Elastic 认证工程师考试经验分享

@zyongqing

2019/09/07

考试简介

考试范围：仅 Elasticsearch

考试形式：10~12 题实机操作

考试时间：3 小时

考试语言：英语

考试地点：在线考试

考试费用：400 美元

考试流程

报名 → 预约 → 考试 → 通过

2019.08.01 – 2019.10.31 报名且参加考试可免费重考一次

#1 官方信息

Open Doors with Elastic Certification

You mastered the Elastic Stack, now it's time to enhance your professional visibility and grow opportunities for your company by becoming Elastic certified. When someone asks for your Elastic credentials, show them your (digital) badge.

Purchase and attempt the Elastic Certified Engineer exam by October 31, and receive a 2nd attempt free.

Get certified

Elastic certification is tough, but we have tips for making sure you're prepared.

Watch video

Have questions about the certification process? We have answers for you.

Get the FAQ

your professional visibility and grow opportunities for your company by becoming Elastic certified. When someone asks for your Elastic credentials, show them your (digital) badge.

Purchase and attempt the Elastic Certified Engineer exam by October 31, and receive a 2nd attempt free.

Get certified

考试报名*

考试说明

- 考试大纲 *
- 考试形式
- 考场要求
- 考试准备

Elastic certification is tough, but we have tips for making sure you're prepared.

Watch video

考试经验

考试系统 *

考题讲解 *

…

Have questions about the certification process? We have answers for you.

