# Splunk Federated Data Management Workshop

## Learn How to Filter, Mask, Route, & Metricize Your Data with Ingest Processor, Edge Processor and Ingest Actions

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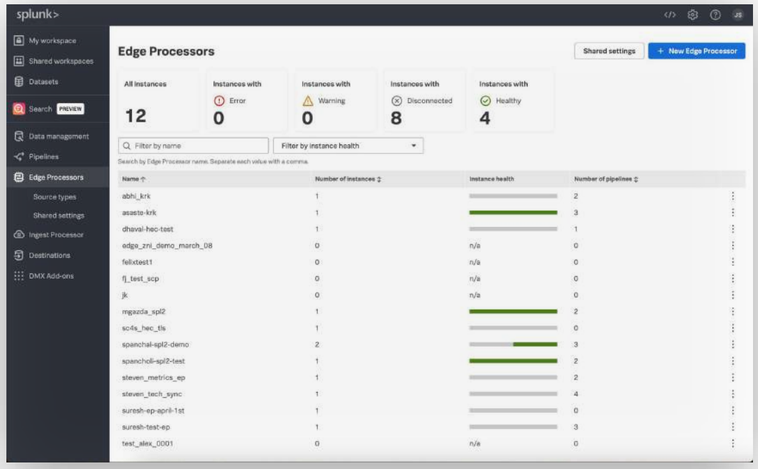
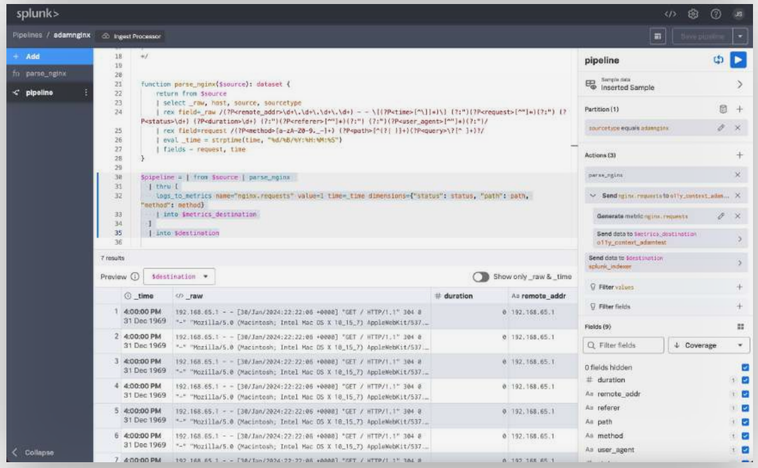
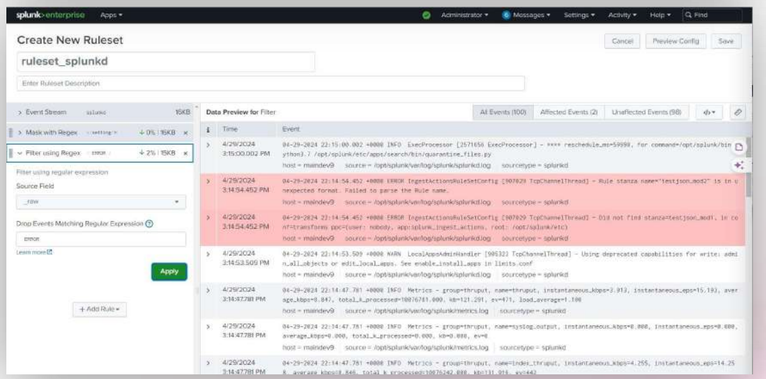
# Why?

Quickly manage your data.

- Learn what tools exist and how to use them.
- Learn how to manage data from your browser.
- Learn to filter, mask, transform, enrich, and route data to multiple destinations.
- Learn you can get faster feedback that your changes are working.



# Workshop Structure

## One base use case for three labs

- Reduce noisy logs.
- Mask sensitive data.
- Route data to S3.
- Route data to a Splunk index.

## Ingest Actions Lab

- Federated Search for AWS S3.

## Splunk Edge Processor Lab

- Enrich data with lookups.

## Ingest Processor Lab

- Logs to metrics.

