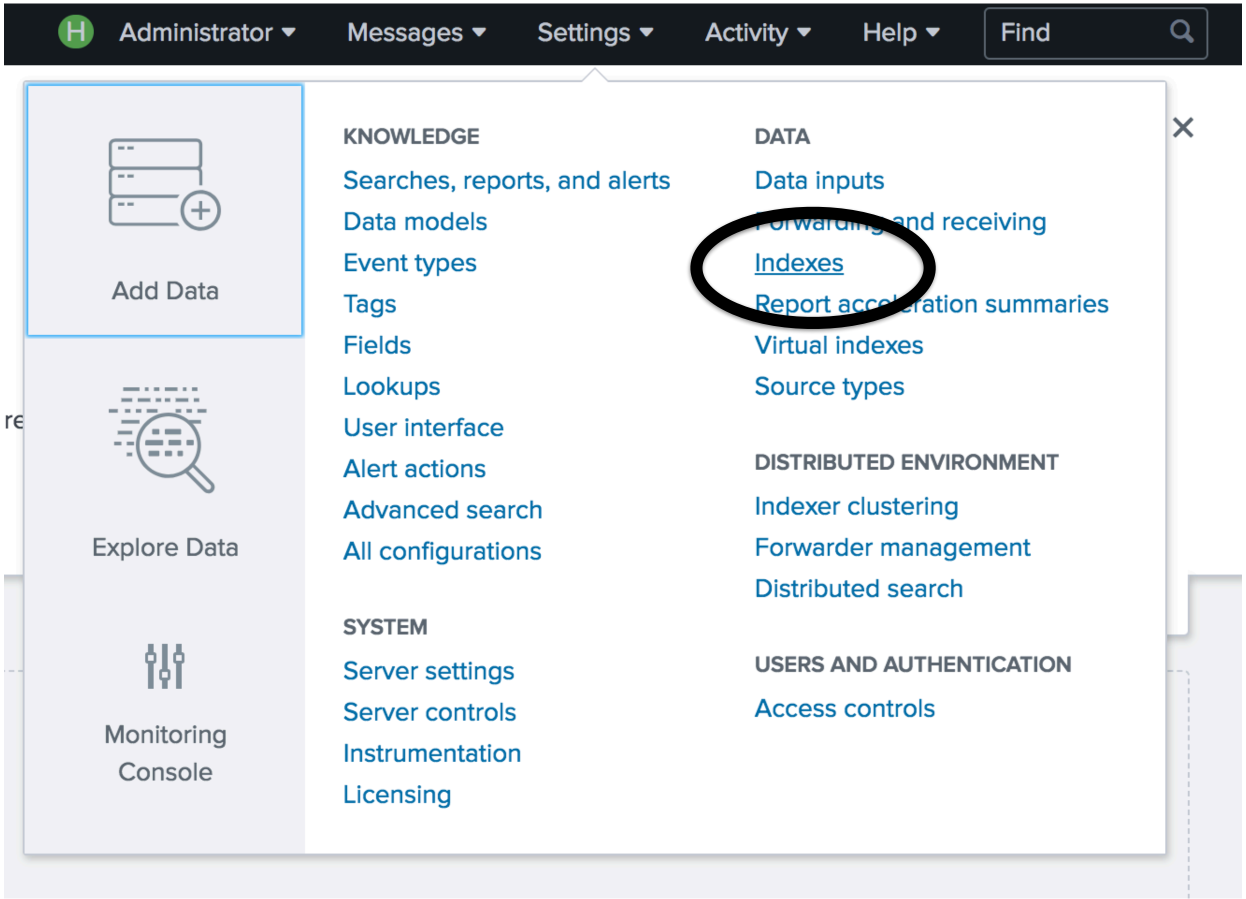
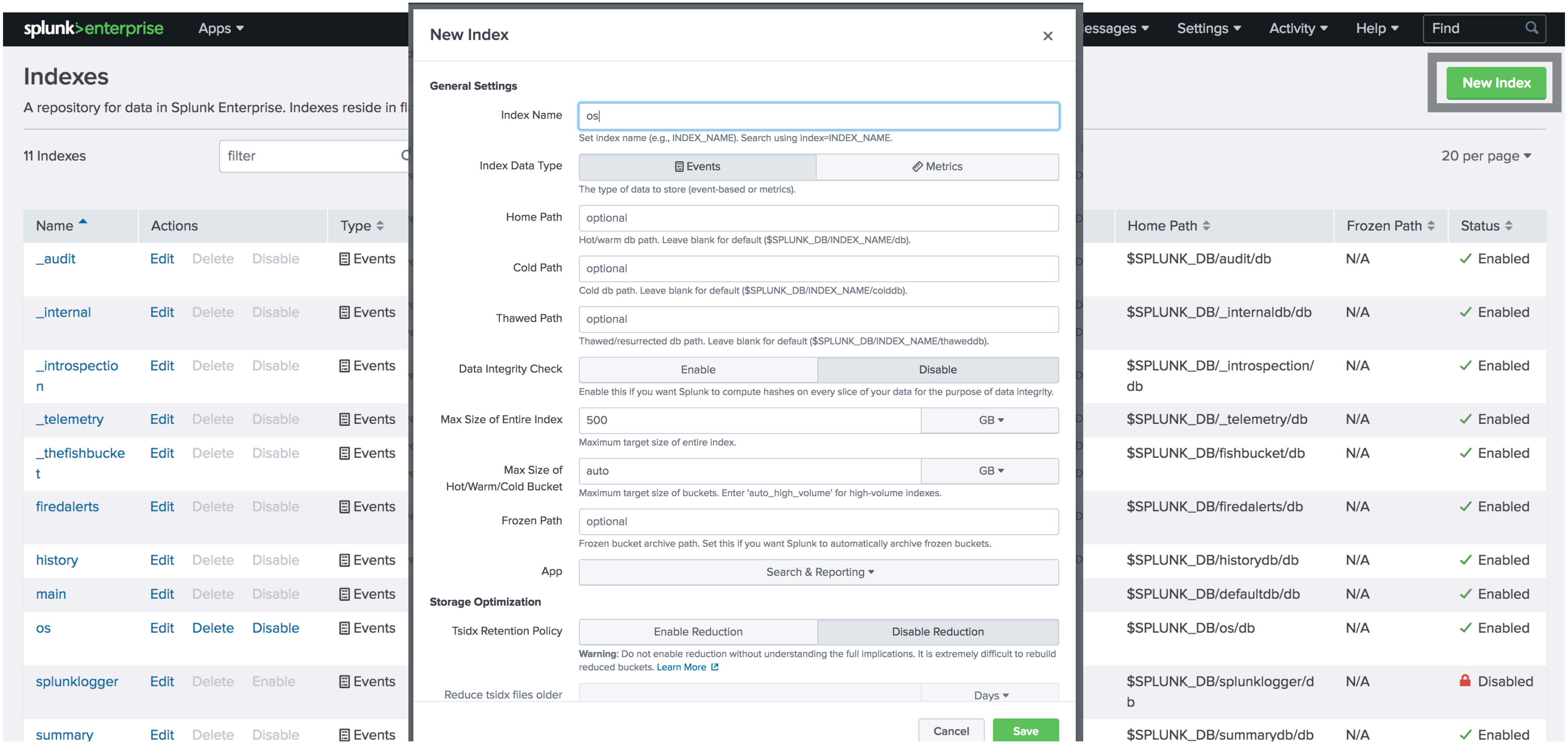
Start by Creating an Index