Get the FAQ

常见问题

- 考试版本 *
- 身份验证 *
- …

#2 官方培训

Elasticsearch Engineer I

教室 - 2 天，8 小时/每天

在线 - 4 天，4 小时/每天

Elasticsearch Engineer II

教室 - 2 天，8 小时/每天

在线 - 4 天，4 小时/每天

#3 复习内容

目标

1 搞懂考试大纲

Installation and Configuration

Indexing Data

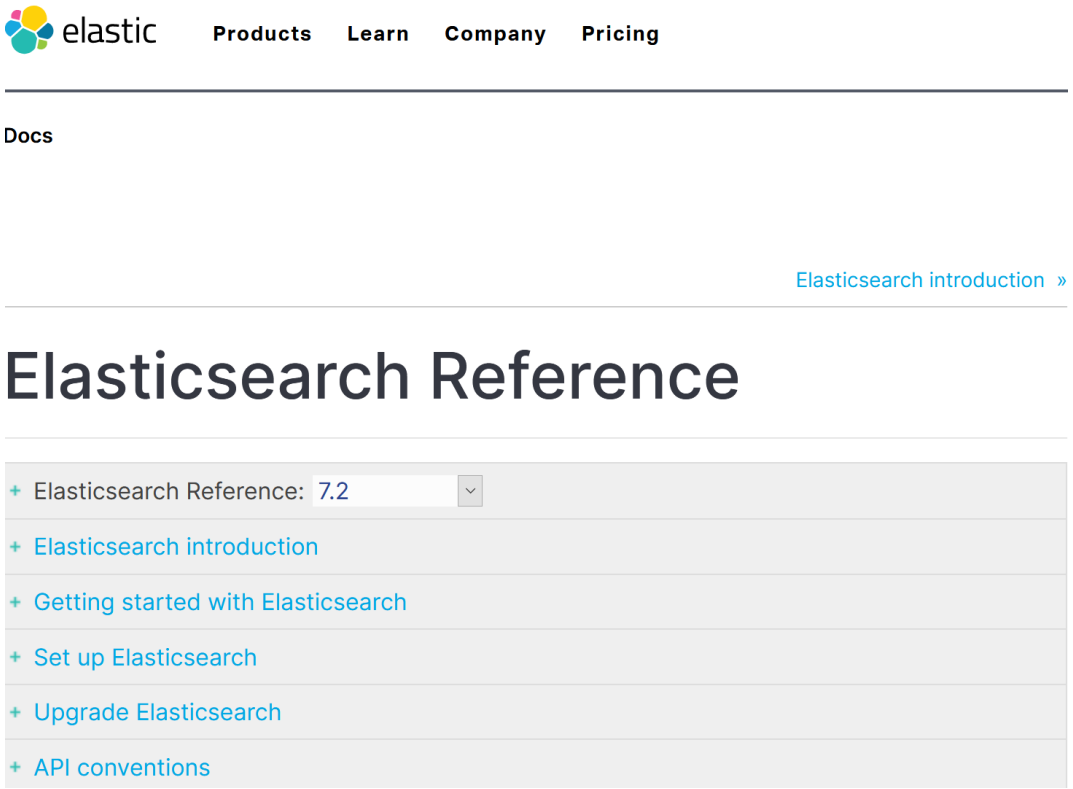
Queries

Aggregations

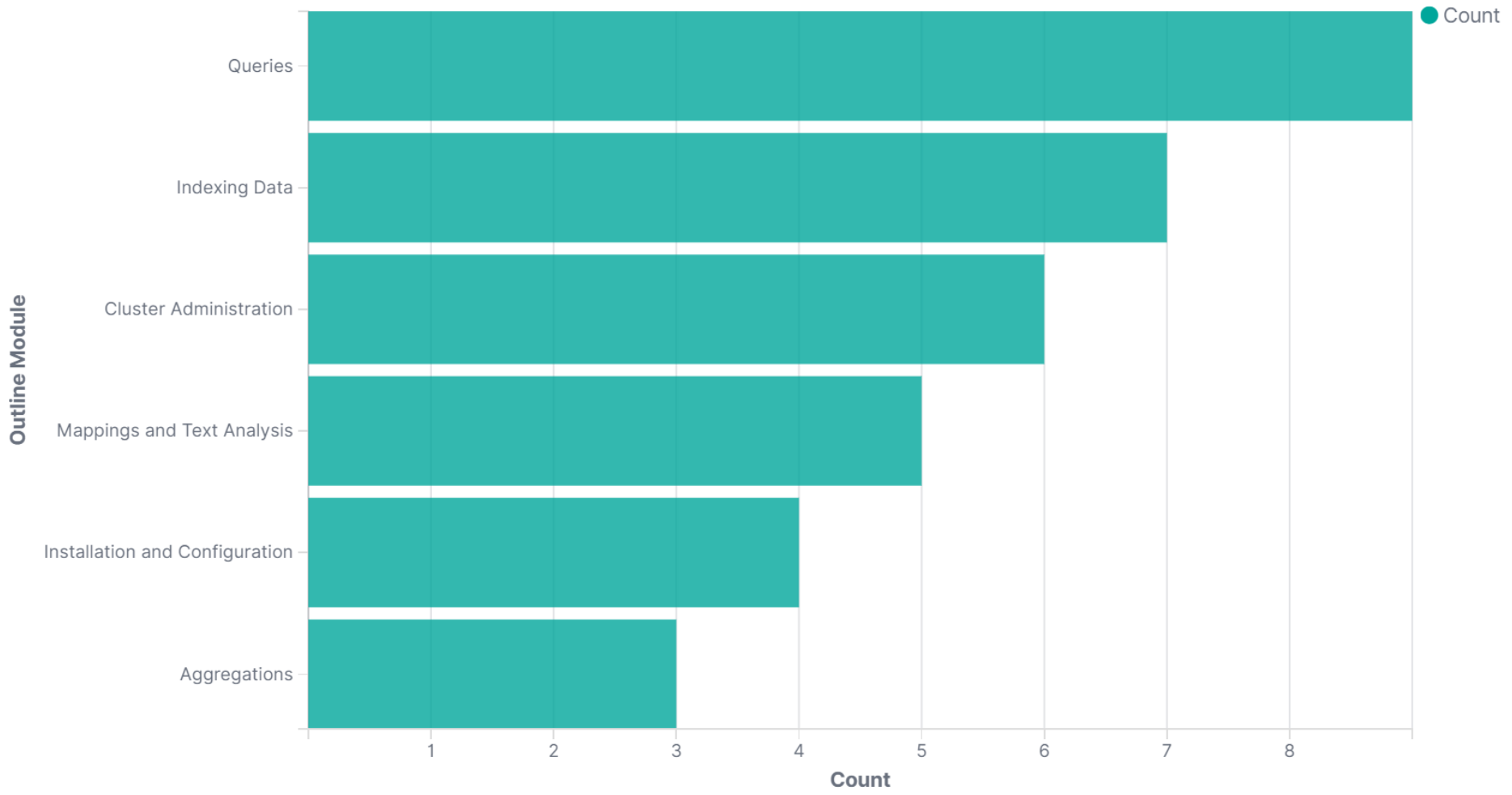
Mappings and Text Analysis

Cluster Administration

