Splunk Fundamentals 1 Lab Exercises

Lab typographical conventions:

[`sourcetype=db_audit`] OR [`cs_mime_type`] indicates either a source type or the name of a field.

NOTE: Lab work will be done on your personal computer or virtual machine, no lab environment is provided. We suggest you **DO NOT** do the lab work on your production environment.

Lab Module 4 – Ingesting Data

Description

This lab exercise will get data ingested into Splunk from three source types.

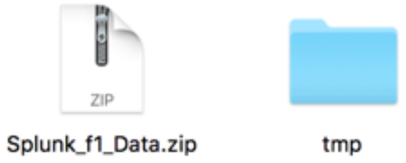
NOTE: We will be ingesting static data sources that cover 30 days. For this demo you will not see real-time data.

Steps

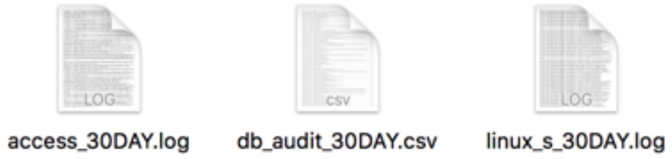
Scenario: You have recently joined the team at Buttercup Games as a Splunk Administrator. You have been asked to ingest data into your Splunk Enterprise instance for searching.

Task 1: Download log files from the repository.

1. Open a new browser window and direct it to http://splk.it/f1data
2. The file **Splunk_f1_Data.zip** will be downloaded to your system.
3. Use an archive tool to unarchive the file.
4. Once unarchived, you will see a folder labeled **tmp.**



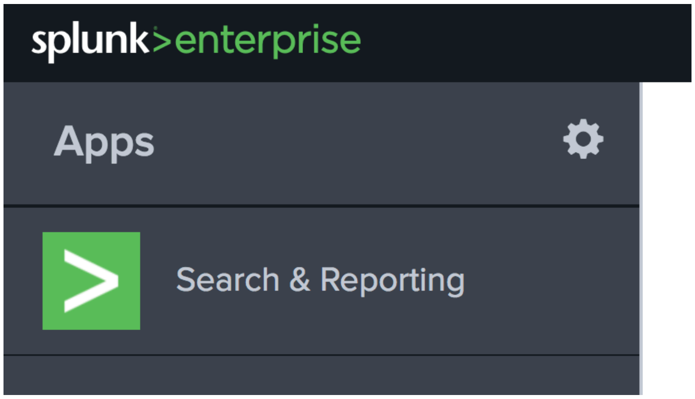
5. Inside the folder you will see three files.



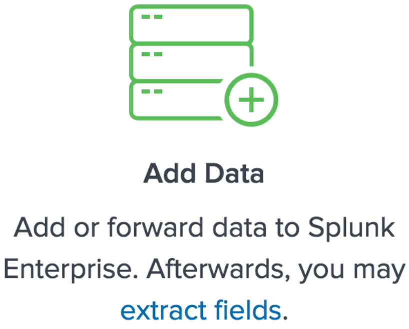
6. Return to the browser window for your instance of Splunk Web or open a new one.

Task 2: Ingest web application data into Splunk Enterprise.

7. Go to the **Home** app by clicking the Splunk Enterprise logo in the upper left hand of the interface.



8. Click the **Add Data** icon.

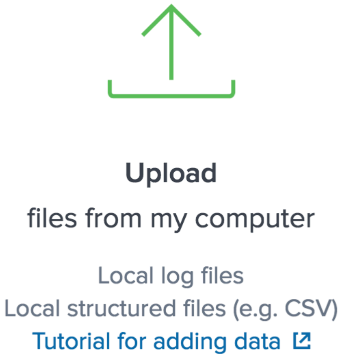


Add Data

Add or forward data to Splunk Enterprise. Afterwards, you may extract fields.

NOTE: You must be logged in as admin to see this icon. If you do not see the icon, log out and back in with your administrator account.