## Short recap and Q&A after each lab

# Ingest Actions

Filter, Mask, and Route

Easy to deploy simple ingest-time transformation and routing rules using existing Splunk indexing and forwarding technology

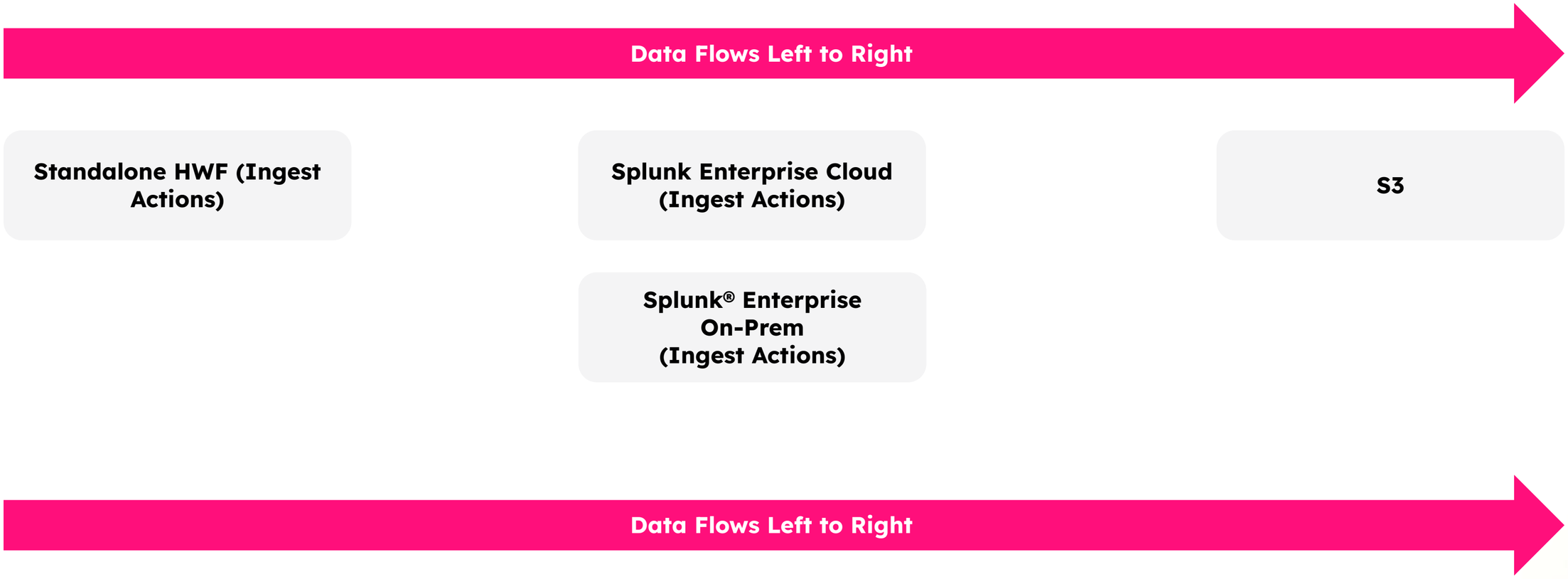
ON-PREM CLOUD

# Ingest Actions

## Data Admin / UI Power User

| WHEN TO USE | HOW IT'S DONE | WHAT YOU NEED |
| --- | --- | --- |
| • Reduce noise / volume → | • Filtering | • Good data quality<br>  – sourcetype, source, host |
| • Redact sensitive data → | • Masking | • Simple → medium complexity use cases |
| • Send to indexes / S3 → | • Routing | |