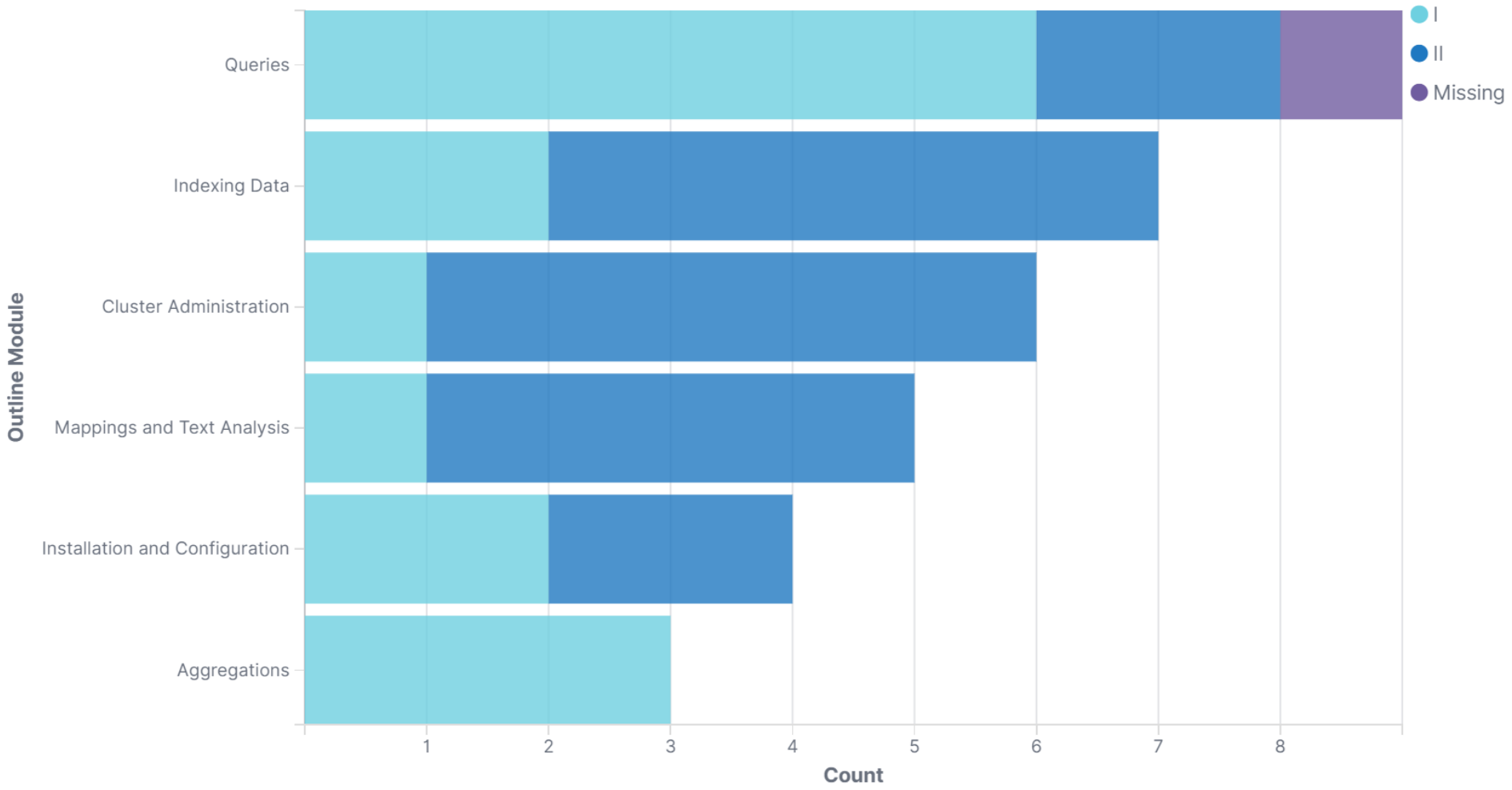
2 熟悉官方文档



考试大纲


Count
Queries
Indexing Data
Cluster Administration
Mappings and Text Analysis
Installation and Configuration
Aggregations
Outline Module
1
2
3
4
5
6
7
8
Count

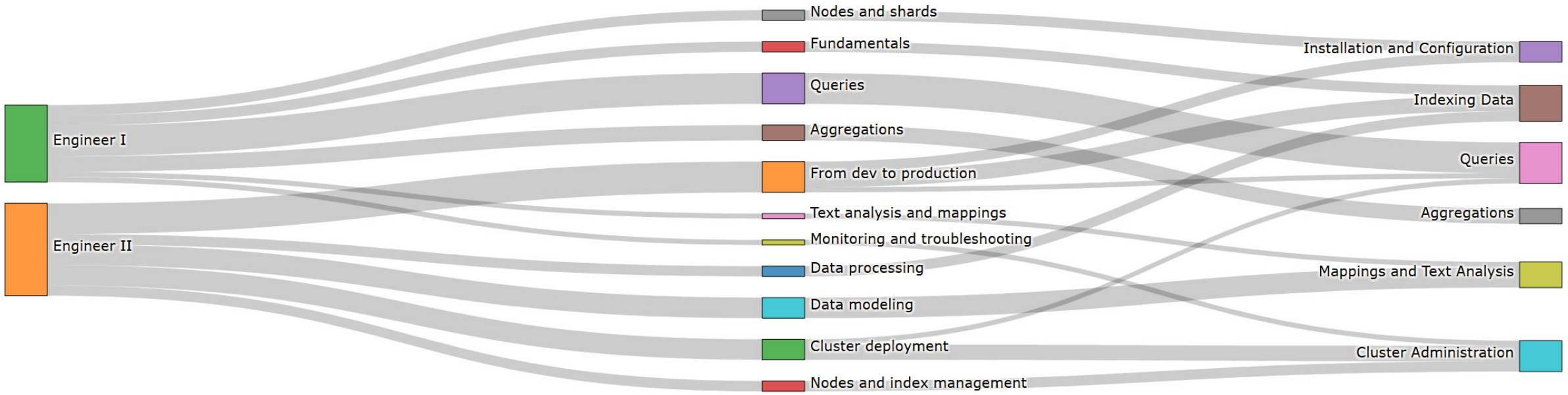
培训大纲 - 考试大纲


Queries
Indexing Data
Cluster Administration
Mappings and Text Analysis
Installation and Configuration
Aggregations
Outline Module
1
2
3
4
5
6
7
8
Count
I
II
Missing