9. From the **Add Data** page, click the **upload** button.

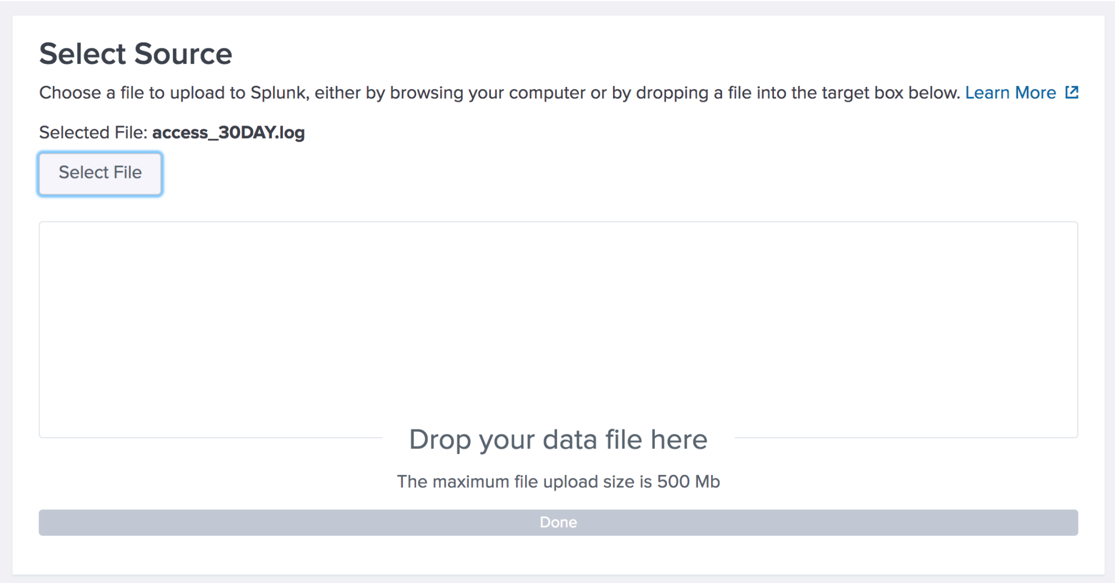


Upload

files from my computer

Local log files
Local structured files (e.g. CSV)
Tutorial for adding data

10. You will be taken to the **Select Source** step**.** Click the **Select File** button and choose the access_30Day.log file that you downloaded and unarchived earlier.

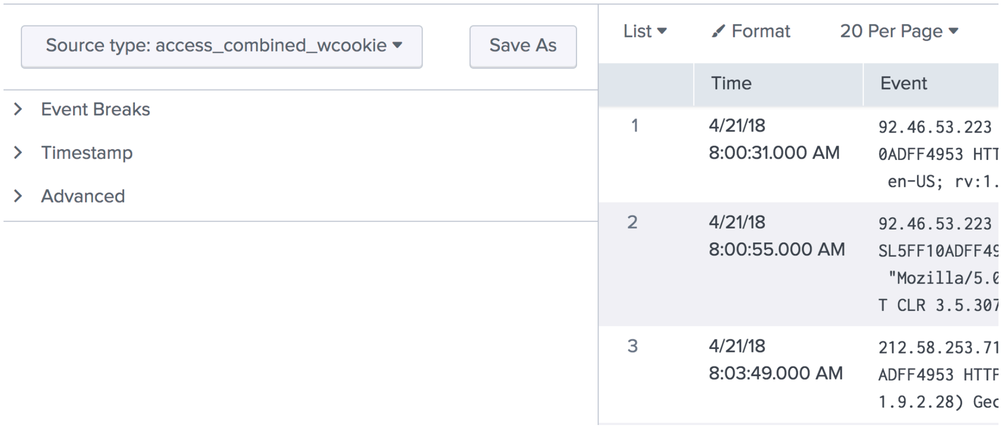


Select Source

Choose a file to upload to Splunk, either by browsing your computer or by dropping a file into the target box below. Learn More

Selected File: **access_30DAY.log**

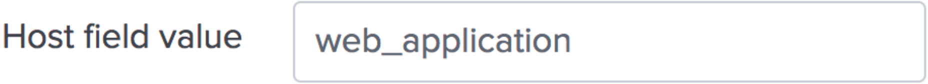
11. Once the file is uploaded, click the **Next** button.
12. On the **Set Source Type** step, you will see that Splunk automatically set the source type correctly as **access_combined_wcookie**. Click the **Next** button.