# Ingest Actions Dataflow



# Enroll in Today's Workshop

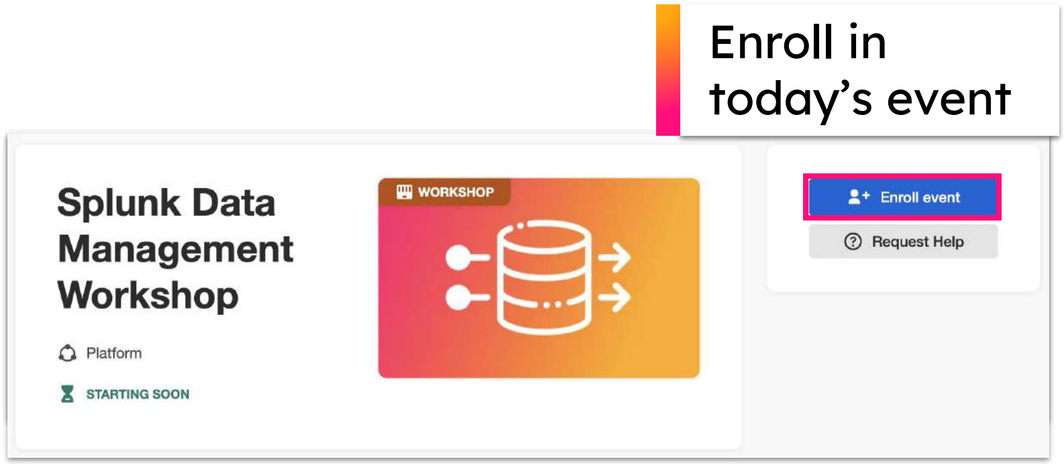
## Tasks

1. Get a splunk.com account if you don't have one yet:
   https://splk.it/SignUp
2. Enroll in the Splunk Show workshop event:
   https://show.splunk.com/event/<eventID>
3. Download the hands-on lab guide:
   https://splk.it/DM-Lab-Guide

   Contains step-by-step instructions for all of today's exercises!
4. Download a copy of today's slide deck:
   https://splk.it/DM-Attendee

## Goal

Enroll in today's event



Workshop


# Ingest Actions

# Ingest Actions Recap

What did you learn?

- How to target and manipulate events using the Ingest Actions UI.
  - No need to edit .conf files.

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- How to route data to S3.
  - Lower cost to store.
  - Great for:
    - Compliance and audit.
    - Low value / high volume data.
  - Can use Splunk Federated Search for S3.

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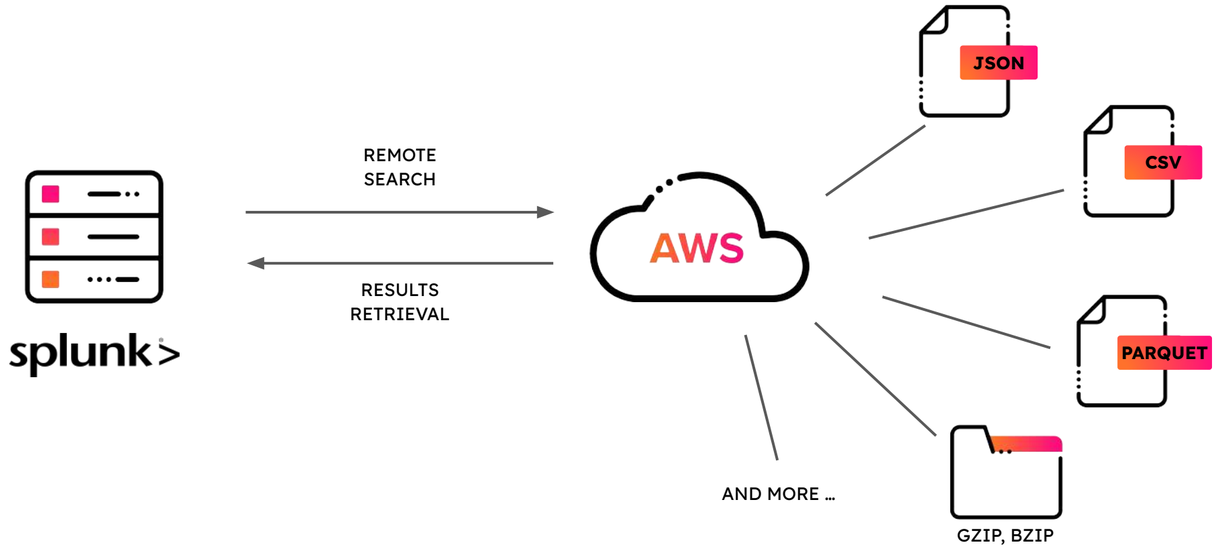
  - Can use Splunk Federated Search for S3.
- How to route data to Splunk indexes.
  - Store data you need for immediate searching.

# Ingest Actions Questions

# Federated Search for Amazon S3

Read datasets from your Amazon S3 buckets directly in Splunk® Cloud Platform!

