# Setting Up Elasticsearch and Kibana on Windows

## Introduction

Setting up Kibana and Elasticsearch involves preparing these tools to work seamlessly together. This guide is specifically for Windows users who chose not to use the Elastic Cloud setup. Below are step-by-step instructions for installing and configuring Elasticsearch and Kibana locally.

## Elasticsearch Setup

### 1. Download and Extract Archives

1. Download Elasticsearch and Kibana archives from the provided links.  
2. Extract the archives to your local machine.  
- Note: Use an advanced extractor like 7-Zip if the built-in Windows unzipper fails due to long file paths.

### 2. Dependencies

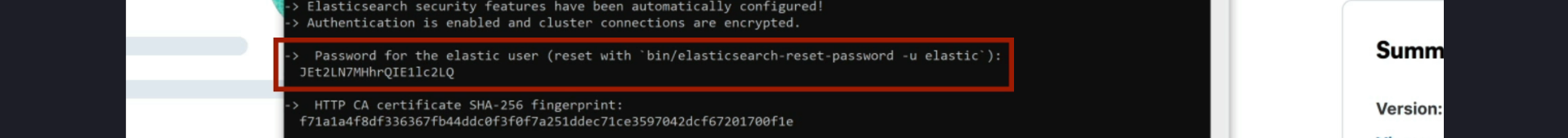
1. Elasticsearch includes OpenJDK (no need to install Java separately).  
2. Kibana includes Node.js for its web server(bundled within the archive).

### 3. Starting Elasticsearch

1. Open Command Prompt and navigate to the extracted Elasticsearch directory using the `cd` command.  
2. Rename the extracted directory if needed to simplify navigation.  
3. Run the following command to start Elasticsearch:  
 ```  
 bin\elasticsearch.bat  
 ```  
4. Elasticsearch will initialize and start.

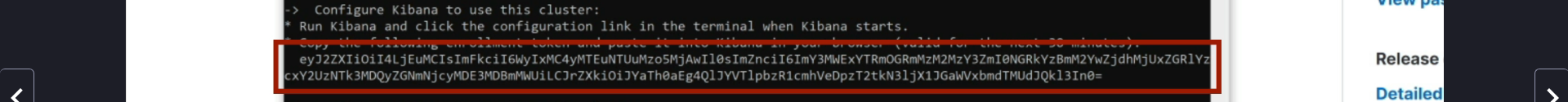
### 4. Key Security Configurations: A couple of things will be automatically configured for us such as

* \*\*Superuser and Password:\*\*

1. A superuser is created automatically with a generated password.  
2. Locate the password in the Command Prompt output and save it for future use.  
  
3. Reset the password if lost using the following command:  
 ```  
 bin\elasticsearch-reset-password  
 ```

* \*\*TLS Certificates:\*\*

Automatically generated for encrypted internal and external communication with Elasticsearch over HTTP (Kibana uses APIs under the hood).

* \*\*Enrollment Token:\*\*  
  

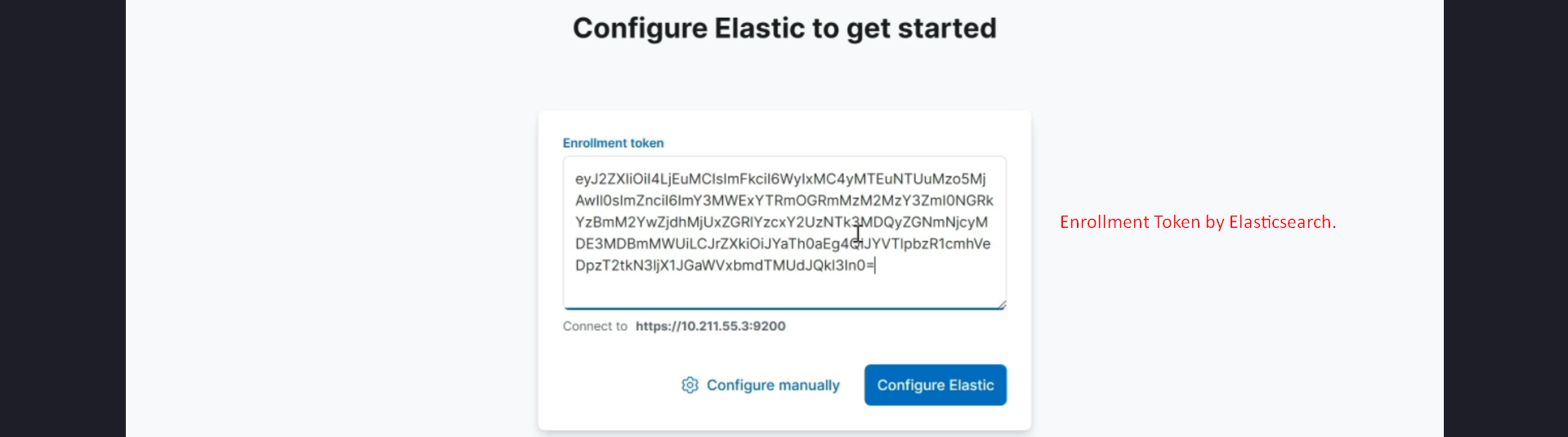
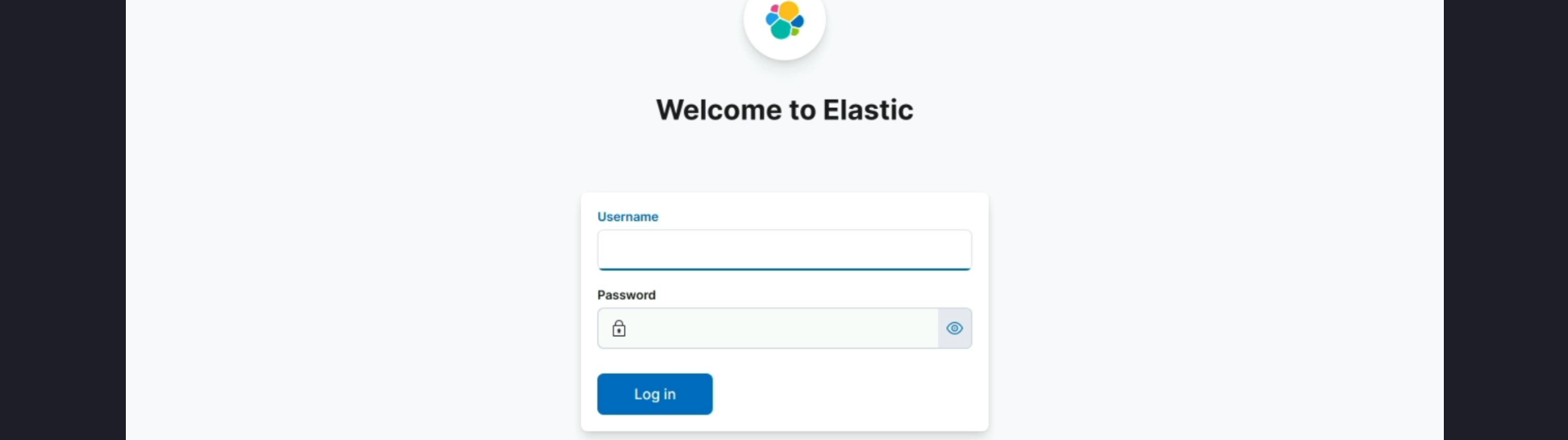
Generated for secure Kibana setup. Valid for 30 minutes but can be regenerated with the following command:  
 ```  
 bin\elasticsearch-create-enrollment-token  
 ```