- For the lab, this can be done in the WebUI
  - In a distributed environment, this is typically managed in an app



Creating an Index



Indexes

A repository for data in Splunk Enterprise. Indexes reside in fl

11 Indexes filter 20 per page ▾

Name ▲	Actions	Type ⇕	Home Path ⇕	Frozen Path ⇕	Status ⇕
_audit	Edit Delete Disable	Events	$SPLUNK_DB/audit/db	N/A	✓ Enabled
_internal	Edit Delete Disable	Events	$SPLUNK_DB/_internaldb/db	N/A	✓ Enabled
_introspection	Edit Delete Disable	Events	$SPLUNK_DB/_introspection/db	N/A	✓ Enabled
_telemetry	Edit Delete Disable	Events	$SPLUNK_DB/_telemetry/db	N/A	✓ Enabled
_thefishbucket	Edit Delete Disable	Events	$SPLUNK_DB/fishbucket/db	N/A	✓ Enabled
firedalerts	Edit Delete Disable	Events	$SPLUNK_DB/firedalerts/db	N/A	✓ Enabled
history	Edit Delete Disable	Events	$SPLUNK_DB/historydb/db	N/A	✓ Enabled
main	Edit Delete Disable	Events	$SPLUNK_DB/defaultdb/db	N/A	✓ Enabled
os	Edit Delete Disable	Events	$SPLUNK_DB/os/db	N/A	✓ Enabled
splunklogger	Edit Delete Enable	Events	$SPLUNK_DB/splunklogger/db	N/A	🔒 Disabled
summary	Edit Delete Disable	Events	$SPLUNK_DB/summarydb/db	N/A	✓ Enabled

New Index ×

General Settings

Index Name: os
Set index name (e.g., INDEX_NAME). Search using index=INDEX_NAME.

Index Data Type: [✓ Events] Metrics
The type of data to store (event-based or metrics).

Home Path: optional
Hot/warm db path. Leave blank for default ($SPLUNK_DB/INDEX_NAME/db).

Cold Path: optional
Cold db path. Leave blank for default ($SPLUNK_DB/INDEX_NAME/colddb).

Thawed Path: optional
Thawed/resurrected db path. Leave blank for default ($SPLUNK_DB/INDEX_NAME/thaweddb).

Data Integrity Check: Enable [✓ Disable]
Enable this if you want Splunk to compute hashes on every slice of your data for the purpose of data integrity.

Max Size of Entire Index: 500 GB ▾
Maximum target size of entire index.

Max Size of Hot/Warm/Cold Bucket: auto GB ▾
Maximum target size of buckets. Enter 'auto_high_volume' for high-volume indexes.