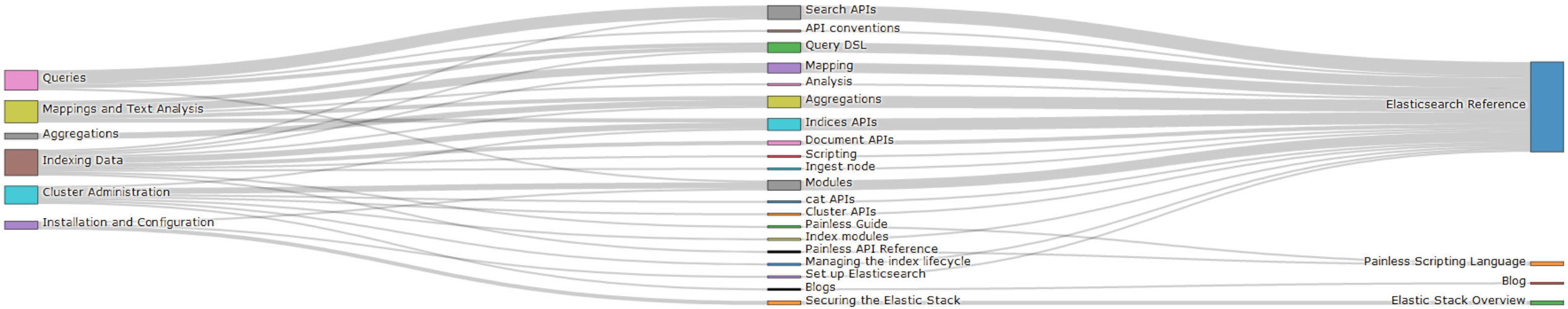
培训大纲 - 考试大纲

课程编号	模块名称	大纲模块	大纲内容
I	Elasticsearch fundamentals	Indexing Data	Define an index that satisfies a given set of requirements
I	Elasticsearch fundamentals	Indexing Data	Perform index, create, read, update, and delete operations on the documents of an index
I	Elasticsearch queries	Queries	Write and execute a search query for terms and/or phrases in one or more fields of an index
I	Elasticsearch queries	Queries	Apply fuzzy matching to a query
I	Elasticsearch queries	Queries	Write and execute a search query that is a Boolean combination of multiple queries and filters
I	Elasticsearch queries	Queries	Highlight the search terms in the response of a query
I	Elasticsearch queries	Queries	Sort the results of a query by a given set of requirements
I	Elasticsearch queries	Queries	Implement pagination of the results of a search query
I	Elasticsearch aggregations	Aggregations	Write and execute metric and bucket aggregations
I	Elasticsearch aggregations	Aggregations	Write and execute aggregations that contain sub-aggregations
I	Elasticsearch aggregations	Aggregations	Write and execute pipeline aggregations
I	Elasticsearch text analysis and mappings	Mappings and Text Analysis	Define a mapping that satisfies a given set of requirements
I	Elasticsearch nodes and shards	Installation and Configuration	Deploy and start an Elasticsearch cluster that satisfies a given set of requirements
I	Elasticsearch nodes and shards	Installation and Configuration	Configure the nodes of a cluster to satisfy a given set of requirements
I	Elasticsearch monitoring and troubleshooting	Cluster Administration	Diagnose shard issues and repair a cluster's health
II	Elasticsearch data modeling	Mappings and Text Analysis	Define and use a custom analyzer that satisfies a given set of requirements
II	Elasticsearch data modeling	Mappings and Text Analysis	Define and use multi-fields with different data types and/or analyzers
II	Elasticsearch data modeling	Mappings and Text Analysis	Configure an index so that it properly maintains the relationships of nested arrays of objects
II	Elasticsearch data modeling	Mappings and Text Analysis	Configure an index that implements a parent/child relationship
II	Elasticsearch data processing	Indexing Data	Define and use an ingest pipeline that satisfies a given set of requirements, including the use of Painless to m
II	Elasticsearch data processing	Indexing Data	Use the Reindex API and Update By Query API to reindex and/or update documents

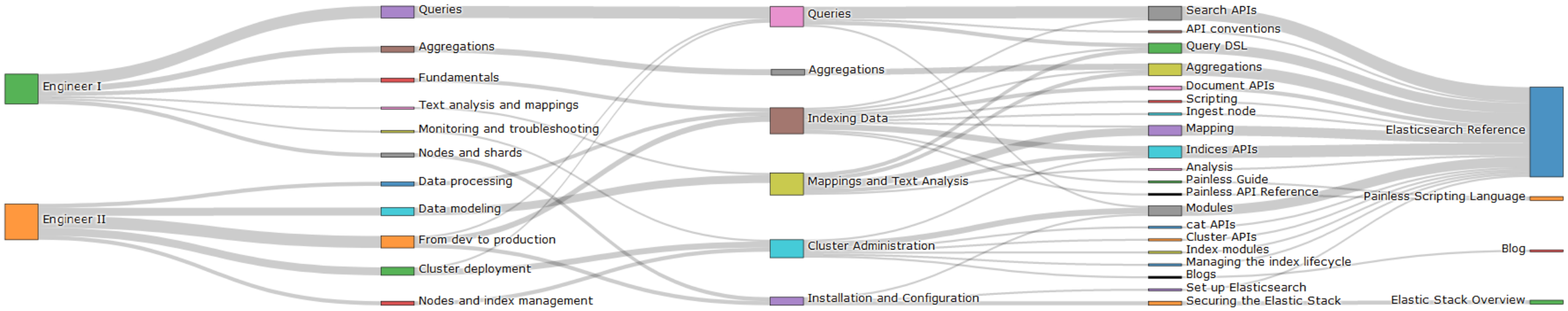
培训大纲 - 考试大纲


Engineer I
Engineer II
Nodes and shards
Fundamentals
Queries
Aggregations
From dev to production
Text analysis and mappings
Monitoring and troubleshooting
Data processing
Data modeling
Cluster deployment
Nodes and index management
Installation and Configuration
Indexing Data
Queries
Aggregations
Mappings and Text Analysis
Cluster Administration

