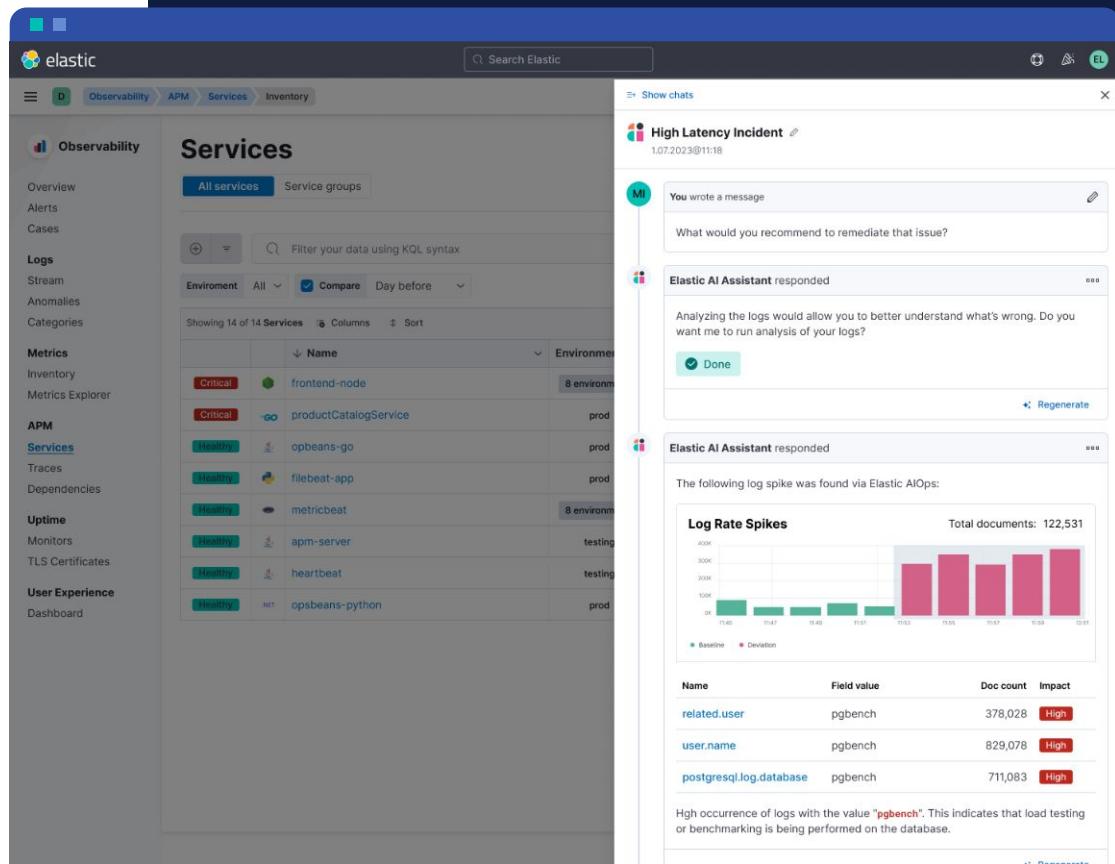
```
14.             l: false,
15.             exports: {}
16.         };
17.
18.         // Execute the module function
19.         modules[moduleId].call(module.exports, module, module.exports, __webpack_require__);
20.
21.         // Flag the module as loaded
22.         module.l = true;
23.
24.         // Return the exports of the module
```

> 1 library frame

## AI 어시스턴트

Powered by ESRE

- 인시던트 관리 및 근본 원인 분석 지원
- 문제를 대화형으로 해결 - 생성형 AI
- LLM에 의존하지 않는 개방형 기능
- 컨텍스트 기반으로 신뢰할 수 있는 데이터 제공
- 실제 데이터 기반으로 가이드 (runbook) 제공



The screenshot shows the Elastic Observability web interface. On the left, there's a sidebar with navigation links for Observability, APM, Services, and Inventory. The main area is titled "Services" and lists 14 services: frontend-node, productCatalogService, opbeans-go, filebeat-app, metricbeat, apm-server, heartbeat, and opsbeans-python. Each service has a status indicator (e.g., Critical, Healthy) and a small icon. To the right, a modal window titled "High Latency Incident" from July 1, 2023, at 11:18, is open. It contains a message from the AI Assistant asking for a recommendation to remediate the issue, followed by a response suggesting log analysis. Below this is another AI Assistant message about log spikes. At the bottom, there's a chart titled "Log Rate Spikes" showing document counts over time, and a table of field values with their impact levels.