Frozen Path: optional
Frozen bucket archive path. Set this if you want Splunk to automatically archive frozen buckets.

App: Search & Reporting ▾

Storage Optimization

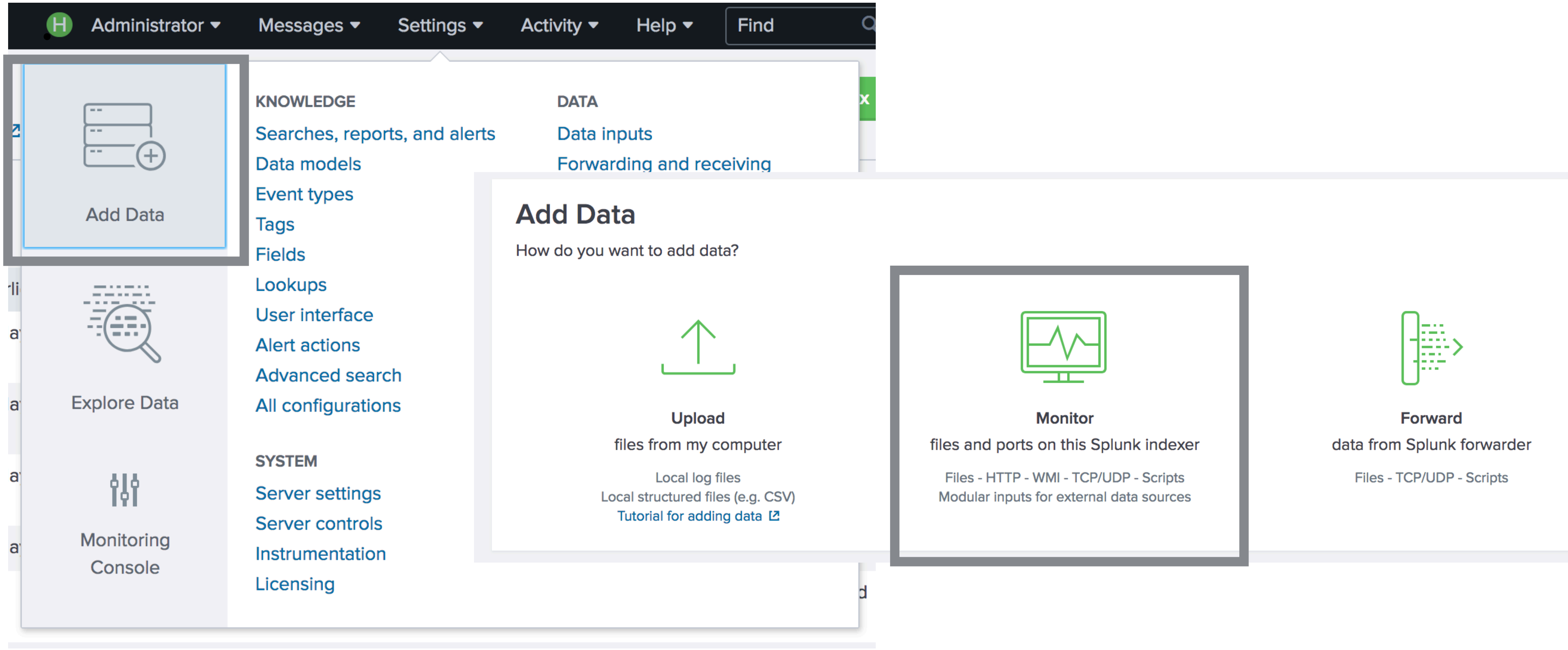
Tsidx Retention Policy: Enable Reduction [✓ Disable Reduction]
Warning: Do not enable reduction without understanding the full implications. It is extremely difficult to rebuild reduced buckets. Learn More

Reduce tsidx files older: Days ▾

Cancel Save

Import Data

- Let’s tell Splunk to monitor data on our system



Add Data

How do you want to add data?