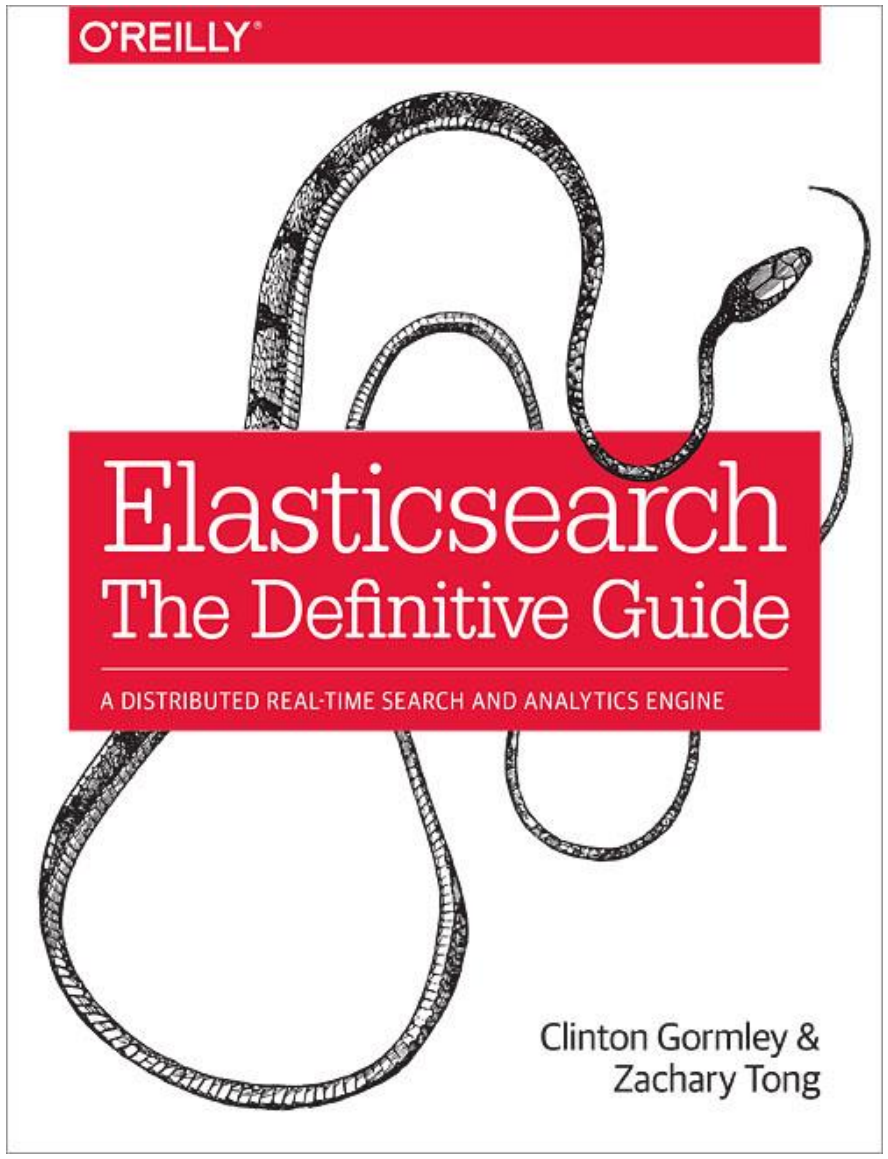
考试大纲 - 官方文档


Queries
Mappings and Text Analysis
Aggregations
Indexing Data
Cluster Administration
Installation and Configuration
Search APIs
API conventions
Query DSL
Mapping
Analysis
Aggregations
Indices APIs
Document APIs
Scripting
Ingest node
Modules
cat APIs
Cluster APIs
Painless Guide
Index modules
Painless API Reference
Managing the index lifecycle
Set up Elasticsearch
Blogs
Securing the Elastic Stack
Elasticsearch Reference
Painless Scripting Language
Blog
Elastic Stack Overview