Federated Search for Amazon S3 is a search capability that allows you to perform a **remote search** on your Amazon S3 buckets and retrieve the search results directly in your **Splunk® Cloud Platform** instance for investigations, enrichment and analysis.

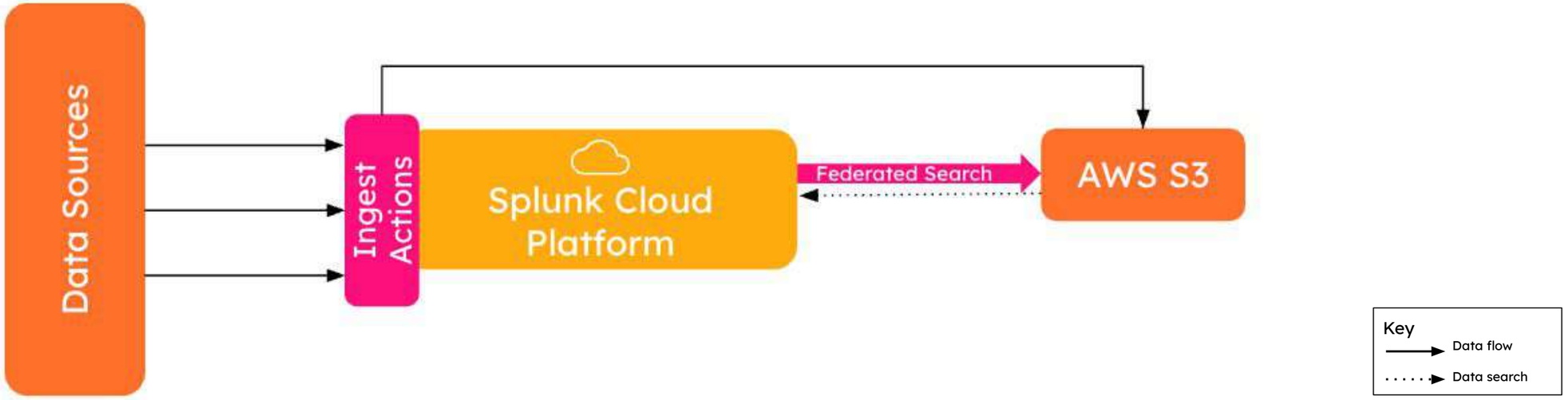


# Scenario

Read data from AWS S3 bucket (Data Ingested by Ingest Actions from Lab 1)

“Search all data on AWS S3 bucket leveraging partitioning with AWS Glue, or using a specified location in Amazon S3 path.

```
| sdselect * from federated:fss3_cisco_index
```



# Edge Processor

Filter, Mask, Enrich, Transform, and Route

Works at the edge of your network to filter, mask, enrich, and transform your data close to its source before routing the processed data to external environments.

HYBRID

# Edge Processor

Data Admin / SPL2 User

## WHEN TO USE

- Reduce noise / volume
- Redact sensitive data
- **Add data via lookups / evals**
- **Add indexed fields**
- Send to indexes / S3