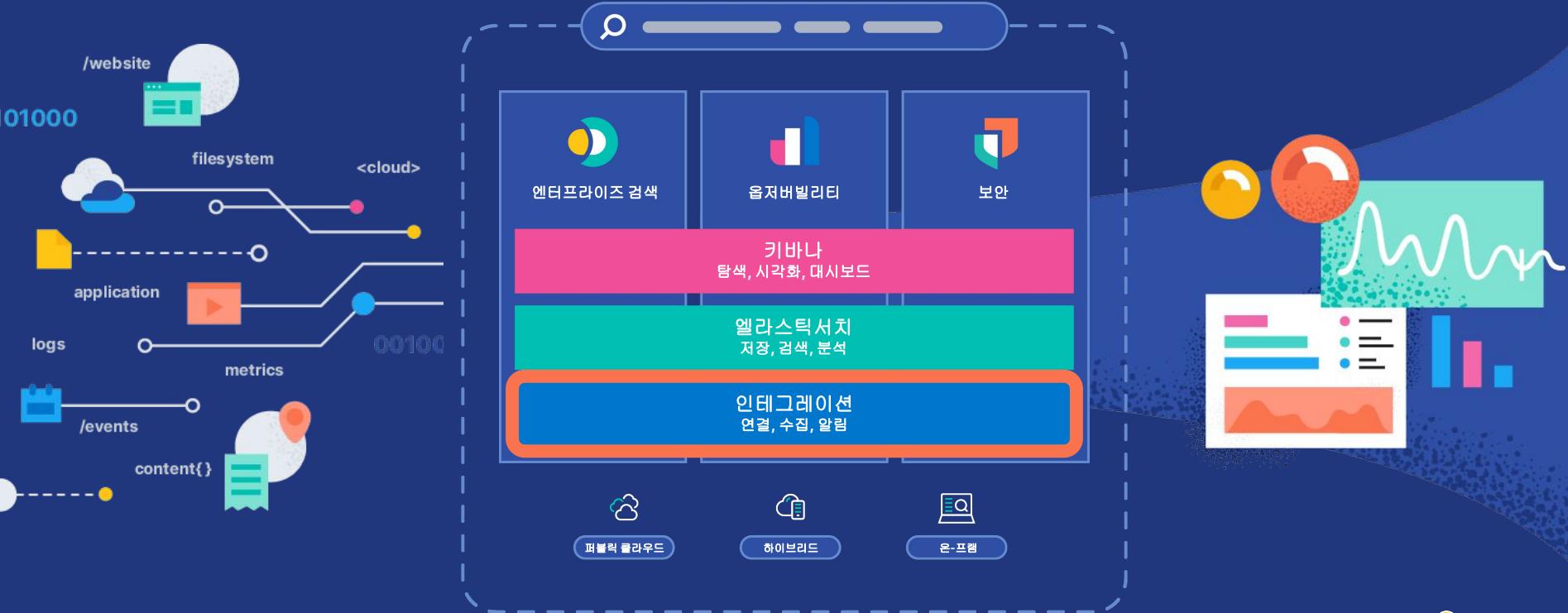
Name	Field value	Doc count	Impact
related.user	pgbench	378,028	High
user.name	pgbench	829,078	High
postgresql.log.database	pgbench	711,083	High

High occurrence of logs with the value "pgbench". This indicates that load testing or benchmarking is being performed on the database.