培训大纲 - 考试大纲 – 官方文档



#4 参考资料



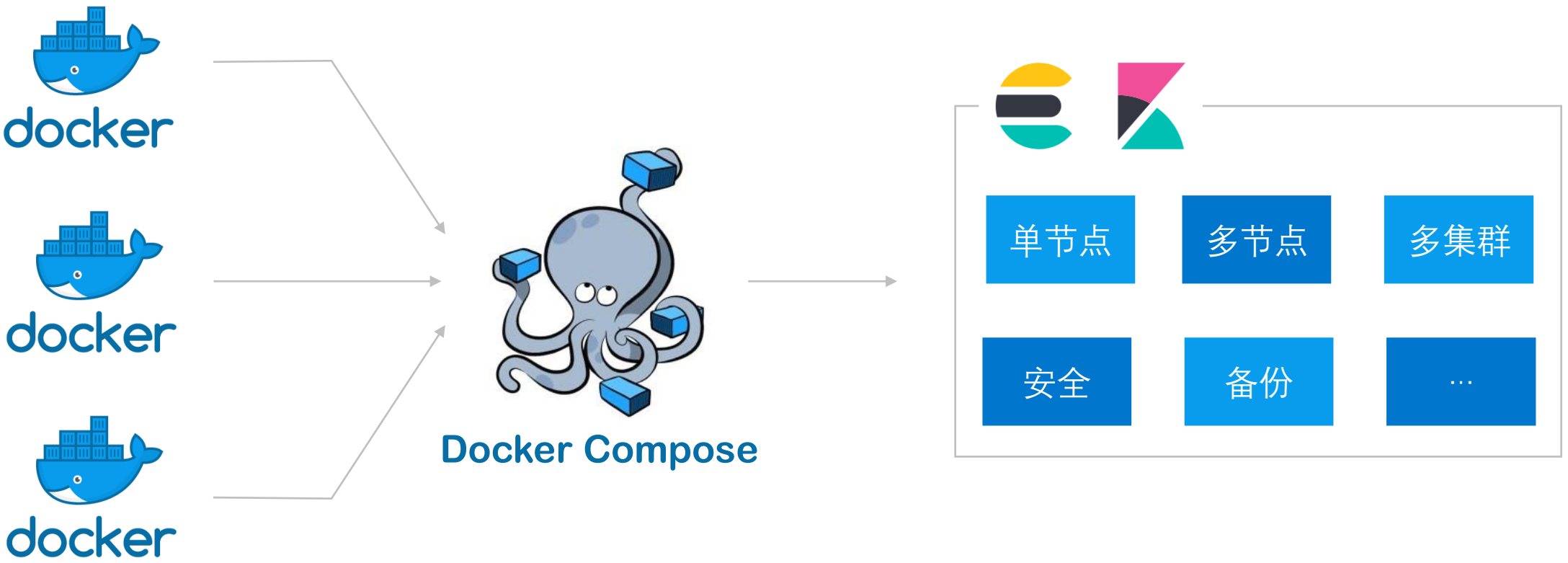
对应 Elasticsearch 2.x 版本

以下章节涉及内部原理

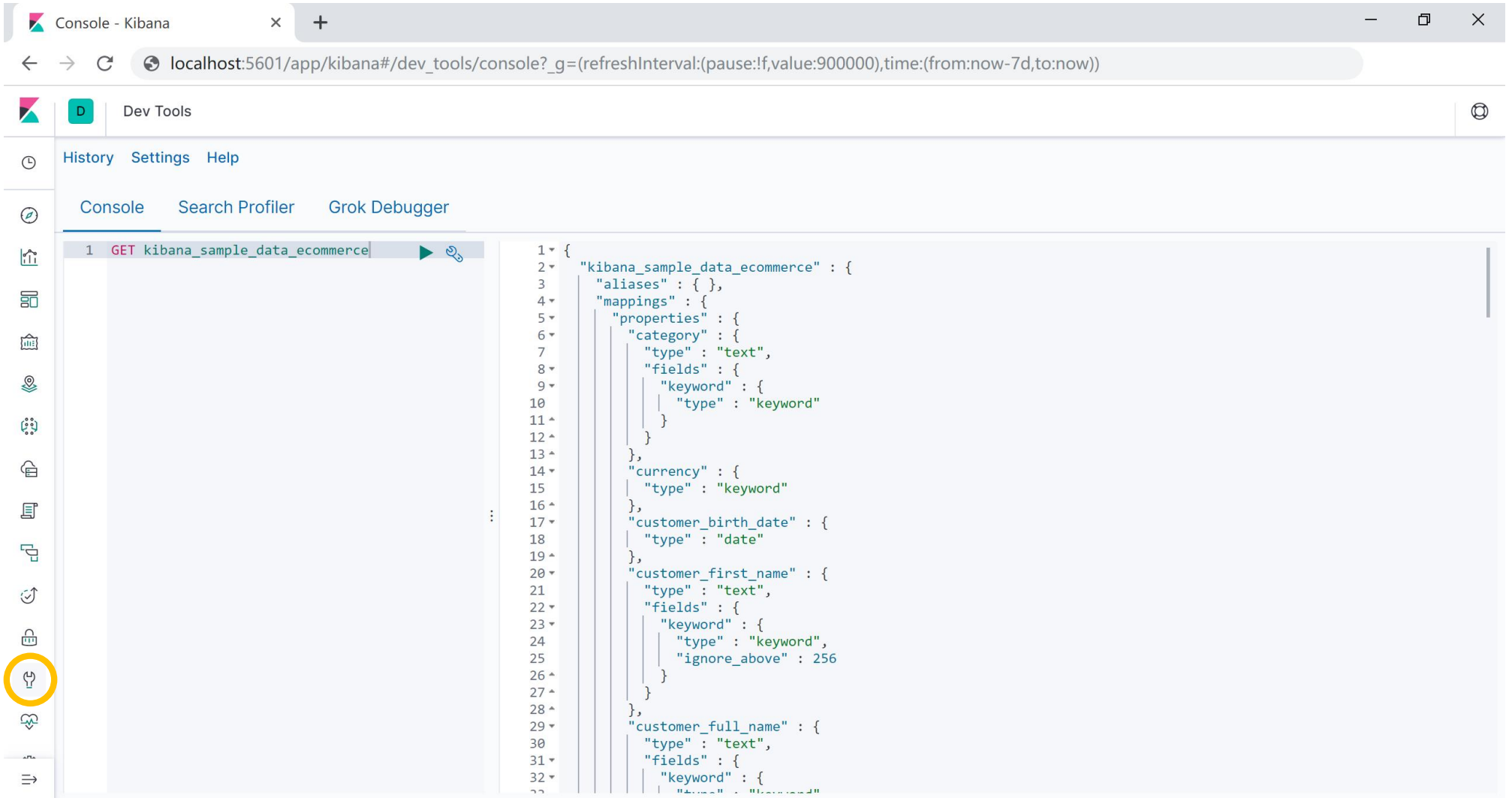
- Chapter 2 Life Inside a Cluster
- Chapter 4 Distributed Document Store
- Chapter 9 Distributed Search Execution
- Chapter 11 Inside a Shard