Source type: access_combined_wcookie

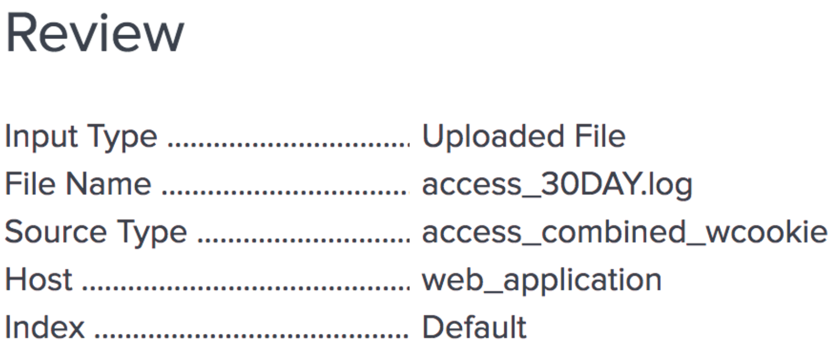
	Time	Event
1	4/21/18 8:00:31.000 AM	92.46.53.223 0ADFF4953 HTT en-US; rv:1.
2	4/21/18 8:00:55.000 AM	92.46.53.223 SL5FF10ADFF49 "Mozilla/5.0 T CLR 3.5.307
3	4/21/18 8:03:49.000 AM	212.58.253.71 ADFF4953 HTTP 1.9.2.28) Gec

13. From the **Input Settings** step, enter `web_application` as the **Host field value** and click the **Review** button.



Host field value: web_application

14. You will be taken to the **Review** step. Make sure your settings match what is shown below and click the **Submit** button.



Review

Input Type	Uploaded File
File Name	access_30DAY.log
Source Type	access_combined_wcookie
Host	web_application
Index	Default

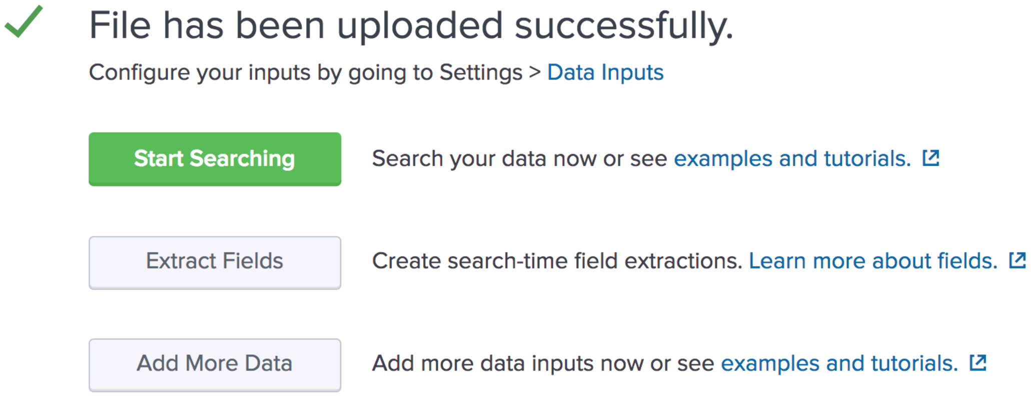
15. Splunk will process the file.

Uploading File

16. When completed, a dialog will appear telling you the file has been successfully uploaded.

Task 3: Ingest web server data into Splunk Enterprise.

17. Click the **Add More Data** button.



File has been uploaded successfully.

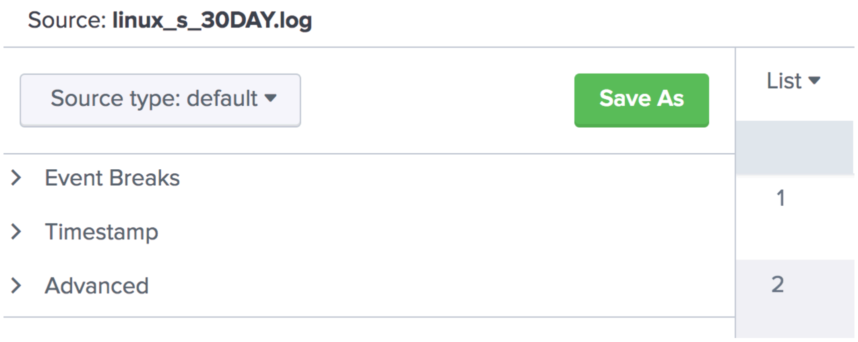
Configure your inputs by going to Settings > Data Inputs

Search your data now or see examples and tutorials.