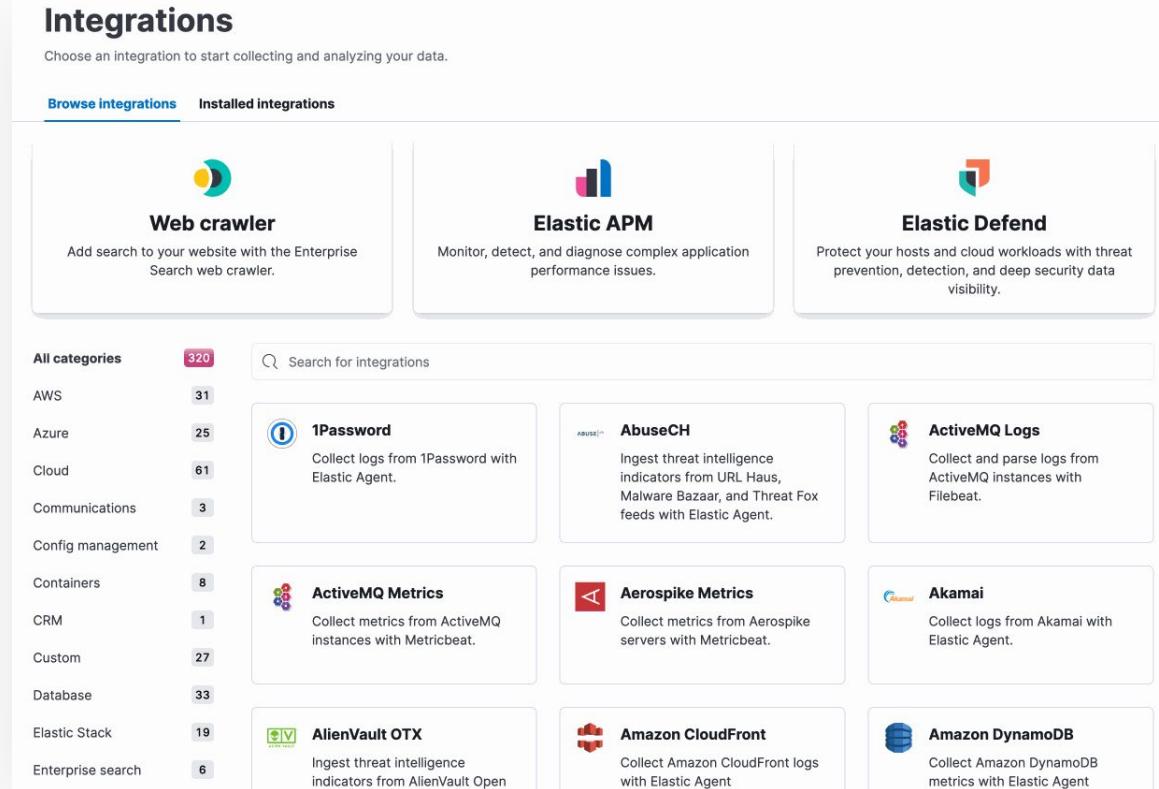
# 데이터 수집

# 엘라스틱 플랫폼



## 간편한 데이터 수집

- 로그, 메트릭, 트레이스 데이터 수집을 한 에이전트에서
- 중앙 에이전트 관리 (Fleet)
  - 수천개의 에이전트 관리
  - 한 번의 클릭으로 에이전트 설정 변경 및 업그레이드
- 대시보드 및 시각화 기능 포함  
350개 이상 통합(Integrations) 지원



The screenshot shows the Elastic Observability interface for managing integrations. At the top, there's a search bar and two tabs: "Browse integrations" (selected) and "Installed integrations". Below this, there are three large cards for "Web crawler", "Elastic APM", and "Elastic Defend". The "Web crawler" card says "Add search to your website with the Enterprise Search web crawler." The "Elastic APM" card says "Monitor, detect, and diagnose complex application performance issues." The "Elastic Defend" card says "Protect your hosts and cloud workloads with threat prevention, detection, and deep security data visibility." On the left, a sidebar lists categories with counts: All categories (320), AWS (31), Azure (25), Cloud (61), Communications (3), Config management (2), Containers (8), CRM (1), Custom (27), Database (33), Elastic Stack (19), and Enterprise search (6). The main area displays a grid of integration cards, each with a logo, name, and brief description. Some examples include 1Password, ActiveMQ Metrics, AlienVault OTX, Amazon CloudFront, AbuseCH, ActiveMQ Logs, Aerospike Metrics, Akamai, and Amazon DynamoDB.

All categories	320
AWS	31
Azure	25
Cloud	61
Communications	3
Config management	2
Containers	8
CRM	1
Custom	27
Database	33
Elastic Stack	19
Enterprise search	6

Search for integrations

 **1Password**  
Collect logs from 1Password with Elastic Agent.

 **AbuseCH**  
Ingest threat intelligence indicators from URL Haus, Malware Bazaar, and Threat Fox feeds with Elastic Agent.