#5 动手实验

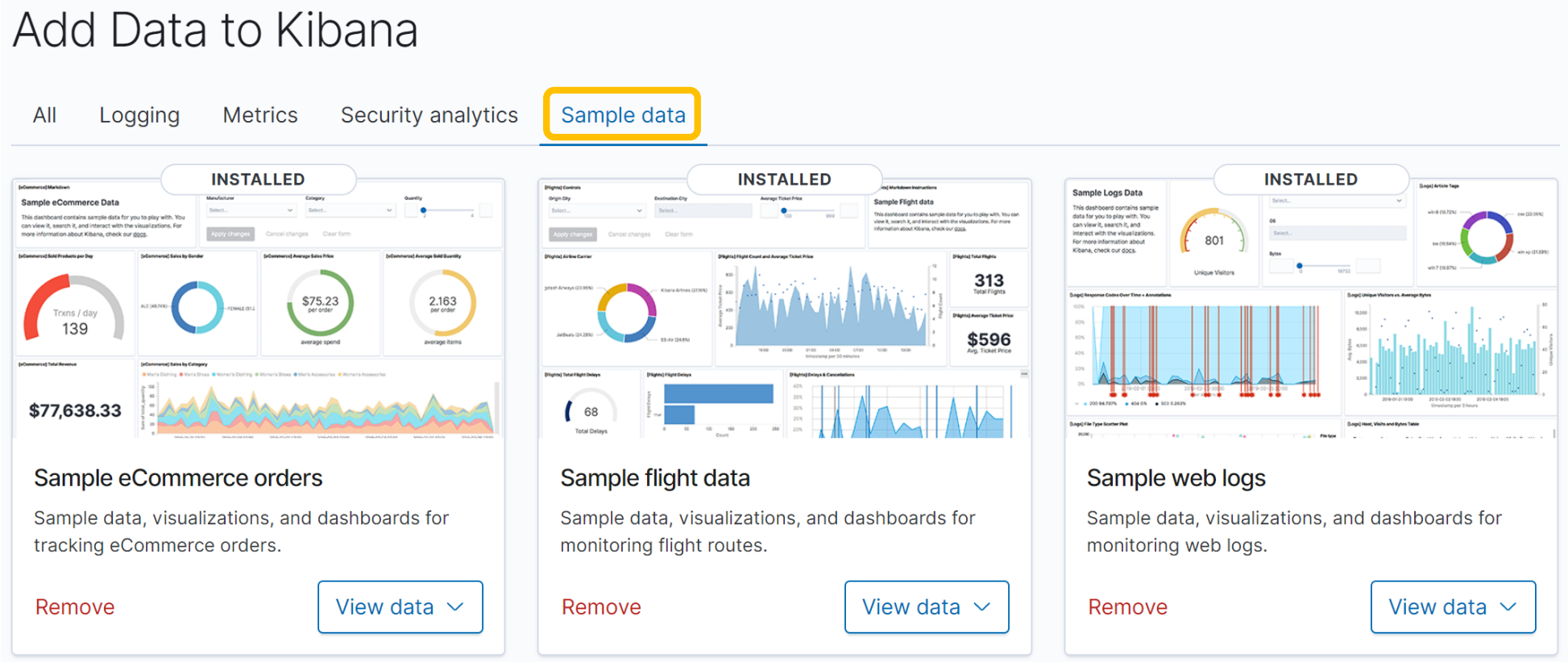
实验环境



实验工具


Console - Kibana
localhost:5601/app/kibana#/dev_tools/console?_g=(refreshInterval:(pause:!f,value:900000),time:(from:now-7d,to:now))
Dev Tools
History
Settings
Help
Console
Search Profiler
Grok Debugger
GET kibana_sample_data_ecommerce
{
"kibana_sample_data_ecommerce" : {
"aliases" : { },
"mappings" : {
"properties" : {
"category" : {
"type" : "text",
"fields" : {
"keyword" : {
"type" : "keyword"
}
}
},
"currency" : {
"type" : "keyword"
},
"customer_birth_date" : {
"type" : "date"
},
"customer_first_name" : {
"type" : "text",
"fields" : {
"keyword" : {
"type" : "keyword",
"ignore_above" : 256
}
}
},
"customer_full_name" : {
"type" : "text",
"fields" : {
"keyword" : {

实验数据




```
health status index                          uuid                   pri rep docs.count docs.deleted store.size pri.store.size
green  open   kibana_sample_data_ecommerce olYV5ZOvRb2lOfbtSNRAWQ   1   0       4675            0      4.7mb          4.7mb
green  open   kibana_sample_data_logs      1dVT-YJCQGiFzEmAuV5NqA   1   0      14074            0     11.5mb         11.5mb
green  open   kibana_sample_data_flights   mTfl88A_TfmOUO4OryI3mw   1   0      13059            0      6.4mb          6.4mb
```

#6 例題

来源

1. 官方视频（共 6 题）

   Preparing for the Elastic Certified Engineer Exam - Get Elasticsearch Certified

   Helpful Tips for Passing the Elastic Certified Engineer Exam for Elasticsearch 7.x