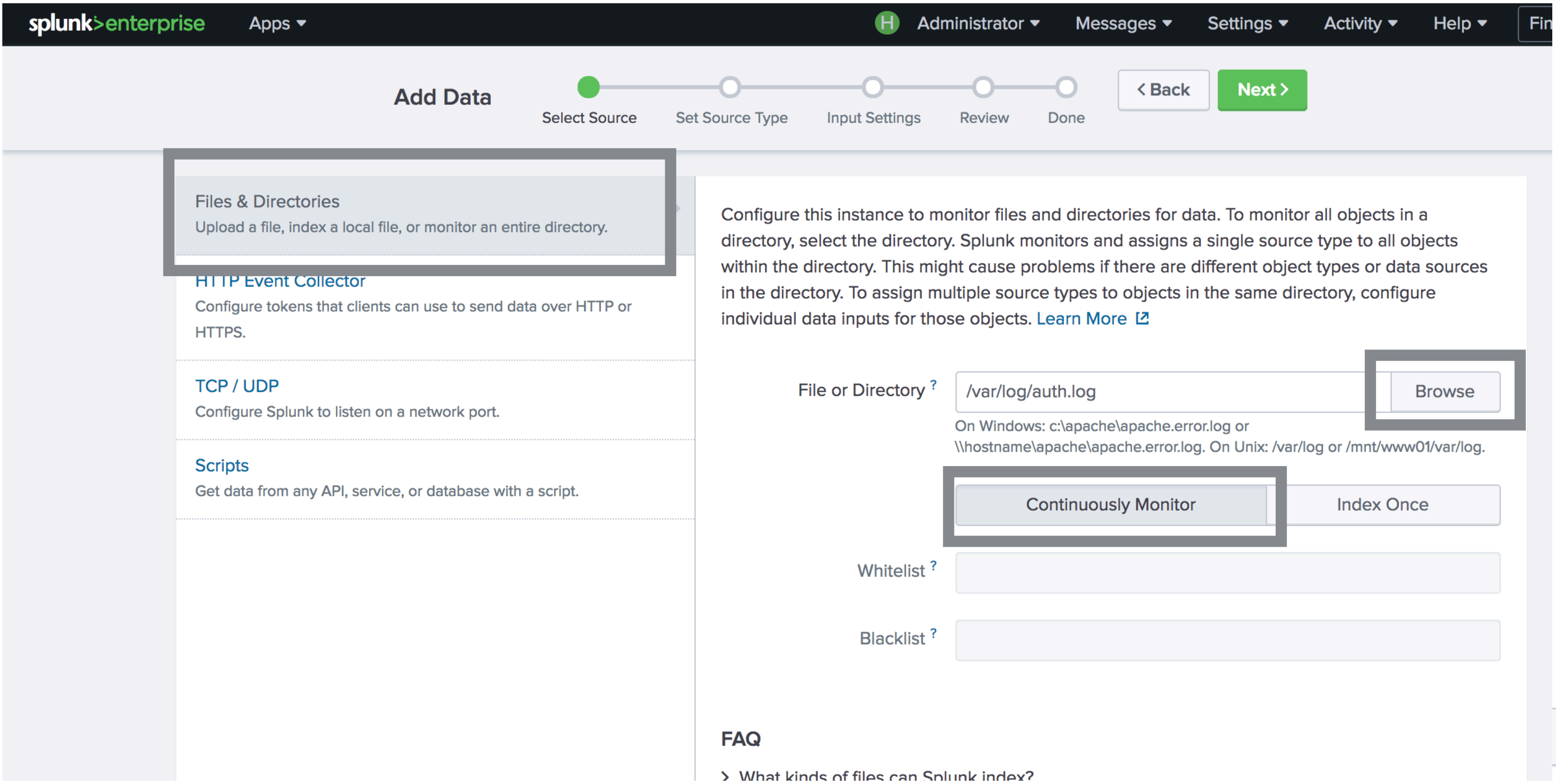
Upload
files from my computer
Local log files
Local structured files (e.g. CSV)
Tutorial for adding data

Monitor
files and ports on this Splunk indexer
Files - HTTP - WMI - TCP/UDP - Scripts
Modular inputs for external data sources

Forward
data from Splunk forwarder
Files - TCP/UDP - Scripts

Import Data From File

- Select “Files & Directories”, and locate the file



Files & Directories
Upload a file, index a local file, or monitor an entire directory.

HTTP Event Collector
Configure tokens that clients can use to send data over HTTP or HTTPS.

TCP / UDP
Configure Splunk to listen on a network port.

Scripts
Get data from any API, service, or database with a script.

Configure this instance to monitor files and directories for data. To monitor all objects in a directory, select the directory. Splunk monitors and assigns a single source type to all objects within the directory. This might cause problems if there are different object types or data sources in the directory. To assign multiple source types to objects in the same directory, configure individual data inputs for those objects. Learn More

File or Directory ? /var/log/auth.log Browse

On Windows: c:\apache\apache.error.log or \\hostname\apache\apache.error.log. On Unix: /var/log or /mnt/www01/var/log.

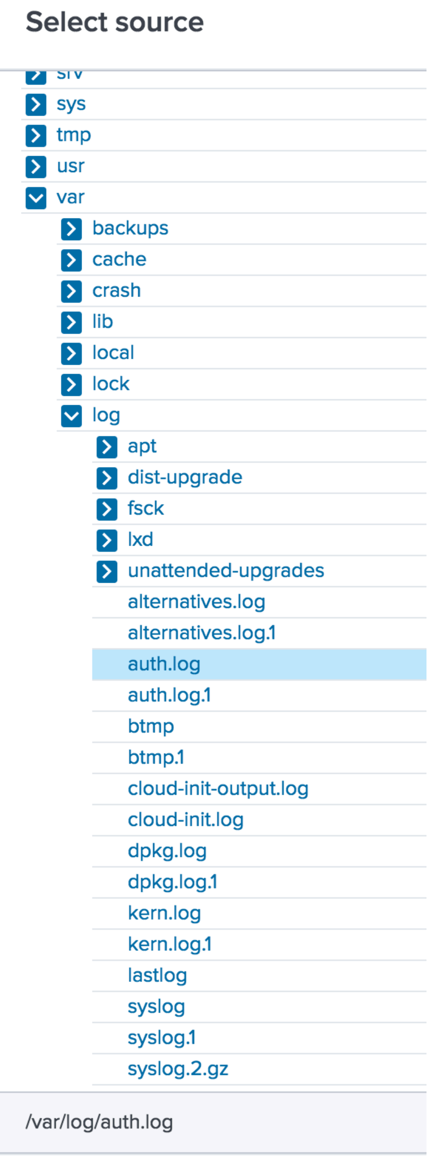
Continuously Monitor | Index Once

Whitelist ?