 **ActiveMQ Logs**  
Collect and parse logs from ActiveMQ instances with Filebeat.

 **ActiveMQ Metrics**  
Collect metrics from ActiveMQ instances with Metricbeat.

 **Aerospike Metrics**  
Collect metrics from Aerospike servers with Metricbeat.

 **Akamai**  
Collect logs from Akamai with Elastic Agent.

 **AlienVault OTX**  
Ingest threat intelligence indicators from AlienVault Open

 **Amazon CloudFront**  
Collect Amazon CloudFront logs with Elastic Agent

 **Amazon DynamoDB**  
Collect Amazon DynamoDB metrics with Elastic Agent

# 엘라스틱 에이전트

로그, 메트릭, 트레이스, 보안 등을 위한 단일 통합 에이전트  
핵심 비즈니스 에이전트를 내부적으로 조정

## BEFORE

### ON EVERY HOST:

- **Filebeat** for 로그
- **Metricbeat** for 메트릭
- **APM agent** for 트레이스
- **Packetbeat** for 네트워크
- **Winlogbeat** for 윈도우 데이터
- **Auditbeat** for 감사 데이터
- **Heartbeat** for 업타임
- **Endpoint agent** for Host



## NOW

### ON EVERY HOST:

- **Elastic Agent** for 로그, 메트릭, 트레이스, 업타임, 보안, 윈도우 데이터 등



설치, 설정, 확장을  
한번에 할 수 있음



# 에이전트 설정 → UI로 가능

데이터 수집이  만큼 쉬움

## BEFORE

```
1 ##### Filebeat Configuration Example #####
2
3 # This file is an example configuration file highlighting only the most common
4 # options. The filebeat.reference.yml file from the same directory contains all the
5 # supported options with more comments. You can use it as a reference.
6 #
7 # You can find the full configuration reference here:
8 # https://www.elastic.co/guide/en/beats/filebeat/index.html
9
10 # For more available modules and options, please see the filebeat.reference.yml sample
11 # configuration file.
12
13 # ===== Filebeat inputs =====
14
15 filebeat.inputs:
16
17 # Each - is an input. Most options can be set at the input level, so
18 # you can use different inputs for various configurations.
19 # Below are the input specific configurations.
20
21 - type: log
22
23 # Change to true to enable this input configuration.
24 enabled: false
25
26 # Paths that should be crawled and fetched. Glob based paths.
27 paths:
28   - /var/log/*.log
29   #- c:\programdata\elasticsearch\logs\*
30
31 # Exclude lines. A list of regular expressions to match. It drops the lines that are
32 # matching any regular expression from the list.
33 #exclude_lines: ['^DBG']
34
35 # Include lines. A list of regular expressions to match. It exports the lines that are
36 # matching any regular expression from the list.
37 #include_lines: ['ERR', 'WARN']
38
39 # Exclude files. A list of regular expressions to match. Filebeat drops the files that
40 # are matching any regular expression from the list. By default, no files are dropped.
41 #exclude_files: ['.gz$']
```



## NOW

- Collect logs from Nginx instances
- Collect metrics from Nginx instances

# API 키 사용

최소 권한으로 더 나은 제어

## BEFORE

- 비츠에서 아이디/패스워드 입력
- 패스워드 YAML 설정에 저장됨
- 기본 사용자는 슈퍼유저 권한이 있음
- 하나 또는 몇 개의 비밀번호로 모든 비츠 사용