2. 官方培训

3. 网络及社区

4. 假想题

使用

1. 确定知识点深度，避免钻牛角尖
2. 搞懂知识点，确保会做
3. 限制时间，确保按时做完

#7 考前准备

场地要求

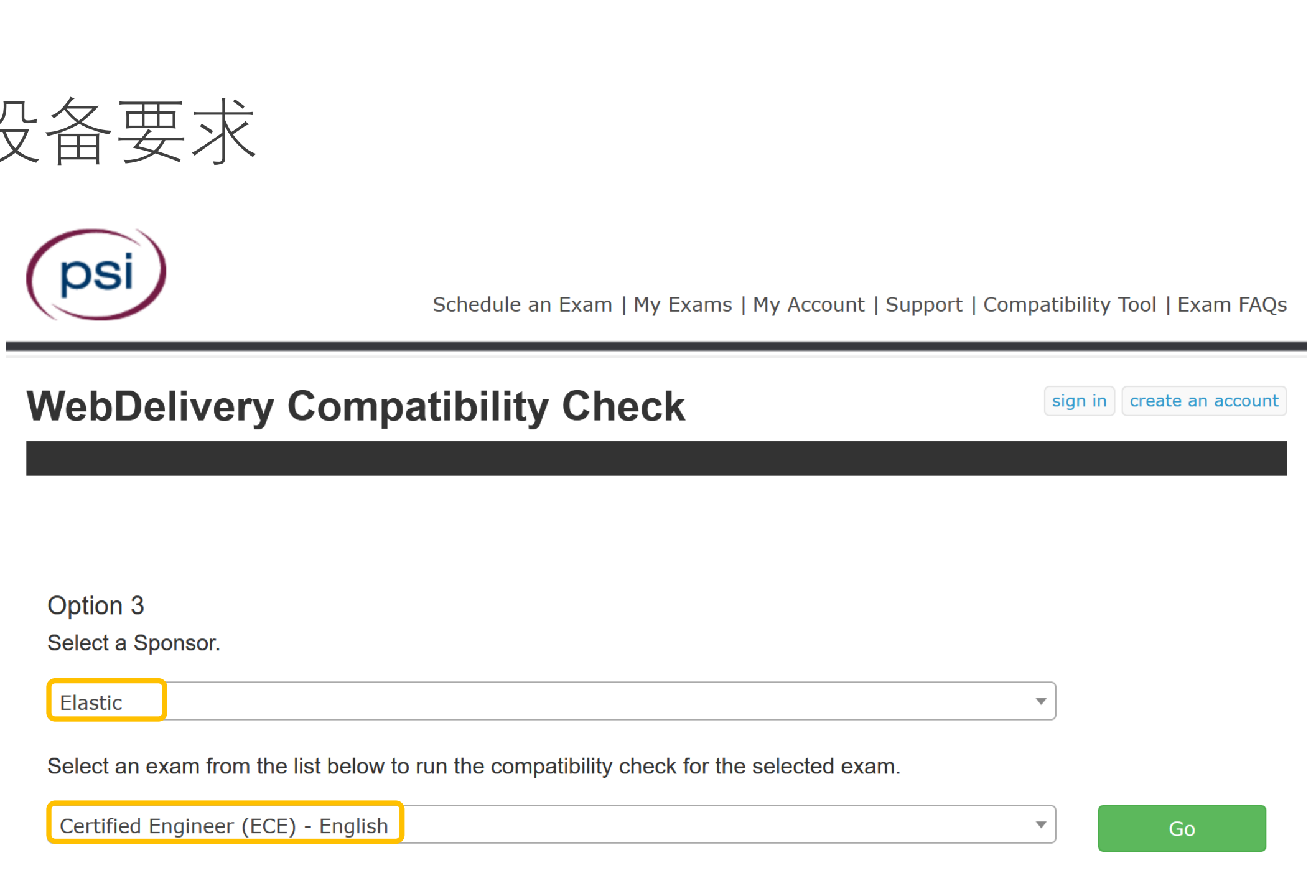
1. 安静的房间

   没有噪音，没有强光，没有外人 …

2. 清洁的桌面

   没有纸、笔、书、显示器 …

设备要求


psi
Schedule an Exam | My Exams | My Account | Support | Compatibility Tool | Exam FAQs
WebDelivery Compatibility Check
sign in
create an account
Option 3
Select a Sponsor.
Elastic
Select an exam from the list below to run the compatibility check for the selected exam.
Certified Engineer (ECE) - English
Go

Component	Minimum Requirement	Status	Action Required
Operating System	▪ Windows XP, Vista, 7, 8 ▪ Mac OS X and above ▪ Linux ▪ Chrome OS	✓	Linux distributions using Wayland (such as Fedora 28) may experience issues with the Google Chrome Extension. Consider using an alternate distribution or operating system to avoid issues on your exam day.
Web Browser	Current version of Google Chome or Chromium.	✗	Google Chrome or Chromium required.
Browser Settings	Your browser must accept 3rd party cookies for the duration of the exam ONLY.		Please ensure that your browser accepts 3rd party cookies for the duration of the exam ONLY. To change your settings visit: chrome://settings/content and unblock 3rd party cookies.
Webcam/Microphone	▪ Minimum VGA 640 x 480 resolution ▪ Enabled built in or external microphone	✓	
Google Chrome Extension	Install PSI Google Chrome Extension	✗	See step 1 at top of page
Ports	**TCP:** port 80 and 443	✓	
Bandwidth	**Minimum** 500Kbps download and 256Kbps upload **Recommended** 5Mbps or higher download and upload	✗	Must meet at least 500kb/s download and 250kb/s upload speed.
Hardware Requirements	▪ 1GB RAM & 2GHz dual core processor ▪ Minimum 1280 x 800 resolution		Please ensure that you meet the minimum hardware requirements, listed to the left, before launching your exam at scheduled time.
Testing Environment	▪ Room must be quiet, private and well lit. Public spaces such as coffee shops, stores, etc. are not allowed. ▪ Desk must clear of all notes and electronics. ▪ Examinee should reside in the center of the camera frame ▪ No bright lights or windows behind the examinee		Please ensure that you meet the testing environment requirements, listed to the left, before launching your exam at scheduled time.

必须使用 Chrome 浏览器

确保摄像头无遮挡

必须安装考试插件

确保**考试时**网络流畅

考试环境要求

#8 考试注意事项

1. 可提前 15 分钟进入考试，迟到 15 分钟直接挂科
2. 提前喝水、吃东西、上厕所
3. 准备好护照或身份证，考前要核对身份
4. 时间较充裕，不要过度紧张，不会的标记后先跳过
5. 仔细看题，仔细看题、仔细看题
6. 使用文档搜索，说不定有惊喜
7. 做完记得保存并提交

总结

1. 掌握考纲内容
2. 熟悉官方文档
3. 努力动手实验
4. 沉着冷静考试

资料汇总

官方信息

https://training.elastic.co/exam/elastic-certified-engineer

https://www.elastic.co/training/certification/faq

官方视频

https://www.bilibili.com/video/av64692198 （7.x）

https://www.bilibili.com/video/av63688396 （6.x）

官方培训

https://www.elastic.co/cn/training/elasticsearch-engineer-1

https://www.elastic.co/cn/training/elasticsearch-engineer-2

参考资料

Elasticsearch - The Definitive Guide

https://www.elastic.co/guide/en/elasticsearch/guide/current/index.html （英）

https://www.elastic.co/guide/cn/elasticsearch/guide/current/index.html （中）

设备兼容性检测

https://www.examslocal.com/ScheduleExam/Home/CompatibilityCheck

演讲文档及资料

https://github.com/zyongqing/elastic-certified-engineer

Q&A