Blacklist ?

FAQ

> What kinds of files can Splunk index?

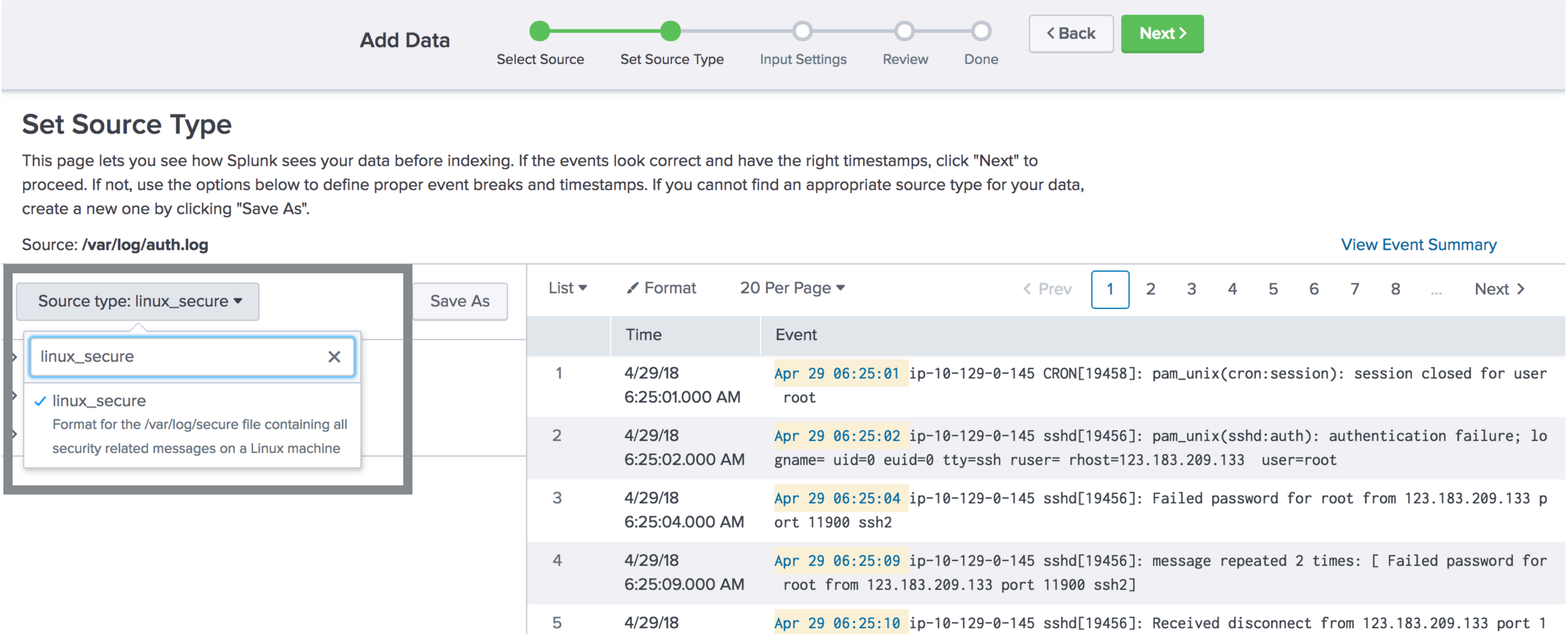

Select source

- srv
- sys
- tmp
- usr
- var
  - backups
  - cache
  - crash
  - lib
  - local
  - lock
  - log
    - apt
    - dist-upgrade
    - fsck
    - lxd
    - unattended-upgrades
    - alternatives.log
    - alternatives.log.1
    - auth.log
    - auth.log.1
    - btmp
    - btmp.1
    - cloud-init-output.log
    - cloud-init.log
    - dpkg.log
    - dpkg.log.1
    - kern.log
    - kern.log.1
    - lastlog
    - syslog
    - syslog.1
    - syslog.2.gz

/var/log/auth.log

Set Sourcetype

- Set source type to linux_secure



Set Source Type

This page lets you see how Splunk sees your data before indexing. If the events look correct and have the right timestamps, click "Next" to proceed. If not, use the options below to define proper event breaks and timestamps. If you cannot find an appropriate source type for your data, create a new one by clicking "Save As".