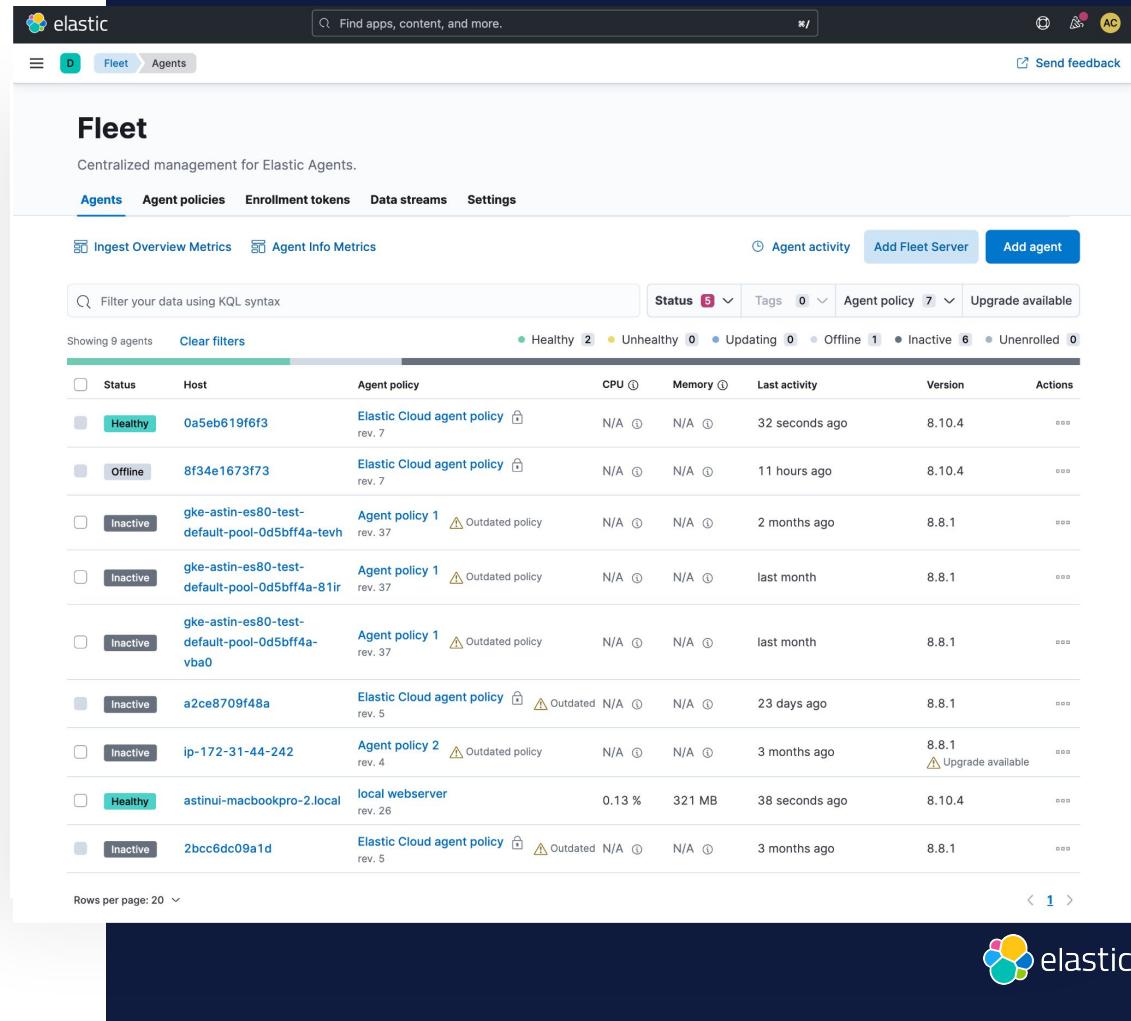


## NOW

- Fleet 및 엘라스틱서치에 대한 API 키
- Fleet에서 자동으로 키 생성
- 각 에이전트에서 최소한의 권한으로 사용
- 에이전트 당 하나의 키로 쉽게 관리 가능

# 중앙 에이전트 관리 (Fleet)

- 여러 에이전트를 중앙에서 UI로 관리
- 엘라스틱 에이전트 상태에 대한 빠른 가시성 확보
- 에이전트 설정 및 버전을 원격으로 업데이트



The screenshot shows the Elastic Fleet interface. At the top, there's a navigation bar with the Elastic logo, a search bar, and user account information. Below the navigation is a header titled "Fleet" with sub-links for Agents, Agent policies, Enrollment tokens, Data streams, and Settings. A secondary navigation bar below the main header includes links for Ingest Overview Metrics and Agent Info Metrics, along with buttons for Agent activity, Add Fleet Server, and Add agent.