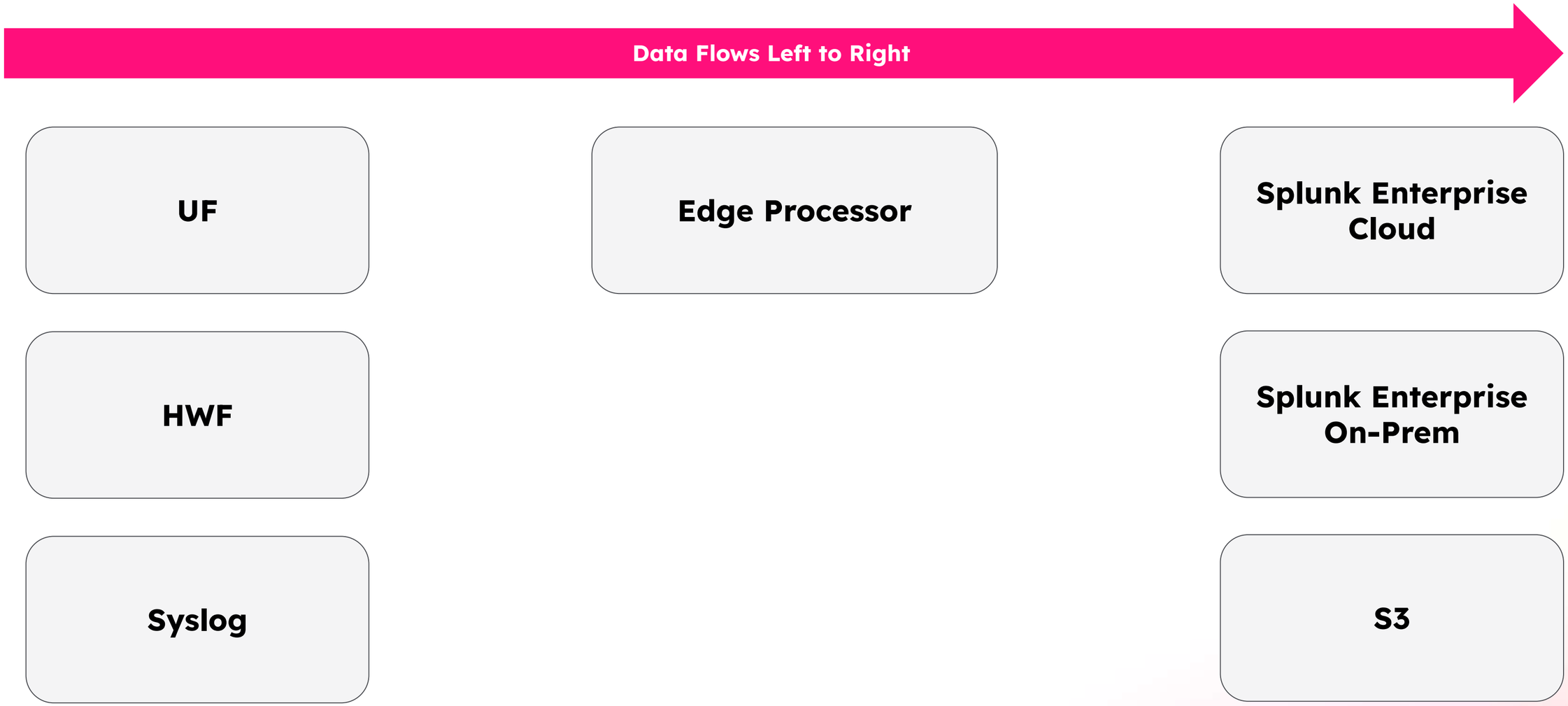
## HOW IT'S DONE

- Filtering
- Masking
- **Enriching**
- **Transforming**
- Routing

## WHAT YOU NEED

- Edge Processing nodes in your own network
- **Cloud stack for pipeline authoring and management of Edge Processing nodes**
- Defined sourcetypes

# Edge Processor Dataflow



# Workshop

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# Edge Processor

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  - Using SPL2.

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- How to author and manage SPL2 pipelines using Edge Processor service UI.
  - No need to manage the Edge Processor nodes.

# Edge Processor Recap

What did you learn?

- Reinforced what you learned in the Edge Processor Lab.
  - Using SPL2.
- How to author and manage SPL2 pipelines using Edge Processor service UI.
  - No need to manage the Edge Processor nodes.
- How to enrich data using lookups as it passes through the Edge Processor.
  - Move data enrichment to the edge.

# Edge Processor Questions

# Ingest Processor

Filter, Mask, Enrich, Transform, and Route

Data processing capability that is fully hosted and managed by Splunk. Use to configure data flows, control data format, apply transformation rules prior to indexing, and route to destinations.