Source: **/var/log/auth.log**

View Event Summary

Source type: linux_secure ▾

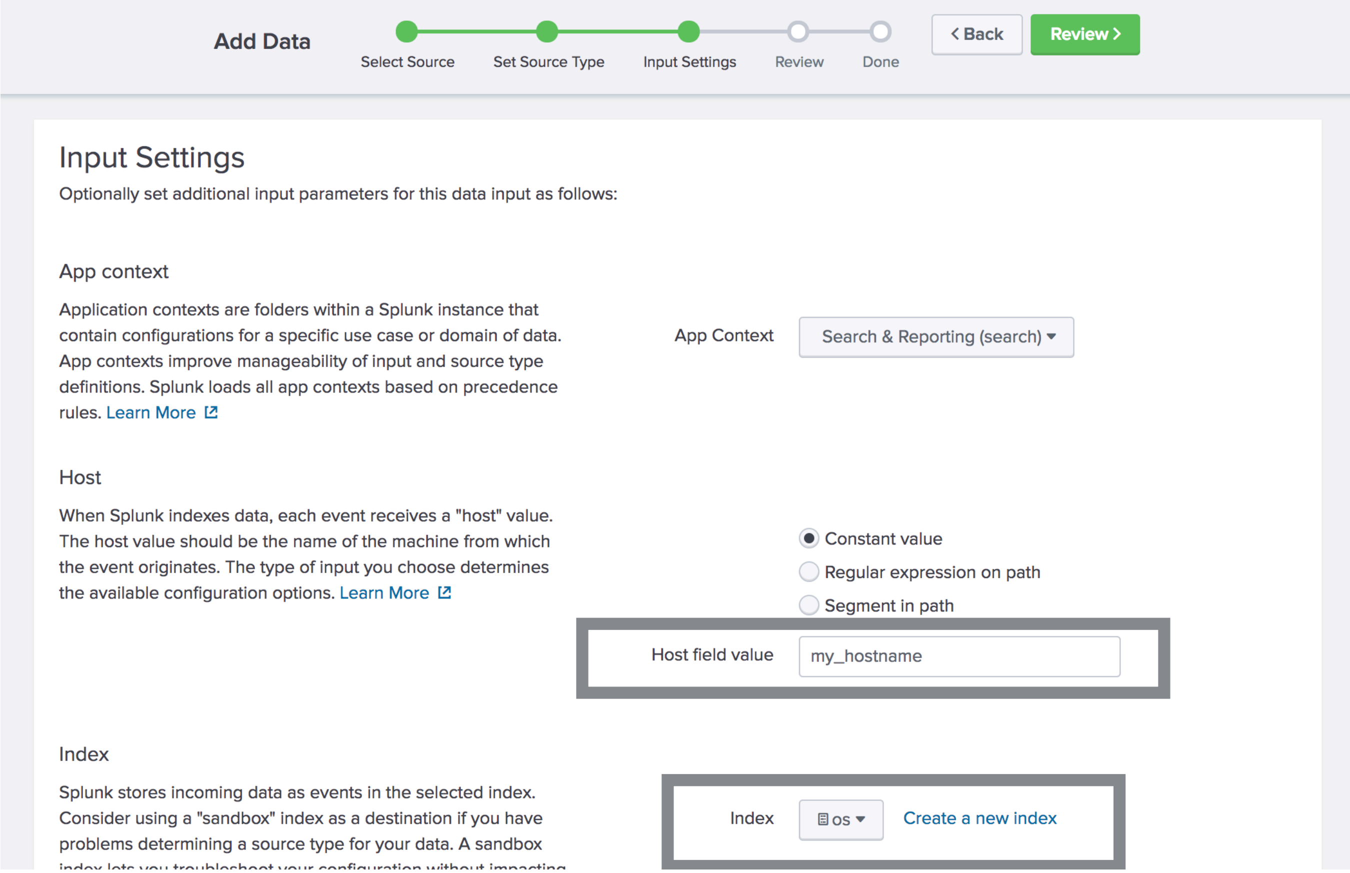
linux_secure ✕

✓ linux_secure
Format for the /var/log/secure file containing all security related messages on a Linux machine

	Time	Event
1	4/29/18 6:25:01.000 AM	Apr 29 06:25:01 ip-10-129-0-145 CRON[19458]: pam_unix(cron:session): session closed for user root
2	4/29/18 6:25:02.000 AM	Apr 29 06:25:02 ip-10-129-0-145 sshd[19456]: pam_unix(sshd:auth): authentication failure; logname= uid=0 euid=0 tty=ssh ruser= rhost=123.183.209.133 user=root
3	4/29/18 6:25:04.000 AM	Apr 29 06:25:04 ip-10-129-0-145 sshd[19456]: Failed password for root from 123.183.209.133 port 11900 ssh2
4	4/29/18 6:25:09.000 AM	Apr 29 06:25:09 ip-10-129-0-145 sshd[19456]: message repeated 2 times: [Failed password for root from 123.183.209.133 port 11900 ssh2]
5	4/29/18	Apr 29 06:25:10 ip-10-129-0-145 sshd[19456]: Received disconnect from 123.183.209.133 port 1

Set Host and Index

- On a production system, we would typically configure this in an inputs app (I'll show you this in a bit)



Input Settings

Optionally set additional input parameters for this data input as follows:

App context

Application contexts are folders within a Splunk instance that contain configurations for a specific use case or domain of data. App contexts improve manageability of input and source type definitions. Splunk loads all app contexts based on precedence rules. Learn More