Create search-time field extractions. Learn more about fields.

Add more data inputs now or see examples and tutorials.

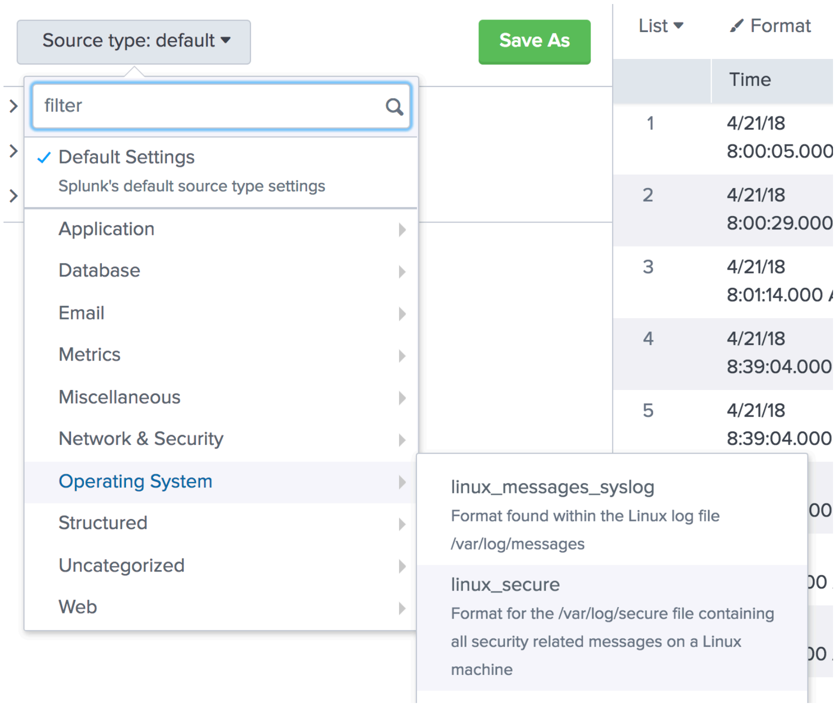
18. Click the **upload** icon and the **Select File** button.
19. Select the linux_s_30Day.log file that you downloaded and unarchived earlier and click the **Next** button.
20. Notice that this time Splunk was not able to automatically select a source type for the data.



Source: **linux_s_30DAY.log**

Source type: default

21. Manually assign the source type by selecting the **Source type** button and selecting **linux_secure** from the **Operating System** menu.



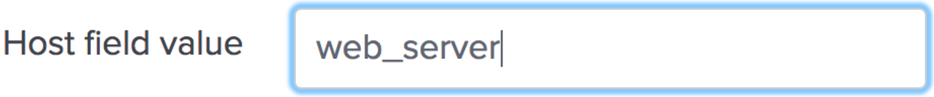
Source type: default

	Time
1	4/21/18 8:00:05.000
2	4/21/18 8:00:29.000
3	4/21/18 8:01:14.000
4	4/21/18 8:39:04.000
5	4/21/18 8:39:04.000

Save As
List
Format
filter
✓ Default Settings
Splunk's default source type settings
Application
Database
Email
Metrics
Miscellaneous
Network & Security
Operating System
Structured
Uncategorized
Web
linux_messages_syslog
Format found within the Linux log file /var/log/messages
linux_secure
Format for the /var/log/secure file containing all security related messages on a Linux machine

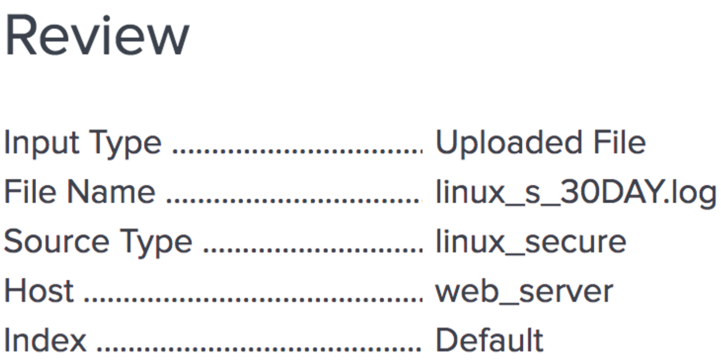
22. Click the **Next** button.