## Kibana Setup

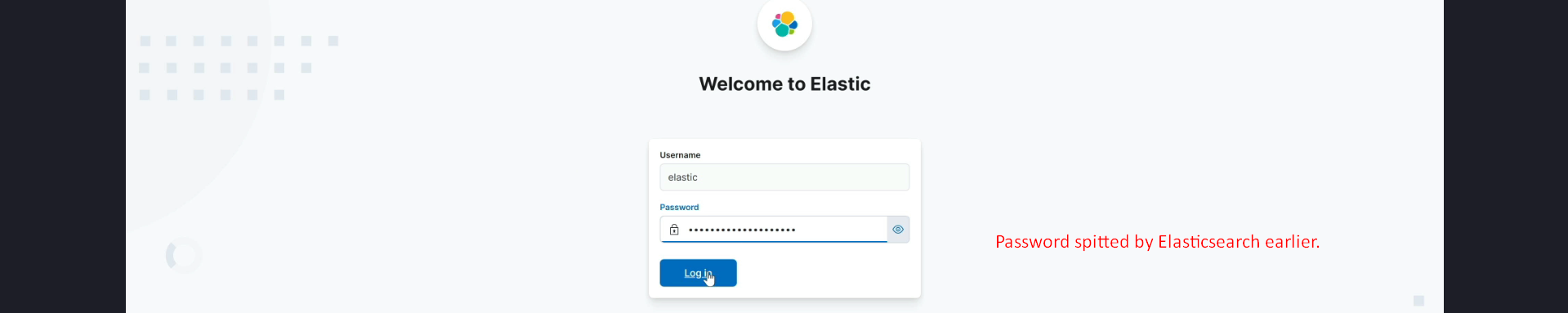
### 1. Starting Kibana

1. Open a new Command Prompt and navigate to the Kibana directory.  
2. Start Kibana with the following command:  
 ```  
 bin\kibana.bat  
 ```  
3. The Kibana web server will start on port 5601.

### 2. Configuration

1. Open the provided URL including the token (?code=<some-number>) from the Command Prompt output.  
2. Paste the enrollment token generated by Elasticsearch.  
- The token allows secure communication between Kibana and Elasticsearch.  
  
  
You will see the following screen:  


### 3. Authentication

Log in using the `elastic` superuser credentials:  
- Username: `elastic`  
- Password: Generated during Elasticsearch setup.  


### 4. Optional: Test Data

1. Upon initial setup, Kibana offers to import sample test data or explore without importing data.  
2. Choose 'Explore on my own' if you plan to import your own data later.

## Shutting Down Elasticsearch and Kibana

To stop Elasticsearch or Kibana:  
- Press Ctrl + C in the respective Command Prompt windows.

## Summary

1. Elasticsearch and Kibana are self-contained directories that don’t require complex installation processes.  
2. Security measures like TLS, superuser credentials, and enrollment tokens are automatically configured during setup.  
3. The local setup requires minimal manual configuration beyond starting the services and entering tokens.  
  
With Elasticsearch and Kibana set up, you’re ready to begin exploring and analyzing your data.