The main content area displays a table of agents. The table has columns for Status, Host, Agent policy, CPU, Memory, Last activity, Version, and Actions. A filter bar above the table allows users to search by KQL syntax and apply filters for Status (Healthy, Unhealthy, Updating, Offline, Inactive, Unenrolled), Tags, Agent policy, and Upgrade available. The table shows 9 agents:

Status	Host	Agent policy	CPU	Memory	Last activity	Version	Actions
Healthy	0a5eb619f6f3	Elastic Cloud agent policy rev. 7	N/A	N/A	32 seconds ago	8.10.4	...
Offline	8f34e1673f73	Elastic Cloud agent policy rev. 7	N/A	N/A	11 hours ago	8.10.4	...
Inactive	gke-astin-es80-test-default-pool-0d5bff4a-tevh	Agent policy 1 rev. 37	N/A	N/A	2 months ago	8.8.1	...
Inactive	gke-astin-es80-test-default-pool-0d5bff4a-81ir	Agent policy 1 rev. 37	N/A	N/A	last month	8.8.1	...
Inactive	gke-astin-es80-test-default-pool-0d5bff4a-vba0	Agent policy 1 rev. 37	N/A	N/A	last month	8.8.1	...
Inactive	a2ce8709f48a	Elastic Cloud agent policy rev. 5	N/A	N/A	23 days ago	8.8.1	...
Inactive	ip-172-31-44-242	Agent policy 2 rev. 4	N/A	N/A	3 months ago	8.8.1 <small>Upgrade available</small>	...
Healthy	astinui-macbookpro-2.local	local webserver rev. 26	0.13 %	321 MB	38 seconds ago	8.10.4	...
Inactive	2bcc6dc09a1d	Elastic Cloud agent policy rev. 5	N/A	N/A	3 months ago	8.8.1	...

At the bottom of the page, there are pagination controls and a note indicating 20 rows per page. The footer features the Elastic logo.



## 클릭 한 번으로 모두 업데이트

- 클릭 한 번으로 모든 에이전트에서 정책(Policy) 업데이트
- Powershell, Chef, Ansible 등을 사용하는데 드는 시간과 번거로움을 줄여줌

The screenshot shows the 'Add integration' screen in the Elastic Fleet interface. A dropdown menu is open under the 'Apache' section, listing various services: AWS, Barracuda Web Application Firewall, Blue Coat Director, and Check Point. A modal dialog box is centered over the interface, titled 'Save and deploy changes'. Inside the dialog, a message states: 'This action will update 56 agents. Fleet has detected that the selected agent policy, Default policy, is already in use by some of your agents. As a result of this action, Fleet will deploy updates to all agents that use this policy.' Below the message, a warning note says: 'This action can not be undone. Are you sure you wish to continue?'. At the bottom right of the dialog are 'Cancel' and 'Save and deploy changes' buttons. The main interface below the dialog shows configuration options for collecting logs and metrics from Apache instances.

Add integration

Apache

aws AWS

Barracuda Web Application Firewall

Blue Coat Director

Check Point

Save and deploy changes

This action will update 56 agents

Fleet has detected that the selected agent policy, **Default policy**, is already in use by some of your agents. As a result of this action, Fleet will deploy updates to all agents that use this policy.

This action can not be undone. Are you sure you wish to continue?

Cancel Save and deploy changes

Advanced options

Collect logs from Apache instances

Collect metrics from Apache instances

# Fleet

Centralized management for Elastic Agents.

[Agents](#) [Agent policies](#) [Enrollment tokens](#) [Data streams](#) [Settings](#)

[Ingest Overview Metrics](#) [Agent Info Metrics](#)

[Agent activity](#)

[Add Fleet Server](#)

[Add agent](#)

Filter your data using KQL syntax

Status 5 Tags 0 Agent policy 7 Upgrade available

Showing 9 agents

[Clear filters](#)