23. For the **Input Settings** step, enter `web_server` as the **Host field value** and click the **Review** button.



Host field value: web_server

24. On the **Review** step, make sure your settings match what is shown below and click the **Submit** button.

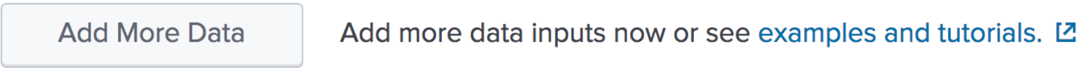


Review

Input Type .... Uploaded File
File Name .... linux_s_30DAY.log
Source Type .... linux_secure
Host .... web_server
Index .... Default

Task 4: Ingest database server data into Splunk Enterprise.

25. Click the **Add More Data** button.

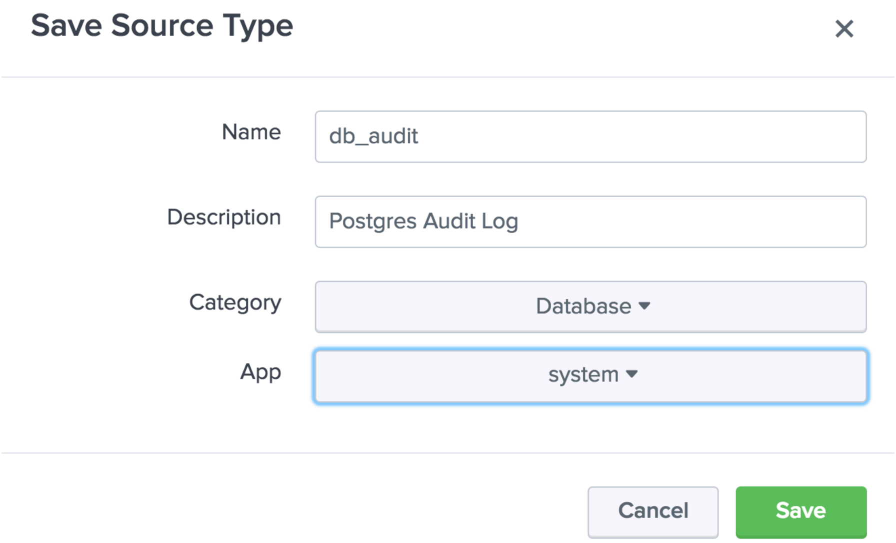


Add more data inputs now or see examples and tutorials.

26. Click the **upload** icon and the **Select File** button.
27. Select the db_audit_30DAY.csv file that you downloaded and unarchived earlier and click the **Next** button.
28. Notice that Splunk automatically selected a source type of csv for the data. We want to create a new source type for this data so we click the **Save As** button.

Source type: csv ▾
Save As

29. In the modal window, give the source type a name of `db_audit` and a description. Using the **Category** menu, select **Database** and click **Save**.



Save Source Type

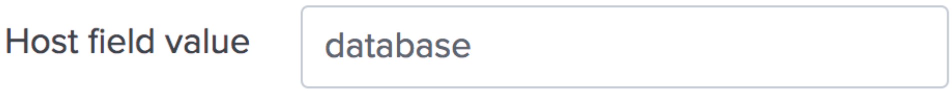
Name: db_audit

Description: Postgres Audit Log

Category: Database ▾

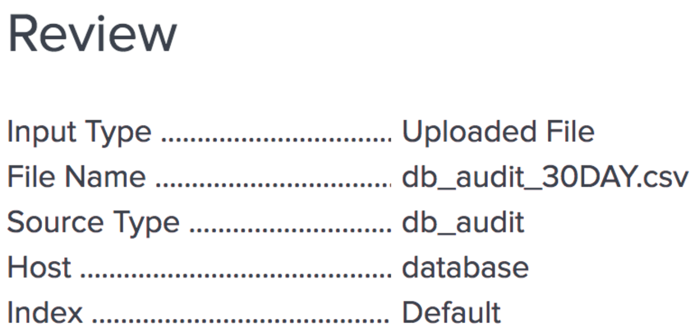
App: system ▾

30. Click the **Next** button to continue to the **Input Settings** step.
31. Enter `database` as the **Host field value** and click the **Review** button.