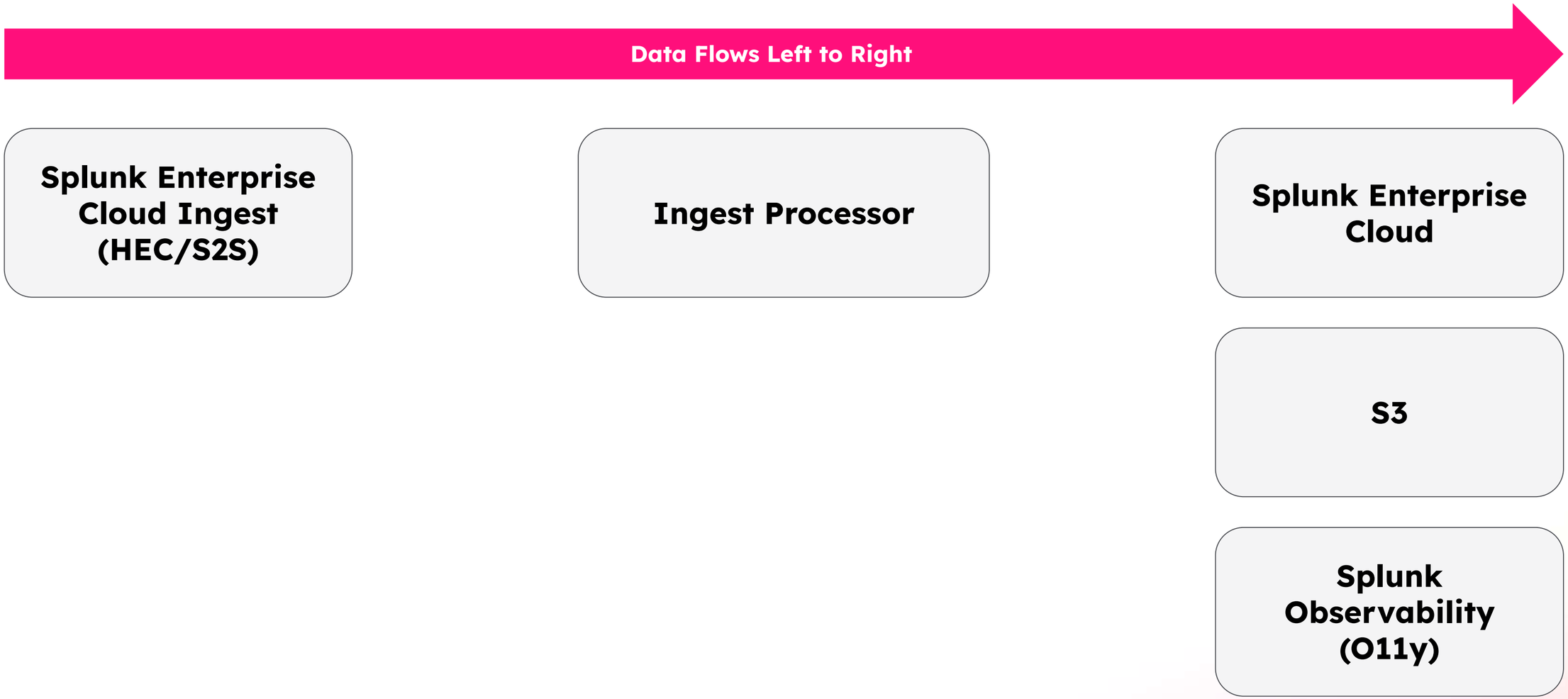
CLOUD

# Ingest Processor

## Data Admin / SPL2 User

| WHEN TO USE | HOW IT'S DONE | WHAT YOU NEED |
| --- | --- | --- |
| • Reduce noise / volume | • Filtering | • Cloud stack |
| • Redact sensitive data | • Masking | • **No infrastructure setup required** |
| • Add data via evals | • Calculated enrichment | |
| • **Logs to O11y metrics** | • Transforming | |
| • Send to indexes / **O11y** / S3 | • Routing | |

# Ingest Processor Dataflow



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- How to preview snapshot data.
  - No need to upload sample data.

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- How to author and manage SPL2 pipelines using Ingest Processor service UI.
  - No need to synchronize to edge nodes.
- How to preview snapshot data.
  - No need to upload sample data.
- How to convert logs to metrics.
  - Reduce log data.

# Ingest Processor Questions


# Workshop Recap

- You learned what you can do with Ingest Actions, Edge Processor, and Ingest Processor that helps you with your data.


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- You learned where Ingest Actions, Edge Processor, and Ingest Processor components reside.


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- You learned how Ingest Actions, Edge Processor, and Ingest Processor work and where they do data processing.


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- You learned where Ingest Actions, Edge Processor, and Ingest Processor components reside.
- You learned how Ingest Actions, Edge Processor, and Ingest Processor work and where they do data processing.
- You learned why you should use Ingest Actions, Edge Processor, and Ingest Processor instead of editing configuration files.

# Workshop Questions

# Thank you

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