App Context: Search & Reporting (search)

Host

When Splunk indexes data, each event receives a "host" value. The host value should be the name of the machine from which the event originates. The type of input you choose determines the available configuration options. Learn More

● Constant value
○ Regular expression on path
○ Segment in path

Host field value: my_hostname

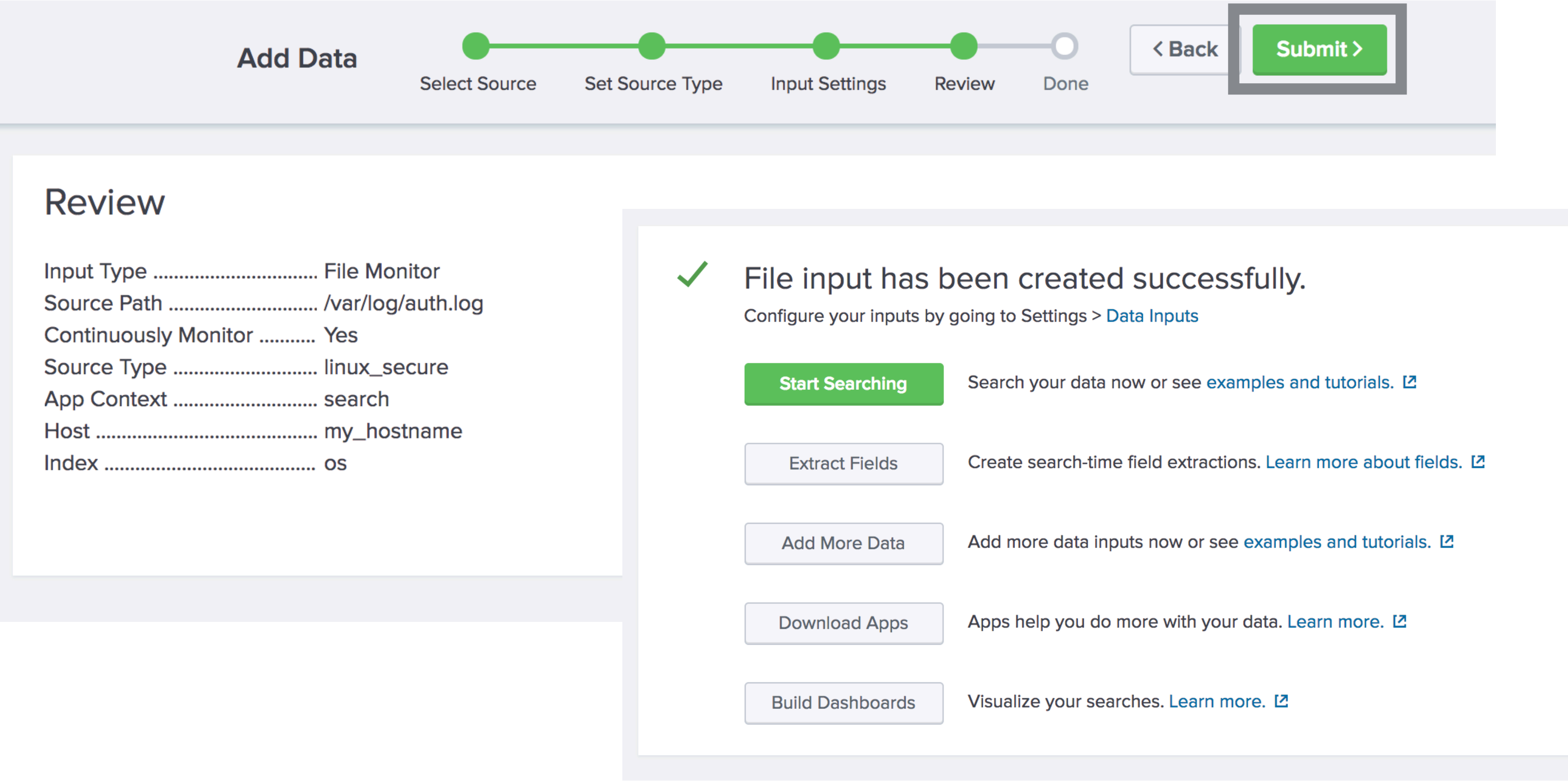
Index

Splunk stores incoming data as events in the selected index. Consider using a "sandbox" index as a destination if you have problems determining a source type for your data. A sandbox index lets you troubleshoot your configuration without impacting

Index: os

Yay! You're Almost Done

- Click submit to finish, then start searching!



Review

Input Type	File Monitor
Source Path	/var/log/auth.log
Continuously Monitor	Yes
Source Type	linux_secure
App Context	search
Host	my_hostname
Index	os

✓ File input has been created 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.