Host field value: database

32. Make sure your settings match what is shown below and click the **Submit** button.

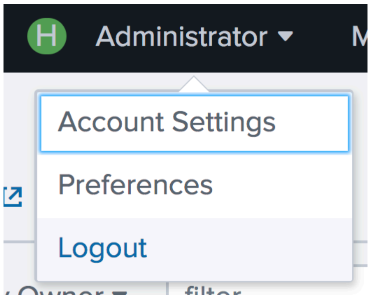


Review

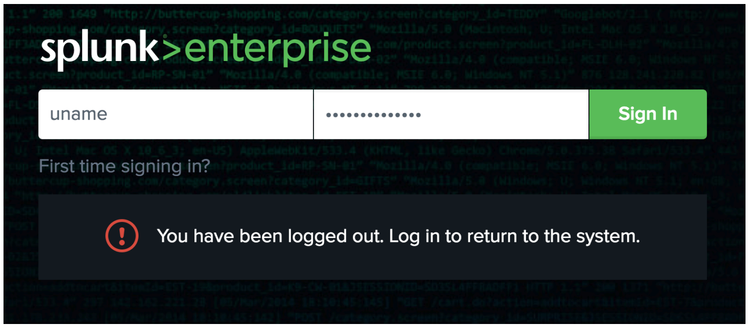
Input Type .... Uploaded File
File Name .... db_audit_30DAY.csv
Source Type .... db_audit
Host .... database
Index .... Default

Task 5: Log in to Splunk Enterprise as a Power User.

33. Log out of your instance using the **Logout** link in the **User** menu.



34. Log back in using the Power User account you created earlier. If you followed the suggested credentials, use `uname` in the **Username** field and `5p1unkbcup` for the **Password** field.



uname
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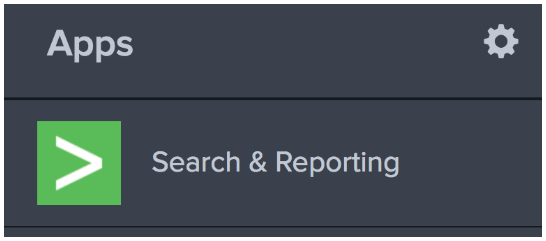
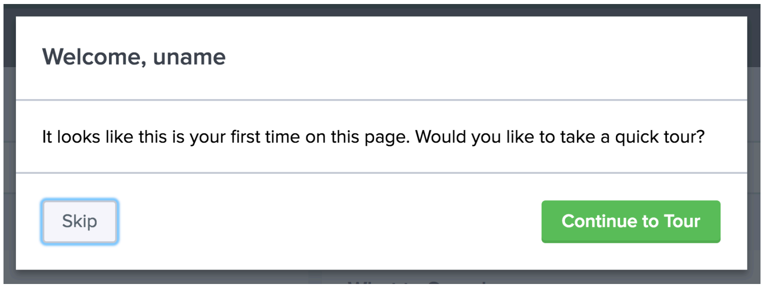
You have been logged out. Log in to return to the system.

35. Select the **Search & Reporting** app from the sidebar.



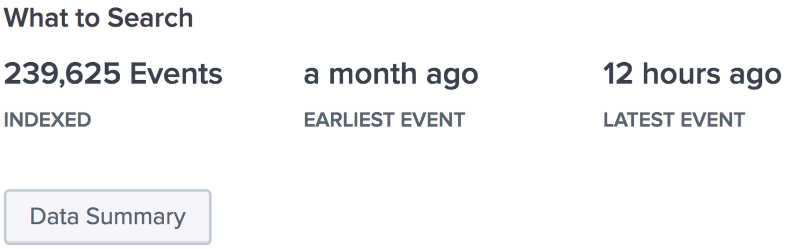
36. You will be asked if you would like to take a tour. Click the **Skip** button.



Welcome, uname

It looks like this is your first time on this page. Would you like to take a quick tour?

37. You should now see the number of events indexed in your system.



What to Search

239,625 Events INDEXED

a month ago EARLIEST EVENT

12 hours ago LATEST EVENT