● Healthy 2 ● Unhealthy 0 ● Updating 0 ● Offline 1 ● Inactive 6 ● Unenrolled 0

<input type="checkbox"/> Status	Host	Agent policy	CPU ⓘ	Memory ⓘ	Last activity	Version	Actions
<span>Healthy</span>	0a5eb619f6f3	Elastic Cloud agent policy ⓘ rev. 7	N/A ⓘ	N/A ⓘ	32 seconds ago	8.10.4	...
<span>Offline</span>	8f34e1673f73	Elastic Cloud agent policy ⓘ rev. 7	N/A ⓘ	N/A ⓘ	11 hours ago	8.10.4	...
<span>Inactive</span>	gke-astin-es80-test-default-pool-0d5bff4a-tevh	Agent policy 1 ⓘ rev. 37	⚠️ Outdated policy	N/A ⓘ	N/A ⓘ	2 months ago	8.8.1
<span>Inactive</span>	gke-astin-es80-test-default-pool-0d5bff4a-81ir	Agent policy 1 ⓘ rev. 37	⚠️ Outdated policy	N/A ⓘ	N/A ⓘ	last month	8.8.1
<span>Inactive</span>	gke-astin-es80-test-default-pool-0d5bff4a-vba0	Agent policy 1 ⓘ rev. 37	⚠️ Outdated policy	N/A ⓘ	N/A ⓘ	last month	8.8.1
<span>Inactive</span>	a2ce8709f48a	Elastic Cloud agent policy ⓘ rev. 5	⚠️ Outdated	N/A ⓘ	N/A ⓘ	23 days ago	8.8.1
<span>Inactive</span>	ip-172-31-44-242	Agent policy 2 ⓘ rev. 4	⚠️ Outdated policy	N/A ⓘ	N/A ⓘ	3 months ago	8.8.1 ⚠️ Upgrade available
<span>Healthy</span>	astinui-macbookpro-2.local	local webserver rev. 26	0.13 %	321 MB	38 seconds ago	8.10.4	...
<span>Inactive</span>	2bcc6dc09a1d	Elastic Cloud agent policy ⓘ rev. 5	⚠️ Outdated	N/A ⓘ	N/A ⓘ	3 months ago	8.8.1

Rows per page: 20

< 1 >

[View all agent policies](#)

# Agent policy 1

Revision  
40Integrations  
7Agents  
[Add agent](#)Last updated on  
Nov 15, 2023[Actions](#) ▾[Integrations](#) [Settings](#)

Search...

Namespace ▾

Add integration

Name	Integration	Namespace	Actions
auditd-1	Auditd Logs v3.10.0	default	...
elastic-defend	Elastic Defend v8.10.2	default	...
kubernetes-1	Kubernetes v1.42.0	default	...
network_traffic-1	Network Packet Capture v1.19.1	default	...
osquery_manager	Osquery Manager v1.7.3	default	...
system-1	System v1.46.0	default	...
ti_util-1	Threat Intelligence Utilities v1.2.0	default	...

&lt; Cancel

## Edit System integration

Agent policy  
Agent policy 1

Modify integration settings and deploy changes to the selected agent policy.

### Integration settings

Choose a name and description to help identify how this integration will be used.

#### Integration name

system-1

#### Description

Optional

|

&gt; Advanced options

#### Collect logs from System instances

Change defaults ^

##### System auth logs (log)

Collect System auth logs using log input

#### Paths

/var/log/auth.log\*

X

/var/log/secure\*

X

⊕ Add row

##### Preserve original event



Preserves a raw copy of the original event, added to the field event.original.

&gt; Advanced options

##### System syslog logs (log)

Collect System syslog logs using log input

#### Paths

/var/log/messages\*

X

/var/log/syslog\*

X

/var/log/system\*

X

⊕ Add row

##### Preserve original event



Cancel Preview API request Save integration

# 무료 14일 트라이얼

## elastic.co/cloud/signup

### 퀵스터트 elastic.co/training/free

FREE ELASTIC TRAINING

## Enterprise Search Quick Start

In this 3-step Quick Start series, you'll learn about Elastic Enterprise Search: modern, natural search experiences with pretuned relevance for your apps and websites. See how quickly you can get set up, ingest data, discover the search interface, and analyze and tune a search engine for your needs. Topics include what is Elastic Enterprise Search, indexing data into Elastic Enterprise Search, and analyzing and refining search.

[Start free trial](#) [Read documentation →](#)

The screenshot shows the Elastic Enterprise Search interface under the 'Analytics' tab. It features a line chart titled 'Total queries' from October 27, 2021, to November 3, 2021. The chart shows a sharp increase in queries starting around October 30th. A tooltip for November 1, 2021, indicates 150 total queries, 10 total clicks, and 47 total queries with no results. Below the chart is a table of 'Top queries' and 'Top queries with no results'. The 'Top queries' table includes rows for 'forest', 'waterfalls', 'biggest park', 'rivers', and 'rain'. The 'Top queries with no results' table includes rows for 'rainbow', 'burbot', 'haddock', and 'woodpecker'.

# Thank you!