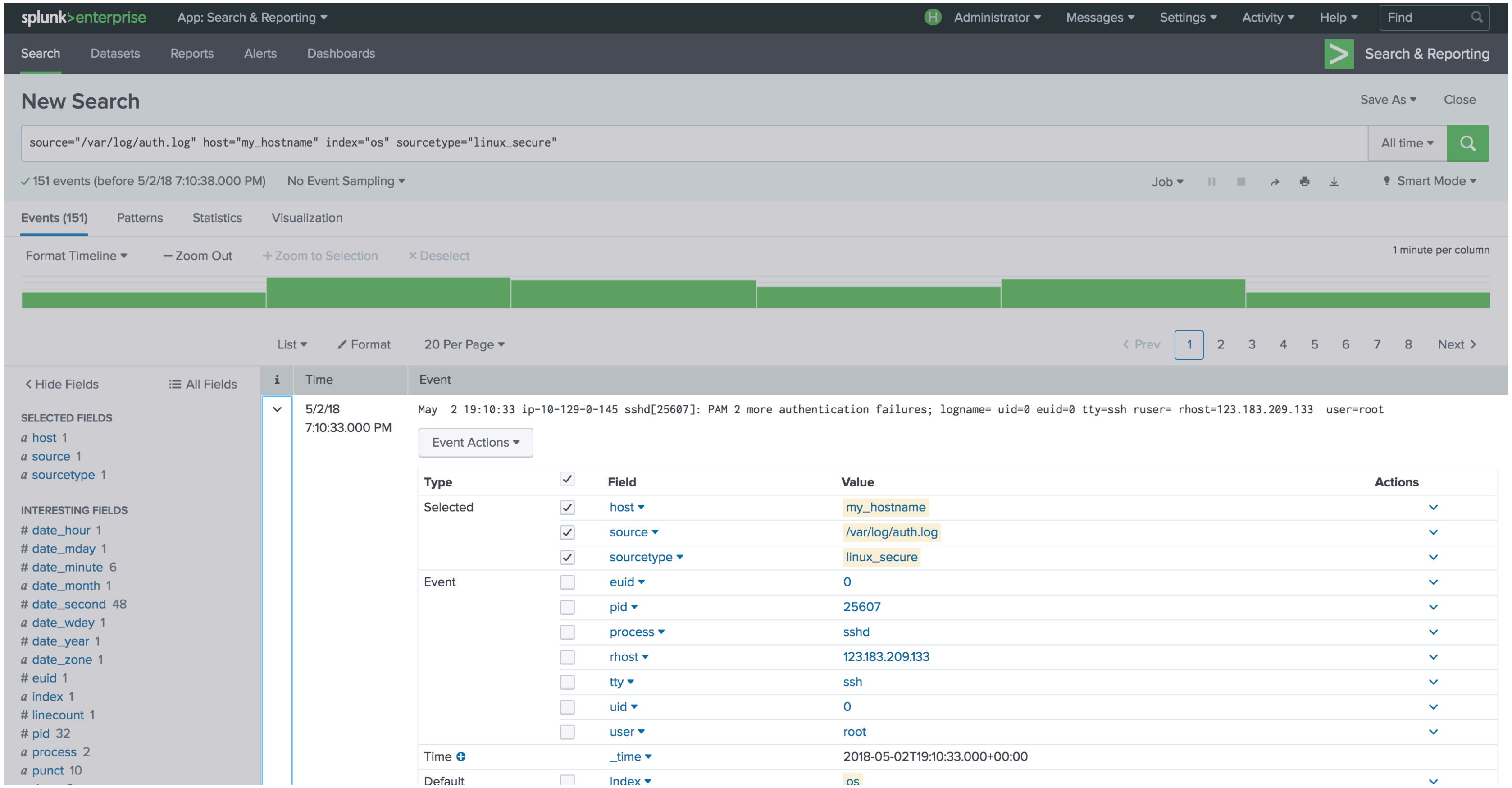
Add more data inputs now or see examples and tutorials.

Apps help you do more with your data. Learn more.

Visualize your searches. Learn more.

Your First Search (of this data)

- What do you see?



```
source="/var/log/auth.log" host="my_hostname" index="os" sourcetype="linux_secure"
```

✓ 151 events (before 5/2/18 7:10:38.000 PM) No Event Sampling ▾

SELECTED FIELDS
a host 1
a source 1
a sourcetype 1

INTERESTING FIELDS
# date_hour 1
# date_mday 1
# date_minute 6
a date_month 1
date_second 48
a date_wday 1
date_year 1
a date_zone 1
euid 1
a index 1
linecount 1
pid 32
a process 2
a punct 10

5/2/18
7:10:33.000 PM

```
May  2 19:10:33 ip-10-129-0-145 sshd[25607]: PAM 2 more authentication failures; logname= uid=0 euid=0 tty=ssh ruser= rhost=123.183.209.133  user=root
```

Type	☑	Field	Value	Actions
Selected	☑	host ▾	my_hostname	
	☑	source ▾	/var/log/auth.log	
	☑	sourcetype ▾	linux_secure	
Event	□	euid ▾	0	
	□	pid ▾	25607	
	□	process ▾	sshd	
	□	rhost ▾	123.183.209.133	
	□	tty ▾	ssh	
	□	uid ▾	0	
	□	user ▾	root	
Time		_time ▾	2018-05-02T19:10:33.000+00:00	
Default	□	index ▾	os	